

April 12, 2006

Mr. Grant Pinkerton
P & Z Director
Chavez County
P.O. Box 1817
Rowell, New Mexico 88202-1817

CERTIFIED MAIL
RETURN RECEIPT
REQUESTED

Re: The Ranches at Antelope Run

Dear Mr. Pinkerton:

The Water Use & Conservation/Subdivision Review Bureau of the Office of the State Engineer has reviewed the referenced subdivision proposal pursuant to the Chavez County Subdivision Regulations, the New Mexico Subdivision Act and the OSE Rules and Regulations Governing the Appropriation and Use of Ground Water in New Mexico.

It is the opinion of this office that the subdivider's water supply proposal satisfies the requirements of Appendix C-1, Sections 2, 3 and 6.3 of the County Regulation. Accordingly, a **positive** opinion is hereby issued.

A staff memorandum providing the specific comments and recommendations is attached for your information. If you have any questions, please call Julie Valdez at 505-827-6790.

Sincerely,

John W. Longworth, P.E.
Water Use & Conservation/Subdivision Review Bureau Chief

Encl.

cc: OSE Water Rights Division, Roswell Office

DATE: April 12, 2006
TO: John W. Longworth
FROM: Julie Valdez
CC: Mara Smith
SUBJECT: The Ranches at Antelope Run Subdivision

SUMMARY

On March 15, 2006, the Office of the State Engineer (OSE) received a request to review the proposal for the Ranches at Antelope Run, a Type 3 subdivision. The proposal is a request to subdivide 76.7 acres into 14 lots, with sizes ranging between 7.1 and 5 acres. The property is located in Roswell, adjacent to the intersection of Pine Lodge Road and Montana Avenue within Section 8, Township 10 South, Range 24 East, NMPM. Water will be supplied by individual domestic wells.

The documentation submitted to this office consists of a Disclosure Statement, Plat Maps and a Water Availability Assessment.

This proposal was reviewed pursuant to the Chavez County Subdivision Regulations, the New Mexico Subdivision Act and the OSE Rules and Regulations Governing the Drilling of Wells and the Appropriation and Use of the Ground Water in New Mexico. The water supply proposal satisfies the requirements of Appendix C-1, Sections 2, 3 and 6.3 of the County Regulation. Therefore, a **positive** opinion should be issued.

WATER DEMAND ANALYSIS & WATER CONSERVATION

The developer has quantified the maximum annual water requirements for the subdivision pursuant to Appendix C-1, Section 3.3.2 of the Chavez County Regulations for both indoor and outdoor purposes following the procedures set forth in OSE Technical Report 48 (Wilson, 1996). The maximum water demand was quantified as 1.01 acre-feet per year per lot or 15 acre-feet per year for the entire subdivision, assuming 4 persons per dwelling (at 85 gpcd), 5000 square feet of Bermuda grass and 5% for distribution system losses.

On January 3, 2006, the State Engineer released proposed regulations on the Use of Public Underground Water for Household and Domestic Use. The proposed Regulations will replace Article 1-15 of the existing Rules and Regulations Governing the Drilling of Wells and the Appropriation and Use of the Ground Water in New Mexico. The maximum permitted diversion of Under Ground Water from a 72-12-1.1 well shall not exceed 1.0 acre-foot per annum. For more details regarding the matter please visit our website at ose.state.nm.us.

Therefore, it is recommended that the developer limit the outdoor water use total to 800 square feet per parcel and quantify irrigation water requirements accordingly. The limitations

on irrigated area should be specified under item # 17 of the Disclosure Statement to reasonable notify the amount of water used at each residence does not exceed the estimated amount. This restriction may be stated as follows: *“The total irrigated area shall not exceed 800 square feet per lot. The 800 square feet may be planted in any combination of trees, shrubs, annuals, and perennials, grasses, and garden. Grasses should be selected that are well adapted to local climatic conditions, and non-native grasses are discouraged. Low-water use landscaping techniques applying the principles of xeriscape shall be utilized. Drip irrigation is encouraged whenever possible”*. Finally, this office suggests that other outdoor uses such as swimming pools, hot tubs, water fountains, and decorative ponds be restricted.

WATER AVAILABILITY ASSESSMENT

Water will be supplied by individual domestic wells. The owners of each lot will be responsible for drilling their own well.

The developer states under item #19 of the disclosure statement, that the average depth to water is 135 feet and the minimum and maximum depth to water is between 120 to 150 feet. The well estimated yield is from 50 to 100 gallons per minute based on the 16 well logs from nearby domestic wells. After reviewing the 16 well logs provided by the developer, it was found that the minimum and maximum depth to water is between 70 to 198 feet, not between 120 and 150 feet.

Item # 20 if the Disclosure Statement requires the subdivider to state the life expectancy of the water supply for the subdivision under full development; the subdivider’s response is that the life expectancy of the water supply is infinite, based on the increasing water levels in the San Andres aquifer. This office agrees that water in sufficient quantity is available for the proposed subdivision, but recommends that the developer revise the statement contained under Item # 20 of the Disclosure Statement. Statements, of “infinite” water supplies are unsubstantiated.

The Chavez County Regulations require the developer to demonstrate that groundwater will be continuously available to the subdivision for a period of 40 years. Item # 20 of the Disclosure Statement may be stated as follows: *“The San Andres aquifer recharge has exceeded the aquifer outflow for approximately the past 30 years. The increasing potentiometric surface elevation and increase in aquifer storage is expected to be managed at these levels for the next 40-years. This is based on the fact that there are no new appropriations within this basin and that it is not a mined groundwater system. Therefore, groundwater sufficient to meet the maximum annual water requirements of the subdivision is physically available and can be practically recovered to sustain the development for a continuous period of forty years”*.