

# **Si View Aquatics Center**

North Bend, WA

Schematic Design October 22, 2021 Cumming Project No. 21-01149



# Prepared for EHDD

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## **EXECUTIVE SUMMARY**

#### 1.1 Introduction

This estimate has been prepared, pursuant to an agreement between EHDD and Cumming, for the purpose of establishing a probable cost of construction at the schematic design stage.

The project scope encompasses pricing 2 options for the proposed aquatics center. The first option is to build 26,800 sf aquatics center on a 180,000 sf site with an add alterante to a new 20,000 sf extension. While the second option is to build 46,800 sf aquatics center on a 230,000 sf site in one phase. The site location is not yet specified so a greenfield leveled site was assumed.

### 1.2 Project Schedule (Assumed)

	Start	Finish	Duration
Aquatics Center - Phase 1	Aug-24	Aug-26	25 months
Aquatics Center - Phase 2 - Add Alternate	Aug-29	Aug-31	25 months
Aquatics Center Building Option 2	Aug-24	Aug-26	25 months

### 1.3 Key Assumptions & Exclusions

#### Key Assumptions

- Greenfield leveled site
- No sport light poles at Lap Pool
- Escalation
- Site areas as provided by architect

### Key Exclusions

- Project Soft Costs
- AV Equipment
- HAZMAT Abatement
- Soil Contamination
- Demolition of any structures
- B&O Tax

### **Documents Used:**

- Schematic Design Document, dated 07/18/2019
- Schematic Site Layouts
- Pool pricing received from Aquatics Design Group 08/07/2019

Bid Conditions: This estimate has been based upon competitive bid situations (minimum of 3 bidders) for all items of subcontracted work.

**Basis For Quantities:** Wherever possible, this estimate has been based upon the actual measurement of different items of work. For the remaining items, parametric measurements were used in conjunction with other projects of a similar nature.

**Basis for Unit Costs:** Unit costs as contained herein are based on current bid prices in Greater Seattle. Sub overheads and profit are included in each line item unit cost. Their overhead and profit covers each sub's cost for labor burden, materials, and equipment, sales taxes, field overhead, home office overhead, and profit. The general contractor's overhead is shown separately on the master summary.

**Sources for Pricing:** This estimate was prepared by a team of qualified cost consultants experienced in estimating construction costs at all stages of design. These consultants have used pricing data from Cumming's database.

SUMMAF	RY		
Element	Area	Cost / SF	Total
Option A- Build 26,800 sf - phase 1			
Aquatics Center - Phase 1	26,800	\$868.35	\$23,271,783
Site	180,000	\$39.28	\$7,069,949
Total Estimated Construction Cost - Phase 1 (Including WSST)	26,800	\$1,132.15	\$30,341,732
dd Alternate			
Aquatics Center - Phase 2	20,000	\$1,103.92	\$22,078,407
Sitework due to phase 2 - demo existing landscape and site prep			\$101,992
Total Estimated Construction Cost - Phases 1 & 2 (Including WSST)	46,800	\$1,122.27	\$52,522,131
Option B - Build 46,800 sf in one phase			
Aquatics Center - one phase	46,800	\$883.00	\$41,324,368
Site	180,000	\$39.28	\$7,069,949
Total Estimated Construction Cost (Including WSST)	46,800	\$1,034.07	\$48,394,317

						Option A						Option B	
		Aquati	cs Center - Ph	ase 1		Site		Aquatics	Center - Phas Alternate	e 2 - Add	Aquatics	Center Building	g Option 2
			26,800 SF			180,000 SF			20,000 SF			26,800 SF	
Element		Subtotal	Total	Cost/SF	Subtotal	Total	Cost/SF	Subtotal	Total	Cost/SF	Subtotal	Total	Cost/SF
A) Shell (1-5)			\$5,715,218	\$213.25					\$4,271,259	\$213.56		\$9,175,601	\$342.37
1 Foundations		\$1.154.802	, . ,	\$43.09				\$868.431	. , ,	\$43.42	\$1.954.313	,	\$72.92
2 Vertical Structure		\$930.768		\$34.73				\$553,450		\$27.67	\$1,482,907		\$55.33
3 Floor & Roof Structures		\$1,098,660		\$40.99				\$774,844		\$38.74	\$1,646,374		\$61.43
4 Exterior Cladding		\$2,126,448		\$79.35				\$1,738,611		\$86.93	\$3,352,152		\$125.08
5 Roofing and Waterproofing		\$404,541		\$15.09				\$335.922		\$16.80	\$739,855		\$27.61
B) Interiors (6-7)		ψ.ισ.ι,σ.ι.	\$1,192,293	\$44.49				4000,022	\$837,135	\$41.86	<b>ψ. 00,000</b>	\$1,955,564	\$72.97
6 Interior Partitions, Doors and Glaz	ina	\$621,232	V.,.02,200	\$23.18				\$316.152	<b>400.</b> ,.00	\$15.81	\$937.383	<b>V</b> 1,000,001	\$34.98
7 Floor, Wall and Ceiling Finishes	9	\$571,062		\$21.31				\$520,983		\$26.05	\$1,018,181		\$37.99
C) Equipment and Vertical Transportati	ion (8-9)	ψ011,002	\$2,757,294	\$102.88				Ψ020,000	\$2,104,655	\$105.23	ψ1,010,101	\$5,789,218	\$216.02
8 Function Equipment and Specialtie	` '	\$2.502.183	<b>4</b> 2,707,204	\$93.37				\$2.085.155	<b>42</b> , 104,000	\$104.26	\$5,514,607	ψ0,100, <b>2</b> 10	\$205.77
9 Stairs and Vertical Transportation		\$255,111		\$9.52				\$19,500		\$0.98	\$274,611		\$10.25
D) Mechanical and Electrical (10-13)		Ψ200,111	\$4,108,699	\$153.31		\$1,187,804	\$6.60	ψ13,300	\$3,527,238	\$176.36	Ψ214,011	\$7,537,623	\$281.25
10 Plumbing Systems		\$702,407	ψ <del>1</del> , 100,033	\$26.21		ψ1,101,00 <del>4</del>	ψ0.00	\$643.149	ψ0,021,200	\$32.16	\$1,335,226	ψ1,001,020	\$49.82
11 Heating, Ventilation and Air Condit	tioning	\$2,336,574		\$87.19				\$1,982,522		\$99.13	\$4,243,771		\$158.35
12 Electrical Lighting, Power and Con	•	\$801.818		\$29.92	\$1.187.804		\$6.60	\$694.568		\$34.73	\$1,496,626		\$55.84
13 Fire Protection Systems	minumoutions	\$267,900		\$10.00	ψ1,101,004		ψ0.00	\$207,000		\$10.35	\$462,000		\$17.24
E) Site Construction (14-16)		Ψ201,300		ψ10.00		\$2,996,576	\$16.65	Ψ201,000		ψ10.55	ψ402,000		ψ17.2 <del>4</del>
14 Site Preparation and Demolition					\$307,204	ΨZ,330,310	\$10.03						
15 Site Paving, Structures & Landsca	nina				\$2,444,022		\$13.58						
16 Utilities on Site	iping				\$245.350		\$1.36						
16 Othicles on Site					\$240,000		φ1.30						
Subtotal Cost			\$13,773,505	\$513.94		\$4,184,380	\$23.25		\$10,740,286	\$537.01		\$24,458,006	\$912.61
General Conditions	7.0%		\$964,145	\$35.98		\$292,907	\$1.63		\$751,820	\$37.59		\$1,712,060	\$63.88
General Requirements	3.0%		\$442,130	\$16.50		\$134,319	\$0.75		\$344,763	\$17.24		\$785,102	\$29.29
Bonds & Insurance	2.0%		\$303,596	\$11.33		\$92,232	\$0.51		\$236,737	\$11.84		\$539,103	\$20.12
Contractor's Fee	4.0%		\$619,335	\$23.11		\$188,153	\$1.05		\$482,944	\$24.15		\$1,099,771	\$41.04
Design Contingency	10.0%		\$1,610,271	\$60.08		\$489,199	\$2.72		\$1,255,655	\$62.78		\$2,859,404	\$106.69
Construction Contingency	3.0%		\$531,389	\$19.83		\$161,436	\$0.90		\$414,366	\$20.72		\$943,603	\$35.21
Escalation to MOC			\$2,956,223	\$110.31		\$898,098	\$4.99		\$5,886,856	\$294.34		\$5,249,449	\$195.87
WSST	8.9%		\$2,071,189	\$77.28		\$629,225	\$3.50		\$1,964,978	\$98.25		\$3,677,869	\$137.23
Total Estimated Construction Co	st		\$23,271,783	\$868.35		\$7,069,949	\$39.28		\$22,078,407	\$1,103.92		\$41,324,368	\$1,541.95

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Option A- Aquatics Center- Phase 1

Element	Subtotal	Total	Cost / SF	Cost / SF
A) Shell (1-5)		\$5,715,218		\$213.25
1 Foundations	\$1,154,802		\$43.09	
2 Vertical Structure	\$930,768		\$34.73	
3 Floor & Roof Structures	\$1,098,660		\$40.99	
4 Exterior Cladding	\$2,126,448		\$79.35	
5 Roofing and Waterproofing	\$404,541		\$15.09	
B) Interiors (6-7)		\$1,192,293		\$44.49
6 Interior Partitions, Doors and Glazing	\$621,232		\$23.18	
7 Floor, Wall and Ceiling Finishes	\$571,062		\$21.31	
C) Equipment and Vertical Transportation (8-9)		\$2,757,294		\$102.88
8 Function Equipment and Specialties	\$2,502,183		\$93.37	
9 Stairs and Vertical Transportation	\$255,111		\$9.52	
D) Mechanical and Electrical (10-13)		\$4,108,699		\$153.31
10 Plumbing Systems	\$702,407		\$26.21	
11 Heating, Ventilation and Air Conditioning	\$2,336,574		\$87.19	
12 Electrical Lighting, Power and Communications	\$801,818		\$29.92	
13 Fire Protection Systems	\$267,900		\$10.00	
Subtotal		\$13,773,505	_	\$513.94
General Conditions	7.00%			\$35.98
Subtotal		\$14,737,650	_	\$549.91
General Requirements	3.00%			\$16.50
Subtotal		\$15,179,780	_	\$566.41
Bonds & Insurance	2.00%	\$303,596		\$11.33
Subtotal		\$15,483,376	_	\$577.74
Contractor's Fee	4.00%	\$619,335		\$23.11
Subtotal		\$16,102,711	_	\$600.85
Design Contingency	10.00%	\$1,610,271		\$60.08
Subtotal		\$17,712,982	_	\$660.93
Construction Contingency	3.00%	\$531,389		\$19.83
Subtotal		\$18,244,371	<del></del>	\$680.76
Escalation to MOC, 08/01/25	16.20%	\$2,956,223		\$110.31
Subtotal		\$21,200,594	_	\$791.07
WSST	8.90%	\$2,071,189		\$77.28
TOTAL ESTIMATED CONSTRUCTION COST		\$23,271,783		\$868.35

Total Area: 26,800 SF

DETAIL ELEMENTS - AQUATICS CEN	TER - PHA	SE 1		
Element	Quantity	Unit	Unit Cost	Total
1 Foundations				
Earthwork				
Field staking/layout	26,800	gsf	\$0.15	\$4,020
Clear and grub site	26,800	gsf	\$0.12	\$3,323
Mass excavation	4,026	су	\$11.65	\$46,902
Backfill	2,053	су	\$18.59	\$38,158
Haul excess, 10 mile round trip	1,973	су	\$20.11	\$39,684
Fine grading	26,800	gsf	\$0.38	\$10,184
Erosion control	26,800	gsf	\$0.06	\$1,608
Basement Excavation				
Mass excavation, basement	1,061	су	\$11.65	\$12,359
Backfill, basement	341	су	\$18.59	\$6,345
Export, assume 10 mile round trip	932	су	\$20.11	\$18,737
Temporary shoring, assume needed	1,920	sf	\$39.26	\$75,379
Pools Earthwork				
Mass Excavation				
Swimming pool	729	су	\$11.65	\$8,495
Surge tank	288	су	\$11.65	\$3,355
Backfill				
Swimming pool			Assume I	Not Required
Surge tank	237	су	\$18.59	\$4,408
Haul Excess		•		
Swimming pool	875	су	\$20.11	\$17,597
Surge tank	62	сy	\$20.11	\$1,250
Miscellaneous hauling, allowance	500	су	\$20.11	\$10,055
Foundations		,		
Continuous Footings assumed 3' wide x 3' deep, at perimeter and basement walls	S			
Concrete, continuous footings, 4000 psi	447	су	\$257.50	\$115,103
Formwork, continuous footings	7,320	sf	\$8.00	\$58,560
Foundation reinforcing, assume 150 #/cy	67,100	lbs	\$1.81	\$121,451
Excavation	904	су	\$23.50	\$21,244
Backfill	500	су	\$20.38	\$10,190
Haul excess	410	Cy	\$20.11	\$8,245
Spread Footings		o,	Ψ20.11	Ψ0,210
Spread Footings allowance, excluding pool areas	22,200	gsf	\$5.60	\$124,320
Slab On Grade, excluding pool areas	22,200	90.	ψ0.00	Ψ121,020
Concrete, slab on grade, 4000 psi	456	су	\$250.00	\$114,000
Formwork, slab on grade	1,040		\$8.40	\$8,736
Sand base, 4"	22,200		\$2.14	\$47,508
Gravel sub base, 6"	22,200		\$1.88	\$41,736
Slab on grade reinforcing, assumed 2.5 #/sf	61,600		\$1.72	\$105,952
Finish to slab	22,200		\$0.87	\$19,314
Vapor barrier	22,200		\$0.46	\$10,212
Concrete, slab on grade, add for thickened edges	22,200 64	Cy	\$241.74	\$15,471
Loading dock ramp and walls	1,030	sf	\$30.00	\$30,900
Loading dook ramp and waits	1,030	31	ψ50.00	ψυυ, υυυ
Total Foundations				¢4.454.000
Total - Foundations				\$1,154,802

DETAIL ELEMENTS - AQUATICS CE	NTER - PHA	SE 1		
Element	Quantity	Unit	Unit Cost	Total
2 Vertical Structure				
Concrete				
Basement Walls				
Concrete, basement walls 5000 psi	114	су	\$275.00	\$31,350
Formwork, basement walls	5,600	sf	\$17.10	\$95,760
Basement wall reinforcing, assumed 250 #/cy	28,519	lbs	\$1.81	\$51,619
Waterproofing	2,800	sf	\$7.34	\$20,552
Finish to walls	2,800	sf	\$1.16	\$3,248
Stem Walls, assume 30" wide x 24" high				
Concrete, walls 5000 psi	51	су	\$275.00	\$14,025
Formwork, walls	1,000	sf	\$17.10	\$17,100
Wall reinforcing, assume 200 #/cy	10,185	lbs	\$1.81	\$18,435
Finish to walls	500	sf	\$1.16	\$580
Allow for bench finish, wood assumed	250	lf	\$150.00	\$37,500
Cast-In-Place Concrete Shear Walls, elevator walls, assume 30' high			,	, , , , , , , , , , , , , , , , , , , ,
Concrete, shear walls, 5000 psi	26	су	\$275.00	\$7,150
Formwork, shear walls	1,260	sf	\$17.10	\$21,546
Wall reinforcing, assume 250 #/cy	6,420	lbs	\$1.81	\$11,620
Finish to walls	630	sf	\$1.16	\$731
Structural Steel	000	O.	Ψι.ιο	Ψίσι
Vertical steel framing, allowance	26,800	gsf	\$17.00	\$455,600
Metals	20,000	ysi	ψ17.00	ψ433,000
	10	la a	¢40,000,00	¢400,000
Miscellaneous bracing	10	loc	\$10,000.00	\$100,000
Miscellaneous metals	26,800	gsf	\$1.64	\$43,952
Total - Vertical Structure				\$930,768
3 Floor & Roof Structures				
Concrete				
Cast-In-Place Concrete Slabs, Mezzanine, assume 8" thick				
Concrete, elevated floor slabs, 5000 psi	60	су	\$278.00	\$16,680
Formwork to soffit, elevated floor slabs	2,220	sf	\$10.20	\$22,644
Formwork slab edge, elevated floor slabs	260	sf	\$9.65	\$2,509
Elevated slab reinforcing, assume 5.5 #/sf	13,430	lbs	\$1.81	\$24,308
Finish to elevated floor slabs	2,220	sf	\$0.87	\$1,931
Cast-In-Place Concrete Slabs, Mechanical Room Roof, assume 8" thick	, -		***	, , ,
Concrete, elevated floor slabs, 5000 psi	63	су	\$278.00	\$17,514
Formwork to soffit, elevated floor slabs	2,310	sf	\$10.20	\$23,562
Formwork slab edge, elevated floor slabs	200	sf	\$9.65	\$1,930
Elevated slab reinforcing, assume 5.5 #/sf	13,976	lbs	\$1.81	\$25,297
Finish to elevated floor slabs	2,310	sf	\$0.87	\$2,010
Miscellaneous Concrete	2,010	O.	ψ0.01	Ψ2,010
Concrete, elevator pit	1	ea	\$12,994.00	\$12,994
Rough Carpentry- Roof Framing	,	ou	Ψ12,334.00	Ψ12,334
30" x 8 3/4" glu-lam	1,020	lf	\$90.00	\$91,800
70" x 8 3/4" glu-lam	220	lf	\$210.00	\$46,200
Tie rod with 18" steel circular turnbuckle	1,020	lf	\$27.00	\$27,540
Horizontal wood framing, truss allowance	26,800	gsf	\$27.00 \$11.50	\$308,200
<del>-</del>		-		
8" DLT roof panels	23,487	sf	\$20.00	\$469,740

DETAIL ELEMENTS - AQUATICS CENTER - PHASE 1						
lement	Quantity	Unit	Unit Cost	Total		
Metals						
Light support, assume 10 #/lf	2,100	lb	\$1.81	\$3,80		
Total - Floor & Roof Structures				\$1,098,66		
Exterior Cladding						
Aquatics Center Building Envelope	40.000	,	#0.70	<b>0.40.50</b>		
Exterior walls, densglass sheathing	13,062	sf	\$3.72	\$48,59		
Rigid insulation, exterior walls	13,062 8,571	sf	\$1.79 \$105.00	\$23,38		
Metal Panel Rainscreen System	6,571 4,491	sf sf	\$87.00	\$899,95 \$390,71		
Random Rough Cedar Siding Rainscreen System Aluminum windows/storefront, vision glazing, generic	4,491	si sf	\$105.96	\$390,7 \$461,98		
Storefront with Rainscreen System	959	sf	\$105.90 \$190.00	\$401,90 \$182,21		
·	1		\$5,556.46	\$5,55		
Aluminum door sets, frames and hardware, glazed, single, tempered glass	·	ea	. ,	. ,		
Aluminum door sets, frames and hardware, glazed, double	2	pr	\$11,030.17	\$22,06		
Storefornt Entry Doors	1	pr	\$21,050.00	\$21,05		
Coiling door at loading dock, 10' wide x 20' high assumed Louver allowance	1	ea Is	\$20,942.00 \$50,000.00	\$20,9 <sup>4</sup> \$50,00		
Total - Exterior Cladding				\$2,126,44		
Roofing and Waterproofing						
Roofing	23,487	of	\$6.00	\$140,92		
Single ply membrane roofing Rigid roof insulation, poly iso insulation	23,467	sf sf	\$5.76	\$140,92 \$135,28		
Flashing / Counterflashing	23,407	31	ψ3.70	ψ100,20		
Aluminum coping at parapets	524	lf	\$33.50	\$17,55		
Base flashings at base of parapets	524	if	\$36.96	\$19,36		
Roof Accessories	021	••	φσσ.σσ	ψ.ο,ο.		
Aluminum gutters	218	lf	\$26.55	\$5,78		
Aluminum downspouts	75	lf	\$26.55	\$1,99		
Miscellaneous accessories	26,800	gsf	\$2.10	\$56,28		
Miscellaneous						
Crickets	1,078	sf	\$6.48	\$6,98		
Caulking allowance	26,800	gfa	\$0.36	\$9,64		
Miscellaneous						
Caulking & sealant allowance	26,800	gsf	\$0.40	\$10,72		
Total - Roofing and Waterproofing				\$404,54		
Interior Partitions, Doors and Glazing						
Partition Walls						
Suspended wall at Reception						
Metal studs, 3 5/8", 20 Ga., at 16" o.c.	48	sf	\$11.08	\$53		
Bolt top stud channel to structure above incl. double top track	24	lf	\$25.62	\$61		
Gypsum board, 5/8" thick, finished (I4), type X	96	sf	\$3.58	\$34		

DETAIL FLEMENTS.	AQUATICS CENTER	DHASE 1
DETAIL ELEMENTS:	' AQUATICO CENTEN'	·FUASE I

Element		Quantity	Unit	Unit Cost	Total
	Partition wall 11' 6" high				
	Metal studs, 3 5/8", 20 Ga., at 16" o.c.	164	sf	\$11.08	\$1,817
	Bolt top stud channel to structure above incl. double top track	14	lf	\$25.62	\$359
	Bolt bottom stud channel to concrete floor	14	if	\$13.23	\$185
	Gypsum board, 5/8" thick, finished (I4), type X	328	sf	\$3.58	\$1,174
	Sound batt insulation, unbacked	164	sf	\$1.32	\$216
	Partition wall 9' 6" high		O.	ψ1.02	Ψ2.0
	Metal studs, 3 5/8", 20 Ga., at 16" o.c.	3,431	sf	\$11.08	\$38,015
	Bolt top stud channel to structure above incl. double top track	361	lf	\$25.62	\$9,249
	Bolt bottom stud channel to concrete floor	361	if	\$13.23	\$4,774
	Gypsum board, 5/8" thick, finished (I4), type X	6,862	sf	\$3.58	\$24,566
	Sound batt insulation, unbacked	3,431	sf	\$1.32	\$4,529
	Partition wall - wet - 9' 6" high	0,401	31	Ψ1.02	Ψ+,023
	Metal studs, 3 5/8", 20 Ga., at 16" o.c.	2,518	sf	\$11.08	\$27,899
	Bolt top stud channel to structure above incl. double top track	265	If	\$25.62	\$6,789
	Bolt bottom stud channel to concrete floor	265	if	\$13.23	\$3,505
	Gypsum board, 5/8" thick, finished (I4), type X	2,386	sf	\$3.58	\$8,542
	Sound batt insulation, unbacked	2,518	sf	\$1.32	\$3,324
	Vapor barrier	2,915	sf	\$2.14	\$6,238
	Backer board	2,650	sf	\$3.40	\$9,010
	Ceramic tile, walls	2,650 2,650	sf	\$19.00	\$50,350
		2,000	51	<b>ф 19.00</b>	φ30,330
	Partition wall - wet - one-sided 9' 6" high	E1E	o.f	¢11 00	<b>¢</b> ፍ ሰንበ
	Metal studs, 3 5/8", 20 Ga., at 16" o.c.	545	sf	\$11.08	\$6,039 \$1,460
	Bolt top stud channel to structure above incl. double top track	57	lf If	\$25.62 \$13.23	\$1,460
	Bolt bottom stud channel to concrete floor	57	lf -f		\$754
	Gypsum board, 5/8" thick, finished (I4), type X	805	sf	\$3.58	\$2,882
	Sound batt insulation, unbacked	545	sf	\$1.32	\$719
	Vapor barrier	314	sf	\$2.14	\$672
	Backer board	285	sf	\$3.40	\$969
	Ceramic tile, walls	285	sf	\$19.00	\$5,415
	Partition wall - wet - plumbing chase 9' 6" high	740	,	<b>644.00</b>	<b>#0.000</b>
	Metal studs, 3 5/8", 20 Ga., at 16" o.c.	748	sf	\$11.08	\$8,288
	Bolt top stud channel to structure above incl. double top track	79	lf ''	\$25.62	\$2,024
	Bolt bottom stud channel to concrete floor	79	lf .	\$13.23	\$1,045
	Gypsum board, 5/8" thick, finished (I4), type X	353	sf	\$3.58	\$1,264
	Gypsum board, 5/8" thick, unfinished	1,101	sf	\$2.59	\$2,852
	Sound batt insulation, unbacked	748	sf	\$1.32	\$987
	Vapor barrier	435	sf	\$2.14	\$931
	Backer board	395	sf	\$3.40	\$1,343
	Ceramic tile, walls	395	sf	\$19.00	\$7,505
	Shaft wall				
	Metal studs, 6" CH, 16 Ga., at 16" o.c.	1,476	sf	\$12.00	\$17,712
	Bolt top stud channel to structure above incl. double top track	135	lf	\$25.62	\$3,459
	Bolt bottom stud channel to concrete floor	135	lf	\$13.23	\$1,786
	Gypsum board, 1" thick coreboard at shaft walls	1,476	sf	\$5.37	\$7,926
	Gypsum board, 5/8" thick, finished (I4), type X	1,476	sf	\$3.58	\$5,284
	Sound batt insulation, unbacked	1,476	sf	\$1.32	\$1,948
	Interior of exterior walls				
	Interior of exterior, 5/8" thick gypsum board X, finished	3,976	sf	\$3.58	\$14,234
	Furring, on walls, 3/4" channel, 16" o.c.	1,594	sf	\$11.08	\$17,662

Interior Glazing	DETAIL ELEMENTS - AQUATICS CENT	TER - PHA	SE 1		
Interior glazing	Element	Quantity	Unit	Unit Cost	Total
Interior storefront - 9 16 high   1,062 sf   \$88.74   \$94,242   Interior storefront - 11 6 high   1,033 sf   \$88.74   \$91,688   Interior Openings   Doors	Interior Glazing				
Interior Sprefront - 11° 6" high Interior Openings Doors  Aluminum door sets, frames and hardware, glazed, double  Aluminum door sets, frames and hardware, glazed, single, tempered glat Aluminum door sets, frames and hardware, glazed, single, tempered glat SC wood door incl. AL frame and hardware, gingle, 6" 0" x" 7" 5 pr \$4.078.00 \$20,380.892 SC wood door incl. AL frame and hardware, double, 6" 0" x" 7" 5 pr \$4.078.00 \$4.078 SC wood door incl. AL frame and hardware, double, 6" 0" x" 7" 1 pr \$4.078.00 \$4.078 Hardware premium  Total - Interior Partitions, Doors and Glazing  7 Floor, Wall and Ceiling Finishes Flooring & Base Sealed concrete Sealed concrete Sealed concrete Sealed concrete 1,267 sf \$1.85 \$6.427 Floor prepleveling 6,645 sf \$1.00 \$8.645 Carpet tile 1,267 sf \$4.95 \$6.272 Walk-off mat 9.92 sf \$336.58 \$3.355 Ceramic tile, base Ceiling Acoustical ceiling tile, suspended, includes suspension system 3,762 sf \$18.44 \$136.050 Resilient base 15,181 if \$5.23 \$7.939 Caramic tile, base Ceiling Acoustical ceiling, incl. framing 5,826 sf \$11.41 \$66.475 Wood Stat Ceiling, allowance 2,900 sf \$4.876 \$141.44 Wall finishes, misc. Allowance 16,282 sf \$1.00 \$15.282 Paint ceilings allowance Painting and Coating Part walls 16,282 sf \$1.00 \$15.282 Frant ceilings Concrete pool epoxy deck paint 5,826 Standard, stainless steel 3 3 ea \$1,909.43 \$63.011 Handicap, stainless steel 4 ea \$2.06.64 \$8.227 Tollet / Restroom Specialites Interior Specialites Interior Specialites Bathroom mirrors 13 sf \$3.92.93 \$3.93.55 Card hook 7 ea \$3.93.95 \$3.120 Janlor mop sink rack 1 ea \$13.61.2 \$1.55 Landard, stainless steel 6 ea \$2.03.26 \$1.220 Janlor mop sink rack 7 ea \$3.93.95 \$3.120	Interior glazing				
Interior Openings   Doors   Aluminum door sets, frames and hardware, glazed, double   3 pr   \$10,641.00   \$31,923   Aluminum door sets, frames and hardware, glazed, single, tempered glat   7 ea   \$5,556.00   \$38,892   \$50.000   \$50.010. Al frame and hardware, glouble, 8'0" x 7'0"   7 ea   \$5,256.00   \$20,393   \$30.000   \$20,393   \$30.000   \$20,393   \$30.000   \$20,393   \$30.0000   \$30.000   \$30.000   \$30.0000   \$30.0000   \$30.0000   \$30.0000	Interior storefront - 9' 6" high	1,062	sf	\$88.74	\$94,242
Doors	Interior storefront - 11' 6" high	1,033	sf	\$88.74	\$91,668
Aluminum door sets, frames and hardware, glazed, double Aluminum door sets, frames and hardware, glazed, single, tempered gla: SC wood door incl. Al. frame and hardware, single, 3°0" x 7°0" SC wood door incl. Al. frame and hardware, double, 6°0" x 7°0" SC wood door incl. Al. frame and hardware, double, 6°0" x 7°0" SC wood door incl. Al. frame and hardware, double, 6°0" x 7°0" SC wood door incl. Al. frame and hardware, double, 5°0" x 7°0" Hardware premium SC wood door incl. Al. frame and hardware, double, 5°0" x 7°0" SC wood door incl. Al. frame and hardware, double, 5°0" x 7°0" Hardware premium SC wood door incl. Al. frame and hardware, double, 5°0" x 7°0" SC wood door incl. Al. frame and hardware, double, 5°0" x 7°0" SC wood door incl. Al. frame and hardware, double, 5°0" x 7°0" SC wood wood wood wood wood wood with the wood wood wood wood wood wood wood woo	Interior Openings				
Aluminum door sets, frames and hardware, glazed, single, tempered glat	Doors				
SC wood door incl. AL frame and hardware, single, 3'0" x 7'0" 7 ea \$2,121.00 \$14.847 SC wood door incl. AL frame and hardware, double, 6'0" x 7'0" 5 pr \$4,078.00 \$20,390 SC wood door incl. AL frame and hardware, double, 5'0" x 7'0" 1 pr \$4,078.00 \$4,078 BC wood door incl. AL frame and hardware, double, 5'0" x 7'0" 1 pr \$4,078.00 \$4,078 BC wood door incl. AL frame and hardware, double, 5'0" x 7'0" 1 pr \$4,078.00 \$4,078 BC wood door incl. AL frame and hardware, double, 5'0" x 7'0" 1 pr \$4,078.00 \$4,078 BC wood with the state of the			pr	. ,	
SC wood door incl. AL frame and hardware, double, 6' 0" x 7' 0"   1 pr		n: 7	ea		
SC wood door incl. AL frame and hardware, double, 5' 0" x 7' 0"   1 pr   \$4,078.00   \$4,078   \$32   leaves   \$250.00   \$8,000		•	ea		
Hardware premium   32 leaves   \$250.00   \$8,000     Total - Interior Partitions, Doors and Glazing   \$621,232     Teloor, Wall and Ceiling Finishes   Flooring & Base   Sealed concrete   3,474   sf   \$1.85   \$6,427     Floor prep/leveling   8,645   sf   \$1.00   \$8,645     Carpet tile   1,267   sf   \$4.95   \$6,212     Walk-off mat   92   sf   \$36,58   \$3,305     Ceramic tile   7,378   sf   \$18,44   \$136,050     Resilient base   1,518   ff   \$52,23   \$7,939     Ceramic tile, base   666   ff   \$18,45   \$12,288     Ceiling   Acoustical ceiling tile, suspended, includes suspension system   3,762   sf   \$5.10   \$19,186     Gypsum board ceilings, incl. framing   5,826   sf   \$11.41   \$66,475     Wood Slat Ceiling, allowance   2,900   sf   \$48,76   \$141,404     Wall finishes, misc.   Allowance   16,282   sf   \$2.80   \$45,590     Paint walls   16,282   sf   \$1.00   \$16,282     Paint veilings   5,826   sf   \$1.50   \$3,739     Concrete pool epoxy deck paint   6,160   sf   \$15.00   \$32,400      Total - Floor, Wall and Ceiling Finishes   \$571,062      Function Equipment and Specialties   Interior Specialties   \$1.00   \$16,282     Interior Specialties   \$1.00   \$1.00     Total - Floor, Wall and Ceiling Finishes   \$30,20   \$3.011     Handicap, stainless steel   4   ea   \$2,056,64   \$8,227     Toilet / Restroom Specialties   4   ea   \$2,056,64   \$8,227     Toilet / Restroom Specialties   3   sf   \$39,29   \$3511     Coat hook   7   ea   \$30,35   \$21,20     Janitor mop sink rack   6   ea   \$203,26   \$1,220     Janitor mop sink rack   7   ea   \$30,521   \$3,550     Paper towel dispenser combo unit, recessed   7   ea   \$30,521   \$3,550     Coat hook   7   ea   \$30,521   \$3,550     Paper towel dispenser combo unit, recessed   7   ea   \$30,521   \$3,550     Standard, stainless steel   \$3,120   \$3,130     Paper towel dispenser combo unit, recessed   7   ea   \$30,521   \$3,550     Wall finishes   \$3,000     Total - Floor, wall and Ceiling Finishes   \$3,000     Total - Floor, Wall and Ceiling Finishes   \$3,000     Total - Floor, Wall and		5	'		
Total - Interior Partitions, Doors and Glazing   \$621,232		1	•		
7 Floor, Wall and Ceiling Finishes Flooring & Base Sealed concrete 3,474 sf \$1.85 \$6,427 Floor prep/leveling 8,645 sf \$1.00 \$8,645 Carpet tile 1,267 sf \$4.95 \$6,227 Walk-off mat 9.2 sf \$36,588 \$3,365 Ceramic tile 7,378 sf \$18,44 \$136,050 Resilient base 1,518 lf \$5.23 \$7,939 Ceramic tile, base 666 lf \$18,45 \$12,288 Ceiling Acoustical ceiling tile, suspended, includes suspension system 3,762 sf \$5.10 \$19,186 Gypsum board ceilings, incl. framing 5,826 sf \$11.41 \$66,475 Wood Slat Ceiling, allowance 2,900 sf \$48.76 \$141,404 Wall finishes, misc. Allowance 16,282 sf \$2.80 \$45,590 Painting and Coating Paint walls 16,282 sf \$1.00 \$16,282 Paint ceilings 5,826 sf \$1.50 \$8,739 Concrete pool epoxy deck paint 6,160 sf \$15.00 \$92,400  Total - Floor, Wall and Ceiling Finishes  Function Equipment and Specialties Interior Specialties Interior Specialties  Totlet Cubicles Standard, stainless steel 33 ea \$1,909.43 \$63,011 Handicap, stainless steel 4 ea \$2,056,64 \$8,227 Totlet / Restroom Specialties  Bathroom mirrors 13 sf \$39.29 \$511 Coat hook 7 ea \$30.35 \$212 Grab bars 6 ea \$203,26 \$1,220 Janitor mop sink rack 1 ea \$136,12 \$136	Hardware premium	32	leaves	\$250.00	\$8,000
Flooring & Base   Sealed concrete   3,474   sf   \$1.85   \$6,427     Floor prepleveling   8,645   sf   \$1.00   \$8,645     Carpet tile   1,267   sf   \$4.95   \$6,272     Walk-off mat   92   sf   \$36,58   \$3,305     Carginic tile   7,378   sf   \$18.44   \$136,050     Resilient base   1,518   ff   \$5,23   \$7,939     Ceramic tile, base   666   ff   \$18.45   \$12,288     Ceiling   Acoustical ceiling tile, suspended, includes suspension system   3,762   sf   \$5,10   \$19,186     Gypsum board ceilings, incl. framing   5,826   sf   \$11.41   \$66,475     Wood Slat Ceiling, allowance   2,900   sf   \$48.76   \$141,404     Wall finishes, misc.               Wall finishes, misc.               Paintt walls   16,282   sf   \$1.00   \$16,282     Paint ceilings   5,826   sf   \$1.50   \$87,399     Concrete pool epoxy deck paint   \$1,6282   sf   \$1.50   \$87,399     Concrete pool epoxy deck paint   \$1,6282   sf   \$1.50   \$92,400      Total - Floor, Wall and Ceiling Finishes   \$571,062      Function Equipment and Specialties	Total - Interior Partitions, Doors and Glazing				\$621,232
Flooring & Base   Sealed concrete   3,474   sf   \$1.85   \$6,427     Floor prepleveling   8,645   sf   \$1.00   \$8,645     Carpet tile   1,267   sf   \$4.95   \$6,272     Walk-off mat   92   sf   \$36,58   \$3,305     Carginic tile   7,378   sf   \$18.44   \$136,050     Resilient base   1,518   ff   \$5,23   \$7,939     Ceramic tile, base   666   ff   \$18.45   \$12,288     Ceiling   Acoustical ceiling tile, suspended, includes suspension system   3,762   sf   \$5,10   \$19,186     Gypsum board ceilings, incl. framing   5,826   sf   \$11.41   \$66,475     Wood Slat Ceiling, allowance   2,900   sf   \$48.76   \$141,404     Wall finishes, misc.               Wall finishes, misc.               Paintt walls   16,282   sf   \$1.00   \$16,282     Paint ceilings   5,826   sf   \$1.50   \$87,399     Concrete pool epoxy deck paint   \$1,6282   sf   \$1.50   \$87,399     Concrete pool epoxy deck paint   \$1,6282   sf   \$1.50   \$92,400      Total - Floor, Wall and Ceiling Finishes   \$571,062      Function Equipment and Specialties	7 Floor. Wall and Ceiling Finishes				
Floor prep/leveling					
Carpet tile	· · · · · · · · · · · · · · · · · · ·	3,474	sf	\$1.85	\$6,427
Walk-off mat         92 sf         \$36.58         \$3,365           Ceramic tile         7,378 sf         \$18.44         \$136.050           Resilient base         1,518 lf         \$5.23         \$7,939           Ceramic tile, base         666 lf         \$18.45         \$12,288           Ceiling         Acoustical ceiling tile, suspended, includes suspension system         3,762 sf         \$5.10         \$19,186           Gypsum board ceilings, incl. framing         5,826 sf         \$11.41         \$66,475         Wood Slat Ceiling, allowance         2,900 sf         \$48.76         \$141,404           Wall finishes, misc.         Allowance         16,282 sf         \$2.80         \$45,590           Painting and Coating         16,282 sf         \$1.00         \$16,282           Paint walls         16,282 sf         \$1.00         \$16,282           Paint ceilings         5,826 sf         \$1.50         \$8,739           Concrete pool epoxy deck paint         6,160 sf         \$15.00         \$92,400           Total - Floor, Wall and Ceiling Finishes         \$571.062           Standard, stainless steel         33 ea         \$1,909.43         \$63.011           Handicap, stainless steel         33 ea         \$1,909.43         \$63.011 <td>Floor prep/leveling</td> <td>8,645</td> <td>sf</td> <td>\$1.00</td> <td>\$8,645</td>	Floor prep/leveling	8,645	sf	\$1.00	\$8,645
Ceramic tile	Carpet tile	1,267	sf	\$4.95	\$6,272
Resilient base	Walk-off mat	92	sf	\$36.58	\$3,365
Ceramic tile, base   666   If   \$18.45   \$12,288   Ceiling	Ceramic tile	7,378	sf	\$18.44	\$136,050
Ceiling	Resilient base		lf	\$5.23	\$7,939
Acoustical ceiling tile, suspended, includes suspension system Gypsum board ceilings, incl. framing Gypsum board ceilings, incl. framing S,826 sf \$11.41 \$66,475 Wood Slat Ceiling, allowance 2,900 sf \$48.76 \$141,404 Wall finishes, misc. Allowance 16,282 sf \$2.80 \$45,590 Painting and Coating Paint walls 16,282 sf \$1.00 \$16,282 Paint ceilings 5,826 sf \$1.50 \$8,739 Concrete pool epoxy deck paint 6,160 sf \$15.00 \$92,400  Total - Floor, Wall and Ceiling Finishes  Function Equipment and Specialties Interior Specialties Standard, stainless steel 33 ea \$1,909.43 \$63,011 Handicap, stainless steel 4 ea \$2,056.64 \$8,227 Toilet / Restroom Specialties Bathroom mirrors 13 sf \$39.29 \$511 Coat hook 7 ea \$30.35 \$212 Grab bars 6 ea \$203.26 \$1,220 Janitor mop sink rack 1 ea \$136.12 \$136 Paper towel dispenser combo unit, recessed 7 ea \$365.21 \$2,556		666	lf	\$18.45	\$12,288
Gypsum board ceilings, incl. framing   5,826 sf   \$11.41 \$66,475   Wood Slat Ceiling, allowance   2,900 sf   \$48.76 \$141,404   Wall finishes, misc.	· · · · · · · · · · · · · · · · · · ·				
Wood Slat Ceiling, allowance         2,900 sf         \$48.76         \$141,404           Wall finishes, misc.         16,282 sf         \$2.80         \$45,590           Painting and Coating         16,282 sf         \$1.00         \$16,282           Paint ceilings         5,826 sf         \$1.50         \$8,739           Concrete pool epoxy deck paint         6,160 sf         \$15.00         \$92,400           Total - Floor, Wall and Ceiling Finishes         \$571,062           8 Function Equipment and Specialties           Interior Specialties         \$571,062           Standard, stainless steel         33 ea         \$1,909.43         \$63,011           Handicap, stainless steel         4 ea         \$2,056.64         \$8,227           Toilet / Restroom Specialties         3         8         \$1,909.43         \$63,011           Handicap, stainless steel         4 ea         \$2,056.64         \$8,227           Toilet / Restroom Specialties         3         8         \$1,909.43         \$63,011           Coat hook         7         ea         \$30.35         \$212           Grab bars         6         ea         \$203.26         \$1,220           Janitor mop sink rack         1         ea				· ·	
Wall finishes, misc.         Allowance       16,282 sf       \$2.80       \$45,590         Painting and Coating       Paint walls       16,282 sf       \$1.00       \$16,282         Paint ceilings       5,826 sf       \$1.50       \$8,732         Concrete pool epoxy deck paint       6,160 sf       \$15.00       \$92,400         Total - Floor, Wall and Ceiling Finishes         \$571,062         8 Function Equipment and Specialties         Interior Specialties       \$571,062         Standard, stainless steel       33 ea       \$1,909.43       \$63,011         Handicap, stainless steel       4 ea       \$2,056.64       \$8,227         Toilet / Restroom Specialties       Bathroom mirrors       13 sf       \$39.29       \$511         Coat hook       7 ea       \$30.35       \$212         Grab bars       6 ea       \$203.26       \$1,220         Janitor mop sink rack       1 ea       \$136.12       \$136         Paper towel dispenser combo unit, recessed       7 ea       \$365.21       \$2,556	•••			·	
Allowance 16,282 sf \$2.80 \$45,590 Painting and Coating Paint walls 16,282 sf \$1.00 \$16,282 Paint ceilings 5,826 sf \$1.50 \$8,739 Concrete pool epoxy deck paint 6,160 sf \$15.00 \$92,400 \$15.00 \$15.00 \$92,400 \$15.00 \$15.00 \$92,400 \$15.00 \$15.00 \$92,400 \$15.0		2,900	sf	\$48.76	\$141,404
Painting and Coating         Paint walls       16,282 sf       \$1.00       \$16,282         Paint ceilings       5,826 sf       \$1.50       \$8,739         Concrete pool epoxy deck paint       6,160 sf       \$15.00       \$92,400         Total - Floor, Wall and Ceiling Finishes         \$571,062         8 Function Equipment and Specialties         Interior Specialties         Toilet Cubicles       33 ea       \$1,909.43       \$63,011         Handicap, stainless steel       33 ea       \$1,909.43       \$63,011         Handicap, stainless steel       4 ea       \$2,056.64       \$8,227         Toilet / Restroom Specialties       33 ea       \$1,909.43       \$63,011         Bathroom mirrors       13 sf       \$39.29       \$511         Coat hook       7 ea       \$30.35       \$212         Grab bars       6 ea       \$203.26       \$1,220         Janitor mop sink rack       1 ea       \$136.12       \$136         Paper towel dispenser combo unit, recessed       7 ea       \$365.21       \$2,556	·	40.000		Φ0.00	<b>0.45</b> 500
Paint walls   16,282 sf   \$1.00   \$16,282   Paint ceilings   5,826 sf   \$1.50   \$8,739   Paint ceilings   5,826 sf   \$1.50   \$8,739   Paint ceiling Finishes   \$571,062   \$571		16,282	SŤ	\$2.80	\$45,590
Paint ceilings       5,826       sf       \$1.50       \$8,739         Concrete pool epoxy deck paint       6,160       sf       \$15.00       \$92,400         Total - Floor, Wall and Ceiling Finishes         \$571,062         8 Function Equipment and Specialties         Interior Specialties         Toilet Cubicles         Standard, stainless steel       33       ea       \$1,909.43       \$63,011         Handicap, stainless steel       4       ea       \$2,056.64       \$8,227         Toilet / Restroom Specialties         Bathroom mirrors       13       sf       \$39.29       \$511         Coat hook       7       ea       \$30.35       \$212         Grab bars       6       ea       \$203.26       \$1,220         Janitor mop sink rack       1       ea       \$136.12       \$136         Paper towel dispenser combo unit, recessed       7       ea       \$365.21       \$2,556	· · · · · · · · · · · · · · · · · · ·	40,000	- <b>c</b>	¢4.00	<b>#40 000</b>
Total - Floor, Wall and Ceiling Finishes   \$571,062					
Total - Floor, Wall and Ceiling Finishes				· ·	
8 Function Equipment and Specialties         Interior Specialties       Toilet Cubicles         Standard, stainless steel       33 ea \$1,909.43 \$63,011         Handicap, stainless steel       4 ea \$2,056.64 \$8,227         Toilet / Restroom Specialties         Bathroom mirrors       13 sf \$39.29 \$511         Coat hook       7 ea \$30.35 \$212         Grab bars       6 ea \$203.26 \$1,220         Janitor mop sink rack       1 ea \$136.12 \$136         Paper towel dispenser combo unit, recessed       7 ea \$365.21 \$2,556	Сопстете роог ероху ческ раги	0,100	SI	\$15.00	<b>φ92,400</b>
Interior Specialties	Total - Floor, Wall and Ceiling Finishes				\$571,062
Interior Specialties	8 Function Equipment and Specialties				
Toilet Cubicles         Standard, stainless steel       33 ea       \$1,909.43       \$63,011         Handicap, stainless steel       4 ea       \$2,056.64       \$8,227         Toilet / Restroom Specialties       8       \$39.29       \$511         Coat hook       7 ea       \$30.35       \$212         Grab bars       6 ea       \$203.26       \$1,220         Janitor mop sink rack       1 ea       \$136.12       \$136         Paper towel dispenser combo unit, recessed       7 ea       \$365.21       \$2,556	···				
Handicap, stainless steel       4       ea       \$2,056.64       \$8,227         Toilet / Restroom Specialties       3       \$1       \$2       \$1       \$2       \$1       \$2       \$1       \$2       \$1       \$2       \$1       \$2       \$1       \$1       \$2       \$1       \$1       \$2       \$1       \$1       \$2       \$1       \$1       \$2       \$1       \$2       \$1       \$2       \$1       \$2       \$1       \$2       \$2       \$5       \$2       \$2       \$5       \$2       \$2       \$3       \$3       \$2       \$2       \$3	Toilet Cubicles				
Toilet / Restroom Specialties         Bathroom mirrors       13 sf       \$39.29       \$511         Coat hook       7 ea       \$30.35       \$212         Grab bars       6 ea       \$203.26       \$1,220         Janitor mop sink rack       1 ea       \$136.12       \$136         Paper towel dispenser combo unit, recessed       7 ea       \$365.21       \$2,556	Standard, stainless steel	33	ea	\$1,909.43	\$63,011
Bathroom mirrors       13       sf       \$39.29       \$511         Coat hook       7       ea       \$30.35       \$212         Grab bars       6       ea       \$203.26       \$1,220         Janitor mop sink rack       1       ea       \$136.12       \$136         Paper towel dispenser combo unit, recessed       7       ea       \$365.21       \$2,556	Handicap, stainless steel	4	ea	\$2,056.64	\$8,227
Coat hook       7       ea       \$30.35       \$212         Grab bars       6       ea       \$203.26       \$1,220         Janitor mop sink rack       1       ea       \$136.12       \$136         Paper towel dispenser combo unit, recessed       7       ea       \$365.21       \$2,556					
Grab bars       6       ea       \$203.26       \$1,220         Janitor mop sink rack       1       ea       \$136.12       \$136         Paper towel dispenser combo unit, recessed       7       ea       \$365.21       \$2,556		13	sf		
Janitor mop sink rack1 ea\$136.12\$136Paper towel dispenser combo unit, recessed7 ea\$365.21\$2,556		7	ea		
Paper towel dispenser combo unit, recessed 7 ea \$365.21 \$2,556		6	ea		
	·	1	ea		
Seat cover dispenser 11 ea \$138.43 \$1,523	·	7			
	Seat cover dispenser	11	ea	\$138.43	\$1,523

DETAIL ELEMENTS - AQUATICS CENTER - PHASE 1						
Element	Quantity	Unit	Unit Cost	Total		
Shower accessories, per stall	9	ea	\$1,048.63	\$9,438		
Soap dispenser	13	ea	\$98.41	\$1,279		
Toilet paper dispenser	11	ea	\$86.64	\$953		
Storage Specialties			70000	7		
Lockers, 2-tier incl. concrete base	42	ea	\$262.00	\$11,004		
Locker room benches	79	lf	\$165.00	\$13,035		
Other Specialties	13	"	ψ100.00	ψ10,000		
Handrail - free-standing	43	lf	\$250.00	\$10,750		
<u>*</u>	26,800	sf	\$1.15	\$30,820		
Miscellaneous specialty allowance			·			
Interior signage, code	26,800	sf	\$2.71	\$72,628		
Fire extinguisher and cabinet, allowance	8	ea	\$450.00	\$3,600		
Exterior signage, allowance	1	ls	\$50,000.00	\$50,000		
Rough Carpentry						
Additional blocking, support backing, stiffeners, etc.	26,800	sf	\$1.00	\$26,800		
Casework						
Café casework - 36"	59	lf	\$591.00	\$34,869		
Reception desk - 36"	32	lf	\$485.00	\$15,520		
Lifeguard casework bases - 30"	50	lf	\$330.00	\$16,500		
Lifeguard casework - uppers - 14"	28	lf	\$211.00	\$5,908		
Lifeguard casework bases - 20"	24	lf	\$315.00	\$7,560		
Group Room casework bases - 30"	79	if	\$330.00	\$26,070		
Restroom vanity counter - 24"	29	lf	\$425.00	\$12,325		
Window Covering	20	11	Ψτ20.00	Ψ12,020		
	2 461	~f	¢20.06	Ф <b>7</b> 2 Б42		
Mechoshades, motorized	3,461	sf	\$20.96	\$72,543		
Furniture	40		<b>#250.00</b>	<b>#0.500</b>		
Café table	10	ea	\$350.00	\$3,500		
Café chair	40	ea	\$150.00	\$6,000		
Pool Construction (Cost provided by Aquatics Design Group dated 8/8/2019)						
Recreational pool, construction cost	4,600	sf	\$406.30	\$1,868,980		
Recreational pool, equipment cost	4,600	sf	\$27.11	\$124,706		
Total - Function Equipment and Specialties				\$2,502,183		
				<del></del>		
9 Stairs and Vertical Transportation						
Elevators - Including Smoke Containment Curtain Assembly	•		*** 774 00	****		
Passenger, 3500 lbs, hydraulic	3	stop	\$66,771.00	\$200,313		
Elevator pit ladder	1	ea	\$1,754.00	\$1,754		
Stairs						
Entrance Stairs, on grade	350	lf	\$65.00	\$22,750		
Mechanical Room Stair						
Precast stair, 4' wide including steel stringers, assume	18	riser	\$335.00	\$6,030		
Precast landing	40	sf	\$55.00	\$2,200		
Handrail, assume 2 line pipe rail	16	lf	\$122.00	\$1,952		
Mezzanine Stair	10	"	Ψ122.00	Ψ1,002		
	36	riser	\$335.00	\$12,060		
Precast stair, 4' wide including steel stringers, assume			•			
Handrail, assume 2 line pipe rail	66	lf	\$122.00	\$8,052		
Total - Stairs and Vertical Transportation				\$255,111		

DETAIL ELEMENTS - AQUATICS CEN	NTER - PHA	SE 1		
Element	Quantity	Unit	Unit Cost	Total
10 Plumbing Systems				
General plumbing				
Water heater, Double wall, plate and frame heat exchangers	1	ea	\$20,500.00	\$20,500
Circulating pump, duplex	1	ea	\$2,537.13	\$2,537
Expansion tank	1	ea	\$1,022.02	\$1,022
Local water heaters, electric	3	ea	\$1,478.91	\$4,437
Sewage ejector / Sump pump - allowance	1	ea	\$11,276.70	\$11,277
Grease / Sand / Oil interceptor	1	ea	\$17,331.00	\$17,331
Sanitary fixtures				
Water closet	12	ea	\$1,894.86	\$22,738
Urinal	4	ea	\$1,929.52	\$7,718
Lavatory	10	ea	\$1,834.78	\$18,348
Shower, exterior - next to the water	4	ea	\$1,883.30	\$7,533
Shower, enclosed - inside the locker room	8	ea	\$2,033.50	\$16,268
Emergency Shower / Eyewash stations	1	ea	\$2,657.42	\$2,657
Drinking fountain, with bottle filing stations	2	ea	\$4,945.11	\$9,890
Sinks, Group rooms	4	ea	\$1,415.37	\$5,661
Hose bibs	12	ea	\$430.60	\$5,167
Floor drains	10	ea	\$759.10	\$7,591
Trench drains for pool area - corrosion resistant HDPE	20	ea	\$1,097.63	\$21,953
Rough ins				
Local rough-in at fixture	45	ea	\$1,059.50	\$47,678
Rough-in at floor sink or floor drain	30	ea	\$1,254.76	\$37,643
Rough-ins to OFCI commercial kitchen: cold and hot water, direct and	6	ea	\$1,155.40	\$6,932
Make up water for swimming pool	1	ea	\$7,510.10	\$7,510
Domestic water piping	26,800	gsf	\$4.39	\$117,666
Waste / vent piping	26,800	gsf	\$4.62	\$123,859
Roof / storm drainage				
RD/OD - Roof drain with Overhead drain	8	ea	\$826.11	\$6,609
3" pipe, ci, no-hub, in bldg	580	lf	\$63.50	\$36,830
4" pipe, ci, no-hub, in bldg	410	lf	\$74.47	\$30,531
Condensate drainage	26,800	gsf	\$0.50	\$13,400
Miscellaneous	26,800	gsf	\$3.40	\$91,120
Total - Plumbing Systems				\$702,407
11 Heating, Ventilation and Air Conditioning				
Wet side equipment: chiller, boiler, pumps etc.	26,800	gsf	\$13.50	\$361,800
Chilled water piping distribution	26,800	gsf	\$2.30	\$61,640
Hot water piping distribution	26,800		\$5.70	\$152,760
Air-Side Equipment	20,000	901	ψ0.10	Ψ102,700
AHU-1, Air handling unit, outdoor, vav, modular	20,000	cfm	\$11.50	\$230,000
AHU-2, Air handling unit, outdoor, vav, modular	20,000		\$11.50	\$230,000
FCU, Fan coil units for IDF / MDF rooms	20,000	ea	\$4,449.45	\$8,899
VAV terminal boxes, with reheat coil	24	ea	\$2,125.94	\$51,022
EF, Exhaust fan, inline, Greenheck	6,200	cfm	\$4.00	\$24,800
Air Distribution	0,200	CIIII	Ψ+.00	ΨΔ4,000
Ductwork, galv - protected with epoxy based paint	22,000	lb	\$14.44	\$317,735
Ductwork, galv - protected with epoxy based paint  Ductwork, stainless steel	3,000	lb	\$32.00	\$96,000
Duct insulation	12,000	sf	\$4.46	\$53,518
Duot modiculon	12,000	Ji	<b>ΨΤ</b> Ο	ψου,υ το

DETAIL ELEMENTS - AQUATICS (	CENTER - PHA	SE <sub>1</sub>		
Element	Quantity	Unit	Unit Cost	Total
Combination fire / smoke damper	16	ea	\$1,097.63	\$17,562
Grilles, registers and diffusers, including dampers and flex duct	26,800	sf	\$2.80	\$75,040
Acoustical attenuation	2	ea	\$5,199.30	\$10,399
Ventilation premium for PHIUS+ requirements, allowance	1	ls	\$350,000.00	\$350,000
Miscellaneous testing & commissioning				
Test / balance HVAC	200	hr	\$176.94	\$35,388
Start-up/check-out	160	hr	\$140.88	\$22,540
Commissioning assist	160	hr	\$140.88	\$22,540
Piping identification: labels, arrows and valve tags	200	ea	\$31.89	\$6,378
Seismic and vibration requirements	1	ea	\$28,885.00	\$28,885
HVAC Controls				
DDC controls to plumbing systems	1	ls	\$5,777.00	\$5,777
DDC controls, air handlers	2	ea	\$17,000.00	\$34,000
DDC controls, vav box, reheat coils	24	ea	\$2,161.12	\$51,867
DDC controls, general exhaust fan	4	ea	\$1,518.20	\$6,073
DDC controls, smoke damper monitor	16	ea	\$1,100.00	\$17,600
DDC misc. items, training, integration	200	hr	\$161.76	\$32,351
DDC controls for pools	1	ls	\$32,000.00	\$32,000
DDC controls for pools	ı	15	ψ32,000.00	ψ32,000
Total - Heating, Ventilation and Air Conditioning				\$2,336,574
12 Electrical Lighting, Power and Communications Service & Distribution Equipment			040.055.04	040.055
Main switchboard, 1200 amp, 120/208v, 3ph, 4w	1	ea	\$49,955.01	\$49,955
Distribution board, 400 amp, 120/208v, 3ph, 4w	1	ea	\$24,325.37	\$24,325
Panelboard, 225 amp, 120/208v, 3ph, 4w	3	ea	\$3,308.48	\$9,925
Feeder, 225 amp, emt	125	lf	\$108.10	\$13,513
Feeder, 400 amp, emt	150	lf	\$184.08	\$27,612
Feeder, 1200 amp, PVC	50	lf	\$796.25	\$39,813
Conduit, 1 1/4" pvc	100	lf	\$10.41	\$1,041
Copper wire, #8 thhn	100	lf	\$2.03	\$203
Copper wire, #4 thhn	200	lf	\$4.12	\$824
HVAC & Equipment Connections				
AHU-1	1	ea	\$1,150.55	\$1,151
AHU-2	1	ea	\$1,150.55	\$1,151
FCU	2	ea	\$238.87	\$478
EF, Exhaust Fans	4	ea	\$209.15	\$837
Disconnect switch, 60/3 fused N1	2	ea	\$992.58	\$1,985
Disconnect switch, motor rated N3R	4	ea	\$268.56	\$1,074
Disconnect switch, 200/3 fused N3R	2	ea	\$3,051.75	\$6,103
Disconnect elevator switch, 60/3 fused N1	1	ea	\$2,988.75	\$2,989
Equipment feeder, 20 amp	950	lf	\$20.29	\$19,276
Equipment feeder, 60 amp	200	if	\$38.80	\$7,760
Equipment feeder, 200 amp	225	if	\$93.01	\$20,927
Convenience Power	220		Ψ00.01	720,021
Duplex receptacle, 20 amp	47	ea	\$132.72	\$6,238
Double duplex receptacle, 20 amp	3	ea	\$175.88	\$528
Duplex receptacle, 20 amp GFCI	12	ea	\$151.39	\$1,817
Buplox 1000ptable, 20 airip Of Of	12	ou	ψ101.00	Ψ1,017

DETAIL ELEMENTS - AQUATICS (	CENTER - PHA	SE 1		
Element	Quantity	Unit	Unit Cost	Total
Double duplex receptacle, 20 amp GFCI wp	2	ea	\$162.18	\$324
Branch power, 20 amp	2,250	lf	\$19.15	\$43,088
10/2 armored cable	1,400	lf	\$7.77	\$10,878
Lighting & Lighting Controls				
Down Lights Phase #1	283	ea	\$315.25	\$89,216
Pool Flood Light High Bay	50	ea	\$855.75	\$42,788
Mezzanine Lighting	20	ea	\$605.44	\$12,109
Exit Lighting	14	ea	\$301.01	\$4,214
Lighting control panel	1	ea	\$5,125.15	\$5,125
Single pole switch	2	ea	\$140.93	\$282
Dimmer three way switch	8	ea	\$156.14	\$1,249
Occupancy sensor, ceiling mounted	8	ea	\$319.79	\$2,558
Occupancy sensor, wall mounted	8	ea	\$267.09	\$2,137
Lighting branch power, fixtures	3,530	lf	\$19.15	\$67,593
Lighting branch power, controls	110	lf	\$18.00	\$1,980
Fire Alarm System				
FA control panel	1	ea	\$10,915.88	\$10,916
FA annunciator panel	1	ea	\$2,997.03	\$2,997
FA beam sensor	2	ea	\$1,515.66	\$3,031
FA duct smoke detector	2	ea	\$675.44	\$1,351
FA flow switch	1	ea	\$575.12	\$575
FA heat detector	1	ea	\$329.55	\$330
FA pull station	2	ea	\$341.55	\$683
FA smoke detector	2	ea	\$326.95	\$654
FA tamper switch	1	ea	\$515.66	\$516
FA horn strobe unit, wall mount	8	ea	\$215.05	\$1,720
Conduit, 3/4" emt	3,150	lf	\$10.79	\$33,989
Fire alarm cable rated, 4C	3,150	lf	\$4.85	\$15,278
Telecommunications System				
Tele/data outlet, 2 port	14	ea	\$145.75	\$2,041
Wireless access point	6	ea	\$373.96	\$2,244
Fire treated plywood	1	ea	\$295.45	\$295
Main telecommunication grounding busbar	1	ea	\$2,150.55	\$2,151
Conduit, 3/4" emt	1,400	lf	\$10.79	\$15,106
CAT-6, 4 pair 23 AWG, UTP	1,400	lf	\$1.58	\$2,212
Public Address System				
Clock/speaker	4	ea	\$719.36	\$2,877
PA speaker	32	ea	\$248.65	\$7,957
Conduit, 3/4" emt	3,600	lf	\$10.79	\$38,844
PA system speaker cable	3,650	lf	\$1.32	\$4,818
Distributed Antenna System	26,800	gsf	\$1.55	\$41,540
Security, Access Control & CCTV Systems				
CCTV PTZ IP camera, outdoor	3	ea	\$3,660.16	\$10,980
CCTV fixed IP camera	6	ea	\$946.74	\$5,680
DVR, 4TB storage	1	ea	\$1,801.43	\$1,801
Conduit, 3/4" emt	600	lf	\$10.79	\$6,474
CCTV cabling	600	lf	\$1.58	\$948
Access control system				
Access control panel	1	ea	\$5,155.05	\$5,155
Access control panel power supply	1	ea	\$670.48	\$670
Card reader, proximity type	6	ea	\$1,039.99	\$6,240

Element	Quantity	Unit	Unit Cost	Total
Alarm contact, flush mount	4	ea	\$231.84	\$927
Conduit, 3/4" emt	1,200	lf	\$10.79	\$12,948
Access control cable	1,200	lf	\$1.58	\$1,896
Miscellaneous				
Small tools	1	ls	\$5,033.00	\$5,033
	1	ls	\$8,355.15	\$8,355
Consumables	l l	10		
Consumables Equipment rentals	1	ls	\$10,671.44	\$10,671
	1			
Equipment rentals	1 1	ls	\$10,671.44	\$8,850
Equipment rentals Testing/commissioning	1	ls	\$10,671.44	\$8,850
Equipment rentals Testing/commissioning  Total - Electrical Lighting, Power and Communications	1 1	ls	\$10,671.44	\$8,850
Equipment rentals Testing/commissioning  Total - Electrical Lighting, Power and Communications  13 Fire Protection Systems	m 26,800	ls	\$10,671.44	\$10,671 \$8,850 \$801,818 \$214,400
Equipment rentals Testing/commissioning  Total - Electrical Lighting, Power and Communications  13 Fire Protection Systems New hydraulically calculated wet pipe automatic fire sprinkler systems		ls ls	\$10,671.44 \$8,850.15	\$8,850 \$801,818
Equipment rentals Testing/commissioning  Total - Electrical Lighting, Power and Communications  13 Fire Protection Systems New hydraulically calculated wet pipe automatic fire sprinkler system Wet-pipe fire sprinkler, complete	26,800 1	ls ls	\$10,671.44 \$8,850.15 \$8.00 \$40,000.00	\$8,850 \$801,818 \$214,400

Site

SUMMARY - SITE						
Element	Subtotal	Total	Cost / SF	Cost / SF		
D) Mechanical and Electrical (10-13)	<b>*</b> 4.40 <b>7</b> .004	\$1,187,804	<b>A</b> O 00	\$6.60		
<ul><li>12 Electrical Lighting, Power and Communications</li><li>13 Fire Protection Systems</li></ul>	\$1,187,804		\$6.60			
E) Site Construction (14-16)		\$2,996,576		\$16.65		
14 Site Preparation and Demolition	\$307,204	· · · · ·	\$1.71	<b>4.0.00</b>		
15 Site Paving, Structures & Landscaping	\$2,444,022		\$13.58			
16 Utilities on Site	\$245,350		\$1.36			
Subtotal		\$4,184,380	_	\$23.25		
General Conditions	7.00%	\$292,907		\$1.63		
Subtotal		\$4,477,287	_	\$24.87		
General Requirements	3.00%	\$134,319		\$0.75		
Subtotal		\$4,611,605	_	\$25.62		
Bonds & Insurance	2.00%	\$92,232		\$0.51		
Subtotal		\$4,703,837	_	\$26.13		
Contractor's Fee	4.00%	\$188,153		\$1.05		
Subtotal		\$4,891,991	_	\$27.18		
Design Contingency	10.00%	\$489,199		\$2.72		
Subtotal		\$5,381,190	_	\$29.90		
Construction Contingency	3.00%	\$161,436		\$0.90		
Subtotal		\$5,542,625		\$30.79		
Escalation to MOC, 08/01/25	16.20%	\$898,098		\$4.99		
Subtotal		\$6,440,724		\$35.78		
WSST	8.90%	\$629,225		\$3.50		
TOTAL ESTIMATED CONSTRUCTION COST		\$7,069,949		\$39.28		

Total Area: 180,000 SF

DETAIL ELEMENTS - SIT	Έ			
Element	Quantity	Unit	Unit Cost	Total
12 Electrical Lighting, Power and Communications				
Site Electrical				
Distribution equipment	4		0.47.004.05	0.47.00.4
Distribution board, 1200 amp, 120/208v, 3ph, 4w	1	ea	\$47,934.05	\$47,934
Generator, diesel, 800kW, 480v, 3ph, 4w	1	ea	\$415,215.66	\$415,216
Automatic transfer switch, 1000/4	2	ea	\$21,331.87	\$42,664
Feeder, 2000 amp, PVC	150	lf	\$1,194.38	\$179,157
Lighting and lighting control	40		04.455.00	074.70
Site Lighting Pole Lights	18	ea	\$4,155.22	\$74,794
Bollard Walk way lights	10	ea	\$2,012.64	\$20,126
Conduit, 1" pvc	3,100		\$8.56	\$26,536
Copper wire, #10 thhn	10,000		\$1.35	\$13,500
Site Lighting Trenching and backfill	3,100	lf	\$67.85	\$210,335
Site service and distribution	050	16	200.00	040.40
Conduit, 4" pvc	650	lf	\$29.39	\$19,104
Pull box, 36x60x36	2	ea	\$6,566.62	\$13,133
Trenching, backfill and compaction	430	lf	\$95.66	\$41,134
Site communications	200	16	200.00	047.004
Conduit, 4" pvc	600	lf	\$29.39	\$17,634
Pull box, 48"x72"x48" Telecommunication	2	ea	\$6,125.51	\$12,251
Miscellaneous	,		04.000.00	04.000
Small tools	1	ls	\$1,869.00	\$1,869
Consumables	1	ls	\$16,750.12	\$16,750
Equipment rentals	1	ls	\$19,555.12	\$19,555
Testing/commissioning	1	ls	\$16,112.03	\$16,112
Total - Electrical Lighting, Power and Communications				\$1,187,804
14 Site Preparation and Demolition  Demolition				
Demo & dispose existing structures	180,000	acf	\$0.30	\$54,000
,	100,000	gsf	φυ.ου	\$34,000
Grading  Rough grading, cut and fill, based on balanced site	14,300	OV	\$6.43	\$91,949
Haul excess, 10 mile round trip, allow	14,300 500	•	\$0.43 \$20.11	\$91,948 \$10,055
Proof roll site	180,000	,	\$0.40	\$72,000
Fine grade	180,000		\$0.40 \$0.38	\$68,400
Temporary erosion and sediment control, allowance	180,000		\$0.06	\$10,800
Total - Site Preparation and Demolition			-	\$307,204
15 Site Paving, Structures & Landscaping AC Paving				
Parking lot, 3" AC over 8" AB	52,517	sf	\$5.43	\$285,167
Hardscape	- /		·	,
Concrete paving, 4" thick, incl. sub base, reinforcement, and finish, assumed	15,082	sf	\$14.59	\$220,046
Concrete Curbs	-,- 3=	-	*	, -,
Concrete curbs	2,757	lf	\$23.24	\$64,073
	_,. J.		,	,,

Element		Quantity	Unit	Unit Cost	Total
(	Concrete Ramps				
	Curb cut concrete ramps	2	ea	\$1,459.77	\$2,920
	Continuous concrete ramps incl. all concrete, reinforcement, sub base, edge				
	forms, grooved finish, allow	560	sf	\$35.97	\$20,143
	Concrete Stairs	50	sf	\$30.44	\$1,522
	Parking Lot Striping / Signage, 140 parking stalls, directional signage, and striping Planting	1	ls	\$3,000.00	\$3,000
•	Lawn	3,430	sf	\$3.00	\$10,290
	Shrubbery, allowance	133,669	sf	\$8.20	\$1,096,086
	Shrub and turf irrigation	133,669	sf	\$1.73	\$231,158
	Mulch to shrub area	133,669	sf	\$0.95	\$127,623
	Tree Bubblers, allow 2 per tree	100	ea	\$150.00	\$15,000
	Trees, 24" box	50	ea	\$589.00	\$29,450
	Tree Guying, all trees	50	ea	\$188.81	\$9,441
(	Site Specialties				
	Splash pad, allow	2,000	sf	\$123.19	\$246,380
	Decking	1,856	sf	\$15.75	\$29,232
	Bollards, 8" square steel, allow	12	ea	\$1,041.00	\$12,492
ı	Miscellaneous site finishes	1	ls	\$40,000.00	\$40,000
(	Site Furniture			. ,	. ,
	Trash and recycling receptacles				FF&E
	Chairs				FF&E
					ГГОГ
	Tables, allow				FF&E
	Tables, allow Benches				
ī					FF&E
	Benches				FF&E FF&E NA NA
-	Benches Metal Canopy				FF&E NA
-	Benches Metal Canopy Mechanical Equipment Yard Site Paving, Structures & Landscaping				FF&E NA NA
Total - \$	Benches Metal Canopy Mechanical Equipment Yard Site Paving, Structures & Landscaping s on Site				FF&E NA NA
Total - \$	Benches Metal Canopy Mechanical Equipment Yard Site Paving, Structures & Landscaping s on Site Domestic water	1	ea	\$25,000,00	FF&E NA NA \$2,444,022
Total - \$	Benches Metal Canopy Mechanical Equipment Yard Site Paving, Structures & Landscaping s on Site Domestic water 4" domestic water meter		ea If	\$25,000.00 \$78.00	FF&E NA NA \$2,444,022 \$25,000
Total - \$	Benches Metal Canopy Mechanical Equipment Yard  Site Paving, Structures & Landscaping  s on Site  Domestic water  4" domestic water meter  4" water line, including trenching and backfill	1 250 1		\$78.00	\$2,444,022 \$25,000 \$19,500
Total - \$	Benches Metal Canopy Mechanical Equipment Yard  Site Paving, Structures & Landscaping  s on Site Domestic water  4" domestic water meter  4" water line, including trenching and backfill Gate valve, 4"	250	lf	\$78.00 \$950.00	\$2,444,022 \$25,000 \$19,500 \$950
Total - \$	Benches Metal Canopy Mechanical Equipment Yard  Site Paving, Structures & Landscaping  s on Site Domestic water  4" domestic water meter  4" water line, including trenching and backfill Gate valve, 4"  4" to 8" water line tap	250 1 1	If ea	\$78.00 \$950.00 \$450.00	\$2,444,022 \$2,444,022 \$25,000 \$19,500 \$950 \$450
Total - S	Benches Metal Canopy Mechanical Equipment Yard  Site Paving, Structures & Landscaping  s on Site Domestic water  4" domestic water meter  4" water line, including trenching and backfill Gate valve, 4"	250	If ea ea	\$78.00 \$950.00	\$2,444,022 \$2,444,022 \$25,000 \$19,500 \$950 \$450
Total - S	Benches Metal Canopy Mechanical Equipment Yard  Site Paving, Structures & Landscaping  s on Site Domestic water  4" domestic water meter  4" water line, including trenching and backfill Gate valve, 4"  4" to 8" water line tap Extend 6" (assumed) water line, including trenching and backfill  Fire water	250 1 1 100	If ea ea	\$78.00 \$950.00 \$450.00 \$95.00	\$2,444,022 \$25,000 \$19,500 \$450 \$9,500
Total - \$	Benches Metal Canopy Mechanical Equipment Yard  Site Paving, Structures & Landscaping  s on Site Domestic water  4" domestic water meter  4" water line, including trenching and backfill Gate valve, 4"  4" to 8" water line tap Extend 6" (assumed) water line, including trenching and backfill	250 1 1	If ea ea If	\$78.00 \$950.00 \$450.00	\$25,000 \$19,500 \$450 \$9,500
Total - S	Benches Metal Canopy Mechanical Equipment Yard  Site Paving, Structures & Landscaping  s on Site Domestic water  4" domestic water meter  4" water line, including trenching and backfill Gate valve, 4"  4" to 8" water line tap Extend 6" (assumed) water line, including trenching and backfill  Fire water  6" fire line pipe Gate valve, 6"	250 1 1 100 200	If ea ea If If ea	\$78.00 \$950.00 \$450.00 \$95.00 \$125.00 \$1,400.00	\$2,444,022 \$25,000 \$19,500 \$950 \$450 \$9,500 \$25,000 \$1,400
Total - S	Benches Metal Canopy Mechanical Equipment Yard  Site Paving, Structures & Landscaping  s on Site Domestic water  4" domestic water meter  4" water line, including trenching and backfill  Gate valve, 4"  4" to 8" water line tap  Extend 6" (assumed) water line, including trenching and backfill  Fire water  6" fire line pipe  Gate valve, 6"  Fire hydrants, qty assumed	250 1 1 100 200 1	If ea ea If	\$78.00 \$950.00 \$450.00 \$95.00 \$125.00 \$1,400.00 \$8,000.00	\$25,000 \$19,500 \$450 \$9,500 \$1,400 \$16,000
Total - S	Benches Metal Canopy Mechanical Equipment Yard  Site Paving, Structures & Landscaping  s on Site Domestic water  4" domestic water meter  4" water line, including trenching and backfill Gate valve, 4"  4" to 8" water line tap Extend 6" (assumed) water line, including trenching and backfill  Fire water  6" fire line pipe Gate valve, 6" Fire hydrants, qty assumed 6" fire department connection	250 1 1 100 200 1 2	If ea ea ea	\$78.00 \$950.00 \$450.00 \$95.00 \$125.00 \$1,400.00	\$25,000 \$19,500 \$450 \$9,500 \$1,400 \$16,000
Total - S	Benches Metal Canopy Mechanical Equipment Yard  Site Paving, Structures & Landscaping  s on Site Domestic water  4" domestic water meter  4" water line, including trenching and backfill  Gate valve, 4"  4" to 8" water line tap  Extend 6" (assumed) water line, including trenching and backfill  Fire water  6" fire line pipe  Gate valve, 6"  Fire hydrants, qty assumed	250 1 1 100 200 1 2	If ea ea ea	\$78.00 \$950.00 \$450.00 \$95.00 \$125.00 \$1,400.00 \$8,000.00	\$25,000 \$19,500 \$450 \$9,500 \$1,400 \$16,000 \$3,000
Total - S	Benches Metal Canopy Mechanical Equipment Yard  Site Paving, Structures & Landscaping  s on Site Domestic water  4" domestic water meter  4" water line, including trenching and backfill Gate valve, 4"  4" to 8" water line tap Extend 6" (assumed) water line, including trenching and backfill  Fire water  6" fire line pipe Gate valve, 6" Fire hydrants, qty assumed 6" fire department connection  Sanitary sewer Grease interceptor, size TBD, allow	250 1 1 100 200 1 2	If ea ea If If ea ea ea ea	\$78.00 \$950.00 \$450.00 \$95.00 \$125.00 \$1,400.00 \$8,000.00 \$3,000.00	\$25,000 \$19,500 \$950 \$450 \$9,500 \$1,400 \$16,000 \$1,8500
Total - S	Benches Metal Canopy Mechanical Equipment Yard  Site Paving, Structures & Landscaping  s on Site Domestic water  4" domestic water meter  4" water line, including trenching and backfill  Gate valve, 4"  4" to 8" water line tap  Extend 6" (assumed) water line, including trenching and backfill  Fire water  6" fire line pipe  Gate valve, 6"  Fire hydrants, qty assumed  6" fire department connection  Sanitary sewer  Grease interceptor, size TBD, allow  4" (assumed) lift station	250 1 1 100 200 1 2	If ea ea If If ea ea ea	\$78.00 \$950.00 \$450.00 \$95.00 \$1,400.00 \$8,000.00 \$3,000.00	\$25,000 \$19,500 \$450 \$9,500 \$1,400 \$16,000 \$1,600 \$1,7,000
Total - S	Benches Metal Canopy Mechanical Equipment Yard  Site Paving, Structures & Landscaping  s on Site  Domestic water  4" domestic water meter  4" water line, including trenching and backfill  Gate valve, 4"  4" to 8" water line tap  Extend 6" (assumed) water line, including trenching and backfill  Fire water  6" fire line pipe  Gate valve, 6"  Fire hydrants, qty assumed  6" fire department connection  Sanitary sewer  Grease interceptor, size TBD, allow  4" (assumed) lift station  4" (assumed) sanitary sewer line, including trenching and backfill	250 1 1 100 200 1 2 1	If ea ea If If ea ea ea ea ea	\$78.00 \$950.00 \$450.00 \$95.00 \$125.00 \$1,400.00 \$8,000.00 \$3,000.00 \$18,500.00 \$7,000.00	\$25,000 \$19,500 \$450 \$9,500 \$1,400 \$16,000 \$18,500 \$7,000
Total - S	Benches Metal Canopy Mechanical Equipment Yard  Site Paving, Structures & Landscaping  s on Site Domestic water  4" domestic water meter  4" water line, including trenching and backfill  Gate valve, 4"  4" to 8" water line tap  Extend 6" (assumed) water line, including trenching and backfill  Fire water  6" fire line pipe  Gate valve, 6"  Fire hydrants, qty assumed  6" fire department connection  Sanitary sewer  Grease interceptor, size TBD, allow  4" (assumed) lift station	250 1 1 100 200 1 2 1	If ea ea If If ea ea ea ea ea	\$78.00 \$950.00 \$450.00 \$95.00 \$125.00 \$1,400.00 \$8,000.00 \$3,000.00 \$18,500.00 \$7,000.00	FF&E NA NA

**DETAIL ELEMENTS - SITE** 

DETAIL ELEMENTS - SITE				
Element	Quantity	Unit	Unit Cost	Total
Storm water 24" storm water pipe, including trenching and backfill Storm detention vault	400	If	\$180.00 Assumed	\$72,000 d Not Needed
Total - Utilities on Site			_	\$245,350

Aquatics Center - Phase 2 - Add Alternate

Element	Subtotal	Total	Cost / SF	Cost / SF
A) Shell (1-5)		\$4,271,259		\$213.56
1 Foundations	\$868,431	Ψ4,271,239	\$43.42	φ <b>2</b> 13.30
2 Vertical Structure	\$553,450		\$27.67	
3 Floor & Roof Structures	\$774,844		\$38.74	
4 Exterior Cladding	\$1,738,611		\$86.93	
5 Roofing and Waterproofing	\$335,922		\$16.80	
B) Interiors (6-7)	. ,	\$837,135		\$41.86
6 Interior Partitions, Doors and Glazing	\$316,152	,	\$15.81	
7 Floor, Wall and Ceiling Finishes	\$520,983		\$26.05	
C) Equipment and Vertical Transportation (8-9)		\$2,104,655		\$105.23
8 Function Equipment and Specialties	\$2,085,155		\$104.26	
9 Stairs and Vertical Transportation	\$19,500		\$0.98	
D) Mechanical and Electrical (10-13)		\$3,527,238		\$176.36
10 Plumbing Systems	\$643,149		\$32.16	
11 Heating, Ventilation and Air Conditioning	\$1,982,522		\$99.13	
12 Electrical Lighting, Power and Communications	\$694,568		\$34.73	
13 Fire Protection Systems	\$207,000		\$10.35	
Subtotal		\$10,740,286	_	\$537.01
General Conditions	7.00%	\$751,820		\$37.59
Subtotal		\$11,492,107	_	\$574.61
General Requirements	3.00%	\$344,763		\$17.24
Subtotal		\$11,836,870	_	\$591.84
Bonds & Insurance	2.00%	\$236,737		\$11.84
Subtotal		\$12,073,607	_	\$603.68
Contractor's Fee	4.00%	\$482,944		\$24.15
Subtotal		\$12,556,551	_	\$627.83
Design Contingency	10.00%	\$1,255,655		\$62.78
Subtotal		\$13,812,207	_	\$690.61
Construction Contingency	3.00%	\$414,366		\$20.72
Subtotal		\$14,226,573	_	\$711.33
Escalation to MOC, 08/01/30	41.38%	\$5,886,856		\$294.34
Subtotal		\$20,113,429	_	\$1,005.67
WSST	8.90%	\$1,964,978		\$98.25
TOTAL ESTIMATED CONSTRUCTION COST	_	\$22,078,407		\$1,103.92

Total Area: 20,000 SF

Clear and grub site Mass excavation Backfill, basement Haul excess, 10 mile round trip Fine grading Erosion control Pools Earthwork Mass Excavation Swimming pool Surge tank Backfill Swimming pool Surge tank Haul Excess Swimming pool Surge tank Haul Excess Swimming pool Surge tank Continuous Footings assumed 3' wide x 3' deep, at perimeter and basement walls Concrete, continuous footings, 4000 psi Formwork, continuous footings Foundation reinforcing, assume 150 #/cy Excavation Backfill Haul excess Spread Footings Foundation, conventional, excluding pool areas Concrete, slab on grade, 4000 psi Formwork, slab on grade Sand base, 4" Gravel sub base, 6" Slab on grade reinforcing, assumed 2.5 #/sf Finish to slab	0,000 0,000 2,437 1,212 1,225 0,000 0,000	gsf gsf cy cy cy gsf gsf	\$0.15 \$0.12 \$11.65 \$18.59 \$20.11 \$0.38 \$0.06	\$3,000 \$2,480 \$28,397 \$22,535 \$24,640 \$7,600 \$1,200
Earthwork Field staking/layout Clear and grub site Mass excavation Backfill, basement Haul excess, 10 mile round trip Fine grading Erosion control Pools Earthwork Mass Excavation Swimming pool Surge tank Backfill Swimming pool Surge tank Haul Excess Swimming pool Surge tank Haul Excess Swimming pool Surge tank Miscellaneous hauling, allowance Foundations Underpinning existing phase 1 building Continuous Footings assumed 3' wide x 3' deep, at perimeter and basement walls Concrete, continuous footings, 4000 psi Formwork, continuous footings Foundation reinforcing, assume 150 #/cy Excavation Backfill Haul excess Spread Footings Foundation, conventional, excluding pool areas Concrete, slab on grade, 4000 psi Formwork, slab on grade, 4000 psi Formwork, slab on grade Sand base, 4" Gravel sub base, 6" Slab on grade reinforcing, assumed 2.5 #/sf Finish to slab	0,000 2,437 1,212 1,225 0,000 0,000	gsf cy cy cy gsf gsf	\$0.12 \$11.65 \$18.59 \$20.11 \$0.38	\$2,480 \$28,397 \$22,535 \$24,640 \$7,600
Field staking/layout Clear and grub site Mass excavation Backfill, basement Haul excess, 10 mile round trip Fine grading Erosion control Pools Earthwork Mass Excavation Swimming pool Surge tank Backfill Swimming pool Surge tank Haul Excess Swimming pool Surge tank Miscellaneous hauling, allowance Foundations Underpinning existing phase 1 building Continuous Footings assumed 3' wide x 3' deep, at perimeter and basement walls Concrete, continuous footings, 4000 psi Formwork, continuous footings Foundation reinforcing, assume 150 #/cy Excavation Backfill Haul excess Spread Footings Foundation, conventional, excluding pool areas Concrete, slab on grade, 4000 psi Formwork, slab on grade Sand base, 4" Gravel sub base, 6" Slab on grade reinforcing, assumed 2.5 #/sf Finish to slab	0,000 2,437 1,212 1,225 0,000 0,000	gsf cy cy cy gsf gsf	\$0.12 \$11.65 \$18.59 \$20.11 \$0.38	\$2,480 \$28,397 \$22,535 \$24,640 \$7,600
Clear and grub site  Mass excavation  Backfill, basement  Haul excess, 10 mile round trip  Fine grading  Erosion control  Pools Earthwork  Mass Excavation  Swimming pool  Surge tank  Backfill  Swimming pool  Surge tank  Haul Excess  Swimming pool  Surge tank  Haul Excess  Swimming pool  Surge tank  Housellaneous hauling, allowance  Foundations  Underpinning existing phase 1 building  Continuous Footings assumed 3' wide x 3' deep, at perimeter and basement walls  Concrete, continuous footings, 4000 psi  Formwork, continuous footings  Foundation reinforcing, assume 150 #/cy  Excavation  Backfill  Haul excess  Spread Footings  Foundation, conventional, excluding pool areas  Concrete, slab on grade, 4000 psi  Formwork, slab on grade  Sand base, 4"  Gravel sub base, 6"  Slab on grade reinforcing, assumed 2.5 #/sf  Finish to slab	0,000 2,437 1,212 1,225 0,000 0,000	gsf cy cy cy gsf gsf	\$0.12 \$11.65 \$18.59 \$20.11 \$0.38	\$2,480 \$28,397 \$22,535 \$24,640 \$7,600
Mass excavation Backfill, basement Haul excess, 10 mile round trip Fine grading Erosion control Pools Earthwork Mass Excavation Swimming pool Surge tank Backfill Swimming pool Surge tank Haul Excess Swimming pool Surge tank Haul Excess Swimming pool Surge tank Haul Excess Swimming pool Surge tank Miscellaneous hauling, allowance Foundations Underpinning existing phase 1 building Continuous Footings assumed 3' wide x 3' deep, at perimeter and basement walls Concrete, continuous footings, 4000 psi Formwork, continuous footings Foundation reinforcing, assume 150 #/cy Excavation Backfill Haul excess Spread Footings Foundation, conventional, excluding pool areas Spread Footings Foundation, conventional, excluding pool areas Concrete, slab on grade, 4000 psi Formwork, slab on grade Sand base, 4" Gravel sub base, 6" Slab on grade reinforcing, assumed 2.5 #/sf Finish to slab	2,437 1,212 1,225 0,000 0,000	cy cy cy gsf gsf	\$11.65 \$18.59 \$20.11 \$0.38	\$28,397 \$22,535 \$24,640 \$7,600
Backfill, basement Haul excess, 10 mile round trip Fine grading Erosion control  Pools Earthwork  Mass Excavation Swimming pool Surge tank Backfill Swimming pool Surge tank Haul Excess Swimming pool Surge tank Miscellaneous hauling, allowance Foundations Underpinning existing phase 1 building Continuous Footings assumed 3' wide x 3' deep, at perimeter and basement walls Concrete, continuous footings, 4000 psi Formwork, continuous footings Foundation reinforcing, assume 150 #/cy Excavation Backfill Haul excess Spread Footings Foundation, conventional, excluding pool areas Concrete, slab on grade, 4000 psi Formwork, slab on grade Sand base, 4" Gravel sub base, 6" Slab on grade reinforcing, assumed 2.5 #/sf Finish to slab	1,212 1,225 0,000 0,000	cy cy gsf gsf	\$18.59 \$20.11 \$0.38	\$22,535 \$24,640 \$7,600
Haul excess, 10 mile round trip Fine grading Erosion control Pools Earthwork  Mass Excavation Swimming pool Surge tank Backfill Swimming pool Surge tank Haul Excess Swimming pool Surge tank Miscellaneous hauling, allowance Foundations Underpinning existing phase 1 building Continuous Footings assumed 3' wide x 3' deep, at perimeter and basement walls Concrete, continuous footings, 4000 psi Formwork, continuous footings, 4000 psi Formwork, continuous footings Foundation reinforcing, assume 150 #/cy Excavation Backfill Haul excess Spread Footings Foundation, conventional, excluding pool areas Concrete, slab on grade, 4000 psi Formwork, slab on grade Sand base, 4" Gravel sub base, 6" Slab on grade reinforcing, assumed 2.5 #/sf Finish to slab	1,225 0,000 0,000	cy gsf gsf	\$20.11 \$0.38	\$24,640 \$7,600
Fine grading Erosion control Pools Earthwork Mass Excavation Swimming pool Surge tank Backfill Swimming pool Surge tank Haul Excess Swimming pool Surge tank Miscellaneous hauling, allowance Foundations Underpinning existing phase 1 building Continuous Footings assumed 3' wide x 3' deep, at perimeter and basement walls Concrete, continuous footings, 4000 psi Formwork, continuous footings Foundation reinforcing, assume 150 #/cy Excavation Backfill Haul excess Spread Footings Foundation, conventional, excluding pool areas Concrete, slab on grade, 4000 psi Formwork, slab on grade Sand base, 4" Gravel sub base, 6" Slab on grade reinforcing, assumed 2.5 #/sf Finish to slab	0,000 0,000 1,971	gsf gsf	\$0.38	\$7,600
Erosion control  Pools Earthwork  Mass Excavation  Swimming pool  Surge tank  Backfill  Swimming pool  Surge tank  Haul Excess  Swimming pool  Surge tank  Miscellaneous hauling, allowance  Foundations  Underpinning existing phase 1 building  Continuous Footings assumed 3' wide x 3' deep, at perimeter and basement walls  Concrete, continuous footings, 4000 psi  Formwork, continuous footings  Foundation reinforcing, assume 150 #/cy  Excavation  Backfill  Haul excess  Spread Footings  Foundation, conventional, excluding pool areas  Concrete, slab on grade, 4000 psi  Formwork, slab on grade  Sand base, 4"  Gravel sub base, 6"  Slab on grade reinforcing, assumed 2.5 #/sf  Finish to slab	0,000 1,971	gsf	·	
Pools Earthwork  Mass Excavation  Swimming pool  Surge tank  Backfill  Swimming pool  Surge tank  Haul Excess  Swimming pool  Surge tank  Miscellaneous hauling, allowance  Foundations  Underpinning existing phase 1 building  Continuous Footings assumed 3' wide x 3' deep, at perimeter and basement walls  Concrete, continuous footings, 4000 psi  Formwork, continuous footings  Foundation reinforcing, assume 150 #/cy  Excavation  Backfill  Haul excess  Spread Footings  Foundation, conventional, excluding pool areas  Concrete, slab on grade, 4000 psi  Formwork, slab on grade  Sand base, 4"  Gravel sub base, 6"  Slab on grade reinforcing, assumed 2.5 #/sf  Finish to slab	1,971	-	\$0.06	\$1,200
Mass Excavation Swimming pool Surge tank Backfill Swimming pool Surge tank Haul Excess Swimming pool Surge tank Haul Excess Swimming pool Surge tank Miscellaneous hauling, allowance Foundations Underpinning existing phase 1 building Continuous Footings assumed 3' wide x 3' deep, at perimeter and basement walls Concrete, continuous footings, 4000 psi Formwork, continuous footings Foundation reinforcing, assume 150 #/cy Excavation Backfill Haul excess Spread Footings Foundation, conventional, excluding pool areas Concrete, slab on grade, 4000 psi Formwork, slab on grade, 4000 psi Formwork, slab on grade sand base, 4" Gravel sub base, 6" Slab on grade reinforcing, assumed 2.5 #/sf Finish to slab		су		
Swimming pool Surge tank Backfill Swimming pool Surge tank Haul Excess Swimming pool Surge tank Miscellaneous hauling, allowance Foundations Underpinning existing phase 1 building Continuous Footings assumed 3' wide x 3' deep, at perimeter and basement walls Concrete, continuous footings, 4000 psi Formwork, continuous footings Foundation reinforcing, assume 150 #/cy Excavation Backfill Haul excess Spread Footings Foundation, conventional, excluding pool areas Concrete, slab on grade, 4000 psi Formwork, slab on grade, 4000 psi Formwork, slab on grade Sand base, 4" Gravel sub base, 6" Slab on grade reinforcing, assumed 2.5 #/sf Finish to slab		су		
Surge tank Backfill Swimming pool Surge tank Haul Excess Swimming pool Surge tank Miscellaneous hauling, allowance Foundations Underpinning existing phase 1 building Continuous Footings assumed 3' wide x 3' deep, at perimeter and basement walls Concrete, continuous footings, 4000 psi Formwork, continuous footings Foundation reinforcing, assume 150 #/cy Excavation Backfill Haul excess Spread Footings Foundation, conventional, excluding pool areas Concrete, slab on grade, 4000 psi Formwork, slab on grade Sand base, 4" Gravel sub base, 6" Slab on grade reinforcing, assumed 2.5 #/sf Finish to slab		су		
Backfill Swimming pool Surge tank Haul Excess Swimming pool Surge tank Miscellaneous hauling, allowance Foundations Underpinning existing phase 1 building Continuous Footings assumed 3' wide x 3' deep, at perimeter and basement walls Concrete, continuous footings, 4000 psi Formwork, continuous footings Foundation reinforcing, assume 150 #/cy Excavation Backfill Haul excess Spread Footings Foundation, conventional, excluding pool areas Concrete, slab on grade, 4000 psi Formwork, slab on grade Sand base, 4" Gravel sub base, 6" 13 Slab on grade reinforcing, assumed 2.5 #/sf Finish to slab	288		\$11.65	\$22,959
Swimming pool Surge tank Haul Excess Swimming pool Surge tank Miscellaneous hauling, allowance Foundations Underpinning existing phase 1 building Continuous Footings assumed 3' wide x 3' deep, at perimeter and basement walls Concrete, continuous footings, 4000 psi Formwork, continuous footings Foundation reinforcing, assume 150 #/cy Excavation Backfill Haul excess Spread Footings Foundation, conventional, excluding pool areas Concrete, slab on grade, 4000 psi Formwork, slab on grade Sand base, 4" Gravel sub base, 6" 13 Slab on grade reinforcing, assumed 2.5 #/sf Finish to slab		су	\$11.65	\$3,355
Surge tank Haul Excess Swimming pool Surge tank Miscellaneous hauling, allowance  Foundations Underpinning existing phase 1 building Continuous Footings assumed 3' wide x 3' deep, at perimeter and basement walls Concrete, continuous footings, 4000 psi Formwork, continuous footings Foundation reinforcing, assume 150 #/cy Excavation Backfill Haul excess Spread Footings Foundation, conventional, excluding pool areas Concrete, slab on grade, 4000 psi Formwork, slab on grade Sand base, 4" Gravel sub base, 6" Slab on grade reinforcing, assumed 2.5 #/sf Finish to slab				
Haul Excess Swimming pool Surge tank Miscellaneous hauling, allowance  Foundations Underpinning existing phase 1 building Continuous Footings assumed 3' wide x 3' deep, at perimeter and basement walls Concrete, continuous footings, 4000 psi Formwork, continuous footings Foundation reinforcing, assume 150 #/cy Excavation Backfill Haul excess Spread Footings Foundation, conventional, excluding pool areas Spread Footings Foundation, conventional, excluding pool areas Concrete, slab on grade, 4000 psi Formwork, slab on grade Sand base, 4" Gravel sub base, 6" Slab on grade reinforcing, assumed 2.5 #/sf Finish to slab			Assume I	Not Required
Swimming pool Surge tank Miscellaneous hauling, allowance  Foundations Underpinning existing phase 1 building Continuous Footings assumed 3' wide x 3' deep, at perimeter and basement walls Concrete, continuous footings, 4000 psi Formwork, continuous footings Foundation reinforcing, assume 150 #/cy Excavation Backfill Haul excess Spread Footings Foundation, conventional, excluding pool areas Spread Footings Foundation, conventional, excluding pool areas Concrete, slab on grade, 4000 psi Formwork, slab on grade Sand base, 4" Gravel sub base, 6" Slab on grade reinforcing, assumed 2.5 #/sf Finish to slab	237	су	\$18.59	\$4,408
Surge tank Miscellaneous hauling, allowance Foundations Underpinning existing phase 1 building Continuous Footings assumed 3' wide x 3' deep, at perimeter and basement walls Concrete, continuous footings, 4000 psi Formwork, continuous footings Foundation reinforcing, assume 150 #/cy Excavation Backfill Haul excess Spread Footings Foundation, conventional, excluding pool areas Slab On Grade, excluding pool areas Concrete, slab on grade, 4000 psi Formwork, slab on grade Sand base, 4" Gravel sub base, 6" Slab on grade reinforcing, assumed 2.5 #/sf Finish to slab				
Miscellaneous hauling, allowance Foundations Underpinning existing phase 1 building Continuous Footings assumed 3' wide x 3' deep, at perimeter and basement walls Concrete, continuous footings, 4000 psi Formwork, continuous footings 4 Foundation reinforcing, assume 150 #/cy 45 Excavation Backfill Haul excess Spread Footings Foundation, conventional, excluding pool areas Slab On Grade, excluding pool areas Concrete, slab on grade, 4000 psi Formwork, slab on grade Sand base, 4" Gravel sub base, 6" Slab on grade reinforcing, assumed 2.5 #/sf Finish to slab	2,365	су	\$20.11	\$47,557
Foundations Underpinning existing phase 1 building Continuous Footings assumed 3' wide x 3' deep, at perimeter and basement walls Concrete, continuous footings, 4000 psi Formwork, continuous footings Foundation reinforcing, assume 150 #/cy Excavation Backfill Haul excess Spread Footings Foundation, conventional, excluding pool areas 13 Slab On Grade, excluding pool areas Concrete, slab on grade, 4000 psi Formwork, slab on grade Sand base, 4" Gravel sub base, 6" 13 Slab on grade reinforcing, assumed 2.5 #/sf Finish to slab	62	су	\$20.11	\$1,250
Underpinning existing phase 1 building Continuous Footings assumed 3' wide x 3' deep, at perimeter and basement walls Concrete, continuous footings, 4000 psi Formwork, continuous footings Foundation reinforcing, assume 150 #/cy Excavation Backfill Haul excess Spread Footings Foundation, conventional, excluding pool areas Slab On Grade, excluding pool areas Concrete, slab on grade, 4000 psi Formwork, slab on grade Sand base, 4" Gravel sub base, 6" 13 Slab on grade reinforcing, assumed 2.5 #/sf Finish to slab	500	су	\$20.11	\$10,055
Continuous Footings assumed 3' wide x 3' deep, at perimeter and basement walls  Concrete, continuous footings, 4000 psi  Formwork, continuous footings  Foundation reinforcing, assume 150 #/cy  Excavation  Backfill  Haul excess  Spread Footings  Foundation, conventional, excluding pool areas  Concrete, slab on grade, 4000 psi  Formwork, slab on grade  Sand base, 4"  Gravel sub base, 6"  Slab on grade reinforcing, assumed 2.5 #/sf  Finish to slab  13				
Continuous Footings assumed 3' wide x 3' deep, at perimeter and basement walls  Concrete, continuous footings, 4000 psi  Formwork, continuous footings  Foundation reinforcing, assume 150 #/cy  Excavation  Backfill  Haul excess  Spread Footings  Foundation, conventional, excluding pool areas  Concrete, slab on grade, 4000 psi  Formwork, slab on grade  Sand base, 4"  Gravel sub base, 6"  Slab on grade reinforcing, assumed 2.5 #/sf  Finish to slab  13	1	ls	\$55,000.00	\$55,000
Concrete, continuous footings, 4000 psi Formwork, continuous footings Foundation reinforcing, assume 150 #/cy Excavation Backfill Haul excess Spread Footings Foundation, conventional, excluding pool areas Slab On Grade, excluding pool areas Concrete, slab on grade, 4000 psi Formwork, slab on grade Sand base, 4" Gravel sub base, 6" 13 Slab on grade reinforcing, assumed 2.5 #/sf Finish to slab 13				
Formwork, continuous footings 4 Foundation reinforcing, assume 150 #/cy 45 Excavation Backfill Haul excess Spread Footings Foundation, conventional, excluding pool areas 13 Slab On Grade, excluding pool areas Concrete, slab on grade, 4000 psi Formwork, slab on grade Sand base, 4" 13 Gravel sub base, 6" 13 Slab on grade reinforcing, assumed 2.5 #/sf Finish to slab 13	301	су	\$257.50	\$77,508
Foundation reinforcing, assume 150 #/cy Excavation Backfill Haul excess Spread Footings Foundation, conventional, excluding pool areas Foundation, conventional, excluding pool areas Concrete, slab on grade, 4000 psi Formwork, slab on grade Sand base, 4" Gravel sub base, 6" 13 Slab on grade reinforcing, assumed 2.5 #/sf Finish to slab 13	4,920	sf	\$8.00	\$39,360
Excavation Backfill Haul excess Spread Footings Foundation, conventional, excluding pool areas Slab On Grade, excluding pool areas Concrete, slab on grade, 4000 psi Formwork, slab on grade Sand base, 4" Gravel sub base, 6" 13 Slab on grade reinforcing, assumed 2.5 #/sf Finish to slab 13	5,100	lbs	\$1.81	\$81,631
Haul excess  Spread Footings  Foundation, conventional, excluding pool areas  Slab On Grade, excluding pool areas  Concrete, slab on grade, 4000 psi  Formwork, slab on grade  Sand base, 4"  Gravel sub base, 6"  13  Slab on grade reinforcing, assumed 2.5 #/sf  Finish to slab	607	су	\$23.50	\$14,265
Spread Footings Foundation, conventional, excluding pool areas Slab On Grade, excluding pool areas Concrete, slab on grade, 4000 psi Formwork, slab on grade Sand base, 4" 13 Gravel sub base, 6" 13 Slab on grade reinforcing, assumed 2.5 #/sf Finish to slab 13	334	сy	\$20.38	\$6,807
Foundation, conventional, excluding pool areas  Slab On Grade, excluding pool areas  Concrete, slab on grade, 4000 psi  Formwork, slab on grade  Sand base, 4"  Gravel sub base, 6"  Slab on grade reinforcing, assumed 2.5 #/sf  Finish to slab  13	273	сy	\$20.11	\$5,490
Foundation, conventional, excluding pool areas  Slab On Grade, excluding pool areas  Concrete, slab on grade, 4000 psi  Formwork, slab on grade  Sand base, 4"  Gravel sub base, 6"  Slab on grade reinforcing, assumed 2.5 #/sf  Finish to slab  13		•		
Slab On Grade, excluding pool areas Concrete, slab on grade, 4000 psi Formwork, slab on grade Sand base, 4" 13 Gravel sub base, 6" 13 Slab on grade reinforcing, assumed 2.5 #/sf Finish to slab 13	3,784	gsf	\$13.50	\$186,084
Concrete, slab on grade, 4000 psi Formwork, slab on grade Sand base, 4" 13 Gravel sub base, 6" 13 Slab on grade reinforcing, assumed 2.5 #/sf 37 Finish to slab 13	•	•	·	. ,
Formwork, slab on grade Sand base, 4" 13 Gravel sub base, 6" 13 Slab on grade reinforcing, assumed 2.5 #/sf 37 Finish to slab 13	281	су	\$250.00	\$70,250
Sand base, 4" 13 Gravel sub base, 6" 13 Slab on grade reinforcing, assumed 2.5 #/sf 37 Finish to slab 13	590	lf	\$8.40	\$4,956
Gravel sub base, 6" 13 Slab on grade reinforcing, assumed 2.5 #/sf 37 Finish to slab 13	3,784	sf	\$2.14	\$29,498
Slab on grade reinforcing, assumed 2.5 #/sf 37 Finish to slab 13	3,784	sf	\$1.88	\$25,914
Finish to slab	7,906	lbs	\$1.72	\$65,198
	3,784	sf	\$0.87	\$11,992
	3,784	sf	\$0.46	\$6,341
Concrete, slab on grade, add for thickened edges	36	су	\$241.74	\$8,703
Total - Foundations	50			\$868,431
2 Vertical Structure	30			
Stem Walls, assume 30" wide x 24" high	30			
Concrete, walls 5000 psi	30		\$275.00	\$12,925
Formwork, walls	47	су	\$17.10	\$15,732

DETAIL ELEMENTS - AQUATICS CENTER - PHA	ASE 2 - AD	D AL	TERNATE	
Element	Quantity	Unit	Unit Cost	Total
Wall reinforcing, assume 200 #/cy	9,370	lbs	\$1.81	\$16,960
Finish to walls	460	sf	\$1.16	\$534
Allow for bench finish, wood assumed	230	lf	\$150.00	\$34,500
Structural Steel	00.000			
Vertical steel framing, allowance	20,000	gsf	\$17.00	\$340,000
Metals	10	la a	¢40,000,00	¢400.000
Miscellaneous bracing Miscellaneous metals	10 20,000	loc gsf	\$10,000.00 \$1.64	\$100,000 \$32,800
Total - Vertical Structure			_	\$553,450
2 Floor 9 Poof Chrystyres				
3 Floor & Roof Structures  Rough Carpentry- Roof Framing				
30" x 8 3/4" glu-lam	960	lf	\$90.00	\$86,400
70" x 8 3/4" glu-lam	110	if	\$210.00	\$23,100
Tie rod with 18" steel circular turnbuckle	960	if	\$27.00	\$25,920
Horizontal wood framing, truss allowance	20,000	gsf	\$11.50	\$230,000
8" DLT roof panels	20,254	sf	\$20.00	\$405,080
Metals				
Light support, assume 10 #/lf	2,400	lb	\$1.81	\$4,344
Total - Floor & Roof Structures				\$774,844
4 Exterior Cladding				
Aquatics Center Building Envelope				
Demolish phase 1 exterior wall, along gridline H	4,800	sf	\$28.00	\$134,400
Exterior walls, densglass sheathing	9,600	sf	\$3.72	\$35,712
Rigid insulation, exterior walls	9,600	sf	\$1.79 \$105.00	\$17,184
Metal Panel Rainscreen System Random Rough Cedar Siding Rainscreen System	5,316 4,284	sf sf	\$105.00 \$87.00	\$558,180 \$372,708
Aluminum windows/storefront, vision glazing, generic	3,193	sf	\$105.96	\$372,700
Storefront with Rainscreen System	755	sf	\$190.00	\$143,450
Aluminum door sets, frames and hardware, glazed, single, tempered glass	1	ea	\$5,556.46	\$5,556
Aluminum door sets, frames and hardware, glazed, double	3	pr	\$11,030.17	\$33,091
Louver allowance	1	ls	\$50,000.00	\$50,000
Tie in phase 2 envelope to phase 1	1	ls	\$50,000.00	\$50,000
Total - Exterior Cladding				\$1,738,611
5 Poofing and Waterproofing				
5 Roofing and Waterproofing Roofing				
Single ply membrane roofing	20,254	sf	\$6.00	\$121,524
Rigid roof insulation, poly iso insulation	20,254	sf	\$5.76	\$116,663
Flashing / Counterflashing	•			•
Aluminum coping at parapets	460	lf	\$33.50	\$15,410
Base flashings at base of parapets	460	lf	\$36.96	\$17,002

DETAIL ELEMENTS - AQUATICS CENTER	- PHASE 2 - AD	D AL1	TERNATE	
Element	Quantity	Unit	Unit Cost	Total
Roof Accessories				
Aluminum gutters	110	lf	\$26.55	\$2,921
Aluminum downspouts	50	lf	\$26.55	\$1,328
Miscellaneous accessories	20,000	gsf	\$2.10	\$42,000
Miscellaneous		_		
Crickets	584	sf	\$6.48	\$3,784
Caulking allowance	20,254	gfa	\$0.36	\$7,291
Miscellaneous				
Caulking & sealant allowance	20,000	gsf	\$0.40	\$8,000
Total - Roofing and Waterproofing				\$335,922
6 Interior Partitions, Doors and Glazing				
Partition Walls				
Partition wall 11' 6" high				
Metal studs, 3 5/8", 20 Ga., at 16" o.c.	934	sf	\$11.08	\$10,349
Bolt top stud channel to structure above incl. double top track	81	lf	\$25.62	\$2,075
Bolt bottom stud channel to concrete floor	81	lf	\$13.23	\$1,071
Gypsum board, 5/8" thick, finished (I4), type X	1,868	sf	\$3.58	\$6,687
Sound batt insulation, unbacked	934	sf	\$1.32	\$1,233
Partition wall 9' 6" high				
Metal studs, 3 5/8", 20 Ga., at 16" o.c.	741	sf	\$11.08	\$8,210
Bolt top stud channel to structure above incl. double top track	78	lf	\$25.62	\$1,998
Bolt bottom stud channel to concrete floor	78	lf	\$13.23	\$1,032
Gypsum board, 5/8" thick, finished (I4), type X	1,482	sf	\$3.58	\$5,306
Sound batt insulation, unbacked	741	sf	\$1.32	\$978
Partition wall - wet - 9' 6" high				
Metal studs, 3 5/8", 20 Ga., at 16" o.c.	2,566	sf	\$11.08	\$28,431
Bolt top stud channel to structure above incl. double top track	270	lf	\$25.62	\$6,917
Bolt bottom stud channel to concrete floor	270	lf	\$13.23	\$3,571
Gypsum board, 5/8" thick, finished (I4), type X	2,432	sf	\$3.58	\$8,707
Sound batt insulation, unbacked	2,566	sf	\$1.32	\$3,387
Vapor barrier	2,970	sf	\$2.14	\$6,356
Backer board	2,700	sf	\$3.40	\$9,180
Ceramic tile, walls	2,700	sf	\$19.00	\$51,300
Partition wall - wet - one-sided 9' 6" high				
Metal studs, 3 5/8", 20 Ga., at 16" o.c.	812	sf	\$11.08	\$8,997
Bolt top stud channel to structure above incl. double top track	86	lf	\$25.62	\$2,203
Bolt bottom stud channel to concrete floor	86	lf	\$13.23	\$1,137
Gypsum board, 5/8" thick, finished (I4), type X	1,194	sf	\$3.58	\$4,275
Sound batt insulation, unbacked	812	sf	\$1.32	\$1,072
Vapor barrier	473	sf	\$2.14	\$1,012
Backer board	430	sf	\$3.40	\$1,462
Ceramic tile, walls	430	sf	\$19.00	\$8,170
Interior of exterior walls				
Interior of exterior, 5/8" thick gypsum board X, finished	1,264	sf	\$3.58	\$4,525

DETAIL ELEMENTS - AQUATICS CENTER - PHA	ASE 2 - AD	D ALT	ERNATE	
Element	Quantity	Unit	Unit Cost	Total
Interior Glazing				
Interior glazing				
Interior storefront - 9' 6" high	1,027	sf	\$88.74	\$91,136
Interior storefront - 11' 6" high	31	sf	\$88.74	\$2,751
Interior Openings				
Doors				
Aluminum door sets, frames and hardware, glazed, single, tempered gl	a: 2	ea	\$5,556.00	\$11,112
SC wood door incl. AL frame and hardware, single, 3' 0" x 7' 0"	5	ea	\$2,121.00	\$10,605
SC wood door incl. AL frame and hardware, double, 6' 0" x 7' 0"	2	pr	\$4,078.00	\$8,156
Hardware premium	11	leaves	\$250.00	\$2,750
Total - Interior Partitions, Doors and Glazing				\$316,152
7 Floor, Wall and Ceiling Finishes				
Make good finishes at phase 1 & phase 2 intersection	1	ls	\$80,000.00	\$80,000
Flooring & Base	'	13	ψου,υσυ.υσ	φου,υυυ
Sealed concrete	1,151	sf	\$1.85	\$2,129
Floor prep/leveling	4,250	sf	\$1.00	\$2,129 \$4,250
Rubber athletic flooring	4,250 2,330	sf	\$1.00 \$14.50	\$4,250 \$33,785
			· ·	
Carpet tile	179	sf	\$4.95	\$886
Ceramic tile	4,071	sf	\$18.44	\$75,069
Resilient base	519	lf ''	\$5.23	\$2,714
Ceramic tile, base	626	lf	\$18.45	\$11,550
Ceiling			05.40	<b>4</b>
Acoustical ceiling tile, suspended, includes suspension system	3,096	sf	\$5.10	\$15,790
Gypsum board ceilings, incl. framing	3,423	sf	\$11.41	\$39,056
Wood Slat Ceiling, allowance	3,000	sf	\$48.76	\$146,280
Wall finishes, misc.				
Allowance	8,240	sf	\$2.85	\$23,484
Painting and Coating				
Paint walls	8,240	sf	\$1.00	\$8,240
Paint ceilings	3,423	sf	\$1.50	\$5,135
Concrete pool epoxy deck paint	4,841	sf	\$15.00	\$72,615
Total - Floor, Wall and Ceiling Finishes				\$520,983
8 Function Equipment and Specialties				
Interior Specialties				
Toilet Cubicles				
Standard, stainless steel	25	00	\$1,909.43	\$47,736
Handicap, stainless steel	5	ea	\$2,056.64	\$10,283
Toilet / Restroom Specialties	ວ	ea	Ψ2,030.04	φ10,203
Bathroom mirrors	16	cf	\$39.29	ተድባባ
Coat hook		sf	\$39.29 \$30.35	\$629 \$212
Grab bars	7	ea		\$212
	8	ea	\$203.26	\$1,626
Janitor mop sink rack	1	ea	\$136.12	\$136
Paper towel dispenser combo unit, recessed	11	ea	\$365.21	\$4,017
Seat cover dispenser	16	ea	\$138.43	\$2,215

DETAIL ELEMENTS - AQUATICS CENTER - PHA	DETAIL ELEMENTS - AQUATICS CENTER - PHASE 2 - ADD ALTERNATE					
Element	Quantity	Unit	Unit Cost	Total		
Shower accessories, per stall	10	ea	\$1,048.63	\$10,486		
Soap dispenser	16	ea	\$98.41	\$1,575		
Toilet paper dispenser	16	ea	\$86.64	\$1,386		
Storage Specialties				. ,		
Lockers, 2-tier incl. concrete base	18	ea	\$262.00	\$4,716		
Locker room benches	39	lf	\$165.00	\$6,435		
Other Specialties				, , , , ,		
Handrail - free-standing	43	lf	\$250.00	\$10,750		
Miscellaneous specialty allowance	20,000	sf	\$1.15	\$23,000		
Interior signage, code	20,000	sf	\$2.71	\$54,200		
Fire extinguisher and cabinet, allowance	8	ea	\$450.00	\$3,600		
Rough Carpentry	·	•	,	40,000		
Additional blocking, support backing, stiffeners, etc.	20,000	sf	\$1.00	\$20,000		
Casework	20,000	O.	Ψ1.00	Ψ20,000		
Exercise Room casework - 36"	60	lf	\$330.00	\$19,800		
Restroom vanity counter - 24"	52	if	\$425.00	\$22,100		
Window Covering	52	"	Ψ+20.00	ΨΖΖ,100		
Mechoshades, motorized	3,117	sf	\$20.96	\$65,332		
Pool Construction (Cost provided by Aquatics Design Group dated 8/8/2019)		31	Ψ20.50	Ψ05,332		
Recreational pool, construction cost	6,216	sf	\$253.85	\$1,577,932		
Recreational pool, equipment cost	6,216	sf	\$29.76	\$1,377,932		
Spectator Seating	0,210	51	φ29.70	φ104, <del>3</del> 00		
Permanent bleachers	80	seat	\$150.00	\$12,000		
Total - Function Equipment and Specialties				\$2,085,155		
9 Stairs and Vertical Transportation						
Entrance Stairs, on grade	300	lf	\$65.00	\$19,500		
Total - Stairs and Vertical Transportation				\$19,500		
10 Plumbing Systems						
General plumbing						
Water heater, Double wall, plate and frame heat exchangers	1	ea	\$20,500.00	\$20,500		
Circulating pump, duplex	1	ea	\$2,537.13	\$2,537		
Expansion tank	1	ea	\$1,022.02	\$1,022		
Local water heaters, electric	1	ea	\$1,478.91	\$1,479		
Sewage ejector / Sump pump - allowance	1	ea	\$11,276.70	\$11,277		
Grease / Sand / Oil interceptor	1	ea	\$17,331.00	\$17,331		
Sanitary fixtures						
Water closet	15	ea	\$1,894.86	\$28,423		
Urinal	4	ea	\$1,929.52	\$7,718		
Lavatory	16	ea	\$1,834.78	\$29,356		
Shower, exterior - next to the water	4	ea	\$1,883.30	\$7,533		
Shower, enclosed - inside the locker room	10	ea	\$2,033.50	\$20,335		
Emergency Shower / Eyewash stations	1	ea	\$2,657.42	\$2,657		
Drinking fountain, with bottle filing stations	2	ea	\$4,945.11	\$9,890		
Sink, Janitor	1	ea	\$1,415.37	\$1,415		
Onin, variati	'	ou	ψ1,+10.01	Ψ1,Τ13		

Hose bibs Floor drains Trench drains for pool area - corrosion resistant HDPE Rough ins Local rough-in at fixture Rough-in at floor sink or floor drain Rough-ins to OFCI Flex room / Exercise: cold and hot water, direct and indirect drain Make up water for swimming pool Domestic water piping Waste / vent piping Roof / storm drainage RD/OD - Roof drain with Overhead drain 3" pipe, ci, no-hub, in bldg 4" pipe, ci, no-hub, in bldg Condensate drainage Miscellaneous  Total - Plumbing Systems  11 Heating, Ventilation and Air Conditioning Wet side equipment: chiller, boiler, pumps etc.	10 10 30 53 40 2 1 20,000 20,000 6 530 320 20,000 20,000	ea ea ea ea ea ea gsf gsf ea If	\$430.60 \$759.10 \$1,097.63 \$1,059.50 \$1,254.76 \$1,155.40 \$7,510.10 \$4.39 \$4.62	\$4,306 \$7,591 \$32,929 \$56,154 \$50,191 \$2,311 \$7,510 \$87,810
Floor drains Trench drains for pool area - corrosion resistant HDPE Rough ins Local rough-in at fixture Rough-in at floor sink or floor drain Rough-ins to OFCI Flex room / Exercise: cold and hot water, direct and indirect drain Make up water for swimming pool Domestic water piping Waste / vent piping Roof / storm drainage RD/OD - Roof drain with Overhead drain 3" pipe, ci, no-hub, in bldg 4" pipe, ci, no-hub, in bldg Condensate drainage Miscellaneous  Total - Plumbing Systems	10 30 53 40 2 1 20,000 20,000 6 530 320 20,000	ea ea ea ea ea gsf gsf ea lf	\$759.10 \$1,097.63 \$1,059.50 \$1,254.76 \$1,155.40 \$7,510.10 \$4.39 \$4.62	\$7,591 \$32,929 \$56,154 \$50,191 \$2,311 \$7,510 \$87,810
Trench drains for pool area - corrosion resistant HDPE Rough ins Local rough-in at fixture Rough-in at floor sink or floor drain Rough-ins to OFCI Flex room / Exercise: cold and hot water, direct and indirect drain Make up water for swimming pool Domestic water piping Waste / vent piping Roof / storm drainage RD/OD - Roof drain with Overhead drain 3" pipe, ci, no-hub, in bldg 4" pipe, ci, no-hub, in bldg Condensate drainage Miscellaneous  Total - Plumbing Systems	30 53 40 2 1 20,000 20,000 6 530 320 20,000	ea ea ea ea gsf gsf ea If	\$1,097.63 \$1,059.50 \$1,254.76 \$1,155.40 \$7,510.10 \$4.39 \$4.62	\$32,929 \$56,154 \$50,191 \$2,311 \$7,510 \$87,810
Rough ins Local rough-in at fixture Rough-in at floor sink or floor drain Rough-ins to OFCI Flex room / Exercise: cold and hot water, direct and indirect drain Make up water for swimming pool Domestic water piping Waste / vent piping Roof / storm drainage RD/OD - Roof drain with Overhead drain 3" pipe, ci, no-hub, in bldg 4" pipe, ci, no-hub, in bldg Condensate drainage Miscellaneous  Total - Plumbing Systems	53 40 2 1 20,000 20,000 6 530 320 20,000	ea ea ea ea gsf gsf ea If	\$1,059.50 \$1,254.76 \$1,155.40 \$7,510.10 \$4.39 \$4.62	\$56,154 \$50,191 \$2,311 \$7,510 \$87,810
Local rough-in at fixture Rough-in at floor sink or floor drain Rough-ins to OFCI Flex room / Exercise: cold and hot water, direct and indirect drain Make up water for swimming pool Domestic water piping Waste / vent piping Roof / storm drainage RD/OD - Roof drain with Overhead drain 3" pipe, ci, no-hub, in bldg 4" pipe, ci, no-hub, in bldg Condensate drainage Miscellaneous  Total - Plumbing Systems	40 2 1 20,000 20,000 6 530 320 20,000	ea ea ea gsf gsf	\$1,254.76 \$1,155.40 \$7,510.10 \$4.39 \$4.62	\$50,191 \$2,311 \$7,510 \$87,810
Rough-in at floor sink or floor drain Rough-ins to OFCI Flex room / Exercise: cold and hot water, direct and indirect drain Make up water for swimming pool Domestic water piping Waste / vent piping Roof / storm drainage RD/OD - Roof drain with Overhead drain 3" pipe, ci, no-hub, in bldg 4" pipe, ci, no-hub, in bldg Condensate drainage Miscellaneous  Total - Plumbing Systems  11 Heating, Ventilation and Air Conditioning	2 1 20,000 20,000 6 530 320 20,000	ea ea gsf gsf ea If	\$1,155.40 \$7,510.10 \$4.39 \$4.62	\$2,311 \$7,510 \$87,810
indirect drain Make up water for swimming pool Domestic water piping Waste / vent piping Roof / storm drainage RD/OD - Roof drain with Overhead drain 3" pipe, ci, no-hub, in bldg 4" pipe, ci, no-hub, in bldg Condensate drainage Miscellaneous  Total - Plumbing Systems  11 Heating, Ventilation and Air Conditioning	1 20,000 20,000 6 530 320 20,000	ea gsf gsf ea If	\$7,510.10 \$4.39 \$4.62	\$7,510 \$87,810
indirect drain Make up water for swimming pool Domestic water piping Waste / vent piping Roof / storm drainage RD/OD - Roof drain with Overhead drain 3" pipe, ci, no-hub, in bldg 4" pipe, ci, no-hub, in bldg Condensate drainage Miscellaneous  Total - Plumbing Systems  11 Heating, Ventilation and Air Conditioning	1 20,000 20,000 6 530 320 20,000	ea gsf gsf ea If	\$7,510.10 \$4.39 \$4.62	\$7,510 \$87,810
Make up water for swimming pool Domestic water piping Waste / vent piping Roof / storm drainage RD/OD - Roof drain with Overhead drain 3" pipe, ci, no-hub, in bldg 4" pipe, ci, no-hub, in bldg Condensate drainage Miscellaneous  Total - Plumbing Systems  11 Heating, Ventilation and Air Conditioning	1 20,000 20,000 6 530 320 20,000	ea gsf gsf ea If	\$7,510.10 \$4.39 \$4.62	\$7,510 \$87,810
Domestic water piping Waste / vent piping Roof / storm drainage RD/OD - Roof drain with Overhead drain 3" pipe, ci, no-hub, in bldg 4" pipe, ci, no-hub, in bldg Condensate drainage Miscellaneous  Total - Plumbing Systems	20,000 20,000 6 530 320 20,000	gsf ea If	\$4.39 \$4.62	\$87,810
Waste / vent piping Roof / storm drainage RD/OD - Roof drain with Overhead drain 3" pipe, ci, no-hub, in bldg 4" pipe, ci, no-hub, in bldg Condensate drainage Miscellaneous  Total - Plumbing Systems  11 Heating, Ventilation and Air Conditioning	20,000 6 530 320 20,000	gsf ea If		
Roof / storm drainage	6 530 320 20,000	ea If		\$92,432
RD/OD - Roof drain with Overhead drain 3" pipe, ci, no-hub, in bldg 4" pipe, ci, no-hub, in bldg Condensate drainage Miscellaneous  Total - Plumbing Systems  11 Heating, Ventilation and Air Conditioning	530 320 20,000	lf		. ,
4" pipe, ci, no-hub, in bldg Condensate drainage Miscellaneous  Total - Plumbing Systems  11 Heating, Ventilation and Air Conditioning	320 20,000		\$826.11	\$4,957
Condensate drainage Miscellaneous  Total - Plumbing Systems  11 Heating, Ventilation and Air Conditioning	20,000	lf	\$63.50	\$33,655
Miscellaneous  Total - Plumbing Systems  11 Heating, Ventilation and Air Conditioning			\$74.47	\$23,829
Miscellaneous  Total - Plumbing Systems  11 Heating, Ventilation and Air Conditioning		gsf	\$0.50	\$10,000
11 Heating, Ventilation and Air Conditioning		gsf	\$3.40	\$68,000
				\$643,149
	20,000	gsf	\$13.50	\$270,000
Chilled water piping distribution	20,000	gsf	\$2.30	\$46,000
Hot water piping distribution	20,000	gsf	\$5.70	\$114,000
Air-Side Equipment	20,000	ysi	ψ3.70	φ114,000
AHU-1, Air handling unit, outdoor, vav, modular	20,000	cfm	\$11.50	\$230,000
AHU-2, Air handling unit, outdoor, vav, modular	15,000	cfm	\$11.50	\$172,500
FCU, Fan coil units for IDF / MDF rooms	13,000	ea	\$4,449.45	\$4,449
VAV terminal boxes, with reheat coil	22	ea	\$2,125.94	\$46,771
EF, Exhaust fan, inline, Greenheck	6,000	cfm	\$4.00	\$24,000
Air Distribution	0,000	Citti	Ψ+.00	Ψ24,000
Ductwork, galv - protected with epoxy based paint	20,000	lb	\$14.44	\$288,850
Ductwork, stainless steel	3,000		\$32.00	\$96,000
Duct insulation	11,500	sf	\$4.46	\$51,288
Combination fire / smoke damper	14	ea	\$1,097.63	\$15,367
Grilles, registers and diffusers, including dampers and flex duct	20,000	sf	\$2.80	\$56,000
Acoustical attenuation	2	ea	\$5,199.30	\$10,399
Ventilation premium for PHIUS+ requirements, allowance	1	ls	\$300,000.00	\$300,000
Miscellaneous testing & commissioning	·		<b>4000</b> ,000.00	4000,000
Test / balance HVAC	160	hr	\$176.94	\$28,310
Start-up/check-out	120	hr	\$140.88	\$16,905
Commissioning assist	120	hr	\$140.88	\$16,905
Piping identification: labels, arrows and valve tags	160	ea	\$31.89	\$5,102
Seismic and vibration requirements	1	ea	\$25,000.00	\$25,000
HVAC Controls			+,••••	+==,===
DDC controls to plumbing systems	1	ls	\$5,777.00	\$5,777
DDC controls, air handlers		ea	\$17,000.00	\$34,000
DDC controls, vav box, reheat coils	7	ea	÷ , 5 5 5 . 5 5	(1)()-F ()()()
DDC controls, general exhaust fan	2 22	54	\$2,161.12	\$47,545

**DETAIL ELEMENTS - AQUATICS CENTER - PHASE 2 - ADD ALTERNATE** 

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Element	Quantity	Unit	Unit Cost	Total
DDC controls, smoke damper monitor	14	ea	\$1,100.00	\$15,400
DDC misc. items, training, integration	160	hr	\$161.76	\$25,881
DDC controls for pools	1	ls	\$30,000.00	\$30,000
Total - Heating, Ventilation and Air Conditioning				\$1,982,522
12 Electrical Lighting, Power and Communications				
Service & Distribution Equipment	4		040.055.04	040.055
Main switchboard, 1200 amp, 120/208v, 3ph, 4w	1	ea	\$49,955.01	\$49,955
Pool Eq. Distribution board, 400 amp, 120/208v, 3ph, 4w	1	ea	\$24,325.37	\$24,325
Panelboard, 225 amp, 120/208v, 3ph, 4w	3	ea	\$3,308.48	\$9,925
Feeder, 225 amp, emt	125	lf ''	\$108.10	\$13,513
Feeder, 400 amp, emt	150	lf .r.	\$184.08	\$27,612
Feeder, 1200 amp, PVC	50	lf ır	\$796.25	\$39,813
Conduit, 1 1/4" pvc	100	lf I£	\$10.41	\$1,041
Copper wire, #8 thhn	100	lf It	\$2.03 \$4.12	\$203
Copper wire, #4 thhn	200	lf	<b>Φ4.1</b> 2	\$824
HVAC & Equipment Connections AHU-1	1	00	\$1,150.55	\$1,151
AHU-2	1	ea	\$1,150.55 \$1,150.55	\$1,151 \$1,151
FCU	2	ea	\$1,130.33 \$238.87	\$1,131 \$478
EF, Exhaust Fans	4	ea ea	\$209.15	\$837 \$837
Disconnect switch, 60/3 fused N1	2	ea	\$992.58	\$1,985
Disconnect switch, motor rated N3R	4	ea	\$268.56	\$1,900 \$1,074
Disconnect switch, 200/3 fused N3R	2	ea	\$3,051.75	\$6,103
Disconnect elevator switch, 60/3 fused N1	1	ea	\$2,988.75	\$2,989
Equipment feeder, 20 amp	950	lf	\$20.29	\$19,276
Equipment feeder, 60 amp	200	'' If	\$38.80	\$7,760
Equipment feeder, 200 amp	225	'' If	\$93.01	\$20,927
Convenience Power	220	"	ψ33.01	Ψ20,521
Duplex receptacle, 20 amp	42	ea	\$132.72	\$5,574
Double duplex receptacle, 20 amp	3	ea	\$175.88	\$528
Duplex receptacle, 20 amp GFCI	8	ea	\$151.39	\$1,211
Double duplex receptacle, 20 amp GFCI wp	2	ea	\$162.18	\$324
Branch power, 20 amp	1,870	lf	\$19.15	\$35,811
10/2 armored cable	1,269	if	\$7.77	\$9,860
Lighting & Lighting Controls	1,200		Ψ	ΨΟ,ΟΟ
Down Lights Phase #1	196	ea	\$315.25	\$61,789
Pool Flood Light High Bay	58	ea	\$855.75	\$49,634
Exit Lighting	8	ea	\$301.01	\$2,408
Lighting control panel	1	ea	\$5,125.15	\$5,125
Single pole switch	2	ea	\$140.93	\$282
Occupancy sensor, ceiling mounted	8	ea	\$319.79	\$2,558
Occupancy sensor, wall mounted	8	ea	\$267.09	\$2,137
Lighting branch power, fixtures	3,530	lf	\$19.15	\$67,593
Lighting branch power, controls	110	lf	\$18.00	\$1,980
Fire Alarm System			¥ •	+ - , - • •
FA control panel	1	ea	\$10,915.88	\$10,916
	•		\$2,997.03	\$2,997

ment	Quantity	Unit	Unit Cost	Total
FA beam sensor	2	ea	\$1,515.66	\$3,0
FA duct smoke detector	2	ea	\$675.44	\$1,3
FA flow switch	1	ea	\$575.12	\$5
FA heat detector	1	ea	\$329.55	\$3
FA pull station	2	ea	\$341.55	\$6
FA smoke detector	2	ea	\$326.95	\$6
FA tamper switch	1	ea	\$515.66	\$5
FA horn strobe unit, wall mount	4	ea	\$215.05	\$8
Conduit, 3/4" emt	2,450	lf	\$10.79	\$26,4
Fire alarm cable rated, 4C	2,450	lf	\$4.85	\$11,8
Telecommunications System				
Tele/data outlet, 2 port	4	ea	\$145.75	\$5
Wireless access point	2	ea	\$373.96	\$7
Fire treated plywood	1	ea	\$295.45	\$2
Main telecommunication grounding busbar	1	ea	\$2,150.55	\$2,1
Conduit, 3/4" emt	600	lf	\$10.79	\$6,4
CAT-6, 4 pair 23 AWG, UTP	600	lf	\$1.58	\$9
Public Address System				
Clock/speaker	4	ea	\$719.36	\$2,8
PA speaker	20	ea	\$248.65	\$4,9
Conduit, 3/4" emt	2,400	lf	\$10.79	\$25,8
PA system speaker cable	2,400	lf	\$1.32	\$3,1
Distributed Antenna System	20,000	gsf	\$1.55	\$31,0
Security, Access Control & CCTV Systems				
CCTV PTZ IP camera, outdoor	3	ea	\$3,660.16	\$10,9
CCTV fixed IP camera	6	ea	\$946.74	\$5,6
DVR, 4TB storage	1	ea	\$1,801.43	\$1,8
Conduit, 3/4" emt	600	lf	\$10.79	\$6,4
CCTV cabling	600	lf	\$1.58	\$9
Access control system				
Access control panel	1	ea	\$5,155.05	\$5,1
Access control panel power supply	1	ea	\$670.48	\$6
Card reader, proximity type	3	ea	\$1,039.99	\$3,1
Alarm contact, flush mount	3	ea	\$231.84	\$6
Conduit, 3/4" emt	850	lf	\$10.79	\$9,1
Access control cable	850	lf	\$1.58	\$1,3
Miscellaneous				
Small tools	1	ls	\$4,955.15	\$4,9
Consumables	1	ls	\$8,122.64	\$8,1
Equipment rentals	1	ls	\$9,501.12	\$9,5
Testing/commissioning	1	ls	\$8,850.15	\$8,8

**Total - Electrical Lighting, Power and Communications** 

\$694,568

Element	Quantity	Unit	Unit Cost	Total
13 Fire Protection Systems				
New hydraulically calculated wet pipe automatic fire sprinkler system				
Wet-pipe fire sprinkler, complete	20,000	gsf	\$8.00	\$160,000
316 Stainless Steel piping, premium	1	ea	\$35,000.00	\$35,000
FM 200 preaction systems, Electrical / data rooms - allowance			ne	e Not Needed
Fire sprinkler for chemical storage room, premium	1	ea	\$12,000.00	\$12,000

Aquatics Center Building Option 2

Element	Subtotal	Total	Cost / SF	Cost / SF
A) Shell (1-5)		\$9,175,601		\$342.37
1 Foundations	\$1,954,313		\$72.92	
2 Vertical Structure	\$1,482,907		\$55.33	
3 Floor & Roof Structures	\$1,646,374		\$61.43	
4 Exterior Cladding	\$3,352,152		\$125.08	
5 Roofing and Waterproofing	\$739,855		\$27.61	
B) Interiors (6-7)		\$1,955,564		\$72.97
6 Interior Partitions, Doors and Glazing	\$937,383		\$34.98	
7 Floor, Wall and Ceiling Finishes	\$1,018,181		\$37.99	
C) Equipment and Vertical Transportation (8-9)		\$5,789,218		\$216.02
8 Function Equipment and Specialties	\$5,514,607		\$205.77	
9 Stairs and Vertical Transportation	\$274,611		\$10.25	
D) Mechanical and Electrical (10-13)		\$7,537,623		\$281.25
10 Plumbing Systems	\$1,335,226		\$49.82	
11 Heating, Ventilation and Air Conditioning	\$4,243,771		\$158.35	
12 Electrical Lighting, Power and Communications	\$1,496,626		\$55.84	
13 Fire Protection Systems	\$462,000		\$17.24	
Subtotal		\$24,458,006	_	\$912.61
General Conditions	7.00%	\$1,712,060		\$63.88
Subtotal		\$26,170,066	_	\$976.50
General Requirements	3.00%	\$785,102		\$29.29
Subtotal		\$26,955,168	_	\$1,005.79
Bonds & Insurance	2.00%			\$20.12
Subtotal		\$27,494,272	_	\$1,025.91
Contractor's Fee	4.00%	\$1,099,771		\$41.04
Subtotal		\$28,594,043	_	\$1,066.94
Design Contingency	10.00%	\$2,859,404		\$106.69
Subtotal		\$31,453,447	_	\$1,173.64
Construction Contingency	3.00%	\$943,603		\$35.21
Subtotal		\$32,397,050	_	\$1,208.85
Escalation to MOC, 08/01/25	16.20%			\$195.87
Subtotal	0.000/	\$37,646,500	_	\$1,404.72
WSST	8.90%	\$3,677,869		\$137.23
TOTAL ESTIMATED CONSTRUCTION COST		\$41,324,368		\$1,541.95

Total Area: 26,800 SF

lement	Quantity	Unit	Unit Cost	Total
Foundations				
Earthwork				
Field staking/layout	46,000	gsf	\$0.15	\$6,90
Clear and grub site	46,000	gsf	\$0.12	\$5,70
Mass excavation	6,315	су	\$11.65	\$73,57
Backfill	3,188	су	\$18.59	\$59,26
Haul excess, 10 mile round trip	3,127	су	\$20.11	\$62,89
Fine grading	46,000	gsf	\$0.38	\$17,48
Erosion control	46,000	gsf	\$0.06	\$2,76
Basement Excavation	·	Ü	·	. ,
Mass excavation, basement	1,061	су	\$11.65	\$12,35
Backfill, basement	341	су	\$18.59	\$6,34
Export, assume 10 mile round trip	932	су	\$20.11	\$18,73
Temporary shoring, assume needed	1,920	sf	\$39.26	\$75,37
Pools Earthwork	-,	•	700	4,
Mass Excavation				
Swimming pool	2,700	су	\$11.65	\$31,45
Surge tank	576	су	\$11.65	\$6,71
Backfill	0.0	o,	ψ11.00	ΨΟ,
Swimming pool				
Surge tank	474	су	\$18.59	\$8,8
Haul Excess	717	Oy .	ψ10.00	ψ0,0
Swimming pool	3,240	су	\$20.11	\$65,15
Surge tank	124	СУ	\$20.11	\$2,50
Miscellaneous hauling, allowance	1,000	СУ	\$20.11	\$20,11
Slab on grade, excluding pool areas	21,400	gsf	Ψ20.11	Ψ20, Ι
Foundations	21,400	ysi		
Continuous Footings assumed 3' wide x 3' deep, at perimeter and basement	walle			
Concrete, continuous footings, 4000 psi	walls 748	CV	\$257.50	\$192,6°
Formwork, continuous footings	12,240	cy sf	\$8.00	\$97,92
	112,200	lbs	\$1.81	\$203,08
Foundation reinforcing, assume 150 #/cy Excavation	1,511		\$23.50	\$203,00 \$35,50
	834	су	\$20.38	\$35,50 \$16,99
Backfill Lloui excess		су	·	
Haul excess	683	су	\$20.11	\$13,73
Spread Footings	04 400		<b>ቀ</b> ፫ ርዕ	¢440.0
Spread Footings allowance, excluding pool areas	21,400	gsf	\$5.60	\$119,84
Foundation, conventional, excluding pool areas	13,784	gsf	\$13.50	\$186,08
Slab On Grade, excluding pool areas	707		4050.00	<b>04040</b>
Concrete, slab on grade, 4000 psi	737	су	\$250.00	\$184,25
Formwork, slab on grade	1,630	lf	\$8.40	\$13,69
Sand base, 4"	35,184	sf	\$2.14	\$75,29
Gravel sub base, 6"	35,184	sf	\$1.88	\$66,14
Slab on grade reinforcing, assumed 2.5 #/sf	99,506	lbs	\$1.72	\$171,1
Finish to slab	35,184	sf	\$0.87	\$30,6
Vapor barrier	35,184	sf	\$0.46	\$16,18
Concrete, slab on grade, add for thickened edges	100	су	\$241.74	\$24,1
Loading dock ramp and walls	1,030	sf	\$30.00	\$30,90

DETAIL ELEMENTS - AQUATICS CENTER BUILDING OPTION 2					
Element	Quantity	Unit	Unit Cost	Total	
2 Vertical Structure					
Concrete					
Basement Walls					
Concrete, basement walls 5000 psi	114	СУ	\$275.00	\$31,350	
Formwork, basement walls	5,600	sf	\$17.10	\$95,760	
Basement wall reinforcing, assumed 250 #/cy	28,519	lbs	\$1.81	\$51,619	
Waterproofing	2,800	sf	\$7.34	\$20,552	
Finish to walls	2,800	sf	\$1.16	\$3,248	
Stem Walls, assume 30" wide x 24" high	,				
Concrete, walls 5000 psi	98	су	\$275.00	\$26,950	
Formwork, walls	1,920	sf	\$17.10	\$32,832	
Wall reinforcing, assume 200 #/cy	19,555	lbs	\$1.81	\$35,395	
Finish to walls	960	sf	\$1.16	\$1,114	
Allow for bench finish, wood assumed	480	lf	\$150.00	\$72,000	
Cast-In-Place Concrete Shear Walls, elevator walls, assume 30' high				. ,	
Concrete, shear walls, 5000 psi	26	су	\$275.00	\$7,150	
Formwork, shear walls	1,260	sf	\$17.10	\$21,546	
Wall reinforcing, assume 250 #/cy	6,420	lbs	\$1.81	\$11,620	
Finish to walls	630	sf	\$1.16	\$731	
Structural Steel		٠.	<b>V</b>	Ψ. σ.	
Vertical steel framing, allowance	46,800	gsf	\$17.00	\$795,600	
Metals	40,000	951	Ψ17.00	ψ133,000	
Miscellaneous bracing	20	loc	\$10,000.00	\$200,000	
Miscellaneous metals	46,000	gsf	\$1.64	\$75,440	
Total - Vertical Structure				\$1,482,907	
				. , ,	
3 Floor & Roof Structures					
Concrete					
Cast-In-Place Concrete Slabs, Mezzanine, assume 8" thick					
Concrete, elevated floor slabs, 5000 psi	60	су	\$278.00	\$16,680	
Formwork to soffit, elevated floor slabs	2,220	sf	\$10.20	\$22,644	
Formwork slab edge, elevated floor slabs	260	sf	\$9.65	\$2,509	
Elevated slab reinforcing, assume 5.5 #/sf	13,430	lbs	\$1.81	\$24,308	
Finish to elevated floor slabs	2,220	sf	\$0.87	\$1,931	
Cast-In-Place Concrete Slabs, Mechanical Room Roof, assume 8" thick					
Concrete, elevated floor slabs, 5000 psi	63	су	\$278.00	\$17,514	
Formwork to soffit, elevated floor slabs	2,310	sf	\$10.20	\$23,562	
Formwork slab edge, elevated floor slabs	200	sf	\$9.65	\$1,930	
Elevated slab reinforcing, assume 5.5 #/sf	13,976	lbs	\$1.81	\$25,297	
Finish to elevated floor slabs	2,310	sf	\$0.87	\$2,010	
Miscellaneous Concrete					
Concrete, elevator pit	1	ea	\$12,994.00	\$12,994	
Rough Carpentry- Roof Framing					
30" x 8 3/4" glu-lam	1,980	lf	\$90.00	\$178,200	
70" x 8 3/4" glu-lam	330	lf	\$210.00	\$69,300	
Tie rod with 18" steel circular turnbuckle	1,980	lf	\$27.00	\$53,460	
Horizontal wood framing, truss allowance	46,000	gsf	\$11.50	\$529,000	
T&G wood decking, flat roof, 5/8"	14,060	sf	\$4.50	\$63,270	
8" DLT roof panels	29,681	sf	\$20.00	\$593,620	
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DETAIL ELEMENTS - AQUATICS CENTER	BUILDING	OPTIO	ON 2	
Element	Quantity	Unit	Unit Cost	Total
Metals				
Light support, assume 10 #/lf	4,500	lb	\$1.81	\$8,145
Total - Floor & Roof Structures				\$1,646,374
4 Exterior Cladding				
Aquatics Center Building Envelope				
Exterior walls, densglass sheathing	20,536	sf	\$3.72	\$76,394
Rigid insulation, exterior walls	20,536		\$1.79	\$36,759
Metal Panel Rainscreen System	11,761	sf	\$105.00	\$1,234,905
Random Rough Cedar Siding Rainscreen System	8,775	sf	\$87.00	\$763,425
Aluminum windows/storefront, vision glazing, generic	6,670	sf	\$105.96	\$706,753
Storefront with Rainscreen System	1,714		\$190.00	\$325,660
Aluminum door sets, frames and hardware, glazed, single, tempered glass	2	ea	\$5,556.46	\$11,113
Aluminum door sets, frames and hardware, glazed, double Storefornt Entry Doors	5 1	pr	\$11,030.17 \$21,050.00	\$55,151 \$21,050
Coiling door at loading dock, 10' wide x 20' high assumed	1	pr ea	\$20,942.00	\$21,030 \$20,942
Louver allowance	2	ls	\$50,000.00	\$100,000
Total - Exterior Cladding				\$3,352,152
5 Roofing and Waterproofing				
Roofing Single ply membrane roofing	43,741	sf	\$6.00	\$262,446
Rigid roof insulation, poly iso insulation	43,741	sf	\$5.76	\$202, <del>44</del> 0 \$251,948
Flashing / Counterflashing	40,741	31	ψ3.70	Ψ201,040
Aluminum coping at parapets	984	lf	\$33.50	\$32,964
Base flashings at base of parapets	984	if	\$36.96	\$36,369
Roof Accessories			,,,,,,,	400,000
Aluminum gutters	328	lf	\$26.55	\$8,708
Aluminum downspouts	125	lf	\$26.55	\$3,319
Miscellaneous accessories	46,800	gsf	\$2.10	\$98,280
Miscellaneous				
Crickets	1,662	sf	\$6.48	\$10,770
Caulking allowance	46,254	gfa	\$0.36	\$16,651
Miscellaneous	40.000	,	00.40	<b>040.400</b>
Caulking & sealant allowance	46,000	gsf	\$0.40	\$18,400
Total - Roofing and Waterproofing				\$739,855
6 Interior Partitions, Doors and Glazing				
Partition Walls				
Suspended wall at Reception				
Metal studs, 3 5/8", 20 Ga., at 16" o.c.	48	sf	\$11.08	\$532
Bolt top stud channel to structure above incl. double top track	24	lf .	\$25.62	\$615
Gypsum board, 5/8" thick, finished (I4), type X	96	sf	\$3.58	\$344

## **DETAIL ELEMENTS - AQUATICS CENTER BUILDING OPTION 2**

Element		Quantity	Unit	Unit Cost	Total
	Partition wall 11' 6" high				
	Metal studs, 3 5/8", 20 Ga., at 16" o.c.	1,098	sf	\$11.08	\$12,166
	Bolt top stud channel to structure above incl. double top track	95	lf	\$25.62	\$2,434
	Bolt bottom stud channel to concrete floor	95	lf	\$13.23	\$1,256
	Gypsum board, 5/8" thick, finished (I4), type X	2,196	sf	\$3.58	\$7,862
	Sound batt insulation, unbacked	1,098	sf	\$1.32	\$1,449
	Partition wall 9' 6" high				
	Metal studs, 3 5/8", 20 Ga., at 16" o.c.	4,172	sf	\$11.08	\$46,226
	Bolt top stud channel to structure above incl. double top track	439	lf	\$25.62	\$11,247
	Bolt bottom stud channel to concrete floor	439	lf	\$13.23	\$5,806
	Gypsum board, 5/8" thick, finished (I4), type X	8,344	sf	\$3.58	\$29,872
	Sound batt insulation, unbacked	4,172	sf	\$1.32	\$5,507
	Partition wall - wet - 9' 6" high				
	Metal studs, 3 5/8", 20 Ga., at 16" o.c.	5,084	sf	\$11.08	\$56,331
	Bolt top stud channel to structure above incl. double top track	535	lf	\$25.62	\$13,707
	Bolt bottom stud channel to concrete floor	535	lf	\$13.23	\$7,075
	Gypsum board, 5/8" thick, finished (I4), type X	4,818	sf	\$3.58	\$17,248
	Sound batt insulation, unbacked	5,084		\$1.32	\$6,711
	Vapor barrier	5,885	sf	\$2.14	\$12,594
	Backer board	5,350	sf	\$3.40	\$18,190
	Ceramic tile, walls	5,350	sf	\$19.00	\$101,650
	Partition wall - wet - one-sided 9' 6" high	,		·	, ,
	Metal studs, 3 5/8", 20 Ga., at 16" o.c.	1,357	sf	\$11.08	\$15,036
	Bolt top stud channel to structure above incl. double top track	143	lf	\$25.62	\$3,664
	Bolt bottom stud channel to concrete floor	143	lf	\$13.23	\$1,891
	Gypsum board, 5/8" thick, finished (I4), type X	1,999		\$3.58	\$7,156
	Sound batt insulation, unbacked	1,357		\$1.32	\$1,791
	Vapor barrier	787	sf	\$2.14	\$1,684
	Backer board	715	sf	\$3.40	\$2,431
	Ceramic tile, walls	715	sf	\$19.00	\$13,585
	Partition wall - wet - plumbing chase 9' 6" high		٠.	ψ.σ.σσ	<b>4.5,555</b>
	Metal studs, 3 5/8", 20 Ga., at 16" o.c.	748	sf	\$11.08	\$8,288
	Bolt top stud channel to structure above incl. double top track	79	lf	\$25.62	\$2,024
	Bolt bottom stud channel to concrete floor	79	if	\$13.23	\$1,045
	Gypsum board, 5/8" thick, finished (I4), type X	353	sf	\$3.58	\$1,264
	Gypsum board, 5/8" thick, unfinished	1,101	sf	\$2.59	\$2,852
	Sound batt insulation, unbacked	748	sf	\$1.32	\$987
	Vapor barrier	435	sf	\$2.14	\$931
	Backer board	395	sf	\$3.40	\$1,343
	Ceramic tile, walls	395	sf	\$19.00	\$7,505
	Shaft wall	000	31	ψ10.00	ψ1,000
	Metal studs, 6" CH, 16 Ga., at 16" o.c.	1,476	sf	\$12.00	\$17,712
	Bolt top stud channel to structure above incl. double top track	135	If	\$25.62	\$3,459
	Bolt bottom stud channel to structure above incl. double top track	135	lf	\$13.23	\$3,439 \$1,786
	Gypsum board, 1" thick coreboard at shaft walls	1,476		\$5.37	
	••	1,476	sf	\$3.58	\$7,926 \$5,284
	Gypsum board, 5/8" thick, finished (I4), type X Sound batt insulation, unbacked		sf		
		1,476	91	\$1.32	\$1,948
	Interior of exterior walls	E 040	°t	<b>ሰ</b> ጋ ፫ዐ	<b>640 750</b>
	Interior of exterior, 5/8" thick gypsum board X, finished	5,240	sf	\$3.58	\$18,759
	Furring, on walls, 3/4" channel, 16" o.c.	1,594	sf	\$11.08	\$17,662

DETAIL ELEMENTS - AQUATICS CENTER BUILDING OPTION 2				
Element	Quantity	Unit	Unit Cost	Total
Interior Glazing				
Interior glazing				
Interior storefront - 9' 6" high	2,089	sf	\$88.74	\$185,378
Interior storefront - 11' 6" high	1,064	sf	\$88.74	\$94,419
Interior Openings				
Doors				
Aluminum door sets, frames and hardware, glazed, double	3	pr	\$10,641.00	\$31,923
Aluminum door sets, frames and hardware, glazed, single, tempered gl	a: 9	ea	\$5,556.00	\$50,004
SC wood door incl. AL frame and hardware, single, 3' 0" x 7' 0"	12	ea	\$2,121.00	\$25,452
SC wood door incl. AL frame and hardware, double, 6' 0" x 7' 0"	7	pr	\$4,078.00	\$28,546
SC wood door incl. AL frame and hardware, double, 5' 0" x 7' 0"	1	pr	\$4,078.00	\$4,078
Hardware premium	43	leaves	\$250.00	\$10,750
Total - Interior Partitions, Doors and Glazing				\$937,383
7 Floor, Wall and Ceiling Finishes				
Flooring & Base				
Sealed concrete	4,625	sf	\$1.85	\$8,556
Floor prep/leveling	12,895	sf	\$1.00	\$12,895
Rubber athletic flooring	2,330	sf	\$14.50	\$33,785
Carpet tile	1,446	sf	\$4.95	\$7,158
Walk-off mat	271	sf	\$36.58	\$9,913
Ceramic tile	11,449	sf	\$18.44	\$211,120
Resilient base	2,037	If	\$5.23	\$10,654
Ceramic tile, base	1,292	if	\$18.45	\$23,837
Ceiling	1,202		ψ10.10	Ψ20,001
Acoustical ceiling tile, suspended, includes suspension system	6,858	sf	\$5.10	\$34,976
Gypsum board ceilings, incl. framing	9,249	sf	\$11.41	\$105,531
Wood Slat Ceiling, allowance	5,900	sf	\$48.76	\$287,684
Wall finishes, misc.	0,000	•	Ų 1011 C	<b>4</b> _0.,00.
Allowance	24,522	sf	\$2.80	\$68,662
Painting and Coating			¥=.55	¥ ,
Paint walls	24,522	sf	\$1.00	\$24,522
Paint ceilings	9,249		\$1.50	\$13,874
Concrete pool epoxy deck paint	11,001	sf	\$15.00	\$165,015
Total - Floor, Wall and Ceiling Finishes				\$1,018,181
8 Function Equipment and Specialties				
Interior Specialties				
Toilet Cubicles				
Standard, stainless steel	58	ea	\$1,909.43	\$110,747
Handicap, stainless steel	9	ea	\$2,056.64	\$18,510
Toilet / Restroom Specialties	ŭ		<del>+</del> =,000.01	Ţ 10,0 10
Bathroom mirrors	29	sf	\$39.29	\$1,139
Coat hook	14	ea	\$30.35	\$425
Grab bars	14	ea	\$203.26	\$2,846
Janitor mop sink rack	2	ea	\$136.12	\$272
Paper towel dispenser combo unit, recessed	18	ea	\$365.21	\$6,574
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DETAIL ELEMENTS - AQUATICS CENTER BUILDING OPTION 2				
Element	Quantity	Unit	Unit Cost	Total
Seat cover dispenser	27	ea	\$138.43	\$3,738
Shower accessories, per stall	19	ea	\$1,048.63	\$19,924
Soap dispenser	29	ea	\$98.41	\$2,854
Toilet paper dispenser	27	ea	\$86.64	\$2,339
Storage Specialties				
Lockers, 2-tier incl. concrete base	60	ea	\$262.00	\$15,720
Locker room benches	118	lf	\$165.00	\$19,470
Other Specialties			•	
Handrail - free-standing	86	lf	\$250.00	\$21,500
Miscellaneous specialty allowance	46,000	sf	\$1.15	\$52,900
Interior signage, code	46,000	sf	\$2.71	\$124,660
Fire extinguisher and cabinet, allowance	16	ea	\$450.00	\$7,200
Exterior signage, allowance	1	ls	\$50,000.00	\$50,000
Rough Carpentry	•	.0	φου,σου.σο	φου,σου
Additional blocking, support backing, stiffeners, etc.	46,000	sf	\$1.00	\$46,000
Casework	10,000	O.	Ψ1.00	Ψ10,000
Exercise Room casework - 36"	60	lf	\$330.00	\$19,800
Café casework - 36"	59	if	\$591.00	\$34,869
Reception desk - 36"	32	'' If	\$485.00	\$15,520
Lifeguard casework bases - 30"	50	lf	\$330.00	\$16,500
· · · · · · · · · · · · · · · · · · ·	28	If	\$330.00 \$211.00	\$5,908
Lifeguard casework - uppers - 14" Lifeguard casework bases - 20"	26	If	\$315.00	\$5,906 \$7,560
· · · · · · · · · · · · · · · · · · ·	79		·	
Group Room casework bases - 30"		lf L£	\$330.00	\$26,070
Restroom vanity counter - 24"	81	lf	\$425.00	\$34,425
Window Covering	0.570	- <b>c</b>	<b>#00.00</b>	<b>6407.07</b>
Mechoshades, motorized	6,578	sf	\$20.96	\$137,875
Furniture	40		4050.00	40.500
Café table	10	ea	\$350.00	\$3,500
Café chair	40	ea	\$150.00	\$6,000
Pool Construction (Cost provided by Aquatics Design Group dated 8/8/2019				******
Recreational pool, construction cost	10,816	sf	\$406.30	\$4,394,541
Recreational pool, equipment cost	10,816	sf	\$27.11	\$293,222
Spectator Seating				
Permanent bleachers	80	seat	\$150.00	\$12,000
Total - Function Equipment and Specialties				\$5,514,607
9 Stairs and Vertical Transportation				
Elevators - Including Smoke Containment Curtain Assembly				
Passenger, 3500 lbs, hydraulic	3	stop	\$66,771.00	\$200,313
Elevator pit ladder	1	ea	\$1,754.00	\$1,754
Stairs	•	- Ou	Ψ1,101.00	Ψ1,101
Entrance Stairs, on grade	650	lf	\$65.00	\$42,250
Mechanical Room Stair	030	"	ψ00.00	Ψ-τΖ,ΖΟΟ
Precast stair, 4' wide including steel stringers, assume	18	riser	\$335.00	\$6,030
Precast landing	40	sf	\$55.00 \$55.00	\$2,200
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Handrail, assume 2 line pipe rail	10	lf	\$122.00	\$1,952

DETAIL ELEMENTS - AQUATICS CENTER BUILDING OPTION 2				
Element	Quantity	Unit	Unit Cost	Total
Mezzanine Stair				
Precast stair, 4' wide including steel stringers, assume	36	riser	\$335.00	\$12,060
Handrail, assume 2 line pipe rail	66	lf	\$122.00	\$8,052
Total - Stairs and Vertical Transportation				\$274,611
10 Plumbing Systems				
General plumbing				
Water heater, Double wall, plate and frame heat exchangers	2	ea	\$20,500.00	\$41,000
Circulating pump, duplex	2	ea	\$2,537.13	\$5,074
Expansion tank	2	ea	\$1,022.02	\$2,044
Local water heaters, electric	4	ea	\$1,478.91	\$5,916
Sewage ejector / Sump pump - allowance	2	ea	\$11,276.70	\$22,553
Grease / Sand / Oil interceptor	2	ea	\$17,331.00	\$34,662
Sanitary fixtures				
Water closet	27	ea	\$1,894.86	\$51,161
Urinal	8	ea	\$1,929.52	\$15,436
Lavatory	26	ea	\$1,834.78	\$47,704
Shower, exterior - next to the water	8	ea	\$1,883.30	\$15,066
Shower, enclosed - inside the locker room	18	ea	\$2,033.50	\$36,603
Emergency Shower / Eyewash stations	2	ea	\$2,657.42	\$5,315
Drinking fountain, with bottle filing stations	4	ea	\$4,945.11	\$19,780
Sinks, Group rooms	4	ea	\$1,415.37	\$5,661
Sink, Janitor	1	ea	\$1,415.37	\$1,415
Hose bibs	22	ea	\$430.60	\$9,473
Floor drains	20	ea	\$759.10	\$15,182
Trench drains for pool area - corrosion resistant HDPE	50	ea	\$1,097.63	\$54,882
Rough ins				
Local rough-in at fixture	98	ea	\$1,059.50	\$103,831
Rough-in at floor sink or floor drain	70	ea	\$1,254.76	\$87,834
Rough-ins to OFCI commercial kitchen: cold and hot water, direct and indire	ect 6	ea	\$1,155.40	\$6,932
Rough-ins to OFCI Flex room / Exercise: cold and hot water, direct and indi		ea	\$1,155.40	\$2,31
Make up water for swimming pool	2	ea	\$7,510.10	\$15,020
Domestic water piping	46,000	gsf	\$4.39	\$201,964
Waste / vent piping	46,000	gsf	\$4.62	\$212,594
Roof / storm drainage		Ū		
RD/OD - Roof drain with Overhead drain	14	ea	\$826.11	\$11,566
3" pipe, ci, no-hub, in bldg	1,110	lf	\$63.50	\$70,486
4" pipe, ci, no-hub, in bldg	730	lf	\$74.47	\$54,360
Condensate drainage	46,000	gsf	\$0.50	\$23,000
Miscellaneous	46,000	gsf	\$3.40	\$156,400
Total - Plumbing Systems				\$1,335,226
11 Heating, Ventilation and Air Conditioning				
Wet side equipment: chiller, boiler, pumps etc.	46,000	gsf	\$13.50	\$621,000
Chilled water piping distribution	46,000	gsf	\$2.30	\$105,800
Hot water piping distribution	46,000	gsf	\$5.70	\$262,200
Hot water hibing distribution	40,000	yəi	φυ.τυ	ψΖυΖ,Ζυί

DETAIL ELEMENTS - AQUATICS CENTER BUILDING OPTION 2				
Element	Quantity	Unit	Unit Cost	Total
Air-Side Equipment				
AHU-1, Air handling unit, outdoor, vav, modular	40,000	cfm	\$11.50	\$460,000
AHU-2, Air handling unit, outdoor, vav, modular	35,000	cfm	\$11.50	\$402,500
FCU, Fan coil units for IDF / MDF rooms	3	ea	\$4,449.45	\$13,348
VAV terminal boxes, with reheat coil	46	ea	\$2,125.94	\$97,793
EF, Exhaust fan, inline, Greenheck	12,200	cfm	\$4.00	\$48,800
Air Distribution				
Ductwork, galv - protected with epoxy based paint	42,000	lb	\$14.44	\$606,585
Ductwork, stainless steel	6,000	lb	\$32.00	\$192,000
Duct insulation	23,500	sf	\$4.46	\$104,806
Combination fire / smoke damper	30	ea	\$1,097.63	\$32,929
Grilles, registers and diffusers, including dampers and flex duct	46,000	sf	\$2.80	\$128,800
Acoustical attenuation	4	ea	\$5,199.30	\$20,797
Ventilation premium for PHIUS+ requirements, allowance	2	ls	\$300,000.00	\$600,000
Miscellaneous testing & commissioning				
Test / balance HVAC	360	hr	\$176.94	\$63,698
Start-up/check-out	280	hr	\$140.88	\$39,446
Commissioning assist	280	hr	\$140.88	\$39,446
Piping identification: labels, arrows and valve tags	360	ea	\$31.89	\$11,480
Seismic and vibration requirements	2	ea	\$25,000.00	\$50,000
HVAC Controls			. ,	, ,
DDC controls to plumbing systems	2	ls	\$5,777.00	\$11,554
DDC controls, air handlers	4	ea	\$17,000.00	\$68,000
DDC controls, vav box, reheat coils	46	ea	\$2,161.12	\$99,411
DDC controls, general exhaust fan	8	ea	\$1,518.20	\$12,146
DDC controls, smoke damper monitor	30	ea	\$1,100.00	\$33,000
DDC misc. items, training, integration	360	hr	\$161.76	\$58,232
DDC controls for pools	2	ls	\$30,000.00	\$60,000
Total - Heating, Ventilation and Air Conditioning				\$4,243,771
12 Electrical Lighting, Power and Communications				
Service & Distribution Equipment				
Main switchboard, 1200 amp, 120/208v, 3ph, 4w	2	ea	\$49,955.01	\$99,910
Distribution board, 400 amp, 120/208v, 3ph, 4w	1	ea	\$24,325.37	\$24,325
Pool Eq. Distribution board, 400 amp, 120/208v, 3ph, 4w	1	ea	\$24,325.37	\$24,325
Panelboard, 225 amp, 120/208v, 3ph, 4w	6	ea	\$3,308.48	\$19,851
Feeder, 225 amp, emt	250	lf	\$108.10	\$27,026
Feeder, 400 amp, emt	300	if	\$184.08	\$55,224
Feeder, 1200 amp, PVC	100	if	\$796.25	\$79,625
Conduit, 1 1/4" pvc	200	if	\$10.41	\$2,082
Copper wire, #8 thhn	200	if	\$2.03	\$406
Copper wire, #4 thhn	400	if	\$4.12	\$1,648
HVAC & Equipment Connections	100		Ψ1.12	Ψί,σίο
AHU-1	2	ea	\$1,150.55	\$2,301
AHU-2	2	ea	\$1,150.55	\$2,301
FCU	4	ea	\$238.87	\$955
EF, Exhaust Fans	8	ea	\$209.15	\$1,673
Disconnect switch, 60/3 fused N1	4	ea	\$992.58	\$3,970
Disconnect switch, motor rated N3R	8		\$268.56	\$3,970 \$2,148
Disconlined Switch, Hotol rated NSA	0	ea	φ200.00	φ∠, 140

ement	Quantity	Unit	Unit Cost	Total
Disconnect switch, 200/3 fused N3R	4	ea	\$3,051.75	\$12,20
Disconnect elevator switch, 60/3 fused N1	2	ea	\$2,988.75	\$5,97
Equipment feeder, 20 amp	1,900	lf	\$20.29	\$38,55
Equipment feeder, 60 amp	400	lf	\$38.80	\$15,52
Equipment feeder, 200 amp	450	lf	\$93.01	\$41,85
Convenience Power				
Duplex receptacle, 20 amp	89	ea	\$132.72	\$11,81
Double duplex receptacle, 20 amp	6	ea	\$175.88	\$1,05
Duplex receptacle, 20 amp GFCI	20	ea	\$151.39	\$3,02
Double duplex receptacle, 20 amp GFCI wp	4	ea	\$162.18	\$64
Branch power, 20 amp	4,120	lf	\$19.15	\$78,89
10/2 armored cable	2,669	lf	\$7.77	\$20,73
Lighting & Lighting Controls	· ·		·	. ,
Down Lights Phase #1	479	ea	\$315.25	\$151,00
Pool Flood Light High Bay	108	ea	\$855.75	\$92,42
Mezzanine Lighting	20	ea	\$605.44	\$12,10
Exit Lighting	22	ea	\$301.01	\$6,62
Lighting control panel	2	ea	\$5,125.15	\$10,25
Single pole switch	4	ea	\$140.93	\$56
Dimmer three way switch	8	ea	\$156.14	\$1,24
Occupancy sensor, ceiling mounted	16	ea	\$319.79	\$5,11
Occupancy sensor, wall mounted	16	ea	\$267.09	\$4,27
Lighting branch power, fixtures	7,060	lf	\$19.15	\$135,18
Lighting branch power, controls	220	lf	\$18.00	\$3,96
Fire Alarm System			7.5.55	7 - ,
FA control panel	2	ea	\$10,915.88	\$21,83
FA annunciator panel	2	ea	\$2,997.03	\$5,99
FA beam sensor	4	ea	\$1,515.66	\$6,06
FA duct smoke detector	4	ea	\$675.44	\$2,70
FA flow switch	2	ea	\$575.12	\$1,15
FA heat detector	2	ea	\$329.55	\$65
FA pull station	4	ea	\$341.55	\$1,36
FA smoke detector	4	ea	\$326.95	\$1,30
FA tamper switch	2	ea	\$515.66	\$1,03
FA horn strobe unit, wall mount	12	ea	\$215.05	\$2,58
Conduit, 3/4" emt	5,600	lf	\$10.79	\$60,42
Fire alarm cable rated, 4C	5,600	if	\$4.85	\$27,16
Telecommunications System	0,000		¥••	<b>4</b> ,
Tele/data outlet, 2 port	18	ea	\$145.75	\$2,62
Wireless access point	8	ea	\$373.96	\$2,99
Fire treated plywood	2	ea	\$295.45	\$59
Main telecommunication grounding busbar	2	ea	\$2,150.55	\$4,30
Conduit, 3/4" emt	2,000	lf	\$10.79	\$21,58
CAT-6, 4 pair 23 AWG, UTP	2,000	if	\$1.58	\$3,16
Public Address System	2,000		ψ1.00	ψ0,10
Clock/speaker	8	ea	\$719.36	\$5,75
PA speaker	52	ea	\$248.65	\$12,93
Conduit, 3/4" emt	6,000	lf	\$10.79	\$64,74
PA system speaker cable	6,050	lf	\$1.32	\$7,98
Distributed Antenna System	46,000	gsf	\$1.52 \$1.55	\$71,30
Security, Access Control & CCTV Systems	40,000	yaı	ψ1.00	φ11,30

Element	Quantity	Unit	Unit Cost	Total
CCTV PTZ IP camera, outdoor	6	ea	\$3,660.16	\$21,961
CCTV fixed IP camera	12	ea	\$946.74	\$11,361
DVR, 4TB storage	2	ea	\$1,801.43	\$3,603
Conduit, 3/4" emt	1,200	lf	\$10.79	\$12,948
CCTV cabling	1,200	lf	\$1.58	\$1,896
Access control system				
Access control panel	2	ea	\$5,155.05	\$10,310
Access control panel power supply	2	ea	\$670.48	\$1,341
Card reader, proximity type	9	ea	\$1,039.99	\$9,360
Alarm contact, flush mount	7	ea	\$231.84	\$1,623
Conduit, 3/4" emt	2,050	lf	\$10.79	\$22,120
Access control cable	2,050	lf	\$1.58	\$3,239
Miscellaneous				
Small tools	2	ls	\$5,033.00	\$10,066
Consumables	2	ls	\$8,355.15	\$16,710
Equipment rentals	2	ls	\$10,671.44	\$21,343
Testing/commissioning	2	ls	\$8,850.15	\$17,700
Total - Electrical Lighting, Power and Communications				\$1,496,626
13 Fire Protection Systems				
New hydraulically calculated wet pipe automatic fire sprinkler system				
Wet-pipe fire sprinkler, complete	46,000	gsf	\$8.00	\$368,000
316 Stainless Steel piping, premium	2	ea	\$35,000.00	\$70,000
FM 200 preaction systems, Electrical / data rooms - allowance			Assume	Not Needed
Fire sprinkler for chemical storage room, premium	2	ea	\$12,000.00	\$24,000
Total - Fire Protection Systems				\$462,000

# APPENDIX 1 - SCOPE ASSUMPTIONS

Description	Assumed Scope
General Project Info	<ul> <li>Escalation included as shown in introduction.</li> <li>Local GC laydown / compound area within proximity.</li> <li>Local trade parking available both onsite (partial) and offsite.</li> <li>All sub trades to be competitively bid.</li> <li>Labor pool from Seattle / Tacoma.</li> </ul>
Detailed Assumptions	
Substructure / Foundations	<ul> <li>- Mass excavation and off haul.</li> <li>- Assume no soil import is needed</li> <li>- Conventional continuous footings / spread footings.</li> <li>- Concrete slab on grade - 6" thick.</li> </ul>
2. Structure	<ul> <li>Wood &amp; Steel framed building: glue lam beams &amp; steel columns.</li> <li>Incidental steel supports allowance.</li> <li>T&amp;G wood decking and 8" DLT roof panels.</li> </ul>
3. Envelope / Roofing	<ul> <li>Exterior substrate of metal studs, densglas sheathing, spray applied insulation.</li> <li>Blend of double glazed curtain wall (50%) and composite metal panel systems (50%).</li> <li>Aluminum framed curtain wall with insulated spandrel panels.</li> <li>Metal paneling comprises 50% of total envelope.</li> <li>Single ply roofing with insulation at roof.</li> <li>Soffits at overhangs.</li> </ul>
4. Interiors	<ul> <li>Metal stud framed interior construction.</li> <li>Aluminum framed interior storefront.</li> <li>SC interior door sets.</li> <li>Floors: sealed concrete, carpet, and porcelain tile.</li> <li>Ceilings / soffits: ACT and gypsum board.</li> <li>Walls: paint and porcelain tile.</li> <li>Phenolic restroom cubicles and fixed RR specialties, prefab shower units.</li> <li>P-lam finished casework, storage, and display casings.</li> <li>Code required signage.</li> <li>Equipment - OFCI, CFCI (minimal), loading dock, equipment bracing.</li> </ul>
5. Plumbing	- Full plumbing system including all sanitary fixtures, condensate drainage

# APPENDIX 1 - SCOPE ASSUMPTIONS

Description	Assumed Scope
6. HVAC	<ul> <li>Full HVAC system including new localized chillers / cooling towers, air handling units</li> <li>Chilled / hot water and steam distribution, vertical and horizontal galvanized duct</li> <li>Distribution, DDC sole sourced controls, and premium isolation ventilation.</li> <li>Central Utility Plant assumed to have the following:</li> <li>Cooling system</li> <li>Heating system</li> </ul>
7. Electrical	<ul> <li>Main primary and secondary power.</li> <li>LED lighting,.</li> <li>Full fire alarm system.</li> <li>Rough in of all low voltage systems (T/D, CCTV, security, nurse call, panic, emergency)</li> <li>phone).</li> </ul>
8. Fire Protection	<ul><li>Wet pipe sprinklers throughout.</li><li>Fire sprinkler for chemical storage room, premium.</li></ul>
9. Sitework	<ul> <li>Demolish existing 1 sotry height structures.</li> <li>On site grading / cut and fill, erosion control measures.</li> <li>New surface parking and roadway.</li> <li>Pedestrian circulation - natural color paving.</li> <li>Pedestrian plazas.</li> <li>Reduced landscaping (seeding and mulch to outlying areas).</li> <li>Excluded water features, fixed amenities, signage.</li> <li>Allowed for site walls.</li> <li>New wet utility distribution and connections.</li> <li>Excluded Off site adjustments / connections.</li> <li>Site areas as provided by Architect.</li> </ul>
11. Exclusions	<ul><li>Low voltage devices / cable</li><li>Play structures.</li><li>Monument signage.</li></ul>