

December 10, 2018

Nina Ruiz
El Paso County Development Services Department
Transmission via email: NinaRuiz@elpasoco.com

**RE: Flying Horse North Filing 1-Lot 35 Vacation and Re-plat
File No. SF1842
A Portion of the N1/2 of Section 36, T11S, R66W
Water Division 1, Water District 8**

Dear Ms. Ruiz:

We have reviewed your referral of December 4, 2018 concerning the above referenced proposal to vacate and re-plat Lot 35 of the recently approved Flying Horse North Filing 1 subdivision. Lot 35 contains 7.341 acres and is proposed to be split into two separate lots. Our office previously provided comments on the Flying Horse North Preliminary Plan (SF-17-012) by our letters dated January 17, 2018, May 17, 2018, July 3, 2018 and September 19, 2018 and on the Flying Horse North Filing 1 Final Plat (SF-181) by our letters dated January 17, 2018 and May 1, 2018. The two new residential lots will be served by individual on-lot wells and septic systems. The Applicant obtained an augmentation plan for Dawson aquifer wells in Division 1 Water Court case no. 2016CW3190.

Water Supply Demand

The Subdivision Summary Form Sheet provided indicates that the property will be subdivided into 2 single-family residential lots and the total demand required is 625 gallons/day/unit (0.7 acre-feet/year/lot). Based on the information provided it's not clear if the number of lots within Filing 1 will increase from 80 lots to 81 lots and whether the water demand for Filing 1 will also increase. Therefore, we request clarification on the total number of lots to be created for Filing 1 and the water requirements for Filing 1.

According to previous information received in this office as part of the Flying Horse North Preliminary Plan (SF-17-012), the total demand for the development is 198 acre-feet/year based on in-house demand of 0.3 acre-feet/year/lot (84.9 acre-feet/year total), with the remaining of 113.1 acre-feet available for irrigation of residential lawn and common open space. According to the March 15, 2018 letter from the Applicant's water attorney Mr. Alan G. Hill the on-lot residential wells will be limited to 5,000 square feet of lawn and garden by covenants. In addition, the letter states that 28.06 acre-feet per year will be used for common area irrigation, which would leave 85.04 acre-feet for residential lot irrigation (0.3 acre-feet/year/lot). Therefore the total water requirement for the residential lots would be 0.6 acre-feet/year. In addition the total demand for the irrigation of the golf course is estimated at 180 acre-feet/year to be provided by an existing well operating under permit no. 81145-F. Although, not specifically provided with the re-plat of Lot



35, we assume that the total water requirement for the development will remain the same as 198 acre-feet/year for 283 single-family residential lots.

Source of Water Supply

The proposed source of water for the two new lots is individual on lot wells producing from the not nontributary Dawson aquifer. According to previous information provided to this office, Applicant owns a portion of the ground water adjudicated in case no. 94CW023(B) underlying 701 acres generally located in Sections 30 and 31, Township 11 South, Range 65 West of the 6th P.M. Also, the Applicant’s predecessor-in-interest entered into a Groundwater Production Lease, No. OT-109328 with the State Board of Land Commissioners. Based on the Groundwater Production Lease, the Applicant leased the not nontributary and nontributary groundwater underlying 640 acres located in Section 36, Township 11 South, Range 66 West of the 6th P.M. decreed in case no. 2004CW098 through February 27, 2048. On that date all of the groundwater rights from case no. 2004CW098 revert to the Applicant. The estimated amounts owned and leased by the Applicant are listed in the table below:

Aquifer	Annual amount available to Applicant from case nos. 94CW023(B) and 2004CW098 (acre-feet)	Status
	Based on 100 year allocation approach	
Dawson	716	NNT*
Denver	577	NNT
Arapahoe	239	NT**
Laramie-Fox Hills	386	NT

*NNT=Not nontributary

**NT=Nontributary

The proposed not nontributary Dawson aquifer wells will be operated in accordance with the terms and conditions of the augmentation plan in case no. 2016CW3190. The decreed plan for augmentation in case no. 2016CW3190 allows for an average diversion of 198 acre-feet annually and 59,400 acre-feet total over a 300-year period. According to the decree, the allowed withdrawal from each Dawson aquifer well will be limited to 0.7 acre-feet/year/lot totaling 198 acre-feet/year for the 283 lots for the entire development. The in-house use is limited 84.9 acre-feet/year while the irrigation of individual lots and open space land is limited to 113.1 acre-feet/year. According to the augmentation plan no Dawson aquifer well approved pursuant to the plan for augmentation shall be allowed to pump water for any purpose unless it is also used in a residence on the lot on which such well is located, or for irrigation of open space lands.

The proposed source of water for this subdivision is a bedrock aquifer in the Denver Basin. The State Engineer’s Office does not have evidence regarding the length of time for which this source will be a physically and economically viable source of water. According to 37-90-137(4)(b)(I), C.R.S., “Permits issued pursuant to this subsection (4) shall allow withdrawals on the basis of an aquifer life of one hundred years.” Based on this allocation approach, the annual amounts of water decreed in consolidated case nos. 94CW023(B) and 2004CW098 are equal to one percent of the total

amount, as determined by rules 8.A and 8.B of the Statewide Nontributary Ground Water Rules, 2 CCR 402-7. 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 this source 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 demand for the subdivision equals the allowed average annual amount of withdrawal of 198 acre-feet/year, allowed by the augmentation plan. As a result, the water may be withdrawn in that annual amount for a maximum of 300 years.

Applications for on lot well permits, submitted by entities other than the Applicant (PRI #2, LLC) must include evidence that the well permit Applicant has acquired the right to the portion of the water being requested on the application.

State Engineer’s Office Opinion

Based upon the above and pursuant to Section 30-28-136(1)(h)(l), C.R.S., it is our opinion that the proposed water supply for the new lots is adequate and can be provided without causing injury to decreed water rights, **provided the total annual amount allowed to be withdrawn by the Dawson aquifer wells for the total development, including the two new wells, will not exceed the total annual amount allowed by the augmentation plan approved in the decree in case no. 2016CW3190.**

Our opinion that the water supply is **adequate** is based on our determination that the amount of water required annually to serve the in-house use, residential lot lawn and garden irrigation and irrigation of common open space 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 is greater than the annual amount of water required to supply existing water commitments and the in-house use, residential lot lawn and garden irrigation and irrigation of common open space demands of the proposed subdivision.

Our opinion is qualified by the following:

The Division 1 Water Court 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 aquifers, 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 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.

Should you or the applicant have any questions, please contact Ioana Comaniciu at (303) 866-3581 x8246.

Sincerely,

A handwritten signature in blue ink that reads "Joanna Williams". The signature is written in a cursive style with a large initial 'J'.

Joanna Williams, P.E.
Water Resource Engineer

Ec: Subdivision File 25445