

# Clougherty Pool Replacement Study

Charlestown, MA

August 31, 2022

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CHA Companies

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PFD / BCYF Criteria Feedback



## **executive summary**

# Executive Summary

## Introduction

Fennick McCredie is pleased to submit the following conceptual cost estimate study for the replacement of the existing Clougherty Pool and Bathhouse in Charlestown, MA. The goal of the study is to establish a budget for the construction of a new facility that can accommodate the current population and needs of the community.

This study includes architectural, aquatic, and structural narratives describing the criteria, and scope of the replacement pool facility for the purpose of developing a conceptual construction cost estimate for the City's use.

## Project

The project consists of the construction of a publicly developed replacement bathhouse and pool facility on the site of an existing pool facility in Charlestown, MA, located on property managed by BCYF. The project assumes a Construction Manager at risk procurement including preconstruction services; with expected construction start in spring of 2024.

The replacement bathhouse and pools are planned to accommodate a maximum capacity of 480 swimmers ranging from infants to senior citizens. The pool will be open for a 12 week season during the summer months, and will accommodate the following programs: swim team, swim lessons, water exercise, recreation swimming, and lap swimming.

## Bathhouse and Pools

**Existing Conditions:** The existing facility consists of a two story bathhouse with a roof terrace and two pools: a lap pool and a diving pool. There is bleacher style seating along the edge of the pool deck.

The cost of demolition of the existing facility is included in the study's cost estimate.

**Replacement Bathhouse:** Consists of a single story bathhouse that totals 7,400 GSF of occupiable space. The non-occupiable roof accommodates photovoltaics as well as a green roof. The primary superstructure utilizes a concrete slab on a composite deck at the roof supported by steel beams and load bearing CMU.

**Replacement Pool:** The pool configuration concept assumed for the cost estimate features a recreation pool with zero entry, four lanes of lap swimming, and shaded areas totaling 7,300sf that can accommodate a bather load of 420. Additionally, the facility includes a separate wading pool that can accommodate a bather load of 60.

Two additional pool concepts, with costs, are provided for PFD/BCYF's consideration.

**Replacement Deck:** The pool deck includes bleacher style seating for lounging and spectating, as well as shading structures and pool storage. The equipment room is located below the pool deck. The structure assumes an elevated deck supported by a continuous retaining wall around the perimeter of the facility, accommodating the sloping grade of the existing site. The design assumes open space beneath the deck area, with structural fill to support the pool itself.

## Conceptual Cost Estimation Summary

Bathhouse	\$5,794,091
Sitework	\$2,862,276
Swimming Pool	\$4,361,334
Design Contingency (10%)	\$1,208,000
Burdens and Markups	\$2,594,000
Escalation (7.3%)	\$1,237,000
<b>TOTAL ESTIMATION</b>	<b>\$18,101,701</b>





**architecture**

# Architectural Notes and Diagrams

## Design Criteria

### Applicable Codes:

- **Building:** 780 CMR- Massachusetts State Building Code 9th Edition, amendment of 2015 International Building Code (IBC)
- **Fire:** 527 CMR - Massachusetts Comprehensive Fire Safety Code
- **Accessibility:** Massachusetts Architectural Access Board (MAAB), 2010 ADA Standards for Accessible Design
- **Mechanical:** 2015 International Mechanical Code (IMC)
- **Plumbing:** 248 CMR 10.00 - Uniform State Plumbing Code
- **Energy:** 780 CMR 13.00, amendment of 2018 International Energy Code (IEC)
- **Other:** National Fire Protection Association (NFPA) Standards, as referenced in the above codes, including the following
  - 2013 NFPA 10: Standard for Portable Fire Extinguishers
  - 2013 NFPA 13: Standard for the Installation of Sprinkler systems
  - 2013 NFPA 72: National Fire Alarm and Signaling Code

### Sustainability and Resilience

- Compliance with the Boston Climate Action Plan Requirements where technically feasible; LEED Silver Certification at a minimum.

### Design Population

- 480 persons

Proposed Facility must stay within parcel boundary, cannot extend into historically significant portion of park on the lower side of the site

## Pool Deck

The replacement pool deck is located at the same elevation as the existing deck to limit any further excavation. The site planning takes advantage of the existing grade, locating the bathhouse at the highest point, and accommodates the depth of the pool at its deepest as the grade slopes down. This organization preserves the views out to the existing historical park and beyond.

The proposed layout maintains the existing accessible entrance through the park, as well as the non-compliant route from the sloping Bunker Hill Street sidewalk to an existing stair on the south side of the site.

Shading structures are located on areas of the deck and pool that receive the most sunlight during hours of operation. This provides ample space for spectators and swimmers to lounge comfortably. Additionally, this adds optimal area to locate photovoltaics for power generation.

The pool deck houses 200sf of pool storage separate from the bathhouse structure. The pool equipment is located below the deck, similar to the existing design. This avoids locating any additional structure on the deck level, which would take away from occupiable space for patrons and staff.

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## Bathhouse

### Building:

For best practice functionality, the replacement bathhouse is one story at 7,400 GSF. It is located essentially at-grade at the highest point of the site, matching the floor elevation of the existing bathhouse building.

The non-occupiable roof provides surface for photovoltaic panels located at the area of the roof most suitable for sunlight. The remainder of the surface incorporates a green roof that provides insulation in addition to elevating the aesthetic view from the park above the site. These features contribute to compliance with the City of Boston Climate Action Plan and LEED Silver Requirements.

### Program:

Lockers/Wet Spaces:

- Men's / Women's / Family Lockers
  - one fixture per 40 people per code
  - one shower per 40 people per code
  - day use lockers for 20% of users per industry standards
  - 20 square feet of floor space per projected user per industry standards
- Lifeguard Lockers

Other

- First Aid
- Concession
- Lobby/ Reception
- Office
- Mechanical

Refer to Figure A for program area specifications.

## Systems

Electrical heat pump and Energy Recovery Ventilator (ERV) systems are incorporated to maintain minimal heat during the winter to prevent freezing, and to condition the space during the summer months as desired. The criteria for the building envelope is to conform with energy code.

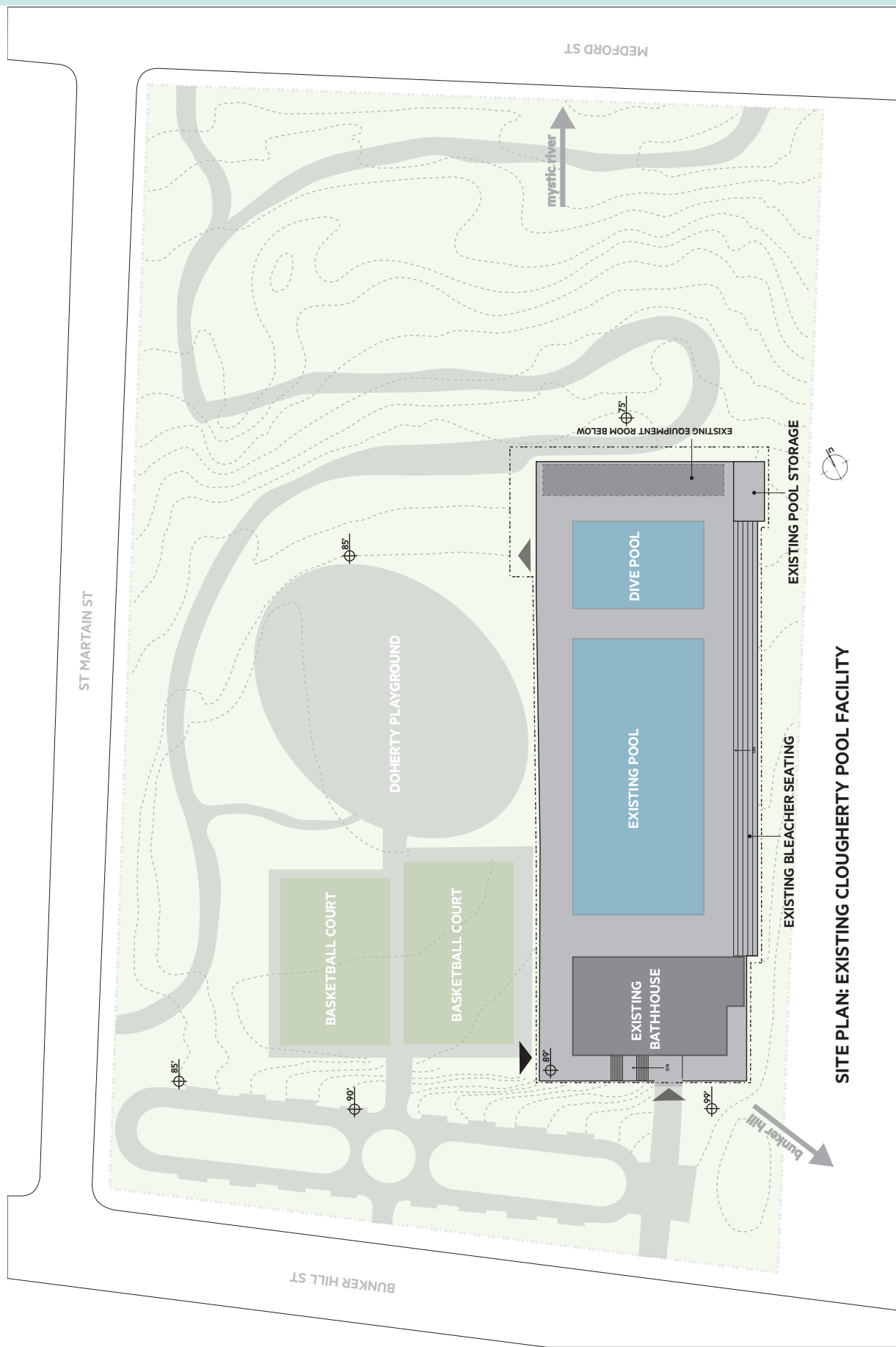
Water heaters and plumbing equipment support plumbing fixture counts.

**Figure A**

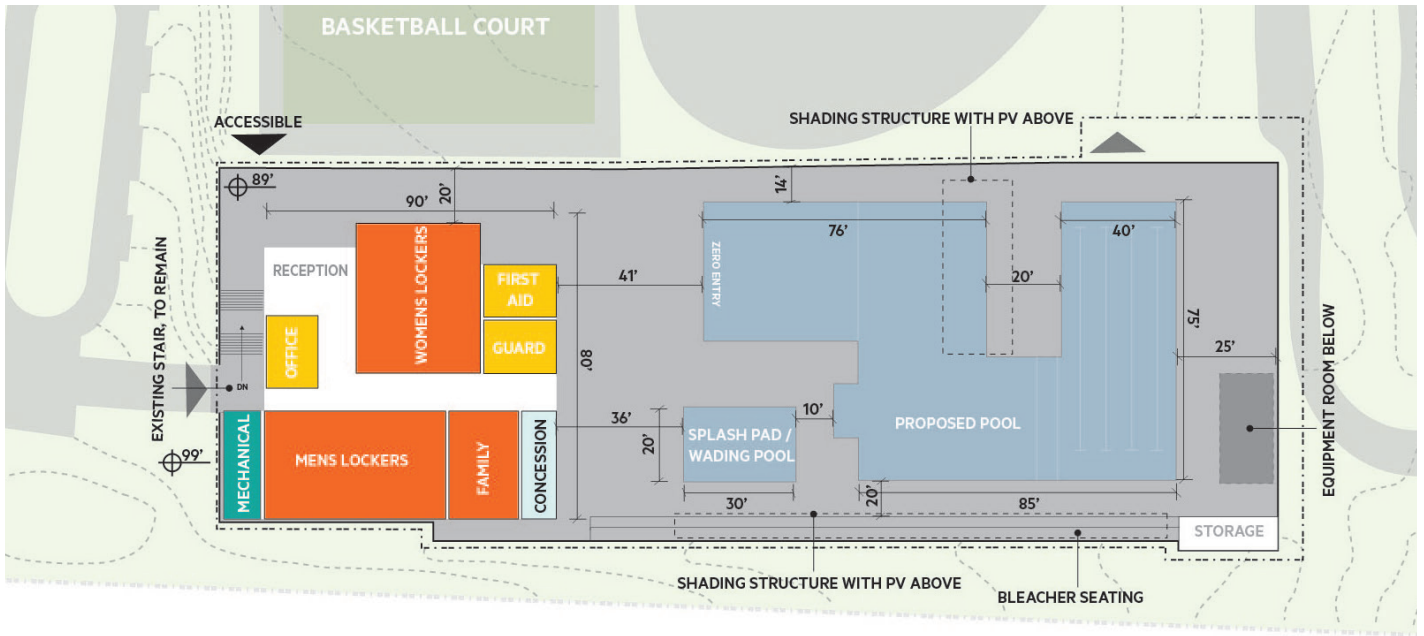
New Clougherty Pool Facility	
Bathhouse	
Women's Locker Room	(one shower per 40 ppl) 7 shower stalls 7 fixtures (toilet) 4 Sinks  Total: 1,500 sf
Men's Locker Room	(one shower per 40 ppl) 7 shower stalls 7 fixtures (toilet/urinal) 4 sinks  Total: 1,500 sf
Family/Universal Locker Room (3x150 sf)	450 sf
<b>Total Locker Room</b>	<b>3,450 sf</b>
Reception	500 sf
Mechanical Room	450 sf
First Aid	180 sf
Lifeguard Locker Room (Mens)	150 sf
Lifeguard Locker Room (Womens)	150 sf
Office	180 sf
Concession	500 sf
Storage	200 sf
Pool Equipment	450 sf
	Net SF: 6,200 sf
<b>Net + 20%</b>	<b>Gross SF: 7,400 sf</b>

Deck	
*10' minimum deck around pools	
Pool Storage	200 sf
Shading Structure	2,000 sf (not in total sf)
Pool Equipment	450 sf
Deck	13,350 sf
<b>Total</b>	<b>14,000 sf</b>

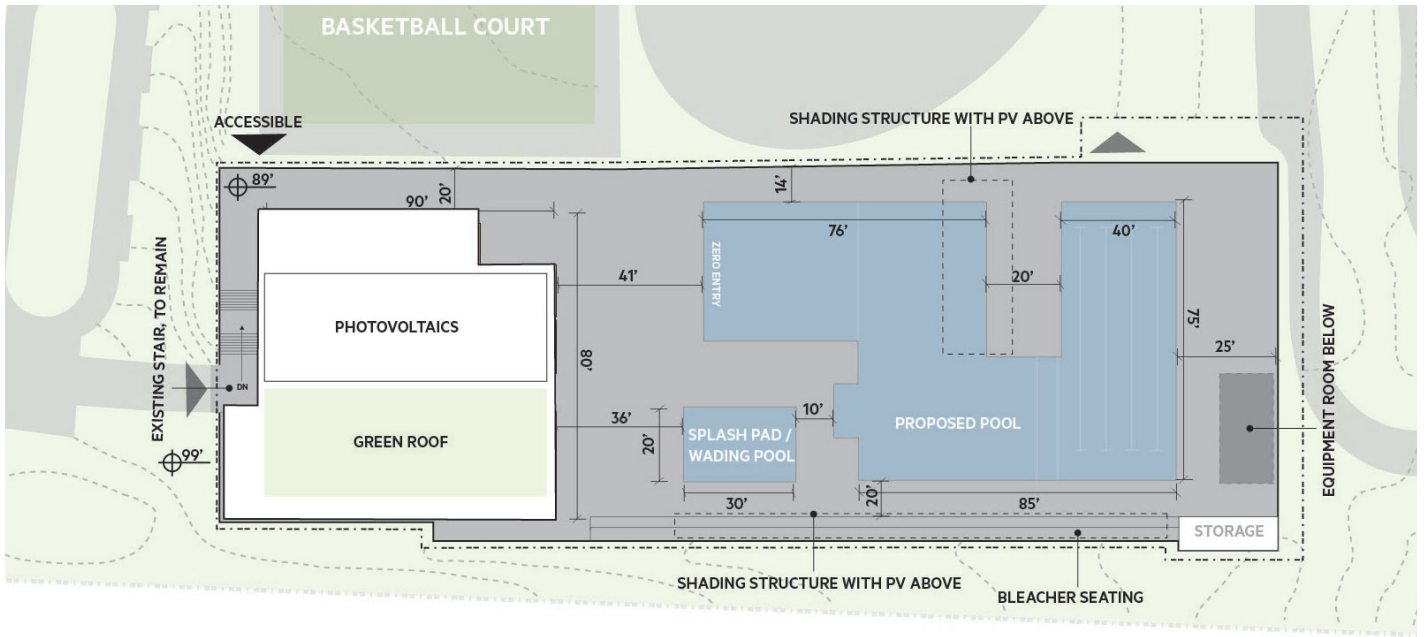
Pool	
Lap Pool (see W&S for further information)	7000 sf
Splash Pad (see W&S for further information)	600 sf
<b>Total</b>	<b>7,600 sf</b>



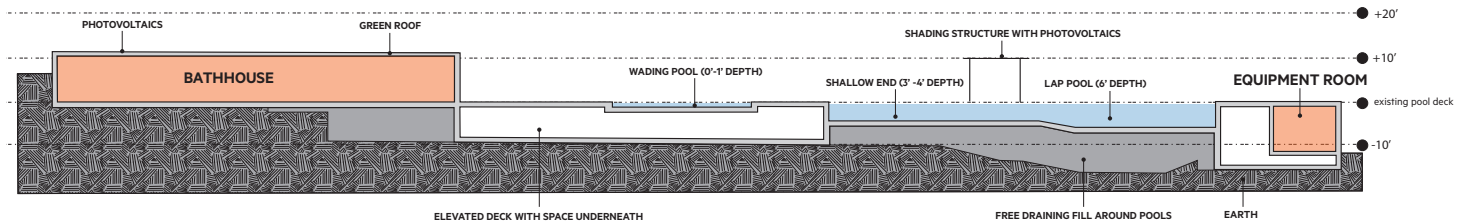




FIT PLAN: NEW CLOUGHERTY POOL FACILITY



FIT PLAN: NEW CLOUGHERTY POOL FACILITY



SECTION: NEW CLOUGHERTY POOL FACILITY



**aquatics**

# Aquatic Notes and Diagrams (W&S)

## Aquatics

The proposed design for the Clougherty Pool includes a multi-use recreation pool and smaller body of water. Both pools include a concrete pool shell with either a tile and plaster finish. The pools shall be designed to meet the following standards:

- *105 CMR 435.00: Minimum Standards For Swimming Pool (State Sanitary Code: Chapter V)*
- *International Swimming Pool and Spa Code (Latest Version)*
- *International Building Code (Latest Version)*
- *American National Standard for Public Swimming Pools (ANSI/NSPI - Latest Version)*
- *American National Standard for Aquatic Recreation Facilities (ANSI/IAF - 9 2005)*
- *United States Access Board - Accessible Swimming Pools and Spa (ADA Code, Latest Version)*

## Design Intent

The proposed design intent of the facility would contain a minimum of two bodies of water. The provisions for two bodies of water will provide the following needs:

- Redundancy in the system. If there is a fecal incident, the facility does not need to shut down all amenities until the system has been chlorinated.
- Provide an oasis for different age groups of children and different abilities to provide inclusive play at different ages and abilities.
- Providing shallow water, activity space, and lap swimming. The combination of the three sectors of the pool is not all available in the current pool layout. Providing shallow water will allow for learn to swim programs, younger children play, and instructional learning. The provision of laps will be providing (4) laps, to allow for open swim laps, while utilizing pool surface for multi-use programs.
- The introduction of a wading pool and splash pad will provide a sector for younger kids.
- Less deep water will be safer and less risk for the City.
- Shallower water will allow for warmer pool water and allow the pool to heat faster through natural light radiant heating.
- Pools are sized to accommodate 480 Bathers.
- Pools will incorporate regenerative media filters and green technology.

We have provided three (3) different options for discussion. Cost estimates have also been provided based on pre-selected options. Each option is interchangeable; however it is our recommendation to select two bodies of water.

The design narrative below is providing clarity of the preferred option, (option #1)



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## Recreation Pool

The recreation pool is an four (4) lane pool that is 25 yards long (approximately 75'-0"), with a zero entry, containing some spray features. The pool will contain activity areas with water depths ranging from two (2) to four (4) feet. The water surface of the pool is 7,300 square feet and the volume is approximately 220,000 gallons. The water depth of the pool shall slope from 0'-0" in the shallow end to 7'-0" in the deep end. The bather load of the pool is 420. The pool includes four, 7'-0" wide swimming lanes that span the length of the pool. Pool will have a section that shall have an overhanging shade structure to provide some shade on the water surface.

Access points into the pool include a zero entry ramp, ADA lift, ladders and access stair systems.

Water from the recreation pool will be recirculated through main drains, a deck level perimeter gutter system and a combination of floor and wall return inlets. Water will gravity feed from the main drains and gutter to a collector tank located in the pool deck. The pool collector tank be a 5,500 gallon tank. The tank shall have an aluminum hatch brought to deck surface, with the exterior and interior of the tank waterproofed.

The pool water will be filtered through a flooded suction pump, with a redundant pump, a regenerative media filter, and erosion tablet feeders for chlorination and pH balance. An ultraviolet system (UV system) will be used for supplemental disinfection. The filter pumps for the pool will be located in a pump pit within the mechanical room. The water level in the pool will be maintained through an automatic water level controller system.

The flow rate through the filtration system will be approximately 920 GPM to achieve a turnover rate of four hours. Pipe sizing will primarily range between 6-inches to 12-inches and all pool piping will be Schedule 80 PVC.

The pool shell shall consist of the following:

1. Shell walls shall be constructed of shotcrete concrete
  - Pool walls less than 5-ft in depth shall be 8-in thick walls with #4 bar 12-in on center each way.
  - Pool walls greater than 5-ft in depth shall be 12-in thick walls with (2) layers of #4 bar 12-in on center each way.
  - Pool floor shall be 12-in thick with (2) layers of #4 bar 12" on center each way.

2. Pool interior shall be finished with a white marcite plaster finish.
3. Pool tile accents shall be 2"x2" non-glazed ceramic tile.
4. Pool shell shall have a 304L Stainless Steel perimeter gutter, that is installed at deck level.  
The gutter shall be complete with non-slip, white PVC gutter grating.
5. The pool shall primarily utilize floor inlets.

### Wading Pool

The wading pool is approximately 600 SF. The water volume is approximately 3,000 gallons. The pool will contain shall water, zero entry, and will have small spray features. The water depth in the wading pool slopes from 0'-0" to 1'-0". The bather load of the family pool is 60.

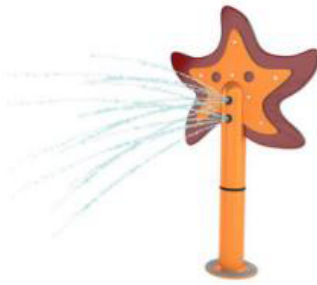
Access points into the pool include a set of stairs and a zero depth entry ramp.

Spray features will be located in the wading pool and on the spray pad. Features include:

- 1 x Anchor Away
- 1 x Starfish
- 4 x Steady Streams (Ground Spray)
- 1 x Geyser (Ground Spray)
- 1 x Waterfall 2



*Waterfall 2 Spray Feature*



*Starfish Spray Feature*



*Anchor Away Spray Feature*





Water from the wading pool will be recirculated through two (2) main drains (two in each area), skimmers and a combination of floor and wall return inlets.

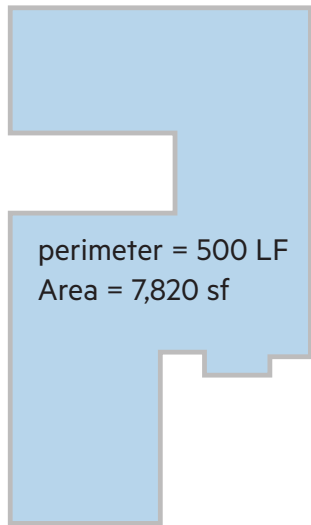
The pool water will be filtered through a flooded suction pump, a sand filter, and erosion tablet feeders for chlorination and pH balance. A UV system will be used for supplemental disinfection. A booster pump will be used to distribute water to the spray features. The filter pumps and booster pump for the pool will be located in a pump pit within the mechanical room. The water level in the pool will be maintained through an automatic water level controller system.

The flow rate through the filtration system will be approximately 65 GPM to achieve a turnover rate of 0.75 hours. Pipe sizing will primarily range between 2-inches to 6-inches and all pool piping will be Schedule 80 PVC.

The pool shell shall consist of the following:

1. Shell walls shall be constructed of shotcrete concrete:
  - Pool walls less than 5-ft in depth shall be 8-in thick walls with #4 bar 12-in on center each way.
  - Pool floor shall be 12-in thick with (2) layers of #4 bar 12" on center each way.
2. Pool interior shall be finished with a white marcite plaster finish.
3. Pool tile accents shall be 2"x2" non-glazed ceramic tile.
4. Pool shall primarily utilize floor inlets.

### Option 1



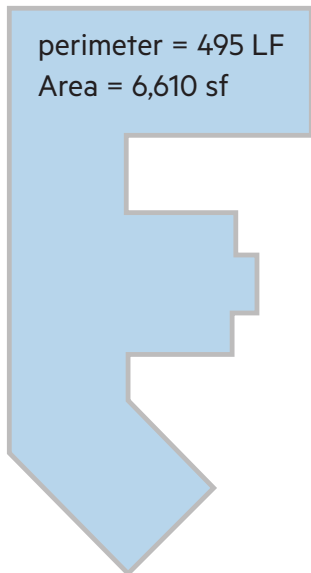
perimeter = 500 LF  
Area = 7,820 sf



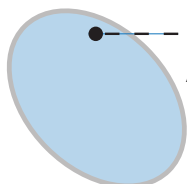
● — perimeter = 100 LF  
Area = 600 sf

preferred option

### Option 2

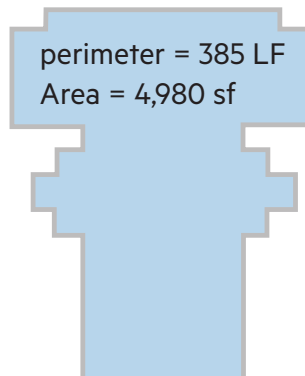


perimeter = 495 LF  
Area = 6,610 sf

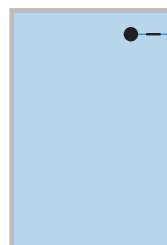


● — perimeter = 130 LF  
Area = 1,310 sf

### Option 3



perimeter = 385 LF  
Area = 4,980 sf



● — perimeter = 200 LF  
Area = 2,400 sf

**Clougherty Pool - Boston - MA - Feasibility Study Probable Cost Estimate**  
**New Concrete Pool Installation - Option #1**

Item	Unit Cost	Unit	Quantity	Equipment/ Material Cost	Labor Cost	Total Cost	Notes
<b>Division 2 - Demolition (specific to Pool only)</b>							
<b>Interior Pool Demo</b>							
Exclude Demo	\$0.00	SF	0			\$0	
<b>Total</b>				<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	
<b>Division 3 - Concrete</b>							
<b>Main Pool</b>							
Form And Wreck	\$27.00	SF	2100			\$56,700	Erection of Forms / Material / Form Removal
Rebar	\$9.50	SF	9380			\$89,110	Supply and tie rebar
Concrete	\$250.00	Yd	415			\$103,750	Supply of Concrete
Concrete Pump	\$4,000.00	EA	4			\$16,000	Pump to Shotcrete Rig & Floor pours
Shotcrete	\$10,000.00	Day	4			\$40,000	Shotcrete Pool and Finish
Concrete Pads	\$4,500.00	LS	1			\$4,500	Concrete House Keeping Pads
Collector Tank	\$12,500.00	LS	1			\$12,500	Precast collector tank
Curing	\$5,500.00	LS	1			\$5,500	Curing of concrete Shell
<b>Total</b>						<b>\$362,335</b>	
<b>Division 5 - Metal Work</b>							
<b>In Pool Equipment Room</b>							
N/A		LS				\$0	
<b>Total</b>						<b>\$0</b>	
<b>Division 6 - Woods &amp; Plastics</b>							
N/A		LS				\$0	
<b>Total</b>						<b>\$0</b>	
<b>Division 7 - Waterproofing</b>							
Main Pool Tank Waterproofing	\$17.50	SF	9500			\$166,250	Flexcrete on interior of pool shell prior to finish
Wading Pool	\$17.50	SF	700			\$12,250	Flexcrete on interior of pool shell prior to finish
<b>Total</b>						<b>\$178,500</b>	
<b>Division 8 - Openings</b>							
N/A		LS				\$0	
<b>Total</b>						<b>\$0</b>	
<b>Division 9 - Finishes</b>							
<b>Main Pool</b>							
Deck Depth Marker Tiles	\$1,250.00	EA	25			\$31,250	Deck Depth Markers
New Pool tile	\$65.00	SF	600			\$39,000	Waterline Tile & Contrasting color Tile on the interior of the pool
Prep Plaster	\$7.50	SF	9500			\$71,250	Prep for Plaster
Plaster Finish	\$30.00	SF	9500			\$285,000	White Plaster Finish
<b>Total</b>						<b>\$470,000</b>	
<b>Wadding Pool</b>							
Deck Depth Marker Tiles	\$1,250.00	EA	6			\$7,500	Deck Depth Markers
New Pool tile	\$65.00	SF	150			\$9,750	Waterline Tile & Contrasting color Tile on the interior of the pool
Prep Plaster	\$7.50	SF	700			\$5,250	Prep for Plaster
Plaster Finish	\$30.00	SF	700			\$21,000	White Plaster Finish
<b>Total</b>						<b>\$470,000</b>	
<b>Division 10 - Signage</b>							
Pool Health & Safety Signage	\$3,500.00	LS	1			\$3,500	State Code Require Signage
<b>Total</b>						<b>\$3,500</b>	
<b>Division 13 - Special Construction (Pool)</b>							
<b>Main Pool</b>							
Whit e Goods	\$4,500.00	LS	1			\$4,500	Skimmers, returns, autofill probe chambers
Main Drains	\$4,000.00	ea	2			\$8,000	Main Drains, F&I
Furnish Pool Equipment	\$340,000.00	LS	1			\$340,000	Funish and Set Pool Filtration Equipment
Install Pool Equipment	\$65,000.00	LS	1			\$65,000	Install Pool Equipment
Pool Piping	\$52,500.00	LS	1			\$52,500	F&I Pool Piping
Ladders	\$2,000.00	ea	6			\$12,000	Pool Ladder
Railings	\$1,500.00	ea	4			\$6,000	Rail Goods for Stairs
Handicap Lift	\$7,000.00	ea	1			\$7,000	Handicap Lift
Life Guard Chairs	\$4,500.00	EA	4			\$18,000	Moveable Lifeguard Chairs
Balancing Pool	\$3,000.00	LS	1			\$3,000	Balance of Pools
Spray Features	\$35,000.00	LS	1			\$35,000	Budget for spray features in the zero entry
Pool Bonding	\$25,000.00	EA	1			\$25,000	Bonding the perimeter pool
Control Wiring	\$13,500.00	LS	1			\$13,500	Control & Low Voltage wiring
Lane Lines & Safety Equipment FFE	\$8,350.00	LS	1			\$8,350	Allowance
Start Up & Training	\$4,500.00	EA	1			\$4,500	One week of Startup and (2) Days of training
<b>Total</b>				<b>\$0</b>	<b>\$0</b>	<b>\$817,850</b>	
<b>Wading Pool</b>							
Whit e Goods	\$1,500.00	LS	1			\$1,500	Skimmers, returns, autofill probe chambers
Main Drains	\$2,000.00	ea	2			\$4,000	Main Drains, F&I
Furnish Pool Equipment	\$72,000.00	LS	1			\$72,000	Funish and Set Pool Filtration Equipment
Install Pool Equipment	\$38,000.00	LS	1			\$38,000	Install Pool Equipment
Pool Piping	\$42,000.00	LS	1			\$42,000	F&I Pool Piping
Ladders	\$2,000.00	ea	0			\$0	Pool Ladder
Railings	\$1,500.00	ea	2			\$3,000	Rail Goods for Stairs
Handicap Lift	\$7,000.00	ea	0			\$0	Handicap Lift
Life Guard Chairs	\$4,500.00	EA	1			\$4,500	Moveable Lifeguard Chairs
Spray Features	\$15,000.00	LS	1			\$15,000	Spray features budget for the wading pool
Balancing Pool	\$2,000.00	LS	1			\$2,000	Balance of Pools
Pool Bonding	\$15,000.00	EA	1			\$15,000	Bonding the perimeter pool
Control Wiring	\$7,500.00	LS	1			\$7,500	Control & Low Voltage wiring
Lane Lines & Safety Equipment FFE	\$6,500.00	LS	1			\$6,500	Allowance
Start Up & Training	\$4,500.00	EA	1			\$4,500	(1) Pipe Fitter, (3) Days @ \$160/hr. (1) Pipe Fitter, (3) Days @ \$160/hr.
<b>Total</b>				<b>\$0</b>	<b>\$0</b>	<b>\$817,850</b>	
Subtotal						\$1,832,185	
General Conditions 15%						\$274,828	
Permits 2%						\$42,140	
Profit (15%)						\$322,373	
Construction Contingency (10%)						\$247,153	
Engineering Contingency (10%)						\$271,868	
<b>Total</b>						<b>\$2,990,546</b>	
<b>Exclusions:</b>							

Line Voltage to Equipment  
Earthwork in preparation, below slab, backfill, trenching and bedding

**Clougherty Pool - Boston - MA - Feasibility Study Probable Cost Estimate**  
**New Concrete Pool Installation - Option #2**

Item	Unit Cost	Unit	Quantity	Equipment/ Material Cost	Labor Cost	Total Cost	Notes
<b>Division 2 - Demolition (specific to Pool only)</b>							
<b>Interior Pool Demo</b>							
Exlude Demo	\$0.00	SF	0			\$0	
<b>Total</b>				<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	
<b>Division 3 - Concrete</b>							
<b>Main Pool</b>							
Form And Wreck	\$27.00	SF	1950			\$52,650	Erection of Forms / Material / Form Removal
Rebar	\$9.50	SF	8560			\$81,320	Supply and tie rebar
Concrete	\$250.00	Yd	390			\$97,500	Supply of Concrete
Concrete Pump	\$4,000.00	EA	4			\$16,000	Pump to Shotcrete Rig & Floor pours
Shotcrete	\$10,000.00	Day	4			\$40,000	Shotcrete Pool and Finish
Concrete Pads	\$4,500.00	LS	1			\$4,500	Concrete House Keeping Pads
Collector Tank	\$12,500.00	LS	1			\$12,500	Precast collector tank
Curing	\$5,500.00	LS	1			\$5,500	Curing of concrete Shell
<b>Splash Pad</b>							
Form And Wreck	\$27.00	SF	275			\$7,425	Erection of Forms / Material / Form Removal
Rebar	\$9.50	SF	1310			\$12,445	Supply and tie rebar
Concrete	\$250.00	Yd	65			\$16,250	Supply of Concrete
Collector Tank	\$9,500.00	EA	1			\$9,500	Underslab collection tank
Concrete Pump	\$4,000.00	EA	2			\$8,000	Pump to Shotcrete Rig & Floor pours
Curing	\$1,500.00	LS	1			\$1,500	Curing of concrete Shell
<b>Total</b>						<b>\$365,090</b>	
<b>Division 5 - Metal Work</b>							
<b>In Pool Equipment Room</b>							
N/A		LS				\$0	
<b>Total</b>						<b>\$0</b>	
<b>Division 6 - Woods &amp; Plastics</b>							
N/A		LS				\$0	
<b>Total</b>						<b>\$0</b>	
<b>Division 7 - Waterproofing</b>							
Main Pool	\$17.50	SF	0			\$0	Flexcrete on interior of pool shell prior to finish
<b>Total</b>						<b>\$0</b>	
<b>Division 8 - Openings</b>							
N/A		LS				\$0	
		LS				\$0	
<b>Total</b>						<b>\$0</b>	
<b>Division 9 - Finishes</b>							
<b>Main Pool</b>							
Deck Depth Marker Tiles	\$1,250.00	EA	25			\$31,250	Deck Depth Markers
New Pool Tile	\$65.00	SF	580			\$37,700	Waterline Tile & Contrasting color Tile on the interior of the pool
Prep Plaster	\$7.50	SF	8650			\$64,875	Prep for Plaster
Plaster Finish	\$30.00	SF	8650			\$259,500	White Plaster Finish
<b>Total</b>						<b>\$393,325</b>	
<b>Division 10 - Signage</b>							
Pool Health & Safety Signage	\$3,500.00	LS	1			\$3,500	State Code Require Signage
<b>Total</b>						<b>\$3,500</b>	
<b>Division 13 - Special Construction (Pool)</b>							
<b>Main Pool</b>							
Whit e Goods	\$4,500.00	LS	1			\$4,500	Skimmers, returns, autofill probe chambers
Main Drains	\$4,000.00	ea	2			\$8,000	Main Drains, F&I
Furnish Pool Equipment	\$340,000.00	LS	1			\$340,000	Funish and Set Pool Filtration Equipment
Install Pool Equipment	\$65,000.00	LS	1			\$65,000	Install Pool Equipment
Pool Piping	\$52,500.00	LS	1			\$52,500	F&I Pool Piping
Ladders	\$2,000.00	ea	6			\$12,000	Pool Ladder
Railings	\$1,500.00	ea	4			\$6,000	Rail Goods for Stairs
Hanicap Lift	\$7,000.00	ea	1			\$7,000	Handicap Lift
Life Guard Chairs	\$4,500.00	EA	4			\$18,000	Moveable Lifeguard Chairs
Balancing Pool	\$3,000.00	LS	1			\$3,000	Balance of Pools
Spray Features	\$35,000.00	LS	1			\$35,000	Budget for spray features in the zero entry
Pool Bonding	\$25,000.00	EA	1			\$25,000	Bonding the perimeter pool
Control Wiring	\$13,500.00	LS	1			\$13,500	Control & Low Voltage wiring
Lane Lines & Safety Equipment FFE	\$8,350.00	LS	1			\$8,350	Allowance
Start Up & Training	\$4,500.00	EA	1			\$4,500	One week of Startup and (2) Days of training
<b>Splash Pad</b>							
Main Drains	\$2,000.00	ea	2			\$4,000	Main Drains, F&I
Furnish Pool Equipment	\$72,000.00	LS	1			\$72,000	Funish and Set Pool Filtration Equipment
Install Pool Equipment	\$38,000.00	LS	1			\$38,000	Install Pool Equipment
Pool Piping	\$42,000.00	LS	1			\$42,000	F&I Pool Piping
Spray Features	\$100,000.00	LS	1			\$100,000	Spray features budget for the wading pool
Balancing Pool	\$2,000.00	LS	1			\$2,000	Balance of Pools
Bonding	\$15,000.00	EA	1			\$15,000	Bonding the perimeter pool
Control Wiring	\$7,500.00	LS	1			\$7,500	Control & Low Voltage wiring
Start Up & Training	\$2,500.00	EA	1			\$2,500	One week of Startup and (1) Days of training
<b>Total</b>				<b>\$0</b>	<b>\$0</b>	<b>\$885,350</b>	
	Subtotal					\$1,647,265	
	General Conditions 15%					\$247,090	
	Permits 2%					\$37,887	
	Profit (15%)					\$289,836	
	Construction Contingency (10%)					\$222,208	
	Engineering Contingency (10%)					\$244,429	
	<b>Total</b>					<b>\$2,688,715</b>	

**Exclusions:**

Line Voltage to Equipment  
Earthwork in preparation, below slab, backfill, trenching and bedding

Clougherty Pool - Boston - MA - Feasibility Study Probable Cost Estimate  
New Concrete Pool Installation - Option #3

Item	Unit Cost	Unit	Quantity	Equipment/ Material Cost	Labor Cost	Total Cost	Notes
<b>Division 2 - Demolition (specific to Pool only)</b>							
<b>Interior Pool Demo</b>							
Exlude Demo	\$0.00	SF	0			\$0	
<b>Total</b>				<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	
<b>Division 3 - Concrete</b>							
<b>Main Pool</b>							
Form And Wreck	\$27.00	SF	1540			\$41,580	Erection of Forms / Material / Form Removal
Rebar	\$9.50	SF	6520			\$61,940	Supply and tie rebar
Concrete	\$250.00	Yd	312			\$78,000	Supply of Concrete
Concrete Pump	\$4,000.00	EA	3			\$12,000	Pump to Shotcrete Rig & Floor pours
Shotcrete	\$10,000.00	Day	3			\$30,000	Shotcrete Pool and Finish
Concrete Pads	\$4,500.00	LS	1			\$4,500	Concrete House Keeping Pads
Collector Tank	\$12,500.00	LS	1			\$12,500	Precast collector tank
Curing	\$5,500.00	LS	1			\$5,500	Curing of concrete Shell
<b>Activity Pool</b>							
Form And Wreck	\$27.00	SF	800			\$21,600	Erection of Forms / Material / Form Removal
Rebar	\$9.50	SF	3200			\$30,400	Supply and tie rebar
Concrete	\$250.00	Yd	145			\$36,250	Supply of Concrete
Concrete Pump	\$4,000.00	EA	2			\$8,000	Pump to Shotcrete Rig & Floor pours
Shotcrete	\$10,000.00	Day	1			\$10,000	Shotcrete Pool and Finish
Curing	\$1,500.00	LS	1			\$1,500	Curing of concrete Shell
<b>Total</b>						<b>\$353,770</b>	
<b>Division 5 - Metal Work</b>							
<b>In Pool Equipment Room</b>							
N/A		LS				\$0	
<b>Total</b>						<b>\$0</b>	
<b>Division 6 - Woods &amp; Plastics</b>							
N/A		LS				\$0	
<b>Total</b>						<b>\$0</b>	
<b>Division 7 - Waterproofing</b>							
Main Pool	\$17.50	SF	6520			\$114,100	Flexcrete on interior of pool shell prior to finish
Activity Pool	\$17.50	SF	3200			\$56,000	Flexcrete on interior of pool shell prior to finish
<b>Total</b>						<b>\$170,100</b>	
<b>Division 8 - Openings</b>							
N/A		LS				\$0	
<b>Total</b>						<b>\$0</b>	
<b>Division 9 - Finishes</b>							
<b>Main Pool</b>							
Deck Depth Marker Tiles	\$1,250.00	EA	25			\$31,250	Deck Depth Markers
New Pool tile	\$65.00	SF	550			\$35,750	Waterline Tile & Contrasting color Tile on the interior of the pool
Prep Plaster	\$7.50	SF	6520			\$48,900	Prep for Plaster
Plaster Finish	\$30.00	SF	6520			\$195,600	White Plaster Finish
<b>Activity Pool</b>							
Deck Depth Marker Tiles	\$1,250.00	EA	12			\$15,000	Deck Depth Markers
New Pool tile	\$65.00	SF	350			\$22,750	Waterline Tile & Contrasting color Tile on the interior of the pool
Prep Plaster	\$7.50	SF	3200			\$24,000	Prep for Plaster
Plaster Finish	\$30.00	SF	3200			\$96,000	White Plaster Finish
<b>Total</b>						<b>\$469,250</b>	
<b>Division 10 - Signage</b>							
Pool Health & Safety Signage	\$3,500.00	LS	1			\$3,500	State Code Require Signage
<b>Total</b>						<b>\$3,500</b>	
<b>Division 13 - Special Construction (Pool)</b>							
<b>Main Pool</b>							
Whit e Goods	\$4,500.00	LS	1			\$4,500	Skimmers, returns, autofill probe chambers
Main Drains	\$4,000.00	ea	2			\$8,000	Main Drains, F&I
Furnish Pool Equipment	\$325,000.00	LS	1			\$325,000	Funish and Set Pool Filtration Equipment
Install Pool Equipment	\$55,000.00	LS	1			\$55,000	Install Pool Equipment
Pool Piping	\$48,000.00	LS	1			\$48,000	F&I Pool Piping
Ladders	\$2,000.00	ea	6			\$12,000	Pool Ladder
Railings	\$1,500.00	ea	4			\$6,000	Rail Goods for Stairs
Hanicap Lift	\$7,000.00	ea	1			\$7,000	Handicap Lift
Life Guard Chairs	\$4,500.00	EA	4			\$18,000	Moveable Lifeguard Chairs
Balancing Pool	\$3,000.00	LS	1			\$3,000	Balance of Pools
Spray Features	\$35,000.00	LS	0			\$0	Budget for spray features in the zero entry
Pool Bonding	\$25,000.00	EA	1			\$25,000	Bonding the perimeter pool
Control Wiring	\$13,500.00	LS	1			\$13,500	Control & Low Voltage wiring
Lane Lines & Safety Equipment FFE	\$8,350.00	LS	1			\$8,350	Allowance
Start Up & Training	\$4,500.00	EA	1			\$4,500	One week of Startup and (2) Days of training
<b>Activity Pool</b>							
Whit e Goods	\$2,000.00	LS	1			\$2,000	Skimmers, returns, autofill probe chambers
Main Drains	\$3,500.00	ea	2			\$7,000	Main Drains, F&I
Furnish Pool Equipment	\$72,000.00	LS	1			\$72,000	Funish and Set Pool Filtration Equipment
Install Pool Equipment	\$38,000.00	LS	1			\$38,000	Install Pool Equipment
Pool Piping	\$48,000.00	LS	1			\$48,000	F&I Pool Piping
Ladders	\$2,000.00	ea	0			\$0	Pool Ladder
Railings	\$1,500.00	ea	2			\$3,000	Rail Goods for Stairs
Hanicap Lift	\$7,000.00	ea	0			\$0	Handicap Lift
Life Guard Chairs	\$4,500.00	EA	2			\$9,000	Moveable Lifeguard Chairs
Spray Features	\$25,000.00	LS	1			\$25,000	Spray features budget for the wading pool
Balancing Pool	\$2,000.00	LS	1			\$2,000	Balance of Pools
Pool Bonding	\$15,000.00	EA	1			\$15,000	Bonding the perimeter pool
Control Wiring	\$7,500.00	LS	1			\$7,500	Control & Low Voltage wiring
Lane Lines & Safety Equipment FFE	\$6,500.00	LS	1			\$6,500	Allowance
Start Up & Training	\$4,500.00	EA	1			\$4,500	(1) Pipe Fitter, (3) Days @ \$160/hr. (1) Pipe Fitter, (3) Days @ \$160/hr.
<b>Total</b>				<b>\$0</b>	<b>\$0</b>	<b>\$777,350</b>	
Subtotal						\$1,773,970	
General Conditions 15%						\$266,096	
Permits 2%						\$40,801	
Profit (15%)						\$312,130	
Construction Contingency (10%)						\$239,300	
Engineering Contingency (10%)						\$263,230	
<b>Total</b>						<b>\$2,895,526</b>	
<b>Exclusions:</b>							
Line Voltage to Equipment							
Earthwork in preparation, below slab, backfill, trenching and bedding							





**structure**

# Structural Notes and Diagrams (LaFuess)

## STRUCTURAL NARRATIVE

### Summary

The proposed Clougherty Pool project is a 7,000 SF pool locker room building planned as a single-story structure with a roof terrace.

The primary superstructure is intended to utilize a concrete slab on composite deck at the roof supported by steel beams and grouted load bearing CMU. Lateral resistance is provided by reinforced CMU masonry walls.

Foundations are anticipated to be slab-on-grade with continuous footings below the bearing walls. A continuous retaining wall around the perimeter of the facility is required to accommodate the sloping grade.

### Design Criteria

- Building Code: 2015 International Building Code
- Live Loads:

Floor and Roof	100 psf
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- Wind Loads:

Ultimate Design Wind Speed	39 mph
Risk Category	III
Wind Exposure Classification	D
- Earthquake Loads – Seismic Criteria:

Risk Category	III
Site Class	D (tbv)
Seismic Design Category	B (tbv)

### Material Properties

- Normal Wt Concrete

Footings and Retaining walls	4,500 psi
Interior Slab-on-Grade	3,500 psi
Slab on Composite Deck	4,000 psi
- Reinforcement: Reinforcing Steel ASTM A615, Grade 60
- Structural Steel

Wide Flanges & WT	ASTM A992, Grade 50
HSS Sections	ASTM A500, Grade C
Other (channels, angles)	ASTM A36

### Geotechnical Report

- A geotechnical report is not available for the site but based on the existing drawings shallow foundations were utilized, which is our basis for the proposed foundations.

Date of Issue: September 26, 2022

www.lafp.com  
Page 1 of 2

Dallas: 3333 Lee Pkwy  
Ste 300, Dallas TX 75219  
214.871.7010

Boston: 211 Congress St  
Ste 810, Boston MA 02110  
617.948.5700

Austin: 8200 N. Mopac Expy  
Ste 115, Austin TX 78759  
512.505.8722

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## **STRUCTURAL SYSTEMS**

- See the attached plans outlining the proposed foundation and building framing.

### **Structural Testing and Inspection**

A qualified Structural Testing/Inspection Agency will be needed to perform special inspections and testing during the construction of this development in accordance with Chapter 17 of the Building Code to verify that work conforms to the Construction Documents.

## **FIGURES**

**SEE ATTACHED SX-01 AND SX-02**

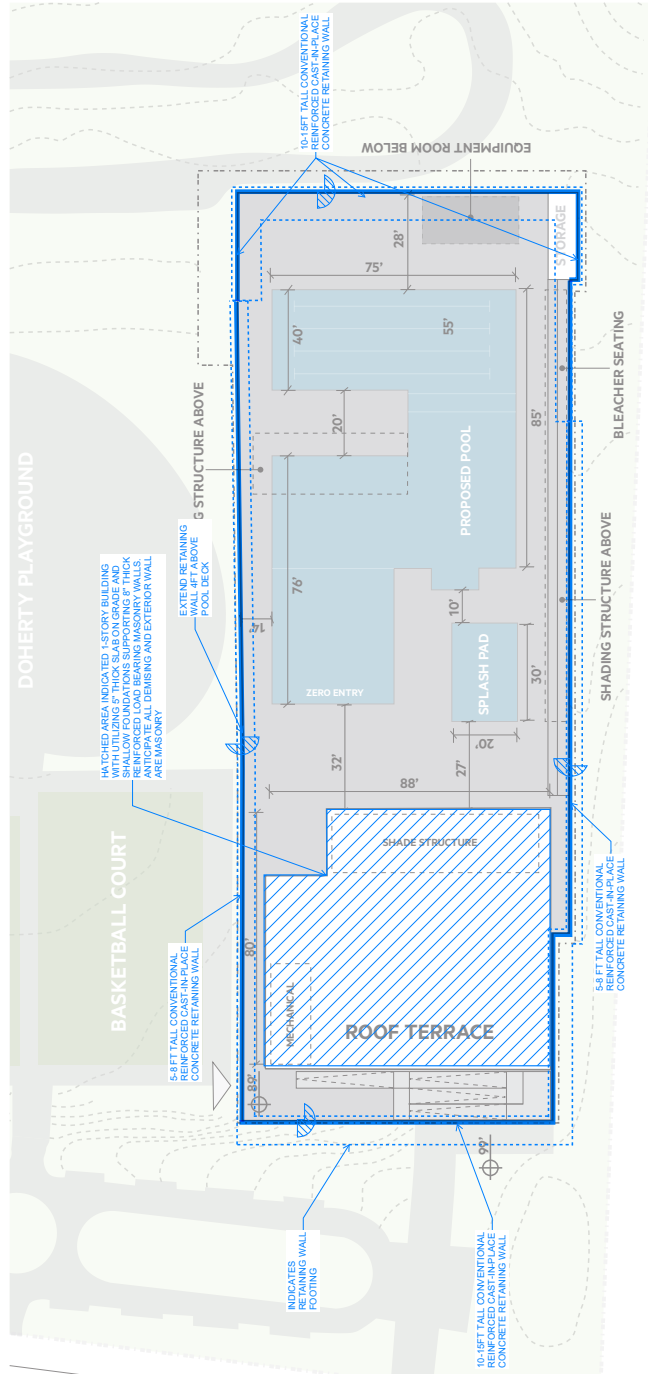
Date of Issue: September 26, 2022

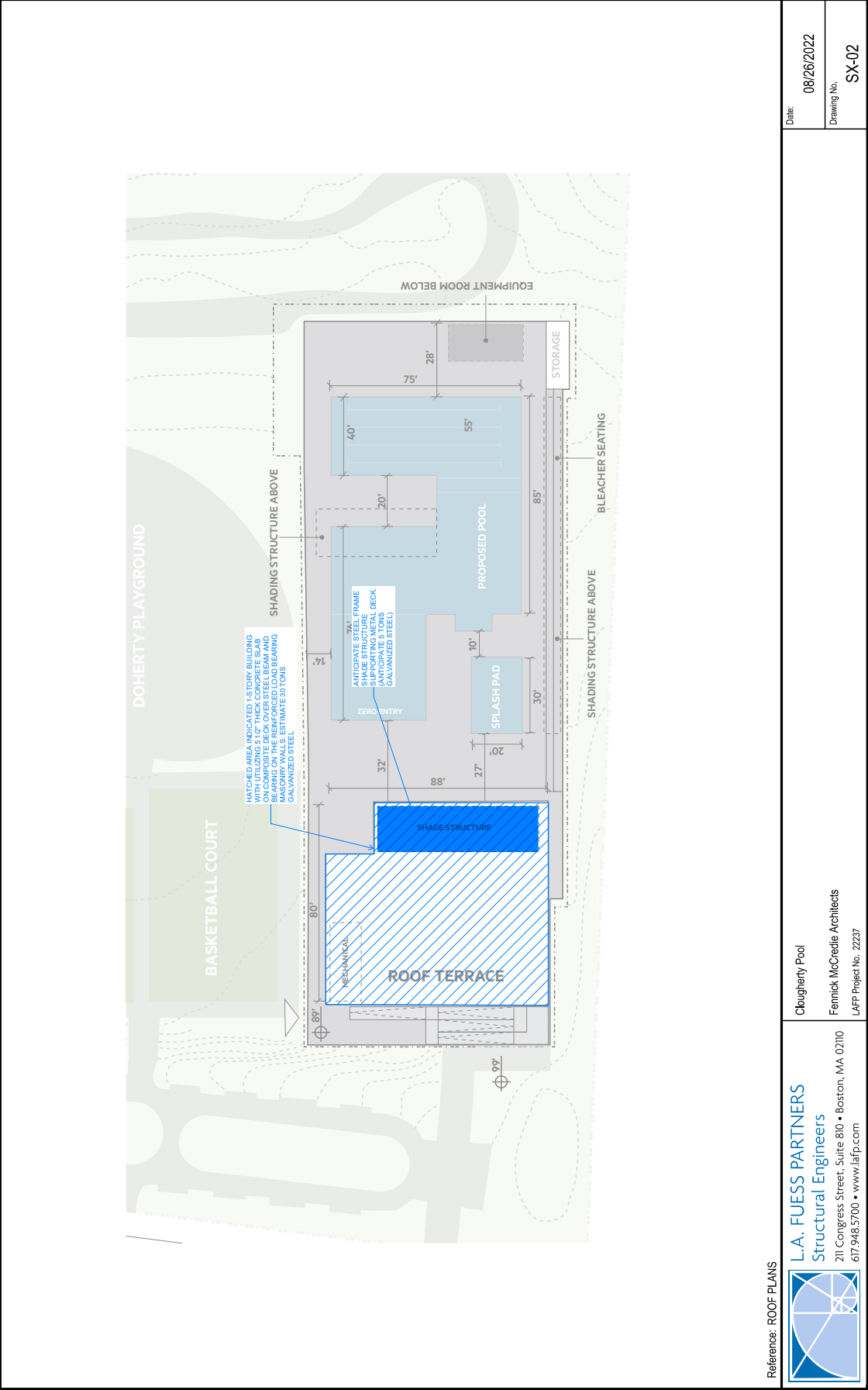
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**cost estimate**

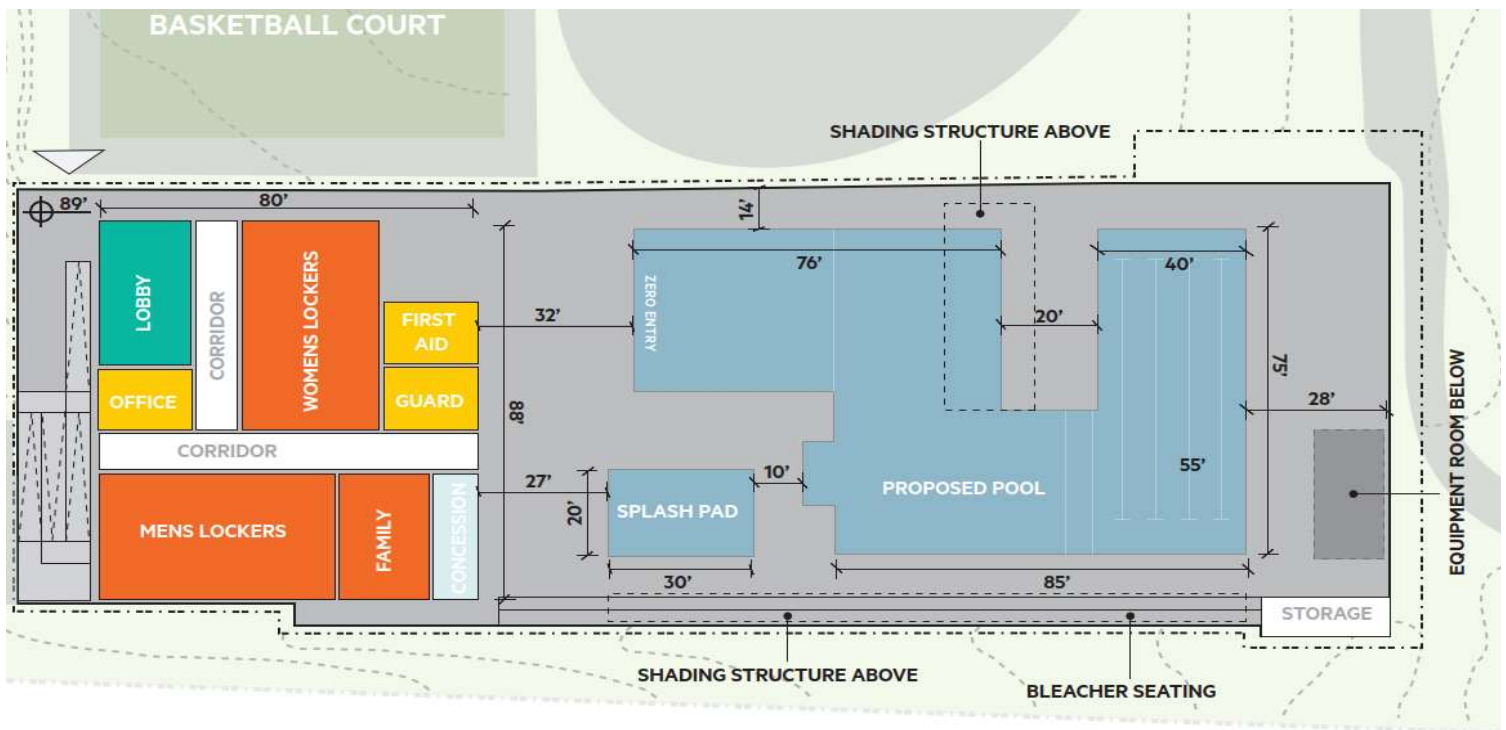




Clougherty Pool  
New Swimming Pool and Bathhouse  
331 Bunker Hill Road  
Boston, MA

August 30, 2022

**Conceptual Estimate**



**Architect:**

Fennick McCredie Architecture  
70 Franklin Street  
Boston, MA 02210  
(617) 350-7900

**Cost Consultant:**

CHA Consulting, Inc.  
One Washington Mall  
Suite 1500  
Boston, MA 02108  
(617) 451-2717

## INTRODUCTION

### Project Description:

Construction of new swimming pools and bathhouse; demolition of existing

#### *New bathhouse facilities:*

Concrete foundations, slab on grade, CMU framed structure, concrete roof

Brick exterior siding over CMU structure & metal window system at addition building enclosure

New program fitout includes restrooms, showers, changing rooms, concessions, and offices

#### *New Support Building:*

New 200sf of storage building

#### *Pool Program and Sitework:*

New 7,000sf Lap Pool & 600sf Splash & Wading Pool

### Project Particulars:

#### *Documents received from Fennick McCredie Architecture*

Clougherty Pool Feasibility Layout dated August 25, 2022

Detailed quantity takeoff from these documents where possible

Discussion, review and reconciliation with Fennick McCredie Architecture and their Design Team

CHA Consulting projects, Inc. experience with similar projects of this nature

### Project Assumptions:

Project will be managed by a Construction Manager under a General Contractor Contract M.G.L. Ch. 149A

It has been assumed that no less than 4 bids will be received. Bids can be expected to be significantly higher if fewer bids are received

No occupancy of the project zone during construction

Operation during normal business hours

The Total Estimated Construction Cost reflects the fair construction value of this project in a competitive prevailing wage bidding market

Unit rates are based on current dollars and main summary includes an escalation allowance

Subcontractor's markups have been included in each unit rate. Markups cover the cost of field overhead, home office, overhead and subcontractor's profit

Design and Pricing Contingency markup is an allowance for unforeseen design issues, design detail development specification expansion during the design period.

General Conditions and Project Requirements includes items from Div. 01 General Requirements, staffing, general facilities to support project, scaffolding, staging and access, temporary protection, cleaning, and other items not attributable to the direct trade cost

Start of construction assumed Spring 2024

**Construction Cost Estimate Exclusions:**

Environmental permitting  
Architectural/Engineering; Design fees and other professional fees, testing, printing, surveying, site investigations  
Unforeseen Conditions Contingency  
Owner's site representation and project administration  
Owner's administration; legal fees, advertising, permitting, Owner's insurance, administration, interest expense  
Third Party testing and commissioning  
Project costs; utility company back charges prior to construction, construction of swing space and temporary facilities,  
program related phasing, relocation  
Equipment, Furnishings, Specialties beyond what is noted in design package. Note that these costs should  
be carried in Owner's Budget  
Work beyond the boundary of the site, except for water and sewer lines from the park entrance to the site  
Police details and street/sidewalk permits

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**MAIN SUMMARY**

			TOTAL
<b>Direct Trade Cost Details</b>			
Bathhouse	7,400 GSF		\$5,749,091
Sitework			\$2,862,276
Swimming Pool Program (W&S Estimate)			\$4,361,334
<b>Direct Trade Cost SubTotal</b>			<b>7,400 GSF \$12,972,701</b>
Design and Pricing Contingency	10.00%	\$12,972,701	\$1,298,000
<b>Direct Trade Cost Total</b>			<b>\$14,270,701</b>
<b>Burdens and Markups</b>			
General Conditions and Project Requirements	10.00%	\$14,270,701	\$1,428,000
Insurances and Bonds	2.30%	\$15,698,701	\$362,000
Fee	5.00%	\$16,060,701	\$804,000
<b>Estimated Construction Cost Total</b>			<b>\$16,864,701</b>
Escalation to midpoint of construction (Winter 2024)	7.33%	\$16,864,701	\$1,237,000
<b>Estimated Construction Cost at Start of Construction</b>			<b>\$18,101,701</b>

# DIRECT TRADE COST SUMMARY

New Swimming Pool and Bathhouse

	BATHHOUSE 7,400 GSF		POOL & SITEWORK	TOTAL
	TOTAL	COST/GSF		
02-EXISTING CONDITIONS			\$1,784,750	\$1,784,750
03-CONCRETE	\$1,181,631	\$159.68		\$1,181,631
04-MASONRY	\$584,735	\$79.02		\$584,735
05-METALS	\$169,977	\$22.97		\$169,977
06-WOOD AND PLASTICS	\$167,551	\$22.64		\$167,551
07-THERMAL AND MOISTURE PROTECTION	\$552,660	\$74.68		\$552,660
08-DOORS AND WINDOWS	\$249,907	\$33.77		\$249,907
09-FINISHES	\$935,733	\$126.45		\$935,733
10-SPECIALTIES	\$319,670	\$43.20		\$319,670
12-FURNISHINGS	\$22,803	\$3.08		\$22,803
13-SPECIAL CONSTRUCTION			\$4,361,334	\$4,361,334
21 00 00 Fire Protection	\$65,510	\$8.85		
22 00 00 Plumbing	\$340,250	\$45.98		\$340,250
23 00 00 HVAC	\$396,630	\$53.60		\$396,630
26 00 00 Electrical	\$385,600	\$52.11	\$257,000	\$642,600
31-EARTHWORK	\$376,434	\$50.87	\$218,646	\$595,080
32-EXTERIOR IMPROVEMENTS			\$417,380	\$417,380
33-MECHANICAL UTILITIES			\$184,500	\$184,500
<b>Direct Trade Cost Subtotal</b>	<b>\$5,749,091</b>	<b>\$776.90</b>	<b>\$7,223,610</b>	<b>\$12,907,191</b>

# BATHHOUSE DIRECT TRADE COST DETAILS

DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL
<b>02-EXISTING CONDITIONS</b>				
<i>Demo Included In Sitework</i>				
<b>02-Existing Conditions Total</b>				<b>\$0</b>
<b>03-CONCRETE</b>				
<b>03 30 00 Cast In Place Concrete</b>				
<i>Strip footing; perimeter - bath house; equipment room</i>	<b>1,253</b>	LF		
Concrete	<b>146</b>	CY	\$185.00	\$27,044
Rebar	<b>8,771</b>	LBS	\$1.55	\$13,595
Formwork	<b>2,506</b>	SF	\$12.00	\$30,072
Place and finish	<b>146</b>	CY	\$85.00	\$12,426
Keyways	<b>1,253</b>	LF	\$2.50	\$3,133
<i>Spread footings; Assume F6 - bath house; equipment room</i>	<b>36</b>	EA		
Concrete	<b>76</b>	CY	\$185.00	\$13,986
Rebar	<b>6,426</b>	LBS	\$1.55	\$9,960
Formwork	<b>1,296</b>	SF	\$12.00	\$15,552
Place and finish	<b>76</b>	CY	\$85.00	\$6,426
<i>Spread footings - suspended slab circulation around pool</i>	<b>76</b>	EA		
Concrete	<b>378</b>	CY	\$185.00	\$69,988
Rebar	<b>32,156</b>	LBS	\$1.55	\$49,842
Formwork	<b>4,864</b>	SF	\$12.00	\$58,368
Place and finish	<b>378</b>	CY	\$85.00	\$32,156
<i>Foundation walls; Assume 12" thick x4'-0" high - bath house; equipment room</i>	<b>5,012</b>	SF		
Concrete	<b>195</b>	CY	\$185.00	\$36,059
Rebar	<b>25,060</b>	LBS	\$1.55	\$38,843
Formwork	<b>10,024</b>	SF	\$16.00	\$160,384
Place and finish	<b>195</b>	CY	\$85.00	\$16,567
Pier/pilaster	<b>112</b>	EA	\$500.00	\$56,000
Column base plate install	<b>112</b>	EA	\$275.00	\$30,800
<i>Retaining walls; Assume 18" thick x6'-0" high avg - pool deck</i>	<b>4,925</b>	SF		
Concrete	<b>287</b>	CY	\$185.00	\$53,151
Rebar	<b>49,252</b>	LBS	\$1.55	\$76,340
Formwork	<b>9,850</b>	SF	\$16.00	\$157,605
Place and finish	<b>287</b>	CY	\$85.00	\$24,421
<i>Slab-on-grade 5" - bath house; equipment room</i>	<b>7,326</b>	SF		
Concrete	<b>120</b>	CY	\$185.00	\$22,136
WWF -10% overlap	<b>8,058</b>	SF	\$0.75	\$6,044
Place, cure, screed and protect	<b>7,326</b>	SF	\$2.50	\$18,314
Slab edge	<b>1,253</b>	SF	\$10.00	\$12,530

# BATHHOUSE DIRECT TRADE COST DETAILS

DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL
52 Vapor barrier under slab	7,326	SF	\$0.75	\$5,494
53 4" insulation below slab on grade at condition spaces; assume full coverage	7,326	SF	\$2.25	\$16,483
54 Circulation; SOG & stairs around bath house	2,514	SF	\$11.93	\$29,983
55 <i>Miscellaneous</i>				
56 Concrete pads and bases	1	LS	\$3,500.00	\$3,500
57 Slab isolation joints around columns	896	LF	\$5.50	\$4,928
58 Slab control joints - saw cut	7,326	SF	\$2.50	\$18,314
59 Slab perimeter joints	1,253	LF	\$4.50	\$5,639
60 Concrete accessories	1	LS	\$34,000.00	\$34,000
61 <i>Roof Structure - Concrete</i>				
62 Reinforced concrete beams, columns and suspended slab in concrete framed construction				
63 Bath house	6,875	SF	\$76.94	\$528,948
64 Storage Building	257	SF	\$71.19	\$18,299
65 Equipment Room	451	SF	\$71.19	\$32,098
66 Circulation; suspended concrete platform around pools	10,975	SF	\$78.94	\$866,339
67 Bleachers, suspended	1,092	SF	\$78.94	\$86,181
68 Deduct for Pool Structure Concrete	(1)	ADJ	\$1,520,315	(\$1,520,315)
69 <b>03-Concrete Total</b>				<b>\$1,181,631</b>
70				
71				
72 <b>04-MASONRY</b>				
73				
74 <i>Exterior Closure</i>				
75 Exterior wall assembly; Brick with CMU backup				
76 Bath house	3,203	SF	\$80.00	\$256,253
77 Storage building	721	SF	\$80.00	\$57,663
78 Equipment building	890	SF	\$80.00	\$71,190
79 Stone sill	240	LF	\$95.00	\$22,844
80 Scaffolding	6,065	SF	\$3.50	\$21,228
81 <i>Interior Partitions</i>				
82 8" CMU interior partitions - Bath house	4,617	SF	\$32.25	\$148,898
83 Interior door lintel - install only	7,400	GSF	\$0.90	\$6,660
84 <b>04-Masonry Total</b>				<b>\$584,735</b>
85				
86				



# BATHHOUSE DIRECT TRADE COST DETAILS

DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL
<b>87 05-METALS</b>				
<b>88</b>				
<b>89</b> Bath house; framing to mechanical enclosure	<b>882</b>	SF	\$45.00	\$39,690
<b>90</b> Bleachers; framing to shade structure PV	<b>886</b>	SF	\$45.00	\$39,868
<b>91</b> Pool; framing to shade structure PV	<b>924</b>	SF	\$45.00	\$41,564
<b>92</b> Miscellaneous metals for exterior enclosure	<b>4,814</b>	SF	\$4.00	\$19,255
<b>93</b> Interior & Exterior door lintel - furnish only	<b>7,400</b>	GSF	\$1.00	\$7,400
<b>94</b> Miscellaneous interior metals	<b>7,400</b>	GSF	\$3.00	\$22,200
<b>95 05-Metals Total</b>				<b>\$169,977</b>
<b>96</b>				
<b>97</b>				
<b>98 06-WOOD AND PLASTICS</b>				
<b>99</b>				
<b>100</b> <i>Rough Carpentry</i>				
<b>101</b> Window blocking	<b>938</b>	LF	\$15.00	\$14,076
<b>102</b> Plywood for electrical panel	<b>1</b>	LS	\$400.00	\$400
<b>103</b> Rough carpentry & blocking internally	<b>7,400</b>	GSF	\$1.50	\$11,100
<b>104</b> Install door & frame	<b>7,400</b>	GSF	\$1.20	\$8,880
<b>105</b> <i>Interior Architectural Woodwork</i>				
<b>106</b> Seating bench at Lobby	<b>642</b>	GSF	\$8.00	\$5,135
<b>107</b> Stainless steel countertop and shelving ; Concession	<b>500</b>	GSF	\$30.00	\$15,000
<b>108</b> Millwork; Office, First Aid; Guard	<b>660</b>	GSF	\$16.00	\$10,560
<b>109</b> Men's, Women's, Family, bathroom; solid surface counter/vanity	<b>3,450</b>	GSF	\$21.00	\$72,450
<b>110</b> Men's, Women's, Family, bathroom; benches	<b>3,450</b>	GSF	\$6.00	\$20,700
<b>111</b> Reception millwork	<b>7,400</b>	GSF	\$1.25	\$9,250
<b>112 06-Wood And Plastics Total</b>				<b>\$167,551</b>
<b>113</b>				
<b>114</b>				

# BATHHOUSE DIRECT TRADE COST DETAILS

DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL
<b>115 07-THERMAL AND MOISTURE PROTECTION</b>				
<b>116</b>				
<b>117 Waterproofing, Dampproofing and Caulking</b>				
<b>118</b> Dampproofing to frost walls	<b>7,518</b>	SF	\$3.50	\$26,313
<b>119</b> Caulking and sealants	<b>7,400</b>	GSF	\$3.50	\$25,900
<b>120</b>				
<b>121 Roofing &amp; Flashing</b>				
<b>122</b> Roof sheathing underlayment x2 layers	<b>7,583</b>	SF	\$7.50	\$56,870
<b>123</b> Roof cover board	<b>7,583</b>	SF	\$3.70	\$28,056
<b>124</b> Roof blocking	<b>1,011</b>	LF	\$20.00	\$20,217
<b>125</b> PVC roofing system, 6" rigid insul.	<b>7,583</b>	SF	\$26.00	\$197,151
<b>126</b> Misc. roof flashing	<b>1</b>	AL	\$15,000.00	\$15,000
<b>127</b> Walkway pads; allow	<b>1</b>	AL	\$400.00	\$400
<b>128</b> Green Roof	<b>7,183</b>	SF	\$20.00	\$143,657
<b>129 Thermal Insulation</b>				
<b>130</b> Rigid insulation to foundation wall	<b>5,012</b>	SF	\$2.50	\$12,530
<b>131</b> Insulation at exterior wall	<b>4,814</b>	SF	\$3.50	\$16,848
<b>132</b> Vapor barrier at exterior wall	<b>4,814</b>	SF	\$1.25	\$6,017
<b>133 Firestopping</b>				
<b>134</b> Through floor penetration firestopping & fire resistive joints	<b>7,400</b>	GSF	\$0.50	\$3,700
<b>135 07-Thermal And Moisture Protection Total</b>				<b>\$552,660</b>
<b>136</b>				
<b>137</b>				
<b>138 08-DOORS AND WINDOWS</b>				
<b>139</b>				
<b>140 Exterior door</b>				
<b>141</b> Door, frame, hardware	<b>7,400</b>	GSF	\$4.50	\$33,300
<b>142 Interior door</b>				
<b>143</b> Door, frame, hardware	<b>7,400</b>	GSF	\$8.40	\$62,160
<b>144 Metal Windows</b>				
<b>145</b> Aluminum and glass window system				
<b>146</b> Bath house	<b>801</b>	SF	\$135.00	\$108,107
<b>147</b> Storage building	<b>72</b>	SF	\$135.00	\$9,731
<b>148</b> Equipment building	<b>89</b>	SF	\$135.00	\$12,013
<b>149 Louvers</b>				
<b>150</b> Bath house	<b>96</b>	SF	\$85.00	\$8,168
<b>151</b> Storage building	<b>86</b>	SF	\$85.00	\$7,352
<b>152</b> Equipment building	<b>107</b>	SF	\$85.00	\$9,077
<b>153 08-Doors And Windows Total</b>				<b>\$249,907</b>
<b>154</b>				
<b>155</b>				

# BATHHOUSE DIRECT TRADE COST DETAILS

DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL
<b>156 09-FINISHES</b>				
<b>157</b>				
<b>158 Tile</b>				
<b>159</b> Floor tiles throughout; Bath house	<b>7,400</b>	SF	\$35.00	\$259,000
<b>160</b> Wall tiles throughout; Bath house	<b>13,000</b>	SF	\$33.00	\$429,000
<b>161</b> Tile wall base; Bath house	<b>1,083</b>	LF	\$15.00	\$16,249
<b>162</b> Marble thresholds @ bathrooms; Bath house	<b>10</b>	OPEN	\$350.00	\$3,500
<b>163 Resinous Flooring</b>				
<b>164</b> Seamless poured epoxy flooring; Storage Building, Equipment Room	<b>650</b>	SF	\$12.00	\$7,800
<b>165</b> Seamless poured epoxy base	<b>164</b>	LF	\$6.00	\$983
<b>166</b> Seamless poured epoxy to concrete surfaces				
<b>167</b> Circulation SOG & stairs around Bath house	<b>2,514</b>	SF	\$12.00	\$30,166
<b>168</b> Circulation suspended concrete platform around Pools	<b>10,975</b>	SF	\$12.00	\$131,696
<b>169</b> Bleachers	<b>1,092</b>	SF	\$12.00	\$13,101
<b>170 Painting</b>				
<b>171</b> CMU walls; Storage Building, Equipment Room	<b>1,965</b>	SF	\$1.75	\$3,439
<b>172</b> Ceiling finishes, underside of structure, water resistant paint quality to concrete; throughout	<b>7,400</b>	SF	\$4.50	\$33,300
<b>173</b> Miscellaneous painting	<b>1</b>	LS	\$7,500.00	\$7,500
<b>174 09-Finishes Total</b>				<b>\$935,733</b>
<b>175</b>				
<b>176</b>				

# BATHHOUSE DIRECT TRADE COST DETAILS

DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL
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## 10-SPECIALTIES

178

### 179 Signage

180	Exterior signage	1	LS	\$7,500.00	\$7,500
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181	Interior signage	7,400	GSF	\$1.00	\$7,400
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### 182 Toilet Accessories

183	Toilet & shower accessories; Men's bathroom	1,500	GSF	\$8.00	\$12,000
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184	Toilet & shower accessories; Women's bathroom	1,500	GSF	\$8.00	\$12,000
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185	Toilet & shower accessories; Family's bathroom	450	GSF	\$8.00	\$3,600
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186	Premium for ADA compliant	3,450	GSF	\$2.00	\$6,900
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### 187 Toilet & Bath Compartments

188	Toilet compartment; Men's bathroom	5	EA	\$2,000.00	\$10,000
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189	Toilet compartment; Women's bathroom	7	EA	\$2,000.00	\$14,000
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190	Urinal; Men's bathroom	2	EA	\$1,550.00	\$3,100
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191	Shower stalls; Men's bathroom	7	EA	\$2,850.00	\$19,950
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192	Shower stalls; Women's bathroom	7	EA	\$2,850.00	\$19,950
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193	Shower stalls; Family bathrooms	3	EA	\$2,850.00	\$8,550
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194	Premium for ADA compliant	6	EA	\$800.00	\$4,800
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195	Fire extinguisher cabinets	4	EA	\$500.00	\$2,000
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196	Men's, Women's, Family, Lifeguard; multi-tier personal solid plastic lock	3,750	GSF	\$36.00	\$135,000
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### 197 10 82 00 Equipment Screens

198	Metal roof screen	882	SF	\$60.00	\$52,920
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199	<b>10-Specialties Total</b>				<b>\$319,670</b>
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200

201

## 12-FURNISHINGS

203

204	Office and Guard FF&E	330	GSF	\$60.61	\$20,000
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205	Roller shades; exterior glazing	400	SF	\$7.00	\$2,803
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206	<b>12-Furnishings Total</b>				<b>\$22,803</b>
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# BATHHOUSE DIRECT TRADE COST DETAILS

DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL
<b>209 21, 22, 23 - MECHANICAL</b>				
<b>210</b>				
<b>211 21 00 00 Fire Protection</b>				
<b>212 Plumbing Equipment</b>				
213 Wet sprinkler system	7,400	GSF	\$6.25	\$46,250
<b>214</b>				
<b>215 Miscellaneous</b>				
216 System testing and flushing	7,400	GSF	\$0.25	\$1,850
217 Coring, cutting, sleeves & fire stopping	7,400	GSF	\$0.30	\$2,220
218 Hydraulic lifts/rigging	7,400	GSF	\$0.25	\$1,850
219 Shop drawings / BIM / ENG Support / As-Built	7,400	GSF	\$0.75	\$5,550
220 Commissioning support	7,400	GSF	\$0.85	\$6,290
221 Fees & permits	1	LS	\$1,500.00	\$1,500
<b>222 21 00 00 Fire Protection Total</b>				<b>\$65,510</b>
<b>223</b>				
<b>224 22 00 00 Plumbing</b>				
<b>225 Plumbing Equipment</b>				
226 4" Water service w/Meter Assembly	1	EA	\$8,500.00	\$8,500
227 1" Reduced Pressure Zone Backflow Preventer	1	EA	\$2,500.00	\$2,500
228 DWH (12 kW Electric Heat Pump Water Heater)	4	EA	\$4,500.00	\$18,000
229 DWH (6.5 kW Electric Tankless Water Heater)	3	EA	\$3,500.00	\$10,500
230 DWHR-1 (Hot water circulator pump assembly)	7	EA	\$1,500.00	\$10,500
231 Floor drains; 4"	14	EA	\$650.00	\$9,100
232 Wall hydrant	2	EA	\$425.00	\$850
233 Hose bibb	8	EA	\$375.00	\$3,000
234 Roof drain	8	EA	\$950.00	\$7,600
235 New integral roof drains	1	AL	\$5,000.00	\$5,000
<b>236 Plumbing Fixtures</b>				
237 Water closet	14	EA	\$1,850.00	\$25,900
238 Shower	14	EA	\$2,250.00	\$31,500
239 Shower / ADA	3	EA	\$2,750.00	\$8,250
240 Lavatory	15	EA	\$1,900.00	\$28,500
241 Urinal	4	EA	\$1,900.00	\$7,600
242 Mop sink w/ rack	1	EA	\$1,450.00	\$1,450
243 Water cooler; Bi Level	1	EA	\$3,050.00	\$3,050
244 Stainless steel sink; concession	1	EA	\$3,200.00	\$3,200
245 Domestic water piping	7,400	GSF	\$6.50	\$48,100
246 Valves & accessories	7,400	GSF	\$1.25	\$9,250
247 Storm drainage, hubless cast iron pipe	7,400	GSF	\$2.25	\$16,650
248 Sanitary house trap	1	EA	\$1,600.00	\$1,600
249 Sanitary waste and vent pipe w/ hangers	7,400	GSF	\$5.50	\$40,700
250 Domestic water to pool equipment room	1	LS	\$7,500.00	\$7,500
<b>251</b>				

# BATHHOUSE DIRECT TRADE COST DETAILS

DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL
<b>252 Miscellaneous</b>				
<b>253</b> System testing and flushing	<b>7,400</b>	GSF	\$0.25	\$1,850
<b>254</b> Coring, cutting, sleeves & fire stopping	<b>7,400</b>	GSF	\$0.30	\$2,220
<b>255</b> Seismic restraints and structural steel Comp.	<b>7,400</b>	GSF	\$0.50	\$3,700
<b>256</b> Hydraulic lifts/rigging	<b>7,400</b>	GSF	\$0.50	\$3,700
<b>257</b> Shop drawings / BIM / ENG Support / As-Built	<b>7,400</b>	GSF	\$0.90	\$6,660
<b>258</b> Commissioning support	<b>7,400</b>	GSF	\$0.90	\$6,660
<b>259</b> Fees & permits	<b>7,400</b>	GSF	\$0.90	\$6,660
<b>260 22 00 00 Plumbing Total</b>				<b>\$340,250</b>
<b>261</b>				
<b>262 23 00 00 HVAC</b>				
<b>263</b> VRF 1-6; 1400cfm ea	<b>6</b>	EA	\$1,200.00	\$7,200
<b>264</b> VRF Condenser; 22 ton total Outdoor Heat Pump	<b>4</b>	EA	\$27,720.00	\$110,880
<b>265</b> Refrigerant piping	<b>7,400</b>	GSF	\$4.50	\$33,300
<b>266</b> ERV; Energy Recovery Ventilator	<b>1</b>	LS	\$20,000.00	\$20,000
<b>267</b> Cabinet unit heater	<b>2</b>	EA	\$1,500.00	\$3,000
<b>268</b> Exhaust Fan	<b>9</b>	EA	\$1,500.00	\$13,500
<b>269 Sheet Metal</b>				
<b>270</b> Insulated galvanized Sheetmetal ductwork	<b>6,600</b>	LBS	\$18.00	\$118,800
<b>271</b> Roof top relief dampers	<b>2</b>	EA	\$500.00	\$1,000
<b>272</b> Exhaust louvers	<b>6</b>	EA	\$750.00	\$4,500
<b>273</b> Supply & Return Grilles	<b>30</b>	EA	\$450.00	\$13,500
<b>274 Miscellaneous</b>				
<b>275</b> Building BMS	<b>7,400</b>	GSF	\$5.00	\$37,000
<b>276</b> Demolition work	<b>1</b>	LS	\$2,500.00	\$2,500
<b>277</b> System testing and flushing	<b>7,400</b>	GSF	\$0.25	\$1,850
<b>278</b> Coring, cutting, sleeves & fire stopping	<b>7,400</b>	GSF	\$0.30	\$2,220
<b>279</b> Seismic Restraints and Structural Steel Comp.	<b>7,400</b>	GSF	\$0.50	\$3,700
<b>280</b> Hydraulic lifts/rigging	<b>7,400</b>	GSF	\$0.50	\$3,700
<b>281</b> Shop drawings / BIM / ENG Support / As-Built	<b>7,400</b>	GSF	\$0.90	\$6,660
<b>282</b> Commissioning support	<b>7,400</b>	GSF	\$0.90	\$6,660
<b>283</b> Fees & permits	<b>7,400</b>	GSF	\$0.90	\$6,660
<b>284 23 00 00 HVAC Total</b>				<b>\$396,630</b>
<b>285</b>				
<b>286</b>				

# BATHHOUSE DIRECT TRADE COST DETAILS

DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL
<b>26 - 27-ELECTRICAL, COMMUNICATION</b>				
<b>26 00 00 Electrical</b>				
<i>Normal power</i>				
MDP; 800 AMP assumed	1	EA	\$15,000.00	\$15,000
LP1; 200 AMP assumed	1	EA	\$3,500.00	\$3,500
PP1; 400 AMP assumed	1	EA	\$6,500.00	\$6,500
Power Distribution; conduit & wire	7,400	GSF	\$7.50	\$55,500
<i>Equipment wiring:</i>				
Exhaust fan	9	EA	\$350.00	\$3,150
Hot water circulator pump	7	EA	\$400.00	\$2,800
Hand dryer feed and connection	7	EA	\$350.00	\$2,450
Misc. equipment feed and connections	7,400	GSF	\$1.00	\$7,400
Misc. equipment wiring not yet defined	7,400	GSF	\$2.50	\$18,500
<i>Lighting &amp; controls</i>				
Lighting fixtures, including emergency & egress	7,400	GSF	\$10.00	\$74,000
Lighting controls	7,400	GSF	\$2.00	\$14,800
<i>Branch devices</i>				
Duplex receptacle	7,400	GSF	\$3.25	\$24,050
WP device plate	6	EA	\$350.00	\$2,100
<i>Branch circuitry</i>				
Lighting & branch circuitry	7,400	GSF	\$1.50	\$11,100
<i>Fire alarm system</i>				
Fire alarm system	7,400	GSF	\$5.00	\$37,000
Telecommunications	7,400	GSF	\$2.00	\$14,800
<i>Security Systems</i>				
Control panel, devices and circuitry	7,400	GSF	\$2.50	\$18,500
<i>Miscellaneous</i>				
Temporary lighting & power	7,400	GSF	\$0.50	\$3,700
Demolition work	1	LS	\$5,000.00	\$5,000
<i>Solar Panels</i>				
Solar Panel System	1	AL	\$55,000.00	\$55,000
Shop drawings / BIM / ENG Support / As-Built	7,400	GSF	\$0.50	\$3,700
Commissioning support	7,400	GSF	\$0.75	\$5,550
Fees & permits	1	LS	\$1,500.00	\$1,500
<b>26 00 00 Electrical Total</b>				<b>\$385,600</b>



# BATHHOUSE DIRECT TRADE COST DETAILS

DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL
<b>31-EARTHWORK</b>				
<b>31 00 00 Earthwork</b>				
Rough and fine grade for new slab	9,840	SF	\$2.00	\$19,679
Gravel below slab; bath house, Equipment room	271	CY	\$38.00	\$10,310
Gravel below slab; circulation; SOG & stairs around bath house	93	CY	\$38.00	\$3,538
Perimeter drain system	1,253	LF	\$16.00	\$20,048
Underslab drainage	9,840	SF	\$4.00	\$39,358
Dewatering during construction	1	LS	\$10,000.00	\$10,000
<i>Continuous footings</i>	1,253	LF		
Excavation	1,299	CY	\$12.00	\$15,593
Soil remove	1,299	CY	\$30.00	\$38,982
Backfill with imported fill	1,153	CY	\$45.00	\$51,895
<i>Spread footings</i>	112	EA		
Excavation	2,155	CY	\$12.00	\$25,856
Soil remove	2,155	CY	\$30.00	\$64,640
Backfill with imported fill	1,701	CY	\$45.00	\$76,534
<b>31-Earthwork Total</b>				<b>\$376,434</b>

## SITE DEVELOPMENT DIRECT TRADE COST DETAILS

DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL
<b>02-EXISTING CONDITIONS</b>				
<i>Abatement</i>				
Abatement of hazardous materials	15,000	GSF	\$12.00	\$180,000
Disposal of hazardous materials	15,000	GSF	\$8.00	\$120,000
<i>Total Demolition</i>				
Demo pool structure in entirety	28,000	GSF	\$35.00	\$980,000
Demo bathhouse structure in entirety	15,000	GSF	\$20.00	\$300,000
<i>Selective Demolition</i>				
Existing entrance stairs	1,800	SF	\$25.00	\$45,000
Demo existing entrance walkway	2,000	SF	\$3.25	\$6,500
Sawcut existing pavement	250	LF	\$12.00	\$3,000
Curbing	250	LF	\$7.00	\$1,750
Fence	675	LF	\$20.00	\$13,500
Miscellaneous site demolition	1	AL	\$50,000.00	\$50,000
Haul off demolished materials, disposal	1	LS	\$70,000.00	\$70,000
Protect existing element to remain	1	LS	\$15,000.00	\$15,000
<b>02-Existing Conditions Total</b>				<b>\$1,784,750</b>
<b>13-SPECIAL CONSTRUCTION</b>				
<i>Swimming Pools (W&amp;S Provided)</i>				
Pool construction; lap pool 7,000sf & splash pool; 600 sf	1	QUOTE	\$2,841,019	\$2,841,019
Pool Structure Concrete	1	ADJ	\$1,520,315	\$1,520,315
<b>13-Special Construction Total</b>				<b>\$4,361,334</b>
<b>31-EARTHWORK</b>				
<i>Site Preparation &amp; Clearing</i>				
8' construction fence	1,200	LF	\$16.00	\$19,200
Double construction gate	2	EA	\$2,500.00	\$5,000
Stabilized construction entrance	2	LS	\$7,500.00	\$15,000
Site clearing and grubbing; misc.	1	LS	\$7,500.00	\$7,500
Existing tree to remain - protect	10	EA	\$350.00	\$3,500
Temporary signs	1	LS	\$5,000.00	\$5,000
<i>Erosion and Sedimentation Controls</i>				
Erosion control fence	1,200	LF	\$16.00	\$19,200
Inlet protection	12	EA	\$350.00	\$4,200
Haybales at stockpile topsoil areas	1	AL	\$3,500.00	\$3,500
<i>Earthwork</i>				

# SITE DEVELOPMENT DIRECT TRADE COST DETAILS

DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL
50 Remove & stockpile topsoil; assume 6" thick	50	CY	\$25.00	\$1,250
51 Cuts and fills under structure footprint	1,185	CY	\$65.00	\$77,037
52 Cuts and fills - site grade	296	CY	\$65.00	\$19,259
53 Rough and fine grade of sitework	32,000	SF	\$0.75	\$24,000
54 Dewatering	1	LS	\$15,000.00	\$15,000
55 <b>31-Earthwork Total</b>				<b>\$218,646</b>
56				
57				
58 <b>32-EXTERIOR IMPROVEMENTS</b>				
59				
60 <i>Bituminous Asphalt Pavement</i>				
61 Asphalt pavement; trench pave	2,000	SF	\$4.20	\$8,400
62 <i>Curbing</i>				
63 Vertical granite curb	150	LF	\$65.00	\$9,750
64 <i>Markings &amp; Signage</i>				
65 Wayfinding signage	6	EA	\$750.00	\$4,500
66 Misc. Markings Allowance	1	AL	\$5,000.00	\$5,000
67 Traffic sign	1	LS	\$5,000.00	\$5,000
68 <i>Site Furnishings</i>				
69 Picnic table and 4-chairs	6	SET	\$5,500.00	\$33,000
70 Pool deck chair	20	EA	\$650.00	\$13,000
71 Bike racks	1	LS	\$3,500.00	\$3,500
72 Trash/recycle receptacles	10	LS	\$2,400.00	\$24,000
73 Flagpole	1	EA	\$8,500.00	\$8,500
74 Bench	10	LS	\$4,500.00	\$45,000
75 <i>Fence &amp; Railings</i>				
76 Fence; assume 6' metal picket fence	850	LF	\$125.00	\$106,250
77 Double gate	3	PR	\$1,500.00	\$4,500
78 Misc. site improvement other than above	1	LS	\$50,000.00	\$50,000
79 <i>Topsoil</i>				
80 Respread stockpiled topsoil	50	CY	\$15.00	\$750
81 Mulch	68	CY	\$45.00	\$3,060
82 Imported topsoil for plant bed and drainage swale	418	CY	\$65.00	\$27,170
83 Lawn seed	10,000	SF	\$0.35	\$3,500
84 <i>Plantings</i>				
85 Deciduous Tree	10	EA	\$2,500.00	\$25,000
86 Evergreen Tree	10	EA	\$1,500.00	\$15,000
87 Shrubs	150	EA	\$150.00	\$22,500
88 <b>32-Exterior Improvements Total</b>				<b>\$417,380</b>
89				
90				

# SITE DEVELOPMENT DIRECT TRADE COST DETAILS

DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL
<b>91 33-MECHANICAL UTILITIES</b>				
<b>92</b>				
<b>93 Water Distribution</b>				
<b>94 2" Copper domestic water; Assumed</b>	<b>300</b>	LF	\$65.00	\$19,500
<b>95 Street connection</b>	<b>1</b>	LS	\$12,500.00	\$12,500
<b>96 Sanitary Sewerage</b>				
<b>97 Sanitary Structures</b>	<b>1</b>	AL	\$15,000.00	\$15,000
<b>98 8" PVC Sanitary; Assumed</b>	<b>500</b>	LF	\$95.00	\$47,500
<b>99 Street connection</b>	<b>1</b>	LS	\$12,500.00	\$12,500
<b>100 Storm Drainage</b>				
<b>101 Drain Manhole (4' dia.)</b>	<b>3</b>	EA	\$4,500.00	\$13,500
<b>102 Area drain, pool deck</b>	<b>10</b>	EA	\$2,500.00	\$25,000
<b>103 Connection to Existing</b>	<b>2</b>	EA	\$4,500.00	\$9,000
<b>104 6" PVC roof drain</b>	<b>100</b>	LF	\$45.00	\$4,500
<b>105 12" HDPE drain line</b>	<b>300</b>	LF	\$85.00	\$25,500
<b>106 33-Mechanical Utilities Total</b>				<b>\$184,500</b>
<b>107</b>				
<b>108</b>				
<b>109 33-ELECTICAL UTILITIES</b>				
<b>110</b>				
<b>111 Electrical Utilities</b>				
<b>112 Site electrical demo</b>	<b>1</b>	LS	\$15,000.00	\$15,000
<b>113 Power riser (1-5")</b>	<b>1</b>	EA	\$2,000.00	\$2,000
<b>114 Primary duct bank</b>	<b>200</b>	LF	\$100.00	\$20,000
<b>115 Pad mount transformer, By Utility Co, pad only</b>	<b>1</b>	EA	\$2,500.00	\$2,500
<b>116 Secondary duct bank</b>	<b>150</b>	LF	\$200.00	\$30,000
<b>117 Electrical Utilities (Pool)</b>				
<b>118 Power riser (1-5")</b>	<b>1</b>	EA	\$2,000.00	\$2,000
<b>119 Secondary duct bank</b>	<b>500</b>	LF	\$200.00	\$100,000
<b>120 Fire Alarm Duct bank and Service:</b>				
<b>121 Pole riser</b>	<b>1</b>	EA	\$1,000.00	\$1,000
<b>122 Fire alarm service conduit w/IMSA cable</b>	<b>50</b>	LF	\$25.00	\$1,250
<b>123 1" Fire alarm conduit</b>	<b>250</b>	LF	\$12.00	\$1,500
<b>124 Telecommunications:</b>				
<b>125 Communications riser</b>	<b>1</b>	EA	\$2,500.00	\$2,500
<b>126 2"C conduit to pump rooms</b>	<b>350</b>	LF	\$45.00	\$15,750
<b>127 Site Lighting</b>				
<b>128 Single head pole light fixture</b>	<b>10</b>	EA	\$4,500.00	\$45,000
<b>129 Lighting circuitry</b>	<b>1,000</b>	LF	\$15.00	\$15,000
<b>130 Pole base</b>	<b>10</b>	EA	\$350.00	\$3,500
<b>131 Electrical Utilities Total</b>				<b>\$257,000</b>
<b>132</b>				



# **Appendix**

How many occupants would the city permit in the facility at one time?	480+Staff = 500 total
Historically, what has been the maximum one time capacity at this facility (in the last 10 years)	150
What programs are intended to be offered at the pool?	If Summer Pool, Recreation Swim & Lap Swim. If 3 season/year round Pool, Recreation Swim, Lap Swim, Swim lessons, Swim Team, Water Exercise
What programs have been offered at the pool?	Recreation Swim & Lap Swim
What programs would like to be provided at this facility, but can't due to the current facility configuration?	Swim lessons, Swim Team, Water Exercise.
Do camps operate from this pool, or intend to be in the future?	Currently No, Future if possible.
What is the demographics of the neighborhood?	<a href="http://www.bostonplans.org/getattachment/86f801a8-f8a6-4d0c-83ed-b9a63684d6b5">http://www.bostonplans.org/getattachment/86f801a8-f8a6-4d0c-83ed-b9a63684d6b5</a> <a href="http://www.bostonplans.org/research/research-publications">http://www.bostonplans.org/research/research-publications</a>
What is the target age group?	Infant - Senior Citizen
Will there be competition swimming at this facility?	If the pool operates more than just summer, YES
Would there be any push back if (6) swim lanes were not provided?	As long as there are some swim lanes, I don't believe so.
Has there been any feedback from the neighborhood as to what they would like to see in the facility?	Not yet. Community feedback will likely be solicited in phase II of the study or during the design phase.
Is there any features the City would NOT want incorporated into this facility?	Diving boards and slides.
Will the city operate beyond the 12 week standard season?	Phase I should assume a 12 week season. Phase II of the study will look at a 3/4 season enclosure.
Does the pool want the pools heated?	If open more than just summer.
Does the city want a zero entry (beach entry?)	This would be ideal as it would make the pool more of a family destination like the beach. Would be great for training beach lifeguards

Do we have to follow the rectangle?	no but need to stay within the approximate parcel outline at <a href="https://www.cityofboston.gov/assessing/search/?q=0201503000">https://www.cityofboston.gov/assessing/search/?q=0201503000</a> and cannot extend any further into the historically significant lower portion of the park.
Are there any LEED qualifications required?	A new pool and pool house would need to meet LEED Silver. A new pool and pool house should also meet the COB NZC requirements if technically and financially feasible.
When is the proposed construction start date?	For cost estimating purposes assume that the construction start date for a new pool and pool house would likely be spring of 2024.
Is there a desire to have a slide at this facility?	My feeling is NO
Will there be night swimming?	If pool is open more than just summer, YES
Is the city interested in having gender neutral approach to the bathhouse or should we consider a more conventional approach of women, men, and family lockers?	Stick to traditional Male, Female, and Family  I'm not sure what the total fixture count requirement vs. sq ft requirements are for the bath house but I did want to mention that if there is room, having a unisex single stall restroom labeled "family" accessible to from a common area has been helpful in some of our other BCYF and BPL facilities as it meets both the needs of families with small children and provides a secure gender neutral restroom at the same time





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