



**STRONG
ASSOCIATES**

240 41ST STREET • OAKLAND, CA 94611 • 510/428-2904 • FAX 510/658-9972

October 6, 1999

To: Bill Abbott 916-446-2291, Dave Haley 209-785-8551, Bob Kawasaki 209-754-⁶⁶⁶⁴~~4227~~

From: David Strong – Strong Associates

Re: Saddle Creek Community Services District (CSD) Cost/Income Analysis

Attached is our updated analysis of the projected costs and income for the Saddle Creek Community Services District (CSD).

I. SUMMARY

As summarized on page 1 of the Tables:

- There will be a total of 1,163 residential lots at build-out, in year 9.
- The costs of providing on-going services are estimated at a total of \$871,400 per year at build-out.
- This comes to an average of \$750 per lot per year, or \$62.50 per lot per month.
(Note that variable costs, such as amount of security services, have been adjusted to maintain this desired level of per lot cost.)

All costs are projected in constant 1999 value dollars. Thus the estimates of costs in future years are based on what those services would cost in 1999. (The Consumer Price Index has been inflating at an average of 4.25% per year over the past five years, while the construction cost index has been inflating only slightly faster, at an average of 5.52%, according to the Engineering News Record.) Thus, the California CPI inflator would adequately keep income in line with costs to keep pace with inflation.

II. LAND USE

The build-out projections (on page 1 of the Tables) are based on the phased construction of infrastructure and reasonable annual lot sales. Sales of large blocks of lots are assumed to join the CSD upon filing of the recorded map, approval of conditional use permits, or the issuing of building permits, whichever is first.

As shown, there will be a mix of different lot types, with a total at build-out of:

- 113 Phase 1 lots (existing);
- 119 estate lots;
- 360 family lots;
- 208 small family lots;
- 241 cottage lots; and
- 122 bungalow lots.

The phasing of lots entering the CSD is estimated at over 200 lots per year in the first three years, dropping to 85 and 22 lots in years 4 and 5, and then hovering at about 100 lots per year in years 6 through 9. The total at build-out is 1,163 lots.

Based on this phasing of infrastructure and lot sales, the estimated costs of services per lot stay relatively constant throughout the nine years of development, very close to the average of \$750 per lot per year.

III. CSD COSTS

The cost estimates are detailed in pages 2 through 5 of the Tables and discussed below. The amount and timing of infrastructure have been estimated by Sierra Engineers, and costs are estimated by a combination of Sierra Engineers and Strong Associates, based on public sector owned and maintained facilities.

All costs are for on-going service and maintenance, shown in constant 1999 dollar values. Initial costs of building infrastructure are borne by the developer, then dedicated to the CSD when the infrastructure is complete and ready for use by the lot owners.

A. Roadways

As detailed on page 2 of the Tables, the Saddle Creek development will involve the following roads at build-out:

- 1,200 linear feet of 44'-width entry drive;
- 16,425 linear feet of 32'-width entry road;
- 47,650 linear feet of 28'-width roads;
- 29,400 linear feet of 24'-width courts; and
- 73 – 5,000 sq. ft. cul-de-sacs (of which ½ would have an interior curbed circle).

These road lengths and paved areas have been adjusted to correspond to the Specific Plan on file with the County as modified by actual and planned construction.

For all of the roads, costs include annual maintenance and long-term replacement costs of the paved area as well as curb, gutter and sidewalks. For the paved road area, costs are estimated at \$.086 per sq. ft. per year. This includes:

- \$.05 per sq. ft. for repaving, estimated to be needed at 12 year intervals, which amortizes to \$.042 per year;
- \$.012 per sq. ft. for new slurry seal, estimated to occur at approximate 5-year intervals, which amortizes to \$.024 per year; and
- \$.02 per sq. ft. for annual costs of sign replacement and repair, striping and occasional street cleaning.

For annual maintenance and long-term repair of curbs and gutters, costs are estimated at \$.21 per linear foot per year. (Note that each foot of roadway involves twice the linear footage for curbs on each side of the street. The cul-de-sacs have 225 linear feet of outside curb. Those with an interior circle will have an added 120 linear feet of inside curbs, or an average of 60 linear feet per cul-de-sac.)

Total on-going road maintenance costs thus come to \$304,062 per year at build-out.

B. Storm Drains

The total storm drain improvements at build-out are projected based on the detailed engineering plans for the first two years. As shown in the footnote on page 3, these plans indicate that at year 2 there is a need for:

- one linear foot of culverts for each 3.4 feet of roadway;
- one catch basin for each 458.5 feet of roadway; and
- one man hole for each 2,834 feet of roadway.

Thus at build-out, with 94,675 linear feet of roadways, we estimate a need for:

- 27,642 linear feet of culverts at an estimated cost of \$.21 per linear foot;
- 207 catch basins, at \$15 annual cost per basin; and
- 33 man holes, at \$15 annual cost per man hole.

Total storm drain costs at build-out are thus estimated at \$9,403 per year.

C. Lighting

As shown on page 3 of the Tables, there will be a total of 106 street lights, 2 monument entry lights, 2 park & ride lot lights, and 1 mini-park/trail light at build-out. The street lights are phased in over the nine-year period, the entry lights are at year 1, and the other lights are at year 9.

Street light costs are estimated at \$70 per light per year. This includes:

- Annual electric cost for a 70-watt high-pressure sodium vapor lamp, estimated by PG&E at \$46 per year; and
- Pole repair labor and parts estimated at \$24 per pole per year.

Annual costs at build-out are thus estimated at \$7,770.

D. Landscape

As shown on page 4 of the Tables, landscape costs are subdivided into the following categories:

1. Formal parks including special street planting, mini-strip parks, medians/traffic circles, entry parkways, and park & ride lot. All of these are estimated at annual maintenance of \$0.16 per sq. ft. This is based on:
 - Water - 3 ac feet at \$300 per ac foot (\$900/ac/yr)
 - Labor for mowing, weeding, and vegetation maintenance at 5 hours per acre per week at \$19 per hour contract for time/ and machinery (\$5,000 ac/yr.)
 - Equipment replacement, and incidental costs at \$1,100/ac/yr
 - Total costs at \$7,000/ac/yr or \$0.16/sq. ft./yr.
2. Low maintenance parks (natural park and park & ride areas), estimated at half the cost of formal parks, or \$0.08 per sq. ft.
3. Native landscape, estimated at \$0.04 per sq. ft. per year maintenance.
4. A total of 2,200 re-vegetation areas trees. These are estimated to cost more initially, with on-going cost after year 3, as follows:
 - Year 1 - 1/2 hour of time @\$19: 1,500 gallons of water@\$1.50: 3% tree replacement@\$4.50, chemicals @\$0.50. Total = \$16/tree/yr1
 - Year 2 - 1/2 the cost of year 1, but no tree replacement = \$5.75/tree/yr2
 - Year 3 on - \$3.75/tree for water, labor, chemicals.

5. Natural wetlands (10 acres) and enhanced wetlands (5 acres), estimated at \$150 per acre per year, based on 2 hours per acre of maintenance 4 times per year @ \$19/hour.
6. Perimeter clearing (fire fuel reduction), estimated at \$0.10 per linear foot, based on 500 feet per hour @ \$25/hour 2 times per year.
7. Trail maintenance (weed, annual and long-term repairs) at \$1,100 per mile, or \$0.21 per linear foot of trail.

Total costs for landscaping are thus estimated at \$72,345 per year at build-out.

E. Structures & Special Areas

As shown on page 5 of the Tables, these improvements include:

- The entry security system (beginning in year 2), at a cost of \$2,200/year. This annual cost includes a kiosk (250 sq. ft.) entry gate, security system, utilities, telephone, janitorial, and building maintenance at \$180/month.
- Entry monument lighting (beginning in year 1) estimated at \$200/year.
- Maintenance for an 800 sq. ft. tot lot estimated at \$200/year.
- A second entry security system (in year 9), estimated at \$500/year.

Total structures and special area costs are estimated at \$3,100 per year at build-out.

F. Mosquito Abatement

This cost, including stocking of fish, spraying, and monitoring, is estimated at \$1,000 per year for years 1 and 2 and \$2,000 per year thereafter.

G. Security Services, CSD Management, Insurance/Legal

These costs include the following at build-out:

- Gate security supervisor contract services at \$30,000 annually.
- Gate and patrol security contract personnel (10.5 at build-out) at \$23,000 each annually. (Contract personnel costs include all employee benefits.)
- Auto and equipment for four patrol vehicles at \$2,500 each per year.
- CSD Management fee for County overview and management estimated at \$80,000 at build-out.
- Insurance and legal costs estimated at \$32,000 per year at build-out.

Security and management costs thus total an estimated \$393,500 per year at build-out.

H. Contingency

Contingency costs are estimated at 10% of the total other costs to cover unforeseen expenses. As noted above, the *total* on-going costs at build-out are estimated at \$871,400 per year, with the lion's share for roads (\$304,100) and security & management (\$393,500). Landscaping (\$72,350) and contingencies (\$79,200) are also significant, with other costs (storm drain, lighting, structure maintenance, and mosquito abatement) fairly minor.

SADDLE 'REEK CSD - October 6, 1999
COST/INCOME ANALYSIS

COST/INCOME ANALYSIS

Prepared by Strong Associates - David Strong 510-428-2904 - October 6, 1999
Saddle Creek CSD: Cost/Income - Calaveras County

	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09
LAND USE									
1 Phase 1 Lots - Existing									
Cumulative Total	113	113	113	113	113	113	113	113	113
2 Estate Lots - Added/yr									
Cumulative Total	7	7	30	37	59	59	83	119	119
3 Family Lots - Added/yr									
Cumulative Total	77	24	42	85	0	0	73	28	31
4 Small Family Lots - Added/yr									
Cumulative Total	0	38	70	0	0	42	0	34	24
5 Cottage Lots - Added/yr									
Cumulative Total	35	36	80	0	0	90	0	0	208
6 Bungalow Lots - Added/yr									
Cumulative Total	17	105	0	0	0	150	150	184	241
Added per Year									
Cumulative Total	17	122	122	122	122	122	122	122	122
COST RECAP									
A. Roadways	\$65,643	\$102,883	\$168,843	\$190,438	\$192,224	\$217,062	\$255,349	\$293,314	\$304,062
B. Storm drain	\$1,150	\$3,096	\$5,187	\$5,858	\$5,907	\$6,652	\$7,879	\$9,066	\$9,403
C. Lighting	\$2,310	\$3,080	\$4,550	\$4,970	\$4,970	\$5,600	\$6,580	\$7,420	\$7,770
D. Landscape	\$34,947	\$36,680	\$39,797	\$43,274	\$41,799	\$45,720	\$50,030	\$53,001	\$72,345
E. Structures & Special areas	\$400	\$2,600	\$2,600	\$2,600	\$2,600	\$2,600	\$2,600	\$2,600	\$3,100
F. Mosquito Abatement	\$1,000	\$1,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000
G. Security & Management	\$60,500	\$158,500	\$236,500	\$267,500	\$282,500	\$341,000	\$366,500	\$387,500	\$393,500
H. Contingency (10% of above)	\$16,595	\$30,784	\$45,948	\$51,664	\$53,200	\$62,063	\$69,094	\$75,490	\$79,218
Total Cost	\$182,545	\$338,623	\$505,425	\$568,303	\$585,200	\$682,697	\$760,031	\$830,391	\$871,399
COST PER PARCEL									
Annual Cost/Parcel	\$754	\$749	\$750	\$749	\$749	\$748	\$753	\$749	\$749
Per Month Charge	\$62.86	\$62.43	\$62.49	\$62.40	\$62.44	\$62.31	\$62.71	\$62.45	\$62.44

Prepared by Strong Associates - David Strong 510-422-3750
Saddle Creek CSD: Cost/Income - C. J. Aras County

Prepared by Strong Associates - David Strong 510-428-2904 - October 6, 1999

Saddle Creek CSD: Cost/Income - C.
Jasper County

2000/01 2001/02 2002/03 2003/04 2004/05 2005/06 20

B. STORM DRAIN									
Added Street (linear ft.)									
Cum. Total (linear ft.)									
1 Storm drain culverts									
Cum. Total (linear ft.)									
Cost per lin ft. @\$.21 linear ft.									
2 Catch Basins									
Cum. Total									
Cost per Basin @\$15 yr									
3 Man Holes									
Cum. Total									
Cost per Basin @\$15 yr									
Storm Drain Costs									
\$1,150	\$3,096	\$5,187	\$5,858	\$5,907	\$6,652	\$7,879	\$9,066	\$9,403	

(1) Storm drain analysis in yr. 2 for facility projections to completion:

	Year 2	Feet of road per	2	106	\$7,420
Street length in feet	31,175				
Storm drain culverts	9102	3.4			
Catch Basins	68	458.5			
Man Holes	11	2,834.1			
C. LIGHTING					
1 Street lights added/yr	31	11	21	9	12
Total	31	42	63	69	92
Cost @ \$70/yr	\$2,170	\$2,940	\$4,410	\$4,830	\$5,460
2 Monument entry lights/yr	2				
Total	2	2	2	2	2
Cost @ \$70/yr	\$140	\$140	\$140	\$140	\$140
3 Park & ride lot light					
Cost @ \$70/yr					
4 Mini park/Trail/Median					
Cost @ \$70/yr					
Lighting Costs					
	\$2,310	\$3,080	\$4,550	\$4,970	\$5,600

	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09
	1	2	3	4	5	6	7	8	9
D. LANDSCAPE									
1 Formal, Irrigated Parks (sq.ft. added)									
Special cond. street planting									
Mini strip parks	10,650	95,700			5,000				
Medians/Traffic Circle									
Entry Parkway									
Park & Ride parking lot	106,350	106,350	106,350	111,350	111,350	133,350	155,350	177,350	10,890
Total sq. ft. added /yr.									54,890
Cumulative total sq.ft.									232,240
Cost @ \$0.16/sf	\$17,016	\$17,016	\$17,016	\$17,816	\$17,816	\$21,336	\$24,856	\$28,376	\$37,158
2 Low Maintenance Parks (sq.ft.)									
Park and ride added/yr	22,000	22,000	22,000	66,000	66,000	66,000	66,000	66,000	11,000
Natural park area added/yr	22,000	44,000	66,000	\$5,280	\$5,280	\$5,280	\$5,280	\$5,280	22,000
Cumulative Total	\$1,760	\$3,520	\$4,000	0	0	0	0	0	99,000
Cost @\$0.08/sf									\$7,920
3 Native Landscape (sq.ft.)									
Cumulative Total	22,000	66,000	109,000	109,000	109,000	109,000	109,000	109,000	131,000
Cost @\$0.04/sf	\$880	\$2,640	\$4,360	\$4,360	\$4,360	\$4,360	\$4,360	\$4,360	\$5,240
4 Re-vegetation Area (trees)									
Cumulative Total	700	1,000	1,200	200	300	100	100	100	400
Cost (1)	\$11,200	\$8,825	\$7,550	\$9,700	\$7,825	\$7,800	\$8,175	\$6,950	2,200
5 Natural & Enhanced Wetlands (ac)									
Cumulative Total	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
Cost @\$150/ac	\$2,250	\$2,250	\$2,250	\$2,250	\$2,250	\$2,250	\$2,250	\$2,250	\$2,250
6 Fire fuel reduction (linear ft.)									
Cumulative Total	5,600	2,100	2,400	3,800	4,000	3,100	4,150	4,350	6,950
Cost @\$0.10/ft	\$560	\$770	\$1,010	\$1,390	\$1,790	\$2,100	\$2,515	\$2,950	\$3,645
7 Trails (linear ft.)									
Cumulative Total	6,100	1,800	3,200	700	700	550	1,150	1,150	700
Cost @\$0.21/ft	\$1,281	\$1,659	\$2,331	\$2,478	\$2,478	\$2,594	\$2,594	\$2,835	\$2,982
Landscape Costs									
	\$34,947	\$36,680	\$39,797	\$43,274	\$41,799	\$45,720	\$50,030	\$53,001	\$72,345

(1) Re-vegetation area trees as follows: Yr 1 @\$16(replacement/water/chemicals/labor); Yr 2 @\$5.75 (same as 1 reduced); Yr 3 on @\$3.75 (ongoing care, min water/chem/labor)

	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09
	1	2	3	4	5	6	7	8	9
E. STRUCTURES & SPECIAL AREAS									
1 Entry security system Cost	\$2,200	\$2,200	\$2,200	\$2,200	\$2,200	\$2,200	\$2,200	\$2,200	\$2,200
2 Entry monuments	1	1	1	1	1	1	1	1	1
Cost @ \$200 yr	\$200	\$200	\$200	\$200	\$200	\$200	\$200	\$200	\$200
3 Entry feature (sq.ft.)	800	800	800	800	800	800	800	800	800
Cost to date @\$0.25/sf	\$200	\$200	\$200	\$200	\$200	\$200	\$200	\$200	\$200
4 Second entry security system Cost									\$500
Structures/Special Areas Costs	\$400	\$2,600	\$3,100						
F. MOSQUITO ABATEMENT									
Fish, spray, and monitoring	\$1,000	\$1,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000
G. SECURITY SERVICES, MANAGEMENT, OTHER									
1 Supervisor/Manager	0.25	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Cost @ \$30,000	\$7,500	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000
2 Gate/Patrol	0.0	3.0	6.0	7.0	7.5	9.5	10.5	10.5	10.5
Cost @ \$23,000	\$0	\$69,000	\$138,000	\$161,000	\$172,500	\$218,500	\$241,500	\$241,500	\$241,500
3 Vehicles		1	1	1	2	3	4	4	4
Cost @\$2,500 each	\$0	\$2,500	\$2,500	\$2,500	\$5,000	\$7,500	\$10,000	\$10,000	\$10,000
4 CSD Management	\$35,000	\$37,000	\$45,000	\$50,000	\$50,000	\$60,000	\$60,000	\$75,000	\$80,000
5 Insurance / Legal cost	\$18,000	\$20,000	\$21,000	\$24,000	\$25,000	\$25,000	\$25,000	\$31,000	\$32,000
Security Management/Other Costs	\$60,500	\$158,500	\$236,500	\$267,500	\$282,500	\$341,000	\$366,500	\$387,500	\$393,500
H. CONTINGENCY									
Total Costs except Contingency	\$165,950	\$307,839	\$459,477	\$516,639	\$532,000	\$620,634	\$690,938	\$754,901	\$792,181
Contingency Cost @ 10%	\$16,595	\$30,784	\$45,948	\$51,664	\$53,200	\$62,063	\$69,094	\$75,490	\$79,218
Grand total All Costs	\$182,545	\$338,623	\$505,425	\$568,303	\$585,200	\$682,697	\$760,031	\$830,391	\$871,399



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January 21, 2000 - Saddle Creek, roadway sinking fund analysis

To: Bill Abbott (916-446-2291) and Dave Haley (209-785-8551)
From: David Strong - Strong Associates - 510-428-2904

Road installed in February 1996 - Current age approximately 4 years

Sinking fund costs per Sq Foot:

Detail of roadway sq.ft. costs	Per sq.ft.	Every # years	Annual cost
Repave cost - 1 year	\$0.50	12	\$0.0417
Cost for 4 year			\$0.1667
Total per Sq. Ft. cost for sinking fund - 4 years			\$0.1667

A. ROADWAYS	2000/01
1 Entry - 44 ft width added	
Cum. Total (linear ft.)	1,200
Cum. Total (sq. ft.)	52,800
2 Entry - 32 ft width added	
Cum. Total (linear ft.)	5,050
Cum. Total (sq. ft.)	161,600
3 Roads 28 ft width added	
Cum. Total (linear ft.)	8,200
Cum. Total (sq. ft.)	229,600
4 Courts 24 ft width added	
Cum. Total (linear ft.)	5,600
Cum. Total (sq. ft.)	134,400
5 Cul-de-sac Bulb@5,000sf	
Total	14
Total Sq.ft. (5,000 sf per Bulb)	70,000
Total Sq. Ft.	648,400
Total Per SF Cost	\$0.1667
Roadway Costs	\$108,067