DEVELOPMENT SERVICES DEPARTMENT MAX L ROTHSCHILD P.E. EXECUTIVE DIRECTOR

NOV 2 4 2014

Review Agency Comment Sheet

WATER RESOURCES STATE ENGINEER COLO

Date:	11/20/14	Review Agency:	STATE WATER ENG				
File Number:	SP-14-015	Reviewer:					
3		Project Manager:	Kari Parsons				
Send response comments to: <u>DSDcomments@elpasoco.com</u>							
Project Name:	Sterling Ranch Preliminary Plan						
Request:	to preliminary pla Development zor	A request by SR Land, LLC Inc., Morley Bentley Investments and Arvest Bank to preliminary plan 258.45 acres. A concurrent rezone to the Planned Unit Development zone district is also under review. The applicant is proposing a single-family development with open space, a fire station and public right-ofway.					
Commissioner Dist:							
Tax ID# (s):	52000-00-364/36	52000-00-364/365, 53000-00-173, 52330-00-005/006					
Outside Review Agencies: Please email comments to the DSD Comments e-mail noted above. Comments can also be faxed to 719-520-6695 or mail written comments to the Development Services Division directly. NOTE: If this form is not returned, additional review information will not be provided. County Review Agencies: Please type your comments in Arial 11.							
All comments must be returned to the							
EPC Development Services Department no later than:							
12/11/14							
NOTE: If plan sets are returned Please identify your review comments on plan sets by printing the date, your name and company/agency for future reference.							
Reviewed by:		=	Date:				
Previous Reference Files:							
Fire District: Yes	(Fire Marshall Revi	ew Optional) No (Fire Marshall Review Required)				



DEPARTMENT OF NATURAL RESOURCES



DIVISION OF WATER RESOURCES

John W. Hickenlooper Governor Mike King Executive Director Dick Wolfe, P.E. Director/State Engineer

December 18, 2014

Kari Parsons El Paso County Development Services Department 2880 International Circle, Suite 110 Colorado Springs, CO 80910

RE: Sterling

Sterling Ranch Phase I

Preliminary Plan and PUD Revision

Secs. 28, 32 & 33, Twp. 12S, Rng. 65W, 6th P.M.

Secs. 4 & 5, Twp. 13S, Rng. 65W, 6th P.M.

Water Division 2, Water District 10 CDWR Assigned Subdivision No. 22158

Dear Ms. Parsons,

We have received a revision of the Sterling Ranch Phase I Preliminary Plan and PUD Plan in El Paso County. This office previously provided comments regarding this development dated August 28, 2009, attached, which are to be replaced by the comments provided herein for the revision as submitted. According to the materials, it appears the development consists of 672 residential lots on 258.45 acres. The proposed source of water supply is to be served by the Sterling Ranch Metropolitan District No. 1 and wastewater disposal is to be served by the Sterling Ranch Metropolitan District No. 1 and the Meridian Service Metropolitan District.

Water Supply Demand

According to Appendix B of the November, 2014 Water Resources Report provided in the referral, the estimated demand for the proposed development is 236.91 acre-feet/year for 672 lots (~0.353 acre-foot/year per lot), 4.59 acre-feet/year for use in an elementary school, 1.77 acre-feet/year for commercial use, 7.05 acre-feet/year for irrigation of a neighborhood park, 5.3 acre-feet/year for median irrigation, and 0.35 acre-foot/year for use in a lift station, for a total estimated demand of 255.96 acre-feet/year.

Source of Water Supply

The proposed water supplier is Sterling Ranch Metropolitan District No. 1 ("District") and a November 17, 2014 preliminary letter of commitment from the District was included with the submittal. According to the submittal, the District will provide water from Arapahoe and Laramie-Fox Hills aquifer well(s) to a central system utilizing the water rights shown in Table 1, below.

Table 1 - Denver Basin Ground Water Rights

Aquifer	Decree	Tributary Status	Volume (AF)	Annual Allocation 100 Year (AF/Year)	Annual Allocation 300 Year (AF/Year)
Laramie-Fox Hills	86CW19	NT	53,900	539	179.67
Laramie-Fox Hills	08CW113	NT	40	0.4	
Arapahoe	86CW18	NT			0.13
Total	300000	INI	57,500	575	191.67
Total		L	111,440	1,114.4	371.47

According to 37-90-137(4)(b)(l), 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 is equal to one percent of the total amount available 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 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 <u>allocation</u> approach based on three hundred years, the allowed average annual amount of withdrawal of 1,114.4 acre-feet/year would be reduced to one third of that amount, or 371.47 acre-feet/year, which is greater than the annual estimated demand of 255.96 acre-feet/year for Sterling Ranch Phase I. As a result, the water may be withdrawn in that annual amount for a maximum of 300 years.

State Engineer's Office Opinion

Pursuant to the provision of C.R.S. 30-28-136(1)(h)(II), it is the opinion of this office that the proposed water supply is expected to be adequate and can be provided without injury to existing 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 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 (none at this time) and the estimated demands of the proposed subdivision.

Our opinion is qualified by the following:

The Division 2 Water Court has retained jurisdiction over the final amount of water available pursuant to the above-referenced decrees, 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 300 years used for <u>allocation</u> 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 questions regarding any of the above, please contact Caleb Foy of this office.

Sincerely,

Heidi Frey, P.E.

Water Resource Engineer

cc: Steve Witte, Division 2 Engineer (via email)

Doug Hollister, District 10 Water Commissioner (via email)

HCF:crf



DEPARTMENT OF NATURAL RESOURCES

DIVISION OF WATER RESOURCES

August 28, 2009

Bill Ritter, Jr. Governor Harris D. Sherman Executive Director Dick Wolfe, P.E. Director/State Engineer

Craig Dossey
El Paso County Planning Dept.
2880 International Cir., Ste 110
Colorado Springs, CO 80910

Re:

Sterling Ranch PUD Phase I

Secs. 28, 32, & 33, T12S, R65W, and Secs. 4 & 5, T13S, R65W, 6th P.M.

Water Division 2, Water District 10

Dear Mr. Deconinck:

We have received the above referenced proposal to subdivide 279.12 acres into 845 dwelling units, commercial businesses, church, fire station, park, and open space. The proposed source of water is Arapahoe and Laramie-Fox Hills aquifer wells to supply a central system.

Water Supply Demand

According to the submittal, the estimated water requirements total 358.7 acre-feet annually. In-Door demands are 253.5 acre-feet annually and irrigation requirements are 105.2 acre-feet annually.

Source of Water Supply

A decree was entered in case no. 86CW18 on October 29, 1986, which quantified the amount of water within the Arapahoe aquifer underlying 1,444 acres. A decree was entered in case no. 86CW19 on October 29, 1986, which quantified the amount of water within the Laramie-Fox Hills aquifer underlying 1,444 acres. The amount of water was determined to be 575 acre-feet annually from the Arapahoe aquifer and 539 acre-feet annually from the Laramie-Fox Hills aquifer for a 100-year aquifer life. As required by El Paso County's 300-year water supply requirement, these amounts are reduced to 191.67 acre-feet for the Arapahoe aquifer and 179.67 acre-feet for the Laramie-Fox Hills aquifer for a total of 371.33 acre-feet annually.

According to 37-90-137(4)(b)(l), 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 is equal to one percent of the total amount available 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 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 <u>allocation</u> approach based on three hundred years, the allowed average annual amount of withdrawal of 1,114 acre-feet/year would be reduced to one third of that amount, or 371.33 acre-feet/year, which is greater than the annual demand for the total build out of Sterling Ranch. 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 Section 30-28-136(1)(h)(l), 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 <u>allocation</u> approach, for the proposed uses 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 Division 2 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 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 have any questions, please contact me at 303-866-3581.

Sincerely,

Water Resource Engineer

Steve Witte, Division Engineer Water Supply Branch Subdivision File CC:

HCF:word/sterling ranch phase 1