

**REV 2**

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**CONCEPTUAL ESTIMATE**

**FOR:**

**Interior Architects, P.C**

**AT:**

Brooklyn Heights Library, Brooklyn Public Library, Brooklyn, NY

**BY:**

GARDINER AND THEOBALD INC

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Issued: 6/20/2013

LIBRARY RENOVATION

June 20, 2013

Item	Trade Description	Value
<b>PROJECT SCOPE</b>		
1	Replacement Chiller Plant	\$3,500,000
2	Boiler Replacement	\$600,000
3	Lighting Upgrade/ BMS Controls	\$900,000
4	Sprinkler & Fire Alarm	\$1,000,000
5	Site Drainage & Waterproofing	\$430,000
6	Elevator & Machine Room	\$575,000
7	Roof and Roof Bulkhead	\$1,000,000
<b>DESIGN DEVELOPMENT CONTINGENCY</b>		
8	Contingency 15%	Incl
<b>TRADE CONTRACT SUB-TOTAL</b>		<b>\$8,010,000</b>
E	General Conditions - 8%	\$641,000
G	CM Fee - 2.0%	\$173,000
H	Insurance - 1.75%	\$154,000
I	OT Permits	\$50,000
<b>CONSTRUCTION SUB-TOTAL</b>		<b>\$9,030,000</b>
J	Construction Contingency 10%	\$900,000
<b>CONSTRUCTION TOTAL</b>		<b>\$9,900,000</b>
K	IFA Management Fee 12% A - J	\$1,190,000
<b>CONSTRUCTION TOTAL</b>		<b>\$11,100,000</b>
L	Soft Costs 12% - A to J	\$1,190,000
<b>CONSTRUCTION INCL FEES</b>		<b>\$12,300,000</b>
M	Escalation 3.3% - A to L	\$410,000
<b>CONSTRUCTION INCL FEES &amp; ESCALATION</b>		<b>\$12,700,000</b>

**ASSUMPTIONS AND EXCLUSIONS**

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## NOTES, ASSUMPTIONS & EXCLUSIONS

### **NOTES:**

#### GENERALLY

Interior Architects Scope Narrative dated 05.24.2013

Union Labor has been assumed

ACM & Lead Abatement allowances have been included as necessary

Existing foundations and structure is capable of withstanding any additional loads

All costs are G & T opinion of probable costs at the time of preparing the estimate and represent our best judgments as consultants familiar with the local construction market. These costs are subject to change depending upon construction start date, the final selection of specification, design and method of procurement.

Escalation is excluded; however if escalation is required then this should be included at 3% per annum compounded to the commencement of construction.

We have included a 15% Design and Pricing Contingency and 10% Project Contingency

Floor Area is as follows:-

Sub-Cellar - 12,675sf

Cellar - 13,105sf

1st Floor - 18,940sf

2nd Floor - 18,197sf

**TOTAL - 62,917sf**

Add Alternates included all associated mark ups i.e. contingency

### **ASSUMPTIONS**

#### GENERALLY

Local Law 11 work is excluded

All open violations, permits etc will be cleared prior to work commencing

Library is assumed to be **closed** during the period of construction.

Allowances have been included for phasing where necessary

FF&E will be removed by BPL prior to construction commencement

Each scope of work has been priced on an individual basis and does not assume all work will be carried out

All work is assumed to be on straight time unless specifically noted

#### CHILLED WATER SYSTEM REPLACEMENT

Existing structure is capable of supporting new Chiller; no structural strengthening is included.

Distribution pipework will be run within existing shafts

No Temporary cooling is required; new distribution system will be installed along with new chiller. Cooling will be commissioned and swung over prior to decommissioning and demolition of existing

Includes Cooling Tower

#### BOILER REPLACEMENT

Boiler size assumed approx 1,000BHP

Replacement of Boiler only

Existing supplies are sufficient for new boiler; no requirement to upsize

**INTERIOR ARCHITECTS, P.C**  
**BROOKLYN HEIGHTS LIBRARY, BROOKLYN PUBLIC LIBRARY,**  
**BROOKLYN, NY**

Issued:	6/20/2013
USF:	N/A

**NOTES, ASSUMPTIONS & EXCLUSIONS**

**LIGHTING UPGRADE & BMS CONTROLS**

Assume replacement throughout.  
Replacement of ballasts/ light bulbs only not full fixtures  
Occupancy sensors throughout  
Work to be carried out room by room on straight time; work in open areas will be carried out in portions with the work area cordoned off per OSHA requirements  
Daylight dimming is excluded

**FIRE ALARM/ SPRINKLER**

Sprinkler coverage to sub-cellar, cellar & emergency stair case only  
Fire Alarm excludes duct detectors

**SITE DRAINAGE**

Site Drainage budget is per the Park Slope general construction scope escalated to current day pricing

**ELEVATOR & MACHINE ROOM**

Cabs replaced one at a time.  
No work to existing shafts; runners and shafts assumed to code  
Replacement of gear and cables only  
Existing power connections are sufficient for new gear.

**ROOF & ROOF BULKHEAD**

New three ply roofing finish with new insulation  
Sidewalk bridge is required to single elevation with lift for material and labor  
Existing roof structure is sufficient to support new roof finish  
New roof outlets only; rainwater leaders as existing.  
25% of parapet area to be repaired

**EXCLUSIONS**

Local Law 11 work is excluded  
Financing/ Legal Costs  
Overtime  
LEED Certification or LEED Construction Costs  
Professional & other Fees or any soft costs associated with this work  
Pre-Action Systems

**CAPITAL NEEDS ASSESSMENT**

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INTERIOR ARCHITECTS, P.C

BROOKLYN HEIGHTS LIBRARY, BROOKLYN PUBLIC LIBRARY, BROOKLYN, NY

6/20/2013

**CAPITAL NEEDS ASSESSMENT**

SYS	DESCRIPTION	QTY	UNIT	UNIT COST \$	EST'D COST \$	SUB TOTAL \$	TOTAL COST \$
<b>1. REPLACEMENT OF EXISTING CHILLED WATER COOLING SYSTEM</b>							<b>884,000</b>
<b>Abatement</b>							<b>210,000</b>
	Allowance for ACM Abatement	1	Allow	\$100,000.00	\$100,000		
	Allowance for lead paint removal	1	Allow	\$25,000.00	\$25,000		
	Air monitoring for above	1	Allow	\$25,000.00	\$25,000		
	Surveys for above	1	Allow	\$25,000.00	\$25,000		
	Demolition associated with above	1	Allow	\$35,000.00	\$35,000		
<b>Demolition</b>							<b>258,000</b>
	Removal of existing units; incl rigging	1	ls	\$50,000.00	\$50,000		
	Removal of existing distribution pipework	62,917	sf	\$2.00	\$125,834		
	Allowance for opening up existing ceilings	62,917	sf	\$0.75	\$47,188		
	Allowance for opening up existing shaft space	1	ls	\$35,000.00	\$35,000		
<b>Structural Steel/ Ironwork</b>							<b>100,000</b>
	New Dunnage for Chiller	1	ls	\$100,000.00	\$100,000		
<b>Windows/ Roofing</b>							<b>15,000</b>
	Allowance for roofing work associated with new dunnage	1	allow	\$15,000.00	\$15,000		
<b>Interior Construction</b>							<b>206,000</b>
	Closing up walls following installation of infrastructure	62,917	sf	\$1.00	\$62,917		
	Patching ceilings following demolition	62,917	sf	\$1.00	\$62,917		
	Allow for replacement ceilings	1	allow	\$50,000.00	\$50,000		
	Allow for painting touch up	1	allow	\$30,000.00	\$30,000		
<b>General Requirements</b>							<b>95,000</b>
	Misc scaffolding	1	ls	\$50,000.00	\$50,000		
	Temporary Protection	1	ls	\$35,000.00	\$35,000		
	Weather Protection	1	ls	\$10,000.00	\$10,000		
<b>ARCHITECTURAL TOTAL/ STRUCTURAL WORK</b>							<b>880,000</b>
<b>PLUMBING</b>							<b>15,000</b>
<b>Demolition</b>							
	Allowance for plumbing relocates to accommodate infrastructure	1	ls	\$15,000.00	\$15,000		
<b>MECHANICAL</b>							<b>2,000,000</b>
<b>HVAC Units</b>							
	250T Chiller; includes all pipework, controls, commissioning, cooling tower and pumps	250	T	\$8,000.00	\$2,000,000		
<b>ELECTRICAL</b>							<b>129,000</b>
<b>Demolition</b>							
	Allowance for electrical relocates to accommodate infrastructure	1	ls	\$25,000.00	\$25,000		
<b>Power &amp; Distribution</b>							
	New Power to Chiller Units	1	ls	\$75,000.00	\$75,000		
<b>General Requirements</b>							
	Welding Hook Ups	5	ea	\$800.00	\$4,000		
	Standby - allowance	1	ls	\$25,000.00	\$25,000		
<b>MEPFP TOTAL</b>							<b>2,140,000</b>
	Design Development contingency					15%	450,000
<b>TOTAL TRADE COSTS</b>							<b>3,500,000</b>









INTERIOR ARCHITECTS, P.C

BROOKLYN HEIGHTS LIBRARY, BROOKLYN PUBLIC LIBRARY, BROOKLYN, NY

6/20/2013

**CAPITAL NEEDS ASSESSMENT**

SYS	DESCRIPTION	QTY	UNIT	UNIT COST \$	EST'D COST \$	SUB TOTAL \$	TOTAL COST \$
	<b>5. NEW FIRE ALARM THROUGHOUT &amp; SPRINKLER TO SUB CELLAR &amp; CELLER</b>						<b>177,000</b>
	<b>Abatement</b>					<b>52,500</b>	
	Allowance for ACM Abatement	1	Allow	\$35,000.00	\$35,000		
	Allowance for lead paint removal	1	Allow		\$0		
	Air monitoring for above	1	Allow	\$2,500.00	\$2,500		
	Surveys for above	1	Allow	\$5,000.00	\$5,000		
	Demolition associated with above	1	Allow	\$10,000.00	\$10,000		
	<b>Demolition</b>					<b>58,000</b>	
	Allowance for misc demo	1	ls	\$15,000.00	\$15,000		
	Allowance for opening up existing ceilings	62,917	sf	\$0.25	\$15,729		
	Allowance for opening up existing shaft space	1	ls	\$15,000.00	\$15,000		
	<b>Excavation</b>					<b>12,500</b>	
	Allow 200lf of misc service trench excavation including backfill and disposal	50	lf	\$250.00	\$12,500		
	<b>Interior Construction</b>					<b>41,000</b>	
	Closing up walls following installation of risers	62,917	sf	\$0.25	\$15,729		
	Patching ceilings following demolition	62,917	sf	\$0.25	\$15,729		
	Allow for replacement ceilings	1	allow	\$5,000.00	\$5,000		
	Allow for painting touch up	1	allow	\$5,000.00	\$5,000		
	<b>General Requirements</b>					<b>25,000</b>	
	Misc scaffolding	1	ls	\$20,000.00	\$20,000		
	Temporary Protection	1	ls	\$5,000.00	\$5,000		
	<b>ARCHITECTURAL TOTAL/ STRUCTURAL WORK</b>						<b>190,000</b>
	<b>SPRINKLER</b>					<b>355,000</b>	
	<b>WET SYSTEM</b>						
	New sprinkler system to Fire Escape Stairs	1	ea	\$150,000.00	\$150,000		
	Sprinkler distribution to sub-cellar and cellar	25,780	sf	\$7.00	\$180,460		
	Sprinkler mains from street	1	ls	\$25,000.00	\$25,000		
	<b>ELECTRICAL</b>						
	<b>Fire Alarm</b>					<b>340,000</b>	
	Fire Alarm backbone	62,917	sf	\$1.00	\$62,917		
	Fire Alarm sounders, pull stations etc	62,917	sf	\$4.00	\$251,668		
	<b>General Requirements</b>						
	Standby - allowance	1	ls	\$25,000.00	\$25,000		
	<b>MEPFP TOTAL</b>						<b>700,000</b>
	Design Development contingency					15%	<b>130,000</b>
	<b>TOTAL TRADE COSTS</b>						<b>1,000,000</b>





INTERIOR ARCHITECTS, P.C

BROOKLYN HEIGHTS PUBLIC LIBRARY, BROOKLYN HEIGHTS

6/20/2013

**CAPITAL NEEDS ASSESSMENT**

SYS	DESCRIPTION	QTY	UNIT	UNIT COST \$	EST'D COST \$	SUB TOTAL \$	TOTAL COST \$
	<b>7. ROOF REPLACEMENT</b>						<b>873,000</b>
	<b>Abatement</b>					<b>41,500</b>	
	Allowance for ACM Abatement	18,250	sf	\$2.00	\$36,500		
	Allowance for lead paint removal	1	Allow	\$0.00	\$0		
	Air monitoring for above	1	Allow	\$0.00	\$0		
	Surveys for above	1	Allow	\$5,000.00	\$5,000		
	Demolition associated with above	1	Allow	\$0.00	\$0		
	<b>Demolition</b>					<b>91,000</b>	
	Removal of existing roof including flashings etc	18,250	ls	\$5.00	\$91,250		
	<b>Windows/ Roofing</b>					<b>547,500</b>	
	New roofing; assume 3 ply roofing membrane on new insulation	18,250	sf	\$30.00	\$547,500		
	<b>Masonry/ Concrete</b>					<b>48,000</b>	
	Allowance for masonry repairs to parapet; 25% of area	750	sf	\$50.00	\$37,500		
	Repointing window sills	1	la	\$10,000.00	\$10,000		
	<b>General Requirements</b>					<b>145,000</b>	
	Sidewalk Bridge/ Scaffolding	200	lf	\$500.00	\$100,000		
	Life for materials & labor	1	ls	\$25,000.00	\$25,000		
	Weather Protection	1	ls	\$20,000.00	\$20,000		
	<b>ARCHITECTURAL TOTAL/ STRUCTURAL WORK</b>						<b>870,000</b>
	<b>PLUMBING</b>					<b>9,000</b>	
	<b>Roof Drainage</b>						
	Allowance for new roof outlets	18,250	sf	\$0.50	\$9,125		
	<b>ELECTRICAL</b>					<b>23,000</b>	
	<b>Relocates</b>					<b>23,000</b>	
	Allowance for relocates	1	ls	\$7,500.00	\$7,500		
	<b>General Requirements</b>						
	Temporary Power	1	ls	\$5,000.00	\$5,000		
	Standby - allowance	1	ls	\$10,000.00	\$10,000		
	<b>MEPFP TOTAL</b>						<b>30,000</b>
	Design Development contingency					15%	<b>140,000</b>
	<b>TOTAL TRADE COSTS</b>						<b>1,000,000</b>