6/19/2013

San Leandro High School
Theoretical Operating Cost Analysis
Swimming Pools

DESIGN CRITERIA	NEW CRITERIA	OLD CRITERIA
Surface Area (square feet):	7,489.00	3,150.00
Minimum Depth (feet):	3.50	4.00
Maximum Depth (feet):	7.25	10.00
Volume (gallons):	366,202.00	182,605.00
Turnover (gpm):	1,017.00	507.00

CATEGORY	AVG. DAILY USAGE	UNIT	UNIT PRICE	DAILY COST	NEW Recreational ANNUAL COST	NEW Instructional ANNUAL COST	NEW Total	OLD COST	
Water	1,760.00	GAL	$ 0.01	$ 17.60	$ 6,160.00	$ 1,497.30	$ 7,657.30		
Sewer	918.90	GAL	$ 0.01	$ 9.19	$ 3,216.15	$ 707.35	$ 3,923.50		
Electricity, Circ. Pump	474.20	KWH	$ 0.15	$ 71.13	$ 24,895.50	$ 5,475.75	$ 30,371.25	$ 9,034.00	
Electricity, Booster Pump						$ 11,056.50	$ 11,056.50		
Natural Gas	275.80	THRM	$ 1.00	$ 275.80	$ 49,644.00	$ 21,978.00	$ 71,622.00	$ 23,940.00	
Sodium Hypochlorite	19.80	GAL	$ 2.50	$ 49.50	$ 17,325.00	$ 5,075.00	$ 22,400.00	$ 9,703.56	Chlorine
Carbon Dioxide CO2	5.00	LBS	$ 3.00	$ 15.00	$ 5,250.00	$ 1,575.00	$ 6,825.00	$ 1,600.00	Acid
Pool Cleaning Service					$ 21,600.00			$ 17,000.00	
District Labor Costs					$ 5,200.00			$ 5,200.00	
Phone					$ 100.00			$ 100.00	
Building Maintenance					$ 1,500.00			$ 1,500.00	
Equipment Maintenance					$ 2,500.00			$ 2,500.00	
Annual Calibration Diag.					$ 1,500.00			$ 1,500.00	
Vandalism/Graffiti					$ 1,500.00			$ 1,500.00	
Custodial Supplies					$ 500.00			$ 500.00	
Fire/Security					$ 240.00			$ 240.00	
TOTALS				$ 438.22	$ 106,490.65	$ 47,364.90	$ 153,855.55	$ 74,317.56	

Increase in cost $79,537.99

($60k in the 2013-14 budget)

ASSUMPTIONS:

1. Annual Cost based upon 180 days of operation.
2. Analysis does not include maintenance/operations labor costs.
3. Water usage based upon 60" annual evaporative loss and filter backwash averaging once weekly.
4. Electrical usage based upon 18 hours per day operation.
5. Natural gas usage based upon air velocity of 5 ft/second, 82 degree water and 60 degree air temperature.