

MEMORANDUM
June 29, 2007

To: PBCSD Board of Directors

From: Michael Niccum, District Engineer

Subject: **Pump Station P-8 Rehabilitation Project**

RECOMMENDATION

It is recommended the Board adopt Resolution 07-12 authorizing the general manager to negotiate a contract with Anderson Pacific Engineering Construction, Inc. for construction of the Pump Station P-8 Rehabilitation Project within a budget limit of \$250,000.

SCOPE OF PROJECT

PBCSD has an ongoing capital improvement program to upgrade and replace the existing infrastructure within the District. Pump station P-8 was constructed in 1987 as part of the Inn at Spanish Bay construction project to transport wastewater from the west side of the hotel to a manhole located on the south side lawn area. The dry well of pump station is a prefabricated underground unit including a fiberglass structure, pumps and valves. The existing wet well consists of a 6-foot diameter unlined concrete structure with suction piping and float controls connecting with the dry well. Electrical controls and power supply for the pump station are located in a nearby storage room inside the hotel structure. The hotel electrical generator allows the pump station to continue operating during power outages. The pump station is located in a sensitive area near meeting rooms and outdoor patios used for hotel functions

During recent repair operations, the maintenance department reported the unlined concrete walls of the wet well were in a deteriorated condition with observations indicating pieces of concrete wall were breaking off. Based on the observed conditions, it was apparent the wet well required rehabilitation work before the next wet season. The long-term capital outlay plan identified replacing pump station equipment located in the dry well this year. Several repair alternatives, which all require bypassing the existing pump station, were considered by District and Pebble Beach Company staff. The preferred option includes construction of a new 8-foot diameter wet well and installation of submersible pumps prior to rehabilitation work on the existing wet well. The dry well pumping equipment will be removed rather than rehabilitated and the fiberglass tank will be used for emergency overflow storage to provide additional response time if the pump station stops operating. The project would also include pipeline connections to the new structures. A site plan of the proposed improvements is attached.

E2 Consulting Engineers, Inc. reviewed flow patterns at pump station P-8 and determined the proposed pump station improvements would increase the storage capacity from the existing 4,500 gallons to over 12,000 gallons. Currently, the wet well retention time at this pump station is approximately 45 minutes during periods of peak flow, after which sewage will overflow directly to Pacific Ocean. The additional storage capacity will provide an additional 90 minutes of emergency storage during peak demand periods.

Pebble Beach Company staff reviewed the proposed project and agreed this construction option would have the least impact on resort operations. One additional aesthetic benefit is the 3-foot diameter fiberglass entrance to the dry well that currently extends two feet above the ground level will be removed when the dry well is converted to emergency overflow storage. The building engineer suggested the preferred construction period would begin after Labor Day. This construction window would allow time for fabrication and delivery of submersible pumps before field work begins and allow the project to be completed before the wet season.

Due to the sensitive location of the project and the limited time to complete construction activities before the wet season, District staff recommends the work be negotiated directly with a qualified contractor to expedite construction activities. District staff and E2 Consulting Engineers met with Anderson Pacific Engineering Construction, Inc. and reviewed the scope of the project. The District had a positive experience working with Anderson Pacific on the Forest Lake Reservoir project. The construction area is limited by emergency access roadways and existing hotel structures. Construction of the new wet well will require significant shoring due to the sandy soil conditions. Anderson Pacific prepared a cost estimate of \$250,000 for the preliminary engineering design prepared by E2. District staff reviewed the estimate, which is summarized on the attached table, and determined it is reasonable for the revised scope of the project.

Staff recommends the Board authorize the general manager to negotiate a contract with Anderson Pacific within a budget limit of \$250,000. The draft fiscal year 2007-08 budget included an allocation of \$120,000 to rehabilitate the P-8 pump station. The final budget will be modified before final adoption to reflect the cost of the revised project.

C: Shawn Casey, Pebble Beach Company

Attachments: Site Plan
Construction Cost Estimate

Agenda Item No. 12