

The Restored Richmond Plunge

The Greenest and Healthiest Public Pool in America

Todd Jersey Architecture

August 10, 2009

Project Features

Site:

- Zero Water (xeriscape) landscaping emphasizing plants native to Richmond and the Bay Area. Emphasis also on providing support for struggling native species of birds, butterflies and other native critters by providing key species of flora that support them.
- Victory garden being created on the large underused west side of the structure for growing food for the community. *Note: This garden will be used and run by urban food growing advocates and volunteers*
- Mushroom fountain being repurposed into a kids play fountain in our front yard area.

Water Conservation:

- Xeriscape landscape with no irrigation needs replaces the lawn which had massive irrigation needs and maintenance requirements.
- Ultra low flow shower and sink faucets.
- Dual flush toilets.
- Ultra low water urinals.
- Pool covers. The use of these pool covers will drastically reduce pool water loss by evaporation, saving tens of thousands of gallons of water per year. *Note: Our new plan, with the dressing rooms in the North wing, allows for a much larger pool deck which can accommodate portable pool covers.*

Energy:

- Reconstruction of historic roof monitor to increase natural daylight and decrease dependence on artificial lights.
- 100% LED lamp technology saves 35% more energy and does not have the mercury disposal problem that fluorescent lamps have.
- Computerized pool pump monitor saves 50% of energy demand.
- Installation of a computerized, automated energy management system by Watt Stopper.
- Radiant heating system heats the bodies in the space and not the air allowing for a high degree of fresh air through natural ventilation without wasting energy.
- 20kw solar electric system to generate 75% of the electrical needs for the pool.
- 80 4x10 Heliodyne Gobi solar hot water panels to provide most of our summer hot water needs for the pool.
- High amount of operable windows coupled with radiant heaters eliminate the need for power hungry dehumidification systems.
- Pool covers conserve heat when pool is not in use.
- Building commissioning to be performed and staff user's manual created to help ensure maximum energy efficiencies are maintained.

Health related features:

- Automated motorized windows in clerestory to ensure maximum fresh air by natural ventilation all year long creating superior indoor air quality especially for a public pool.
- Ultra Violet sanitizer installed to eliminate unhealthy chloramines in the water which cause the foul odor and sting the eyes.
- Salt based chlorine generator creates chlorine safely and organically on site and also reduces the chloramines in the pool.

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Historic Features:

- Rebuilding the historic Monitor.
- Rebuilding the historic "MUNICIPAL NATATORIUM" illuminated sign.
- Bringing back the historic palm tree.
- Removing the ramp and restoring the front doors and windows to the lobby.
- Rebuilding all the historic wood windows and doors.
- Replacing the front light posts.
- Recreating the original exterior colors.
- Repurposing of the historic "mushroom" fountain into a kids play fountain in the front yard park.

Durability, Maintenance and Economic Sustainability

- Designed and built for minimum 50 years of service.
- Paint job designed for *minimum* 30 years. *Note: All interior paint had to and was removed and epoxy based paints applied to stable and clean substrate. This was essential to a long lasting paint job.*
- Energy efficiency measures and solar systems will reduce energy payments 75-90% of what they were creating vastly reduced maintenance costs.
- Maintenance drastically simplified and reduced by all new coordinated smart systems.

Over eight years ago, a basic plan for the restoration of The Plunge was created by a local design firm in a report titled "Richmond Municipal Natatorium - Building Assessment and Schematic Design Options" and dated June 2002. Other than having plans to reconstruct the roof monitor, rebuild the wood windows and replace the historic light posts, the basic 2002 plan had none of the features indicated above. The price tag for the 2002 design was over 8 million dollars.

Eight years later we are well on our way now to completing a state of the art historic and green facility with all of the features mentioned above for fewer than 7 million dollars. This remarkable achievement is a testament to the commitment of our design and construction team, to the leadership of the Save the Plunge Trust and Rich Davidson of the City of Richmond, to provide the highest quality green, healthy and historic project to the City of Richmond at the lowest possible cost.