

October 10, 2023

Kylie Bagley, Project Manager El Paso County Development Services Department Transmitted via the EPC EDARP Portal

Re: Falcon Highlands Commercial Final Plat (File # SF2240)

Part of the NE ¼ of Sec. 12, Twp. 13S, Rng. 65W, 6<sup>th</sup> P.M.

Water Division 2, Water District 10

Upper Black Squirrel Creek Designated Basin

Dear Kylie Bagley:

We have reviewed the above referenced referral concerning the development of a U-Haul commercial business on 11.5 within Falcon Highlands Subdivision. Water supply to the lot will be provided by Falcon Highlands Metropolitan District and wastewater will be handled by the Woodmen Hills Metropolitan District.

## **Water Supply Demand**

According to the submittal, the anticipated water demand at the commercial site be 0.917 acre-feet per year which is equivalent to three (3) single family equivalents (SFE's).

## Source of Water Supply

The proposed water supplier is the Falcon Highlands Metropolitan District (District). According to the letter dated December 20, 2022, the District is committed to providing water to the commercial lot. Recent information provided from the District states that the District currently has a supply of 710 SFEs. Information available in our office indicates that the District has a current commitment demand of 500 SFEs or 150 acre-feet per year. Therefore the uncommitted supply is adequate to serve the additional 3 SFEs.

According to the June 2023 Falcon Highlands Water Resources Report prepared by JDS-Hydro Consultants Inc. ("Report"), the District owns and/or controls various Determinations of Water Rights water court decrees, summarized in Table 3.2 of the Report, as follows: nontributary and not-nontributary groundwater allocated under Determination of Water Right nos. 141-BD, 142-BD, and 143-BD; nontributary groundwater decreed in Division 2 Water Court case nos. 83CW134 and 01CW065; and not-nontributary groundwater decreed in case nos. 83CW133 (augmented in case no. 06CW102) and 83CW135. The District has constructed wells under the following permit nos.: 57949-F (Determination of Water Right no. 141-BD), 57950-F (Determination of Water Right no. 142-BD), and 66364-F (Div. 2 Case No. 83CW134).

According to the Report, the total supply available to the District based on a 100-year supply is 641.62 acrefeet per year or based on a 300-year water supply is 213.87 acre-feet per year (approximately 713 SFEs)<sup>2</sup>, which does not account for relinquishment requirements.

According to information available to our office, the total supply available to the District based on a 100-year supply is 641.62 acre-feet per year or based on a 300-year water supply is 202.24 acre-feet per year<sup>2</sup>, which do not account for the relinquishment requirements. Accounting for the relinquishment requirements

<sup>&</sup>lt;sup>2</sup> This amount does not include the water available under the 06CW102 augmentation plan since the plan is only approved for a period of 100 years.



<sup>&</sup>lt;sup>1</sup> The Applicant is using a conversion rate is 0.30 acre-feet per year per SFE based on current use data from the Falcon Highlands Metropolitan District.

which sum to 15.9 acre-feet per year, our office calculates that the total supply available to the District based on a 100-year supply is 625.7 acre-feet/year. For nontributary (NT) designated groundwater allocated under Determination of Water Right nos. 141-BD and 142-BD, the relinquishment requirement was not accounted for by the Applicant because: "Roughly 90% of the water from the use of the NT water is discharged back into the UBS basin via the Woodmen Hills WWTP. Therefore, much less than 98% of the water is actually consumed, and full withdrawal is allowable." For purposes of this review, this calculation is acceptable so long as the District complies with the relinquishment requirement and all other conditions of applicable permits and determinations. Additionally, the 34.90 acre-feet per year of water adjudicated in Division 1 Water Court case no. 83CW133 and augmented in case no. 06CW102 was augmented only for a period of 100 years, however the Applicant has counted this water as part of their 300-year supply. For purposes of this review, this office will not considered the 06CW102 augmented water in the District's 300-year supply until the augmentation plan is amended to allow withdrawal for a period of 300 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 this source will "meet the average annual demand of the proposed subdivision." However, treating El Paso County's requirement as an <u>allocation</u> approach based on 300 years, the allowed average annual amount of withdrawal of 641.62 acre-feet/year would be reduced to one third of that amount, or 202.24 acre-feet per year<sup>4</sup>, which is greater than the total water demand on the District of 150.917 acre-feet per year, including the demand from this commercial business. As a result, the water may be withdrawn in that annual amount for a maximum of 300 years.

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

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- (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 this source will "meet the average annual demand of the proposed subdivision." However, treating El Paso County's requirement as an <u>allocation</u> approach based on 300 years, the allowed average annual amount of withdrawal would be reduced to one third of that amount, which is <u>greater</u> than the annual demand of 1.96 acre-feet for this development. As a result, the water may be withdrawn in that annual amount for a maximum of 300 years.

## State Engineer's Office Opinion

Based upon the above and pursuant to sections 30-28-136(1)(h)(l) and 30-28-136(1)(h)(ll), 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 determinations of water rights and permits, pending actual geophysical data from the aguifer.

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.

## **Additional Comments**

According to the submitted material, storm water detention structure(s) will be developed on the site. The Applicant should be aware that, unless the structures can meet the requirements of a "storm water detention and infiltration facility" as defined in Designated Basin Rule 5.11, the structures may be subject to administration by this office. The Applicant should review Rule 5.11 to determine whether the structures meet the requirements of the Rule and ensure any notification requirement is met.

Please contact Ivan Franco at (303) 866-3581 x8243 or at ivan.franco@state.co.us with questions.

Sincerely,

Ioana Comaniciu, P.E. Water Resource Engineer

Ec: Subdivision File No. 30975

FHMD File

Upper Black Squirrel Ground Water Management District