System Capabilities and Capacities for:																						
Date:	May 30, 2007																					
Project Name:	Sundmidstod Strendingur																					
Architect/Engineer:	r/Feðgar, Vélaverk ehf.																					
Location:	Iceland																					
for:	calculations – system design																					
													Outdoor Hot Pots				Filtration Sizing					
	Sundlaug	Filter No. 1	Sundlaug	Filter No. 2		Filter No. 2	Nuddottur	Filter No. 3	Heitur pottur	Quantity	Combined	Filter No. 3	Heitur pottur	Quantity	Combined	Filter No. 3	Filter 1 (two filters–104 ft²)	Filter 2 (one filter – 80 ft²)		Filter 3 (one filter 30–ft²)		
Pool Dimensions and Configuration	Competition Pool		Recreation–Lap Pool		Combined Slide Pool – Children's Pool		Whirlpool (Jacuzzi)		Hot pot (38–40° C)	2.00			Hot pot (40–42° C)	2.00			50–m competition pool	recreation–lap pool, slide and wading pool		whirlpool – hot pots		
Pool shape	Rectangular				Rectangular		Rectangle		Rectangle				Rectangle									
Length	51.27 –m	168.21 –ft	16.70 –m	54.79 –ft	11.08 –m	36.35 –ft	4.70 –m	15.42 –ft	3.43 –m	11.25 –ft			3.43 –m	11.25 –ft								
Width	25.03 –m	82.12 –ft	10.03 –m	32.91 –ft	5.70 –m	18.70 –ft	2.10 –m	6.89 –ft	2.10 –m	6.89 –ft			2.10 –m	6.89 –ft								
Length																						
Width																						
Surface Area	1,283.31 –m²	13,813.47 –ft²	167.50 –m²	1,802.97 –ft²	63.16 –m²	679.81 –ft²	9.87 –m²	106.24 –ft²	3.46 –m²	37.28 –ft²	6.93 –m²	74.56 –ft²	3.46 –m²	37.28 –ft²	6.93 –m²	74.56 –ft²						
Pool Perimeter	152.60 –m	500.66 –ft	53.46 –m	175.39 –ft	37.76 –m	123.87 –ft	13.60 –m	44.62 –ft	6.60 –m	21.64 –ft			6.60 –m	21.64 –ft								
Minimum Depth	2.06 –m	6.76 –ft	0.92 –m	3.02 –ft	0.20 –m	0.66 –ft	1.00 –m	3.28 –ft	1.00 –m	3.28 –ft			1.00 –m	3.28 –ft								
Maximum Depth	2.06 –m	6.76 –ft	1.12 –m	3.67 –ft	0.60 –m	1.97 –ft	1.00 –m	3.28 –ft	1.00 –m	3.28 –ft			1.00 –m	3.28 –ft								
Averaging Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.80	1.00			0.80	1.00								
Average Depth	2.06 –m	6.76 –ft	1.02 –m	3.35 –ft	0.40 –m	1.31 –ft	1.00 –m	3.28 –ft	0.80 –m	2.62 –ft			0.80 –m	2.62 –ft								
Approximate Volume (Agreed volume –03/07/07)	2560.00 –m³	676,280 –gal	170.85 –m³	45,134 –gal	25.26 –m³	6,674 –gal	6.87 –m³	1,815 –gal	4.89 –m³	1,291 –gal	9.77 –m³	2,581 –gal	4.89 –m³	1,291 –gal	9.77 –m³	2,581 –gal	2560.00 –m³	676,280 –gal	196.11 –m³	51,808 –gal	26.41 –m³	6,978 –gal
Hydraulics																						
Pool volume:	2560.00 –m³	676,280 –gal	170.85 –m³	45,134 –gal	25.26 –m³	6,674 –gal	6.87 –m³	1,815 –gal	4.89 –m³	1,291 –gal	9.77 –m³	2,581 –gal	4.89 –m³	1,291 –gal	9.77 –m³	2,581 –gal	2560.00 –m³	676,280 –gal	196.11 –m³	51,808 –gal	26.41 –m³	6,978 –gal
Design turnover:	4.00 hrs	4.00	1.00 hrs	1.00	1.00 hrs	1.00	0.33 hrs	0.33	0.33 hrs	0.33			0.33 hrs	0.33								
Turnover per day	6.00	6.00	24.00	24.00	24.00	24.00	72.73	72.73	72.73	72.73			72.73	72.73								
Each cm depth=	12.83 –m³	3,390 –gal	1.68 –m³	442 –gal	0.63 –m³	167 –gal	0.10 –m³	26 –gal	0.03 –m³	9 –gal			0.03 –m³	9 –gal								
Flow rate (design flow rate)	640.00 –m³/hr	2,818 –gpm	170.85 –m³/hr	752 –gpm	25.26 –m³/hr	111 –gpm	20.82 –m³/hr	91.66 –gpm	14.81 –m³/hr	65.19 –gpm	29.61 –m³/hr	130.38 –gpm	14.81 –m³/hr	65.19 –gpm	29.61 –m³/hr	130.38 –gpm	640.00 –m³/hr	2,817.84 –gpm	196.11 –m³/hr	863.46 –gpm	80.04 –m³/hr	352.42 –gpm
Flow rate (4 hour)	640.00 –m³/hr	2,818 –gpm	42.71 –m³/hr	188 –gpm	6.32 –m³/hr	28 –gpm	1.72 –m³/hr	7.56 –gpm	1.22 –m³/hr	5.38 –gpm	2.44 –m³/hr	10.76 –gpm	1.22 –m³/hr	5.38 –gpm	2.44 –m³/hr	10.76 –gpm	640.00 –m³/hr	2,818 –gpm	49.03 –m³/hr	215.87 –gpm	6.60 –m³/hr	29.07 –gpm
Flow rate (12 hour set–back)	213.33 –m³/hr	939.28 –gpm	14.24 –m³/hr	62.69 –gpm	2.11 –m³/hr	9.27 –gpm	0.57 –m³/hr	2.52 –gpm	0.41 –m³/hr	1.79 –gpm	0.81 –m³/hr	3.59 –gpm	0.41 –m³/hr	1.79 –gpm	0.81 –m³/hr	3.59 –gpm	213.33 –m³/hr	939.28 –gpm	16.34 –m³/hr	71.96 –gpm	2.20 –m³/hr	9.69 –gpm
Surge Requirement	0.05 –m³/m²	1.25 –gal/ft²	0.05 –m³/m²	1.25 –gal/ft²	0.05 –m³/m²	1.25 –gal/ft²	0.05 –m³/m²	1.25 –gal/ft²	0.05 –m³/m²	1.25 –gal/ft²	0.10 –m³/m²	2.50 –gal/ft²	0.10 –m³/m²	2.45 –gal/ft²	0.10 –m³/m²	2.45 –gal/ft²						
Surge Tank Size	65.34 –m³	2,307.40 –ft³	8.53 –m³	301.17 –ft³	3.22 –m³	113.55 –ft³	0.50 –m³	132.77 –ft³	0.18 –m³	46.59 –ft³	0.35 –m³	1.55 –ft³	0.35 –m³	91.51 –ft³	0.69 –m³	3.05 –ft³	65.34 –m³	287.68 –ft³	11.74 –m³	51.71 –ft³	1.55 –m³	6.82 –ft³
Surge Tank Size	65.34 –m³	17,261 –gal	8.53 –m³	2,253 –gal	3.22 –m³	849 –gal	0.50 –m³	18 –gal	0.18 –m³	6 –gal	0.35 –m³	2 –gal	0.35 –m³	12 –gal	0.69 –m³	3 –gal	65.34 –m³	288 –gal	11.74 –m³	51.71 –ft³	1.55 –m³	6.82 –ft³

A 2.1 POOL / SPA DATA

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Sundmidstod

Iceland

Samþykkt þann 07 MAI 2008
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