

Construction Cost Estimate

Concept Design Cost Estimate - Revision 2

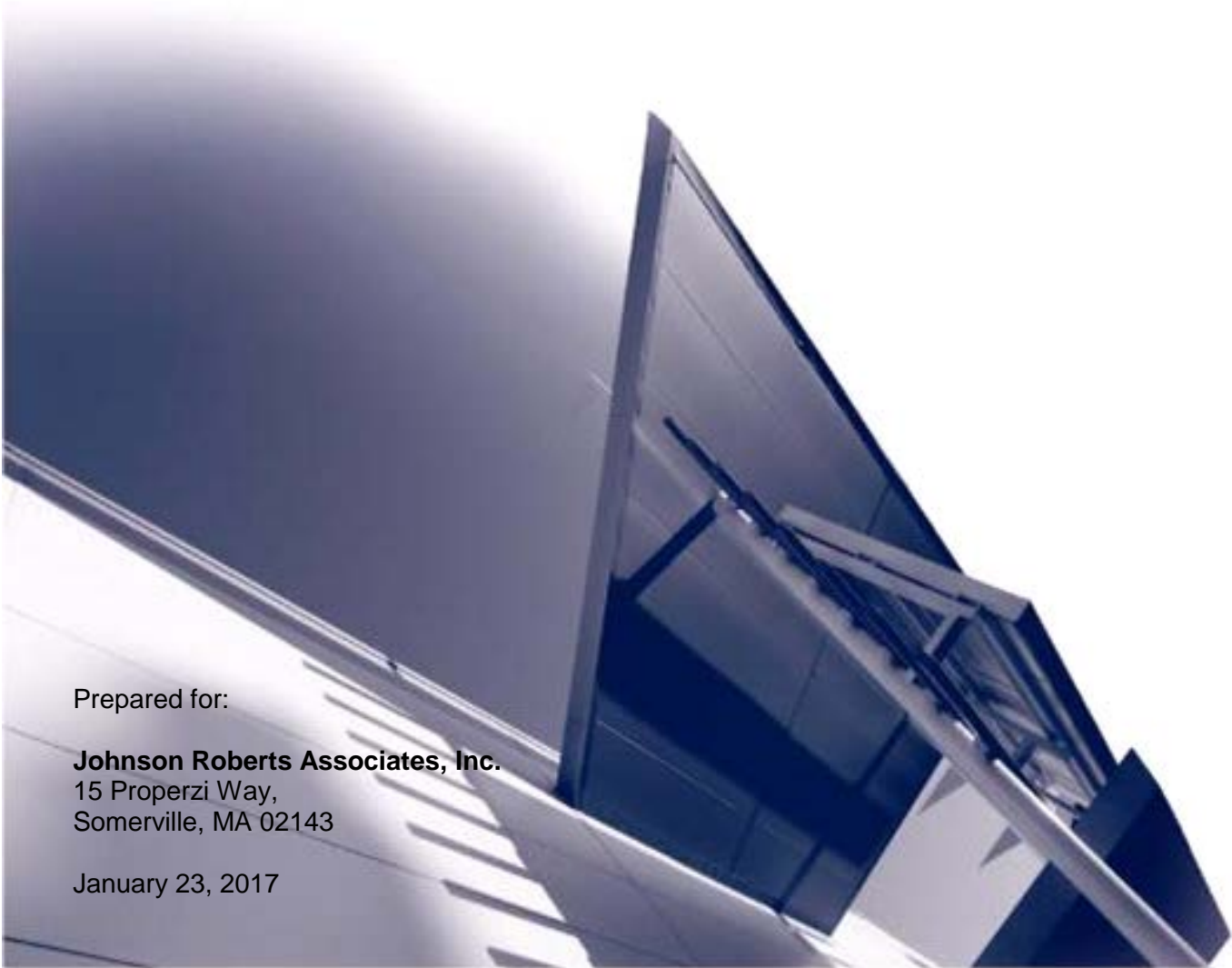
Belmont Public Library Option 2 - Renovation and Addition

Belmont, MA

Prepared for:

Johnson Roberts Associates, Inc.
15 Properzi Way,
Somerville, MA 02143

January 23, 2017



Belmont Public Library**Concept Design Cost Estimate - Option 2 - Revision 2**

Project Details

Description***Basis of Estimate***

This estimate has been prepared at the request of the Johnson Roberts Associates and is to provide a Concept Design Cost Study for the renovation and addition to the existing Belmont Public Library, located at 336 Concord Ave. in Belmont, MA.

The estimate is based upon measured quantities and built-up rates prepared from the Concept Design drawings and Sketch-Up Model issued to RLB on the 16th of December 2016, prepared by Johnson Roberts Associates.

Where information was insufficient, assumptions and allowances were made based wherever possible on discussions with the architect and engineers.

It is assumed that the project will be competitively bid by four to six general contractors and that the awarded contractor and all subcontractors will be required to pay prevailing wage rates. It is also expected that the project will be competitively bid by four to six subcontractors where filed sub-bids are required.

Unit pricing is based on January 2017 costs. A Design / Estimating Contingency of 15.0% has been included. An allowance for escalation has not been included.

Items Specifically Included

- . This estimate is based on a "Renovation" Gross Floor Area of approx. 30,720 sq.ft.
- . This estimate is based on an "Addition" Gross Floor Area of approx. 15,040 sq.ft.

Items Specifically Excluded

- . Modifications and/or repairs to existing masonry façade (unless noted otherwise).
- . Modifications and/or repairs to existing window sills, headers, and reveals (unless noted otherwise).
- . Structural repairs and modifications, unless noted otherwise.
- . Wiring and equipment to communications systems (estimate includes infrastructure only).
- . Wiring and equipment to security systems (estimate includes infrastructure only).
- . Book security / detection system (assume by Owner).
- . Library storage, racking, and/or shelving (assume by Owner).
- . Interior feature signage.
- . Removal, storage, and re-installation of existing FF&E.
- . Re-routing and/or modifications to existing water and sewer utilities.
- . Re-routing and/or modifications to existing electrical and communications utilities.
- . Deep foundation systems.
- . Excavation in rock and/or contaminated soils.
- . Excavation within and/or below groundwater table.
- . Hazardous materials abatement, unless noted otherwise.
- . Costs associated with phasing the construction work, including out of hours work.
- . Furniture, Fittings and Equipment (FF&E).
- . Murals and works of art.
- . Mock-ups.

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Project Details

Description

- . Work outside the site boundaries unless noted otherwise.
- . Owner's / Construction contingency.
- . Land and legal costs.
- . Architectural, Engineering and other professional fees.
- . Geotechnical, traffic and all other studies.
- . Items marked as "Excl." in the estimate.
- . Escalation beyond Q1 2017.

Documents

Please refer to Basis of Estimate.

Belmont Public Library
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GFA: Gross Floor Area
 Rates Current At January 2017

Location Summary

Location	GFA SF	Cost/SF	Total Cost
A ADDITION	15,040.0	348.37	5,239,476
R RENOVATION	30,720.0	220.08	6,760,838
ESTIMATED NET COST	45,760	\$262.24	\$12,000,314
MARGINS & ADJUSTMENTS			
General Conditions / Requirements	9.0 %		\$1,080,028
Bonds and Insurances	2.7 %		\$353,169
Overhead and Profit	4.0 %		\$537,340
Design / Estimating Contingency	15.0 %		\$2,095,628
Escalation			Excl.
ESTIMATED TOTAL COST	45,760	\$351.10	\$16,066,479

Belmont Public Library
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Gross Floor Area: 45,760 SF
 Rates Current At January 2017

Divisions/Elements Summary

Description	Cost/SF	Total Cost
02 Existing Conditions		
F2010 Building Elements Demolition	9.30	425,390
F2020 Hazardous Components Abatement		Excl.
G1020 Site Demolition and Relocations	1.80	82,213
Existing Conditions	\$11.09	\$507,603
03 Concrete		
A1010 Standard Foundations	3.88	177,700
A1020 Special Foundations	5.68	260,000
A1030 Slab on Grade	3.60	164,695
B1010 Floor Construction	3.16	144,475
B2010 Exterior Walls	1.62	73,950
Concrete	\$17.94	\$820,820
04 Masonry		
B2010 Exterior Walls	9.39	429,842
C1010 Partitions	2.86	130,752
Masonry	\$12.25	\$560,594
05 Metals		
B1010 Floor Construction	5.94	271,750
B1020 Roof Construction	11.18	511,740
B2010 Exterior Walls	3.41	155,840
C1030 Fittings	4.72	216,200
C2010 Stair Construction	2.95	135,000
Metals	\$28.20	\$1,290,530
06 Wood, Plastics, and Composites		
B3010 Roof Coverings	0.42	19,270
C1030 Fittings	2.09	95,440
C3010 Wall Finishes	2.29	104,820
E2010 Fixed Furnishings	4.98	228,060
Wood, Plastics, and Composites	\$9.78	\$447,590
07 Thermal and Moisture Protection		
A1010 Standard Foundations	0.12	5,320
A1030 Slab on Grade	1.14	52,040
B1010 Floor Construction	1.80	82,345
B1020 Roof Construction	1.26	57,810
B2010 Exterior Walls	2.93	133,970
B3010 Roof Coverings	8.23	376,747
C1030 Fittings	3.00	137,280

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Gross Floor Area: 45,760 SF
 Rates Current At January 2017

Divisions/Elements Summary

Description	Cost/SF	Total Cost
C3020 Floor Finishes		Excl.
D2040 Rain Water Drainage	0.54	24,675
Thermal and Moisture Protection		\$19.02 \$870,187
08 Openings		
B2020 Exterior Windows	7.03	321,810
B2030 Exterior Doors	0.38	17,300
C1010 Partitions	5.50	251,630
C1020 Interior Doors	2.69	122,900
Openings		\$15.60 \$713,640
09 Finishings		
B2010 Exterior Walls	0.84	38,303
C1010 Partitions	5.60	256,391
C2020 Stair Finishes	0.15	7,048
C3010 Wall Finishes	1.98	90,486
C3020 Floor Finishes	8.01	366,732
C3030 Ceiling Finishes	7.95	363,952
Finishings		\$24.54 \$1,122,912
10 Specialties		
C1030 Fittings	1.48	67,530
D4030 Fire Protection Specialties	0.12	5,600
Specialties		\$1.60 \$73,130
11 Equipment		
E1010 Commercial Equipment	0.12	5,700
E1020 Institutional Equipment	0.11	5,000
Equipment		\$0.23 \$10,700
12 Furnishings		
C3020 Floor Finishes	0.08	3,500
E2010 Fixed Furnishings	0.67	30,824
E2020 Movable Furnishings		Excl.
Furnishings		\$0.75 \$34,324
14 Conveying Equipment		
D1010 Elevators & Lifts	2.62	120,000
Conveying Equipment		\$2.62 \$120,000
21 Fire Suppression		
D4010 Sprinklers	5.84	267,040
Fire Suppression		\$5.84 \$267,040

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Divisions/Elements Summary

Description	Cost/SF	Total Cost
22 Plumbing		
D2010 Plumbing Fixtures	0.73	33,500
D2020 Domestic Water Distribution	4.34	198,400
D2030 Sanitary Waste	3.34	152,640
D2040 Rain Water Drainage	2.50	114,400
D2090 Other Plumbing Systems	1.90	86,776
	Plumbing	\$12.80 \$585,716
23 Heating, Ventilating, and Air Conditioning		
D3020 Heat Generating Systems	4.34	198,400
D3030 Cooling Generating Systems	3.34	152,640
D3040 Distribution Systems	26.34	1,205,440
D3060 Controls & Instrumentations	6.00	274,560
D3070 Systems Testing & Balancing	0.75	34,320
D3090 Other HVAC Systems & Equipment	3.23	147,880
	Heating, Ventilating, and Air Conditioning	\$44.00 \$2,013,240
26 Electrical		
D5010 Electrical Service & Distribution	8.67	396,800
D5020 Lighting and Branch Wiring	17.50	800,800
D5090 Other Electrical Systems	3.31	151,520
	Electrical	\$29.48 \$1,349,120
27 Communications		
D5030 Communications & Security	4.75	217,360
	Communications	\$4.75 \$217,360
28 Electronic Safety and Security		
D5030 Communications & Security	5.00	228,800
	Electronic Safety and Security	\$5.00 \$228,800
31 Earthwork		
A1010 Standard Foundations	0.63	28,980
A1030 Slab on Grade	0.41	18,785
G1010 Site Clearing	1.12	51,328
G1030 Site Earthwork	1.10	50,444
G2020 Parking Lots	1.59	72,875
G2030 Pedestrian Paving	0.17	7,685
	Earthwork	\$5.03 \$230,097
32 Exterior Improvements		
G2020 Parking Lots	1.51	69,101

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Divisions/Elements Summary

Description	Cost/SF	Total Cost
G2030 Pedestrian Paving	0.52	23,710
G2040 Site Development	5.46	250,000
G2050 Landscaping	1.34	61,500
Exterior Improvements	\$8.84	\$404,311
33 Utilities		
G3010 Water Supply		Excl.
G3020 Sanitary Water		Excl.
G3030 Storm Sewer	1.81	82,600
G3090 Other Site Mechanical Utilities		Excl.
G4010 Electrical Distribution		Excl.
G4020 Site Lighting	1.09	50,000
G4030 Site Communications & Security		Excl.
Utilities	\$2.90	\$132,600
ESTIMATED NET COST	\$262.24	\$12,000,314
MARGINS & ADJUSTMENTS		
General Conditions / Requirements	9.0 %	\$1,080,028
Bonds and Insurances	2.7 %	\$353,169
Overhead and Profit	4.0 %	\$537,340
Design / Estimating Contingency	15.0 %	\$2,095,628
Escalation		Excl.
ESTIMATED TOTAL COST	\$351.10	\$16,066,479

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Divisions/Elements Item

Description	Unit	Qty	Rate	Total Cost
02 Existing Conditions				
F2010 Building Elements Demolition				
1 Interior gut demolition of existing building	SF	30,720	6.00	184,320
202 Dismantle and remove existing roofing, including structure	SF	12,690	10.00	126,900
205 Dismantle and remove existing entrance overhang, including columns, etc	SF	190	25.00	4,750
203 Take-down and remove existing brick veneer facade back to frame	SF	5,610	5.00	28,050
204 Remove and dispose of existing window unit	EA	98	200.00	19,600
206 Remove and dispose of existing bay window	EA	1	750.00	750
208 Remove and dispose of existing single-leaf exterior door	EA	6	150.00	900
207 Remove and dispose of existing double-leaf exterior door	Pr	1	250.00	250
214 Form opening in existing prestressed concrete tees for new elevator pit	SF	50	25.00	1,250
212 Form opening in existing floor construction for new elevator / circulation stair	SF	240	50.00	12,000
211 Form opening in existing exterior wall for new corridor opening	SF	396	25.00	9,900
210 Form opening in existing exterior wall for new single-leaf door opening	EA	7	500.00	3,500
220 Form opening in existing exterior wall for new double-leaf door opening	Pr	1	1,000.00	1,000
219 Form opening in existing exterior wall for new window opening	EA	2	750.00	1,500
209 Allowance for miscellaneous demolition not identified	SF	30,720	1.00	30,720
Building Elements Demolition			\$9.30/SF	\$425,390
F2020 Hazardous Components Abatement				
153 Hazardous materials abatement - Excluded (assume not required)	Item			Excl.
Hazardous Components Abatement				Excl.
G1020 Site Demolition and Relocations				
194 Sawcut, break-up, and remove existing parking lot	SF	27,060	1.00	27,060
195 Sawcut, break-up, and remove existing pedestrian pavement	SF	3,435	1.50	5,153
154 Allowance for miscellaneous site demolition not identified	Item			50,000
Site Demolition and Relocations			\$1.80/SF	\$82,213
Existing Conditions			\$11.09/SF	\$507,603
03 Concrete				
A1010 Standard Foundations				
3 Concrete perimeter strip footing to foundation walls, allow 3' x 12" deep	LF	380	125.00	47,500

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Divisions/Elements Item

Description	Unit	Qty	Rate	Total Cost
124 Concrete isolated spread footing, allow 6' x 6' x 12" deep (perimeter)	EA	24	750.00	18,000
125 Concrete isolated spread footing, allow 5' x 5' x 12" deep (internal)	EA	15	600.00	9,000
6 Concrete piers, allow 2' x 2'	LF	137	200.00	27,400
4 Concrete perimeter foundation walls, allow 12" thick	SF	1,520	40.00	60,800
123 Concrete elevator pit	Item			15,000
Standard Foundations			\$3.88/SF	\$177,700
A1020 Special Foundations				
218 Allowance for underpinning	LF	260	1,000.00	260,000
Special Foundations			\$5.68/SF	\$260,000
A1030 Slab on Grade				
7 Concrete slab on grade, allow 5" thick	SF	7,440	8.00	59,520
256 Allowance for selective trenching and patching for new underslab MEP services	SF	2,538	25.00	63,450
221 Allowance for topping slab to existing prestressed concrete tees	SF	12,690	2.50	31,725
217 Strengthening / repairs at slab opening for new elevator pit	EA	1	10,000.00	10,000
Slab on Grade			\$3.60/SF	\$164,695
B1010 Floor Construction				
155 Concrete topping to slab on metal deck, allow 5-1/2" thick overall depth	SF	7,600	6.50	49,400
224 Allowance for topping slab to existing floor construction	SF	18,030	2.50	45,075
257 Allowance for miscellaneous structural modifications not identified	Item			50,000
Floor Construction			\$3.16/SF	\$144,475
B2010 Exterior Walls				
272 WWF Reinforcement to exterior wall strengthening	SF	12,150	2.50	30,375
273 Shotcrete to exterior wall strengthening, 4" thick, 4,000 PSI	CY	150	250.00	37,500
274 Finish shotcrete exterior wall strengthening	SF	12,150	0.50	6,075
Exterior Walls			\$1.62/SF	\$73,950
Concrete			\$17.94/SF	\$820,820
04 Masonry				
B2010 Exterior Walls				
8 Brick veneer to exterior walls	SF	5,865	40.00	234,600
9 Brick veneer to exterior columns	SF	352	50.00	17,600
225 Precast / cast-stone wall cladding	SF	294	60.00	17,640

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Divisions/Elements Item

Description	Unit	Qty	Rate	Total Cost
197 CMU Back-up to brick veneer column	SF	352	22.00	7,744
233 Re-pointing of existing brick veneer facade	SF	5,244	18.00	94,392
234 Pressure-wash existing brick veneer facade	SF	5,244	1.50	7,866
235 Allowance for miscellaneous repairs to existing brick facade to remain	Item			50,000
Exterior Walls			\$9.39/SF	\$429,842
C1010 Partitions				
53 CMU Partition, allow 12" thick	SF	4,152	24.00	99,648
54 CMU Partition, allow 12" thick (elevator shaft)	SF	1,296	24.00	31,104
Partitions			\$2.86/SF	\$130,752
Masonry			\$12.25/SF	\$560,594
05 Metals				
B1010 Floor Construction				
156 Structural steel floor framing, allow 15 psf	T	57.00	3,750.00	213,750
157 Metal floor deck, allow 3" thick	SF	7,600	5.00	38,000
215 Strengthening / repairs at floor opening for new circulation stair	EA	1	10,000.00	10,000
216 Strengthening / repairs at floor opening for new elevator	EA	2	5,000.00	10,000
Floor Construction			\$5.94/SF	\$271,750
B1020 Roof Construction				
10 Structural steel roof framing, allow 10 psf (addition)	T	37.20	3,750.00	139,500
232 Structural steel roof framing, allow 12 psf (renovation)	T	76.14	3,750.00	285,525
11 Metal roof deck, allow 1-1/2" thick	SF	19,270	4.50	86,715
Roof Construction			\$11.18/SF	\$511,740
B2010 Exterior Walls				
12 Metal stud framing to exterior walls	SF	6,820	12.00	81,840
198 Galvanized steel lintel to opening in brick veneer facade	LF	400	60.00	24,000
229 Allowance for seismic reinforcing to existing exterior walls	Item			50,000
Exterior Walls			\$3.41/SF	\$155,840
C1030 Fittings				
248 Painted steel interior guardrail	LF	180	200.00	36,000
179 Roof access ladder / stair	Item			2,500
180 Elevator pit ladder	EA	1	1,200.00	1,200
230 Cast-iron downspout boot	EA	17	500.00	8,500
159 Allowance for miscellaneous metals (addition)	SF	15,040	3.00	45,120

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Divisions/Elements Item

Description	Unit	Qty	Rate	Total Cost
227 Allowance for miscellaneous metals (renovation)	SF	30,720	4.00	122,880
Fittings			\$4.72/SF	\$216,200
C2010 Stair Construction				
158 Metal stairs with concrete filled pan and landings, including railings	FT/R	90	1,500.00	135,000
Stair Construction			\$2.95/SF	\$135,000
Metals			\$28.20/SF	\$1,290,530
06 Wood, Plastics, and Composites				
B3010 Roof Coverings				
13 Allowance for roof blocking	SF	19,270	1.00	19,270
Roof Coverings			\$0.42/SF	\$19,270
C1030 Fittings				
14 Allowance for rough carpentry (addition)	SF	15,040	0.75	11,280
228 Allowance for rough carpentry (renovation)	SF	30,720	1.25	38,400
15 Allowance for wood blocking	SF	45,760	1.00	45,760
Fittings			\$2.09/SF	\$95,440
C3010 Wall Finishes				
258 Wood window sill and apron	LF	745	75.00	55,875
259 Wood window trim / reveal	LF	3,263	15.00	48,945
Wall Finishes			\$2.29/SF	\$104,820
E2010 Fixed Furnishings				
16 Casework: Main reception desk	LF	35	700.00	24,500
252 Casework: Self-check desk	LF	15	600.00	9,000
17 Casework: Children's Area reception desk	LF	23	600.00	13,800
18 Casework: Adult space reference desk	LF	23	600.00	13,800
160 Casework: Children's story room craft base cabinet with plastic laminate countertop	LF	27	400.00	10,800
19 Casework: Base cabinet with plastic laminate countertop	LF	119	400.00	47,600
20 Casework: Overhead wall cabinet	LF	108	250.00	27,000
251 Casework: Built-in workstation / desk	LF	164	200.00	32,800
21 Casework: Solid surface lavatory including supports and brackets	LF	15	200.00	3,000

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Divisions/Elements Item

Description	Unit	Qty	Rate	Total Cost
161 Allowance for miscellaneous casework not identified	SF	45,760	1.00	45,760
Fixed Furnishings			\$4.98/SF	\$228,060
Wood, Plastics, and Composites			\$9.78/SF	\$447,590
07 Thermal and Moisture Protection				
A1010 Standard Foundations				
22 Air and vapor barrier	SF	1,520	0.50	760
23 Rigid insulation	SF	1,520	3.00	4,560
Standard Foundations			\$0.12/SF	\$5,320
A1030 Slab on Grade				
24 Air and vapor barrier	SF	7,440	0.50	3,720
25 Rigid insulation	SF	7,440	3.00	22,320
222 Expansion joint to existing first floor slab	LF	260	100.00	26,000
Slab on Grade			\$1.14/SF	\$52,040
B1010 Floor Construction				
223 Expansion joint to existing floor construction	LF	260	125.00	32,500
184 Spray-applied fire-proofing to structural steel floor framing	SF	7,600	3.00	22,800
254 Touch-up and repairs to existing fire-proofing	SF	18,030	1.50	27,045
Floor Construction			\$1.80/SF	\$82,345
B1020 Roof Construction				
185 Spray-applied fire-proofing to structural steel roof framing	SF	19,270	3.00	57,810
Roof Construction			\$1.26/SF	\$57,810
B2010 Exterior Walls				
226 Fiber cement wall cladding	SF	956	20.00	19,120
31 Air and vapor barrier to exterior walls	SF	6,820	6.00	40,920
27 Gypsum board sheathing to exterior walls	SF	6,820	2.50	17,050
28 Batt insulation to exterior walls	SF	6,820	4.00	27,280
261 Expansion joint at existing brick veneer facade	LF	44	100.00	4,400
255 Allowance for repairs to weatherproofing at existing window opening	EA	63	400.00	25,200
Exterior Walls			\$2.93/SF	\$133,970
B3010 Roof Coverings				
32 Membrane roofing, complete	SF	10,418	20.00	208,360
33 Asphalt shingle roofing	SF	8,853	4.50	39,839
34 Gypsum board sheathing	SF	8,853	3.00	26,559

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Divisions/Elements Item

Description		Unit	Qty	Rate	Total Cost
36	Rigid insulation, allow 2" thick	SF	8,853	4.50	39,839
35	Ice and water protection	SF	8,853	1.25	11,066
37	Allowance for exterior roof soffits	SF	215	45.00	9,675
38	Allowance for miscellaneous roof flashings	SF	19,270	1.50	28,905
162	Allowance for roof walkway	SF	1,042	12.00	12,504
Roof Coverings				\$8.23/SF	\$376,747
C1030 Fittings					
39	Miscellaneous fire-stopping	SF	45,760	0.50	22,880
40	Miscellaneous caulking and sealing	SF	45,760	2.50	114,400
Fittings				\$3.00/SF	\$137,280
C3020 Floor Finishes					
271	Allowance for moisture mitigation - assumed not required	SF	36,540		Excl.
Floor Finishes					Excl.
D2040 Rain Water Drainage					
186	Aluminum gutter to pitched roof	LF	365	35.00	12,775
187	Aluminum downspout	LF	476	25.00	11,900
Rain Water Drainage				\$0.54/SF	\$24,675
Thermal and Moisture Protection				\$19.02/SF	\$870,187
08 Openings					
B2020 Exterior Windows					
260	Window unit fixed into new brick facade	SF	2,496	80.00	199,680
253	Window unit fixed into existing opening	SF	1,357	90.00	122,130
Exterior Windows				\$7.03/SF	\$321,810
B2030 Exterior Doors					
42	Double leaf glazed aluminum doors including frame, hardware and finish	Pr	1	7,500.00	7,500
236	Single leaf glazed aluminum doors including frame, hardware and finish	EA	2	3,500.00	7,000
43	Single leaf hollow metal doors including frame, hardware and finish	EA	2	1,400.00	2,800
Exterior Doors				\$0.38/SF	\$17,300
C1010 Partitions					
49	Interior glazed aluminum storefront system	SF	1,620	50.00	81,000
231	Interior window unit fixed into existing opening	SF	879	90.00	79,110

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Divisions/Elements Item

Description	Unit	Qty	Rate	Total Cost
164 Allowance for miscellaneous interior borrowed lights and storefront not identified	SF	45,760	2.00	91,520
Partitions			\$5.50/SF	\$251,630
C1020 Interior Doors				
44 Double leaf glazed aluminum doors including frame, hardware and finish	Pr	5	7,500.00	37,500
249 Double leaf hollow metal doors including frame, hardware and finish	Pr	1	2,500.00	2,500
250 Single leaf glazed aluminum doors including frame, hardware and finish	EA	1	3,500.00	3,500
47 Single leaf wood doors including frame, hardware and finish	EA	40	1,600.00	64,000
48 Single leaf hollow metal doors including frame, hardware and finish	EA	11	1,400.00	15,400
Interior Doors			\$2.69/SF	\$122,900
Openings			\$15.60/SF	\$713,640
09 Finishings				
B2010 Exterior Walls				
165 Gypsum board lining to inside face of exterior wall	SF	6,820	2.00	13,640
238 Gypsum board lining to inside face of existing exterior wall	SF	9,865	2.50	24,663
Exterior Walls			\$0.84/SF	\$38,303
C1010 Partitions				
50 Gypsum board partition	SF	9,396	8.50	79,866
52 Gypsum board partition, plumbing chase	SF	360	6.50	2,340
237 Gypsum board wall lining over existing framing (at removed brick veneer)	SF	5,610	2.50	14,025
262 Allowance for miscellaneous drywall, column enclosures, etc	SF	45,760	3.50	160,160
Partitions			\$5.60/SF	\$256,391
C2020 Stair Finishes				
181 Carpet flooring to stair treads and risers	SY	36	75.00	2,700
182 Concrete sealer to stair treads	SF	623	2.50	1,558
183 Resilient floor base to stair treads and risers	LF	465	6.00	2,790
Stair Finishes			\$0.15/SF	\$7,048
C3010 Wall Finishes				
119 Ceramic tiles to restroom walls	SF	875	18.00	15,750
152 Prepare and apply paint to interior walls	SF	41,447	1.20	49,736

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Divisions/Elements Item

Description	Unit	Qty	Rate	Total Cost
120 Allowance for architectural feature wall finishes	Item			25,000
Wall Finishes			\$1.98/SF	\$90,486
C3020 Floor Finishes				
263 Terrazzo flooring	SF	2,079	45.00	93,555
143 Carpet flooring	SY	3,725	45.00	167,625
145 Porcelain floor tiling	SF	644	24.00	15,456
144 Resilient flooring	SF	3,023	5.00	15,115
146 Concrete sealer	SF	1,125	1.20	1,350
264 Terrazzo floor base	LF	195		Incl.
147 Stained wood base	LF	5,349	12.00	64,188
148 Rubber floor base	LF	1,059	3.50	3,707
149 Porcelain floor base	LF	239	24.00	5,736
Floor Finishes			\$8.01/SF	\$366,732
C3030 Ceiling Finishes				
150 Acoustic ceiling tile system	SF	22,118	5.50	121,649
166 Gypsum board ceiling system	SF	15,389	9.00	138,501
188 Allowance for decorative ceiling system	SF	2,079	40.00	83,160
265 Prepare and apply paint to gypsum board ceiling	SF	15,389	1.25	19,236
266 Prepare and apply paint to exposed structure	SF	1,125	1.25	1,406
Ceiling Finishes			\$7.95/SF	\$363,952
Finishings			\$24.54/SF	\$1,122,912
10 Specialties				
C1030 Fittings				
129 Toilet compartment: Handicap	EA	2	1,400.00	2,800
130 Toilet compartment: Standard	EA	4	1,250.00	5,000
131 Toilet compartment: Urinal screen	EA	2	600.00	1,200
132 Toilet accessories: Paper towel dispenser / waste receptacle	EA	6	750.00	4,500
133 Toilet accessories: Grab bars	EA	12	75.00	900
134 Toilet accessories: Sanitary napkin disposal unit	EA	7	250.00	1,750
135 Toilet accessories: Liquid soap dispenser	EA	10	50.00	500
136 Toilet accessories: Baby changing station	EA	6	550.00	3,300
137 Toilet accessories: Toilet paper holder	EA	10	45.00	450
138 Toilet accessories: Coat hooks	EA	10	25.00	250
139 Toilet accessories: Mirror	EA	10	400.00	4,000
140 Allowance for interior signage	SF	45,760	0.50	22,880

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Divisions/Elements Item

Description	Unit	Qty	Rate	Total Cost
141 Allowance for exterior building signage	Item			20,000
	Fittings		\$1.48/SF	\$67,530
D4030 Fire Protection Specialties				
142 Allowance for fire extinguisher and cabinets	EA	16	350.00	5,600
	Fire Protection Specialties		\$0.12/SF	\$5,600
	Specialties		\$1.60/SF	\$73,130
11 Equipment				
E1010 Commercial Equipment				
170 Refrigerator	EA	3	1,500.00	4,500
171 Microwave	EA	3	400.00	1,200
	Commercial Equipment		\$0.12/SF	\$5,700
E1020 Institutional Equipment				
167 Allowance for book and media through wall drop return including drop cart	Item			5,000
189 Book detection system - Excluded (assume by Owner)	Item			Excl.
190 Projectors and/or project screens - Excluded (assume by Owner)	Item			Excl.
	Institutional Equipment		\$0.11/SF	\$5,000
	Equipment		\$0.23/SF	\$10,700
12 Furnishings				
C3020 Floor Finishes				
168 Recessed entry mat	SF	70	50.00	3,500
	Floor Finishes		\$0.08/SF	\$3,500
E2010 Fixed Furnishings				
169 Manually operated window shades	SF	3,853	8.00	30,824
	Fixed Furnishings		\$0.67/SF	\$30,824
E2020 Movable Furnishings				
192 Library shelving, racks, etc - Excluded (assume by Owner)	Item			Excl.
191 FF&E - Excluded (by Owner)	Item			Excl.
	Movable Furnishings			Excl.
	Furnishings		\$0.75/SF	\$34,324

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Divisions/Elements Item

Description	Unit	Qty	Rate	Total Cost
14 Conveying Equipment				
D1010 Elevators & Lifts				
121 3-Stop passenger elevator	EA	1	120,000.00	120,000
Elevators & Lifts			\$2.62/SF	\$120,000
Conveying Equipment			\$2.62/SF	\$120,000
21 Fire Suppression				
D4010 Sprinklers				
63 Allowance for fire sprinkler system (addition)	SF	15,040	5.50	82,720
239 Allowance for fire sprinkler system (renovation)	SF	30,720	6.00	184,320
Sprinklers			\$5.84/SF	\$267,040
Fire Suppression			\$5.84/SF	\$267,040
22 Plumbing				
D2010 Plumbing Fixtures				
55 Water closet - handicap	EA	6	1,200.00	7,200
56 Water closet - standard	EA	4	1,200.00	4,800
57 Urinal	EA	2	1,000.00	2,000
58 Lavatory sink	EA	10	1,300.00	13,000
59 Kitchen sink	EA	1	1,300.00	1,300
60 Staff lounge sink	EA	2	1,300.00	2,600
61 Mop sink	EA	1	1,600.00	1,600
62 Hose bibb	EA	2	500.00	1,000
Plumbing Fixtures			\$0.73/SF	\$33,500
D2020 Domestic Water Distribution				
64 Allowance for domestic water distribution system (addition)	SF	15,040	4.00	60,160
240 Allowance for domestic water distribution system (renovation)	SF	30,720	4.50	138,240
Domestic Water Distribution			\$4.34/SF	\$198,400
D2030 Sanitary Waste				
65 Allowance for sanitary waste system (addition)	SF	15,040	3.00	45,120
241 Allowance for sanitary waste system (renovation)	SF	30,720	3.50	107,520
Sanitary Waste			\$3.34/SF	\$152,640
D2040 Rain Water Drainage				
172 Allowance for roof drainage systems (addition)	SF	15,040	2.50	37,600

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Divisions/Elements Item

Description	Unit	Qty	Rate	Total Cost
242 Allowance for roof drainage systems (renovation)	SF	30,720	2.50	76,800
Rain Water Drainage			\$2.50/SF	\$114,400
D2090 Other Plumbing Systems				
66 Allowance for gas distribution systems (addition)	SF	15,040	1.00	15,040
243 Allowance for gas distribution systems (renovation)	SF	30,720	1.00	30,720
67 Balancing and testing	SF	45,760	0.35	16,016
68 Subcontractors GC's/GR's	Item			25,000
Other Plumbing Systems			\$1.90/SF	\$86,776
Plumbing			\$12.80/SF	\$585,716
23 Heating, Ventilating, and Air Conditioning				
D3020 Heat Generating Systems				
69 Allowance for heat generation systems (addition)	SF	15,040	4.00	60,160
244 Allowance for heat generation systems (renovation)	SF	30,720	4.50	138,240
Heat Generating Systems			\$4.34/SF	\$198,400
D3030 Cooling Generating Systems				
70 Allowance for cooling generation systems (addition)	SF	15,040	3.00	45,120
245 Allowance for cooling generation systems (renovation)	SF	30,720	3.50	107,520
Cooling Generating Systems			\$3.34/SF	\$152,640
D3040 Distribution Systems				
71 Allowance for HVAC distribution systems (addition)	SF	15,040	25.00	376,000
246 Allowance for HVAC distribution systems (renovation)	SF	30,720	27.00	829,440
Distribution Systems			\$26.34/SF	\$1,205,440
D3060 Controls & Instrumentations				
72 Allowance for controls	SF	45,760	6.00	274,560
Controls & Instrumentations			\$6.00/SF	\$274,560
D3070 Systems Testing & Balancing				
73 Systems testing and balancing	SF	45,760	0.75	34,320
Systems Testing & Balancing			\$0.75/SF	\$34,320
D3090 Other HVAC Systems & Equipment				
74 Rigging & hoisting	Item			30,000
75 Temporary heating and cooling	SF	45,760	0.50	22,880

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Divisions/Elements Item

Description		Unit	Qty	Rate	Total Cost
76	Subcontractors GC's/GR's	Item			95,000
	Other HVAC Systems & Equipment			\$3.23/SF	\$147,880
	Heating, Ventilating, and Air Conditioning			\$44.00/SF	\$2,013,240
26	Electrical				
	D5010 Electrical Service & Distribution				
77	Allowance for electrical service and distribution (addition)	SF	15,040	8.00	120,320
247	Allowance for electrical service and distribution (renovation)	SF	30,720	9.00	276,480
	Electrical Service & Distribution			\$8.67/SF	\$396,800
	D5020 Lighting and Branch Wiring				
78	Allowance for interior lighting & controls	SF	45,760	14.00	640,640
79	Allowance for branch power and receptacles	SF	45,760	3.50	160,160
	Lighting and Branch Wiring			\$17.50/SF	\$800,800
	D5090 Other Electrical Systems				
193	Allowance for miscellaneous electrical systems (grounding, lighting protection, etc)	SF	45,760	2.00	91,520
80	Subcontractor GC's/GR's	Item			60,000
	Other Electrical Systems			\$3.31/SF	\$151,520
	Electrical			\$29.48/SF	\$1,349,120
27	Communications				
	D5030 Communications & Security				
81	Allowance for Tel/Data systems - infrastructure only	SF	45,760	1.25	57,200
82	Allowance for AV / Sound systems - infrastructure only	SF	45,760	3.50	160,160
173	Wiring and equipment to Tel/Data systems - Excluded (assume by owner)	Item			Excl.
174	Wiring and equipment to AV / Sound systems - Excluded (assume by owner)	Item			Excl.
	Communications & Security			\$4.75/SF	\$217,360
	Communications			\$4.75/SF	\$217,360
28	Electronic Safety and Security				
	D5030 Communications & Security				
83	Allowance for fire alarm system	SF	45,760	3.00	137,280
84	Allowance for security systems - infrastructure only	SF	45,760	2.00	91,520

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Divisions/Elements Item

Description	Unit	Qty	Rate	Total Cost
175 Wiring and equipment to security systems - Excluded (assume by Owner)	Item			Excl.
Communications & Security			\$5.00/SF	\$228,800
Electronic Safety and Security			\$5.00/SF	\$228,800
31 Earthwork				
A1010 Standard Foundations				
267 Excavate for building foundations	CY	441	10.00	4,410
268 Remove excavated materials from site	CY	441	25.00	11,025
269 Prepare and compact sub-base	SF	2,379	0.50	1,190
270 Imported foundation backfill	CY	353	35.00	12,355
Standard Foundations			\$0.63/SF	\$28,980
A1030 Slab on Grade				
86 Excavate for slab on grade	CY	253	10.00	2,530
87 Remove and dispose of excavated spoil from site	CY	253	25.00	6,325
88 Prepare and compact sub-base	SF	7,440	0.50	3,720
89 Granular fill below slab on grade	CY	138	45.00	6,210
Slab on Grade			\$0.41/SF	\$18,785
G1010 Site Clearing				
196 Strip existing topsoil and stockpile on-site	CY	166	8.00	1,328
176 Site clearing and grubbing	Item			20,000
90 Temporary construction entrance	EA	1	5,000.00	5,000
177 Allowance for erosion and sediment control	Item			25,000
Site Clearing			\$1.12/SF	\$51,328
G1030 Site Earthwork				
91 Allowance for site earthworks and grading	SF	40,355	1.25	50,444
Site Earthwork			\$1.10/SF	\$50,444
G2020 Parking Lots				
92 Excavate for parking lot sub-base	CY	924	10.00	9,240
93 Remove excavated spoil from site	CY	924	25.00	23,100
94 Prepare and compact sub-base	SF	18,700	0.50	9,350
95 Granular fill to parking pavement	CY	693	45.00	31,185
Parking Lots			\$1.59/SF	\$72,875
G2030 Pedestrian Paving				
96 Excavate for walkways	CY	103	10.00	1,030

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Divisions/Elements Item

Description		Unit	Qty	Rate	Total Cost
97	Remove excavated spoil from site	CY	103	25.00	2,575
98	Prepare and compact sub-base	SF	3,030	0.50	1,515
99	Granular fill to pedestrain walkways	CY	57	45.00	2,565
Pedestrian Paving				\$0.17/SF	\$7,685
Earthwork				\$5.03/SF	\$230,097
32	Exterior Improvements				
	G2020 Parking Lots				
100	Bituminous asphalt top and finish course to parking pavement	SY	2,078	25.00	51,950
101	Concrete curb	LF	930	15.00	13,950
102	Pavement marking, parking lanes	LF	801	2.50	2,003
103	Pavement marking, striping	SF	166	3.00	498
104	Pavement marking, handicap symbol	EA	2	350.00	700
Parking Lots				\$1.51/SF	\$69,101
	G2030 Pedestrian Paving				
105	Concrete walkway, allow 5" thick	SF	3,030	7.00	21,210
200	Allowance to repair existing sidewalk at eliminated driveway	Item			2,500
Pedestrian Paving				\$0.52/SF	\$23,710
	G2040 Site Development				
128	Allowance for site development not identified	Item			250,000
Site Development				\$5.46/SF	\$250,000
	G2050 Landscaping				
110	Allowance for loam and seed	SF	11,000	1.50	16,500
108	Allowance for trees	Item			25,000
109	Allowance for ground covers, shrubs, evergreens, etc.	Item			20,000
178	Irrigation - Excluded (assume not required)	Item			Excl.
Landscaping				\$1.34/SF	\$61,500
Exterior Improvements				\$8.84/SF	\$404,311
33	Utilities				
	G3010 Water Supply				
111	Re-working of existing domestic and fire water utilities - Excluded (assume existing to remain)	Item			Excl.
Water Supply					Excl.

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Divisions/Elements Item

Description	Unit	Qty	Rate	Total Cost
G3020 Sanitary Water				
112 Re-working of existing site sanitary sewer service - Excluded (assume existing to remain)	Item			Excl.
Sanitary Water				Excl.
G3030 Storm Sewer				
113 Allowance for re-working existing site storm drainage systems	Item			75,000
201 Perimeter foundation drain	LF	380	20.00	7,600
Storm Sewer			\$1.81/SF	\$82,600
G3090 Other Site Mechanical Utilities				
114 Gas piping and meter - Excluded (assume by Utility Company)	Item			Excl.
115 Allowance for re-working existing site gas distribution (trenching only)	Item			Excl.
Other Site Mechanical Utilities				Excl.
G4010 Electrical Distribution				
116 Re-working of existing site electrical distribution - Excluded (assume existing to remain)	Item			Excl.
Electrical Distribution				Excl.
G4020 Site Lighting				
117 Allowance for site lighting	Item			50,000
Site Lighting			\$1.09/SF	\$50,000
G4030 Site Communications & Security				
118 Re-working of existing site communications distribution - Excluded (assume existing to remain)	Item			Excl.
Site Communications & Security				Excl.
Utilities			\$2.90/SF	\$132,600
ESTIMATED NET COST			\$262.24/SF	\$12,000,314