

June 12, 2018

Nina Ruiz, PM/Planner II
El Paso County Planning and Community Development Department

Subject: Flying Horse North, SP-17-012, Review 2

Dear Ms. Ruiz:

This letter responds to your review letter dated May15, 2018 regarding the subject application. Responses to comments are shown in **RED** below the original comment.

EL PASO COUNTY PLANNING AND COMMUNITY DEVELOPMENT DEPARTMENT

Current Planning

Fire Protection

1.The fire protection report is incomplete. Please include all required information and include both fire districts in the report. **Department response times have been added to the report for each department.**

Engineering Division

Review 2 comments on the following documents will be uploaded by the project manager: - Preliminary Plan - Traffic Impact Study - Drainage Report. **Revised documents that address redlines have been resubmitted.**

EL PASO COUNTY ATTORNEY'S OFFICE

It is the opinion of the County Attorney's Office that a Use Restriction Agreement does not afford the County the same protections as a conservation easement. If the BoCC requested or required a conservation easement, that is what should be provided. **This issue has been resolved by provision of a Use Restriction Agreement because County chose not to be the recipient of a conservation easement.**

Comment:

OCA has reviewed the Agreement to Restrict OS Use. It is acceptable as to form. **Noted.**

COLORADO DIVISION OF WATER RESOURCES

We have reviewed your referrals of January 10, 2018 concerning the above referenced proposed preliminary plan for a planned community of 283 single-family residential lots on a 1417-acre parcel and the final plat of phase one of the planned community consisting of 80 lots. 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 Water Supply Information Summary Sheet (“Summary Sheet”) provided indicates that the property will be subdivided into 282 single-family residential lots and the total demand required for the subdivision is 197.4 acre-feet (based on 0.7 acre-feet/year/lot). Additional information submitted with the application in a letter dated November 24, 2017 from the Applicants’ water consultant Mr. Curt Wells indicates that the property will be developed into 283 single-family residential lots and the maximum water demand per lot is 0.7 acre- feet/year/lot totaling to 198 acre-feet/year for the entire subdivision. The in-house use water is estimated at 84.9 acre-feet/year (0.3 acre-feet/year/lot x 283 lots), the irrigation of lawn and garden is estimated at 81.2 acre-feet/year (2.5 acre-feet/irrigated acre x 0.115 acre/lot x 283 lots), the domestic animals watering is estimated at 3.3 acre-feet/year (based on 0.11 acre-feet/year for 10-large domestic animals and 366 total animals for the subdivision), and the demand for the common area is estimated at 28.06 acre-feet/year. We note that based on the assumption of 0.11 acre-feet/year for 10-large domestic animals and 366 animals for the subdivision the demand for the domestic animals would be 4.0 acre-feet. It is unclear from the provided information if Dawson aquifer wells will be drilled specifically for the irrigation of common areas, or if the on lot Dawson wells will be used for that purpose. The Applicant should clarify how the open space will be irrigated. If the open space will be irrigated with separate irrigation wells in the Dawson aquifer the Applicant must show that the decreed augmentation plan allows for such wells. We recommend that Applicant provide clarification on all the proposed uses for on-lot wells and irrigation well within the subdivision, and the water requirements for those uses, prior to the subdivision approval. In addition, since there is a discrepancy on the number of lots proposed in the Summary Sheet and the number of lots identified in the November 24, 2017 letter we recommend the Applicant provides clarification on the number of lots they intend to create.

Source of Water Supply

The proposed source of water for this subdivision is individual on lot wells producing from the not nontributary Dawson aquifer. The decree granted in case nos. 94CW023(B) (Division 1) (amended case no. 85CW446) quantified the amount of water underlying 701 acres generally located in Sections 30 and 31, Township 11 South, Range 65 West of the 6th P.M. and the decree in case no. 2004CW098 (Division 2) quantified the amount of water underlying 640 acres located in Section 36, Township 11 South, Range 66 West of the 6th P.M. According to the decrees the following amounts of water were determined to be available underlying the 701 acres parcel and the 640 acre parcel respectively:

Aquifer	Status	Annual amount available for case no. 94CW023(B) for the 701 acre parcel (acre-feet)	Status	Annual amount available for case no. 2004CW098 for the 640 acre parcel (acre-feet)
		Based on 100 year allocation approach		Based on 100 year allocation approach
Dawson	NNT*	591	NNT	515
Denver	NT**	600	NNT	577
Arapahoe	NT	280	NT	239
Laramie-Fox Hills	NT	210	NT	182

*NNT=Not nontributary

**NT=Nontributary

According to the information provided Applicant owns a portion of the ground water adjudicated in case no. 94CW023(B) underlying the 701 acres. 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 same the Groundwater Production Lease, the Applicant leased the not nontributary and nontributary groundwater underlying the 640 acres 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)
	Based on 100 year allocation approach
Dawson	716
Denver	577
Arapahoe	239
Laramie-Fox Hills	386

According to our records, on July 24, 2017 the Applicant obtained well permit no. 81145-F for the amount of water transferred to the Applicant in case no. 2004CW098 in the Arapahoe aquifer (239 acre-feet). The use of ground water from this well is limited to municipal, industrial, domestic, commercial, irrigation, stock watering, recreational, fish and wildlife, fire protection, and augmentation purposes. Although a copy of this well permit was provided in the referral material no information was provided whether this well will be used within the development.

The recently 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. The decree allows the withdrawal from wells in the Dawson aquifer pursuant to the decreed augmentation plan. 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. 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. Maximum area to be irrigated on each lot and open space will be limited by the restrictive covenants. 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 is 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.

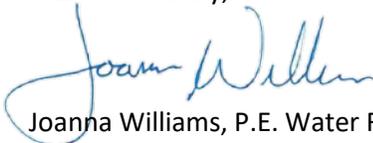
Records available in this office show that there are four existing stock wells operating under permit nos. 17278- A, 17279, 17280, 75882 and one existing domestic well operating under permit no. 2132, located on the subject 1417 acre parcel that appear to be producing water from the not nontributary Dawson aquifer. CRS 37-92- 602(3)(b)(III) requires that the cumulative effect of all wells in a subdivision be considered when evaluating material injury to decreed water rights. **Accordingly, if the parcel is subdivided the well constructed under permit nos. 17278-A, 17279, 17280, 75882 and 2132 must either be plugged and abandoned or included in the augmentation plan in case no. 2016CW3190, prior to subdivision approval, in order to prevent injury to decreed water rights.**

Furthermore, the applicant should be aware that any proposed detention pond for this Planned Development, must meet the requirements of a "storm water detention and infiltration facility" as defined in section 37-92- 602(8), Colorado Revised Statutes, to be exempt from administration by this office. The applicant should review DWR's [Administrative Statement Regarding the Management of Storm Water Detention Facilities and Post-Wildland Fire Facilities in Colorado](#) to ensure that the notification, construction and operation of the proposed structure meets statutory and administrative requirements. The applicant is encouraged to use Colorado Stormwater Detention and Infiltration Facility Notification Portal, located at <https://maperture.digitaldataservices.com/gvh/?viewer=cswdif>, to meet the notification requirements.

State Engineer's Office Opinion

Since insufficient information was provided, we cannot comment on the potential for injury to decreed water rights or the adequacy of the proposed water supply under the provisions of Section 30-28-136(1)(h)(I), C.R.S. Prior to further review of the subdivision water supply plan by this office, the Applicant must clarify the number of lots to be created, clarify all the proposed uses for the development and if the existing wells mentioned above will be plugged and abandoned or covered under by the existing augmentation plan decreed in case no. 2016CW3190 prior to subdivision approval.

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



Joanna Williams, P.E. Water Resource Engineer

Ec: Subdivision File 24155

This comment conflicts with a subsequent letter dated May 17, 2018 from the same reviewer for the Colorado Division of Water Resources. In the latter letter, Ms. Williams finds that no injury will occur. The May 17, 2018 letter resolves this issue.

EL PASO COUNTY PARKS DEPARTMENT

Recommend to the Planning Commission and Board of County Commissioners that approval of the Flying Horse North Phase I Final Plat include the following conditions: (1) designate and provide to El Paso County a 25-foot wide public regional trail easement along the southern property line and through the open space park that allows for public access, as well as construction and maintenance by El Paso County of the Fox Run Primary Regional Trail, and the easement be shown on and dedicated to the County via forthcoming final plat(s); and (2) require fees in lieu of land dedication for regional park purposes in the amount of \$34,400. **Noted.**

BLACK FOREST LAND USE COMMITTEE

The Land Use Committee has reviewed this application and provides these comments:

1. We feel strongly that no waiver should be granted for the golf course water requirements in the Arapahoe aquifer. The 300-year rule is one of the few safety nets that private well-owners have in our county and this rule should not be waived for any of the aquifers. If there is not enough water for the 300-year rule, the golf course should not be part of this development. **This issue is under discussion with County staff.**

2. As we look at the FH North plan more thoroughly we are concluding that the Holmes Road exit is not needed and could be reserved for an emergency exit.

a. Holmes is about 2 miles long. It has a poorly constructed asphalt surface that is not thick or strong. There are no shoulders. North of Vessey the road is only 19 feet wide and south of Vessey it is 23 feet wide. The standard road width is 24 feet plus any shoulders that might be added.

b. The road has 61 driveways (several serving more than one residence,) 6 blind hills and 5 feeder roads that branch off it. In building Holmes, little or no cut and fill was used so the road is very hilly, resulting in the blind hills.

c. At Shoup Road, Holmes slopes downward and is very dangerous in snowy weather. Many people have slid across Shoup trying to stop. A resident who lived at the Holmes/Shoup intersection for years has many stories of the accidents there. That intersection has no intersection improvements such as right in/right out to improve traffic flow and increase safety.

d. Being a straight road, people drive far too fast along all of those driveways and blind hills. Many of the numerous driveways are near blind hills making it very hard for residents to get safely out of their driveways.

We don't see that any Holmes improvements by the county or Classic would be part of this development so that leaves the road in this condition. While there may not seem to be a large number of FH North residents who would use Holmes, the traffic on the road would increase and it could be used as a shortcut to Pine Creek HS and Wolford school as well as a way to get down to Powers and Union once the Milam/Union connection is completed. If the entrance were closed, only a small number of lots just inside FH North would have to drive north to Stagecoach to go east or west to get out of the development. Many of those residents will be going north to Stagecoach anyway because their destination is better served by

the Stagecoach Road exit to highway 83. In addition, those lots just inside FH North on Holmes would be more secluded and not have through traffic on their roads.

There is real merit in Holmes being an emergency exit only and not a regular entrance. The current plan has 5 main entrances into FH North (in addition to the two cul-de-sacs) when only 2 are required.

We understand there are issues with possibly too many homes being served by one entrance (if Holmes were closed.) Could that restriction be lifted if Holmes were an emergency exit?

Applicant disagrees with this request. Holmes Road access was approved on the recorded PUD Development Plan where this issue was discussed and resolved by BoCC approval.

3. We request that a 100-foot setback be established for homes along Black Forest Road and Hodgen Road. This would enhance the development by leaving a buffer back from the road.

Applicant disagrees with this request. A combination of additional right-of-way dedication and preservation, along with the topography of this portion of the site, makes this request unfeasible without placing fill in a natural drainage area to create building sites for new homes.

Terry Stokka, Chairman, Black Forest Land Use Committee

In addition to the Black Forest Land Use comments in the attached letter, we wish to make several other comments. 1. We appreciate that the applicant followed the BFPres Plan and maintained the 5-acre average for the density. 2. We appreciate that the border lots on Hodgen and BF Road and parts of the rest of the development are full 5-acre lots in order to provide separation and maintain the "country feel" of the development. **Noted.**

ELPASO COUNTY HEALTH DEPARTMENT

Please accept the following comments from El Paso County Public Health regarding the project referenced above: **Noted.**

- The proposed 80 lot (2.5 acre+ minimum lot size) rural residential development will be provided water from individual private wells. Wastewater treatment service is proposed to be by onsite wastewater treatment systems (OWTS). **Noted.**
- There is a finding for sufficiency in terms of water quality. The analytical results submitted by Colorado Analytical in March, 2018, were in compliance with the parameters required by El Paso County Public Health. Please be advised that the results for fluoride were measured at 3.37 mg/L, and the maximum contaminate level (MCL) established by the EPA is 4.0 mg/L. No treatment measures are required, but advising future property owners to test their own well water quality for fluoride is recommended. **Noted.**
- The 20Nov2017, Entech Engineering Soil, Geology, Geologic Hazard, and Wastewater Study Report, and The Entech Engineering Soil, Geology, Geologic Hazard, and Wastewater Study Report was reviewed to determine the feasibility of using wastewater treatment through onsite wastewater treatment systems (OWTS). The referenced report supports the use of onsite wastewater treatment systems for this proposed development project. Review of the 4 existing (2016) soil percolation tests and the 11 soil profile test pit excavations all indicated that the majority of, if not all, OWTS's will be require a Colorado Professional Engineer design due to poor soil conditions. It is recommended that this information is discussed at future

formal and informal public meetings. In any case, all onsite wastewater treatment systems must comply with Chapter 8 of the El Paso County Board of Health Regulations. Each individual lot requires soil profile test pit excavations in the proposed soil treatment areas as part of the permitting process by El Paso County Public Health. Planning the location of the house footprint, well location, and primary and secondary soil treatment area locations on each lot is critical. Dry gulches, ponds, and rolling terrain are variables to watch during lot development. **Noted.**

- The OWTS for the Clubhouse and any golf course related out-building with wastewater requirements must also be designed by a Colorado Registered Professional Engineer. **Noted.**
- Water Quality detention ponds must be maintained to eliminate stagnant water in an effort to minimize the risk of West Nile Virus from potential mosquito breeding areas. **Noted.**
- Radon resistant construction building techniques/practices are encouraged to be used in this area. The EPA has determined that Colorado, and the specifically the El Paso County area, have potentially higher radon levels than other areas of the country. **Noted.**
- Earthmoving activity in excess of one acre, but less than twenty-five acres, will require a Construction Activity Permit from El Public Health. Go to <https://www.elpasocountyhealth.org/service/air-quality/construction-activity-application> for more information, and links to the Colorado Department of Public Health and Environment for earthmoving activity greater than 25 acres. **Noted.**
- El Paso County Public Health encourages planned walk-ability of residential communities. Please consider appropriate connections to commercial areas through the use of sidewalks, and bike trails. Walk-ability features help in the effort to reduce obesity and associated heart diseases. **Noted.**

Mike McCarthy, R.E.H.S.
El Paso County Public Health
Environmental Health Division
719.575.8602
mikemccarthy@elpasoco.com
10Jan2018, (Revised 28Apr2018)

EL PASO COUNTY CONSERVATION DIST

The El Paso County Conservation District Board of Supervisors have no comments at this time. **Noted.**

Please contact our office if you have additional comments, or have questions.

Sincerely,
N.E.S. Inc.



John A. Maynard
Planning Director