

By: Thom McGraham

December, 2006



## **WHITE HILLS, Ariz.**

- Having received a letter of water adequacy approval recently from the State of Arizona - for development of 25,000 homesites on 35,000 acres of land in the Ranch at White Hills on Highway 93 about 27 miles south of Hoover Dam, developers Leonard and Susan

Mardian are focusing on a masterplan, road engineering work and other required projects to ensure model homes in their development will be available for sale in 2008 when the new bridge at Hoover Dam is completed.

With a new bridge in place in about two years, driving time for residents living in the The Ranch at White Hills - to Las Vegas - would be reduced to 45 minutes. In the meantime, "it will take us that long just to get all of our approvals from the County to build the water and sewer treatment plant, to get all of the roads built and to start on the housing, to record our subdivision and to do all of the necessary legwork - that's what we are processing," said Susan Mardian.

The Ranch at White Hills is a 25,167-acre, master-planned community within the vast 700,000-acre Mardian Ranch, a land mass extending from the Colorado River north to Lake Mead, to an Indian reservation east and south to Dolan Springs. The White Hills ranch project extends across 43 different sections of land east of Highway 93 about midway between Las Vegas, Nev., and Kingman, Ariz. It is one of three "ranch" developments in the Mardian Ranch master plan and its initial phase will include 1,800 acres of land in the immediate vicinity of White Hills Road east of Highway 93.

Since receiving water adequacy approval from the Arizona Department of Water Resources, the Mardians have submitted a similar, second application to the state regulatory agency seeking water adequacy approval for an additional 25,000 to 35,000 homes in The Ranch at White Hills.

"We've drilled all of the wells, done all of the testing and submitted everything to the ADWR and we are waiting approval on that one (second application)," said Susan Mardian. Estimated cost of installing the 30 wells is in the \$8-\$9 million range. Thirteen of the 30 wells drilled inside the Mardian Ranch were drilled in the Ranch at White Hills. "So there are a lot of wells out there - and a lot of water," said Susan.

From the environmental impact perspective, The Ranch at White Hills is designed to be compatible with its scenic desert surroundings and one of the many projects the project's consultants are implementing is a water recharge system. "When the rain hits the ground, it is recharged back into the aquifers that are below the ground. It takes a period of time, about 30 years, to recharge it back into the aquifers, so, 30 years from now, or project will be putting as much water into the ground as we are taking out of the ground. It will equalize it," Susan Mardian explained.

"We're using grey water (effluent via the Mardian's Double Diamond Utility waste water treatment system) for the golf courses." The Ranch at White Hills will also utilize a water-saving technique used by Israel in the desert for centuries - cisterns, which will be installed on the tops of buildings in the large project to "catch the rain water and use it directly for landscaping." Susan said one of the Mardian group's consultants, Elno Roundy, a retired specialist with the Bureau of Land Management (BLM), came up with the strategy which has proven practical and successful in desert climates.

Homes in The Ranch at White Hills will be Energy Star dwellings and will therefore utilize solar energy. Another consultant on the White Hills ranch project is Kathy Tackett-Hicks who, among her many duties, oversees the energy efficiency aspects of the project. Tackett-Hicks operated her own successful consultant firm before joining the Mardian team, and out of a nucleus of 22 professionals comprising the team, she is one of 16 women.

Tackett-Hicks said the water recharge system is an "aggressive" program and that she and other consultants with the Mardian Group have been working with various levels of county, state and federal agencies to "put together a program that is going to work" which involves management of a huge, massive watershed.

She said treated effluent from the Double Diamond waste water treatment system will be used for all of the open turf areas in The Ranch at White Hills community. "Everything that goes into the waste water treatment plant will be treated to an A-plus standard which means that it can be directly recharged back into the groundwater (denitrification) or used to water our turf areas." The initial sewage treatment facility will be designed so it can be expanded as the White Hills project is built out in phases and, eventually, a regional plant will be designed and constructed, she said.