

June 21, 2023

Ryan Howser, Project Manager El Paso County Community & Development Services Transmitted via email: <u>ryanhowser@elpasoco.com</u>

Re: Falcon Highlands South Filing No. 3 - Phase 1 (3<sup>rd</sup> Letter) Case No. PUDSP225, Planned Unit Development, Preliminary Plan & Early Grading Part of SW ¼ of Section 12, Township 13 South, Range 65 West, 6<sup>th</sup> P.M. Upper Black Squirrel Creek Designated Basin Water Division 2, Water District 10

Dear Ryan Howser:

We have reviewed the additional information provided on June 16, 2023 concerning the above-referenced proposal for Phase 1 of the Falcon Highlands South Planned Unit Development, Preliminary Plan and Early Grading on approximately 17 acres in the SW ¼ of Section 12, Township 13 South, Range 65 West, 6<sup>th</sup> P.M. This phase proposes to plat the first 50 of 378 lots known as Falcon Highlands Filing No. 3. The Applicant is requesting a finding of sufficiency of water supply for the first 50 lots. The comments contained in this letter only address the water supply for the first phase concerning 50 lots and do not provide an opinion of adequacy on all phases of Filing 3.

The land within Filing No. 3 will be developed into 378 single-family residential lots, trail corridors, open space, park space, and for stormwater facilities in 4 phases on 125.56 acres. Falcon Highlands Filing No. 3 is part of the Falcon Highlands Sketch Plan, originally approved in 2004. The sketch plan encompassed 240 acres, most of which has been developed into single-family residential in Filing Nos. 1 and 2.

This office previously provided comments on the Falcon Highlands Filing No. 3 (referral no. 28927) on July 25, 2022 and specifically for Phase 1 of Filing No. 3 (this referral no. 30472) on May 5, 2023. This letter supersedes our May 5, 2023 letter concerning Phase 1 of Filing No. 3.

## Water Supply Demand

According to previously provided referral materials, the estimated water demand for the 50 lots is 13,391 gallons per day or 15 acre-feet per year [50 single-family equivalents (SFEs)<sup>1</sup>].

## Source of Water Supply

The proposed water supply is service provided by the Falcon Highlands Metropolitan District ("District"). According to the letter dated April 18, 2023 from the District previously provided to this office, Filing No. 3 is within its boundaries and is eligible to receive water service. The letter commits to providing service for 50 SFEs for the first 50 lots of Phase I.

The April 18, 2023 letter states that the District currently has a supply of 710 SFEs. The June 16, 2023 letter from Ryan Mangino states that the District is currently committed to serving Rolling Thunder Business Park, Falcon Highlands Marketplace, The Shoppes, and Meridian Crossing, with a total demand of 450 SFEs

<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.



or 135 acre-feet per year.<sup>2</sup> Therefore the uncommitted supply is adequate to serve the additional 50 SFEs; however the uncommitted supply is not adequate to serve all 378 SFEs associated with the entire Filing 3. The District is seeking additional water rights to meet its commitments, including the development of Arapahoe Well No. 2 in 2023.

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 acrefeet per year (approximately 713 SFEs)<sup>3</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 100year supply is 641.62 acre-feet per year or based on a 300-year water supply is 202.24 acre-feet per year<sup>4</sup>, which do not account for the relinquishment requirements. Accounting for the relinquishment requirements 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 300year 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 acre-feet per year, including the demand from this Filing 3 Phase 1. As a result, the water may be withdrawn in that annual amount for a maximum of 300 years.

<sup>&</sup>lt;sup>2</sup> Based on a conversion rate of 0.30 acre-feet per year per SFE.

<sup>&</sup>lt;sup>3</sup> Based on a conversion rate of 0.30 acre-feet per year per SFE.

<sup>&</sup>lt;sup>4</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.

## State Engineer's Office Opinion

Based upon the above and pursuant to sections 30-28-136(1)(h)(I) and 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. 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, stormwater detention structure(s) will be developed on the site. The Applicant should be aware that, unless the structure can meet the requirements of a "storm water detention and infiltration facility" as defined in Designated Basin Rule 5.11, the structure may be subject to administration by this office. The Applicant should review Rule 5.11 to determine whether the structure meets the requirements of the Rule and ensure any notification requirement is met.

Please contact Wenli Dickinson at (303) 866-3581 x8206 or at Wenli.Dickinson@state.co.us with questions.

Sincerely,

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Ioana Comaniciu, P.E. Water Resource Engineer

Ec: Referral No. 30472 FHMD File Upper Black Squirrel Ground Water Management District