New Facility Will Reduce Groundwater “Hardness”  
Zone 7 Awards Construction Contract

Construction of a facility that will reduce the “hardness” of a portion of the Valley’s underground drinking water supplies by removing excess minerals will get under way in June now that the Zone 7 Water Agency board has approved a construction contract.

The board on Wednesday night awarded a contract for just under $24 million to GSE Construction of Livermore, which submitted the lowest bid of three firms vying for the contract. The Mocho Groundwater Demineralization Plant, to be built in northern Pleasanton, is expected to be operational in May 2009. A second demineralization plant will be constructed in the future to treat additional groundwater.

Zone 7 is the water wholesaler for Pleasanton, Livermore and Dublin. It has been working with all of its retailers to improve the quality of both its groundwater, which is delivered primarily to the western side of its service area in Pleasanton and Dublin, and its imported surface-water supplies from the State Water Project.

High content of calcium, magnesium and other minerals in groundwater can create water spots, coat plumbing fixtures with deposits and make it more difficult to get clothes clean. While it also can affect the taste of water, it is safe to drink at the levels found in Zone 7’s groundwater.

The demineralization plant will use reverse-osmosis membrane technology to treat up to 7.7 million gallons of groundwater a day pumped from a series of nearby existing Zone 7 wells. After the salt concentrate is removed, about 6.1 million gallons per day of treated water will be available for blending with other supplies prior to delivery to retailers. Zone 7 has partnered with the Dublin San Ramon Services District (DSRSD), a water retailer and the wastewater services provider for the western portion of the Valley, to
discharge up to 1.6 million gallons per day of salt concentrate to the San Francisco Bay via the Livermore Amador Valley Water Management Agency (LAVWMA) export pipeline.

The project is intended to begin the process of improving the overall salt balance of the groundwater basin, a critical source of water both during the summer when season water demands are the highest, and in times of drought. Improving the salt balance also allows the Valley to use recycled water for outdoor landscaping, the “uninterruptible water supply.”

“A dry year like this reminds us of how important our groundwater basin is,” said board President Jim Concannon. “Not only does this project reduce the hardness of water delivered to customers, it ensures the longterm viability of the basin as a supply source, primarily for use during droughts.”

Total project cost has been estimated at $36.7 million, including costs for planning, design, construction and construction management. Half will be funded by water rates and half by connection fees charged to new development. Planning is already under way for the second demineralization facility of roughly the same size, expected to be in service by 2012. That project will be funded entirely by connection fees.

The Zone 7 Water Agency is one of the 10 active zones of the Alameda County Flood Control and Water Conservation District. The District was established by the State Legislature in October 1949 to solve problems of flooding, drainage, channel erosion and water supply and conservation in Alameda County. In 1957, by popular vote, Zone 7 became a special district governed by a seven-member board of directors. Along with flood protection, Zone 7 supplies water to all of eastern Alameda County and a population of more than 190,000. Treated water is sold wholesale to local retailers, including the cities of Livermore and Pleasanton, the Dublin San Ramon Services District, and the California Water Service Company. Zone 7 also distributes untreated water to local agriculture operations and golf courses.