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SUBJECT: AWARD OF PROPOSAL FOR A HORIZONTAL GEOTHERMAL SYSTEM FOR THE MAIN BUILDING REPLACEMENT PROJECT AT MISSION COLLEGE

CHANCELLOR’S RECOMMENDATION:

That the Board of Trustees approve the proposal of \$2,676,360 from Precision Directional Boring for a horizontal geothermal system for the Main Building Replacement Project at Mission College. The award of the contract is based on the Proposal Price as follows:

Mission College:

<u>Contractor</u>	<u>Base Proposal</u>	<u>Owners Allowance</u>	<u>Contract Award</u>
Precision Directional Boring	\$2,676,360	None	\$2,676,360

The District did not request or receive any other proposals.

Funding Source/Fiscal Impact

The funding for this project is through Measure H, line item 10 on the Mission College Project Priority List.

Reference(s)

This item is associated with the implementation of the MC Facilities Master Plan, the WVMCCD 5-Year Construction Plan, and the Measure H Project Priority List. Also, Government Code Sections 4217.16 and 4217.18.

Background/Alternatives

On December 6, 2011, the Board approved the contract with Roebbelen Contracting in the amount of \$44,781,514 for the Main Building Replacement project at Mission College. Part of this project is installation of a vertical closed-loop geothermal system. The geothermal system is part of the heating, ventilating, and air conditioning (HVAC) system that uses the earth to heat and cool the fluid of the HVAC system, saving substantial energy for the District. The original geothermal system consisted of 440 vertical bores, 180 feet deep. During installation of the system, several bores leaked due

to very active artesian wells in the area. The Santa Clara Water District pulled the permit and required that the District redesign the system to avoid the artesian wells in the area.

After investigating alternate geothermal systems, the design team recommended a new horizontal closed-loop system. The new horizontal geothermal system will consist of 50 horizontal bores, 820 linear feet long at a depth of 15 feet; plus 60 horizontal bores, 820 linear feet long at a depth of 30 feet. By installing the bores at a depth of 15 feet and 30 feet, the new system will avoid the artesian wells and the Santa Clara Water District will reissue the permit and work can resume. This new system will provide substantial energy savings to the District in the operation of the HVAC system for the new Main Building Replacement project at Mission College.

Roebbelen Contracting and the District have been unable to reach an agreement on a contract amendment for the deletion of portions of the previously designed vertical closed-loop geothermal system and the addition of the newly designed horizontal closed-loop geothermal system, which requires, among other things, the replacement of Roebbelen Contracting's prior geothermal subcontractor due to its inability to construct the newly designed horizontal closed-loop geothermal system.

Government Code Sections 4217.16 and 4217.18, allow public agencies to negotiate and award a contract for the installation of alternate energy equipment on the basis of experience of the contractor, the type of technology employed by the contractor, the cost to the local agency, and any other relevant considerations. Precision Directional Boring was recommended to the District by the District's geothermal consultant, who worked with Precision Directional Boring on construction of a similar horizontal closed-loop geothermal system. Precision Directional Boring performed the initial horizontal test bores for the District's horizontal closed-loop geothermal system, and during that work exhibited substantial knowledge and expertise regarding horizontal closed-loop geothermal systems. In addition, one of the key relevant considerations is Contract Time, because additional delay in the construction of the geothermal system will impact the Project Schedule and completion of the Main Building Replacement Project. Precision Directional Boring has proposed a construction schedule that minimizes any impact and delay to the Project Schedule and completion of the Main Building Replacement Project, and has stated its commitment to the timely completion of the geothermal system.

Coordination

This project includes work of the Executive Director of Facilities, Construction and Maintenance; Director of Construction; Vice Chancellor of Administrative Services; and Gilbane Building Company.

Follow-up / Outcome

Upon Board approval, a Notice to Proceed will be issued to Precision Directional Boring in the amount of \$2,676,360 for the new geothermal system at Mission College.