

PRELIMINARY DRAINAGE REPORT FOR FOURSQUARE AT STERLING RANCH PRELIMINARY PLAN / PUD

Prepared for:
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Job No. 1183.20

PCD Project No. PUD SP-227



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ENGINEER'S STATEMENT:

The attached drainage plan and report were prepared under my direction and supervision and are correct to the best of my knowledge and belief. Said drainage report has been prepared according to the criteria established by the County for drainage reports and said report is in conformity with the applicable master plan of the drainage basin. I accept responsibility for any liability caused by any negligent acts, errors, or omissions on my part in preparing this report.

Marc A. Whorton C	Colorado P.E. #37155	Date	
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OWNER'S/DEVELO	PER'S STATEMENT:		
I, the owner/develor drainage report and	· ·	omply with all of the requireme	ents specified in this
Business Name:	CLASSIC SRJ LAND, LLC		
Ву:			
Title:			
Address:	2138 Flying Horse Club	<u>Drive</u>	
	Colorado Springs, CO 8	0921	
	1 1 -	the Drainage Criteria Manual, V Development Code as amende	
For County Enginee	er, / ECM Administrator	Date	
Conditions:			
Pi	rovide		
si	gnatures		



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PURPOSE

The purpose of this Preliminary Drainage Report is to address on-site and off-site drainage quantities and patterns for the proposed development, compare to approved MDDP and identify general drainage improvements and facilities required to minimize impacts to the adjacent properties.

GENERAL DESCRIPTION

Classic SRJ Land, LLC (Classic Homes) has recently purchased the remaining portion of the Sterling Ranch property east of Sand Creek from the Jim Morley. This is one of the three initial development proposals east of Sand Creek and will be known as **Foursquare at Sterling Ranch Preliminary Plan/PUD**. This PUD consists of development area northwest of the intersection of Briargate Pkwy. and Sterling Ranch Road per the proposed roadway plats, prepared by JR Engineering. The total PUD area is **36.76 acres** and includes the proposed tract for Pond FSD-16. It is located in portions of sections 33 and 34, township 12 south, range 65 west of the sixth principal meridian. The site is bounded on the north, east and west by proposed and future Sterling Ranch East residential development, west and south by the proposed extension of Briargate Pkwy. The site is in the upper portion of both the Sand Creek and East Fork Sand Creek Drainage Basins. Urban single family residential development with a total of **158 lots** is proposed within this PUD.

The average soil condition reflects Hydrologic Group "A" (Blakeland loamy sand and Columbine gravelly sandy loam) with also some presence of Hydrologic Group "B" (Pring coarse sandy loam) as determined by the "Web Soil Survey of El Paso County Area," prepared by the Natural Resources Conservation Service (see map in Appendix). However, the majority of the site does exhibit Group "A" soils and these will be used in all hydrologic calculations.

existing runoff (sentence was revised but not clarified per previous comment)

For clarification: "Also, to recognize that soils within a development project are usually disturbed and covered with top soil, sod or landscaping and irrigated, Type A soils must be represented as Type B soils for post development curve number calculations. Type A soils are not required to be represented as Type SIC B soils if these portions of a site are avoided and protected during development."

The following basins are all contained within basin SC3-16A as presented in the MDDP for Sterling Ranch, prepared by M&S Civil Consultants, approved in 2018:

Basin TR-V ($Q_5 = 3$ cfs, $Q_{100} = 7$ cfs) consists of 2.1 Ac. of rear yards of the adjacent Retreat at TimberRidge Filing No. 2 development. As previously described in the existing conditions part of this report, Basin TR-7 in the developed condition is included in the on-site Basin P1-F. These flows are currently captured in a natural swale along the common property line and routed south and then west towards a temporary sediment basin at the end of Bison Valley Trail that was constructed with the TimberRidge development. With the development of this portion of the proposed Sterling Ranch East Preliminary Plan No. 1, these flows will likely remain being captured by the natural swale along the westerly property line adjacent to Retreat at TimberRidge but then be directed into Basin P1-F and continue within a natural swale in a southerly direction along the western edge of Basin P1-F. These flows are then routed to Design Point 1. Basin P1-F ($Q_5 = 125$ cfs, $Q_{100} = 243$ cfs) represents 76.6 Ac. of the anticipated future urban residential basin. The western half of this basin is tributary to the downstream storm system at Design Point 1, while the eastern half of the basin will be captured in a temporary sediment basin just east of Design Point 1. However, to allow for the appropriate sizing of these downstream storm facilities and Pond FSD-16, **Design Point 1** ($Q_5 = 127$ cfs, Q_{100} = 248 cfs) represents the anticipated total developed flow at this location upon full build-out. In the interim, before development within this basin, the historic flow patterns may be captured in a temporary sediment basin located just east of Design Point 1. This facility will help mitigate the historic flows from the large upstream basin (EX-10) prior to and during the construction of the extension of Sterling Ranch Road, Pond FSD-16 and the northerly portion of this proposed Preliminary Plan area. The final drainage report(s) for this portion of the development will describe any temporary sediment basins and collection points for these predevelopment flows for safe routing further downstream.

Basin TR-W ($Q_5 = 2$ cfs, $Q_{100} = 5$ cfs) consists of 1.4 Ac. of rear yards and a small portion of the Bison Valley Trail roadway within the adjacent Retreat at TimberRidge Filing No. 2 development. These flows are currently captured in a natural swale along the common

Unresolved: constructed (or delete "natural")

