

April 7, 2014

Carlos Mendoza
Fiscalini Ranch Preserve Manager
Cambria Community Services District
Sent via email

RE: Fiscalini Ranch Community Park Phase 1 Design Development Documents

Dear Carlos,

Please find attached in digital format the Phase 1 documents including the County's Determination of Substantial Conformity for the change in dog park location. The scope services for the Design Development work was to identify the appropriate level of grading and drainage infrastructure needed for phased park implementation, and to relocate the dog park closer to the parking area. The documents include:

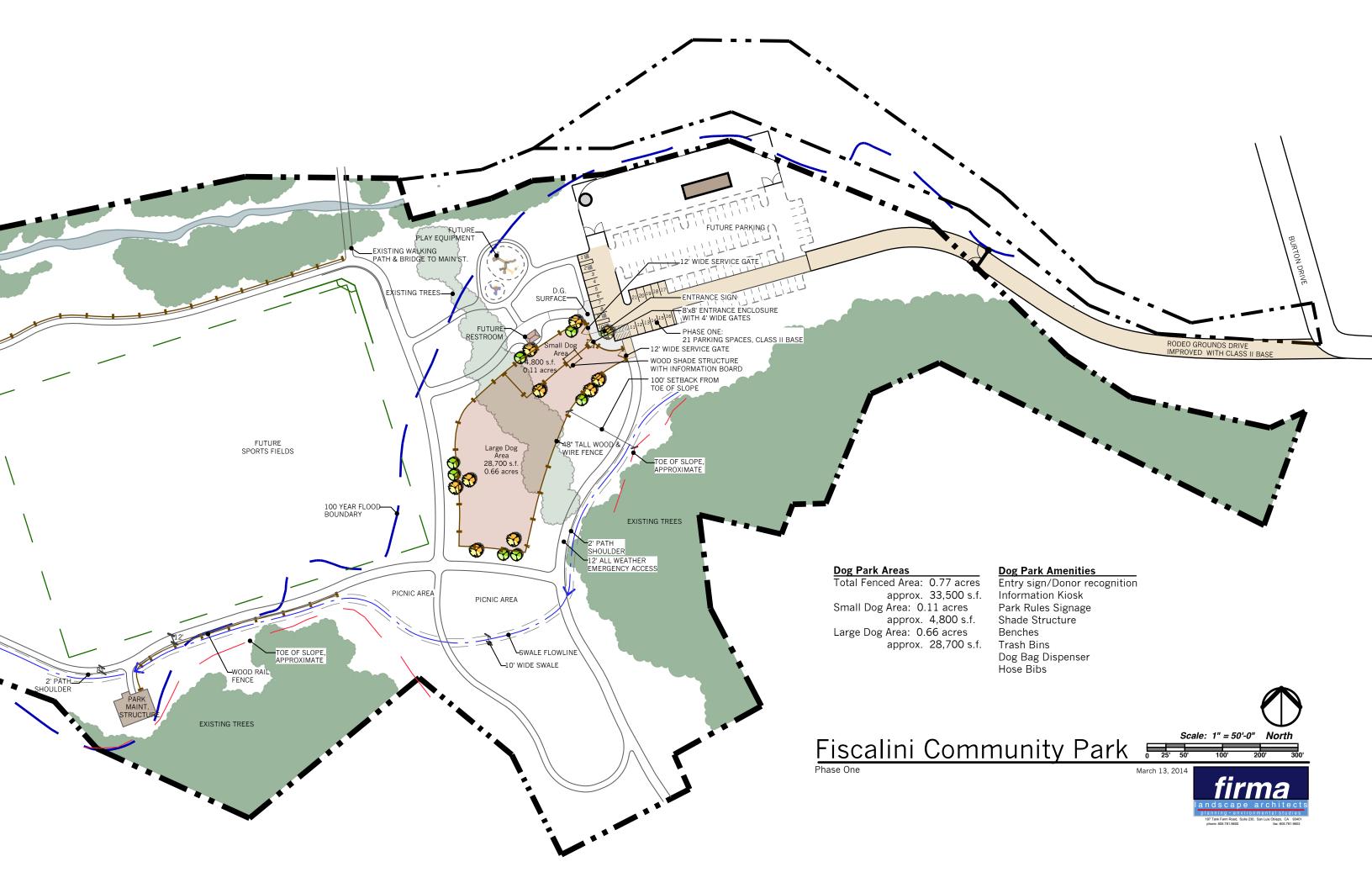
- Phase 1 Design Development Site Plan
- Grading and Drainage Plan with import to achieve minimum 1% slopes
- Grading and Drainage Plan with balanced earthwork on-site (no import)
- Phase 1 cost estimate (includes all park earthwork)
- Preliminary Drainage Calculation Report

As indicated above the cost estimate includes all park grading and drainage infrastructure. We have had ongoing discussion within our design team as well as with PROS on the comparative merits of the import fill solution vs. the balance on site solution. We think given the magnitude of cost for the import solution that the next stage of design (construction documents for grading and building permits) should take a closer look at the options. A key part of the next stage is to obtain a topographic survey of the park. With this information the grading can be refined more accurately.

As always it has been a pleasure to work with the Cambria Community Services District on this great Ranch Preserve and Park!

Sincerely,

David Foote ASLA



firma

landscape architecture environmental studies planning ecological restoration

Opinion of Probable Cost DESIGN DEVELOPMENT PHASE

Phase 1

PROJECT: Fiscalini Ranch Community Park

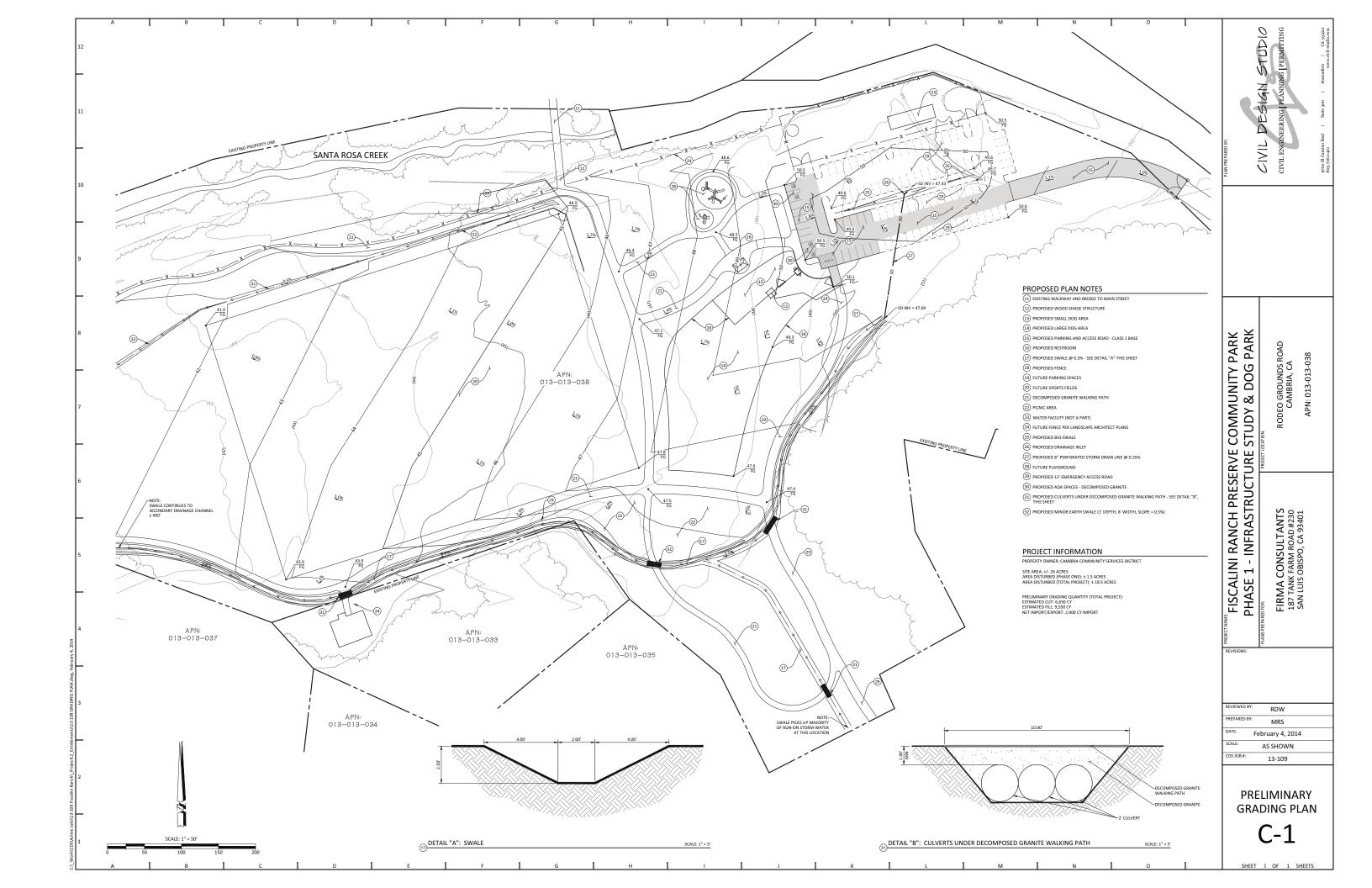
DATE: February 20, 2013

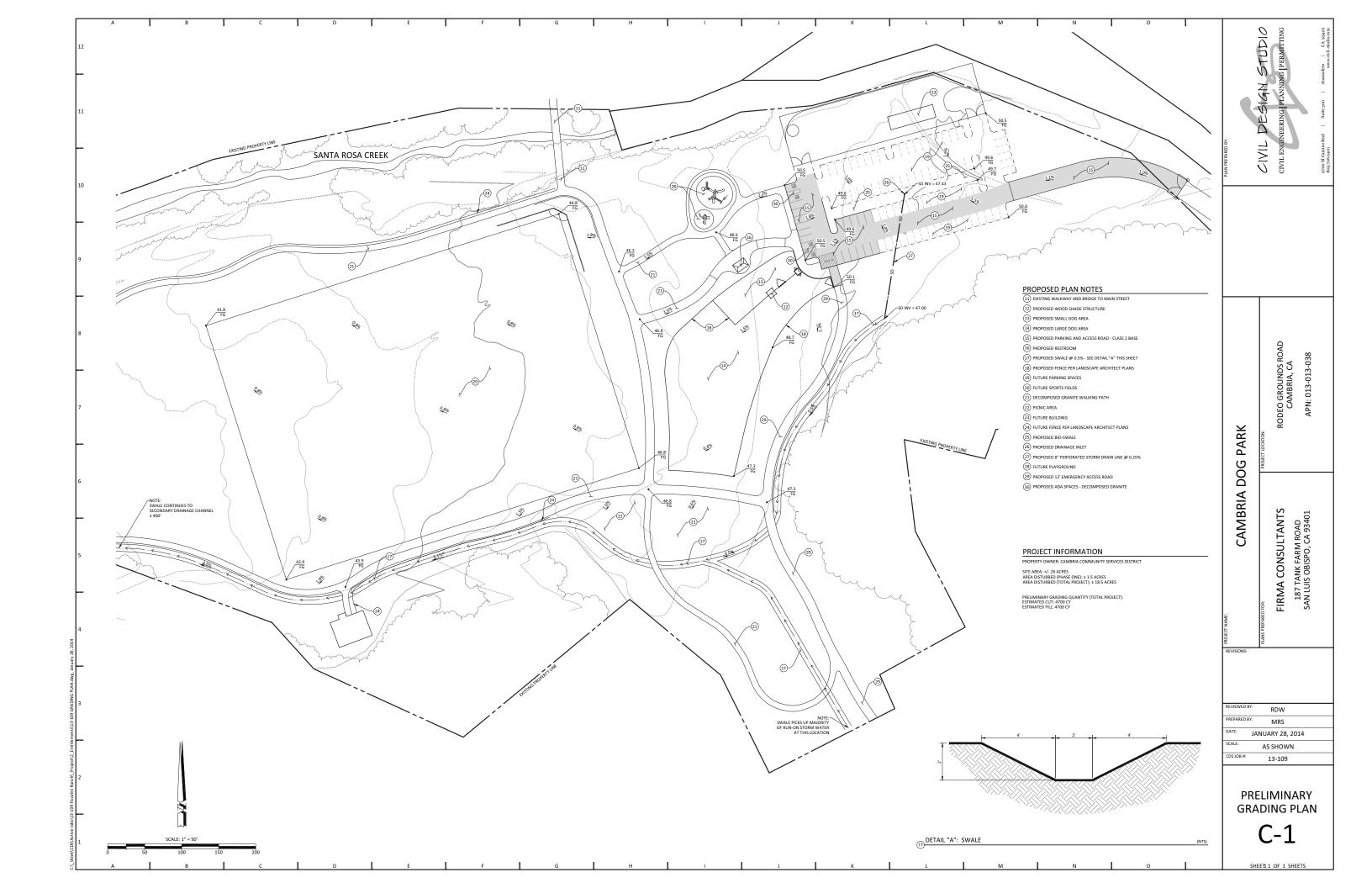
site work:	QUANTITY	UNIT		UNIT COST		TOTAL COST
SITE PREPARATION:						
Tree removal	14	EA	Χ	\$850.00	=	\$11,900.00
Bulk excavation*	9,550	CY	Χ	\$3.22	=	\$30,751.00
Import labor**	2,900	CY	Χ	\$13.75	=	\$39,875.00
Mobilization/ OH/ Erosion control	1	LS	Χ	\$10,000.00	=	\$10,000.00
STORM DRAIN:						
Storm Drain Inlet Minor	1	EA	Χ	\$1,700.00	=	\$1,700.00
Storm Drain - 12" or less	150	LF	X	\$25.00	=	\$3,750.00
PAVING/SURFACING:						
Access Road	20,000	SF	X	\$0.77	=	\$15,400.00
Parking DG / CL 2 base	370	CY	X	\$27.33	=	\$10,112.10
Decomposed Granite paths	1,200	SF	X	\$1.50	=	\$1,800.00
DOG PARK Improvments						
Fence, structures, surface etc	1	LS	Х	\$32,480.00	=	\$32,480.00
per PROS / Roche estimate						
TOTAL SITE WORK:						\$157,768.10
TOTAL SITE WORK:						\$157,768.10
AF Tono Design and normite	1		.,	25.000		#2E 000 00
AE Topo, Design and permits	1		X	25,000		\$25,000.00
TOTAL***						\$182,768.10

^{*} Assumes all earthwork for ballfield/swale. Other phase 1 options merit exploration.

^{**} If CCSD elects to not import to get 1% gradients, deduct this amount. Assumes no cost for material.

^{***} No contingency shown, normal practice is add a 10% contingency





Preliminary Drainage Calculation Report

Prepared By:

Monte Soto, PE 9700 El Camino Real, Suite 300 Atascadero, CA 93422 805.706.0401

FISCALINI RANCH

APN: 013-131-038 Cambria, CA **Attn: David Foote**

FIRMA

187 Tank Farm Road #230 San Luis Obispo, CA 93401

Subject: Fiscalini Ranch Park Project

Re: Drainage Calculation Report

Dear David:

Please find enclosed the Drainage Calculation Report for the above referenced project.

The study calculations were prepared using the most conservative approach: the USGS stream stats website.

Please contact me for any clarifications or supporting information you need with reference to this report.

Regards,



Monte Soto, PE

Fiscalini Ranch

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Introduction

Site Location

The proposed project site is located in the community of Cambria, County of San Luis Obispo. The site is South of Main Street in Cambria. Historically, the site was used for the old Cambria Rodeo Grounds.

The subject parcel is owned by the Cambria Community Services District (CCSD). The parcel is +/-26 acres.



Figure 1: Site Location - SLO County Permit View

Existing Conditions

The majority of the existing site is open space. The only improvements are a relatively small parking lot (Class 2 Base) and an old abandoned cattle corral. The majority of the site is composed of rangeland (native grasses) with the remainder composed of pine forest. The rangeland portion of the site is relatively flat (approximately 1%).

The site contains two outlets for storm water. The first is Santa Rosa Creek, which generally follows the North border of the property and flows towards the West. The second storm water outlet is an existing secondary drainage channel, which runs parallel to Santa Rosa Creek, and spills into Santa Rosa Creek where Santa Rosa Creek crosses Highway 1.

Approximately 1/3 of existing site storm water sheet flows from the project site into Santa Rosa Creek and approximately 2/3 of existing site storm water is collected by the secondary drainage channel. In addition to site runoff, the site receives water from a residential area to the South.



Figure 2: Aerial View - SLO County Permit View

Proposed Project

The proposed project consists of the following features broken into at least two phases. Phase 1 construction will include:

- Parking area Covered in class 2 base
- Picnic area
- Dog park
- Restroom

Fiscalini Ranch

The future portion of this project may be one or more phases. For simplicity, we will call it Phase 2. This phase includes the following features:

- Additional Parking area Covered in class 2 base
- Sports fields
- Playground

Post-construction impervious area will remain effectively the same as pre-construction impervious area. The only new fully impervious area to be added is the restroom. This project will utilize a main swale to direct sheet flow from the offsite tributary area (residential and pine forest) towards the existing secondary drainage channel. In addition, the parking lot will contain a bio-swale, which will collect drainage from the parking area, provide an opportunity for infiltration, and then convey excess drainage into the main swale via an 8" perforated pipe. The outlet for the bio-swale will be set approximately 4" above grade, which will allow some ponding in the bio-swale and enhance infiltration for small storms.

Summary

Peak Flow Analysis

The USGS California StreamStats Website was utilized to estimate the peak flow for the tributary area. This method is extremely conservative. It includes an area south of highway 1 that does not actually drain to the site because Highway 1 intercepts this drainage, however, the USGS website does not account for this fact. **Figure 3** shows the area tributary to the project site.

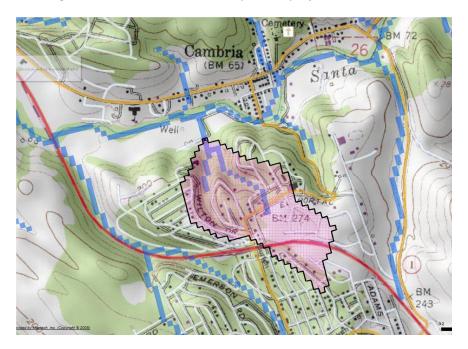
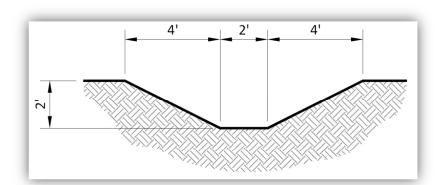


Figure 3: Tributary Area - USGS StreamStats

The full summary of peak flow from the USGS website can be found at the end of this report. However, the 50yr storm is estimated at 50.4 CFS.

Earthen Swale Analysis

The earthen swale dimensions for this project have been chosen to create a drainage feature that will convey the projected flows. A diagram of the earthen swale is shown below:



Fiscalini Ranch

To analyze the flow capacity of this earthen swale, Mannings equation will be utilized with the values from the table below:

Mannings Equation Input	Value		
	0.025 (Chow, V. T. (1959), Open Channel		
Manning's n	Hydraulics, McGraw-Hill) clean, straight		
	channel, no rifts or deep pools		
Cross sectional Area, (sq. ft.)	12		
Wetted Perimeter (ft.)	10.9		
Hydraulic Radius (area/perimeter)	1.1		
(ft.)	1.1		
Slope (ft/ft)	0.005		

When the values from the table above are input into Mannings Equation, the corresponding velocity is 4.5 ft/sec.

Therfore, the capacity of the earth swale is (velocity x area) = 53.8 cfs

Report Conclusion

The swale, as designed, is capable of conveying the 50 year storm as predicted by USGS (conservative).

Supporting Documentation

Tributary Area

The tributary area for has been determined from the USGS StreamStats Website. The resulting tributary area has been estimated at 0.1 square miles. In addition, a Google Earth image and surface has been imported into Autodesk Civil 3d for drainage analysis.

USGS StreamStats Site Report

Date: Tue Dec 31 2013 10:41:53 Mountain Standard Time

Site Location: California

NAD27 Latitude: 35.5608 (35 33 39) NAD27 Longitude: -121.0844 (-121 05 04) NAD83 Latitude: 35.5608 (35 33 39) NAD83 Longitude: -121.0854 (-121 05 08)

Drainage Area: 0.1 mi2 Percent Urban: 79.0 % Percent Impervious: 20.1 %

Peak-Flow Basin Characteristics						
100% Central Coast Region (0.1 mi2)						
Parameter	Value	Regression Equation Valid Range				
		Min	Max			
Drainage Area (square miles)	0.1 (below min value 0.17)	0.17	4156			
Mean Annual Precipitation (inches)	22	8	52			
Altitude Index (thousand feet)	0.19	0.1	2.4			

Warning: Some parameters are outside the suggested range. Estimates will be extrapolations with unknown errors.

Peak-Flow Streamflow Statistics						
Statistic Flow (ft ³ /s)	_		Equivalent	90-Percent Prediction Interval		
	Standard Error (percent)	years of record	Minimum	Maximum		
PK2	11.7					
PK5	22.4					
PK10	30.8					
PK25	42.3					
PK50	50.4					
PK100	60.3					
PK500	82.6					

SAN LUIS OBISPO COUNTY



DEPARTMENT OF PLANNING AND BUILDING

April 4, 2014

David Foote Firma 187 Tank Farm Road Suite 230 San Luis Obispo, CA 93401

SUBJECT: Substantial Conformity for DRC2010-00026 (CCSD - Fiscalini Ranch)

The land use permit and the environmental determination approved for the above-referenced project have been reviewed and the county has determined that the proposed changes are in substantial conformity:

- × Satisfies all conditions of approval
- Conforms to environmental determination

Other: ____

Description of proposed changes:

Relocation and expansion of the dog park (closer to the parking area) – see attached site plan

Drainage system adjustment - from a piped drain system to an overland swale system

Approved changes attached.

Nancy Orton, Division Manager Department of Planning & Building

976 Osos Street, Room 300

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February 20, 2014

Kerry Brown
Department of Planning and Building
County of San Luis Obispo
Sent via email

RE: Request for Determination of Substantial Conformity for the Fiscalini Community Park Phase 1 Improvements

Dear Kerry,

As discussed at our meeting today, this letter is to request a determination of substantial conformity for the Phase 1 improvements to Fiscalini Ranch Preserve Community Park. The Phase 1 plan is attached along with the approved Master Plan blow up of the affected area, for reference.

There are two proposed changes to the Master Plan shown on the Phase 1 Plan:

- The dog park is shifted closer to the parking area. The required 100 foot buffer setback from the toe of the wooded slope has been accommodated. The informal open picnic areas would be on either side of the dog park. The path system is essentially the same.
- The Master Plan piped storm drain system has been changed to an overland swale system. The off-site watershed is captured by a grassy swale at the toe of the wooded slope and flows to meet the existing secondary channel that enters Santa Rosa creek at Highway 1. The swale along the north side of the ballfields will capture the park runoff and convey water similarly to the creek. The approved concept of these long bioswales to filter runoff water is accommodated well.

Please call me if I can answer any questions about the phase 1 Plan.

Sincerely,

David Foote ASLA

C: Carlos Mendoza, FRP Ranch Manager Jerry Gruber, CCSD District Manger

