Si View Aquatics Center

Schematic Design

August 20, 2019

18-01475



Prepared for Patano Studio Architecture



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## **EXECUTIVE SUMMARY**

#### 1.1 Introduction

This estimate has been prepared, pursuant to an agreement between Patano Studio Architecture 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
Option A- phase 1 & siteworks	Aug-21	Dec-22	17 months
Option A- phase 2	Aug-25	Aug-26	13 months
Option B	Aug-21	Aug-23	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.

SUMMAR	Υ		
Element	Area	Cost / SF	Total
Option A- Build 26,800 sf - phase 1			
Aquatics Center - Phase 1 Site Option 1	26,800 180,000	\$783.15 \$33.57	\$20,988,290 \$6,043,374
Total Estimated Construction Cost - Phase 1 (Including WSST)	26,800	\$1,008.64	\$27,031,664
Add Alternate  Aquatics Center - Phase 2 - assume construction starts 2025  Sitework due to phase 2 - demo existing landscape and site prep	20,000	\$969.43	\$19,388,630 \$95,961
Total Estimated Construction Cost - Phases 1 & 2 (Including WSST)	46,800	\$993.94	\$46,516,255
Option B - Build 46,800 sf in one phase			
Aquatics Center - one phase Site Option 2	46,800 230,000	\$779.13 \$24.88	\$36,463,058 \$5,723,542
Total Estimated Construction Cost (Including WSST)	46,800	\$901.42	\$42,186,600

#### SUMMARY MATRIX

						SUIVIIV	/IARY IVIA	IKIA										
					Option A									Option B				
	Aquat	ics Center - Ph	ase 1		ite Option 1		Aquatics	Center - Phase	e 2 - Add		West Wing			East Wing			ite Option 2	
Flores	0 11.1.1	26,800 SF	01/05		180,000 SF	0	0 11111	20,000 SF	0	0 11.1.1	26,800 SF	0	0 1000	20,000 SF	01/05		230,000 SF	01/05
Element	Subtotal	Total	Cost/SF	Subtotal	Total	Cost/SF	Subtotal	Total	Cost/SF	Subtotal	Total	Cost/SF	Subtotal	Total	Cost/SF	Subtotal	Total	Cost/SF
A) Shell (1-5)		\$5,455,688	\$203.57					\$4,072,451	\$203.62		\$4,998,285	\$186.50		\$3,759,449	\$187.97			
1 Foundations	\$1,077,727		\$40.21				\$807,408		\$40.37	\$1,064,791		\$39.73	\$757,408		\$37.87			
2 Vertical Structure	\$847,642		\$31.63				\$497,628		\$24.88	\$846,442		\$31.58	\$497,628		\$24.88			
3 Floor & Roof Structures	\$987,161		\$36.83				\$694,302		\$34.72	\$875,323		\$32.66	\$601,300		\$30.07			
4 Exterior Cladding	\$2,107,065		\$78.62				\$1,708,638		\$85.43	\$1,775,939		\$66.27	\$1,538,638		\$76.93			
5 Roofing and Waterproofing	\$436,094		\$16.27				\$364,476		\$18.22	\$435,790		\$16.26	\$364,476		\$18.22			
B) Interiors (6-7)		\$1,227,784	\$45.81					\$832,645	\$41.63		\$1,227,784	\$45.81		\$757,645	\$37.88			
6 Interior Partitions, Doors and Glazing	\$619,660		\$23.12				\$315,578		\$15.78	\$619,660		\$23.12	\$315,578		\$15.78			
7 Floor, Wall and Ceiling Finishes	\$608,124		\$22.69				\$517,067		\$25.85	\$608,124		\$22.69	\$442,067		\$22.10			
C) Equipment and Vertical Transportation (8-9)		\$2,627,658	\$98.05					\$2,038,799	\$101.94		\$2,625,930	\$97.98		\$2,038,799	\$101.94			
8 Function Equipment and Specialties	\$2,389,063		\$89.14				\$2,019,299		\$100.96	\$2,387,335		\$89.08	\$2,019,299		\$100.96			
9 Stairs and Vertical Transportation	\$238,595		\$8.90				\$19,500		\$0.98	\$238,595		\$8.90	\$19,500		\$0.98			
D) Mechanical and Electrical (10-13)		\$3,533,365	\$131.84		\$733,390	\$4.07		\$3,080,636	\$154.03		\$3,500,525	\$130.62		\$3,080,636	\$154.03		\$1,041,759	\$4.53
10 Plumbing Systems	\$610,329		\$22.77				\$569,494		\$28.47	\$601,289		\$22.44	\$569,494		\$28.47			
11 Heating, Ventilation and Air Conditioning	\$2,045,094		\$76.31				\$1,778,361		\$88.92	\$2,027,894		\$75.67	\$1,778,361		\$88.92			
12 Electrical Lighting, Power and Communications	\$643,343		\$24.01	\$733,390		\$4.07	\$549,281		\$27.46	\$642,343		\$23.97	\$549,281		\$27.46	\$1,041,759		\$4.53
13 Fire Protection Systems	\$234,600		\$8.75				\$183,500		\$9.18	\$229,000		\$8.54	\$183,500		\$9.18			
E) Site Construction (14-16)					\$2,965,057	\$16.47											\$1,921,441	\$8.35
14 Site Preparation and Demolition				\$269,607		\$1.50										\$225,943		\$0.98
15 Site Paving, Structures & Landscaping				\$2,485,748		\$13.81										\$1,469,662		\$6.39
16 Utilities on Site				\$209,702		\$1.17										\$225,836		\$0.98
Subtotal Cost		\$12,844,495	\$479.27		\$3,698,447	\$20.55		\$10,024,532	\$501.23		\$12,352,524	\$460.92		\$9,636,530	\$481.83		\$2,963,200	\$12.88
General Conditions 7.0%		\$899.115	\$33.55		\$258.891	\$1.44		\$701.717	\$35.09		\$864.677	\$32.26		\$674,557	\$33.73		\$207.424	\$0.90
General Requirements 3.0%		\$412,308	\$15.38		\$118,720	\$0.66		\$321,787	\$16.09		\$396,516	\$14.80		\$309,333	\$15.47		\$95,119	\$0.41
Bonds & Insurance 2.0%		\$283,118	\$10.56		\$81,521	\$0.45		\$220,961	\$11.05		\$272,274	\$10.16		\$212,408	\$10.62		\$65,315	\$0.28
Contractor's Fee 4.0%		\$577,561	\$21.55		\$166,303	\$0.92		\$450,760	\$22.54		\$555,440	\$20.73		\$433,313	\$21.67		\$133,242	\$0.58
Design Contingency 10.0%		\$1.501.660	\$56.03		\$432,388	\$2.40		\$1.171.976	\$58.60		\$1.444.143	\$53.89		\$1,126,614	\$56.33		\$346,430	\$1.51
Construction Contingency 3.0%		\$495,548	\$18.49		\$142,688	\$0.79		\$386,752	\$19.34		\$476,567	\$17.78		\$371,783	\$18.59		\$114,322	\$0.50
Escalation to MOC		\$2,106,527	\$78.60		\$606,554	\$3.37		\$4,384,557	\$219.23		\$2,298,245	\$85.76		\$1,792,922	\$89.65		\$1,289,095	\$5.60
WSST 8.9%		\$1,867,958	\$69.70		\$537,860	\$2.99		\$1,725,588	\$86.28		\$1,823,023	\$68.02		\$1,422,189	\$71.11		\$509,395	\$2.21
3.776	+	,,. 50	******		,	¥=···		,	*****		,,			,,	******			
Total Estimated Construction Cost		\$20,988,290	\$783.15		\$6,043,374	\$33.57		\$19,388,630	\$969.43		\$20,483,410	\$764.31		\$15,979,648	\$798.98		\$5,723,542	\$24.88

Prepared by CUMMING

Option A- Aquatics Center- Phase 1

1 Foundations \$1,077,727 \$40,21 \$2 vertical Structure \$847,642 \$31.63 \$3 Floor & Roof Structures \$987,161 \$36.83 \$4 Exterior Cladding \$2,107,065 \$78.62 \$580,000 \$16.27 \$78.62 \$580,000 \$16.27 \$78.62 \$16.07 \$16.07	Element	Subtotal	Total	Cost / SF	Cost / SF
2 Vertical Structure \$847,642 \$31.63 3 Floor & Roof Structures \$987,161 \$36.8.3 4 Exterior Cladding \$2,107,065 \$78.62 5 Roofing and Waterproofing \$436,094 \$16.27 \$78.62 5 Roofing and Waterproofing \$436,094 \$16.27 \$16.27,784 \$45.50 \$16.27 \$16.27,784 \$45.50 \$16.27 \$16.27,784 \$45.50 \$16.27,784 \$	A) Shell (1-5)		\$5,455,688		\$203.57
3 Floor & Roof Structures   \$987,161   \$36.83   4 Exterior Cladding   \$2,107,065   \$78.62   5 Roofing and Waterproofing   \$436,094   \$16.27   8) Interiors (6-7)   \$1,227,784   \$45   6 Interior Partitions, Doors and Glazing   \$619,660   \$23.12   7 Floor, Wall and Ceiling Finishes   \$608,124   \$22.69   C) Equipment and Vertical Transportation (8-9)   \$2,627,658   \$98   8 Function Equipment and Specialities   \$2,389,063   \$89.14   9 Stairs and Vertical Transportation   \$238,595   \$8.90   D) Mechanical and Electrical (10-13)   \$3,533,365   \$131   10 Plumbing Systems   \$610,329   \$22.77   11 Healing, Ventilation and Air Conditioning   \$2,045,094   \$76.31   12 Electrical Lighting, Power and Communications   \$643,343   \$24.01   13 Fire Protection Systems   \$234,600   \$8.75    Subtotal   \$13,743,610   \$13,743,610   \$512   General Requirements   \$3.00%   \$412,308   \$15   Subtotal   \$14,155,918   \$528   Bonds & Insurance   \$2.00%   \$283,118   \$10   Contractor's Fee   \$4.00%   \$577,561   \$221   Subtotal   \$15,016,598   \$560   Design Contingency   \$3.00%   \$495,548   \$18   Subtotal   \$16,518,258   \$614   Construction Contingency   \$3.00%   \$495,548   \$18   Subtotal   \$17,013,805   \$634   Escalation to MOC, 04/01/22   \$12.88%   \$2,106,527   \$78	1 Foundations	\$1,077,727		\$40.21	
4 Exterior Cladding \$2,107,065 \$78.62 \$5 Roofing and Waterproofing \$436,094 \$16.27 \$16.27 \$1 \$45 \$16.27 \$1 \$45 \$16.27 \$1 \$1.227,784 \$45 \$16.27 \$1 \$1.227,784 \$45 \$16.27 \$1 \$1.227,784 \$45 \$1.627 \$1 \$1.227,784 \$45 \$1.627 \$1 \$1.227,784 \$45 \$1.627 \$1 \$1.227,784 \$45 \$1.627 \$1 \$1.227,784 \$45 \$1.627 \$1 \$1.227,784 \$45 \$1.627 \$1 \$1.227,784 \$45 \$1.627 \$1.227,784 \$45 \$1.627 \$1.227,784 \$45 \$1.627 \$1.227,784 \$45 \$1.627 \$1.227,784 \$45 \$1.627 \$1.227,784 \$45 \$1.627 \$1.227,784 \$45 \$1.627 \$1.227,785 \$1.227,785 \$1.227,658 \$1.89 \$1	2 Vertical Structure	\$847,642		\$31.63	
5 Roofing and Waterproofing         \$436,094         \$1,227,784         \$45           B) Interiors (6-7)         \$1,227,784         \$45           6 Interior Partitions, Doors and Glazing         \$619,660         \$23.12           7 Floor, Wall and Celling Finishes         \$608,124         \$22.69           C) Equipment and Vertical Transportation (8-9)         \$2,627,658         \$89.14           8 Function Equipment and Specialties         \$2,389,063         \$89.14           9 Stairs and Vertical Transportation         \$238,595         \$8.90           D) Mechanical and Electrical (10-13)         \$3,533,365         \$131           10 Plumbing Systems         \$610,329         \$22.77           11 Healting, Ventilation and Air Conditioning         \$2,045,094         \$76.31           12 Electrical Lighting, Power and Communications         \$643,343         \$24.01           13 Fire Protection Systems         \$234,600         \$8.75           Subtotal         \$12,844,495         \$479           General Conditions         7.00%         \$89,115         \$33           Subtotal         \$13,743,610         \$512           General Requirements         3.00%         \$412,308         \$15           Subtotal         \$14,439,036         \$538           C	3 Floor & Roof Structures	\$987,161		\$36.83	
B) Interiors (6-7)	4 Exterior Cladding	\$2,107,065		\$78.62	
6 Interior Partitions, Doors and Glazing       \$619,660       \$23.12         7 Floor, Wall and Ceiling Finishes       \$608,124       \$22.69         C) Equipment and Vertical Transportation (8-9)       \$2,627,658       \$98         8 Function Equipment and Specialties       \$2,389,063       \$89.14         9 Stairs and Vertical Transportation       \$238,595       \$8.90         D) Mechanical and Electrical (10-13)       \$3,533,365       \$131         10 Plumbing Systems       \$610,329       \$22.77         11 Healting, Ventiliation and Air Conditioning       \$2,045,094       \$76.31         12 Electrical Lighting, Power and Communications       \$643,343       \$24.01         13 Fire Protection Systems       \$234,600       \$8.75         Subtotal       \$12,844,495       \$479         General Conditions       7.00%       \$899,115       \$33         Subtotal       \$13,7743,610       \$512         General Requirements       3.00%       \$412,308       \$15         Subtotal       \$14,155,918       \$528         Bonds & Insurance       2.00%       \$283,118       \$10         Subtotal       \$15,016,598       \$560         Design Contingency       10.00%       \$15,016,598       \$560         Su	5 Roofing and Waterproofing	\$436,094		\$16.27	
7 Floor, Wall and Celling Finishes         \$608,124         \$22,69           C) Equipment and Vertical Transportation (8-9)         \$2,389,063         \$9.14           8 Function Equipment and Specialities         \$2,389,063         \$89.14           9 Stairs and Vertical Transportation         \$238,595         \$8.90           D) Mechanical and Electrical (10-13)         \$3,533,365         \$131           10 Plumbing Systems         \$610,329         \$22,77           11 Heating, Ventilation and Air Conditioning         \$2,045,094         \$76.31           12 Electrical Lighting, Power and Communications         \$643,343         \$24.01           13 Fire Protection Systems         \$234,600         \$8.75           Subtotal         \$12,844,495         \$479           General Conditions         7.00%         \$899,115         \$33           Subtotal         \$13,743,610         \$512           General Requirements         3.00%         \$412,308         \$15           Subtotal         \$14,155,918         \$528           Bonds & Insurance         2.00%         \$283,118         \$10           Subtotal         \$15,016,598         \$560           Contractor's Fee         4.00%         \$577,561         \$21           Subtotal         \$1	B) Interiors (6-7)		\$1,227,784		\$45.81
C) Equipment and Vertical Transportation (8-9)         \$2,627,658         \$98           8 Function Equipment and Specialties         \$2,389,063         \$89.14           9 Stairs and Vertical Transportation         \$238,595         \$8.90           D) Mechanical and Electrical (10-13)         \$3,533,365         \$131           10 Plumbing Systems         \$610,329         \$22.77           11 Heating, Ventilation and Air Conditioning         \$2,045,094         \$76.31           12 Electrical Lighting, Power and Communications         \$643,343         \$24.01           13 Fire Protection Systems         \$234,600         \$8.75           Subtotal         \$12,844,495         \$479           General Conditions         7,00%         \$899,115         \$33           Subtotal         \$13,743,610         \$512           General Requirements         3,00%         \$412,308         \$15           Subtotal         \$14,155,918         \$528           Bonds & Insurance         2,00%         \$283,118         \$10           Subtotal         \$14,439,036         \$538           Contractor's Fee         4,00%         \$577,561         \$21           Subtotal         \$15,016,598         \$560           Design Contingency         3,00%         <	6 Interior Partitions, Doors and Glazing	\$619,660		\$23.12	
8 Function Equipment and Specialities         \$2,389,063         \$89,14           9 Stairs and Vertical Transportation         \$238,595         \$8,90           D) Mechanical and Electrical (10-13)         \$3,533,365         \$131           10 Plumbing Systems         \$610,329         \$22.77           11 Heating, Vertiliation and Air Conditioning         \$2,045,094         \$76,31           12 Electrical Lighting, Power and Communications         \$643,343         \$24,01           13 Fire Protection Systems         \$234,600         \$8.75           Subtotal         \$12,844,495         \$479           General Conditions         7.00%         \$899,115         \$33           Subtotal         \$13,743,610         \$512           General Requirements         3.00%         \$412,308         \$15           Subtotal         \$14,155,918         \$528           Bonds & Insurance         2.00%         \$283,118         \$10           Subtotal         \$14,439,036         \$538           Contractor's Fee         4.00%         \$577,561         \$21           Subtotal         \$15,016,598         \$560           Design Contingency         3.00%         \$495,548         \$18           Subtotal         \$17,013,805         \$634 </td <td>7 Floor, Wall and Ceiling Finishes</td> <td>\$608,124</td> <td></td> <td>\$22.69</td> <td></td>	7 Floor, Wall and Ceiling Finishes	\$608,124		\$22.69	
9 Stairs and Vertical Transportation D) Mechanical and Electrical (10-13) 10 Plumbing Systems 11 Heating, Ventilation and Air Conditioning 12 Electrical Lightling, Power and Communications 13 Fire Protection Systems  Subtotal Subtotal General Requirements Subtotal	C) Equipment and Vertical Transportation (8-9)		\$2,627,658		\$98.05
D) Mechanical and Electrical (10-13)   \$3,533,365   \$131     10 Plumbing Systems   \$610,329   \$22.77     11 Heating, Ventilation and Air Conditioning   \$2,045,094   \$76.31     12 Electrical Lighting, Power and Communications   \$643,343   \$24.01     13 Fire Protection Systems   \$234,600   \$8.75      Subtotal   \$12,844,495   \$8.75      Subtotal   \$13,743,610   \$512     General Conditions   7.00%   \$899,115   \$33     Subtotal   \$13,743,610   \$512     General Requirements   3.00%   \$412,308   \$15      Subtotal   \$14,155,918   \$528     Bonds & Insurance   2.00%   \$283,118   \$10      Subtotal   \$14,439,036   \$538     Contractor's Fee   4.00%   \$577,561   \$21      Subtotal   \$15,016,598   \$560     Design Contingency   10.00%   \$1,501,660   \$56      Subtotal   \$15,016,598   \$616     Construction Contingency   3.00%   \$495,548   \$18      Subtotal   \$17,013,805   \$634     Escalation to MOC, 04/01/22   12.38%   \$2,106,527   \$78      Subtotal   \$19,120,332   \$713      Subtotal   \$19,120,332   \$713      Subtotal   \$19,120,332   \$773      Subtotal   \$10,000   \$10,000	8 Function Equipment and Specialties	\$2,389,063		\$89.14	
10 Plumbing Systems       \$610,329       \$22.77         11 Heating, Ventilation and Air Conditioning       \$2,045,094       \$76.31         12 Electrical Lighting, Power and Communications       \$643,343       \$24.01         13 Fire Protection Systems       \$234,600       \$8.75         Subtotal       \$12,844,495       \$479         General Conditions       7.00%       \$899,115       \$33         Subtotal       \$13,743,610       \$512         General Requirements       3.00%       \$412,308       \$15         Subtotal       \$14,155,918       \$528         Bonds & Insurance       2.00%       \$283,118       \$10         Subtotal       \$14,439,036       \$538         Contractor's Fee       4.00%       \$577,561       \$21         Subtotal       \$15,016,598       \$560         Design Contingency       10.00%       \$1,501,660       \$56         Subtotal       \$16,518,258       \$616         Construction Contingency       3.00%       \$495,548       \$18         Subtotal       \$17,013,805       \$634         Escalation to MOC, 04/01/22       \$12.38%       \$2,106,527       \$78         Subtotal       \$19,120,332       \$713   <	9 Stairs and Vertical Transportation	\$238,595		\$8.90	
11 Heating, Ventilation and Air Conditioning       \$2,045,094       \$76.31         12 Electrical Lighting, Power and Communications       \$643,343       \$24.01         13 Fire Protection Systems       \$234,600       \$8.75         Subtotal       \$12,844,495       \$479         General Conditions       7.00%       \$899,115       \$33         Subtotal       \$13,743,610       \$512         General Requirements       3.00%       \$412,308       \$15         Subtotal       \$14,155,918       \$528         Bonds & Insurance       2.00%       \$283,118       \$10         Subtotal       \$14,439,036       \$538         Contractor's Fee       4.00%       \$577,561       \$21         Subtotal       \$15,016,598       \$560         Design Contingency       10.00%       \$1,501,660       \$56         Subtotal       \$16,518,258       \$616         Construction Contingency       3.00%       \$495,548       \$18         Subtotal       \$17,013,805       \$634         Escalation to MOC, 04/01/22       12.38%       \$2,106,527       \$78         Subtotal       \$19,120,332       \$713	D) Mechanical and Electrical (10-13)		\$3,533,365		\$131.84
12 Electrical Lighting, Power and Communications       \$643,343       \$24.01         13 Fire Protection Systems       \$234,600       \$8.75         Subtotal       \$12,844,495       \$479         General Conditions       7.00%       \$899,115       \$33         Subtotal       \$13,743,610       \$512         General Requirements       3.00%       \$412,308       \$15         Subtotal       \$14,155,918       \$528         Bonds & Insurance       2.00%       \$283,118       \$10         Subtotal       \$14,439,036       \$538         Contractor's Fee       4.00%       \$577,561       \$21         Subtotal       \$15,016,598       \$560         Design Contingency       10.00%       \$1,501,660       \$56         Subtotal       \$16,518,258       \$616         Construction Contingency       3.00%       \$495,548       \$18         Subtotal       \$17,013,805       \$634         Escalation to MOC, 04/01/22       12.38%       \$2,106,527       \$78         Subtotal       \$19,120,332       \$713	10 Plumbing Systems	\$610,329		\$22.77	
Subtotal         \$12,844,495         \$479           General Conditions         7.00%         \$899,115         \$33           Subtotal         \$13,743,610         \$512           General Requirements         3.00%         \$412,308         \$15           Subtotal         \$14,155,918         \$528           Bonds & Insurance         2.00%         \$283,118         \$10           Subtotal         \$14,439,036         \$538           Contractor's Fee         4.00%         \$577,561         \$21           Subtotal         \$15,016,598         \$560           Design Contingency         10.00%         \$1,501,6598         \$660           Subtotal         \$16,518,258         \$616           Construction Contingency         3.00%         \$495,548         \$18           Subtotal         \$17,013,805         \$634           Escalation to MOC, 04/01/22         12.38%         \$2,106,527         \$78           Subtotal         \$19,120,332         \$713	11 Heating, Ventilation and Air Conditioning	\$2,045,094		\$76.31	
Subtotal         \$12,844,495         \$479           General Conditions         7.00%         \$899,115         \$33           Subtotal         \$13,743,610         \$512           General Requirements         3.00%         \$412,308         \$15           Subtotal         \$14,155,918         \$528           Bonds & Insurance         2.00%         \$283,118         \$10           Subtotal         \$14,439,036         \$538           Contractor's Fee         4.00%         \$577,561         \$21           Subtotal         \$15,016,598         \$560           Design Contingency         10.00%         \$1,501,660         \$56           Subtotal         \$16,518,258         \$616           Construction Contingency         3.00%         \$495,548         \$18           Subtotal         \$17,013,805         \$634           Escalation to MOC, 04/01/22         12.38%         \$2,106,527         \$78           Subtotal         \$19,120,332         \$713	12 Electrical Lighting, Power and Communications	\$643,343		\$24.01	
General Conditions         7.00%         \$899,115         \$33           Subtotal         \$13,743,610         \$512           General Requirements         3.00%         \$412,308         \$15           Subtotal         \$14,155,918         \$528           Bonds & Insurance         2.00%         \$283,118         \$10           Subtotal         \$14,439,036         \$538           Contractor's Fee         4.00%         \$577,561         \$21           Subtotal         \$15,016,598         \$560           Design Contingency         10.00%         \$1,501,660         \$56           Subtotal         \$16,518,258         \$616           Construction Contingency         3.00%         \$495,548         \$18           Subtotal         \$17,013,805         \$634           Escalation to MOC, 04/01/22         12.38%         \$2,106,527         \$78           Subtotal         \$19,120,332         \$713	13 Fire Protection Systems	\$234,600		\$8.75	
Subtotal         \$13,743,610         \$512           General Requirements         3.00%         \$412,308         \$15           Subtotal         \$14,155,918         \$528           Bonds & Insurance         2.00%         \$283,118         \$10           Subtotal         \$14,439,036         \$538           Contractor's Fee         4.00%         \$577,561         \$21           Subtotal         \$15,016,598         \$560           Design Contingency         10.00%         \$1,501,660         \$56           Subtotal         \$16,518,258         \$616           Construction Contingency         3.00%         \$495,548         \$18           Subtotal         \$17,013,805         \$634           Escalation to MOC, 04/01/22         12.38%         \$2,106,527         \$78           Subtotal         \$19,120,332         \$713	Subtotal		\$12,844,495	_	\$479.27
General Requirements       3.00%       \$412,308       \$15         Subtotal       \$14,155,918       \$528         Bonds & Insurance       2.00%       \$283,118       \$10         Subtotal       \$14,439,036       \$538         Contractor's Fee       4.00%       \$577,561       \$21         Subtotal       \$15,016,598       \$560         Design Contingency       10.00%       \$1,501,660       \$56         Subtotal       \$16,518,258       \$616         Construction Contingency       3.00%       \$495,548       \$18         Subtotal       \$17,013,805       \$634         Escalation to MOC, 04/01/22       12.38%       \$2,106,527       \$78         Subtotal       \$19,120,332       \$713	General Conditions	7.00%	\$899,115		\$33.55
Subtotal       \$14,155,918       \$528         Bonds & Insurance       2.00%       \$283,118       \$10         Subtotal       \$14,439,036       \$538         Contractor's Fee       4.00%       \$577,561       \$21         Subtotal       \$15,016,598       \$560         Design Contingency       10.00%       \$1,501,660       \$56         Subtotal       \$16,518,258       \$616         Construction Contingency       3.00%       \$495,548       \$18         Subtotal       \$17,013,805       \$634         Escalation to MOC, 04/01/22       12.38%       \$2,106,527       \$78         Subtotal       \$19,120,332       \$713	Subtotal		\$13,743,610	_	\$512.82
Bonds & Insurance       2.00%       \$283,118       \$10         Subtotal       \$14,439,036       \$538         Contractor's Fee       4.00%       \$577,561       \$21         Subtotal       \$15,016,598       \$560         Design Contingency       10.00%       \$1,501,660       \$56         Subtotal       \$16,518,258       \$616         Construction Contingency       3.00%       \$495,548       \$18         Subtotal       \$17,013,805       \$634         Escalation to MOC, 04/01/22       12.38%       \$2,106,527       \$78         Subtotal       \$19,120,332       \$713	General Requirements	3.00%	\$412,308		\$15.38
Bonds & Insurance       2.00%       \$283,118       \$10         Subtotal       \$14,439,036       \$538         Contractor's Fee       4.00%       \$577,561       \$21         Subtotal       \$15,016,598       \$560         Design Contingency       10.00%       \$1,501,660       \$56         Subtotal       \$16,518,258       \$616         Construction Contingency       3.00%       \$495,548       \$18         Subtotal       \$17,013,805       \$634         Escalation to MOC, 04/01/22       12.38%       \$2,106,527       \$78         Subtotal       \$19,120,332       \$713	Subtotal		\$14,155,918	_	\$528.21
Contractor's Fee       4.00%       \$577,561       \$21         Subtotal       \$15,016,598       \$560         Design Contingency       10.00%       \$1,501,660       \$56         Subtotal       \$16,518,258       \$616         Construction Contingency       3.00%       \$495,548       \$18         Subtotal       \$17,013,805       \$634         Escalation to MOC, 04/01/22       12.38%       \$2,106,527       \$78         Subtotal       \$19,120,332       \$713	Bonds & Insurance	2.00%			\$10.56
Contractor's Fee       4.00%       \$577,561       \$21         Subtotal       \$15,016,598       \$560         Design Contingency       10.00%       \$1,501,660       \$56         Subtotal       \$16,518,258       \$616         Construction Contingency       3.00%       \$495,548       \$18         Subtotal       \$17,013,805       \$634         Escalation to MOC, 04/01/22       12.38%       \$2,106,527       \$78         Subtotal       \$19,120,332       \$713	Subtotal		\$14,439,036	_	\$538.77
Design Contingency       10.00%       \$1,501,660       \$56         Subtotal       \$16,518,258       \$616         Construction Contingency       3.00%       \$495,548       \$18         Subtotal       \$17,013,805       \$634         Escalation to MOC, 04/01/22       12.38%       \$2,106,527       \$78         Subtotal       \$19,120,332       \$713	Contractor's Fee	4.00%			\$21.55
Subtotal       \$16,518,258       \$616         Construction Contingency       3.00%       \$495,548       \$18         Subtotal       \$17,013,805       \$634         Escalation to MOC, 04/01/22       12.38%       \$2,106,527       \$78         Subtotal       \$19,120,332       \$713	Subtotal		\$15,016,598	_	\$560.32
Construction Contingency       3.00%       \$495,548       \$18         Subtotal       \$17,013,805       \$634         Escalation to MOC, 04/01/22       12.38%       \$2,106,527       \$78         Subtotal       \$19,120,332       \$713	Design Contingency	10.00%	\$1,501,660		\$56.03
Subtotal       \$17,013,805       \$634         Escalation to MOC, 04/01/22       12.38%       \$2,106,527       \$78         Subtotal       \$19,120,332       \$713	Subtotal		\$16,518,258	_	\$616.35
Escalation to MOC, 04/01/22       12.38%       \$2,106,527       \$78         Subtotal       \$19,120,332       \$713	Construction Contingency	3.00%	\$495,548		\$18.49
Subtotal \$19,120,332 \$713	Subtotal		\$17,013,805	_	\$634.84
	Escalation to MOC, 04/01/22	12.38%	\$2,106,527		\$78.60
WSS1 8.90% \$1,867,958 \$69		_		_	\$713.45
	WSST	8.90%	\$1,867,958		\$69.70

Total Area: 26,800 SF

Femmit	DETAIL ELEMENTS - AQUATICS CENTER - PHASE 1							
Field stakinglayout	Element	Quantity	Unit	Unit Cost	Total			
Field staking/layout	1 Foundations							
Clear and grub site   26,800 gsf   \$0,12   \$3,216     Mass excavation   4,026   cy   \$10,78   \$13,39     Backfill   2,053   cy   \$17,13   \$353,161     Haul excess, 10 mile round trip   1,973   cy   \$19,39   \$38,263     Fine grading   26,800 gsf   80,35   \$9,380     Erosion control   26,800 gsf   80,35   \$9,380     Basement Excavation   1,061   cy   \$10,78   \$11,436     Backfill basement   341   cy   \$11,73   \$5,847     Export, assume 10 mile round trip   932   cy   \$19,39   \$18,066     Temporary shoring, assume needed   1,920   sf   \$42,14   \$80,909     Pools Earthwork   288   cy   \$10,78   \$7,861     Surge tank   288   cy   \$16,93   \$4,876     Backfill   Swimming pool   729   cy   \$10,78   \$7,861     Surge tank   287   cy   \$11,13   \$4,062     Haul Excess   Swimming pool   875   cy   \$11,13   \$4,062     Haul Excess   Swimming pool   \$875   cy   \$11,13   \$1,0697     Surge tank   622   cy   \$19,39   \$16,967     Surge tank   622   cy   \$19,39   \$16,967     Surge tank   622   cy   \$19,39   \$1,097     Formwork, continuous footings, 4000 psi   447   cy   \$249,65   \$111,594     Formwork, continuous footings, 4000 psi   447   cy   \$249,65   \$111,594     Formwork, continuous footings   7,320   sf   \$7,75   \$65,750     Backfill   500   cy   \$18,75   \$9,979     Excavation   904   cy   \$21,64   \$19,563     Backfill   500   cy   \$18,75   \$9,979     Excavation   904   cy   \$21,64   \$19,563     Backfill   500   cy   \$18,75   \$19,39     Formwork, continuous footings   456   cy   \$242,06   \$110,379     Excavation   50,766   cy   \$10,379     Excavation   50,766   cy   \$10,379     Excavation   50,766   cy   \$10,379     Excavation   50,766   cy   \$10,379     Excavation   50,775   cy   \$10,379     Excavation   50,775   cy   \$10,479     Excavation   50,775   cy   \$10,479     Excavation   50,775   cy   \$10,479     Excavation   50,775   cy   \$10,479     Exca	Earthwork							
Clear and grub site   26,800 gsf   \$0,12   \$3,216     Mass excavation   4,026   cy   \$10,78   \$13,39     Backfill   2,053   cy   \$17,13   \$353,161     Haul excess, 10 mile round trip   1,973   cy   \$19,39   \$38,263     Fine grading   26,800 gsf   80,35   \$9,380     Erosion control   26,800 gsf   80,35   \$9,380     Basement Excavation   1,061   cy   \$10,78   \$11,436     Backfill basement   341   cy   \$11,73   \$5,847     Export, assume 10 mile round trip   932   cy   \$19,39   \$18,066     Temporary shoring, assume needed   1,920   sf   \$42,14   \$80,909     Pools Earthwork   288   cy   \$10,78   \$7,861     Surge tank   288   cy   \$16,93   \$4,876     Backfill   Swimming pool   729   cy   \$10,78   \$7,861     Surge tank   287   cy   \$11,13   \$4,062     Haul Excess   Swimming pool   875   cy   \$11,13   \$4,062     Haul Excess   Swimming pool   \$875   cy   \$11,13   \$1,0697     Surge tank   622   cy   \$19,39   \$16,967     Surge tank   622   cy   \$19,39   \$16,967     Surge tank   622   cy   \$19,39   \$1,097     Formwork, continuous footings, 4000 psi   447   cy   \$249,65   \$111,594     Formwork, continuous footings, 4000 psi   447   cy   \$249,65   \$111,594     Formwork, continuous footings   7,320   sf   \$7,75   \$65,750     Backfill   500   cy   \$18,75   \$9,979     Excavation   904   cy   \$21,64   \$19,563     Backfill   500   cy   \$18,75   \$9,979     Excavation   904   cy   \$21,64   \$19,563     Backfill   500   cy   \$18,75   \$19,39     Formwork, continuous footings   456   cy   \$242,06   \$110,379     Excavation   50,766   cy   \$10,379     Excavation   50,766   cy   \$10,379     Excavation   50,766   cy   \$10,379     Excavation   50,766   cy   \$10,379     Excavation   50,775   cy   \$10,379     Excavation   50,775   cy   \$10,479     Excavation   50,775   cy   \$10,479     Excavation   50,775   cy   \$10,479     Excavation   50,775   cy   \$10,479     Exca	Field staking/layout	26,800	gsf	\$0.15	\$4,020			
Backfill		26,800	gsf	\$0.12	\$3,216			
Haul excess, 10 mile round trip 1,973 cy \$19,39 \$38,263 Fine grading 26,800 gsf \$0,36 \$9,380 Fine grading 26,800 gsf \$0,36 \$1,608 Basement Excavation  Mass excavation, basement 1,061 cy \$10,78 \$11,408 Backfill, basement 1,061 cy \$10,78 \$11,408 Backfill bases as well brille round trip 1,920 cy \$19,39 \$18,060 Temporary shoring, assume needed 1,920 cy \$10,78 \$18,060 Temporary shoring, assume needed 7,900 cy \$10,78 \$	Mass excavation	4,026	СУ	\$10.78	\$43,399			
Fine grading	Backfill	2,053	-	\$17.13	\$35,161			
Erosion control  Basement Excavation  Mass excavation, basement  Mass excavation, basement  Backfill, basement  Export, assume 10 mile round trip  Export, assume 10 mile round trip  Export, assume 10 mile round trip  Pools Earthwork  Mass Excavation  Mass Excavation  Mass Excavation  Surimming pool  Surge tank  Surge tank  Accident Surge tank  Accident Surge tank  Accident Surge tank  Accident Surge tank  Controllen Surge tank  Controllen Surge tank  Controllen Surge tank  Controllen Surge tank  Foundations  Controllen Surge tank  Controllen Surge tank  Foundations  Controllen Surge tank  Formwork, continuous footings, 4000 psi  Foundation Folding Sussumed 3' wide x 3' deep, at perimeter and basement walls  Concrete, continuous footings, 4000 psi  Foundation Folding Sussumed Surger, at perimeter and basement walls  Concrete, continuous footings, 4000 psi  Formwork, continuous footings, 4000 psi  Formwork, continuous footings, 4000 psi  Formwork, continuous footing Susumed Surger, at perimeter and basement walls  Concrete, slab on grade, 4000 psi  Formwork, slab on grade, 4000 psi  Formwork, slab on grade elinforcing, assumed 2:5#sf  Finish to slab  Vapor barrier  4 22,200  5 \$18.87  \$1.84  \$4.97  \$1.84,976  \$1.84  \$1.84,976  \$1.84  \$1.84,976  \$1.84  \$1.84,976  \$1.84  \$1.84,976  \$1.84  \$1.84,976  \$1.84  \$1.84,976  \$1.84  \$1.84,976  \$1.84  \$1.84,976  \$1.84  \$1.84,976  \$1.84  \$1.84,976  \$1.84  \$1.84,976  \$1.84  \$1.84,976  \$1.84  \$1.84,976  \$1.84  \$1.84,976  \$1.84  \$1.84,976  \$1.84,976  \$1.84,976  \$1.84,976  \$1.84,976  \$1.84,976  \$1.84,976  \$1.84,976  \$1.84,976  \$1.84,976  \$1.84,976  \$1.84,	Haul excess, 10 mile round trip	1,973	-	\$19.39	\$38,263			
Prosion control   26,800 gsf   \$0.06 \$1,008   Basement   Excavation	•	26,800	-	\$0.35	\$9,380			
Mass excavation, basement         1,061         cy         \$10.78         \$11.436           Backfill, basement         344         cy         \$17.13         \$5,847           Export, assume 10 mile round trip         932         cy         \$19.39         \$18,060           Temporary shoring, assume needed         1,920         sf         \$42.1         \$80,090           Pools Earthwork           Mass Excavation           Swimming pool         729         cy         \$10.78         \$7,861           Surge tank         288         cy         \$10.93         \$4,876           Backfill         237         cy         \$17.31         \$4,062           Surge tank         237         cy         \$19.39         \$16,967           Aut Excess         237         cy         \$19.39         \$16,967           Surge tank         26         cy         \$19.39         \$16,967           Surge tank         50         cy         \$19.39         \$16,967           Surge tank         42         cy         \$19.39         \$16,967           Surge tank         42         cy         \$19.39         \$16,967           Contral anal Excess         30		26,800	gsf	\$0.06	\$1,608			
Backfill, basement         341         cy         \$17.13         \$5.847           Export, assume 10 mile round trip         92         cy         \$19.39         \$18.066           Temporary shoring, assume needed         1,92         cy         \$42.14         \$80.090           Pools Earthwork         ***********************************	Basement Excavation		Ü					
Backfill, basement         341         cy         \$17.13         \$5.847           Export, assume 10 mile round trip         92         cy         \$19.39         \$18.066           Temporary shoring, assume needed         192         cy         \$10.21         \$80.090           Pools Earthwork         ***********************************	Mass excavation, basement	1,061	СУ	\$10.78	\$11,436			
Export, assume 10 mile round trip	Backfill, basement	341	-	\$17.13	\$5,847			
Temporary shoring, assume needed         1,920         sf         \$42.14         \$80,909           Pools Earthwork         Wass Excavation         \$729         Cy         \$10.78         \$7,861           Swimming pool         288         Cy         \$16.93         \$4,876           Backfill         237         Cy         \$17.13         \$4,062           Swimming pool         875         Cy         \$17.13         \$4,062           Haul Excess         50         Cy         \$19.39         \$16,067           Swimming pool         875         Cy         \$19.39         \$16,067           Surge tank         237         Cy         \$19.39         \$16,067           Surge tank         60         Cy         \$19.39         \$16,062           Surge tank         60         Cy         \$19.39         \$16,062           Surge tank         60         Cy         \$19.39         \$16,062           Miscellaneous hauling, allowance         50         Cy         \$19.39         \$1,205           Foundations         Concrete, continuous footings 4         47         Cy         \$24,965         \$111,594           Formwork, continuous footings         7,320         sf         \$7.75	Export, assume 10 mile round trip	932	-	\$19.39	\$18,066			
Pools Earthwork   Mass Excavation   Swimming pool   729   cy   \$10.78   \$7,861   Surge tank   288   cy   \$16.93   \$4,876   Backfill   Swimming pool   Swimm	·	1,920	-	\$42.14				
Swimming pool         729 but sold to the part of the par								
Surge lank         288         cy         \$16.93         \$4,876           Backfill         Swimming pool         Assume Not Required           Surge tank         237         cy         \$17.13         \$4,062           Haul Excess         Swimming pool         875         cy         \$19.39         \$16,967           Surge tank         62         cy         \$19.39         \$1,205           Miscellaneous hauling, allowance         500         cy         \$19.39         \$9,695           Foundations         Contrete, continuous footings, 4000 psi         447         cy         \$249.65         \$111,594           Formwork, continuous footings, 4000 psi         447         cy         \$249.65         \$111,594           Formwork, continuous footings         7,320         sf         \$7.75         \$56,730           Foundation reinforcing, assume 150 #/cy         67,100         lbs         \$1.49         \$99,979           Excavation         904         cy         \$21.64         \$19,563           Backfill         500         cy         \$18.75         \$9,375           Haul excess         410         cy         \$19.39         \$7,950           Spread Footings         \$2,200         gsf <t< td=""><td>Mass Excavation</td><td></td><td></td><td></td><td></td></t<>	Mass Excavation							
Surge tank         288         cy         \$16.93         \$4,876           Backfill         Swimming pool         Assume Not Required           Surge tank         237         cy         \$17.13         \$4,062           Haul Excess         Swimming pool         875         cy         \$19.39         \$16,967           Surge tank         62         cy         \$19.39         \$1,205           Miscellaneous hauling, allowance         500         cy         \$19.39         \$9,695           Foundations         Contrete, continuous footings, allowance         500         cy         \$19.39         \$9,695           Foundations         Concrete, continuous footings, allowance         447         cy         \$249.65         \$111,594           Formwork, continuous footings         7,320         sf         \$7.75         \$56,730           Foundation reinforcing, assume 150 #/cy         67,100         lbs         \$1.49         \$99,979           Excavation         904         cy         \$21.64         \$19,563           Backfill         500         cy         \$18.75         \$9,375           Haul excess         410         cy         \$19.39         \$7,950           Spread Footings         22,200	Swimming pool	729	СУ	\$10.78	\$7,861			
Backfill           Swimming pool         Assume Not Required           Surge tank         237         cy         \$17.13         \$4,062           Haul Excess         Swimming pool         875         cy         \$19.39         \$16,967           Surge tank         62         cy         \$19.39         \$1,205           Miscellaneous hauling, allowance         500         cy         \$19.39         \$9,695           Foundations         Contreto, continuous Footings assumed 3' wide x 3' deep, at perimeter and basement walls         2         cy         \$19.39         \$9,695           Foundations         7,302         sf         \$7.75         \$56,730           Formwork, continuous footings, 4000 psi         447         cy         \$249.65         \$111,594           Formwork, continuous footings         7,320         sf         \$7.75         \$56,730           Foundation reinforcing, assume 150 #/cy         67,100         lbs         \$1.49         \$99,979           Excavation         904         cy         \$21.64         \$19,563           Backfill         500         cy         \$18.75         \$9,375           Haul excess         410         cy         \$18.09         \$1,506 <t< td=""><td></td><td>288</td><td>-</td><td>\$16.93</td><td></td></t<>		288	-	\$16.93				
Surge tank         237         cy         \$17.13         \$4,062           Haul Excess         Swimming pool         875         cy         \$19.39         \$16,967           Surge tank         62         cy         \$19.39         \$1,205           Miscellaneous hauling, allowance         500         cy         \$19.39         \$9,695           Foundations         Continuous Footings assumed 3' wide x 3' deep, at perimeter and basement walls         Concrete, continuous footings, 4000 psi         447         cy         \$249.65         \$111,594           Formwork, continuous footings, 4000 psi         447         cy         \$249.65         \$111,594           Formdation reinforcing, assume 150 #/cy         67,100         lbs         \$1.49         \$99,979           Excavation         904         cy         \$21.64         \$19,563           Backfill         500         cy         \$18.75         \$9,375           Haul excess         410         cy         \$18.75         \$9,375           Spread Footings allowance, excluding pool areas         22,200         gsf         \$5.00         \$1110,000           Slab On Grade, excluding pool areas         22,200         gsf         \$5.00         \$1111,000           Slab On grade, excluding pool areas	· ·		,					
Surge tank         237         cy         \$17.13         \$4,062           Haul Excess         Swimming pool         875         cy         \$19.39         \$16,967           Surge tank         62         cy         \$19.39         \$1,205           Miscellaneous hauling, allowance         500         cy         \$19.39         \$9,695           Foundations         Continuous Footings assumed 3' wide x 3' deep, at perimeter and basement walls         Concrete, continuous footings, 4000 psi         447         cy         \$249.65         \$111,594           Formwork, continuous footings, 4000 psi         447         cy         \$249.65         \$111,594           Formdation reinforcing, assume 150 #/cy         67,100         lbs         \$1.49         \$99,979           Excavation         904         cy         \$21.64         \$19,563           Backfill         500         cy         \$18.75         \$9,375           Haul excess         410         cy         \$18.75         \$9,375           Spread Footings allowance, excluding pool areas         22,200         gsf         \$5.00         \$1110,000           Slab On Grade, excluding pool areas         22,200         gsf         \$5.00         \$1111,000           Slab On grade, excluding pool areas	Swimming pool			Assume I	Not Required			
Haul Excess   Swimming pool   875   Cy   \$19.39   \$16,967   Surge tank   62   Cy   \$19.39   \$1,205   Miscellaneous hauling, allowance   500   Cy   \$19.39   \$9,695   Foundations   Continuous Footings assumed 3' wide x 3' deep, at perimeter and basement walls   Concrete, continuous footings, 4000 psi   447   Cy   \$249.65   \$111,594   Formwork, continuous footings   7,320   sf   \$7.75   \$56,730   Foundation reinforcing, assume 150 #/cy   67,100   lbs   \$1.49   \$99,979   Excavation   904   Cy   \$21.64   \$19,563   Backfill   500   Cy   \$18.75   \$9,375   Haul excess   410   Cy   \$19.39   \$7,950   \$19.39		237	CV		•			
Surge tank         62         cy         \$19.39         \$1,205           Miscellaneous hauling, allowance         500         cy         \$19.39         \$9,695           Foundations         Continuous Footings assumed 3' wide x 3' deep, at perimeter and basement walls           Concrete, continuous footings, 4000 psi         447         cy         \$249.65         \$111,594           Formwork, continuous footings         7,320         sf         \$7.75         \$56,730           Foundation reinforcing, assume 150 #/cy         67,100         lbs         \$1.49         \$99,979           Excavation         904         cy         \$21.64         \$19,563           Backfill         500         cy         \$18.75         \$9,375           Haul excess         410         cy         \$19.39         \$7,950           Spread Footings         22,200         gsf         \$5.00         \$111,000           Slab On Grade, excluding pool areas         22,200         gsf         \$5.00         \$111,000           Slab On Grade, excluding pool areas         22,200         gsf         \$8.17         \$8,497           Formwork, slab on grade, 4000 psi         456         cy         \$242.06         \$110,379           Formwork, slab on grade, excluding	· ·		,					
Surge tank         62         cy         \$19.39         \$1,205           Miscellaneous hauling, allowance         500         cy         \$19.39         \$9,695           Foundations         Continuous Footings assumed 3' wide x 3' deep, at perimeter and basement walls           Concrete, continuous footings, 4000 psi         447         cy         \$249.65         \$111,594           Formwork, continuous footings         7,320         sf         \$7.75         \$56,730           Foundation reinforcing, assume 150 #/cy         67,100         lbs         \$1.49         \$99,979           Excavation         904         cy         \$21.64         \$19,563           Backfill         500         cy         \$18.75         \$9,375           Haul excess         410         cy         \$19.39         \$7,950           Spread Footings         22,200         gsf         \$5.00         \$111,000           Slab On Grade, excluding pool areas         22,200         gsf         \$5.00         \$111,000           Slab On Grade, excluding pool areas         22,200         gsf         \$8.17         \$8,497           Formwork, slab on grade, 4000 psi         456         cy         \$242.06         \$110,379           Formwork, slab on grade, excluding	Swimming pool	875	СУ	\$19.39	\$16,967			
Miscellaneous hauling, allowance         500         cy         \$19.39         \$9,695           Foundations         Continuous Footings assumed 3' wide x 3' deep, at perimeter and basement walls         Concrete, continuous footings, 4000 psi         447         cy         \$249.65         \$111,594           Formwork, continuous footings         7,320         sf         \$7.75         \$56,730           Foundation reinforcing, assume 150 #/cy         67,100         lbs         \$1.49         \$99,979           Excavation         904         cy         \$21.64         \$19,563           Backfill         500         cy         \$18.75         \$9,375           Haul excess         410         cy         \$19.39         \$7,950           Spread Footings         22,200         gsf         \$5.00         \$111,000           Slab On Grade, excluding pool areas         22,200         gsf         \$5.00         \$111,000           Slab On Grade, excluding pool areas         22,200         gsf         \$5.00         \$110,379           Formwork, slab on grade, 4000 psi         456         cy         \$242.06         \$110,379           Formwork, slab on grade, 4000 psi         22,200         sf         \$2.03         \$45,066           Gravel sub base, 6" <td< td=""><td></td><td></td><td>-</td><td></td><td></td></td<>			-					
Foundations         Continuous Footings assumed 3' wide x 3' deep, at perimeter and basement walls         Concrete, continuous footings, 4000 psi       447 cy       \$249.65       \$111,594         Formwork, continuous footings       7,320 sf       \$7.75       \$56,730         Foundation reinforcing, assume 150 #/cy       67,100 lbs       \$1.49       \$99,979         Excavation       904 cy       \$21.64       \$19,563         Backfill       500 cy       \$18.75       \$9,375         Haul excess       410 cy       \$19.39       \$7,950         Spread Footings       22,200 gsf       \$5.00       \$111,000         Slab On Grade, excluding pool areas       22,200 gsf       \$5.00       \$1110,379         Formwork, slab on grade, 4000 psi       456 cy       \$242.06       \$110,379         Formwork, slab on grade       1,040 lf       \$8.17       \$8.497         Sand base, 4"       22,200 sf       \$1.81       \$40,182         Slab on grade reinforcing, assumed 2.5 #/sf       61,600 lbs       \$1.84       \$91,784         Finish to slab       22,200 sf       \$0.84       \$18,648         Vapor barrier       22,200 sf       \$0.84       \$97,68	· · · · · · · · · · · · · · · · · · ·		-					
Concrete, continuous footings, 4000 psi         447 cy         \$249.65         \$111,594           Formwork, continuous footings         7,320 sf         \$7.75         \$56,730           Foundation reinforcing, assume 150 #/cy         67,100 lbs         \$1.49         \$99,979           Excavation         904 cy         \$21.64         \$19,563           Backfill         500 cy         \$18.75         \$9,375           Haul excess         410 cy         \$19.39         \$7,950           Spread Footings         22,200 gsf         \$5.00         \$111,000           Slab On Grade, excluding pool areas         22,200 gsf         \$5.00         \$1110,379           Formwork, slab on grade, 4000 psi         456 cy         \$242.06         \$110,379           Formwork, slab on grade         1,040 lf         \$8.17         \$8,497           Sand base, 4"         22,200 sf         \$1.81         \$40,182           Slab on grade reinforcing, assumed 2.5 #/sf         61,600 lbs         \$1.49         \$91,784           Finish to slab         22,200 sf         \$0.84         \$18,648           Vapor barrier         22,200 sf         \$0.84         \$9,768	· · · · · · · · · · · · · · · · · · ·		,		. ,			
Concrete, continuous footings, 4000 psi         447 cy         \$249.65         \$111,594           Formwork, continuous footings         7,320 sf         \$7.75         \$56,730           Foundation reinforcing, assume 150 #/cy         67,100 lbs         \$1.49         \$99,979           Excavation         904 cy         \$21.64         \$19,563           Backfill         500 cy         \$18.75         \$9,375           Haul excess         410 cy         \$19.39         \$7,950           Spread Footings         22,200 gsf         \$5.00         \$111,000           Slab On Grade, excluding pool areas         22,200 gsf         \$5.00         \$1110,379           Formwork, slab on grade, 4000 psi         456 cy         \$242.06         \$110,379           Formwork, slab on grade         1,040 lf         \$8.17         \$8,497           Sand base, 4"         22,200 sf         \$1.81         \$40,182           Slab on grade reinforcing, assumed 2.5 #/sf         61,600 lbs         \$1.49         \$91,784           Finish to slab         22,200 sf         \$0.84         \$18,648           Vapor barrier         22,200 sf         \$0.84         \$9,768	Continuous Footings assumed 3' wide x 3' deep, at perimeter and basement wa	alls						
Formwork, continuous footings         7,320 sf         \$7.75         \$56,730           Foundation reinforcing, assume 150 #/cy         67,100 lbs         \$1.49         \$99,979           Excavation         904 cy         \$21.64         \$19,563           Backfill         500 cy         \$18.75         \$9,375           Haul excess         410 cy         \$19.39         \$7,950           Spread Footings         \$22,200 gsf         \$5.00         \$111,000           Slab On Grade, excluding pool areas         \$22,200 gsf         \$5.00         \$1110,379           Formwork, slab on grade, 4000 psi         456 cy         \$242.06         \$110,379           Formwork, slab on grade         1,040 lf         \$8.17         \$8,497           Sand base, 4"         22,200 sf         \$2.03         \$45,066           Gravel sub base, 6"         22,200 sf         \$1.81         \$40,182           Slab on grade reinforcing, assumed 2.5 #/sf         61,600 lbs         \$1.49         \$91,784           Finish to slab         22,200 sf         \$0.84         \$18,648           Vapor barrier         22,200 sf         \$0.44         \$9,768			CV	\$249.65	\$111,594			
Foundation reinforcing, assume 150 #/cy       67,100 lbs       \$1.49       \$99,979         Excavation       904 cy       \$21.64       \$19,563         Backfill       500 cy       \$18.75       \$9,375         Haul excess       410 cy       \$19.39       \$7,950         Spread Footings       22,200 gsf       \$5.00       \$111,000         Slab On Grade, excluding pool areas       22,200 gsf       \$5.00       \$110,379         Formwork, slab on grade, 4000 psi       456 cy       \$242.06       \$110,379         Formwork, slab on grade       1,040 lf       \$8.17       \$8,497         Sand base, 4"       22,200 sf       \$2.03       \$45,066         Gravel sub base, 6"       22,200 sf       \$1.81       \$40,182         Slab on grade reinforcing, assumed 2.5 #/sf       61,600 lbs       \$1.49       \$91,784         Finish to slab       22,200 sf       \$0.84       \$18,648         Vapor barrier       22,200 sf       \$0.44       \$9,768	· ·		-					
Excavation       904 cy       \$21.64       \$19,563         Backfill       500 cy       \$18.75       \$9,375         Haul excess       410 cy       \$19.39       \$7,950         Spread Footings       22,200 gsf       \$5.00       \$111,000         Slab On Grade, excluding pool areas       22,200 gsf       \$5.00       \$111,000         Slab On Grade, excluding pool areas       456 cy       \$242.06       \$110,379         Formwork, slab on grade, 4000 psi       456 cy       \$242.06       \$110,379         Formwork, slab on grade       1,040 lf       \$8.17       \$8,497         Sand base, 4"       22,200 sf       \$2.03       \$45,066         Gravel sub base, 6"       22,200 sf       \$1.81       \$40,182         Slab on grade reinforcing, assumed 2.5 #/sf       61,600 lbs       \$1.49       \$91,784         Finish to slab       22,200 sf       \$0.84       \$18,648         Vapor barrier       22,200 sf       \$0.44       \$9,768	· ·							
Backfill       500 cy       \$18.75       \$9,375         Haul excess       410 cy       \$19.39       \$7,950         Spread Footings       22,200 gsf       \$5.00       \$111,000         Slab On Grade, excluding pool areas       22,200 gsf       \$5.00       \$111,000         Slab On Grade, excluding pool areas       500 cy       \$242.06       \$110,379         Formwork, slab on grade, 4000 psi       456 cy       \$242.06       \$110,379         Formwork, slab on grade       1,040 lf       \$8.17       \$8,497         Sand base, 4"       22,200 sf       \$2.03       \$45,066         Gravel sub base, 6"       22,200 sf       \$1.81       \$40,182         Slab on grade reinforcing, assumed 2.5 #/sf       61,600 lbs       \$1.49       \$91,784         Finish to slab       22,200 sf       \$0.84       \$18,648         Vapor barrier       22,200 sf       \$0.44       \$9,768								
Haul excess       410 cy       \$19.39       \$7,950         Spread Footings       22,200 gsf       \$5.00       \$111,000         Slab On Grade, excluding pool areas       22,200 gsf       \$5.00       \$111,000         Slab On Grade, excluding pool areas       50.00       \$110,379       \$10,379         Formwork, slab on grade, 4000 psi       456 cy       \$242.06       \$110,379         Formwork, slab on grade       1,040 lf       \$8.17       \$8,497         Sand base, 4"       22,200 sf       \$2.03       \$45,066         Gravel sub base, 6"       22,200 sf       \$1.81       \$40,182         Slab on grade reinforcing, assumed 2.5 #/sf       61,600 lbs       \$1.49       \$91,784         Finish to slab       22,200 sf       \$0.84       \$18,648         Vapor barrier       22,200 sf       \$0.44       \$9,768			-					
Spread Footings         Spread Footings allowance, excluding pool areas       22,200 gsf       \$5.00 \$111,000         Slab On Grade, excluding pool areas       20,200 gsf       \$242.06 \$110,379         Concrete, slab on grade, 4000 psi       456 cy       \$242.06 \$110,379         Formwork, slab on grade       1,040 lf       \$8.17 \$8,497         Sand base, 4"       22,200 sf       \$2.03 \$45,066         Gravel sub base, 6"       22,200 sf       \$1.81 \$40,182         Slab on grade reinforcing, assumed 2.5 #/sf       61,600 lbs       \$1.49 \$91,784         Finish to slab       22,200 sf       \$0.84 \$18,648         Vapor barrier       22,200 sf       \$0.44 \$9,768			-					
Spread Footings allowance, excluding pool areas       22,200 gsf       \$5.00       \$111,000         Slab On Grade, excluding pool areas       456 cy       \$242.06       \$110,379         Concrete, slab on grade, 4000 psi       456 cy       \$242.06       \$110,379         Formwork, slab on grade       1,040 lf       \$8.17       \$8,497         Sand base, 4"       22,200 sf       \$2.03       \$45,066         Gravel sub base, 6"       22,200 sf       \$1.81       \$40,182         Slab on grade reinforcing, assumed 2.5 #/sf       61,600 lbs       \$1.49       \$91,784         Finish to slab       22,200 sf       \$0.84       \$18,648         Vapor barrier       22,200 sf       \$0.44       \$9,768			- 7		. ,			
Slab On Grade, excluding pool areas         Concrete, slab on grade, 4000 psi       456 cy       \$242.06       \$110,379         Formwork, slab on grade       1,040 lf       \$8.17       \$8,497         Sand base, 4"       22,200 sf       \$2.03       \$45,066         Gravel sub base, 6"       22,200 sf       \$1.81       \$40,182         Slab on grade reinforcing, assumed 2.5 #/sf       61,600 lbs       \$1.49       \$91,784         Finish to slab       22,200 sf       \$0.84       \$18,648         Vapor barrier       22,200 sf       \$0.44       \$9,768		22,200	asf	\$5.00	\$111,000			
Concrete, slab on grade, 4000 psi       456 cy       \$242.06       \$110,379         Formwork, slab on grade       1,040 lf       \$8.17       \$8,497         Sand base, 4"       22,200 sf       \$2.03       \$45,066         Gravel sub base, 6"       22,200 sf       \$1.81       \$40,182         Slab on grade reinforcing, assumed 2.5 #/sf       61,600 lbs       \$1.49       \$91,784         Finish to slab       22,200 sf       \$0.84       \$18,648         Vapor barrier       22,200 sf       \$0.44       \$9,768		,	3		. ,			
Formwork, slab on grade 1,040 If \$8.17 \$8,497 Sand base, 4" 22,200 sf \$2.03 \$45,066 Gravel sub base, 6" 22,200 sf \$1.81 \$40,182 Slab on grade reinforcing, assumed 2.5 #/sf 61,600 lbs \$1.49 \$91,784 Finish to slab 22,200 sf \$0.84 \$18,648 Vapor barrier 22,200 sf \$0.44 \$9,768		456	CV	\$242.06	\$110.379			
Sand base, 4"       22,200 sf       \$2.03       \$45,066         Gravel sub base, 6"       22,200 sf       \$1.81       \$40,182         Slab on grade reinforcing, assumed 2.5 #/sf       61,600 lbs       \$1.49       \$91,784         Finish to slab       22,200 sf       \$0.84       \$18,648         Vapor barrier       22,200 sf       \$0.44       \$9,768								
Gravel sub base, 6"       22,200 sf       \$1.81       \$40,182         Slab on grade reinforcing, assumed 2.5 #/sf       61,600 lbs       \$1.49       \$91,784         Finish to slab       22,200 sf       \$0.84       \$18,648         Vapor barrier       22,200 sf       \$0.44       \$9,768	· · · · · · · · · · · · · · · · · · ·							
Slab on grade reinforcing, assumed 2.5 #/sf       61,600 lbs       \$1.49       \$91,784         Finish to slab       22,200 sf       \$0.84       \$18,648         Vapor barrier       22,200 sf       \$0.44       \$9,768								
Finish to slab       22,200 sf       \$0.84       \$18,648         Vapor barrier       22,200 sf       \$0.44       \$9,768								
Vapor barrier 22,200 sf \$0.44 \$9,768								
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Element	DETAIL ELEMENTS - AQUATICS CENTER - PHASE 1								
Total - Foundations	Element	Quantity	Unit	Unit Cost	Total				
	Loading dock ramp and walls	1,030	sf	\$25.00	\$25,750				
Concrete Basement Walls   Concrete, basement walls 5000 psi	Total - Foundations				\$1,077,727				
Basement Walls	2 Vertical Structure								
Concrete, basement walls 5000 psi	Concrete								
Formwork, basement wall reinforcing, assumed 250 #/cy	Basement Walls								
Basement wall reinforcing, assumed 250 #/cy   28,519   lbs   \$1,58   \$45,060   Walerproofing   2,800   sf   \$7,40   \$2,0720   Finish to walls   \$2,800   sf   \$7,40   \$2,0720   Finish to walls   \$2,800   sf   \$7,40   \$2,0720   \$2,000   sf   \$1,000   \$2,0	Concrete, basement walls 5000 psi	114	су	\$266.24	\$30,351				
Waterproofing	Formwork, basement walls	5,600	sf	\$16.77	\$93,912				
Finish to walls	Basement wall reinforcing, assumed 250 #/cy	28,519	lbs	\$1.58	\$45,060				
Stem Walls, assume 30' wide x 24' high   Concrete, walls 5000 psi   51 cy   \$266.24   \$13,578   Formwork, walls   1,000   sf   \$16,77   \$16,770   Wall reinforcing, assume 200 #/cy   10,185   lbs   \$1.58   \$16,092   Finish to walls   500   sf   \$0.83   \$415   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 cy   \$266.24   \$6,922   Formwork, shear walls   5000 psi   26 cy   \$266.24   \$6,922   Formwork, shear walls   5000 psi   26 cy   \$266.24   \$6,922   Formwork, shear walls   5000 psi   510,77   \$21,130   Wall reinforcing, assume 250 #/cy   6,420   lbs   \$1.58   \$10,144   Finish to walls   630   sf   \$0.83   \$523   \$1000   Structural Steel   Vertical steel framing, allowance   26,800   gsf   \$15.00   \$402,000   Metals   Vertical steel framing, allowance   26,800   gsf   \$15.00   \$402,000   \$402,		•		\$7.40					
Concrete, walls 5000 psi		2,800	sf	\$0.83	\$2,324				
Formwork, walls	· ·								
Wall reinforcing, assume 200 #/cy         10,185         bs         \$1.58         \$16,092           Finish to walls         500         sf         \$0.33         \$415           Allow for bench finish, wood assumed         250         lf         \$15.00         \$37,500           Cast-In-Place Concrete Shear Walls, elevator walls, assume 30' high         Concrete, shear walls, 5000 psi         26         cy         \$26.24         \$6,922           Formwork, shear walls         1,260         sf         \$16.77         \$21,130           Wall reinforcing, assume 250 #/cy         6,420         lbs         \$1.677         \$21,130           Wall reinforcing, assume 250 #/cy         6,420         lbs         \$1.677         \$21,130           Wall reinforcing, assume 250 #/cy         6,420         lbs         \$1.677         \$21,130           Wall reinforcing, assume 250 #/cy         6,420         lbs         \$1.687         \$10,144           Finish to walls         26,800         gsf         \$15.00         \$402,000           Metals         26,800         gsf         \$15.00         \$402,000           Miscellaneous bracing         10         loc         \$9,000.00         \$90,000           Miscellaneous metals         26,800         gsf <t< td=""><td>Concrete, walls 5000 psi</td><td></td><td>-</td><td></td><td>\$13,578</td></t<>	Concrete, walls 5000 psi		-		\$13,578				
Finish to walls		· ·							
Allow for bench finish, wood assumed  Cast-In-Place Concrete Shear Walls, elevator walls, assume 30' high  Concrete, shear walls, 5000 psi  Concrete Cast-In-Place Concrete Slabs, Mezzanine, assume 250 #/cy  Concrete, elevated floor slabs  Formwork to soffit, elevated floor slabs  Cast-In-Place Concrete Slabs, Mezzanine, assume 8" thick  Concrete, elevated floor slabs  Cast-In-Place Concrete Slabs, Mezzanine, assume 8" thick  Concrete, elevated floor slabs  Cast-In-Place Concrete Slabs, Mezzanine, assume 8" thick  Concrete, elevated floor slabs  Cast-In-Place Concrete Slabs, Mechanical Room Roof, assume 8" thick  Concrete, elevated floor slabs, 5000 psi  Cast-In-Place Concrete Slabs, Mechanical Room Roof, assume 8" thick  Concrete, elevated floor slabs, 5000 psi  Cast-In-Place Concrete Slabs, Mechanical Room Roof, assume 8" thick  Concrete, elevated floor slabs, 5000 psi  C	,		lbs						
Cast-In-Place Concrete Shear Walls, elevator walls, assume 30' high           Concrete, shear walls, 5000 psi         26         cy         \$266.24         \$6,922           Formwork, shear walls         1,260         sf         \$16.77         \$21,130           Wall reinforcing, assume 250 #/cy         6,420         lbs         \$1.58         \$10,144           Finish to walls         630         sf         \$0.83         \$523           Structural Steel         Vertical steel framing, allowance         26.800         gsf         \$15.00         \$402,000           Miscellaneous bracing         10         loc         \$9,000.00         \$90,000           Miscellaneous metals         26.800         gsf         \$1.50         \$402,000           Total - Vertical Structure         ***********************************									
Concrete, shear walls, 5000 psi         26 cy         \$266.24         \$6,922           Formwork, shear walls         1,260 sf         \$16.77         \$21,130           Wall reinforcing, assume 250 #/cy         6,420 lbs         \$1.58         \$10,144           Finish to walls         630 sf         \$0.83         \$523           Structural Steel         Vertical steel framing, allowance         26,800 gsf         \$15.00         \$402,000           Metals         Miscellaneous bracing         10 loc         \$9,000.00         \$90,000           Miscellaneous metals         26,800 gsf         \$1.50         \$402,000           Total - Vertical Structure           Total - Vertical Structures           Concrete           Cast-In-Place Concrete Slabs, Mezzanine, assume 8" thick           Concrete, elevated floor slabs, 5000 psi         60 cy         \$269.76         \$16,186           Formwork to soffiit, elevated floor slabs         2,220 sf         \$10.05         \$22,311           Formwork slab elevated floor slabs         2,00 sf         \$9,38         \$2,439           Elevated slab reinforcing, assume 5.5 #/sf         13,430 lbs         \$1.49         \$20,111           Finish to elevated floor slabs         2,220 sf         \$0.83 <td< td=""><td>·</td><td>250</td><td>lf</td><td>\$150.00</td><td>\$37,500</td></td<>	·	250	lf	\$150.00	\$37,500				
Formwork, shear walls	· · · · · · · · · · · · · · · · · · ·								
Wall reinforcing, assume 250 #/cy       6,420 lbs       \$1.58       \$10,144         Finish to walls       630 sf       \$0.83       \$523         Structural Steel       Vertical steel framing, allowance       26,800 gsf       \$15.00       \$402,000         Metals       10 loc       \$9,000.00       \$90,000         Miscellaneous bracing       10 loc       \$9,000.00       \$90,000         Miscellaneous metals       26,800 gsf       \$1.50       \$40,200         Total - Vertical Structure       ***********************************	•		•						
Finish to walls 630 sf \$0.83 \$523 Structural Steel  Vertical steel framing, allowance 26,800 gsf \$15.00 \$402,000  Metals  Miscellaneous bracing 10 loc \$9,000.00 \$90,000  Miscellaneous metals 26,800 gsf \$1.50 \$40,200  Total - Vertical Structure \$847,642   Total	·	· ·							
Structural Steel   Vertical steel framing, allowance   26,800   gsf   \$15.00   \$402,000   Metals     Miscellaneous bracing   10   loc   \$90,000   \$90,000   Miscellaneous metals   26,800   gsf   \$1.50   \$402,000   \$90,000   Miscellaneous metals   26,800   gsf   \$1.50   \$402,000   \$900	,								
Vertical steel framing, allowance         26,800 gsf         \$15.00         \$402,000           Metals         Miscellaneous bracing         10 loc         \$9,000.00         \$90,000           Miscellaneous metals         26,800 gsf         \$1.50         \$40,200           Total - Vertical Structure           \$847,642           3 Floor & Roof Structures           Concrete           Cast-In-Place Concrete Slabs, Mezzanine, assume 8" thick           Concrete, elevated floor slabs, 5000 psi         60 cy         \$269.76         \$16,186           Formwork to soffit, elevated floor slabs         2,220 sf         \$10.05         \$22,311           Formwork slab edge, elevated floor slabs         260 sf         \$9.38         \$2,439           Elevated slab reinforcing, assume 5.5 #/sf         13,430 lbs         \$1.49         \$20,011           Finish to elevated floor slabs         2,220 sf         \$0.83         \$1,843           Cast-In-Place Concrete Slabs, Mechanical Room Roof, assume 8" thick         Concrete, elevated floor slabs, 5000 psi         63 cy         \$26,976         \$16,995           Formwork to soffit, elevated floor slabs         2,310 sf         \$10.05         \$23,216		630	sf	\$0.83	\$523				
Metals           Miscellaneous bracing Miscellaneous metals         10 loc \$9,000.00 \$90,000 \$90,000           Miscellaneous metals         26,800 gsf         \$1.50         \$40,200           Total - Vertical Structure           \$847,642           3 Floor & Roof Structures           Concrete           Cast-In-Place Concrete Slabs, Mezzanine, assume 8" thick           Concrete, elevated floor slabs, 5000 psi         60 cy \$269.76 \$16,186           Formwork to soffit, elevated floor slabs         2,220 sf \$10.05 \$22,311           Formwork slab edge, elevated floor slabs         260 sf \$9.38 \$2,439           Elevated slab reinforcing, assume 5.5 #/sf         13,430 lbs \$1.49 \$20,011           Finish to elevated floor slabs         2,220 sf \$0.83 \$1,843           Cast-In-Place Concrete Slabs, Mechanical Room Roof, assume 8" thick         63 cy \$269.76 \$16,995           Concrete, elevated floor slabs, 5000 psi         63 cy \$269.76 \$16,995           Formwork to soffit, elevated floor slabs         2,310 sf \$10.05 \$23,216									
Miscellaneous bracing Miscellaneous metals         10 loc 26,800 gsf         \$90,000 \$90,000 \$90,000           Miscellaneous metals         26,800 gsf         \$1.50         \$40,200           Total - Vertical Structures           Structures           Concrete           Cast-In-Place Concrete Slabs, Mezzanine, assume 8" thick           Concrete, elevated floor slabs, 5000 psi         60 cy         \$269.76         \$16,186           Formwork to soffit, elevated floor slabs         2,220 sf         \$10.05         \$22,311           Formwork slab edge, elevated floor slabs         260 sf         \$9.38         \$2,439           Elevated slab reinforcing, assume 5.5 #/sf         13,430 lbs         \$1.49         \$20,011           Finish to elevated floor slabs         2,220 sf         \$0.83         \$1,843           Cast-In-Place Concrete Slabs, Mechanical Room Roof, assume 8" thick         63 cy         \$269.76         \$16,995           Formwork to soffit, elevated floor slabs         2,310 sf         \$10.05         \$23,216		26,800	gsf	\$15.00	\$402,000				
Miscellaneous metals         26,800 gsf         \$1.50         \$40,200           Total - Vertical Structures           3 Floor & Roof Structures           Concrete         Concrete         Cost-In-Place Concrete Slabs, Mezzanine, assume 8" thick         5000 psi         60 cy         \$269.76         \$16,186         \$10,186         \$10.05         \$22,311         \$22,311         \$22,311         \$22,311         \$24,399         \$24,399         \$24,399         \$24,399         \$24,399         \$24,399         \$20,011         \$11,843         \$1,49         \$20,011         \$20,011         \$1,843         \$2,220 sf         \$0.83         \$1,843           Cast-In-Place Concrete Slabs, Mechanical Room Roof, assume 8" thick         \$2,220 sf         \$0.83         \$1,843           Concrete, elevated floor slabs, 5000 psi         63 cy         \$269.76         \$16,995           Formwork to soffit, elevated floor slabs         2,310 sf         \$10.05         \$23,216									
Total - Vertical Structures  Concrete Cast-In-Place Concrete Slabs, Mezzanine, assume 8" thick Concrete, elevated floor slabs, 5000 psi 60 cy \$269.76 \$16,186 Formwork to soffit, elevated floor slabs 2,220 sf \$10.05 \$22,311 Formwork slab edge, elevated floor slabs 260 sf \$9.38 \$2,439 Elevated slab reinforcing, assume 5.5 #/sf 13,430 lbs \$1.49 \$20,011 Finish to elevated floor slabs 2,220 sf \$0.83 \$1,843 Cast-In-Place Concrete Slabs, Mechanical Room Roof, assume 8" thick Concrete, elevated floor slabs, 5000 psi 63 cy \$269.76 \$16,995 Formwork to soffit, elevated floor slabs	<del>-</del>			•					
3 Floor & Roof Structures  Concrete Cast-In-Place Concrete Slabs, Mezzanine, assume 8" thick Concrete, elevated floor slabs, 5000 psi 60 cy \$269.76 \$16,186 Formwork to soffit, elevated floor slabs 2,220 sf \$10.05 \$22,311 Formwork slab edge, elevated floor slabs 260 sf \$9.38 \$2,439 Elevated slab reinforcing, assume 5.5 #/sf 13,430 lbs \$1.49 \$20,011 Finish to elevated floor slabs 2,220 sf \$0.83 \$1,843 Cast-In-Place Concrete Slabs, Mechanical Room Roof, assume 8" thick Concrete, elevated floor slabs, 5000 psi 63 cy \$269.76 \$16,995 Formwork to soffit, elevated floor slabs 2,310 sf \$10.05 \$23,216	Miscellaneous metals	26,800	gsf	\$1.50	\$40,200				
Concrete Cast-In-Place Concrete Slabs, Mezzanine, assume 8" thick  Concrete, elevated floor slabs, 5000 psi 60 cy \$269.76 \$16,186  Formwork to soffit, elevated floor slabs 2,220 sf \$10.05 \$22,311  Formwork slab edge, elevated floor slabs 260 sf \$9.38 \$2,439  Elevated slab reinforcing, assume 5.5 #/sf 13,430 lbs \$1.49 \$20,011  Finish to elevated floor slabs 2,220 sf \$0.83 \$1,843  Cast-In-Place Concrete Slabs, Mechanical Room Roof, assume 8" thick  Concrete, elevated floor slabs, 5000 psi 63 cy \$269.76 \$16,995  Formwork to soffit, elevated floor slabs 2,310 sf \$10.05 \$23,216	Total - Vertical Structure				\$847,642				
Cast-In-Place Concrete Slabs, Mezzanine, assume 8" thick  Concrete, elevated floor slabs, 5000 psi 60 cy \$269.76 \$16,186  Formwork to soffit, elevated floor slabs 2,220 sf \$10.05 \$22,311  Formwork slab edge, elevated floor slabs 260 sf \$9.38 \$2,439  Elevated slab reinforcing, assume 5.5 #/sf 13,430 lbs \$1.49 \$20,011  Finish to elevated floor slabs 2,220 sf \$0.83 \$1,843  Cast-In-Place Concrete Slabs, Mechanical Room Roof, assume 8" thick  Concrete, elevated floor slabs, 5000 psi 63 cy \$269.76 \$16,995  Formwork to soffit, elevated floor slabs 2,310 sf \$10.05 \$23,216	3 Floor & Roof Structures								
Concrete, elevated floor slabs, 5000 psi       60 cy       \$269.76       \$16,186         Formwork to soffit, elevated floor slabs       2,220 sf       \$10.05       \$22,311         Formwork slab edge, elevated floor slabs       260 sf       \$9.38       \$2,439         Elevated slab reinforcing, assume 5.5 #/sf       13,430 lbs       \$1.49       \$20,011         Finish to elevated floor slabs       2,220 sf       \$0.83       \$1,843         Cast-In-Place Concrete Slabs, Mechanical Room Roof, assume 8" thick       Concrete, elevated floor slabs, 5000 psi       63 cy       \$269.76       \$16,995         Formwork to soffit, elevated floor slabs       2,310 sf       \$10.05       \$23,216	Concrete								
Formwork to soffit, elevated floor slabs  Formwork slab edge, elevated floor slabs  Elevated slab reinforcing, assume 5.5 #/sf  Finish to elevated floor slabs  Cast-In-Place Concrete Slabs, Mechanical Room Roof, assume 8" thick  Concrete, elevated floor slabs  Concrete, elevated floor slabs  Concrete, elevated floor slabs  Concrete, elevated floor slabs  Formwork to soffit, elevated floor slabs  2,220 sf  \$0.83 \$1,843  \$1,843  \$2,210 sf  \$0.83 \$1,843  \$1,843	Cast-In-Place Concrete Slabs, Mezzanine, assume 8" thick								
Formwork to soffit, elevated floor slabs  Formwork slab edge, elevated floor slabs  Elevated slab reinforcing, assume 5.5 #/sf  Finish to elevated floor slabs  Cast-In-Place Concrete Slabs, Mechanical Room Roof, assume 8" thick  Concrete, elevated floor slabs  Concrete, elevated floor slabs  Concrete, elevated floor slabs  Concrete, elevated floor slabs  Formwork to soffit, elevated floor slabs  2,220 sf  \$0.83 \$1,843  \$1,843  \$2,210 sf  \$0.83 \$1,843  \$1,843	Concrete, elevated floor slabs, 5000 psi	60	СУ	\$269.76	\$16,186				
Formwork slab edge, elevated floor slabs  Elevated slab reinforcing, assume 5.5 #/sf  Finish to elevated floor slabs  Cast-In-Place Concrete Slabs, Mechanical Room Roof, assume 8" thick  Concrete, elevated floor slabs, 5000 psi  Formwork to soffit, elevated floor slabs  Separate Slabs assume 8 thick  Concrete, elevated floor slabs and some Roof, assume 8 thick  Concrete, elevated floor slabs and some Roof, assume 8 thick  Concrete, elevated floor slabs and some Roof, assume 8 thick  Concrete, elevated floor slabs and some Roof, assume 8 thick  Concrete, elevated floor slabs and some Roof, assume 8 thick  Concrete, elevated floor slabs and some Roof, assume 8 thick  Concrete, elevated floor slabs and some Roof, assume 8 thick  Concrete, elevated floor slabs and some Roof, assume 8 thick  Concrete, elevated floor slabs and some Roof, assume 8 thick  Concrete, elevated floor slabs and some Roof, assume 8 thick  Concrete, elevated floor slabs and some Roof, assume 8 thick  Concrete, elevated floor slabs and some Roof, assume 8 thick  Concrete, elevated floor slabs and some Roof, assume 8 thick  Concrete, elevated floor slabs and some Roof, assume 8 thick  Concrete, elevated floor slabs and some Roof, assume 8 thick  Concrete, elevated floor slabs and some Roof, assume 8 thick  Concrete, elevated floor slabs and some Roof, assume 8 thick  Concrete, elevated floor slabs and some Roof, assume 8 thick  Concrete, elevated floor slabs and some Roof, assume Roo	·		-	\$10.05					
Elevated slab reinforcing, assume 5.5 #/sf 13,430 lbs \$1.49 \$20,011 Finish to elevated floor slabs 2,220 sf \$0.83 \$1,843  Cast-In-Place Concrete Slabs, Mechanical Room Roof, assume 8" thick Concrete, elevated floor slabs, 5000 psi 63 cy \$269.76 \$16,995 Formwork to soffit, elevated floor slabs 2,310 sf \$10.05 \$23,216	·	· ·							
Finish to elevated floor slabs 2,220 sf \$0.83 \$1,843  Cast-In-Place Concrete Slabs, Mechanical Room Roof, assume 8" thick  Concrete, elevated floor slabs, 5000 psi 63 cy \$269.76 \$16,995  Formwork to soffit, elevated floor slabs 2,310 sf \$10.05 \$23,216	Elevated slab reinforcing, assume 5.5 #/sf	13,430	lbs	\$1.49	\$20,011				
Concrete, elevated floor slabs, 5000 psi         63 cy         \$269.76         \$16,995           Formwork to soffit, elevated floor slabs         2,310 sf         \$10.05         \$23,216	· · · · · · · · · · · · · · · · · · ·	2,220	sf	\$0.83	\$1,843				
Formwork to soffit, elevated floor slabs 2,310 sf \$10.05 \$23,216	Cast-In-Place Concrete Slabs, Mechanical Room Roof, assume 8" thick								
Formwork to soffit, elevated floor slabs 2,310 sf \$10.05 \$23,216	Concrete, elevated floor slabs, 5000 psi	63	су	\$269.76	\$16,995				
Formwork slab edge, elevated floor slabs 200 sf \$9.38 \$1,876	Formwork to soffit, elevated floor slabs	2,310	sf	\$10.05	\$23,216				
	Formwork slab edge, elevated floor slabs	200	sf	\$9.38	\$1,876				

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Element	Quantity	Unit	Unit Cost	Total
Elevated slab reinforcing, assume 5.5 #/sf	13,976	lbs	\$1.49	\$20,82
Finish to elevated floor slabs	2,310	sf	\$0.83	\$1,91
Miscellaneous Concrete				
Concrete, elevator pit	1	ea	\$12,548.05	\$12,54
Rough Carpentry- Roof Framing				
30" x 8 3/4" glu-lam	1,020	lf	\$82.00	\$83,64
70" x 8 3/4" glu-lam	220	lf	\$191.00	\$42,02
Tie rod with 18" steel circular turnbuckle	1,020	lf	\$24.00	\$24,48
Horizontal wood framing, truss allowance	26,800	gsf	\$10.00	\$268,00
8" DLT roof panels	23,487	sf	\$18.00	\$422,76
Metals	25,407	JI	ψ10.00	ΨΤΖΖ, / C
	2 100	lh	42.00	¢4.00
Light support, assume 10 #/lf	2,100	lb	\$2.90	\$6,09
Total - Floor & Roof Structures				\$987,16
Exterior Cladding				
Aquatics Center Building Envelope				
Exterior walls, densglass sheathing	13,062	sf	\$3.64	\$47,54
Rigid insulation, exterior walls	13,062	sf	\$1.83	\$23,90
Metal Panel Rainscreen System	8,571	sf	\$100.00	\$857,10
Random Rough Cedar Siding Rainscreen System	4,491	sf	\$80.00	\$359,28
Aluminum windows/storefront, vision glazing, generic	4,360	sf	\$121.06	\$527,82
Storefront with Rainscreen System	959	sf	\$181.59	\$174,14
Aluminum door sets, frames and hardware, glazed, single, tempered glass	1	ea	\$5,485.63	\$5,48
Aluminum door sets, frames and hardware, glazed, double	2	pr	\$10,891.72	\$21,78
Storefornt Entry Doors	1	pr	\$20,000.00	\$20,00
Coiling door at loading dock, 10' wide x 20' high assumed	1		\$20,000.00	\$20,00
Louver allowance	1	ea Is	\$50,000.00	\$20,00
Louver allowance	'	13	ψ30,000.00	φ30,00
Total - Exterior Cladding				\$2,107,06
Roofing and Waterproofing				
Roofing				
Single ply membrane roofing	23,487	sf	\$7.84	\$184,13
Rigid roof insulation, poly iso insulation	23,487	sf	\$5.75	\$135,05
Flashing / Counterflashing	20,107	31	ψοο	φισσίος
Aluminum coping at parapets	524	lf	\$35.04	\$18,36
Base flashings at base of parapets	524	if	\$37.65	\$19,72
Roof Accessories	02.		ψ07.00	¥ . / / . Z
Aluminum gutters	218	lf	\$27.72	\$6,04
Aluminum downspouts	75	lf	\$27.72	\$2,07
·	26,800	gsf	\$2.00	\$53,60
Miscellaneous accessories	23,000	J°.	72.00	+30,00
Miscellaneous accessories Miscellaneous				
Miscellaneous	1.078	sf	\$6.41	\$6.91
	1,078 26,800	sf gfa	\$6.41 \$0.03	\$6,91 \$80

DETAIL ELEMENTS - AQUATICS CENTER - PHASE 1							
Element	Quantity	Unit	Unit Cost	Total			
Miscellaneous							
Caulking & sealant allowance	26,800	gsf	\$0.35	\$9,380			
Total - Roofing and Waterproofing				\$436,094			
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	\$11.36	\$545			
Bolt top stud channel to structure above incl. double top track	24	lf	\$24.65	\$592			
Gypsum board, 5/8" thick, finished (I4), type X	96	sf	\$3.49	\$335			
Partition wall 11' 6" high							
Metal studs, 3 5/8", 20 Ga., at 16" o.c.	164	sf	\$11.36	\$1,863			
Bolt top stud channel to structure above incl. double top track	14	lf	\$24.65	\$345			
Bolt bottom stud channel to concrete floor	14	lf	\$12.73	\$178			
Gypsum board, 5/8" thick, finished (I4), type X	328	sf	\$3.49	\$1,145			
Sound batt insulation, unbacked	164	sf	\$1.34	\$220			
Partition wall 9' 6" high							
Metal studs, 3 5/8", 20 Ga., at 16" o.c.	3,431	sf	\$11.36	\$38,976			
Bolt top stud channel to structure above incl. double top track	361	lf	\$24.65	\$8,899			
Bolt bottom stud channel to concrete floor	361	lf	\$12.73	\$4,596			
Gypsum board, 5/8" thick, finished (I4), type X	6,862	sf	\$3.49	\$23,948			
Sound batt insulation, unbacked	3,431	sf	\$1.34	\$4,598			
Partition wall - wet - 9' 6" high							
Metal studs, 3 5/8", 20 Ga., at 16" o.c.	2,518	sf	\$11.36	\$28,604			
Bolt top stud channel to structure above incl. double top track	265	lf	\$24.65	\$6,532			
Bolt bottom stud channel to concrete floor	265	lf	\$12.73	\$3,373			
Gypsum board, 5/8" thick, finished (I4), type X	2,386	sf	\$3.49	\$8,327			
Sound batt insulation, unbacked	2,518	sf	\$1.34	\$3,374			
Vapor barrier	2,915	sf	\$0.39	\$1,137			
Backer board	2,650	sf	\$4.94	\$13,091			
Ceramic tile, walls	2,650	sf	\$19.08	\$50,562			
Partition wall - wet - one-sided 9' 6" high							
Metal studs, 3 5/8", 20 Ga., at 16" o.c.	545	sf	\$11.36	\$6,191			
Bolt top stud channel to structure above incl. double top track	57	lf	\$24.65	\$1,405			
Bolt bottom stud channel to concrete floor	57	lf	\$12.73	\$726			
Gypsum board, 5/8" thick, finished (I4), type X	805	sf	\$3.49	\$2,809			
Sound batt insulation, unbacked	545	sf	\$1.34	\$730			
Vapor barrier	314	sf	\$0.39	\$122			
Backer board	285	sf	\$4.94	\$1,408			
Ceramic tile, walls	285	sf	\$19.08	\$5,438			

Element	Quantity	Unit	Unit Cost	Total
Element	Quantity	UIIII	Unit Cost	TOTAL
Partition wall - wet - plumbing chase 9' 6" high				
Metal studs, 3 5/8", 20 Ga., at 16" o.c.	748	sf	\$11.36	\$8,497
Bolt top stud channel to structure above incl. double top track	79	lf	\$24.65	\$1,947
Bolt bottom stud channel to concrete floor	79	lf	\$12.73	\$1,006
Gypsum board, 5/8" thick, finished (I4), type X	353	sf	\$3.49	\$1,232
Gypsum board, 5/8" thick, unfinished	1,101	sf	\$2.55	\$2,808
Sound batt insulation, unbacked	748	sf	\$1.34	\$1,002
Vapor barrier	435	sf	\$0.39	\$170
Backer board	395	sf	\$4.94	\$1,951
Ceramic tile, walls	395	sf	\$19.08	\$7,537
Shaft wall				
Metal studs, 6" CH, 16 Ga., at 16" o.c.	1,476	sf	\$20.56	\$30,347
Bolt top stud channel to structure above incl. double top track	135	lf	\$24.65	\$3,328
Bolt bottom stud channel to concrete floor	135	lf	\$12.73	\$1,719
Gypsum board, 1" thick coreboard at shaft walls	1,476	sf	\$5.23	\$7,719
Gypsum board, 5/8" thick, finished (I4), type X	1,476	sf	\$3.49	\$5,151
Sound batt insulation, unbacked	1,476	sf	\$1.34	\$1,978
Interior of exterior walls	1,170	31	Ψ1.01	Ψίμπο
Interior of exterior, 5/8" thick gypsum board X, finished	3,976	sf	\$3.49	\$13,876
Furring, on walls, 3/4" channel, 16" o.c.	1,594	sf	\$2.46	\$3,921
Interior Glazing	1,074	31	Ψ2.40	Ψ5,721
Interior glazing				
Interior storefront - 9' 6" high	1,062	sf	\$87.59	\$93,021
Interior storefront - 11' 6" high	1,033	sf	\$87.59	\$90,480
Interior Openings	1,033	SI	Φ07.37	\$70,40C
Doors				
Aluminum door sets, frames and hardware, glazed, double	າ	pr	\$10,891.72	¢22 475
<u> </u>	3	pr	· ·	\$32,675
Aluminum door sets, frames and hardware, glazed, single, tempered gla	! 7	ea	\$5,485.63	\$38,399
SC wood door incl. AL frame and hardware, single, 3' 0" x 7' 0"	/	ea	\$2,308.01	\$16,156
SC wood door incl. AL frame and hardware, double, 6' 0" x 7' 0"	5	pr	\$4,469.80	\$22,349
SC wood door incl. AL frame and hardware, double, 5' 0" x 7' 0"	1	pr	\$4,320.81	\$4,321
Hardware premium	32	leaves	\$250.00	\$8,000
Total - Interior Partitions, Doors and Glazing				\$619,660
7 Floor Wall and Cailing Finishes				
7 Floor, Wall and Ceiling Finishes				
Flooring & Base	0 474	c.t	¢1.04	¢/ 300
Sealed concrete	3,474	sf	\$1.84	\$6,392
Floor prep/leveling	8,645	sf	\$9.62	\$83,165
Carpet tile	1,267	sf	\$5.09	\$6,449
Walk-off mat	92	sf	\$50.00	\$4,600
Ceramic tile	7,378	sf	\$18.49	\$136,419
Resilient base	1,518	lf	\$5.27	\$8,000
Ceramic tile, base	666	lf	\$18.45	\$12,288

DETAIL ELEMENTS - AQUATICS CENTER - PHASE 1								
Element	Quantity	Unit	Unit Cost	Total				
Ceiling								
Acoustical ceiling tile, suspended, includes suspension system	3,762	sf	\$5.06	\$19,036				
Gypsum board ceilings, incl. framing	5,826	sf	\$11.12	\$64,785				
Wood Slat Ceiling, allowance	2,900	sf	\$40.00	\$116,000				
Wall finishes, misc.								
Allowance	16,282	sf	\$2.50	\$40,705				
Painting and Coating								
Paint walls	16,282	sf	\$0.78	\$12,700				
Paint ceilings	5,826	sf	\$0.89	\$5,185				
Concrete pool epoxy deck paint	6,160	sf	\$15.00	\$92,400				
Total - Floor, Wall and Ceiling Finishes				\$608,124				
8 Function Equipment and Specialties								
Interior Specialties								
Toilet Cubicles								
Standard, stainless steel	33	ea	\$1,917.89	\$63,290				
Handicap, stainless steel	4	ea	\$2,066.93	\$8,268				
Toilet / Restroom Specialties		ou	Ψ2/000.70	Ψ0/200				
Bathroom mirrors	13	sf	\$39.65	\$515				
Coat hook	7	ea	\$30.31	\$212				
Grab bars	6	ea	\$203.72	\$1,222				
Janitor mop sink rack	1	ea	\$136.15	\$136				
Paper towel dispenser combo unit, recessed	7	ea	\$367.67	\$2,574				
Seat cover dispenser	11	ea	\$139.12	\$1,530				
Shower accessories, per stall	9	ea	\$1,053.35	\$9,480				
Soap dispenser	13	ea	\$98.38	\$1,279				
Toilet paper dispenser	11	ea	\$86.46	\$951				
Storage Specialties	- 11	Ca	ψ00.40	Ψ751				
Lockers, 2-tier incl. concrete base	42	ea	\$263.33	\$11,060				
Locker room benches	79		\$150.00	\$11,850				
Other Specialties	17	11	ψ150.00	Ψ11,030				
Handrail - free-standing	43	lf	\$250.00	\$10,750				
Miscellaneous specialty allowance	26,800	sf	\$1.00	\$26,800				
Interior signage, code	26,800		\$0.15	\$4,020				
Fire extinguisher and cabinet, allowance	20,000		\$444.31	\$3,554				
Exterior signage, allowance	1							
0 0	ı	ls	\$25,000.00	\$25,000				
Rough Carpentry	24 000	of	¢1 01	¢27.040				
Additional blocking, support backing, stiffeners, etc.	26,800	sf	\$1.01	\$27,068				
Casework	F0	ıc	¢220.70	¢10.457				
Café casework - 36"	59		\$329.78	\$19,457				
Reception desk - 36"	32		\$800.00	\$25,600				
Lifeguard casework bases - 30"	50		\$311.46	\$15,573				
Lifeguard casework - uppers - 14"	28	lf	\$210.43	\$5,892				

DETAIL ELEMENTS - AQUATICS CENT	ΓER - PHA	SE 1		
Element	Quantity	Unit	Unit Cost	Total
Lifeguard casework bases - 20"	24	lf	\$269.93	\$6,478
Group Room casework bases - 30"	79	lf	\$311.46	\$24,605
Restroom vanity counter - 24"	29	lf	\$191.93	\$5,566
Window Covering				
Mechoshades, motorized	3,461	sf	\$21.13	\$73,131
Furniture				
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	\$1,869,000
Recreational pool, equipment cost	4,600	sf	\$27.11	\$124,700
	.,,,,,		¥	
Total - Function Equipment and Specialties				\$2,389,063
9 Stairs and Vertical Transportation				
Elevators - Including Smoke Containment Curtain Assembly				
Passenger, 3500 lbs, hydraulic	3	stop	\$55,000.00	\$165,000
Elevator pit ladder	1	ea	\$1,844.55	\$1,845
Stairs	'	ou	Ψ1,011.00	ΨΙ,ΟΙΟ
Entrance Stairs, on grade	350	lf	\$65.00	\$22,750
Mechanical Room Stair	330	"	ψ03.00	ΨΖΖ,130
Precast stair, 4' wide including steel stringers, assume	18	riser	\$320.00	\$5,760
Precast landing	40	sf	\$55.00	\$2,200
Handrail, assume 2 line pipe rail	16	lf	\$360.00	\$5,760
Mezzanine Stair	10	11	φ300.00	Ψ3,700
Precast stair, 4' wide including steel stringers, assume	36	riser	\$320.00	\$11,520
			\$360.00	\$11,320
Handrail, assume 2 line pipe rail	66	lf	\$300.00	\$23,760
Total - Stairs and Vertical Transportation				\$238,595
10 Plumbing Systems				
General plumbing				
Water heater, Double wall, plate and frame heat exchangers	1	ea	\$16,800.00	\$16,800
Circulating pump, duplex	1	ea	\$2,195.89	\$2,196
Expansion tank	1	ea	\$884.56	\$885
Local water heaters, electric	3	ea	\$1,280.00	\$3,840
Sewage ejector / Sump pump - allowance	1	ea	\$9,760.00	\$9,760
Grease / Sand / Oil interceptor	1	ea	\$15,000.00	\$15,000
Sanitary fixtures				
Water closet	12	ea	\$1,640.00	\$19,680
Urinal	4	ea	\$1,670.00	\$6,680
Lavatory	10	ea	\$1,588.00	\$15,880
Shower, exterior - next to the water	4	ea	\$1,630.00	\$6,520
Shower, enclosed - inside the locker room	8	ea	\$1,760.00	\$14,080

DETAIL ELEMENTS - AQUATICS CE	NTER - PHA	SE 1		
Element	Quantity	Unit	Unit Cost	Total
Emergency Shower / Eyewash stations	1	ea	\$2,300.00	\$2,300
Drinking fountain, with bottle filing stations	2	ea	\$4,280.00	\$8,560
Sinks, Group rooms	4	ea	\$1,225.00	\$4,900
Hose bibs	12	ea	\$372.69	\$4,472
Floor drains	10	ea	\$657.00	\$6,570
Trench drains for pool area - corrosion resistant HDPE	20	ea	\$950.00	\$19,000
Rough ins				
Local rough-in at fixture	45	ea	\$917.00	\$41,265
Rough-in at floor sink or floor drain	30	ea	\$1,086.00	\$32,580
Rough-ins to OFCI commercial kitchen: cold and hot water, direct and	6	ea	\$1,000.00	\$6,000
Make up water for swimming pool	1	ea	\$6,500.00	\$6,500
Domestic water piping	26,800	gsf	\$3.80	\$101,840
Waste / vent piping	26,800	gsf	\$4.00	\$107,200
Roof / storm drainage		9	,	, ,
RD/OD - Roof drain with Overhead drain	8	ea	\$715.00	\$5,720
3" pipe, ci, no-hub, in bldg	580	lf	\$54.96	\$31,877
4" pipe, ci, no-hub, in bldg	410	lf	\$64.45	\$26,425
Condensate drainage	26,800	gsf	\$0.50	\$13,400
Miscellaneous	26,800	gsf	\$3.00	\$80,400
Total - Plumbing Systems				\$610,329
11 Heating, Ventilation and Air Conditioning				
Wet side equipment: chiller, boiler, pumps etc.	26,800	gsf	\$12.00	\$321,600
Chilled water piping distribution	26,800	gsf	\$2.00	\$53,600
Hot water piping distribution	26,800	gsf	\$5.00	\$134,000
Air-Side Equipment		3		, ,
AHU-1, Air handling unit, outdoor, vav, modular	20,000	cfm	\$10.00	\$200,000
AHU-2, Air handling unit, outdoor, vav, modular	20,000	cfm	\$10.00	\$200,000
FCU, Fan coil units for IDF / MDF rooms		ea	\$3,851.00	\$7,702
VAV terminal boxes, with reheat coil	24	ea	\$1,840.00	\$44,160
EF, Exhaust fan, inline, Greenheck	6,200	cfm	\$3.85	\$23,870
Air Distribution				
Ductwork, galv - protected with epoxy based paint	22,000	lb	\$12.50	\$275,000
Ductwork, stainless steel	3,000	lb	\$29.14	\$87,420
Duct insulation	12,000	sf	\$3.86	\$46,320
Combination fire / smoke damper	16	ea	\$950.00	\$15,200
Grilles, registers and diffusers, including dampers and flex duct	26,800	sf	\$2.50	\$67,000
Acoustical attenuation	2	ea	\$4,500.00	\$9,000
Ventilation premium for PHIUS+ requirements, allowance	1	ls	\$300,000.00	\$300,000
Miscellaneous testing & commissioning				
Test / balance HVAC	200	hr	\$153.14	\$30,628
Start-up/check-out	160	hr	\$121.93	\$19,509
Commissioning assist	160	hr	\$121.93	\$19,509
Piping identification: labels, arrows and valve tags	200	ea	\$27.60	\$5,520
Seismic and vibration requirements	1	ea	\$25,000.00	\$25,000

DETAIL ELEMENTS - AQUATICS	CENTER - PHA	SE 1		
Element	Quantity	Unit	Unit Cost	Total
HVAC Controls				
DDC controls to plumbing systems	1	ls	\$5,000.00	\$5,000
DDC controls, air handlers	2	ea	\$14,800.00	\$29,600
DDC controls, vav box, reheat coils	24	ea	\$1,957.00	\$46,968
DDC controls, general exhaust fan	4	ea	\$1,314.00	\$5,256
DDC controls, smoke damper monitor	16	ea	\$952.00	\$15,232
DDC misc. items, training, integration	200	hr	\$140.00	\$28,000
DDC controls for pools	1	ls	\$30,000.00	\$30,000
Total - Heating, Ventilation and Air Conditioning				\$2,045,094
12 Electrical Lighting, Power and Communications Service & Distribution Equipment				
Main switchboard, 1200 amp, 120/208v, 3ph, 4w	1	ea	\$47,909.94	\$47,910
Distribution board, 400 amp, 120/208v, 3ph, 4w	1	ea	\$20,358.56	\$20,359
Panelboard, 225 amp, 120/208v, 3ph, 4w	3	ea	\$2,578.77	\$7,736
Feeder, 225 amp, emt	125	lf	\$57.58	\$7,197
Feeder, 400 amp, emt	150	 If	\$105.75	\$15,862
Feeder, 1200 amp, PVC	50	lf	\$267.02	\$13,351
Conduit, 1 1/4" pvc	100	lf	\$6.75	\$675
Copper wire, #8 thhn	100	lf	\$1.00	\$100
Copper wire, #4 thhn	200	lf	\$1.78	\$355
HVAC & Equipment Connections				
AHU-1	1	ea	\$1,028.29	\$1,028
AHU-2	1	ea	\$1,028.29	\$1,028
FCU	2	ea	\$226.51	\$453
EF, Exhaust Fans	4	ea	\$191.67	\$767
Disconnect switch, 60/3 fused N1	2	ea	\$734.97	\$1,470
Disconnect switch, motor rated N3R	4	ea	\$418.91	\$1,676
Disconnect switch, 200/3 fused N3R	2	ea	\$2,273.14	\$4,546
Disconnect elevator switch, 60/3 fused N1	1	ea	\$2,443.87	\$2,444
Equipment feeder, 20 amp	950	lf	\$17.93	\$17,030
Equipment feeder, 60 amp	200	lf	\$21.25	\$4,251
Equipment feeder, 200 amp	225	lf	\$27.35	\$6,154
Convenience Power				
Duplex receptacle, 20 amp	47	ea	\$91.10	\$4,282
Double duplex receptacle, 20 amp	3	ea	\$121.42	\$364
Duplex receptacle, 20 amp GFCI	12	ea	\$107.07	\$1,285
Double duplex receptacle, 20 amp GFCI wp	2	ea	\$160.76	\$322
Branch power, 20 amp	2,250	lf	\$16.06	\$36,142
10/2 armored cable	1,400	lf	\$5.65	\$7,904
Lighting & Lighting Controls				
Down Lights Phase #1	283	ea	\$255.81	\$72,393
Pool Flood Light High Bay	50	ea	\$765.60	\$38,280
Mezzanine Lighting	20	ea	\$524.44	\$10,489
Exit Lighting	14	ea	\$294.00	\$4,116
Lighting control panel	1	ea	\$4,624.80	\$4,625

# **DETAIL ELEMENTS - AQUATICS CENTER - PHASE 1**

DETAIL ELEMENTS - AQUA	THOS OCIVILITY THAT	JL I		
Element	Quantity	Unit	Unit Cost	Total
Single pole switch	2	ea	\$94.64	\$189
Dimmer three way switch	8	ea	\$229.67	\$1,837
Occupancy sensor, ceiling mounted	8	ea	\$242.18	\$1,937
Occupancy sensor, wall mounted	8	ea	\$204.64	\$1,637
Lighting branch power, fixtures	3,530	lf	\$16.06	\$56,702
Lighting branch power, controls	110	lf	\$15.40	\$1,694
Fire Alarm System				
FA control panel	1	ea	\$10,818.26	\$10,818
FA annunciator panel	1	ea	\$2,538.97	\$2,539
FA beam sensor	2	ea	\$1,485.48	\$2,971
FA duct smoke detector	2	ea	\$635.84	\$1,272
FA flow switch	1	ea	\$550.84	\$551
FA heat detector	1	ea	\$319.54	\$320
FA pull station	2	ea	\$337.81	\$676
FA smoke detector	2	ea	\$320.96	\$642
FA tamper switch	1	ea	\$499.45	\$499
FA horn strobe unit, wall mount	8	ea	\$183.08	\$1,465
Conduit, 3/4" emt	3,150	lf	\$10.17	\$32,030
Fire alarm cable rated, 4C	3,150	lf	\$3.74	\$11,775
Telecommunications System	·			
Tele/data outlet, 2 port	14	ea	\$127.21	\$1,781
Wireless access point	6	ea	\$295.12	\$1,771
Fire treated plywood	1	ea	\$288.67	\$289
Main telecommunication grounding busbar	1	ea	\$1,494.17	\$1,494
Conduit, 3/4" emt	1,400	lf	\$10.17	\$14,236
CAT-6, 4 pair 23 AWG, UTP	1,400	lf	\$1.03	\$1,436
Public Address System	,			
Clock/speaker	4	ea	\$591.80	\$2,367
PA speaker	32	ea	\$194.31	\$6,218
Conduit, 3/4" emt	3,600	lf	\$10.17	\$36,606
PA system speaker cable	3,650	lf	\$1.06	\$3,855
Distributed Antenna System	26,800	gsf	\$1.25	\$33,500
Security, Access Control & CCTV Systems	,	J		
CCTV PTZ IP camera, outdoor	3	ea	\$3,330.81	\$9,992
CCTV fixed IP camera	6	ea	\$898.74	\$5,392
DVR, 4TB storage	1	ea	\$1,431.10	\$1,431
Conduit, 3/4" emt	600	lf	\$10.17	\$6,101
CCTV cabling	600	lf	\$1.31	\$784
Access control system				
Access control panel	1	ea	\$5,066.69	\$5,067
Access control panel power supply	1	ea	\$515.99	\$516
Card reader, proximity type	6	ea	\$407.77	\$2,447
Alarm contact, flush mount	4	ea	\$175.86	\$703
Conduit, 3/4" emt	1,200	lf	\$10.17	\$12,202
Access control cable	1,200	lf	\$1.32	\$1,588
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\$8,281.00	\$8,28
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\$9,661.00	\$9,661
\$6,900.00	\$6,900
sf \$7.00	\$187,600
	\$35,000
Assum	e Not Needed
, 1000111	\$12,000
_	ea \$35,000.00

Project # 18-01475 08/20/19

Site Option 1

Element	Subtotal	Total	Cost / SF	Cost / SF
Liement	Jubiotal	Total	003(73)	003(75)
D) Mechanical and Electrical (10-13)		\$733,390		\$4.07
12 Electrical Lighting, Power and Communications	\$733,390	1	\$4.07	
13 Fire Protection Systems				
E) Site Construction (14-16)		\$2,965,057		\$16.47
14 Site Preparation and Demolition	\$269,607		\$1.50	
15 Site Paving, Structures & Landscaping	\$2,485,748		\$13.81	
16 Utilities on Site	\$209,702		\$1.17	
Subtotal		\$3,698,447	_	\$20.55
General Conditions	7.00%	\$258,891		\$1.44
Subtotal		\$3,957,339	_	\$21.99
General Requirements	3.00%	\$118,720		\$0.66
Subtotal		\$4,076,059	_	\$22.64
Bonds & Insurance	2.00%	\$81,521		\$0.45
Subtotal		\$4,157,580	_	\$23.10
Contractor's Fee	4.00%	\$166,303		\$0.92
Subtotal		\$4,323,883	_	\$24.02
Design Contingency	10.00%	\$432,388		\$2.40
Subtotal		\$4,756,272	_	\$26.42
Construction Contingency	3.00%	\$142,688		\$0.79
Subtotal		\$4,898,960	_	\$27.22
Escalation to MOC, 04/01/22	12.38%	\$606,554		\$3.37
Subtotal		\$5,505,514	_	\$30.59
WSST	8.90%	\$537,860		\$2.99
TOTAL ESTIMATED CONSTRUCTION COST		\$6,043,374		\$33.57

Total Area: 180,000 SF

DETAIL ELEMENTS - SITE OP	TION 1			
Element	Quantity	Unit	Unit Cost	Total
12 Electrical Lighting, Power and Communications				
Site Electrical				
Distribution equipment				
Distribution board, 1200 amp, 120/208v, 3ph, 4w	1	ea	\$38,964.49	\$38,964
Generator, diesel, 800kW, 480v, 3ph, 4w	1	ea	\$319,667.53	\$319,668
Automatic transfer switch, 1000/4	2	ea	\$19,221.11	\$38,442
Feeder, 2000 amp, PVC	150	lf	\$388.76	\$58,314
Lighting and lighting control				
Site Lighting Pole Lights	18	ea	\$3,898.27	\$70,169
Bollard Walk way lights	10	ea	\$1,964.76	\$19,648
Conduit, 1" pvc	3,100	lf	\$5.65	\$17,504
Copper wire, #10 thhn	10,000	lf	\$0.74	\$7,381
Site Lighting Trenching and backfill	3,100	lf	\$12.00	\$37,200
Site service and distribution				
Conduit, 4" pvc	650	lf	\$18.28	\$11,881
Pull box, 36x60x36	2	ea	\$6,192.56	\$12,385
Trenching, backfill and compaction	430	lf	\$67.76	\$29,137
Site communications				
Conduit, 4" pvc	600	lf	\$18.28	\$10,967
Pull box, 48"x72"x48" Telecommunication	2	ea	\$5,977.06	\$11,954
Miscellaneous				
Small tools	21	hr	\$80.30	\$1,686
Consumables	1	ls	\$16,030.00	\$16,030
Equipment rentals	1	ls	\$18,702.00	\$18,702
Testing/commissioning	1	ls	\$13,358.00	\$13,358
Total - Electrical Lighting, Power and Communications				\$733,390
14 Site Preparation and Demolition				
Demolition				
Demo & dispose existing structures	180,000	asf	\$0.25	\$45,000
Grading	100,000	951	ψ0.20	Ψ10,000
Rough grading, cut and fill, based on balanced site	14,300	CV	\$5.84	\$83,512
Haul excess, 10 mile round trip, allow	500	су	\$19.39	\$9,695
•		cy		
Proof roll site	180,000	sf	\$0.34	\$61,200
Fine grade	180,000	sf	\$0.35	\$63,000
Temporary erosion and sediment control, allowance	180,000	gsf	\$0.04	\$7,200
Total - Site Preparation and Demolition				\$269,607
15 Site Paving, Structures & Landscaping				
AC Paving				
Parking lot, 3" AC over 8" AB	52,517	sf	\$4.83	\$253,657
Hardscape				•
Concrete paving, 4" thick, incl. sub base, reinforcement, and finish, assume	d 15,082	sf	\$9.78	\$147,502

Concrete Curbs Concrete curbs Concrete Ramps Curb cut concrete ramps Curb cut concrete ramps incl. all concrete, reinforcement, sub base, edge forms, grooved finish, allow Concrete Stairs Concrete Stairs Parking Lot Striping / Signage, 140 parking stalls, directional signage, and striping Lawn Shrubbery, allowance Shrub and turf irrigation Mulch to shrub area Tree Bubblers, allow 2 per tree Trees, 24" box  Concrete Curbs Concrete Curbs Concrete Curbs Concrete Curbs Captalog C		
Concrete curbs Concrete Ramps Curb cut concrete ramps Curb cut concrete ramps incl. all concrete, reinforcement, sub base, edge forms, grooved finish, allow Concrete Stairs Farking Lot Striping / Signage, 140 parking stalls, directional signage, and striping Planting Lawn Shrubbery, allowance Shrub and turf irrigation Mulch to shrub area Trees, 24" box  12,757 If 2,757 If 2,757 If 2,757 If 2,757 If 2 ea 2,757 If 2 ea 2,757 If 2 ea 2,757 If 2,757 If 2 ea 2,757 If 2 ea	Unit Cost	Total
Concrete Ramps Curb cut concrete ramps Curb cut concrete ramps incl. all concrete, reinforcement, sub base, edge forms, grooved finish, allow Concrete Stairs Farking Lot Striping / Signage, 140 parking stalls, directional signage, and striping Planting Lawn Shrubbery, allowance Shrub and turf irrigation Mulch to shrub area Tree Bubblers, allow 2 per tree Trees, 24" box  2 ea  2 ea  2 ea  2 ea  2 ea  3 50 sf  50 sf  50 sf  50 sf  50 sf  51 ls  52 sf  53 sf  54 sf  55 sf  56 sf  57 sf  58		
Curb cut concrete ramps  Continuous concrete ramps incl. all concrete, reinforcement, sub base, edge forms, grooved finish, allow  Concrete Stairs  Parking Lot Striping / Signage, 140 parking stalls, directional signage, and striping  Lawn  Lawn  Shrubbery, allowance  Shrub and turf irrigation  Mulch to shrub area  Tree Bubblers, allow 2 per tree  Trees, 24" box  Tee Bubblers, allow 2 per tree  Trees, 24" box	\$21.79	\$60,075
Continuous concrete ramps incl. all concrete, reinforcement, sub base, edge forms, grooved finish, allow 560 sf Concrete Stairs 50 sf Parking Lot Striping / Signage, 140 parking stalls, directional signage, and striping 1 ls Planting  Lawn 3,430 sf Shrubbery, allowance 133,669 sf Shrub and turf irrigation 133,669 sf Mulch to shrub area 133,669 sf Tree Bubblers, allow 2 per tree 100 ea Trees, 24" box 50 ea		
forms, grooved finish, allow Concrete Stairs  Parking Lot Striping / Signage, 140 parking stalls, directional signage, and striping Planting Lawn Shrubbery, allowance Shrub and turf irrigation Mulch to shrub area Tree Bubblers, allow 2 per tree Trees, 24" box  50 sf Shrub and turf irrigation Tree Bubblers, allow 2 per tree Trees, 24" box  50 sf Shrub and turf irrigation Tree Shrub area Trees, 24" box	\$1,362.83	\$2,726
Concrete Stairs 50 sf Parking Lot Striping / Signage, 140 parking stalls, directional signage, and striping Planting  Lawn 3,430 sf Shrubbery, allowance 133,669 sf Shrub and turf irrigation 133,669 sf Mulch to shrub area 133,669 sf Tree Bubblers, allow 2 per tree 100 ea Trees, 24" box 50 ea		
Parking Lot Striping / Signage, 140 parking stalls, directional signage, and striping Planting  Lawn 3,430 sf Shrubbery, allowance 133,669 sf Shrub and turf irrigation 133,669 sf Mulch to shrub area 133,669 sf Tree Bubblers, allow 2 per tree 100 ea Trees, 24" box 50 ea	\$33.52	\$18,771
Planting       3,430       sf         Lawn       3,430       sf         Shrubbery, allowance       133,669       sf         Shrub and turf irrigation       133,669       sf         Mulch to shrub area       133,669       sf         Tree Bubblers, allow 2 per tree       100       ea         Trees, 24" box       50       ea	\$30.00	\$1,500
Shrubbery, allowance 133,669 sf Shrub and turf irrigation 133,669 sf Mulch to shrub area 133,669 sf Tree Bubblers, allow 2 per tree 100 ea Trees, 24" box 50 ea	\$2,800.00	\$2,800
Shrub and turf irrigation133,669sfMulch to shrub area133,669sfTree Bubblers, allow 2 per tree100eaTrees, 24" box50ea	\$8.00	\$27,440
Mulch to shrub area 133,669 sf Tree Bubblers, allow 2 per tree 100 ea Trees, 24" box 50 ea	\$8.00	\$1,069,352
Tree Bubblers, allow 2 per tree 100 ea Trees, 24" box 50 ea	\$1.67	\$223,227
Trees, 24" box 50 ea	\$0.91	\$121,639
	\$150.00	\$15,000
	\$650.00	\$32,500
Tree Guying, all trees 50 ea	\$175.00	\$8,750
Site Specialties	<b>\$040.50</b>	<b>\$405.000</b>
Splash pad, allow 2,000 sf	\$212.50	\$425,000
Decking 1,856 sf Bollards, 8" square steel, allow 12 ea	\$15.00 \$1,080.76	\$27,840 \$12,969
Miscellaneous site finishes 1 ls	\$1,000.70	\$35,000
Site Furniture	\$33,000.00	\$33,000
Trash and recycling receptacles		FF&E
Chairs		FF&E
Tables, allow		FF&E
Benches		FF&E
Metal Canopy		NA
Mechanical Equipment Yard		NA
Moshanida Equipmont raru		
Total - Site Paving, Structures & Landscaping		\$2,485,748
16 Utilities on Site		
Domestic water		
4" domestic water meter 1 ea	\$21,995.78	\$21,996
4" water line, including trenching and backfill 250 If	\$68.54	\$17,135
Gate valve, 4" 1 ea	\$776.86	\$777
4" to 8" water line tap 1 ea	\$350.00	\$350
Extend 6" (assumed) water line, including trenching and backfill 100 If	\$77.24	\$7,724
Fire water		
6" fire line pipe 200 If	\$105.73	\$21,146
Gate valve, 6" 1 ea	\$1,059.35	\$1,059
Fire hydrants, qty assumed 2 ea	\$6,757.59	\$13,515
6" fire department connection 1 ea	\$2,816.02	\$2,816
Sanitary sewer		
Grease interceptor, size TBD, allow 1 ea	\$15,000.00	\$15,000
4" (assumed) lift station 1 ea	\$5,000.00	\$5,000
4" (assumed) sanitary sewer line, including trenching and backfill 250 If	\$82.26	\$20,565

Element	Quantity	Unit	Unit Cost	Total
Natural gas				
2" (assumed) gas line, including trenching and backfill	200	lf	\$62.85	\$12,570
2" gas meter	1	ea	\$7,456.67	\$7,457
Storm water				
24" storm water pipe, including trenching and backfill	400	lf	\$156.48	\$62,592
Storm detention vault			Assumed	Not Needed

Aquatics Center - Phase 2 - Add Alternate

Element	Subtotal	Total	Cost / SF	Cost / SF
A) Shell (1-5)		\$4,072,451		\$203.62
1 Foundations	\$807,408		\$40.37	
2 Vertical Structure	\$497,628		\$24.88	
3 Floor & Roof Structures	\$694,302		\$34.72	
4 Exterior Cladding	\$1,708,638		\$85.43	
5 Roofing and Waterproofing	\$364,476		\$18.22	
B) Interiors (6-7)		\$832,645		\$41.63
6 Interior Partitions, Doors and Glazing	\$315,578		\$15.78	
7 Floor, Wall and Ceiling Finishes	\$517,067		\$25.85	
C) Equipment and Vertical Transportation (8-9)		\$2,038,799		\$101.94
8 Function Equipment and Specialties	\$2,019,299		\$100.96	
9 Stairs and Vertical Transportation	\$19,500		\$0.98	
D) Mechanical and Electrical (10-13)		\$3,080,636		\$154.03
10 Plumbing Systems	\$569,494		\$28.47	
11 Heating, Ventilation and Air Conditioning	\$1,778,361		\$88.92	
12 Electrical Lighting, Power and Communications	\$549,281		\$27.46	
13 Fire Protection Systems	\$183,500		\$9.18	
Subtotal	-	\$10,024,532	_	\$501.23
General Conditions	7.00%	\$701,717		\$35.09
Subtotal	-	\$10,726,249	_	\$536.31
General Requirements	3.00%	\$321,787		\$16.09
Subtotal	-	\$11,048,037	_	\$552.40
Bonds & Insurance	2.00%	\$220,961		\$11.05
Subtotal	-	\$11,268,997	_	\$563.45
Contractor's Fee	4.00%	\$450,760		\$22.54
Subtotal	-	\$11,719,757	_	\$585.99
Design Contingency	10.00%	\$1,171,976		\$58.60
Subtotal	-	\$12,891,733	_	\$644.59
Construction Contingency	3.00%	\$386,752		\$19.34
Subtotal	-	\$13,278,485	_	\$663.92
Escalation to MOC, 01/30/26	33.02%	\$4,384,557		\$219.23
Subtotal	- 	\$17,663,042	_	\$883.15
WSST	8.90%	\$1,725,588		\$86.28
TOTAL ESTIMATED CONSTRUCTION COST		\$19,388,630		\$969.43

Total Area: 20,000 SF

Foundations   Earthwork	DETAIL ELEMENTS - AQUATICS CENTER - PHA				
Field staking/layout	Element	Quantity	Unit	Unit Cost	Total
Field staking/layout	1 Foundations				
Clear and grub site	Earthwork				
Mass excavation         2,437 cy         \$10.78         \$26,27           Backfill, basement         1,212 cy         \$17.13         \$20,77           Haul excess, 10 mile round trip         1,225 cy         \$19.39         \$23,75           Fine grading         20,000 gsf         \$0.05         \$17.00           Erosion control         20,000 gsf         \$0.06         \$1,20           Pools Earthwork         80.00         \$1,271 cy         \$10.78         \$21,20           Surge tank         288 cy         \$16.93         \$4,81           Backfill         Swimming pool         2.00         \$10.78         \$21,20           Surge tank         237 cy         \$17.13         \$4,00           Haul Excess         \$500 cy         \$19.39         \$45,81           Surge tank         62 cy         \$19.39         \$45,81           Surge tank <td>Field staking/layout</td> <td>20,000</td> <td>gsf</td> <td>\$0.15</td> <td>\$3,000</td>	Field staking/layout	20,000	gsf	\$0.15	\$3,000
Backfill, basement	Clear and grub site	20,000	gsf	\$0.12	\$2,400
Haul excess, 10 mile round trip	Mass excavation	2,437	СУ	\$10.78	\$26,276
Fine grading   20,000 gsf   \$0.35   \$7.00     Erosion control   20,000 gsf   \$0.06   \$1.20     Pools Earthwork	Backfill, basement	1,212	СУ	\$17.13	\$20,766
Prosison control   20,000 gsf   \$0.06 st.200   Prosis Earthwork   Swimming pool   1,971 cy   \$10.78   \$21,200   \$10.78   \$21,200   \$10.78   \$21,200   \$10.78   \$21,200   \$10.78   \$21,200   \$10.78   \$21,200   \$10.78   \$21,200   \$10.78   \$21,200   \$10.78   \$21,200   \$10.78   \$21,200   \$10.78   \$21,200   \$10.78   \$21,200   \$10.78   \$21,200   \$10.78   \$21,200   \$10.78   \$21,200   \$10.78   \$21,200   \$10.78   \$21,200   \$10.78   \$21,200   \$10.78   \$21,200   \$2.365   \$2.99   \$17.13   \$4.000   \$2.365   \$2.99   \$19.39   \$45,800   \$2.99   \$1.200   \$2.365   \$2.99   \$19.39   \$45,800   \$2.99   \$1.200   \$2.365   \$2.99   \$19.39   \$45,800   \$2.99   \$1.200   \$2.99   \$2.99   \$1.200   \$2.99   \$2	Haul excess, 10 mile round trip	1,225	СУ	\$19.39	\$23,757
Pools Earthwork   Mass Excavation   Swimming pool   1,971   cy   \$10.78   \$21,24   \$21,24   \$3   \$21,24   \$3   \$3   \$4,85   \$3   \$4,85   \$3   \$4,85   \$3   \$4,85   \$3   \$4,85   \$3   \$4,85   \$3   \$4,85   \$3   \$4,85   \$3   \$3   \$4,85   \$3   \$3   \$3   \$3   \$3   \$3   \$3   \$	Fine grading	20,000	gsf	\$0.35	\$7,000
Pools Earthwork           Mass Excavation         1,971 cy         \$10.78 \$21,24 \$2		20,000	gsf	\$0.06	\$1,200
Swimming pool         1,971         cy         \$10.78         \$21,24           Surge tank         288         cy         \$16.93         \$4,87           Backfill         300         \$15.07         \$4,87           Surge tank         237         cy         \$17.13         \$4,06           Haul Excess         Swimming pool         2,365         cy         \$19.39         \$45,88           Surge tank         62         cy         \$19.39         \$50.00           Concrete, continuous footings at x 3' deep, at perimeter and basement walls         cy	Pools Earthwork		Ü		
Surge tank   Backfill   Swimming pool   Assume Not Required Surge tank   237   cy   \$17.13   \$34.00	Mass Excavation				
Surge tank   Backfill   Swimming pool   Assume Not Required Surge tank   Backfill   Swimming pool   Assume Not Required Surge tank   Backfill   Swimming pool   Backfill   Ba	Swimming pool	1,971	CV	\$10.78	\$21,244
Swimming pool   Swimming poo			•		\$4,876
Surge tank         237         cy         \$17.13         \$4,00           Haul Excess         Swimming pool         2,365         cy         \$19.39         \$45,85           Surge tank         62         cy         \$19.39         \$1,20           Miscellaneous hauling, allowance         500         cy         \$19.39         \$9,69           Foundations         Underpinning existing phase 1 building         1         Is         \$50,000.00         \$50,00           Continuous Footings assumed 3' wide x 3' deep, at perimeter and basement walls         Concrete, continuous footings, 4000 psi         301         cy         \$249.65         \$75,14           Formwork, continuous footings         4,920         sf         \$7.75         \$38,13           Foundation reinforcing, assume 150 #/cy         45,100         lbs         \$1.49         \$67,16           Excavation         334         cy         \$18.75         \$6,26           Haul excess         273         cy         \$19.39         \$5,29           Spread Footings         13,784         gsf         \$12.50         \$172,30           Slab On Grade, excluding pool areas         13,784         gsf         \$12.50         \$172,30           Slab On grade, excluding pool areas         281			- )		,
Surge tank         237         cy         \$17.13         \$4,00           Haul Excess         Swimming pool         2,365         cy         \$19.39         \$45,85           Surge tank         62         cy         \$19.39         \$1,20           Miscellaneous hauling, allowance         500         cy         \$19.39         \$9,69           Foundations         Underpinning existing phase 1 building         1         Is         \$50,000.00         \$50,00           Contrete, continuous Footings assumed 3' wide x 3' deep, at perimeter and basement walls         Concrete, continuous footings, 4000 psi         301         cy         \$249.65         \$75,14           Formwork, continuous footings         4,920         sf         \$7.75         \$38,13           Foundation reinforcing, assume 150 #/cy         45,100         lbs         \$1.49         \$67,16           Excavation         334         cy         \$18.75         \$6,26           Haul excess         273         cy         \$19.39         \$5,29           Spread Footings         13,784         gsf         \$12.50         \$172,30           Slab On Grade, excluding pool areas         13,784         gsf         \$12.50         \$172,30           Sand base, 4"         3,784 <td< td=""><td>Swimming pool</td><td></td><td></td><td>Assume I</td><td>Not Required</td></td<>	Swimming pool			Assume I	Not Required
Haul Excess   Swimming pool   2,365   cy   \$19.39   \$45,85   \$20   \$19.39   \$45,85   \$30   \$45,85   \$30   \$45,85   \$30   \$45,85		237	CV		\$4,062
Swimming pool         2,365 cy         cy         \$19.39         \$45,88           Surge tank         62 cy         \$19.39         \$1,20           Miscellaneous hauling, allowance         500 cy         \$19.39         \$9,69           Foundations         1 ls         \$50,000.00         \$50,00           Continuous Footings assumed 3' wide x 3' deep, at perimeter and basement walls         301 cy         \$249.65         \$75,14           Formwork, continuous footings, 4000 psi         301 cy         \$249.65         \$75,14           Formwork, continuous footings         4,920 sf         \$7.75         \$38,13           Foundation reinforcing, assume 150 #/cy         45,100 lbs         \$1.49         \$67,15           Excavation         607 cy         \$21.64         \$13,13           Backfill         334 cy         \$18.75         \$6,26           Haul excess         273 cy         \$19.39         \$5,29           Spread Footings         50 degree         \$12.50         \$172,30           Slab On Grade, excluding pool areas         13,784 gf         \$12.50         \$172,30           Slab On Grade, excluding pool areas         590 lf         \$8.17         \$4,82           Sand base, 4"         3,794         \$1         \$1,81         \$2,4	•		٠,		, -,-
Surge tank         62 cy         \$19.39         \$1,20           Miscellaneous hauling, allowance         500 cy         \$19.39         \$9,69           Foundations         Underpinning existing phase 1 building         1 ls         \$50,000.00         \$50,000           Continuous Footings assumed 3' wide x 3' deep, at perimeter and basement walls         301 cy         \$249.65         \$75,14           Formwork, continuous footings, 4000 psi         301 cy         \$249.65         \$75,14           Formwork, continuous footings         4,920 sf         \$7.75         \$38,13           Foundation reinforcing, assume 150 #/cy         45,100 lbs         \$1.49         \$67,19           Excavation         607 cy         \$21.64         \$13,13           Backfill         334 cy         \$18.75         \$6,26           Haul excess         273 cy         \$19.39         \$5,29           Spread Footings         273 cy         \$19.39         \$5,29           Spread Footings         13,784 gsf         \$12.50         \$172,30           Slab On Grade, excluding pool areas         281 cy         \$242.06         \$68,01           Formwork, slab on grade, 4000 psi         281 cy         \$242.06         \$68,01           Sand base, 4"         13,784 sf         \$1.81 <td></td> <td>2.365</td> <td>CV</td> <td>\$19.39</td> <td>\$45.854</td>		2.365	CV	\$19.39	\$45.854
Miscellaneous hauling, allowance         500         cy         \$19.39         \$9,69           Foundations         Underpinning existing phase 1 building         1         Is         \$50,000.00         \$50,00           Continuous Footings assumed 3' wide x 3' deep, at perimeter and basement walls         301         cy         \$249.65         \$75,14           Concrete, continuous footings, 4000 psi         301         cy         \$249.65         \$75,14           Formwork, continuous footings         4,920         sf         \$7.75         \$38,13           Foundation reinforcing, assume 150 #/cy         45,100         lbs         \$1.49         \$67,19           Excavation         607         cy         \$21.64         \$13,13           Backfill         334         cy         \$18.75         \$6,26           Haul excess         273         cy         \$19.39         \$5,29           Spread Footings         5         \$12.50         \$172,30           Spread Footings         13,784         gsf         \$12.50         \$172,30           Slab On Grade, excluding pool areas         13,784         gsf         \$12.50         \$172,30           Slab on grade, 4000 psi         281         cy         \$242.06         \$68,01			•		
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 4,920 sf \$7.75 \$38,13 Foundation reinforcing, assume 150 #/cy Excavation Excavation Backfill Backfill Backfill Backfill Backfill Backfootings Foundation, conventional, excluding pool areas Concrete, slab on grade, 4000 psi Formwork, slab on grade Sand base, 4" Slab on grade reinforcing, assumed 2.5 #/sf Finish to slab Vapor barrier  13,784 sf \$0.84 \$11,55 Vapor barrier	· · · · · · · · · · · · · · · · · · ·		•		
Underpinning existing phase 1 building         1         Is         \$50,000.00         \$50,000           Continuous Footings assumed 3' wide x 3' deep, at perimeter and basement walls         301         cy         \$249.65         \$75,14           Formwork, continuous footings         4,920         sf         \$7.75         \$38,13           Foundation reinforcing, assume 150 #/cy         45,100         lbs         \$1.49         \$67,19           Excavation         607         cy         \$21.64         \$13,13           Backfill         334         cy         \$18.75         \$6,26           Haul excess         273         cy         \$19.39         \$5,29           Spread Footings         50         \$172,30         \$172,30           Spread Footings         50         \$172,30         \$172,30           Slab On Grade, excluding pool areas         13,784         gsf         \$12.50         \$172,30           Slab On Grade, excluding pool areas         281         cy         \$242.06         \$68,01           Formwork, slab on grade, 4000 psi         281         cy         \$242.06         \$68,01           Fand base, 4"         13,784         sf         \$1.81         \$24,94           Slab on grade reinforcing, assumed 2.5 #/sf	<u> </u>	000	o y	ψ17.07	Ψ7/070
Continuous Footings assumed 3' wide x 3' deep, at perimeter and basement walls         Concrete, continuous footings, 4000 psi       301 cy       \$249.65       \$75,14         Formwork, continuous footings       4,920 sf       \$7.75       \$38,13         Foundation reinforcing, assume 150 #/cy       45,100 lbs       \$1.49       \$67,19         Excavation       607 cy       \$21.64       \$13,13         Backfill       334 cy       \$18.75       \$6,26         Haul excess       273 cy       \$19.39       \$5,29         Spread Footings       Foundation, conventional, excluding pool areas       13,784 gsf       \$12.50       \$172,30         Slab On Grade, excluding pool areas       13,784 gsf       \$12.50       \$172,30         Slab On Grade, excluding pool areas       281 cy       \$242.06       \$68,01         Formwork, slab on grade, 4000 psi       281 cy       \$242.06       \$68,01         Formwork, slab on grade at a sub base, 6"       13,784 sf       \$1.81       \$24,94         Slab on grade reinforcing, assumed 2.5 #/sf       37,906 lbs       \$1.49       \$56,48         Finish to slab       13,784 sf       \$0.84       \$11,57         Vapor barrier       13,784 sf       \$0.44       \$6,00		1	ls	\$50,000.00	\$50.000
Concrete, continuous footings, 4000 psi         301 cy         \$249.65         \$75,14           Formwork, continuous footings         4,920 sf         \$7.75         \$38,13           Foundation reinforcing, assume 150 #/cy         45,100 lbs         \$1.49         \$67,19           Excavation         607 cy         \$21.64         \$13,13           Backfill         334 cy         \$18.75         \$6,26           Haul excess         273 cy         \$19.39         \$5,29           Spread Footings         Foundation, conventional, excluding pool areas         13,784 gsf         \$12.50         \$172,30           Slab On Grade, excluding pool areas         13,784 gsf         \$242.06         \$68,01           Formwork, slab on grade, 4000 psi         281 cy         \$242.06         \$68,01           Formwork, slab on grade         590 lf         \$8.17         \$4,82           Sand base, 4"         13,784 sf         \$2.03         \$27,98           Gravel sub base, 6"         13,784 sf         \$1.81         \$24,94           Slab on grade reinforcing, assumed 2.5 #/sf         37,906 lbs         \$1.49         \$56,48           Finish to slab         13,784 sf         \$0.84         \$11,57           Vapor barrier         13,784 sf         \$0.44		-	.0	400,000.00	400/000
Formwork, continuous footings 4,920 sf \$7.75 \$38,13 Foundation reinforcing, assume 150 #/cy 45,100 lbs \$1.49 \$67,19 Excavation 607 cy \$21.64 \$13,13 Backfill 334 cy \$18.75 \$6,26 Haul excess 273 cy \$19.39 \$5,29 Spread Footings Foundation, conventional, excluding pool areas 13,784 gsf \$12.50 \$172,30 Slab On Grade, excluding pool areas Concrete, slab on grade, 4000 psi 281 cy \$242.06 \$68,01 Formwork, slab on grade 590 lf \$8.17 \$4,82 Sand base, 4" 13,784 sf \$2.03 \$27,98 Gravel sub base, 6" 13,784 sf \$1.81 \$24,94 Slab on grade reinforcing, assumed 2.5 #/sf 37,906 lbs \$1.49 \$56,48 Finish to slab 13,784 sf \$0.84 \$11,55 Vapor barrier 13,784 sf \$0.84 \$11,55 Vapor barrier			CV	\$249.65	\$75 14F
Foundation reinforcing, assume 150 #/cy 45,100 lbs \$1.49 \$67,19 Excavation 607 cy \$21.64 \$13,13 Backfill 334 cy \$18.75 \$6,26 Haul excess 273 cy \$19.39 \$5,29 Spread Footings Foundation, conventional, excluding pool areas 13,784 gsf \$12.50 \$172,30 Slab On Grade, excluding pool areas Concrete, slab on grade, 4000 psi 281 cy \$242.06 \$68,01 Formwork, slab on grade 590 lf \$8.17 \$4,82 Sand base, 4" 13,784 sf \$2.03 \$27,98 Gravel sub base, 6" 13,784 sf \$1.81 \$24,94 Slab on grade reinforcing, assumed 2.5 #/sf 37,906 lbs \$1.49 \$56,48 Finish to slab Vapor barrier 13,784 sf \$0.84 \$11,57 \$0.85 \$1.85 \$0.85 \$1.85 \$0.85 \$1.85 \$0.85 \$1.85 \$0.85 \$1.85 \$0.85 \$1.85 \$0.85 \$1.85 \$0.85 \$1.85 \$0.85 \$1.85 \$0.85 \$1.85 \$0.85 \$1.85 \$0.85 \$1.85 \$0.85 \$1.85 \$0.85 \$1.85 \$0.85 \$1.85 \$0.85 \$0.85 \$1.85 \$0.85 \$1.85 \$0.85 \$0.85 \$1.85 \$0.85 \$	· ·		-		
Excavation       607 cy       \$21.64       \$13.13         Backfill       334 cy       \$18.75       \$6.26         Haul excess       273 cy       \$19.39       \$5.29         Spread Footings       Foundation, conventional, excluding pool areas       13,784 gsf       \$12.50       \$172,30         Slab On Grade, excluding pool areas       281 cy       \$242.06       \$68,01         Formwork, slab on grade, 4000 psi       281 cy       \$242.06       \$68,01         Formwork, slab on grade       590 lf       \$8.17       \$4,82         Sand base, 4"       13,784 sf       \$2.03       \$27,98         Gravel sub base, 6"       13,784 sf       \$1.81       \$24,94         Slab on grade reinforcing, assumed 2.5 #/sf       37,906 lbs       \$1.49       \$56,48         Finish to slab       13,784 sf       \$0.84       \$11,57         Vapor barrier       13,784 sf       \$0.44       \$6,06	<u> </u>	•			
Backfill       334 cy       \$18.75       \$6,26         Haul excess       273 cy       \$19.39       \$5,29         Spread Footings       13,784 gsf       \$12.50       \$172,30         Slab On Grade, excluding pool areas       281 cy       \$242.06       \$68,01         Formwork, slab on grade, 4000 psi       281 cy       \$242.06       \$68,01         Formwork, slab on grade       590 lf       \$8.17       \$4,82         Sand base, 4"       13,784 sf       \$2.03       \$27,98         Gravel sub base, 6"       13,784 sf       \$1.81       \$24,94         Slab on grade reinforcing, assumed 2.5 #/sf       37,906 lbs       \$1.49       \$56,48         Finish to slab       13,784 sf       \$0.84       \$11,57         Vapor barrier       13,784 sf       \$0.44       \$6,060					
Haul excess       273 cy       \$19.39       \$5,29         Spread Footings       Foundation, conventional, excluding pool areas       13,784 gsf       \$12.50       \$172,30         Slab On Grade, excluding pool areas       Concrete, slab on grade, 4000 psi       281 cy       \$242.06       \$68,01         Formwork, slab on grade       590 lf       \$8.17       \$4,82         Sand base, 4"       13,784 sf       \$2.03       \$27,98         Gravel sub base, 6"       13,784 sf       \$1.81       \$24,94         Slab on grade reinforcing, assumed 2.5 #/sf       37,906 lbs       \$1.49       \$56,48         Finish to slab       13,784 sf       \$0.84       \$11,57         Vapor barrier       13,784 sf       \$0.44       \$6,06			-		
Spread Footings       13,784 gsf       \$12.50 \$172,30         Foundation, conventional, excluding pool areas       13,784 gsf       \$12.50 \$172,30         Slab On Grade, excluding pool areas       281 cy \$242.06 \$68,01         Concrete, slab on grade, 4000 psi       281 cy \$242.06 \$68,01         Formwork, slab on grade       590 lf \$8.17 \$4,82         Sand base, 4"       13,784 sf \$2.03 \$27,98         Gravel sub base, 6"       13,784 sf \$1.81 \$24,94         Slab on grade reinforcing, assumed 2.5 #/sf       37,906 lbs \$1.49 \$56,48         Finish to slab       13,784 sf \$0.84 \$11,57         Vapor barrier       13,784 sf \$0.44 \$6,06			•		
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  Vapor barrier  13,784 gsf  \$12.50 \$172,30 \$1		213	Су	ψ17.57	Ψ5,270
Slab On Grade, excluding pool areas       281 cy       \$242.06       \$68,01         Formwork, slab on grade       590 lf       \$8.17       \$4,82         Sand base, 4"       13,784 sf       \$2.03       \$27,98         Gravel sub base, 6"       13,784 sf       \$1.81       \$24,94         Slab on grade reinforcing, assumed 2.5 #/sf       37,906 lbs       \$1.49       \$56,48         Finish to slab       13,784 sf       \$0.84       \$11,57         Vapor barrier       13,784 sf       \$0.44       \$6,06		12 70/	act	¢12 50	\$172 200
Concrete, slab on grade, 4000 psi       281 cy       \$242.06       \$68,01         Formwork, slab on grade       590 lf       \$8.17       \$4,82         Sand base, 4"       13,784 sf       \$2.03       \$27,98         Gravel sub base, 6"       13,784 sf       \$1.81       \$24,94         Slab on grade reinforcing, assumed 2.5 #/sf       37,906 lbs       \$1.49       \$56,48         Finish to slab       13,784 sf       \$0.84       \$11,57         Vapor barrier       13,784 sf       \$0.44       \$6,06	- · · · · · · · · · · · · · · · · · · ·	13,704	ysi	φ12.50	\$172,300
Formwork, slab on grade 590 lf \$8.17 \$4,82 \$1 \$2.03 \$27,98 \$1 \$2.03 \$27,98 \$2.03 \$2.03 \$27,98 \$2.03 \$2.03 \$2.03 \$27,98 \$2.03 \$2.0		201	CV	\$242.06	¢60 010
Sand base, 4"       13,784 sf       \$2.03       \$27,98         Gravel sub base, 6"       13,784 sf       \$1.81       \$24,94         Slab on grade reinforcing, assumed 2.5 #/sf       37,906 lbs       \$1.49       \$56,48         Finish to slab       13,784 sf       \$0.84       \$11,57         Vapor barrier       13,784 sf       \$0.44       \$6,06	·		-		
Gravel sub base, 6"       13,784 sf       \$1.81       \$24,94         Slab on grade reinforcing, assumed 2.5 #/sf       37,906 lbs       \$1.49       \$56,48         Finish to slab       13,784 sf       \$0.84       \$11,57         Vapor barrier       13,784 sf       \$0.44       \$6,06	_				
Slab on grade reinforcing, assumed 2.5 #/sf       37,906 lbs       \$1.49       \$56,48         Finish to slab       13,784 sf       \$0.84       \$11,57         Vapor barrier       13,784 sf       \$0.44       \$6,06					
Finish to slab 13,784 sf \$0.84 \$11,57 Vapor barrier 13,784 sf \$0.44 \$6,06					
Vapor barrier 13,784 sf \$0.44 \$6,06		•			
·					
Concrete, stab on grade, add for inickened edges 36 - Cy \$242.06 \$8,7	•				
	Concrete, slab on grade, add for thickened edges	36	су	\$242.06	\$8,714

DETAIL ELEMENTS - AQUATICS CENTER - PHA	ASE 2 - AD	D AL	TERNATE	
Element	Quantity	Unit	Unit Cost	Total
2 Vertical Structure				
Stem Walls, assume 30" wide x 24" high				
Concrete, walls 5000 psi	47	су	\$266.24	\$12,513
Formwork, walls	920	sf	\$16.77	\$15,428
Wall reinforcing, assume 200 #/cy	9,370	lbs	\$1.58	\$14,805
Finish to walls	460	sf	\$0.83	\$382
Allow for bench finish, wood assumed	230	lf	\$150.00	\$34,500
Structural Steel				
Vertical steel framing, allowance	20,000	gsf	\$15.00	\$300,000
Metals				
Miscellaneous bracing	10	loc	\$9,000.00	\$90,000
Miscellaneous metals	20,000	gsf	\$1.50	\$30,000
Total - Vertical Structure				\$497,628
3 Floor & Roof Structures				
Rough Carpentry- Roof Framing				
30" x 8 3/4" glu-lam	960	lf	\$82.00	\$78,720
70" x 8 3/4" glu-lam	110	lf	\$191.00	\$21,010
Tie rod with 18" steel circular turnbuckle	960	lf	\$24.00	\$23,040
Horizontal wood framing, truss allowance	20,000	gsf	\$10.00	\$200,000
8" DLT roof panels	20,254	sf	\$18.00	\$364,572
Metals			,	,,,,,,,
Light support, assume 10 #/lf	2,400	lb	\$2.90	\$6,960
Total - Floor & Roof Structures				\$694,302
4 Exterior Cladding				
Aquatics Center Building Envelope				
Demolish phase 1 exterior wall, along gridline H	4,800	sf	\$25.00	\$120,000
Exterior walls, densglass sheathing	9,600	sf	\$3.64	\$34,944
Rigid insulation, exterior walls	9,600	sf	\$1.83	\$17,568
Metal Panel Rainscreen System	5,316		\$100.00	\$531,600
Random Rough Cedar Siding Rainscreen System	4,284	sf	\$80.00	\$342,720
Aluminum windows/storefront, vision glazing, generic	3,193	sf	\$121.06	\$386,545
Storefront with Rainscreen System	755	sf	\$181.59	\$137,100
Aluminum door sets, frames and hardware, glazed, single, tempered glass	1	ea	\$5,485.63	\$5,486
Aluminum door sets, frames and hardware, glazed, double	3	pr	\$10,891.72	\$32,675
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				\$1,708,638

DETAIL ELEMENTS - AQUATICS CENTER	- PHASE 2 - AD	D AL	TERNATE	
Element	Quantity	Unit	Unit Cost	Total
5 Roofing and Waterproofing				
Roofing				
Single ply membrane roofing	20,254		\$7.84	\$158,791
Rigid roof insulation, poly iso insulation	20,254	sf	\$5.75	\$116,461
Flashing / Counterflashing	4/0	ıc	<b>#25.04</b>	¢1/ 110
Aluminum coping at parapets	460		\$35.04	\$16,118
Base flashings at base of parapets Roof Accessories	460	lf	\$37.65	\$17,319
Aluminum gutters	110	lf	\$27.72	\$3,049
Aluminum gutters Aluminum downspouts	50	lf	\$27.72 \$27.72	\$1,386
Miscellaneous accessories	20,000		\$2.00	\$40,000
Miscellaneous	20,000	ysi	Ψ2.00	Ψ+0,000
Crickets	584	sf	\$6.41	\$3,743
Caulking allowance	20,254		\$0.03	\$608
Miscellaneous		3	, , , ,	,
Caulking & sealant allowance	20,000	gsf	\$0.35	\$7,000
Total - Roofing and Waterproofing				\$364,476
( Interior Doubling Deers and Claring				
6 Interior Partitions, Doors and Glazing				
Partition Walls				
Partition wall 11' 6" high	00.4	,	***	*10 /10
Metal studs, 3 5/8", 20 Ga., at 16" o.c.	934	sf	\$11.36	\$10,610
Bolt top stud channel to structure above incl. double top track	81	lf	\$24.65	\$1,997
Bolt bottom stud channel to concrete floor	81	lf	\$12.73	\$1,031
Gypsum board, 5/8" thick, finished (I4), type X	1,868		\$3.49	\$6,519
Sound batt insulation, unbacked	934	sf	\$1.34	\$1,252
Partition wall 9' 6" high				
Metal studs, 3 5/8", 20 Ga., at 16" o.c.	741	sf	\$11.36	\$8,418
Bolt top stud channel to structure above incl. double top track	78	lf	\$24.65	\$1,923
Bolt bottom stud channel to concrete floor	78	lf	\$12.73	\$993
Gypsum board, 5/8" thick, finished (I4), type X	1,482	sf	\$3.49	\$5,172
Sound batt insulation, unbacked	741	sf	\$1.34	\$993
Partition wall - wet - 9' 6" high				
Metal studs, 3 5/8", 20 Ga., at 16" o.c.	2,566	sf	\$11.36	\$29,150
Bolt top stud channel to structure above incl. double top track	270		\$24.65	\$6,656
Bolt bottom stud channel to concrete floor	270		\$12.73	\$3,437
Gypsum board, 5/8" thick, finished (I4), type X	2,432		\$3.49	\$8,488
Sound batt insulation, unbacked	2,566		\$1.34	\$3,438
Vapor barrier	2,970		\$0.39	\$1,158
Backer board	2,700		\$4.94	\$1,138
Ceramic tile, walls	2,700			
	2,700	21	\$19.08	\$51,516
Partition wall - wet - one-sided 9' 6" high	010	O.t	¢11 0/	<u></u> ቀብ ገብ 4
Metal studs, 3 5/8", 20 Ga., at 16" o.c.	812		\$11.36	\$9,224
Bolt top stud channel to structure above incl. double top track	86	lf	\$24.65	\$2,120

			ERNATE	
Element	Quantity	Unit	Unit Cost	Total
Bolt bottom stud channel to concrete floor	86	lf	\$12.73	\$1,095
Gypsum board, 5/8" thick, finished (I4), type X	1,194	sf	\$3.49	\$4,167
Sound batt insulation, unbacked	812	sf	\$1.34	\$1,088
Vapor barrier	473	sf	\$0.39	\$184
Backer board	430	sf	\$4.94	\$2,12
Ceramic tile, walls	430	sf	\$19.08	\$8,20
Interior of exterior walls				
Interior of exterior, 5/8" thick gypsum board X, finished	1,264	sf	\$3.49	\$4,41
Interior Glazing				
Interior glazing				
Interior storefront - 9' 6" high	1,027	sf	\$87.59	\$89,955
Interior storefront - 11' 6" high	31	sf	\$87.59	\$2,715
Interior Openings				
Doors				
Aluminum door sets, frames and hardware, glazed, single, tempered gla:	2	ea	\$5,485.63	\$10,971
SC wood door incl. AL frame and hardware, single, 3' 0" x 7' 0"	5	ea	\$2,308.01	\$11,540
SC wood door incl. AL frame and hardware, double, 6' 0" x 7' 0"	2	pr	\$4,469.80	\$8,940
Hardware premium	11	leaves	\$250.00	\$2,750
7 Floor, Wall and Ceiling Finishes  Make good finishes at phase 1.8 phase 3 intersection	1	le	¢75 000 00	¢7E 000
Make good finishes at phase 1 & phase 2 intersection	1	ls	\$75,000.00	\$75,000
Flooring & Base				
Sealed concrete	1,151	sf	\$1.84	\$2,118
Floor prep/leveling	4,250	sf	\$9.62	\$40,88
Rubber athletic flooring	2,330	sf	\$13.81	\$32,17
Carpet tile	179	sf	\$5.09	\$91
Ceramic tile	4,071	sf	\$18.49	\$75,273
Resilient base	519	lf	\$5.27	\$2,73
Ceramic tile, base	626	lf	\$18.45	\$11,550
Ceiling				
Coming			ΦΕ Ο /	¢1⊑ ∠∠∠
Acoustical ceiling tile, suspended, includes suspension system	3,096	sf	\$5.06	
Acoustical ceiling tile, suspended, includes suspension system Gypsum board ceilings, incl. framing	3,423	sf	\$11.12	\$38,064
Acoustical ceiling tile, suspended, includes suspension system Gypsum board ceilings, incl. framing Wood Slat Ceiling, allowance				\$38,064
Acoustical ceiling tile, suspended, includes suspension system Gypsum board ceilings, incl. framing Wood Slat Ceiling, allowance Wall finishes, misc.	3,423 3,000	sf	\$11.12 \$40.00	\$38,064 \$120,000
Acoustical ceiling tile, suspended, includes suspension system Gypsum board ceilings, incl. framing Wood Slat Ceiling, allowance Wall finishes, misc. Allowance	3,423	sf	\$11.12	\$38,064 \$120,000
Acoustical ceiling tile, suspended, includes suspension system Gypsum board ceilings, incl. framing Wood Slat Ceiling, allowance Wall finishes, misc. Allowance Painting and Coating	3,423 3,000 8,240	sf sf	\$11.12 \$40.00 \$2.50	\$38,064 \$120,000 \$20,600
Acoustical ceiling tile, suspended, includes suspension system Gypsum board ceilings, incl. framing Wood Slat Ceiling, allowance Wall finishes, misc. Allowance Painting and Coating Paint walls	3,423 3,000 8,240 8,240	sf sf sf	\$11.12 \$40.00 \$2.50 \$0.78	\$38,064 \$120,000 \$20,600 \$6,42
Acoustical ceiling tile, suspended, includes suspension system Gypsum board ceilings, incl. framing Wood Slat Ceiling, allowance Wall finishes, misc. Allowance Painting and Coating Paint walls Paint ceilings	3,423 3,000 8,240 8,240 3,423	sf sf sf sf	\$11.12 \$40.00 \$2.50 \$0.78 \$0.89	\$15,666 \$38,064 \$120,000 \$20,600 \$6,427 \$3,046
Acoustical ceiling tile, suspended, includes suspension system Gypsum board ceilings, incl. framing Wood Slat Ceiling, allowance Wall finishes, misc. Allowance Painting and Coating Paint walls	3,423 3,000 8,240 8,240	sf sf sf	\$11.12 \$40.00 \$2.50 \$0.78	\$38,064 \$120,000 \$20,600 \$6,42

DETAIL ELEMENTS - AQUATICS CENTER - PHASE 2 - ADD ALTERNATE					
Element	Quantity	Unit	Unit Cost	Total	
8 Function Equipment and Specialties					
Interior Specialties					
Toilet Cubicles					
Standard, stainless steel	25	ea	\$1,917.89	\$47,947	
Handicap, stainless steel	5	ea	\$2,066.93	\$10,335	
Toilet / Restroom Specialties					
Bathroom mirrors	16	sf	\$39.65	\$634	
Coat hook	7	ea	\$30.31	\$212	
Grab bars	8	ea	\$203.72	\$1,630	
Janitor mop sink rack	1	ea	\$136.15	\$136	
Paper towel dispenser combo unit, recessed	11	ea	\$367.67	\$4,044	
Seat cover dispenser	16	ea	\$139.12	\$2,226	
Shower accessories, per stall	10	ea	\$1,053.35	\$10,534	
Soap dispenser	16	ea	\$98.38	\$1,574	
Toilet paper dispenser	16	ea	\$86.46	\$1,383	
Storage Specialties					
Lockers, 2-tier incl. concrete base	18	ea	\$263.33	\$4,740	
Locker room benches	39	lf	\$150.00	\$5,850	
Other Specialties					
Handrail - free-standing	43	lf	\$250.00	\$10,750	
Miscellaneous specialty allowance	20,000	sf	\$1.00	\$20,000	
Interior signage, code	20,000	sf	\$0.15	\$3,000	
Fire extinguisher and cabinet, allowance	8	ea	\$444.31	\$3,554	
Rough Carpentry					
Additional blocking, support backing, stiffeners, etc.	20,000	sf	\$1.01	\$20,200	
Casework					
Exercise Room casework - 36"	60	lf	\$329.78	\$19,787	
Restroom vanity counter - 24"	52	lf	\$191.93	\$9,980	
Window Covering					
Mechoshades, motorized	3,117	sf	\$21.13	\$65,862	
Pool Construction (Cost provided by Aquatics Design Group dated 8/8/2019)					
Recreational pool, construction cost	6,216	sf	\$253.85	\$1,577,920	
Recreational pool, equipment cost	6,216	sf	\$29.76	\$185,000	
Spectator Seating					
Permanent bleachers	80	seat	\$150.00	\$12,000	
Total - Function Equipment and Specialties				\$2,019,299	
9 Stairs and Vertical Transportation					
Entrance Stairs, on grade	300	lf	\$65.00	\$19,500	
Total - Stairs and Vertical Transportation				\$19,500	

DETAIL ELEMENTS - AQUATICS CENTER - PHASE 2 - ADD ALTERNATE					
Element	Quantity	Unit	Unit Cost	Total	
10 Plumbing Systems					
General plumbing					
Water heater, Double wall, plate and frame heat exchangers	1	ea	\$16,800.00	\$16,800	
Circulating pump, duplex	1	ea	\$2,195.89	\$2,196	
Expansion tank	1	ea	\$884.56	\$885	
Local water heaters, electric	1	ea	\$1,280.00	\$1,280	
Sewage ejector / Sump pump - allowance	1	ea	\$9,760.00	\$9,760	
Grease / Sand / Oil interceptor	1	ea	\$15,000.00	\$15,000	
Sanitary fixtures					
Water closet	15	ea	\$1,640.00	\$24,600	
Urinal	4	ea	\$1,670.00	\$6,680	
Lavatory	16	ea	\$1,588.00	\$25,408	
Shower, exterior - next to the water	4	ea	\$1,630.00	\$6,520	
Shower, enclosed - inside the locker room	10	ea	\$1,760.00	\$17,600	
Emergency Shower / Eyewash stations	1	ea	\$2,300.00	\$2,300	
Drinking fountain, with bottle filing stations	2	ea	\$4,280.00	\$8,560	
Sink, Janitor	1	ea	\$1,025.00	\$1,025	
Hose bibs	10	ea	\$372.69	\$3,727	
Floor drains	10	ea	\$657.00	\$6,570	
Trench drains for pool area - corrosion resistant HDPE	30	ea	\$950.00	\$28,500	
Rough ins					
Local rough-in at fixture	53	ea	\$917.00	\$48,601	
Rough-in at floor sink or floor drain	40	ea	\$1,086.00	\$43,440	
Rough-ins to OFCI Flex room / Exercise: cold and hot water, direct and					
indirect drain	2	ea	\$1,000.00	\$2,000	
Make up water for swimming pool	1	ea	\$10,000.00	\$10,000	
Domestic water piping	20,000	gsf	\$4.00	\$80,000	
Waste / vent piping	20,000	gsf	\$4.20	\$84,000	
Roof / storm drainage	20,000	951	Ψ1.20	ΨΟ 1,000	
RD/OD - Roof drain with Overhead drain	6	ea	\$715.00	\$4,290	
3" pipe, ci, no-hub, in bldg	530	lf	\$54.96	\$29,129	
4" pipe, ci, no-hub, in bldg	320	if	\$64.45	\$20,624	
Condensate drainage	20,000		\$0.50	\$10,000	
Miscellaneous	20,000	gsf	\$3.00	\$60,000	
		_			
Total - Plumbing Systems				\$569,494	
11 Heating, Ventilation and Air Conditioning					
Wet side equipment: chiller, boiler, pumps etc.	20,000	gsf	\$12.00	\$240,000	
Chilled water piping distribution	20,000	•	\$2.00	\$40,000	
Hot water piping distribution	20,000	gsf	\$5.00	\$100,000	
Air-Side Equipment	20,000	301	Ψ0.00	7100,000	
AHU-1, Air handling unit, outdoor, vav, modular	20,000	cfm	\$10.00	\$200,000	
AHU-2, Air handling unit, outdoor, vav, modular	15,000	cfm	\$10.00	\$200,000	
FCU, Fan coil units for IDF / MDF rooms	13,000	ea	\$3,851.00	\$3,851	
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DETAIL ELEMENTS - AQUATICS CENTER - PHASE 2 - ADD ALTERNATE				
Element	Quantity	Unit	Unit Cost	Total
VAV terminal boxes, with reheat coil	22	ea	\$1,840.00	\$40,480
EF, Exhaust fan, inline, Greenheck	6,000	cfm	\$3.85	\$23,100
Air Distribution				
Ductwork, galv - protected with epoxy based paint	20,000	lb	\$12.50	\$250,000
Ductwork, stainless steel	3,000	lb	\$29.14	\$87,420
Duct insulation	11,500	sf	\$3.86	\$44,390
Combination fire / smoke damper	14	ea	\$950.00	\$13,300
Grilles, registers and diffusers, including dampers and flex duct	20,000	sf	\$2.50	\$50,000
Acoustical attenuation	2	ea	\$4,500.00	\$9,000
Ventilation premium for PHIUS+ requirements, allowance	1	ls	\$300,000.00	\$300,000
Miscellaneous testing & commissioning				
Test / balance HVAC	160	hr	\$153.14	\$24,502
Start-up/check-out	120	hr	\$121.93	\$14,632
Commissioning assist	120	hr	\$121.93	\$14,632
Piping identification: labels, arrows and valve tags	160	ea	\$27.60	\$4,416
Seismic and vibration requirements	1	ea	\$20,000.00	\$20,000
HVAC Controls			45.000.00	45.000
DDC controls to plumbing systems	1	ls	\$5,000.00	\$5,000
DDC controls, air handlers	2	ea	\$14,800.00	\$29,600
DDC controls, vav box, reheat coils	22	ea	\$1,957.00	\$43,054
DDC controls, general exhaust fan	4	ea	\$1,314.00	\$5,256
DDC controls, smoke damper monitor	14	ea	\$952.00	\$13,328
DDC misc. items, training, integration	160	hr	\$140.00	\$22,400
DDC controls for pools	1	ls	\$30,000.00	\$30,000
Total - Heating, Ventilation and Air Conditioning				\$1,778,361
12 Electrical Lighting, Power and Communications				
Service & Distribution Equipment				
Main switchboard, 1200 amp, 120/208v, 3ph, 4w	1	ea	\$47,909.94	\$47,910
Pool Eq. Distribution board, 400 amp, 120/208v, 3ph, 4w	1	ea	\$20,358.56	\$20,359
Panelboard, 225 amp, 120/208v, 3ph, 4w	3	ea	\$2,578.77	\$7,736
Feeder, 225 amp, emt	125	lf	\$57.58	\$7,197
Feeder, 400 amp, emt	150	lf	\$105.75	\$15,862
Feeder, 1200 amp, PVC	50	lf	\$267.02	\$13,351
Conduit, 1 1/4" pvc	100	lf	\$6.75	\$675
Copper wire, #8 thhn	100	lf	\$1.00	\$100
Copper wire, #4 thhn	200	lf	\$1.78	\$355
HVAC & Equipment Connections				
AHU-1	1	ea	\$1,028.29	\$1,028
AHU-2	1	ea	\$1,028.29	\$1,028
FCU	2	ea	\$226.51	\$453
EF, Exhaust Fans	4	ea	\$191.67	\$767
Disconnect switch, 60/3 fused N1	2	ea	\$734.97	\$1,470
Disconnect switch, motor rated N3R	4	ea	\$418.91	\$1,676
Disconnect switch, 200/3 fused N3R	2	ea	\$2,273.14	\$4,546
Disconnect elevator switch, 60/3 fused N1	1	ea	\$2,443.87	\$2,444

nent	Quantity	Unit	Unit Cost	Total
Equipment feeder, 20 amp	950	lf	\$17.93	\$17,03
Equipment feeder, 60 amp	200	lf	\$21.25	\$4,25
Equipment feeder, 200 amp	225	lf	\$27.35	\$6,15
Convenience Power				
Duplex receptacle, 20 amp	42	ea	\$91.10	\$3,82
Double duplex receptacle, 20 amp	3	ea	\$121.42	\$36
Duplex receptacle, 20 amp GFCI	8	ea	\$107.07	\$85
Double duplex receptacle, 20 amp GFCI wp	2	ea	\$160.76	\$32
Branch power, 20 amp	1,870	lf	\$16.06	\$30,03
10/2 armored cable	1,269	lf	\$5.65	\$7,16
Lighting & Lighting Controls				
Down Lights Phase #1	196	ea	\$255.81	\$50,13
Pool Flood Light High Bay	58	ea	\$765.60	\$44,40
Exit Lighting	8	ea	\$294.00	\$2,35
Lighting control panel	1	ea	\$4,624.80	\$4,62
Single pole switch	2	ea	\$94.64	\$18
Occupancy sensor, ceiling mounted	8	ea	\$242.18	\$1,93
Occupancy sensor, wall mounted	8	ea	\$204.64	\$1,63
Lighting branch power, fixtures	3,530	lf	\$16.06	\$56,70
Lighting branch power, controls	110	 If	\$15.40	\$1,69
Fire Alarm System	110		ψ10.10	Ψ1/07
FA control panel	1	ea	\$10,818.26	\$10,81
FA annunciator panel	1	ea	\$2,538.97	\$2,53
FA beam sensor	2	ea	\$1,485.48	\$2,97
FA duct smoke detector	2	ea	\$635.84	\$1,27
FA flow switch	1	ea	\$550.84	\$55
FA heat detector	1	ea	\$319.54	\$32
FA pull station	2	ea	\$337.81	\$67
FA smoke detector	2	ea	\$320.96	\$64
FA tamper switch	1	ea	\$320.40 \$499.45	\$49
FA horn strobe unit, wall mount	4		\$183.08	\$73
·		ea		
Conduit, 3/4" emt Fire alarm cable rated, 4C	2,450 2,450	lf If	\$10.17 \$3.74	\$24,91
Telecommunications System	2,430	lf	\$3.74	\$9,15
· · · · · · · · · · · · · · · · · · ·	1	00	¢127 21	¢E(
Tele/data outlet, 2 port	4 2	ea	\$127.21	\$50 \$50
Wireless access point		ea	\$295.12	\$59
Fire treated plywood	1	ea	\$288.67	\$28
Main telecommunication grounding busbar	1	ea	\$1,494.17	\$1,49
Conduit, 3/4" emt	600	lf .c	\$10.17	\$6,10
CAT-6, 4 pair 23 AWG, UTP	600	lf	\$1.03	\$6
Public Address System			<b>*</b> =04.00	**
Clock/speaker	4	ea	\$591.80	\$2,36
PA speaker	20	ea	\$194.31	\$3,88
Conduit, 3/4" emt	2,400	lf 	\$10.17	\$24,40
PA system speaker cable	2,400	lf .	\$1.06	\$2,53
Distributed Antenna System	20,000	gsf	\$1.25	\$25,00
Security, Access Control & CCTV Systems				
CCTV PTZ IP camera, outdoor	3	ea	\$3,330.81	\$9,99
CCTV fixed IP camera	6	ea	\$898.74	\$5,39

Element	Quantity	Unit	Unit Cost	Total
DVR, 4TB storage	1	ea	\$1,431.10	\$1,431
Conduit, 3/4" emt	600	lf	\$10.17	\$6,101
CCTV cabling	600	lf	\$1.31	\$784
Access control system				
Access control panel	1	ea	\$5,066.69	\$5,067
Access control panel power supply	1	ea	\$515.99	\$516
Card reader, proximity type	3	ea	\$407.77	\$1,223
Alarm contact, flush mount	3	ea	\$175.86	\$528
Conduit, 3/4" emt	850	lf	\$10.17	\$8,643
Access control cable	850	lf	\$1.32	\$1,125
Miscellaneous				
Small tools	45	hr	\$80.30	\$3,614
Consumables	1	ls	\$7,114.00	\$7,114
Equipment rentals	1	ls	\$8,300.00	\$8,300
Testing/commissioning	1	ls	\$5,928.00	\$5,928
Total - Electrical Lighting, Power and Communications				\$549,281
13 Fire Protection Systems				
New hydraulically calculated wet pipe automatic fire sprinkler system				
Wet-pipe fire sprinkler, complete	20,000	gsf	\$7.00	\$140,000
316 Stainless Steel piping, premium	1	ea	\$35,000.00	\$35,000
FM 200 preaction systems, Electrical / data rooms - allowance			Assume	e Not Needed
Fire sprinkler for chemical storage room, premium	1	ea	\$8,500.00	\$8,500
Total - Fire Protection Systems				\$183,500

Option B- West Wing

Element	Subtotal	Total	Cost / SF	Cost / SF
A) Shell (1-5)		\$4,998,285		\$186.50
1 Foundations	\$1,064,791		\$39.73	Ψ100.50
2 Vertical Structure	\$846,442		\$31.58	
3 Floor & Roof Structures	\$875,323		\$32.66	
4 Exterior Cladding	\$1,775,939		\$66.27	
5 Roofing and Waterproofing	\$435,790		\$16.26	
B) Interiors (6-7)		\$1,227,784		\$45.81
6 Interior Partitions, Doors and Glazing	\$619,660		\$23.12	
7 Floor, Wall and Ceiling Finishes	\$608,124		\$22.69	
C) Equipment and Vertical Transportation (8-9)		\$2,625,930		\$97.98
8 Function Equipment and Specialties	\$2,387,335		\$89.08	
9 Stairs and Vertical Transportation	\$238,595		\$8.90	
D) Mechanical and Electrical (10-13)		\$3,500,525		\$130.62
10 Plumbing Systems	\$601,289		\$22.44	
11 Heating, Ventilation and Air Conditioning	\$2,027,894		\$75.67	
12 Electrical Lighting, Power and Communications	\$642,343		\$23.97	
13 Fire Protection Systems	\$229,000		\$8.54	
Subtotal		\$12,352,524	_	\$460.92
General Conditions	7.00%	\$864,677		\$32.26
Subtotal		\$13,217,201	_	\$493.18
General Requirements	3.00%	\$396,516		\$14.80
Subtotal		\$13,613,717		\$507.97
Bonds & Insurance	2.00%	\$272,274		\$10.16
Subtotal		\$13,885,991		\$518.13
Contractor's Fee	4.00%	\$555,440		\$20.73
Subtotal		\$14,441,431	_	\$538.86
Design Contingency	10.00%	\$1,444,143		\$53.89
Subtotal		\$15,885,574	_	\$592.75
Construction Contingency	3.00%	\$476,567		\$17.78
Subtotal		\$16,362,141	_	\$610.53
Escalation to MOC, 08/01/22	14.05%	\$2,298,245		\$85.76
Subtotal		\$18,660,386	_	\$696.28
WSST	8.90%	\$1,823,023		\$68.02
TOTAL ESTIMATED CONSTRUCTION COST	_	\$20,483,410		\$764.31

Total Area: 26,800 SF

Clear and grub site   26,000 gsf   \$0.12   \$3,120	DETAIL ELEMENTS - WEST WING				
Earthwork	Element	Quantity	Unit	Unit Cost	Total
Field staking/layout	1 Foundations				
Clear and grub site   26,000 gsf   \$0.12   \$3,120	Earthwork				
Mass excavation   3,878   cy   \$10,78   \$41,802   Backfill   1,976   cy   \$17,13   \$33,844   Fine grading   1,902   cy   \$19,39   \$33,894   Fine grading   26,000   gsf   \$0.05   \$59,100   Erosion control   26,000   gsf   \$0.06   \$1,560   Basement Excavation	Field staking/layout	26,000	gsf	\$0.15	\$3,900
Backfill	Clear and grub site	26,000	gsf	\$0.12	\$3,120
Haul excess, 10 mile round trip	Mass excavation	3,878	су	\$10.78	\$41,802
Fine grading	Backfill	1,976	су	\$17.13	\$33,841
Erosion control   Basement Excavation   Basement Excavation   Structure   St	Haul excess, 10 mile round trip	1,902	су	\$19.39	\$36,884
Basement Excavation   Mass excavation, basement   1,061   cy   \$10,78   \$11,436   Backfill, basement   341   cy   \$17,13   \$5,847   Export, assume 10 mile round trip   932   cy   \$19,39   \$18,066   Temporary shoring, assume needed   1,920   sf   \$42,14   \$80,909   Pools Earthwork   Wass Excavation   Swimming pool   729   cy   \$10,78   \$7,861   Surge lank   288   cy   \$16,93   \$4,876   Backfill   Swimming pool   729   cy   \$10,78   \$7,861   Surge lank   237   cy   \$17,13   \$4,062   Haul Excess   Swimming pool   875   cy   \$19,39   \$16,967   Surge tank   62   cy   \$19,39   \$10,967   Surge tank   62   cy   \$11,39   \$10,967   Surge tank   62   cy   \$11,594   Surge tank   62	Fine grading	26,000	gsf	\$0.35	\$9,100
Mass excavation, basement         1,061         cy         \$10.78         \$11,436           Backfill, basement         341         cy         \$17.13         \$5,847           Export, assume 10 mile round trip         932         cy         \$19.39         \$18.066           Temporary shoring, assume needed         1,920         sf         \$42.14         \$80,909           Pools Earthwork         ***********************************	Erosion control	26,000	gsf	\$0.06	\$1,560
Backfill, basement         341 cy         \$17.13         \$5,847           Export, assume 10 mile round trip         932 cy         \$19.39         \$18,066           Temporary shoring, assume needed         1,920 sf         \$42.14         \$80,909           Pools Earthwork         ***********************************	Basement Excavation				
Export, assume 10 mile round trip	Mass excavation, basement	1,061	су	\$10.78	\$11,436
Temporary shoring, assume needed	Backfill, basement	341	су	\$17.13	\$5,847
Pools Earthwork   Mass Excavation   Swimming pool   729   cy   \$10.78   \$7.861   \$10.78   \$1.876   \$	Export, assume 10 mile round trip	932	су	\$19.39	\$18,066
Mass Excavation         729 cy         \$10.78         \$7,861           Surge tank         288 cy         \$16.93         \$4,876           Backfill         800 cy         \$16.93         \$4,876           Backfill         800 cy         \$17.13         \$4,062           Surge tank         237 cy         \$17.13         \$4,062           Haul Excess         875 cy         \$19.39         \$16,967           Swimming pool         875 cy         \$19.39         \$16,967           Surge tank         62 cy         \$19.39         \$16,967           Miscellaneous hauling, allowance         500 cy         \$19.39         \$1,6967           Slab on grade, excluding pool areas         21,400 gsf         \$17.39         \$9,695           Slab on grade, excluding sassumed 3' wide x 3' deep, at perimeter and basement walls         \$2         \$2         \$111,594           Concrete, continuous footings, 4000 psi         447 cy         \$249.65         \$111,594           Formwork, continuous footings, 4000 psi         467,700         <	Temporary shoring, assume needed	1,920	sf	\$42.14	\$80,909
Swimming pool         729 but sold to stand the stand to stand the stand to sta	Pools Earthwork				
Surge tank         288         cy         \$16.93         \$4,876           Backfill         Swimming pool         327         cy         \$17.13         \$4,062           Haul Excess         Swimming pool         875         cy         \$19.39         \$16,967           Surge tank         62         cy         \$19.39         \$1,205           Miscellaneous hauling, allowance         500         cy         \$19.39         \$9,695           Slab on grade, excluding pool areas         21,400         gsf         \$12,205         \$10,205         \$11,594         \$10,205         \$111,594         \$11,594         \$10,205         \$111,594         \$11,594         \$11,594         \$11,594         \$11,594         \$11,594         \$111,594         \$111,594         \$111,594         \$111,594         \$111,594         \$111,594         \$111,594         \$111,594         \$111,594         \$	Mass Excavation				
Backfill         Swimming pool           Surge tank         237 cy         \$17.13         \$4,062           Haul Excess         875 cy         \$19.39         \$16,967           Swimming pool         875 cy         \$19.39         \$1,6967           Surge tank         62 cy         \$19.39         \$1,205           Miscellaneous hauling, allowance         500 cy         \$19.39         \$9,695           Slab on grade, excluding pool areas         21,400 gsf         \$19.39         \$9,695           Foundations         Controte, continuous footings, avoing, 4000 psi         447 cy         \$249.65         \$111,594           Formwork, continuous footings, 4000 psi         447 cy         \$249.65         \$111,594           Foundation reinforcing, assume 150 #/cy         67,100 lbs         \$1.49         \$99,979           Excavation         904 cy         \$21.64         \$19,563           Backfill         500 cy         \$18.75         \$9,375           Haul excess         410 cy         \$19.39         \$7,950           Spread Footings         21,400 gsf         \$5.00         \$107,000           Slab On Grade, excluding pool areas         21,400 gsf         \$5.00         \$107,000           Slab On Grade, excluding pool areas <t< td=""><td>Swimming pool</td><td>729</td><td>су</td><td>\$10.78</td><td>\$7,861</td></t<>	Swimming pool	729	су	\$10.78	\$7,861
Swimming pool         3237         cy         \$17.13         \$4,062           Haul Excess         875         cy         \$19.39         \$16,967           Surge tank         62         cy         \$19.39         \$1,205           Miscellaneous hauling, allowance         500         cy         \$19.39         \$1,205           Miscellaneous hauling, allowance         500         cy         \$19.39         \$9,695           Slab on grade, excluding pool areas         21,400         gs         \$19.39         \$9,695           Foundations         Controlluous Footings assumed 3' wide x 3' deep, at perimeter and basement walls         \$1,400         gs         \$19.39         \$11,594           Concrete, continuous footings, 4000 psi         447         cy         \$249.65         \$111,594           Formwork, continuous footings         7,320         sf         \$7.75         \$56,730           Formwork, continuous footings         7,320         sf         \$7.75         \$56,730           Formwork, continuous footings         67,100         lbs         \$1.49         \$99,979           Excavation         904         cy         \$21.64         \$19,563           Backfill         50         cy         \$18.75         \$9,375	Surge tank	288	су	\$16.93	\$4,876
Surge tank         237         cy         \$17.13         \$4,062           Haul Excess         Swimming pool         875         cy         \$19.39         \$16,967           Surge tank         62         cy         \$19.39         \$1,6967           Surge tank         62         cy         \$19.39         \$1,605           Miscellaneous hauling, allowance         500         cy         \$19.39         \$9,695           Slab on grade, excluding pool areas         21,400         gsf         \$19.39         \$9,695           Foundations         21,400         gsf         \$19.39         \$9,695           Foundations         21,400         gsf         \$111,594           Formork, continuous footings, 4000 psi         447         cy         \$249.65         \$111,594           Formwork, continuous footings         7,320         sf         \$7.75         \$56,730           Fuccavation         8ackfill         500	Backfill				
Haul Excess   Swimming pool   875   cy   \$19.39   \$16,967   Surge tank   62   cy   \$19.39   \$1,205   Miscellaneous hauling, allowance   500   cy   \$19.39   \$9,695   Slab on grade, excluding pool areas   21,400   gsf   Foundations   Continuous Footings assumed 3' wide x 3' deep, at perimeter and basement walls   Concrete, continuous footings, 4000 psi   447   cy   \$249.65   \$111,594   Formwork, continuous footings   4000 psi   447   cy   \$249.65   \$111,594   Formwork, continuous footings   7,320   sf   \$7.75   \$56,730   Foundation reinforcing, assume 150 #/cy   67,100   lbs   \$1.49   \$99,979   Excavation   904   cy   \$21.64   \$19,563   Backfill   500   cy   \$18.75   \$9,375   Haul excess   410   cy   \$19.39   \$7,950   \$107,000	Swimming pool				
Swimming pool         875 cy         \$19.39         \$16,967           Surge tank         62 cy         \$19.39         \$1,205           Miscellaneous hauling, allowance         500 cy         \$19.39         \$9,695           Slab on grade, excluding pool areas         21,400 gsf         \$7.00         \$7.00           Foundations         Concrete, continuous Footings assumed 3' wide x 3' deep, at perimeter and basement walls         447 cy         \$249.65         \$1111,594           Formwork, continuous footings, 4000 psi         447 cy         \$249.65         \$1111,594           Formwork, continuous footings, 4000 psi         7,320 sf         \$7.75         \$56,730           Foundation reinforcing, assume 150 #/cy         67,100 lbs         \$1.49         \$99,979           Excavation         904 cy         \$21.64         \$19,563           Backfill         500 cy         \$18.75         \$9,375           Haul excess         410 cy         \$19.39         \$7,950           Spread Footings         Sloon Grade, excluding pool areas         21,400 gsf         \$5.00         \$107,000           Slab On Grade, excluding pool areas         21,400 gsf         \$2.03         \$43,442           Concrete, slab on grade, 4000 psi         456 cy         \$2.03         \$43,442      <	Surge tank	237	су	\$17.13	\$4,062
Surge tank         62         cy         \$19.39         \$1,205           Miscellaneous hauling, allowance         500         cy         \$19.39         \$9,695           Slab on grade, excluding pool areas         21,400         gsf           Foundations           Contrinuous Footings assumed 3' wide x 3' deep, at perimeter and basement walls         447         cy         \$249.65         \$111,594           Formwork, continuous footings         7,320         sf         \$7.75         \$56,730           Foundation reinforcing, assume 150 #/cy         67,100         lbs         \$1.49         \$99,979           Excavation         904         cy         \$21.64         \$19,563           Backfill         500         cy         \$18.75         \$9,375           Haul excess         410         cy         \$19.39         \$7,950           Spread Footings         21,400         gsf         \$5.00         \$107,000           Slab On Grade, excluding pool areas         21,400         gsf         \$5.00         \$107,000           Slab On Grade, excluding pool areas         21,400         sf         \$8.17         \$8,497           Sand base, 4"         21,400         sf         \$2.20         \$43,442	Haul Excess				
Miscellaneous hauling, allowance         500 cy         \$19.39         \$9,695           Slab on grade, excluding pool areas         21,400 gsf         \$19.39         \$9,695           Foundations         21,400 gsf         \$10.00         \$10.00         \$10.00         \$111,594           Concrete, continuous footings, 4000 psi         447 cy         \$249.65         \$111,594           Formwork, continuous footings         7,320 sf         \$7.75         \$56,730           Foundation reinforcing, assume 150 #/cy         67,100 lbs         \$1.49         \$99,979           Excavation         904 cy         \$21.64         \$19,563           Backfill         500 cy         \$18.75         \$9,375           Haul excess         410 cy         \$19.39         \$7,950           Spread Footings         \$21,400 gsf         \$5.00         \$107,000           Slab On Grade, excluding pool areas         21,400 gsf         \$5.00         \$107,000           Slab On Grade, excluding pool areas         21,400 gsf         \$5.00         \$110,379           Formwork, slab on grade, 4000 psi         456 cy         \$242.06         \$110,379           Formwork, slab on grade, 4000 psi         456 cy         \$2.203         \$43,442           Gravel sub base, 6"         21,400	Swimming pool	875	су	\$19.39	\$16,967
Slab on grade, excluding pool areas       21,400 gsf         Foundations       Continuous Footings assumed 3' wide x 3' deep, at perimeter and basement walls         Concrete, continuous footings, 4000 psi       447 cy       \$249.65       \$111,594         Formwork, continuous footings       7,320 sf       \$7.75       \$56,730         Foundation reinforcing, assume 150 #/cy       67,100 lbs       \$1.49       \$99,979         Excavation       904 cy       \$21.64       \$19,563         Backfill       500 cy       \$18.75       \$9,375         Haul excess       410 cy       \$19.39       \$7,950         Spread Footings       21,400 gsf       \$5.00       \$107,000         Slab On Grade, excluding pool areas       21,400 gsf       \$5.00       \$107,000         Slab On Grade, excluding pool areas       21,400 gsf       \$5.00       \$107,000         Slab On Grade, excluding pool areas       21,400 gsf       \$242.06       \$110,379         Formwork, slab on grade, 4000 psi       456 cy       \$242.06       \$110,379         Sand base, 4"       21,400 sf       \$2.03       \$43,442         Gravel sub base, 6"       21,400 sf       \$1.81       \$38,734         Slab on grade reinforcing, assumed 2.5 #/sf       61,600 lbs       \$1.49 </td <td>Surge tank</td> <td>62</td> <td>су</td> <td>\$19.39</td> <td>\$1,205</td>	Surge tank	62	су	\$19.39	\$1,205
Foundations  Continuous Footings assumed 3' wide x 3' deep, at perimeter and basement walls  Concrete, continuous footings, 4000 psi 447 cy \$249.65 \$111,594 Formwork, continuous footings 7,320 sf \$7.75 \$56,730 Foundation reinforcing, assume 150 #/cy 67,100 lbs \$1.49 \$99,979 Excavation 904 cy \$21.64 \$19,563 Backfill 500 cy \$18.75 \$9,375 Haul excess 410 cy \$19.39 \$7,950  Spread Footings Spread Footings Spread Footings allowance, excluding pool areas 21,400 gsf \$5.00 \$107,000  Slab On Grade, excluding pool areas  Concrete, slab on grade, 4000 psi 456 cy \$242.06 \$110,379 Formwork, slab on grade 1,040 lf \$8.17 \$8,497 Sand base, 4" 21,400 sf \$2.03 \$43,442 Gravel sub base, 6" 21,400 sf \$1.81 \$38,734 Slab on grade reinforcing, assumed 2.5 #/sf 61,600 lbs \$1.49 \$91,784 Finish to slab 21,400 sf \$0.84 \$17,976 Vapor barrier	Miscellaneous hauling, allowance	500	СУ	\$19.39	\$9,695
Continuous Footings assumed 3' wide x 3' deep, at perimeter and basement walls           Concrete, continuous footings, 4000 psi         447 cy         \$249.65         \$111,594           Formwork, continuous footings         7,320 sf         \$7.75         \$56,730           Foundation reinforcing, assume 150 #/cy         67,100 lbs         \$1.49         \$999,979           Excavation         904 cy         \$21.64         \$19,563           Backfill         500 cy         \$18.75         \$9,375           Haul excess         410 cy         \$19.39         \$7,950           Spread Footings         21,400 gsf         \$5.00         \$107,000           Slab On Grade, excluding pool areas         21,400 gsf         \$5.00         \$107,000           Slab On Grade, excluding pool areas         21,400 gsf         \$242.06         \$110,379           Formwork, slab on grade, 4000 psi         456 cy         \$242.06         \$110,379           Formwork, slab on grade and grade         1,040 lf         \$8.17         \$8,497           Sand base, 4"         21,400 sf         \$1.81         \$38,734           Slab on grade reinforcing, assumed 2.5 #/sf         61,600 lbs         \$1.49         \$91,784           Finish to slab         21,400 sf         \$0.44         \$91,796	Slab on grade, excluding pool areas	21,400	gsf		
Concrete, continuous footings, 4000 psi         447 cy         \$249.65         \$111,594           Formwork, continuous footings         7,320 sf         \$7.75         \$56,730           Foundation reinforcing, assume 150 #/cy         67,100 lbs         \$1.49         \$99,979           Excavation         904 cy         \$21.64         \$19,563           Backfill         500 cy         \$18.75         \$9,375           Haul excess         410 cy         \$19.39         \$7,950           Spread Footings         21,400 gsf         \$5.00         \$107,000           Slab On Grade, excluding pool areas         21,400 gsf         \$5.00         \$107,000           Slab On Grade, excluding pool areas         21,400 gsf         \$5.00         \$110,379           Formwork, slab on grade, 4000 psi         456 cy         \$242.06         \$110,379           Formwork, slab on grade         1,040 lf         \$8.17         \$8,497           Sand base, 4"         21,400 sf         \$2.03         \$43,442           Gravel sub base, 6"         21,400 sf         \$1.81         \$38,734           Slab on grade reinforcing, assumed 2.5 #/sf         61,600 lbs         \$1.49         \$91,784           Finish to slab         21,400 sf         \$0.44         \$9,416 </td <td>Foundations</td> <td></td> <td></td> <td></td> <td></td>	Foundations				
Formwork, continuous footings         7,320 sf         \$7.75         \$56,730           Foundation reinforcing, assume 150 #/cy         67,100 lbs         \$1.49         \$99,979           Excavation         904 cy         \$21.64         \$19,563           Backfill         500 cy         \$18.75         \$9,375           Haul excess         410 cy         \$19.39         \$7,950           Spread Footings         21,400 gsf         \$5.00         \$107,000           Slab On Grade, excluding pool areas         21,400 gsf         \$5.00         \$107,000           Slab On Grade, excluding pool areas         21,400 gsf         \$5.00         \$110,379           Formwork, slab on grade, 4000 psi         456 cy         \$242.06         \$110,379           Formwork, slab on grade         1,040 lf         \$8.17         \$8,497           Sand base, 4"         21,400 sf         \$2.03         \$43,442           Gravel sub base, 6"         21,400 sf         \$1.81         \$38,734           Slab on grade reinforcing, assumed 2.5 #/sf         61,600 lbs         \$1.49         \$91,784           Finish to slab         21,400 sf         \$0.84         \$17,976           Vapor barrier         21,400 sf         \$0.44         \$9,416	Continuous Footings assumed 3' wide x 3' deep, at perimeter and baseme	ent walls			
Foundation reinforcing, assume 150 #/cy       67,100 lbs       \$1.49       \$99,979         Excavation       904 cy       \$21.64       \$19,563         Backfill       500 cy       \$18.75       \$9,375         Haul excess       410 cy       \$19.39       \$7,950         Spread Footings       21,400 gsf       \$5.00       \$107,000         Slab On Grade, excluding pool areas       21,400 gsf       \$5.00       \$107,000         Slab On Grade, excluding pool areas       20,400 gsf       \$5.00       \$107,000         Formwork, slab on grade, 4000 psi       456 cy       \$242.06       \$110,379         Formwork, slab on grade       1,040 lf       \$8.17       \$8,497         Sand base, 4"       21,400 sf       \$2.03       \$43,442         Gravel sub base, 6"       21,400 sf       \$1.81       \$38,734         Slab on grade reinforcing, assumed 2.5 #/sf       61,600 lbs       \$1.49       \$91,784         Finish to slab       21,400 sf       \$0.84       \$17,976         Vapor barrier       21,400 sf       \$0.44       \$9,416	Concrete, continuous footings, 4000 psi	447	су	\$249.65	\$111,594
Excavation       904 cy       \$21.64       \$19,563         Backfill       500 cy       \$18.75       \$9,375         Haul excess       410 cy       \$19.39       \$7,950         Spread Footings       21,400 gsf       \$5.00       \$107,000         Slab On Grade, excluding pool areas       21,400 gsf       \$5.00       \$107,000         Slab On Grade, excluding pool areas       500 cy       \$242.06       \$110,379         Formwork, slab on grade, 4000 psi       456 cy       \$242.06       \$110,379         Formwork, slab on grade       1,040 lf       \$8.17       \$8,497         Sand base, 4"       21,400 sf       \$2.03       \$43,442         Gravel sub base, 6"       21,400 sf       \$1.81       \$38,734         Slab on grade reinforcing, assumed 2.5 #/sf       61,600 lbs       \$1.49       \$91,784         Finish to slab       21,400 sf       \$0.84       \$17,976         Vapor barrier       21,400 sf       \$0.44       \$9,416	Formwork, continuous footings	7,320	sf	\$7.75	\$56,730
Backfill         500 cy         \$18.75         \$9,375           Haul excess         410 cy         \$19.39         \$7,950           Spread Footings         21,400 gsf         \$5.00         \$107,000           Slab On Grade, excluding pool areas         21,400 gsf         \$5.00         \$107,000           Slab On Grade, excluding pool areas         500 cy         \$242.06         \$110,379           Formwork, slab on grade, 4000 psi         456 cy         \$242.06         \$110,379           Formwork, slab on grade         1,040 lf         \$8.17         \$8,497           Sand base, 4"         21,400 sf         \$2.03         \$43,442           Gravel sub base, 6"         21,400 sf         \$1.81         \$38,734           Slab on grade reinforcing, assumed 2.5 #/sf         61,600 lbs         \$1.49         \$91,784           Finish to slab         21,400 sf         \$0.84         \$17,976           Vapor barrier         21,400 sf         \$0.44         \$9,416	Foundation reinforcing, assume 150 #/cy	67,100	lbs	\$1.49	\$99,979
Backfill         500 cy         \$18.75         \$9,375           Haul excess         410 cy         \$19.39         \$7,950           Spread Footings         21,400 gsf         \$5.00         \$107,000           Slab On Grade, excluding pool areas         21,400 gsf         \$5.00         \$107,000           Slab On Grade, excluding pool areas         500 cy         \$242.06         \$110,379           Formwork, slab on grade, 4000 psi         456 cy         \$242.06         \$110,379           Formwork, slab on grade         1,040 lf         \$8.17         \$8,497           Sand base, 4"         21,400 sf         \$2.03         \$43,442           Gravel sub base, 6"         21,400 sf         \$1.81         \$38,734           Slab on grade reinforcing, assumed 2.5 #/sf         61,600 lbs         \$1.49         \$91,784           Finish to slab         21,400 sf         \$0.84         \$17,976           Vapor barrier         21,400 sf         \$0.44         \$9,416	Excavation	904	СУ	\$21.64	\$19,563
Haul excess       410 cy       \$19.39       \$7,950         Spread Footings       21,400 gsf       \$5.00       \$107,000         Slab On Grade, excluding pool areas       21,400 gsf       \$5.00       \$107,000         Slab On Grade, excluding pool areas       50.00       \$107,000       \$107,000         Concrete, slab on grade, 4000 psi       456 cy       \$242.06       \$110,379         Formwork, slab on grade       1,040 lf       \$8.17       \$8,497         Sand base, 4"       21,400 sf       \$2.03       \$43,442         Gravel sub base, 6"       21,400 sf       \$1.81       \$38,734         Slab on grade reinforcing, assumed 2.5 #/sf       61,600 lbs       \$1.49       \$91,784         Finish to slab       21,400 sf       \$0.84       \$17,976         Vapor barrier       21,400 sf       \$0.44       \$9,416	Backfill	500	-	\$18.75	\$9,375
Spread Footings       Spread Footings allowance, excluding pool areas       21,400 gsf       \$5.00       \$107,000         Slab On Grade, excluding pool areas       Concrete, slab on grade, 4000 psi       456 cy       \$242.06       \$110,379         Formwork, slab on grade       1,040 lf       \$8.17       \$8,497         Sand base, 4"       21,400 sf       \$2.03       \$43,442         Gravel sub base, 6"       21,400 sf       \$1.81       \$38,734         Slab on grade reinforcing, assumed 2.5 #/sf       61,600 lbs       \$1.49       \$91,784         Finish to slab       21,400 sf       \$0.84       \$17,976         Vapor barrier       21,400 sf       \$0.44       \$9,416	Haul excess	410	-	\$19.39	\$7,950
Slab On Grade, excluding pool areas       456 cy       \$242.06       \$110,379         Formwork, slab on grade, 4000 psi       456 cy       \$242.06       \$110,379         Formwork, slab on grade       1,040 lf       \$8.17       \$8,497         Sand base, 4"       21,400 sf       \$2.03       \$43,442         Gravel sub base, 6"       21,400 sf       \$1.81       \$38,734         Slab on grade reinforcing, assumed 2.5 #/sf       61,600 lbs       \$1.49       \$91,784         Finish to slab       21,400 sf       \$0.84       \$17,976         Vapor barrier       21,400 sf       \$0.44       \$9,416	Spread Footings		-		
Slab On Grade, excluding pool areas         Concrete, slab on grade, 4000 psi       456 cy       \$242.06       \$110,379         Formwork, slab on grade       1,040 lf       \$8.17       \$8,497         Sand base, 4"       21,400 sf       \$2.03       \$43,442         Gravel sub base, 6"       21,400 sf       \$1.81       \$38,734         Slab on grade reinforcing, assumed 2.5 #/sf       61,600 lbs       \$1.49       \$91,784         Finish to slab       21,400 sf       \$0.84       \$17,976         Vapor barrier       21,400 sf       \$0.44       \$9,416	Spread Footings allowance, excluding pool areas	21,400	gsf	\$5.00	\$107,000
Formwork, slab on grade 1,040 lf \$8.17 \$8,497 Sand base, 4" 21,400 sf \$2.03 \$43,442 Gravel sub base, 6" 21,400 sf \$1.81 \$38,734 Slab on grade reinforcing, assumed 2.5 #/sf 61,600 lbs \$1.49 \$91,784 Finish to slab 21,400 sf \$0.84 \$17,976 Vapor barrier 21,400 sf \$0.44 \$9,416	Slab On Grade, excluding pool areas		Ü		
Formwork, slab on grade 1,040 If \$8.17 \$8,497 Sand base, 4" 21,400 sf \$2.03 \$43,442 Gravel sub base, 6" 21,400 sf \$1.81 \$38,734 Slab on grade reinforcing, assumed 2.5 #/sf 61,600 lbs \$1.49 \$91,784 Finish to slab 21,400 sf \$0.84 \$17,976 Vapor barrier 21,400 sf \$0.44 \$9,416	Concrete, slab on grade, 4000 psi	456	СУ	\$242.06	\$110,379
Gravel sub base, 6"       21,400 sf       \$1.81       \$38,734         Slab on grade reinforcing, assumed 2.5 #/sf       61,600 lbs       \$1.49       \$91,784         Finish to slab       21,400 sf       \$0.84       \$17,976         Vapor barrier       21,400 sf       \$0.44       \$9,416	Formwork, slab on grade	1,040	lf	\$8.17	\$8,497
Slab on grade reinforcing, assumed 2.5 #/sf       61,600 lbs       \$1.49       \$91,784         Finish to slab       21,400 sf       \$0.84       \$17,976         Vapor barrier       21,400 sf       \$0.44       \$9,416	Sand base, 4"	21,400	sf	\$2.03	\$43,442
Slab on grade reinforcing, assumed 2.5 #/sf       61,600 lbs       \$1.49       \$91,784         Finish to slab       21,400 sf       \$0.84       \$17,976         Vapor barrier       21,400 sf       \$0.44       \$9,416		21,400	sf	\$1.81	
Finish to slab 21,400 sf \$0.84 \$17,976 Vapor barrier 21,400 sf \$0.44 \$9,416		61,600	lbs	\$1.49	
Vapor barrier 21,400 sf \$0.44 \$9,416	Finish to slab	21,400	sf	\$0.84	\$17,976
·	Vapor barrier	21,400	sf	\$0.44	\$9,416
	Concrete, slab on grade, add for thickened edges	64	су	\$242.06	\$15,492

DETAIL ELEMENTS - WEST WING					
Element	Quantity	Unit	Unit Cost	Total	
Loading dock ramp and walls	1,030	sf	\$25.00	\$25,750	
Total - Foundations				\$1,064,791	
2 Vertical Structure					
Concrete					
Basement Walls					
Concrete, basement walls 5000 psi	114	су	\$266.24	\$30,351	
Formwork, basement walls	5,600	sf	\$16.77	\$93,912	
Basement wall reinforcing, assumed 250 #/cy	28,519	lbs	\$1.58	\$45,060	
Waterproofing	2,800	sf	\$7.40	\$20,720	
Finish to walls	2,800	sf	\$0.83	\$2,324	
Stem Walls, assume 30" wide x 24" high					
Concrete, walls 5000 psi	51	су	\$266.24	\$13,578	
Formwork, walls	1,000	sf	\$16.77	\$16,770	
Wall reinforcing, assume 200 #/cy	10,185	lbs	\$1.58	\$16,092	
Finish to walls	500	sf	\$0.83	\$415	
Allow for bench finish, wood assumed	250	lf	\$150.00	\$37,500	
Cast-In-Place Concrete Shear Walls, elevator walls, assume 30' high	200		Ψ.00.00	40.7000	
Concrete, shear walls, 5000 psi	26	СУ	\$266.24	\$6,922	
Formwork, shear walls	1,260	sf	\$16.77	\$21,130	
Wall reinforcing, assume 250 #/cy	6,420	lbs	\$1.58	\$10,144	
Finish to walls	630	sf	\$0.83	\$10,144	
Structural Steel	030	31	Ψ0.03	Ψ020	
Vertical steel framing, allowance	26,800	gsf	\$15.00	\$402,000	
Metals	20,000	ysi	φ15.00	ψτ02,000	
Miscellaneous bracing	10	loc	\$9,000.00	\$90,000	
Miscellaneous metals	26,000	gsf	\$1.50	\$39,000	
Total - Vertical Structure				\$846,442	
3 Floor & Roof Structures					
Concrete					
Cast-In-Place Concrete Slabs, Mezzanine, assume 8" thick	/0		<b>\$270.77</b>	<b>41/10/</b>	
Concrete, elevated floor slabs, 5000 psi	60	су	\$269.76	\$16,186	
Formwork to soffit, elevated floor slabs	2,220	sf	\$10.05	\$22,311	
Formwork slab edge, elevated floor slabs	260	sf 	\$9.38	\$2,439	
Elevated slab reinforcing, assume 5.5 #/sf	13,430	lbs	\$1.49	\$20,011	
Finish to elevated floor slabs	2,220	sf	\$0.83	\$1,843	
Cast-In-Place Concrete Slabs, Mechanical Room Roof, assume 8" thick					
Concrete, elevated floor slabs, 5000 psi	63	СУ	\$269.76	\$16,995	
Formwork to soffit, elevated floor slabs	2,310	Sf	\$10.05	\$23,216	
Formwork slab edge, elevated floor slabs	200	sf	\$9.38	\$1,876	

DETAIL ELEMENTS - WEST WING					
Element	Quantity	Unit	Unit Cost	Total	
Elevated slab reinforcing, assume 5.5 #/sf	13,976	lbs	\$1.49	\$20,824	
Finish to elevated floor slabs	2,310	sf	\$0.83	\$1,917	
Miscellaneous Concrete					
Concrete, elevator pit	1	ea	\$12,548.05	\$12,548	
Rough Carpentry- Roof Framing					
30" x 8 3/4" glu-lam	1,020	lf	\$82.00	\$83,640	
70" x 8 3/4" glu-lam	220	lf	\$191.00	\$42,020	
Tie rod with 18" steel circular turnbuckle	1,020	lf	\$24.00	\$24,480	
Horizontal wood framing, truss allowance	26,000	gsf	\$10.00	\$260,000	
T&G wood decking, flat roof, 5/8"	7,417	sf	\$4.00	\$29,668	
8" DLT roof panels	16,070	sf	\$18.00	\$289,260	
Metals					
Light support, assume 10 #/lf	2,100	lb	\$2.90	\$6,090	
Total - Floor & Roof Structures				\$875,323	
4 Exterior Cladding					
Aquatics Center Building Envelope					
Exterior walls, densglass sheathing	10,936	sf	\$3.64	\$39,807	
Rigid insulation, exterior walls	10,936	sf	\$1.83	\$20,013	
Metal Panel Rainscreen System	6,445	sf	\$100.00	\$644,500	
Random Rough Cedar Siding Rainscreen System	4,491	sf	\$80.00	\$359,280	
Aluminum windows/storefront, vision glazing, generic	3,477	sf	\$121.06	\$420,926	
Storefront with Rainscreen System	959	sf	\$181.59	\$174,145	
Aluminum door sets, frames and hardware, glazed, single, tempered glass	1	ea	\$5,485.63	\$5,486	
Aluminum door sets, frames and hardware, glazed, double	2	pr	\$10,891.72	\$21,783	
Storefornt Entry Doors	1	pr	\$20,000.00	\$20,000	
Coiling door at loading dock, 10' wide x 20' high assumed	1	ea	\$20,000.00	\$20,000	
Louver allowance	1	ls	\$50,000.00	\$50,000	
Total - Exterior Cladding				\$1,775,939	
5 Roofing and Waterproofing					
Roofing					
Single ply membrane roofing	23,487	sf	\$7.84	\$184,138	
Rigid roof insulation, poly iso insulation	23,487	sf	\$5.75	\$135,050	
Flashing / Counterflashing					
Aluminum coping at parapets	524	lf	\$35.04	\$18,361	
Base flashings at base of parapets	524	lf	\$37.65	\$19,729	
Roof Accessories					
Aluminum gutters	218	lf	\$27.72	\$6,043	
Aluminum downspouts	75	lf	\$27.72	\$2,079	
Miscellaneous accessories	26,800	gsf	\$2.00	\$53,600	

DETAIL ELEMENTS - WEST WING				
Element	Quantity	Unit	Unit Cost	Total
Miscellaneous				
Crickets	1,078	sf	\$6.41	\$6,910
Caulking allowance	26,000	gfa	\$0.03	\$780
Miscellaneous				
Caulking & sealant allowance	26,000	gsf	\$0.35	\$9,100
Total - Roofing and Waterproofing				\$435,790
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	\$11.36	\$545
Bolt top stud channel to structure above incl. double top track	24	lf	\$24.65	\$592
Gypsum board, 5/8" thick, finished (I4), type X	96	sf	\$3.49	\$335
Partition wall 11' 6" high				
Metal studs, 3 5/8", 20 Ga., at 16" o.c.	164	sf	\$11.36	\$1,863
Bolt top stud channel to structure above incl. double top track	14	lf	\$24.65	\$345
Bolt bottom stud channel to concrete floor	14	lf	\$12.73	\$178
Gypsum board, 5/8" thick, finished (I4), type X	328	sf	\$3.49	\$1,145
Sound batt insulation, unbacked	164	sf	\$1.34	\$220
Partition wall 9' 6" high				
Metal studs, 3 5/8", 20 Ga., at 16" o.c.	3,431	sf	\$11.36	\$38,976
Bolt top stud channel to structure above incl. double top track	361	lf	\$24.65	\$8,899
Bolt bottom stud channel to concrete floor	361	lf	\$12.73	\$4,596
Gypsum board, 5/8" thick, finished (I4), type X	6,862		\$3.49	\$23,948
Sound batt insulation, unbacked	3,431	sf	\$1.34	\$4,598
Partition wall - wet - 9' 6" high				
Metal studs, 3 5/8", 20 Ga., at 16" o.c.	2,518	sf	\$11.36	\$28,604
Bolt top stud channel to structure above incl. double top track	265	lf	\$24.65	\$6,532
Bolt bottom stud channel to concrete floor	265	lf	\$12.73	\$3,373
Gypsum board, 5/8" thick, finished (I4), type X	2,386		\$3.49	\$8,327
Sound batt insulation, unbacked	2,518		\$1.34	\$3,374
Vapor barrier	2,915	sf	\$0.39	\$1,137
Backer board	2,650	sf	\$4.94	\$13,091
Ceramic tile, walls	2,650	sf	\$19.08	\$50,562
Partition wall - wet - one-sided 9' 6" high				
Metal studs, 3 5/8", 20 Ga., at 16" o.c.	545	sf	\$11.36	\$6,191
Bolt top stud channel to structure above incl. double top track	57	lf	\$24.65	\$1,405
Bolt bottom stud channel to concrete floor	57	lf	\$12.73	\$726
Gypsum board, 5/8" thick, finished (I4), type X	805	sf	\$3.49	\$2,809
Sound batt insulation, unbacked	545	sf	\$1.34	\$730
Vapor barrier	314	sf	\$0.39	\$122
Backer board	285	sf	\$4.94	\$1,408
Ceramic tile, walls	285	sf	\$19.08	\$5,438

DETAIL ELEMENTS - WEST WING				
Element	Quantity	Unit	Unit Cost	Total
Partition wall - wet - plumbing chase 9' 6" high				
Metal studs, 3 5/8", 20 Ga., at 16" o.c.	748	sf	\$11.36	\$8,497
Bolt top stud channel to structure above incl. double top track	79	lf	\$24.65	\$1,947
Bolt bottom stud channel to concrete floor	79	lf	\$12.73	\$1,006
Gypsum board, 5/8" thick, finished (I4), type X	353	sf	\$3.49	\$1,232
Gypsum board, 5/8" thick, unfinished	1,101	sf	\$2.55	\$2,808
Sound batt insulation, unbacked	748	sf	\$1.34	\$1,002
Vapor barrier	435	sf	\$0.39	\$170
Backer board	395	sf	\$4.94	\$1,951
Ceramic tile, walls	395	sf	\$19.08	\$7,537
Shaft wall				
Metal studs, 6" CH, 16 Ga., at 16" o.c.	1,476	sf	\$20.56	\$30,347
Bolt top stud channel to structure above incl. double top track	135	lf	\$24.65	\$3,328
Bolt bottom stud channel to concrete floor	135	lf	\$12.73	\$1,719
Gypsum board, 1" thick coreboard at shaft walls	1,476	sf	\$5.23	\$7,719
Gypsum board, 5/8" thick, finished (I4), type X	1,476	sf	\$3.49	\$5,151
Sound batt insulation, unbacked	1,476	sf	\$1.34	\$1,978
Interior of exterior walls				
Interior of exterior, 5/8" thick gypsum board X, finished	3,976	sf	\$3.49	\$13,876
Furring, on walls, 3/4" channel, 16" o.c.	1,594	sf	\$2.46	\$3,921
Interior Glazing	,			
Interior glazing				
Interior storefront - 9' 6" high	1,062	sf	\$87.59	\$93,021
Interior storefront - 11' 6" high	1,033	sf	\$87.59	\$90,480
Interior Openings	.,,,,,		,	, , , , , , ,
Doors				
Aluminum door sets, frames and hardware, glazed, double	3	pr	\$10,891.72	\$32,675
Aluminum door sets, frames and hardware, glazed, single, tempered glazed		ea	\$5,485.63	\$38,399
SC wood door incl. AL frame and hardware, single, 3' 0" x 7' 0"	7	ea	\$2,308.01	\$16,156
SC wood door incl. AL frame and hardware, double, 6' 0" x 7' 0"	5	pr	\$4,469.80	\$22,349
SC wood door incl. AL frame and hardware, double, 5' 0" x 7' 0"	1	pr	\$4,320.81	\$4,321
Hardware premium	32	leaves	\$250.00	\$8,000
	<u> </u>		¥200.00	40,000
Total - Interior Partitions, Doors and Glazing				\$619,660
7 Floor, Wall and Ceiling Finishes				
Flooring & Base				
Sealed concrete	3,474	sf	\$1.84	\$6,392
Floor prep/leveling	8,645	sf	\$9.62	\$83,165
Carpet tile	1,267	sf	\$5.09	\$6,449
Walk-off mat	92	sf	\$5.07	\$4,600
Ceramic tile	7,378	sf	\$30.00 \$18.49	\$136,419
Resilient base	1,518	SI If	\$10.49 \$5.27	\$130,419
Ceramic tile, base	666	II If	\$3.2 <i>1</i> \$18.45	\$12,288
Geranne the, base	000	II	φ10.40	φ1∠,∠00

DETAIL ELEMENTS - WEST WING				
Element	Quantity	Unit	Unit Cost	Total
Ceiling				
Acoustical ceiling tile, suspended, includes suspension system	3,762	sf	\$5.06	\$19,036
Gypsum board ceilings, incl. framing	5,826	sf	\$11.12	\$64,785
Wood Slat Ceiling, allowance	2,900	sf	\$40.00	\$116,000
Wall finishes, misc.				
Allowance	16,282	sf	\$2.50	\$40,705
Painting and Coating				
Paint walls	16,282	sf	\$0.78	\$12,700
Paint ceilings	5,826	sf	\$0.89	\$5,185
Concrete pool epoxy deck paint	6,160	sf	\$15.00	\$92,400
Total - Floor, Wall and Ceiling Finishes				\$608,124
8 Function Equipment and Specialties				
Interior Specialties				
Toilet Cubicles				
Standard, stainless steel	33	ea	\$1,917.89	\$63,290
Handicap, stainless steel	4	ea	\$2,066.93	\$8,268
Toilet / Restroom Specialties				
Bathroom mirrors	13	sf	\$39.65	\$515
Coat hook	7	ea	\$30.31	\$212
Grab bars	6	ea	\$203.72	\$1,222
Janitor mop sink rack	1	ea	\$136.15	\$136
Paper towel dispenser combo unit, recessed	7	ea	\$367.67	\$2,574
Seat cover dispenser	11	ea	\$139.12	\$1,530
Shower accessories, per stall	9	ea	\$1,053.35	\$9,480
Soap dispenser	13	ea	\$98.38	\$1,279
Toilet paper dispenser	11	ea	\$86.46	\$951
Storage Specialties		ou	ψου. το	Ψ701
Lockers, 2-tier incl. concrete base	42	ea	\$263.33	\$11,060
Locker room benches	79	lf	\$150.00	\$11,850
Other Specialties			,,,,,,,,	* * * * * * * * * * * * * * * * * * * *
Handrail - free-standing	43	lf	\$250.00	\$10,750
Miscellaneous specialty allowance	26,000	sf	\$1.00	\$26,000
Interior signage, code	26,000	sf	\$0.15	\$3,900
Fire extinguisher and cabinet, allowance	8	ea	\$444.31	\$3,554
Exterior signage, allowance	1	ls	\$25,000.00	\$25,000
Rough Carpentry		13	Ψ23,000.00	Ψ25,000
Additional blocking, support backing, stiffeners, etc.	26,000	sf	\$1.01	\$26,260
Casework	20,000	SI	ψ1.01	φ <b>∠</b> υ,∠υ∪
Casework - 36"	59	lf	\$329.78	\$19,457
Reception desk - 36"	32	II If	\$329.70 \$800.00	\$19,437
Lifeguard casework bases - 30"	52 50	II If	\$600.00 \$311.46	\$25,600
· · · · · · · · · · · · · · · · · · ·	28	II If		
Lifeguard casework - uppers - 14"	28	II	\$210.43	\$5,892

DETAIL ELEMENTS - WEST WING						
Element	Quantity	Unit	Unit Cost	Total		
Lifeguard casework bases - 20"	24	lf	\$269.93	\$6,478		
Group Room casework bases - 30"	79	lf	\$311.46	\$24,605		
Restroom vanity counter - 24"	29	lf	\$191.93	\$5,566		
Window Covering						
Mechoshades, motorized	3,461	sf	\$21.13	\$73,131		
Furniture						
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 8/8/201	<u>9)</u>					
Recreational pool, construction cost	4,600	sf	\$406.30	\$1,869,000		
Recreational pool, equipment cost	4,600	sf	\$27.11	\$124,700		
Total - Function Equipment and Specialties				\$2,387,335		
9 Stairs and Vertical Transportation						
Elevators - Including Smoke Containment Curtain Assembly						
Passenger, 3500 lbs, hydraulic	3	stop	\$55,000.00	\$165,000		
Elevator pit ladder	1	ea	\$1,844.55	\$1,845		
Stairs						
Entrance Stairs, on grade	350	lf	\$65.00	\$22,750		
Mechanical Room Stair						
Precast stair, 4' wide including steel stringers, assume	18	riser	\$320.00	\$5,760		
Precast landing	40	sf	\$55.00	\$2,200		
Handrail, assume 2 line pipe rail	16	lf	\$360.00	\$5,760		
Mezzanine Stair						
Precast stair, 4' wide including steel stringers, assume	36	riser	\$320.00	\$11,520		
Handrail, assume 2 line pipe rail	66	lf	\$360.00	\$23,760		
Total - Stairs and Vertical Transportation				\$238,595		
10 Plumbing Systems						
General plumbing						
Water heater, Double wall, plate and frame heat exchangers	1	ea	\$16,800.00	\$16,800		
Circulating pump, duplex	1	ea	\$2,195.89	\$2,196		
Expansion tank	1	ea	\$884.56	\$885		
Local water heaters, electric	3	ea	\$1,280.00	\$3,840		
Sewage ejector / Sump pump - allowance	1	ea	\$9,760.00	\$9,760		
Grease / Sand / Oil interceptor	1	ea	\$15,000.00	\$15,000		
Sanitary fixtures			,	13		
Water closet	12	ea	\$1,640.00	\$19,680		
Urinal	4	ea	\$1,670.00	\$6,680		
Lavatory	10	ea	\$1,588.00	\$15,880		
Shower, exterior - next to the water	4	ea	\$1,630.00	\$6,520		
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Element	Quantity	Unit	Unit Cost	Total
	-			
Shower, enclosed - inside the locker room	8	ea	\$1,760.00	\$14,080
Emergency Shower / Eyewash stations	1	ea	\$2,300.00	\$2,300
Drinking fountain, with bottle filing stations	2	ea	\$4,280.00	\$8,560
Sinks, Group rooms	4	ea	\$1,225.00	\$4,900
Hose bibs	12	ea	\$372.69	\$4,472
Floor drains	10	ea	\$657.00	\$6,570
Trench drains for pool area - corrosion resistant HDPE	20	ea	\$950.00	\$19,000
Rough ins				
Local rough-in at fixture	45	ea	\$917.00	\$41,265
Rough-in at floor sink or floor drain	30	ea	\$1,086.00	\$32,580
Rough-ins to OFCI commercial kitchen: cold and hot water, direct and indirect	6	ea	\$1,000.00	\$6,000
Make up water for swimming pool	1	ea	\$6,500.00	\$6,500
Domestic water piping	26,000	gsf	\$3.80	\$98,800
Waste / vent piping	26,000	gsf	\$4.00	\$104,000
Roof / storm drainage				
RD/OD - Roof drain with Overhead drain	8	ea	\$715.00	\$5,720
3" pipe, ci, no-hub, in bldg	580	lf	\$54.96	\$31,877
4" pipe, ci, no-hub, in bldg	410	lf	\$64.45	\$26,425
Condensate drainage	26,000	gsf	\$0.50	\$13,000
Miscellaneous	26,000	gsf	\$3.00	\$78,000
Total - Plumbing Systems				4404.000
Total Transing Systems				\$601,289
				\$601,289
11 Heating, Ventilation and Air Conditioning	26,000	acf	¢12.00	
11 Heating, Ventilation and Air Conditioning  Wet side equipment: chiller, boiler, pumps etc.	26,000	gsf	\$12.00	\$312,000
11 Heating, Ventilation and Air Conditioning  Wet side equipment: chiller, boiler, pumps etc.  Chilled water piping distribution	26,000	gsf	\$2.00	\$312,000 \$52,000
11 Heating, Ventilation and Air Conditioning Wet side equipment: chiller, boiler, pumps etc. Chilled water piping distribution Hot water piping distribution		-		\$312,000 \$52,000
11 Heating, Ventilation and Air Conditioning  Wet side equipment: chiller, boiler, pumps etc.  Chilled water piping distribution  Hot water piping distribution  Air-Side Equipment	26,000 26,000	gsf gsf	\$2.00 \$5.00	\$312,000 \$52,000 \$130,000
11 Heating, Ventilation and Air Conditioning  Wet side equipment: chiller, boiler, pumps etc.  Chilled water piping distribution  Hot water piping distribution  Air-Side Equipment  AHU-1, Air handling unit, outdoor, vav, modular	26,000 26,000 20,000	gsf gsf cfm	\$2.00 \$5.00 \$10.00	\$312,000 \$52,000 \$130,000 \$200,000
11 Heating, Ventilation and Air Conditioning  Wet side equipment: chiller, boiler, pumps etc.  Chilled water piping distribution  Hot water piping distribution  Air-Side Equipment  AHU-1, Air handling unit, outdoor, vav, modular  AHU-2, Air handling unit, outdoor, vav, modular	26,000 26,000 20,000 20,000	gsf gsf cfm cfm	\$2.00 \$5.00 \$10.00 \$10.00	\$312,000 \$52,000 \$130,000 \$200,000 \$200,000
11 Heating, Ventilation and Air Conditioning  Wet side equipment: chiller, boiler, pumps etc.  Chilled water piping distribution  Hot water piping distribution  Air-Side Equipment  AHU-1, Air handling unit, outdoor, vav, modular  AHU-2, Air handling unit, outdoor, vav, modular  FCU, Fan coil units for IDF / MDF rooms	26,000 26,000 20,000 20,000 2	gsf gsf cfm cfm ea	\$2.00 \$5.00 \$10.00 \$10.00 \$3,851.00	\$312,000 \$52,000 \$130,000 \$200,000 \$200,000 \$7,702
11 Heating, Ventilation and Air Conditioning  Wet side equipment: chiller, boiler, pumps etc.  Chilled water piping distribution  Hot water piping distribution  Air-Side Equipment  AHU-1, Air handling unit, outdoor, vav, modular  AHU-2, Air handling unit, outdoor, vav, modular  FCU, Fan coil units for IDF / MDF rooms  VAV terminal boxes, with reheat coil	26,000 26,000 20,000 20,000 2	gsf gsf cfm cfm ea ea	\$2.00 \$5.00 \$10.00 \$10.00 \$3,851.00 \$1,840.00	\$312,000 \$52,000 \$130,000 \$200,000 \$200,000 \$7,702 \$44,160
11 Heating, Ventilation and Air Conditioning  Wet side equipment: chiller, boiler, pumps etc.  Chilled water piping distribution  Hot water piping distribution  Air-Side Equipment  AHU-1, Air handling unit, outdoor, vav, modular  AHU-2, Air handling unit, outdoor, vav, modular  FCU, Fan coil units for IDF / MDF rooms  VAV terminal boxes, with reheat coil  EF, Exhaust fan, inline, Greenheck	26,000 26,000 20,000 20,000 2	gsf gsf cfm cfm ea	\$2.00 \$5.00 \$10.00 \$10.00 \$3,851.00	\$312,000 \$52,000 \$130,000 \$200,000 \$200,000 \$7,702 \$44,160
11 Heating, Ventilation and Air Conditioning Wet side equipment: chiller, boiler, pumps etc. Chilled water piping distribution Hot water piping distribution Air-Side Equipment AHU-1, Air handling unit, outdoor, vav, modular AHU-2, Air handling unit, outdoor, vav, modular FCU, Fan coil units for IDF / MDF rooms VAV terminal boxes, with reheat coil EF, Exhaust fan, inline, Greenheck Air Distribution	26,000 26,000 20,000 20,000 2 24 6,200	gsf gsf cfm cfm ea ea cfm	\$2.00 \$5.00 \$10.00 \$10.00 \$3,851.00 \$1,840.00 \$3.85	\$312,000 \$52,000 \$130,000 \$200,000 \$7,702 \$44,160 \$23,870
11 Heating, Ventilation and Air Conditioning  Wet side equipment: chiller, boiler, pumps etc.  Chilled water piping distribution  Hot water piping distribution  Air-Side Equipment  AHU-1, Air handling unit, outdoor, vav, modular  AHU-2, Air handling unit, outdoor, vav, modular  FCU, Fan coil units for IDF / MDF rooms  VAV terminal boxes, with reheat coil  EF, Exhaust fan, inline, Greenheck  Air Distribution  Ductwork, galv - protected with epoxy based paint	26,000 26,000 20,000 20,000 2 24 6,200	gsf gsf cfm cfm ea ea cfm	\$2.00 \$5.00 \$10.00 \$10.00 \$3,851.00 \$1,840.00 \$3.85	\$312,000 \$52,000 \$130,000 \$200,000 \$7,702 \$44,160 \$23,870
11 Heating, Ventilation and Air Conditioning  Wet side equipment: chiller, boiler, pumps etc.  Chilled water piping distribution  Hot water piping distribution  Air-Side Equipment  AHU-1, Air handling unit, outdoor, vav, modular  AHU-2, Air handling unit, outdoor, vav, modular  FCU, Fan coil units for IDF / MDF rooms  VAV terminal boxes, with reheat coil  EF, Exhaust fan, inline, Greenheck  Air Distribution  Ductwork, galv - protected with epoxy based paint  Ductwork, stainless steel	26,000 26,000 20,000 20,000 2 24 6,200 22,000 3,000	gsf gsf cfm cfm ea ea cfm	\$2.00 \$5.00 \$10.00 \$10.00 \$3,851.00 \$1,840.00 \$3.85 \$12.50 \$29.14	\$312,000 \$52,000 \$130,000 \$200,000 \$7,702 \$44,160 \$23,870 \$275,000 \$87,420
11 Heating, Ventilation and Air Conditioning  Wet side equipment: chiller, boiler, pumps etc.  Chilled water piping distribution  Hot water piping distribution  Air-Side Equipment  AHU-1, Air handling unit, outdoor, vav, modular  AHU-2, Air handling unit, outdoor, vav, modular  FCU, Fan coil units for IDF / MDF rooms  VAV terminal boxes, with reheat coil  EF, Exhaust fan, inline, Greenheck  Air Distribution  Ductwork, galv - protected with epoxy based paint  Ductwork, stainless steel  Duct insulation	26,000 26,000 20,000 20,000 2 24 6,200 22,000 3,000 12,000	gsf gsf cfm cfm ea ea cfm	\$2.00 \$5.00 \$10.00 \$10.00 \$3,851.00 \$1,840.00 \$3.85 \$12.50 \$29.14 \$3.86	\$312,000 \$52,000 \$130,000 \$200,000 \$7,702 \$44,160 \$23,870 \$275,000 \$87,420 \$46,320
11 Heating, Ventilation and Air Conditioning  Wet side equipment: chiller, boiler, pumps etc.  Chilled water piping distribution  Hot water piping distribution  Air-Side Equipment  AHU-1, Air handling unit, outdoor, vav, modular  AHU-2, Air handling unit, outdoor, vav, modular  FCU, Fan coil units for IDF / MDF rooms  VAV terminal boxes, with reheat coil  EF, Exhaust fan, inline, Greenheck  Air Distribution  Ductwork, galv - protected with epoxy based paint  Ductwork, stainless steel  Duct insulation  Combination fire / smoke damper	26,000 26,000 20,000 20,000 2 24 6,200 22,000 3,000 12,000 16	gsf gsf cfm cfm ea ea cfm	\$2.00 \$5.00 \$10.00 \$10.00 \$3,851.00 \$1,840.00 \$3.85 \$12.50 \$29.14 \$3.86 \$950.00	\$312,000 \$52,000 \$130,000 \$200,000 \$7,702 \$44,160 \$23,870 \$275,000 \$87,420 \$46,320 \$15,200
11 Heating, Ventilation and Air Conditioning  Wet side equipment: chiller, boiler, pumps etc.  Chilled water piping distribution  Hot water piping distribution  Air-Side Equipment  AHU-1, Air handling unit, outdoor, vav, modular  AHU-2, Air handling unit, outdoor, vav, modular  FCU, Fan coil units for IDF / MDF rooms  VAV terminal boxes, with reheat coil  EF, Exhaust fan, inline, Greenheck  Air Distribution  Ductwork, galv - protected with epoxy based paint  Ductwork, stainless steel  Duct insulation  Combination fire / smoke damper  Grilles, registers and diffusers, including dampers and flex duct	26,000 26,000 20,000 20,000 2 24 6,200 22,000 3,000 12,000 16 26,000	gsf gsf cfm cfm ea ea cfm	\$2.00 \$5.00 \$10.00 \$10.00 \$3,851.00 \$1,840.00 \$3.85 \$12.50 \$29.14 \$3.86 \$950.00 \$2.50	\$312,000 \$52,000 \$130,000 \$200,000 \$7,702 \$44,160 \$23,870 \$275,000 \$87,420 \$46,320 \$15,200 \$65,000
11 Heating, Ventilation and Air Conditioning  Wet side equipment: chiller, boiler, pumps etc.  Chilled water piping distribution  Hot water piping distribution  Air-Side Equipment  AHU-1, Air handling unit, outdoor, vav, modular  AHU-2, Air handling unit, outdoor, vav, modular  FCU, Fan coil units for IDF / MDF rooms  VAV terminal boxes, with reheat coil  EF, Exhaust fan, inline, Greenheck  Air Distribution  Ductwork, galv - protected with epoxy based paint  Ductwork, stainless steel  Duct insulation  Combination fire / smoke damper  Grilles, registers and diffusers, including dampers and flex duct  Acoustical attenuation	26,000 26,000 20,000 20,000 2 24 6,200 22,000 3,000 12,000 16 26,000	gsf gsf cfm cfm ea ea cfm lb lb sf ea sf ea	\$2.00 \$5.00 \$10.00 \$10.00 \$3,851.00 \$1,840.00 \$3.85 \$12.50 \$29.14 \$3.86 \$950.00 \$2.50 \$4,500.00	\$312,000 \$52,000 \$130,000 \$200,000 \$200,000 \$7,702 \$44,160 \$23,870 \$275,000 \$87,420 \$46,320 \$15,200 \$65,000 \$9,000
11 Heating, Ventilation and Air Conditioning  Wet side equipment: chiller, boiler, pumps etc.  Chilled water piping distribution  Hot water piping distribution  Air-Side Equipment  AHU-1, Air handling unit, outdoor, vav, modular  AHU-2, Air handling unit, outdoor, vav, modular  FCU, Fan coil units for IDF / MDF rooms  VAV terminal boxes, with reheat coil  EF, Exhaust fan, inline, Greenheck  Air Distribution  Ductwork, galv - protected with epoxy based paint  Ductwork, stainless steel  Duct insulation  Combination fire / smoke damper  Grilles, registers and diffusers, including dampers and flex duct  Acoustical attenuation  Ventilation premium for PHIUS+ requirements, allowance	26,000 26,000 20,000 20,000 2 24 6,200 22,000 3,000 12,000 16 26,000	gsf gsf cfm cfm ea ea cfm	\$2.00 \$5.00 \$10.00 \$10.00 \$3,851.00 \$1,840.00 \$3.85 \$12.50 \$29.14 \$3.86 \$950.00 \$2.50	\$312,000 \$52,000 \$130,000 \$200,000 \$7,702 \$44,160 \$23,870 \$275,000 \$87,420 \$46,320 \$15,200 \$65,000 \$9,000
11 Heating, Ventilation and Air Conditioning  Wet side equipment: chiller, boiler, pumps etc. Chilled water piping distribution Hot water piping distribution Air-Side Equipment AHU-1, Air handling unit, outdoor, vav, modular AHU-2, Air handling unit, outdoor, vav, modular FCU, Fan coil units for IDF / MDF rooms VAV terminal boxes, with reheat coil EF, Exhaust fan, inline, Greenheck Air Distribution Ductwork, galv - protected with epoxy based paint Ductwork, stainless steel Duct insulation Combination fire / smoke damper Grilles, registers and diffusers, including dampers and flex duct Acoustical attenuation Ventilation premium for PHIUS+ requirements, allowance Miscellaneous testing & commissioning	26,000 26,000 20,000 20,000 2 24 6,200 22,000 3,000 12,000 16 26,000 2	gsf gsf gsf cfm cfm ea ea cfm lb lb sf ea sf ea ls	\$2.00 \$5.00 \$10.00 \$10.00 \$3,851.00 \$1,840.00 \$3.85 \$12.50 \$29.14 \$3.86 \$950.00 \$2.50 \$4,500.00 \$300,000.00	\$312,000 \$52,000 \$130,000 \$200,000 \$7,702 \$44,160 \$23,870 \$275,000 \$87,420 \$46,320 \$15,200 \$65,000 \$9,000
11 Heating, Ventilation and Air Conditioning  Wet side equipment: chiller, boiler, pumps etc.  Chilled water piping distribution  Hot water piping distribution  Air-Side Equipment  AHU-1, Air handling unit, outdoor, vav, modular  AHU-2, Air handling unit, outdoor, vav, modular  FCU, Fan coil units for IDF / MDF rooms  VAV terminal boxes, with reheat coil  EF, Exhaust fan, inline, Greenheck  Air Distribution  Ductwork, galv - protected with epoxy based paint  Ductwork, stainless steel  Duct insulation  Combination fire / smoke damper  Grilles, registers and diffusers, including dampers and flex duct  Acoustical attenuation  Ventilation premium for PHIUS+ requirements, allowance	26,000 26,000 20,000 20,000 2 24 6,200 22,000 3,000 12,000 16 26,000	gsf gsf cfm cfm ea ea cfm lb lb sf ea sf ea	\$2.00 \$5.00 \$10.00 \$10.00 \$3,851.00 \$1,840.00 \$3.85 \$12.50 \$29.14 \$3.86 \$950.00 \$2.50 \$4,500.00	\$312,000 \$52,000 \$130,000 \$200,000 \$200,000 \$7,702 \$44,160 \$23,870 \$275,000 \$87,420 \$46,320 \$15,200 \$65,000 \$9,000

DETAIL ELEMENTS - WEST WING				
Element	Quantity	Unit	Unit Cost	Total
Commissioning assist	160	hr	\$121.93	\$19,509
Piping identification: labels, arrows and valve tags	200	ea	\$27.60	\$5,520
Seismic and vibration requirements	1	ea	\$25,000.00	\$25,000
HVAC Controls				
DDC controls to plumbing systems	1	ls	\$5,000.00	\$5,000
DDC controls, air handlers	2	ea	\$14,800.00	\$29,600
DDC controls, vav box, reheat coils	24	ea	\$1,957.00	\$46,968
DDC controls, general exhaust fan	4	ea	\$1,314.00	\$5,256
DDC controls, smoke damper monitor	16	ea	\$952.00	\$15,232
DDC misc. items, training, integration	200	hr	\$140.00	\$28,000
DDC controls for pools	1	ls	\$30,000.00	\$30,000
Total - Heating, Ventilation and Air Conditioning				\$2,027,894
12 Electrical Lighting, Power and Communications				
Service & Distribution Equipment				
Main switchboard, 1200 amp, 120/208v, 3ph, 4w	1	ea	\$47,909.94	\$47,910
Distribution board, 400 amp, 120/208v, 3ph, 4w	1	ea	\$20,358.56	\$20,359
Panelboard, 225 amp, 120/208v, 3ph, 4w	3	ea	\$2,578.77	\$7,736
Feeder, 225 amp, emt	125	lf	\$57.58	\$7,197
Feeder, 400 amp, emt	150	lf	\$105.75	\$15,862
Feeder, 1200 amp, PVC	50	lf	\$267.02	\$13,351
Conduit, 1 1/4" pvc	100	lf	\$6.75	\$675
Copper wire, #8 thhn	100	lf	\$1.00	\$100
Copper wire, #4 thhn	200	lf	\$1.78	\$355
HVAC & Equipment Connections				
AHU-1	1	ea	\$1,028.29	\$1,028
AHU-2	1	ea	\$1,028.29	\$1,028
FCU	2	ea	\$226.51	\$453
EF, Exhaust Fans	4	ea	\$191.67	\$767
Disconnect switch, 60/3 fused N1	2	ea	\$734.97	\$1,470
Disconnect switch, motor rated N3R	4	ea	\$418.91	\$1,676
Disconnect switch, 200/3 fused N3R	2	ea	\$2,273.14	\$4,546
Disconnect elevator switch, 60/3 fused N1	1	ea	\$2,443.87	\$2,444
Equipment feeder, 20 amp	950	lf	\$17.93	\$17,030
Equipment feeder, 60 amp	200	lf	\$21.25	\$4,251
Equipment feeder, 200 amp	225	lf	\$27.35	\$6,154
Convenience Power				
Duplex receptacle, 20 amp	47	ea	\$91.10	\$4,282
Double duplex receptacle, 20 amp	3	ea	\$121.42	\$364
Duplex receptacle, 20 amp GFCI	12	ea	\$107.07	\$1,285
Double duplex receptacle, 20 amp GFCI wp	2	ea	\$160.76	\$322
Branch power, 20 amp	2,250	lf	\$16.06	\$36,142
10/2 armored cable	1,400	lf	\$5.65	\$7,904

DETAIL ELEMENTS - WES	ST WI	NG	j

Element	Quantity	Unit	Unit Cost	Total
Lighting 9 Lighting Controls				
Lighting & Lighting Controls	283	00	\$255.81	¢72 202
Down Lights Phase #1	283 50	ea		\$72,393
Pool Flood Light High Bay		ea	\$765.60	\$38,280
Mezzanine Lighting	20	ea	\$524.44	\$10,489
Exit Lighting	14	ea	\$294.00	\$4,116
Lighting control panel	1	ea	\$4,624.80	\$4,625
Single pole switch	2	ea	\$94.64	\$189
Dimmer three way switch	8	ea	\$229.67	\$1,837
Occupancy sensor, ceiling mounted	8	ea	\$242.18	\$1,937
Occupancy sensor, wall mounted	8	ea	\$204.64	\$1,637
Lighting branch power, fixtures	3,530	lf .c	\$16.06	\$56,702
Lighting branch power, controls	110	lf	\$15.40	\$1,694
Fire Alarm System			****	440.040
FA control panel	1	ea	\$10,818.26	\$10,818
FA annunciator panel	1	ea	\$2,538.97	\$2,539
FA beam sensor	2	ea	\$1,485.48	\$2,971
FA duct smoke detector	2	ea	\$635.84	\$1,272
FA flow switch	1	ea	\$550.84	\$551
FA heat detector	1	ea	\$319.54	\$320
FA pull station	2	ea	\$337.81	\$676
FA smoke detector	2	ea	\$320.96	\$642
FA tamper switch	1	ea	\$499.45	\$499
FA horn strobe unit, wall mount	8	ea	\$183.08	\$1,465
Conduit, 3/4" emt	3,150	lf	\$10.17	\$32,030
Fire alarm cable rated, 4C	3,150	lf	\$3.74	\$11,775
Telecommunications System				
Tele/data outlet, 2 port	14	ea	\$127.21	\$1,781
Wireless access point	6	ea	\$295.12	\$1,771
Fire treated plywood	1	ea	\$288.67	\$289
Main telecommunication grounding busbar	1	ea	\$1,494.17	\$1,494
Conduit, 3/4" emt	1,400	lf	\$10.17	\$14,236
CAT-6, 4 pair 23 AWG, UTP	1,400	lf	\$1.03	\$1,436
Public Address System				
Clock/speaker	4	ea	\$591.80	\$2,367
PA speaker	32	ea	\$194.31	\$6,218
Conduit, 3/4" emt	3,600	lf	\$10.17	\$36,606
PA system speaker cable	3,650	lf	\$1.06	\$3,855
Distributed Antenna System	26,000	gsf	\$1.25	\$32,500
Security, Access Control & CCTV Systems		Ü		
CCTV PTZ IP camera, outdoor	3	ea	\$3,330.81	\$9,992
CCTV fixed IP camera	6	ea	\$898.74	\$5,392
DVR, 4TB storage	1	ea	\$1,431.10	\$1,431
Conduit, 3/4" emt	600	lf	\$10.17	\$6,101
CCTV cabling	600	lf	\$1.31	\$784

Element	Quantity	Unit	Unit Cost	Total
		•	<b></b>	
Access control system				
Access control panel	1	ea	\$5,066.69	\$5,067
Access control panel power supply	1	ea	\$515.99	\$516
Card reader, proximity type	6	ea	\$407.77	\$2,447
Alarm contact, flush mount	4	ea	\$175.86	\$703
Conduit, 3/4" emt	1,200	lf	\$10.17	\$12,202
Access control cable	1,200	lf	\$1.32	\$1,588
Miscellaneous				
Small tools	57	hr	\$80.30	\$4,577
Consumables	1	ls	\$8,281.00	\$8,281
Equipment rentals	1	ls	\$9,661.00	\$9,661
Testing/commissioning	1	ls	\$6,900.00	\$6,900
Total - Electrical Lighting, Power and Communications				\$642,343
13 Fire Protection Systems				
New hydraulically calculated wet pipe automatic fire sprinkler system				
Wet-pipe fire sprinkler, complete	26,000	gsf	\$7.00	\$182,000
316 Stainless Steel piping, premium	1	ea	\$35,000.00	\$35,000
FM 200 preaction systems, Electrical / data rooms - allowance				e Not Needed
Fire sprinkler for chemical storage room, premium	1	ea	\$12,000.00	\$12,000
Total - Fire Protection Systems				\$229,000

Option B- East Wing

Element	Subtotal	Total	Cost / SF	Cost / SF
Lionon	odbtotal	Total	00317 01	003(70)
A) Shell (1-5)		\$3,759,449		\$187.97
1 Foundations	\$757,408		\$37.87	
2 Vertical Structure	\$497,628		\$24.88	
3 Floor & Roof Structures	\$601,300		\$30.07	
4 Exterior Cladding	\$1,538,638		\$76.93	
5 Roofing and Waterproofing	\$364,476		\$18.22	
B) Interiors (6-7)		\$757,645		\$37.88
6 Interior Partitions, Doors and Glazing	\$315,578		\$15.78	
7 Floor, Wall and Ceiling Finishes	\$442,067		\$22.10	
C) Equipment and Vertical Transportation (8-9)		\$2,038,799		\$101.94
8 Function Equipment and Specialties	\$2,019,299		\$100.96	
9 Stairs and Vertical Transportation	\$19,500		\$0.98	
D) Mechanical and Electrical (10-13)		\$3,080,636		\$154.03
10 Plumbing Systems	\$569,494		\$28.47	
11 Heating, Ventilation and Air Conditioning	\$1,778,361		\$88.92	
12 Electrical Lighting, Power and Communications	\$549,281		\$27.46	
13 Fire Protection Systems	\$183,500		\$9.18	
Subtotal		\$9,636,530	_	\$481.83
General Conditions	7.00%	\$674,557		\$33.73
Subtotal		\$10,311,087	_	\$515.55
General Requirements	3.00%	\$309,333		\$15.47
Subtotal		\$10,620,420	_	\$531.02
Bonds & Insurance	2.00%	\$212,408		\$10.62
Subtotal		\$10,832,828		\$541.64
Contractor's Fee	4.00%	\$433,313		\$21.67
Subtotal		\$11,266,141	_	\$563.31
Design Contingency	10.00%	\$1,126,614		\$56.33
Subtotal		\$12,392,755	_	\$619.64
Construction Contingency	3.00%	\$371,783		\$18.59
Subtotal		\$12,764,538	_	\$638.23
Escalation to MOC, 08/01/22	14.05%	\$1,792,922		\$89.65
Subtotal		\$14,557,459	_	\$727.87
WSST	8.90%	\$1,422,189		\$71.11
TOTAL ESTIMATED CONSTRUCTION COST		\$15,979,648	_	\$798.98

Total Area: 20,000 SF

DETAIL ELEMENTS - EAST WING					
Element	Quantity	Unit	Unit Cost	Total	
1 Foundations					
Earthwork					
Field staking/layout	20,000	gsf	\$0.15	\$3,000	
Clear and grub site	20,000	gsf	\$0.12	\$2,400	
Mass excavation	2,437	су	\$10.78	\$26,276	
Backfill, basement	1,212	су	\$17.13	\$20,766	
Haul excess, 10 mile round trip	1,225	су	\$19.39	\$23,757	
Fine grading	20,000	gsf	\$0.35	\$7,000	
Erosion control	20,000	gsf	\$0.06	\$1,200	
Pools Earthwork					
Mass Excavation					
Swimming pool	1,971	су	\$10.78	\$21,244	
Surge tank	288	су	\$16.93	\$4,876	
Backfill					
Swimming pool					
Surge tank	237	су	\$17.13	\$4,062	
Haul Excess					
Swimming pool	2,365	су	\$19.39	\$45,854	
Surge tank	62	су	\$19.39	\$1,205	
Miscellaneous hauling, allowance	500	су	\$19.39	\$9,695	
Foundations					
Continuous Footings assumed 3' wide x 3' deep, at perimeter and basement wall	ls				
Concrete, continuous footings, 4000 psi	301	су	\$249.65	\$75,145	
Formwork, continuous footings	4,920	sf	\$7.75	\$38,130	
Foundation reinforcing, assume 150 #/cy	45,100	lbs	\$1.49	\$67,199	
Excavation	607	су	\$21.64	\$13,135	
Backfill	334	су	\$18.75	\$6,263	
Haul excess	273	су	\$19.39	\$5,293	
Spread Footings					
Foundation, conventional, excluding pool areas	13,784	gsf	\$12.50	\$172,300	
Slab On Grade, excluding pool areas					
Concrete, slab on grade, 4000 psi	281	су	\$242.06	\$68,019	
Formwork, slab on grade	590	lf	\$8.17	\$4,820	
Sand base, 4"	13,784	sf	\$2.03	\$27,982	
Gravel sub base, 6"	13,784	sf	\$1.81	\$24,949	
Slab on grade reinforcing, assumed 2.5 #/sf	37,906	lbs	\$1.49	\$56,480	
Finish to slab	13,784	sf	\$0.84	\$11,579	
Vapor barrier	13,784	sf	\$0.44	\$6,065	
Concrete, slab on grade, add for thickened edges	36	СУ	\$242.06	\$8,714	
Total - Foundations				\$757,408	

DETAIL ELEMENTS - EAST WING					
Element	Quantity	Unit	Unit Cost	Total	
2 Vertical Structure					
Concrete					
Stem Walls, assume 30" wide x 24" high					
Concrete, walls 5000 psi	47	су	\$266.24	\$12,513	
Formwork, walls	920	sf	\$16.77	\$15,428	
Wall reinforcing, assume 200 #/cy	9,370	lbs	\$1.58	\$14,805	
Finish to walls	460	sf	\$0.83	\$382	
Allow for bench finish, wood assumed	230	lf	\$150.00	\$34,500	
Structural Steel					
Vertical steel framing, allowance	20,000	gsf	\$15.00	\$300,000	
Metals					
Miscellaneous bracing	10	loc	\$9,000.00	\$90,000	
Miscellaneous metals	20,000	gsf	\$1.50	\$30,000	
Total - Vertical Structure				\$497,628	
3 Floor & Roof Structures					
Rough Carpentry- Roof Framing					
30" x 8 3/4" glu-lam	960	lf	\$82.00	\$78,720	
70" x 8 3/4" glu-lam	110	lf	\$191.00	\$21,010	
Tie rod with 18" steel circular turnbuckle	960	lf	\$24.00	\$23,040	
Horizontal wood framing, truss allowance	20,000	gsf	\$10.00	\$200,000	
T&G wood decking, flat roof, 5/8"	6,643	sf	\$4.00	\$26,572	
8" DLT roof panels	13,611	sf	\$18.00	\$244,998	
Metals					
Light support, assume 10 #/lf	2,400	lb	\$2.90	\$6,960	
Total - Floor & Roof Structures				\$601,300	
4 Exterior Cladding					
Aquatics Center Building Envelope					
Exterior walls, densglass sheathing	9,600	sf	\$3.64	\$34,944	
Rigid insulation, exterior walls	9,600	sf	\$1.83	\$17,568	
Metal Panel Rainscreen System	5,316		\$100.00	\$531,600	
Random Rough Cedar Siding Rainscreen System	4,284		\$80.00	\$342,720	
Aluminum windows/storefront, vision glazing, generic	3,193	sf	\$121.06	\$386,545	
Storefront with Rainscreen System	755	sf	\$181.59	\$137,100	
Aluminum door sets, frames and hardware, glazed, single, tempered glas		ea	\$5,485.63	\$5,486	
Aluminum door sets, frames and hardware, glazed, double	3	pr	\$10,891.72	\$32,675	
Louver allowance	1	ls	\$50,000.00	\$50,000	
Total - Exterior Cladding	_		_	\$1,538,638	

DETAIL ELEMENTS - EAST WING					
Element	Quantity	Unit	Unit Cost	Total	
5 Roofing and Waterproofing					
Roofing					
Single ply membrane roofing	20,254	sf	\$7.84	\$158,791	
Rigid roof insulation, poly iso insulation	20,254	sf	\$5.75	\$116,461	
Flashing / Counterflashing					
Aluminum coping at parapets	460	lf	\$35.04	\$16,118	
Base flashings at base of parapets	460	lf	\$37.65	\$17,319	
Roof Accessories					
Aluminum gutters	110	lf	\$27.72	\$3,049	
Aluminum downspouts	50	lf	\$27.72	\$1,386	
Miscellaneous accessories	20,000	gsf	\$2.00	\$40,000	
Miscellaneous					
Crickets	584	sf	\$6.41	\$3,743	
Caulking allowance	20,254	gfa	\$0.03	\$608	
Miscellaneous					
Caulking & sealant allowance	20,000	gsf	\$0.35	\$7,000	
Total - Roofing and Waterproofing				\$364,476	
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	\$11.36	\$10,610	
Bolt top stud channel to structure above incl. double top track	81	lf	\$24.65	\$1,997	
Bolt bottom stud channel to concrete floor	81	lf	\$12.73	\$1,031	
Gypsum board, 5/8" thick, finished (I4), type X	1,868	sf	\$3.49	\$6,519	
Sound batt insulation, unbacked	934	sf	\$1.34	\$1,252	
Partition wall 9' 6" high				. ,	
Metal studs, 3 5/8", 20 Ga., at 16" o.c.	741	sf	\$11.36	\$8,418	
Bolt top stud channel to structure above incl. double top track	78	lf	\$24.65	\$1,923	
Bolt bottom stud channel to concrete floor	78	lf	\$12.73	\$993	
Gypsum board, 5/8" thick, finished (I4), type X	1,482		\$3.49	\$5,172	
Sound batt insulation, unbacked	741	sf	\$1.34	\$993	
Partition wall - wet - 9' 6" high			,	,,,,	
Metal studs, 3 5/8", 20 Ga., at 16" o.c.	2,566	sf	\$11.36	\$29,150	
Bolt top stud channel to structure above incl. double top track	270	lf	\$24.65	\$6,656	
Bolt bottom stud channel to concrete floor	270		\$12.73	\$3,437	
Gypsum board, 5/8" thick, finished (I4), type X	2,432		\$3.49	\$8,488	
Sound batt insulation, unbacked	2,566		\$1.34	\$3,438	
Vapor barrier	2,970		\$0.39	\$1,158	
Backer board	2,700		\$0.37 \$4.94	\$13,338	
Ceramic tile, walls	2,700		\$4.74 \$19.08	\$51,516	
Partition wall - wet - one-sided 9' 6" high	2,700	JI	ψ17.00	Ψυι,υιΟ	
Metal studs, 3 5/8", 20 Ga., at 16" o.c.	812	sf	\$11.36	\$9,224	
iviciai stuus, 3 3/0 , 20 Ga., at 10 U.C.	012	21	φ11.30	<b>Φ7,</b> ∠∠4	

Element  Bolt top stud channel to structure above incl. double top track Bolt bottom stud channel to concrete floor Gypsum board, 5/8" thick, finished (I4), type X Sound batt insulation, unbacked Vapor barrier Backer board Ceramic tile, walls Interior of exterior walls Interior Glazing Interior glazing Interior glazing Interior storefront - 9' 6" high Interior Openings Doors 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" Hardware premium  Total - Interior Partitions, Doors and Glazing  7 Floor, Wall and Ceiling Finishes Flooring & Base Sealed concrete Floor prep/leveling Rubber athletic flooring	86 86 1,194 812 473 430 430 1,264 1,027 31	Unit  If If If Sf Sf Sf Sf Sf Sf F Sf Sf If	\$24.65 \$12.73 \$3.49 \$1.34 \$0.39 \$4.94 \$19.08 \$3.49 \$87.59 \$87.59 \$5,485.63 \$2,308.01 \$4,469.80 \$250.00	\$2,120 \$1,095 \$4,167 \$1,088 \$184 \$2,124 \$8,204 \$4,411 \$89,955 \$2,715 \$10,971 \$11,540 \$8,940 \$2,750
Bolt bottom stud channel to concrete floor Gypsum board, 5/8" thick, finished (l4), type X Sound batt insulation, unbacked Vapor barrier Backer board Ceramic tile, walls Interior of exterior walls Interior Glazing Interior Glazing Interior glazing Interior storefront - 9' 6" high Interior Openings Doors Aluminum door sets, frames and hardware, glazed, single, tempered glass C 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" Hardware premium  Total - Interior Partitions, Doors and Glazing  7 Floor, Wall and Ceiling Finishes Flooring & Base Sealed concrete Floor prep/leveling	86 1,194 812 473 430 430 1,264 1,027 31	If sf sf sf sf sf sf sf	\$12.73 \$3.49 \$1.34 \$0.39 \$4.94 \$19.08 \$3.49 \$87.59 \$87.59 \$5,485.63 \$2,308.01 \$4,469.80	\$1,095 \$4,167 \$1,088 \$184 \$2,124 \$8,204 \$4,411 \$89,955 \$2,715 \$10,971 \$11,540 \$8,940
Gypsum board, 5/8" thick, finished (l4), type X Sound batt insulation, unbacked Vapor barrier Backer board Ceramic tile, walls Interior of exterior walls Interior of exterior, 5/8" thick gypsum board X, finished Interior Glazing Interior glazing Interior storefront - 9' 6" high Interior Openings Doors Aluminum door sets, frames and hardware, glazed, single, tempered glases C 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" Hardware premium  Total - Interior Partitions, Doors and Glazing  7 Floor, Wall and Ceiling Finishes Flooring & Base Sealed concrete Floor prep/leveling	1,194 812 473 430 430 1,264 1,027 31	sf sf sf sf sf sf ea ea pr	\$3.49 \$1.34 \$0.39 \$4.94 \$19.08 \$3.49 \$87.59 \$87.59 \$5,485.63 \$2,308.01 \$4,469.80	\$4,167 \$1,088 \$184 \$2,124 \$8,204 \$4,411 \$89,955 \$2,715 \$10,971 \$11,540 \$8,940
Sound batt insulation, unbacked Vapor barrier Backer board Ceramic tile, walls Interior of exterior walls Interior Glazing Interior glazing Interior storefront - 9' 6" high Interior Openings Doors Aluminum door sets, frames and hardware, glazed, single, tempered glast 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" Hardware premium  Total - Interior Partitions, Doors and Glazing  7 Floor, Wall and Ceiling Finishes Flooring & Base Sealed concrete Floor prep/leveling	812 473 430 430 1,264 1,027 31	sf sf sf sf sf ea ea pr	\$1.34 \$0.39 \$4.94 \$19.08 \$3.49 \$87.59 \$87.59 \$5,485.63 \$2,308.01 \$4,469.80	\$1,088 \$184 \$2,124 \$8,204 \$4,411 \$89,955 \$2,715 \$10,971 \$11,540 \$8,940
Vapor barrier Backer board Ceramic tile, walls Interior of exterior walls Interior of exterior, 5/8" thick gypsum board X, finished Interior Glazing Interior glazing Interior storefront - 9' 6" high Interior Openings Doors Aluminum door sets, frames and hardware, glazed, single, tempered glased 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" Hardware premium  Total - Interior Partitions, Doors and Glazing  7 Floor, Wall and Ceiling Finishes Flooring & Base Sealed concrete Floor prep/leveling	473 430 430 1,264 1,027 31	sf sf sf sf sf ea ea pr	\$0.39 \$4.94 \$19.08 \$3.49 \$87.59 \$87.59 \$5,485.63 \$2,308.01 \$4,469.80	\$184 \$2,124 \$8,204 \$4,411 \$89,955 \$2,715 \$10,971 \$11,540 \$8,940
Backer board Ceramic tile, walls Interior of exterior walls Interior of exterior, 5/8" thick gypsum board X, finished Interior Glazing Interior glazing Interior storefront - 9' 6" high Interior Openings Doors Aluminum door sets, frames and hardware, glazed, single, tempered glased 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" Hardware premium  Total - Interior Partitions, Doors and Glazing  7 Floor, Wall and Ceiling Finishes Flooring & Base Sealed concrete Floor prep/leveling	430 430 1,264 1,027 31	sf sf sf sf ea ea pr	\$4.94 \$19.08 \$3.49 \$87.59 \$87.59 \$5,485.63 \$2,308.01 \$4,469.80	\$2,124 \$8,204 \$4,411 \$89,955 \$2,715 \$10,971 \$11,540 \$8,940
Ceramic tile, walls Interior of exterior walls Interior of exterior, 5/8" thick gypsum board X, finished Interior Glazing Interior glazing Interior storefront - 9' 6" high Interior Openings Doors Aluminum door sets, frames and hardware, glazed, single, tempered glases C 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" Hardware premium  Total - Interior Partitions, Doors and Glazing  7 Floor, Wall and Ceiling Finishes Flooring & Base Sealed concrete Floor prep/leveling	430 1,264 1,027 31 2 5	sf sf sf sf ea ea pr	\$19.08 \$3.49 \$87.59 \$87.59 \$5,485.63 \$2,308.01 \$4,469.80	\$8,204 \$4,411 \$89,955 \$2,715 \$10,971 \$11,540 \$8,940
Interior of exterior walls Interior of exterior, 5/8" thick gypsum board X, finished Interior Glazing Interior glazing Interior storefront - 9' 6" high Interior openings Doors Aluminum door sets, frames and hardware, glazed, single, tempered glasted 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" Hardware premium  Total - Interior Partitions, Doors and Glazing  7 Floor, Wall and Ceiling Finishes Flooring & Base Sealed concrete Floor prep/leveling	1,264 1,027 31 2 5	sf sf sf ea ea pr	\$3.49 \$87.59 \$87.59 \$5,485.63 \$2,308.01 \$4,469.80	\$4,411 \$89,955 \$2,715 \$10,971 \$11,540 \$8,940
Interior of exterior, 5/8" thick gypsum board X, finished Interior Glazing Interior glazing Interior storefront - 9' 6" high Interior Openings Doors Aluminum door sets, frames and hardware, glazed, single, tempered glas 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" Hardware premium  Total - Interior Partitions, Doors and Glazing  7 Floor, Wall and Ceiling Finishes Flooring & Base Sealed concrete Floor prep/leveling	1,027 31 2 5 2	sf sf ea ea pr	\$87.59 \$87.59 \$5,485.63 \$2,308.01 \$4,469.80	\$89,955 \$2,715 \$10,971 \$11,540 \$8,940
Interior Glazing Interior storefront - 9' 6" high Interior storefront - 11' 6" high Interior Openings Doors Aluminum door sets, frames and hardware, glazed, single, tempered glaster 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" Hardware premium  Total - Interior Partitions, Doors and Glazing  7 Floor, Wall and Ceiling Finishes Flooring & Base Sealed concrete Floor prep/leveling	1,027 31 2 5 2	sf sf ea ea pr	\$87.59 \$87.59 \$5,485.63 \$2,308.01 \$4,469.80	\$89,955 \$2,715 \$10,971 \$11,540 \$8,940
Interior glazing Interior storefront - 9' 6" high Interior Openings Doors Aluminum door sets, frames and hardware, glazed, single, tempered glasted 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" Hardware premium  Total - Interior Partitions, Doors and Glazing  7 Floor, Wall and Ceiling Finishes Flooring & Base Sealed concrete Floor prep/leveling	2 5 2	ea ea pr	\$87.59 \$5,485.63 \$2,308.01 \$4,469.80	\$2,715 \$10,971 \$11,540 \$8,940
Interior storefront - 9' 6" high Interior Storefront - 11' 6" high Interior Openings Doors 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" Hardware premium  Total - Interior Partitions, Doors and Glazing  7 Floor, Wall and Ceiling Finishes Flooring & Base Sealed concrete Floor prep/leveling	2 5 2	ea ea pr	\$87.59 \$5,485.63 \$2,308.01 \$4,469.80	\$2,715 \$10,971 \$11,540 \$8,940
Interior storefront - 11' 6" high Interior Openings Doors Aluminum door sets, frames and hardware, glazed, single, tempered glasses 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" Hardware premium  Total - Interior Partitions, Doors and Glazing  7 Floor, Wall and Ceiling Finishes Flooring & Base Sealed concrete Floor prep/leveling	2 5 2	ea ea pr	\$87.59 \$5,485.63 \$2,308.01 \$4,469.80	\$2,715 \$10,971 \$11,540 \$8,940
Interior Openings Doors Aluminum door sets, frames and hardware, glazed, single, tempered glasses 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" Hardware premium  Total - Interior Partitions, Doors and Glazing  7 Floor, Wall and Ceiling Finishes Flooring & Base Sealed concrete Floor prep/leveling	2 5 2	ea ea pr	\$5,485.63 \$2,308.01 \$4,469.80	\$10,971 \$11,540 \$8,940
Doors  Aluminum door sets, frames and hardware, glazed, single, tempered glass 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" Hardware premium  Total - Interior Partitions, Doors and Glazing  7 Floor, Wall and Ceiling Finishes Flooring & Base Sealed concrete Floor prep/leveling	5 2	ea pr	\$2,308.01 \$4,469.80	\$11,540 \$8,940
Doors Aluminum door sets, frames and hardware, glazed, single, tempered glass 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" Hardware premium  Total - Interior Partitions, Doors and Glazing  7 Floor, Wall and Ceiling Finishes Flooring & Base Sealed concrete Floor prep/leveling	5 2	ea pr	\$2,308.01 \$4,469.80	\$11,540 \$8,940
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" Hardware premium  Total - Interior Partitions, Doors and Glazing  7 Floor, Wall and Ceiling Finishes Flooring & Base Sealed concrete Floor prep/leveling	5 2	ea pr	\$2,308.01 \$4,469.80	\$11,540 \$8,940
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" Hardware premium  Total - Interior Partitions, Doors and Glazing  7 Floor, Wall and Ceiling Finishes Flooring & Base Sealed concrete Floor prep/leveling	2	pr	\$4,469.80	\$11,540 \$8,940
SC wood door incl. AL frame and hardware, double, 6' 0" x 7' 0" Hardware premium  Total - Interior Partitions, Doors and Glazing  7 Floor, Wall and Ceiling Finishes Flooring & Base Sealed concrete Floor prep/leveling		•	\$4,469.80	\$8,940
Hardware premium  Total - Interior Partitions, Doors and Glazing  7 Floor, Wall and Ceiling Finishes Flooring & Base Sealed concrete Floor prep/leveling		•		
Total - Interior Partitions, Doors and Glazing  7 Floor, Wall and Ceiling Finishes Flooring & Base Sealed concrete Floor prep/leveling			,	. ,
Flooring & Base Sealed concrete Floor prep/leveling				\$315,578
Sealed concrete Floor prep/leveling				
Floor prep/leveling	1,151	sf	\$1.84	\$2,118
	4,250	sf	\$1.64 \$9.62	\$2,116 \$40,885
Rubber attrieuc nooning	2,330	si Sf	\$9.02 \$13.81	\$40,663
•	2,330 179	si sf	\$13.01 \$5.09	\$32,177 \$911
Carpet tile Ceramic tile	4,071	sf	\$5.09 \$18.49	\$75,273
Resilient base	519	SI If	\$10.49 \$5.27	\$2,735
Ceramic tile, base	626	lf	\$3.27 \$18.45	\$2,733 \$11,550
Ceiling	020	II .	\$10.45	\$11,000
Acoustical ceiling tile, suspended, includes suspension system	3,096	sf	\$5.06	\$15,666
Gypsum board ceilings, incl. framing	3,423	sf	\$3.00 \$11.12	\$13,000
Wood Slat Ceilings, allowance	3,000	sf	\$40.00	\$120,000
Wall finishes, misc.	3,000	31	\$40.00	\$120,000
Allowance	8,240	sf	\$2.50	\$20,600
Painting and Coating	0,240	31	φ2.50	\$20,000
Painting and Coating  Paint walls	8,240	sf	\$0.78	\$6,427
Paint walls Paint ceilings	3,423	si sf	\$0.76 \$0.89	\$0,427 \$3,046
Concrete pool epoxy deck paint	3,423 4,841	SI Sf	\$0.89 \$15.00	\$3,040 \$72,615
Concrete poor epoxy deck paint	4,041	31	φ13.00	Ψ72,013
Total - Floor, Wall and Ceiling Finishes				\$442,067

DETAIL ELEMENTS - EAST	WING			
Element	Quantity	Unit	Unit Cost	Total
8 Function Equipment and Specialties				
Interior Specialties				
Toilet Cubicles				
Standard, stainless steel	25	ea	\$1,917.89	\$47,947
Handicap, stainless steel	5	ea	\$2,066.93	\$10,335
Toilet / Restroom Specialties				
Bathroom mirrors	16	sf	\$39.65	\$634
Coat hook	7	ea	\$30.31	\$212
Grab bars	8	ea	\$203.72	\$1,630
Janitor mop sink rack	1	ea	\$136.15	\$136
Paper towel dispenser combo unit, recessed	11	ea	\$367.67	\$4,044
Seat cover dispenser	16	ea	\$139.12	\$2,226
Shower accessories, per stall	10	ea	\$1,053.35	\$10,534
Soap dispenser	16	ea	\$98.38	\$1,574
Toilet paper dispenser	16	ea	\$86.46	\$1,383
Storage Specialties				
Lockers, 2-tier incl. concrete base	18	ea	\$263.33	\$4,740
Locker room benches	39	lf	\$150.00	\$5,850
Other Specialties				
Handrail - free-standing	43	lf	\$250.00	\$10,750
Miscellaneous specialty allowance	20,000	sf	\$1.00	\$20,000
Interior signage, code	20,000	sf	\$0.15	\$3,000
Fire extinguisher and cabinet, allowance	8	ea	\$444.31	\$3,554
Rough Carpentry				
Additional blocking, support backing, stiffeners, etc.	20,000	sf	\$1.01	\$20,200
Casework				
Exercise Room casework - 36"	60	lf	\$329.78	\$19,787
Restroom vanity counter - 24"	52	lf	\$191.93	\$9,980
Window Covering				
Mechoshades, motorized	3,117	sf	\$21.13	\$65,862
Pool Construction (Cost provided by Aquatics Design Group dated 8/8/2019)				
Recreational pool, construction cost	6,216	sf	\$253.85	\$1,577,920
Recreational pool, equipment cost	6,216	sf	\$29.76	\$185,000
Spectator Seating				
Permanent bleachers	80	seat	\$150.00	\$12,000
Total - Function Equipment and Specialties				\$2,019,299
9 Stairs and Vertical Transportation				
Entrance Stairs, on grade	300	lf	\$65.00	\$19,500
Total - Stairs and Vertical Transportation				\$19,500

DETAIL ELEMENTS - EAST WING					
Element	Quantity	Unit	Unit Cost	Total	
10 Plumbing Systems					
General plumbing					
Water heater, Double wall, plate and frame heat exchangers	1	ea	\$16,800.00	\$16,800	
Circulating pump, duplex	1	ea	\$2,195.89	\$2,196	
Expansion tank	1	ea	\$884.56	\$885	
Local water heaters, electric	1	ea	\$1,280.00	\$1,280	
Sewage ejector / Sump pump - allowance	1	ea	\$9,760.00	\$9,760	
Grease / Sand / Oil interceptor	1	ea	\$15,000.00	\$15,000	
Sanitary fixtures					
Water closet	15	ea	\$1,640.00	\$24,600	
Urinal	4	ea	\$1,670.00	\$6,680	
Lavatory	16	ea	\$1,588.00	\$25,408	
Shower, exterior - next to the water	4	ea	\$1,630.00	\$6,520	
Shower, enclosed - inside the locker room	10	ea	\$1,760.00	\$17,600	
Emergency Shower / Eyewash stations	1	ea	\$2,300.00	\$2,300	
Drinking fountain, with bottle filing stations	2	ea	\$4,280.00	\$8,560	
Sink, Janitor	1	ea	\$1,025.00	\$1,025	
Hose bibs	10	ea	\$372.69	\$3,727	
Floor drains	10	ea	\$657.00	\$6,570	
Trench drains for pool area - corrosion resistant HDPE	30	ea	\$950.00	\$28,500	
Rough ins					
Local rough-in at fixture	53	ea	\$917.00	\$48,601	
Rough-in at floor sink or floor drain	40	ea	\$1,086.00	\$43,440	
Rough-ins to OFCI Flex room / Exercise: cold and hot water, direct and indir	e 2	ea	\$1,000.00	\$2,000	
Make up water for swimming pool	1	ea	\$10,000.00	\$10,000	
Domestic water piping	20,000	gsf	\$4.00	\$80,000	
Waste / vent piping	20,000	gsf	\$4.20	\$84,000	
Roof / storm drainage		Ü			
RD/OD - Roof drain with Overhead drain	6	ea	\$715.00	\$4,290	
3" pipe, ci, no-hub, in bldg	530	lf	\$54.96	\$29,129	
4" pipe, ci, no-hub, in bldg	320	lf	\$64.45	\$20,624	
Condensate drainage	20,000	gsf	\$0.50	\$10,000	
Miscellaneous	20,000	gsf	\$3.00	\$60,000	
Total - Plumbing Systems				\$569,494	
44 Hardina Washington and Ala Oras Philadeles					
11 Heating, Ventilation and Air Conditioning	20.000	a o f	¢10.00	¢0.40.000	
Wet side equipment: chiller, boiler, pumps etc.	20,000	gsf	\$12.00	\$240,000	
Chilled water piping distribution	20,000	gsf	\$2.00	\$40,000	
Hot water piping distribution	20,000	gsf	\$5.00	\$100,000	
Air-Side Equipment	00.000	. c	440.00	<b>#</b> 000 000	
AHU-1, Air handling unit, outdoor, vav, modular	20,000	cfm	\$10.00	\$200,000	
AHU-2, Air handling unit, outdoor, vav, modular	15,000	cfm	\$10.00	\$150,000	

FCU, Fan coli units for IDF / MDF rooms	DETAIL ELEMENTS - EAST WING					
VAV terminal boxes, with reheat coil   22   ea   \$1,840.00   \$40,480   EF, Exhaust fan, Inline, Greenheck   6,000   cfm   \$3.85   \$23,100   Azi Distribution   Variable Statistics   Variable Statis	Element	Quantity	Unit	Unit Cost	Total	
FF. Exhaust fan, Inline, Greenheck	FCU, Fan coil units for IDF / MDF rooms	1	ea	\$3,851.00	\$3,851	
Air Distribution	VAV terminal boxes, with reheat coil					
Ductwork, galv - protected with epoxy based paint   20,000   lb   \$12.50   \$250,000   Ductwork, stainless steel   3,000   lb   \$29.14   \$87,420   \$20.00   \$1.500   \$7.83.66   \$44,390   \$2.50   \$2.		6,000	cfm	\$3.85	\$23,100	
Ductwork, stainless steel   3,000   b   \$29.14   \$87,420   Duct insulation   11,500   sf   \$3.86   \$44,390   Combination fire / smoke damper   14   ea   \$950.00   \$13,000   Gilles, registers and diffusers, including dampers and flex duct   20,000   sf   \$2,50   \$50,000   Acoustical attenuation   2   ea   \$4,500.00   \$300,000   \$9,000   Ventilation premium for PHIUS+ requirements, allowance   1   ls   \$300,000,000   \$300,000   \$000,000						
Duct insulation						
Combination fire / smoke damper						
Grilles, registers and diffusers, including dampers and flex duct         20,000         sf         \$2.50         \$50,000           Acoustical attenuation         2         ea         \$4,500.00         \$9,000           Veniliation premium for PHIUS+ requirements, allowance         1         ls         \$300,000.00         \$9,000           Miscellaneous testing & commissioning         1         16         hr         \$1153.14         \$24,502           Start-up/check-out         160         hr         \$1121.93         \$114,632           Commissioning assist         120         hr         \$121.93         \$14,632           Commissioning assist         120         hr         \$121.93         \$14,632           Piping Identification: labels, arrows and valve tags         160         ea         \$27,60         \$4,416           Selsmic and vibration requirements         1         ts         \$5,000.00         \$20,000           HVAC Controls         DDC controls to plumbing systems         1         ts         \$5,000.00         \$5,000.00           DDC controls to plumbing systems         2         ea         \$1,480.00         \$29,000           DDC controls, smoke damper monitor         14         ea         \$1,300.00         \$5,000           DDC controls,			sf			
Acoustical attenuation	·					
Ventilation premium for PHIUS+ requirements, allowance         1         Is         \$300,000.00         \$300,000           Miscellaneous testing & commissioning         Test / balance HVAC         160         hr         \$153.14         \$24,502           Start-up/check-out         120         hr         \$121.93         \$14,632           Commissioning assist         120         hr         \$121.93         \$14,632           Piping identification: labels, arrows and valve lags         160         ea         \$27.60         \$4,416           Seismic and vibration requirements         1         ea         \$20,000.00         \$20,000           HVAC Controls         DDC controls to plumbing systems         1         ls         \$5,000.00         \$50,000           DDC controls, are handlers         2         ea         \$14,800.00         \$29,600           DDC controls, sincke damper monitor         14         ea         \$13,314.00         \$5,256           DDC controls, smoke damper monitor         14         ea         \$952.00         \$13,328           DDC controls for pools         1         ls         \$30,000.00         \$30,000           Total - Heating, Ventilation and Air Conditioning         \$1,778.36         \$1,778.36           Total - Heatin	· · · · · · · · · · · · · · · · · · ·		sf			
Miscellaneous testing & commissioning   Test / I balance HVAC		2	ea			
Test / balance HVAC		1	ls	\$300,000.00	\$300,000	
Start-up/check-out	· · · · · · · · · · · · · · · · · · ·					
Commissioning assist   120 hr   \$121,93   \$14,632   Piping identification: labels, arrows and valve tags   160 ea   \$27,60   \$4,416   Seismic and vibration requirements   1 ea   \$20,000,00   \$20,000   \$20			hr			
Piping identification: labels, arrows and valve tags   160   ea   \$27.60   \$4.416   \$5eismic and vibration requirements   1   ea   \$20,000.00   \$20,000	·	120	hr		\$14,632	
Seismic and vibration requirements         1         ea         \$20,000.00         \$20,000           HVAC Controls         HVAC Controls         85,000.00         \$5,000           DDC controls, air handlers         2         ea         \$14,800.00         \$29,600           DDC controls, vav box, reheat coils         22         ea         \$1,957.00         \$43,054           DDC controls, general exhaust fan         4         ea         \$1,314.00         \$5,256           DDC controls, smoke damper monitor         14         ea         \$952.00         \$13,328           DDC misc, items, training, integration         160         hr         \$140.00         \$22,400           DDC controls for pools         1         ls         \$30,000.00         \$30,000           Total - Heating, Ventilation and Air Conditioning         \$1,778.361           Total - Heating, Power and Communications           Service & Distribution Equipment           Main switchboard, 1200 amp, 120/208v, 3ph, 4w         1         ea         \$47,909.94         \$47,910           Pool Eq. Distribution Equipment         1         ea         \$20,358.56         \$20,359           Panelboard, 225 amp, 120/208v, 3ph, 4w         1         ea         \$20,358.56         \$20,359	Commissioning assist	120	hr	\$121.93	\$14,632	
HVAC Controls   DDC controls to plumbing systems   1   Is   \$5,000.00   \$5,000   DDC controls, air handlers   2   ea   \$14,800.00   \$29,600   DDC controls, vav box, reheat coils   22   ea   \$1,957.00   \$43,054   DDC controls, general exhaust fan   4   ea   \$1,314.00   \$5,256   DDC controls, smoke damper monitor   14   ea   \$952.00   \$13,328   DDC misc. Items, training, integration   160   hr   \$140.00   \$22,400   DDC controls for pools   1   Is   \$30,000.00   \$30,000	Piping identification: labels, arrows and valve tags	160	ea	\$27.60	\$4,416	
DDC controls to plumbing systems	Seismic and vibration requirements	1	ea	\$20,000.00	\$20,000	
DDC controls, air handlers   2   ea   \$14,800.00   \$29,600     DDC controls, vav box, reheat coils   22   ea   \$1,957.00   \$43,054     DDC controls, general exhaust fan   4   ea   \$1,314.00   \$52,566     DDC controls, smoke damper monitor   14   ea   \$952.00   \$13,328     DDC misc. items, training, integration   160   hr   \$140.00   \$22,400     DDC controls for pools   1   ls   \$30,000.00   \$30,000     Total - Heating, Ventilation and Air Conditioning   \$1,778,361     Telectrical Lighting, Power and Communications   Service & Distribution Equipment   1   ea   \$47,909.94   \$47,910     Pool Eq. Distribution board, 400 amp, 120/208v, 3ph, 4w   1   ea   \$20,358.56   \$20,359     Panelboard, 225 amp, 120/208v, 3ph, 4w   1   ea   \$2,578.77   \$7,736     Feeder, 225 amp, emt   125   lf   \$57.58   \$7,197     Feeder, 225 amp, emt   150   lf   \$1,05.75   \$15,862     Feeder, 1200 amp, PVC   50   lf   \$267.02   \$13,351     Conduit, 1 1/4" pvc   100   lf   \$6.75   \$675     Copper wire, #8 thhn   100   lf   \$1.00   \$100     Copper wire, #8 thhn   100   lf   \$1.00   \$100     Copper wire, #8 thhn   100   lf   \$1.00   \$100     Copper wire, #8 thhn   100   lf   \$1.78   \$355     HVAC & Equipment Connections   4HU-1   1   ea   \$1,028.29   \$1,028     AHU-2   1   ea   \$1,028.29   \$1,028     FCU   5   5   5   5   5   5     FCU   5   5   5   5   5     FCU   5   5   5   5   5     S453	HVAC Controls					
DDC controls, vav box, reheat coils   22   ea   \$1,957.00   \$43,054   DDC controls, general exhaust fan   4   ea   \$1,314.00   \$5,256   DDC controls, smoke damper monitor   14   ea   \$952.00   \$13,328   DDC misc. items, training, integration   160   hr   \$140.00   \$22,400   DDC controls for pools   1   ls   \$30,000.00   \$30,000   \$3	DDC controls to plumbing systems	1	ls	\$5,000.00	\$5,000	
DDC controls, general exhaust fan	DDC controls, air handlers	2	ea	\$14,800.00	\$29,600	
DDC controls, smoke damper monitor	DDC controls, vav box, reheat coils	22	ea	\$1,957.00	\$43,054	
DDC misc. items, training, integration   160 hr   \$140.00   \$22,400	DDC controls, general exhaust fan	4	ea	\$1,314.00	\$5,256	
DDC controls for pools   1   Is   \$30,000.00   \$30,000	DDC controls, smoke damper monitor	14	ea	\$952.00	\$13,328	
Total - Heating, Ventilation and Air Conditioning   \$1,778,361	DDC misc. items, training, integration	160	hr	\$140.00	\$22,400	
12 Electrical Lighting, Power and Communications  Service & Distribution Equipment  Main switchboard, 1200 amp, 120/208v, 3ph, 4w  Pool Eq. Distribution board, 400 amp, 120/208v, 3ph, 4w  Panelboard, 225 amp, 120/208v, 3ph, 4w  Reeder, 225 amp, emt  Feeder, 225 amp, emt  Feeder, 400 amp, emt  Feeder, 1200 amp, PVC  Fooltii, 1 1/4" pvc  Conduit, 1 1/4" pvc  Coopper wire, #8 thhn  Coopper wire, #8 thhn  Coopper wire, #4 thhn  Abu-1  AHU-1  AHU-1  AHU-2  FCU  AHU-2  FCU  AHU-2  FCU  ABUSE  FEED  AFOS	DDC controls for pools	1	ls	\$30,000.00	\$30,000	
Service & Distribution Equipment         Main switchboard, 1200 amp, 120/208v, 3ph, 4w       1 ea       \$47,909.94       \$47,910         Pool Eq. Distribution board, 400 amp, 120/208v, 3ph, 4w       1 ea       \$20,358.56       \$20,359         Panelboard, 225 amp, 120/208v, 3ph, 4w       3 ea       \$2,578.77       \$7,736         Feeder, 225 amp, emt       125 lf       \$57.58       \$7,197         Feeder, 400 amp, emt       150 lf       \$105.75       \$15,862         Feeder, 1200 amp, PVC       50 lf       \$267.02       \$13,351         Conduit, 1 1/4" pvc       100 lf       \$6.75       \$675         Copper wire, #8 thhn       100 lf       \$1.00       \$100         Copper wire, #4 thhn       200 lf       \$1.78       \$355         HVAC & Equipment Connections         AHU-1       1 ea       \$1,028.29       \$1,028         AHU-2       1 ea       \$1,028.29       \$1,028         FCU       2 ea       \$226.51       \$453	Total - Heating, Ventilation and Air Conditioning				\$1,778,361	
Main switchboard, 1200 amp, 120/208v, 3ph, 4w       1 ea       \$47,909.94       \$47,910         Pool Eq. Distribution board, 400 amp, 120/208v, 3ph, 4w       1 ea       \$20,358.56       \$20,359         Panelboard, 225 amp, 120/208v, 3ph, 4w       3 ea       \$2,578.77       \$7,736         Feeder, 225 amp, emt       125 lf       \$57.58       \$7,197         Feeder, 400 amp, emt       150 lf       \$105.75       \$15,862         Feeder, 1200 amp, PVC       50 lf       \$267.02       \$13,351         Conduit, 1 1/4" pvc       100 lf       \$6.75       \$675         Copper wire, #8 thhn       100 lf       \$1.00       \$100         Copper wire, #4 thhn       200 lf       \$1.78       \$355         HVAC & Equipment Connections         AHU-1       1 ea       \$1,028.29       \$1,028         AHU-2       1 ea       \$1,028.29       \$1,028         FCU       2 ea       \$26.51       \$453	12 Electrical Lighting, Power and Communications					
Pool Eq. Distribution board, 400 amp, 120/208v, 3ph, 4w       1 ea       \$20,358.56       \$20,358.95         Panelboard, 225 amp, 120/208v, 3ph, 4w       3 ea       \$2,578.77       \$7,736         Feeder, 225 amp, emt       125 lf       \$57.58       \$7,197         Feeder, 400 amp, emt       150 lf       \$105.75       \$15,862         Feeder, 1200 amp, PVC       50 lf       \$267.02       \$13,351         Conduit, 1 1/4" pvc       100 lf       \$6.75       \$675         Copper wire, #8 thhn       100 lf       \$1.00       \$100         Copper wire, #4 thhn       200 lf       \$1.78       \$355         HVAC & Equipment Connections       3 ea       \$1,028.29       \$1,028         AHU-1       1 ea       \$1,028.29       \$1,028         AHU-2       1 ea       \$1,028.29       \$1,028         FCU       2 ea       \$26.51       \$453	Service & Distribution Equipment					
Panelboard, 225 amp, 120/208v, 3ph, 4w       3 ea       \$2,578.77       \$7,736         Feeder, 225 amp, emt       125 lf       \$57.58       \$7,197         Feeder, 400 amp, emt       150 lf       \$105.75       \$15,862         Feeder, 1200 amp, PVC       50 lf       \$267.02       \$13,351         Conduit, 1 1/4" pvc       100 lf       \$6.75       \$675         Copper wire, #8 thhn       100 lf       \$1.00       \$100         Copper wire, #4 thhn       200 lf       \$1.78       \$355         HVAC & Equipment Connections         AHU-1       1 ea       \$1,028.29       \$1,028         AHU-2       1 ea       \$1,028.29       \$1,028         FCU       2 ea       \$226.51       \$453	· · · · · · · · · · · · · · · · · · ·	1	ea			
Feeder, 225 amp, emt       125 lf       \$57.58       \$7,197         Feeder, 400 amp, emt       150 lf       \$105.75       \$15,862         Feeder, 1200 amp, PVC       50 lf       \$267.02       \$13,351         Conduit, 1 1/4" pvc       100 lf       \$6.75       \$675         Copper wire, #8 thhn       100 lf       \$1.00       \$100         Copper wire, #4 thhn       200 lf       \$1.78       \$355         HVAC & Equipment Connections         AHU-1       1 ea       \$1,028.29       \$1,028         AHU-2       1 ea       \$1,028.29       \$1,028         FCU       2 ea       \$26.51       \$453		1	ea	\$20,358.56	\$20,359	
Feeder, 400 amp, emt       150 lf       \$105.75       \$15,862         Feeder, 1200 amp, PVC       50 lf       \$267.02       \$13,351         Conduit, 1 1/4" pvc       100 lf       \$6.75       \$675         Copper wire, #8 thhn       100 lf       \$1.00       \$100         Copper wire, #4 thhn       200 lf       \$1.78       \$355         HVAC & Equipment Connections       31 ea       \$1,028.29       \$1,028         AHU-1       1 ea       \$1,028.29       \$1,028         AHU-2       1 ea       \$1,028.29       \$1,028         FCU       2 ea       \$26.51       \$453	Panelboard, 225 amp, 120/208v, 3ph, 4w	3	ea	\$2,578.77	\$7,736	
Feeder, 1200 amp, PVC       50 lf       \$267.02       \$13,351         Conduit, 1 1/4" pvc       100 lf       \$6.75       \$675         Copper wire, #8 thhn       100 lf       \$1.00       \$100         Copper wire, #4 thhn       200 lf       \$1.78       \$355         HVAC & Equipment Connections       31 ea       \$1,028.29       \$1,028         AHU-1       1 ea       \$1,028.29       \$1,028         AHU-2       1 ea       \$1,028.29       \$1,028         FCU       2 ea       \$26.51       \$453	Feeder, 225 amp, emt	125	lf	\$57.58	\$7,197	
Conduit, 1 1/4" pvc       100 lf       \$6.75       \$675         Copper wire, #8 thhn       100 lf       \$1.00       \$100         Copper wire, #4 thhn       200 lf       \$1.78       \$355         HVAC & Equipment Connections       31 ea       \$1,028.29       \$1,028         AHU-1       1 ea       \$1,028.29       \$1,028         AHU-2       1 ea       \$1,028.29       \$1,028         FCU       2 ea       \$226.51       \$453	Feeder, 400 amp, emt	150	lf	\$105.75	\$15,862	
Copper wire, #8 thhn       100 lf       \$1.00       \$100         Copper wire, #4 thhn       200 lf       \$1.78       \$355         HVAC & Equipment Connections       1 ea       \$1,028.29       \$1,028         AHU-1       1 ea       \$1,028.29       \$1,028         AHU-2       1 ea       \$1,028.29       \$1,028         FCU       2 ea       \$226.51       \$453	Feeder, 1200 amp, PVC	50	lf	\$267.02	\$13,351	
Copper wire, #4 thhn       200       If       \$1.78       \$355         HVAC & Equipment Connections         AHU-1       1       ea       \$1,028.29       \$1,028         AHU-2       1       ea       \$1,028.29       \$1,028         FCU       2       ea       \$226.51       \$453	Conduit, 1 1/4" pvc	100	lf	\$6.75	\$675	
HVAC & Equipment Connections  AHU-1	Copper wire, #8 thhn	100	lf	\$1.00	\$100	
AHU-1 1 ea \$1,028.29 \$1,028 AHU-2 1 ea \$1,028.29 \$1,028 FCU 2 ea \$226.51 \$453	Copper wire, #4 thhn	200	lf	\$1.78	\$355	
AHU-2 1 ea \$1,028.29 \$1,028 FCU 2 ea \$226.51 \$453	HVAC & Equipment Connections					
FCU 2 ea \$226.51 \$453	AHU-1	1	ea	\$1,028.29	\$1,028	
	AHU-2	1	ea	\$1,028.29	\$1,028	
EF, Exhaust Fans 4 ea \$191.67 \$767	FCU	2	ea	\$226.51	\$453	
	EF, Exhaust Fans	4	ea	\$191.67	\$767	

<b>DETAIL ELEMENTS - E</b>	AST WING
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DETAIL ELEMENTS - EAST WING					
Element	Quantity	Unit	Unit Cost	Total	
Disconnect switch, 60/3 fused N1	2	ea	\$734.97	\$1,470	
Disconnect switch, motor rated N3R	4	ea	\$418.91	\$1,676	
Disconnect switch, 200/3 fused N3R	2	ea	\$2,273.14	\$4,546	
Disconnect elevator switch, 60/3 fused N1	1	ea	\$2,443.87	\$2,444	
Equipment feeder, 20 amp	950	lf	\$17.93	\$17,030	
Equipment feeder, 60 amp	200	lf	\$21.25	\$4,251	
Equipment feeder, 200 amp	225	lf	\$27.35	\$6,154	
Convenience Power					
Duplex receptacle, 20 amp	42	ea	\$91.10	\$3,826	
Double duplex receptacle, 20 amp	3	ea	\$121.42	\$364	
Duplex receptacle, 20 amp GFCI	8	ea	\$107.07	\$857	
Double duplex receptacle, 20 amp GFCI wp	2	ea	\$160.76	\$322	
Branch power, 20 amp	1,870	lf	\$16.06	\$30,038	
10/2 armored cable	1,269	lf	\$5.65	\$7,164	
Lighting & Lighting Controls					
Down Lights Phase #1	196	ea	\$255.81	\$50,138	
Pool Flood Light High Bay	58	ea	\$765.60	\$44,405	
Exit Lighting	8	ea	\$294.00	\$2,352	
Lighting control panel	1	ea	\$4,624.80	\$4,625	
Single pole switch	2	ea	\$94.64	\$189	
Occupancy sensor, ceiling mounted	8	ea	\$242.18	\$1,937	
Occupancy sensor, wall mounted	8	ea	\$204.64	\$1,637	
Lighting branch power, fixtures	3,530	lf	\$16.06	\$56,702	
Lighting branch power, controls	110	lf	\$15.40	\$1,694	
Fire Alarm System					
FA control panel	1	ea	\$10,818.26	\$10,818	
FA annunciator panel	1	ea	\$2,538.97	\$2,539	
FA beam sensor	2	ea	\$1,485.48	\$2,971	
FA duct smoke detector	2	ea	\$635.84	\$1,272	
FA flow switch	1	ea	\$550.84	\$551	
FA heat detector	1	ea	\$319.54	\$320	
FA pull station	2	ea	\$337.81	\$676	
FA smoke detector	2	ea	\$320.96	\$642	
FA tamper switch	1	ea	\$499.45	\$499	
FA horn strobe unit, wall mount	4	ea	\$183.08	\$732	
Conduit, 3/4" emt	2,450	lf	\$10.17	\$24,913	
Fire alarm cable rated, 4C	2,450	lf	\$3.74	\$9,158	
Telecommunications System					
Tele/data outlet, 2 port	4	ea	\$127.21	\$509	
Wireless access point	2	ea	\$295.12	\$590	
Fire treated plywood	1	ea	\$288.67	\$289	
Main telecommunication grounding busbar	1	ea	\$1,494.17	\$1,494	
Conduit, 3/4" emt	600	lf	\$10.17	\$6,101	
CAT-6, 4 pair 23 AWG, UTP	600	lf	\$1.03	\$615	

DETAIL ELEMENTS - EAST WING						
Element	Quantity	Unit	Unit Cost	Total		
Public Address System						
Clock/speaker	4	ea	\$591.80	\$2,367		
PA speaker	20	ea	\$194.31	\$3,886		
Conduit, 3/4" emt	2,400	lf	\$10.17	\$24,404		
PA system speaker cable	2,400	lf	\$1.06	\$2,535		
Distributed Antenna System	20,000	gsf	\$1.25	\$25,000		
Security, Access Control & CCTV Systems						
CCTV PTZ IP camera, outdoor	3	ea	\$3,330.81	\$9,992		
CCTV fixed IP camera	6	ea	\$898.74	\$5,392		
DVR, 4TB storage	1	ea	\$1,431.10	\$1,431		
Conduit, 3/4" emt	600	lf	\$10.17	\$6,101		
CCTV cabling	600	lf	\$1.31	\$784		
Access control system						
Access control panel	1	ea	\$5,066.69	\$5,067		
Access control panel power supply	1	ea	\$515.99	\$516		
Card reader, proximity type	3	ea	\$407.77	\$1,223		
Alarm contact, flush mount	3	ea	\$175.86	\$528		
Conduit, 3/4" emt	850	lf	\$10.17	\$8,643		
Access control cable	850	lf	\$1.32	\$1,125		
Miscellaneous						
Small tools	45	hr	\$80.30	\$3,614		
Consumables	1	ls	\$7,114.00	\$7,114		
Equipment rentals	1	ls	\$8,300.00	\$8,300		
Testing/commissioning	1	ls	\$5,928.00	\$5,928		
Total - Electrical Lighting, Power and Communications				\$549,281		
13 Fire Protection Systems						
New hydraulically calculated wet pipe automatic fire sprinkler system						
Wet-pipe fire sprinkler, complete	20,000	gsf	\$7.00	\$140,000		
316 Stainless Steel piping, premium	1	ea	\$35,000.00	\$35,000		
Fire sprinkler for chemical storage room, premium	1	ea	\$8,500.00	\$8,500		
Total - Fire Protection Systems				\$183,500		

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Site Option 2

Element	Subtotal	Total	Cost / SF	Cost / SF
D) Mechanical and Electrical (10-13)		\$1,041,759		\$4.53
12 Electrical Lighting, Power and Communications	\$1,041,759		\$4.53	
13 Fire Protection Systems		<b>\$4.004.444</b>		40.01
E) Site Construction (14-16)	<b>\$205.040</b>	\$1,921,441	40.00	\$8.3
14 Site Preparation and Demolition	\$225,943		\$0.98	
15 Site Paving, Structures & Landscaping	\$1,469,662		\$6.39	
16 Utilities on Site	\$225,836		\$0.98	
Subtotal		\$2,963,200	_	\$12.88
General Conditions	7.00%	\$207,424		\$0.90
Subtotal		\$3,170,624	_	\$13.79
General Requirements	3.00%	\$95,119		\$0.41
Subtotal		\$3,265,742	_	\$14.20
Bonds & Insurance	2.00%	\$65,315		\$0.28
Subtotal		\$3,331,057	_	\$14.48
Contractor's Fee	4.00%	\$133,242		\$0.58
Subtotal		\$3,464,300	_	\$15.06
Design Contingency	10.00%	\$346,430		\$1.51
Subtotal		\$3,810,730	_	\$16.57
Construction Contingency	3.00%	\$114,322		\$0.50
Subtotal		\$3,925,051	_	\$17.07
Escalation to MOC	32.84%	\$1,289,095		\$5.60
Subtotal		\$5,214,147		\$22.67
WSST	8.90%	\$509,395		\$2.21
TOTAL ESTIMATED CONSTRUCTION COST		_	_	

Total Area: 230,000 SF

DETAIL ELEMENTS - SITE OPTION 2				
Element	Quantity	Unit	Unit Cost	Total
12 Electrical Lighting, Power and Communications				
Site Electrical				
Distribution equipment				
Distribution board, 1200 amp, 120/208v, 3ph, 4w	1	ea	\$38,964.49	\$38,964
Generator, diesel, 800kW, 480v, 3ph, 4w	1	ea	\$319,667.53	\$319,668
Automatic transfer switch, 1000/4	2	ea	\$19,221.11	\$38,442
Feeder, 70 amp, PVC	700	lf	\$388.76	\$272,133
Feeder, 2000 amp, PVC	150	lf	\$388.76	\$58,314
Lighting and lighting control				
Site Lighting Pole Lights	28	ea	\$3,898.27	\$109,152
Bollard Walk way lights	10	ea	\$1,964.76	\$19,648
Conduit, 1" pvc	3,500	lf	\$5.65	\$19,762
Copper wire, #10 thhn	10,000	lf	\$0.74	\$7,381
Site Lighting Trenching and backfill	3,800	lf	\$12.00	\$45,600
Demolition	80	hr	\$80.30	\$6,424
Site service and distribution				
Conduit, 4" pvc	310	lf	\$18.28	\$5,666
Pull box, 36x60x36	2	ea	\$6,192.56	\$12,385
Trenching, backfill and compaction	310	lf	\$67.76	\$21,006
Site communications				
Conduit, 4" pvc	300	lf	\$18.28	\$5,484
Pull box, 48"x72"x48" Telecommunication	2	ea	\$5,977.06	\$11,954
Miscellaneous				
Small tools	21	hr	\$80.30	\$1,686
Consumables	1	ls	\$16,030.00	\$16,030
Equipment rentals	1	ls	\$18,702.00	\$18,702
Testing/commissioning	1	ls	\$13,358.00	\$13,358
Total - Electrical Lighting, Power and Communications				\$1,041,759
14 Site Preparation and Demolition				
Demolition				
Demo & dispose existing structures	130,944	gsf	\$0.25	\$32,736
Grading	130,744	ysi	Ψ0.23	Ψ32,730
3	11 /11		¢Г 0.4	¢/7.00F
Site cut / Excavate	11,611	су	\$5.84	\$67,805
Haul excess, 10 mile round trip, allow	1,333	су	\$19.39	\$25,851
Proof roll site	130,944	sf	\$0.34	\$44,521
Fine grade	130,944	Sf	\$0.35	\$45,830
Temporary erosion and sediment control, allowance	230,000	sf	\$0.04	\$9,200
Total - Site Preparation and Demolition				\$225,943
15 Site Paving, Structures & Landscaping				
AC Paving				
Parking lot, 3" AC over 8" AB	53,716	sf	\$4.83	\$259,448

DETAIL ELEMENTS - SITE OPTION 2				
Element	Quantity	Unit	Unit Cost	Total
Hardscape				
Concrete paving, 4" thick, incl. sub base, reinforcement, and finish	9,373	sf	\$9.78	\$91,668
Concrete Curbs	0.5/4	16	+04.70	±== 00.4
Concrete curbs	2,561	lf	\$21.79	\$55,804
Concrete Ramps	2		¢1 2/2 02	¢ኅ <b>7</b> ኅ/
Curb cut concrete ramps	2	ea	\$1,362.83	\$2,726
Continuous concrete ramps incl. all concrete, reinforcement, sub base, edge	0.40		<b>\$00.50</b>	¢0.745
forms, grooved finish, allow	260	sf	\$33.52	\$8,715
Concrete Stairs	100	sf	\$30.00	\$3,000
Site Walls, allow	OF	Ιŧ	¢ንንር 00	¢21.27F
CIP colored concrete seatwalls, 18" high	95 400	lf If	\$225.00 \$200.00	\$21,375
Retaining walls, 18" average Parking Lot Striping / Signage, 97 parking stalls, directional signage, and striping	400	ls	\$200.00	\$80,000 \$4,000
Planting Lot Striping / Signage, 97 parking stalls, directional signage, and striping	ı	12	\$4,000.00	\$4,000
Stormwater planted areas	6,677	sf	\$8.00	\$53,416
Shrubbery, allowance	35,612	sf	\$8.00	\$284,896
Shrub and turf irrigation	35,612	sf	\$1.67	\$59,472
Mulch to shrub area	35,612	sf	\$0.91	\$32,407
Tree Bubblers, allow 2 per tree	100	ea	\$150.00	\$15,000
Trees, 24" box	50	ea	\$650.00	\$32,500
Tree Guying, all trees	50	ea	\$175.00	\$8,750
Site Specialties				, , , , , ,
Splash pad, allow	2,000	sf	\$212.50	\$425,000
Bollards, 8" square steel, allow	6	ea	\$1,080.76	\$6,485
Miscellaneous site finishes	1	ls	\$25,000.00	\$25,000
Site Furniture				
Trash and recycling receptacles				FF&E
Chairs				FF&E
Tables, allow				FF&E
Benches				FF&E
Metal Canopy				NA
Total - Site Paving, Structures & Landscaping				\$1,469,662
16 Utilities on Site				
Domestic water				
4" domestic water meter	1	ea	\$21,995.78	\$21,996
4" water line, including trenching and backfill	200	lf	\$68.54	\$13,708
Gate valve, 4"	1	ea	\$776.86	\$13,700
4" to 8" water line tap	1		\$350.00	\$350
'	-	ea		
Extend 6" (assumed) water line, including trenching and backfill Fire water	300	lf	\$77.24	\$23,172
	200	If	¢10E 72	¢ጋ1 1 <i>1/</i>
6" fire line pipe	200	lf	\$105.73	\$21,146
Gate valve, 6"	1	ea	\$1,059.35	\$1,059
Fire hydrants, qty assumed	2	ea	\$6,757.59	\$13,515
6" fire department connection	1	ea	\$2,816.02	\$2,816

lement	Quantity	Unit	Unit Cost	Total
Sanitary sewer				
Grease interceptor, size TBD, allow	1	ea	\$15,000.00	\$15,000
4" (assumed) lift station	1	ea	\$5,000.00	\$5,000
4" (assumed) sanitary sewer line, including trenching and backfill	300	lf	\$82.26	\$24,678
Natural gas				
2" (assumed) gas line, including trenching and backfill	200	lf	\$62.85	\$12,570
2" gas meter	1	ea	\$7,456.67	\$7,457
Storm water				
24" storm water pipe, including trenching and backfill	400	lf	\$156.48	\$62,592
Storm detention vault			Assumed	Not Needec

## 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>