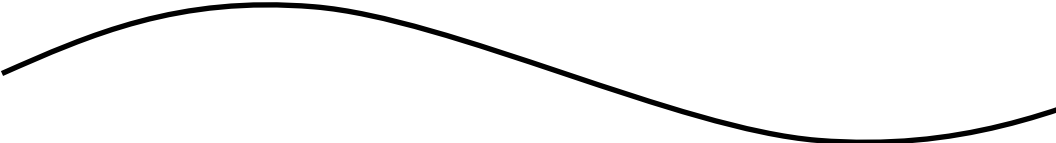


POOL FACILITY ASSESSMENT

Metro Design Associates Inc.

Appendices



## Oakton Park Pool Filtration Capacities

Rated Pool Capacity	321,510 Gallons
Practical Bather Load	500+ Population
Minimum Required Turnover Rate/G.P.M.	Lap Pool 6 Hours/847 G.P.M.
	Wading Pool 2 Hours/141 G.P.M.
Existing Filter Capacity Area	1,260 Sq. Ft. Filter
	1,890 G.P.M. Flow
Rate	
Required Surge Capacity	7,004 Gallons
Existing Surge Capacity	+10,000 Gallons

## POOL FACILITY ASSESSMENT

Metro Design Associates Inc.

# Filter System Comparison

Assuming: 300,000 gallon pool capacity; 4 hours turnover rate; 1,250 gpm flow rate

	<u>Vacuum D.E.</u>	<u>Vacuum and High Rate Sand</u>	<u>Regenerative D.E.</u>
<b>Avg. Backwashes/Season</b>	45 – 60	30 – 45	4 – 6
<b>Gallons/Backwash</b>	4,000 Gallons	8,400 Gallons	2,680 Gallons
<b>Gallons Backwashed/Season</b>	180,000 – 240,000	252,000 – 378,000	10,720 – 16,080
<b>Man Hours/Backwash</b>	3.0*	0.5-3.0	0.5
<b>Backwash Man Hours/Season</b>	135 – 180	15 – 23	2 – 3
<b>Filter Media/Backwash</b>	140 lbs.	None	275 lbs.
<b>Backwash Filter Media/Season</b>	6,300 – 8,400	None	1,100 – 1,650 lbs.
<b>Life Expectancy</b>	25 – 30 years	20 – 25 years	40 – 50 years
<b>Filter Efficiency</b>	Contaminants as small as 2-3 microns (includes some forms of bacteria)	Contaminants as small as 15-20 microns (can achieve 10 microns with a fouled filter at backwash)	Contaminants as small as 2-3 microns (includes some forms of bacteria)

- includes labor or material for manual application of diatomaceous earth between backwashes