



January 31, 2022

Ryan Howser
El Paso County Development Services Department
DSDcomments@elpasoco.com

RE: Mountains Edge Subdivision, Final Plat
Section 13, T12S, R63W, 6th P.M.
Water Division 2, Water District 10
Upper Black Squirrel Creek Designated Basin

Dear Ryan Howser:

We have reviewed your January 11, 2021 submittal concerning the above referenced proposal for the subdivision of 30.613 acres into 5 residential lots. We previously commented on this development by letters dated April 26, 2010, September 30, 2010, October 12, 2018, February 25, 2020 and November 21, 2021. At the time of our prior reviews the proposal was to divide 40 acres into 5 residential lots, however 9.387 acres has been removed from the land to be subdivided. According to information provided by the County the remaining 9.387 acre parcel is not part of this subdivision, is not a legal tract of land and will not become a legal tract of land as a result of this subdivision.

Water Supply Demand

According to the Mountains Edge Filing 1 subdivision Water Resources Report dated May 12, 2021 and revised December 8, 2021 (“Water Resources Report”) provided with the submittal, the estimated water requirements total 2.28 acre-feet annually (0.456 acre-feet/year per lot), for in house use; a maximum of 3,000 square feet of landscape/irrigation of lawn and gardens; and watering of 2 domestic animals per lot.

Source of Water Supply

The proposed source of water supply is individual on-lot wells producing from the nontributary Arapahoe aquifer pursuant to Determination of Water Right No. 1484-BD.

Determination of Water Right no. 1484-BD was issued by the Ground Water Commission (“Commission”) on March 12, 2008 for an allowed average annual amount of withdrawal of groundwater of 13.3 acre-feet from the Arapahoe Aquifer (based on an aquifer life of 100 years) to be used on 40 acres generally described as the N1/2 of the N1/2 of the SW1/4, Section 13, Township 12 South, Range 63 West, 6th P.M. (Overlying Land). The 30.613 acres that are the subject of this referral are within the 40 acres of Overlying Land.

According to the Water Resources Report, the 13.3 acre-feet of allowed annual withdrawal allocated in 1484-BD is available for use by this proposed subdivision. The Water Resource Report further states that no water allocated under Determination of Water Right No. 1484-BD was transferred to the owner of the 9.387 acre parcel described above.

The proposed source of water for this development is a bedrock aquifer allocation from the Denver Basin. 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 in Determination of Water Right No. 1484-BD is 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.

The *El Paso County Land Development Code*, Section 8.4.7.(B)(7)(b) states:

“(7) Finding of Sufficient Quantity

(b) Required Water Supply. The water supply shall be of sufficient quantity to meet the average annual demand of the proposed subdivision for a period of 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 allowed average annual amount of withdrawal of 13.3 acre-feet per year from the Arapahoe aquifer would be reduced to one third of the allocation, or 4.43 acre-feet per year. As a result, the water may be withdrawn in that annual amount for a maximum of 300 years, and is sufficient to meet the proposed on lot demands.

According to the Water Resource Report, well 225983 lies within the property boundaries of the proposed Mountains Edge subdivision but will not be used as a water supply source for the proposed Mountains Edge subdivision. The Applicant will plug and abandon the well.

Applications for on lot well permits, submitted by an entity other than the Determination of Water Right applicant (TKB Properties, LLC), must include evidence that the applicant has acquired the right to the portion of water being requested on the application.

State Engineer’s Office Opinion

Based upon the above and pursuant to Section 30-28-136(1)(h)(I), it is our opinion that the proposed water supply is adequate and can be provided without causing injury to decreed water rights, **as long as well 225983 is plugged and abandoned prior to subdivision approval.**

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.

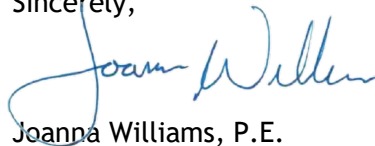
Our opinion is qualified by the following:

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. The source of water is from a non-renewable aquifer, the allocations of which are based on a 100 year aquifer life. 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 years (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.

If you, or the applicant, have any questions, please contact me at 303-866-3581 ext. 8265 or Joanna.Williams@state.co.us.

Sincerely,

A handwritten signature in blue ink that reads "Joanna Williams". The signature is fluid and cursive, with the first name "Joanna" written in a larger, more prominent script than the last name "Williams".

Joanna Williams, P.E.
Water Resources Engineer

Ec: Upper Black Squirrel Creek GWMD
Well permit no. 225983
SEO Subdivision referral no. 22285