



**60% Contract Documents Estimate**

**Claiborne Pell Elementary School  
New School and Sitework Package**

Newport, RI

Prepared for:

**HMFH Architects**

August 18, 2011



**Claiborne Pell Elementary School**  
 New School and Sitework Package  
 Newport, RI

18-Aug-11

**60% Contract Documents Estimate**

**MAIN CONSTRUCTION COST SUMMARY**

	<b>Construction Start</b>	<b>Gross Floor Area</b>	<b>\$/sf</b>	<b>Estimated Construction Cost</b>
NEW ELEMENTARY SCHOOL	Nov-11	102,847	\$187.14	\$19,247,074
SITWORK		102,847	\$26.27	\$2,701,300
<b>SUBTOTAL TRADE COSTS</b>		102,847	\$213.41	<b><u>\$21,948,374</u></b>
GENERAL CONDITIONS	16	Months	\$60,000.00	\$960,000
BONDS	1.00%			\$219,484
INSURANCE	1.25%			\$274,355
PERMIT (Assumed Waived)				NIC
OVERHEAD AND FEE	3%			\$658,451
ESCALATION TO MID-POINT (3rd QTR 2012)	2%			\$438,967
DESIGN AND PRICING CONTINGENCY	0.0%			\$0
<b>TOTAL OF ALL CONSTRUCTION</b>		102,847	\$238.21	<b><u>\$24,499,631</u></b>
<b>DEXTER ROAD COSTS</b>			ADD	<b>\$159,023</b>
<b>DEMOLITION PACKAGE</b>				
HAZARDOUS MATERIAL REMOVALS				NIC
DEMOLITION OF EXISTING BUILDING				NIC
<b>SUBTOTAL TRADE COSTS</b>				<b>\$0</b>
Markups				\$0
<b>TOTAL OF ALL CONSTRUCTION</b>				<b><u>\$0</u></b>
<b>Breakouts (not included in pricing above)</b>				
1. Costs associated with arsenic (removals and adding clean fill)				<b>\$586,018</b>
<b>Alternates (Including Markups):</b>				
1. Lighting upgrades				<b>\$0</b>
2. Photovoltaic Panels 100.8kW				<b>\$560,000</b>
3. Geothermal Option (2 wells)				<b>\$223,328</b>
4. Superior wall insulation, 4" spray insulation in lieu of 2"				<b>\$67,373</b>
5. Poured-In-Place playground surfacing				<b>\$86,548</b>
6. Additional Brick Masonry				<b>\$147,916</b>



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This 60% Construction Document cost estimate was produced from drawings, outline specifications and other documentation prepared by HMFH Architects and their design team dated July 22nd, 2011. Design and engineering changes occurring subsequent to the issue of these documents have not been incorporated in this estimate.

This estimate includes all direct construction costs, general contractor's overhead and profit and design contingency. Cost escalation assumes start dates indicated.

Bidding conditions are expected to be public bidding to pre-qualified general contractors, and pre-qualified sub-contractors, open specifications for materials and manufactures.

The estimate is based on prevailing wage rates for construction in this market and represents a reasonable opinion of cost. It is not a prediction of the successful bid from a contractor as bids will vary due to fluctuating market conditions, errors and omissions, proprietary specifications, lack or surplus of bidders, perception of risk, etc. Consequently the estimate is expected to fall within the range of bids from a number of competitive contractors or subcontractors, however we do not warrant that bids or negotiated prices will not vary from the final construction cost estimate.

**ITEMS NOT CONSIDERED IN THIS ESTIMATE**

Items not included in this estimate are:

- All professional fees and insurance
- Building Permit costs
- Land acquisition, feasibility, and financing costs
- All Furnishings, Fixtures and Equipment
- Items identified in the design as Not In Contract (NIC)
- Items identified in the design as by others
- Owner supplied and/or installed items (e.g. draperies, furniture and equipment)
- Rock excavation; special foundations (unless indicated by design engineers)
- Utility company back charges, including work required off-site
- Work to City streets and sidewalks, (except as noted in this estimate)
- Construction or occupancy phasing or off hours' work, (except as noted in this estimate)

**CITY OF NEWPORT**

Pell Elementary School

CD Estimate Analysis

7/22/11

	A	B
	C2E date	PM&C 8/12/2011
<i>\$(000) except \$/GSF</i>		
Construction GSF		
<b>Building Construction Current\$/GSF</b>		
<b>Total Construction Current \$/GSF</b>		\$238.21
<b>I. <u>Building Construction (to 5' beyond perimeter)</u></b>		
A. New Building Construction		
2 Building Sitework		\$ 145,422.0
3 Concrete		\$ 954,310.0
4 Masonry		\$ 1,084,524.0
5 Metals		\$ 3,078,291.0
6 Woods & Plastics		\$ 971,288.0
7 Thermal & Moisture Protection		\$ 1,745,734.0
8 Openings		\$ 1,285,264.0
9 Finishes		\$ 2,557,946.0
10 Specialties		\$ 236,940.0
11 Equipment		\$ 421,134.0
12 Furnishing		\$ 199,427.0
14 Conveying System		\$ 65,000.0
21 Fire Suppression		\$ 384,346.0
22 Plumbing		\$ 1,084,432.0
23 HVAC		\$ 2,518,815.0
26 Electrical		\$ 2,514,201.0
27 Communications		inc above
28 Electronic Safety & Security		inc above
<b>Total Building Construction</b>	<b>0.0</b>	<b>19,247,074.0</b>
<b>II. <u>Related Construction</u></b>		
A. <b>Sitework (beyond 5' of building )</b>		
1 Site Prep.		365,711.0
2 Drives, Paths & Plazas		621,016.0
3 Parking		Incl Above
4 Site Improvements		416,816.0
5 Landscape & Planting		257,363.0
6 <b>Phase I Demo (Sitework, Demo, Haz Mat)</b>		
a. Haz Mat		NIC
b. All Other Demo		NIC
c. Markups		0.0
B. <b>Site Utility Systems (beyond 5' of building)</b>		
1 Water & Fire Protection		106,562.0
2 Sanitary Sewer		57,575.0
3 Storm Sewer		523,957.0
4 Electric		99,850.0
5 Data & Communications		35,000.0
6 Site Lighting		209,650.0
7 Gas		7,800.0
8 Chilled Water		-
C. <b>Hazardous Materials</b>		
<b>Total Related Construction</b>	<b>0.0</b>	<b>2,701,300.0</b>
<b>Total Construction before Markups</b>	<b>0.0</b>	<b>21,948,374.0</b>

D. General Conditions		960,000.0
E. Design & Pricing Contingency		0.0
Escalation to mid-point 3rd quarter 2012		438,967.0
F. GC Overhead & Profit		658,451.0
G. Permits		NIC
H. Performance Bond		219,484.0
I. Insurance		274,355.0
<b>Total Markups</b>	<b>0.0</b>	<b>2,551,257.0</b>

<b>Total Construction</b>	<b>0.0</b>	<b>24,499,631.0</b>
	<i>#DIV/0!</i>	<i>11.6%</i>

<b>III. Furniture, Fixtures &amp; Equipment (FF&amp;E)</b>		
A. Loose Furnishings	By Owner	By Owner
B. Fixtures and Equipment	By Owner	By Owner
B. Program Related Equipment	By Owner	By Owner
C. Technology Equipment	By Owner	By Owner
D. Specialty Signage	By Owner	By Owner
<b>Total FF &amp; E</b>	By Owner	By Owner
<b>IV. Fees and Expenses</b>	By Owner	By Owner
<b>V. Contingency</b>	By Owner	By Owner

<b>Total Project 2011 Dollars</b>	<b>#VALUE!</b>	<b>#VALUE!</b>
<b>VI. Inflation</b>		
<b>Total Project Fall 2011 Construction</b>	<b>#VALUE!</b>	<b>#VALUE!</b>
<b>Estimators Totals (Constr + Inflation)</b>	<b>0.0</b>	<b>24,499,631.0</b>

<b>Alternates:</b>		
1. Lighting Upgrades		0.0
2. Rooftop photovoltaic array 100.8kw		560,000.0
3. Partial Geothermal - 2 wells		223,328.0
4. Superior Wall Insulation (4" sprayed ILO 2")		67,373.0
5. Poured-In-Place playground surfacing		0.0
6. Additional Brick Masonry		0.0



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GFA

102,847

**CONSTRUCTION COST SUMMARY IN CSI FORMAT**

		NEW ELEMENTARY SCHOOL		SITWORK		TOTAL PROJECT	
		Subtotal	Total	Subtotal	Total	Subtotal	Total
<b>NEW ELEMENTARY SCHOOL AND SITWORK</b>							
<b>DIV. 1 GENERAL CONDITIONS</b>			<b>\$0</b>		<b>\$0</b>		<b>\$0</b>
01000	General conditions	\$0		\$0		\$0	
<b>DIV. 2 SITWORK</b>			<b>\$145,422</b>		<b>\$1,954,151</b>		<b>\$2,099,573</b>
02050	Selective Demolition	\$0		\$0		\$0	
02100	Site Demolition	\$0		\$89,765		\$89,765	
02121	Hazardous Material	\$0		\$0		\$0	
02200	Earthwork	\$145,422		\$275,946		\$421,368	
02500	Storm/Sanitary Utilities	\$0		\$581,532		\$581,532	
02550	Water Utilities	\$0		\$106,562		\$106,562	
02610	Paving and curbing	\$0		\$243,742		\$243,742	
02700	Site Improvements	\$0		\$318,241		\$318,241	
02800	Fencing	\$0		\$81,000		\$81,000	
02830	Landscaping	\$0		\$257,363		\$257,363	
<b>DIV. 3 CONCRETE</b>			<b>\$954,310</b>		<b>\$377,274</b>		<b>\$1,331,584</b>
03300	Cast-in-Place Concrete	\$954,310		\$377,274		\$1,331,584	
<b>DIV. 4 MASONRY</b>			<b>\$1,084,524</b>		<b>\$0</b>		<b>\$1,084,524</b>
04200	Masonry	\$1,084,524		\$0		\$1,084,524	
<b>DIV. 5 METALS</b>			<b>\$3,078,291</b>		<b>\$25,375</b>		<b>\$3,103,666</b>
05120	Structural Steel	\$2,589,181		\$0		\$2,589,181	
05400	Cold Formed Metal Framing	\$240,618		\$0		\$240,618	
05500	Metal Fabrications	\$183,492		\$25,375		\$208,867	
05510	Metal Stairs	\$65,000		\$0		\$65,000	
05720	Ornamental Handrails & Railing	\$0		\$0		\$0	
05800	Expansion Control	\$0		\$0		\$0	
<b>DIV. 6 WOODS &amp; PLASTICS</b>			<b>\$971,288</b>		<b>\$0</b>		<b>\$971,288</b>
06100	Rough Carpentry	\$222,335		\$0		\$222,335	
06200	Finish Carpentry	\$5,800		\$0		\$5,800	
06400	Architectural Woodwork	\$743,153		\$0		\$743,153	
<b>DIV. 7 THERMAL &amp; MOISTURE PROTECTION</b>			<b>\$1,745,734</b>		<b>\$0</b>		<b>\$1,745,734</b>
07100	Waterproofing	\$4,580		\$0		\$4,580	
07150	Dampproofing	\$174,632		\$0		\$174,632	
07210	Building Insulation	\$366,180		\$0		\$366,180	
07240	Roof and Deck Insulation	\$360,498		\$0		\$360,498	



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		Subtotal	Total	Subtotal	Total	Subtotal	Total
<b>NEW ELEMENTARY SCHOOL AND SITWORK</b>							
07250	Spray-on Fireproofing	\$10,000		\$0		\$10,000	
07270	Fire stopping	\$5,000		\$0		\$5,000	
07461	Metal Exterior Wall Panels	\$304,374		\$0		\$304,374	
07420	Metal panels	\$0		\$0		\$0	
07500	Membrane Roofing	\$229,806		\$0		\$229,806	
07610	Sheet Metal Roofing	\$89,151		\$0		\$89,151	
07620	Flashing and Trim	\$53,240		\$0		\$53,240	
07660	Gravel Stops	\$83,545		\$0		\$83,545	
07830	Hatches/Vents	\$4,000		\$0		\$4,000	
07900	Sealants	\$60,728		\$0		\$60,728	
07950	Expansion Joints	\$0		\$0		\$0	
<b>DIV. 8 DOORS &amp; WINDOWS</b>			<b>\$1,285,264</b>		<b>\$0</b>		<b>\$1,285,264</b>
08100	Metal Doors and Frames	\$80,970		\$0		\$80,970	
08140	Wood Doors	\$76,450		\$0		\$76,450	
08305	Access Doors	\$3,000		\$0		\$3,000	
08330	Coiling Doors	\$48,825		\$0		\$48,825	
084113	Aluminum Doors and Frames	\$77,000		\$0		\$77,000	
084413	Curtainwall and Storefront	\$0		\$0		\$0	
08520	Aluminum Windows	\$714,064		\$0		\$714,064	
08600	Skylights	\$27,560		\$0		\$27,560	
08710	Finish Hardware	\$129,800		\$0		\$129,800	
08800	Glazing	\$127,595		\$0		\$127,595	
<b>DIV. 9 FINISHES</b>			<b>\$2,557,946</b>		<b>\$0</b>		<b>\$2,557,946</b>
09242	Stucco	\$0		\$0		\$0	
09250	Gypsum Wallboard Assemblies	\$1,351,464		\$0		\$1,351,464	
09300	Tile	\$202,984		\$0		\$202,984	
09510	Acoustical Ceilings and walls	\$415,653		\$0		\$415,653	
09550	Athletic Flooring	\$81,724		\$0		\$81,724	
09650	Resilient Flooring	\$262,564		\$0		\$262,564	
09680	Carpeting	\$59,040		\$0		\$59,040	
09900	Painting	\$184,517		\$0		\$184,517	
<b>DIV 10 SPECIALTIES</b>			<b>\$236,940</b>		<b>\$0</b>		<b>\$236,940</b>
10100	Markerboards and Tackboards	\$80,352		\$0		\$80,352	
10160	Toilet and Shower Partitions	\$32,400		\$0		\$32,400	
10200	Louvers and Vents	\$5,535		\$0		\$5,535	
10226	Operable Partitions	\$24,928		\$0		\$24,928	



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		NEW ELEMENTARY SCHOOL		SITWORK		TOTAL PROJECT	
		Subtotal	Total	Subtotal	Total	Subtotal	Total
<b>NEW ELEMENTARY SCHOOL AND SITWORK</b>							
10400	Identifying Devices	\$27,625		\$0		\$27,625	
10475	Fire Extinguishers and Cabinets	\$11,900		\$0		\$11,900	
10670	Storage Shelving	\$0		\$0		\$0	
10700	Trash Compactor	\$0		\$0		\$0	
10800	Toilet & Bathroom Accessories	\$38,200		\$0		\$38,200	
10999	Projection Screens	\$16,000		\$0		\$16,000	
<b>DIV. 11 EQUIPMENT</b>			<b>\$421,134</b>		<b>\$0</b>		<b>\$421,134</b>
11400	Food Service Equipment	\$321,065		\$0		\$321,065	
11500	Athletic Equipment	\$76,981		\$0		\$76,981	
11530	Laboratory Equipment	\$0		\$0		\$0	
11510	Kiln	\$3,088		\$0		\$3,088	
11970	Stage Equipment and Curtains	\$20,000		\$0		\$20,000	
<b>DIV. 12 FURNISHINGS</b>			<b>\$199,427</b>		<b>\$0</b>		<b>\$199,427</b>
12320	Manufactured Casework	\$42,000		\$0		\$42,000	
12500	Window Treatment	\$29,765		\$0		\$29,765	
12600	Lockers	\$92,800		\$0		\$92,800	
12610	Fixed Seating	\$0		\$0		\$0	
12670	Rugs & Mats	\$34,862		\$0		\$34,862	
<b>DIV. 13 SPECIAL CONSTRUCTION</b>			<b>\$0</b>		<b>\$0</b>		<b>\$0</b>
No Items in This Division				\$0			
<b>DIV. 14 CONVEYING SYSTEMS</b>			<b>\$65,000</b>		<b>\$0</b>		<b>\$65,000</b>
14200	Elevators	\$65,000		\$0		\$65,000	
<b>DIV. 15 MECHANICAL</b>			<b>\$3,987,593</b>		<b>\$0</b>		<b>\$3,987,593</b>
15100	Plumbing	\$1,084,432		\$0		\$1,084,432	
15200	Fire Protection	\$384,346		\$0		\$384,346	
15300	HVAC	\$2,518,815		\$0		\$2,518,815	
<b>DIV. 16 ELECTRICAL</b>			<b>\$2,514,201</b>		<b>\$344,500</b>		<b>\$2,858,701</b>
16100	Electrical	\$2,514,201		\$344,500		\$2,858,701	
<b>SUBTOTAL DIRECT (TRADE) COST</b>			<b>\$19,247,074</b>		<b>\$2,701,300</b>		<b>\$21,948,374</b>



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## **CONSTRUCTION COST SUMMARY**

*BUILDING SYSTEM*

*TOTAL*

### **NEW ELEMENTARY SCHOOL AND SITEWORK**

A10	FOUNDATIONS	\$1,127,141
A20	BASEMENT CONSTRUCTION	\$0
B10	SUPERSTRUCTURE	\$2,842,746
B20	EXTERIOR CLOSURE	\$2,939,765
B30	ROOFING	\$965,668
C10	INTERIOR CONSTRUCTION	\$2,252,137
C20	STAIRCASES	\$95,987
C30	INTERIOR FINISHES	\$1,363,225
D10	CONVEYING SYSTEMS	\$66,500
D20	PLUMBING	\$1,084,432
D30	HVAC	\$2,518,815
D40	FIRE PROTECTION	\$384,346
D50	ELECTRICAL	\$2,514,201
E10	EQUIPMENT	\$437,134
E20	FURNISHINGS	\$654,977
F10	SPECIAL CONSTRUCTION	\$0
F20	HAZMAT REMOVALS	\$0
G10	SITEWORK	\$2,701,300

***TOTAL DIRECT COST (Trade Costs)***

**\$21,948,374**

GFA	102,847
\$/sf	\$213.41



<b>CONSTRUCTION COST SUMMARY</b>					
<i>BUILDING SYSTEM</i>		<i>SUB-TOTAL</i>	<i>TOTAL</i>	<i>\$/SF</i>	<i>%</i>
<b>NEW ELEMENTARY SCHOOL</b>					
<b>A10</b>	<b>FOUNDATIONS</b>				
A1010	Standard Foundations	\$603,898			
A1020	Special Foundations	\$0			
A1030	Lowest Floor Construction	\$523,243	<b>\$1,127,141</b>	\$10.96	5.9%
<b>A20</b>	<b>BASEMENT CONSTRUCTION</b>				
A2010	Basement Excavation (Structural Fill)	\$0			
A2020	Basement Walls	\$0	<b>\$0</b>	\$0.00	0.0%
<b>B10</b>	<b>SUPERSTRUCTURE</b>				
B1010	Upper Floor Construction	\$2,486,782			
B1020	Roof Construction	\$355,964	<b>\$2,842,746</b>	\$27.64	14.8%
<b>B20</b>	<b>EXTERIOR CLOSURE</b>				
B2010	Exterior Walls	\$2,052,674			
B2020	Windows	\$837,176			
B2030	Exterior Doors	\$49,915	<b>\$2,939,765</b>	\$28.58	15.3%
<b>B30</b>	<b>ROOFING</b>				
B3010	Roof Coverings	\$927,292			
B3020	Roof Openings	\$38,376	<b>\$965,668</b>	\$9.39	5.0%
<b>C10</b>	<b>INTERIOR CONSTRUCTION</b>				
C1010	Partitions	\$1,161,137			
C1020	Interior Doors	\$425,570			
C1030	Specialties/Millwork	\$665,430	<b>\$2,252,137</b>	\$21.90	11.7%
<b>C20</b>	<b>STAIRCASES</b>				
C2010	Stair Construction	\$69,900			
C2020	Stair Finishes	\$26,087	<b>\$95,987</b>	\$0.93	0.5%
<b>C30</b>	<b>INTERIOR FINISHES</b>				
C3010	Wall Finishes	\$455,852			
C3020	Floor Finishes	\$447,278			
C3030	Ceiling Finishes	\$460,095	<b>\$1,363,225</b>	\$13.25	7.1%
<b>D10</b>	<b>CONVEYING SYSTEMS</b>				
D1010	Elevator	\$66,500	<b>\$66,500</b>	\$0.65	0.3%
<b>D20</b>	<b>PLUMBING</b>				
D20	Plumbing	\$1,084,432	<b>\$1,084,432</b>	\$10.54	5.6%
<b>D30</b>	<b>HVAC</b>				
D30	HVAC	\$2,518,815	<b>\$2,518,815</b>	\$24.49	13.1%



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<b>CONSTRUCTION COST SUMMARY</b>					
<i>BUILDING SYSTEM</i>		<i>SUB-TOTAL</i>	<i>TOTAL</i>	<i>\$/SF</i>	<i>%</i>
<b>NEW ELEMENTARY SCHOOL</b>					
<b>D40 FIRE PROTECTION</b>					
D40	Fire Protection	\$384,346	<b>\$384,346</b>	\$3.74	2.0%
<b>D50 ELECTRICAL</b>					
D5010	Service & Distribution	\$512,139			
D5020	Lighting & Power	\$954,435			
D5030	Communication & Security Systems	\$886,280			
D5040	Other Electrical Systems	\$161,347	<b>\$2,514,201</b>	\$24.45	13.1%
<b>E10 EQUIPMENT</b>					
E10	Equipment	\$437,134	<b>\$437,134</b>	\$4.25	2.3%
<b>E20 FURNISHINGS</b>					
E2010	Fixed Furnishings	\$654,977			
E2020	Movable Furnishings	NIC	<b>\$654,977</b>	\$6.37	3.4%
<b>F10 SPECIAL CONSTRUCTION</b>					
F10	Special Construction	\$0	<b>\$0</b>	\$0.00	0.0%
<b>F20 HAZMAT REMOVALS</b>					
F2010	Building Elements Demolition	\$0			
F2020	Hazardous Components Abatement	\$0	<b>\$0</b>	\$0.00	0.0%
<b>TOTAL DIRECT COST (Trade Costs)</b>			<b>\$19,247,074</b>	\$187.14	100.0%



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102,847

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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**NEW ELEMENTARY SCHOOL**

**GROSS FLOOR AREA CALCULATION**

First Floor	<b>63,476</b>
Second Floor	<b>39,371</b>

<b>TOTAL GROSS FLOOR AREA (GFA)</b>	<b>102,847 sf</b>
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**A10 FOUNDATIONS**

**A1010 STANDARD FOUNDATIONS**

Strip footings to exterior walls - 2'-0" x 1'-0"

02200	Excavation	<b>1,829</b>	cy	8.00	14,632
02200	Store on site for reuse	<b>1,829</b>	cy	6.00	10,974
02200	Backfill with existing fill	<b>1,701</b>	cy	8.00	13,608
03300	Formwork	<b>3,292</b>	sf	6.05	19,917
03300	Re-bar	<b>3,457</b>	lbs	0.90	3,111
03300	Concrete material; 3,000 psi	<b>128</b>	cy	83.67	10,710
03300	Placing concrete	<b>128</b>	cy	30.00	3,840

Strip footings to exterior walls - 2'-0" x 1'-0" Bridge storage area

02200	Excavation	<b>183</b>	cy	8.00	1,464
02200	Store on site for reuse	<b>183</b>	cy	6.00	1,098
02200	Backfill with existing fill	<b>170</b>	cy	8.00	1,360
03300	Formwork	<b>330</b>	sf	6.05	1,997
03300	Re-bar	<b>347</b>	lbs	0.90	312
03300	Concrete material; 3,000 psi	<b>13</b>	cy	83.67	1,088
03300	Placing concrete	<b>13</b>	cy	30.00	390

Grade beam/foundation to interior bracing and CMU walls- 24" x 30"

02200	Excavation	<b>375</b>	cy	10.00	3,750
02200	Store on site for reuse	<b>375</b>	cy	6.00	2,250
02200	Backfill with existing fill	<b>244</b>	cy	8.00	1,952
03300	Formwork	<b>3,375</b>	sf	6.05	20,419
03300	Re-bar	<b>21,485</b>	lbs	0.90	19,337
03300	Concrete material; 3,000 psi	<b>131</b>	cy	83.67	10,961
03300	Placing concrete	<b>131</b>	cy	30.00	3,930

Foundation walls at exterior - 14" thick

03300	Formwork	<b>11,526</b>	sf	6.59	75,956
03300	Re-bar	<b>21,131</b>	lbs	0.90	19,018
03300	Concrete material; 3,000 psi	<b>262</b>	cy	83.67	21,922
03300	Placing concrete	<b>262</b>	cy	30.00	7,860
07150	Dampproofing foundation wall and footing	<b>11,526</b>	sf	1.48	17,058
07210	Insulation to foundation walls; 2" thick	<b>7,684</b>	sf	1.96	15,061
03300	Form shelf	<b>1,921</b>	lf	5.00	9,605

Foundation walls at exterior - 20" thick at bridge storage

03300	Formwork	<b>1,320</b>	sf	6.59	8,699
03300	Re-bar	<b>1,815</b>	lbs	0.90	1,634
03300	Concrete material; 3,000 psi	<b>43</b>	cy	83.67	3,598
03300	Placing concrete	<b>43</b>	cy	30.00	1,290
07150	Dampproofing foundation wall and footing	<b>990</b>	sf	1.48	1,465
07210	Insulation to foundation walls; 2" thick	<b>660</b>	sf	1.96	1,294
03300	Form shelf	<b>165</b>	lf	5.00	825

Column footings F3

02200	Excavation	<b>190</b>	cy	8.00	1,520
02200	Store on site for reuse	<b>190</b>	cy	6.00	1,140
02200	Backfill with existing fill	<b>173</b>	cy	8.00	1,384
03300	Formwork	<b>594</b>	sf	6.05	3,594
03300	Re-bar	<b>529</b>	lbs	0.90	476
03300	Concrete material; 3,000 psi	<b>17</b>	cy	83.67	1,422
03300	Placing concrete	<b>17</b>	cy	30.00	510



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CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
<b>NEW ELEMENTARY SCHOOL</b>							
60	03300 Set anchor bolts grout plates	33	ea	125.00	4,125		
61	<u>Column footings F4</u>						
62	02200 Excavation	233	cy	8.00	1,864		
63	02200 Store on site for reuse	233	cy	6.00	1,398		
64	02200 Backfill with existing fill	204	cy	8.00	1,632		
65	03300 Formwork	744	sf	6.05	4,501		
66	03300 Re-bar	1,552	lbs	0.90	1,397		
67	03300 Concrete material; 3,000 psi	29	cy	83.67	2,426		
68	03300 Placing concrete	29	cy	30.00	870		
69	03300 Set anchor bolts grout plates	31	ea	125.00	3,875		
70	<u>Column footings F5</u>						
71	02200 Excavation	304	cy	8.00	2,432		
72	02200 Store on site for reuse	304	cy	6.00	1,824		
73	02200 Backfill with existing fill	257	cy	8.00	2,056		
74	03300 Formwork	960	sf	6.05	5,808		
75	03300 Re-bar	2,336	lbs	0.90	2,102		
76	03300 Concrete material; 3,000 psi	47	cy	83.67	3,932		
77	03300 Placing concrete	47	cy	30.00	1,410		
78	03300 Set anchor bolts grout plates	32	ea	125.00	4,000		
79	<u>Column footings F5BR</u>						
80	02200 Excavation	95	cy	8.00	760		
81	02200 Store on site for reuse	95	cy	6.00	570		
82	02200 Backfill with existing fill	71	cy	8.00	568		
83	03300 Formwork	500	sf	6.05	3,025		
84	03300 Re-bar	1,460	lbs	0.90	1,314		
85	03300 Concrete material; 3,000 psi	24	cy	83.67	2,008		
86	03300 Placing concrete	24	cy	30.00	720		
87	03300 Set anchor bolts grout plates	10	ea	125.00	1,250		
88	<u>Column footings F6</u>						
89	02200 Excavation	564	cy	8.00	4,512		
90	02200 Store on site for reuse	564	cy	6.00	3,384		
91	02200 Backfill with existing fill	463	cy	8.00	3,704		
92	03300 Formwork	1,728	sf	6.05	10,454		
93	03300 Re-bar	6,056	lbs	0.90	5,450		
94	03300 Concrete material; 3,000 psi	101	cy	83.67	8,451		
95	03300 Placing concrete	101	cy	30.00	3,030		
96	03300 Set anchor bolts grout plates	48	ea	125.00	6,000		
97	<u>Column footings F6BR</u>						
98	02200 Excavation	211	cy	8.00	1,688		
99	02200 Store on site for reuse	211	cy	6.00	1,266		
100	02200 Backfill with existing fill	148	cy	8.00	1,184		
101	03300 Formwork	1,080	sf	6.05	6,534		
102	03300 Re-bar	4,542	lbs	0.90	4,088		
103	03300 Concrete material; 3,000 psi	63	cy	83.67	5,271		
104	03300 Placing concrete	63	cy	30.00	1,890		
105	03300 Set anchor bolts grout plates	18	ea	125.00	2,250		
106	<u>Column footings F7</u>						
107	02200 Excavation	156	cy	8.00	1,248		
108	02200 Store on site for reuse	156	cy	6.00	936		
109	02200 Backfill with existing fill	125	cy	8.00	1,000		
110	03300 Formwork	462	sf	6.05	2,795		
111	03300 Re-bar	2,203	lbs	0.90	1,983		
112	03300 Concrete material; 3,000 psi	31	cy	83.67	2,594		
113	03300 Placing concrete	31	cy	30.00	930		
114	03300 Set anchor bolts grout plates	11	ea	125.00	1,375		
115	<u>Column footings F7BR</u>						
116	02200 Excavation	28	cy	8.00	224		



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CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
<b>NEW ELEMENTARY SCHOOL</b>							
117	02200	Store on site for reuse	28	cy	6.00	168	
118	02200	Backfill with existing fill	18	cy	8.00	144	
119	03300	Formwork	140	sf	6.05	847	
120	03300	Re-bar	801	lbs	0.90	721	
121	03300	Concrete material; 3,000 psi	10	cy	83.67	837	
122	03300	Placing concrete	10	cy	30.00	300	
123	03300	Set anchor bolts grout plates	2	ea	125.00	250	
124		<u>Column footings F8</u>					
125	02200	Excavation	68	cy	8.00	544	
126	02200	Store on site for reuse	68	cy	6.00	408	
127	02200	Backfill with existing fill	48	cy	8.00	384	
128	03300	Formwork	256	sf	6.05	1,549	
129	03300	Re-bar	1,196	lbs	0.90	1,076	
130	03300	Concrete material; 3,000 psi	20	cy	83.67	1,673	
131	03300	Placing concrete	20	cy	30.00	600	
132	03300	Set anchor bolts grout plates	4	ea	125.00	500	
133		<u>Column footings F8BR</u>					
134	02200	Excavation	355	cy	8.00	2,840	
135	02200	Store on site for reuse	355	cy	6.00	2,130	
136	02200	Backfill with existing fill	224	cy	8.00	1,792	
137	03300	Formwork	1,680	sf	6.05	10,164	
138	03300	Re-bar	12,560	lbs	0.90	11,304	
139	03300	Concrete material; 3,000 psi	131	cy	83.67	10,961	
140	03300	Placing concrete	131	cy	30.00	3,930	
141	03300	Set anchor bolts grout plates	21	ea	125.00	2,625	
142		<u>Column footings 14'x7'</u>					
143	02200	Excavation	23	cy	8.00	184	
144	02200	Store on site for reuse	23	cy	6.00	138	
145	02200	Backfill with existing fill	12	cy	8.00	96	
146	03300	Formwork	126	sf	6.05	762	
147	03300	Re-bar	1,047	lbs	0.90	942	
148	03300	Concrete material; 3,000 psi	11	cy	83.67	920	
149	03300	Placing concrete	11	cy	30.00	330	
150	03300	Set anchor bolts grout plates	2	ea	125.00	250	
151		<u>Miscellaneous</u>					
152	03300	Form key in footing	1,921	lf	4.00	7,684	
153	03300	Parge exposed concrete foundation wall	2,882	sf	2.50	7,205	
154	02200	Gravel fill to bottom of footings	203	cy	24.00	4,872	
155	03300	<u>Piers/Pilasters; 24" x 12"</u>					
156	03300	Formwork	1,792	sf	8.00	14,336	
157	03300	Re-bar	10,080	lbs	0.90	9,072	
158	03300	Concrete material; 3,000 psi	35	cy	83.67	2,928	
159	03300	Placing concrete	35	cy	30.00	1,050	
160	03300	<u>Bridge pier and footing</u>					
161	03300	Formwork	570	sf	15.00	8,550	
162	03300	Re-bar	1,800	lbs	0.90	1,620	
163	03300	Concrete material; 3,000 psi	20	cy	83.67	1,673	
164	03300	Placing concrete	20	cy	250.00	5,000	
165		SUBTOTAL					\$603,898
166							
167	<b>A1020</b>	<b>SPECIAL FOUNDATIONS</b>					
168		<b>No Work in this section</b>					
169		SUBTOTAL					
170							
171	<b>A1030</b>	<b>LOWEST FLOOR CONSTRUCTION</b>					
172		<u>New Slab on grade, 5" thick</u>					
173	02200	Gravel fill, 9"	1,763	cy	24.00	42,312	



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<b>NEW ELEMENTARY SCHOOL</b>							
174	07210 Rigid insulation	63,476	sf	1.87	118,700		
175	07210 Vapor barrier	63,476	sf	0.50	31,738		
176	07210 Compact existing sub-grade	63,476	sf	0.50	31,738		
177	03300 Mesh reinforcing 15% lap	72,997	sf	0.55	40,148		
178	03300 Concrete - 5" thick; 4,000 psi	1,037	cy	88.82	92,106		
179	03300 Placing concrete	1,037	cy	30.00	31,110		
180	03300 Finishing and curing concrete	63,476	sf	1.30	82,519		
181	03300 Control joints - saw cut	63,476	sf	0.10	6,348		
182	07900 Isolation joints at columns	896	lf	2.50	2,240		
183	<u>Elevator Pits</u>						
184	02200 Excavation for elevator pit	84	cy	8.00	672		
185	02200 Remove off site	84	cy	15.00	1,260		
186	02200 Backfill with gravel	4	cy	24.00	96		
187	Elevator pit walls						
188	03300 formwork	480	sf	7.95	3,816		
189	03300 reinforcement	720	lbs	0.90	648		
190	03300 concrete material	6	cy	88.82	533		
191	03300 placing concrete	6	cy	30.00	180		
192	Slab						
193	03300 formwork	60	sf	7.95	477		
194	03300 reinforcement	750	lbs	0.90	675		
195	03300 concrete material in slab	6	cy	88.82	533		
196	03300 placing concrete	6	cy	30.00	180		
197	07100 Bentonite waterstops	1	ls	500.00	500		
198	07100 Cementitious waterproofing to elevator pit	340	sf	12.00	4,080		
199	<u>Miscellaneous</u>						
200	03300 Depressed slab	12,817	sf	2.00	25,634		
201	03300 Equipment pads	1	ls	5,000.00	5,000		
202						\$523,243	
203							
204	<b>TOTAL - FOUNDATIONS</b>						<b>\$1,127,141</b>
205							
206							
207	<b>A20 BASEMENT CONSTRUCTION</b>						
208							
209	<b>A2010 BASEMENT FILL</b>						
210	<b>No Work in this section</b>						
211	SUBTOTAL						
212							
213	<b>A2020 BASEMENT WALLS</b>						
214	<b>No Work in this section</b>						
215	SUBTOTAL						
216							
217	<b>TOTAL - BASEMENT CONSTRUCTION</b>						
218							
219							
220	<b>B10 SUPERSTRUCTURE</b>						
221							
222	<b>B1010 FLOOR CONSTRUCTION</b>						
223		718	tns		-		
224	<u>Floor Structure - Steel:</u>						
224	05120 Structural steel; including bracing	13.96	lbs/sf		-		
225	05120 Shear studs	9,843	ea	2.50	24,608		
226	<u>Floor Structure</u>						
227	05120 2" 18 Ga. Metal galvanized floor Deck	39,371	sf	2.45	96,459		
228	03300 WWF reinforcement	45,277	sf	0.55	24,902		
229	03300 Concrete Fill to metal deck; 5-1/2" thick; Normal Weight	798	cy	88.82	70,878		



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<b>NEW ELEMENTARY SCHOOL</b>								
230	03300	Place and finish concrete	39,371	sf	1.90	74,805		
231	03300	Rebar to decks	11,811	lbs	0.90	10,630		
232		<u>Miscellaneous</u>						
233		Bridge connection						
234	05120	Window support frames	15	tns	2,800.00	42,000		
235	05120	Truss frame and columns; galvanized; painted	20	tns	4,500.00	90,000		
236	05120	Aluminum grate flooring	950	sf	70.00	66,500		
237	05500	SS guardrails at bridge	200	lf	175.00	35,000		
238	05500	SS infill panel and gate	1	ls	2,000.00	2,000		
239	05500	Aluminum column covers	4	loc	1,900.00	7,600		
240	07250	Fire proofing to beams and columns; Type 11B construction - not required	39,371	sf	1.90	NIC		
241	07250	Fire proofing to stairs	1	ls	10,000.00	10,000		
242	07270	Fire stopping floors	1	ls	5,000.00	5,000		
243		SUBTOTAL					\$2,486,782	
244								
245		<b>B1020 ROOF CONSTRUCTION</b>						
246		<u>Roof Structure - Steel:</u>						
247	05120	Structural steel - included in floor construction above						
248	05120	Gymnasium roof joists and bracing	30	tns	2,800.00	84,000		
249	05120	Structure at bridge storage room	1,500	sf	10.00	15,000		
250		<u>Roof Structure</u>						
251	05120	1-1/2" 18 Ga. galvanized Metal Roof Deck	58,984	sf	2.25	132,714		
252	05120	Acoustical deck over gymnasium; 3" thick 20/20	6,400	sf	5.00	32,000		
253	03300	WWF reinforcement	3,450	sf	0.55	1,898		
254	03300	Concrete Fill to metal deck; 6" thick; NW	58	cy	88.82	5,152		
255	03300	Place and finish concrete	3,000	sf	1.90	5,700		
256		<u>Roof Structure to bridge storage</u>						
257	05120	6" CIP concrete slab	1,500	sf	15.00	22,500		
258		<u>Miscellaneous</u>						
259	05120	Steel for entrance brick archway etc.	1,600	sf	20.00	32,000		
260	05120	Allowance for AESS at gym	1	ls	10,000.00	10,000		
261	05120	Galvanizing relieving angles etc.	1	ls	15,000.00	15,000		
262	07250	Fire proofing to beams, columns and decks; Type 11B construction - not required	58,984	sf	2.40	NIC		
263		SUBTOTAL					\$355,964	
264								
265	<b>TOTAL - SUPERSTRUCTURE</b>							<b>\$2,842,746</b>
266								
267								
268	<b>B20 EXTERIOR CLOSURE</b>							
269								
270		<b>B2010 EXTERIOR WALLS</b>						
271		<u>Interior skin</u>						
272	05400	6" metal stud backup	40,103	sf	6.00	240,618		
273	04200	CMU backup at gymnasium, 13'	2,860	sf	12.75	36,465		
274	07210	Spray foam insulation, 2"	40,103	sf	1.77	70,982		
275	07210	Wall Insulation, Rigid, isocyanurate,	42,963	sf	2.25	96,667		
276	07150	Air barrier	42,963	sf	3.00	128,889		
277	07150	Air barrier/flashing at windows	5,444	lf	5.00	27,220		
278	06100	Gypsum Sheathing	40,103	sf	2.00	80,206		
279	09250	Drywall lining to interior face of stud backup	40,103	sf	1.53	61,358		
280		<u>Exterior skin</u>						
281	07461	Metal siding - flat seam sheet metal	4,218	sf	23.00	97,014		
282	04200	Brick veneer with patterning; utility brick	12,977	sf	22.00	285,494		
283	04200	Decorative CMU veneer	25,768	sf	18.00	463,824		
284	04200	Cast stone sills/bands on bldg	1,120	lf	55.00	61,600		
285	04200	Decorative CMU veneer to bridge storage and entry gate	1,333	sf	22.00	29,326		



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<b>NEW ELEMENTARY SCHOOL</b>							
286	04200	Cast stone cap at bridge and entry gate walls	240	lf	55.00	13,200	
287	04200	Masonry Expansion Joint	180	lf	25.00	4,500	
288	04200	Mockups	1	ls	15,000.00	15,000	
289		<u>Miscellaneous</u>					
290	04200	Lintels in masonry openings - labor and material	25,768	sf	1.00	25,768	
291	07461	Acoustic roof screens; Metal Panel including HSS support framing; av 8 feet high	4,320	sf	48.00	207,360	
292	05500	Allowance for aluminum signs; (2) locations	1	ls	12,000.00	12,000	
293	05500	Metal clock	1	ls	4,000.00	4,000	
294	04200	Relieving angle - included in steel QTY					
295	04200	Expansion joint at exterior walls	1	ls	10,000.00	10,000	
296	04200	Staging to exterior wall	54,122	sf	1.50	81,183	
297		SUBTOTAL					\$2,052,674
298							
299	<b>B2020</b>	<b>WINDOWS</b>	<b>9,647</b>	sf		-	
300		<b>Curtainwall and Aluminum windows</b>					
301	08520	AL 01 - 2' - 0" x 2' - 8"	43	sf	62.00	2,666	
302	08520	AL 02 - 2' - 0" x 5' - 4"	149	sf	62.00	9,238	
303	08520	AL 03 - 2' - 0" x 10' - 6"	651	sf	62.00	40,362	
304	08520	AL 04 - 2' - 0" x 7' - 4"	1,583	sf	62.00	98,146	
305	08520	AL 04A - 2' - 0" x 7' - 4"	147	sf	62.00	9,114	
306	08520	AL 05 - 4' - 0" x 2' - 8"	11	sf	62.00	682	
307	08520	AL 06 - 4' - 8" x 7' - 4"	69	sf	62.00	4,278	
308	08520	AL 07 - 4' - 0" x 7' - 4"	59	sf	62.00	3,658	
309	08520	AL 08 - 4' - 0" x 7' - 4"	1,378	sf	62.00	85,436	
310	08520	AL 09 - 4' - 4" x 7' - 4"	32	sf	62.00	1,984	
311	08520	AL 10 - 5' - 0" x 7' - 0"	35	sf	62.00	2,170	
312	08520	AL 11 - 6' - 8" x 7' - 4"	98	sf	62.00	6,076	
313	08520	AL 12 - 6' - 8" x 10' - 6"	70	sf	62.00	4,340	
314	08520	AL 13 - 8' - 0" x 7' - 4"	1,056	sf	62.00	65,472	
315	08520	AL 14 - 4' - 0" x 7' - 4"	29	sf	62.00	1,798	
316	08520	AL 15 - 10' - 0" x 10' - 4"	103	sf	62.00	6,386	
317	08520	AL 16 - 4' - 0" x 7' - 8"	61	sf	62.00	3,782	
318	08520	AL 17 - 9' - 0" x 7' - 4"	66	sf	62.00	4,092	
319	08520	AL 18 - 10' - 0" x 7' - 4"	73	sf	62.00	4,526	
320	08520	AL 19 - 10' - 0" x 8' - 4"	166	sf	62.00	10,292	
321	08520	AL 20 - 10' - 8" x 7' - 4"	78	sf	62.00	4,836	
322	08520	AL 21 - 10' - 0" x 24' - 0"	2,400	sf	62.00	148,800	
323	08520	AL 22 - 12' - 0" x 7' - 4"	88	sf	62.00	5,456	
324	08520	AL 23 - 12' - 0" x 10' - 8"	256	sf	62.00	15,872	
325	08520	AL 24 - 14' - 0" x 8' - 0"	448	sf	62.00	27,776	
326	08520	AL 25 - 12' - 0" x 14' - 8"	176	sf	62.00	10,912	
327	08520	AL 26 - 20' - 0" 15' - 8"	314	sf	62.00	19,468	
328	08520	AL 27 - 2' - 0"	8	sf	62.00	496	
329	08520	CW 4 - 20	1,546	sf	75.00	115,950	
330	05500	Aluminum sun shade at S. facing windows	694	lf	120.00	83,280	
331	10200	L-1 Louvers	123	sf	45.00	5,535	
332	07900	Backer rod & double sealant	5,444	lf	3.80	20,687	
333	06100	Wood blocking at openings	5,444	lf	2.50	13,610	
334		SUBTOTAL					\$837,176
335							
336	<b>B2030</b>	<b>EXTERIOR DOORS</b>					
337	84113	B - Alum glazed entrance doors including frame and hardware; single door	18	ea	2,200.00	39,600	



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<b>NEW ELEMENTARY SCHOOL</b>							
338	08100 A - Fiberglass doors and hardware; single in CW frame above	6	ea	980.00	5,880		
339	08100 HM doors, frame and hardware to bridge storage	1	pr	2,400.00	2,400		
340	07900 Backer rod & double sealant	323	lf	3.80	1,227		
341	06100 Wood blocking at openings	323	lf	2.50	808		
342							
343							
344							
345							
346							
347							
348							
349							
350							
351	07500 Flat roofing TPO roof membrane fully adhered	54,170	sf	4.15	224,806		
352	07240 Insulation; R-30	54,170	sf	4.00	216,680		
353	07240 Insulation tapered	1	ls	5,000.00	5,000		
354	07240 1/2" dens-deck protection board	54,170	sf	1.15	62,296		
355	07240 Reinforced vapor barrier	54,170	sf	0.45	24,377		
356							
357	07610 Sloped roofing Asphalt roofing	11,214	sf	7.00	78,498		
358	07610 Slip sheet rosin paper	11,214	sf	0.50	5,607		
359	06100 Nailers board on 3/4" sleepers spaced 18"oc; screwed through insulation to metal deck (6" deep)	11,214	sf	4.50	50,463		
360	07610 Reinforced vapor barrier	11,214	sf	0.45	5,046		
361	07240 Rigid insulation 2 layers	11,214	sf	3.50	39,249		
362	07240 1/2" dens-deck protection board	11,214	sf	1.15	12,896		
363	06100 Rough blocking	16,235	lf	3.00	48,705		
364							
365	07660 Miscellaneous Roofing Roofing at bridge storage	350	sf	15.00	5,250		
366	07660 Edge detail at flat roof edge	2,287	lf	25.00	57,175		
367	07660 Roof edge detail at asphalt roof	960	lf	22.00	21,120		
368	04200 Metal flashing to walls at low roof	1,100	lf	15.00	16,500		
369	07620 Gutters	550	lf	14.00	7,700		
370	07620 Down spouts	367	lf	12.00	4,404		
371	07620 Splash blocks	12	ea	110.00	1,320		
372	07620 Snow Guards	550	lf	60.00	33,000		
373	05500 Roof ladder	2	loc	1,100.00	2,200		
374	07500 Walk pads	1	ls	5,000.00	5,000		
375							
376							
377							
378	08600 B3020 ROOF OPENINGS Skylights including curbs; USO1 and o2 - 4ft x 4ft	352	sf	65.00	22,880		
379	08600 Skylights including curbs; USO3 - 6ft x 6ft	72	sf	65.00	4,680		
380	07620 Flashing to Skylights	568	lf	12.00	6,816		
381	07830 Roof Hatch	2	loc	2,000.00	4,000		
382							
383							
384							
385							
386							
387							
388							
389							
390	09250 C1010 PARTITIONS o1A - 6" MS, insulation, 2 layers FR GWB, insulation	40,455	sf	8.56	346,295		
391	09250 o1C - 8" MS, insulation, 2 layers FR GWB, insulation	15,433	sf	9.56	147,539		
392	09250 o2A - 6" MS, insulation, 3 layers FR GWB, insulation	1,211	sf	9.56	11,577		
393	09250 o3A - 6" MS, insulation, 4 layers FR GWB, insulation	8,655	sf	10.56	91,397		
						\$49,915	
<b>TOTAL - EXTERIOR CLOSURE</b>							<b>\$2,939,765</b>
<b>B30 ROOFING</b>							
<b>B3010 ROOF COVERINGS</b>							
<b>B3020 ROOF OPENINGS</b>							
						\$927,292	
<b>TOTAL - ROOFING</b>							<b>\$965,668</b>
<b>C10 INTERIOR CONSTRUCTION</b>							
<b>C1010 PARTITIONS</b>							



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CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
<b>NEW ELEMENTARY SCHOOL</b>							
394	09250	03C - 8" MS, insulation, 4 layers FR GWB, insulation	21,333	sf	10.56	225,276	
395	09250	06A - 3-5/8" MS, insulation, 1 layer FR GWB, insulation	11,344	sf	5.78	65,568	
396	09250	06B - 3-5/8" MS, insulation, 1 layer FR GWB, insulation	12,122	sf	5.78	70,065	
397	09250	06C - 8" MS, insulation, 1 layer FR GWB, insulation	4,655	sf	8.03	37,380	
398	09250	08a - 3 5/8" MS, insulation, 2 layers FR GWB	4,244	sf	8.56	36,329	
399	09250	12 A - 2 rows 3-5/8" MS, 2 rows insulation, 4 layers FR insulation	2,064	sf	13.06	26,956	
400	09250	14 A - low wall w/ 6" studs, wood cap	124	lf	30.00	3,720	
401	04200	16A - CMU; 8" thick	2,655	sf	11.20	29,736	
402	09250	25C - 8" MS, insulation, 4 layers FR GWB each side	1,255	sf	10.56	13,253	
403	04200	CMU; 8" thick acoustic CMU in gymnasium; Premium over reg CMU	1,988	sf	6.00	11,928	
404	09250	Shaftwall at elevator (CMU)	905	sf	15.00	13,575	
405	07900	Sealants & caulking at partitions	1	ls	3,000.00	3,000	
406	06100	Rough blocking	9,181	lf	3.00	27,543	
407		SUBTOTAL					\$1,161,137
408							
409		<b>C1020 INTERIOR DOORS</b>					
410	08140	A - G Solid Core Wood Doors - 3' to 3'-6" wide	218	ea	325.00	70,850	
411	08140	A Solid Core Wood Doors - 4'	8	ea	325.00	2,600	
412	08140	HM Doors (not identified)	10	ea	300.00	3,000	
413	08100	Frame 1/A1 - HM single	144	ea	215.00	30,960	
414	08100	Frame 2 / 2A - HM double	11	ea	280.00	3,080	
415	08100	Frame 3 - single HM w/ 10" sidelight	69	ea	550.00	37,950	
416	08100	Frame 4 - single HM w/ transom and 10" sidelight	1	ea	700.00	700	
417	08710	Hardware sets	236	ea	550.00	129,800	
418	84113	B - Alum glazed vestibule doors including frame and hardware; single door	17	ea	2,200.00	37,400	
419	08800	B - G - Vision /louver panels	118	loc	225.00	26,550	
420	08330	Classroom bay coiling doors - 2'-1" x 7'-4"	11	loc	1,575.00	17,325	
421	08330	Classroom bay coiling doors - 4'-1" x 7'-4"	8	loc	2,625.00	21,000	
422	08330	RD1 - stainless coiling doors - 6' x 9'	3	loc	3,500.00	10,500	
423	09900	Paint doors and frames	255	ea	70.00	17,850	
424	07900	Sealants & caulking	255	ea	51.00	13,005	
425	08305	Allowance for access doors	1	ls	3,000.00	3,000	
426		SUBTOTAL					\$425,570
427							
428		<b>C1030 SPECIALTIES / MILLWORK</b>					
429	10160	Toilet Partitions; handicapped; Phenolic; including grab bars	8	ea	1,300.00	10,400	
430	10160	Toilet Partitions; Reg stall; Phenolic	16	ea	1,100.00	17,600	
431	10160	Toilet Partitions; Urinal screen; Phenolic	4	ea	1,100.00	4,400	
432	05500	Miscellaneous metal to ceiling supported toilet partitions	24	ea	200.00	4,800	
433	06100	Backer panels in electrical closets	1	ls	1,000.00	1,000	
434		Visual Display Boards					
435	010100	4' and 8' Marker boards	3,168	sf	15.00	47,520	
436	010100	4' and 8' Tackboards	2,736	sf	12.00	32,832	
437	010100	IWB	47	ea	3,000.00	F,F&E	
438	06200	Ramp to Cafe Stage	120	sf	30.00	3,600	
439	06200	Wall mounted handrail to ramp/stairs to Cafe Stage	44	lf	50.00	2,200	
440	06400	Window sill; Plam	1,120	lf	26.00	29,120	
441	10400	Building directory	2	loc	3,000.00	6,000	
442	10400	Bronze dedication plaque	1	loc	2,500.00	2,500	
443	06400	Staff mailboxes/casework	1	ls	3,500.00	3,500	
444	10400	Room Signs	255	loc	75.00	19,125	



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CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST	
<b>NEW ELEMENTARY SCHOOL</b>								
445	10475	34	ea	350.00	11,900			
446	12600	580	opng	160.00	92,800			
447	06400	260	lf	190.00	49,400			
448	06400	725	lf	15.00	10,875			
449	06400	985	lf	12.00	11,820			
450	06400	250	sf	50.00	12,500			
451	06400	234	sf	50.00	11,700			
452	06400	24	lf	400.00	9,600			
453	06400	1	loc	1,600	1,600			
454	06400	1	ls	11,200	11,200			
455	06400	124	lf	12.00	1,488			
456	09900	124	lf	4.00	496			
457	08800	80	sf	200.00	16,000			
458	08800	108	sf	55.00	5,940			
459	08800	60	sf	55.00	3,300			
460	08800	49	sf	55.00	2,695			
461	08800	24	sf	55.00	1,320			
462	08800	216	sf	55.00	11,880			
463	08800	198	sf	60.00	11,880			
464	08800	109	sf	55.00	5,995			
465	08800	376	sf	55.00	20,680			
466	08800	20	sf	75.00	1,500			
467	08800	26	sf	55.00	1,430			
468	08800	23	sf	55.00	1,265			
469	08800	252	sf	55.00	13,860			
470	08800	60	sf	55.00	3,300			
471	12320	12	loc	3,500.00	42,000			
472	10226	684	sf	32.00	21,888			
473	10226	540	sf	32.00	NIC			
474	10226	38	lf	80.00	3,040			
475	10800	1	ls	1,500.00	1,500			
476	10800	3	rms	900.00	2,700			
477	10800							
478	10800	8	rms	3,000.00	24,000			
479	10800	20	rms	500.00	10,000			
480	05500	1	ls	3,000.00	3,000			
481	05500	102,847	sf	0.25	25,712			
482	07900	102,847	sf	0.20	20,569			
483						\$665,430		
484								
485	<b>TOTAL - INTERIOR CONSTRUCTION</b>						<b>\$2,252,137</b>	
486								
487								
488	<b>C20 STAIRCASES</b>							
489								
490	<b>C2010 STAIR CONSTRUCTION</b>							
491	05510	5	flt	13,000.00	65,000			
492	05500	30	lfr	80.00	2,400			
493	03300	5	flt	500.00	2,500			
494						\$69,900		
495								
496	<b>C2020 STAIR FINISHES</b>							
497	09650	650	lfr	18.90	12,285			



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CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
<b>NEW ELEMENTARY SCHOOL</b>							
498	09650	Rubber to landings	1,373	sf	5.50	7,552	
499	09900	Paint to staircases	5	flt	1,250.00	6,250	
500		SUBTOTAL					\$26,087
501							
502		<b>TOTAL - STAIRCASES</b>					<b>\$95,987</b>
503							
504							
505		<b>C30 INTERIOR FINISHES</b>					
506							
507		<b>C3010 WALL FINISHES</b>					
508	09900	Paint to GWB	171,761	sf	0.50	85,881	
509	09900	Paint to CMU	9,075	sf	0.70	6,353	
510	09900	High Performance Paint to corridor walls, stairways and toilet rooms	23,793	sf	1.25	29,741	
511	09510	Acoustical wall panels in music room, activity and media	955	sf	16.00	15,280	
512	09510	Acoustical wall panels in gym	1,411	sf	14.00	19,754	
513	09510	Tackable surface above lockers	2,900	sf	1.50	4,350	
514	09300	Ceramic tile to corridors, stairs, cafeteria	7,566	sf	9.80	74,147	
515	09300	Glazed Wall tile to bathroom walls - full height at wet walls only, wainscot	7,744	sf	8.40	65,050	
516	09510	Wood panels at media, activity, cafeteria, classrooms, lobbies	4,853	sf	32.00	155,296	
517		SUBTOTAL					\$455,852
518							
519		<b>C3020 FLOOR FINISHES</b>					
520	09650	VCT flooring	65,431	sf	2.40	157,034	
521	09650	Barrier II additive to floor slab	67,657	sf	1.25	NIC	
522	09300	G3 / G4 Slip resistant vinyl floor	1,755	sf	15.22	26,711	
523	09550	RAF - Resilient Athletic Flooring including markings	5,610	sf	11.50	64,515	
524	09550	B3 Wood flooring at stage; including sanding and finishing	850	sf	16.00	13,600	
525	09680	C2 Carpet	368	sy	30.00	11,040	
526	09680	Raised floor system; 12" high	4,000	sf	12.00	48,000	
527	09300	F1, F2, F3 - Ceramic Tile	3,433	sf	10.80	37,076	
528	09650	B-1 Architectural concrete	5,766	sf	6.50	37,479	
529	09650	Sealed concrete	2,100	sf	1.20	2,520	
530	09550	Ventilated wood base at Gym	311	lf	9.00	2,799	
531	09550	Wood base	135	lf	6.00	810	
532	09650	Ceramic Tile Base	2,134	lf	9.00	19,206	
533	09650	Rubber base	13,244	lf	2.00	26,488	
534		SUBTOTAL					\$447,278
535							
536		<b>C3030 CEILING FINISHES</b>					
537	09510	ACT ceilings; 2' x 4'	25,988	sf	2.50	64,970	
538	09510	ACT ceilings; 2' x 4', sloped	28,670	sf	2.75	78,843	
539	09510	ACT ceilings; 2' x 8'	8,655	sf	7.00	60,585	
540	09510	ACT ceilings; 2' x 8', sloped	2,210	sf	7.50	16,575	
541	09250	Acoustic reflectors/soffit in cafeteria	300	sf	85.00	25,500	
542	09250	Drywall ceilings	8,770	sf	7.50	65,775	
543	09250	U soffits	224	sf	30.00	6,720	
544	09250	L soffits	1,771	lf	26.00	46,046	
545	09250	Drop soffits	1,968	lf	20.00	39,360	
546	09250	Skylight sloped soffits	70	lf	45.00	3,150	
547	09250	Light shelf; 15" deep on brackets	585	lf	25.00	14,625	
548	09900	Paint to GWB ceilings and soffits	21,982	sf	0.75	16,487	
549	09900	Paint to exposed structure	4,144	sf	2.20	9,117	
550	09900	Paint to exposed structure to gymnasium	5,610	sf	2.20	12,342	
551		SUBTOTAL					\$460,095
552							
553		<b>TOTAL - INTERIOR FINISHES</b>					<b>\$1,363,225</b>
554							
555							
556		<b>D10 CONVEYING SYSTEMS</b>					



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CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST	
<b>NEW ELEMENTARY SCHOOL</b>								
557								
558	<b>D1010 ELEVATOR</b>							
559	14200 Passenger elevator, 2 stop	1	ea	65,000.00	65,000			
560	05500 Pit ladders	1	ea	900.00	900			
561	05500 Sill angles	24	lf	25.00	600			
562						\$66,500		
563								
564	<b>TOTAL - CONVEYING SYSTEMS</b>							<b>\$66,500</b>
565								
566								
567	<b>D20 PLUMBING</b>							
568								
569	<b>D20 PLUMBING, GENERALLY</b>							
570	15100 <u>Equipment</u>							
571	15100 Gas fired water heater with tank	2	ea	17,500.00	35,000			
572	15100 Hot water circulator pump	2	ea	2,000.00	4,000			
573	15100 Water meter	1	ea	4,266.00	4,266			
574	15100 Reduce pressure backflow preventer	1	ea	1,200.00	1,200			
575	15100 Mixing valve	1	ea	500.00	500			
576	15100 Interior grease trap	3	ea	3,000.00	9,000			
577	15100 Connection to gas meter	1	ea	750.00	750			
578	15100 Hose bibb	9	ea	150.00	1,350			
579	15100 Wall hydrant	9	ea	250.00	2,250			
580	15100 Floor drain	20	ea	550.00	11,000			
581	15100 Trap primer	20	ea	325.00	6,500			
582	15100 Roof drain	32	ea	650.00	20,800			
583	15100 <u>Plumbing Fixtures</u>							
584	15100 Water closet	40	ea	1,200.00	48,000			
585	15100 Lavatory	44	ea	850.00	37,400			
586	15100 Stainless steel sink	44	ea	725.00	31,900			
587	15100 Stainless steel sink with sediment interceptor	2	ea	825.00	1,650			
588	15100 Urinal	8	ea	1,500.00	12,000			
589	15100 Water cooler	4	ea	3,800.00	15,200			
590	15100 Mop sink	4	ea	900.00	3,600			
591	15100 Rough-in and connection to kitchen equipment	1	ls	30,000.00	30,000			
592	15100 Acid neutralization tank	1	ls	9,000.00	9,000			
593	15100 <u>Domestic Water Supply And Return, Type L Copper Pipe</u>							
594	15100 Domestic water pipe with fittings & hangers	8,000	lf	30.00	240,000			
595	15100 Fixture Rough In	144	ea	100.00	14,400			
596	15100 <u>Pipe insulation</u>							
597	15100 Pipe insulation	8,000	lf	6.00	48,000			
598	15100 <u>Sanitary Waste And Vent Pipe w/ Hangers</u>							
599	15100 Sanitary waste & vent pipe with fittings & hangers	6,800	lf	32.00	217,600			
600	15100 Fixture Rough In	144	ea	100.00	14,400			
601	15100 <u>Storm Drainage, Hubless Cast Iron Pipe</u>							
602	15100 Storm pipe with fittings & hangers	3,873	lf	42.00	162,666			
603	15100 <u>Gas And Fuel Distribution Pipe</u>							
604	15100 Gas /oil pipe, schedule 40 steel							
605	15100 Gas pipe with fittings & hangers	1,000	lf	45.00	45,000			
606	15100 <u>Reimbursable</u>							
607	15100 Coordination & management	1	ls	18,000.00	18,000			
608	15100 Coring & patching	1	ls	2,000.00	2,000			
609	15100 Commissioning of system	1	ls	5,000.00	5,000			
610	15100 Seismic restraints	1	ls	20,000.00	20,000			
611	15100 Testing and sterilization	1	ls	2,000.00	2,000			
612	15100 Fees & permits	1	ls	10,000.00	10,000			
613						\$1,084,432		
614								
615	<b>TOTAL - PLUMBING</b>							<b>\$1,084,432</b>
616								
617								



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CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
<b>NEW ELEMENTARY SCHOOL</b>							
<b>D30 HVAC</b>							
<b>D30 HVAC, GENERALLY</b>							
15300	Heating equipment						
15300	Gas fired hot water boiler 532 MBH with controls	2	ea	16,000.00	32,000		
15300	Expansion tank	1	ea	720.00	720		
15300	Air separator tank	1	ea	1,080.00	1,080		
15300	Chemical treatment system	1	ea	6,344.00	6,344		
15300	Radiant heat panel	1,684	lf	125.00	210,500		
15300	Cabinet unit heater	15	ea	600.00	9,000		
15300	Unit heater	8	ea	400.00	3,200		
<u>Pumps</u>							
15300	Boiler circulation pump	2	ea	750.00	1,500		
15300	Hot water pump 170 GPM	2	ea	5,000.00	10,000		
15300	VFD's	2	ea	2,800.00	5,600		
<u>Air distribution</u>							
<u>Roof Top Unit</u>							
15300	RTU 12,285 CFM with gas fired furnace, DX cooling coil, ERW	1	ea	98,280.00	98,280		
15300	RTU 10,630 CFM with gas fired furnace, DX cooling coil, ERW	1	ea	85,040.00	85,040		
15300	RTU 6,250 CFM with gas fired furnace, DX cooling coil ERW	1	ea	50,000.00	50,000		
15300	RTU with gas fired furnace, DX cooling coil, ERW with hot gas reheat (Media center)	1	ea	32,000.00	32,000		
15300	RTU 6,605 CFM with gas fired furnace, DX cooling coil, ERW	1	ea	52,840.00	52,840		
15300	MUA 5,000 CFM	1	ea	10,000.00	10,000		
15300	HV 1,200 CFM with heating coil	1	ea	2,400.00	2,400		
<u>Ductless Split Units</u>							
15300	Split units telecom server/elect	5	ea	3,000.00	15,000		
<u>Exhaust fan</u>							
15300	EF-1 500 CFM	1	ea	625.00	625		
15300	EF-2 360 CFM	1	ea	450.00	450		
15300	EF-3 535 CFM	1	ea	668.00	668		
15300	EF-4 250 CFM	1	ea	312.00	312		
15300	EF-5 150 CFM	1	ea	188.00	188		
15300	EF-6 700 CFM	1	ea	875.00	875		
15300	EF-7 75 CFM	1	ea	100.00	100		
15300	EF-8 4,850 CFM	1	ea	6,062.00	6,062		
15300	EF-9 360 CFM	1	ea	450.00	450		
15300	EF-10 360 CFM	1	ea	450.00	450		
<u>Sheet metal &amp; Accessories</u>							
15300	Ductwork	84,000	lbs	8.00	672,000		
15300	Duct insulation	50,000	sf	3.50	175,000		
15300	Black iron welded kitchen exhaust allowance	2,000	lbs	16.00	32,000		
15300	Aluminum ductwork for dishwasher (allowance)	1,000	lbs	14.00	14,000		
15300	Breeching & flue	120	lf	150.00	18,000		
15300	RGD's	196	ea	75.00	14,700		
15300	Displacement diffuser	173	ea	300.00	51,900		
15300	Sound attenuator	5	ea	1,000.00	5,000		
15300	VAV boxes with HW coils	6	ea	1,400.00	8,400		
<u>Piping</u>							
Hot Water & Chilled Water Pipe							
15300	Hot water pipe with fittings & hangers	9,500	lf	30.00	285,000		
Refrigeration Pipe							
15300	Refrigeration pipe with fittings & hangers	700	lf	18.00	12,600		
Condensate Drain Pipe							
15300	Condensate drain pipe with fittings & hangers	400	lf	18.00	7,200		



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<b>NEW ELEMENTARY SCHOOL</b>								
672	15300	<u>Piping Insulation</u>	<b>10,800</b>	lf	6.00	64,800		
673	15300	<u>Controls (DDC)</u>						
674	15300	Automatic temperature controls / CO2	<b>102,847</b>	sf	3.50	359,965		
675	15300	<u>Balancing</u>						
676	15300	System testing & balancing	<b>102,847</b>	sf	0.55	56,566		
677	15300	<u>Reimbursable</u>						
678	15300	Coordination & management	<b>1</b>	ls	48,000.00	48,000		
679	15300	Coring & patching	<b>1</b>	ls	3,000.00	3,000		
680	15300	Equipment start-up and inspection	<b>1</b>	ls	5,000.00	5,000		
681	15300	Rigging & equipment rental	<b>1</b>	ls	15,000.00	15,000		
682	15300	Vibration & seismic restraints	<b>1</b>	ls	10,000.00	10,000		
683	15300	Fees & permits	<b>1</b>	ls	25,000.00	25,000		
684		SUBTOTAL					\$2,518,815	
685	<b>TOTAL - HVAC</b>							<b>\$2,518,815</b>
686								
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688								
689	<b>D40 FIRE PROTECTION</b>							
690								
691	<b>D40 FIRE PROTECTION, GENERALLY</b>							
692	15200	Double check valve assembly 8"	<b>1</b>	ea	8,000.00	8,000		
693	15200	Alarm check valve	<b>1</b>	ea	4,000.00	4,000		
694	15200	Fire department connection valve	<b>1</b>	ea	2,000.00	2,000		
695	15200	Floor control valve station	<b>7</b>	ea	1,600.00	11,200		
696	15200	Sprinkler head	<b>915</b>	ea	78.00	71,370		
697	15200	Branch sprinkler piping with fittings & hangers	<b>8,784</b>	lf	22.00	193,248		
698	15200	Main sprinkler piping with fittings & hangers	<b>2,928</b>	lf	26.00	76,128		
699	15200	<u>Reimbursable</u>						
700	15200	Coordination & management	<b>1</b>	ls	7,400.00	7,400		
701	15200	Hydraulic calculations	<b>1</b>	ls	4,000.00	4,000		
702	15200	Coring & patching	<b>1</b>	ls	2,000.00	2,000		
703	15200	Commissioning of system	<b>1</b>	ls	5,000.00	5,000		
704		SUBTOTAL					\$384,346	
705	<b>TOTAL - FIRE PROTECTION</b>							<b>\$384,346</b>
706								
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708								
709	<b>D50 ELECTRICAL</b>							
710								
711	<b>D5010 SERVICE &amp; DISTRIBUTION</b>							
712	<u>Normal Power</u>							
713	16100	Gear and distribution						
714	16100	Install utility company meter	<b>1</b>	ea	350.00	350		
715	16100	1200A 480/277V main switchboard	<b>1</b>	ls	25,000.00	25,000		
716	16100	600A 480/277V distribution panelboard	<b>2</b>	ea	5,500.00	11,000		
717	16100	225A 480/277V panelboard	<b>1</b>	ea	2,100.00	2,100		
718	16100	100A 480/277V panelboard	<b>6</b>	ea	1,600.00	9,600		
719	16100	45KVA k-13 rated dry type transformer	<b>2</b>	ea	5,950.00	11,900		
720	16100	30KVA k-13 rated dry type transformer	<b>2</b>	ea	5,100.00	10,200		
721	16100	30KVA dry type transformer	<b>4</b>	ea	4,140.00	16,560		
722	16100	225A 208/120V triple tub panelboard	<b>2</b>	ea	6,300.00	12,600		
723	16100	225A 208/120V double tub panelboard	<b>1</b>	ea	4,400.00	4,400		
724	16100	100A 208/120V double tub panelboard	<b>2</b>	ea	2,900.00	5,800		
725	16100	100A 208/120V panelboard	<b>5</b>	ea	1,600.00	8,000		
726	16100	TVSS	<b>5</b>	ea	350.00	1,750		
727	16100	Feeders						
728	16100	600A feed	<b>590</b>	lf	117.00	69,030		
729	16100	225A feed	<b>450</b>	lf	40.00	18,000		
730	16100	150A feed	<b>60</b>	lf	28.50	1,710		



60% Contract Documents Estimate

GFA

102,847

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
<b>NEW ELEMENTARY SCHOOL</b>							
731	16100 100A feed	540	lf	20.00	10,800		
732	16100 60A feed	150	lf	14.00	2,100		
733	16100 Grounding	1	ls	8,500.00	8,500		
734	<u>Emergency power</u>						
735	16100 125KW natural gas fueled 480/277V emergency generator set in weatherproof enclosure	1	ea	78,000.00	78,000		
736	16100 200A 480/277V automatic transfer switch	1	ea	5,600.00	5,600		
737	16100 100A 480/277V automatic transfer switch	1	ea	3,670.00	3,670		
738	16100 225A 480/277V panelboard	1	ea	2,100.00	2,100		
739	16100 100A 480/277V panelboard	2	ea	1,600.00	3,200		
740	16100 45KVA k-13 rated dry type transformer	1	ea	5,950.00	5,950		
741	16100 200A disconnect switch	1	ea	1,400.00	1,400		
742	16100 100A disconnect switch	1	ea	960.00	960		
743	16100 Feeders						
744	16100 200A feed	60	lf	37.00	2,220		
745	16100 150A feed	30	lf	28.50	855		
746	16100 100A feed	140	lf	20.00	2,800		
747	<u>UPS</u>						
748	16100 15kW UPS with 7 minute back-up	1	ea	10,000.00	10,000		
749	16100 225A 208/120V double tub panelboard	1	ea	4,400.00	4,400		
750	16100 100A fused disconnect switch	1	ea	960.00	960		
751	16100 EPO	1	ea	450.00	450		
752	16100 Feeders						
753	16100 100A feed	180	lf	20.00	3,600		
754	<u>Photovoltaic</u>						
755	16100 100.8KW Photovoltaic system	1	ls	500,000	ALTERNATE		
756	16100 50.4kw panel, flat roof	240	ea	Included above			
757	16100 50.4kw panel, sloped roof	156	ea	Included above			
758	16100 100A disconnect switch WP	2	ea	Included above			
759	16100 AC contactor	2	ea	Included above			
760	16100 AC PCU	2	ea	Included above			
761	16100 AC disconnect switch	2	ea	Included above			
762	16100 Combiner box DC WP, 20 circuit, wall mounted	2	ea	Included above			
763	16100 DC disconnect switch	2	ea	Included above			
764	16100 DC monitoring	2	ea	Included above			
765	16100 Inverter 60kW DC-AC	2	ea	Included above			
766	16100 Lightning arrester	2	ea	Included above			
767	16100 Pulse meter	2	ea	Included above			
768	16100 Weather station, wall mount	1	ea	Included above			
769	<u>Equipment Wiring</u>						
770	16100 Boiler 20A feed, connection, magnetic motor starter, & 30A FSS	2	ea	1,100.00	2,200		
771	16100 EF feed and connection	10	ea	1,000.00	10,000		
772	16100 Elevator 100A feed, connection, & 100A safety switch	1	ea	5,000.00	5,000		
773	16100 Elevator cab feed, connection, & safety switch	1	ea	1,200.00	1,200		
774	16100 HT feed & connection	2	ea	1,600.00	3,200		
775	16100 HV 20A feed, connection, & 30A FSS	1	ea	1,200.00	1,200		
776	16100 Kiln feed, connection, & safety switch	1	ea	1,500.00	1,500		
777	16100 MAU 20A feed, connection, & 30A FSS	1	ea	1,400.00	1,400		
778	16100 RTU feed, connection and FSS	5	ea	2,500.00	12,500		
779	16100 Split unit feed, connection and FSS	5	ea	1,500.00	7,500		
780	16100 Kitchen equipment wiring	1	ls	15,000.00	15,000		
781	16100 Boiler circulator pump feed and connection	2	ea	1,200.00	2,400		
782	16100 UH feed and connection	8	ea	900.00	7,200		
783	16100 CUH feed and connection	15	ea	750.00	11,250		
784	16100 Hot water circulator pump feed and connection	2	ea	1,200.00	2,400		
785	16100 Motorized basketball backboard feed and connection	6	ea	700.00	4,200		
786	16100 Motorized shade feed and connection	20	ea	850.00	17,000		
787	16100 Other equipment wiring	102,847	sf	0.50	51,424		



60% Contract Documents Estimate

GFA

102,847

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
<b>NEW ELEMENTARY SCHOOL</b>							
788	SUBTOTAL					\$512,139	
789							
790	<b>D5020 LIGHTING &amp; POWER</b>						
791	<u>Lighting &amp; Branch Power</u>						
792	16100 FC4	10	ea	180.00	1,800		
793	16100 FC8	4	ea	360.00	1,440		
794	16100 FP4	201	ea	320.00	64,320		
795	16100 FP14	4	ea	180.00	720		
796	16100 FP4D	276	ea	420.00	115,920		
797	16100 FP8	14	ea	600.00	8,400		
798	16100 FP8D	6	ea	700.00	4,200		
799	16100 FP18	24	ea	360.00	8,640		
800	16100 FS4	41	ea	160.00	6,560		
801	16100 FW1	75	ea	320.00	24,000		
802	16100 FWW1	39	ea	500.00	19,500		
803	16100 JC4	15	ea	350.00	5,250		
804	16100 K	12	ea	220.00	2,640		
805	16100 P24	41	ea	650.00	26,650		
806	16100 P30	24	ea	650.00	15,600		
807	16100 P40	24	ea	650.00	15,600		
808	16100 RC1	86	ea	180.00	15,480		
809	16100 RC1D	6	ea	280.00	1,680		
810	16100 RC2	64	ea	180.00	11,520		
811	16100 RC3	6	ea	250.00	1,500		
812	16100 RT22L	36	ea	360.00	12,960		
813	16100 RT22LD	3	ea	325.00	975		
814	16100 RT22LS	14	ea	325.00	4,550		
815	16100 Exit sign	89	ea	170.00	15,130		
816	16100 Roof top sconce at HVAC unit	7	ea	250.00	1,750		
817	16100 Lighting not yet defined	102,847	sf	0.30	30,854		
818	16100 Lighting controls						
819	16100 Single pole switch	238	ea	18.00	4,284		
820	16100 Three way switch	87	ea	24.00	2,088		
821	16100 Single pole dimmer switch	1	ea	55.00	55		
822	16100 Single pole low voltage switch	2	ea	18.00	36		
823	16100 Single pole switch WP	7	ea	23.00	161		
824	16100 Master switch	24	ea	50.00	1,200		
825	16100 Occupancy sensor with power pack	89	ea	100.00	8,900		
826	16100 Occupancy sensor with power pack (2-pole)	4	ea	120.00	480		
827	16100 Occupancy sensor, ceiling mount	42	ea	120.00	5,040		
828	16100 Photocell	57	ea	85.00	4,845		
829	16100 Time clock	2	ea	100.00	200		
830	16100 Low voltage daylight harvesting lighting control system	102,847	sf	1.25	128,559		
831	16100 Branch devices						
832	16100 Duplex receptacles	355	ea	18.00	6,390		
833	16100 Double duplex receptacle	223	ea	38.00	8,474		
834	16100 GFI receptacle	136	ea	25.00	3,400		
835	16100 GFI double duplex receptacle	82	ea	50.00	4,100		
836	16100 Branch devices not yet defined	102,847	sf	0.25	25,712		
837	16100 Device plate WP	9	ea	14.50	131		
838	16100 Device plate	1,349	ea	3.50	4,722		
839	16100 Device box	2,470	ea	20.00	49,400		
840	16100 3/4" EMT	12,350	lf	5.20	64,220		
841	16100 #12 THHN	55,580	lf	0.70	38,906		
842	16100 12-2 MC cable	27,000	lf	2.75	74,250		
843	16100 12-3 MC cable	9,000	lf	3.25	29,250		
844	16100 Other Lighting and branch circuitry	102,847	sf	0.70	71,993		
845	SUBTOTAL					\$954,435	



60% Contract Documents Estimate

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CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
<b>NEW ELEMENTARY SCHOOL</b>							
846							
847	<b>D5030 COMMUNICATION &amp; SECURITY SYSTEMS</b>						
848	<u>Telephone/Data/CATV</u>						
849	16100 Devices and cabling						
850	16100 Telephone	75	ea	20.00	1,500		
851	16100 2 port data device	79	ea	40.00	3,160		
852	16100 3 port data device	72	ea	60.00	4,320		
853	16100 4 port data device	24	ea	80.00	1,920		
854	16100 Teacher device	59	ea	220.00	12,980		
855	16100 Wireless access point	90	ea	50.00	4,500		
856	16100 TVE	62	ea	150.00	9,300		
857	16100 TVC	3	ea	180.00	540		
858	16100 Cat 6/fiber cabling	154,800	lf	1.00	154,800		
859	16100 RG-6 cabling	9,050	lf	0.60	5,430		
860	16100 Backbone cabling	600	lf	20.00	12,000		
861	16100 Rough-in						
862	16100 2 gang device box with conduit stub	45	ea	130.00	5,850		
863	16100 Device box with conduit stub	430	ea	110.00	47,300		
864	16100 MDF fit out	1	ea	3,000.00	3,000		
865	16100 IDF fit out	3	ea	1,500.00	4,500		
866	16100 Cable tray	130	lf	25.00	3,250		
867	16100 2-2" sleeves	45	ea	200.00	9,000		
868	16100 4" sleeve	27	ea	150.00	4,050		
869	16100 2-4" EMT	540	lf	39.00	21,060		
870	16100 Backboard	4	ea	350.00	1,400		
871	16100 Closet grounding	4	ea	500.00	2,000		
872	<u>Fire Alarm</u>						
873	16100 Fire alarm control panel	1	ea	25,000.00	25,000		
874	16100 Fire alarm remote annunciator	1	ea	1,200.00	1,200		
875	16100 Fire alarm terminal cabinet	3	ea	1,200.00	3,600		
876	16100 Electric bell	2	ea	250.00	500		
877	16100 Beacon	2	ea	250.00	500		
878	16100 Knox box	2	ea	300.00	600		
879	16100 Manual pull station	11	ea	80.00	880		
880	16100 Smoke detector	91	ea	100.00	9,100		
881	16100 Heat detector	1	ea	100.00	100		
882	16100 Duct smoke detector	8	ea	320.00	2,560		
883	16100 Audio visual device wall mount	115	ea	115.00	13,225		
884	16100 Audio visual device ceiling mount	55	ea	115.00	6,325		
885	16100 Visual device	29	ea	85.00	2,465		
886	16100 Remote alarm indicator	9	ea	75.00	675		
887	16100 CO detector	13	ea	95.00	1,235		
888	16100 FP equipment connection, allow	10	ea	150.00	1,500		
889	16100 Monitor control modules	34	ea	200.00	6,800		
890	16100 Wire guard	4	ea	35.00	140		
891	16100 Device box	400	ea	20.00	8,000		
892	16100 3/4" EMT	15,000	lf	5.20	78,000		
893	16100 #14 THHN	45,000	lf	0.54	24,300		
894	16100 FA cable	7,500	lf	0.65	4,875		
895	16100 Testing & programming	1	ls	9,000.00	9,000		
896	<u>Master Clock System</u>						
897	16100 Wireless master clock system head-end	1	ls	8,000.00	8,000		
898	16100 Clock	127	ea	120.00	15,240		
899	16100 Rough-in						
900	16100 Device box with conduit stub to ceiling	127	ea	85.00	10,795		
901	16100 12-3 cabling	3,810	lf	2.80	10,668		
902	16100 Head end rough-in	1	ls	2,500.00	2,500		
903	<u>Public Address System</u>						
904	16100 Head end	1	ls	10,000.00	10,000		



60% Contract Documents Estimate

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CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
<b>NEW ELEMENTARY SCHOOL</b>							
905	16100 Ceiling mounted speaker	237	ea	120.00	28,440		
906	16100 Loud speaker	7	ea	350.00	2,450		
907	16100 Speaker sphere	1	ea	1,500.00	1,500		
908	16100 Volume device	41	ea	80.00	3,280		
909	16100 Rough-in						
910	16100 Device box	286	ea	20.00	5,720		
911	16100 Sound cabling	17,200	lf	0.65	11,180		
912	<u>Cafetorium</u>						
913	16100 Audio/visual system	1	ls			AV contractor	
914	16100 AV rough-in	1	ls	20,000.00	20,000		
915	16100 Cafetorium dimming system:	1	ls	60,000.00	60,000		
916	16100 Crestron 24 dimmer cabinet	1	ls			Incl	
917	16100 Crestron dimming processor	1	ls			Incl	
918	16100 Dimmer cabinet installation	1	ea	1,500.00	1,500		
919	16100 Processor installation	1	ea	500.00	500		
920	16100 Emergency light transfer switch, allow 6 circuit	1	ea	5,400.00	5,400		
921	Control:						
922	16100 Leprecon LPC48 control console	1	ls			Incl	
923	16100 Stage manager panel	1	ea			Incl	
924	16100 Control receptacle plug station	3	ea			Incl	
925	16100 Back box	3	ea	20.00	60		
926	16100 3/4" conduit, allow	500	lf	5.20	2,600		
927	Distribution:						
928	16100 Batten mounted raceway, allow	3	ea			Incl	
929	16100 Raceway installation	3	ea	500.00	1,500		
930	16100 1 -1/4" conduit, allow	400	lf	8.93	3,572		
931	16100 #10 THHN, allow	7,500	lf	1.05	7,875		
932	16100 Terminations	120	ea	12.00	1,440		
933	Stage fixtures:						
934	16100 FT-1, Altman 6" fresnel	8	ea			Incl	
935	16100 FT-2, Altman 360Q	10	ea			Incl	
936	16100 FT-3, Altman R40-3 strip lights	6	ea			Incl	
937	16100 Initial lighting hand & focus	1	ls			Incl	
938	16100 System turn on & training	1	ls			Incl	
939	<u>Gymnasium</u>						
940	16100 Scoreboard with 2 shot clocks, controls, wiring, & installation	1	ea	15,000.00	15,000		
941	16100 Motorized backstop connection	6	ea	1,500.00	9,000		
942	16100 Motorized divider curtain connection	1	ea	1,200.00	1,200		
943	16100 Microphone	2	ea	450.00	900		
944	16100 Audio visual system	1	ls			AV contractor	
945	16100 AV rough-in	1	ls	10,000.00	10,000		
946	<u>Security System</u>						
947	16100 Security system head-end	1	ls	20,000.00	20,000		
948	16100 Intercom master station	1	ea	3,500.00	3,500		
949	16100 Card reader WP	8	ea	400.00	3,200		
950	16100 CCTV camera WP	9	ea	2,200.00	19,800		
951	16100 CCTV camera	15	ea	1,200.00	18,000		
952	16100 Door contact	32	ea	150.00	4,800		
953	16100 Electric lock	8	ea			Security contractor	
954	16100 Electric hinge	15	ea			Security contractor	
955	16100 Intercom	1	ea	1,000.00	1,000		
956	16100 Motion detector	61	ea	150.00	9,150		
957	16100 Request to exit	15	ea			Security contractor	
958	16100 Power transfer device with thermal switch (device by Security contractor)	8	ea	125.00	1,000		
959	16100 Device box with conduit stub	110	ea	85.00	9,350		



60% Contract Documents Estimate

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CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
<b>NEW ELEMENTARY SCHOOL</b>							
960	16100 Door junction box with 1" conduit stub	8	ea	150.00	1,200		
961	16100 3/4" EMT	3,500	lf	5.20	18,200		
962	16100 CAT-6	4,320	lf	1.00	4,320		
963	16100 Security cabling	10,000	lf	1.00	10,000		
964							
965							
966	<b>D5040 OTHER ELECTRICAL SYSTEMS</b>						
967	<u>Lightning protection</u>						
968	16100 UL Master label lightning protection	102,847	sf	0.45	46,281		
969	16100 <u>Miscellaneous</u>						
970	16100 Temp services	102,847	sf	0.55	56,566		
971	16100 Seismic restraints	1	ls	7,000.00	7,000		
972	16100 Coring & patching	1	ls	8,500.00	8,500		
973	16100 Fire stopping	1	ls	12,000.00	12,000		
974	16100 Fault current & coordination study	1	ls	10,000.00	10,000		
975	16100 Fees & Permits	1	ls	21,000.00	21,000		
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<b>TOTAL - ELECTRICAL</b>						<b>\$2,514,201</b>
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<b>E10 EQUIPMENT</b>
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<b>E10 EQUIPMENT, GENERALLY</b>							
984	11500 Gym wall pads	1,285	sf	9.63	12,375		
985	11500 Basketball backstops; swing up; electric operated	6	ea	6,500.00	39,000		
986	11500 Gymnasium dividing net; electrically operated	1,450	sf	16.28	23,606		
987	11500 Volleyball net and standards	1	ea	2,000.00	2,000		
988	11500 Bleachers	1	ea	60,000	NIC		
989	11970 Platform curtains and all associated miscellaneous metals for prop supports	1	ls	20,000	20,000		
990	11400 Kitchen equipment	1	ls	316,565	316,565		
991	11400 Refrigerator/freezer	1	ls	4,000.00	4,000		
992	11400 Microwave	2	loc	250.00	500		
993	11510 Kiln	1	ea	3,088.00	3,088		
994	10999 Electrically operated projection screen to cafetorium/library/Gym	4	loc	4,000.00	16,000		
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<b>TOTAL - EQUIPMENT</b>						<b>\$437,134</b>
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<b>E20 FURNISHINGS</b>
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<b>E2010 FIXED FURNISHINGS</b>							
1003	12670 Entry mats & frames - recessed with carpet/rubber strips - EM-R1	541	sf	22.00	11,902		
1004	12670 Entry mats & frames - recessed with carpet/rubber strips - EM-R2	1,148	sf	20.00	22,960		
1005	12500 Electrically Operated Shades in Media Rm.	800	sf	15.00	12,000		
1006	12500 Window blinds	3,553	sf	5.00	17,765		
1007	06400 Perimeter shelving to media center; 9ft high	30	lf	260.00	7,800		
1008	06400 Perimeter shelving to media center; 2'-6"ft high	60	lf	180.00	10,800		
1009	06400 Perimeter shelving to classrooms	1,150	lf	175.00	201,250		
1010	06400 Base cabinets and counter to classrooms	470	lf	300.00	141,000		
1011	06400 Upper Cabinets in classrooms	470	lf	140.00	65,800		
1012	06400 Tall storage to classrooms; 3ft wide	40	ea	900.00	36,000		
1013	06400 Tall storage to classrooms; 2ft wide	39	ea	900.00	35,100		
1014	06400 Counters and base cabinets in Art rooms	60	lf	300.00	18,000		
1015	06400 Upper Cabinets in art rooms	60	lf	140.00	8,400		



60% Contract Documents Estimate

GFA

102,847

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
<b>NEW ELEMENTARY SCHOOL</b>							
1016	06400 Storage at art room s	38	lf	400.00	15,200		
1017	06400 Storage at music room	90	lf	400.00	36,000		
1018	06400 Media center circulation desk	1	ls	15,000.00	15,000		
1019	06400 Library shelving					NIC	
1020							
1021							
							\$654,977
1022	<b>E2020 MOVABLE FURNISHINGS</b>						
1023	All movable furnishings to be provided and installed by owner						
1024							
1025							NIC
1026							
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60% Contract Documents Estimate

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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SITWORK

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60% Contract Documents Estimate

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
<b>SITWORK</b>							
51	03300	concrete paving; 6" thick speed table	291	sf	15.00	4,365	
52	03300	Detectable warning pavers	327	sf	12.00	3,924	
53	03300	concrete paving; at trash, transformer and generator ar	1	ls	6,000.00	6,000	
54	03300	Concrete unit pavers at main entrance; on bituminous concrete setting bed	4,178	sf	18.00	NIC	
55		<u>Site Improvements</u>					
56	03300	Concrete Retaining Wall with sand blasted finish; 1'-3" wide	792	lf	225.00	178,200	
57	03300	Brick veneer retaining wall	229	lf	327.00	74,883	
58	02200	Excavate and backfill with gravel for retaining walls	227	cy	45.00	10,215	
59	03300	Ramp and railings					
60	03300	Concrete ramp	283	sf	15.00	4,245	
61	03300	Concrete cheek walls to stairs/ramp	125	lf	150.00	18,750	
62	05500	SS guardrails at stairs/ramp	125	lf	175.00	21,875	
63	03300	Concrete stairs with granite treads	92	lfr	170.00	15,640	
64	03300	Concrete stairs	89	lfr	70.00	6,230	
65	03300	Concrete landing	80	sf	15.00	1,200	
66	03300	Concrete cheek walls to stairs	26	lf	150.00	3,900	
67	05500	SS guardrails at stairs	20	lf	175.00	3,500	
68		<u>Community Garden</u>					
69	02200	New planter soil	43	cy	36.00	NIC	
70	02610	Wood planter edging	895	lf	12.00	NIC	
71	02610	Stone dust path	1,934	sf	1.50	NIC	
72	03300	Hose bibs (4) and backflow preventer	1	ea	6,800.00	6,800	
73	02700	Play structure Area 1	1	ls	42,685.00	42,685	
74	02700	Play structure Area 2	1	ls	56,351.00	56,351	
75	02700	Play structure Area 3	1	ls	84,080.00	84,080	
76	02700	Base - wood fiber surface at play areas	15,455	sf	5.00	77,275	
77	02800	Wood guardrail	390	lf	45.00	17,550	
78	02800	Dumpster enclosure	1	loc	4,600.00	4,600	
79	02800	D1 & 2 - 4ft high chainlink fencing	328	lf	40.00	13,120	
80	02800	D3 - 5ft high chainlink fencing	474	lf	45.00	21,330	
81	02800	D4 - 5ft high chainlink fencing galv	495	lf	25.00	12,375	
82	02800	D5 & 6 - 6ft high wood fence	185	lf	65.00	12,025	
83	02700	Bicycle racks	16	ea	900.00	14,400	
84	02700	Flag pole; 40 feet high with integral winch	1	loc	3,650.00	3,650	
85	02700	Trash receptacles	3	loc	1,500.00	4,500	
86	02700	Bollards	7	loc	1,300.00	9,100	
87	02700	Benches - Steel	7	loc	1,900.00	13,300	
88	02700	New traffic signs	1	ls	7,500.00	7,500	
89		<u>Landscaping &amp; Plantings:</u>					
90	02830	Sand base at multi-purpose field; 6" thick	875	cy	35.00	30,625	
91	02830	New seeded areas	185,666	sf	0.20	37,133	
92	02830	Shade Tree; 3-3-1/2" Cal	96	ea	1,200.00	115,200	
93	02830	Evergreen Tree 14' - 15' high	25	ea	900.00	22,500	
94	02830	Flowering Tree; 14' - 15' ft high	21	ea	900.00	18,900	
95	02830	Decid shrubs	209	ea	65.00	13,585	
96	02830	Evergreen shrubs	30	ea	65.00	1,950	
97	02830	Groundcover	300	ea	25.00	7,500	
98	02830	Planting beds	3,988	sf	2.50	9,970	
99		SUBTOTAL					\$1,417,370
100							
101	<b>G30</b>	<b>CIVIL MECHANICAL UTILITIES</b>					



**60% Contract Documents Estimate**

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
<b>SITWORK</b>							
102	<u>Water supply</u>						
103 02550	Remove and dispose existing water service	1	ea	1,500.00		NIC	
104 02550	New water and fire DI piping; 8" (Cement lined)	536	lf	65.00		34,840	
105 02550	New water and fire DI piping; 4" (Cement lined)	536	lf	42.00		22,512	
106 02550	2" HDPE water pipe	1,120	lf	18.00		20,160	
107 02550	Irrigation ground hydrant	7	ea	2,600.00		18,200	
108 02550	Fire hydrant	1	ea	2,600.00		2,600	
109 02550	Connect to existing line (Wet Taps)	2	loc	2,000.00		4,000	
110 02550	Gate valves	3	loc	750.00		2,250	
111	<u>Sanitary sewer</u>						
112 02500	Cap and seal existing service	1	loc	750.00		NIC	
113 02500	6" PVC Sanitary sewer with concrete encasement	400	lf	85.00		34,000	
114 02550	Connect to existing sanitary line	1	loc	2,000.00		2,000	
115 02500	Sanitary sewer manhole	4	loc	2,800.00		11,200	
116 02500	Grease trap; 7,000 gallon	1	ls	10,000.00		10,000	
117 02500	6" cast iron vent	15	lf	25.00		375	
118	<u>Storm Sewer</u>						
119 02500	Subsurface retention system - Infiltration beds 1 & 2						
120 02200	Excavation and dispose on site (assumed grades can be raised to use as fill)	3,300	cy	10.00		33,000	
121 02200	Gravel fill	2,700	cy	22.00		59,400	
122 02500	48" HDPE; soil tight joint perforated HDPE	362	lf	80.00		28,960	
123 02500	36" HDPE	3,430	lf	55.00		188,650	
124 02500	24" RCP	127	lf	70.00		8,890	
125 02500	18" HDPE	550	lf	35.00		19,250	
126 02500	15" HDPE	370	lf	33.00		12,210	
127 02500	12" HDPE	1,150	lf	30.00		34,500	
128 02500	12" RCP	180	lf	45.00		8,100	
129 02500	10" PVC	60	lf	20.00		1,200	
130 02500	8" PVC	100	lf	13.00		1,300	
131 02500	8" perforated PVC	300	lf	14.00		4,200	
132 02500	SDB/SIB Inspection Access Ports	47	ea	500.00		23,500	
133 02500	6" PVC Rain Drain	910	lf	14.00		12,740	
134 02500	1x6 flat drains	2,600	lf	12.00		31,200	
135 02500	Drain inlet	9	ea	1,200.00		10,800	
136 02500	Rain Drain CO	9	ea	500.00		4,500	
137 02500	Downspouts	9	ea	300.00		2,700	
138 02500	3 ft wide perimeter filter trench drain	124	lf	18.00		2,232	
139 02500	Stone trench	169	lf	25.00		4,225	
140 02500	New drainage manholes	18	loc	2,800.00		50,400	
141 02500	New drainage catch basins	16	loc	2,600.00		41,600	
142 02500	New drainage catch basins; double	2	loc	3,400.00		6,800	
143 02500	Outlet control structures	2	loc	6,000.00		12,000	
144 02500	Water quality structures	2	loc	8,000.00		16,000	
145 02500	Cut and cap gas service	1	loc	1,500.00		NIC	
146 02500	Remove and dispose gas meter	1	loc	500.00		NIC	
147	<b><i>Assumed that new gas connection &amp; piping is by the utility company</i></b>						
148 02200	Excavate and backfill for new gas main (piping by utility Co.)	650	lf	12.00		7,800	
149	SUBTOTAL						\$788,294
150							
151	<b>G40 ELECTRICAL UTILITIES</b>						



60% Contract Documents Estimate

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
<b>SITWORK</b>							
152	16100						
	<u>Primary service</u>						
153	16100						
	Riser pole	1	ea	1,500.00	1,500		
154	16100						
	Manhole	3	ea	7,500.00	22,500		
155	16100						
	Primary/Comm ductbank AA 5-4"	570	lf	70.00	39,900		
156	16100						
	Primary ductbank BB 2-4"	30	lf	40.00	1,200		
157	16100						
	Exterior pad mounted transformer by Utility Co.	1	ls		NIC		
158	16100						
	Transformer pad	1	ea	2,500.00	2,500		
159	16100						
	<u>Secondary service</u>						
160	16100						
	Secondary ductbank CC 1200A	30	lf	215.00	6,450		
161	16100						
	Generator ductbank EE	40	lf	85.00	3,400		
162	16100						
	Secondary ductbank FF 5-4", 1-3", 1-2"	80	lf	280.00	22,400		
163	16100						
	<u>Site lighting</u>						
164	16100						
	Fixture SL10	231	lf	110.00	25,410		
165	16100						
	Fixture SL1H	22	ea	2,600.00	57,200		
166	16100						
	Fixture SL2	7	ea	2,500.00	17,500		
167	16100						
	Fixture SL3	2	ea	2,900.00	5,800		
168	16100						
	Fixture SL5	8	ea	550.00	4,400		
169	16100						
	Fixture SL7	2	ea	550.00	1,100		
170	16100						
	Fixture SL9	389	lf	110.00	42,790		
171	16100						
	Pole base	31	ea	350.00	10,850		
172	16100						
	Handhole/pull box	3	ea	1,200.00	3,600		
173	16100						
	Circuitry	3,500	lf	10.00	35,000		
174	16100						
	1" spare	1,000	lf	6.00	6,000		
175	16100						
	<u>Communication</u>						
176	16100						
	Communication riser pole	1	ea	1,500.00	1,500		
177	16100						
	Communication manhole	4	ea	7,500.00	30,000		
178	16100						
	Communication ductbank DD 3-4"	70	lf	50.00	3,500		
179							
	SUBTOTAL					\$344,500	
180							
181							
<b>TOTAL - SITE DEVELOPMENT</b>							<b>\$2,701,300</b>



Claiborne Pell Elementary School  
 New School and Sitework Package  
 Newport, RI

18-Aug-11

60% Contract Documents Estimate

GFA 103,060

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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PV ARRAY

**GROSS FLOOR AREA CALCULATION**

First Floor	63,476
Second Floor	39,371

<b>TOTAL GROSS FLOOR AREA (GFA)</b>	<b>102,847 sf</b>
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**D50 ELECTRICAL**

**D5010 SERVICE & DISTRIBUTION  
 Gear & Distribution**

Photovoltaic

16100	100.8KW Photovoltaic system	1	ls	500,000	500,000		
16100	50.4kw panel, flat roof	240	ea	Included above			
16100	50.4kw panel, sloped roof	156	ea	Included above			
16100	100A disconnect switch WP	2	ea	Included above			
16100	AC contactor	2	ea	Included above			
16100	AC PCU	2	ea	Included above			
16100	AC disconnect switch	2	ea	Included above			
16100	Combiner box DC WP, 20 circuit, wall mounted	2	ea	Included above			
16100	DC disconnect switch	2	ea	Included above			
16100	DC monitoring	2	ea	Included above			
16100	Inverter 60kW DC-AC	2	ea	Included above			
16100	Lightning arrester	2	ea	Included above			
16100	Pulse meter	2	ea	Included above			
16100	Weather station, wall mount	1	ea	Included above			
	SUBTOTAL						\$500,000

<b>TOTAL - ELECTRICAL</b>	<b>\$500,000</b>
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60% Contract Documents Estimate

GFA 102,847

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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**GEOTHERMAL 2 WELLS**

<b>TOTAL GROSS FLOOR AREA (GFA)</b>					<b>102,847</b>	<b>sf</b>	
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**D30 HVAC**

**D30 HVAC**  
Equipment

15100	Geothermal well 2 @ 1,500 feet with pump	<b>3,000</b>	lf	25.00	75,000		
15100	Heat pump chiller 20 tons	<b>2</b>	ea	13,000.00	26,000		
15100	Plate & frame heat exchanger	<b>1</b>	ea	12,000.00	12,000		
15100	Supply and return manifold 2 wells per heat exchanger	<b>2</b>	ea	2,500.00	5,000		
15100	Filtration system	<b>1</b>	ea	2,000.00	2,000		
15100	Well pump VFD's	<b>2</b>	ea	2,200.00	4,400		
15100	Condensers, pumps, VFD's, tanks and accessories	<b>1</b>	ls	25,000.00	25,000		
15100	Geothermal controls	<b>1</b>	ls	5,000.00	5,000		
15100	Credit to adjust RTU's to eliminate DX cooling and add cooling coil	<b>(1)</b>	ls	15,000.00	(15,000)		
15100	<u>Piping</u>						
15100	Ground source piping						
15100	HDPE piping with fittings	<b>1,500</b>	lf	28.00	42,000		
	SUBTOTAL						181,400

<b>TOTAL - HVAC</b>							<b>\$181,400</b>
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**D50 ELECTRICAL**

**D5010 SERVICE & DISTRIBUTION**  
Equipment Wiring

16100	Heat pump chiller feed and connection	<b>2</b>	ea	2,500.00	5,000		
16100	Heat exchanger feed and connection	<b>2</b>	ea	3,000.00	6,000		
16100	Well pump feed and connection	<b>2</b>	ea	3,500.00	7,000		
	SUBTOTAL						18,000

<b>TOTAL - ELECTRICAL</b>							<b>\$18,000</b>
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Claiborne Pell Elementary School  
 New School and Sitework Package  
 Newport, RI

18-Aug-11

60% Contract Documents Estimate

GFA 102,847

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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**6. Additional Brick Masonry**

<b>TOTAL GROSS FLOOR AREA (GFA)</b>					<b>102,847 sf</b>		
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<b>B20 EXTERIOR CLOSURE</b>							
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**B2010 EXTERIOR WALLS**

**Alternate Exterior skin**

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04200	add	Brick veneer with patterning	<b>18,840</b>	sf	25.01	471,188	
04200	delete	Decorative CMU veneer	<b>(18,840)</b>	sf	18.00	(339,120)	
		SUBTOTAL					\$132,068



60% Contract Documents Estimate

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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**SITWORK - Dexter Street**

<b>G</b>	<b>SITWORK</b>
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**G20 SITE IMPROVEMENTS**

Roadways and Parking Lots

Grind existing roadway and install new bituminous concrete on existing sub-base **32,422** sf 1.50 48,633

Granite curbs; 6" x 18" **1,669** lf 23.00 38,387

Pedestrian paving

Concrete paving gravel base; 8" thick **276** cy 28.00 7,728

concrete paving; 4" thick **11,128** sf 3.50 38,948

concrete paving; 6" thick speed table **291** sf 15.00 4,365

Detectable warning pavers **327** sf 12.00 3,924

SUBTOTAL \$141,985

<b>TOTAL DEXTER STREET</b>						<b>\$141,985</b>
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