

June 15, 2022

Ryan Howser, Project Manager El Paso County Development Services Department Transmitted via the EPC EDARP Portal: epcdevplanreview.com

Re: Mayberry Filing 3 Case No. SF2219

Part of the NE ¼ NE ¼ of Sec. 15 and part of the N½ N½ of Sec. 14, T14S, R63W, 6th P.M.

Upper Black Squirrel Creek Designated Basin

Water Division 2, Water District 10

Dear Ryan Howser:

We have reviewed the information submitted on May 25, 2022 in regards to the water supply for Mayberry Filing 3. Filing 3 will consist of 37 acres which will be divided into 142 lots. The proposed plat is a part of the overall Phase 1 PUD area which proposed a total of 240 single-family residential lots, 3 industrial lots, and open space tracts on 71.39-acres located in part of the NE ¼ NE ¼ of Sec. 15 and part of the N½ N½ of Sec. 14, T14S, R63W, 6th P.M. off of State Highway 94. Our office provided comments on the Mayberry Phase 1 PUD by letter dated February 22, 2022.

Since Mayberry Filing 3 is a portion of the Phase 1 PUD, and there appear to be no changes to the water supply plan for the Phase 1 PUD since our last review, please see out attached February 22, 2022 letter for our comments.

If you or the Applicant have any questions, please contact Joanna Williams at (303) 866-3581 x8265 or at <u>Joanna.Williams@state.co.us</u>.

Sincerely,

Joanna Williams, P.E. Water Resource Engineer

Ec: SEO Referral No. 30306

Upper Black Squirrel Ground Water Management District





February 22, 2022

Ryan Howser, Project Manager El Paso County Development Services Department Transmitted via the EPC EDARP Portal: epcdevplanreview.com

Re: Mayberry Phase 1 PUD/SP (a.k.a. Ellicott Town Center Phase 1 PUD Amendment)
Case No. PUDSP219

Part of the NE ¼ NE ¼ of Sec. 15 and part of the N ½ N ½ of Sec. 14, T14S, R63W, 6th P.M. Upper Black Squirrel Creek Designated Basin

Water Division 2, Water District 10

Dear Ryan Howser:

We have reviewed additional information submitted on February 10, 2022 and February 16, 2022 in regards to the water supply for Mayberry Phase 1. Based on review of that information we have the following comments on the water supply plan for Mayberry Phase 1 PUD. This letter supersedes our letters dated June 28, 2021; July 23, 2021; December 27, 2021 and February 3, 2022.

Mayberry Phase 1 PUD is an amendment to the existing Ellicott Town Center Phase 1 PUD. Therefore this letter also supersedes the letters previously written for Ellicott Town Center Filings 1 and 2. The proposed development will consist of 240 single-family residential lots, 3 industrial lots, and open space tracts on 71.39-acres located in part of the NE $\frac{1}{4}$ NE $\frac{1}{4}$ of Sec. 15 and part of the N $\frac{1}{2}$ N $\frac{1}{2}$ of Sec. 14, T14S, R63W, 6th P.M. off of State Highway 94.

Water Supply Demand

According to the Water Supply Information Summary and "Water Resources and Wastewater Treatment Report" ("Report") prepared by MMI Water Engineers dated February 14, 2022 (which supersedes the report prepared for the original PUD), the total estimated water demand is 81.94 acre-feet/year (62.40 acre-feet/year for household use in 240 units, 11.84 acre-feet/year for the irrigation of 4.81 acres, and 7.70 acre-feet/year for industrial use).

The Applicant should be aware that the proposed household supply (0.26 acre-feet/year per unit) used in estimating the above demand is less than what this office typically views as an adequate household supply. However, the report provides an analysis based on actual water usage data from the Viewpoint Estates/Antelope Park Ranchettes and Sunset Village developments, for which the lot sizes are greater than the lot sizes proposed for this development, and states that this estimated demand is applicable for the Mayberry development. This analysis is valid so long as the existing units within the above developments have comparable water demands to those planned for the Mayberry development.

Source of Water Supply

The proposed water supply source is service provided by Ellicott Utilities Company, LLC ("Company"). According to the letter dated May 14, 2021 and revised June 2, 2021, the Company will provide water and sewer service to the Mayberry Phase 1 development, subject to the Company's Rules and Regulations. This office has not received information that the Applicant has met these requirements. The service letter supersedes the two prior commitment letters from the Company for Ellicott Town Center Filing Nos. 1 and 2.



The Company has no other water commitments at this time. However the Company's infrastructure is used to deliver 50 acre-feet per year of water controlled by the Cherokee Metropolitan District ("Cherokee") to the Viewpoint Estates/Antelope Park Ranchettes subdivisions.

According to the report, the Company owns and controls water rights associated with Determination of Water Right Nos. 598-BD and 599-BD, an interest in the Tipton Well and the Benton Well. For purposes of this letter only the water associated with Determination of Water Right no. 598-BD and the Tipton Well is considered, since water from Determination of Water Right no. 599-BD and the Benton well are not currently legally available for use within the proposed development.

Determination of Water Right No. 598-BD was issued November 8, 2004 and allows an average annual withdrawal of 161 acre-feet/year for 100 years from the Laramie-Fox Hills aquifer for domestic, irrigation, commercial, industrial, firefighting, and recreational use. The allowed place of use is the 551.26 acres generally described as the W $\frac{1}{2}$ and the W $\frac{1}{2}$ of the NE $\frac{1}{4}$ of Section 14 and the E $\frac{1}{2}$ of Section 15, all in Township 14 South, Range 63 West of the 6th P.M. Mayberry Phase 1 PUD is within this allowed place of use.

A proposed source of water for this development (Determination no. 598-BD) 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. 598-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 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 161 acre-feet/year from the Laramie-Fox Hills aquifer would be reduced to one third of that amount, or 53.67 acre-feet/year. The Company anticipates a 5% transit loss in delivering the water supply, therefore an amount of 50.98 acre-feet/year is available from this source to supply the development.

According to the Report, the Company has an 82 acre-feet/year interest in the Tipton Well. The 82 acre-feet/year that the Company claims a right to is part of 225 acre-feet/year of fully consumable alluvial groundwater associated with the Tipton Well (permit nos. 16253-RFP-R and 27574-FP) adjudicated in Colorado Ground Water Commission Case No. 91GW01 for municipal, commercial and/or industrial use or export outside of the Upper Black Squirrel Creek Designated Ground Water Basin. The Company anticipates a 5% transit loss in delivering the water supply, therefore an amount of 77.9 acre-feet/year is available from this source to supply the development.

Based on additional information provided by the Applicant the Company has a water service agreements with Cherokee for the delivery of 82 AF/yr of water from the Tipton Well to this proposed development. In addition, Cherokee has provided evidence that the 82 AF/yr from the Tipton Well is not committed to serve any of Cherokee's existing water commitments.

The uncommitted annual water supply of 128.88 acre-feet/year (50.98 acre-feet/year from 598-BD and 77.9 acre-feet/year from the Tipton well) is more than the estimated annual demand of 81.94 acre-feet/year for Mayberry Phase 1.

State Engineer's Office Opinion

Based upon the above and pursuant to Section 30-28-136(1)(h)(I) and Section 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.

If you or the Applicant have any questions, please contact Joanna Williams at (303) 866-3581 x8265 or at <u>Joanna.Williams@state.co.us</u>.

Singerely,

Joanna Williams, P.E. Water Resource Engineer

Ec: SEO Referral No. 27762

Upper Black Squirrel Ground Water Management District