



Evaluation Categories	Comments	Fiscal Impact
Pool drain covers are VGB Compliant, Inlets and other covers are in good condition.	I was unable to observe the bottom drains in the main and tot pool. These drain covers need to be of the anti-entrapment type and need to be replaced, re-inspected and recertified every 5, 7 or 10 years according to the manufacturer specifications. This can be done by a licensed contractor or engineer. I was also unable to inspect the covers for return water lines due to water clarity.	\$5,000 for replacement drain covers and recertification

Evaluation Categories	Comments	Fiscal Impact
Pool surface is uniform in color and surface is acceptable, lane markings are visible and in good condition.	Pool surface was unobservable. The pool appears to have been fiber glassed over with painted racing targets. There are probably racing stripes on the bottom. The tot pool appears to be fiberglass. Seriously consider returning the main pool and the tot pool to plaster and tile, it lasts longer, will not wear and cause swimmer discomfort due to fibers in their skin, and it looks better.	\$150,000, includes removal of previous fiberglass liner

Evaluation Categories	Comments	Fiscal Impact
ADA Compliance for means of pool entry, placement of pool lifts and alternate means of entry ramps, stairs	There is a mount for an ADA lift but it must have been stored for non use. ADA lifts are required to be in at all times the pool is open and available for unassisted use by patrons when they visit the pool, meaning battery in and remote working so a user can roll up, transfer themselves and drop in and get out of the water by themselves. They are required to be permanently mounted when open.	Deck mounting a permanently placed lift with anchor installation and lift \$7,500

Evaluation Categories	Comments	Fiscal Impact
Facility fences and barriers meet State code	The facility fence meets code except where compromised. It is 6 feet in some places and 7 feet in others. It has barbed wire in some places and others it does not. Consider full replacement with 8-foot fence or higher. Small mesh coated cyclone, or unclimbable and cut-proof metal wire style. Final option is "guardian" style rod iron with curved out tops. The current fence poses liability and after hour entry issues.	\$120,000 to \$160,000 depending on style of fence







Evaluation Categories	Comments	Fiscal Impact
Pool signs meet code requirements, including Capacity, 911, RB/CPR, Active Diarrhea, Pool Rules. No Diving; No LG on Duty,	Required signs are (listed here). They should be in plain sight and "unavoidable" when patrons enter and use the facility.	\$500
Additional signs depending on facility amenities and type of use; No Swimming After Dark, No Running, Shower Before Entering, and others	Due to the 6-foot fence in some areas of the pool and the ease of after-hours entry, no swimming after dark should be posted next to a no lifeguard on duty sign for liability against midnight swimmers and the liability, they bring in event of a catastrophic incident. Health Department report calls for gender identification signs on the restroom entrances	\$300

Evaluation Categories	Comments	Fiscal Impact
Entrance to mechanical areas and chemical storage areas are well marked, hazardous material signs and precautions are appropriate,	Chemical storage is in shed outside the pool area, it has Haz Mat warning signs on the door, consider a sign on door "employees only" or something similar. Dry chemicals are stored in the mechanical room. Without some sort of slurry system to introduce the chemicals to the pool water are the bags carried to the pool? The bags and crates are large, heavy and the staircase is not conducive to carry these out of that room.	\$25 for sign







Evaluation Categories	Comments	Fiscal Impact
Safety Data Sheets are on file or in a binder and readily available. A facility map with an evacuation plan is posted and visible.	There were no readily available Safety Data Sheets. These sheets provide data on the dangers of chemicals and other materials and how to treat exposure. SDS should be kept in a binder in the mechanical room. There should also be a posted evacuation plan in the mechanical room	\$50

Evaluation Categories	Comments	Fiscal Impact
Portable tools and equipment are stored correctly, and other equipment is stored correctly and in a proper location.	As indicated above, the pool has not been operating for some time. It is hard to judge as there are items throughout the mechanical room.	\$0

Evaluation Categories	Comments	Fiscal Impact
Extra pool mechanical equipment is stored correctly and in a proper location.	Most pools have an area where spare or "to be repaired" equipment is stored. It is good to have these items well organized and out of the way of normal operations.	\$0

Evaluation Categories	Comments	Fiscal Impact
Area is clean and not cluttered. Working surfaces are well maintained and ready for use.	The pool has not been operational in two years, it is hard to judge this area. There will be some cleaning required to restart the facility.	\$0



Evaluation Categories	Comments	Fiscal Impact
Extra pool mechanical equipment is stored correctly and in a proper location.	Most pools have an area where spare or "to be repaired" equipment is stored. It is good to have these items well organized and out of the way of normal operations.	\$0



Evaluation Categories	Comments	Fiscal Impact
There is at least three feet of clearance in front of all electrical panels.	Code requires three feet of clearance in front of all electrical panels. When renovating the mechanical room this needs consideration when laying out the spaces.	\$0 to \$5,000 depending on plans



Evaluation Categories	Comments	Fiscal Impact
Daily pool log is kept and up to date, test times, routine maintenance, and regular inspections, are noted.	We found a blank pool log that is acceptable but could definitely be improved to capture much more operational information. We can supply one upon request.	\$0
Additional chemicals if added are noted in pool log (anything not from automated chemical controllers)	There is a space for these additions on the current log.	\$0
Special projects and equipment replacements are recorded and tracked for long range maintenance planning	Any daily repairs or projects should be noted on the operational log sheet. Code also calls for having an operating procedures manual and brochures/manuals for each piece of equipment in the mechanical room.	\$0

Evaluation Categories	Comments	Fiscal Impact
Pipe contents and flow direction are well marked on the appropriate plumbing.	Pipes that are part of the pool circulatory system should be labeled with contents and flow direction. Some of the main plumbing is marked and some is not, there have been repairs and replumbing over time that make it difficult to follow the flow of the system.	\$200
Pipe valves, pressure and flow gauges, and water shut-off points are well marked, visible and easily accessible to ensure operational readiness in the event of an emergency	The mechanical room has many gauges and shut-off points, valves, and flow reducers/controllers. Some are accessible, others are harder to access. A plumbing diagram with critical shutoff points should be posted in plain sight so anyone can perform basic system shutdown. The flowmeter is old and needs to be replaced and positioned properly in an unobstructed ten-foot run of pipe.	\$1,000









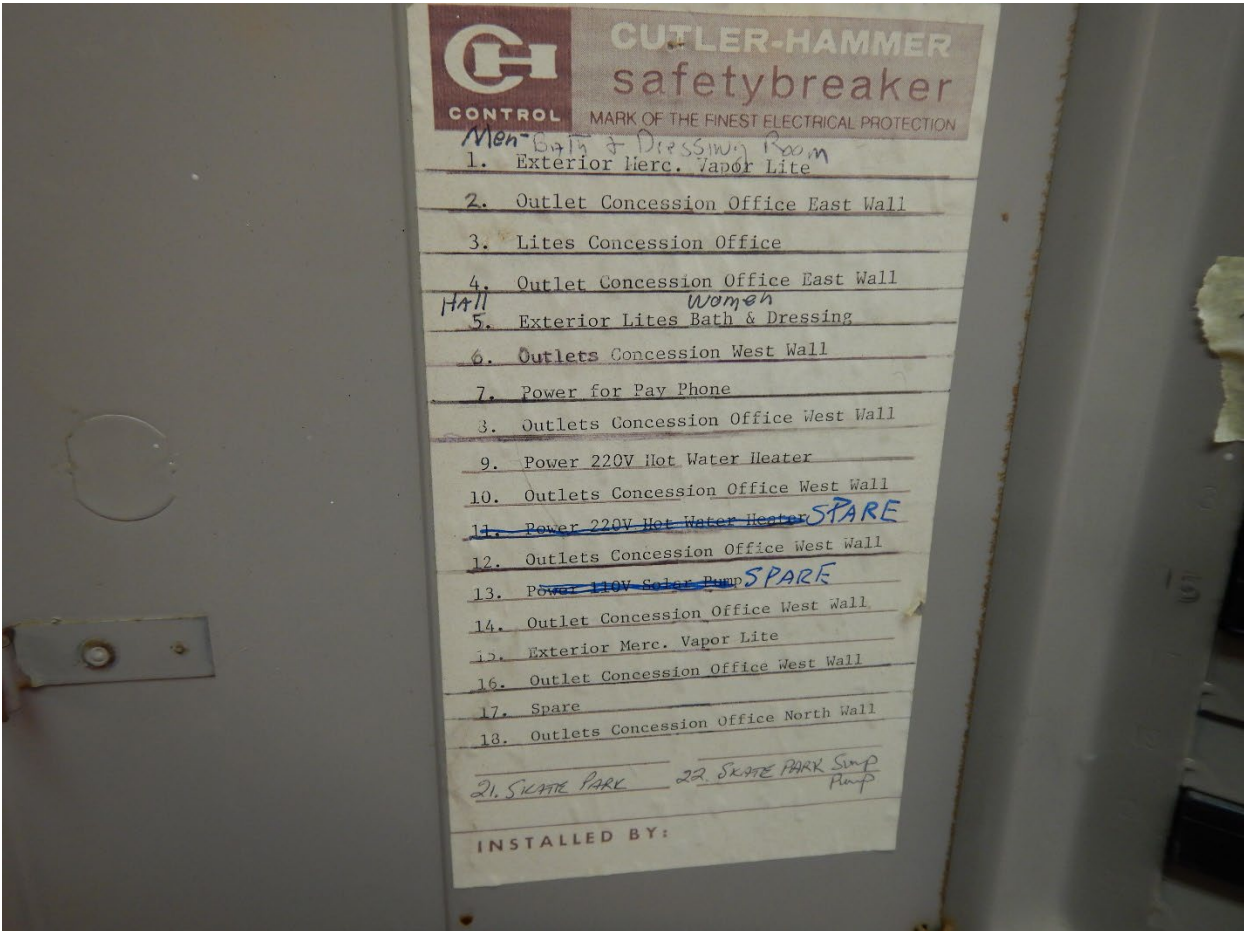




Evaluation Categories	Comments	Fiscal Impact
Lights - Pool, Overhead, Buildings	There are no overhead lights at the facility and no pool lights. All building lights, the lights on the building and lights in the mechanical should be changed out to LED lights for better lighting and cost savings.	\$2,500

Evaluation Categories	Comments	Fiscal Impact
Circuit Breakers, Outlets	There are multiple outlets and some electrical hook-ups that need to be evaluated and reconfigured. The circuit breaker panel is very old and should be updated if the mechanical room is renovated.	Part of larger renovation bid from AquaSource attached as Exhibit A





Evaluation Categories	Comments	Fiscal Impact
Chemical Feeding System	The facility appears to have had a chemical feeding system with a chemical controller. It appears to have been removed therefore the system would require manual feeding of chemicals. This is ineffective and cumbersome. An automated chemical feeding system should be installed.	Part of larger renovation bid from AquaSource attached as Exhibit A





Evaluation Categories	Comments	Fiscal Impact
Surge Tank/Pit	The gutter water return system is plumbed into two large holding tanks; these act as surge tanks for retaining water when swimmers are in the pool. The water is pumped back into the pool when the ball float gets elevated, and the return pump goes back on. It is unclear how plumbing returns to put the water back in the circulatory system.	Part of larger renovation bid from AquaSource attached as Exhibit A



Evaluation Categories	Comments	Fiscal Impact
Pool Water Make-up	Pool water make-up source that keeps the proper amount of water in the circulatory system is plumbed into the suction side of the main pump. This needs to be remedied through the renovation process.	Part of larger renovation bid from AquaSource attached as Exhibit A

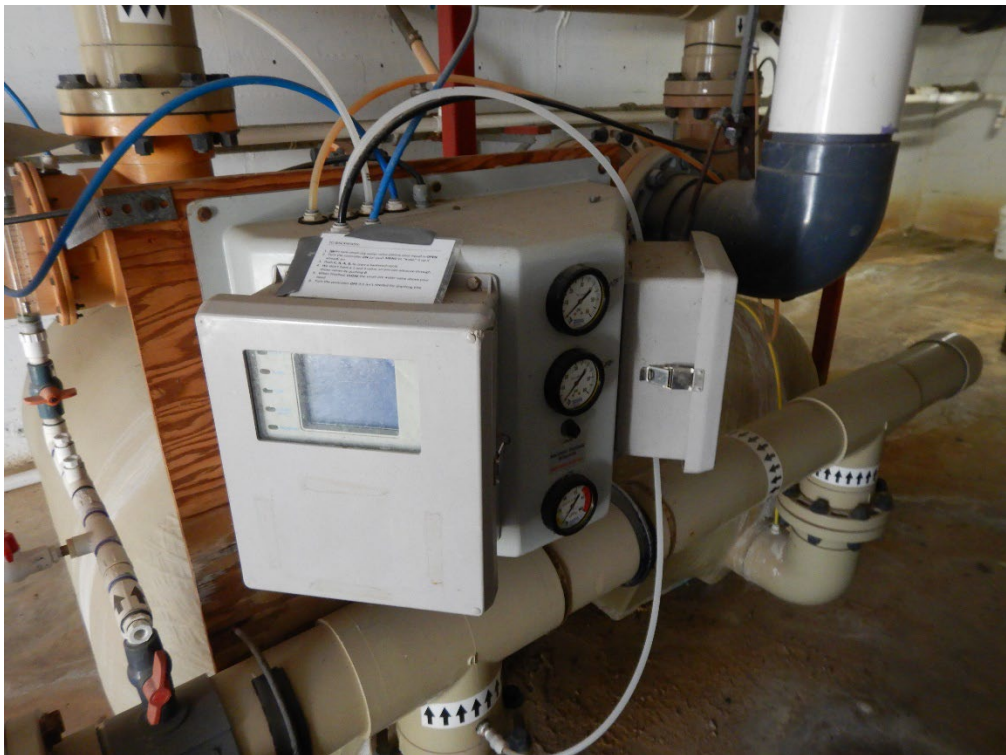


Evaluation Categories	Comments	Fiscal Impact
Main Pump (motor, impeller and strainer)	The main motor and the impeller are old and should be replaced with a newer more energy efficient pump system.	Part of larger renovation bid from AquaSource Attached as Exhibit A

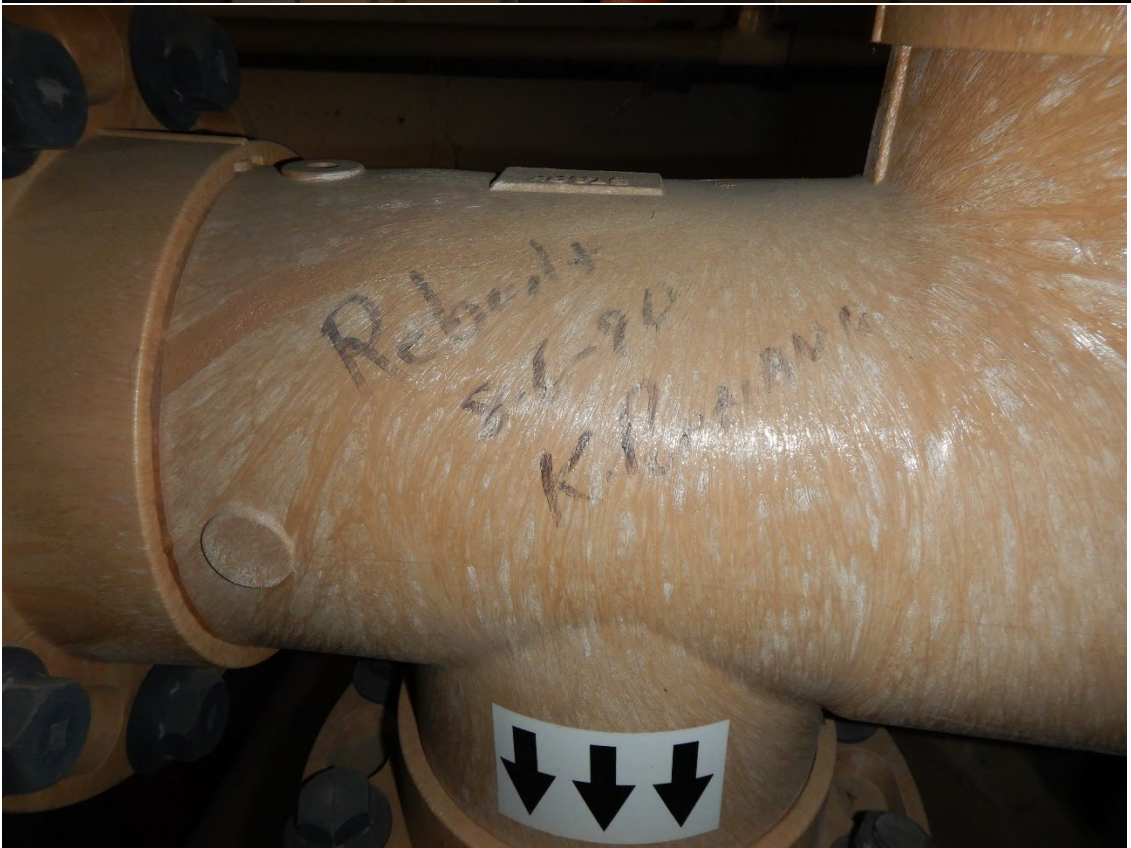
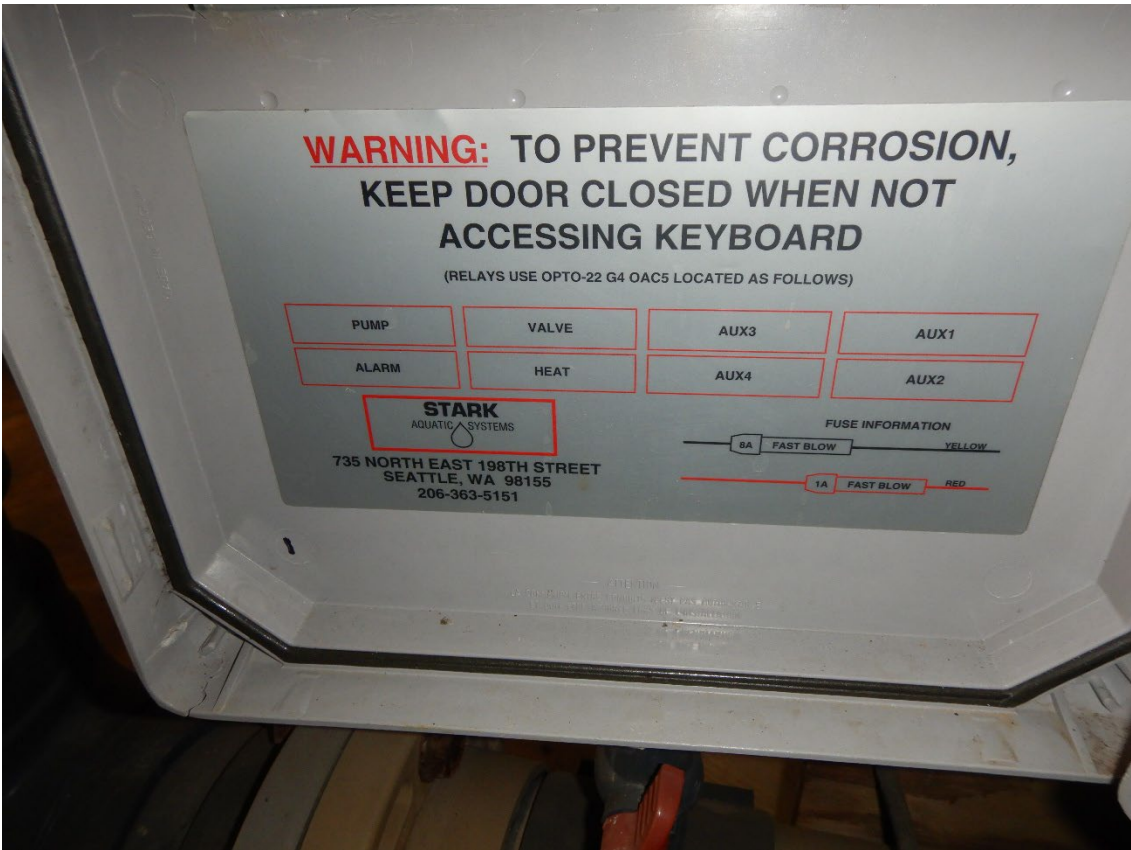




Evaluation Categories	Comments	Fiscal Impact
Filtration	The system has two spun fiberglass Stark brand filters. These were visually evaluated by both TAM and AquaSource. It is believed that they can continue to be used. However, the filtration media (generally sand) should be replaced before any future use and the tanks visually inspected and the two backwash valves should be rebuilt. AquaSource quote includes valve rebuild, but not new filter media.	\$10,000 for filter media replacement, valve rebuild is included as part of larger renovation bid from AquaSource Attached as Exhibit A











Evaluation Categories	Comments	Fiscal Impact
Maintenance staff is properly trained and/or certified and receives safety and compliance training and is well supervised.	Every pool in California is required to have a designated "Pool Operator" this is the person responsible for taking care of the pool and ensuring it is operated within state and county guidelines. This person should be a Certified Pool Operator (CPO). The person should have hazardous materials communication training as part of the City's Injury and Illness Prevention Plan in addition to other mandated training.	\$400/person to get certified as a CPO.

Summary of Potential Costs

Exhibit B

Small Operational Equipment Items

Rescue Tubes	\$280
First Aid	\$75
Emergency Response Bag	\$400
Automated External Defibrillator	\$1,500
Reaching Poles	\$400
Ring Buoys	\$204
Lifeguard Fanny Packs	\$60
Pool Signs for Code Compliance	\$825
Safety Data Sheets and Binder	\$50
TOTAL	\$3,794

Deck Equipment

Lane Lines	\$2,500
Diving Board Stand and Board	\$20,000
Starting Blocks Replace and Install	\$19,200
Potable/Mobile Lifeguard Stands	\$12,000
ADA Pool Lift, Buy and Mount	\$7,500
TOTAL	\$61,200

Facility Equipment and Repairs

Restroom Fixtures	\$200
Soap Dispensers	\$60
Shower Button Covers	\$30
Drinking Fountain	\$2,000
Deck Repairs	\$800 to \$200,000
Expansion Joint Sealing	\$500
Replace Depth Markers	\$2,500 to \$10,000
No Diving Markers and Lettering	\$500
Hand Rail on Tot Pool Step	\$3,000
Covers for Ladder Mounting Bolts	\$200
VGB Compliant Drain Covers	\$5,000
Pool Replaster Main and Tot Pools	\$150,000
Facility Fencing	\$120,000 to \$160,000
Electrical Panel Reposition and Replace	\$5,000
Pipe Content and Flow Direction Labeling	\$200
Flow Meter Installation and Guages	\$1,000
LED Lighting in Office and Mechanical Room	\$2,500
Filter Media Replacement	\$10,000
TOTAL	\$303,490 to \$550,190

Mechanical Room Renovation

AquaSource Mechanical Room Renovation	\$164,000
TOTAL	\$164,000

TOTAL	\$532,484	No Deck Replacement In-house Depth Marker Repair Cyclone Facility Fence Replacement
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TOTAL	\$779,184	Replace Most of Deck Contracted Depth Marker Replacement Higher Quality Fencing
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EXHIBIT C



City of Willows

Swimming Pool Mechanical Evaluation

5/12/2022

Mechanical Room Observations

- Scum gutter have been converted to holding tanks in the pump room with a pump back to the pool.
- No chemical controller on site.
- No chemical automaton on site.
- City water fed direct into the suction side pump.
- Vacuum is used on suction side of the pump.
- Backwash water does not have air gap.

Upgrades Recommended/Required

- Replace 15hp pump with energy efficient pump.
- New VFD with pool control. Eco-Flow C with Bypass Panel.
- New strainer pot 6"x pump inlet. MerMade Fiberglass FO Series.
- Disconnect city water from suction of pump.
- Disconnect vacuum line.
- ProMinent DCM 510 Controller.
- AR 2500 Tableted pH Control System.
- Accu-Tab Power Base 3150 Tableted Chlorination System.
- Re-pipe backwash line for air gap.
- Overhaul 2 Stark Backwash Valves.
- Re-pipe room.
- 2 auto fill CLA-VAL valves with 1 diagram valve.
- Maytronics Wave 150 Robotic Pool Cleaner

Cost Estimate

Labor – \$38,125.00

Equipment – \$94,700.00

Install Materials – \$24,800.00

Mobilization – \$5,860.00

Total - \$163,485.00

Prepared By

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General Manager

Aqua Source, Inc.

Lic# 940786 C53, C61/D35

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ITEM	COST	NOTES
Medical supplies - crash or go bag	\$ 400.00	Can be department supplies
OSHA 10-person first aid kit	\$ 75.00	Can be department supplies
AED	\$ 1,400.00	Can be department supplies
Pool hooks	\$ 400.00	Can be department supplies
Ring buoys	\$ 204.00	Can be department supplies
Lifeguard Fanny packs	\$ 60.00	Can be department supplies
Dept. Supply Total	\$ 2,539.00	

NEEDED IMPROVEMENTS

ADA drinking fountain	\$ 2,000.00	
ADA Pool Lift	\$ 7,500.00	
Deck patching/sealing/crack filling	\$ 5,000.00	Note:entire deck replacement would be \$250K
Depth Markers on side of pool	\$ 5,000.00	
"No Diving" markers on 5' or less	\$ 500.00	
Pool coping	??	
Handrail in tot pool	\$ 3,000.00	
Pool ladder modifications	\$ 200.00	
New lifeguard stands	\$ 12,000.00	
Drain cover replacement/recertification	\$ 5,000.00	
Removal of fiberglass and plaster/tile both tot pool and main pool	\$ 150,000.00	
Flow Meter installation gauges	\$ 1,000.00	
Filter media replacement	\$ 10,000.00	
Electrical panel	\$ 5,000.00	
Replace fencing	\$ 60,000.00	
Required pool signage	\$ 825.00	
Concrete platform railing	\$ 15,000.00	
SUBTOTAL NEEDED POOL IMPTS	\$ 282,025.00	

MECHANICAL IMPROVEMENTS

Mechanical equipment upgrades	\$ 163,485.00	See Report for list
SUBTOTAL OF MECHANICAL IMPTS	\$ 163,485.00	

SUBTOTAL OF NEEDED REPAIRS \$ 445,510.00
Contingency (25%) \$ 111,377.50

CONSTRUCTION TOTAL \$ 556,887.50

Preparation of Bid Docs 10%	\$ 55,688.75
Construction Oversight 10%	\$ 55,688.75

CONSTRUCTION AND SOFTCOSTS \$ 668,265.00

DESIRED IMPROVEMENTS

Replace/repair decking	\$ 200,000.00
Diving Board	\$ 20,000.00
Starting blocks	\$ 19,200.00



COMMENTS AND REPORTS