April 10, 2007

Mr. Luis Marmolejo
Doña Ana County
Planning and Development Department
845 N. Motel Blvd.
Las Cruces, NM 88007

CERTIFIED MAIL
RETURN RECEIPT
REQUESTED

Re: Cielo Grande Subdivision

Dear Mr. Marmolejo:

The Water Use & Conservation/Subdivision Review Bureau of the Office of the State Engineer has reviewed the referenced subdivision proposal pursuant to the Doña Ana County Subdivision Regulations and the New Mexico Subdivision Act.

Based on the information provided, this office cannot determine that the subdivider can furnish water sufficient in quantity to fulfill the maximum annual water requirements of the subdivision, including water for indoor and outdoor domestic uses, and that the subdivider can fulfill the proposals in his disclosure statement concerning water, excepting water quality. Accordingly, a **negative** opinion is issued.

A staff memorandum providing specific comments is attached for your information. If you have any questions, please call Jerry Keller at 505-827-3845.

Sincerely,

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

Encl.

cc: OSE Water Rights Division, Las Cruces Office

JK:jk

MEMORANDUM
New Mexico Office of the State Engineer
Water Use and Conservation Bureau

DATE: April 9, 2007
TO: John Longworth, P.E. Water Use & Conservation Bureau Chief
FROM: Jerry Keller, Senior Water Resource Specialist
SUBJECT: Cielo Grande Subdivision in Doña Ana County

SUMMARY

On March 14, 2007 the Office of the State Engineer (OSE) received additional/revised information for the Preliminary Plat for Cielo Grande, a Type Two Subdivision. This subdivision was previously submitted in March 2005 under the name of the Tierra Grande Subdivision. The proposal is a request to subdivide a 128.6-acre parcel into 25 residential lots ranging in size from 3-acres to 5-acres each. The proposed water supply is 72-12-1 individual wells. The property is located approximately 2.5 miles east of Vado, on Santana Road, between Vista del Rey and High Valley Road, in Section 12, Township 25 South, Range 3 East, NMPM.

This office issued a negative opinion for the Tierra Grande Subdivision on March 11, 2005 and August 17, 2005 and for Cielo Grande Subdivision on September 19, 2006. Please see the previous letters for specific details.

The water supply documents submitted to this office consist of a Disclosure Statement, Water Supply Plan, and a Plat Map.

This proposal was reviewed pursuant to the Doña Ana County Subdivision Regulations (Regulations) and the New Mexico Subdivision Act (Act). The water supply proposal is not in compliance with the requirements of Section 14.3.5.B of the Regulations and Section 47-6-11-F (1) of the Act. Accordingly a **negative** opinion should be issued.

WATER DEMAND ANALYSIS AND WATER CONSERVATION

The current proposal contains a revised detailed water demand analysis. The developer has quantified the maximum annual water requirement for the subdivision for indoor and outdoor use, excluding fire flow, following the procedure set forth in OSE Technical Report 48 (Wilson, 1996), as 0.39 acre-feet per lot and 9.7 acre-feet for the subdivision. The assumptions utilized for the analysis are three persons per dwelling unit with evaporative cooling, water softening, and a total landscape area of 800 square feet consisting of 625 square feet of Bermuda grass, 157 square feet of trees, and 18 square feet of horticultural plants.

Under Item No. 17 of the Disclosure Statement the subdivider states the maximum annual water requirement for both indoor and outdoor purposes for each parcel in a residential subdivision shall be 0.67 acre-feet per year.

The Disclosure Statement should reflect the water quantity estimates contained in the water

demand analysis.

The proposal does not contain restrictive covenants or any method to enforce the water use restrictions contained in the Water Demand Analysis.

WATER AVAILABILITY ASSESSMENT

The proposed water supply for the subdivision is individual 72-12-1 domestic wells to be constructed by the purchaser.

The subdivider has not addressed previous OSE comments. No additional information is contained in the current Water Supply Plan.

The Water Supply Plan does not include at least one well log from an on-site well or from an existing nearby well completed in geologic conditions representative of the conditions within the proposed subdivision, a description of the water bearing formation including a statement of the maximum and minimum depths to water in the subdivision and the basis for these statements, and a statement of the estimated yield of wells in gallons per minute based upon well logs from existing nearby wells.

The minimum recommended construction parameters are not in agreement with the data presented. Four wells are identified in the OSE WATERS database Water Column Report for Section 12. The wells range in depth from 530 feet to 613 feet. The average depth of wells per the recommendations is 200 to 400 feet. No information is provided to support the estimated yield of 25 to 50 gpm.

The Water Supply Plan does not meet the minimum requirements of the Section 14.3.5.B of the Regulations.