

Pool and Spa Facilities Update

Summary of Aqua Design International (ADI) Facility Evaluations

October 2024

GVR Pools: Alphabetical

- Abrego North: pool built 1978/rebuilt 2016, 30x60 ft, 57,370 gallons
- Abrego South: pool built 1977, 30x60 ft, 44,112 gallons
- Canoa Hills: pool built 1990, 55x82 ft, 125,033 gallons
- Canoa Ranch: pool built 2007, 34x75 ft, 103,000 gallons
- Casa Paloma I: pool built 1975, 32x70 ft, 86,010 gallons
- Casa Paloma II: pool built 1977, 30x60 ft, 68,217 gallons
- Continental Vistas: pool built 1979, 30x60 ft, 67,329 gallons
- Desert Hills: pool built 1981, 39x90 ft, 118,409 gallons
- East Center: pool built 1963/rebuilt 2023, 25x60 ft, 75,000 gallons
- Las Campanas: pool built 1997, 50x82 ft, 137,500 gallons
- Madera Vista: pool built 1983, 25x50 ft, 35,966 gallons
- Santa Rita Springs: pool built 1996, 38x75 ft, 84,588 gallons
- West Center: pool built 1980, 50x75 ft, 114,635 gallons



Pool Evaluations and Findings

Consultant evaluations conducted June to August 2024

Conducted on-site assessments of all pools, spas, and equipment with staff assistance

□ Identified problems/issues, mainly with equipment and piping. Code issues.

Recommended repairs and upgrades for each facility

□ Provided a cost estimate for design and reconstruction of pool at Desert Hills

Findings

□ Need updated chemical placards/signs and life rings per code

□ Need minor electrical repairs: equipment rooms, pool deck connections, pool lights per code

Emergency shut-off (ESO) buttons needed for older pools and heaters.

□ Pumps and filters need to be replaced at some pools for proper filtration rates per code

Gradient Flow meters need to be installed on return pipes per code

Backwash valves need to be replaced so they are less restrictive on water flow and better quality

Heaters need power vents for proper burning of gas and less corrosion (wear and tear)

□ Maintenance: clean jet blowers, replace seals on motors annually, repair baskets and weirs

UGB-compliant drains need to be checked per federal code

□ Shade structures do not exist at three facilities: CR, CV, EC. Needed to protect expensive equipment.

Pool equipment could be monitored from the office/remotely if proper equipment installed

Abrego North

Devil Pool built 1978/*rebuilt 2016*, 30x60 ft, 57,370 gallons

D Pool and Spa Improvements- ADI Recommendations

- □ Replace two chemical controllers to digital systems for accuracy
- □ Replace backwash valves that are better/less restrictive
- □ Install three D2 power vents on Raypak gas heaters to prevent sooting
- □ Install vacuum gauge on suction side of spa pump
- □ Pool Deck: do scratch-coat, add acrylic lace topping and paint

- □ Install new chemical placards per code. Replace life rings with new 24" size.
- □ Remove minor scale build-up on pools, spa, rails, tiles. Use 3M pad or media blast
- □ Balance chemicals to reduce copper staining from heaters
- □ Clean pool deck with TSP and pressure washer to remove staining



Abrego South

Pool built 1977, 30x60 ft, 44,112 gallons

D Pool and Spa Improvements- ADI Recommendations

- □ Replace two chemical controllers to digital systems for accuracy
- □ Re-install lift at spa. Currently on the ground.
- □ Install additional TR-140 filter to pool. Replace spa filter with new TR-140 for correct flow
- □ Replace 3hp single-speed pool pumps with 2 new 3hp variable-speed pumps or one 5hp pump
- □ Replace 3hp spa pump with new 3hp variable-speed pump
- **D** Replace backwash valves that are less restrictive. Re-plumb equipment room for efficiency.
- □ Install three D2 power vents on Raypak gas heaters to prevent sooting
- □ Install Flo-viz meters and vacuum gauges on suction side of pumps per code.
- □ Install Emergency Shut-off (ESO) switch by pool and spa to meet current code
- $\hfill \square$ Install Pentair I10D automated control system with an Intellichem control system

- □ Install new chemical placards per code. Replace life rings with new 24" size.
- □ Remove minor scale build-up on pools, spa, rails, tiles. Use 3M pad or media blast
- □ Balance chemicals to reduce copper staining from heaters
- □ Clean pool deck with TSP and pressure washer to remove staining
- □ Clean spa jet orifices. If done right, may eliminate need for jet pump.
- □ Ensure pool drains are VGB compliant. Must have labels. Replace every 3 to 5 years.



Canoa Hills

Pool built 1990, 55x82 ft, 125,033 gallons

D Pool and Spa Improvements- ADI Recommendations

- □ Replace two chemical controllers to digital systems for accuracy
- □ Check pool lights for proper securement.
- U-3 style skimmers: repair weirs and install correct baskets
- □ Install additional TR-140 filter to pool. Replace spa filter with new TR-140 for correct flow.
- **Q** Replace three 3hp single-speed pool pumps with two new 5hp variable-speed pumps. Electrical issue.
- **D** Replace pipes on pool heater power vents to meet code. Should be SS sealed pipe: Dura-vent or Z-Vent.
- □ Install one D2 power vents on Raypak gas heater for spa to prevent sooting
- □ Replace 3hp single-speed spa pump with new 3hp variable-speed pump
- **D** Replace backwash valves that are less restrictive. Re-plumb equipment room for efficiency.
- □ Install Flo-viz meters and vacuum gauges on suction side of pumps per code.
- □ Install Emergency Shut-off (ESO) switch by pool and spa to meet current code
- □ Install Pentair I10D automated control system with an Intellichem control system

- □ Install new chemical placards per code. Replace life rings with new 24" size.
- D Remove minor scale build-up on pools, spa, rails, tiles. Use 3M pad or media blast
- **D** Balance chemicals to reduce copper staining from heaters
- Clean pool deck with TSP and pressure washer to remove staining
- □ Clean spa jet orifices. If done right, may eliminate need for jet pump.
- □ Ensure pool drains are VGB compliant. Must have labels. Replace every 3 to 5 years.



Canoa Ranch

Pool built 2007, 34x75 ft, 103,000 gallons

D Pool and Spa Improvements- ADI Recommendations

- □ Install correct vacuum fitting on side wall
- □ Replace two chemical controllers to digital systems for accuracy
- **Q** Replace three 3hp single-speed pool pumps with two 5hp variable-speed pumps or 3 3hp VS.
- □ Install two D2 power vents on Raypak gas heater for pool to prevent sooting
- □ Replace 3hp single-speed spa pump with new 3hp variable-speed pump
- □ Install one D2 power vent on Raypak gas heater for spa to prevent sooting
- **Q** Replace backwash valves that are less restrictive. Re-plumb equipment room.
- □ Install Flo-viz meters and vacuum gauges on suction side of pumps per code.
- □ Install Emergency Shut-off (ESO) switch by pool and spa to meet current code
- □ Install Pentair I10D automated control system with an Intellichem control system
- □ Install shade structure to protect value equipment from sun damage

- □ Install new chemical placards per code. Replace life rings with new 24" size.
- C Remove minor scale build-up on pools, spa, rails, tiles. Use 3M pad or media blast
- □ Balance chemicals to reduce copper staining from heaters
- Ensure pool drains are VGB compliant. Must have labels. Replace every 3 to 5 years.



Casa Paloma I

□ Pool built 1975, 32x70 ft, 86,010 gallons

D Pool and Spa Improvements- ADI Recommendations

- □ Replace two chemical controllers to digital systems for accuracy
- Replace worn depth tiles at waterline
- **D** Replace filters with three TR-140 filters to pool. Add extra TR-100 filter to spa.
- **Q** Replace two 3hp single-speed pool pumps with two 5hp XF pumps.
- □ Install three D2 power vents on three Raypak gas heater for pool and spa to prevent sooting
- **Q** Replace 3hp single-speed spa pump with new 5hp variable-speed pump
- **D** Replace backwash valves that are less restrictive. Re-plumb equipment room for efficiency.
- □ Install Flo-viz meters and vacuum gauges on suction side of pumps per code.
- □ Install Emergency Shut-off (ESO) switch by pool and spa to meet current code
- **D** Relocate air blower to equipment room. Air flow enclosure does not allow enough air flow for blower.
- □ Remove air blower enclosure and landscape garden to meet code. Remove ability to climb over wall.

- □ Install new chemical placards per code. Replace life rings with new 24" size.
- D Remove minor scale build-up on pools, spa, rails, tiles. Use 3M pad or media blast
- □ Balance chemicals to reduce copper staining from heaters
- □ Clean pool deck with TSP and pressure washer to remove staining. Repaint with acrylic paint.
- Clean spa jet orifices. If done right, may eliminate need for jet pump.
- **D** Ensure pool drains are VGB compliant. Must have labels. Replace every 3 to 5 years.



Casa Paloma II

□ Pool built 1977, 30x60 ft, 68,217 gallons

D Pool and Spa Improvements- ADI Recommendations

- **D** Replace two chemical controllers to digital systems for accuracy
- **Q** Readjust lights in pool and spa to ensure they are installed correctly
- **D** Replace two pool filters with two TR-140 filters. Replace spa filter with TR-100 or TR-140 filter.
- □ Replace two 3hp single-speed pool pumps with two 3hp Intelliflow3 pumps.
- □ Install three D2 power vents on three Raypak gas heaters for pool and spa to prevent sooting
- □ Replace 1hp single-speed spa pump with 3hp variable-speed pump
- **Q** Replace backwash valves that are less restrictive. Re-plumb equipment room for efficiency.
- □ Install Flo-viz meters and vacuum gauges on suction side of pumps per code.
- □ Install Emergency Shut-off (ESO) switch by pool and spa to meet current code

- □ Install new chemical placards per code. Replace life rings with new 24" size.
- **Q** Remove minor scale build-up on pools, spa, rails, tiles. Use 3M pad or media blast
- □ Balance chemicals to reduce copper staining from heaters
- □ Ensure pool drains are VGB compliant. Must have labels. Replace every 3 to 5 years.



Continental Vistas

□ Pool built 1979, 30x60 ft, 67,329 gallons

D Pool and Spa Improvements- ADI Recommendations

- **Q** Replace two chemical controllers to digital systems for accuracy
- **D** Replace two pool filters with two TR-140 filters. Replace spa filter with TR-140 filter.
- □ Replace two 3hp single-speed pool pumps with two 3hp Intelliflow3 pumps.
- □ Install three D2 power vents on three Raypak gas heaters for pool and spa to prevent sooting
- □ Replace one 3hp Whisperflow spa pump with 3hp Intelliflow variable-speed pump
- **Q** Replace backwash valves that are less restrictive. Re-plumb equipment room for efficiency.
- □ Install Flo-viz meters and vacuum gauges on suction side of pumps per code.
- □ Install Emergency Shut-off (ESO) switch by pool ad spa to meet current code
- □ Install Pentair I10D automated control system with an Intellichem control system
- □ Install shade structure to protect value equipment from sun damage

- □ Install new chemical placards per code. Replace life rings with new 24" size.
- **Q** Remove minor scale build-up on pools, spa, rails, tiles. Use 3M pad or media blast
- Clean pool deck with TSP and pressure washer to remove staining. Repaint with acrylic.
- **D** Balance chemicals to reduce copper staining from heaters
- □ Ensure pool drains are VGB compliant. Must have labels. Replace every 3 to 5 years.



Desert Hills

□ Pool built 1981, 39x90 ft, 118,409 gallons

D Pool and Spa Improvements- ADI Recommendations

- □ Replace two chemical controllers to digital systems for accuracy
- U-3 style skimmers: repair weirs and install correct baskets
- **□** Replace three pool filters with three TR-140 filters. Replace spa filter with new TR-140 for correct flow.
- **Q** Replace three 3hp single-speed pool pumps with two new 5hp variable-speed pumps.
- □ Install D2 power vents on four Raypak gas heaters to prevent sooting. Replumb heater manifold.
- **Q** Replace backwash valves that are less restrictive. Re-plumb equipment room for efficiency.
- □ Install Flo-viz meters and vacuum gauges on suction side of pumps per code.
- □ Install Emergency Shut-off (ESO) switch by pool and spa to meet current code
- □ Fix all plumbing in poor condition. Identify abandoned pipes. Replumb for proper flow.

- □ Install new chemical placards per code. Replace life rings with new 24" size.
- □ Remove minor scale build-up on pools, spa, rails, tiles. Use 3M pad or media blast
- □ Clean pool deck with TSP and pressure washer to remove staining. Paint with acrylic
- □ Balance chemicals to reduce copper staining from heaters
- □ Replace pump seals. Showing signs of leaking.
- □ Ensure pool drains are VGB compliant. Must have labels. Replace every 3 to 5 years.



East Center

□ Pool built 1963/*rebuilt 2023*, 25x60 ft, 75,000 gallons

D Pool and Spa Improvements- ADI Recommendations

□ Install shade structure to protect value equipment from sun damage

- □ Remove minor scale build-up on pools, spa, rails, tiles. Use 3M pad or media blast
- □ Service the 5 Pentair ETI heaters on a regular basis. Get Pentair training.
- □ Clean pool deck with TSP and pressure washer to remove staining.
- □ Ensure pool drains are VGB compliant. Must have labels. Replace every 3 to 5 years.



Las Campanas

Dool built 1997, 50x82 ft, 137,500 gallons

D Pool and Spa Improvements- ADI Recommendations

- **D** Replace two chemical controllers to digital systems for accuracy
- □ Check pool and spa lights for proper securement
- U-3 style skimmers: repair weirs and install correct baskets
- **D** Replace manual fill valve on pool. Broken handle. May require cutting concrete deck.
- Add additional TR-140 pool filter. Replace spa filter with new TR-140 for correct flow.
- **Q** Replace three 3hp single-speed pool pumps with two new 5hp variable-speed pumps.
- □ Replace single-speed spa and jet pumps with two 3hp Intelliflow pumps
- □ Install correct D2 power vents on four Raypak gas heaters to prevent sooting.
- **Q** Replace backwash valves that are less restrictive. Re-plumb equipment room for efficiency.
- □ Install Flo-viz meters and vacuum gauges on suction side of pumps per code. Replumb equipment room.
- □ Install Emergency Shut-off (ESO) switch by pool and spa to meet current code. Install ESO by boilers.
- □ Install Pentair I10D automated control system with an Intellichem control system

- □ Install new chemical placards per code. Replace life rings with new 24" size.
- D Remove minor scale build-up on pools, spa, rails, tiles. Use 3M pad or media blast
- Clean pool deck with TSP and pressure washer to remove staining. Repaint with acrylic when needed.
- □ Balance chemicals to reduce copper staining from heaters
- □ Replace pump seals. Showing signs of leaking.
- **D** Ensure pool drains are VGB compliant. Must have labels. Replace every 3 to 5 years.



Madera Vista

□ Pool built 1983, 25x50 ft, 35,966 gallons

D Pool and Spa Improvements- ADI Recommendations

- **D** Replace two chemical controllers to digital systems for accuracy
- **Q** Replace one 3hp Whisperflow spa pump with 3hp Intelliflow variable-speed pump
- Connect the spa filter/jet pump to the Intellicenter for proper flow and electric cost savings
- **Q** Replace backwash valves that are less restrictive. Re-plumb equipment room for efficiency.
- □ Install Flo-viz meters and vacuum gauges on suction side of pumps per code.
- □ Install Emergency Shut-off (ESO) switch by pool and spa to meet current code
- □ Install Pentair I10D automated control system with an Intellichem control system

- □ Install new chemical placards per code. Replace life rings with new 24" size.
- □ Remove minor scale build-up on pools, spa, rails, tiles. Use 3M pad or media blast
- □ Clean pool deck with TSP and pressure washer to remove staining. Repaint with acrylic.
- **D** Balance chemicals to reduce copper staining from heaters
- □ Ensure pool drains are VGB compliant. Must have labels. Replace every 3 to 5 years.
- Get Pentair heaters serviced bi-annually by official service tech



Santa Rita Springs

Devil Pool built 1996, 38x75 ft, 84,588 gallons

D Pool and Spa Improvements- ADI Recommendations

- □ Replace two chemical controllers to digital systems for accuracy
- □ Install an ADA lift for spa. Pool has one.
- □ Add additional TR-140 pool filter. Spa filter is okay.
- □ Replace two 3hp single-speed pool pumps with three 3hp variable-speed or two 5hp VS pumps
- **D** Replumb piping for proper flow when changing out pumps and filters
- **Q** Replace single-speed 3hp spa pump (leaking seal) with one new 3hp Intelliflow pump
- □ Install correct D2 power vents on four Raypak gas heaters to prevent sooting.
- **Q** Replace backwash valves that are less restrictive. Re-plumb equipment room for efficiency.
- □ Install Flo-viz meters and vacuum gauges on suction side of pumps per code.
- □ Install Emergency Shut-off (ESO) switch by pool and spa to meet current code. Install ESO by boilers.
- Install Pentair I10D automated control system with an Intellichem control system

- □ Install new chemical placards per code. Replace life rings with new 24" size.
- D Remove minor scale build-up on pools, spa, rails, tiles. Use 3M pad or media blast
- **Clean pool deck with TSP and pressure washer to remove staining. Repaint with acrylic.**
- □ Balance chemicals to reduce copper staining from heaters
- □ Replace pump seals. Showing signs of leaking.
- □ Ensure pool drains are VGB compliant. Must have labels. Replace every 3 to 5 years.



West Center

□ Pool built 1980, 50x75 ft, 114,635 gallons

Pool and Spa Improvements- ADI Recommendations

- **D** Replace two chemical controllers digital systems for accuracy
- **D** Replace and reattach missing deck drain sections that are broken
- **Check light in spa for proper connection**
- □ Replace three TR-100 pool filters with four TR-140 filters to meet flow rates.
- □ Replace one TR-100 spa filter with two TR-100 filters with high-flow backwash system
- □ Replace two 3hp single-speed pool pumps with three 3hp variable-speed or two 5hp VS pumps
- **D** Replumb piping for proper flow when changing out pumps and filters
- □ Replace single-speed 3hp spa pump (leaking seal) with one new 5hp Intelliflow variable-speed pump
- □ Install correct D2 power vents on four Raypak gas heaters to prevent sooting.
- □ Replace backwash valves that are less restrictive. Re-plumb equipment room for efficiency.
- □ Install Flo-viz meters and vacuum gauges on suction side of pumps per code.
- □ Install Emergency Shut-off (ESO) switch by pool and spa to meet current code. Install ESO by boilers.
- □ Install Pentair I10D automated control system with an Intellichem control system

- □ Install new chemical placards per code. Replace life rings with new 24" size.
- Remove minor scale build-up on pools, spa, rails, tiles. Use 3M pad or media blast
- □ Replace or repair degrading sections of concrete deck
- **Clean pool deck with TSP and pressure washer to remove staining. Repaint with acrylic.**
- Balance chemicals to reduce copper staining from heaters
- Clean out spa jets. Not all are working properly
- □ Replace pump seals. Showing signs of leaking.
- □ Ensure pool drains are VGB compliant. Must have labels. Replace every 3 to 5 years.



MRR-B Pool & Spa Replacement Fund

Interest Contributions 6.00%

Annual Inc. Contr.	7.0%						
	Beginning	Annual				Ending	
Year	Balance	Contributions	Income	Available	Expenditure	Balance	Location
2021	-	1,300,207	-	1,300,207	(216,502)	1,083,705	
2022	1,083,705	270,472	6,662	1,360,839	(783,876)	576,963	
2023	576,963	289,405	56,184	922,552	(107,787)	814,765	
2024	814,765	299,400	73,150	1,187,315	-	1,187,315	
2025	1,187,315	320,358	90,460	1,598,133	-	1,598,133	
2026	1,598,133	342,783	116,455	2,057,372	-	2,057,372	
2027	2,057,372	366,778	145,449	2,569,598	-	2,569,598	
2028	2,569,598	392,452	177,723	3,139,774	-	3,139,774	
2029	3,139,774	419,924	213,582	3,773,280	(1,598,371)	2,174,909	CP1
2030	2,174,909	449,319	157,454	2,781,681	-	2,781,681	
2031	2,781,681	480,771	195,747	3,458,199	-	3,458,199	
2032	3,458,199	514,425	238,357	4,210,981	-	4,210,981	
2033	4,210,981	529,858	284,450	5,025,289	(1,591,669)	3,433,620	WC
2034	3,433,620	545,753	238,762	4,218,136	-	4,218,136	
2035	4,218,136	562,126	286,816	5,067,077	-	5,067,077	
2036	5,067,077	578,990	338,764	5,984,831	-	5,984,831	
2037	5,984,831	596,359	394,871	6,976,062	(1,109,536)	5,866,527	CP2
2038	5,866,527	614,250	388,847	6,869,623	-	6,869,623	
2039	6,869,623	632,678	450,138	7,952,439	-	7,952,439	
2040	7,952,439	651,658	516,246	9,120,343	-	9,120,343	
2041	9,120,343	671,208	587,493	10,379,044	(1,133,038)	9,246,007	CV
2042	9,246,007	691,344	596,241	10,533,592	-	10,533,592	
2043	10,533,592	712,084	674,741	11,920,417	-	11,920,417	
2044	11,920,417	733,447	759,232	13,413,095	-	13,413,095	
2045	13,413,095	755,450	850,113	15,018,659	(2,164,307)	12,854,351	DH
2046	12,854,351	778,114	817,948	14,450,413	-	14,450,413	
2047	14,450,413	801,457	915,112	16,166,983	-	16,166,983	
2048	16,166,983	825,501	1,019,549	18,012,033	-	18,012,033	
2049	18,012,033	850,266	1,131,738	19,994,037	(1,130,805)	18,863,232	MV
2050	18,863,232	875,774	1,184,340	20,923,346	-	20,923,346	
2051	20,923,346	902,047	1,309,524	23,134,917	-	23,134,917	
2052	23,134,917	929,109	1,443,842	25,507,867	-	25,507,867	
2053	25,507,867	956,982	1,587,891	28,052,740	(3,210,991)	24,841,749	SRS
2054	24,841,749	985,691	1,549,646	27,377,087	-	27,377,087	
2055	27,377,087	1,015,262	1,703,541	30,095,890	-	30,095,890	
2056	30,095,890	1,045,720	1,868,497	33,010,107	-	33,010,107	