

SCHEMATIC DESIGN
COST PLAN

for

Downtown Library
Palo Alto, California

May 5, 2008

DAVIS LANGDON

SCHEMATIC DESIGN COST PLAN

for

Downtown Library
Palo Alto, California

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EXCLUSIONS

Library stacks

Loose furniture and equipment except as specifically identified

Audio visual equipment (Technology Budget)

Hazardous material handling, disposal and abatement

Compression of schedule, premium or shift work, and restrictions on the contractor's working hours

Design, testing, inspection or construction management fees

Scope change and post contract contingencies

Assessments, taxes, finance, legal and development charges

Environmental impact mitigation

Builder's risk, project wrap-up and other owner provided insurance program

Land and easement acquisition

Cost escalation beyond a start date of January 2008

COMPONENT SUMMARY

	Gross Area:	9,046 SF	
		\$/SF	\$x1,000
1. Foundations		0.00	0
2. Vertical Structure		0.00	0
3. Floor & Roof Structures		3.87	35
4. Exterior Cladding		11.39	103
5. Roofing, Waterproofing & Skylights		0.00	0
<i>Shell (1-5)</i>		15.26	138
6. Interior Partitions, Doors & Glazing		16.03	145
7. Floor, Wall & Ceiling Finishes		25.15	228
<i>Interiors (6-7)</i>		41.18	373
8. Function Equipment & Specialties		19.32	175
9. Stairs & Vertical Transportation		0.00	0
<i>Equipment & Vertical Transportation (8-9)</i>		19.32	175
10. Plumbing Systems		13.80	125
11. Heating, Ventilating & Air Conditioning		30.99	280
12. Electric Lighting, Power & Communications		65.81	595
13. Fire Protection Systems		0.00	0
<i>Mechanical & Electrical (10-13)</i>		110.60	1,000
<i>Total Building Construction (1-13)</i>		186.35	1,686
14. Site Preparation & Demolition		8.56	77
15. Site Paving, Structures & Landscaping		2.76	25
16. Utilities on Site		11.62	105
<i>Total Site Construction (14-16)</i>		22.94	208
<i>TOTAL BUILDING & SITE (1-16)</i>		209.29	1,893
General Conditions	17.50%	36.59	331
Contractor's Overhead & Profit or Fee	5.00%	12.27	111
<i>RECOMMENDED BUDGET</i>		<i>January 2008</i>	258.15
			2,335

<i>Item Description</i>	<i>Quantity</i>	<i>Unit</i>	<i>Rate</i>	<i>Total</i>
<u>1. Foundations</u>				
No work anticipated				0
<u>2. Vertical Structure</u>				
No work anticipated				0
<u>3. Floor and Roof Structure</u>				
Add continuous blocking between glulams	100	LF	150.00	15,000
Strengthen trusses to support mech unit	1	LS	20,000.00	20,000
				35,000
<u>4. Exterior Cladding</u>				
Apply safety film to inside surface of all glass panes	3,000	SF	20.00	60,000
New exterior doors	4	EA	3,000.00	12,000
New glazing infill	1	EA	3,000.00	3,000
Replace slats at exterior soffits at removed battons	1	LS	10,000.00	10,000
Infill doors at existing restroom corridor entries	2	EA	5,000.00	10,000
New book drops inc. demolition and patching	2	EA	4,000.00	8,000
				103,000

<i>Item Description</i>	<i>Quantity</i>	<i>Unit</i>	<i>Rate</i>	<i>Total</i>
<u>5. Roofing, Waterproofing & Skylights</u>				
No work anticipated				0
<u>6. Interior Partitions, Doors & Glazing</u>				
Interior partitions	400	LF	200.00	80,000
Interior doors	15	EA	2,000.00	30,000
Interior glazing	30	LF	500.00	15,000
Polycarbonate partition	20	LF	500.00	10,000
Rated rolled down door	1	EA	10,000.00	10,000
				145,000
<u>7. Floor, Wall & Ceiling Finishes</u>				
Floors				
Integral color concrete	1,500	SF	15.00	22,500
Ceramic tile	500	SF	16.00	8,000
Carpet	7,050	SF	6.00	42,300
Walls	9,050	SF	5.00	45,250
Ceilings				
Gypsum board	2,000	SF	16.00	32,000
Acoustic tile	7,050	SF	6.00	42,300
Fabric canopy	200	SF	40.00	8,000
Soffits and bulkheads	9,050	SF	3.00	27,150
				227,500

<i>Item Description</i>	<i>Quantity</i>	<i>Unit</i>	<i>Rate</i>	<i>Total</i>
 <u>8. Function Equipment & Specialties</u>				
Specialties including window blinds, signage entrance mats, etc.	9,050	SF	5.00	45,250
Library shelving and endpanels				FF & E
Casework	9,050	SF	10.00	90,500
Theft detection devices	2	EA	15,000.00	30,000
Book drops	3	EA	3,000.00	9,000
				174,750

9. Stairs & Vertical Transportation

None anticipated

0

10. Plumbing Systems

Sanitary fixtures	20	FX		
Water closets	7	EA	1,525.00	10,675
Urinals	3	EA	1,450.00	4,350
Lavatories	7	EA	1,350.00	9,450
Breakroom sinks	2	EA	1,850.00	3,700
Mop sink	1	EA	2,250.00	2,250
Drinking fountain	1	EA	3,350.00	3,350

<i>Item Description</i>	<i>Quantity</i>	<i>Unit</i>	<i>Rate</i>	<i>Total</i>
Sanitary waste, vent and service pipework				
Hose bibs, include local connection pipework	1	LS	2,000.00	2,000
Floor drains, include new pipework, trap primers	1	LS	5,000.00	5,000
Rough-in sanitary waste, vent and service pipework, modify existing, route new where necessary	20	EA	2,500.00	50,000
Water treatment, storage and circulation				
Gas fired water heater	1	EA	4,500.00	4,500
Circulation pump and expansion tank	1	EA	1,750.00	1,750
Natural gas service				
Extend pipework to new water heater location, include pipe, fittings, valves and specialties (allow)	100	LF	50.00	5,000
Surface water drainage				
Storm and overflow drainage system (allow)	9,050	SF	1.25	11,313
Trade demolition	1	LS	7,500.00	7,500
Connect to existing waste, vent and service piping systems	1	LS	4,000.00	4,000
				124,838

11. Heating, Ventilation & Air Conditioning

Air Handling Equipment				
Roof top packaged AC unit, DX cooling, Gas heating, multi zone, return fan	10,000	CFM	6.50	65,000
Rooftop packaged AC units, DX type, telecom and electrical rooms	2	EA	4,500.00	9,000

<i>Item Description</i>	<i>Quantity</i>	<i>Unit</i>	<i>Rate</i>	<i>Total</i>
Air Distribution and Return				
Reconfigure ductwork for program room, 12 zones, duct sizes and routing will be adjusted	13,700	LBS	4.00	54,800
Flexible ductwork	230	LF	15.00	3,450
Dampers				
Volume	46	EA	125.00	5,750
Fire/smoke	8	EA	850.00	6,800
Insulation	8,220	SF	4.50	36,990
Diffusers, registers and grilles	46	EA	200.00	9,200
Controls and instrumentation				
BMS, interface with existing invensys IA series system, include CO2 monitoring of program room	9,050	SF	4.50	40,725
Test and balance air/water systems	40	HRS	125.00	5,000
HVAC commissioning	1	LS	25,000.00	25,000
Unit ventilation/exhaust fans				
General exhaust	1,400	CFM	1.00	1,400
Toilet and janitor closet exhaust	1,000	CFM	1.00	1,000
Kitchen exhaust	800	CFM	1.50	1,200
Trade demolition	1	LS	15,000.00	15,000
				280,315

12. Electrical Lighting, Power & Communication

Service and distribution

Main switchboard, 120/208V/3, main breaker, meter, TVSS	600	AM	36.00	21,600
Panel board breakers 277V/1 - mechanical	24	EA	115.00	2,760
Feeder conduit and cable	50	LF	145.00	7,250

<i>Item Description</i>	<i>Quantity</i>	<i>Unit</i>	<i>Rate</i>	<i>Total</i>
Emergency power				
Emergency lighting battery inverter, including feeder conduit and cable	10	KVA	3,000.00	30,000
Machine and equipment connection				
Including switch, conduit and cable				
Roof top packaged AC unit, < = 20 hp	1	EA	2,500.00	2,500
Rooftop packaged AC units, telecom and electrical rooms, < = 5hp	2	EA	1,500.00	3,000
Circulation pump, < = 2	1	EA	700.00	700
Exhaust fans < = 7.5 hp	1	EA	1,500.00	1,500
Exhaust fans < = 2 hp	4	EA	700.00	2,800
Fire/smoke damper power connection	8	EA	550.00	4,400
Gas fired water heater, 120V/1 connection	1	EA	550.00	550
Plumbing fixture's sensor connection	17	EA	350.00	5,950
Drinking fountain	1	EA	450.00	450
Miscellaneous connections	30	EA	550.00	16,500
User convenience power				
Panel board breakers 120V/1	126	EA	115.00	14,490
Feeder conduit and cable	120	LF	74.00	8,880
Receptacles wall and flush floor mounted in access floor, including conduit and cables	9,050	SF	5.00	45,250
Lighting				
Panel board breakers 120V/1	42	EA	115.00	4,830
Feeder conduit and cable	40	LF	74.00	2,960
Interior lighting fixtures, including conduit and cables	9,050	SF	13.50	122,175
Egress lighting with integral emergency battery packs, and exit signs, including conduit and cables	9,050	SF	1.50	13,575
Switches, occupancy sensors, including conduit and cables	9,050	SF	1.50	13,575
Exterior building light, allow	1	LS	8,000.00	8,000

<i>Item Description</i>	<i>Quantity</i>	<i>Unit</i>	<i>Rate</i>	<i>Total</i>
Light and power specialties				
Grounding	1	LS	8,000.00	8,000
Lighting control relay panel, programmable, master lovoltage dataline switch station, astro-dial, electronic, multichannel, time clock	1	EA	10,000.00	10,000
Miscellaneous 120V/1 connections	50	EA	550.00	27,500
Telephone data and communication system				
Telecom room MDF - rough-ins including racks, vertical wire way, cable runway, plywood backboard, patch panels, terminal blocks	1	LS	10,000.00	10,000
Telephone data outlets wall or flush floor access box, including conduit and cable				
Telephone data outlets, 2 port	28	EA	650.00	18,200
Telephone data outlets, 4 port	3	EA	850.00	2,550
Telephone or data outlets, 1 port	2	EA	500.00	1,000
Telephone data outlets, ceiling	1	EA	550.00	550
Telephone data outlets, 2 port, flush floor box	3	EA	850.00	2,550
Telephone data outlets, 4 port, flush floor box	2	EA	1,200.00	2,400
Book theft data, flush floor box	6	EA	750.00	4,500
Lighting control, firealarm control panel data connections (etc)	4	EA	550.00	2,200
Wireless access point allow	4	EA	650.00	2,600
Trenching for new power and data	1	LS	37,500.00	37,500
Infrastructure conduit and cable	9,050	SF	0.75	6,788
Paging system including speaker, conduit and cable	9,050	SF	2.50	22,625
AV system				
A/V conduit, and floor/wall boxes, racks	1	LS	10,000.00	10,000
AV equipment				Sep Budget
Assistive listening	1	LS	4,000.00	4,000
Fire alarm system				
Including fire alarm control, annunciator panels, fire alarm initiating devices, flow, tamper switch and PIV connections, fire alarm fire smoke damper connections and battery back-up power	9,050	SF	3.50	31,675

<i>Item Description</i>	<i>Quantity</i>	<i>Unit</i>	<i>Rate</i>	<i>Total</i>
Security system				
Security card access system connections, card reader, security control panel, book theft gate connections and conduit and cable	9,050	SF	2.00	18,100
Security alarm system				
Motion detectors	10	EA	450.00	4,500
Door switch	16	EA	225.00	3,600
Request to exit detector	8	EA	225.00	1,800
Duress alarm button	1	EA	500.00	500
CCTV including camera conduit and cable, DVD/VCR,	9,050	SF	2.00	18,100
Trade demolition	9,050	SF	1.15	10,408
				595,340

13. Fire Protection Systems

Automatic wet sprinklers				not required
				0

14. Site Preparation & Building Demolition

Selective demo	9,050	SF	8.00	72,400
Demo enclosure at transformer	1	LS	5,000.00	5,000
				77,400

<i>Item Description</i>	<i>Quantity</i>	<i>Unit</i>	<i>Rate</i>	<i>Total</i>
<u>15. Site Paving, Structures & Landscaping</u>				
Selective patch	1	LS	10,000.00	10,000
New transformer enclosure	1	LS	15,000.00	15,000
				25,000
<u>16. Utilities on Site</u>				
New water service for fire water	1	LS	15,000.00	15,000
Site electrical				
Primary service conduit, concrete encased 4"	100	LF	40.00	4,000
Utility transformer pad	1	EA	3,500.00	3,500
Secondary service feeder conduit and cable, concrete encased - 600A	100	LF	192.00	19,200
Telecom service conduit (1) 2" concrete encased	150	LF	32.00	4,800
CATV service conduit (1) 2" concrete encased	150	LF	32.00	4,800
City man connection conduit (1) 2" concrete encased	150	LF	32.00	4,800
Pull box with traffic rated lid	3	EA	3,000.00	9,000
Telecom infrastructure cabling, allow	1	LS	12,000.00	12,000
Cable TV cabling				by others
Cut and patch as required	1	LS	8,000.00	8,000
Miscellaneous utilities	1	LS	20,000.00	20,000
				105,100