

IMPACT IDENTIFICATION

COMPATIBILITY/TRANSITIONS: The site is surrounded by residential development, or vacant land zoned for residential. To the east is vacant land zoned RR-5. To the north are RR-2.5 lots. Sterling Ranch Filing No. 2 is to the west, zoned RS-5000.

ACCESS AND CIRCULATION: A full-movement access is provided at the intersection of Alzada Drive and Outcrop Point. A ¾ movement access is provided at the intersection of Bynum Drive and Salt Fork Point. Alzada Drive and Bynum Drive are both planned to be constructed as Urban Local streets as part of Sterling Ranch Filing No. 2.

TRAFFIC: A Traffic Impact Analysis was prepared by LSC Transportation Consultants, Inc. for the entirety of the Phase One Preliminary Plan (*Sterling Ranch Phase One, Traffic Impact Analysis, February 2015*). An updated Traffic Memo has been prepared in support of Copper Chase at Sterling Ranch, which incorporates subsequent analysis related to traffic estimates generated by buildout of Sterling Ranch Phase I and Phase II, and The Retreat at Timber Ridge. Sterling Ranch Filing No. 2 includes the construction of Marksheffel Road between Vollmer Road and Sterling Ranch Road, and Sterling Ranch Road will be constructed from Marksheffel Road to Dines Boulevard, thereby connecting it to the southern point of Filing No. 1.

AIR QUALITY: The proposed residential use will not negatively impact air quality. The proposed development is located within a developing area with convenient access to Vollmer Rd, E Woodmen Rd, and Highway 24, providing shorter travel time to employment and commercial facilities.

WATER: FAWWA-owned and currently available on-site non-tributary (NT) and adjudicated non-tributary (NNT) water totals are 1901.83 AF for 300 YRs which would be adequate supply to meet the needs of 5,387 SFE. This leaves a net excess of currently available water of 1037 AF for 300 YR and therefore there is more than sufficient water supply to meet the needs of Sterling Ranch Phase One (which includes Copper Chase) on the 300-year basis.

This specific site of 138 single family lots and roughly 1.38AC of irrigated landscaping. The total commitment is 52.13 acre-feet. A Water Resources Report, provided by RESPEC, is included in this submittal.

WASTEWATER: The wastewater commitment is for 23,736 gal/day on an average daily- maximum monthly basis. Sufficient supply is available as demonstrated by the water and sewer service commitment letter. The loading projected from Cooper Chase represents roughly 2.35 % of the contractual capacity available to the Falcon Area Water and Wastewater Authority (FAWWA). FAWWA therefore has more than adequate wastewater treatment capacity to provide service to Copper Chase. Public sewage disposal is further addressed in the Wastewater Report prepared by JDS Hydro.

NOISE: The Land Development Code requires the impacts of noise pollution to residents be mitigated. A noise study conducted by LSC in December of 2021 is included with this submittal. The Noise Study found that with a minimum 6-foot-high noise barrier all noise levels in the development will be below 67 decibels. The noise barrier referenced by the study determined to be a rigid material, with a density of

at least four pounds per square foot. It identifies a 6-foot sound wall adjacent to Marksheffel Road and Vollmer Rd to address this recommendation.

WILDLIFE: Wildlife that has been viewed on the site and surrounding areas including rodents, deer, and carnivores. Potential for several species of mammals, rodents, fish, and vegetation is possible but unlikely to be impacted by the project. As development occurs within Sterling Ranch, care will be taken to minimize human and wildlife conflicts within reasonable limits.

FLOODPLAIN: This site, 8335 Vollmer Road is not within a designated F.E.M.A. Floodplain as determined by the flood insurance rate map, community panel number 08041C0529G, effective 12.07.2018.

GEOLOGIC HAZARDS: The site was found to be suitable for development. Some areas of the proposed subdivision have been found to be impacted by geologic conditions. These conditions impose some constraints on development, which can be mitigated by avoidance, regrading or through proper engineering design and construction methods. A map of the hazard areas and proposed mitigation measures can be found in the Soils, Geology, and Geologic Hazard Study prepared by Entech Engineering Inc included in this submittal.

WILDFIRE: The primary wildland fuel type is grassland with scattered trees. The Colorado State Forest Service has determined a moderate-high wildfire hazard potential and listed as a moderate risk with one small pocket of high risk near the northeast corner.

SCHOOLS: Two school sites are identified on the Sketch Plan within the District 20 boundary. The Branding Iron Filing 2 Plat includes a site for an elementary school. Recent discussions with School District 20 indicate that they have a need for the school site within Sterling Ranch; and discussions have been ongoing to relocate the 11.66AC school site shown with Branding Iron 2 Final Plat to an 11.8AC site shown in Filing 3 of the Sterling Ranch East Phase 1 Preliminary Plan. The new school site location will be south of Sterling Ranch Road and east of Sand Creek, with a detention pond to south and RS-5000 single family housing to the east. This location is in compliance with the approved Sketch Plan. A second 35-acre K-8 school site located east of the Sand Creek Channel on Briargate Parkway is identified on the Sketch Plan and is anticipated to serve this development in the future.

TRAILS AND OPEN SPACE: The Sterling Ranch Phase I Preliminary Plan included an interconnected system of trails, open spaces and neighborhood parks to allow for a recreation-oriented community. This system of open spaces, trails and parks is intended to provide a comprehensive off-street pedestrian circulation system to supplement the standard sidewalks along streets. Parks have been located so that residents have a ten-minute walk or less to these facilities. Landscape trail buffers are provided along the Marksheffel and Vollmer right of ways, providing buffers of 30' at Marksheffel and 50' at Vollmer between the roadways and this development. Parks will be maintained by the Sterling Ranch Metropolitan District. Copper Chase at Sterling Ranch provides connections to this parks, trails, and open space system. There is 158,558 SF of open space provided in this PUD (85,595 SF required).

DRAINAGE: The drainage improvements associated with the Copper Chase at Sterling Ranch are consistent with the Master Development Drainage Plan and Preliminary Drainage Report for Sterling Ranch. The drainage improvements are designed to the most current El Paso County Engineering Criteria

Manual, the Sand Creek Drainage Basin Study, the City of Colorado Springs/El Paso County Drainage Criteria Manual, and the Urban Storm Drainage Criteria Manual.

UTILITIES: The property is located within the boundaries of Sterling Ranch Metropolitan District No. 2. Water, wastewater, storm water and park/recreational services will be provided by Sterling Ranch Metropolitan District No. 1 pursuant to an intergovernmental agreement with Sterling Ranch Metropolitan District No. 2.

Mountain View Electric Association, Inc. will supply electricity service and Colorado Springs Utilities will supply natural gas. The utility commitment letters are submitted with this application.

DISTRICTS/ENTITIES SERVING THE PROPERTY:

The following districts will serve the property:

- Academy School District 20
- Mountain View Electric Association
- City of Colorado Springs Utilities Department – Gas
- Sterling Ranch Metro District
- Black Forest Fire Protection District

RELATIONSHIP TO THE ADOPTED COUNTY MASTER PLANS

The relevant County Plans for Sterling Ranch are the Your El Paso Master Plan, the Water Master Plan, and the Black Forest Preservation Plan, the 2040 Major Transportation Corridor Plan, and the Parks Master Plan. A detailed analysis of the relationship of the Sterling Ranch Sketch Plan and the goals and objectives of these plans was previously provided with the Sketch Plan. These include the provision of adequate buffers and transitions from lower, rural density residential development, the provision of adequate urban services by Sterling Ranch Metropolitan District, an interconnected system of trails, open spaces and neighborhood parks, and the preservation of open space.

YOUR EL PASO MASTER PLAN

The new County Master Plan denotes the site as a suburban residential placetype, which consists of predominantly single-family homes while supporting multi-family, neighborhood commercial, and parks. The Copper Chase at Sterling Ranch PUD Preliminary Plan proposes 138 single family detached residential units, which aligns with this placetype. This plan also aligns with the curvilinear pattern of streets that characterizes the suburban residential placetype.

This area is located within a priority development area, and is denoted as a “new development area” on the Areas of Change map. New development areas take place on land largely undeveloped, adjacent to built out areas. These areas are to be designed to integrate with and compliment adjacent development.

The PUD Preliminary Plan is also consistent with Core Principle 1, Land Use and Development, which seeks to “manage growth to ensure a variety of compatible land uses that preserve all character areas of the county,” in addition to goal 1.1, “ensure compatibility with established character and infrastructure capacity.”

It is also consistent with Core Principle 2, Housing & Communities, which seeks to “preserve and develop neighborhoods with a mix of housing types”, as well as Goal 2.1 to “Promote development of a mix of housing types in identified areas.”

BLACK FOREST PRESERVATION PLAN GOALS & POLICIES

The project area is primarily within the Gateway unit boundary of the Black Forest Preservation Plan and is specifically described as “area is perceived as more urban in nature”. The Gateway area borders the Transition unit providing a buffer in land uses and densities from the forested timbered area and the urbanizing area proposed.

Goal 1.2 Allow nodes of higher density residential, commercial, and industrial development only in those areas designated on the Concept Plan and described in the Land Use Scenario.

Goal 1.4 Provide for a mix of compatible uses within designated urban density areas.

Goal 3.2 Give careful consideration to clustering alternatives in areas appropriate for subdivision as a means of preserving more open space, minimizing costs and environmental impacts and promoting aesthetic quality.

Goal 3.5 Generally support residential development which compliments and enhances the area’s terrain, vegetation, and natural resources.

The zoning provides for an additional housing option and transition in density for this urbanizing area. The proposed single-family residential zoning and density is compatible with the recently approved and developing subdivisions. By providing smaller lots and clustering them near the intersection of Vollmer and Marksheffel, the project provides preservation of the Sand Creek Channel and opportunity for trail connections and open space in the area.

WATER MASTER PLAN

Goal 1.1 – Ensure an adequate water supply in terms of quantity, dependability and quality for existing and future development.

Goal 6.0 – Require adequate water availability for proposed development.

Policy 6.0.8 – Encourage development patterns and higher density, mixed use developments in appropriate locations that propose to incorporate meaningful water conservation measures.

Policy 6.0.11– Continue to limit urban level development to those areas served by centralized utilities.

This development will be served by FAWWA, which is the overall service entity for Sterling Ranch and other adjacent properties. Copper Chase at Sterling Ranch includes 138 lots which fall into high-density development ratios for small lots, and roughly 1.368 acres of irrigated landscaping. The resulting water demand is 52.13 acres feet.

FAWWA-owned and currently available on-site non-tributary (NT) and adjudicated not non-tributary (NNT) water totals are 1901.83 AF for 300 YRs which would be adequate supply to meet the needs of 5,387 SFE. This leaves a net excess of currently available water of 1037 AF for 300 YR and therefore

there is more than sufficient water supply to meet the needs of Sterling Ranch Phase One (which includes Copper Chase) on the 300-year basis.

The FAWWA water system has only been in operation for three years, so little-to-no usable historic information would be reliable for unique, long-term planning. However, substantial nearby data from the Falcon area is available for use. As of the end of 2021, the system had approximately only 300 active users. Therefore, initial projections have been based on area-wide water user characteristics and a linear buildout rate. This rate is considered to be an average annual rate that might be reasonably maintainable over a 10-year period. The average growth rate is projected as 180 units added per year.

- **2040 Scenario:** Based on the above factors, the FAWWA system might conservatively anticipate serving 3,710 SFEs in the year 2040. This number is a service area projection and includes the Retreat and The Ranch, as well as the main Sterling Ranch residents. This would require no additional water.
- **2060 Scenario:** Based on the same factors, the Sterling system might be expected to serve 7,310 SFEs within its expanded service area, which includes the Retreat and The Ranch. This would be substantially greater than the actual Sterling Ranch. The annual acre-foot requirement might be 679 annual AF, but supply would include water from The Ranch which has not yet been added to inventory. In addition to adding off-site sources, potential, additional supplies include renewable resources and/or regional projects bringing new water to the area

Municipal water demand for Sterling Ranch would be met using primarily Arapahoe and Laramie-Fox Hills formation wells in the SRMD area. The first well site will be drilled with an Arapahoe Well (A-1) and Laramie-Fox Hills Well (LFH-1); well site #1 includes both an Arapahoe and a Laramie-Fox Hills well. Additional permits will be obtained as needed to ultimately continue to add to the system as needed. Existing well permits are included in the Water Resources Report completed by JDS Hydro in October, 2022.

The project is located within Region 3, Falcon Area, containing 4 growth areas projected to be completed by 2040, three areas to be completed by 2060, and two other growth areas located on the north and south sides of Falcon Highway directly east of Falcon. Specifically, the Water Master Plan states:

“Region 3 contains four growth areas west of Falcon projected to be completed by 2040. Other areas of 2040 growth are projected for the north-central part of the region west of Highway 24 extending from Falcon to 4-Way Ranch. North of Falcon along Highway 24, growth is projected by 2060 on both sides of the highway. Just west of Falcon, another small development is projected by 2060 on the north and south sides of Woodmen Road. On the east side of Highway 24, three separate areas of growth are projected for development by 2060, with the largest of the three spanning from south of Judge Orr Road to east of Peyton Highway into Region 4c. This development will likely consist of 35-acre lots that will require individual wells to use Denver Basin groundwater. The other two growth areas will be located on the north and south sides of Falcon Highway directly east of Falcon.”

Copper Chase will be centrally serviced by FAWWA which will become the overall service entity, for not only the Sterling Ranch Metropolitan District, but the Retreat and the future ranch as well. It is expected that an urban residential home in Sterling Ranch will require an average of 0.353 annual acre-feet. This is consistent with the historic needs of nearby developments.

Water rights adjudications have been decreed by the State of Colorado, Water Division 2 District Court, Water Division 1 District Court, and the Colorado Groundwater Commission. The comprehensive rights for the FAWWA service include both decrees and determinations. The most recent water rights added to the Sterling Ranch Inventory are three acquisitions: McCune Ranch 391.33 AC for 300 YRs, Bar-X Ranch 592.78 AF for 300 YRs, and Shamrock West 220.10 AF for 300 YRs. FAWWA currently has a total supply of 1901.83 acre-feet. This leaves a net excess of currently available water of 1037.64AF over 300years; thereby creating a more than sufficient water supply to meet the needs of Sterling Ranch East Phase one on the 300-year basis.

FAWWA's main supply source is centralized at a point that both Cherokee Metropolitan District and Woodmen Hills Metropolitan District have adjacent major storage and delivery facilities. There are currently no arrangements in place to make connections, but in the future, SRMD may seek to have interconnections and possibly share supply. Other actions include conducting cooperative actions with CSU and SRMD to potentially share centralized facilities.

Municipal water demand for Sterling Ranch would be met using primarily Arapahoe and Laramie-Fox Hills formation wells in the SRMD area. The first well site will be drilled with an Arapahoe Well (A-1) and Laramie-Fox Hills Well (LFH-1); well site #1 includes both an Arapahoe and a Laramie-Fox Hills well. Additional permits will be obtained as needed to ultimately continue to add to the system as needed. Existing well permits are included in the Water Resources Report completed by JDS Hydro in October, 2022.

2040 MAJOR TRANSPORTATION CORRIDOR PLAN

The 2040 Functional Classification map shows adjacent roads Vollmer and Black Forest Roads as minor arterials. Woodmen Road is an expressway.

The 2040 Improvements map identified the most proximate roadway improvement to the site is the county road capacity improvements to Vollmer Rd between Marksheffel Rd and Stapleton Drive. There will be rural county road upgrades to Vollmer Rd north of the site. The extension of Briargate Parkway will add a new roadway connection just north of the site. The 2060 corridor preservation plan depicts that Briargate Pkwy will become a principal arterial. Vollmer Road is expected a minor collector by 2040.

EL PASO COUNTY PARKS MASTER PLAN

The Parks Master Plan does not identify any proposed parks or candidate open space on this site or in the vicinity. The site is 5 miles from the Pineries Open Space and 7 miles from Black Forest Regional Park. It is in close proximity to various trailheads as well. There is a proposed county trail going through the site on the El Paso County Master Plan, however, this trail is being diverted through The Ranch and Sterling Ranch developments, as the current location necessitates going through multiple 5-acre lots to the south.