PARKS & RECREATION COMMISSION

Jag Bains, District 1
Fatima Malik, District 2 (Vice Chair)
David Guerrero, District 3
Julie Murphy, District 4
Joe Flores, District 5
Tyler Aguilar, District 6
Shane Singh, District 7
Chinua Rhodes, District 8
David Heitstuman, At Large (Chair)
David O'Toole, At Large
Rita Good, Mayoral

COMMISSION STAFF

Christopher C. Conlin, Director
Shannon Brown, Operations Manager
Mia Lorenz, Support Services Manager
Ilee Muller, Administrative Analyst
Sheryl Patterson, Senior Deputy City Attorney

City of SACRAMENTO

Agenda

Parks & Recreation Commission

Historic City Hall Hearing Room
915 I Street
Published by the
Parks & Recreation Department
(916) 808-5172

Thursday, September 7, 2017
6:30 p.m.

NOTICE TO THE PUBLIC

You are welcomed and encouraged to participate in this meeting. Public comment is taken on items listed on the agenda when they are called. Public Comment on items not listed on the agenda will be heard as noted on the agenda. Comments on controversial items may be limited and large groups are encouraged to select 3-5 speakers to represent the opinion of the group.

Notice to Lobbyists: When addressing the Commission, you must identify yourself as a lobbyist and announce the client/business/organization you are representing *(City Code 2.15.160).*

Speaker slips are available on the City's Website and available from staff, and should be completed and submitted to the Commission Clerk.

Government Code 54950 (The Brown Act) requires that a brief description of each item to be transacted or discussed be posted at least 72 hours prior to a regular meeting. The City posts Agendas at City Hall as well as offsite meeting locations.

The order and estimated time for Agenda items are listed for reference and may be taken in any order deemed appropriate by the Commission.

The Agenda provides a general description and staff Recommendation; however, the Commission may take action other than what is recommended. Hard copies of the agenda and Commission material are available at the Parks & Recreation Department, and all written material received is available at the meeting for public review.

Meeting facilities are accessible to persons with disabilities. If you require special assistance to participate in the meeting, notify the Commission Staff at (916) 808-5172 at least 48 hours prior to the meeting.

General Conduct for the Public Attending Parks & Recreation Commission Meetings

- Members of the public attending commission meetings shall observe the same rules and decorum applicable to the Members and staff as noted in Chapters 3 and 4 of Council Rules of Procedure.
- Stamping of feet, whistles, yells or shouting, physically threatening conduct, and/or similar demonstrations are unacceptable public behavior and will be prohibited by the Sergeant-at-Arms.
- Lobbyists must identify themselves and the client(s), business, or organization they represent before speaking to the Committee.
- Members of the public wishing to provide documents to the Committee shall comply with Rule 7D of the Council Rules of Procedure.

Members of the Public Addressing the Parks & Recreation Commission

- Purpose of Public Comment. The City provides opportunities for the public to address the Committee as a whole in order to listen to the public's opinions regarding non-agendized matters within the subject matter jurisdiction of the City during Regular meetings and regarding items on the Agenda at all other meetings.
    - Public comments should not be addressed to individual Members nor to City officials, but rather to the ALBHMF Commission as a whole regarding Commission business.
    - While the public may speak their opinions on Commission business, personal attacks on Commission members and City officials, use of swear words, and signs or displays of disrespect for individuals are discouraged as they impede good communication with the Commission.
    - Consistent with the Brown Act, the public comment periods on the Agenda are not intended to be "Question and Answer" periods or conversations with the Commission and City officials. The limited circumstances under which Members may respond to public comments are set out in Rule 8D2 of the Council Rules of Procedure.

Speaker Time Limits

In the interest of facilitating the Committee's conduct of the business of the City, the following time limits apply to members of the public (speakers) who wish to address the Committee during the meeting.

- **Matters not on the Agenda.** Two (2) minutes per speaker.
- **Consent Calendar Items.** The Consent Calendar is considered a single item, and speakers are therefore subject to the two (2) minute time limit for the entire Consent Calendar. Consent Calendar items can be pulled at a member's request. Such pulled Consent Calendar items will be considered individually and up to two (2) minutes of public comment per speaker on those items will be permitted.
- **Discussion Calendar Items.** Two (2) minutes per speaker.

Time Limits per Meeting In addition to the above time limits per item, the total amount of time any one individual may address the Committee at any meeting is eight (8) minutes.

- Each speaker shall limit his/her remarks to the specified time allotment.
- The Presiding Officer shall consistently utilize the timing system which provides speakers with notice of their remaining time to complete their comments. A countdown display of the allotted time will appear and will flash red at the end of the allotted time.
- In the further interest of time, speakers may be asked to limit their comments to new materials and not repeat what a prior speaker said. Organized groups may choose a single spokesperson who may speak for the group but with no increase in time.
- Speakers shall not concede any part of their allotted time to another speaker.

The Presiding Officer may further limit the time allotted for public comments per speaker or in total for the orderly conduct of the meeting and such limits shall be fairly applied

AGENDA

Thursday, September 7, 2017

6:30 p.m.

Historic City Hall Hearing Room, 915 I Street, Sacramento, CA 95814

Open Session – 6:30 p.m.

Roll Call

Public Comments-Matters Not on the Agenda (2 minutes per speaker)

Consent Calendar

All items listed under the Consent Calendar are considered and acted upon by one Motion. Anyone may request an item be removed for separate consideration.

1. **Parks and Recreation Commission Meeting Minutes**
   Location: Citywide
   Recommendation: Approve Commission minutes for August 9, 2017
   Contact: Ilee Muller, Administrative Analyst, (916) 808-1022, Fiscal and Management Services

Discussion Calendar **Estimated Time: 80 Minutes**

Discussion Calendar items include an oral presentation including those recommending "receive and file".

2. **Citywide Pool Assessment Update**
   Location: Citywide
   Recommendation: Receive and File
   Contact: Shannon Brown, Operations Manager, (916) 808-6076; Jodie Vong, Administrative Officer, (916) 808-5122, Department of Parks and Recreation; Jeff Katz, President, JKA Architecture

3. **Older Adult Services Overview and 25th Anniversary of Triple-R Adult Day Program**
   Location: Citywide
   Recommendation: Informational
   Contact: Sylvia Fort, Recreation Manager, (916) 808-8381; Rosanne Bernardy, Recreation Superintendent, (916) 808-1590; Stephanie Wilson, Program Supervisor, (916) 808-1591, Department of Parks and Recreation

4. **Parks and Recreation Director Report (Oral): Review Highlights for August**
   Location: Citywide
   Recommendation: Informational
   Contact: Christopher C. Conlin, Director, (916) 808-8526, Department of Parks and Recreation

Member Comments-Ideas, Questions and Meeting/Conference Reports
Adjournment

City of SACRAMENTO

Meeting Minutes of the Parks and Recreation Commission

Wednesday, August 9, 2017

6:30 p.m.

City Hall – 915 I Street – First Floor Council Chamber

Open Session – 6:30 p.m.

Roll Call

The meeting was called to order by Chair Heitstuman at 6:31 p.m.

Present: Commissioners Bains, Flores, Good, Guerrero, Murphy, Rhodes, Singh, and Chair Heitstuman. Commissioner Aguilar arrived late, shorly after the roll call.
Absent: Commissioner Malik

Public Comments-Matters Not on the Agenda (2 minutes per speaker)

Jayme Hungerfield who serves on a soccer board spoke about safety and the poor conditions of the fields at the following parks:

Reichmuth Park: Large cracks in the soil which pose a safety concern for the kids while playing soccer because the thick clover cover hides the cracks.The soccer board would like the field watered twice a day, mowed regularly, and have ground cover added to even out the field.

Mangan Park: The grass in the middle of the soccer field is hay because the sprinklers only reach the perimeter not the middle of the field. She also expressed concerns regarding homeless encampments around the park, and the archery range missing safety signage, indicating use of range is prohibited when the soccer field is in use.

Bahnfleth Park: Last year the soccer field was a wetland. They would like the ground regraded to better serve dual purposes as a retention basin and soccer field.

Consent Calendar

1. **Parks and Recreation Commission Meeting Minutes**
   Location: Citywide
   Recommendation: Approve Commission minutes for June 1, 2017

Contact: Ilee Muller, Administrative Analyst, (916) 808-1022, Fiscal and Management Services

Action: Motion to approve the Consent Calendar.
Moved, seconded (Aguilar/Rhodes) 7 Ayes and 1 Abstention (Singh)

Discussion Calendar **Estimated Time: 80 Minutes**

2. **Sacramento Police Department Youth Programs**
Location: Citywide
Recommendation: Informational
Contact: Charles Husted, Police Lieutenant, (916) 808-8125, Sacramento Police Department

Lieutenant Husted provided an overview of Youth Programs the Sacramento Police Department (SPD) oversees. SPD Youth Services Unit works directly with over 650 youth annually. The bulk of the youth participate in the Criminal Justice Academies, which are housed at four area high schools; Kennedy, Grant, Hiram Johnson, and McClatchy. Additionally, the Youth Services Unit operates the Police Cadet Program, which includes participants between the ages of 14-20 years old, who have an interest in law enforcement and maintain a 2.5 or above GPA. SPD also supports youth programming through the Sacramento Police Activities League (SacPAL). SacPAL currently has an active Rugby program for boys and girls, ranging from ages 10-18 years. SPD also provides a Ski and Mountain Bike program. SPD youth programs serve over 700 youth annually.

Lieutenant Husted announced a Fishing Derby from 8 AM – 1 PM on Saturday, August 12, 2017, at Granite Regional Park..

3. **City Golf Courses Operations and Future Capital Improvements; Strategy for Success**
Location: Citywide
Recommendation: Informational
Contact: Barbara Smith, Administrative Officer, (916) 808-5762, Golf Administration, Department of Parks and Recreation; Terry Daubert, President of Morton Golf (916) 808-2517, Parks and Recreation Partner

Mr. Morton provided the following overview of Golf operations:
- City golf course facilities
- Unique and historical highlights to know about Golf
- City of Sacramento instruction programs
- Personal success stories
- Capital improvement projects
- City golf facility national awards

4. **Parks and Recreation Director Report (Oral): Review Highlights for July**
Location: Citywide
Recommendation: Informational
Contact: Christopher C. Conlin, Director, (916) 808-8526, Department of Parks and Recreation

Director Chris Conlin provided an update on the following items:

- Update on the Parks Department youth integration efforts
- Camp Sacramento ACA certification status
- Brown Act refresher
- Announced new commission member Rita Good

Member Comments-Ideas, Questions and Meeting/Conference Reports

Commissioner Guerrero asked the Police Department to partner with Parks and Recreaton at their Hot Spots in Gardenland Park and suggested coordinating with PAL to organize a basketball tournament.

Commissioner Flores requested data on how many youth enter the police academy or become non-sworn employees after they complete police programs.

Chair Heitstuman asked for the Police Department to update the Cadet program application to include gender, gender identification, or gender expression under the Physical Requirements section.

Adjournment

Chair Heitstuman adjourned the meeting at 8:41 p.m.

Respectfully submitted:

Ilee Muller, Administrative Analyst
Department of Parks and Recreation

Approved by:

David Heitstuman, Chair
Parks and Recreation Commission

City of SACRAMENTO

Meeting Date: 9/7/17

Report Type: Discussion

Parks and Recreation Report

915 I Street, 1st Floor
www.CityofSacramento.org

Title: Citywide Pool Assessment Update

Location: Citywide

Recommendation: Receive and File

Contact: Shannon Brown, Operations Manager, (916) 808-6076, Parks and Recreation

Presenter: Jeff Katz, President of JKA Architecture, (619) 698-9177

Department: Parks and Recreation

Division: Aquatics

Dept ID: 19001521

Attachments:
- **01 Description/Analysis**
- **02 Citywide Pool Assessment Report**
- **03 JKA PowerPoint Presentation**

Submitted By:	Shannon Brown
Signature:	
Approved By:	Christopher Conlin
Signature:	

Attachment 01 – Description/Analysis

Issue: In the spring of 2016, Jeff Katz Architecture (JKA) was commissioned by the Department of Parks and Recreation to prepare a comprehensive assessment for the City's 12 aquatic facilities and 5 wading pools. The assessment is intended to identify and prioritize aquatic, mechanical, electrical, plumbing, structural, accessibility, and programmatic deficiencies at each facility and include an analysis of current conditions and recommendations for improvement. The purpose of this report is to present the findings of the assessment.

Assessment Summary by Pool
JKA's assessment report includes a comprehensive description of the deficiencies and upgrades needed at each of the 17 facilities, with associated estimated costs, and the priority for undertaking the corrective work based on the following classifications:

- Priority A: Safety Issues, Priority Code Compliance, and Code Compliance Triggered by other items
- Priority B: Priority Maintenance & Repair Items and Deferred Maintenance Items
- Priority C: Items to Bring the Facility up to Industry Standards and other Facility Enhancements

Below is a summary table of estimated costs for each facility based on these priorities:

Facility	Priority A Costs	Priority B Costs	Priority C Costs	Total Facility Costs
Bertha Henschel Play Pool	$263,500	$138,200	$75,488	$477,188
Cabrillo Pool	$1,086,720	$183,550	$108,740	$1,379,010
Clunie Pool	$1,532,950	$368,250	$199,760	$2,100,960
Colonial Play Pool	$117,100	$141,500	$28,500	$287,100
Doyle Pool	$243,050	$158,235	$95,860	$497,145
George Sim Pool	$1,182,470	$251,062	$10,000	$1,443,532
Glenn Hall Pool	$654,900	$534,356	$101,740	$1,290,996
Johnston Pool	$1,074,680	$152,436	$24,370	$1,251,486
Mama Marks Play Pool	$27,300	$24,100	$0	$51,400
Mangan Pool	$1,053,250	$157,550	$82,425	$1,293,225
McClatchy Park Pool	$1,193,820	$241,452	$145,250	$1,580,522
Pannell Meadowview Pool	$203,750	$710,544	$91,500	$1,005,794
Oki Pool	$642,930	$160,818	$44,200	$847,948
Robertson Pool	$26,520	$95,125	$462,000	$583,645
Southside Pool	$1,612,790	$196,875	$133,300	$1,942,965
Tahoe Park Pool	$1,060,520	$214,600	$38,300	$1,313,420
William Land Park Play Pool	$81,470	$97,300	$12,500	$191,270
Total Cost	**$12,057,720**	**$3,825,953**	**$1,653,933**	**$17,537,605**

For Summer 2016, the high and low use facilities are as follows:

High Use	Low Use
1. Pannell Meadowview Pool - 18,144	9. McClatchy Park Pool - 4,565
2. Clunie Pool - 16,373	10. Oki Pool - 3,363
3. George Sim Pool - 8,651	11. Cabrillo Pool - 1,365

Note: Stand-alone wading pools are not included.

Given the significant costs to upgrade the facilities, staff recommends working towards funding all the Priority A items, funding the Priority B items at the highest use facilities in the near term, funding the Priority C items after all of the other items have been corrected, and continuing to operate on a "maintenance" type level, fixing items as needed. Many of the repairs or replacements identified in the JKA report would likely trigger compliance with current code requirements, resulting in larger scopes of work and significantly higher cost impacts. Staff will also be looking for other funding opportunities to address repairs and add upgrades on a case by case basis, taking into consideration the use and viability of the facility long term. For example, the City received a state grant to repair Cabrillo Pool so that it could be reopened and upgraded.

Funding for necessary repairs or upgrades

Historically, there has been limited General Fund investment for on-going maintenance of these facilities, beyond the minimum to keep them functionally operational. Measure U has provided the necessary operating funding to staff and keep the pools open during the summer months. Another unknown factor is whether Measure U will be renewed to allow all the facilities to continue in operation, as Measure U is set to expire in 2019.

With the identified deficiencies, recommended repairs and improvements, and anticipated costs of over $17.5 million, the City will use the JKA report as a tool to plan and prioritize maintenance, repair needs, funding, and budgeting for the future. The Department plans to review and discuss the findings and recommendations with each Council Member. Based on Council input and direction, staff will develop an aquatic facility improvement plan prior to the annual budget cycle to set aside funding and address the priority repairs and maintenance needs.

Policy Considerations: Providing parks and recreation facilities is consistent with the City's strategic plan to enhance livability in Sacramento's neighborhoods by expanding park, recreation, and trail facilities throughout the City.

Economic Impacts: Not Applicable

Environmental Considerations: Planning and feasibility studies are exempt from environmental review under Section 15262 of the CEQA Guidelines. The future pool repair projects will also be exempt under Section 15301 of the CEQA Guidelines, Existing Facilities.

Sustainability: Not Applicable

Commission/Committee Action: Not Applicable

Rationale for Recommendation: Not Applicable

Financial Considerations: Not Applicable

Local Business Enterprise (LBE): Not Applicable

City of
SACRAMENTO
Parks and Recreation

CITYWIDE POOL ASSESSMENT

AUGUST 8, 2017

Submitted By:

JKA jeff katz ARCHITECTURE

280 Bettencourt St, Sonoma, CA 95476
619.698.9177 (Office)
www.jeffkatzarchitecture.com

Including input from our consultant team:

Aquatic Design Group

EXP U.S. Services, Inc.

BKF Engineers

US Access Consultants, Inc.

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1.0 Introduction

1.1 Assessment Team Members

Architectural:	JKA	Sonoma, CA
Aquatics:	Aquatic Design Group	Carlsbad, CA
Civil Engineer:	BKF Engineers	Sacramento, CA
M.E.P. Engineers:	EXP U.S. Services, Inc.	Sacramento, CA
Accessibility:	US Access Consultants, Inc.	San Diego, CA

1.2 City of Sacramento Team Members

Jill Nunes, Recreation Manager
Jackie Beecham, Recreation Superintendent
Bill Jackson, Plant Operator
Cierra Voss, Aquatics Recreation Coordinator
Samantha Matranga, Aquatics Recreation Coordinator
Sjon Swanson, Aquatics Recreation Supervisor

1.3 Codes

For the purpose of this report, the facilities' compliance with the current codes have been examined. The current codes that apply are:

- 2016 California Building Code (CBC)
- Title 24 of the California Building Code
- Title 22 of the California Health and Safety Code
- Virginia Graeme Baker Pool and Spa Safety Act (VGB)
- Assembly Bill 1020 (2009), Anti-entrapment Devices and Systems (AB1020)
- 2014 National Electric Code (NEC) – Article 680
- 2016 California Fire Code (CFC) – Article 80
- 2016 California Green Building Code (CGBC)

Article 680 of the NEC is the electrical code that pertains to swimming pools. Article 80 of the CFC is the article that pertains to hazardous material storage and use. Title 24 of the CBC, Chapter 31B provides the regulations for the design and operation of public swimming pools. Title 22, Chapter 20 of the California Health and Safety Code provides health and safety regulations for swimming pools.

1.4 Executive Summary

In the spring of 2016, JKA was commissioned by the City of Sacramento Parks & Recreation Department to prepare a comprehensive assessment for the City's 12 aquatic facilities and 5 wading pools. The assessment is intended to identify and prioritize aquatic, mechanical, electrical, plumbing, structural, accessibility and programmatic deficiencies at each facility and include an analysis of current conditions and recommendations for improvement. A spreadsheet of identified deficiencies, recommended repairs/improvements, and anticipated costs is included in the study, with a priority ranking and columns to act as a tool for the City to plan for, complete, and track future improvements.

The following report is a summary of the existing conditions, code compliance, deficiencies, proposed improvements, and potential opportunities for each facility. The scope of this report includes the pool house (where applicable), swimming pool(s), wading/activity pool (where applicable), pool deck area, and pool mechanical equipment. This excludes the structural integrity of the building structure and pool structure unless visible damage is apparent.

The Assessment Overview pages give a brief snapshot of each facilities' key elements, program offerings, facility needs and opportunities we have identified. More detailed descriptions and identified deficiencies follow within the narrative. Organized by facility, each section begins with an overview of the site followed by a summary of each discipline based on the assessments conducted by each team member. Photographs are included to clarify conditions where necessary.

Certain California Building Code or Health Code compliance issues are due to the fact that the pools were built many years ago before code requirements changed and may be due to deterioration and material failures. . Providing that the code compliance issues are not deemed an immediate health or safety risk, the Environmental Health Department typically would not require immediate upgrades. Rather, these grandfathered conditions are normally allowed to exist until such time as when the facility is undergoing repairs or replacements and the scope of the work will be required to include the needed code upgrades. Any repairs to the pool structure, the electrical, mechanical and plumbing systems, and the pool deck requires a building permit. Both the City's Chief Building Inspector and the Environmental Health Department would require that the facilities be brought into compliance with current code requirements as part of the work scope.

The spreadsheet provides a comprehensive list of the code compliance issues and deficiencies at each facility, with associated costs, and identified with the following classifications:

- Priority A includes: Safety Issues, Priority Code Compliance, and Code Compliance Triggered by other items.
- Priority B includes: Priority Maintenance & Repair Items and Deferred Maintenance Items
- Priority C includes: Identified Items to Bring the Facility up to Industry Standards and other Facility Enhancements

Below is a summary of estimated costs for each facility based on these priorities. Estimated costs are based on our recommendation of the scope of work required to rectify each specific line item.

Facility	Estimated Priority A Costs	Estimated Priority B Costs	Estimated Priority C Costs	Estimated Total Facility Costs
Bertha Henschel Play Pool	$263,500.00	$138,200.00	$75,487.50	$477,187.50
Cabrillo Pool	$1,086,720.00	$183,550.00	$108,740.00	$1,379,010.00
Clunie Pool	$1,532,950.00	$368,250.00	$199,760.00	$2,100,960.00
Colonial Play Pool	$117,100.00	$141,500.00	$28,500.00	$287,100.00
Doyle Pool	$243,050.00	$158,235.00	$95,860.00	$497,145.00
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Glenn Hall Pool	$654,900.00	$534,356.00	$101,740.00	$1,290,996.00
Johnston Pool	$1,074,680.00	$152,436.00	$24,370.00	$1,251,486.00
Mama Marks Play Pool	$27,300.00	$24,100.00	$0.00	$51,400.00
Mangan Pool	$1,053,250.00	$157,550.00	$82,425.00	$1,293,225.00
McClatchy Park Pool	$1,193,820.00	$241,451.75	$145,250.00	$1,580,521.75
Pannell Meadowview Pool	$203,750.00	$710,544.00	$91,500.00	$1,005,794.00
Oki Pool	$642,930.00	$160,818.00	$44,200.00	$847,948.00
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Southside Pool	$1,612,790.00	$196,875.00	$133,300.00	$1,942,965.00
Tahoe Park Pool	$1,060,520.00	$214,600.00	$38,300.00	$1,313,420.00
William Land Park Play Pool	$81,470.00	$97,300.00	$12,500.00	$191,270.00

Based on these estimates, our recommendation is to continue to operate on a 'maintenance' type level, fixing items as they come up, based on the

understanding that many of the items identified in this report trigger large scopes of work and have significant cost impacts. We suggest looking for opportunities to add upgrades on a case by case basis taking into consideration the use and viability of the facility long term. Based on information received from the Aquatics Recreation team, the highest & lowest used facilities for the last year (2016) are as follows:

Highest Use	Lowest Use
1. Pannell Meadowview Pool - 18,144	9. McClatchy Park Pool - 4,565
2. Clunie Pool - 16,373	10. Oki Pool - 3,363
3. George Sim Pool - 8,651	11. Cabrillo Pool - 1,365

Note: Stand-Alone Wading Pools are not included

Of the 17 facilities reviewed, the City operates nine pool complexes that include wading pools and another five complexes that are stand-alone wading pool facilities. A wading pool is defined by California Building Code as a pool intended to be used for wading by small children and having a maximum water depth of 18-inches at the deepest point. California Health and Safety Code requires public swimming pools and wading pools that charge a fee for use to provide lifeguards anytime the pool is open for use.

Wading pools were previously exempt from accessibility guidelines. However, in 2010 the ADA regulations were amended to include accessibility requirements for swimming and wading pools with a requirement to provide either a pool lift or sloped entry for ADA access. Newly constructed or altered pools must meet these requirements. The only way to make a wading pool ADA compliant is to provide a ramp entrance required to go to the deepest part of the wading pool, typically 18-inches, with acceptable slopes and hand rails when required. The ramp entrance would require reconstruction of the wading pools. An aquatic wheel chair would also be needed since patrons will typically not want to put their wheel chair into the pool water and code will not allow electric wheel chairs to enter the pool water. An aquatic wheel chair also needs to be provided by the City at one or more wading pools. As a municipal entity, the City of Sacramento is required by the ADA regulations to conduct and assessment of all of its facilities and prepare a Transition Plan to identify the upgrades needed to be fully ADA compliant. This report, which identifies for each pool all of the upgrades required, serves as the Pool ADA Transition Plan. Program accessibility does not require that every wading pool be made accessible, but does require a sufficient number of wading pools to be made accessible.

In lieu of renovating the existing wading pools to make them ADA compliant the City may opt to replace the wading pool with a sprayground. A sprayground is defined by California Building Code as a pool with no standing water in the splash zone. These spraygrounds could be constructed to be ADA complaint and since there is no standing water lifeguards are not required. A sprayground also has the ability to provide greater recreation value while at the same time reducing staffing and operating expenses for each facility. However, County Environmental Health Department regulations require a shower and bathroom facility in close proximation to the sprayground.

Since a wading pool is classified by the California Building Code and Health Code as a public swimming pool, public bathrooms are required. For the nine facilities with a combination of swimming pools and wading pools this should not be a problem, provided that the facility has an adequate number of bathroom fixtures (i.e., showers, toliets and sinks). In the case of the five stand-alone wading pool facilities the California Building Code requires toilet facilities within 300-feet (path of travel) from the pool or in an adjacent recreational facility. Considering that these existing stand-alone wading pool facilities are within parks, the existing park restroom facilities should be able to accommodate this requirement, but the location and number of fixtures were not reviewed as a part of this assessment, as the scope of this report is limited to the immediate aquatic facility area.

The following is a typical proforma example of the budget to replace a wading pool with a sprayground assuming site utilities are readily available and not including any restroom additions or modifications.

PROFORMA

Preliminary Opinion of Probable Cost

Replacement Sprayground

ITEM	DESCRIPTION	QTY	UNIT	UNIT PRICE	EXTENSIONS
1.0	INTERACTIVE PLAY EQUIPMENT				
1.1	Interactive Play Equipment	1	LS	$ 75,000.00	$ 75,000.00
1.2	Play Equipment Manifold	1	LS	$ 16,000.00	$ 16,000.00
1.3	Above Grade Valve Box	1	LS	$ 8,500.00	$ 8,500.00
1.4	**TOTAL WATER ODYSSEY COSTS**				**$ 99,500.00**
2.0	SPRAYGROUND SITE				
2.1	Demo and Disposal of Existing Pool & Concrete	1	LS	$ 75,000.00	$ 75,000.00
2.2	New Concrete Pad	2,000	SF	$ 30.00	$ 60,000.00
2.3	Perimeter Drainage	190	LF	$ 40.00	$ 7,600.00
2.4	Drain Valve Boxes	2	LS	$ 8,000.00	$ 16,000.00
2.5	ADA Access	0	LS	$ 30,000.00	$ -
2.6	Shade Structure	0	LS	$ 85,000.00	$ -
2.7	Benches	0	EA	$ 600.00	$ -
2.8	Picnic Tables	0	EA	$ 1,000.00	$ -
2.9	Fence upgrades	0	LS	$ -	$ -
2.10	Landscape	0	LS	$ -	$ -
2.11	**TOTAL SPRAYGROUND COSTS**				**$ 158,600.00**
3.0	MECHANICAL				
3.1	Underground Piping	1	LS	$ 55,000.00	$ 55,000.00
3.2	Mechanical Equipment	1	LS	$ 130,000.00	$ 130,000.00
3.3	Balance Tank	1	LS	$ 45,000.00	$ 45,000.00
3.4	**TOTAL MECHANICAL COSTS**				**$ 230,000.00**
4.0	**TOTAL CONSTRUCTION COSTS**				**$ 488,100.00**
5.0	SOFT COSTS				
5.1	Contractor Markup / Profit	10%			$ 48,810.00
5.2	Contingency	15%			$ 73,215.00
5.3	Testing/Inspection	0%			$ -
5.4	Permits & Fees	0%			$ -
5.5	Escalation (Annual)	5%			$ 24,405.00
5.6	**TOTAL SOFT COSTS**				**$ 122,025.00**
6.0	**TOTAL ESTIMATED PROJECT COST**				**$ 610,125.00**

As the City tries to increase revenue to offset the operations costs to operate the pools, we have identified some simple improvements that could be made globally to the facilities. Improved wayfinding within the communities of each aquatic facility would help pull users from other areas and keep the facility in the forefront of people's minds. Also, since many of the facilities are located within community parks and neighborhoods, having a consistent identifier like a monument sign or similar 'front door' for every facility would provide a consistent 'brand' for the City's aquatic centers.

We have found that another key to increasing revenues is to look at the recreation values of each facility. Based on each facility's existing program and community it serves, the question should be asked, how does the built environment at each facility serve programs? As children get older they look for more thrill and participation activities. Possible added features to include:

- Inflatable Obstacle Courses (requires a 6-foot minimum water depth)
- Water Basketball & Water Volleyball
- Inner Tube Water Polo
- Aquatic Climbing Walls
- Log Rolling
- Aquatic 'Hamster Balls'

Any additions will require County Health Department approval and should also be reviewed with staff to ensure safe operations. Many communities have found that these types of additions (which do not require construction improvements) can increase the frequency of visits, length of stay and the revenue that a facility can generate.

The following sections provide more information regarding Sacramento's demographics, facility patronage, and industry trends our team has compiled regarding modern aquatic programs and facilities.

1.5 Demographics & Patronage

Population growth is projected to be relatively rapid over the next 15 years in Sacramento County. Annual growth in the 2015-2020 period should average 1.2 percent per year and an average of 9,600 additional persons will enter the County each year during the same period. An average of 4,200 housing permits are expected be issued each year, and there are a number of large scale development projects proposed in the region. The largest projected age groups of growth are in the 25 years and up categories, including working age, retirees, and seniors. It should be noted that growth will also be consistent in the 0-24 year categories. Real per capita income between 2015 and 2020 is also forecasted to rise an average of 1.5 percent per year. Growth beyond 2020 is

expected to continue at relatively the same pace. (Information gathered from sacog.org & dot.ca.gov)

According to the City Parks and Recreation Department, pool patronage has been steadily increasing over the last few years as seen below:

- 2014: 55,985
- 2015: 81,220
- 2016: 83,049

1.6 Industry Trends

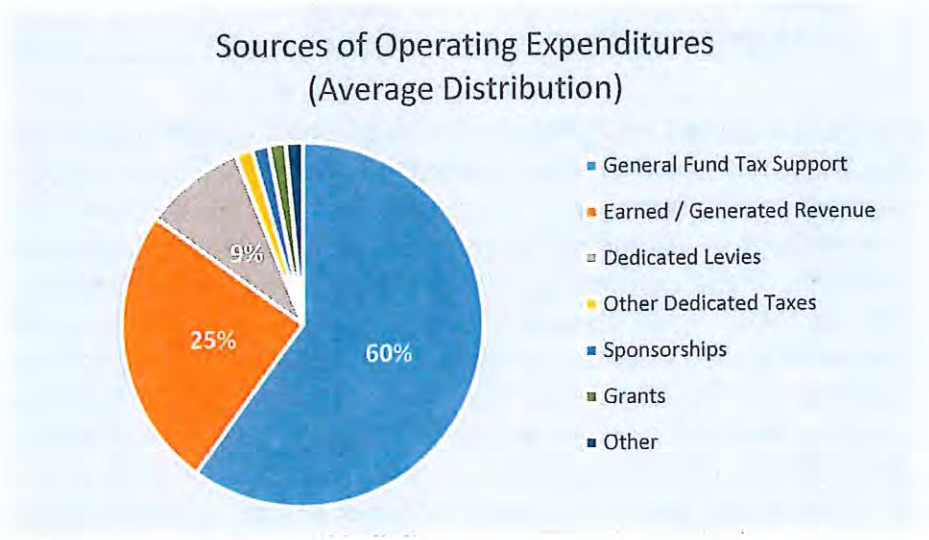
The National Recreation and Park Association (NRPA) issued a 2016 Field Report. This field report is an analysis of the National Database for Parks and Recreation departments across the country. The following are some of the statistics presented in this report:

1. A typical parks and recreation agency has 9.5 acres of park land per 1,000 residents.
2. A typical parks and recreation agency has operating expenditures of $76.44 per capita.
3. A typical parks and recreation agency has one park for every 2,277 residents.
4. 54% of the parks and recreation agencies have outdoor swimming pools for every 34,686 median number of residents.
5. The NRPA promotes programming with its three-pillars of conservation, health and wellness, and social equity. This key programming includes the top nine programs that are included in 60% or more parks and recreation programs across the US. They include:

Team Sports	84%
Fitness Enhancement Courses	83%
Health and Wellness Education	81%
Safety Training	69%
Visual Arts	67%
Trips and Tours	66%
Martial Arts	60%
Performing Arts	60%
Aquatics	60%

6. Staffing to support these programs typically represents 55% of a Parks and Recreation Agency's annual operating expenditures. For Parks and Recreation Agencies serving 250,000 or more jurisdiction population the statistics show 1.7 Full Time Equivalents (FTE) per 10,000 residents for the lower quartile and 7.6 FTEs per 10,000 residents for the upper quartile. The median staffing is 3.9 FTEs per 10,000 residents. This would place the equivalent staffing range for the City of Sacramento at 52 to 232 FTEs.

7. The typical breakdown of annual operating expenditures for a parks and recreation agency is shown in the graph below.



8. A typical parks and recreation agency with a population density of 2,500 residents or greater per square mile will generate revenues ranging from $9.48 per resident to $73.13 per resident with the median revenue being $29.93 per resident. At these national averages the City of Sacramento could expect to generate $290,000 to $2.2 million in annual revenue. This revenue as a percentage of operating expenditures will represent 14.7% to 49.4% on a national average annual cost recovery. For population densities like the City of Sacramento the national average is 31.5% annual operating cost recovery.

9. Aquatics averages:
    a. The National Recreation and Parks Association reports that the median number of residents per outdoor public swimming pool is one pool for every 34,686 residents.
    b. The ongoing industry standard for public swimming pools is one pool for every 50,000 residents.
    c. The NRPA statistics for a splash pad is one facility for every 75,000 residents.

d. For smaller neighborhood pools the industry standard is one pool for every 25,000 residents.

The following table extrapolates these statistics to the City of Sacramento population.

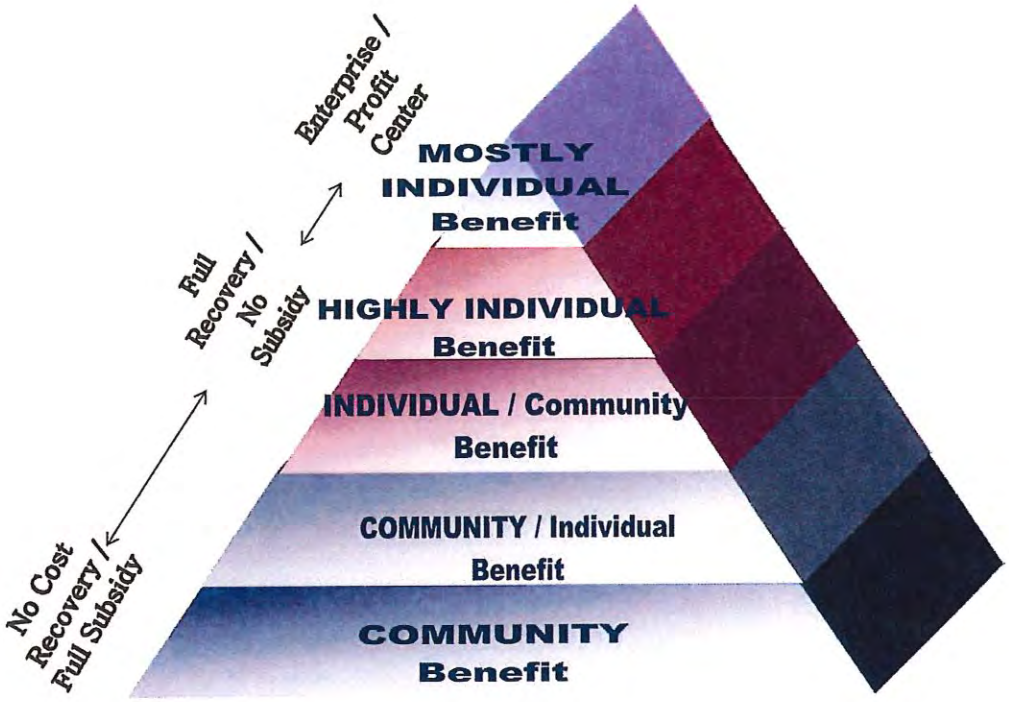
Type of Venue	Number of Residents per Pool	Projected Number of Pools for Sacramento
NRPA Median Avg.	34,686	14
Public Swimming Pool	50,000	10
Splash Pad	75,000	7
Neighborhood Pool	25,000	20

10. As stated earlier, municipal swimming pools in California that are rectilinear in configuration typically generate about a 40-50% annual operating cost recovery. As a pool's recreation features and capabilities are increased, including items such as slides and interactive water features, these operating cost recoveries can be increased as much as 70% to 100%. The increase in cost recovery can be directly attributed to an increase in programs offered at an aquatic facility as well as the number of repeat visits by the patrons. There are certain basic services such as recreation swim and swim lessons that a community typically provides at minimal subsidies. As the programs offered become more individualized, fees increase to market values. These enhanced programs can include master swim teams, water aerobics, party rentals, and others. As fee based programming is added to a facility the potential to recover operating expenses increases. The graphic below shows the relationship between subsidized community benefit programming and individualized programming.

FEE STRUCTURE THEORY, Source: Green Play. As the recreation programs are more individualized the more market value and fees can be charged. For example, group swim lessons have a certain fee, but semi-private swim lessons have a higher fee and private swim lessons have an even higher fee.

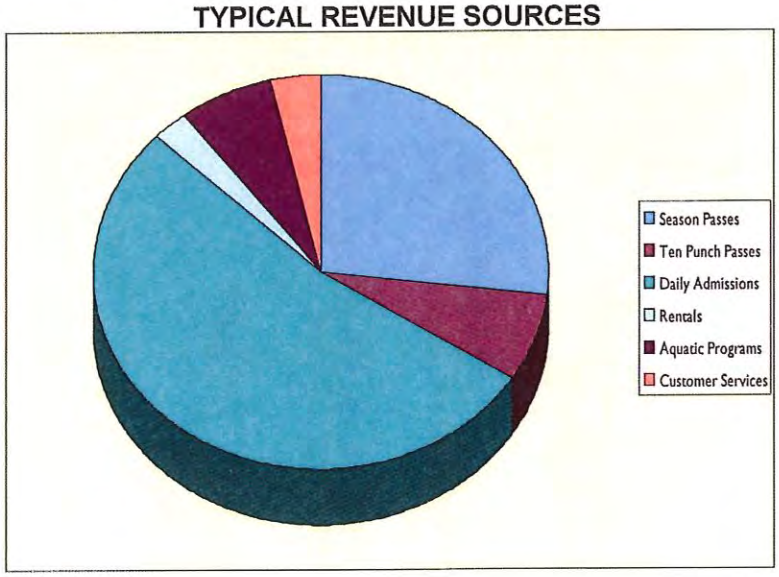
These individualized programs can:

- Create value for the services and facilities
- Allow rationing of high demand services and facilities
- Reserve funding for other necessary programs

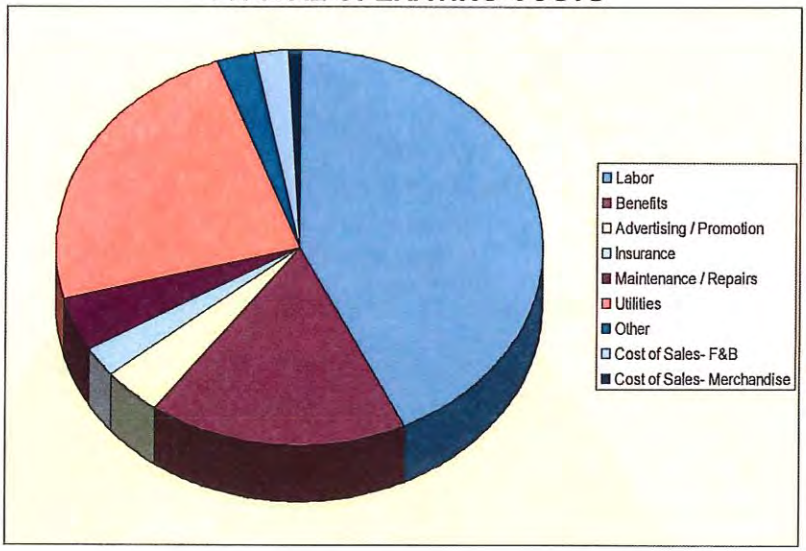


The next two graphs show the typical revenue sources and the typical operating costs for the average aquatic center in California.

TYPICAL REVENUE SOURCES

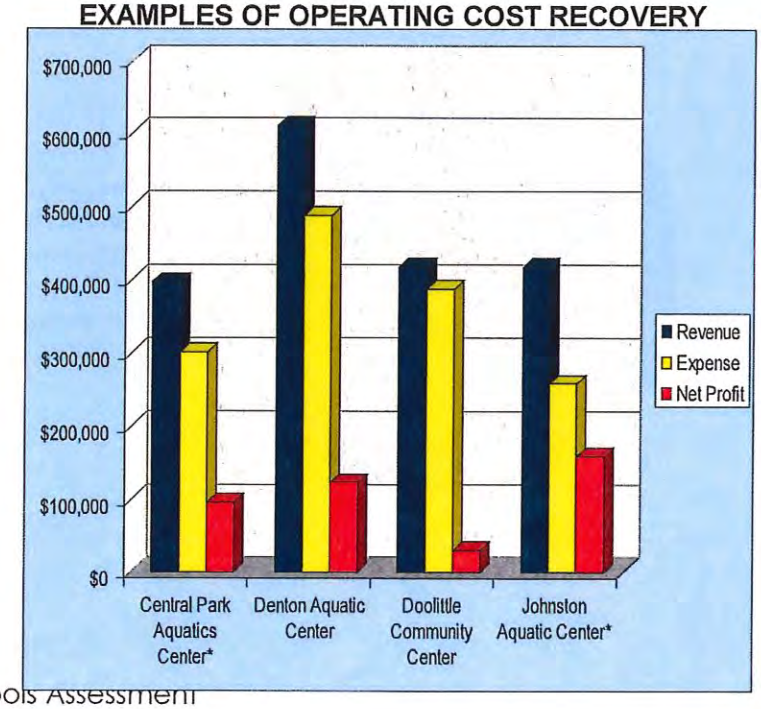


TYPICAL OPERATING COSTS

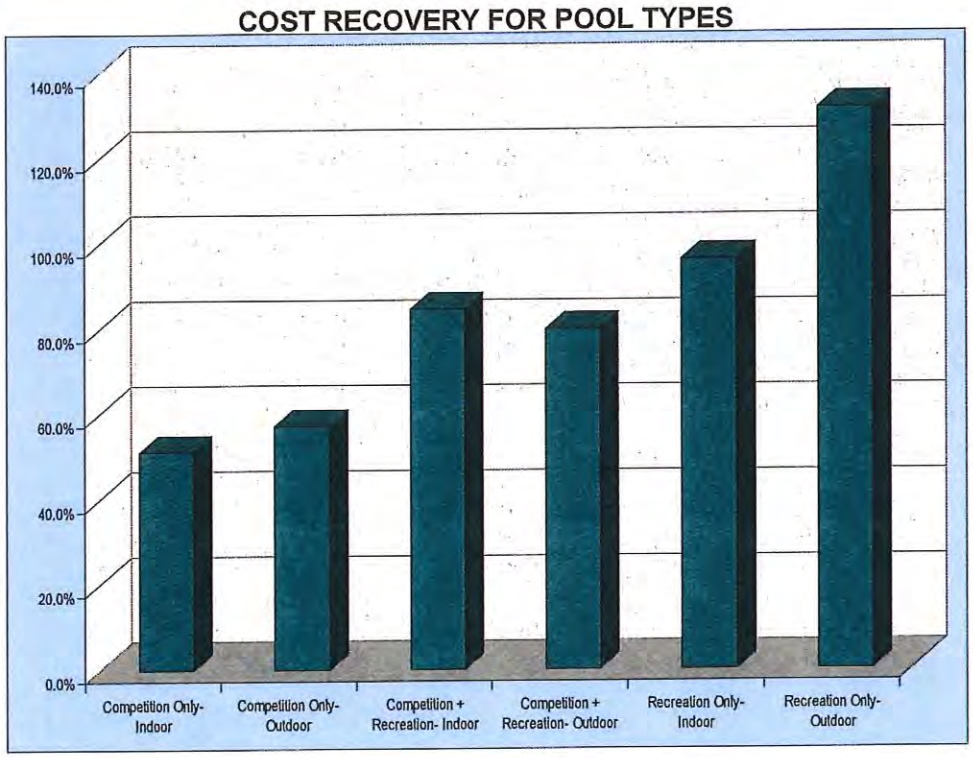


11. In many cases the new trend for aquatic centers is shared facilities that can be used by City Park and Recreation Districts as well as local high schools, YMCA, or other entities. The more competition programming is brought into a facility the less likely that the facility will recover its annual operating expenses. The facilities shown below represent regional type aquatic centers that focus primarily on recreational programs. These facilities all have pool slides, interactive water play features and other amenities to make them more of a destination type facility.

EXAMPLES OF OPERATING COST RECOVERY



To achieve a positive operating cost recovery, these facilities cannot operate as old Municipal pools used to, as drop-off facilities. To achieve a positive cost recovery these facilities must include revenues from concessions and other program draws, and are also must be in a position to charge market level pricing for admissions and other programs. The graph below shows an industry average for cost recovery for the different types of modern aquatic centers. The majority of the Sacramento pools do not fit precisely into any of these categories as they do not provide competitive venues, nor does it offer modern recreation programs such as slides and interactive water playgrounds.



12. Recreation pools typically offer interactive play features such as spray features and slides. These types of facilities will also offer shade areas and concessions. With these types of features an operator can expect to draw patrons on repeated visits. When these visits are made by families rather than children that are dropped off, the potential for concession revenues are greatly increased. All of these features can contribute to the annual operating cost recovery potential for a facility. The following is a list of revenue opportunities that may be achieved from a comprehensive aquatics center: Programming, Rentals and Parties, Merchandising, Concessions, Programming, Marketing, Partnerships, Sponsorships.

If we match the Sacramento demographics with the industry trends we can get a better picture of the potential for aquatics participation. The National Sporting Goods Association (NSGA) estimates that 15.5% of the population will participate in public aquatics programs. Given the Sacramento demographics it is believed that the participation rate may be closer to 11%. This same study also reports that patrons can frequent a public swimming pool up to 50 times per year. However, in a recent City of Stockton Needs survey 20.78% reported that they would use a public swimming pool more than 15 times per year. For those people that are involved in organized swim programs, such as swim lessons, swim teams and water fitness classes the national average is approximately 38 participation times per year. The number of uses is also dependent on the months of operation. Since the Sacramento pools only operate seasonally, the number of expected uses per year are reduced from the national averages. If we use a median average of the national statistic with the results we got from the Stockton public survey we would conservatively estimate the average number of times a person would participate in swimming as 10 times per year. This estimated 10 swims per year combined with the estimated 53,978 participants equals a total of 539,780 swims per year. These numbers can then be extrapolated into entrance fees or other opportunities for revenue generation expectations.

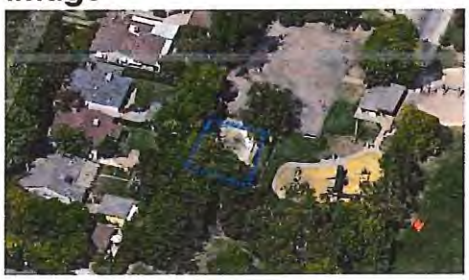
2.0 Assessment Overview

Facilities Included in the Assessment

1. Bertha Henschel Play Pool	District 3	Page 26
2. Cabrillo Pool	District 8	Page 31
3. Clunie Pool	District 3	Page 38
4. Colonial Play Pool	District 6	Page 44
5. Doyle Pool	District 3	Page 48
6. George Sim Pool	District 6	Page 54
7. Glenn Hall Pool	District 3	Page 60
8. Johnston Pool	District 2	Page 66
9. Mama Marks Play Pool	District 2	Page 72
10. Mangan Pool	District 5	Page 75
11. McClatchy Park Pool	District 5	Page 82
12. Pannell Meadowview Pool	District 8	Page 90
13. Oki Pool	District 6	Page 95
14. Robertson Play Pool	District 2	Page 102
15. Southside Pool	District 4	Page 106
16. Tahoe Park Pool	District 6	Page 114
17. William Land Park Play Pool	District 4	Page 121

2.1 Bertha Henschel Play Pool

Image



Facility

160 45th Street
Built in: 1998
District 3
Approximate Site Area: 4,000SF
Street Parking
Zero Entry Wading Pool
Pool Construction: Fiberglass

Program Offerings

Private Pool Rental

Facility Needs

Pool Deck Repl. $60,000
ADA Pool Access $45,000

Identified Opportunities

Additional Wayfinding
Expanded Deck Area
Sprayground

2.2 Cabrillo Pool

Image

Facility

1648 65th Avenue
Built in: 1962
District 8
Approx. Site Area: 26,100SF
Street Parking
Rec Pool: 16.7yd L-Shaped
Pool Construction: Fiberglass
Zero Entry Wading Pool
Shaded Deck Area
Building Construct: Brick/Wood

Program Offerings

Recreational Swim
Swim Team
Swim Lessons
Junior Guard
Private Pool Rental

Facility Needs

Pool Deck Repl. $350,000
ADA Pool Access $65,000

Identified Opportunities

Additional Wayfinding
HVAC
Designated Space for Shared Community Programs

2.3 Clunie Pool

Image

Facility

601 Alhambra Blvd.
Built in: 1936
District 3
Approx. Site Area: 18,750 SF
Street Parking
Rec Pool: Lap Pool
Pool Construction: Fiberglass
Low Spring Diving Board
Enclosed Dual Flume Slide
Activity Pool
Shaded Deck Area
Building Construct: Brick/Wood

Program Offerings

Recreational Swim
Swim Team
Swim Lessons
Lap Swim
Junior Guard
Water Aerobics
Private Pool Rental

Facility Needs

Pool Diving Depth $1,075,250
Pool Deck Repl. $213,500
ADA Pool Access $75,000

Identified Opportunities

Additional Wayfinding
Pool Heating
Additional Storage

2.4 Colonial Play Pool

Image

Facility

18th Avenue & 53rd Street
Built in: 1999
District 6
Approximate Site Area: 4,500SF
Street Parking
Zero Entry Wading Pool
Pool Construction: Fiberglass
Shaded Deck Area

Program Offerings

Private Pool Rental

Facility Needs

Pool Deck Repl. $66,500
Pool Resurface $58,000
Deck Drainage $35,000

Identified Opportunities

Additional Wayfinding
Cabana Space
Sprayground

2.5 Doyle Pool

Image

Facility

2827 Mendel Way
Built in: 1980
District 3
Approx. Site Area: 18,000SF
Parking Lot
Rec Pool: 25yd Lap
Dive Pool
Low spring diving board
Pool Construction: Fiberglass
Zero Entry Wading Pool
Shaded Deck Area
Building Construct: Conc Block

Program Offerings

Recreational Swim
Swim Lessons
Junior Guard
Private Pool Rental

Facility Needs

Separated Filter Syst. $140,000
Restrooms $70,000

Identified Opportunities

Additional Wayfinding
Cabana Space
Additional Storage

2.6 George Sim Pool

Image

Facility

6207 Logan Street
Built in: 1969
District 6
Approx. Site Area: 24,000SF
Parking Lot
Pool Size: 16.7yd L-Shaped
Pool Construction: Fiberglass
Low spring diving board
Zero Entry Wading Pool
Shaded Deck Area
Building Construct: Conc Block

Program Offerings

Recreational Swim
Swim Lessons
Swim Team
Junior Guard
Private Pool Rental

Facility Needs

Pool Gutter $490,000
Pool Deck Repl. $486,500
Restrooms $100,500

Identified Opportunities

Additional Wayfinding
LED Lighting

2.7 Glenn Hall Pool

Image

Facility

5415 Sandburg Drive
Built in: 1956
District 3
Approx. Site Area: 20,500SF
Parking Lot
Pool Size: 16.7yd L-Shaped
Pool Construction: Fiberglass
Low Spring Diving Board
Enclosed Flume Slide
Shaded Deck Area
Building Construct: Brick/Wood

Program Offerings

Recreational Swim
Swim Team
Swim Lessons
Junior Guard
Private Pool Rental

Facility Needs

Pool Deck Repl. $225,000
Pool Gutter $225,000
Pool Floor Inlets $80,000

Identified Opportunities

Additional Wayfinding
HVAC
Family/Assist Restrooms

2.8 Johnston Pool

Image

Facility

231 Eleanor Avenue
Built in: 1966
District 2
Approx. Site Area: 28,300SF
Parking Lot
Pool Size: 16.7yd L-Shaped
Pool Construction: Fiberglass
Low Spring Diving Board
Zero Entry Wading Pool
Shaded Deck Area
Building Construct: Conc Block

Program Offerings

Recreational Swim
Swim Lessons
Junior Guard
Private Pool Rental

Facility Needs

Pool Deck $420,000
Pool Gutter $490,000
Restrooms $55,000

Identified Opportunities

Additional Wayfinding

2.9 Mama Marks Play Pool

Image

Facility

1140 Roanoke Ave
Built in: 2001
District 2
Approximate Site Area: 3,000
Street Parking
Zero Entry Wading Pool
Shaded Deck Area
Pool Construction: Fiberglass

Program Offerings

N/A

Facility Needs

Pool Deck Repl. $25,000
Equipment Area Drains $12,000

Identified Opportunities

Additional Wayfinding
Sprayground

2.10 Mangan Pool

Image

Facility

2140 34th Avenue
Built in: 1956
District 5
Approx. Site Area: 17,000SF
Parking Lot
Pool Size: 16.7yd L-Shaped
Shaded Deck Area
Pool Construction: Fiberglass
Low Spring Diving Board
Building Construct: Brick

Program Offerings

Recreational Swim
Lap Swim
Swim Team
Swim Lessons
Junior Guard
Private Pool Rental

Facility Needs

Pool Deck $225,000
Restrooms $130,000
Pool Gutter $235,000
Fiberglass Repl. $150,000
Pool Floor Inlets $80,000

Identified Opportunities

Family/Assist Restroom
Additional Wayfinding

2.11 McClatchy Park pool

Image

Facility

3500 5th Avenue
Built in: 1920's
District 5
Approx. Site Area: 18,000SF
Street Parking
Pool Size: 25yd Lap
Dive Pool
Low Spring Diving Board
Pool Construction: Fiberglass
Zero Entry Wading Pool
Shaded Deck Area
Building Construct: Brick

Program Offerings

Recreational Swim
Lap Swim
Swim Lessons
Swim Team
Junior Guard
Private Pool Rental

Facility Needs

Pool Deck Repl. $325,500
Deck Drainage $280,000
Separated Filter Syst. $140,000
Fiberglass Repl. $130,000

Identified Opportunities

Additional Wayfinding
Family/Assist Restroom
Expanded Pool Deck and/or
Added Rental Area

2.12 Pannell Meadowview Pool

Image

Facility

2450 Meadowview Road
Built in: 2001
District 8
Approx. Site Area: 32,000SF
Parking Lot
Pool Size: 25yd Freeform w/
Zero Entry Wading area
Spiraling open flume slide
Pool Construction: Plaster
Zero Entry Wading Pool
Shaded Deck Area
Building Construct: Conc Block

Program Offerings

Recreational Swim
Lap Swim
Swim Lessons
Swim Team
Junior Guard
Water Aerobics
Private Pool Rental

Facility Needs

Pool Deck Repl. $595,000
Restrooms $44,000

Identified Opportunities

Additional Wayfinding
Expanded Pool Deck and/or
Added Rental Area

2.13 Oki Pool

Image

Facility

2715 Wissemann Drive
Built in: 1980
District 6
Approx. Site Area: 22,000SF
Street Parking
Pool Size: 25yd Lap
Dive Pool
Low Spring Diving Board
Pool Construction: Fiberglass
Zero Entry Wading Pool
Shaded Deck Area
Building Construct: Conc Block

Program Offerings

Recreational Swim
Lap Swim
Swim Team
Swim Lessons
Junior Guard
Private Pool Rental

Facility Needs

Pool Deck Repl. $280,000
Separated Filter Syst. $80,000

Identified Opportunities

Additional Wayfinding
Expanded Pool Deck and/or
Added Program in Lawn Area

2.14 Robertson Play Pool

Image

Facility

3525 Norwood Avenue
Built in: 2001
District 2
Approximate Site Area: 4,000SF
Parking Lot
Zero Entry Wading Pool
Pool Construction: Fiberglass

Program Offerings

Water Slide

Facility Needs

Pool Deck Repl. $45,000
ADA Showers $20,000

Identified Opportunities

Additional Wayfinding
Sprayground

2.15 Southside Pool

Image

Facility

2107 6th Street
Built in: 1952
District 4
Approx. Site Area: 21,000SF
Parking Lot
Pool Size: Lap Pool
Dive Pool
Low Spring Diving Board
Pool Construction: Fiberglass
Zero Entry Wading Pool
Shaded Deck Area
Building Construct: Brick

Program Offerings

Recreational Swim
Lap Swim
Swim Lessons
Swim Team
Junior Guard
Private Pool Rental

Facility Needs

Pool Deck Repl. $252,000
Pool Gutters $235,000
Pool Floor Inlets $85,000

Identified Opportunities

Additional Wayfinding
Pool Heaters
Expanded Pool Deck and/or
Added Rental Area

2.16 Tahoe Park Pool

Image

Facility

3501 59th Street
Built in: 1955
District 6
Approx. Site Area: 22,000SF
Street Parking
Pool Size: 16.7yd L-Shaped
Pool Construction: Fiberglass
Zero Entry Activity Pool
Shaded Deck Area
Building Construct: Brick

Program Offerings

Recreational Swim
Lap Swim
Water Aerobics

Facility Needs

Pool Deck Repl. $225,000
Pool Gutters $235,000
Fiberglass Repl. $150,000
Pool Floor Transition $80,000

Identified Opportunities

Additional Wayfinding
Expanded Pool Deck and/or
Added Rental Area

2.17 William Land Park Play Pool

Image

Facility

13th Street & 13th Avenue
Built in: 2002
District 4
Approximate Site Area: 3,000SF
Street Parking
Zero Entry Wading Pool
Shaded Deck Area
Pool Construction: Plaster

Program Offerings

Private Rental

Facility Needs

Pool Resurface $65,000
Pool Deck Repl. $25,000

Identified Opportunities

Additional Wayfinding
Sprayground

3.1 Bertha Henschel Play Pool

Address

160 45th Street

Metrics

Approximate Site Area: 4,000 SF
Street Parking
Zero Entry Wading Pool
- Estimate Volume = 6,900 Gallons
- Minimum Code Required Flow Rate = 115 GPM
- Minimum Code Required Turnover Rate = 1 Hour
- Posted Maximum Occupancy (Bathers): 45

200 SF Pump Area

Major Renovations

None

Notes

Park restroom facilities are not located within the facility and the restrooms associated with the surrounding park were not reviewed. Restrooms are required for wading pools within 300' or at an adjacent recreational facility.

Overview

The Bertha Henschel Play pool, in District 3, is located adjacent to a large public park and has natural shading from the surrounding foliage (Pic 1). The pool is a zero entry wading pool with a "mushroom" (Pic 2) water feature.

Pic 1 Wading pool

Pic 2 Mushroom feature

Pic 3 Equipment enclosure

Architecture, Structure & Accessibility

The pool facility is located at the back of a local park. Wayfinding signage from the parking area to the pool and additional entrance signage is suggested to make it easier for patrons to find their way to the facility.

The wading pool area is lacking emergency exit signage and accessibly compliant gate hardware, which is required per California Building Code, Chapters 10 and 11B. Unless required hardware is added, this gate should remain open whenever the pool is in use. The current entrance/exit into the pool is accessed directly off of a basketball court, which could potentially be a safety hazard for small children entering and exiting the pool. Relocating the entrance/exit gate directly off the main park would be beneficial and could easily be accomplished if the pool perimeter fencing is expanded.

Based on the pool size at this facility, and pursuant to California Building Code Chapter 31B, Section 3116B, the following fixtures are required:

	Water Closets	Lavatories	Urinals	Showers	Drinking Fountains
Required Men's	1	1		1	
Required Women's	1	1		1	
Required Totals	2	2	0	2	1
Existing	0	0	0	0	0
Difference	-2	-2		-2	-1

Note: Park restroom facilities are not located within the facility and the restrooms associated with the surrounding park were not reviewed. Restrooms are required for wading pools within 300'.

The perimeter metal fencing is rusting in several places and should be sanded down and repainted to prevent further damage. Current seating at the pool deck is lacking an accessible bench (CBC, Chapter 11B).

There is an existing concrete block pump enclosure with a chain link roof and gate. It is in good condition, but it would be beneficial to provide a water tight roof for this space that would keep the equipment out of the elements. The pool equipment/pump area is of sufficient size and additional storage could be incorporated directly adjacent to the pool equipment building if needed.

Added rental space in the form of cabanas could be beneficial at this facility and could be accommodated by removing existing landscaping area, and possibly expanding the fence into the adjacent park. This wading pool could also be replaced with a small sprayground that would serve a larger age range than we typically see utilizing a wading pool. Spraygrounds can also potentially provide lower operation and utility costs due to higher efficiency water usage

and no requirement for lifeguard supervision. We believe that a sprayground would increase rentals of the facility as well as overall usage.

Aquatics

The Bertha Henschel wading pool is a stand-alone pool complex. The fiberglass pool has water depths ranging from 0'-0" to 1'-0" with a mushroom interactive water play feature. The fiberglass pool has exceeded its useful life and is due for resurface or replacement. The pool zero depth area lacks proper waterproofing and is a potential source for water leaks. The zero depth area slope has slopes greater than allowed by CBC and lacks the double handrails required to be considered code compliant. The zero depth area also has grates that are parallel to the direction of travel, which is not allowed by code.

The pool area has four main drains, which are compliant with both the VGB and California AB1020 suction entrapment regulations. The filtered water is returned to the pool via a combination of floor inlets and wall inlets. Surface water is collected from two surface skimmers.

In lieu of renovating the existing wading pool to make it ADA compliant the City could opt to replace the wading pool with a sprayground. Since there is no standing water lifeguards are not required and a sprayground has the ability to provide greater recreation value while at the same time reducing staffing and operating expenses for the facility. Since these standalone wading pools are primarily used for private rentals, this would provide a more attractive option because a sprayground appeals to a wider range of user age groups providing more revenue potential for the City.

Pool Deck

The pool deck is a medium broom finish concrete deck that provides the proper slip coefficient. The existing pool deck lacks the depth markers as required by code, CBC Chapter 31B, and the current pool coping is damaged and in need of replacement. A portion of the deck is cracked and settled creating a tripping hazard. The deck on the east side of the wading pool has slopes greater than 2%. The deck should be modified in order to provide an accessible path of travel throughout the site (CBC Section 3114B.3). A survey should be completed of the existing deck elevations to determine if sections could be removed and replaced with modified sloping or if a complete replacement is necessary to provide a compliant path around the deck.

Pool Mechanical

The wading pool water is filtered by a cartridge filter system and the water is chlorinated with a liquid chlorine feed system that utilizes 15-gallon drums and a

Stenner peristaltic chlorine feed pump. An extra set of cartridges to be used for cleaning is required by code and should be kept on site. The pH is maintained with a muriatic acid system which features a small disposable acid container and a Stenner peristaltic feed pump. Both feed pumps are controlled by a Chemtrol controller. Pool water is not heated.

All of the pool mechanical, electrical and chemical equipment is located in a single enclosed and locked, concrete block wall enclosure. The electrical equipment inside the enclosure is corroding, likely due to exposure to the elements and acid fumes from the acid storage system. We suggest installing an acid fume neutralizer to prevent further damage.

Site Utilities

A backflow preventer and water meter are located in the adjacent park, and a hose bib is located near the pool equipment area. The existing backflow preventer should be reviewed against City of Sacramento Water Standards on a yearly basis to ensure proper function.

No area drains are present in the pool equipment area. The pool filter area should be modified to add area drains plumbed into the sanitary sewer system and re-sloped to drain. There are no sanitary sewer structures, such as cleanouts, located onsite, but there are restrooms located at the adjacent park. Further study is needed to determine the closest point of connection. In addition, the sanitary sewer system should be reviewed to confirm adequate capacity and sizes.

The wading pool deck drains directly to surrounding landscape. If the facility expands and storm drainage is necessary, the system should be reviewed to determine adequate capacity and sizes.

Expanding Pool Deck

This facility would seem to benefit from expanding the perimeter and pool deck to provide cabana, table, and shaded space. If desired this could be provided in an area which is currently a planting area and slopes up towards the adjacent park. The park is approximately 2 feet higher than the wading pool deck. Prior to expansion, further study will be needed to confirm underground utilities (water, sewer, and storm) are not running underneath the proposed pool decking. A topographic survey is recommended to assist in the design of the expansion.

Equipment Enclosure Plumbing

There is (1) emergency shower / eye wash station inside the equipment enclosure, as required by code, and it is in good working order. There are, however, barrels stored underneath the shower that impede access to the shower. Barrels need to be relocated and the area under the shower kept clear.

Equipment Enclosure Electrical

The electrical meter and main panel are in good condition. The filter pump and mushroom pump disconnects are rusted and need replacement. The rusted electrical conduit, (likely due to acid fumes) will also need to be replaced.

Lighting

There is no exterior or interior lighting at this facility.

3.2 Cabrillo Pool

Address

1648 65th Avenue

Metrics

Approximate Site Area: 26,100 SF
Street Parking
Rec Pool: 16.7yd L-Shaped
- Estimate Volume = 230,114 Gallons
- Minimum Code Required Flow Rate = 639 GPM
- Minimum Code Required Turnover Rate = 6 Hours
- Posted Maximum Occupancy (Bathers): 331

Zero Entry Wading Pool
- Estimate Volume = 5,087
- Minimum Code Required Flow Rate = 85 GPM
- Minimum Code Required Turnover Rate = 1 Hour
- Posted Maximum Occupancy (Bathers): 40

Shaded Deck Area
4,500 SF Pool House
340 SF Pump Area
Patronage: 2016 =1,365

Major Renovations

2015 – Piping repairs, Fiberglass Resurfacing
2016 – Shade structure fabric replaced

Pic 1 – Pool house East elevation

Pic 2 – Deck Shade Structure

Notes

A local community group shares use of the pool house for functions year round.

Renovation of women's restroom and addition of air conditioning unit scheduled to be completed by June 1, 2017.

Overview

The Cabrillo pool facility, located in District 8, consists of an L Shaped fiberglass pool with a shallow area for recreation and instruction, a lap area for swimming, and a zero entry wading pool with 'mushroom' feature. These elements provide a variety of program areas for multiple uses and user groups. The pool house is adequately sized for the current functions.

Architecture, Structure & Accessibility

The interior of the pool house has code issues related to exiting, door hardware, signage, and accessibility to the restrooms and changing areas (CBC, Chapters 10 and 11B). The showers and toilet facilities are non-compliant due to clearance requirements and there is no path identified for accessible access through the building that complies with sloping requirements (under 2% in any direction).

Based on the pool size at this facility, and pursuant to California Building Code Chapter 31B, Section 3116B, the following fixtures are required:

	Water Closets	Lavatories	Urinals	Showers	Drinking Fountains
Required Men's	3	3	3	5	
Required Women's	4	3		5	
Required Totals	7	6	3	10	2
Existing	4	4	2	6	2
Difference	-3	-2	-1	-4	0

If the City plans to continue the shared use of the facility, building access and space planning of the main area of the pool house could be improved to increase security and flexibility of the space for multiple uses. The structure of the pool house seems to be in good condition. However, replacement of the windows and installation of roof insulation would improve building comfort and efficiency (if ventilation or HVAC is added to the building).

Any improvements to the interior of the pool house should consider updated modern finishes and aesthetics to provide a more fun and functional experience for users and a more durable and permanent solution for the City. This includes replacement of the toilet partitions, restroom finishes, floor and wall coverings, and the replacement of the current plywood partitions that separate the administrative and restroom areas.

Site furnishings are minimal and not adequate for the current programming and use of this facility. Shaded seating areas should be added around the pool

deck, possibly utilizing anchored umbrellas and moveable chairs that are easy to store and cost effective to replace. This facility is also a good candidate for added recreational programming, based on the shape and current usage of the pool. Adding features such as inflatable obstacle courses, climbing walls, log rolling, water basketball, water volleyball and inner tube water polo can increase frequency of user visits, length of stay and the revenue that the facility can generate.

Better facility identification, such as a monument sign and building ID sign, would improve wayfinding to the facility.

Aquatics

The complex has two public pools: a swimming pool and a wading pool. The swimming pool is an "L" shaped pool, which is 3'-0" deep at the shallow end and 6'-6" at the deep end. The 2015 renovations modified the depth of the pool to 6'-6", but water depth markers have not been updated. The pool has five lap lanes in the deep end of the pool. The shallow end has two sets of walk-in stairs on both sides of the shallow end. The opposite end of the pool and the deep "L" have in-pool ladders for egress. The pool surface water is collected by a scum-gutter, which does not skim the water continuously, as required by current code. The pool appears to be out of level based on the inconsistencies of perimeter gutter depths.

The wading pool has depths ranging from 0'-0" to 1'-6" with dual main drains that are in compliance with current code. The pool does provide a zero entry but lacks the double handrails required to be considered accessibly compliant. The zero depth area also has grates that are parallel to the direction of travel, which is not allowed by code. The water surface is collected by two surface skimmers and the pool includes a 'mushroom' type feature in adequate condition. The zero depth area shows significant wear and the tile grout is failing. This tile should be replaced with non-slip tile of a contrasting color to the pool surface (similar to the existing). The surface of the wading pool also shows evidence of cracking and needs resurfacing.

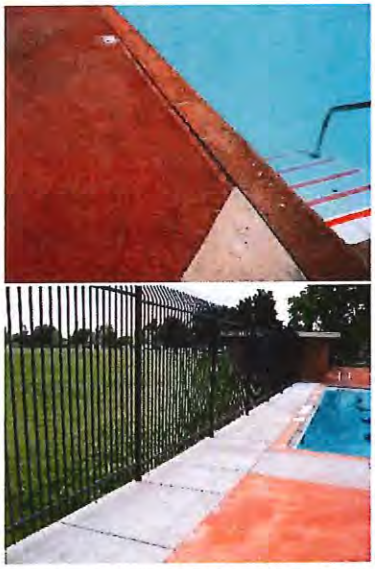
In lieu of renovating the existing wading pool to make it ADA compliant the City could opt to replace the wading pool with a sprayground. Since there is no standing water lifeguards are not required and a sprayground has the ability to provide greater recreation value while at the same time reducing staffing and operating expenses for the facility.

Pool Deck

The concrete pool deck is spalling and breaking away in multiple areas, the worst of which is located at the shallow end stair area, presumably where the most traffic occurs. The coping stones have been repaired or replaced and should continue to be monitored for additional needs. Multiple sections of coping are also missing expansion joint mastic (Pic 4).

The pool fill line is an over the deck fill pipe that is leaking and in need of repair (Pic 5). This pipe is a trip hazard and may warrant full replacement. If replacement is considered, we recommend an auto-fill system be incorporated.

The pool deck has areas of significant sloping (in excess of 2%) toward drains. The deck should be modified in order to provide an accessible path of travel throughout the site (CBC Section 3114B.3). A survey should be completed of the existing deck elevations to determine if sections could be removed and replaced with modified sloping or if a complete replacement is necessary to provide a compliant path around the deck.



Pic 4 – Missing Expansion Joint

Pic 5 – Pool Fill Line

Pic 6 – Expanded Pool Deck

Pool Mechanical

Both pools are filtered with high rate fiberglass sand filters which have visible glass strands that need to be repaired. The swimming pool is chlorinated with calcium hypochlorite, (tablet chlorine) while the wading pool is chlorinated with sodium hypochlorite (liquid chlorine). The pool equipment is in relatively good condition, but the swimming pool Pulsar chlorinator booster pump shelf is rusting and needs to be replaced. The pool equipment pit lacks adequate safety measures including: no safety chain for the ladder, no acid vapor neutralizer, and rusted unistrut sections supporting equipment and piping.

The pH of each pool is maintained with muriatic acid feed systems. The swimming pool does not have an ABB variable frequency drive like the other swimming pools in the City. A variable speed pool pump can obtain similar gpm rates as a single-speed pump but at greater energy efficiencies and should be installed at this location similar to the other facilities. A portion of the pool piping in the mechanical pump pit area is steel, which is rusting, and should be replaced when associated equipment is replaced or piping repairs are required. The swimming pool circulation pump effluent pipe has a water leak.

Site Utilities

Visible domestic water structures onsite include a backflow preventer located near 65th Ave. and hose bib on the pool deck near the filter area. The pool backwash is draining into the storm drain system based on observations of a manhole located outside the pool filter area. Additional investigation is necessary to determine if this is accurate. If the pool backwash is draining into the storm drain system, this should be revised to discharge into the sanitary sewer system. There are no visible sanitary sewer structures, like cleanouts, but restrooms are located on the western side of the facility which could be used as a point of connection if there is adequate capacity.

There are no area drains in the pool filter area, which currently slopes and drains into the adjacent landscaping. The pool deck drains to multiple 3" area drains spaced around the deck approximately 24' apart (25' required, max 400 SF) and the wading pool deck area drains to adjacent landscaping. Deck drainage is adequate, except for a few areas that lack sufficient sloping to drains. Standing water can be a safety hazard and these areas should be replaced or 'floated' to provide positive drainage.

Building Plumbing

The facility has an existing gas-fired water heater that was installed in 2014. It is set to deliver low temperature water. There is currently no thermostatic mixing valve installed which is currently required by CBC Code section 3115B.4, as it limits the hot water to 110° F maximum in order to prevent scalding.

The utility room includes a maintenance sink plumbed for hot and cold water. There are also adequate drinking fountains (2) for the facility. However, they do not meet height and clearance requirements for the CBC (Chapter 10 & 11). Showers are fully operational (typical of 6). However, they do not provide tempered water (CBC Section 3116B.4) and are served by exposed copper piping. These are older style shower fixtures and should be replaced with low flow heads and push button controls that meet current accessibility

requirements, reduction in water consumption (CGBC Table 5.303.2.2) and lower utility costs.

There are (4) water closets, (2) urinals, and (4) lavatories, all of which are fully operational. However, they do not meet height and clearance requirements for accessibility (CBC, Chapter 11B). The lavatories are cold water only, and all of the plumbing fixtures are of an older style and, if replaced, should be with low flow models that meet current standards for reduction in water consumption (CGBC Table 5.303.2.2) and lower utility costs.

There are two rows of trench drains in the floor of the pool house common room. They have been painted over several times to the point where the perforations in the grates are filled, making drainage of the area difficult. These drains are not adequate for wash down of this room for cleaning and we recommend the existing grates be replaced and the under floor sanitary piping be snaked to verify drainage.

Make up water for the pool system is provided in the pool equipment yard along with an emergency shower/eyewash unit. All of these systems are in good working order. There are (4) interior and (3) exterior hose bibs which are in good condition. Hose bibs should be protected by a backflow prevention device and hose should be provided of length long enough to reach all portions of the pool deck, per Title 24 Section 3118B.

The building roof drainage system is a series of gutters and downspouts which connect directly to the site storm water system. This system is in good working condition, but gutters and downspouts should be cleaned at regular intervals.

Building Mechanical

There is no air conditioning or mechanical ventilation system in this facility. Ventilation is accomplished with operable windows only. There is an existing gas space heater to heat the common room operated by an Accustat thermostat with an inline timer and is in good working condition. The bottom of the unit is low (75" AFF) which creates a risk for head injuries and is also an accessibility code violation (minimum 80" vertical clearance for any protruding objects). This unit should be adjusted and mounted higher or a guardrail could be added below as a cane-detectable barrier. If the unit is not used, it should be removed.

The pool house building could easily accommodate the addition of air conditioning to increase building comfort for guests, staff, and community groups. Since there are no ceilings, ductless mini-split systems are recommended for their low initial cost, seasonal use, and expected cooling and

heating loads of the facility. The condensing units for these systems could be installed anywhere around the perimeter of the building and the indoor units could be wall mounted or suspended from the overhead structure.

Building Electrical

The main switchboard, panelboards, and disconnects are rusted and need to be replaced. Tracing of circuits, if needed, and a new panel schedule should also be provided for ease of maintenance. Visible conduit throughout the building is in fair condition, but some areas of rust are beginning and should be monitored or replaced. Building receptacles are in good condition. Any renovations or improvements to the pool house should consider relocating or housing exposed conduit, specifically in the administration area, for safety reasons.

Lighting

Pool deck lighting is minimal, although it is understood that site lighting is only used for security purposes. The NE corner of the site does not have adequate light levels, even for security, and additional lighting should be considered for this area. Some of the current floodlights were not operational, and should be tested for a burned-out lamp, bad ballast, or bad circuit.

Exterior building perimeter lights are not operational and should be tested for a burned-out lamp, bad ballast, or bad circuit. In general, all lamps in the interior of the pool house are functioning, minus a few burned-out or missing lamps that need to be replaced. Lighting in the pump room is controlled at the breaker panel making it difficult to access, and an analog time clock is used for the site lighting. We recommend adding a switch or occupancy sensor to the pump room and changing to a digital time clock for the site lighting with multiple timing events for weekly or seasonal changes.

It appears that the lighting power consumption meets the current requirements of Title 24. However, controls would need to be updated with any permitted changes to the lighting systems. In general, all lighting fixtures should be replaced with LED equivalents to reduce energy consumption, maintenance costs, and lower energy costs.

3.3 Clunie Pool

Address

601 Alhambra Blvd.

Metrics

Approximate Site Area: 18,750 SF
Street Parking
Rec Pool: Lap Pool with Slide
- Estimate Volume = 459,054 Gallons
- Minimum Code Required Flow Rate = 1,275 GPM
- Minimum Code Required Turnover Rate = 6 Hours
- Posted Maximum Occupancy (Bathers): 532

Activity Pool
- Estimate Volume = 9,425 Gallons
- Minimum Code Required Flow Rate = 157 GPM
- Minimum Code Required Turnover Rate = 1 Hour
- Posted Maximum Occupancy (Bathers): 64

Shaded Deck Area
2,630 SF Pool House
650 SF Pump Area
Patronage: 2014=13,939 / 2015=13,611 / 2016=16,373

Major Renovations

2015- Main pool VFD installation and Wading pool fiberglass replacement
2016- Main pool fiberglass replacement

Notes

The pool house is designated as a historic building and any suggested modifications to the building should not be completed until further investigation into the Historic building requirements. It has been noted that there is a large number of waterfowl in the area of this pool due to the wildlife pond at the park.

Pic 1. Activity Pool

Pic 2. Lap Pool

Overview

The Clunie pool facility, located in District 3, incorporates both pool building and adjacent equipment room. The lap pool has a pool slide at one end and shares a deck with an activity pool at the other side.

Architecture, Structure & Accessibility

Clunie's masonry building is in need of repair. There has been some cracking at brick and mortar joints and missing bricks that require replacement. Windows all appear to be single pane glazing and are in need of replacement. Dual pane windows will provide greater building efficiency, and providing translucent glazing in the restroom and changing areas would provide additional privacy.

The emergency exits from the building and pool deck area are not compliant with current code requirements (CBC, Chapter 10), and all building door hardware is "knob" style which does not meet accessibility requirements (CBC, Chapters 10 and 11B). We recommend replacement of all door hardware throughout the building.

The plumbing fixtures and accessories in the men's and women's restrooms do not meet current building codes for height and clearance and should be replaced. The floor and wall finishes in the restrooms and changing areas are cracked and spalling and past their useful life.

Based on the pool size at this facility, and pursuant to California Building Code Chapter 31B, Section 3116B, the following fixtures are required:

	Water Closets	Lavatories	Urinals	Showers	Drinking Fountains
Required Men's	5	5	5	8	
Required Women's	7	5		8	
Required Totals	12	10	5	16	4
Existing	7	5	4	18	4
Difference	-5	-5	-1	+2	0

The building does not have a separate First Aid space which provides an accessible exam bed and the administrative area does not provide an

accessible transaction area. Due to the age and condition of the current casework, we recommend replacement with compliant high/low transaction counters. Despite the large size of this facility, no family changing area is currently provided at this location. While this is not a code requirement, it is considered to be a modern accommodation at contemporary aquatic facilities. There is plenty of room to accommodate a family changing area if both the men's and women's changing spaces were reconfigured.

Aquatics

The swimming pool is a large rectangular pool with water depths ranging from 3'-6" to 10'-6" and has seven sets of recessed steps and handrails for means of egress. The swimming pool surface water is collected via a rusting stainless steel gutter. Surface rust should be removed and if there is any damage to the integrity of the stainless steel the gutters should be replaced. The filtered pool water is returned to the pool via vents in the bottom of the pool gutter. This does not meet California Health Code requirements, CBC, Chapter 31B Section 3125B. The swimming pool has two main drains that are compliant with both the VGB and California AB1020 suction entrapment regulations (CBC 3137B).

At the deep end of the pool is a 1-meter above water diving board and a dual flume slide. The diving board area water depth is 10'-6", which does not meet current code (CBC Section 3113B). The minimum depth is 11'-6" for this type of board. The swimming pool is constructed with expansion joints throughout the pool floor. These joints are a common source for water leaks and should be monitored on a regular basis; testing and/or repairs to joints should occur whenever the pool is scheduled to be refinished.

Based on the programs provided here, the location within the city/community, and the number of annual users reported, this facility could benefit from the addition of tempered water being provided in the lap pool. This would facilitate more adult programming like lap swimming and aerobics, and also provide a better facility for family uses like swim lessons and private rentals. By adding a pool water heater the City could also explore the option of extending the swim season to a full 12 months.

The activity pool has water depths ranging from 0'-6" to 2'-0". The 2' water depth classifies this pool as a swimming pool, since it is greater than the maximum allowable water depth of 18" for a wading pool. This activity pool features a waterfall feature on the side of the pool. Due to the lack of unobstructed walkway into this pool, it is classified as a special purpose pool. Health Departments do not typically allow for the use of water features such as

the waterfall in pools with water depths greater than 18". The pool surface water is collected by three surface skimmers and the pool has four main drains. The velocity of the water for these drains is unclear, but this may explain the vacuum release safety devices on both pumps for this pool.

Pool Deck

Portions of the Clunie pool deck have a slope greater than 2%, which exceeds the maximum slope allowed. The deck should be modified in order to provide an accessible path of travel throughout the site (CBC Section 3114B.3). A survey should be completed of the existing deck elevations to determine if sections could be removed and replaced with modified sloping or if a complete replacement is necessary to provide a compliant path around the deck. There is evidence of water ponding at the deck drains suggesting that the deck drainage is not functioning, most likely due to clogging and small grate openings. These drains should be cleaned and tested and if the deck is removed drainage should be replaced (recommend linear trench drains around the deck).

This facility would benefit from the addition of lounge style seating and/or cabanas at the south side of the site. The site has the space to provide these features by expanding the pool deck, and it would increase both user comfort as well as revenue for the facility. Wayfinding within the facility should also be improved with signage to help identify the locations of critical amenities like restrooms, first aid, showers, drinking fountains, etc.

Pool Mechanical

The swimming pool mechanical equipment is located in the adjacent buildings basement and the swimming pool chemicals are in a room above the basement. The activity pool mechanical equipment is stored outdoors under an outdoor stair area. The fencing to this area is between 3' to 4' high in some locations and we recommend replacement with a taller fence to prevent unauthorized access. The swimming pool water is filtered by high rate sand filters. The pool water is treated with a calcium hypochlorite tablet chlorine feeder and the chemical feed is controlled with Chemtrol controllers, which are not electrically bonded.

Site Utilities

Visible water structures onsite include a backflow preventer located in the adjacent park and hose bib on the pool deck. The existing backflow preventer should be reviewed against City of Sacramento Water Standards on a yearly basis to ensure proper function.

There is a sanitary sewer cleanout located near the bath house, but further study is needed to determine the closest point of connection. The pool deck and activity pool deck drain to area drains as previously discussed.

Building Plumbing

There is a boiler and hot water heater in the pump room, but they only serve the adjacent community center, not the pool facility. This equipment should be reviewed to see if they have the capacity to serve both the community center and the pool house. There are (7) water closets, (4) urinals, and (5) lavatories and are all fully operational. There is currently no hot water heater for this facility, but lavatories should provide at a minimum tempered water (CBC 3116B.4). All of the fixtures are of an older style and do not meet current low flow requirements for reduction in water consumption (CGBC Table 5.303.2.2). Replacement of these fixtures will also lower yearly utility costs. Floor drains appear to be clogged and should be cleaned and tested, if not completely replaced.

There are (18) showers, all of which are fully operational, except one whose valve leaks and should be repaired. They are cold water only which does not meet current code requirements to provide tempered water (CBC Section 3116B.4) and are served by exposed copper pipes. These are older style shower heads and should be replaced by low flow heads that meet current standards for reduction in water consumption (CGBC Table 5.303.2.2) and will also help lower yearly utility costs.

There are (4) fully operational drinking fountains, but they do not meet accessibility height and clearance requirements, (CBC, Chapter 11B) and should be replaced.

There are (4) interior and (3) exterior hose bibs which appear to be in good condition. Hose bibs should be protected by a backflow prevention device and hose should be provided of length long enough to reach all portions of the pool deck, per Title 24 Section 3118B. There is (1) janitor's sink with only cold water, but it is fully functional. (1) Emergency shower / eye wash station is provided in the chemical storage and it is in good working order.

Building Mechanical

Exhaust in the men's shower is a small turbine vent. Exhaust in the women's changing room is provided by a small exhaust fan. Exhaust air quantities do not meet current code for minimum air flow rates. Minimum exhaust air flow rates are defined by 2013 California Mechanical Code – Table 403.7. No corrective action is needed, unless the facility undergoes a significant renovation. There is

a small gas fired space heater in the central office area, but that remains the only heating element.

The pool house building could accommodate the addition of air conditioning to increase building comfort for guests and staff. Ductless mini-split systems are recommended for their low initial cost, seasonal use, and expected cooling and heating loads of the facility. The condensing units for these systems could be installed anywhere around the perimeter of the building and the indoor units could be wall mounted or suspended from structure above.

Building Electrical

Panelboard B is in good condition but Panelboard BP is starting to show signs of rust. Sub Panel 1 has a considerable amount of rust and should be replaced, Sub Panel 2 is in better condition but also starting to show signs of rust. Provide new type written panel schedules with any new panels.

Some receptacles around the facility are missing faceplates, which need to be provided per code (CEC 406.6). Other receptacles have been painted over, and need to be replaced. Regular receptacles adjacent to sinks should be replaced with GFI receptacles as required by code (CEC 210.8B(5)).

Lighting

There are existing floodlights on the pool deck, which are used for early morning programming. Some of the floodlights were not operational and should be tested for either a burned-out lamp, a bad ballast or a bad circuit. Exterior building perimeter lights are either not operational, or in need of maintenance. Since these lights are used for security purposes, we recommend repair or replacement as necessary. Most lights in the interior of the building are operational, minus a few (assumed to be) burned-out or missing lamps.

Lighting in the pump room utilizes an obsolete T12 lamp that will be no longer available in the near future. It is recommended that this lighting be replaced with a T8 or LED fixture. In general, all lighting fixtures (throughout the building) should be replaced with LED equivalents to reduce energy consumption, maintenance costs and reduced energy costs.

It appears that the lighting power consumption meets the current requirements of Title 24. However, the controls need to be updated with any permitted changes to the lighting systems. The analog time clock on the controls did not appear to be operational. We recommend changing to a digital time clock with multiple timing events for weekly or seasonal changes.

3.4 Colonial Play Pool

Address

18th Avenue & 53rd Street

Metrics

Approximate Site Area: 4,500SF
Street Parking
Zero Entry Wading Pool
- Estimate Volume = 9,984 Gallons
- Minimum Code Required Flow Rate = 166 GPM
- Minimum Code Required Turnover Rate = 1 Hour
- Posted Maximum Occupancy (Bathers): 45

Shaded Deck Area
350 SF Pump Area

Major Renovations

None

Notes

Park restroom facilities are not located within the facility and the restrooms associated with the surrounding park were not reviewed. Restrooms are required for wading pools within 300' or at an adjacent recreational facility.

Overview

The Colonial wading pool and adjacent equipment area is located in District 6. It adjoins a local residential park that could be expanded into if more space is desired.

Pic 1. Zero Entry

Pic 2. Wading pool

Pic 3. Proposed cabana area

Architecture, Structure & Accessibility

While this pool facility is in good overall condition, the perimeter fence is rusting and requires sanding and repainting with a rust inhibitor to prevent further corrosion. The Entry/exit gate into the facility does not provide the required exiting hardware in the event of an emergency (CBC, Chapter 10) and should be provided. At the pool equipment building the perimeter fencing abuts the pool equipment building CMU wall. This is a potential security issue as individuals may be able to climb the fence/equipment building to gain access to the pool.

In the pool equipment room, there is insufficient head height provided (80" min required). The roof is constructed of fabric draped over a chain link structure which is starting to bow under the weight of dead leaves that have accumulated. The roof structure should be raised and reconstructed from materials that will not bow under the weight of landscaping debris. The emergency shut off button is located on the opposite side of the pool from the lifeguard chair. We recommend locating the lifeguard chair closer to the shut off for quicker response in the event of an emergency.

Based on the pool size at this facility, and pursuant to California Building Code Chapter 31B, Section 3116B, the following fixtures are required:

	Water Closets	Lavatories	Urinals	Showers	Drinking Fountains
Required Men's	1	1		1	
Required Women's	1	1		1	
Required Totals	2	2		2	1
Existing	0	0		0	0
Difference	-2	-2		-2	-1

Note: Park restroom facilities are not located within the facility and the restrooms associated with the surrounding park were not reviewed. Restrooms are required for wading pools within 300'.

The existing shade structure is in good shape, with only minor holes in the fabric and does not yet require replacement.

Aquatics

The wading pool is a stand-alone pool complex. The pool has water depths ranging from 0'-0" to 1'-6". The pool does provide a zero entry but lacks the double handrails required to be considered code compliant. The zero depth area also has grates that are parallel to the direction of travel, which is not allowed by code. The pools fiberglass finish is worn and there is a mushroom interactive water play feature that is in fair condition. The pool has four main drains, which are compliant with both the VGB and California AB1020 suction entrapment regulations. The filtered water is returned to the pool via a combination of floor inlets and wall inlets. Surface water is collected from two

surface skimmers. The pool coping provides safety handholds at the 18" water depth areas only, the zero entry area does not provide safety handholds. The zero depth area also has slopes greater than that allowed by code requirements (CBC Section 3109B.3). The shallow portion of the pool lacks waterline depth markers as required by code (CBC Section 3110B.4).

In lieu of renovating the existing wading pool to make it ADA compliant the City could opt to replace the wading pool with a sprayground. Since there is no standing water lifeguards are not required and a sprayground has the ability to provide greater recreation value while at the same time reducing staffing and operating expenses for the facility. Since these standalone wading pools are primarily used for private rentals, this would provide a more attractive option because a sprayground appeals to a wider range of user age groups providing more revenue potential for the City.

Pool Deck

The pool deck is a medium broom finish concrete with adequate slip resistance. The deck depth and safety markers require replacement, and the pool coping is damaged and needs replacement. There is currently no seating provided at the pool deck, but there is plenty of space for tables and/or benches to be added on site.

Pool Mechanical

The pool water is filtered by a cartridge filter and the water feature is powered by a 7.5 horsepower booster pump. An extra set of cartridges to be used for cleaning is required by code and should be kept on site. The water is chlorinated with a liquid chlorine feed system that features 15-gallon drums and a Stenner peristaltic chlorine feed pump. The pH is maintained with a muriatic acid system which features a small disposable acid container and a Stenner peristaltic feed pump. Both feed pumps are controlled by a Chemtrol controller, which is not electrically bonded (CEC Article 680). All of the pool mechanical, electrical and chemical equipment is located in a single locked enclosure.

The booster pump electrical disconnect is corroding, likely due to acid fumes from the acid storage system, we recommend an acid fume neutralizer be installed. The liquid chlorine and muriatic acid are non-compatible chemicals that should never be mixed in full strength, these chemicals are stored directly adjacent to each other. A barrier should be installed to prevent these chemicals from inadvertently mixing, causing dangerous off-gassing of toxic fumes. The chemical feed tubing is a clear tubing, which lacks UV protection

and is not rated for outdoor use. A UV protected tubing, rated for outdoor use, should be installed.

Site Utilities

A backflow preventer and water meter are located in the adjacent park. The existing backflow preventer should be reviewed against City of Sacramento Water Standards on a yearly basis to ensure proper function. A sanitary sewer cleanout is located on the northeastern side of the site, near the park's building structure. No area drains are present in the pool filter area. The pool filter area should be modified to add area drains plumbed into the sanitary sewer system and re-sloped to drain.

Expanding Pool Deck

This facility would seem to benefit from expanding the perimeter and pool deck to provide cabana, table, and shaded space. If desired, this expansion would be suggested for the northern side of the site which is currently landscaped and slopes up to an adjacent park. The existing landscape is approximately 2-3 feet higher near the pool filter area and is currently retained by a CMU block wall. Depending on the size of the pool decking expansion, the CMU wall may need to be modified. Further study is needed to determine if underground utilities (water, sewer, and storm) are currently running underneath this area. A topographic survey is recommended to assist in the design of the expansion.

This wading pool could also be replaced with a small sprayground that would serve a larger age range than we typically see utilize a wading pool. Spraygrounds can also potentially provide lower operation and utility costs due to higher efficiency water usage and no requirement for lifeguard supervision. We believe that a sprayground would increase rentals of the facility as well as overall usage.

Equipment Enclosure Plumbing

There is (1) emergency shower / eye wash station in the equipment enclosure, and it is in good working order.

Equipment enclosure Electrical

Electrical equipment including disconnects are starting to rust due to acid exposure. These will need to be replaced in the near future. Rusted conduit in the equipment area should be replaced.

Lighting

There is no exterior or interior lighting at this facility.

3.5 Doyle Pool

Address

2827 Mendel Way

Metrics

Approximate Site Area: 23,200 SF
Parking Lot
Rec Pool: 25yd lap pool, Diving pool
- Estimate Volume = 190,899 Gallons
- Minimum Code Required Flow Rate = 530 GPM
- Minimum Code Required Turnover Rate = 6 Hours
- Posted Maximum Occupancy (Bathers): 168 Lap, 57 Diving

Zero Entry Wading Pool
- Estimate Volume = 5,087 Gallons
- Minimum Code Required Flow Rate = 85 GPM
- Minimum Code Required Turnover Rate = 1 Hour
- Posted Maximum Occupancy (Bathers): 40

Shaded Deck Area
1,250 SF Pool House
650 SF Pump Area
Patronage: 2014=5,131 / 2015=7,751 / 2016=6,069

Major Renovations

2015 – VFD installed at main pool
2016 – New pool deck, diving board, pool skimmers and deck showers

Notes

None

Pic 1 – Lap Pool

Pic 2 – Pool Deck & Wading Pool

Pic 3 – Efflorescence at wall

Overview

Doyle Pool facility, located in District 3, consists of a Lap pool (Pic 1), a dive pool and a zero entry wading pool with a mushroom feature (Pic 2). The pool house is undersized for the current functions; more specifically, it lacks defined changing areas and shower facilities and its administrative and first aid areas share one small space.

Architecture, Structure & Accessibility

When entering this facility, the transaction counter is non-accessible as well as the drinking fountain, entrance to the restrooms, revolving door, signage, and gates (CBC, Chapter 11B). We would recommend the removal of the revolving door. There is a safety issue at the zero entry side of the wading pool where the tile meets the corner pool coping. This area of the coping is raised up compared to the zero entry and acts as a tripping hazard. The coping should either be ground down or replaced. The tile at the zero entry does not provide adequate slip resistance to meet building code requirements and should be replaced with a non-slip tile. Currently, the wading pool deck does not provide adequate path of travel (4' min required) around the perimeter of the pool because both the site bench and lifeguard chair are bolted in place and impeded upon the deck clear area. These should either be moved out of the path of travel (which requires a minimum 4' wide clear path CBC Section 3114B.1, 3114B.5) or the pool deck should be expanded.

Based on the pool size at this facility, and pursuant to California Building Code Chapter 31B, Section 3116B, the following fixtures are required:

	Water Closets	Lavatories	Urinals	Showers	Drinking Fountains
Required Men's	2	2	2	4	
Required Women's	3	3		4	
Required Totals	5	5	2	8	2
Existing	5	4	2	0	1
Difference	0	-1	0	-8	-1

The pool house building is built from concrete block walls with a corrugated metal roof which has no overhang. This lack of overhang at the roof is allowing water to seep into the building walls, causing efflorescence on the interior of the block walls (Pic 3) and deterioration of the block on the exterior of the walls. The metal roof itself has also begun to rust and fail. A new roof is highly recommended to prevent further deterioration of the existing structure, preferably a roof that provides an overhang and drip edge to prevent water running back into the walls. Interior finishes of the building have surpassed their useful life. Flooring is chipping (Pic 4), ceilings are water stained (Pic 6),

casework is old and delaminating and wall paint is peeling. These repairs should be considered in comparison to a larger remodel of this building to solve the conditions and operational items identified.

Pic 4 – Floor Chipping

Pic 5 – Perimeter fence

Pic 6 – Water damage

Aquatics

Doyle pool complex has three public pools: a wading pool, swimming pool and an adjacent diving pool. The lap and dive pools are separate but comingled as a single body of water with a single pump and filtration system. This configuration is no longer allowed by California Code (Section 3123B). The swimming pool is a rectangular pool, which is 3'-6" deep at one end and 5'-0' at the other. The pool has walk-out stairs on both sides of the shallow end. The surface water is collected with eight surface skimmers and the filtered water is returned via floor inlets. The pool has two main drains that are compliant with both the VGB and California AB1020 suction entrapment regulations. The diving pool has depths ranging from 10'-6" to 12'-0" and features a 1-meter above water diving board. The dive pool has two sets of recessed steps with grab rails for means of egress.

The wading pool has depths ranging from 0'-0" to 1'-6" with dual main drains that are in compliance with current code. The pool does provide a zero entry but lacks the double handrails required to be considered accessibly compliant. The zero depth area also has grates that are parallel to the direction of travel, which is not allowed by code. The water surface is collected by two surface skimmers and the pool includes a 'mushroom' type feature in adequate condition.

In lieu of renovating the existing wading pool to make it ADA compliant the City could opt to replace the wading pool with a sprayground. Since there is no standing water lifeguards are not required and a sprayground has the ability to provide greater recreation value while at the same time reducing staffing and operating expenses for the facility.

There is also currently a large grass area adjacent to the pools that is underutilized. This could also be a great location to provide either a small sprayground or additional cabana rental space.

Pool Deck

The pool deck was just replaced this past year (Pic 2). It has a medium broom finish, trench drains, and proper depth markers for all pools. The perimeter fence is rusting in several locations (Pic 5) and should be sanded down and repainted.

Pool Mechanical

The lap and dive pools are treated via a single steel tank vertical sand filter. The pool mechanical header piping is also steel construction. The filter tank and header piping are corroding and are in need of replacement and the filter tank is not seismically anchored. The pool water is treated with a calcium hypochlorite tablet chlorine feeder controlled with a Chemtrol controller that is not electrically bonded (CEC Article 680). No pH feed and storage equipment was installed or on site during our site visit. Muriatic acid is used to balance the pH of the pool water.

Site Utilities

A backflow preventer and water meter are located in the adjacent park on Brewerton Drive. The existing backflow preventer should be reviewed against City of Sacramento Water Standards on a yearly basis to ensure proper function.

It is undetermined if the pool backwash drains to the storm or sanitary sewer system. Further study is needed to determine if the pool backwash system discharges into the sanitary sewer system. If the pool backwash discharges into the storm drain system, then the backwash system should be updated to discharge into the sanitary sewer system at the closest point of connection. There are no visible sanitary sewer structures, like cleanouts, but restrooms are located on the northeastern side of the pool, so a sanitary sewer system is present onsite.

Building Plumbing

There is an existing electric water heater (Rheem) in the plumbing pipe chase, but it is only used for the faucet at the janitor's sink. There is a countertop sink in the office that is functional, but it does not meet code accessibility clearance requirements. Its faucet is piped for only cold water which does not meet code requirements for providing tempered water (CBC 3116B.4) and the faucet is not functional and not installed properly. We recommend replacing the sink, faucet and surrounding casework.

There is (1) exterior drinking fountain and it is fully operational. Exterior showers are present and any new shower heads need to meet current standards for reduction in water consumption (CGBC Table 5.303.2.2).

There are (5) water closets, (2) urinals, and (4) lavatories, all of which are made of steel and fully operational. The lavatories are cold water only (hot water faucets are screwed closed) which does not conform to code requirements to provide tempered water (CBC 3116B.4). All the fixtures are of an older style and should be replaced by a low flow style that meet current standards for reduction in water consumption (CGBC Table 5.303.2.2). This will help lower utility costs. The current plumbing fixtures also do not meet accessibility height and clearance requirements (CBC, Chapter 11B).

There is (1) janitor's sink with a thermostatic mixing valve (Symmons). It does not have a faucet, only a hose bibb. Therefore, only cold water is being discharged. The water heater and mixing valve should be tested for proper operation. There are (2) interior hose bibs which appear to be in good condition. Hose bibs should be protected by a backflow prevention device and hose should be provided of length long enough to reach all portions of the pool deck, per Title 24 Section 3118B.

Make up water for the pool system is provided in the pool equipment yard along with an emergency shower / eyewash unit. All of these systems appear to be in good working order.

The building roof drainage system is a series of gutters and downspouts that directly connect to the site storm water system. This system appears to be in good working condition, but gutters and downspouts should be cleaned at regular intervals to ensure proper drainage.

Building Mechanical

There is no air conditioning or mechanical ventilation system in this facility. Ventilation is accomplished with operable windows only. If air conditioning is desired in the future to increase comfort for guests and staff, it can easily be accomplished due to the open plan. Ductless mini-split systems are recommended for their low first cost, seasonal use, and expected cooling and heating loads. The condensing units for these systems could be installed anywhere around the perimeter of the building and the indoor units could be wall mounted or suspended from the overhead structure.

Building Electrical

The electrical panelboard is rusted and nearing the end of its useful life, it needs to be replaced. The receptacle near the sink needs to be changed to

GFI to comply with CEC 210.8B (5). Outdoor electrical equipment, including conduit and junction boxes, are starting to rust. Rusted equipment needs to be replaced. Provide new type written panel schedules with any new panels.

Lighting

The south deck floodlights were not operational and should be tested for a burned-out lamp, a bad ballast or a bad circuit. We recommend repair of these lights so that they may be used for security purposes at night. Most lamps in the building interior are operational, with the exception of the restrooms which have a few (assumed to be) burned-out or missing lamps. While most lighting is functional, we recommend that all lighting fixtures be updated to LED equivalents in order to reduce energy consumption, maintenance costs, and lower energy costs.

It appears that the current lighting power consumption meets the current requirements for Title 24. Currently, the facility does not have a time clock for the controller, which would be a beneficial addition to the facility. A digital time clock with multiple timing events for weekly or seasonal changes.

3.6 George Sim Pool

Address

6207 Logan Street

Metrics

Approximate Site Area: 24,000 SF
Parking lot
Rec Pool: 16.7yd L-Shaped
- Estimate Volume = 261,603 Gallons
- Minimum Code Required Flow Rate = 727 GPM
- Minimum Code Required Turnover Rate = 6 Hours
- Posted Maximum Occupancy (Bathers): 324

Zero Entry Wading Pool
- Estimate Volume = 5,087 Gallons
- Minimum Code Required Flow Rate = 85 GPM
- Minimum Code Required Turnover Rate = 1 Hour
- Posted Maximum Occupancy (Bathers): 40

Shaded Deck Area
4,000 SF Pool House
850 SF Pump Area
Patronage: 2014=7,477 / 2015=8,368 / 2016=8,651

Major Renovations

2015 – VFD installation at main pool

Notes

None

Pic 1. Lap pool

Pic 2. Wading pool

Pic 3. Cracking at walls

Overview

The George Sim facility, located in District 6, is adjacent to a community center and provides an L shaped fiberglass swim pool (Pic 1) with diving area and a separate fiberglass wading pool (Pic 2) with an interactive mushroom feature. The pool house is undersized for the current functions; more specifically, lacking adequate space for staff and lifeguards as well as a lack of modern accommodations and finishes typical of today's aquatic facilities.

Architecture, Structure & Accessibility

The George Sim Pool and Wading Pool are directly adjacent to the George Sim Community Center, but the wayfinding to the pool entry is lacking. We suggest some wayfinding signs be added from the parking lot area to direct patrons to the pool entrance.

The interior of the pool house has code related issues regarding accessibility in both restroom and changing areas (CBC, Chapter 11B). Entrance and exit to/from the pool complex is through a large rolling gate. This does not provide code compliant door operating hardware for entrance or exit, nor does it provide emergency exiting hardware that meets CBC, Chapter 10. Unless required hardware is added, this gate should remain open whenever the pool is in use. There was not a second emergency exit provided as required. The entrances from the pool deck into the pool building (restrooms etc.) all provide thresholds which are too steep for current accessibility requirements. We suggest either replacement of the thresholds or 'floating' & ramping the pool deck at this location to raise the elevation.

Based on the pool size at this facility, and pursuant to California Building Code Chapter 31B, Section 3116B, the following fixtures are required:

	Water Closets	Lavatories	Urinals	Showers	Drinking Fountains
Required Men's	3	3	3	5	
Required Women's	4	3		5	
Required Totals	7	6	3	10	2
Existing	5	3	1	3	1
Difference	-2	-3	-2	-7	-1

An expansion, remodel, and/or improvements to the interior of the pool house should be considered. Current finishes are cracked/broken and beyond their useful life. Updated modern finishes and aesthetics can provide a more welcoming appearance and a more durable solution. This would include replacement of toilet partitions, toilet accessories, restroom and office finishes (floor, wall and ceiling coverings). The first aid area and employee break room appear to share the same space, and the first aid space does not provide an

exam bed. If an expansion or remodel is performed, we recommend separating out these spaces and providing an accessible first aid exam bed. This facility is also a good candidate for added recreational programming, based on the shape and current usage of the pool. Adding features such as inflatable obstacle courses, climbing walls, log rolling, water basketball, water volleyball and inner tube water polo can increase frequency of user visits, length of stay and the revenue that the facility can generate.

Cracking was observed at the CMU walls, along with efflorescence. Cracks should be monitored in the future to determine if additional settlement is occurring.

The perimeter fencing is in poor shape with rust, holes larger than 4" and required maintenance. Most rusted areas can be treated with sanding and repainting, but there are a few areas where gaps of more than 4" are present and more extensive repairs are needed. We suggest the fence be repaired in order to provide a secure site and meet code requirements (CBC 3109.3).

Aquatics

The George Sim pool complex has two public pools: a swimming pool and a wading pool. The swimming pool is an "L" shaped pool, which is 3'-0" deep at the shallow end and 12'-0" at the deep end. The pool has six lap lanes in the shallow end of the pool, which has two corner in-pool stairs with double handrails. The step front edge stripes required by code are peeling off and need replacement (CBC Section 3111B). The opposite end of the pool and the deep "L" has in-pool ladders for egress. The ladder here is the wrong size, creating a potential entrapment hazard and should be replaced as required by CBC section 3111B.

The pool surface water is collected by a scum-gutter, which does not skim the water continuously as required by code (CBC Section 3136B). We recommend upgrading this. The pool also appears to be out of level based on inconsistencies of gutter depths. The pool has a single main drain, which is controlled with a vacuum release device.

The wading pool has depths ranging from 0'-0" to 1'-6" and has dual main drains in accordance with code (CBC Section 3137B). The pool does provide a zero entry but lacks the double handrails required to be considered accessibly compliant. The zero depth area also has grates that are parallel to the direction of travel, which is not allowed by code. The water surface is collected by two surface skimmers, but these skimmers lack equalizer fittings visible in the pool. We confirmed with City staff that equalizer fittings are installed under the main drain grates. Grates must be rated for 100% system flow to each grate. The

expansion joint mastic at the wading pool is starting to fail and needs to be replaced.

In lieu of renovating the existing wading pool to make it ADA compliant the City could opt to replace the wading pool with a sprayground. Since there is no standing water lifeguards are not required and a sprayground has the ability to provide greater recreation value while at the same time reducing staffing and operating expenses for the facility.

Pool Deck

The pool deck is missing the code required "NO RUNNING" AND "NO DIVING" safety signs (CBC Section 3110B.5) which should be added. The pool fill line is an over the deck fill pipe that is leaking and needs repair. This pipe is a trip hazard and may warrant full replacement. If replacement is considered, it is recommended that an auto-fill system be incorporated.

The pool deck has areas of excessive sloping (more than 2%), cracking, and drainage issues. Some areas are missing expansion joint material altogether, creating a safety and tripping hazard. The deck should be modified in order to provide an accessible path of travel throughout the site (CBC Section 3114B.3). A survey should be completed of the existing deck elevations to determine if sections could be removed and replaced with modified sloping or if a complete replacement is necessary to provide a compliant path around the deck.

This facility is also a good candidate for added recreational programming, based on the shape and current usage of the pool. Adding features such as inflatable obstacle courses, climbing walls, log rolling, water basketball, water volleyball and inner tube water polo can increase frequency of user visits, length of stay and the revenue that the facility can generate.

Pool Mechanical

Both pools are filtered with high rate sand filters. The swimming pool is chlorinated with calcium hypochlorite, (tablet chlorine) while the wading pool is chlorinated with sodium hypochlorite (liquid chlorine). The pH of both pools is maintained with a muriatic acid feed. A portion of the pool piping, in the mechanical area pump pit is steel, and should be replaced with corrosion resistant pvc. The water chemistry in both pools is controlled with Chemtrol controllers, but these controllers are not electrically bonded (CEC Article 680). Also, the swimming pool controller safety flow switch is not functioning and needs to be replaced.

Site Utilities

A backflow preventer and water meter are located onsite along Logan Street. The existing backflow preventer should be reviewed against City of Sacramento Water Standards on a yearly basis to ensure proper function.

The pool backwash appears to be draining into the storm drain system according to the record drawings provided. Further study is needed to confirm this assumption. If the pool backwash discharges into the storm drain system, the system should be updated to discharge into the sanitary sewer system at the closest point of connection. There are no visible sanitary sewer structures, like cleanouts, but restrooms are located on the western side of the pool, so a sanitary sewer system is present onsite. Further study is needed to determine the closest point of connection for the sanitary sewer system to plumb the pool backwash.

Area drains are present in the pool filter area, but appear to be draining to the storm drain system per the provided record drawings. The area drains in the pool filter area should be re-plumbed to the sanitary sewer system.

Building Plumbing

There is (1) lavatory in the office/first aid room with both hot and cold water. There are (4) water closets, (1) urinal, and (2) lavatories in the men's and women's restrooms, all of which are fully operational but do not meet current accessible height and clearance requirements (CBC, Chapter 11B). The lavatories are cold water only, tempered water should be provided (CBC 3116B.4). These are older style fixtures and should be replaced by low flow fixtures that meet current standards for reduction in water consumption (CGBC Table 5.303.2.2) and will lower yearly utility costs.

There is (1) water closet and (1) lavatory in the companion restroom. The faucet is not functional and needs to be repaired or replaced. The fixtures and accessories provided do not meet current accessibility height and clearance requirements (CBC, Chapter 11B) and should be replaced.

There are (3) interior and (3) exterior hose bibs that are in good condition. (1) drinking fountain was found onsite, but does not meet current accessibility height and reach requirements, we recommend replacement. Hose bibs should be protected by a backflow prevention device and hose should be provided of length long enough to reach all portions of the pool deck, per Title 24 Section 3118B.

Make up water for the pool system is provided in the pool equipment yard along with an emergency shower / eyewash unit. All of these systems appear to be in good working order.

There are (3) outdoor showers which are cold water only (CBC Section 3116B.4). None of these showers meet the height and reach requirements for accessibility. These are older style shower heads whose fittings are rusting and should be replaced by low flow heads that meet current standards for reduction in water consumption (CGBC Table 5.303.2.2) and lower utility costs. At least one shower should be retrofitted to accessible reach standards. The nearby drain is clogged and not draining, we recommend snaking this drain.

Building Mechanical

There is no air conditioning in the office/first aid room, but there is a small operable window (32"x24"). The pool house building could easily accommodate the addition of air conditioning to increase building comfort for guests and staff. Ductless mini-split systems are recommended for their low initial cost, seasonal use, and expected cooling and heating loads of the facility. The condensing units for these systems could be installed anywhere around the perimeter of the building and the indoor units could be wall mounted or suspended from the overhead structure. All restrooms appear to be properly exhausted.

Building Electrical

Electrical at this facility is in very good condition. Panelboard A is old but is still in good condition, although replacement parts will become more difficult to find for equipment of this age and any repairs could lead to necessary replacement. All other panelboards and switchboards are in good condition, and do not need to be replaced.

Lighting

Although operational, pool deck floodlights are filled with debris, preventing proper illumination, cleaning is suggested. Exterior perimeter lighting on building facades are operational, and all interior lighting is operational. It appears that the lighting power consumption meets the current requirements of Title 24 and controls are present and operational.

In general, as lighting fixtures begin to age, they should be replaced with LED equivalents to reduce energy consumption, maintenance costs, and lower energy costs.

3.7 Glenn Hall Pool

Address

5415 Sandburg Drive

Metrics

Approximate Site Area: 20,500 SF
Parking lot
Rec Pool: 16.7yd L-Shaped
- Estimate Volume = 283,953 Gallons
- Minimum Code Required Flow Rate = 789 GPM
- Minimum Code Required Turnover Rate = 6 Hours
- Posted Maximum Occupancy (Bathers): 330

Shaded Deck Area
3,700 SF Pool House
700 SF Pump Area
Patronage: 2014=1,081 / 2015=4,972 / 2016=5,021

Major Renovations

2015 – VFD installation at main pool

Notes

It has been noted that there is a large number of waterfowl at this pool.

Pic 1. Pool

Pic 2. Lifeguard tower

Pic 3. Pool deck

Overview

Glenn Hall pool facility, located in District 3, consists of an L-shaped fiberglass pool (Pic 1) with a shallow area for recreation and instruction, an area for lap swimming, and a deep area with a recreational slide. These different elements provide a variety of program areas for multiple users. The pool house is

adequately sized, but it incorporates a large un-programmed and undefined space that could be better utilized.

Architecture, Structure & Accessibility

Glenn Hall pool provides both a swimming and recreational facility with a large pool house. The pool house has multiple code issues relating to door hardware, thresholds, slip issues on floors and accessibility to restroom and changing facilities (CBC, Chapters 10, 11B). The changing areas and restrooms do not meet accessibility height and clearance requirements, (CBC, Chapter 11) and there is no clear path identified for accessible access throughout the building that complies with sloping requirements (under 2% in any direction).

This facility could benefit from upgrades to provide modern amenities and finishes for the patrons. The pool house currently lacks a family changing area, while not code required it is considered a modernization improvement. Improvements to the interior that should be considered are: replacement of the toilet partitions and accessories, restroom finishes, floor and wall coverings throughout, replacement of the current plywood partitions that separate the administrative areas and the restroom areas, and replacement of the fabric panels that separate the administrative spaces.

Based on the pool size at this facility, and pursuant to California Building Code Chapter 31B, Section 3116B, the following fixtures are required:

	Water Closets	Lavatories	Urinals	Showers	Drinking Fountains
Required Men's	3	3	3	5	
Required Women's	4	3		5	
Required Totals	7	6	3	10	2
Existing	4	4	2	9	2
Difference	-3	-2	-1	-1	0

Replacement of the single pane windows is recommended. The restroom and changing areas would benefit from translucent, rather than clear glass at the windows to provide additional privacy. Modern dual pane windows would also reduce heat transfer during the warm summer months.

While the site does provide shaded seating areas, site furnishings are minimal and inadequate for the current programming and use of this facility. The site would benefit from additional shaded seating around the deck, possibly utilizing anchored umbrellas and movable chairs that are easy to relocate. This facility is also a good candidate for added recreational programming, based on the shape and current usage of the pool. Adding features such as inflatable obstacle courses, climbing walls, log rolling, water basketball, water volleyball

and inner tube water polo can increase frequency of user visits, length of stay and the revenue that the facility can generate. Additional storage lockers could be provided here as well, and there is room to accommodate them if some re-programming is incorporated in the pool house.

Aquatics

The Glenn Hall complex has one "L" shaped public pool which is 3'-0" deep at the shallow end and 12'-0" at the deep end. The pool has six lap lanes in the shallow end of the pool which has two sets of corner "in-pool" stairs with double handrails. The opposite end of the pool and the deep "L" has in-pool ladders for egress. The pool surface water is collected by a scum-gutter, which does not skim the water continuously, as required by code (CBC Section 3125B). The pool has a fiberglass finish that is worn and in need of resurface or replacement, with faded lane and step edge markings. The pool lacks the safety markings at the 4'-6" water depth and water line depth markers as required by code (CBC Section 3110B.4). The swimming pool filtered water is returned to the pool via wall inlets which do not meet current code (CBC Section 3125B) requirements. The pool lacks water line depth markers as required by code (CBC Section 3110B)

Pool Deck

The pool deck has slopes that are greater than the maximum 2% allowed. The deck should be modified in order to provide an accessible path of travel throughout the site (CBC Section 3114B.3). A survey should be completed of the existing deck elevations to determine if sections could be removed and replaced with modified sloping or if a complete replacement is necessary to provide a compliant path around the deck. Due to a large lifeguard tower (Pic. 2), the pool deck lacks the 4' of unobstructed walkway as required by code (CBC, Section 3114B). If the lifeguard tower cannot be relocated, the pool deck should be extended beyond it to accommodate the clear walkway as required.

The pool fill line is a large over the deck pipe fill with an adjacent steel plate. Both these items are a trip hazard and may warrant a full replacement. If replacement is considered, it is recommended that an auto-fill system be incorporated. Additionally, the deck drains are holding water and not draining properly. They should be snaked or replaced.

Pool Mechanical

The pool is filtered with a high rate sand filter and chlorinated with calcium hypochlorite (tablet chlorine). The pH of the pool is maintained with a muriatic acid feed. A portion of the pool piping in the mechanical area is steel. It is rusting and should be replaced. The pump strainer is also cast iron, and should

be replaced. The fiberglass filter tanks are worn with exposed glass strands, these should be repaired or replaced. The water chemistry is controlled with Chemtrol controllers which is not electrically bonded (CEC Article 680). The chemicals are fed via chemical tubing that is clear, and not rated for outdoor use yet the tubing is not protected indoors. The tubing should be replaced with outdoor rated tubing. These filter tanks backwash into a tank which is open to atmosphere. It is unclear if this connects to sanitary sewer, storm drain, or some other location. The acid storage space is severely corroded and needs to be repaired.

Site Utilities

Visible domestic water structures onsite include two backflow preventers, water meters, and (3) hose bibs on the pool deck. Hose bibs should be protected by a backflow prevention device and hose should be provided of length long enough to reach all portions of the pool deck, per Title 24 Section 3118B. The pool backwash appears to be draining into the storm drain system. Further study is needed to confirm this assumption. If the pool backwash discharges into the storm drain system, the backwash system should be updated to discharge into the sanitary sewer system at the closest point of connection.

There are no visible sanitary sewer structures, like cleanouts, but restrooms are located on the western side of the pool, so sanitary sewer system is present onsite. Further study is needed to determine the closest point of connection for the sanitary sewer system to plumb the pool backwash.

No area drains are present in the pool equipment area. The pool filter area should be modified to add area drains plumbed into the sanitary sewer system and re-sloped to drain. The pool deck drains into area drains, but there is evidence of standing water at many of these drains. We recommend snaking the drain lines to ensure proper function of these drains.

Building Plumbing

There is an existing gas-fired water heater that was installed before 1985 in this facility, it is heavily corroded, not operational and should be replaced. There is currently no thermostatic mixing valve installed as it was not required by code at the time of installation. We recommend installing a thermostatic mixing valve, which is currently required by CBC Code section 3115B.4, as it limits the hot water to 110° F maximum in order to prevent scalding.

There is a countertop sink in the utility room that has a functional faucet and is piped to receive both hot and cold water, but the sink fails to meet accessibility clearance requirements and the faucet does not provide the

proper lever handles necessary by code (CBC, Chapter 11B). For this reason, we recommend replacement of the sink, faucet and casework.

There are (2) drinking fountains provided, one at each changing area. The men's is fully operational. However, the women's doesn't flow well, gets stuck on and drips. Neither provide the proper accessibility hardware or clearances, and therefore both should be replaced.

There are (9) showers, all of which are fully operational. They are cold water only which does not meet code (CBC Section 3116B.4) to provide tempered water, and the showers are served by exposed copper pipes. None of the showers provided meet the accessibility height and reach requirements. These are older style shower heads and they should be replaced by low flow heads that meet current standards for reduction in water consumption (CGBC Table 5.303.2.2) which will lower yearly utility costs.

There are (4) water closets, (2) urinals, and (4) lavatories, all of which are fully operational but a water closet in the men's restroom doesn't flush well. The lavatories are cold water only, but code requires tempered water be provided (CBC 3116B.4). None of these fixtures or accessories meet the current accessibility height and clearance requirements. They are older style fixtures and they should be replaced by low flow fixtures that meet current standards for reduction in water consumption (CGBC Table 5.303.2.2) which will reduce utility costs.

There are two rows of trench drains in the floor of the common room which have been painted over several times to the point where the perforations in the grates are solid. These rooms necessitate wash down for cleaning so it is recommended that the existing grates be replaced and the under floor sanitary piping be snaked to maintain good drainage.

Make up water for the pool system is provided in the pool equipment yard along with an emergency shower / eyewash unit. All of these systems are in good working order.

There are (4) interior and (3) exterior hose bibs which appear to be in good condition. Hose bibs should be protected by a backflow prevention device and hose should be provided of length long enough to reach all portions of the pool deck, per Title 24 Section 3118B. The building roof drainage system is a series of gutters and downspouts which directly connect to the site storm water system and appear to be functioning properly.

Building Mechanical

There is no air conditioning or mechanical ventilation system in this facility. Ventilation is accomplished with operable single pane windows only. There is an existing gas space heater to heat the common room, however, it is not operational. It is disconnected from the power source and it is missing ductwork and a flue. We recommend installing a new unit if air conditioning is not going to be added to this facility.

If air conditioning is desired in the future, it can easily be accomplished since there are no ceilings. Ductless mini-split systems are recommended for their low first cost, seasonal use and expected cooling and heating loads. The condensing units for these systems could be installed anywhere around the perimeter of the building and the indoor units could be wall mounted or suspended from the overhead structure.

Building Electrical

Main service switch and panelboard are nearing the end of their useful life. There is considerable rust on both, but they are still operational. The unlabeled panelboard is old, and it will be difficult to find replacement parts for it in the future. Panelboard P, near the pump area, is in good condition and does not need replacement. Provide new type written panel schedules with new panels.

Most receptacles are in good condition. A receptacle near the sink in the office is required to be GFI rated to comply with CEC 210.8B (5). Conduit and wire run down the center of the main room and are mounted to a temporary partition wall to provide electrical power for a cash register. This is a safety issue and a more permanent solution should to be considered.

Lighting

Some of the exterior floodlights and building perimeter lights were not operational and should be checked for either a burned-out lamp, a bad ballast or a bad circuit. We recommend repairing the exterior lighting since it is used primarily for security purposes.

All lights in the interior are functional, but in general, all lighting fixtures should be replaced with LED equivalents to reduce energy consumption, maintenance costs and lower energy costs. The current lighting power consumption meets the requirements of Title 24.

3.8 Johnston Pool

Address

231 Eleanor Avenue

Metrics

Approximate Site Area: 28,300 SF
Parking lot
Rec Pool: 16.7yd L-Shaped
- Estimate Volume = 261,603 Gallons
- Minimum Code Required Flow Rate = 727 GPM
- Minimum Code Required Turnover Rate = 6 Hours
- Posted Maximum Occupancy (Bathers): 324

Zero Entry Wading Pool
- Estimate Volume = 5,087 Gallons
- Minimum Code Required Flow Rate = 85 GPM
- Minimum Code Required Turnover Rate = 1 Hour
- Posted Maximum Occupancy (Bathers): 40

Shaded Deck Area
5,200 SF Pool House
1,200 SF Pump Area
Patronage: 2014=6,098 / 2015=8,211 / 2016=7,019

Major Renovations

2015 – VFD installation at main pool

Pic 1. Pool Deck

Pic 2. Lap Pool

Notes

None

Overview

The Johnston Pool facility, located in District 2, consists of an L-shaped pool that provides an area for lap swimming and a deep area for diving. There is also a zero entry wading pool with a "mushroom" feature. The portion of the facilities buildings used for the pool house and administration functions is undersized; more specifically, lacking adequate space for staff and lifeguards as well as a lack of modern accommodations and finishes typical to today's aquatic facilities. The main facility building appears to be used by a community group and was not accessible for review. If this building could be shared for pool programming the pool house functions could be adequately accommodated.

Architecture, Structure & Accessibility

The main entrance to this facility is through exterior gates that do not provide the proper emergency exit and entrance hardware (CBC, Chapter 10). This hardware should be provided at the existing gates to ensure that all patrons can exit in the event of an emergency.

The interior of the pool house has code issues related to accessibility to the restrooms and changing areas (CBC, Chapter 11B). The toilet and shower facilities are not compliant due to accessibility height and clearance requirements.

Based on the pool size at this facility, and pursuant to California Building Code Chapter 31B, Section 3116B, the following fixtures are required:

	Water Closets	Lavatories	Urinals	Showers	Drinking Fountains
Required Men's	3	3	3	5	
Required Women's	4	3		5	
Required Totals	7	6	3	10	2
Existing	2	2	0	2	0
Difference	-5	-4	-3	-8	-2

The building's interior finishes have exceeded their expected life and are in need of replacement. The facility could also use improvements to provide modern amenities such as a family changing area and a separate first aid space. Ideally, the current community space could be reconfigured and utilized for pool house functions to accommodate these improvements.

The exterior of the building has had some security cameras removed, but the associated electrical wires and conduit have been left exposed and should be removed for safety reasons.

On the pool deck, shaded seating areas are currently provided, but the quantity is minimal in relation to the size of this facility. There is currently no accessible seating provided on the pool deck. It is recommended that additional seating be provided, both standard and accessible, as well as additional site shading. The use of anchored umbrellas and moveable tables and chairs, is recommended. This facility is also a good candidate for added recreational programming, based on the shape and current usage of the pool. Adding features such as inflatable obstacle courses, climbing walls, log rolling, water basketball, water volleyball and inner tube water polo can increase frequency of user visits, length of stay and the revenue that the facility can generate.

Aquatics

The swimming pool is an "L" shaped pool, which is 3'-0" deep at the shallow end and 12'-0" at the deep end. The pool has six lap lanes in the shallow end of the pool, and has two corner in-pool stairs with double handrails. The opposite end of the pool and the deep "L" has in-pool ladders for egress. The pool surface water is collected by a scum-gutter, which does not skim the water continuously, as required by code (CBC Section 3125B). The pool has a fiberglass finish with faded stair markings that are in need of replacement. The swimming pool has a single main drain connected to a single vacuum release device. The pool gutter stones are cracked and in need of replacement, as does the expansion joint behind the coping stones.

The wading pool has depths ranging from 0'-0" to 1'-6". The tile grout at the zero entry is failing and needs to be replaced. This pool lacks the double handrails required to be considered accessibly compliant. The zero depth area also has grates that are parallel to the direction of travel, which is not allowed by code. The wading pool provides dual main drains, in accordance with code (CBC Section 3137B). The wading pool has a single mushroom water feature. The surface water is collected by two surface skimmers.

In lieu of renovating the existing wading pool to make it ADA compliant the City could opt to replace the wading pool with a sprayground. Since there is no standing water lifeguards are not required and a sprayground has the ability to provide greater recreation value while at the same time reducing staffing and operating expenses for the facility.

Pool Deck

The pool deck has slopes that are greater than the maximum allowed for an accessible path of travel (in excess of 2% in any direction). The deck should be modified in order to provide an accessible path of travel throughout the site

(CBC Section 3114B.3). A survey should be completed of the existing deck elevations to determine if sections could be removed and replaced with modified sloping or if a complete replacement is necessary to provide a compliant path around the deck.

In general, wayfinding within the facility should be improved with signage to help identify the locations of critical amenities like restrooms, first aid, showers, drinking fountains, etc. The pool deck currently lacks the code minimum number of hose bibs to clean the pool deck (CBC Section3118B). The deck also has metal expansion joints which are rusting and failing, creating a safety and tripping hazard. These should be grinded down or cut out and replaced to prevent injury to patrons.

The perimeter fencing at the site has chipping paint and areas of rust that need to be sanded and repainted. A midrail was added to the fencing which is spaced less than 48" from other horizontal members. This midrail should be removed to be compliant with code requirements (CBC Section 3209).

Pool Mechanical

Both pools are filtered with high rate sand filters. The swimming pool is chlorinated with calcium hypochlorite, (tablet chlorine) while the wading pool is chlorinated with sodium hypochlorite (liquid chlorine). The pH of both pools is maintained with a muriatic acid feed. The ABB swimming pool variable frequency drive was switched to by-pass and was not operating in automatic mode. Water chemistry is controlled with a Chemtrol controller. The controller safety flow switch was disconnected, not operating, and needs to be installed or replaced.

Site Utilities

Visible domestic water structures onsite include a backflow preventer located along Eleanor Avenue. The existing backflow preventer should be reviewed against City of Sacramento Water Standards on a yearly basis to ensure proper function.

No area drains are present in the pool equipment area. The pool filter area should be modified to add area drains plumbed into the sanitary sewer system and re-sloped to drain.

Building Plumbing

There are (2) exterior hose bibs that are in good condition. Hose bibs should be protected by a backflow prevention device and hose should be provided of length long enough to reach all portions of the pool deck, per Title 24 Section 3118B. Of the (2) outdoor showers, one does not work. A new shower diverter

valve is recommended. The showers are cold water only. Tempered water is required by code (CBC Section 3116B.4) and neither meet the requirements for accessibility height and reach requirements. These are older style shower heads and should be replaced by low flow heads that meet current standards for reduction in water consumption (CGBC Table 5.303.2.2) which will lower utility costs.

There are (2) water closets and (2) lavatories, all of which are fully operational and in good condition. But none of them meet accessibility height and clearance requirements. The lavatories do provide both hot and cold water. These are older style fixtures and should be replaced by low flow fixtures that meet the current standards for reduction in water consumption (CGBC Table 5.303.2.2) and will lower yearly utility costs. The plumbing fixtures and accessories in the restrooms do not meet current accessibility height and clearance requirements and should be replaced.

There is (1) 100 gallon, 260MBH input hot water heater installed in 1987. It is in good condition and has a thermostatic mixing valve (Symmons) installed for scald protection.

There is (1) lavatory in the office space, which is in good working order but only provides cold water to the faucet, which does not meet code requirements to provide tempered water (CBC Section 3116B.4). This lavatory also does not currently meet the height and clearance requirements for accessibility. This is an older style faucet and should be replaced by a low flow faucet that meets current standards for reduction in water consumption (CGBC Table 5.303.2.2) which will lower utility costs.

Make up water for the pool system is provided in the pool equipment yard along with an emergency shower / eyewash unit. All of these systems are in good working order.

Building Mechanical

Restrooms are properly exhausted, but there is currently no ventilation in the office space, this should be corrected. If desired, the pool house building could easily accommodate the addition of air conditioning to increase building comfort for guests and staff. Ductless mini-split systems are recommended for their low initial cost, seasonal use, and expected cooling and heating loads of the facility. The condensing units for these systems could be installed anywhere around the perimeter of the building and the indoor units could be wall mounted or suspended from the overhead structure.

Building Electrical

The main switchboard in the Electrical Room, adjacent to the bathrooms, is in great condition. Electrical panelboard A, in the same room, is an older panel that is still operational, while it does not need to be replaced immediately, it will need to be replaced in the near future. The electrical panelboards in the office are in good condition and do not need to be replaced, but the panelboard in the pump area is showing considerable rust on the inside and needs replacement.

Abandoned flexible conduit is hanging from the roof and walls in multiple locations and needs to be removed for safety reasons. An outdoor weatherproof receptacle, near the restrooms and transformer is missing a cover plate. This should be fixed to avoid potential injury to pool patrons.

Lighting

We were unable to determine the functionality of the pool deck lights due to a possible bad relay in the lighting control system. Existing lighting controls need to be evaluated for the source of the failure.

It appears that the lighting power consumption meets all the current requirements of Title 24. LED building lights are operational. All interior lighting is functional. Some of the existing light fixtures are already LED fixtures. In general, all remaining lighting fixtures should be replaced with LED equivalents to reduce energy consumption, reduce maintenance costs and lower energy costs.

3.9 Mama Marks Play Pool

Address

1140 Roanoke Avenue

Metrics

Approximate Site Area: 3,000 SF
Street Parking
Zero Entry Wading Pool
- Estimate Volume = 5,087 Gallons
- Minimum Code Required Flow Rate = 85 GPM
- Minimum Code Required Turnover Rate = 1 Hour
- Posted Maximum Occupancy (Bathers): 40

Shaded Deck Area
150 SF Pump Area

Major Renovations

None

Notes

Park restroom facilities are not located within the facility and the restrooms associated with the surrounding park were not reviewed. Restrooms are required for wading pools within 300' or at an adjacent recreational facility.

Pic 1. Wading pool

Pic 2. Shade structure

Pic 3. Pump house

Overview

Mama Marks wading pool is a zero entry plaster finish wading pool with a "mushroom" water feature (Pic 1) located in District 2. This is a newer facility within a public park. The pool facility footprint is very small and there is minimal space for seating provided.

Architecture, Structure & Accessibility

This is a newer wading pool facility and as such, little maintenance is required. Entrance/exit gate to the pool does not provide the required emergency exiting and accessible hardware as required by code (CBC, Chapter 10, 11B). Unless required hardware is added, this gate should remain open whenever the pool is in use. The perimeter fencing is low, while it meets code requirements it is not as substantial as the other facilities and does not provide adequate site security.

The concrete block pump enclosure (Pic 3) is separate from the pool enclosure and is in fair condition. The block walls are showing signs of efflorescence, likely due to the exposure to chemicals and water. To extend the life of the structure and pump equipment, it would be advisable to add a roof to this space as currently none is provided.

Based on the pool size at this facility, and pursuant to California Building Code Chapter 31B, Section 3116B, the following fixtures are required:

	Water Closets	Lavatories	Urinals	Showers	Drinking Fountains
Required Men's	1	1		1	
Required Women's	1	1		1	
Required Totals	2	2		2	1
Existing	0	0	0	0	0
Difference	-2	-2	-1	-2	-1

Note: Park restroom facilities are not located within the facility and the restrooms associated with the surrounding park were not reviewed. Restrooms are required for wading pools within 300' or at an adjacent recreational facility.

Aquatics

The Mama Marks wading pool has water depths ranging from 0'-0" to 1'-6" but lacks the double handrails required to be considered accessibly compliant. The zero depth area also has grates that are parallel to the direction of travel, which is not allowed by code. The pool has a plaster finish, and a mushroom interactive water play feature.

In lieu of renovating the existing wading pool to make it ADA compliant the City could opt to replace the wading pool with a sprayground. Since there is no standing water lifeguards are not required and a sprayground has the ability to provide greater recreation value while at the same time reducing staffing and operating expenses for the facility. Since these standalone wading pools are primarily used for private rentals, this would provide a more attractive option because a sprayground appeals to a wider range of user age groups providing more revenue potential for the City.

Pool Deck

The pool deck is a medium broom finish concrete with adequate slip resistance. There is one shade provided (Pic 2) with one bench. This facility could benefit from additional seating. Shaded seating areas could be added around the pool deck, possibly utilizing anchored umbrellas and moveable chairs that are easy to store and cost effective to replace.

Site Utilities

Visible domestic water structures onsite include a backflow preventer and water meter, located in the adjacent park. The existing backflow preventer should be reviewed against City of Sacramento Water Standards on a yearly basis to ensure proper function.

The pool backwash appears to be draining to the storm or sanitary sewer system. Further study is needed to determine if the pool backwash discharges into the sanitary sewer system. If the pool backwash system is discharging into the storm drain system, then the backwash system should be updated to discharge into the sanitary sewer system at the closest point of connection. A sanitary sewer cleanout is located on the northern side of the site near the park's restroom structure, but further study is required to determine the closest point of connection for the sanitary sewer system to plumb the pool backwash.

No area drains are present in the pool equipment area. The pool filter area should be modified to add area drains plumbed into the sanitary sewer system and re-sloped to drain. The wading pool deck drains into existing area drains.

Equipment Enclosure Plumbing

There is (1) emergency shower / eye wash station and it is in good working order.

Equipment Enclosure Electrical

Rust is starting on the hinge of the panelboard and electrical equipment. This should be sanded and repainted to protect the equipment from further corrosion.

Lighting

There is no exterior or interior lighting at this facility.

3.10 Mangan Pool

Address

2140 34th Avenue

Metrics

Approximate Site Area: 17,000 SF
Parking Lot
Rec Pool: 16.7yd L-Shaped
- Estimate Volume = 254,031 Gallons
- Minimum Code Required Flow Rate = 706 GPM
- Minimum Code Required Turnover Rate = 6 Hours
- Posted Maximum Occupancy (Bathers): 329

Shaded Deck Area
3,700 SF Pool House
700 SF Pump Area
Patronage: 2014=1,581 / 2015=4,950 / 2016=4,754

Major Renovations

2015 – VFD installation at main pool

Notes

The roof is scheduled to be repaired by the city.

Pic 1. Pool house

Pic 2. Pool

Pic 3. Pool deck

Overview

Mangan Pool facility, located in District 5, consists of an L-shaped fiberglass pool (Pic 2) with a lap swimming area, a diving area, and a shallow area for recreation and instruction. The pool house (Pic 1) is adequately sized for the current functions, but does not provide modern accommodations and finishes typical of current aquatic facilities.

Architecture, Structure & Accessibility

The interior of the pool house has code issues related to exiting, door hardware, signage, and accessibility in the restrooms and changing areas (CBC, Chapters 10, 11B). The showers and toilet facilities are non-compliant due to accessibility clearance requirements and there is no clear path identified for accessible access through the building that complies with sloping requirements (under 2% in any direction).

Based on the pool size at this facility, and pursuant to California Building Code Chapter 31B, Section 3116B, the following fixtures are required:

	Water Closets	Lavatories	Urinals	Showers	Drinking Fountains
Required Men's	3	3	3	4	
Required Women's	4	3		4	
Required Totals	7	6	3	8	2
Existing	4	4	2	7	2
Difference	-3	-2	-1	-1	0

The building itself is in good condition, but some of the interior finishes have surpassed their expected lifespan and are in need of replacement. Toilet partitions, accessories, restroom wall and floor finishes and casework are all in need of updating. The blue partition walls separating the restrooms from the administration space are in need of replacement and the large administrative area has wasted space that could be better utilized by more modern accommodations such as a family changing area and more distinct administration and employee lounge areas. The first aid space requires an exam bed.

Replacement of the clear single pane windows with dual glazed units would improve building comfort and efficiency (if ventilation or HVAC is added to the building). Replacing the glazing in the restrooms and changing rooms with translucent glazing would provide greater user comfort and privacy.

This facility is also a good candidate for added recreational programming, based on the shape and current usage of the pool. Adding features such as inflatable obstacle courses, climbing walls, log rolling, water basketball, water volleyball and inner tube water polo can increase frequency of user visits, length of stay and the revenue that the facility can generate.

Aquatics

The complex has a single "L" shaped public swimming pool which is 3'-0" deep at the shallow end and 10'-0" at the deep end. The pool has six lap lanes in the shallow end of the pool and has two corner in-pool stairs with handrails.

The opposite end of the pool and the deep "L" has In-pool ladders for egress. The pool surface water is collected by a scum-gutter, which does not skim the water continuously as required by code (CBC Section 3125B). The pool has a fiberglass finish that is worn and in need of resurface or replacement. The pool lacks the safety markings at the 4'-6" water depth and the water line depth markers as required by code (CBC Section 3110B.4). The swimming pool transition from shallow to deep water is a straight drop-off, which exceeds the maximum floor slope allowable by code (CBC Section 3109B.3). The dive boards could be eliminated and the deep area raised to a compliant depth/slope. The alternative would be to provide a compliant slope transition from shallow to deep and replace the diving boards with a compliant feature for the depth provided.

Pool Deck

The pool deck has a great deal of cracking and spalling and has slopes that are greater than the maximum allowed. The deck should be modified in order to provide an accessible path of travel throughout the site (CBC Section 3114B.3). A survey should be completed of the existing deck elevations to determine if sections could be removed and replaced with modified sloping or if a complete replacement is necessary to provide a compliant path around the deck. The pool coping at the deep end of the pool is starting to fail. Also, some of the coping stones around the pool are broken, creating sharp edge, these should be replaced.

The pool fill line is an over the deck fill pipe. This pipe is a trip hazard and may warrant a full replacement. If replacement is considered, it is recommended that an auto-fill system be incorporated. The deck has steel plates that are rusting and can pose a slip hazard and should be replaced. The pool deck area lacks the minimum code required hose bibs (CBC Section 3118B) needed in order to clean the pool deck.

At the deep end, the pool deck does not continue (Pic. 3) to provide the minimum 4'-0" clear pool deck required by code (CBC Section 3114B). There is room to push the fence back into the existing lawn area in order to provide the pool deck path of travel as required.

Pool Mechanical

The pool is filtered with a high rate sand filter system. The swimming pool circulation pump and the steel pump piping are rusting and need to be replaced. The swimming pool is chlorinated with calcium hypochlorite (tablet chlorine) and the pH of the pool water is maintained with a muriatic acid feed.

The ABB swimming pool variable frequency drive was not operating during our visit. The ABB was set to bypass and the flow reading was zero.

The outdoor PVC pool mechanical piping is oxidizing due to UV exposure. This will eventually cause the piping to become brittle and fail. This piping should be replaced with outdoor rated piping. The pool water chemistry is controlled with a Chemtrol controller. The chemicals are fed via chemical tubing that is clear and not rated for outdoor use. Also, this tubing, which is located overhead, is not double contained and any tubing leaks will pose a health and safety risk. We recommend replacing all tubing with the properly rated outdoor tubing and double contain any overhead tubing.

Site Utilities

Visible domestic water devices on site include a backflow preventer located in the adjacent park along 34th Avenue. The existing backflow preventer should be reviewed against City of Sacramento Water Standards on a yearly basis to ensure proper function.

The pool backwash appears to be draining into the sanitary sewer system, as shown by a sign on the backwash system. No area drains are present in the pool filter area. The pool filter area should be modified to add area drains plumbed into the sanitary sewer system and re-sloped to drain.

Expand Pool Decking

Due to the lack of 4' clear accessibility at the back of the pool, it is recommended that the pool deck and perimeter fence at the back of the pool be expanded into the existing landscaped area, south of the site. The existing landscape is relatively flat with similar ground elevations as the existing pool decking. The area would need minor regrading to expand the pool deck and the fence line.

Building Plumbing

There is an existing gas-fired water heater that was installed in 2003 in this facility, it is set to deliver low temperature water. There is currently no thermostatic mixing valve installed as it was not required by code at the time of installation. We recommend installing a thermostatic mixing valve, which is currently required by CBC Code section 3115B.4, as it limits the hot water to 110° F maximum in order to prevent scalding.

There is a countertop sink in the utility room that does not comply with accessibility height and clearance requirements. Its faucet is functional and has both hot and cold water service, but the levers are not operable per accessible code requirements (CBC, Chapter 11B) and we recommend replacement.

There are (2) drinking fountains. These are fully operational, but do not comply with current accessible standards (CBC, Chapter 11B) so we recommend replacement.

There are (7) showers, all of which are fully operational but they are cold water only. Code requires tempered water be provided (CBC Section 3116B.4). The first shower on the right in the men's room has a valve that leaks, we recommend repairing or replacing the valve. These are all older style shower heads and should be replaced by low flow heads that meet current standards for reduction in water consumption (CGBC Table 5.303.2.2) and will lower utility costs. These showers also do not meet current height and reach requirements for accessibility and should all be replaced.

There are (4) water closets, (2) urinals, and (4) lavatories, all of which are fully operational. However, two water closets (one in each restroom) were dry. This is an indication of a crack in the bowl. These water closets need to be replaced. The lavatories are cold water only, but need to provide tempered water per code (CBC 3116B.4) and they are missing hole covers. All fixtures are older and do not comply with current height and clearance requirements for accessibility and should be replaced by low flow style that meet current standards for reduction in water consumption (CGBC Table 5.303.2.2) which will lower utility costs.

There are two rows of trench drains in the floor of the common room and they have been painted over several times to the point where the perforations in the grates are filled. These rooms need to be able to be washed down for cleaning purposes. It is recommended that the existing grates be replaced and the under floor sanitary piping be snaked to maintain good drainage. There are (4) interior and (2) exterior hose bibs which are in good condition. Hose bibs should be protected by a backflow prevention device and hose should be provided of length long enough to reach all portions of the pool deck, per Title 24 Section 3118B.

Make up water for the pool system is provided in the pool equipment yard along with an emergency shower / eyewash unit. The eyewash flow is not sufficient to flush both eyes, the left stream is too low. We recommend either adjusting the isolation valve on the water supply to allow more flow, replace the eyewash with a different style, or add a small booster pump.

The building roof drainage system is a series of gutters and downspouts which directly connect to the site storm water system. This system appears to be in good working condition, but gutters and downspouts should be cleaned at regular intervals to maintain adequate drainage.

Building Mechanical

There is no air conditioning or mechanical ventilation system in this facility. Ventilation is accomplished with operable windows only. There is an existing gas space heater to heat the common room which is operated by an Accustat thermostat with an inline timer and it is in good working condition. However, the knob is missing from the timer so the system could not be tested. The bottom of the unit is very low (75" AFF) which creates a risk for head injuries, and is a code violation (CBC, Chapter 11B, 80" minimum vertical clearance required). This unit should be adjusted and mounted higher, or a guardrail could be added below as a cane-detectable barrier. If the unit is not used, it should be removed.

The pool house building could easily accommodate the addition of air conditioning to increase building comfort for guests and staff. Since there are no ceilings, ductless mini-split systems are recommended for their low initial cost, seasonal use, and expected cooling and heating loads of the facility. The condensing units for these systems could be installed anywhere around the perimeter of the building and the indoor units could be wall mounted or suspended from the overhead structure.

Building Electrical

The main disconnect switch and Panelboard M are old and require replacement. The panelboard in the pump area is in good condition and does not need to be replaced. Provide new type written panel schedules with all new panels.

Electrical receptacles in the office area are damaged and should be replaced. Conduit and wiring is running down from the ceiling to the center of the room and mounted to the temporary partition wall for the cash register. This is a potential hazard and a more permanent solution should be considered.

Lighting

Pool deck lights are all operational, but the left side of the pool deck is still dark. The flood light here is not mounted high enough to cover the area appropriately. We recommend extending the mounting pole so that the full site can be illuminated for security purposes. Exterior building perimeter lights are not operational and should be tested for a burned-out lamp, a bad ballast or a bad circuit. Repair is necessary to provide adequate security lighting.

All interior lights are currently functional, although there is an occupancy sensor installed at the front door which is broken and needs to be replaced. All other controls within the building are functional. The majority of lights in the

building have no bulb protection. This is a safety concern and all light fixtures should be provided with bulb protection to prevent broken glass.

This facility does not comply with current Title 24 standards. Light fixtures and controls would need to be updated with any permitted changes to the lighting systems. Interior lighting is comprised of older incandescent light fixtures that do not meet the current energy codes. In general, all lighting fixtures should be replaced with LED equivalents to reduce energy consumption, maintenance costs and lower energy costs.

3.11 McClatchy Park Pool

Address

3500 5th Avenue

Metrics

Approximate Site Area: 18,000 SF
Street Parking
Rec Pool: 25yd lap pool, Diving pool
- Estimate Volume = 191,385 Gallons
- Minimum Code Required Flow Rate = 532 GPM
- Minimum Code Required Turnover Rate = 6 Hours
- Posted Maximum Occupancy (Bathers): 168 Lap, 57 Diving

Zero Entry Wading Pool
- Estimate Volume = 4,280 Gallons
- Minimum Code Required Flow Rate = 71 GPM
- Minimum Code Required Turnover Rate = 1 Hour
- Posted Maximum Occupancy (Bathers): 28

Shaded Deck Area
4,700 SF Pool House
850 SF Pump Area
Patronage: 2014=3,244 / 2015=3,821 / 2016=4,565

Major Renovations

2015 - VFD installation at main pool

Notes

None

Pic 1. Deck Access

Pic 2. Lap pool

Pic 3. Pool house

Overview

McClatchy Park Pool Facility is the oldest pool in the city. Located in District 5 within a large community park it is comprised of a lap pool (Pic 2), adjacent diving pool and a separate wading pool with interactive "mushroom" water feature. The building is a brick art deco style building (Pic 3) that is adequately sized for the current functions, but it requires both maintenance and renovation in order to bring this facility up to modern standards for an aquatic facility.

Architecture, Structure & Accessibility

Entering the McClatchy Park Pool building has visible cracking throughout its brick walls, missing brick work, efflorescence on the walls (Pic. 6), cracked and broken glass block and windows that have been removed and boarded up. The cracks should be repointed and missing bricks replaced, all cracking should be monitored going forward to ensure there is no further settlement of the building. The roof should be checked for leaks which may be the cause of the efflorescence and deterioration of the exterior brick walls. The glass block should be replaced or removed to prevent injury.

The interior of the building has code issues relating to door hardware, accessibility to the restrooms and changing areas (CBC, Chapters 10, 11B). The sinks, water closets and showers do not meet accessibility height and clearance requirements and there is no path identified for accessible access through the building that complies with sloping requirements (under 2% in any direction). The gate off the pool deck does not provide the proper hardware required for emergency exiting purposes. Unless required hardware is added, this gate should remain open whenever the pool is in use (Pic. 1).

Besides the maintenance needed to the buildings structural walls, many of the building finishes have surpassed their expected lifespan. Floor and wall finishes, casework, toilet partitions and toilet accessories are all in need of replacement.

Based on the pool size at this facility, and pursuant to California Building Code Chapter 31B, Section 3116B, the following fixtures are required:

	Water Closets	Lavatories	Urinals	Showers	Drinking Fountains
Required Men's	2	2	2	3	
Required Women's	3	2		3	
Required Totals	5	4	2	6	2
Existing	5	4	2	6	1
Difference	0	0	0	0	-1

Suggested improvements and modernizations to the pool house include updating the floor plan to provide a family changing area, redefining the interior of the pool house building which currently appears to act largely as an un-programmed additional storage space, and providing a separate First Aid space with accessible exam bed.

Site furnishings are minimal for a facility of this size. One shade structure is provided, and a handful of tables and benches, none of them accessible (CBC, Chapter 11B). Additional shaded seating areas can be added around the pool deck, possibly utilizing anchored umbrellas and moveable chairs that are easy to store when not in use. This facility is also a good candidate for added recreational programming, based on the shape and current usage of the pool. Adding features such as inflatable obstacle courses, climbing walls, log rolling, water basketball, water volleyball and inner tube water polo can increase frequency of user visits, length of stay and the revenue that the facility can generate.

Aquatics

The McClatchy pool complex has three public pools: a swimming pool, a diving pool and a wading pool. The swimming pool and diving pool are comingled as a single body of water with a single pump and filtration system. This configuration is no longer allowed by California Code Section 3123B. The swimming pool is a rectangular pool, which is 3'-6" deep at both ends and 5'-0" at the center. The pool has stairs on both ends of the long wall, the surface water is collected with eight surface skimmers and the filtered water is returned via floor inlets. The swimming pool has two main drains that are compliant with both the VGB and California AB1020 suction entrapment regulations. The pool has a fiberglass finish that has been patched and repaired previously and is in need of resurface or replacement. The pool water line depth markers cannot be read (CBC Section 3110B.4) and should be replaced as well as the coping stones whose joints are failing. The swimming pool has racing platform anchors installed at the 3'-6" depth area. These anchors should be removed to prevent racing platform diving in this shallow water depth (CBC Section 3110B).

The diving pool has depths ranging from 10'-6" to 12'-0" and features a 1-meter above water diving board. The dive pool has two sets of recessed steps with grab rails for means of egress. The surface water is collected by four surface skimmers and the filtered water is returned via floor inlets. The diving pool has two main drains that appear to be compliant with both the VGB and California AB1020 suction entrapment regulations. The pool water line tile is cracked and needs to be repaired or replaced.

The wading pool (Pic 4) has water depths from 0'-0" to 1'-0" and features a small mushroom interactive water play feature. The pool surface water is collected by three surface skimmers and the filtered water is returned via floor inlets. The wading pool has two main drains that appear to be compliant with both the VGB and California AB1020 suction entrapment regulations. The pool does provide a zero entry but lacks the double handrails required to be considered accessibly compliant. The zero depth area also has grates that are parallel to the direction of travel, which is not allowed by code. The finish of the wading pool is cracking and in need of replacement.

In lieu of renovating the existing wading pool to make it ADA compliant the City could opt to replace the wading pool with a sprayground. Since there is no standing water lifeguards are not required and a sprayground has the ability to provide greater recreation value while at the same time reducing staffing and operating expenses for the facility.

Pic 4. Wading Pool

Pic 5. Gaps at fence

Pic 6. Efflorescence at brick

Pool Deck

The pool deck is badly cracking and spalling in several places. The trench drain system is failing throughout and needs to be replaced. Portions of the drain have become a trip hazard. Other portions have broken creating sharp edges, which has become a safety issue. The deck expansion joint mastic is failing and needs to be replaced. The pool deck has areas of significant sloping (in excess of 2%) towards drains. The deck should be modified in order to provide an accessible path of travel throughout the site (CBC Section 3114B.3). A survey should be completed of the existing deck elevations to determine if sections could be removed and replaced with modified sloping or if a complete replacement is necessary to provide a compliant path around the deck. The pool deck also has multiple steel plates which are rusting and pose a slip hazard, these should be replaced.

The wading pool perimeter fence is rusting due to exposure to chlorinated water mist from the water feature. These should be sanded down and repainted. The fence also has some large gaps (Pic. 5) where it encounters a

light pole posing an entrapment issue for small children (CBC 3109.3). The fence should either be rerouted around the post or closed off properly. The main site perimeter fence has many areas of rust and corrosion, especially near the pump area where chemicals are present. All rust should be removed and the fence primed and painted to protect it from further damage.

Pool Mechanical

The swimming pool and diving pool waters are comingled and treated via a single steel tank vertical sand filter. The filter tank is not seismically anchored as it should be. The pool water is treated with a calcium hypochlorite tablet chlorine feeder. The chemical feed is controlled with Chemtrol controllers, which are not electrically bonded (CEC Article 680). The swimming pool Chemtrol safety flow switch is not connected and needs to be installed or replaced. The water supply for the Pulsar chlorine feed unit is a filter effluent line that is run with a rubber hose, which is not NSF listed for this application.

The emergency shut off switch is currently blocked by multiple empty containers (Pic. 7). This area should be cleared of any storage to provide unencumbered access to the emergency shut off.

Pic 7. Emergency shut off

Pic 8. Pump area drains to deck

Pic 9. Rust at pump area

Site Utilities

Visible domestic water structures on site include a backflow preventer and water structure located by the pool filter area, and a hose bib is located near the restrooms. The existing backflow preventer should be reviewed against City of Sacramento Water Standards on a yearly basis to ensure proper function.

The pool backwash appears to be draining into the sanitary sewer system as shown on City of Sacramento block map II17. No area drains are present in the main pool filter area. The pool filter area should be modified to add area drains plumbed into the sanitary sewer system and re-sloped to drain. No area drains are present in the wading pool pump and chemical enclosure. While it is typical to have drains in pump areas, they are not to be installed in chemical storage areas. Drainage from this area flows directly out onto the pool deck (see pic 8) which could be a danger to patrons in the event of a chemical spill.

Building Plumbing

There is an existing old electric water heater in the utility room adjacent to the men's restroom, it is not operational, and has not been serviced in some time. We recommend replacing this equipment. There is no thermostatic mixing valve installed at the equipment (there is one for the showers, see below) as it was not required by code at the time of installation. We recommend installing a thermostatic mixing valve, which is currently required by CBC Code section 3115B.4, as it limits the hot water to 110° F maximum in order to prevent scalding.

There is a countertop sink in the office that does not meet accessible clearance requirements (CBC, Chapter 11B), its faucet is functional and it has hot and cold water connections, but we recommend replacing the sink in order to comply with code requirements.

There is (1) drinking fountain located at the pool deck. This fixture has very low water flow, which makes it difficult to use. It also does not meet accessible height and clearance requirements (CBC, Chapter 11B). We recommend replacing the fixture.

There are (6) exterior showers, all of which were not operational at the time of this visit. They have both hot and cold water plumbed to them. The isolation valves appear to be frozen in place due to lack of exercise. None of the showers are the proper height to meet accessible reach requirements, at least 1 shower should be provided which meets accessible reach requirements. There is a dedicated thermostatic mixing valve dedicated to the shower water supply (Leonard model). There is one shower push button that is missing which should be replaced. If the showers are to be used, the isolation valves need to be repaired or replaced. These are older style shower heads and should be replaced by low flow heads that meet current standards for reduction in water consumption (CGBC Table 5.303.2.2) which will also lower utility costs.

There are (5) water closets, (2) urinals, and (4) lavatories, all of which are fully operational. (4) of the water closets were dry. This is an indication of a crack in the bowl. These water closets need to be replaced. The water closet in the men's restroom "accessible" stall does not flush properly. The sanitary sewer piping should be inspected for traps and blockages. The lavatories have both hot and cold water connections. In the women's restroom, the cold water knob on the lavatory on the left is broken and should be replaced, as this can cause scalding. All the fixtures are of an older style and should be replaced by low flow style fixtures that meet current standards for reduction in water consumption, (CGBC Table 5.303.2.2) which will also lower utility costs. None of the current plumbing fixtures meet accessible height and clearance

requirements (CBC, Chapter 11B) and it is recommended that they all be replaced.

Make up water for the pool system is provided in the pool equipment yard along with an emergency shower / eyewash unit. All of these systems are in good working order.

There are (2) interior and (3) exterior hose bibs which are in good condition. There are (2) janitor's sinks. Hose bibs should be protected by a backflow prevention device and hose should be provided of length long enough to reach all portions of the pool deck, per Title 24 Section 3118B. The one in the utility room has both hot and cold water; the one in the maintenance room has cold water only. The building roof drainage system is an internal primary/secondary drain system and no gutters or downspouts were visible. There was evidence of water discharging from what appears to be a roof overflow drain, suggesting a possible backup at the main roof drain. Roof drains should be cleaned and snaked to ensure proper drainage.

Building Mechanical

There is no air conditioning or mechanical ventilation system in this facility. Ventilation is accomplished with operable windows only. However, all windows are either boarded up or have metal security gates on them, preventing them from opening outward. Code requires a minimum level of natural ventilation be provided (CMC 2013 Table 403.7), therefore windows that are boarded up need to be re-placed with operable windows before occupancy of the space is allowed. There is an existing gas-fired space heater that heats the common room. It is not operational, and has been disconnected from utilities and ventilation. We recommend removing this in its entirety.

The pool house building could easily accommodate the addition of air conditioning to increase building comfort for guests and staff. Ductless mini-split systems are recommended for their low initial cost, seasonal use, and expected cooling and heating loads of the facility. The condensing units for these systems could be installed anywhere around the perimeter of the building and the indoor units could be wall mounted or suspended from the overhead structure.

Building Electrical

Panelboard A, in the main building, is in great condition. Panelboard B, in the pump area, is older but still in good condition. Panelboard M, for the wading pool, is starting to rust on the outside but the inside is still in good condition. All panelboards can currently remain.

Throughout the building, there are exposed electrical wires that are not protected in conduit and exposed electrical connectors. This is a safety hazard for staff and guests. We recommend running all electrical through protective conduit and removing any previously abandoned wiring.

Lighting

Several flood lights at the pool deck would fail and restrike, a sign of a failing ballast, ballasts should be replaced. Some of the other floodlights were not operational and should be tested for either a burned-out lamp, a bad ballast or a bad circuit. Since the floodlights are used for security purposes, they should be repaired. All exterior lights utilize low pressure sodium lamps, which have poor color rendering properties. For safety concerns, and to lower maintenance and energy costs, we recommend replacing all fixtures with white LED equivalents.

Many lamps on the interior of the building are functional, minus a few (assumed to be) burned-out or missing lamps. Many of the interior light fixtures were lacking bulb protection, which is a safety concern. All lighting should be provided with bulb protection. In general, all lighting fixtures should be replaced with LED equivalents to reduce energy consumption, maintenance costs and lower energy costs. The lighting power consumption meets the current requirements of Title 24, however controls would need to be updated with any permitted changes to the lighting systems.

3.12 Pannell Meadowview Pool

Address

2450 Meadowview Road

Metrics

Approximate Site Area: 32,000 SF
Parking Lot
- Rec Pool: 25yd Freeform Pool w/ Zero Entry Wading area
- Estimate Volume = 240,000 Gallons
- Minimum Code Required Flow Rate = 667 GPM
- Minimum Code Required Turnover Rate = 6 Hours
- Posted Maximum Occupancy (Bathers): 429

Shaded Deck Area
10,000 SF Pool House
1,800 SF Pump Area
Patronage: 2014=14,070 / 2015=18,871 / 2016=18,144

Major Renovations

2014 – Slide repairs

Notes

None

Pic 1. Pool House

Pic 2. Play structure

Pic 3. Lap pool & slide

Overview

Pannell Meadowview pool is a newer aquatic facility located in District 8, with more modern day amenities. The facility provides a recreational slide, a 25-yard lap swimming area adjacent to a zero entry wading pool area with multiple interactive water features. The pool deck is large with ample seating

(both bleacher and moveable chairs) and a variety of areas that can be used for rentals or cabanas.

Architecture, Structure & Accessibility

Pannell Meadowview Pool has been constructed more recently than most of the locations surveyed and is in good condition. The exterior block walls and most spaces are in good condition. The interior of the pool house has code issues relating to slip issues at the restroom epoxy flooring and visible drainage issues. Due to inadequate slip co-efficient of flooring materials, mats have been laid on the floors to increase slip resistance when wet. We recommend floating the floor in these rooms to divert water to the drains and providing a new floor finish with a greater slip co-efficient. While many of the finishes in the restrooms are in fair condition, the metal lockers are badly rusted. It is recommended to replace these with plastic lockers that will not be damaged by water. Tilework at restrooms has been patched and repaired previously and is in need of repair again. It appears to be nearing the end of its useful life and we recommend replacement. There are a few locations above the cove base in the restrooms where there is existing water damage to the wall and finishes. We recommend removing, patching, and repairing these areas before they get worse.

The restrooms themselves don't provide sufficient changing areas with benches, and there is no family changing area provided. If this pool gets a great deal of use, providing additional changing areas and a family restroom would be a great addition to this facility.

The existing kitchen / snack bar seems to be oversized or underutilized, this could be a potential expansion area to consider for men, women and family changing areas. Or this could be remodeled into a multi-purpose room to be utilized for group rentals and staff trainings.

Based on the pool size at this facility, and pursuant to California Building Code Chapter 31B, Section 3116B, the following fixtures are required:

	Water Closets	Lavatories	Urinals	Showers	Drinking Fountains
Required Men's	5	4	5	7	
Required Women's	6	4		7	
Required Totals	11	8	5	14	3
Existing	9	8	4	8	2
Difference	-2	0	-1	-6	-1

There is rust on the awnings, metal doors and door hinges, downspouts, parapet caps, exterior concession window, fencing, gates, and light poles. These should be sanded and repainted to prevent further damage, or replaced.

Site furnishings are adequate. There are bleachers near the lap pool to provide seating for swim meets. These could benefit from additional shade. Other moveable tables and chairs are provided. This facility would benefit from the addition of lounge style seating and/or cabanas at the eastern side of the site. The pool deck has the space to provide these features, and it would increase both user comfort as well as revenue for the facility. The existing area consists of landscape, trees, area drains and several utility vaults. The existing landscape has a small mound that would need to be regraded. Depending on the size of the expansion, the existing trees may need to be removed. There are several utility vaults (telephone and electrical) that would need to be adjusted to proposed grade. The expanded area would also need to be graded to drain.

Aquatics

The Pannell Meadowview pool is the most modern of the pools in the City's inventory. The swimming pool is a single, multi-purpose pool. The pool features a zero-depth beach type entry into a wading zone with interactive play equipment. The play area transitions into the competitive and lap swimming area with eight 25-yard lap lanes. This competition area then transitions to the slide receiving area. The play features are in need of maintenance. Rust is showing and much of the paint is faded or peeling. These areas should be sanded and repainted to protect them from further corrosion.

The pool has a single large water slide. The slide tower, which is a galvanized steel structure, is starting to show early signs of rusting at the stair pans and joints. This rust should be sanded and painted to prevent further corrosion. This pool is built to USA swim standards, so it can support a swim meet.

Pool Deck

The pool deck is a medium broom finish concrete. Some of the pool gutter grate corner pieces are broken and need to be replaced. There are some areas of exposed aggregate (near the wading area) and some cracking that could use patching, but overall, the deck is in fair condition. Perimeter fencing is rusting and needs to be sanded and repainted to prevent further corrosion.

Pool Mechanical

The swimming pool is chlorinated with a liquid chlorine feed system and a Stenner peristaltic chlorine feed pump. The pH is maintained with a muriatic acid system, which has some corrosion on the doors and surfaces. An acid fume neutralizer should be installed to help prevent further corrosion.

Site Utilities

A backflow preventer and water meters are located in the parking lot south of the pool. The existing backflow preventer should be reviewed against City of Sacramento Water Standards on a yearly basis to ensure proper function.

The pool deck drains into trench drains and area drains. Several area drains are set too high and are not flush with the existing pool deck. The deficient area drains should be reset.

Building Plumbing

There is (1) 125 gallon, 339 MBH input gas-fired water heater that was installed in 2001. It is a condensing style unit, and is set to deliver low temperature water. There is currently no thermostatic mixing valve installed as it was not required by code at the time of installation. We recommend installing a thermostatic mixing valve, which is currently required by CBC Code section 3115B.4, as it limits the hot water to 110° F maximum in order to prevent scalding.

There are (2) drinking fountains. These are fully operational and in good condition. There are (3) interior and (5) exterior hose bibs which are in good condition. Hose bibs should be protected by a backflow prevention device and hose should be provided of length long enough to reach all portions of the pool deck, per Title 24 Section 3118B. There are (2) janitor closets with mops sinks that have both hot and cold water.

There are (8) outdoor showers, all of which are fully operational. They have both hot and cold water. These are older style shower heads and should be replaced by low flow heads that meet current standards for reduction in water consumption (CGBC Table 5.303.2.2) which will lower utility costs. One of the showers has been fitted with grab bars and a bench, but the operable parts for this shower remain too high for accessible regulations. It is recommended that the controls for this shower be lowered to meet accessible heights per code.

There are (9) water closets, (4) urinals, and (8) lavatories, all of which are fully operational. The lavatories have both hot and cold water. All the fixtures are of an older style and should be replaced by low flow style that meet current standards for reduction in water consumption (CGBC Table 5.303.2.2) which will help lower yearly utility costs.

There is a gas fired pool heater in this facility. Make up water for the pool system is provided in the pool equipment room as well as (2) emergency shower / eyewash units (one in each chemical storage room). All of these systems appear to be in good working order.

The building roof drainage system is a primary/secondary internal drain system. This system is in good working condition, but there is some significant debris near some drains. Roof drains should be cleaned at regular intervals to ensure proper function of the drains.

Building Mechanical

The pool restrooms are air conditioned by packaged DX units on the roof. The pool restrooms and the janitors' closets are exhausted by fans on the roof that are interlocked with the light switch. All are in good working order.

Building Electrical

The switchboard and panelboard in the pump area are starting to show minor signs of rust, but all switchboards and panelboards are in great condition and should last for many years. Removing the rust and touching up with a rust resistant paint will prolong the life of the equipment.

Lighting

Pedestrian scale poles at the north end of pool deck are not operational. This is likely due to burned out lamps. Mast poles near the pool are rusting due to proximity to chlorinated water spray. We recommend sanding and repainting the poles. Building perimeter lights are operational and the swimming pool site lighting is sized to support a night swim meet event.

All interior lights and controls are functional. Some light fixtures are already LED, in general all remaining lighting fixtures should be replaced with LED equivalents to reduce energy consumption, maintenance costs and lower energy costs. The lighting power consumption meets all the current requirements of Title 24.

3.13 Oki Pool

Address

2715 Wissemann Drive

Metrics

Approximate Site Area: 24,000 SF
Street Parking
Rec Pool: 25yd Lap Pool, Dive pool
- Estimate Volume = 190,899 Gallons
- Minimum Code Required Flow Rate = 530 GPM
- Minimum Code Required Turnover Rate = 6 Hours
- Posted Maximum Occupancy (Bathers): 168 Lap, 57 Diving

Zero Entry Wading Pool
- Estimate Volume = 5,087 Gallons
- Minimum Code Required Flow Rate = 85 GPM
- Minimum Code Required Turnover Rate = 1 Hour
- Posted Maximum Occupancy (Bathers): 40

Shaded Deck Area
1,250 SF Pool House
650 SF Pump Area
Patronage: 2014=2,116 / 2015=3,897 / 2016=3,363

Major Renovations

2013 – Fiberglass replacement at Lap pool
2015 – VFD installation at main pool
2016 – Shade fabric replacement, main pool filter replacement

Pic 1. Pool house

Pic 2. Lap Pool

Pic 3. Wading pool

Notes

None

Overview

Oki Pool facility is located in a residential neighborhood within District 6 and is comprised of a rectangular lap pool (Pic 2), a dive pool, and a separate fenced wading pool (Pic 3) with interactive mushroom water feature. The site is well maintained and has ample site area. The pool house (Pic 1) is small and does not provide modern accommodations and finishes typical of current aquatic facilities.

Architecture, Structure & Accessibility

The Oki pool house toilet facilities are not compliant with accessible height and clearance code requirements (CBC, Chapters 10, 11B). Door hardware throughout the pool house is "knob" style, (not lever style) which is not permitted by code (CBC Chapter 10). In addition, the turnstile gate to the facility is not considered a proper accessible entrance/ exit. The exit gate adjacent to the entrance does not provide the proper emergency exit hardware required in the case of an emergency. Unless required hardware is added, this gate should remain open whenever the pool is in use and should be considered for removal all together.

Based on the pool size at this facility, and pursuant to California Building Code Chapter 31B, Section 3116B, the following fixtures are required:

	Water Closets	Lavatories	Urinals	Showers	Drinking Fountains
Required Men's	2	2	2	4	
Required Women's	3	2		4	
Required Totals	5	4	2	8	2
Existing	5	4	2	1	1
Difference	0	0	0	-7	-1

The pool house building is built from concrete block walls with a corrugated metal roof which has no overhang. This lack of overhang at the roof is allowing water to seep into the building walls (Pic 5), causing efflorescence on the interior of the block walls and deterioration of the block on the exterior of the walls. The metal roof itself has also begun to rust and fail. A new roof is highly recommended to prevent further deterioration of the existing structure, preferably a roof that provides an overhang and drip edge to prevent water running back into the walls. Interior finishes of the building have surpassed their useful life. Flooring is chipping (Pic 7), ceilings are water stained, casework is old and delaminating and wall paint is peeling. These repairs should be considered

in comparison to a larger remodel of this building to solve the conditions and operational items identified.

Quite a few of the exterior metal doors to the pool house were dented and rusting. These should be, at a minimum, sanded and sealed to prevent further rust, and as a more permanent solution, replaced entirely. Perimeter fencing at the facility was in fair condition, but there was rust in multiple locations which needs to be sanded and repainted.

At the exterior front entry to the pool facility, there is a bench located below a low steel trellis that connects to the facility fencing (Pic 1). This bench could facilitate security breaches and we recommend either removing the bench entirely, or relocating it to an area away from the perimeter fencing and trellis. This metal trellis is rusting in several locations and should be sanded and repainted.

Current design does not provide space for a family changing area or single occupancy restroom, nor is there room to create one within the existing building footprint. The administration space houses administration, employee break room and first aid all within the same small area. It would be a welcome addition to provide a separate first aid space with an accessible exam bed.

Site furnishings are provided, but are lacking in number for a facility of this size. The site provides one large shade structure and is surrounded by large trees, providing a good deal of natural shading. Additional seating areas could be added around the deck, possibly utilizing anchored umbrellas and moveable tables and chairs which can be stored when not in use. This facility is also a good candidate for added recreational programming, based on the shape and current usage of the pool. Adding features such as inflatable obstacle courses, climbing walls, log rolling, water basketball, water volleyball and inner tube water polo can increase frequency of user visits, length of stay and the revenue that the facility can generate.

Aquatics

The complex has three public pools: a swimming pool, a diving pool and a wading pool. The swimming pool and diving pool are comingled as a single body of water with a single pump and filtration system. This configuration is no longer allowed by California Code Section 3123B. The swimming pool is a rectangular pool which is 3'-6" deep at one end and 5'-0' at the other. The pool has walk-out stairs on both sides of the shallow end. The swimming pool surface water is collected with eight surface skimmers and the filtered water is returned via floor inlets. The pool has two main drains that appear to be compliant with both the VGB and California AB1020 suction entrapment

regulations. The pools fiberglass finish is in fair condition but the water line depth markers cannot be read and need to be replaced. The swimming pool underwater lights are not working and should be repaired or replaced. If lights are not necessary due to programming then they can be abandoned, but should be safed-off.

The fiberglass diving pool has depths ranging from 10'-6" to 12'-0" and features a 1-meter above water diving board. The dive pool has two sets of recessed steps with grab rails for means of egress. The surface water is collected by four surface skimmers and the filtered water is returned via floor inlets. The pool has two main drains that appear to be compliant with both the VGB and California AB1020 suction entrapment regulations.

The wading pool has water depths ranging from 0'-0" to 1'-6" and features a "mushroom" interactive water play feature. The pool does provide a zero entry but lacks the double handrails required to be considered accessibly compliant. The zero depth area also has grates that are parallel to the direction of travel, which is not allowed by code. The surface water is collected by two surface skimmers and the filtered water is returned via floor inlets. The wading pool has two main drains that are compliant with both the VGB and California AB1020 suction entrapment regulations.

In lieu of renovating the existing wading pool to make it ADA compliant the City could opt to replace the wading pool with a sprayground. Since there is no standing water lifeguards are not required and a sprayground has the ability to provide greater recreation value while at the same time reducing staffing and operating expenses for the facility.

Pool Deck

The pool deck is spalling (Pic 4) and cracking in multiple areas and rebar is exposed in several locations. Expansion joints are failing throughout the deck area and steel sleeves, which were embedded into the deck, are left exposed. Portions of the pool deck have a slope greater than 2%, which is the maximum slope allowed per code (CBC Section 3114B.3). Due to these issues, we recommend installing a new pool deck.

The wading pool perimeter fence gate opens towards the pool, this should swing in the opposite direction, this gate also lacks a self-closing / self-latching mechanism as required (CBC Section 3122B). The entire pool deck area lacks the minimum code required hose bibs to clean the pool deck (CBC Section 3118B). The condition of the wading pool deck is in fair condition, with limited cracking, but the bench and lifeguard tower, which are bolted to the deck, impede upon the 4' clear path of travel required (CBC Section3114B) around

the pool. It is recommended these be relocated where they will not pose a problem, or the deck be extended to provide this required width.

Pool Mechanical

The swimming pool and diving pool shared mechanical equipment is located in one space. The wading pool equipment is located in a separate enclosure. Both mechanical spaces have enclosures open to the elements. The swimming pool pump pit lacks a safety railing and a means of entry/egress. The swimming pool and diving pool waters are treated via dual stark sand filters. The header pipes are steel and are corroding (Pic 6) and should be replaced. The swimming pool circulation pump motor disconnect is located in a separate locked acid enclosure, which is not in accordance with electrical code (CEC Article 680).

The pool water is treated with a calcium hypochlorite tablet chlorine feeder and the chemical feed is controlled with Chemtrol controllers, which are not electrically bonded (CEC Article 680). The swimming pool Chemtrol safety flow switch is not connected and needs to be installed or replaced. The acid storage area is corroded and needs to be neutralized, cleaned, and the acid vapor neutralizer installed.

Pic 4. Spalling at deck

Pic 5. Water damage

Pic 6. Rust at pump

Pic 7. Flooring

Site Utilities

Visible domestic water structures onsite include a backflow preventer and water meter located along Wisseman Drive. The existing backflow preventer should be reviewed against City of Sacramento Water Standards on a yearly basis to ensure proper function.

The pool backwash appears to be draining into the sanitary sewer system. Further study is needed to confirm the assumption. If the pool backwash system is not discharging into the sanitary sewer system then the backwash system should be updated to discharge into the sanitary sewer system at the closest point of connection. There are no visible sanitary sewer structures, like cleanouts, but restrooms are located on the eastern side of the pool, so sanitary sewer

system is present onsite. Additional study will help determine the closest point of connection for the sanitary sewer system to plumb the pool backwash.

The swimming pool deck drains into trench drains and area drains and the wading pool deck drains to the surrounding landscape. Several of the pool deck trench drain grates are broken and clogged and should be cleaned or replaced.

Building Plumbing

There is a countertop sink in the office whose faucet is functional, but the sink fails to meet accessibility clearance requirements and should be replaced.

There is (1) drinking fountain at the pool deck and it is fully operational. There is (1) outdoor shower near the restrooms. The diverter valve leaks heavily when the bottom button is pushed. The shower has been retrofitted to provide one shower which meets accessibility requirements.

There are (5) water closets, (2) urinals, and (4) lavatories, all of which are made of steel and fully operational. The lavatories are cold water only (hot water faucets are screwed closed) and do not comply with code requiring tempered water (CBC 3116B.4). All the fixtures are of an older style and should be replaced by a low flow style that meet current standards for reduction of water consumption (CGBC Table 5.303.2.2) which will help lower utility costs. The current fixtures do not comply with accessibility height and clearance requirements and should therefore be replaced (CBC, Chapter 11B).

There is (1) janitor's sink with a thermostatic mixing valve (Symmons), one electric water heater (Rheem) in the plumbing pipe chase, but it is only used for the faucet at the janitor's sink. There are (2) interior hose bibs which are in good condition. Hose bibs should be protected by a backflow prevention device and hose should be provided of length long enough to reach all portions of the pool deck, per Title 24 Section 3118B.

Make up water for the pool system is provided in the pool equipment yard along with emergency shower / eyewash unit. All of these systems are in good working order.

Building Mechanical

There is no air conditioning or mechanical ventilation system in this facility. Ventilation is accomplished with operable windows only. The windows are single pane windows, which are damaged and past their useful life. The windows should be replaced with modern dual pane windows which will improve thermal comfort for staff.

The pool house building could easily accommodate the addition of air conditioning to increase building comfort for guests and staff due to its open floor plan. A ductless mini-split system is recommended for its low initial cost, seasonal use, and expected cooling and heating loads of the facility. The condensing units for these systems could be installed anywhere around the perimeter of the building and the indoor units could be wall mounted or suspended from the overhead structure.

Building Electrical

Panelboard A is rusted and missing a cover. This panelboard will need to be replaced. The panelboard near the pump area is completely rusted on the outside, but the condition is good on the inside. Sanding and repainting the outside will extend the useful life of this panelboard. The panelboard for the wading pool is currently in good condition.

At the administrative space, there is an electrical receptacle near the sink which needs to be replaced with a GFI receptacle to comply with CEC 210.8B (5).

Lighting

Some of the floodlights were not operational and should be checked for either a burned-out lamp, a bad ballast or a bad circuit. We recommend repair of these fixtures, although they are rarely used and could be abandoned.

Most of the lamps on the interior are functional, however the lamps in the restrooms produce little to no light and need to be replaced. In general, all lighting fixtures should be replaced with LED equivalents to reduce energy consumption, maintenance costs and lower energy costs.

Work lights in the maintenance shed are missing lamps. These should be replaced. Exterior building perimeter lights are not operational and should be checked for either a burned-out lamp, a bad ballast or a bad circuit. These should be repaired since they are used for security purposes.

Controls are operated through an old analog timeclock whose functionality could not be determined. We recommend evaluating the operation of this unit, as it is old and possibly not functioning. It would be beneficial to replace this with a digital timeclock which can be programmed. The lighting power consumption at Oki pool meets the current requirements of Title 24, however updates to controls and lighting could be beneficial and cost effective in the long run.

3.14 Robertson Play Pool

Address

3525 Norwood Avenue

Metrics

Approximate Site Area: 4,000 SF
Parking Lot
Zero Entry Wading Pool
- Estimate Volume = 8,985 Gallons
- Minimum Code Required Flow Rate = 150 GPM
- Minimum Code Required Turnover Rate = 1 Hour
- Posted Maximum Occupancy (Bathers): 45

200 SF Pump Area

Major Renovations

2015 – Fiberglass replacement

Notes

Park restroom facilities are not located within the facility and the restrooms associated with the surrounding park were not reviewed. Restrooms are required for wading pools within 300' or at an adjacent recreational facility.

Pic 1. Wading pool

Pic 2. Chemical storage

Pic 3. Showers

Overview

Robertson wading pool, located in District 2, is a small play pool complex within a public park. The fiberglass pool has a zero entry and a large play structure with a slide (Pic 1).

Architecture, Structure & Accessibility

The Robertson wading pool is a newer facility and remains in good condition. The entrance/ exit gate does not provide proper exiting hardware as required by code. Unless required hardware is added, this gate should remain open whenever the pool is in use. The exterior showers (Pic 3) do not meet accessibility height requirements (CBC, Chapter 11B).

Based on the pool size at this facility, and pursuant to California Building Code Chapter 31B, Section 3116B, the following fixtures are required:

	Water Closets	Lavatories	Urinals	Showers	Drinking Fountains
Required Men's	1	1		1	
Required Women's	1	1		1	
Required Totals	2	2		2	1
Existing	0	0		0	0
Difference	-2	-2		-2	-1

Note: Park restroom facilities are not located within the facility and the restrooms associated with the surrounding park were not reviewed. Restrooms are required for wading pools within 300' or at an adjacent recreational facility.

The tile at the zero entry side of the pool does not provide adequate slip co-efficient and should be replaced. There is ponding water throughout the deck, though most notably in the chemical storage area. Since the equipment enclosure has only chain link for roofing we recommend to provide a solid roof to protect the chemical storage and equipment from the elements. At the remainder of the pool deck where ponding is an issue these areas should be replaced or 'floated' to provide positive drainage.

Aquatics

The Robertson Park Wading Pool is a standalone wading pool complex. The pool has water depths ranging from 0'-0" to 12". The pool fiberglass finish is in fair condition and the pool provides a climb-on interactive play structure that includes a small water slide. The pool has multiple main drains, which are complaint with both the VGB and California AB1020 suction entrapment regulations.

The filtered water is returned to the pool via floor inlets. Surface water is collected from five surface skimmers. The interactive water feature emergency shut-off switch has a broken junction box outside of the wading pool area fence and some electrical wires are exposed posing a safety issue. Areas of the interactive play structure have their gel coating worn away. This should be repaired to prevent accelerated deterioration of the feature.

In lieu of renovating the existing wading pool to make it ADA compliant the City could opt to replace the wading pool with a sprayground. Since there is no standing water lifeguards are not required and a sprayground has the ability to provide greater recreation value while at the same time reducing staffing and operating expenses for the facility. Since these standalone wading pools are primarily used for private rentals, this would provide a more attractive option because a sprayground appeals to a wider range of user age groups providing more revenue potential for the City.

Pool Deck

The pool deck is a medium broom finish concrete with adequate slip resistance. The deck depth markers do not have the universal no-diving symbols required by current code (CBC Section 3110B.4).

Pool Mechanical

The wading pool water is filtered by two Pentair high rate sand filters model TR-100. The filter effluent pressure gauge needs to be replaced. The filters backwash to a floor sink receptacle that is open to the elements. If this floor sink connection is connected to the sanitary sewer then it means that rain water is draining to the sanitary sewer. The water feature at the pool is powered by a 7.5 horsepower booster pump. The water is chlorinated with a liquid chlorine feed system that features 15-gallon drums, and a Stenner peristaltic chlorine feed pump. The pH is maintained with a muriatic acid system which features a small disposable acid container and a Stenner peristaltic feed pump. Both feed pumps are controlled by a Chemtrol controller, which is not electrically bonded (CEC Article 680). All of the pool mechanical, electrical and chemical equipment is located in a single enclosure.

An acid fume neutralizer is not present and should be installed as the acid fumes are causing corrosion on the surrounding equipment. The liquid chlorine and muriatic acid are non-compatible chemicals that should never be mixed in full strength, these chemicals are stored directly adjacent to each other. A barrier should be installed to prevent the chemicals from inadvertently mixing causing an off-gassing of toxic fumes. The chemical feed pump suction tubing is a clear tubing, which lacks UV protection and is not rated for outdoor use. A UV protected tubing, rated for outdoor use, should be installed.

Site Utilities

Visible domestic water structures onsite include a backflow preventer and water meter which are located in the adjacent park and community center. The existing backflow preventer should be reviewed against City of Sacramento Water Standards on a yearly basis to ensure proper function. The hose bib on

the pool deck is labeled as reclaimed water. Restrooms are located west of the wading pool site, so a potable water line should be present in order to provide a potable water hose bib on the pool deck.

Area drains are present in the pool filter area, but ponding water suggests they are not draining properly. Staff confirmed that drain dead ends into the ground and is not connected to either storm or sewer system. The wading pool deck drains to the surrounding landscape. The northwest corner of the pool deck drains to a low spot in the existing landscape. The landscape here should be regraded or an area drain should be installed.

Equipment Enclosure Plumbing

There is (1) emergency shower / eye wash station at the chemical storage area and it is in good working order. There are (3) shower heads, but they are not currently operational. They are located outside of the locked area and have been abandoned due to vandalism. If it's desired to make them operable again, some investigation will be required to determine the reason for their failure. They are piped to both hot and cold water. Another option would be to install new showers inside the locked perimeter fence to help minimize future vandalism of showers. There is currently (1) gas fired water heater on site, but since the shower heads are not operational, the functionality of this equipment could not be determined.

Equipment Enclosure Electrical

Equipment at this facility is rusting due to chemical exposure. Though the equipment is currently operational, replacement will be required in the near future.

Lighting

There is no exterior or interior lighting at this facility. Since this facility is only open during daylight hours, lighting is not a high priority.

3.15 Southside Pool

Address

2107 6th Street

Metrics

Approximate Site Area: 21,000 SF
Parking Lot
Rec Pool: 16.7yd Lap & Dive pool
- Estimate Volume = 371,173 Gallons
- Minimum Code Required Flow Rate = 1,031 GPM
- Minimum Code Required Turnover Rate = 6 Hours
- Posted Maximum Occupancy (Bathers): 390

Zero Entry Wading Pool
- Estimate Volume = 5,087 Gallons
- Minimum Code Required Flow Rate = 85 GPM
- Minimum Code Required Turnover Rate = 1 Hour
- Posted Maximum Occupancy (Bathers): 40

Shaded Deck Area
5,000 SF Pool House
800 SF Pump Area
Patronage: 2014=1,248 / 2015=6,768 / 2016=7,725

Major Renovations

2015 – VFD installed at main pool
2016 – Shade structure fabric replaced

Pic 1. Pool house

Pic 2. Lap & Diving pool

Pic 3. Pond at park

Notes

It has been noted that there is a large number of waterfowl at this pool due to its close proximity to a large pond (Pic 3).

Overview

The Southside Pool facility provides both a lap pool (Pic 2) for swimming and diving and an adjacent plaster finish wading pool with a "mushroom" water feature. The facility is located in District 4 within a large public park. The pool house is adequately sized for the current functions it provides, however it does not provide the modern accomodations and finishes typically found in todays aquatic facilities. This facility has both code issues and several maintenance and modernization improvements recommended.

Architecture, Structure & Accessibility

Entering the Southside pool from the street must be done through the front entrance at the pool house (Pic 1). Along the walkway leading up to the entrance are some very low hanging electrical wires connected to the building roof which are within reach of patrons. We recommend either raising these wires, or running them under the ground so they are not a safety hazard.

The slope of the walkway leading up to the entry door exceeds the 2% max required in all directions per building code (CBC, Chapter 11B). The entry/exit door provides proper accessible hardware, but the administrative/ transaction counter inside does not provide a low level wheelchair transaction space as required by code (CBC Chapter 11B). Additionally, the only way to access the pool deck from the administration area is through either the men's or women's changing areas. There is no direct access from the First Aid space to the pool deck. If a patron is injured, they must be escorted through either of the two changing rooms. We recommend providing a direct access door from the first aid room to the pool deck.

Doors within the pool house still utilize the "knob" style hardware, no longer allowed per building code (CBC Chapter 10). We recommend replacing these with lever style hardware. Additionally, portions of the restroom and changing area floors exceed the 2% max slope allowed per code. Restroom fixtures and accessories do not meet current accessibility height and clearance requirements and have exceeded their useful life. We recommend replacing all plumbing fixtures and accessories. Floor finishes throughout the building are failing, and there is evidence in both restrooms of previous water ponding. New floor finishes are recommended, and we advise snaking and cleaning the drain lines to prevent future issues with ponding.

Based on the pool size at this facility, and pursuant to California Building Code Chapter 31B, Section 3116B, the following fixtures are required:

	Water Closets	Lavatories	Urinals	Showers	Drinking Fountains
Required Men's	4	4	4	6	
Required Women's	5	4		6	
Required Totals	9	8	4	12	3
Existing	4	5	3	13	2
Difference	-5	-3	-1	+1	-1

Finishes throughout the pool house have exceeded their useful life and are in need of replacement. New wall and floor finishes and new accessible casework are recommended throughout. Windows are casement style with single pane glazing and many are no longer operable due to exterior security bars that prevent the windows from opening outwards. Updating the windows with dual pane glazing would improve the building's thermal performance, and providing translucent glazing in the restrooms and the changing areas would increase security and privacy for patrons. Changing the windows from casement style to sliders would allow the windows to operate, even with security bars installed.

The building is comprised of masonry block walls, and there is evidence of efflorescence, cracking, and damage throughout. These areas should be cleaned and repaired and cracks should be monitored going forward. The ceiling shows signs of previous water damage. We advise the roofing be checked, and any leaks be repaired.

Modernization improvements that would benefit this facility are the addition of family changing areas and a family or common entrance to the pool deck. The current administration area houses employee break areas, first aid, and administration all within the same space. These areas should be separated into their own distinct spaces with direct access provided to the pool deck.

Site furnishings are not adequate for the size and functions of this facility. Shade structures are provided, but there is a lack of seating available. Additional seating should be provided, possibly by utilizing anchored umbrellas and moveable chairs and tables, which can be stored when not in use. Perimeter fencing at the site is rusting and should be sanded and repainted to prevent further corrosion. Emergency exit gates off of the pool deck lack the required emergency hardware which should be provided (CBC, Chapter 10). This facility is also a good candidate for added recreational programming, based on the shape and current usage of the pool. Adding features such as inflatable obstacle courses, climbing walls, log rolling, water basketball, water

volleyball and inner tube water polo can increase frequency of user visits, length of stay and the revenue that the facility can generate.

Aquatics

The complex has two public pools: a fiberglass swimming pool and a plaster finish wading pool. The swimming pool is a rectangular pool, which is 3'-0" deep at both ends and 10' deep in the middle. The 1-Meter above water diving board is located in the middle of the pool where the water depth is 10'-0". Current California Code requires a minimum depth of 11'-2" and this diving board should be removed (CBC Chapter 31B). It should be noted that at the time of review the actual spring board was not installed. The pool has eight in-pool ladders as a means of egress. The surface water is collected by a scum-gutter, which does not skim the water continuously, as required by code (CBC Section 3125B). The pool has three main drains, which appear to meet both the VGB and the California AB1020 safety codes for drain suction entrapment prevention, but the swimming pool is missing the code required (CBC Section 3110B.4) water line depth markers which should be provided.

Based on the programs provided here, the location within the city/community, and the number of annual users reported, this facility could benefit from the addition of tempered water being provided in the lap pool. This would facilitate more adult programming like lap swimming and aerobics, and also provide a better facility for family uses like swim lessons and private rentals. By adding a pool water heater the City could also explore the option of extending the swim season to a full 12 months.

The wading pool has depths ranging from 0'-0" to 1'-6" and features a mushroom interactive play feature. The pool does provide a zero entry but lacks the double handrails required to be considered accessibly compliant. The zero depth area also has grates that are parallel to the direction of travel, which is not allowed by code. The wading pool has dual main drains in accordance with code (CBC Section 3137B) and the surface water is collected by two surface skimmers. The wading pool expansion joint mastic is starting to fail and needs to be replaced.

In lieu of renovating the existing wading pool to make it ADA compliant the City could opt to replace the wading pool with a sprayground. Since there is no standing water lifeguards are not required and a sprayground has the ability to provide greater recreation value while at the same time reducing staffing and operating expenses for the facility.

Pic 4. Pool deck

Pic 5. Uneven pool deck

Pic 6. Exposed wires/conduit

Pool Deck

The concrete pool deck is spalling, cracking and breaking in several areas. Portions of the pool deck have slopes greater than the allowable maximum slope of 2% (CBC Section 3114B.3). Some upheaving (Pic 5) has occurred at the deck, creating uneven surfaces which pose a trip hazard. Multiple sections of pool deck are missing the expansion joint mastic. Due to all these issues, we recommend replacement of the pool deck.

The pool fill line is an over the deck fill pipe that is leaking and in need of repair. The pipe is a trip hazard and may warrant a full replacement. If replacement is considered, it is recommended that an auto-fill system be incorporated. The pool deck lacks the minimum 4' of unobstructed walkway around the back of the diving board as required by code (Pic 4) (CBC Section 3114B). Since expanding the deck at this location may be difficult, relocating the dive board may be an easier solution. The pool deck lacks an adequate number of hose bibs spaced around the pool as required by code (CBC Section 3118B).

Pool Mechanical

Both pools are filtered with high rate sand filters. The swimming pool is chlorinated with calcium hypochlorite (tablet chlorine), while the wading pool is chlorinated with sodium hypochlorite (liquid chlorine). The pH of both pools is maintained with a muriatic acid feed. A portion of the suction pool piping and the pump hair and lint strainer in the mechanical area pump pit are steel and should be replaced with corrosion resistant pvc or similar components. The water chemistry in both pools is controlled with Chemtrol controllers, but these controllers are not electrically bonded. The swimming pool filter header piping has a water leak which requires repair and the swimming pool filter lacks a sanitary sewer connection, as required by code (CBC Section 3141B).

Site Utilities

Visible domestic water structures onsite include backflow preventers and water meters, located on 6th Street near the pool house, and a hose bib is located on the northwestern side of the site. The existing backflow preventer should be reviewed against City of Sacramento Water Standards on a yearly basis to ensure proper function.

It is undetermined if the pool backwash drains to the storm or sanitary sewer system. Additional investigation will be necessary to determine if the pool backwash discharges into the sanitary sewer system as required by Sacramento Stormwater Quality Partnership and Sacramento Regional County Sanitary District requirements. If the pool backwash discharges into the storm drain system then the backwash system should be updated to discharge into the sanitary sewer system at the closest point of connection. There are no visible sanitary sewer structures, like cleanouts, but restrooms are located on the western side of the pool, so a sanitary sewer system is present onsite. Further study is necessary to determine the closest point of connection for the sanitary sewer system to plumb the pool backwash.

Area drains are present in the pool filter equipment area, but it could not be confirmed if they discharge to the storm drain system or the sanitary sewer system. We recommend discharging the backwash into the sanitary sewer system, as required by Sacramento Stormwater Quality Partnership and Sacramento Regional County Sanitary District requirements.

The pool deck drains into area drains and the wading pool deck drains to the surrounding landscape. The area drain grates around the main pool have small holes that are easily clogged and there is evidence of previous standing water around many of these drains. The area drain grates should be replaced with grates which provide larger holes (1/4" Max.) and the drain lines snaked.

Building Plumbing

There are two hot water heaters that serve this facility. One is a 199 MBH input and the other is 75 MBH input. There is no thermostatic mixing valve installed on either as it was not required by code at the time of installation. We recommend installing a thermostatic mixing valve, which is currently required by CBC Code section 3115B.4, as it limits the hot water to 110° F maximum in order to prevent scalding.

There are (4) water closets, (3) urinals, and (5) lavatories, and all are fully operational. The lavatories have both hot and cold water, but the fixtures do not currently meet accessibility height and clearance requirements (CBC,

Chapter 11B). All the fixtures are of an older style and should be replaced by low flow style that meet current standards for reduction in water consumption (CGBC Table 5.303.2.2) which will lower utility costs.

There are (13) showers, all of which are fully operational, with the exception of one in the men's restroom, whose valve leaks and should be repaired. They have both hot and cold water, and are served by exposed copper pipes. Currently, there are no showers provided which meet accessibility height and reach ranges. These are older style shower heads and should be replaced by low flow heads that meet current codes for reduction in water consumption (CGBC Table 5.303.2.2) which will lower yearly utility costs.

There are (2) drinking fountains for the facility. These are fully operational and in good condition, but they do not meet accessibility height and clearance requirements. It is recommended to add additional accessible height drinking fountains at this facility.

There are (2) interior and (3) exterior hose bibs which are in good condition. Hose bibs should be protected by a backflow prevention device and hose should be provided of length long enough to reach all portions of the pool deck, per Title 24 Section 3118B. The hose bib in the women's restroom is missing its protective access panel and should be replaced.

There is (1) janitor's sink with hot and cold water, but the faucet is missing a piece, and it leaks badly as a result. This should be repaired. There is (1) emergency shower / eye wash station in the pump area, and it is in good working order.

Building Mechanical

The changing areas are well ventilated with large fans and operable windows, yet many of the windows fail to open to their full capacity, due to security bars on the exterior. The main room is not ventilated well, with only small operable windows available. Windows should be replaced with dual pane sliders which will allow them to open, even with security bars installed. Providing translucent glazing at restroom and changing areas will provide additional user security and comfort. There are (2) gas fired space heaters, one in each changing area, that are fully operational and appear to be adequately sized for their purpose.

The pool house building could accommodate the addition of air conditioning to increase building comfort for guests and staff. A ductless mini-split system is recommended for its low initial cost, seasonal use, and expected cooling and heating loads of the facility. The condensing units for these systems

could be installed anywhere around the perimeter of the building and the indoor units could be wall mounted or suspended from the structure above.

Building Electrical

The panelboard inside the office is old and nearing the end of its useful life. It will need to be replaced in the foreseeable future. Panelboard B, in the pump area, is starting to rust on the outside but the inside is still in good condition. Removing the rust and touching up with a rust resistant paint could prolong the life of the electrical equipment.

Receptacles throughout the facility are old, but in general, should not need to be replaced. There is a good deal of exposed electrical wires (Pic 6) throughout the building. For safety purposes, any abandoned wires should be removed and any live wires should be protected in conduit.

Lighting

The east half of the pool deck lights are controlled from the electrical panel in the pump room, and they are all functional. The west half of the pool deck lights are controlled from the electrical panel in the main building and they are not operational and should be checked for either a burned-out lamp, a bad ballast or a bad circuit. They should be repaired, since these lights are used for security purposes. Exterior building perimeter lights are all operational. Downlights in exterior vestibules between outdoors and the changing rooms are not operational, since these lights are used for security purposes, they should be repaired.

All interior lights are operational, but the occupancy sensor at the front door is broken and needs replacement. Interior lighting is comprised of incandescent light fixtures, and they do not meet current energy codes. Many of the lights in the restroom and changing areas are bare bulbs, and missing their protective cover. For safety reasons, covers should be provided for all lights. In general, all lighting fixtures should be replaced with LED equivalents to reduce energy consumption, maintenance costs and lower energy costs. This facility does not currently comply with Title 24 standards. Light fixtures and controls would need to be updated with any permitted changes to the lighting systems.

3.16 Tahoe Park Pool

Address

3501 59th Street

Metrics

Approximate Site Area: 20,500 SF
Street Parking
Rec Pool: 16.7yd L-Shaped
- Estimate Volume = 203,700 Gallons
- Minimum Code Required Flow Rate = 566 GPM
- Minimum Code Required Turnover Rate = 6 Hours
- Posted Maximum Occupancy (Bathers): 292

Zero Entry Activity Pool
- Estimate Volume = 16,350 Gallons
- Minimum Code Required Flow Rate = 136 GPM
- Minimum Code Required Turnover Rate = 2 Hours
- Posted Maximum Occupancy (Bathers): 66

Shaded Deck Area
3,700 SF Pool House
700 SF Pump Area

Major Renovations

2015 – VFD installaion at main pool

Notes

None

Pic 1. Lap and Dive Pool

Pic 2. Pool House

Pic 3. Activity pool

Overview

Tahoe Park Pool facility, located in district 6, is comprised of a L-shaped lap and deep pool with an adjacent zero entry activity pool. The site is located within a large park complex. The pool house (Pic 2) is adequately sized for the current functions and uses, however, it does not provide the modern accomodations and finishes that current facilities do.

Architecture, Structure & Accessibility

The interior of Tahoe park pool house has code issues related to door hardware, signage, and accessibility to the restroom and shower areas (CBC Chapters 10 and 11B). The showers and restrooms do not meet current accessibility height and clearance requirements and require a full remodel of toilet partitions, finishes and accessories to meet code requirements (CBC, Chapter 11B). Many of the current doors at the pool house have "knob" style door hardware, which does not meet current building code. This hardware should be changed to "lever" style hardware that adheres to code requirements. Additionally, all the doors leading onto the pool deck have steep thresholds that do not comply with max slope (2% max) requirements. We suggest either replacement of the thresholds or 'floating' & ramping the pool deck at this location to raise the elevation.

Based on the pool size at this facility, and pursuant to California Building Code Chapter 31B, Section 3116B, the following fixtures are required:

	Water Closets	Lavatories	Urinals	Showers	Drinking Fountains
Required Men's	3	3	3	5	
Required Women's	4	3		5	
Required Totals	7	6	3	10	2
Existing	4	4	2	7	2
Difference	-3	-2	-1	-3	0

Throughout the building, finishes have exceeded their useful life. Floor and wall finishes are failing, and brickwork is in need of repair. Exterior brickwork has significant efflorescence(Pic 6), likely due to water spray from the irrigation sprinklers. We recommend replacing or adjusting the irrigation spray heads to prevent further damage and provide cleaning at the exterior brick walls. Current windows are single pane glazing, replacing these with dual pane windows would increase thermal efficiency within the building, and providing translucent glazing at the restroom and changing areas would improve user comfort and privacy. The wood roof structure at the pool house and pump enclosure are weathered and deteriorating. All wood that has been damaged should be replaced and all wood sealed for further protection.

The current administration area does not separate employee lounge and administration spaces. The addition of a family changing area would also be a good addition to this facility.

Site furnishings are inadequate for the size and function of this facility. Shade structures are provided on site, but additional shaded seating areas should be added around the pool deck, possibly utilizing anchored umbrellas and moveable chairs that are easy to store when not in use. This facility is also a good candidate for added recreational programming, based on the shape and current usage of the pool. Adding features such as inflatable obstacle courses, climbing walls, log rolling, water basketball, water volleyball and inner tube water polo can increase frequency of user visits, length of stay and the revenue that the facility can generate.

Aquatics

The Tahoe park pool complex has two public pools: a swimming pool and an activity pool. The swimming pool is an "L" shaped pool which is 3'-0" deep at the shallow end and 10'-0" at the deep end. The pool has six lap lanes in the shallow end of the pool. The shallow end has two corner in-pool stairs with double handrails. The opposite end of the pool and the deep "L" has in-pool ladders for egress. The surface water is collected via a scum-gutter, which does not skim the water continuously, as required by code (CBC Section 3125B). The pool has a fiberglass finish that is worn and in need of resurface or replacement. The pool also lacks the safety markings at the 4'-6" water depth, as required by code (CBC Section 3110B.4). The swimming pool transition from shallow to deep water is a straight drop-off, which exceeds the maximum floor slope allowable by code (CBC Section 3109B.3). Dive boards have already been eliminated, but the deep area should also be raised to a compliant depth/slope. The alternative would be to provide a compliant slope transition from shallow to deep and install a compliant feature for the depth provided.

The activity pool is a fiberglass pool which has depths ranging from 0'-0" to 3'-0". The pool has dual main drains in accordance with code (CBC Section 3137B). The water surface is collected by four surface skimmers. This pool is also due for fiberglass replacement. The transition from zero entry to adjacent coping stones is currently a tripping hazard. This should be resolved by either grinding down this area or replacing the coping stones.

Pic 4. Pool deck

Pic 5. Brick damage

Pic 6. Efflorescence

Pool Deck

The concrete pool deck throughout the facility is spalling, cracking and the joint mastic is missing in multiple locations. The pool deck has slopes that exceed the maximum allowed for accessible path of travel of 2% in any direction (CBC Section 3114B.3). The main pool deck is finished with an epoxy (cool-deck) type coating which is worn away in areas of high traffic (Pic 4). Due to these deficiencies, the pool deck should either be replaced or a concrete topping slab should be provided to even out the walking surfaces. The activity pool deck remains a medium broom finish concrete.

The main pool fill line is an over the deck fill pipe that is leaking and in need of repair. This pipe is a trip hazard and may warrant a full replacement. If replacement is considered, it is recommended that an auto-fill system be incorporated.

The site perimeter fencing is rusting and in need of repair, it should be sanded and repainted. Some fencing around the chemical enclosure will need more extensive repair, with replacement of portions of fencing here. The two exit gates off of the pool deck do not provide the required hardware or signage for exiting purposes (CBC, Chapter 10).

Pool Mechanical

Both pools are filtered with high rate sand filters. The swimming pool is chlorinated with calcium hypochlorite (tablet chlorine), while the activity pool is chlorinated with sodium hypochlorite (liquid chlorine). The pH of both pools is maintained with a muriatic acid feed. The ABB swimming pool variable frequency drive was not operating during our visit. A portion of the pool piping in the mechanical area is steel and should be replaced. The water chemistry in both pools is controlled with Chemtrol controllers, but these controllers are not labeled for the pool they serve. The chemicals are fed via chemical tubing that is clear and not rated for outdoor use. This tubing, which is located overhead, is not double contained. Any tubing leaks can pose a health or safety risk, this

tubing should be replaced with that rated for outdoors and all overhead piping double contained.

Site Utilities

Visible domestic water structures onsite include a backflow preventer located at the adjacent park, and a hose bib located on the western side of the site near the pool house. The existing backflow preventer should be reviewed against City of Sacramento Water Standards on a yearly basis to ensure proper function.

It is undetermined if the pool backwash drains to the storm or sanitary sewer system. If the pool backwash system discharges into the storm drain system, then the backwash system should be updated to discharge into the sanitary sewer system at the closest point of connection. There is a sanitary sewer cleanout adjacent to the restrooms. Further study is needed to determine the closest point of connection for the sanitary sewer system to plumb the pool backwash.

No area drains are present in the pool filter area. The pool filter area should be modified to add area drains plumbed into the sanitary sewer system and re-sloped to drain.

The pool deck drains into area drains and storm drain lines which appear to be clogged as they have free standing water in the drains. The storm drain line should be cleaned out and unclogged.

Building Plumbing

There is no water heater installed in this facility yet tempered water should be provided at lavatories and showers (CBC Section 3116B.4). There is a countertop sink in the utility room whose faucet is functional and piped for cold water only, but it does not provide the proper accessible height and clearance requirements and should be replaced. There are (2) drinking fountains. These are fully operational, but do not meet accessible operational requirements, and should therefore be replaced. There are (4) interior and (3) exterior hose bibs, which are in good condition. Hose bibs should be protected by a backflow prevention device and hose should be provided of length long enough to reach all portions of the pool deck, per Title 24 Section 3118B.

There are (7) showers, all of which are fully operational. They are cold water only (CBC Section 3116B.4)and are served by exposed copper pipes. These are older style shower heads and should be replaced by low flow heads that meet current standards for reduction in water consumption (CGBC Table 5.303.2.2) which will lower yearly utility costs. None of the showers meet accessibility height

requirements, and at a minimum, one shower in each restroom should be provided for patrons with disabilities.

There are (4) water closets, (2) urinals, and (4) lavatories, all of which are fully operational. The lavatories are cold water only and have missing hole covers. We recommend replacing the missing hole covers. All the fixtures are of an older style and do not meet current accessibility height and clearance requirements and should be replaced by new low flow models that meet current standards for reduction in water consumption (CGBC Table 5.303.2.2) which will lower utility costs.

There are two rows of trench drains in the floor of the common room. They appear to have been painted over several times to the point where the perforations in the grates are filled. This space needs to be washed down for cleaning. It is recommended that the existing grates be replaced and the under floor sanitary piping be snaked to maintain good drainage from the drains.

Make up water for the pool system is provided in the pool equipment yard, as well as an emergency shower / eyewash unit. All of these systems appear to be in good working order.

The building roof drainage system is a series of gutters and downspouts, which directly connect to the site storm water system. This system appears to be in good working condition.

Building Mechanical

There is no air conditioning or mechanical ventilation system in this facility. Ventilation is accomplished through operable windows only. There is an existing gas space heater to heat the common room. It is operated by an Accustat thermostat with an inline timer and appears to be in good working condition.

The pool house building could easily accommodate the addition of air conditioning to increase building comfort for guests, staff, and community groups. Since there are no ceilings, ductless mini-split systems are recommended for their low initial cost, seasonal use, and expected cooling and heating loads of the facility. The condensing units for these systems could be installed anywhere around the perimeter of the building and the indoor units could be wall mounted or suspended from the overhead structure.

Building Electrical

The Tahoe park facility has a 480V service and transformers. The panelboard and transformers are old and nearing the end of their useful life. The equipment

needs to be replaced. The outdoor panelboards and transformer are rusting, they will need to be replaced in the foreseeable future.

Throughout the pool house building there are exposed electrical wires, some may have previously been abandoned. Any wires that are no longer needed should be removed in their entirety. Those wires that are still live should be protected in conduit.

Lighting

One of the pool deck mast lights was not operational. This is likely due to burned out lamps. Exterior building perimeter lights are not operational and should be checked for either a burned-out lamp, a bad ballast or a timeclock failure. These should be repaired as the exterior lights are used for security purposes.

Lighting in the pump room utilizes an obsolete T12 lamp that will be no longer available in the near future. We recommend replacing this lighting with a T8 or LED fixture. All other interior lights were functional, but many fixtures were missing their housing, leaving the bare bulb exposed. This is a safety hazard, and the housings should be provided or the fixtures replaced. In general, all lighting fixtures should be replaced with LED equivalents to reduce energy consumption, maintenance costs, and lower energy costs. The current lighting power consumption meets the current requirements of Title 24.

There is an analog timeclock (perimeter exterior) and a digital timeclock (pool deck) for exterior lighting controls at this facility. The analog timeclock was not operational. We recommend evaluating the analog timeclock for failure causes.

3.17 William Land Park Play Pool

Address

13th Street & 13th Avenue

Metrics

Approximate Site Area: 3,000 SF
Street Parking
Zero Entry Wading Pool
- Estimate Volume = 5,087 Gallons
- Minimum Code Required Flow Rate = 85 GPM
- Minimum Code Required Turnover Rate = 1 Hour
- Posted Maximum Occupancy (Bathers): 40

Shaded Deck Area
200 SF Pump Area

Major Renovations

None

Notes

Park restroom facilities are not located within the facility and the restrooms associated with the surrounding park were not reviewed. Restrooms are required for wading pools within 300' or at an adjacent recreational facility.

Pic 1. Wading pool

Pic 2. Shower & Drinking fountain

Pic 3. Pump area

Overview

The William Land Park wading pool, located in District 4, is comprised of a zero entry wading pool with a interactive "mushroom" play feature (Pic 1). The facility is located within a large public park and would seem to benefit from more usable space for patrons with additional seating and lounging areas.

Architecture, Structure & Accessibility

The adjacent park is large and wayfinding signage to the pool is lacking, making the facility difficult to find for newcomers. Better facility identification, such as a monument sign or additional directional signs would be a welcome addition for this site.

Based on the pool size at this facility, and pursuant to California Building Code Chapter 31B, Section 3116B, the following fixtures are required:

	Water Closets	Lavatories	Urinals	Showers	Drinking Fountains
Required Men's	1	1		1	
Required Women's	1	1		1	
Required Totals	2	2		2	1
Existing	0	0		2	2
Difference	-2	-2		0	+1

Note: Park restroom facilities are not located within the facility and the restrooms associated with the surrounding park were not reviewed. Restrooms are required for wading pools within 300' or at an adjacent recreational facility.

Emergency exiting through the entrance/exit gate are non-compliant (CBC, Chapter 10) due to improper gate hardware and lack of exiting signage. Proper emergency exiting hardware and signage should be provided. Unless required hardware is added, this gate should remain open whenever the pool is in use. At the zero entry side of the pool the deck is shallow, providing additional deck space here would be beneficial for those entering and exiting the pool. The tile at the zero entry does not provide adequate slip co-efficient and should be replaced with a tile that provides the required slip resistance. If it is desired to expand the facility for rentals or additional seating areas, the existing perimeter fence could be moved back into the surrounding park in order to obtain more usable space. Where the zero entry meets the adjacent coping stones, the coping creates a tripping hazard. This area should either be ground down or the coping stones replaced.

The pump area is comprised of masonry block walls, which are in good condition, with the exception of efflorescence issues (Pic 3). The walls should be cleaned before further damage is done. There is currently no roof on the pump area, which leaves it vulnerable to security breaches and allows debris into the space. A roof of some form is recommended to safeguard this space and extend the useful life of all the equipment housed here.

The perimeter fencing is in fair condition. It has multiple locations that are rusting, which should be sanded and repainted to prevent further deterioration.

Aquatics

The William Land Park wading pool is a stand-alone play pool complex. The pool has water depths from 0'-0" to 1'-6" with a plaster finish and provides a "mushroom" interactive water play feature. The pool has three main drains, which are compliant with both the VGB and California AB1020 suction entrapment regulations. The filtered water is returned to the pool via a combination of floor inlets and wall inlets. Surface water is collected from two surface skimmers, which do not have equalizer fittings visible in the pool. We confirmed with City staff that equalizer fittings are installed under the main drain grates. Grates must be rated for 100% system flow to each grate.

The zero depth area has slopes greater than that allowed by code (CBC Section 3109B.3) and lack the double handrails to be considered accessibly compliant. The zero depth area also has grates that are parallel to the direction of travel, which is not allowed by code. The mushroom water feature emergency shut-off switch is broken and the associated safety sign is missing. This should be repaired before the pool is open to the public.

In lieu of renovating the existing wading pool to make it ADA compliant the City could opt to replace the wading pool with a sprayground. Since there is no standing water lifeguards are not required and a sprayground has the ability to provide greater recreation value while at the same time reducing staffing and operating expenses for the facility. Since these standalone wading pools are primarily used for private rentals, this would provide a more attractive option because a sprayground appeals to a wider range of user age groups providing more revenue potential for the City.

Pool Deck

The pool deck is a medium broom finish concrete. A portion of the pool deck lacks the 4' of unobstructed walkway required (CBC Section 3114B) due to a park bench that is bolted down to the deck. This bench should be relocated or removed, and/or portions of the deck enlarged.

Pool Mechanical

The wading pool water is filtered by a sand filter and the water feature is powered by a 7.5 horsepower booster pump. The pool water is chlorinated with a liquid chlorine feed system that features 15-gallon drums and a Stenner peristaltic chlorine feed pump. The pH is maintained with a muriatic acid system which features a small disposable acid container and a Stenner peristaltic feed

pump. Both feed pumps are controlled by a Chemtrol controller, which is not electrically bonded (CEC Article 680).

All of the pool mechanical, electrical and chemical equipment is located in a single area. The booster pump electrical disconnect is corroding, likely due to acid fumes from the acid storage system and an acid fume neutralizer should be installed. The liquid chlorine and muriatic acid are non-compatible chemicals that should never be mixed in full strength. These chemicals are stored directly adjacent to each other. A barrier should be installed to prevent these chemicals from inadvertently mixing causing an off-gassing of toxic fumes. The chemical feed tubing is a clear tubing, which lacks UV protection and is not rated for outdoor use. Since the pump enclosure currently has no roof a UV protected tubing rated for outdoor use should be installed. The backwash is open to atmosphere and is not clear if this is a connection to the sanitary sewer system or the storm drain system.

Site Utilities

Visible domestic water structures onsite include a backflow preventer located in the adjacent park, drinking fountains, and shower (Pic 2) located near the wading pool. The existing backflow preventer should be reviewed against City of Sacramento Water Standards on a yearly basis to ensure proper function.

Additional study will be necessary to determine if the pool backwash discharges into the sanitary sewer system as it should. If the pool backwash does not discharge into any system, then it should be updated to discharge into the sanitary sewer system at the closest point of connection. No visible sanitary sewer structures are present, but there are restrooms at the adjacent park, so a sanitary sewer system is present onsite. Further study is necessary to determine the closest point of connection for the sanitary sewer system to plumb the pool backwash into.

No area drains are present in the pool filter area. The pool filter area should be modified to add area drains plumbed into the sanitary sewer system and re-sloped to drain. The wading pool deck drains to the surrounding landscape.

Equipment Enclosure Plumbing

There is (1) emergency shower / eye wash station and it is in good working order. There are (2) shower heads. They are piped to both hot and cold water. The hand held shower works well, but the stationary head does not work at all. We recommend repairing or replacing the diverter valve.

There is (1) 12 gallon, 4.5 kW electric water heater, which appears to be operational. There are (2) drinking fountains which are functional and in good condition.

Equipment Enclosure Electrical

Electrical equipment is in good condition.

Lighting

There is no exterior or interior lighting at this facility.

City of
SACRAMENTO
Parks and Recreation

CITYWIDE POOL ASSESSMENT

JKA jeff katz ARCHITECTURE

IN CONJUNCTION WITH:

AQUATIC DESIGN GROUP

EXP U.S. SERVICES, INC.

BKF ENGINEERS

US ACCESS CONSULTANTS, INC.

HISTORY OF THE PROJECT

Purpose:

- To Prepare an Assessment of the City's 12 Aquatic Facilities and 5 Wading Pools.
- Identify and prioritize aquatic, mechanical, electrical, plumbing, structural, accessibility and programmatic deficiencies at each facility.

JKA was selected in early 2016 to provide these services to the City. Over the next several months our team conducted thorough site investigations at each of the 17 facilities.

OVERVIEW OF POOL FACILITIES

Pools

• Cabrillo Pool	District 8
• Clunie Pool	District 3
• Doyle Pool	District 3
• George Sim Pool	District 6
• Glenn Hall Pool	District 3
• Johnston Pool	District 2
• Mangan Pool	District 5
• McClatchy Park Pool	District 5
• Pannell Meadowview Pool	District 8
• Oki Pool	District 6
• Southside Pool	District 4
• Tahoe Park Pool	District 6

Play Pools

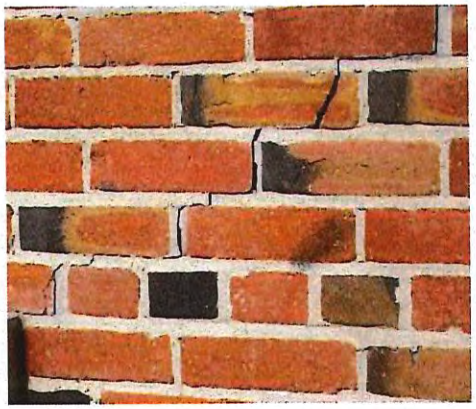
• Bertha Henschel Play Pool	District 3
• Colonial Play Pool	District 6
• Mama Marks Play Pool	District 2
• Robertson Play Pool	District 2
• William Land Park Play Pool	District 4

PURPOSE OF THE REPORT

- Provide a tool to Identify & Prioritize needs across the City's Aquatic Facilities and pursue funding to keep the facilities open and operational
- Identify needs to keep pools functional and operational for the next 5-15 years
- Identify opportunities as well as required improvements, to expand programming, increase useage, and improve efficiency

CURRENT STATE OF POOL FACILITIES

CURRENT STATE OF POOL FACILITIES



ASSESSMENT OVERVIEW

As pool facilities were visited deficiencies were noted, these deficiencies were broken down into 3 classifications based on their importance.

Deficiencies are Identified with the following classifications:

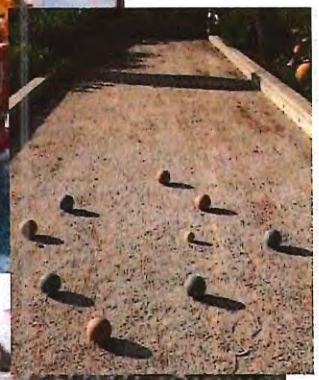
- Priority A: Safety Issues, Immediate Code Violations and Code Violations triggered by other items.
- Priority B: Immediate Maintenance & Repair Items as well as Deferred Maintenance Items.
- Priority C: Identified Items to bring the facility up to Industry Standards as well as Facility Enhancements.

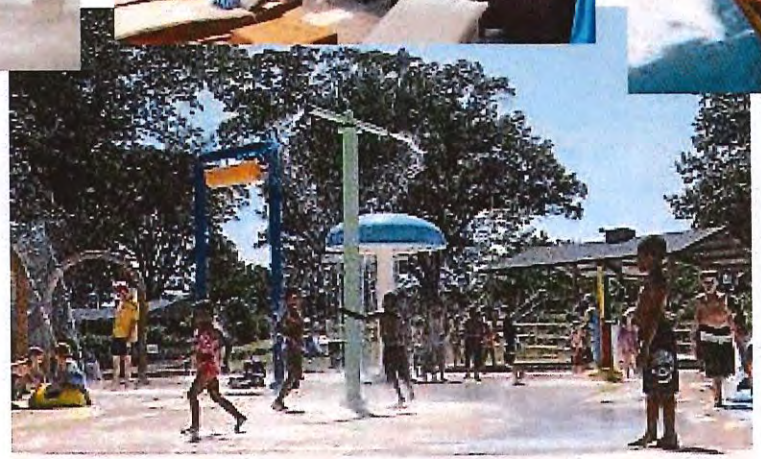
ASSESSMENT OVERVIEW - ESTIMATED COSTS

Priority A Estimated Costs	Priority B Estimated Costs	Priority C Estimated Costs	Total Estimated Costs
$12,000,000	$4,000,000	$2,000,000	$18,000,000

IDENTIFYING OPPORTUNITIES & IMPROVEMENTS

IDENTIFYING OPPORTUNITIES & IMPROVEMENTS





Agenda Item 3
Parks and Recreation Commission Meeting
September 7, 2017

City of SACRAMENTO

Meeting Date: 09/07/17

Report Type: Discussion

Parks and Recreation Report

915 I Street, 1st Floor
www.CityofSacramento.org

Title: Older Adult Services Overview and 25th Anniversary of Triple-R Adult Day Program

Location: Citywide

Recommendation: Informational

Contact: Sylvia Fort, Recreation Manager, (916) 808-8381

Presenters: Rosanne Bernardy, Recreation Superintendent, (916) 808-1590
Stephanie Wilson, Program Supervisor, (916) 808-1591

Department: Parks and Recreation

Division: Recreation – Older Adult Services

Dept ID: 19001011

Attachments:
01 Description/Analysis

Submitted By:	Sylvia Fort
Signature:	
Approved By:	Christopher Conlin
Signature:	

Attachment 01 – Description/Analysis

Issue: Recreation staff seeks to inform the Parks and Recreation Commission about the department's programming for older adults. Older Adult Services is comprised of the Ethel MacLeod Hart Senior Center, which draws hundreds of older adults from throughout the city each day for leisure activities and services; the 50+ Wellness program, which supports health and longevity through fitness, sports and outdoor adventures; Assistance, Referrals and More for Seniors (A.R.M.S.), which links seniors with resources to help support their independence in the community; TechConnections, a computer and technology learning program staffed primarily by trained volunteers; Caring Neighborhoods, a citywide program that supports and assists groups of residents working together to engage and support elders living nearby; and Triple-R Adult Day Program, serving elders with dementia at three locations. 2017 is the 25th anniversary of Triple-R and several events are being held and special projects conducted throughout the year.

Policy Considerations: Providing recreational programs to diverse segments of the community is consistent with the Department of Parks and Recreation mission to ensure opportunities to "Optimize the Experience of Living." Older Adult Services programs demonstrate innovation, creativity, and inclusiveness, three of the department's core values.

Economic Impacts: Not Applicable

Environmental Considerations: Not Applicable

Sustainability: Not Applicable

Financial Considerations: Not Applicable

Local Business Enterprise (LBE): Not Applicable