



COLORADO

Division of Water Resources

Department of Natural Resources
Colorado Ground Water Commission

February 27, 2020

Kari Parsons
El Paso County, Planning and Community Development
DSDcomments@elpasoco.com

RE: Bent Grass Residential Filing No. 2
Part of the SE ¼, Sec. 1, T13S, R65W, 6th P.M.
Water Division 2, Water District 10
Upper Black Squirrel Creek Designated Basin

Dear Ms. Parsons:

We have received your February 12, 2020 submittal of additional information concerning the above-referenced proposal for the subdivision of 50.8 acres into 178 residential lots. This office previously commented on the subject proposal in a letter dated September 6, 2019, this letter supersedes the September letter.

Water Supply Demand

According to the Water Supply Information Summary and the Bent Grass Residential Filing No. 2 Water Resources Report & Wastewater Treatment Report by JDS-Hydro Consultants revised October 2019 ("Water Resources Report"), the total estimated water requirement for the 178 residential lots for Filing No. 2 is 62.83 acre-feet per year for a 300 year water supply.

Source of Water Supply

Woodmen Hills Metropolitan District ("District") is the proposed water supplier. The District has provided a letter dated October 22, 2019 committing to serve 178 residential lots with a water commitment of 62.83 acre-feet per year.

The District's sources of water are a combination of bedrock aquifer allocations from the Denver Basin as well as alluvial sources. The State Engineer's Office does not have evidence regarding the length of time for which the bedrock aquifer sources will be a physically and economically viable source of water. According to 37-90-107(7)(a), C.R.S., "Permits issued pursuant to this subsection (7) shall allow withdrawals on the basis of an aquifer life of 100 years." Based on this allocation approach, the annual amounts of water determined are equal to one percent of the total amount, as determined by rule 5.3.2.1 of the Designated Basin Rules, 2 CCR 410-1. Therefore, the water may be withdrawn in those annual amounts for a maximum of 100 years.

In the *El Paso County Land Development Code*, effective November, 1986, Chapter 5, Section 49.5, (D), (2) states:

"- Finding of Sufficient Quantity - The water supply shall be of sufficient quantity to meet the average annual demand of the proposed subdivision for a period of three hundred (300) years."

The State Engineer's Office does not have evidence regarding the length of time for which the bedrock aquifer sources will "meet the average annual demand of the proposed subdivision." However, treating El Paso County's requirement as an allocation approach based on three hundred



years, the annual amounts of water available from the bedrock aquifers that may be withdrawn from a maximum period of 300 years are equal to one-third of one percent of the total amount.

Information available in our files indicates the District's water supply totals approximately 1,426 acre-feet/year for a period of 300 years (987 acre-feet/year from bedrock aquifers and 439 acre-feet/year from the alluvial aquifer), and it has approximately 936 acre-feet/year committed to supplying subdivisions and 30 acre-feet/year committed to replacement obligations, for a total commitment of 966 acre-feet/year.

The uncommitted annual water supply of 460 acre-feet/year is more than the estimated annual demand of 62.83 acre-feet/year for Bent Grass Residential Filing No. 2 Subdivision.

According to the Water Resources Report the District has a total legal supply of 3500.44 acre-feet based on a 100-year allocation approach. That quantity includes a claim for 18.28 acre-feet from the Denver aquifer associated with Determination of Water Right no. 1314-BD. According to Determination of Water Right no. 1314-BD the allowed average annual amount of withdrawal of ground water from the aquifer shall not exceed 12.7 acre-feet which would be 1,270 total based on a 100 year allocation approach. The Water Resources Report should be modified to correctly state the available water. In addition, the Water Resources Report claims water associated with Determination of Water Right Nos. 503-BD, 504-BD and 505-BD. According to those Determination of Water Rights the place of use of the water is limited to the 54.9 acres of overlying land further described in the determinations. Such water should be removed from the available water supplies until such time as the place of use of the water is changed to allow use within the District. The District should also provide information showing the water rights associated with Determination of Water Right Nos. 503-BD, 504-BD, 505-BD, 1312-BD, 1313-BD and 1314-BD were transferred to the District.

State Engineer's Office Opinion

Based upon the above and pursuant to Section 30-28-136(1)(h)(II), C.R.S., it is our opinion that the proposed water supply is adequate and can be provided without causing injury to decreed water rights.

Our opinion that the water supply is adequate is based on our determination that the amount of water required annually to serve the subdivision is currently physically available, based on current estimated aquifer conditions.

Our opinion that the water supply can be provided without causing injury is based on our determination that the amount of water that is legally available on an annual basis, according to the statutory allocation approach, for the proposed uses on the subdivided land is greater than the annual amount of water required to supply existing water commitments and the demands of the proposed subdivision.

Our opinion is qualified by the following:

The Ground Water Commission has retained jurisdiction over the final amount of water available pursuant to the above-referenced decree, pending actual geophysical data from the aquifer.

The amounts of water in the Denver Basin aquifer, and identified in this letter, are calculated based on estimated current aquifer conditions. For planning purposes the county should be aware that the economic life of a water supply based on wells in a given Denver Basin aquifer may be less than the 100 (or 300) years used for allocation due to anticipated water level declines. We recommend that the county determine whether it is appropriate to require

development of renewable water resources for this subdivision to provide for a long-term water supply.

Should you have any questions, please contact Ailis Thyne at 303-866-3581 ext. 8216.

Sincerely,

A handwritten signature in black ink that reads "Keith Vander Horst". The signature is written in a cursive, flowing style.

Keith Vander Horst, P.E.
Chief of Water Supply, Basins

Ec: Upper Black Squirrel Creek Ground Water Management District