



Lincoln School
Renovation and Additions
Lincoln, MA

October 2, 2018

Schematic Design Estimate

Architect:

Symmes Maini & McKee Associates
1000 Massachusetts Avenue
Cambridge, MA 02138
(617) 547 5400

Owner's Project Manager:

Daedalus Projects, Inc.
1 Faneuil Hall Marketplace
South Market Bldg, Suite 4195
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INTRODUCTION

Project Description:

The Project includes renovation and new additions to an existing elementary and middle school, located in Lincoln, MA

Hazardous material abatement (139,000gsf)

Demolition of existing school building (10,885gsf)

Renovation of remaining building (125,173gsf)

New building construction (39,905gsf) consists of following;

conventional concrete foundations, 1-story steel frame structure

brick veneer facade and aluminum glazed assemblies, single ply membrane roofing

Site utility infrastructure including new water and sanitary systems, and stormwater management

Site improvements including 303 parking spaces

Project Particulars:

Schematic Design Drawings and Project Manual dated September 12, 2018 prepared by SMMA

Appendix C, D, E and F received September 19, 2018

Revised drawings G-011, ES100-ES102 received September 19, 2018

Revised drawing FS-101 received September 24, 2018

Existing Façade Removal Analysis Matrix, Key Plan and Existing Envelope Study Plan received September 24, 2018

Detailed quantity takeoffs where possible from design documents and reports

Daedalus Projects, Inc. experience with similar projects of this nature

Project Assumptions:

Project will be managed by a Construction Manager under a CM at Risk Contract M.G.L. Ch. 149A

Our costs assume that there will be at least three subcontractors submitting unrestricted bids in each sub-trade

Unit rates are escalated to mid-point of construction duration and utilizing prevailing wage labor rates

Operation during normal working hours

Subcontractor's markups are included in each unit rate. These markups cover field and home office overhead and subcontractor's profit

Design and Pricing Contingency is an allowance for unforeseen design issues, design detail development and specification clarifications

General Conditions and Requirements value have been carried in the Main Summary for on-site supervision staff, site office, temporary utilities, project requirements, overheads

Fee markup is calculated on a percentage of direct construction costs

Anticipated start of construction November 1, 2019 for 36 months duration to completion November 1, 2022

Escalation allowance has been carried at a rate of 4% per year

Construction Cost Estimate Exclusions:

A/E fees

OPM fees

INTRODUCTION

Work beyond the boundary of the site
Interest expense
Utility company back charges during construction
Testing & commissioning
Computer networking
Furniture, Fixtures and Equipment

MAIN SUMMARY

ELEMENT		COST	COST/SF	TOTAL	COST/GSF
Direct Trade Details					
Hazardous Waste Remediation	139,000 GSF	\$715,380	\$5.15		
Building Demolition	10,885 GSF	\$119,735	\$11.00		
Site Preparation, Erosion Control	764,858 GSF	\$1,183,367	\$1.55		
Selective Site Demolition	764,858 GSF	\$296,618	\$0.39		
Earthwork	764,858 GSF	\$1,547,689	\$2.02		
Existing Conditions SubTotal				\$3,862,789	\$23.40
Building Direct Trade SubTotal	165,078 GSF			\$43,894,156	\$265.90
Temporary Modulares - Budget provided		\$3,400,000			
Site Prep, Site Utilities, Site Restoration		\$780,674			
PV System - Budget provided		\$2,500,000			
Project Budgets SubTotal				\$6,680,674	\$40.47
Exterior Improvements	764,858 GSF	\$4,089,037	\$5.35		
Site Mechanical Utilities	764,858 GSF	\$1,356,037	\$1.77		
Site Electrical	764,858 GSF	\$1,030,550	\$1.35		
Sitework SubTotal				\$6,475,624	\$39.23
Direct Trade Details SubTotal				\$60,913,243	\$369.00
Design and Pricing Contingency	10.0%	\$55,013,243		\$5,502,000	\$33.33
Subguard on Non-Filed Subbids	1.4%	\$32,469,350		\$455,000	\$2.76
CM Contingency	2.5%	\$66,870,243		\$1,672,000	\$10.13
Direct Trade Cost Total				\$68,542,243	\$415.21
General Conditions, Project Requirements, Overhead	36 MTH	\$200,000		\$7,200,000	\$43.62
Phasing and site logistics				\$1,500,000	\$9.09
Performance and Payment Bonds	0.9%	\$68,542,243		\$583,000	\$3.53
General Liability Insurance	1.4%	\$77,825,243		\$1,090,000	\$6.60
Fee	2.0%	\$68,542,243		\$1,371,000	\$8.31
Estimated Construction Cost Total				\$80,286,243	\$486.35
Escalation	4%	\$80,286,243		\$3,528,000	\$21.37
Estimated Construction Cost Total				\$83,814,243	\$507.73

DIRECT TRADE COST SUMMARY

ELEMENT	BUILDING		SITWORK	TOTAL	
02 EXISTING CONDITIONS	\$2,413,429	\$14.62	\$835,115	\$3,248,544	\$19.68
03 CONCRETE	\$1,832,427	\$11.10		\$1,832,427	\$11.10
04 MASONRY	\$1,579,372	\$9.57		\$1,579,372	\$9.57
05 METALS	\$3,046,312	\$18.45		\$3,046,312	\$18.45
06 WOODS, PLASTICS AND COMPOSITES	\$1,085,819	\$6.58		\$1,085,819	\$6.58
07 THERMAL AND MOISTURE PROTECTION	\$7,776,112	\$47.11		\$7,776,112	\$47.11
08 OPENINGS	\$3,511,950	\$21.27		\$3,511,950	\$21.27
09 FINISHES	\$4,427,174	\$26.82		\$4,427,174	\$26.82
10 SPECIALTIES	\$571,336	\$3.46		\$571,336	\$3.46
11 EQUIPMENT	\$729,300	\$4.42		\$729,300	\$4.42
12 FURNISHINGS	\$1,099,879	\$6.66		\$1,099,879	\$6.66
22 FIRE SUPPRESSION	\$741,929	\$4.49		\$741,929	\$4.49
22 PLUMBING	\$2,213,240	\$13.41		\$2,213,240	\$13.41
23 HVAC	\$6,722,225	\$40.72		\$6,722,225	\$40.72
26 ELECTRICAL	\$6,143,654	\$37.22	\$1,030,550	\$7,174,204	\$43.46
31 EARTHWORK	\$916,201	\$5.55	\$2,111,474	\$3,027,674	\$18.34
32 EXTERIOR IMPROVEMENTS			\$4,089,037	\$4,089,037	\$24.77
33 SITE MECHANICAL UTILITIES			\$1,356,037	\$1,356,037	\$8.21
Direct Trade Details SubTotal	\$44,810,357	\$271.45	\$9,422,212	\$54,232,569	\$328.53

DIRECT TRADE COST DETAILS

ELEMENT	QUANTITY	UNIT	UNIT RATE	COST
02 EXISTING CONDITIONS				
D2090.60 Demolition				
Demo slab on grade	5,000	SF	\$15.00	\$75,000
Demo slab for new column spread footing	77	LOC	\$2,000.00	\$154,000
Demo column	26	LOC	\$1,500.00	\$39,000
<i>Foundation wall extension, det E1, E1A/S-401</i>				
Demo CMU masonry backup wall	2,340	SF	\$5.00	\$11,700
<i>Braced frames to existing building to remain</i>				
Demo CMU wall	560	SF	\$15.00	\$8,400
<i>Interior</i>				
D1. built-in casework and related components	1,805	LF	\$50.00	\$90,250
D2. VCT flooring	6,839	SF	\$2.50	\$17,098
D3. ACP ceiling, grid and related components	46,925	SF	\$2.50	\$117,313
C9 Remove existing surface mounted acoustical ceiling panels	36,700	SF	\$5.00	\$183,500
C11 Remove clouds req'd to install ductwork & sprinklers.	1,610	SF	\$10.00	\$16,100
D4. plumbing fixture				Plumbing
D5. floor tile	2,375	SF	\$2.75	\$6,531
wall tile complete	4,015	SF	\$5.00	\$20,075
D6. single RR; toilet partitions, accessories, mirrors & hardware	7	RMS	\$1,500.00	\$10,500
D6. gang	8	RMS	\$2,500.00	\$20,000
D7. unit ventilator and related components				Mechanical
D8. exterior windows	10	OPEN	\$350.00	\$3,500
doors	23	LEAF	\$350.00	\$8,050
blinds/shades	10	OPEN	\$75.00	\$750
D9. exposed electrical conduit and boxes				Electrical
D10. carpet flooring	109,786	SF	\$2.50	\$274,465
D11. raised platform floor framing, ramp and associated railing and framing @ Smith Gym	1,700	SF	\$15.00	\$25,500
D12. metal lockers and related components	465	LF	\$50.00	\$23,250
D13. wood paneling and trim at existing media center columns	18	EA	\$250.00	\$4,500
Interior partitions	31,815	SF	\$3.50	\$111,353
demo wall for new opening	32	LOC	\$500.00	\$16,000
doors	175	LEAF	\$150.00	\$26,250
sidelights	10	EA	\$200.00	\$2,000
Demolish exterior wall assembly	6,270	SF	\$12.00	\$75,237
exterior storefront	11,752	SF	\$5.00	\$58,760
exterior brick cladding only to be stripped	35,521	SF	\$7.50	\$266,408
<i>Roof</i>				
R1 remove existing membrane roof locations	90,420	SF	\$2.00	\$180,840
R2 remove asphalt roof and insulation down to the roof deck;	31,760	SF	\$1.25	\$39,700
Temp roof protection	122,180	SF	\$2.50	\$305,450
Remove smoke hatches and skylights				Div 07

DIRECT TRADE COST DETAILS

ELEMENT	QUANTITY	UNIT	UNIT RATE	COST
52 Cart, haul, disposal of demo debris including MEP materials	4,439	CY	\$50.00	\$221,950
53 02 Existing Conditions Total				\$2,413,429
54				
55				
56 03 CONCRETE				
57				
58 <i>Strip footing</i>	1,250	LF		
59 Concrete	97	CY	\$135.00	\$13,125
60 Rebar	14,583	LBS	\$1.20	\$17,500
61 Formwork	2,500	SF	\$8.00	\$20,000
62 Place and finish	97	CY	\$75.00	\$7,292
63 <i>Foundation wall</i>	5,000	SF		
64 Concrete	204	CY	\$135.00	\$27,500
65 Rebar	25,000	LBS	\$1.20	\$30,000
66 Formwork	10,000	SF	\$11.00	\$110,000
67 Place and finish	204	CY	\$75.00	\$15,278
68 Brick shelf	1,250	LF	\$8.00	\$10,000
69 Patch and repair existing to remain slab on grade	113,248	SF	\$2.00	\$226,496
70 Infill slab on grade after trenching	6,925	SF	\$10.00	\$69,250
71 <i>Slab-on-Grade; assume 5" thick</i>	44,905	SF		
72 Concrete	794	CY	\$135.00	\$107,168
73 WWF mesh	51,641	SF	\$0.68	\$35,116
74 Place and finish	44,905	SF	\$2.50	\$112,263
75 Edge slab form	1,250	LF	\$5.50	\$6,875
76 Vapor barrier to slab on grade	51,641	SF	\$0.55	\$28,402
77 Infill foundation wall at former bay bump-out x3loc	45	LF	\$250.00	\$11,250
78 Chip down top of foundation wall, disposal	250	LF	\$55.00	\$13,750
79 New basement wall to close off basement/crawl spaces	1	AL	\$50,000.00	\$50,000
80 Spread footing for new column	77	EA	\$1,000.00	\$77,000
81 Pier for new column	28	EA	\$500.00	\$14,000
82 <i>Foundation wall extension, det E1, E1A/S-401</i>				
83 16"x12" strip footing, pin @16"oc to etr footing	2,685	LF	\$75.00	\$201,375
84 8" foundation wall, pin @24"oc to etr foundation wall	8,055	SF	\$52.50	\$422,888
85 <i>Braced frame foundation reinforcement, det G1/S-401</i>				
86 Spread footing over etr footing, pin to etg footing	12	EA	\$1,200.00	\$14,400
87 Grade beam	110	LF	\$150.00	\$16,500
88 PV Canopy; spread footing, pier	24	EA	\$1,500.00	\$36,000
89 Anchor bolt setting	80	EA	\$75.00	\$6,000
90 Loading dock	700	GSF	\$25.00	\$17,500
91 dock walls	500	SF	\$50.00	\$25,000
92 short flight stair	1	FLT	\$2,500.00	\$2,500
93 Concrete general requirements	1	LS	\$88,000.00	\$88,000
94 03 Concrete Total				\$1,832,427
95				

DIRECT TRADE COST DETAILS

ELEMENT	QUANTITY	UNIT	UNIT RATE	COST
96 04 MASONRY				
97				
98 Cut/grind off brick ties, prep backup for new a/v assembly	35,521	SF	\$2.00	\$71,042
99 Mock up; sog, masonry, glazed openings, roofing	1	LS	\$50,000.00	\$50,000
100 <i>Exterior Façade</i>				
101 Nominal 4" thick modular face brick veneer	28,840	SF	\$34.50	\$994,980
102 wall base 2'-6" h	2,125	SF	\$35.00	\$74,375
103 Norman/Ambassador face brick veneer	6,530	SF	\$34.50	\$225,285
104 porch/bay at part A and C (5 loc)	905	SF	\$70.00	\$63,350
105 Infill exterior wall	6	LOC	\$1,500.00	\$9,000
106 Scaffolding to entire exterior façade	99,715	SF	\$3.00	incl.
107 Interior CMU partitions; patch repair	1	AL	\$30,000.00	\$30,000
108 <i>Interior CMU walls:</i>	2,360	SF		
109 type M6A.U	1,400	SF	\$22.00	\$30,800
110 type M8A.U	960	SF	\$24.00	\$23,040
111 Bond beam/lintel @ CMU opening, grout fill frame	5	OPEN	\$1,500.00	\$7,500
112 04 Masonry Total				\$1,579,372
113				
114				
115 05 METALS				
116				
117 <i>Structural Steel Framing</i>				
118 New additions; 12#/gsf allowance provided	269	TNS	\$4,000.00	\$1,077,720
119 Add moment frame - allowance provided	1	AL	\$40,000.00	\$40,000
120 Metal roof deck	44,905	SF	\$4.00	\$179,620
121 Relieving angle supporting brick above large glazed opening	560	LF	\$75.00	\$42,000
122 Steel decking replacement; 5% allowance provided	900	SF	\$6.90	\$6,210
123 New tube column	77	EA	\$2,500.00	\$192,500
124 New tube column bolted wall up to Mezz level	3	EA	\$3,100.00	\$9,300
125 Galv infill framing at tunnel slab opening	1	LOC	\$5,000.00	\$5,000
126 Roof beam; at Link exp joint	1	LOC	\$3,000.00	\$3,000
127 Roof beam; W16x26 bent beam	3	LOC	\$6,500.00	\$19,500
128 Infill roof framing adjacent to bent frames	2,600	GSF	\$25.00	\$65,000
129 Folding partition steel support	65	LF	\$100.00	\$6,500
130 Roof (etr) reinforcement at new RTU	6,880	GSF	\$15.00	\$103,200
131 Steel plate pocket; cut glu-lam beam end	15	EA	\$850.00	\$12,750
132 Glu-lam beam reinforcement angle x4ea +wood blocking bwtn	555	LF	\$25.00	\$13,875
133 Dormer infill; R3 metal roof deck, framing	1,390	GSF	\$20.00	\$27,800
134 Roof screen post/kicker@8'oc	580	GSF	\$75.00	\$43,500
135 <i>Braced frames to existing building to remain</i>				
136 Demo brace frame	7	LOC	\$2,500.00	\$17,500
137 Shore roof, demo CMU wall	470	LF	\$330.00	\$155,100
138 Install new braced frame	810	LF	\$100.00	\$81,000
139 L4x4x 3/8 horizontal X-brace	110	LF	\$25.00	\$2,750

DIRECT TRADE COST DETAILS

ELEMENT	QUANTITY	UNIT	UNIT RATE	COST
140 Rod "X" bracing w/turnbuckles	13	LOC	\$1,100.00	\$14,300
141 PV Canopy; 6:12 sloping tube frame w/column	8,150	GSF	\$20.00	\$163,000
142 Miscellaneous and Ornamental Iron				
143 Miscellaneous metals associated with roof	1	AL	\$50,000.00	\$50,000
144 Roof ladder	4	EA	\$3,500.00	\$14,000
145 Ship ladder to roof hatch	2	EA	\$6,500.00	\$13,000
146 Loose steel lintels above punched windows	65	EA	\$1,250.00	\$81,250
147 Wire mesh columns supporting trellis and PV panels	55	EA	\$5,000.00	\$275,000
148 Miscellaneous metals associated with exterior façade	84,320	GSF	\$1.00	\$84,320
149 Miscellaneous metals associated with interior fit-out	165,078	GSF	\$1.50	\$247,617
150 05 Metals Total				\$3,046,312
151				
152				
153 06 WOODS, PLASTICS AND COMPOSITES				
154				
155 Structural Wood Framing				
156 Glu-lam beam reinforcement wood blocking bwtn	900	GSF	\$10.00	\$9,001
157 Roof (etr) reinforcement w/new sister wood joist@14"oc	3,415	GSF	\$25.00	\$85,375
158 Wood decking replacement; 5% allowance provided	3,500	SF	\$10.00	\$35,000
159 Rough Carpentry				
160 Blocking at glazed openings, door openings	4,530	LF	\$6.25	\$28,314
161 Rough carpentry to roof	169,111	GSF	\$1.50	\$253,667
162 Rough blocking to partitions	161,120	SF	\$0.75	\$120,840
163 Finish Carpentry				
164 E2010.30 Casework				
165 Exterior/interior bench	1	LS	\$200,000.00	\$200,000
166 Display case in Corridors, allow	6	EA	\$5,000.00	\$30,000
167 Kitchen & Janitor's Closets; Washable fiberglass resin panels (FRP)	2,260	SF	\$7.50	\$16,950
168 Janitor's Closets				
169 Window stools; solid surface corian or similar	3,712	LF	\$50.00	\$185,613
170 Reception Desk; custom fabricated Laminate clad	25	LF	\$500.00	\$12,500
171 New stage front	1	LS	\$15,000.00	\$15,000
172 Finish carpentry, standing and running trim, solid surface counters	187,120	GSF	\$0.25	\$46,780
173 Architectural woodwork, casework, paneling, benches, handrails	187,120	GSF	\$0.25	\$46,780
174 06 Woods, Plastics And Composites Total				\$1,085,819
175				
176				
177 07 THERMAL AND MOISTURE PROTECTION				
178				
179 Waterproofing, Dampproofing and Caulking				
180 Foundation walls; dampproofing	15,740	SF	\$2.25	\$35,415
181 Fluid applied air/vapor barrier to exterior opaque walls	50,070	SF	\$6.50	\$325,455
182 to Auditorium high wall cladding	9,200	SF	\$6.50	\$59,800
183 Expansion joint	640	LF	\$75.00	\$48,000

DIRECT TRADE COST DETAILS

ELEMENT	QUANTITY	UNIT	UNIT RATE	COST
184 Caulking and sealants; exterior closure	79,750	SF	\$0.90	\$71,775
185 Caulking and sealants; interior fit-out	187,120	GSF	\$0.75	\$140,340
186 Thermal Insulation				
187 Rigid insulation under slab on grade	51,830	SF	\$2.90	\$150,307
188 Rigid insulation to new foundation wall	5,000	SF	\$3.25	\$16,250
189 <i>Foundation wall extension, det E1, E1A/S-401</i>				
190 4" rigid insulation to etr foundation wall	10,740	SF	\$3.50	\$37,590
191 8" mineral wool insulation @ exterior brick wall	37,495	SF	\$7.50	\$281,213
192 8" stone wool insulation @ exterior fiber cement & metal panel wall	21,775	SF	\$7.80	\$169,845
193 Wall Cladding				
194 Composite metal panel	675	SF	\$50.00	\$33,750
195 Fiber cement panel, rainscreen assembly @ Smith & Reed Gym	11,900	SF	\$75.00	\$892,500
196 Auditorium	9,200	SF	\$75.00	\$690,000
197 New RTU screen	1,375	SF	\$30.00	\$41,250
198 Spandrel wood panel	425	SF	\$55.00	\$23,375
199 B1020 Roof Construction				
200 <i>Existing</i>				
201 R1 install new PVC roof system, inc. air barrier, 9" polyiso roof	90,420	SF	\$22.00	\$1,989,240
202 insulation and single ply pvc roof membrane; flat				
203 R2 sloped asphalt roof shingle syst. Inc. air barrier, 9" polysio	36,760	SF	\$19.00	\$698,440
204 roof insulation, sheathing, ice/ water shield, membrane				
205 <i>New</i>				
206 R3 asphalt shingle roof locations- new addition	18,550	SF	\$21.00	\$389,550
207 <i>inc. air barrier 9" polysio roof insul. and shingle ply PVC roof</i>				
208 R4 membrane roof locations; PVC system inc. air barrier	23,381	SF	\$22.00	\$514,382
209 <i>9" polyiso roof; insulation and single ply pvc roof; flat</i>				
210 R5 infill existing roof skylight opening; not shown	20	EA	\$2,000.00	\$40,000
211 R6 Frame new doghouse duct enclosure	2	LOC	\$50,000.00	\$100,000
212 R7 install new steel bent plates and roof blocking at existing wall	150	LF	\$75.00	\$11,250
213 R8 Install new PV panel system				PV Budget
214 B1020.30 Canopy construction				
215 R10 Canopy structure including PV panels and perf. screen walls	8,150	SF		Div 05
216 R11 replace existing skylight curb at Building E	150	LF	\$50.00	\$7,500
217 skylight, sloped @ shingle roof, Media Center & Learning Commons	270	SF	\$150.00	\$40,463
218 4'x4' unit skylight, demo existing; Building E	8	EA	\$3,900.00	\$31,200
219 Through-wall flashing; low/high roof junction	2,015	LF	\$25.00	\$50,375
220 Roof fascia/parapet; membrane roof	3,735	LF	\$35.00	\$130,725
221 Roof fascia @ shingles roof	2,055	LF	\$35.00	\$71,925
222 overhang; Admin clerestory, Cafeteria, Learning/Media Center, 4' girth	1,100	LF	\$180.00	\$198,000
223 overhang; Learning/Media Center, 10'-6" total girth	105	LF	\$472.50	\$49,613
224 Exterior soffit/ceiling; DEFS; cement board sheathing with direct applied	1,614	SF	\$65.00	\$104,910
225 stucco finish				
226 underside of loading dock canopy (per narratives)	600	SF	\$65.00	\$39,000
227 Gutter	2,315	LF	\$45.00	\$104,175

DIRECT TRADE COST DETAILS

ELEMENT	QUANTITY	UNIT	UNIT RATE	COST
228 Downspout	67	EA	\$500.00	\$33,500
229 Continuous seismic joint assembly	1,200	LF	\$75.00	\$90,000
230 RTU curb; allow	30	LOC	\$1,000.00	\$30,000
231 R12 Remove smoke hatches & install new smoke hatches and	2	EA	\$5,000.00	\$10,000
232 curbs at building E				
233 Roof hatch	2	EA	\$2,500.00	\$5,000
234 Walkway pads; allow	2,500	SF	\$4.00	\$10,000
235 Miscellaneous roof accessories	1	LS	\$10,000.00	\$10,000
236 Applied Fireproofing				
237 Spray fireproofing	44,905	GSF	\$2.00	NIC
238 wood structure zone		SF	\$2.50	NIC
239 07 Thermal And Moisture Protection Total				\$7,776,112
240				
241				
242 08 OPENINGS				
243				
244 B2020 Exterior Windows				
245 Storefront/CW; Extruded fiberglass, triple glazed, fixed and operable	13,225	SF	\$110.00	\$1,454,750
246 premium for spandrel panel	1,325	SF	\$10.00	\$13,245
247 Fiberglass windows; triple glazing	3,220	SF	\$105.00	\$338,100
248 Exterior fiberglass door	23	LEAF	\$4,000.00	\$92,000
249 pair of doors	15	PR	\$8,000.00	\$120,000
250 vestibule	8	PR	\$8,000.00	\$64,000
251 Powered door opener	6	LOC	\$3,255.00	\$19,530
252 Interior storefront, sidelight/borrow light, HM framed, clear temp safety glas	2,250	SF	\$85.00	\$191,250
253 Interior door	6	LEAF	\$4,000.00	\$24,000
254 pair of doors	6	PR	\$8,000.00	\$48,000
255 Ballistic rating; assumed	1	AL	\$25,000.00	\$25,000
256 Glass and Glazing				
257 Interior door sidelight	73	EA	\$1,200.00	\$87,600
258 Mirror wall to wall @ Large restrooms	110	SF	\$45.00	\$4,950
259 Folding glass partitions w/operable door	265	LF	\$1,800.00	\$477,000
260 HM Frames				
261 Frame; single	70	OPEN	\$225.00	\$15,750
262 w/sidelights	85	OPEN	\$275.00	\$23,375
263 double	47	OPEN	\$300.00	\$14,100
264 etr, painted in Div 09	38	OPEN		ETR
265 Wood Doors				
266 Type A4	32	LEAF	\$350.00	\$11,200
267 pair of doors	3	PR	\$700.00	\$2,100
268 Type A5	122	LEAF	\$350.00	\$42,700
269 pair of doors	34	PR	\$700.00	\$23,800
270 Access doors	50	EA	\$350.00	\$17,500
271 Pair of doors; Loading Dock	2	OPEN	\$3,500.00	\$7,000

DIRECT TRADE COST DETAILS

ELEMENT	QUANTITY	UNIT	UNIT RATE	COST
272 Coiling Grille at Kitchen Servery	1	OPEN	\$20,000.00	\$20,000
273 Kitchen/Dishwash opening	1	OPEN	\$5,000.00	\$5,000
274 Insulated Translucent Panel Assemblies				
275 Translucent panel w/10 operable windows	1,680	SF	\$85.00	\$142,800
276 Hardware				
277 Interior door hardware	228	SET	\$750.00	\$171,000
278 Door hardware; Astragal, assume Auditorium & Gyms	14	SET	\$500.00	\$7,000
279 Door hardware; card reader, assume at vestibules	8	EA	\$650.00	\$5,200
280 Door hardware G; gasketing	10	SET	\$400.00	\$4,000
281 Door hardware MHO; magnetic hold open	10	SET	\$750.00	\$7,500
282 Louvers				
283 Aluminum louver	500	SF	\$65.00	\$32,500
284 08 Openings Total				\$3,511,950
285				
286				
287 09 FINISHES				
288				
289 Gypsum Board Assemblies				
290 Exterior wall sheathing; patch, replacement - 20% allowance agreed	7,110	SF	\$4.00	\$28,440
291 Backup to exterior wall façade; 6" galv. mtl stud, 1/2" sheathing	34,250	SF	\$9.75	\$333,937
292 Interior of ext exterior CMU wall; 1 layer 5/8" GWB	15,820	SF	\$3.25	\$51,415
293 Interior of exterior wall; 1 layer 5/8" GWB	34,250	SF	\$3.25	\$111,312
294 <i>Partition Types:</i>	36,225	SF		
295 type C3A.U; 3 5/8" metal stud, 5/8" GWB	2,540	SF	\$7.25	\$18,415
296 type C3C.U; 3 5/8" metal stud, 5/8" GWB, sound atten blanket	3,100	SF	\$8.50	\$26,350
297 type C6B.U; 6" metal stud, 5/8" GWB, sound atten blanket	620	SF	\$10.50	\$6,510
298 type G3A.U; 3 5/8" metal stud, 2x 5/8" GWB, sound atten blanket	1,930	SF	\$11.25	\$21,713
299 type G3C.1; 3 5/8" metal stud, 4x 5/8" GWB, sound atten blanket, 1hr FR	1,585	SF	\$17.00	\$26,945
300 type G3C.U; 3 5/8" metal stud, 4x 5/8" GWB, sound atten blanket	17,380	SF	\$16.25	\$282,425
301 type G3D.U; 3 5/8" metal stud, 2x 5/8" GWB, low partition w/cap, 48" h	310	SF	\$17.35	\$5,384
302 type G6A.U; 6" metal stud, 2x 5/8" GWB, sound atten blanket	4,250	SF	\$13.25	\$56,313
303 type G6B.U; assumed	4,510	SF	\$13.25	\$59,758
304 Infill partition	30	LOC	\$500.00	\$15,000
305 Column enclosure; allow	100	EA	\$750.00	\$75,000
306 Patch and repair existing partitions	120,173	GSF	\$0.50	\$60,087
307 Staging and access	1	LS	\$75,000.00	\$75,000
308 C2010 Wall Finishes				
309 C2010.10 Tile Wall Finish				
310 Ceramic Tile: Glazed, 3" x 6" ceramic tile, half height in toilet rooms; all wal	4,265	SF	\$18.00	\$76,770
311 full height tile @ wet walls	2,845	SF	\$18.00	\$51,210
312 Porcelain Tile: Unglazed, 12" x 24" wall tile, 48" h, Corridors & Servery - cf	2,155	LF	\$20.00	\$43,108
313 wainscot at Cafeteria, Learning Commons	2,400	SF	\$20.00	\$48,000
314				
315				

DIRECT TRADE COST DETAILS

ELEMENT	QUANTITY	UNIT	UNIT RATE	COST
316 Ceiling Finishes				
317 ACP-1; ACT panel 2x2, typical	146,725	SF	\$5.50	\$806,988
318 ACP-1 at classrooms & kindergarten (exposed trusses painted in Div 09)	1,785	SF	\$5.50	\$9,818
319 GWB at Vestibule	310	SF	\$12.00	\$3,720
320 GWB/MTL-1 at Learning Commons	4,440	SF	\$25.00	\$111,000
321 MTL-1 at Media Center	3,565	SF	\$35.00	\$124,775
322 Wood-look perforated metal ceilings: Clouds at existing auditorium	1,610	SF	\$35.00	\$56,350
323 Media room and Cafeteria; allow	2,000	SF	\$35.00	\$70,000
324 C2030 Flooring				
325 C2030.20 Flooring Treatment				
326 C2030.20 Tile Flooring				
327 GCT-1; 2" x 2" Ceramic tile unglazed	2,905	SF	\$20.00	\$58,100
328 PCT-1; unglazed porcelain paver tile 12" x 24"	10,070	SF	\$25.00	\$251,750
329 C2030.50 Resilient Flooring				
330 Lino-1; Linoleum tile	104,200	SF	\$6.00	\$625,200
331 C2030.70 Fluid Applied Flooring				
332 EP epoxy flooring at kitchen / servery	2,815	SF	\$9.00	\$25,335
333 C2030.75 Carpeting				
334 CPT-1; carpet tile - \$30/sy material rate provided	1,571	SY	\$55.00	\$86,429
335 C2030.80 Athletic Flooring				
336 SPED and Physical therapy room	820	SF	\$12.00	\$9,840
337 RB; rubber wall base	5,495	LF	\$3.00	\$16,485
338 WD; wood stage auditorium	2,110	SF	\$25.00	ETR
339 Gym flooring existing to remain	15,485	SF		ETR
340 C2010.20 Wall Paneling				
341 Hardwood veneer paneling, allow	2,000	SF	\$25.00	\$50,000
342 Wood paneling and trim at existing media center columns	18	EA	\$250.00	\$4,500
343 C2010.80 Acoustical Wall Treatment				
344 Acoustical wood fiber wall panels; allow (Spec item)	2,500	SF	\$25.00	\$62,500
345 Fabric-faced acoustical wood fiber wall panels; allow (Spec item)	2,500	SF	\$15.00	\$37,500
346 Digital, Graphics, or Mural wallcovering; allow	1	AL	\$7,500.00	\$7,500
347 Painting				
348 CONC-1 sealed concrete floors	11,205	SF	\$2.00	\$22,410
349 Paint exposed trusses @ at classrooms & kindergarten	7,865	SF	\$5.00	\$39,325
350 EST; exposed ceiling at mechanical rooms	4,790	SF	\$1.25	\$5,988
351 EST/PT-1 at gym, stage, science, resource, k-4, corridor and classrooms	38,840	SF	\$1.75	\$67,970
352 Paint door	228	OPEN	\$150.00	\$34,200
353 new frame	14	OPEN	\$100.00	\$1,400
354 etr frame	8	OPEN	\$125.00	\$1,000
355 Paint CMU walls	4,720	SF	\$1.25	\$5,900
356 Paint GWB walls	100,440	SF	\$1.10	\$110,484
357 Paint existing walls	165,078	GSF	\$1.00	\$165,078
358 Misc. painting	165,078	GSF	\$0.50	\$82,539
359 09 Finishes Total				\$4,427,174

DIRECT TRADE COST DETAILS

ELEMENT	QUANTITY	UNIT	UNIT RATE	COST
360 10 SPECIALTIES				
361				
362 C1090.20 Information Specialties				
363 Markerboard; wall-mounted porcelain on steel w/alum trim; (2) 8'x4'/clsrn	53	RMS	\$1,500.00	\$79,500
364 Conference: 4' x 6'	4	RMS	\$600.00	\$2,400
365 Office: 4' x 4'	20	RMS	\$400.00	\$8,000
366 Tackboard; wall-mounted vinyl-coated cork w/alum trim; (2) 8'x4'/clsrn	53	RMS	\$1,100.00	\$58,300
367 Track strip 6" high; allow 40'/classroom	1,720	LF	\$10.00	\$17,200
368 Room identification ADA signs; directional signage & safety signs	165,078	GSF	\$0.50	\$82,539
369 with message clip at all classrooms and offices				
370 Exterior signage; door numbers	15	LOC	\$200.00	\$3,000
371 Dimensional alum letter signs; building, exterior	2	LOC	\$5,000.00	\$10,000
372 C1090.25 Toilet Compartments and Cubicles				
373 Toilet compartment; phenolic, floor supported, overhead braced	17	EA	\$1,200.00	\$20,400
374 ADA compartment	8	EA	\$1,500.00	\$12,000
375 Urinal screen	9	EA	\$500.00	\$4,500
376 C1090.35 Wall and Door Protection				
377 Wall and corner guards; stainless steel in kitchen and loading docks	1	LS	\$5,000.00	\$5,000
378 C1090.40 Toilet, Bath and Laundry Accessories				
379 Toilet Accessories				
380 Lavatory mirror	15	EA	\$200.00	\$3,000
381 Soap dispenser	69	EA	\$35.00	\$2,415
382 Paper towel dispenser/waste receptacle	69	EA	\$300.00	\$20,700
383 Toilet paper dispenser	44	EA	\$75.00	\$3,300
384 Sanitary napkin dispenser/disposal (1/room)	15	EA	\$250.00	\$3,625
385 Grab bars	44	PR	\$160.00	\$7,040
386 towels dispensers for classroom sinks	30	PR	\$75.00	\$2,250
387 Install toilet accessories	286	EA	\$50.00	\$14,275
388 Custodial; mop holder; assumed	3	RMS	\$150.00	\$450
389 Cubicle Curtains and Track				
390 Shower; assumed qty	3	LOC	\$350.00	\$1,050
391 D4030.30 Fire extinguishers, cabinets and accessories				
392 Fire extinguisher and cabinet	37	EA	\$500.00	\$18,342
393 AED; Defibrillator	2	EA	\$1,500.00	\$3,000
394 C1090.90 Other Interior Specialties				
395 Solid acoustically rated operable partitions w/operable door & magnetic	80	LF	\$660.00	\$52,800
396 whiteboard surfaces				
397 Auditorium; 20'-0" high	70	LF	\$1,900.00	\$133,000
398 Lockers				
399 Maintenance and Kitchen staff lockers; Single-tier, 6-feet high, p. lam	10	EA	\$275.00	\$2,750
400 Metal heavy duty floor supported shelving in receiving and storage areas				FF&E
401 Wardrobe and closet specialties; plastic lam. shelf & chrome rod	10	EA	\$50.00	\$500
402 10 Specialties Total				\$571,336
403				

DIRECT TRADE COST DETAILS

ELEMENT	QUANTITY	UNIT	UNIT RATE	COST
404 11 EQUIPMENT				
405				
406 E1010 Vehicle and Pedestrian Equipment				
407 E1010.50 Loading Dock Equipment; Bumpers	1	AL	\$2,000.00	\$2,000
408 E1030.80 Food Service Equipment				
409 Foodservice Equipment	1	AL	\$450,000.00	\$450,000
410 E1040.10 Educational & Scientific Equipment				
411 Library Equipment				FF&E
412 E1040.20 Healthcare Equipment				
413 Curtain & curtain track @ Nurse	3	LOC	\$1,500.00	\$4,500
414 Lockable medicine cabinet	1	EA	\$500.00	\$500
415 Undercounter refrigerator @ Nurse	1	EA	\$400.00	\$400
416 E1060.10 Residential Appliances				
417 Refrigerator/ microwave at teachers lounge areas; assumed	4	RMS	\$1,700.00	\$6,800
418 Dishwasher	1	EA	\$600.00	\$600
419 Laboratory Fume Hoods				
420 Fixed exhaust hood	3	EA	\$12,500.00	\$37,500
421 E1070.10 Theatrical Equipment				
422 <i>Theater</i>				
423 Platform: LED based theatrical lighting system equipment	1	LS	\$60,000.00	Div 26
424 (Barbizon allowance)				
425 <i>Auditorium</i>				
426 Rigging system equipment & install: Robert Lorelli Assoc, allow	1	LS	\$145,000.00	\$145,000
427 Dimming system equipment: Robert Lorelli Assoc, allowance	1	LS	\$165,000.00	Div 26
428 E1070.50 Athletic Equipment				
429 Indoor Equipment in Gymnasiums				
430 Existing Gym equipment to remain; allow for remove and	1	AL	\$10,000.00	\$10,000
431 reinstall to facilitate new structural and MEP system				
432 E1070.80 Audio-Visual Equipment				
433 Auditorium local AV system equipment: Accentech budget	1	AL	\$304,600.00	Div 26
434 Motorized projection screen; Auditorium, Learning common	3	EA	\$17,500.00	\$52,500
435 & Media Center Library				
436 Classroom; interactive projector				FF&E
437 Other Equipment				
438 Overhead support in OT/PT classroom for therapy swing	1	EA	\$7,500.00	\$7,500
439 Kiln	1	EA	\$8,000.00	\$8,000
440 Goggle sanitizing cabinet	8	EA	\$500.00	\$4,000
441 11 Equipment Total				\$729,300
442				
443				
444				
445				
446				
447				

DIRECT TRADE COST DETAILS

ELEMENT	QUANTITY	UNIT	UNIT RATE	COST
448 12 FURNISHINGS				
449 E2010 Fixed Furnishings				
450 E2010.20 Window Treatments				
451 Horizontal Blinds; 1" wide plastic (PVC) slats manually operated at	38	OPEN	\$150.00	\$5,700
452 Administration suite and at classroom borrowed lites				
453 Manually operated, mecho shades	14,630	SF	\$7.00	\$102,410
454 Motorized double roll shades at Cafeteria and Media Center	1,815	SF	\$12.00	\$21,780
455 E2010.30 Casework				
456 A1. Sink plastic laminate countertop, base and upper cabinets	380	LF	\$635.00	\$241,300
457 A2. P.lam casework-open shelving w/p.lam countertop along ext windows	320	LF	\$415.00	\$132,800
458 A3. Plastic laminate clad tall cabinets	260	LF	\$450.00	\$117,000
459 Art room counters; solid epoxy resin countertops + base cabinet	50	LF	\$550.00	\$27,500
460 A6. Single-tier plastic laminate cubbies @ grades PK-2; qty provided	180	EA	\$350.00	\$63,000
461 A6. Single-tier plastic laminate lockers @ grades 3-8 (60 ea/grade)	360	EA	\$260.00	\$93,600
462 Casework allowance	165,078	GSF	\$0.50	\$82,539
463 C2030.85 Entrance Flooring				
464 MAT-1; recessed grille at entrance, walk-off mats	1,330	SF	\$50.00	\$66,500
465 E2010.70 Fixed multiple seating				
466 Auditorium seating; fixed	530	SEAT	\$275.00	\$145,750
467 E2010.90 Other Fixed Furnishings				
468 Mirrors				Div. 10
469 12 Furnishings Total				\$1,099,879
470				
471				
472 22 FIRE SUPPRESSION				
473				
474 D4010.10 Water-Based Fire Suppression				
475 Electric fire pump on emergency power with	1	EA	\$25,000.00	\$25,000
476 Fire pump controller with automatic transfer switch	1	EA	\$5,000.00	\$5,000
477 8" Fire Service	1	EA	\$12,000.00	\$12,000
478 8" Full size horizontal double check valve assembly	1	EA	\$10,000.00	\$10,000
479 Sprinkler Heads; typical	144,803	GSF	\$3.00	\$434,409
480 Sprinkler Heads; concealed type w/ white cover plate at mech rooms	4,790	GSF	\$3.50	\$16,765
481 Sprinkler guards; gym and mech storage rooms	15,485	GSF	\$3.00	\$46,455
482 Dry type sprinklers at coolers and freezers	1	LS	\$1,500.00	\$1,500
483 Dry sidewall type sprinkler at outdoor loading dock area	1	LS	\$1,000.00	\$1,000
484 4" sprinkler main	880	LF	\$50.00	\$44,000
485 6" sprinkler main	395	LF	\$60.00	\$23,700
486 8" sprinkler main	85	LF	\$70.00	\$5,950
487 Wet alarm valve assemblies	1	EA	\$2,500.00	\$2,500
488 Roof manifolds	3	EA	\$2,500.00	\$7,500
489 control valve	1	LS	\$5,000.00	\$5,000
490 inspector test stations	1	LS	\$2,500.00	\$2,500
491 flow switches	1	LS	\$1,000.00	\$1,000

DIRECT TRADE COST DETAILS

ELEMENT	QUANTITY	UNIT	UNIT RATE	COST
492 Fire department valves (2-1/2") provided at each side of the stage	4	EA	\$1,250.00	\$5,000
493 & at the entry vestibules to auditorium and gym				
494 D4010.80 Fire Protection Equipment				
495 Fire department pumper connections (FDC) adjacent to egress	3	EA	\$3,000.00	\$9,000
496 Free standing post indicator valve outside the building	1	EA	\$5,000.00	\$5,000
497 D4010.80 Fire Protection supplementary components				
498 Remote pump annunciator	1	EA	\$2,000.00	\$2,000
499 Jockey pump for pressure maintenance	1	EA	\$3,000.00	\$3,000
500 Jockey pump controller	1	EA	\$2,000.00	\$2,000
501 Commissioning	1	LS	\$8,000.00	\$8,000
502 Lifting	1	LS	\$17,500.00	\$17,500
503 Testing	1	LS	\$12,000.00	\$12,000
504 Coordination	1	LS	\$15,000.00	\$15,000
505 Coring, Sleeves & sleeves	1	LS	\$7,000.00	\$7,000
506 Seismic Restraints	1	LS	\$2,150.00	\$2,150
507 Shop drawings/hydraulic calculations	1	LS	\$10,000.00	\$10,000
508 22 Fire Suppression Total				\$741,929
509				
510				
511 22 PLUMBING				
512				
513 6" Water Service w/ meter	1	EA	\$7,500.00	\$7,500
514 6" Reduced Pressure Backflow Preventer	1	EA	\$5,700.00	\$5,700
515 600 Gallon 54kW Electric Water Heater	3	EA	\$30,000.00	\$90,000
516 20 Gallon Electric Water Heater	3	EA	\$5,000.00	\$15,000
517 120 Gallon 18 kW Electric Water Heater	1	EA	\$12,000.00	\$12,000
513 Expansion Tank	1	EA	\$3,200.00	\$3,200
519 Bronze Thermostatic Mixing Valve	1	EA	\$250.00	\$250
520 Storage Room Recirculation Pump	1	EA	\$10,000.00	\$10,000
521 - Mixing Valve	1	EA	\$4,800.00	\$4,800
522 - Circulating Pumps	5	EA	\$1,750.00	\$8,750
523 <i>Fixtures</i>				
524 Water Closet	27	EA	\$1,500.00	\$40,500
525 Water Closet, ADA	17	EA	\$1,700.00	\$28,900
526 Urinal	9	EA	\$1,750.00	\$15,750
527 Lavatory, Countertop	18	EA	\$1,180.00	\$21,240
528 Lavatory, Wall-hung	15	EA	\$1,210.00	\$18,150
529 Drinking Fountain	4	EA	\$5,000.00	\$20,000
530 Mop Sink	3	EA	\$1,000.00	\$3,000
531 Shower	4	EA	\$1,625.00	\$6,500
532 Shower, ADA	2	EA	\$2,800.00	\$5,600
533 Science Sink	4	EA	\$1,050.00	\$4,200
534 Emergency Shower/Eyewash	4	EA	\$1,425.00	\$5,700
535 Art Classroom Sink	6	EA	\$1,100.00	\$6,600

DIRECT TRADE COST DETAILS

ELEMENT	QUANTITY	UNIT	UNIT RATE	COST
536 Classroom Sink	20	EA	\$1,555.00	\$31,100
537 Dishwasher, Ice Maker, Refrigerator Water Connection	3	EA	\$725.00	\$2,175
538 Washer Machine Box	1	EA	\$1,200.00	\$1,200
539 Nurse, Break room, Mail/Copy Room Sink	3	EA	\$1,050.00	\$3,150
540 Floor Drains: (Allowance)				
541 - 3" FD-A	51	EA	\$750.00	\$38,250
542 - 4" FD-B	5	EA	\$825.00	\$4,125
543 Trap Primers	8	EA	\$1,250.00	\$10,000
544 Roof Drain:				
545 - RD (miscellaneous allowance)	1	LS	\$15,000.00	\$15,000
546 Hose Bibbs	29	EA	\$550.00	\$15,950
547 Wall Hydrant	7	EA	\$450.00	\$3,150
548 VTR	17	EA	\$375.00	\$6,375
549 <i>Drainage Piping</i>				
550 - Storm drainage cast iron pipe (miscellaneous allowance)	80,000	GSF	\$2.50	\$200,000
551 - Waste and vent hubless cast iron, below grade:	4,000	LF	\$55.00	\$220,000
552 - Waste and vent hubless cast iron, above grade:	6,000	LF	\$49.00	\$294,000
553 - Acid waste polypropylene pipe, below grade:	1,000	LF	\$95.00	\$95,000
554 - Acid waste polypropylene pipe, above grade:	645	LF	\$65.00	\$41,925
555 -pH Adjustment System	1	LS	\$75,000.00	\$75,000
556 <i>Domestic Water Piping</i>				
557 - Domestic water copper pipe	6,850	LF	\$40.00	\$274,000
558 - Domestic water pipe insulation	6,850	LF	\$10.00	\$68,500
559 - Valves & accessories	1	LS	\$140,000.00	\$140,000
560 - Kitchen Sinks and Equipment Hook-ups	1	LS	\$50,000.00	\$50,000
561 Grease trap	1	LS	\$15,000.00	\$15,000
562 Trenching & Backfill	1	LS	\$65,000.00	\$65,000
563 Seismic Restraints	1	LS	\$15,000.00	\$15,000
564 Lift & Hoisting	1	LS	\$20,000.00	\$20,000
558 Demo; Cut, Cap, Make Safe. Demo Gas Lines, Gas Connections	1	LS	\$100,000.00	\$100,000
566 Coring, cutting and sleeves	1	LS	\$8,000.00	\$8,000
567 Commissioning support	1	LS	\$16,000.00	\$16,000
568 Permits & Fees	1	LS	\$24,000.00	\$24,000
569 Test and sterilize	1	LS	\$8,000.00	\$8,000
570 Shop drawings and submittals	1	LS	\$20,000.00	\$20,000
571 22 Plumbing Total				\$2,213,240
572				
573				
574 23 HVAC				
575				
576 - 2000 CFM Zone 1 ERV (K + Case)	1	EA	\$60,000.00	\$60,000
577 - 2500 CFM Zone 2 ERV (Pre-K, 1st, OT/PT, K-4, IDF)	1	EA	\$65,000.00	\$65,000
578 - 2500 CFM Zone 3 ERV (2nd, K-4 Music, Matloff Lab)	1	EA	\$65,000.00	\$65,000
579 - 3000 CFM Zone 4 ERV (3rd, K-4 Sci, K-4 Admin)	1	EA	\$70,000.00	\$70,000

DIRECT TRADE COST DETAILS

ELEMENT	QUANTITY	UNIT	UNIT RATE	COST
580 - 2000 CFM Zone 5 ERV (Media)	1	EA	\$60,000.00	\$60,000
581 - 2500 CFM Zone 6 ERV (Commons)	1	EA	\$65,000.00	\$65,000
582 - 2000 CFM Zone 7 ERV (4th, SPED, 4th Hub, Nurse)	1	EA	\$60,000.00	\$60,000
583 - 2500 CFM Zone 8 ERV (4TH, 5TH, 5TH Hub)	1	EA	\$65,000.00	\$65,000
584 - 3000 CFM Zone 9 ERV (7th, World Language, Digital Lab, IDF)	1	EA	\$70,000.00	\$70,000
585 - 3000 CFM Zone 10 ERV (6th, 6th Hub, Eng'g Lab, World Lang.)	1	EA	\$70,000.00	\$70,000
586 - 2500 CFM Zone 11 ERV (8th, 8th Hub, Resource Rm)	1	EA	\$65,000.00	\$65,000
587 - 2500 CFM Zone 12 ERV (5-8 Music, 5-8 Art, Flex)	1	EA	\$65,000.00	\$65,000
588 - 1000 CFM Zone 13 ERV (Stage)	1	EA	\$45,000.00	\$45,000
589 - 3000 CFM Zone 14 ERV (Auditorium)	1	EA	\$70,000.00	\$70,000
590 - 2000 CFM Zone 15 ERV (Lecture Hall)	1	EA	\$60,000.00	\$60,000
591 - 1000 CFM Zone 16 ERV (Corridor, Storage, Custodial)	1	EA	\$45,000.00	\$45,000
592 - 2500 CFM Zone 17A ERV (Reed Gym)	1	EA	\$65,000.00	\$65,000
593 - 2500 CFM Zone 17B ERV (Reed Gym)	1	EA	\$65,000.00	\$65,000
594 - 600 CFM Zone 18 ERV (Movement, Indoor Unit)	1	EA	\$16,000.00	\$16,000
595 - 500 CFM Zone 19 ERV (Locker Rooms, Indoor Unit)	1	EA	\$16,000.00	\$16,000
596 - 3500 CFM Zone 20 ERV (Smith Gym, Indoor Unit, Above K-4 Music)	1	EA	\$80,000.00	\$80,000
597 - 4000 CFM Zone 21 ERV (Dining, Indoor Unit, Above Kitchen)	1	EA	\$100,000.00	\$100,000
598 - 2700 CFM MAU (Make Up Air Unit)	1	EA	\$65,000.00	\$65,000
599 - 30 Ton ACCU (Zone 1)	1	EA	\$65,000.00	\$65,000
600 - 18 Ton ACCU (Zone 2)	1	EA	\$40,000.00	\$40,000
601 - 24 Ton ACCU (Zone 3)	1	EA	\$52,000.00	\$52,000
602 - 20 Ton ACCU (Zone 4)	1	EA	\$43,000.00	\$43,000
603 - 14 Ton ACCU (Zone 5)	1	EA	\$30,000.00	\$30,000
604 - 16 Ton ACCU (Zone 6)	1	EA	\$35,000.00	\$35,000
605 - 30 Ton ACCU (Zone 7)	1	EA	\$65,000.00	\$65,000
606 - 18 Ton ACCU (Zone 8)	1	EA	\$40,000.00	\$40,000
607 - 12 Ton ACCU (Zone 9)	1	EA	\$30,000.00	\$30,000
608 - 20 Ton ACCU (Zone 10)	1	EA	\$43,000.00	\$43,000
609 - 10 Ton ACCU (Zone 11)	1	EA	\$22,000.00	\$22,000
610 - 18 Ton ACCU (Zone 12)	1	EA	\$40,000.00	\$40,000
611 - 7 Ton ACCU (Zone 13)	1	EA	\$20,000.00	\$20,000
612 - 18 Ton ACCU (Zone 14)	1	EA	\$40,000.00	\$40,000
613 - Ductless Wall Mounted Indoor Units (DS)	58	EA	\$2,500.00	\$145,000
614 - Ducted High Static Indoor Units (FCU)	31	EA	\$4,000.00	\$124,000
615 - Distribution Control Units, Y-Branches	25	EA	\$1,000.00	\$25,000
624 - 4000 CFM Indoor Air Handling Unit (AHU-1, Smith Gym)	2	EA	\$45,000.00	\$90,000
625 - 3000 CFM Indoor Air Handling Unit (AHU-2, Stage)	1	EA	\$35,000.00	\$35,000
626 - 6000 CFM Indoor Air Handling Unit (AHU-3, Auditorium)	1	EA	\$67,500.00	\$67,500
627 - 2000 CFM Indoor Air Handling Unit (AHU-4, Lecture)	1	EA	\$22,500.00	\$22,500
628 - 5000 CFM Indoor Air Handling Unit (AHU-5 Reed Gym)	1	EA	\$56,250.00	\$56,250
629 - 5000 CFM Indoor Air Handling Unit (AHU-6 Reed Gym)	1	EA	\$56,250.00	\$56,250
622 Bathroom, Misc. Exhaust Fans	10	EA	\$2,000.00	\$20,000
623 Kitchen Exhaust Fan	1	EA	\$3,000.00	\$3,000

DIRECT TRADE COST DETAILS

ELEMENT	QUANTITY	UNIT	UNIT RATE	COST
624 Dishwasher Exhaust Fan	1	EA	\$2,000.00	\$2,000
625 BacNet Central Controllers	2	EA	\$10,000.00	\$20,000
626 MultiSite Communication Manager	2	EA	\$8,000.00	\$16,000
627 Power Distribution Indicators	2	EA	\$5,000.00	\$10,000
628 16 kW Cabinet Unit Heaters	10	EA	\$1,500.00	\$15,000
629 10 kW Unit Heaters	6	EA	\$1,200.00	\$7,200
630 Finned Tube Radiation	60	LF	\$150.00	\$9,000
631 Air Curtain	1	EA	\$5,000.00	\$5,000
632 Ceiling Fans	6	EA	\$1,000.00	\$6,000
633 Refrigerant piping	7,500	LF	\$85.00	\$637,500
634 Condensate piping	3,000	LF	\$55.00	\$165,000
635 Diffusers, Registers, Grilles	650	EA	\$150.00	\$97,500
636 Volume Dampers	1	LS	\$20,000.00	\$20,000
637 Flex Duct	1	LS	\$25,000.00	\$25,000
638 Galvanized Duct; agreed 0.75#/gsf	64,850	GSF	\$20.00	\$1,297,000
639 Duct Insulation	64,850	GSF	\$4.50	\$291,825
640 Double Wall Spiral Ductwork (Auditorium & (2) Gyms)	1	AL	\$150,000.00	\$150,000
641 Black Iron Grease Duct w/Fire Wrap	1,500	LBS	\$30.00	\$45,000
642 Stainless Steel Dishwasher Exhaust Duct	785	LBS	\$20.00	\$15,700
643 Kitchen Range Hoods	2	EA	\$5,500.00	\$11,000
644 Seal duct	1	LS	\$20,000.00	\$20,000
645 Demolition, Cut & Drop	1	LS	\$100,000.00	\$100,000
646 Commissioning support	1	LS	\$95,000.00	\$95,000
647 Controls	1	LS	\$900,000.00	\$900,000
648 Testing & Balancing	1	LS	\$80,000.00	\$80,000
649 Rigging & Lifting	1	LS	\$40,000.00	\$40,000
650 Shop drawings and submittals	1	LS	\$25,000.00	\$25,000
651 23 HVAC Total				\$6,722,225
652				
653				
654 26 ELECTRICAL				
655				
656 <i>Interior Electrical</i>				
657 <i>Gear & Distribution</i>				
658 Normal Power				
659 3000A 480/277V main switchboard with digital metering & SPD	1	EA	\$120,000.00	\$120,000
660 400A 480/277V distribution panelboard	4	EA	\$6,500.00	\$26,000
661 250A 480/277V panelboard	2	EA	\$2,500.00	\$5,000
662 100A 480/277V panelboard	6	EA	\$1,800.00	\$10,800
663 112.5KVA dry type transformer	1	EA	\$9,810.00	\$9,810
664 75KVA K-rated transformer	5	EA	\$9,320.00	\$46,600
665 250A 208/120V panelboard	2	EA	\$2,500.00	\$5,000
666 250A 208/120V double tub panelboard	4	EA	\$5,000.00	\$20,000
667 100A 208/120V panelboard	1	EA	\$1,800.00	\$1,800

DIRECT TRADE COST DETAILS

ELEMENT	QUANTITY	UNIT	UNIT RATE	COST
668 400A disconnect	2	EA	\$4,000.00	\$8,000
669 Power monitoring	21	EA	\$1,000.00	\$21,000
670 TVSS	7	EA	\$750.00	\$5,250
671 Normal power feeders	165,078	GSF	\$1.50	\$247,617
672 Grounding and bonding	1	LS	\$15,000.00	\$15,000
673 Generator Power				
674 750KW diesel fueled generator set in WP enclosure	1	LS	\$250,000.00	\$250,000
675 1200A 3 pole automatic transfer switch	1	EA	\$25,550.00	\$25,550
676 150A 3 pole automatic transfer switch	1	EA	\$4,825.00	\$4,825
677 1600A manual transfer switch	1	EA	\$23,200.00	\$23,200
678 1200A 480/277V distribution panelboard	1	EA	\$12,000.00	\$12,000
679 400A 480/277V distribution panelboard	1	EA	\$6,500.00	\$6,500
680 400A 480/277V panelboard	3	EA	\$4,500.00	\$13,500
681 150A 480/277V panelboard	1	EA	\$2,000.00	\$2,000
682 100A 480/277V panelboard	9	EA	\$1,800.00	\$16,200
683 112.5KVA dry type transformer	1	EA	\$9,810.00	\$9,810
684 45KVA dry type transformer	2	EA	\$5,935.00	\$11,870
685 30KVA dry type transformer	1	EA	\$6,085.00	\$6,085
686 400A 208/120V panelboard	1	EA	\$4,500.00	\$4,500
687 150A 208/120V panelboard	2	EA	\$2,000.00	\$4,000
688 100A 208/120V panelboard	1	EA	\$1,800.00	\$1,800
689 Power monitoring	6	EA	\$1,000.00	\$6,000
690 TVSS	1	EA	\$750.00	\$750
691 Emergency power off button	1	EA	\$750.00	\$750
692 Emergency power feeders	165,078	GSF	\$1.25	\$206,348
693 Photovoltaic				PV Budget
694 <i>Equipment Wiring</i>				
695 ACCU feed, connection & safety switch WP	14	EA	\$2,500.00	\$35,000
696 AHU feed & connection& connection to VFD	7	EA	\$3,500.00	\$24,500
697 DDC system power	1	EA	\$1,500.00	\$1,500
698 Air curtain feed & connection	1	EA	\$1,500.00	\$1,500
699 Ceiling fan feed & connection	6	EA	\$1,000.00	\$6,000
700 CUH feed, connection & safety switch	10	EA	\$1,500.00	\$15,000
701 Dishwasher feed & connection	1	EA	\$2,000.00	\$2,000
702 EF feed, connection & safety switch	2	EA	\$1,500.00	\$3,000
703 ERV feed, connection & safety switch WP	22	EA	\$2,500.00	\$55,000
704 EWH feed, connection & safety switch	4	EA	\$1,500.00	\$6,000
705 FCU feed, connection & safety switch	31	EA	\$1,000.00	\$31,000
706 Fire pump 100A	1	EA	\$15,000.00	\$15,000
707 Hot water recirc pump feed, connection & safety switch	1	EA	\$1,500.00	\$1,500
708 Jockey pump feed, connection & safety switch	1	EA	\$1,500.00	\$1,500
709 KEF feed, connection & safety switch WP	1	EA	\$2,000.00	\$2,000
710 MAU feed & connection& connection to VFD	1	EA	\$2,500.00	\$2,500
711 UH feed, connection & safety switch	5	EA	\$1,200.00	\$6,000

DIRECT TRADE COST DETAILS

ELEMENT	QUANTITY	UNIT	UNIT RATE	COST
712 Kitchen equipment wiring allowance	1	LS	\$25,000.00	\$25,000
713 Equipment wiring not yet detailed	1	LS	\$50,000.00	\$50,000
714 <i>Lighting & Branch Power</i>				
715 Lighting fixtures with installation	165,078	GSF	\$5.00	\$825,390
716 Egress & emergency lighting	165,078	GSF	\$0.25	\$41,270
717 Lighting control system	165,078	GSF	\$1.10	\$181,586
718 Time clock	1	EA	\$200.00	\$200
719 Photo cell	1	EA	\$200.00	\$200
720 Branch devices	165,078	GSF	\$0.50	\$82,539
721 Lighting & branch circuitry	165,078	GSF	\$5.00	\$825,390
722 <i>Fire Alarm System (assumes FA MC cable is acceptable)</i>				
723 Addressable fire alarm system with voice evac				
724 Fire alarm system	165,078	GSF	\$2.00	\$330,156
725 Fire alarm control panel				incl. above
726 Fire alarm remote annunciator(s)				incl. above
727 Master box				incl. above
728 Exterior beacon				incl. above
729 Knox box				incl. above
730 Kitchen Ansul connection				incl. above
731 Connection to AV system				incl. above
732 Initiating devices				incl. above
733 FA circuitry				incl. above
734 Testing and programming				incl. above
735 Mass Notification	165,078	GSF	\$0.50	\$82,539
736 Keep existing fire alarm system operational during construction, allow	1	LS	\$50,000.00	\$50,000
737 <i>Public Safety Radio Distributed Antenna System</i>				
738 DAS antenna system	1	LS	\$80,000.00	\$80,000
739 <i>Telephone/Data/CATV</i>				
740 Rough In	165,078	GSF	\$1.25	\$206,348
741 4" EMT sleeves	24	EA	\$250.00	\$6,000
742 Backboard	5	EA	\$500.00	\$2,500
743 Grounding	5	EA	\$500.00	\$2,500
744 MDF rough-in	1	EA	\$2,000.00	\$2,000
745 IDF rough-in	4	EA	\$1,500.00	\$6,000
746 Devices and cabling	165,078	GSF	\$1.75	\$288,887
747 Backbone cabling				incl. above
748 Data acquisition system - allowance provided	1	AL	\$40,000.00	\$40,000
749 <i>Master Clock/Public Address System</i>				
750 Master Clock/Public Address System	165,078	GSF	\$1.50	\$247,617
751 <i>Gymnasium Equipment</i>				
752 Power to gymnasium equipment, allow	1	LS	\$25,000.00	\$25,000
753 Scoreboard with control and shot clock				incl. above
754 Motorized backstop				incl. above
755 Motorized curtain				incl. above

DIRECT TRADE COST DETAILS

ELEMENT	QUANTITY	UNIT	UNIT RATE	COST
756 <i>Audio/Visual Systems</i>				
757 Auditorium local AV system equipment - Accentech budget	1	AL	\$304,600.00	\$304,600
758 Rough-in, allow	1	LS	\$40,000.00	\$40,000
759 Auditorium assistive listening system				incl. above
760 Additional wireless microphones	1	LS	\$86,100.00	Add Alt 1
761 Video streaming	1	LS	\$15,300.00	Add Alt 2
762 Broadcast video	1	LS	\$40,500.00	Add Alt 3
763 Gymnasium local AV system equipment	2	EA	\$15,000.00	\$30,000
764 Student Commons local AV system equipment	1	LS	\$15,000.00	\$15,000
765 Rough-in, allow	3	EA	\$5,000.00	\$15,000
766 Power to projector	2	EA	\$750.00	\$1,500
767 Power to motorized screen & control station	5	EA	\$1,000.00	\$5,000
768 AV equipment to classrooms, conference rooms etc.				By Owner
769 Rough-in, allow	165,078	SF	\$0.35	\$57,777
770 <i>Theatrical Equipment</i>				
771 <i>Theater</i>				
772 Platform: LED based theatrical lighting system equipment	1	LS	\$60,000.00	\$60,000
773 (Barbizon allowance)				
774 Installation, rough-in & 120V power, allow	1	LS	\$25,000.00	\$25,000
775 <i>Auditorium</i>				
776 Rigging system equipment & install: Robert Lorelli Assoc, allow	1	LS	\$145,000.00	See Div 11
777 Power to motorized position, allow	4	EA	\$1,500.00	\$6,000
778 Power to controller, allow	1	LS	\$1,500.00	\$1,500
779 Dimming system equipment: Robert Lorelli Assoc, allowance	1	LS	\$165,000.00	\$165,000
780 Dimmer rack, per App F	1	LS		incl. above
781 Stage fixture package, per App F	1	LS		incl. above
782 Installation, rough-in & 120V power, allow	1	LS	\$50,000.00	\$50,000
783 Dimmer rack installation	1	LS	\$1,500.00	\$1,500
784 Emergency light transfer switch, ELTS, allow	1	LS	\$7,800.00	\$7,800
785 400A company switch	1	EA	\$5,700.00	\$5,700
786 100A company switch	1	EA	\$4,000.00	\$4,000
787 400A feed, co switch & dimmer rack				incl. above
788 100A feed				incl. above
789 <i>Security System</i>				
790 Security System head-end	1	LS	\$60,000.00	\$60,000
791 Door contact	64	EA	\$150.00	\$9,600
792 Motion detector	91	EA	\$150.00	\$13,650
793 CCTV camera - qty provided	45	EA	\$850.00	\$38,250
794 CCTV camera in weather proof enclosure at site pole	20	EA	\$1,200.00	\$24,000
795 Door release	2	EA	\$120.00	\$240
796 Duress button	2	EA	\$120.00	\$240
797 Card reader	13	EA	\$350.00	\$4,550
798 Video intercom master station - qty provided	4	EA	\$1,500.00	\$6,000
799 Video intercom station	4	EA	\$1,000.00	\$4,000

DIRECT TRADE COST DETAILS

ELEMENT	QUANTITY	UNIT	UNIT RATE	COST
800 Rough-in:				
801 Device box with conduit to ceiling - qty provided	161	EA	\$100.00	\$16,100
802 Security cable	16,000	LF	\$1.20	\$19,200
803 Security system allowance	165,078	GSF	\$0.15	\$24,762
804 <i>Lightning Protection</i>				
805 UL Master label lightning protection	1	LS	\$75,000.00	\$75,000
806 <i>Reimbursable</i>				
807 Demo and make safe	1	LS	\$30,000.00	\$30,000
808 Coordination & management	1	LS	\$40,000.00	\$40,000
809 Coring & patching, seismic, studies & testing etc.	1	LS	\$20,000.00	\$20,000
810 Fees & Permits	1	LS	\$80,000.00	\$80,000
811 Temp power & lights	1	LS	\$75,000.00	\$75,000
812 Phasing	1	LS	\$50,000.00	\$50,000
813 26 Electrical Total				\$6,143,654
814				
815				
816 31 EARTHWORK				
817				
818 Underpinning at unsuitable soil removal - qty provided	300	LF	\$2,000.00	\$600,000
819 Trench for new foundation wall, backfill after install	1,273	CY	\$25.00	\$31,829
820 Trench for new grade beam, backfill after install	112	CY	\$31.25	\$3,501
821 Spread footing excavation, backfill after install	78	CY	\$40.00	\$3,137
822 Infill former basement/crawl space under 1948 Building	433	CY	\$50.00	\$21,667
823 Foundation wall extension, det E1, E1A/S-401				
824 Carefully remove soil from existing foundation wall; assume 5' wide	2,736	CY	\$35.00	\$95,751
825 working space, backfill with excavated material				
826 Dewatering during excavation	1	LS	\$15,000.00	\$15,000
827 Rough and fine grade for new slab	51,830	SF	\$1.50	\$77,745
828 Gravel base to slab on grade; 12"	2,112	CY	\$32.00	\$67,571
829 31 Earthwork Total				\$916,201
830				
831				
832				

DIRECT TRADE COST DETAILS

ELEMENT	QUANTITY	UNIT	UNIT RATE	COST
02 EXISTING CONDITIONS				
<i>Hazardous Materials; CDW Memo dated September 4, 2018</i>				
Abatement Cost Estimates	1	AL	\$699,930.00	\$699,930
Other Hazardous Materials Costs	1	AL	\$15,450.00	\$15,450
<i>Building Demolition</i>				
Exist building to be demolished in its entirety, foundations, sawcutting	10,885	SF	\$11.00	\$119,735
02 Existing Conditions Total				\$835,115
31 EARTHWORK				
<i>Site Clearing, Site Preparation</i>				
Temporary fire protection and domestic water to modular building	358	LF	\$75.00	\$26,850
Temporary sewer pipe (install and remove)	208	LF	\$68.00	\$14,144
Temporary SMH (install and remove)	2	EA	\$5,100.00	\$10,200
Power ductbank to Modular building, 2500A	340	LF	\$550.00	\$187,000
2500A switchboard, allow	1	LS	\$100,000.00	\$100,000
Modular building electrical requirements, (assumes electrical for modular building is pre-fabricated)	1	LS	\$25,000.00	\$25,000
Fire alarm to modular building, allow	340	LF	\$25.00	\$8,500
Communication to modular building, allow	340	LF	\$25.00	\$8,500
Metal storage containers	356	SF	\$10.00	\$3,560
Wood shed	112	SF	\$10.00	\$1,120
<i>Selective Site Demolition</i>			\$296,618	
Saw cut existing pavement	180	LF	\$12.00	\$2,160
Asphalt pavement	134,094	SF	\$0.85	\$113,980
Bituminous concrete inside courtyard	702	SF	\$1.00	\$702
Pulverize existing pavement	74,035	SF	\$0.90	\$66,632
Sidewalk	11,696	SF	\$1.50	\$17,544
Brick walk	582	SF	\$1.50	\$873
Concrete stair	38	SF	\$5.00	\$190
Concrete ramp	12	SF	\$5.00	\$60
Concrete pad	814	SF	\$2.50	\$2,035
Concrete dumpster pad	244	SF	\$2.50	\$610
8"brick wall at dumpster enclosure	270	SF	\$4.50	\$1,215
Metal hatches	1	EA	\$150.00	\$150
Bench	6	EA	\$75.00	\$450
Metal bleaches	84	SF	\$12.00	\$1,008
Backstop fence	44	LF	\$10.00	\$440
Sign	2	EA	\$50.00	\$100
Playground equipment	1	LS	\$5,000.00	\$5,000
Cut and cap existing water	1	EA	\$450.00	\$450
Water pipe	162	LF	\$22.00	\$3,564

DIRECT TRADE COST DETAILS

ELEMENT	QUANTITY	UNIT	UNIT RATE	COST
52 Water gate	1	EA	\$350.00	\$350
53 Cut and cap gas service	1	EA	\$450.00	\$450
54 Gas pipe	60	LF	\$22.00	\$1,320
55 Drainage pipe	1,687	LF	\$24.00	\$40,488
56 Drainage structure	10	EA	\$1,200.00	\$12,000
57 Sewer pipe	202	LF	\$24.00	\$4,848
58 Miscellaneous demolition other than above	1	LS	\$20,000.00	\$20,000
59 Protection of existing site elements to remain	1	LS	\$15,000.00	\$15,000
60 31 10 00 Site Clearing				
61 R & D trees	56	EA	\$450.00	\$25,200
62 Trees protection	1	LS	\$60,000.00	\$60,000
63 Tree/bush, clearing, grubbing	0.6	ACRE	\$8,000.00	\$4,795
64 R & D groundcover	1	AL	\$3,500.00	\$3,500
65 Construction stage down area	26,525	SF	\$2.50	\$66,313
66 Construction fence 6' high, maintenance and remove	6,985	LF	\$16.00	\$111,760
67 pair of gates	2	PR	\$2,500.00	\$5,000
68 Stabilized construction entrance, maintenance and remove	2	LS	\$7,000.00	\$14,000
69 Wash down/re-fueling/parking	3,000	SF	\$2.00	\$6,000
70 Temporary signs	1	LS	\$5,000.00	\$5,000
71 Erosion and Sedimentation Control				
72 Erosion control barrier at temporary construction period soil stockpile	1	AL	\$6,000.00	\$6,000
73 Haybale w/silt fence	6,836	LF	\$12.00	\$82,032
74 Inlet protection; sediment bag at catch basin	36	EA	\$250.00	\$9,000
75 Straw wattle	684	LF	\$5.00	\$3,420
76 Compost sock with silt fence	128	LF	\$10.00	\$1,280
77 Earth Moving			\$1,011,682	
78 Strip and stockpile existing topsoil	5,524	CY	\$9.00	\$49,716
79 <i>Quantities provided by Architect</i>				
80 removal of unsuitable within building footprint, disposal	7,874	CY	\$33.00	\$259,842
81 import structural fill	7,874	CY	\$28.00	\$220,472
82 removal of unsuitable soil for underpinning of existing foundation	300	LF	\$50.00	\$15,000
83 - 650lf reduced to 300lf, disposal				
84 Asphalt parking lot and roadway cut and fill	9,544	CY	\$10.00	\$95,436
85 Basketball court; cut and fill	224	CY	\$10.00	\$2,241
86 Concrete pavement; cut and fill	3,751	CY	\$10.00	\$37,506
87 Reinforced turf; cut and fill	230	CY	\$9.00	\$2,067
88 Site grading; cut and fill	8,333	CY	\$9.00	\$75,001
89 Crushed stone	1,342	SF	\$3.50	\$4,697
90 Disposal surplus soil	9,890	CY	\$18.00	\$178,020
91 Rough and fine grade	286,738	SF	\$0.25	\$71,685
92 31 Earthwork Total				\$2,111,474
93				
94				
95				

DIRECT TRADE COST DETAILS

ELEMENT	QUANTITY	UNIT	UNIT RATE	COST
96 32 EXTERIOR IMPROVEMENTS				
97				
98 Paving and Surfacing				
99 <i>Quantities provided by Architect</i>				
100 Bituminous concrete pavement - Heavy duty 4.5" thick	124,433	SF	\$3.30	\$410,629
101 Bituminous concrete pavement - Standard duty 3.5" thick	53,404	SF	\$3.00	\$160,212
102 Import structural fill for parking area and driveway	940	CY	\$28.00	\$26,320
103 Import gravel base for pavement; 12" thick at HD, 8" thick at	3,810	CY	\$28.00	\$106,677
104 Standard. Note: det A1/C-503 specifies 18" and 12" respectively				
105 Bituminous concrete at existing pavement (mill existing, overlay)	958	SF	\$2.75	\$2,635
106 Import gravel base for pavement in addition to qty provided	2,717	CY	\$28.00	etr
107 Porous pavement	6,774	SF	\$5.50	\$37,257
108 Gravel base of porous pavement	276	CY	\$32.00	\$8,831
109 Vertical granite curbing	10,032	LF	\$38.00	\$381,216
110 Sloped granite edging	1,128	LF	\$32.00	\$36,096
111 Flush granite curbing	270	LF	\$35.00	\$9,450
112 Access granite curbing	48	LF	\$42.00	\$2,016
113 Curbing at entrance island	164	LF	\$32.00	\$5,248
114 <i>Pavement Markings:</i>				
115 Standard parking spaces	226	EA	\$35.00	\$7,910
116 ADA parking spaces	8	EA	\$75.00	\$600
117 Crosswalk	3,168	SF	\$2.00	\$6,336
118 Misc. pavement marking	1	LS	\$5,000.00	\$5,000
119 <i>Sidewalks and other surfacing</i>				
120 Concrete entrance	6,150	SF	\$12.50	\$76,875
121 Concrete walkway; 5" thick, slab edge thickening, 12" gravel base	80,048	SF	\$6.50	\$520,312
122 Concrete walkway at courtyard	1,324	SF	\$7.00	\$9,268
123 Concrete entrance pavement	3,136	SF	\$12.50	\$39,200
124 Concrete loading area	1,994	SF	\$8.00	\$15,952
125 Concrete ramp	396	SF	\$15.00	\$5,940
126 Curb cut	15	EA	\$380.00	\$5,700
127 Concrete pad; 8" thick, slab edge thickening, 18" gravel base	3,785	SF	\$10.00	\$37,850
128 Concrete dumpster pad	454	SF	\$12.00	\$5,448
129 Gravel base to sidewalk and surfacing	2,149	CY	\$32.00	\$68,768
130 Reinforced turf	4,662	SF	\$5.00	\$23,310
131 12" gravel base for reinforce turf	190	CY	\$32.00	\$6,078
132 Asphalt pavement in lieu of reinforce turf	4,662	SF	\$3.00	Option
133 Sports Field Development				
134 <i>Playground:</i>				
135 Play safety surface; 3½" surface, 4" bit. conc subbase, 12" gravel base	24,624	SF	\$19.00	\$467,856
136 Playground equipment	2	LS	\$150,000	\$300,000
137 <i>Basketball Courts:</i>				
138 Basketball court pavement	4,840	SF	\$4.05	\$19,602
139 Basketball court pavement marking	4,840	SF	\$2.00	\$9,680

DIRECT TRADE COST DETAILS

ELEMENT	QUANTITY	UNIT	UNIT RATE	COST
140 Basketball goals	1	EA	\$2,800.00	\$2,800
141 Site Improvements				
142 Granite seat wall; 18" wide x18" max high, thermal finish, eased edge	613	LF	\$420.00	\$257,460
143 Concrete cheek wall	6	LF	\$240.00	\$1,440
144 Light pole base, Parking light pole and Pedestrian Light pole base	62	EA		Div 26
145 Concrete steps	26	LFR	\$125.00	\$3,250
146 Railing at concrete ramp/stair	120	LF	\$160.00	\$19,200
147 Site Furnishings				
148 Bike rack	37	EA	\$650.00	\$24,050
149 Metal bollard, det G5/C-504	6	EA	\$600.00	\$3,600
150 Decorative bollard, det G7/C-504	20	EA	\$1,200.00	\$24,000
151 Parking sign	10	EA	\$350.00	\$3,500
152 Traffic sign	3	EA	\$500.00	\$1,500
153 Player bench	1	EA	\$1,500.00	\$1,500
154 Entrance sign	3	EA	\$22,000.00	\$66,000
155 Exterior trash receptacles	4	EA	\$500.00	\$2,000
156 Exterior recycling receptacles	4	EA	\$750.00	\$3,000
157 Flag pole and foundation	1	EA	\$7,500.00	\$7,500
158 Steel picket fence at playground	238	LF	\$150.00	\$35,700
159 Single gate at playground	2	EA	\$800.00	\$1,600
160 Acoustical fence	160	LF	\$120.00	\$19,200
161 10' High chain link fence	154	LF	\$45.00	\$6,930
162 6' High chain link fence	154	LF	\$36.00	\$5,544
163 6' High Double fence gate	1	EA	\$1,000.00	\$1,000
164 42" High chain link fence	310	LF	\$31.00	\$9,610
165 Double gate at mechanical equipment pad	1	EA	\$1,000.00	\$1,000
166 Plantings, Soft Landscaping				
167 Respread topsoil	4,143	CY	\$10.00	\$41,430
168 Import topsoil for lawn and hydroseed mix	2,956	CY	\$25.00	\$73,900
169 Topsoil for planting beds, shrubs and perennials	1,348	CY	\$25.00	\$33,700
170 Mulch	135	CY	\$45.00	\$6,075
171 <i>Planting Plan II C-152; Planting Legend - qty provided</i>				
172 Deciduous tree 3-1/2" - 4" Cal	57	EA	\$1,050.00	\$59,850
173 Flowering tree 2-1/2" -3" Cal	13	EA	\$850.00	\$11,050
174 Evergreen tree 8'-10' Ht.	9	EA	\$700.00	\$6,300
175 Shrub 3'-4' Ht.	72	EA	\$180.00	\$12,960
176 Shrub 18"-24" Ht.	229	EA	\$120.00	\$27,480
177 Groundcover #1 cont.@18"O.C.	4,020	EA	\$12.50	\$50,250
178 Sod lawn - restoration of soccer field after temp modular buildings	160,192	SF	\$2.50	\$400,480
179 removed				
180 Hydroseed mix	168,677	SF	\$0.20	\$33,735
181 Wetland seed mix	6,202	SF	\$0.35	\$2,171
182 Maintenance of Landscaping	1	LS	\$10,000.00	\$10,000
183 32 Exterior Improvements Total				\$4,089,037

DIRECT TRADE COST DETAILS

ELEMENT	QUANTITY	UNIT	UNIT RATE	COST
184 33 SITE MECHANICAL UTILITIES				
185				
186 <i>Water Utilities</i>				
187 Fire hydrants and gate valve	7	EA	\$2,800.00	\$19,600
188 6" CLDI fire water	178	LF	\$75.00	\$13,350
189 8" CLDI fire water	2,619	LF	\$85.00	\$222,615
190 8"x6" Tee	6	EA	\$240.00	\$1,440
191 8" Bend	6	EA	\$160.00	\$960
192 Connection to existing water	4	EA	\$2,400.00	\$9,600
193 Thrust blocks	1	LS	\$1,150.00	\$1,150
194 Temporary fire protection and domestic water to modular building	358	LF	\$75.00	Div 31
195 <i>Sanitary Sewerage Utilities</i>				
196 SMH	11	EA	\$4,000.00	\$44,000
197 5,000 Gallon grease trap	1	EA	\$15,000.00	Div 15
198 earthwork associated with tank	100	CY	\$40.00	\$4,000
199 Sewer pipe	1,182	LF	\$52.00	\$61,464
200 Connect to existing SMH	1	EA	\$2,000.00	\$2,000
201 Temporary sewer pipe (install and remove)	208	LF	\$68.00	Div 31
202 Temporary SMH (install and remove)	2	EA	\$5,100.00	Div 31
203 Protect and maintain existing septic tank, pump station and valve pit	1	LS	\$3,500.00	\$3,500
204 <i>Storm Drainage Utilities</i>				
205 WQS	2	EA	\$16,000.00	\$32,000
206 WQI	7	EA	\$7,500.00	\$52,500
207 OCS	6	EA	\$7,500.00	\$45,000
208 Drain manhole	29	EA	\$3,500.00	\$101,500
209 Area drain	13	EA	\$2,000.00	\$26,000
210 FES	6	EA	\$800.00	\$4,800
211 Rip-rap	1	LS	\$600.00	\$600
212 Catch basin	34	EA	\$3,200.00	\$108,800
213 Catch basin, double	2	EA	\$4,800.00	\$9,600
214 Under drain	364	LF	\$18.00	\$6,552
215 Roof drain pipe	940	LF	\$36.00	\$33,840
216 Drain pipe	4,828	LF	\$42.00	\$202,776
217 RD connection	22	EA	\$150.00	\$3,300
218 Subsurface recharge	8,072	SF	\$30.00	\$242,160
219 New bioretention area	6,202	SF	\$15.00	\$93,030
220 Connect to existing drain MH	1	EA	\$1,500.00	\$1,500
221 <i>Gas Service</i>				
222 New service line				By Others
223 Trenching and backfill only for new service line	240	LF	\$35.00	\$8,400
224 33 Site Mechanical Utilities Total				\$1,356,037
225				
226				
227				

DIRECT TRADE COST DETAILS

ELEMENT	QUANTITY	UNIT	UNIT RATE	COST
228 26 SITE ELECTRICAL UTILITIES				
229				
230 <i>Utility Duct banks and Service</i>				
231 Utility Co. charges				Project
232 Power riser pole, new	1	EA	\$1,500.00	\$1,500
233 New Manhole (electrical)	5	EA	\$8,500.00	\$42,500
234 Overhead service	100	LF		By Utility Co.
235 Primary service duct bank 4-4" PVC	2,100	LF	\$125.00	\$262,500
236 Exterior pad mounted transformer, 1500KVA	1	EA		By Utility Co.
237 HV switchgear	1	LS		Building
238 PCC switchboard	1	LS		In PV allow
239 PV switchboard	1	LS		In PV allow
240 750kw pad mounted 480/277V diesel generator set	1	LS		Building
241 Concrete pad	5	EA	\$2,500.00	\$12,500
242 Secondary service duct bank, 3000A feeder	90	LF	\$650.00	\$58,500
243 Generator service duct bank, with feeders	60	LF	\$400.00	\$24,000
244 Canopy PV system #1 ductbank, empty conduit capped, allow 4-4"	150	LF	\$120.00	\$18,000
245 Canopy PV system #2 ductbank, empty conduit capped, allow 4-4"	120	LF	\$120.00	\$14,400
246 Pool wiring including connections to existing system, allow	300	LF	\$50.00	\$15,000
247 Modular Building				Div 31
248 <i>Communications Duct bank and Service</i>				
249 New Manhole (comm)	5	EA	\$8,500.00	\$42,500
250 Communications service duct bank 4-4" PVC	2,160	LF	\$125.00	\$270,000
251 <i>Site Lighting</i>				
252 Site lighting fixture Type AA	33	EA	\$2,400.00	\$79,200
253 Site lighting fixture Type BB	5	EA	\$2,750.00	\$13,750
254 Site lighting fixture Type CC	20	EA	\$800.00	\$16,000
255 Site lighting fixture unidentified roadway fixture, priced as AA	4	EA	\$2,400.00	\$9,600
256 Pole base	62	EA	\$300.00	\$18,600
257 Site lighting circuitry	7,000	LF	\$16.00	\$112,000
258 <i>Site Electrical Demolition</i>				
259 Site Electrical Demolition	1	LS	\$20,000.00	\$20,000
260 Decommission and remove transformer	1	LS		incl. above
261 Remove existing pole riser	3	EA		incl. above
262 Remove existing underground vault	1	LS		incl. above
263 Demo and remove concrete pad, phase 1	1	EA		incl. above
264 Demo and remove concrete pad, phase 2	2	EA		incl. above
265 Demo and remove secondary feeder, phase 1	60	LF		incl. above
266 Demo and remove secondary feeder, phase 2	140	LF		incl. above
267 Demolition (cut cap and make-safe)	1	LS		incl. above
268 26 Site Electrical Utilities Total				\$1,030,550
269				
270				
271				