

# Appendix A: Project Schedule

ID	Task Name	Duration	Start	Finish	May '06	Jun '06	Jul '06	Aug '06	Sep '06	Oct '06	Nov '06	Dec '06	Jan '07	Feb '07	Mar '07	Apr '07	May '07	Jun '07	Jul '07	Aug '07	Sep '07	Oct '07	Nov '07	Dec '07	Jan '08	Feb '08	Mar '08	Apr '08	May '08	Jun '08	Jul '08	Aug '08	Sep '08	Oct '08	
1	SD Redesign	46 days	Mon 5/15/06	Mon 7/17/06	[Task Bar]																														
2	Kick-Off Team Meeting	5 days	Mon 6/12/06	Fri 6/16/06		[Task Bar]																													
3	Finalize OR Type	10 days	Mon 6/19/06	Fri 6/30/06		[Task Bar]																													
4	Wilmot/Sanz Produce DD Documents	60 days	Tue 7/18/06	Mon 10/9/06			[Task Bar]																												
5	Schematic Design Drawing Review	5 days	Tue 7/18/06	Mon 7/24/06		[Task Bar]																													
6	Final Equipment Decisions (OR Lights and Booms)	0 days	Mon 7/24/06	Mon 7/24/06			◆ 7/24																												
7	Design Development Drawing Review	5 days	Tue 10/10/06	Mon 10/16/06						[Task Bar]																									
8	Owner DD Pricing Review	5 days	Tue 10/31/06	Mon 11/6/06							[Task Bar]																								
9	Board Approval OR Phase 1A & 1B	0 days	Mon 11/6/06	Mon 11/6/06								◆ 11/6																							
10	Wilmot/Sanz Develop CD's	62 days	Tue 11/21/06	Wed 2/14/07							[Task Bar]																								
11	GBCo Prepare DD Estimate	15 days	Tue 10/10/06	Mon 10/30/06						[Task Bar]																									
12	Temporary Office Relocation	62 days	Fri 12/1/06	Mon 2/26/07								[Task Bar]																							
13	GBCo Trade Contract Procurement	25 days	Thu 2/15/07	Wed 3/21/07									[Task Bar]																						
14	GBCo Scope Review Meetings and GMP Prep	10 days	Thu 3/22/07	Wed 4/4/07										[Task Bar]																					
15	GBCo GMP Presentation	1 day	Thu 4/5/07	Thu 4/5/07											[Task Bar]																				
16	Owner NTP Phase 1A	0 days	Tue 10/2/07	Tue 10/2/07																															
17	Phase 1A Demolition	101 days	Tue 10/2/07	Tue 2/19/08																															
18	Phase 1A Construction	199 days	Mon 11/19/07	Thu 8/21/08																															
19	NTP Phase 1B	0 days	Mon 11/5/07	Mon 11/5/07																															
20	Phase 1B Demolition	62 days	Mon 11/26/07	Tue 2/19/08																															
21	Phase 1B Construction	132 days	Wed 2/20/08	Thu 8/21/08																															
22	Decontamination Building Terminations	6 days	Wed 4/2/08	Wed 4/9/08																															
23	Decontamination Electrical Testing	3 days	Fri 4/11/08	Tue 4/15/08																															
24	Inspect and Test New Elevator	5 days	Mon 6/16/08	Fri 6/20/08																															
25	Main Building Terminations	15 days	Tue 7/15/08	Mon 8/4/08																															
26	Start Up Testing and Balancing	36 days	Fri 7/18/08	Fri 9/5/08																															
27	Systems Testing	5 days	Tue 8/5/08	Mon 8/11/08																															
28	Demolish Temporary Construction Tunnel	2 days	Fri 8/8/08	Mon 8/11/08																															
29	Occupancy Inspections	26 days	Fri 8/22/08	Fri 9/26/08																															
30	Occupancy	0 days	Fri 9/26/08	Fri 9/26/08																															◆ 9/26

Project: Original Project Schedule  
Date: Fri 10/5/07

Task [Task Bar] Progress [Progress Bar] Summary [Summary Bar] External Tasks [External Task Bar] Deadline [Deadline Bar]

Split [Split Bar] Milestone [Milestone Diamond] Project Summary [Project Summary Bar] External Milestone [External Milestone Diamond]

**Appendix B:**  
**Project Cost Evaluation Documents**

# Estimate of Probable Cost

CNMC Phase 1 - Oct 2007 - District of Columbia

Prepared By:	<b>Andrea Klein</b> <b>The Pennsylvania State University</b> <b>825 S Allen Street</b> <b>State College, PA 16801</b> <b>Fax:</b>	Prepared For:	
Building Sq. Size:	<b>45312</b>	Site Sq. Size:	<b>0</b>
Bid Date:	<b>12/1/2006</b>	Building use:	<b>Medical</b>
No. of floors:	<b>1</b>	Foundation:	<b>N/A</b>
No. of buildings:	<b>1</b>	Exterior Walls:	<b>N/A</b>
Project Height:	<b>21</b>	Interior Walls:	<b>GYP</b>
1st Floor Height:	<b>14</b>	Roof Type:	<b>N/A</b>
1st Floor Size:	<b>45312</b>	Floor Type:	<b>CON</b>
		Project Type:	<b>ADD/REN</b>

Division		Percent	Sq. Cost	Amount
<b>01</b>	<b>General Requirements</b>	<b>4.37</b>	<b>8.20</b>	<b>371,588</b>
	Fee	4.03	7.55	342,045
	Permits	0.35	0.65	29,543
<b>02</b>	<b>Site Work</b>	<b>1.76</b>	<b>3.30</b>	<b>149,608</b>
	Demolition	1.76	3.30	149,608
	Earthwork	0.00	0.00	0
	Misc. Site	0.00	0.00	0
	Site Concrete	0.00	0.00	0
	Site Work	0.00	0.00	0
<b>03</b>	<b>Concrete</b>	<b>0.00</b>	<b>0.00</b>	<b>0</b>
	Concrete	0.00	0.00	0
	Concrete Labor	0.00	0.00	0
<b>04</b>	<b>Masonry</b>	<b>0.77</b>	<b>1.44</b>	<b>65,395</b>
	Restoration	0.74	1.39	62,846
	Stone	0.00	0.00	0
	Masonry	0.00	0.00	0
	Material, Labor, Equipment	0.03	0.06	2,549
<b>05</b>	<b>Metals</b>	<b>6.91</b>	<b>12.95</b>	<b>586,636</b>
	Iron Works	1.49	2.79	126,289
	Steel Erection	0.59	1.10	49,960
	Material, Labor, Equipment	4.83	9.06	410,387
<b>06</b>	<b>Wood &amp; Plastics</b>	<b>3.63</b>	<b>6.81</b>	<b>308,499</b>
	Millwork	1.07	2.00	90,481
	Material, Labor, Equipment	2.57	4.81	218,018
<b>07</b>	<b>Thermal &amp; Moisture Protection</b>	<b>7.06</b>	<b>13.24</b>	<b>600,116</b>
	Drywall/EIFS/Fireproofing	7.06	13.24	600,116
	Roofing	0.00	0.00	0
<b>08</b>	<b>Doors &amp; Windows</b>	<b>2.79</b>	<b>5.23</b>	<b>237,060</b>
	Access Doors	0.03	0.06	2,849
	Door Hardware	1.71	3.21	145,628
	Glass	0.78	1.47	66,598
	O.H. Doors/Dock	0.07	0.14	6,258
	Sliding Doors	0.19	0.35	15,727
<b>09</b>	<b>Finishes</b>	<b>7.45</b>	<b>13.98</b>	<b>633,301</b>
	Finishes	2.47	4.64	210,089
	Material, Labor, Equipment	4.98	9.34	423,212
<b>10</b>	<b>Specialties</b>	<b>0.39</b>	<b>0.74</b>	<b>33,355</b>
	Corner Guards	0.20	0.38	17,405
	Lockers	0.13	0.25	11,387
	Specialties	0.05	0.10	4,563
<b>11</b>	<b>Equipment</b>	<b>0.00</b>	<b>0.00</b>	<b>0</b>
	Fountain	0.00	0.00	0

<b>12</b>	<b>Furnishings</b>	<b>0.12</b>	<b>0.22</b>	<b>9,909</b>
	Blinds/Folding Doors/Cubicle Curtains	0.12	0.22	9,909
<b>13</b>	<b>Special Construction</b>	<b>0.52</b>	<b>0.97</b>	<b>44,047</b>
	Smoke Guards	0.52	0.97	44,047
<b>14</b>	<b>Conveying Systems</b>	<b>1.94</b>	<b>3.64</b>	<b>164,849</b>
	Elevator	1.94	3.64	164,849
	Wheelchair Lift	0.00	0.00	0
<b>15</b>	<b>Mechanical</b>	<b>40.53</b>	<b>75.98</b>	<b>3,442,891</b>
	Chiller	0.36	0.67	30,566
	HVAC	1.25	2.34	105,926
	Mechanical	37.26	69.86	3,165,325
	Fire Sprinklers	1.66	3.11	141,074
<b>16</b>	<b>Electrical</b>	<b>21.75</b>	<b>40.78</b>	<b>1,847,995</b>
	Electrical	21.75	40.78	1,847,995
<b>Total Building Costs</b>		<b>100.00</b>	<b>187.48</b>	<b>8,495,248</b>
<b>Total Non-Building Costs</b>		<b>100.00</b>	<b>N/A</b>	<b>0</b>
<b>Total Project Costs</b>		<b>--</b>	<b>--</b>	<b>8,495,248</b>

RS Means 2007 - M.330 2-3 Story Hospital

System	Unit	Unit Cost	Amount	Cost	Extra Calculations
<b>Interiors</b>					
Wall Finishes	sf surface	3.08	100000	308000.00	
Floor Finishes	sf floor	8.93	45312	404636.16	
Ceiling Finishes	sf ceiling	4.71	45312	213419.52	
<b>Conveying</b>					
Elevators	each	92950.00	1	92950.00	
<b>Plumbing</b>					
Plumbing Fixtures	each	3339.00	202	674478.00	<i>[45312 sf x (1 fixture/224 sf floor)] = 202 fixtures</i>
Domestic Water Distribution	sf floor	7.14	45312	323527.68	
<b>HVAC</b>					
Energy Supply	sf floor	4.00	45312	181248.00	
Other HVAC Sys. & Equipment	sf floor	23.00	45312	1042176.00	
<b>Electrical</b>					
Lighting & Branch Wiring	sf floor	14.51	45312	657477.12	
Communications & Security	sf floor	3.89	45312	176263.68	
Equipment & Furnishings	sf floor	9.51	45312	430917.12	
<b>Total</b>				<b>4,505,093.28</b>	
<b>Cost/sf</b>				<b>99.42</b>	

RS Means 2007 - M.485 1 Story Outpatient Surgery Center

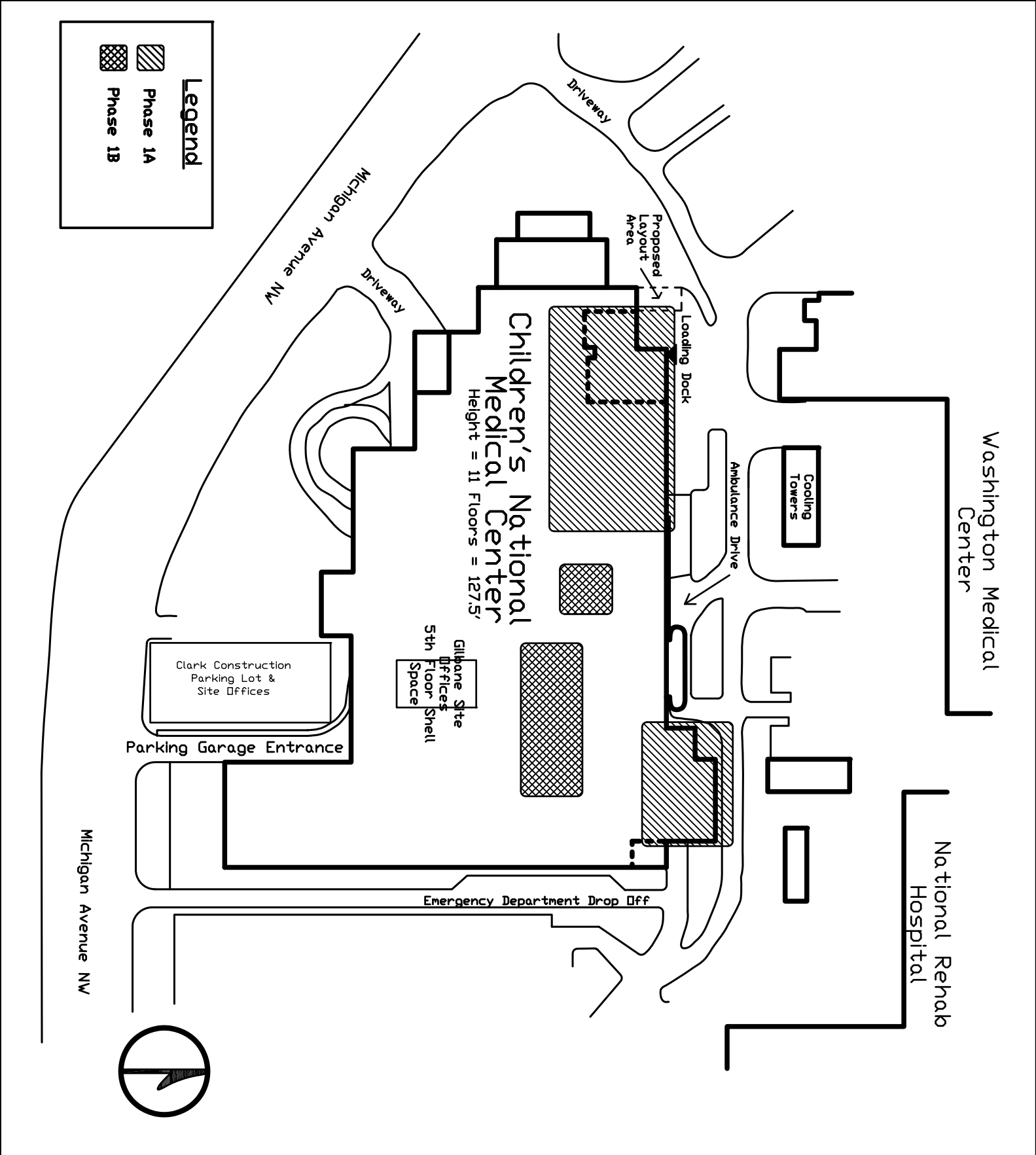
System	Unit	Unit Cost	Amount	Cost	Extra Calculations
<b>Interiors</b>					
Wall Finishes	sf surface	1.70	100000	170000.00	
Floor Finishes	sf floor	1.81	45312	82014.72	
Ceiling Finishes	sf ceiling	3.20	45312	144998.40	
<b>Conveying</b>					
Elevators	each	0.00	0	0.00	
<b>Plumbing</b>					
Plumbing Fixtures	each	2149.00	130	279370.00	<i>[45312 sf x (1 fixture/350 sf floor)] = 130 fixtures</i>
Domestic Water Distribution	sf floor	1.13	45312	51202.56	
<b>HVAC</b>					
Energy Supply	sf floor	9.37	45312	424573.44	
Other HVAC Sys. & Equipment	sf floor	66.00	45312	2990592.00	
<b>Electrical</b>					
Lighting & Branch Wiring	sf floor	12.34	45312	559150.08	
Communications & Security	sf floor	5.69	45312	257825.28	
Equipment & Furnishings	sf floor	39.00	45312	1767168.00	
<b>Total</b>				<b>6,726,894.48</b>	
<b>Cost/sf</b>				<b>148.46</b>	

RS Means 2007 Average Cost

System	M.330 Cost	M.485 Cost	Average Cost
<b>Interiors</b>			
Wall Finishes	308000.00	170000.00	239000.00
Floor Finishes	404536.16	82014.72	243275.44
Ceiling Finises	213419.52	144998.40	179208.96
<b>Conveying</b>			
Elevators	92950.00	0.00	46475.00
<b>Plumbing</b>			
Plumbing Fixtures	674478.00	279370.00	476924.00
Domestic Water Distribution	323527.68	51202.56	187365.12
<b>HVAC</b>			
Energy Supply	181248.00	424573.44	302910.72
Other HVAC Sys. & Equipment	1042176.00	2990592.00	2016384.00
<b>Electrical</b>			
Lighting & Branch Wiring	657477.12	559150.08	608313.60
Communications & Security	176263.68	257825.28	217044.48
Equipment & Furnishings	430917.12	1767168.00	1099042.56
<b>Subtotal</b>			<b>\$5,615,943.88</b>
<b>Cost/sf</b>			<b>\$123.94</b>
<b>Additions</b>	<b>Amount</b>	<b>Cost/unit</b>	<b>Total</b>
<b>Medical Equipment</b>			
Scrub Station	7	2605.00	18235.00
Sterilizers	2	15500.00	31000.00
Deluxe Surgery Tables	2	33200.00	66400.00
<b>Subtotal</b>			<b>\$5,731,578.88</b>
<b>Cost/sf</b>			<b>\$126.49</b>
<b>Location Factor</b>			<b>x Base Cost</b>
<b>District of Columbia</b>			0.98
<b>Total</b>			<b>\$5,616,947.30</b>
<b>Cost/sf</b>			<b>\$123.96</b>

# Appendix C: Site Plan





Andrea Klein

Children's National Medical Center  
Surgery Expansion Project Phase 1

111 Michigan Ave NW - Washington, DC 20010

Site Plan  
Existing Conditions

AS-1