

**ORIGINAL**

New Hospital Pavilion 07-153  
The University of Chicago Medical Center  
December, 2007

Illinois Health Facilities Planning Board

Application for Permit February 2003 Edition Page 1

**ILLINOIS HEALTH FACILITIES PLANNING BOARD RECEIVED**

**APPLICATION FOR PERMIT**

DEC - 7 2007

February 2003 EDITION

**HEALTH FACILITIES  
PLANNING BOARD**

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"The Illinois Department of Public Health does not discriminate on the basis of handicap in admission or access to, or treatment or employment in its programs and activities in compliance with Section 504 of the Rehabilitation Act of 1973, as amended. The Equal Employment Opportunity Officer is responsible for coordination of compliance efforts; voice (217) 785-2034; TTY (217) 785-2088."

**ILLINOIS HEALTH FACILITIES PLANNING BOARD  
525 WEST JEFFERSON STREET  
SPRINGFIELD, ILLINOIS 62761-0001  
(217) 782-3516**

## JUSTIFICATION FOR THE PROJECT

### SUMMARY

The University of Chicago Medical Center ("UCMC") proposes to modernize inpatient beds, operating rooms, interventional radiology, and the GI procedure unit. These critical functions were last renovated in 1977 with the opening of Surgery Brain Research Pavilion and 1983 with Mitchell Hospital. With the steady increase in demand for these services, our current facilities are overtaxed and are in need expansion. The main operating suite is so busy that we already meet the State's recommended use rate for the additional nine rooms we plan to build. Similarly, we conform to the State's standard with current volumes for the expansion of ICU beds we propose. We have seen great increases in interventional radiology and GI procedures, as techniques for minimally invasive techniques have advanced rapidly. These functions have long ago outgrown their locations.

UCH proposes to increase ICU beds by 22, decrease Med/Surg beds by 27, for a net bed decrease of 5 beds. This increase is consistent with the long term trend of a growing in intensity of care we provide to inpatients. Thirty years ago we had 1 ICU bed for every 11 Med/Surg beds. With this latest shift there will be 1 for every 2.6. As mentioned above, we currently meet the requirement for the ICU bed addition we seek. We reach the State's use rate for Med/Surg beds at project completion with a continuation of the gradual, steady growth we've experienced during the last several years.

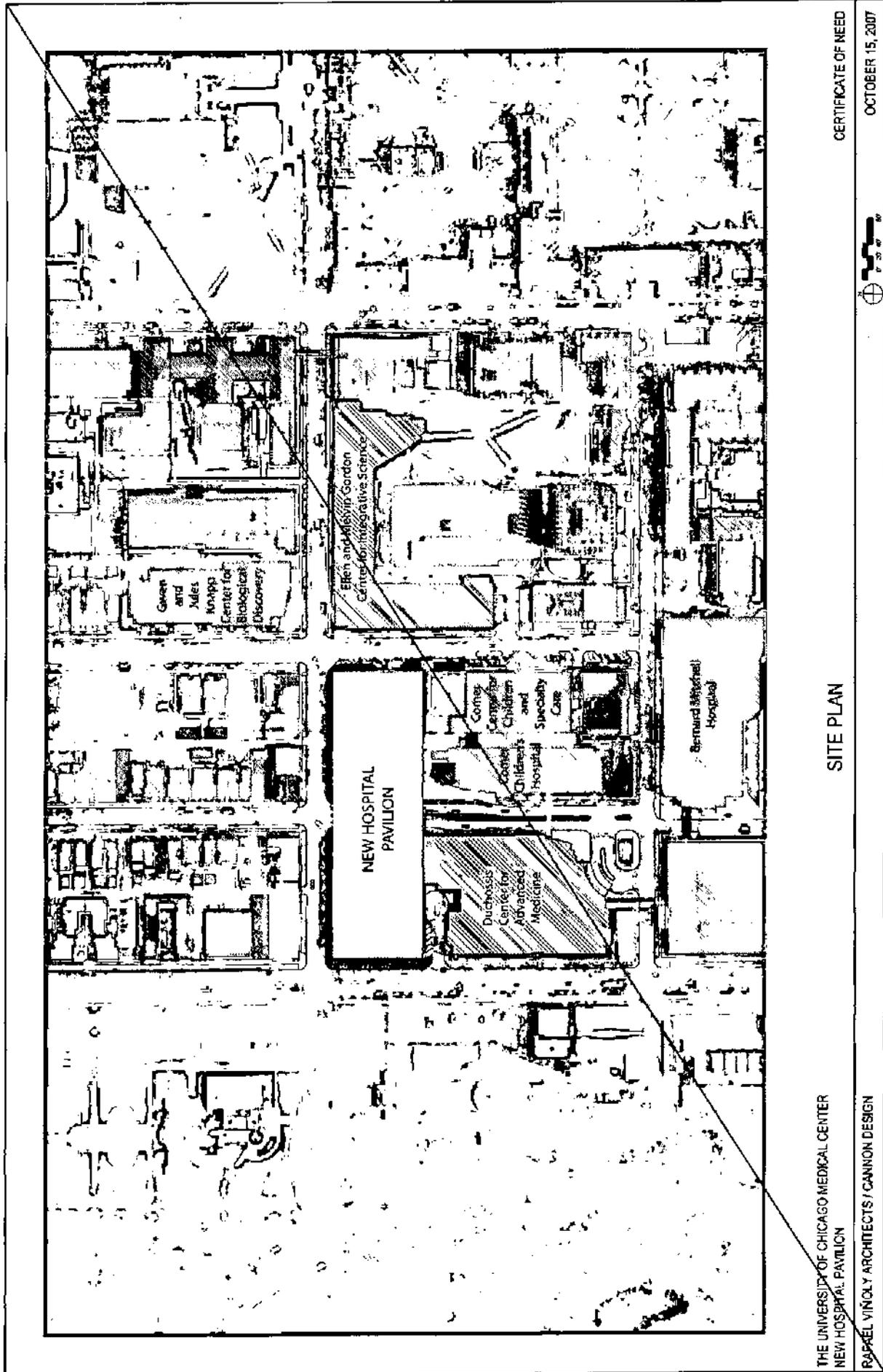
The University of Chicago has a long and celebrated history of advancing the science of medicine. We have many clinical programs that are considered among the top few in the country. This carefully planned expansion of our hospital will allow us to continue to be a valued resource for the citizens of Illinois and, in particular, our immediate community. We respectfully ask the support of the Illinois Health Facilities Planning Board in this important endeavor.



CERTIFICATE OF NEED

OCTOBER 15, 2007

ATTACHMENT INFO - 7



THE UNIVERSITY OF CHICAGO MEDICAL CENTER  
 NEW HOSPITAL PAVILION

PAKEL VINCELY ARCHITECTS / CANNON DESIGN

SITE PLAN

CERTIFICATE OF NEED

OCTOBER 15, 2007

ATTACHMENT INFO - 7

**RECEIVED**

## ILLINOIS HEALTH FACILITIES PLANNING BOARD

DEC - 7 2007

## APPLICATION FOR PERMIT

SECTION I. IDENTIFICATION, GENERAL INFORMATION, AND CERTIFICATION  
HEALTH FACILITIES PLANNING BOARD

This section must be completed for all projects.

**A. Facility/Project Identification**

Facility Name The University of Chicago Medical Center  
 Street Address 5841 South Maryland Avenue City Chicago  
 County Cook Zip 60637 Illinois State Representative District 25th

**B. Applicant Identification** (complete this information for each co-applicant and insert after this page)

Exact Legal Name The University of Chicago Hospitals  
 Address 5841 South Maryland Avenue  
Chicago Name of Registered Agent \_\_\_\_\_  
 Name of Chief Executive Officer David S. Hefner Title President  
 CEO Address 5841 South Maryland Avenue Telephone No. (773) 702-6240

Type of Ownership:  Non-profit Corporation  For-profit Corporation  Limited Liability Company  
 Partnership  Governmental  Sole Proprietorship  Other (specify) \_\_\_\_\_

Corporations and limited liability companies must provide an Illinois certificate of good standing; partnerships must provide the name of the state in which organized and the name and address of each partner specifying whether each is a general or limited partner.

**APPEND DOCUMENTATION AS ATTACHMENT IDEN-1 AFTER THE LAST PAGE OF THIS SECTION.****C. Primary Contact Person** (person who is to receive correspondence or inquiries during the review period)

Name John R. Beberman Title Director of Capital Budget & Control  
 Company Name \_\_\_\_\_  
 Address 14216 South Meadowview Court  
Orland Park Telephone No. (773) 702-1246  
 E-Mail address john.beberman@uchospitals.edu Fax Number (773) 702-8148

**D. Additional Contact Person** (person such as consultant, attorney, financial representative, registered agent, etc. who also is authorized to discuss application and act on behalf of applicant)

Name \_\_\_\_\_ Title \_\_\_\_\_  
 Company Name \_\_\_\_\_  
 Address \_\_\_\_\_  
 Telephone No. ( ) \_\_\_\_\_  
 E-Mail address \_\_\_\_\_ Fax Number ( ) \_\_\_\_\_

**E. Post Permit Contact Person** (person to whom all correspondence and inquiries pertaining to the project subsequent to permit issuance are to be directed)

Name John R. Beberman Title Director of Capital Budget & Control  
 Address 14216 South Meadowview Court  
Orland Park Telephone No. (773) 702-1246  
 E-mail Address \_\_\_\_\_ Fax Number \_\_\_\_\_

**F. Site Ownership** (complete this information for each applicable site and insert after this page)

Exact Legal Name of Person Who Owns Site The University of Chicago Medical Center  
 Address of Site Owner 5841 South Maryland Avenue  
 Street Address or Legal Description of Site 5841 South Maryland Avenue

**G. Operating Entity/Licensee** (complete this information for each applicable facility and insert after this page)

Exact Legal Name The University of Chicago Medical Center  
 Address 5841 South Maryland Avenue

Type of Ownership:  Non-profit Corporation  For-profit Corporation  Limited Liability Company  
 Partnership  Governmental  Sole Proprietorship  Other (specify) \_\_\_\_\_

Corporations and limited liability companies must provide an Illinois certificate of good standing; partnerships must provide the name of the state in which organized and the name and address of each partner specifying whether each is a general or limited partner.

**APPEND DOCUMENTATION AS ATTACHMENT IDEN-2 AFTER THE LAST PAGE OF THIS SECTION.**

**H. Organizational Relationships**

Provide (for each co-applicant) an organization chart containing the name and relationship of any person who is related (related person is defined in Part 1130.140). If the related person is participating in the development or funding of the project, describe the interest and the amount and type of any financial contribution.

**APPEND DOCUMENTATION AS ATTACHMENT IDEN-3 AFTER THE LAST PAGE OF THIS SECTION.**

**I. Status of Previous Certificate of Need Projects**

Provide the project number for any of the applicant's projects which have received permits but are not yet complete (completion is defined in Part 1130.140) and provide the current status of the project. If all projects are complete, indicate NONE: 04-054 Peds ED - preparing final report; 06-024 Master Design - design devel.; 07-095 design devel.

**J. Flood Plain Requirements**

Provide documentation regarding compliance with the Flood Plain requirements of Executive Order #4, 1979.

**APPEND DOCUMENTATION AS ATTACHMENT IDEN-4 AFTER THE LAST PAGE OF THIS SECTION.**

**APPEND DOCUMENTATION AS ATTACHMENT IDEN-5 AFTER THE LAST PAGE OF THIS SECTION.**

**L. Project Classification (check those applicable, refer to Part 1110.40 and Part 1120.20.b)**

- |  |  |   |
|--|--|---|
| 1. Part 1110 Classification<br><input checked="" type="checkbox"/> Substantive<br><input type="checkbox"/> Non-substantive | 2. Part 1120 Applicability or Classification: (check one only)<br><input type="checkbox"/> Part 1120 Not Applicable<br><input type="checkbox"/> DHS or DVA Project | <input type="checkbox"/> Category A Project<br><input checked="" type="checkbox"/> Category B Project |
|--|--|---|

**M. Narrative Description**

Provide in the space below a brief narrative description of the project. Explain what is to be done, **NOT** why it is being done. Include the rationale as to the project's classification as substantive or non-substantive. If the project site does **NOT** have a street address, include a legal description of the site.

**This project is the construction and equipping of a ten story building to house our adult general operating rooms, GI Procedure Unit, Interventional Radiology, other Radiology Imaging, 180 Medical/Surgical beds, 60 ICU beds, and support activities such as Preparation/Recovery, Central Sterile Processing, Pharmacy, Respiratory Therapy, along with other, non-reviewable support functions. The net change in beds will be a reduction of 5, with Medical/Surgical reducing by 27 and ICU increasing by 22. Operating rooms will increase by 9, Interventional Radiology by 2, and GI procedures will also expand. The previous major modernization of these inpatient services occurred in 1977 for the General Operating Rooms and 1983 with the construction of Mitchell Hospital which contains our adult inpatient beds. This project will provide facilities that are up to modern standards and will allow us to continue to offer services at the forefront of medicine.**

**This new building will be located in the Medical Center complex, on 57th Street, between Cottage Grove Avenue and Drexel Avenue. This is adjacent to and north of the Duchossois Center for Advanced Medicine, Comer Children's Hospital, and Comer Center for Children and Specialty Care.**

**We consider this project "substantive" since its costs exceed the review threshold.**

**N. Project Costs and Sources of Funds**

Complete the following table listing all costs (refer to Part 1120.110) associated with the project. When a project or any component of a project is to be accomplished by lease, donation, gift, or other means, the fair market value or dollar value (refer to Part 1190.40.h) of the component must be included in the estimated project cost. If the project contains components that are not related to the provision of health care, complete an additional table for the portions that are solely for health care and insert that table following this page (e.g. separate a nursing home's costs from the components of a retirement community; separate patient care area costs from a hospital project that includes a parking garage).

<b>PROJECT COSTS AND SOURCES OF FUNDS</b>			
	Reviewable	Non-Reviewable	Total
Preplanning Costs	\$0	\$0	\$0
Site Survey and Soil Investigation	59,925	110,075	170,000
Site Preparation	3,197,261	5,873,050	9,070,311
Off Site Work	31,992	58,766	90,758
New Construction Contracts	152,428,902	279,996,724	432,425,625
Modernization Contracts			
Contingencies	15,242,890	27,999,672	43,242,563
Architectural/Engineering Fees	7,536,308	13,843,448	21,379,756
Consulting and Other Fees	10,601,359	19,473,641	30,075,000
Movable or Other Equipment (not in construction contracts)	117,374,450	50,513,826	167,888,276
Bond Issuance Expense (project related)	6,137,578	11,274,121	17,411,699
Net Interest Expense During Construction (project related)	15,967,074	29,329,926	45,297,000
Fair Market Value of Leased Space or Equipment			
Other Costs To Be Capitalized	6,589,939	12,105,061	18,695,000
Acquisition of Buildings or Other Property (excluding land)			
<b>ESTIMATED TOTAL PROJECT COSTS</b>	<b>\$335,167,677</b>	<b>\$450,578,311</b>	<b>\$785,745,988</b>
Cash and Securities			\$185,745,988
Pledges			
Gifts and Bequests			100,000,000
Bond Issues (project related)			500,000,000
Mortgages			
Leases (fair market value)			
Governmental Appropriations			
Grants			
Other Funds and Sources			
<b>TOTAL FUNDS</b>	<b>\$0</b>	<b>\$0</b>	<b>\$785,745,988</b>

## SECTION I.N. Project Costs and Sources of Funds - Detail

## New Hospital Pavilion

		<u>Reviewable</u>	<u>Non-reviewable</u>	<u>Total</u>
		\$0	\$0	\$0
<b>Preplanning Costs</b>				
Conceptual design, reimb. expenses	0			
Patient-focused planning	0			
Cost estimation	0			
City code analysis	0			
<b>Site Survey and Soil Investigation</b>		<b>59,925</b>	<b>110,075</b>	<b>170,000</b>
Survey	55,000			
Testing	65,000			
Soils Analysis/Environmental	50,000			
<b>Site Preparation</b>		<b>3,197,261</b>	<b>5,873,050</b>	<b>9,070,311</b>
Demolition and Site Clearing	1,529,517			
Site Utilities	4,019,275			
Site Work	1,620,749			
Landscaping	428,672			
Temporary Utilities	307,215			
Watermain Connections	214,336			
Electrical Terminations	121,457			
Asbestos Abatement	100,000			
Detention Basin	729,090			
<b>Off Site Work</b>	<b>90,758</b>	<b>31,992</b>	<b>58,766</b>	<b>90,758</b>
<b>New Construction Contracts</b>		<b>152,428,902</b>	<b>279,996,724</b>	<b>432,425,625</b>
Excavation/Foundation	16,263,956			
Structure	72,195,458			
Roofing and Waterproofing	5,347,700			
Exterior Wall	46,996,193			
Interior Finishes	69,142,137			
Fixed Equipment and Specialties	5,394,417			
Vertical Transportation	8,265,147			
Plumbing	22,048,833			
Mechanical Systems	75,723,017			
Fire Protection	7,863,855			
Electrical Systems	66,463,842			
Tunnel (NHP, Comer, DCAM)	2,304,069			
General Requirements	14,736,038			
General Conditions	17,810,963			
<b>Owner Directed Construction:</b>				
- Locks, cylinders, keys	226,000			
- Hyperchlorination water system	80,000			
- Plant services, shutdowns	64,000			
- Interior signage	500,000			
- Move-in corrections	1,000,000			
<b>Modernization Contracts</b>				<b>0</b>
<b>Contingencies</b>		<b>15,242,890</b>	<b>27,999,672</b>	<b>43,242,563</b>
<b>Architectural/Engineering Fees</b>		<b>7,536,308</b>	<b>13,843,448</b>	<b>21,379,756</b>
Vinoly/Cannon	21,379,756			

## SECTION I.N. Project Costs and Sources of Funds - Detail

New Hospital Pavilion

			<u>Reviewable</u>	<u>Non-reviewable</u>	<u>Total</u>
<b>Consulting and Other Fees</b>			10,601,359	19,473,641	30,075,000
Acoustic				175,000	
Affirmative action				650,000	
City approval				95,000	
Commissioning				1,100,000	
Communications				150,000	
CON				65,000	
Construction management				8,750,000	
Curtainwall & structural peer review				100,000	
Drug testing				135,000	
Elevator				55,000	
Environmental				65,000	
Equipment				2,225,000	
Fire stop inspection				265,000	
Food service				160,000	
Furniture				225,000	
Geotechnical services				20,000	
Information technology				65,000	
Injury prevention				20,000	
Landmark				15,000	
Landscape				90,000	
Lighting				45,000	
Materials testing and inspection				2,250,000	
Parking				25,000	
Plan expediter				35,000	
Pneumatic tube				65,000	
Preconstruction services				2,200,000	
Program management				10,250,000	
Radiation protection				55,000	
Security				43,000	
Signage				235,000	
Special features				50,000	
Traffic				47,000	
Utility study				75,000	
Vibration monitoring				275,000	
<b>Movable and Other Equipment</b>			117,374,450	50,513,826	167,888,276
	<u>Unit Cost</u>	<u>Quant.</u>			
<b>Group I - Fixed</b>					
PACU monitors; pre and post procedure	40,000	132		5,280,000	
Food Service; cafeteria patient/employee				2,500,000	
Information systems -telecom, cabling, pc's				35,141,526	
- Network systems	13,467,109				
- End User Devices - pc's, printers, PDA's	3,788,571				
- AV Systems	4,216,680				
- Medical Systems	4,356,857				
- Security Systems	3,056,114				
- Facility Systems - nurse call, locator, bldg aut.	4,248,251				
- Other - overhead paging, heliport, wireless	2,007,943				
OR fixed equipment	700,000	24		16,800,000	
OR information systems	30,000	24		720,000	
OR Interoperative MR 3T				2,700,000	
OR Interoperative CT 64 slice				2,450,000	
OR instruments storage containers				200,000	

## SECTION I.N. Project Costs and Sources of Funds - Detail

New Hospital Pavilion

			<u>Reviewable</u>	<u>Non-reviewable</u>	<u>Total</u>
OR robots, specialty tables, endo sterilizers, etc.					7,000,000
Radiology					17,114,000
- CT	2,000,000	2			
- MR	2,000,000	1			
- Digital Radiographic	450,000	2			
- Digital Fluoro	900,000	1			
- C-Arm	220,000	6			
- Portable X-Ray	100,000	10			
- PACS plate readers	500,000	10			
- PACS diagnostic workstations	18,000	68			
- PACS license	7,000	110			
Interventional Radiology (Angio)	2,250,000	7			15,750,000
Radiology UPS system					1,400,000
Patient room patient lifts	9,000	240			2,160,000
Surgical Pathology Laboratory					624,000
- Grossing workstations	41,250	8			
- Cryostats	25,000	4			
- Ultra low temperature freezer	13,000	1			
- Microwriter cassette labeler	16,500	4			
- Telepathology system	60,000	1			
- X-ray for tissue biopsies	45,000	1			
- Photography station	10,000	1			
Central sterile supply					1,671,000
- Sterrad 200	240,000	2			
- Steris system one endoscope processor	21,000	7			
- Steam sterilizers	110,000	4			
- Ultrasonic cleaners	32,000	2			
- Cart washer	130,000	2			
- Washer decontaminator	70,000	4			
Pharmacy					1,000,000
GI Procedure Area					4,203,600
- Endoscopy room	180,000	10			
- Bronchoscopy room	475,000	2			
- Liver biopsy room	32,800	2			
- Fluoroscopy (standard)	350,000	2			
- Fluoroscopy/ERCP room	160,000	1			
- Scope cleaning room washer/sterilizers	57,000	4			
- Equipment booms	30,000	10			
Miscellaneous equipment					1,000,000
					117,714,126
	Subtotal				
<b>Group II - Movable</b>					
Installation allowance					750,000
Material mgt. supply shelves, carts, stretchers					2,000,000
Delivery tugs, walkies					140,000
Storage racks					500,000
Storage shelf dividers					190,000
EVS equipment					1,070,000
- Buffers, carpet extractors, vacuums, carts	550,000				
- Sanipak sterilizer	500,000				
- Tuggers	10,000	2			
Small clinical support					864,000
- Prep/recovery beds (incl. IV pumps, etc.)	10,000	50			
- Pre-op/post-op beds	7,000	52			
OR instruments		24			4,950,000
Surgical Pathology Laboratory					86,000

## SECTION I.N. Project Costs and Sources of Funds - Detail

New Hospital Pavilion

			<u>Reviewable</u>	<u>Non-reviewable</u>	<u>Total</u>
- Microscope 8 headed	50,000	1			
- Microscope 2 headed	18,000	2			
PACU Phase I Recovery exam lights	1,500	95		142,500	
Inpatient movable medical monitoring				11,100,000	
- ICU monitoring	65,000	60			
- Medical/Surgical acute care	40,000	180			
Other misc moveable				5,453,600	
- Infusion pumps	3,000	960			
- Defibrillators	13,600	17			
- Ice dispensers	7,000	12			
- Staff lounge refrigerators, microwaves, etc.	3,300	40			
- Ventilators	30,000	60			
- Medication rooms	10,000	12			
- Nourishment rooms	1,200	12			
- EKG machines	10,000	12			
- Pacemakers	6,000	12			
	<b>Subtotal</b>			<b>27,246,100</b>	
<b>Group III - Furnishings</b>					
Patient room furnishings				13,160,750	
- ICU room beds - Total Care bed	40,000	60			
- ICU sleeper chairs	4,000	60			
- ICU other room furnishings	2,200	60			
- Med/Surg beds - Total Care bed	40,000	180			
- Med/Surg sleeper chairs	4,000	60			
- Med/Surg other room furnishings	2,200	180			
- Bariatric room furnishings	212,750				
- Headwall boom - ICU	12,000	60			
- Headwall - Med/Surg acute care	9,000	180			
Artwork with consultant				2,148,000	
<b>Movable and Other Equipment (continued)</b>					
Modular casework and admin office furnishings				6,824,300	
- Office	5,500	226			
- Conference room	8,000	112			
- Consultation room	5,000	24			
- Nurse station/work station (lin. feet)	1,300	3000			
- Waiting area (seats)	1,000	380			
- Dining tables	350	185			
- Dining chairs	275	802			
Flat panel tv monitors (with mounting hardware)				795,000	
- 42" LCD	4,000	180			
- 20" LCD	600	60			
- 15" LCD with swing arm	1,300	30			
	<b>Subtotal</b>			<b>22,928,050</b>	
<b>Bond Issuance Expense</b>			6,137,578	11,274,121	17,411,699
Initial issuance expense		6,250,000			
Bond insurance		11,161,699			
<b>Net Interest Expense During Construction</b>			15,967,074	29,329,926	45,297,000
Interest Expense During Construction (4.26%)		83,766,000			
Interest Earnings During Construction (4.25%)		(38,469,000)			

## SECTION I.N. Project Costs and Sources of Funds - Detail

New Hospital Pavilion

		<u>Reviewable</u>	<u>Non-reviewable</u>	<u>Total</u>
Net Interest During Construction Total	45,297,000			
<b>Other Costs to be Capitalized</b>		6,589,939	12,105,061	18,695,000
Internal project management salaries, supplies	5,500,000			
Project office furniture, renovations	50,000			
Excess Facility Charge (Electrical)	1,400,000			
Legal and documentation	350,000			
Insurance - Builder's Risk	1,375,000			
Insurance - OPIP (errors and omissions)	3,500,000			
CON fee	220,000			
IDPH plan review	200,000			
City fees	75,000			
<b>Other Costs to be Capitalized (continued)</b>				
Building permits	250,000			
Traffic direction - U of C Police	225,000			
Mock-ups	1,250,000			
Document printing	250,000			
Exterior signage (includes offsite)	1,750,000			
Environmental services - project cleaning	650,000			
Equipment warehousing, delivery, installation	800,000			
Moving	850,000			
<b>Acquisition of Buildings or Other Property</b>				0
<b>ESTIMATED TOTAL PROJECT COST</b>		<b>\$335,167,677</b>	<b>\$450,578,311</b>	<b>\$785,745,988</b>
Cash and Securities		\$79,231,778	\$106,514,210	\$185,745,988
Pledges		42,655,983	57,344,017	100,000,000
Bond Issues (project related)		213,279,916	286,720,084	500,000,000
<b>TOTAL FUNDS</b>		<b>\$335,167,677</b>	<b>\$450,578,311</b>	<b>\$785,745,988</b>

**O. Related Project Costs**

1. Provide the following information, as applicable, with respect to any land related to the project that will be or has been acquired during the last two calendar years:

No land acquisition is related to the project; Purchase Price \$ \_\_\_\_\_ Fair Market Value \$ \_\_\_\_\_

2. Does the project involve establishment of a new facility or a new category of service? Yes  No

If yes, provide the dollar amount of all non-capitalized operating start-up costs (including operating deficits) through the first full fiscal year when the project achieves or exceeds the target utilization specified in Part 1100.

Estimated start-up costs and operating deficit cost is \$ \_\_\_\_\_.

**P. Project Status and Completion Schedules**

1. Indicate the stage of the project's architectural drawings: **Design development in process**

None or not applicable  Schematics  Preliminary  Final Working

2. Provide the following dates (indicate N/A for any item that is not applicable):

25% of project costs expended	<u>December, 2010</u>	50% of project costs expended	<u>December, 2011</u>
75% of project costs expended	<u>September, 2012</u>	95% of project costs expended	<u>June, 2013</u>
100% of project costs expended	<u>June, 2016</u>	Midpoint of construction date	<u>December, 2010</u>
Anticipated project completion date (refer to Part 1130.140)	<u>December 31, 2016</u>		

3. Indicate the following with respect to project expenditures or to obligation (refer to Part 1130.140):

- Purchase orders, leases, or contracts pertaining to the project have been executed;
- Project obligation is contingent upon permit issuance. Provide a copy of the contingent "certification of obligation" document, highlighting any language related to CON contingencies.
- Project obligation will occur after permit issuance. **Follows Master Design Project - contracts carry forward**

**APPEND DOCUMENTATION AS ATTACHMENT INFO-6 AFTER THE LAST PAGE OF THIS SECTION.**

**Q. Cost/Space Requirements**

Provide in the format of the following example the gross square footage (GSF) and the attributable portion of total project cost for each department/area. Identify each piece of major medical equipment. The sum of the department costs MUST equal the total estimated project costs. Indicate if any space is being reallocated for a different purpose. Include outside wall measurements plus the department or area's portion of the surrounding circulation space. Indicate the proposed use of any vacated space.

Department/Area	Cost	Gross Square Feet		Amount of Proposed Total GSF That Is:			
		Existing	Proposed	New Const.	Remodeled	As Is	Vacated Spa
Dietary	\$1,150,000	3,000	6,000	3,000	1,000	2,000	
Radiation Therapy	3,250,000 *	4,000(1)	5,500	5,500			
Medical Records	300,000	2,500	6,500		4,000 (1)	2,500	
<b>TOTAL</b>	<b>4,700,000</b>	<b>9,500</b>	<b>18,000</b>	<b>8,500</b>	<b>1,000</b>	<b>4,500</b>	

\*Includes \$1,500,000 for an 18 MEV linear accelerator.

(1) Existing radiation therapy space will be vacated and remodeled and converted to medical records.

**APPEND DOCUMENTATION AS ATTACHMENT INFO-7 AFTER THE LAST PAGE OF THIS SECTION.**

**R. Facility Bed Capacity and Utilization**

1. Complete the following chart as applicable. Complete a separate chart for each facility which is part of the project and insert following this page. Provide the existing bed capacity and provide utilization data for the latest 12 month period for which data is available. Any bed capacity discrepancy from the Inventory will result with the application being deemed incomplete.

FACILITY NAME The University of Chicago Hospitals CITY Chicago

REPORTING PERIOD DATES: From 9/30/2006 to 9/30/2007

Category of Service	Existing # of Beds	Number of Admissions	Patient Days	Bed Changes	Proposed # of Beds*
Medical/Surgical	327	15,312	85,644	-27	300
Pediatrics	64	3,003	16,963		64
Obstetrics	50	2,824	8,863		50
Intensive Care	92	3,890	27,545	22	114
Neonatal ICU	47	812	14,369		47
Acute Mental Illness	16	345	3,506		16
Rehabilitation					
Nursing Care					
Sheltered Care					
Other (identify)					
Other (identify)					
Other (identify)					
<b>TOTAL</b>	<b>596</b>	<b>26,186</b>	<b>156,890</b>	<b>-5</b>	<b>591</b>

2. Is the facility certified for participation in the Medicare "swing bed" (i.e. acute care beds certified for extended care) program?        Yes   X   No
3. For the following categories of service, indicate the number of existing beds that are Medicare certified and the number of existing beds that are Medicaid certified (if none, so indicate): **none**

Service	# Medicare Beds	# Medicaid Beds
Nursing Care	<u>0</u>	<u>0</u>
ICF/DD Adult	<u>0</u>	<u>0</u>
Children DD	<u>0</u>	<u>0</u>

**Note: We have submitted an application to discontinue 16 Acute Mental Illness beds at the time of this writing.**

S. Certification

The application must be signed by the authorized representative(s) of the applicant entity. The authorized representative(s) are in the case of a corporation, any two of its officers or members of its board of directors; in the case of a limited liability company, any two of its managers or members (or the sole manager or member when two or more managers or members do not exist); in the case of a partnership, two of its general partners (or the sole general partner when two or more general partners do not exist); in the case of estates or trusts, two of its beneficiaries (or the sole beneficiary when two or more beneficiaries do not exist); and in the case of a sole proprietor, the individual that is the proprietor. The signature(s) must be notarized. If the application has co-applicants, a separate certification page must be completed for each co-applicant and inserted following this page. One copy of the application must have the ORIGINAL signatures for all persons that sign for the applicant and for each of the co-applicants.

This Application for Permit is filed on behalf of The University of Chicago Medical Center \* in accordance with the requirements and procedures of the Illinois Health Facilities Planning Act. The undersigned certifies that he or she has the authority to execute and file this application for permit on behalf of the applicant entity. The undersigned further certifies that the data and information provided herein, and appended hereto, are complete and correct to the best of his or her knowledge and belief. The undersigned also certifies that the permit application fee required for this application is sent herewith or will be paid upon request.

David S. Hefner  
Signature

Lawrence J. Furnstahl  
Signature

Printed Name David S. Hefner

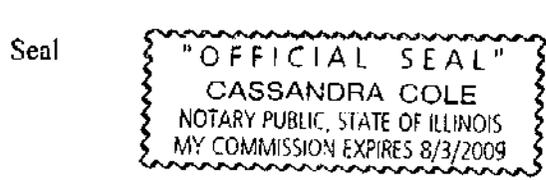
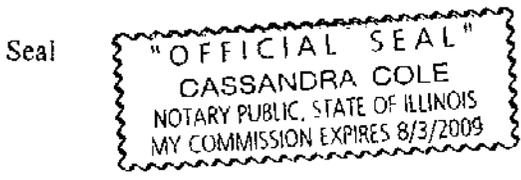
Printed Name Lawrence J. Furnstahl

Printed Title President

Printed Title Chief Financial & Strategy Officer

Notarization:  
Subscribed and sworn to before me  
this 6th day of December, 2007  
Cassandra Cole  
Signature of Notary

Notarization:  
Subscribed and sworn to before me  
this 6th day of December, 2007  
Cassandra Cole  
Signature of Notary



\* Insert EXACT legal name of the applicant



SERVICES    PROGRAMS    PRESS    PUBLICATIONS    DEPARTMENTS    CONTACT

### CORPORATION FILE DETAIL REPORT

Entity Name	THE UNIVERSITY OF CHICAGO MEDICAL CENTER	File Number	54397577
Status	GOODSTANDING		
Entity Type	CORPORATION	Type of Corp	NOT-FOR-PROFIT
Incorporation Date (Domestic)	10/01/1986	State	ILLINOIS
Agent Name	SUSAN S SHER	Agent Change Date	09/22/1998
Agent Street Address	5841 S MARYLAND	President Name & Address	
Agent City	CHICAGO	Secretary Name & Address	
Agent Zip	60637	Duration Date	PERPETUAL
Annual Report Filing Date	00/00/0000	For Year	2007
Assumed Name	ACTIVE - WYLER'S CHILDREN'S HOSPITAL ACTIVE - BERNARD MITCHELL HOSPITAL ACTIVE - CHICAGO LYING-IN HOSPITAL ACTIVE - THE UNIVERSITY OF CHICAGO CHILDREN'S HOSPITAL ACTIVE - THE UNIVERSITY OF CHICAGO HOSPITALS AND HEALTH SYSTEM ACTIVE - THE DUCHOSSOIS CENTER OF ADVANCED MEDICINE INACTIVE - THE UNIVERSITY OF CHICAGO MEDICAL CENTER ACTIVE - UNIVERSITY OF CHICAGO COMER CHILDREN'S HOSPITAL ACTIVE - COMER CHILDREN'S HOSPITAL ACTIVE - THE UNIVERSITY OF CHICAGO HOSPITALS		
Old Corp Name	08/07/2006 - THE UNIVERSITY OF CHICAGO HOSPITALS		

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REMOVE THIS CARD TO CARRY AS AN IDENTIFICATION



State of Illinois 1813327  
Department of Public Health

LICENSE, PERMIT, CERTIFICATION, REGISTRATION  
UNIVERSITY OF CHICAGO HOSPITALS

EXPIRATION DATE	CATEGORY	TD NUMBER
06/30/08	BGBD	0003897

FULL LICENSE

GENERAL HOSPITAL

EFFECTIVE: 07/01/07

05/05/07

UNIVERSITY OF CHICAGO HOSPITALS  
5841 SOUTH MARYLAND  
MC 1112  
CHICAGO IL 60637

FEE RECEIPT NO.

State of Illinois 1813327  
Department of Public Health

LICENSE, PERMIT, CERTIFICATION, REGISTRATION

The person, firm or corporation whose name appears on this certificate has complied with the provisions of the Illinois Statutes and/or rules and regulations and is hereby authorized to engage in the activity as indicated below

ERIC E. WHITAKER, M.D.  
DIRECTOR

Issued under the authority of  
The State of Illinois  
Department of Public Health

EXPIRATION DATE	CATEGORY	TD NUMBER
06/30/08	BGBD	0003897

FULL LICENSE

GENERAL HOSPITAL

EFFECTIVE: 07/01/07

BUSINESS ADDRESS

UNIVERSITY OF CHICAGO HOSPITALS  
5841 SOUTH MARYLAND  
MC 1112  
CHICAGO IL 60637

The face of this license has a colored background. Printed by authority of the State of Illinois • 2/97 •

# CITY OF CHICAGO

## LICENSE CERTIFICATE NON-TRANSFERABLE

BY THE AUTHORITY OF THE CITY OF CHICAGO, THE FOLLOWING SPECIFIED LICENSE IS HEREBY GRANTED TO:

NAME: **THE UNIVERSITY OF CHICAGO HOSPITALS**

DBA: **BERNARD MITCHELL HOSPITAL**  
AT: **5815 S. MARYLAND AVE.**  
**CHICAGO, IL 60637**

LICENSE NO: **14446** CODE: **1175** FEE: **\$\*\*2,108.33**  
LICENSE: **Hospital**

1000 Bed & Max.

PRINTED ON : 08/16/2007

\$\*\*2,108.33

THIS LICENSE IS ISSUED AND ACCEPTED SUBJECT TO THE REPRESENTATIONS MADE ON THE APPLICATION THEREFOR AND MAY BE SUSPENDED OR REVOKED FOR CAUSE AS PROVIDED BY LAW. LICENSEES SHALL OBSERVE AND COMPLY WITH ALL LAWS, ORDINANCES, RULES AND REGULATIONS OF THE UNITED STATES GOVERNMENT, STATE OF ILLINOIS, COUNTY OF COOK, CITY OF CHICAGO AND ALL AGENCIES THEREOF.

WITNESS THE HAND OF THE MAYOR OF SAID CITY AND THE CORPORATE SEAL THEREOF  
THIS 15 DAY OF AUGUST, 2007

EXPIRATION DATE: **08/15/2008**

ATTEST:

*Randal M. Daley*  
MAYOR

*Miguel del Valle*  
CITY CLERK

DRIV NO. **5538** SITE: **4**  
TRANS NO.

THIS LICENSE MUST BE POSTED IN A CONSPICUOUS PLACE UPON THE LICENSED PREMISES.



# CITY OF CHICAGO

## LICENSE CERTIFICATE

### NON-TRANSFERABLE

BY THE AUTHORITY OF THE CITY OF CHICAGO, THE FOLLOWING SPECIFIED LICENSE IS HEREBY GRANTED TO

NAME: THE UNIVERSITY OF CHICAGO MEDICAL CENTER

DBA: CHICAGO LYING-IN HOSPITAL

AT: 5815 S. MARYLAND AVE.  
CHICAGO, IL 60637

LICENSE NO.: CODE: 9100

FEE: \$\*\*\*\*\*40.00

LICENSE: Change of Legal Name

THE UNIVERSITY OF CHICAGO HOSPITALS

PRINTED ON : 08/17/2007

\$\*\*\*\*\*40.00

THIS LICENSE IS ISSUED AND ACCEPTED SUBJECT TO THE REPRESENTATIONS MADE ON THE APPLICATION THEREFOR, AND MAY BE SUSPENDED OR REVOKED FOR CAUSE AS PROVIDED BY LAW. LICENSEE SHALL OBSERVE AND COMPLY WITH ALL LAWS, ORDINANCES, RULES AND REGULATIONS OF THE UNITED STATES GOVERNMENT, STATE OF ILLINOIS, COUNTY OF COOK, CITY OF CHICAGO AND ALL AGENCIES THEREOF.

WITNESS THE HAND OF THE MAYOR OF SAID CITY AND THE CORPORATE SEAL THEREOF

THIS 17 DAY OF AUGUST, 2007

EXPIRATION DATE:

ATTEST:



*Rishal M. Daley*  
MAYOR

*Miguel del Valle*  
CITY CLERK

DREV NO. 6533 SITE: 1  
TRANS NO.



THIS LICENSE MUST BE POSTED IN A CONSPICUOUS PLACE UPON THE LICENSEE'S

ATTACHMENT IDEN - 2

# CITY OF CHICAGO

## LICENSE CERTIFICATE NON-TRANSFERABLE

BY THE AUTHORITY OF THE CITY OF CHICAGO, THE FOLLOWING SPECIFIED LICENSE IS HEREBY GRANTED TO:

NAME: THE UNIVERSITY OF CHICAGO HOSPITALS

DBA: CHICAGO LYING-IN HOSPITAL  
AT: 5815 S. MARYLAND AVE.  
CHICAGO, IL 60637

LICENSE NO.: 1226308 CODE: 1375 FEE: \$\*\*2,108.33

LICENSE: Hospital

Seal Max.

PRINTED ON : 08/16/2007

\$\*\*2,108.33

THIS LICENSE IS ISSUED AND ACCEPTED SUBJECT TO THE REPRESENTATIONS MADE ON THE APPLICATION THEREFOR, AND MAY BE SUSPENDED OR REVOKED FOR CAUSE AS PROVIDED BY LAW. LICENSEE SHALL OBSERVE AND COMPLY WITH ALL LAWS, ORDINANCES, RULES AND REGULATIONS OF THE UNITED STATES GOVERNMENT, STATE OF ILLINOIS, COUNTY OF COOK, CITY OF CHICAGO AND ALL AGENCIES THEREOF.

WITNESS THE HAND OF THE MAYOR OF SAID CITY AND THE CORPORATE SEAL THEREOF  
THIS 15 DAY OF AUGUST, 2007

EXPIRATION DATE: July 25, 2008

ATTEST:

*Richard M. Daley*  
MAYOR

*Miguel del Valle*  
CITY CLERK

REV NO. 6533 SHEET 1  
TRANS NO.



THIS LICENSE MUST BE POSTED IN A CONSPICUOUS PLACE UPON THE LICENSED PREMISES.

# CITY OF CHICAGO

## LICENSE CERTIFICATE NON-TRANSFERABLE

BY THE AUTHORITY OF THE CITY OF CHICAGO, THE FOLLOWING SPECIFIED LICENSE IS HEREBY GRANTED TO:

NAME: THE UNIVERSITY OF CHICAGO HOSPITALS

DBA: THE UNIVERSITY OF CHICAGO COMB CHILDREN'S HOSPI  
AT: 5839 S. MARYLAND AVE.  
CHICAGO, IL 60637

LICENSE NO.: 14444                      CODE: 1375                      FEE: \$\*\*2,108.33

LICENSE: Hospital

3000 Beds Max.

PRINTED ON : 08/16/2007

\$\*\*2,108.33

THIS LICENSE IS ISSUED AND ACCEPTED SUBJECT TO THE REPRESENTATIONS MADE ON THE APPLICATION THEREFOR, AND MAY BE SUSPENDED OR REVOKED FOR CAUSE AS PROVIDED BY LAW. LICENSEES SHALL OBEY AND COMPLY WITH ALL LAWS, ORDINANCES, RULES AND REGULATIONS OF THE UNITED STATES GOVERNMENT, STATE OF ILLINOIS, COUNTY OF COOK, CITY OF CHICAGO AND ALL AGENCIES THEREOF.

WITNESS THE HAND OF THE MAYOR OF SAID CITY AND THE CORPORATE SEAL THEREOF

THIS 15 DAY OF AUGUST, 2007

EXPIRATION DATE: 08/15/2008

ATTEST:

*Rudolph W. Daley*  
MAYOR

*Miguel del Valle*  
CITY CLERK

DREV NO. 5539      SITE 3  
TRANS NO. 3

THIS LICENSE MUST BE POSTED IN A CONSPICUOUS PLACE UPON THE LICENSED PREMISES.



# CITY OF CHICAGO

## LICENSE CERTIFICATE NON-TRANSFERABLE

BY THE AUTHORITY OF THE CITY OF CHICAGO, THE FOLLOWING SPECIFIED LICENSE IS HEREBY GRANTED TO

NAME: THE UNIVERSITY OF CHICAGO HOSPITALS  
DBA: DUCROSSOIS CENTER FOR ADVANCED MEDICINE  
AT: 5758 S. MARYLAND AVE.  
CHICAGO, IL 60637  
HOSPITAL

LICENSE NO. 1226404 CODE: 1375 FEE: \$\*\*2,108.33  
LICENSE: Hospital

Beds Max.

PRINTED ON : 08/16/2007

\$\*\*2,108.33

THIS LICENSE IS ISSUED AND ACCEPTED SUBJECT TO THE REPRESENTATIONS MADE ON THE APPLICATION THEREFOR, AND MAY BE SUSPENDED OR REVOKED FOR CAUSE AS PROVIDED BY LAW. LICENSEE SHALL OBSERVE AND COMPLY WITH ALL LAWS, ORDINANCES, RULES AND REGULATIONS OF THE UNITED STATES GOVERNMENT, STATE OF ILLINOIS, COUNTY OF COOK, CITY OF CHICAGO AND ALL AGENCIES THEREOF.

WITNESS THE HAND OF THE MAYOR OF SAID CITY AND THE CORPORATE SEAL THEREOF

THIS 15 DAY OF AUGUST, 2007

EXPIRATION DATE:

ATTEST:



*Rudolph M. Daley*  
MAYOR

*Michael J. Daley*  
CITY CLERK

ORRV NO. 6533 SITE: 8  
TRANS NO.

THIS LICENSE MUST BE POSTED IN A CONSPICUOUS PLACE UPON THE LICENSED PREMISES.

## SECTION I. H. Organizational Relationships

The University of Chicago Medical Center is a 501(c)(3) corporation. The University of Chicago Medical Center is organized as an Illinois not for profit corporation. The management, control, and operation of the business, affairs, and properties of the University of Chicago Medical Center are vested exclusively in the Board of Trustees of the University of Chicago Medical Center, which is responsible for establishing policy, maintaining quality patient care, and providing for institutional management and planning.





# Illinois State Water Survey

Main Office • 2204 Griffith Drive • Champaign, IL 61820 • Tel (217) 333-2210 • Fax (217) 333-6540  
Peoria Office • P.O. Box 697 • Peoria, IL 61652-0697 • Tel (309) 671-2196 • Fax (309) 671-3106



## Special Flood Hazard Area Determination pursuant to Governor's Executive Order 5 (2006) (supersedes Governor's Executive Order 4 (1979))

Requester: John R. Beberman, Director of Capital Budget & Control  
Address: The University of Chicago Hospitals, MC 0953, 5841 S. Maryland Ave.  
City, state, zip: Chicago, IL 60637-1470 Telephone: (773) 702-6901

### Site description of determination:

Site address: 5701-5799 S. Maryland Ave. / 5700-5798 S. Drexel Ave.  
City, state, zip: Chicago, IL 60637  
County: Cook Sec $\frac{1}{4}$ : SW 1/4 of NW 1/4 Section: 14 T. 38 N. R. 14 E. PM: 3rd  
Subject area: Property within the area bounded by E. 57th St. on the north, E. 58th St. on the south, S. Maryland Ave. on the west, S. Drexel Ave. on the east.

The property described above IS NOT located in a Special Flood Hazard Area or a shaded Zone X floodzone.  
Floodway mapped: N/A Floodway on property: No  
Source used: FEMA Flood Insurance Rate Map (FIRM). An annotated copy is attached.  
Community name: City of Chicago, IL Community number: 170074  
Panel/map number: 17031C0540F Effective Date: November 6, 2000  
Flood zone: X [unshaded] Base flood elevation: N/A ft NGVD 1929

- N/A a. The community does not currently participate in the National Flood Insurance Program (NFIP). NFIP flood insurance is not available; certain State and Federal assistance may not be available.
- N/A b. Panel not printed: no Special Flood Hazard Area on the panel (panel designated all Zone C or unshaded X).
- N/A c. No map panels printed: no Special Flood Hazard Areas within the community (NSFHA).

### The primary structure on the property:

- N/A d. Is located in a Special Flood Hazard Area. Any activity on the property must meet State, Federal, and local floodplain development regulations. Federal law requires that a flood insurance policy be obtained as a condition of a federally-backed mortgage or loan that is secured by the building.
- N/A e. Is located in shaded Zone X or B (500-yr floodplain). Conditions may apply for local permits or Federal funding.
- X f. Is not located in a Special Flood Hazard Area or a 500-year floodplain. (Flood insurance may still be available.)
- N/A g. A determination of the building's exact location cannot be made on the current FEMA flood hazard map.
- N/A h. Exact structure location is not available or was not provided for this determination.

Note: This determination is based on the current Federal Emergency Management Agency (FEMA) flood hazard map for the community. This letter does not imply that the referenced property will or will not be free from flooding or damage. A property or structure not in a Special Flood Hazard Area may be damaged by a flood greater than that predicted on the FEMA map or by local drainage problems not mapped. This letter does not create liability on the part of the Illinois State Water Survey, or employee thereof for any damage that results from reliance on this determination. This letter does not exempt the project from local stormwater management regulations.

Questions concerning this determination may be directed to Bill Saylor (217/333-0447) at the Illinois State Water Survey. Questions concerning requirements of Governor's Executive Order 5 (2006), or State floodplain regulations, may be directed to John Lentz (847/608-3100) at the IDNR Office of Water Resources.

William Saylor  
William Saylor, CFM IL-03-0007, Illinois State Water Survey

Title: ISWS Surface Water & Floodplain Information Date: 9/25/07



# LEGEND



**SPECIAL FLOOD HAZARD AREAS INUNDATED BY 100-YEAR FLOOD**

**ZONE A** No base flood elevations determined.

**ZONE AE** Base flood elevations determined.

**ZONE AH** Flood depths of 1 to 3 feet (usually areas of ponding); base flood elevations determined.

**ZONE AO** Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.

**ZONE A99** To be protected from 100-year flood by Federal flood protection system under construction; no base flood elevations determined.

**ZONE V** Coastal flood with velocity hazard (wave action); no base flood elevations determined.

**ZONE VE** Coastal flood with velocity hazard (wave action); base flood elevations determined.



**HOODWAY AREAS IN ZONE AE**



**OTHER FLOOD AREAS**

**ZONE X** Areas of 500-year flood; areas of 100-year flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 100-year flood.



**OTHER AREAS**

**ZONE X** Areas determined to be outside 500-year floodplain.

**ZONE D** Areas in which flood hazards are undetermined, but possible.

**UNDEVELOPED COASTAL BARRIERS\***



Identified 1983



Identified 1990 or Later



Otherwise Protected Areas Identified 1991 or Later

\* Coastal barrier areas are normally located within or adjacent to Special Flood Hazard Areas.

Floodplain Boundary

Floodway Boundary

Zone D Boundary

Boundary, Dividing Special Flood Hazard Zones, and Boundary, Dividing Areas of Different Coastal Base Flood Elevations Within Special Flood Hazard Zones.

Base Flood Elevation Line; Elevation in Feet\*\*

Cross Section Line

Transsect Line

Base Flood Elevation in Feet Where Uniform Within Zone\*\*

Elevation Reference Mark

River Mile

\*\*Referenced to the National Geodetic Vertical Datum of 1929

MAP REPOSITORY

Refer to Repository Listing on Map Index

EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP

NOVEMBER 8, 2000

EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL

Please refer to the Listing of Communities table on the FRM index for NFIP identification and Post-FIRM dates for all jurisdictions shown on this map.

To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at (800) 638 6620





**Illinois Historic  
Preservation Agency**

1 Old State Capitol Plaza • Springfield, Illinois 62701-1512 • Teletypewriter Only (217) 524-7128

Voice (217) 782-4838

www.illinois-history.gov

March 20, 2006

John Beberman  
The University of Chicago Hospitals  
Room L-018  
MC 0953  
5841 S. Maryland Ave.  
Chicago, IL 60637-1470

Dear Mr. Beberman:

We have reviewed your letter of January 31, 2006, in reference to a new hospital building. This project was previously reviewed pursuant to the Illinois State Agency Historic Resources Preservation Act (20 ILCS 3420) for its adverse effects to properties within the Hyde Park-Kenwood Historic District, which is listed on the National Register of Historic Places. Accordingly, a Memorandum of Agreement (MOA) was executed in March 2004 to adequately take into account these adverse effects through recordation of affected properties.

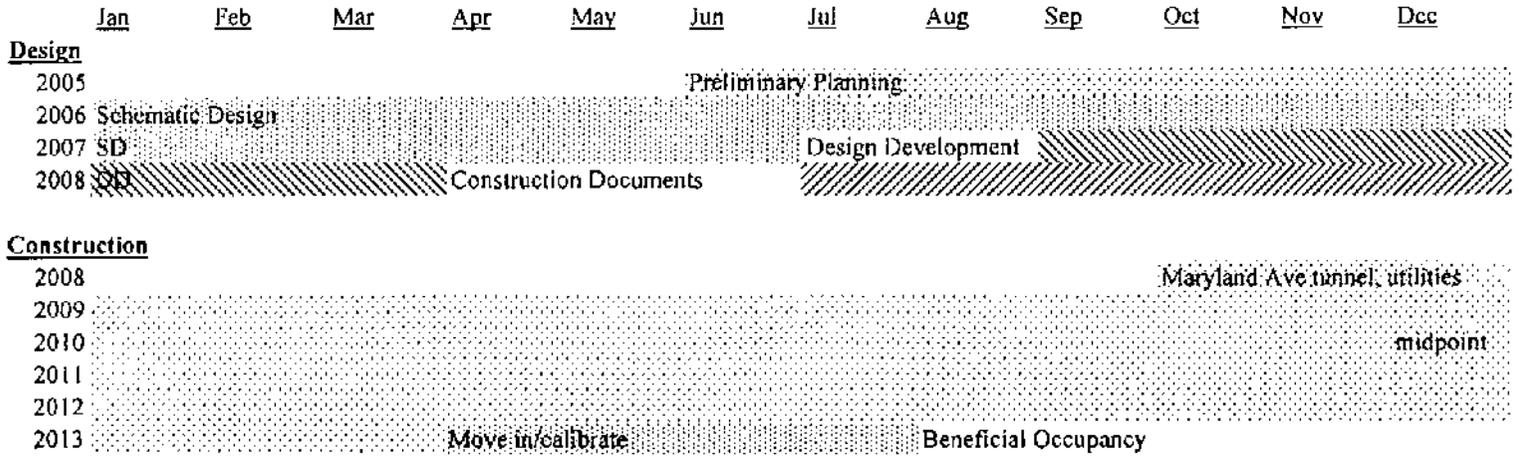
Full compliance with the terms of the MOA was achieved by the University of Chicago Hospitals and a final approval letter was issued by this office on June 11, 2004.

Thank you for your cooperation.

Sincerely,

*Anne E. Haaker*  
Anne E. Haaker  
Deputy State Historic  
Preservation Officer

SECTION I. P. Completion Schedule



Represents construction put in place. Payments lag behind.

SECTION I. Q. Cost/Space Requirements

<u>Department</u>	<u>Cost</u>	<u>Gross Square Feet</u>		<u>Amnt of Proposed Total GSF That Is:</u>				
		<u>Existing</u>	<u>Proposed</u>	<u>New</u>	<u>Remod.</u>	<u>As Is</u>	<u>Vacated</u>	<u>Re-assign</u>
Med/Surg Acute Care	\$94,394,535	125,427	196,998	141,552		55,446	69,980	0
ICU	38,683,759	45,977	70,278	49,173		21,105	24,872	0
Surgery	72,853,222	58,099	100,747	61,389		39,358	18,741	0
Preparation/Recovery	32,653,058	16,037	37,038	37,038		0	16,037	0
Anatomic Pathology Lab	7,204,979	15,956	20,210	8,254		11,956	4,000	0
Central Sterile Process.	6,093,713	20,996	30,292	9,296		20,996	0	3,930
Radiology	56,538,472	71,911	108,333	36,422		71,911	0	9,467
GI Procedures	12,868,581	12,404	26,243	13,839		12,404	0	12,404
Pharmacy	6,371,778	14,918	26,520	11,602		14,918	0	3,793
Respiratory Therapy	928,905	2,650	4,609	1,959		2,650	0	0
Clinical Support	6,576,675	44,422	55,403	16,069		39,334	5,088	5,088
<b>Total Reviewable</b>	<b>\$335,167,677</b>	<b>428,797</b>	<b>676,671</b>	<b>386,593</b>		<b>290,078</b>	<b>138,719</b>	<b>34,681</b>
Family and Staff Support	\$88,846,811	51,009	235,070	189,051		46,019	4,990	0
Support Services	74,220,970	205,175	291,130	85,955		205,175	0	0
Infrastructure	253,852,461	285,937	612,742	326,805		285,937	0	0
Bridges/Tunnels	3,561,306	30,009	37,735	7,726		30,009	0	0
Future Development	30,096,762	48,138	246,616	198,478		48,138	0	0
<b>Total Nonreviewable</b>	<b>\$450,578,311</b>	<b>620,268</b>	<b>1,423,292</b>	<b>808,014</b>		<b>615,278</b>	<b>4,990</b>	<b>0</b>
<b>Grand Total</b>	<b>\$785,745,988</b>	<b>1,049,065</b>	<b>2,099,963</b>	<b>1,194,607</b>		<b>905,356</b>	<b>143,709</b>	<b>34,681</b>

There is no major movable equipment as defined in Sec. 1130.140, though we identify costly equipment in Page 4 Detail.

**RATIONALE FOR REVIEWABLE VERSUS  
NON-REVIEWABLE ASSIGNMENTS**

**Reviewable Departments**

Med/Surg Acute Care	Inpatient bed unit - defined category of service
ICU	Inpatient bed unit - defined category of service
Surgery	Surgical operating rooms
Preparation/Recovery	Pre-operative/procedure preparation, post-procedure recovery
Anatomic Pathology Lab	Clinical laboratory that supports Surgery and procedure services
Central Sterile Processing	Clinical support area for cleaning/sterilizing instruments, equipment
Radiology	Defined category of service - includes MRI
GI Procedures	Clinical procedures, primarily through endoscopy
Pharmacy	Preparation and dispensing of medications
Respiratory Therapy	Operation and support of ventilators, blood gas analysis
Clinical Support	Off-stage storage rooms for clinical equipment, patient beds

**Non-Reviewable Departments**

Family and Staff Support	Family - lobbies, lounges, waiting areas, retail food service, gift shops Staff - offices, toilets, locker rooms, lounges, on-call rooms, meeting rms
Support Services	Materials management, Info Systems, Plant work areas, EVS storage
Infrastructure	Mechanical, electrical, plumbing, elevators, stairways, UPS, helipad store
Bridges/Tunnels	Connecting structure to adjacent buildings - DCAM, Comer, CCCSC
Future Development	Enclosed but otherwise unconstructed areas for future development See Attachment GRC - 5L for explanation, justification.

## Building Square Footage By Department

Level	Description	Department	BGSF	Reviewable	Non-Reviewable
	Tunnels		6,593		6,593
	Bridges		1,133		1,133
LL	Lower Level	Central Sterile Processing	9,296	9,296	
		Support Services	39,820		39,820
		Mech/Elect/Plumbing	49,714		49,714
		Future Development	10,645		10,645
			<u>109,474</u>		
1	Lobby	Family & Staff Support	39,610		39,610
		Support Services	20,579		20,579
		Mech/Elect/Plumbing	18,091		18,091
			<u>78,280</u>		
2	MEP/Surg Pathology	Anatomic Pathology Lab	8,254	8,254	
		Pharmacy	8,254	8,254	
		Support Services	11,514		11,514
		Mech/Elect/Plumbing	52,698		52,698
			<u>80,720</u>		
3	Future Development	Cardiology	93,916		93,916
		Mech/Elect/Plumbing	8,539		8,539
			<u>102,455</u>		
4	Future Development	Inpatient Beds	93,916		93,916
		Mech/Elect/Plumbing	8,539		8,539
			<u>102,455</u>		
5	Clinical Procedures	Radiology	36,422	36,422	
		GI Procedures	13,839	13,839	
		Preparation/Recovery	19,060	19,060	
		Clinical Support	1,861	1,861	
		Family & Staff Support	17,005		17,005
		Support Services	1,645		1,645
		Mech/Elect/Plumbing	12,623		12,623
			<u>102,455</u>		
6	Surgery	Surgery	61,389	61,389	
		Preparation/Recovery	17,978	17,978	
		Pharmacy	1,262	1,262	
		Clinical Support	2,337	2,337	
		Family & Staff Support	6,166		6,166
		Support Services	1,205		1,205
		Mech/Elect/Plumbing	12,118		12,118
			<u>102,455</u>		
7	Sky Lobby	Family & Staff Support	68,899		68,899
		Support Services	3,709		3,709
		Mech/Elect/Plumbing	10,664		10,664
			<u>83,272</u>		

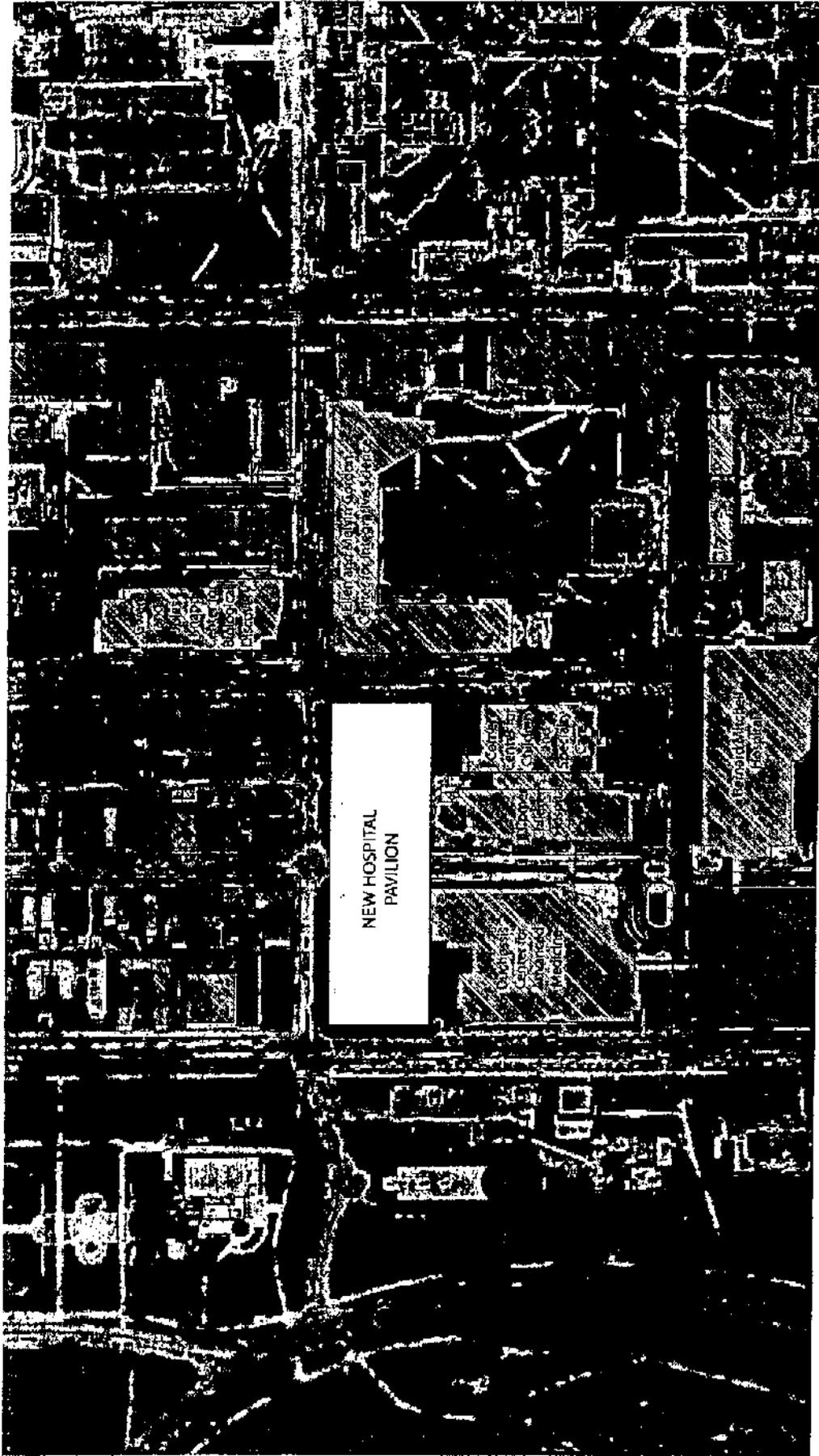
## SECTION I.Q.Cost/Space Req.

## Building Square Footage By Department

Level	Description	Department	BGSF	Reviewable	Non-Reviewable
8	Inpatient Beds	Med/Surg Acute Care	44,947	44,947	
		ICU	19,494	19,494	
		Clinical Support	4,480	4,480	
		Family & Staff Support	19,382		19,382
		Support Services	1,205		1,205
		Mech/Elect/Plumbing	12,946		12,946
			<u>102,455</u>		
9	Inpatient Units	Medical/Surgical	43,961	43,961	
		Intensive Care	19,997	19,997	
		Respiratory Therapy	1,959	1,959	
		Clinical Support	4,112	4,112	
		Family & Staff Support	18,750		18,750
		Support Services	717		717
		Mech/Elect/Plumbing	12,960		12,960
	<u>102,455</u>				
10	Inpatient Units	Medical/Surgical	52,644	52,644	
		Intensive Care	9,682	9,682	
		Pharmacy	2,086	2,086	
		Clinical Support	3,280	3,280	
		Family & Staff Support	19,239		19,239
		Support Services	2,343		2,343
		Mech/Elect/Plumbing	13,180		13,180
	<u>102,455</u>				
11	Mech/Elect/Plumbing	Support Services	758		758
		Mech/Elect/Plumbing	56,082		56,082
		<u>56,840</u>			
12	Mech/Elect/Plumbing	Support Services	1,282		1,282
		Mech/Elect/Plumbing	54,449		54,449
		<u>55,731</u>			
13	Heliport	Support Services	1,177		1,177
		Mech/Elect/Plumbing	4,202		4,202
		<u>5,379</u>			
<b>Grand Total</b>			<b>1,194,607</b>	<b>386,593</b>	<b>808,014</b>

SECTION I. Q. COST/SPACE REQUIREMENTS

# OVERVIEW



THE UNIVERSITY OF CHICAGO MEDICAL CENTER  
NEW HOSPITAL PAVILION

RAFAEL VIÑOLY ARCHITECTS / CANNON DESIGN

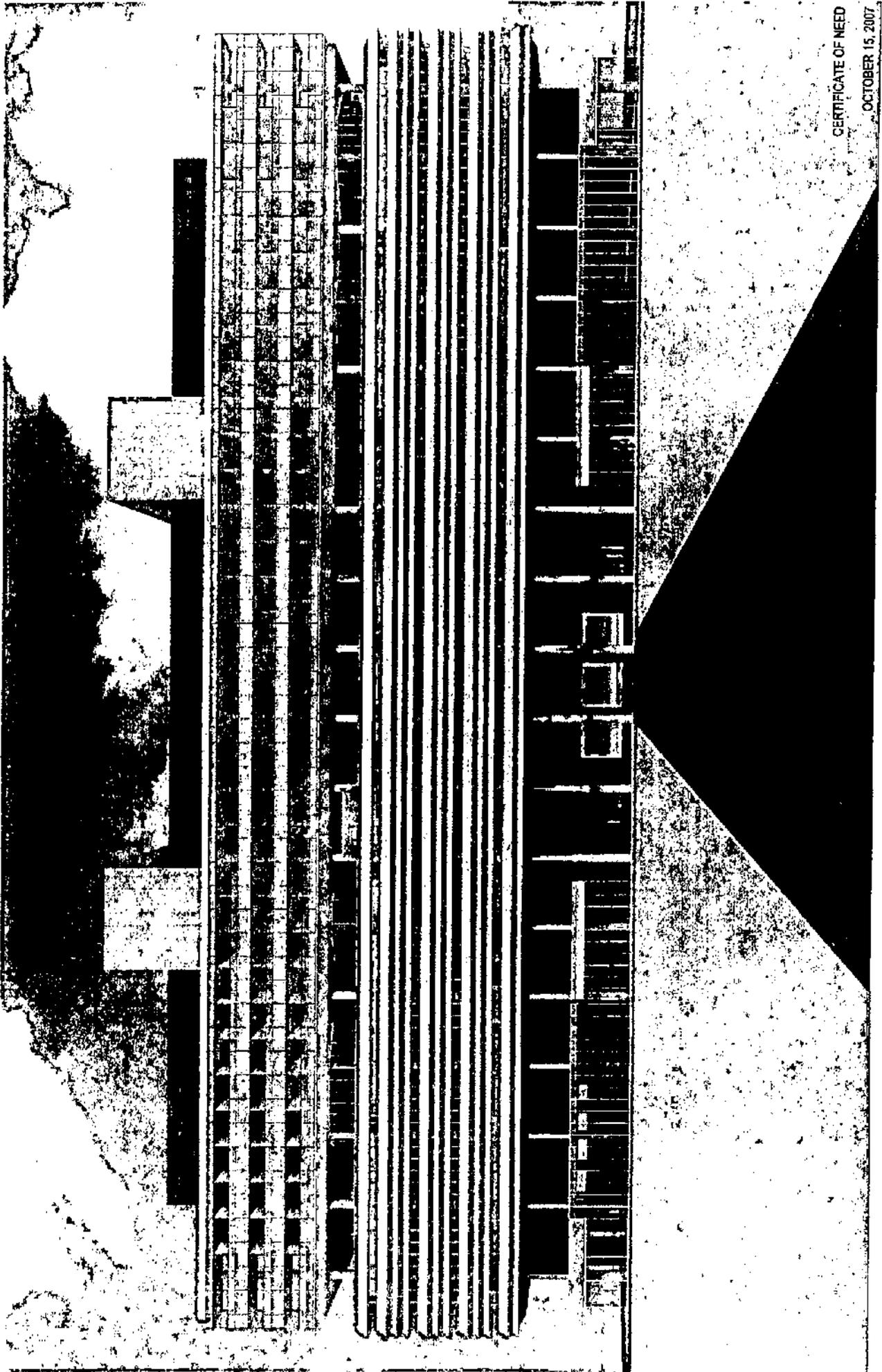
SITE PLAN

CERTIFICATE OF NEED

OCTOBER 15, 2007

ATTACHMENT INFO - 7

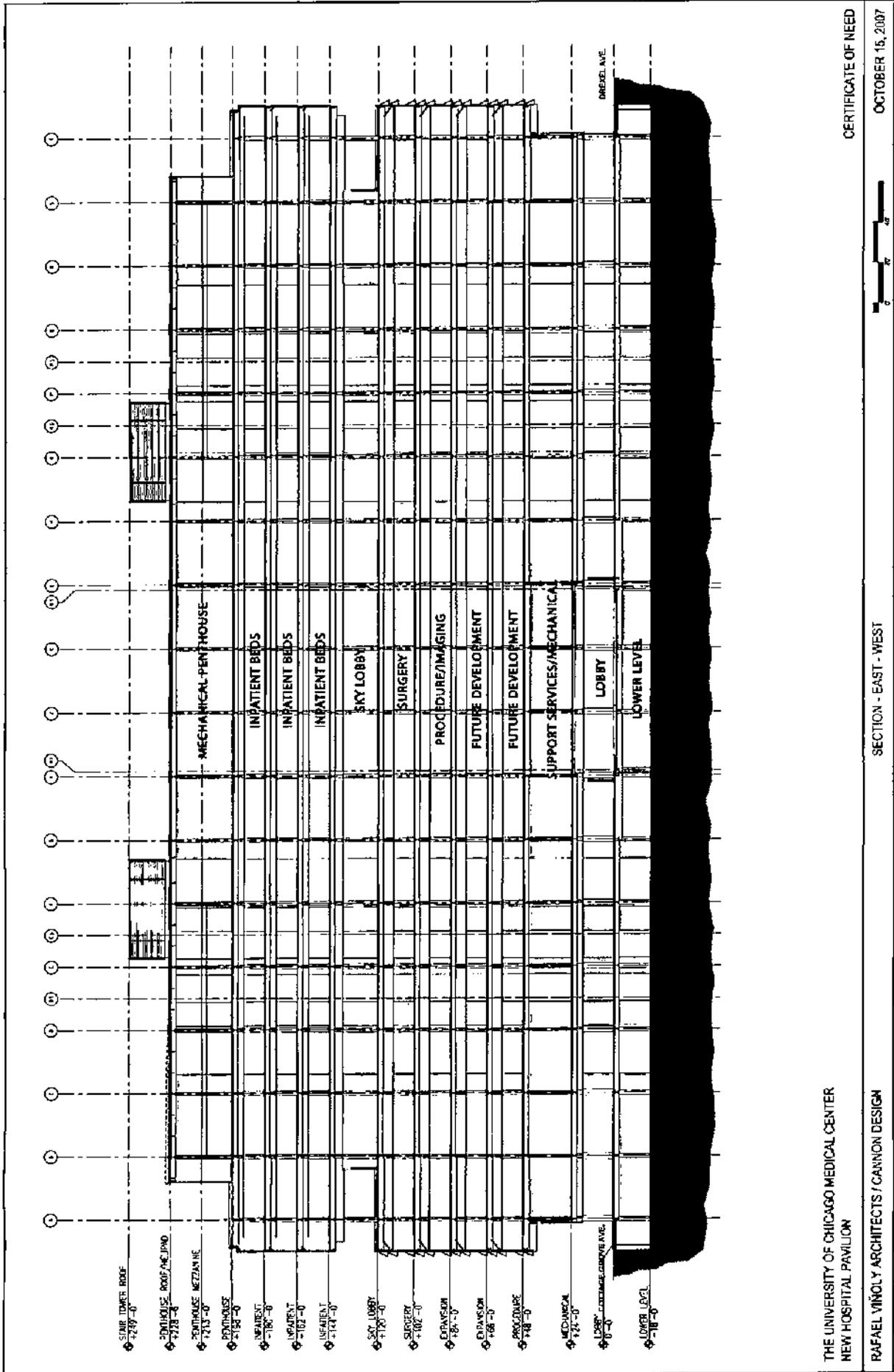




CERTIFICATE OF NEED

OCTOBER 15, 2007

ATTACHMENT INFO - 7



THE UNIVERSITY OF CHICAGO MEDICAL CENTER  
NEW HOSPITAL PAVILION

RAFAEL VIÑOLY ARCHITECTS / CANNON DESIGN

SECTION - EAST - WEST

CERTIFICATE OF NEED

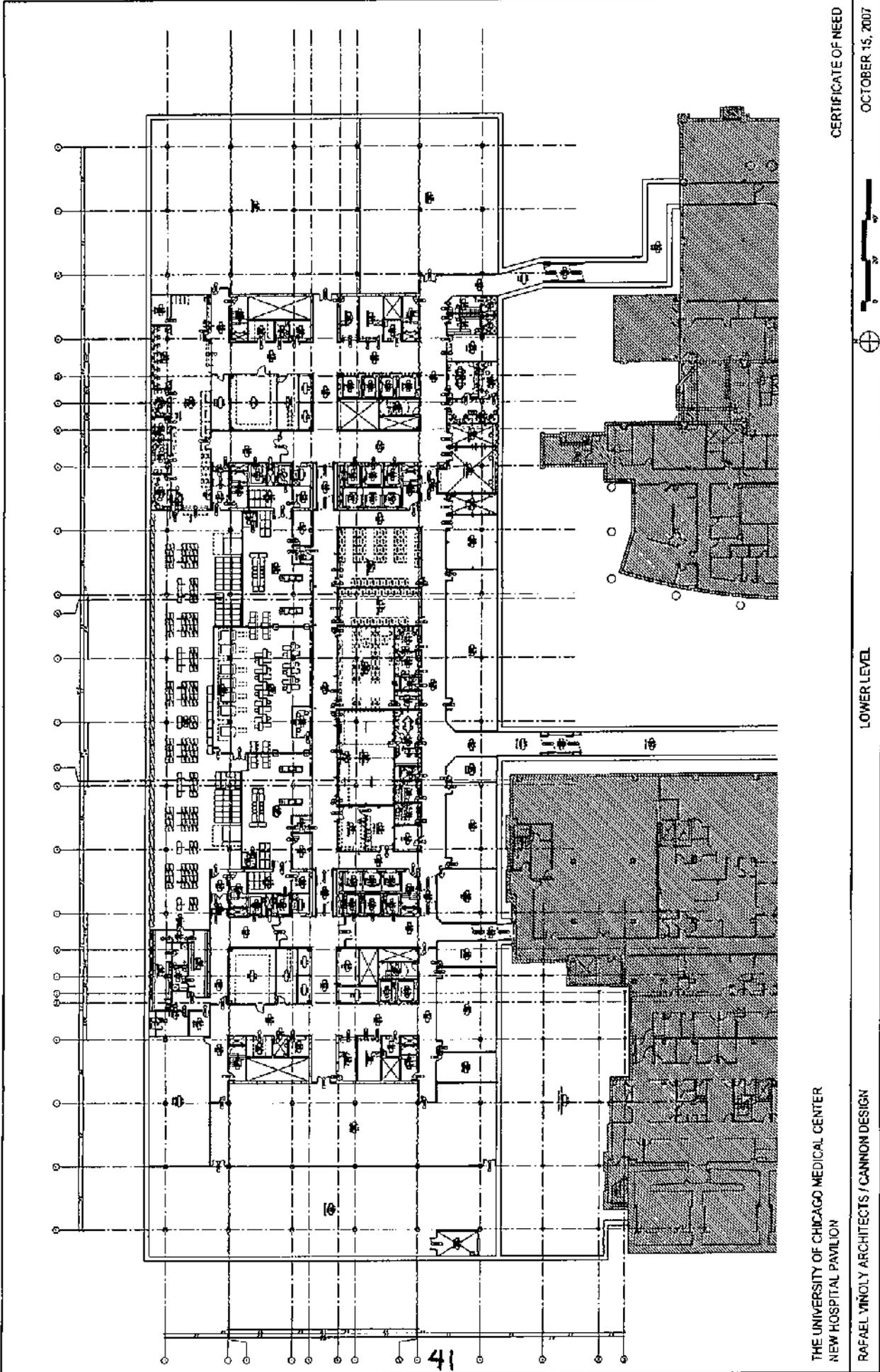
OCTOBER 15, 2007

ATTACHMENT INFO - 7

SECTION I. Q. COST/SPACE REQUIREMENTS

# FLOOR PLAN

ATTACHMENT INFO - 7



41

THE UNIVERSITY OF CHICAGO MEDICAL CENTER  
NEW HOSPITAL PAVILION

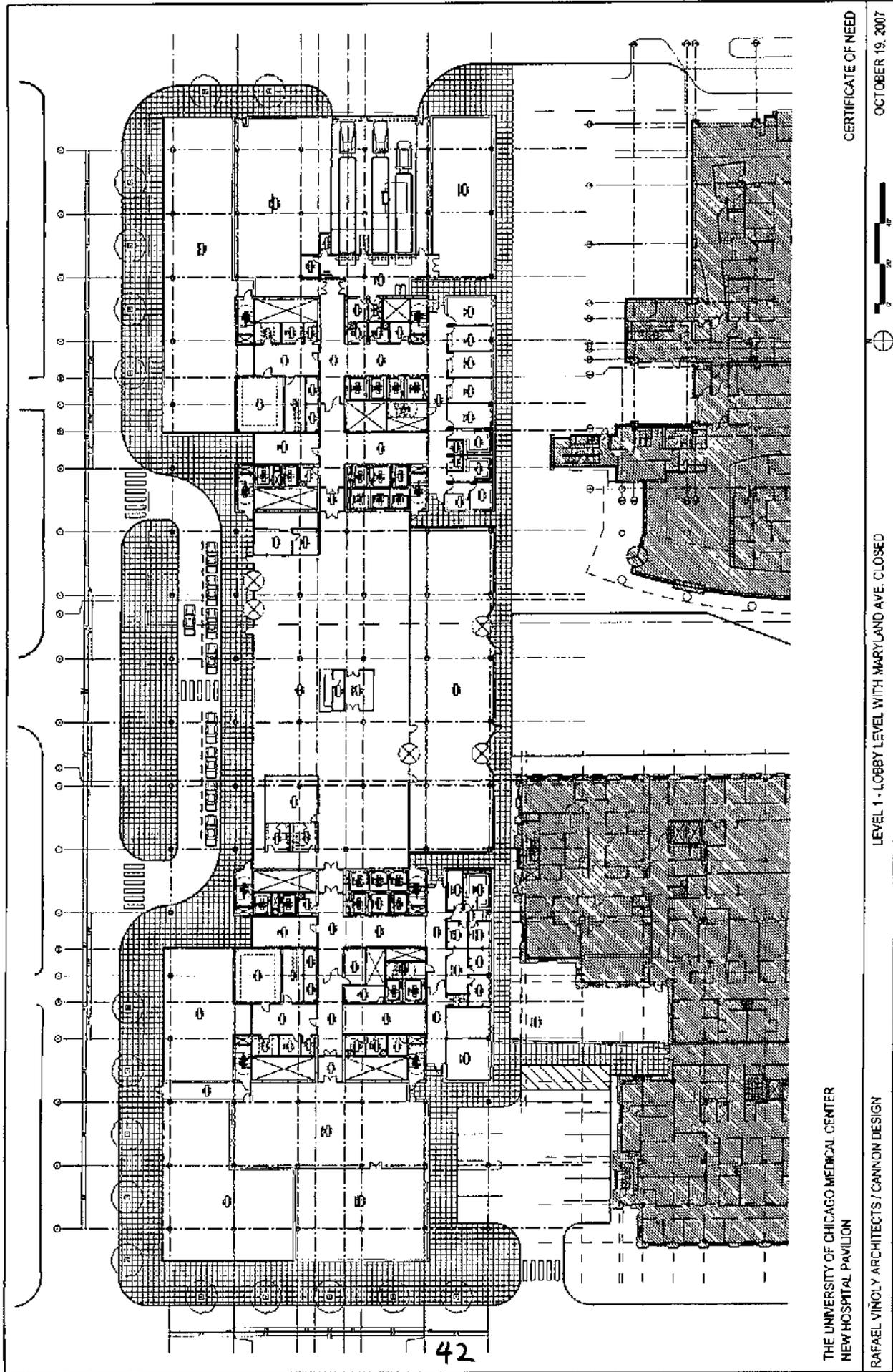
RAFAEL VINOLY ARCHITECTS / CANNON DESIGN

CERTIFICATE OF NEED

LOWER LEVEL

OCTOBER 15, 2007

ATTACHMENT INFO. 7



42

THE UNIVERSITY OF CHICAGO MEDICAL CENTER  
NEW HOSPITAL PAVILION

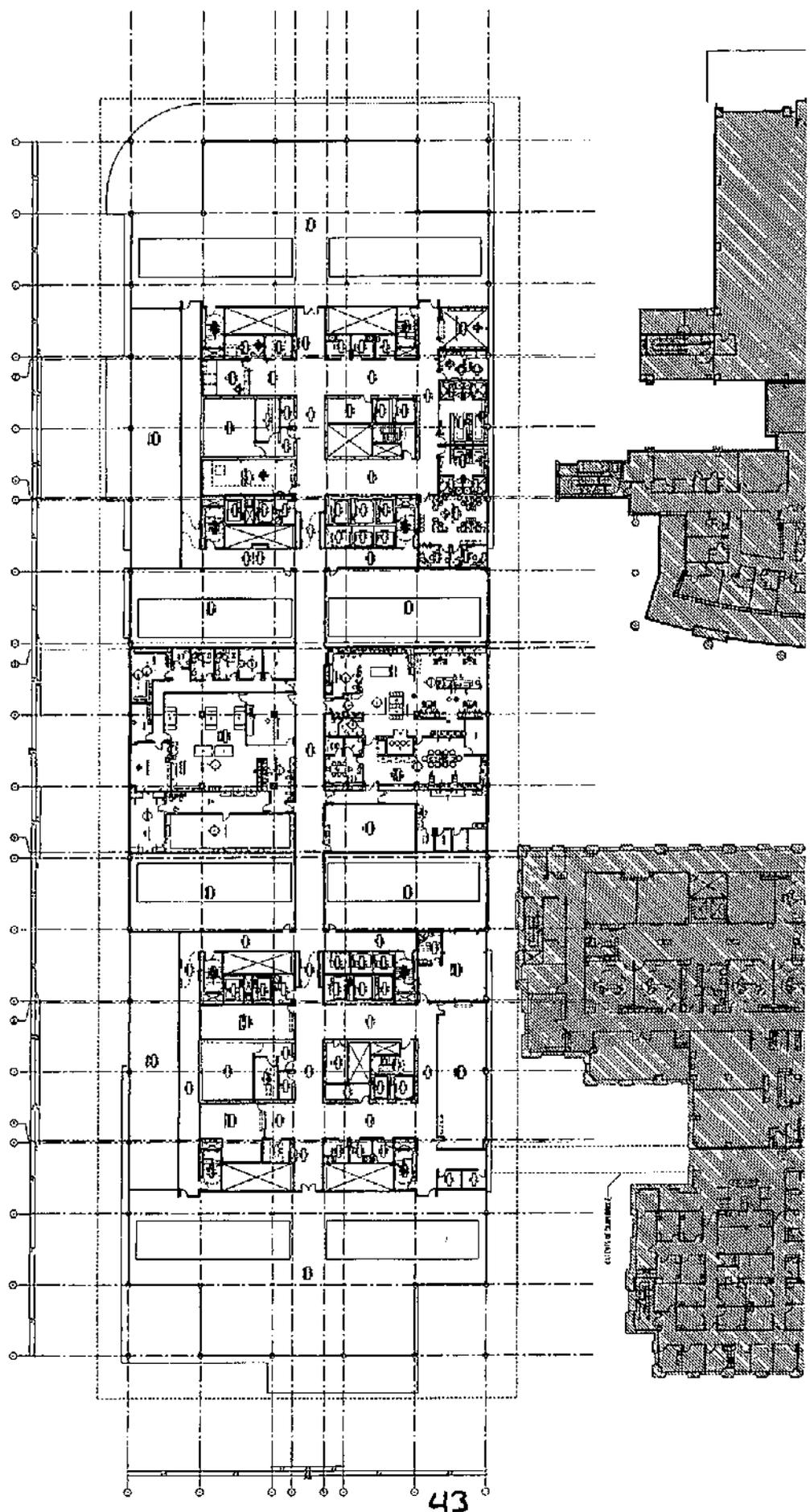
RAFAEL VINOLY ARCHITECTS / CANNON DESIGN

LEVEL 1 - LOBBY LEVEL WITH MARYLAND AVE. CLOSED

CERTIFICATE OF NEED

OCTOBER 19, 2007

ATTACHMENT INFO - 7



43

THE UNIVERSITY OF CHICAGO MEDICAL CENTER  
NEW HOSPITAL PAVILION

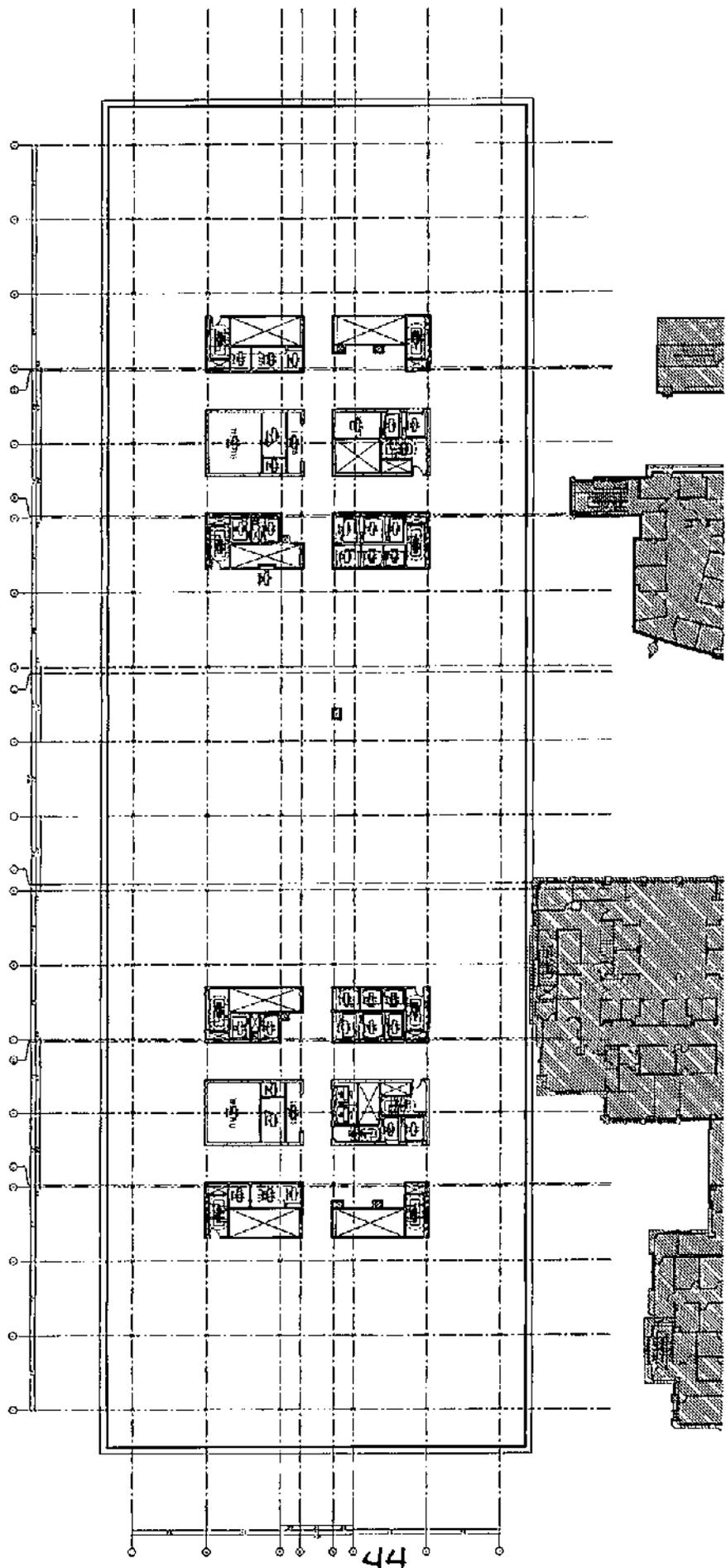
RAFAEL VINOLY ARCHITECTS / CANNON DESIGN

LEVEL 2 - SUPPORT SRVC / LAB PATH / MECHANICAL

CERTIFICATE OF NEED

OCTOBER 15, 2007  
REVISED NOVEMBER 12, 2007

ATTACHMENT INFO - 7



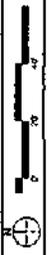
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THE UNIVERSITY OF CHICAGO MEDICAL CENTER  
NEW HOSPITAL PAVILION

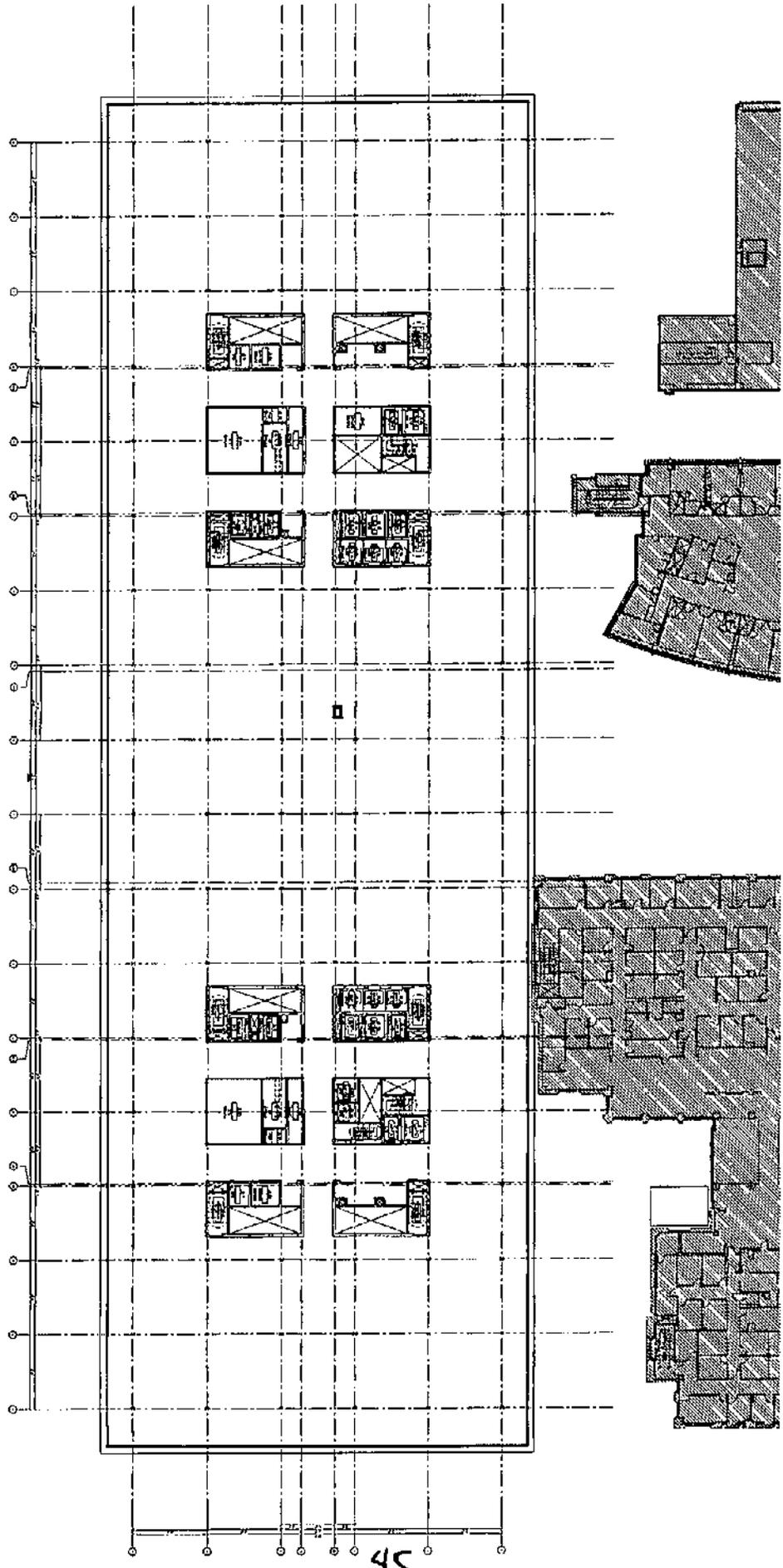
CERTIFICATE OF NEED

LEVEL 3 - FUTURE DEVELOPMENT (INPATIENT BEDS LIKELY)

OCTOBER 15, 2007



ATTACHMENT INFO - 7



45

THE UNIVERSITY OF CHICAGO MEDICAL CENTER  
NEW HOSPITAL PAVILION

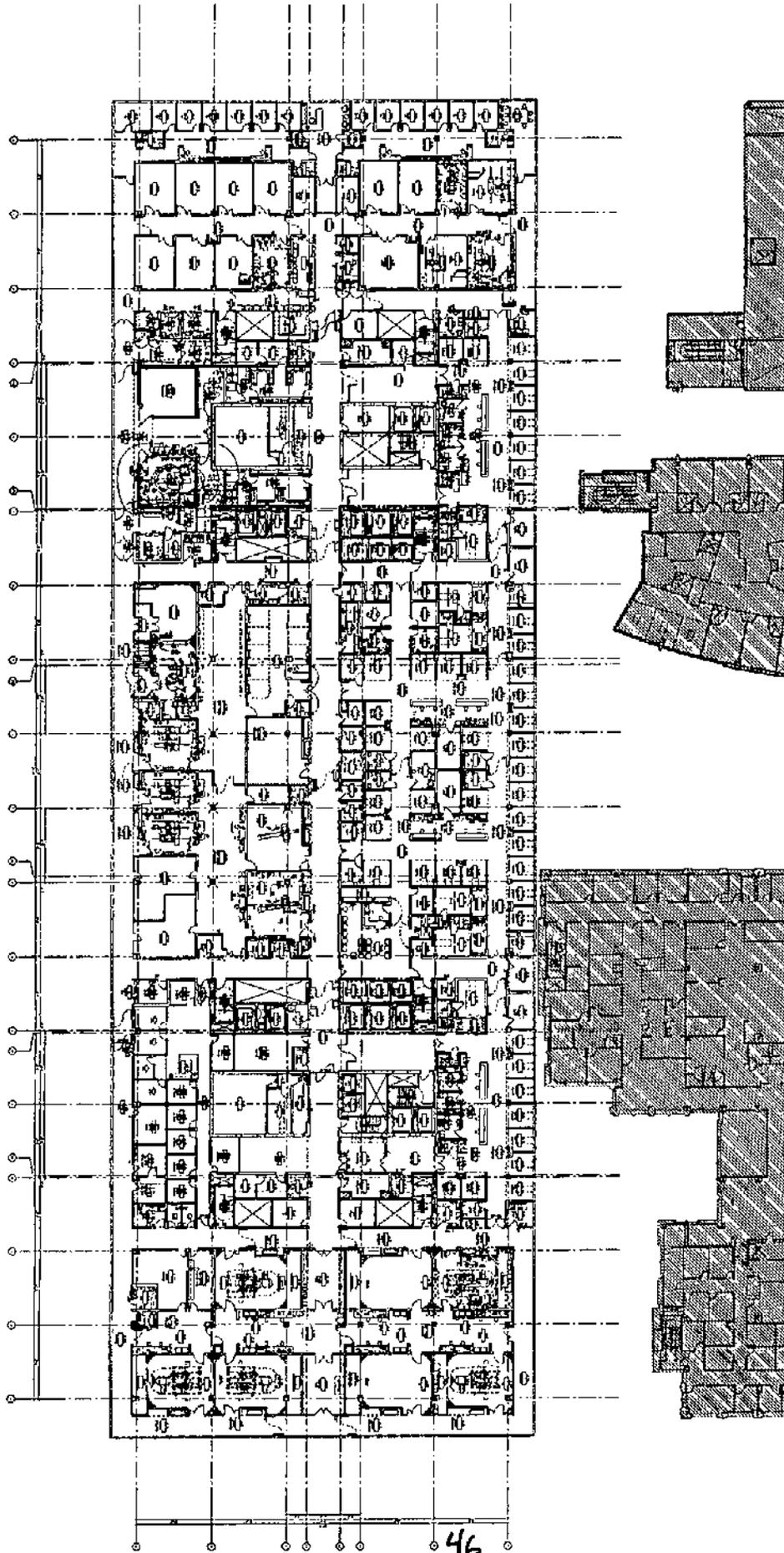
CERTIFICATE OF NEED

RAFAEL VIÑOLY ARCHITECTS / CANNON DESIGN

LEVEL 4 - FUTURE DEVELOPMENT (CARDIOLOGY/DIAGNOSTIC TREATMENT LIKELY)

OCTOBER 15, 2007

ATTACHMENT INFO - 7



46

THE UNIVERSITY OF CHICAGO MEDICAL CENTER  
NEW HOSPITAL PAVILION

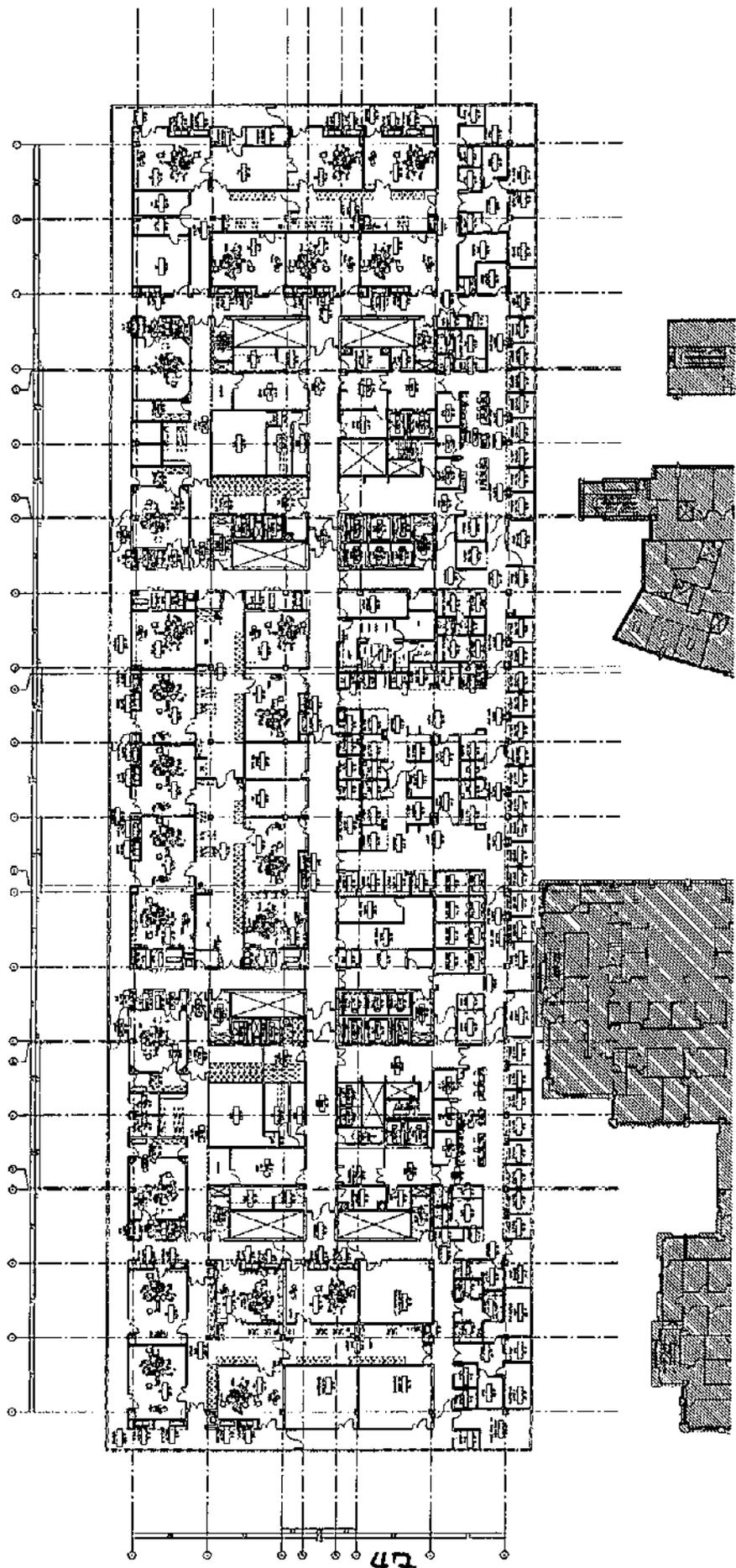
RAFAEL VINOLY ARCHITECTS / CANNON DESIGN

LEVEL 5 - PROCEDURE

CERTIFICATE OF NEED

OCTOBER 15, 2007

ATTACHMENT INFO - 7



47

THE UNIVERSITY OF CHICAGO MEDICAL CENTER  
 NEW HOSPITAL PAVILION

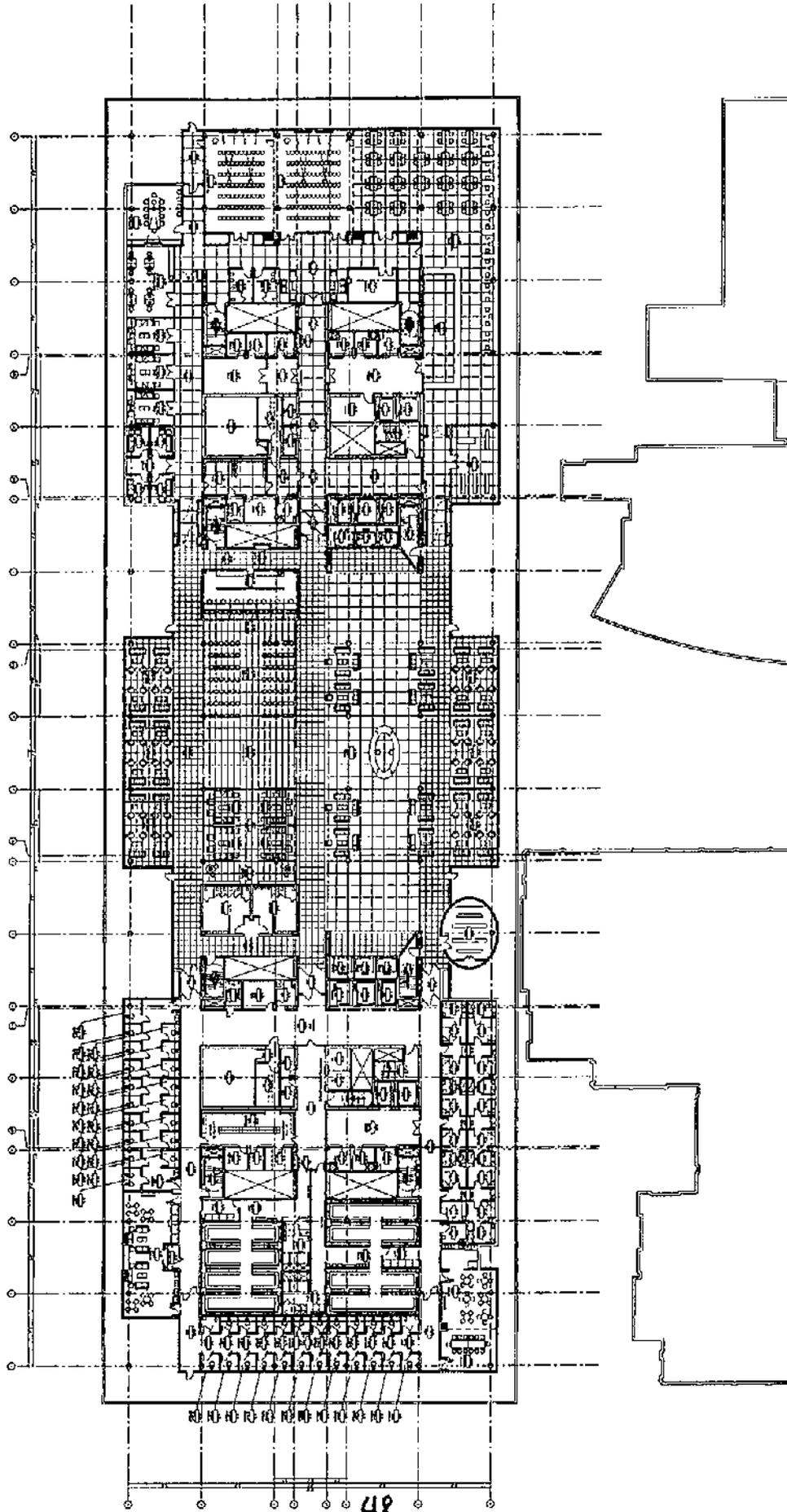
RAFAEL VIÑOLY ARCHITECTS / CANNON DESIGN

LEVEL 6 - SURGERY

CERTIFICATE OF NEED

OCTOBER 15, 2007





48

THE UNIVERSITY OF CHICAGO MEDICAL CENTER  
NEW HOSPITAL PAVILION

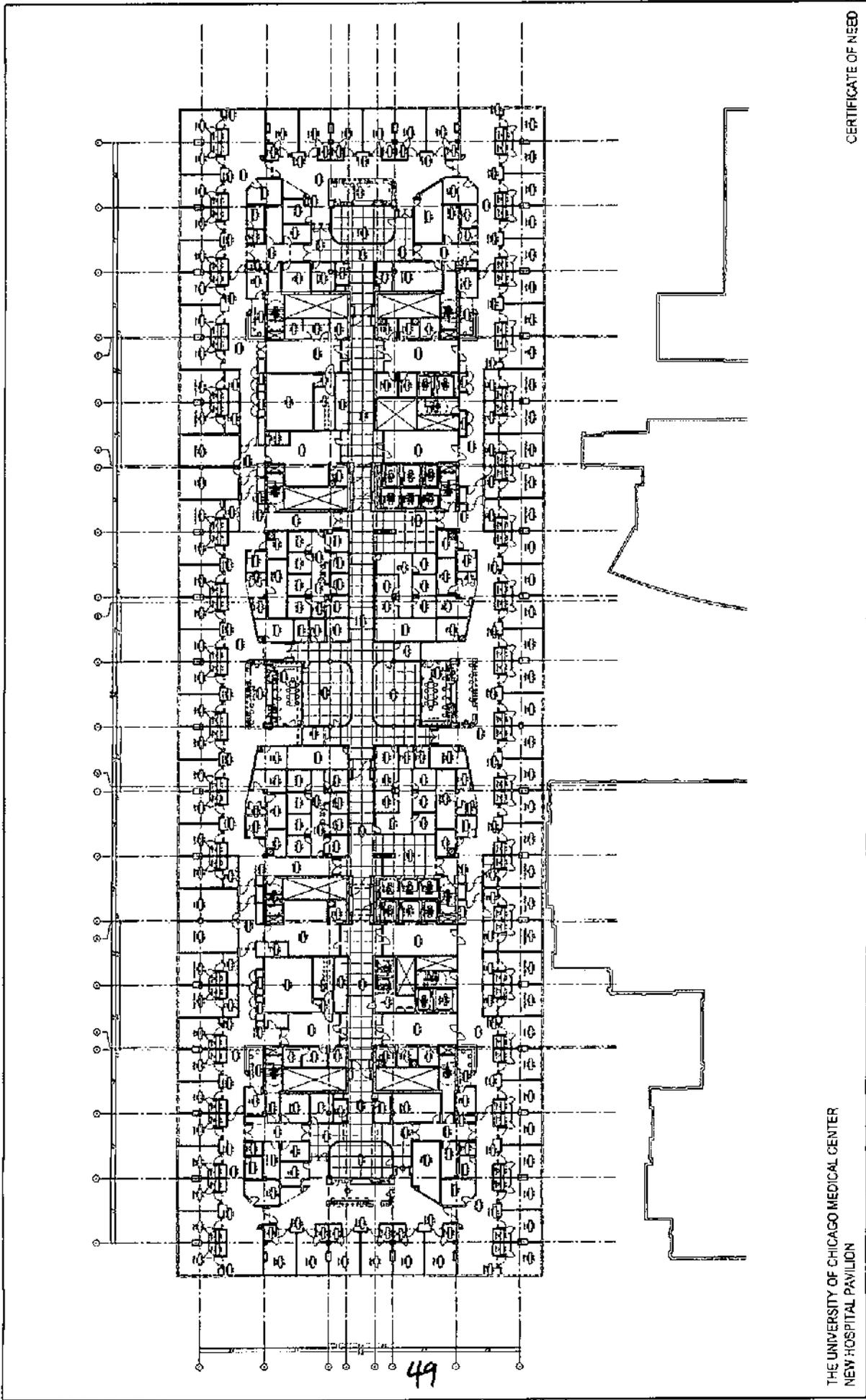
RAFAEL VIÑOLY ARCHITECTS / CANNON DESIGN

LEVEL 7 - SKY LOBBY

CERTIFICATE OF NEED

OCTOBER 15, 2007  
BY: [Signature]

ATTACHMENT INFO - 7



49

THE UNIVERSITY OF CHICAGO MEDICAL CENTER  
NEW HOSPITAL PAVILION

RAFAEL VIÑOLY ARCHITECTS / CANNON DESIGN

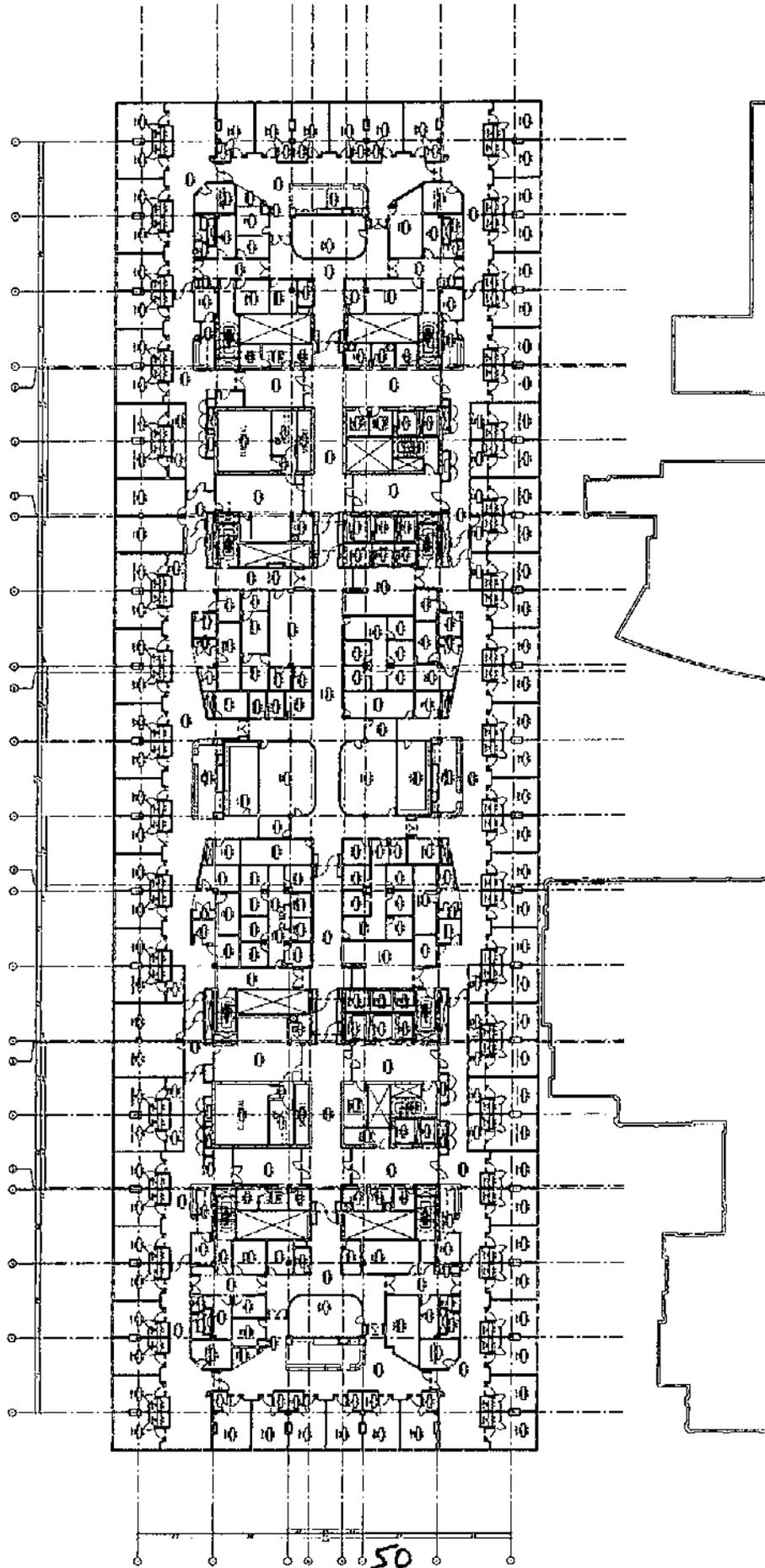
CERTIFICATE OF NEED

OCTOBER 16, 2007

ATTACHMENT INFO - 7



LEVEL 8 - INPATIENT



50

THE UNIVERSITY OF CHICAGO MEDICAL CENTER  
NEW HOSPITAL PAVILION

RAFAEL VIÑOLY ARCHITECTS / CANNON DESIGN

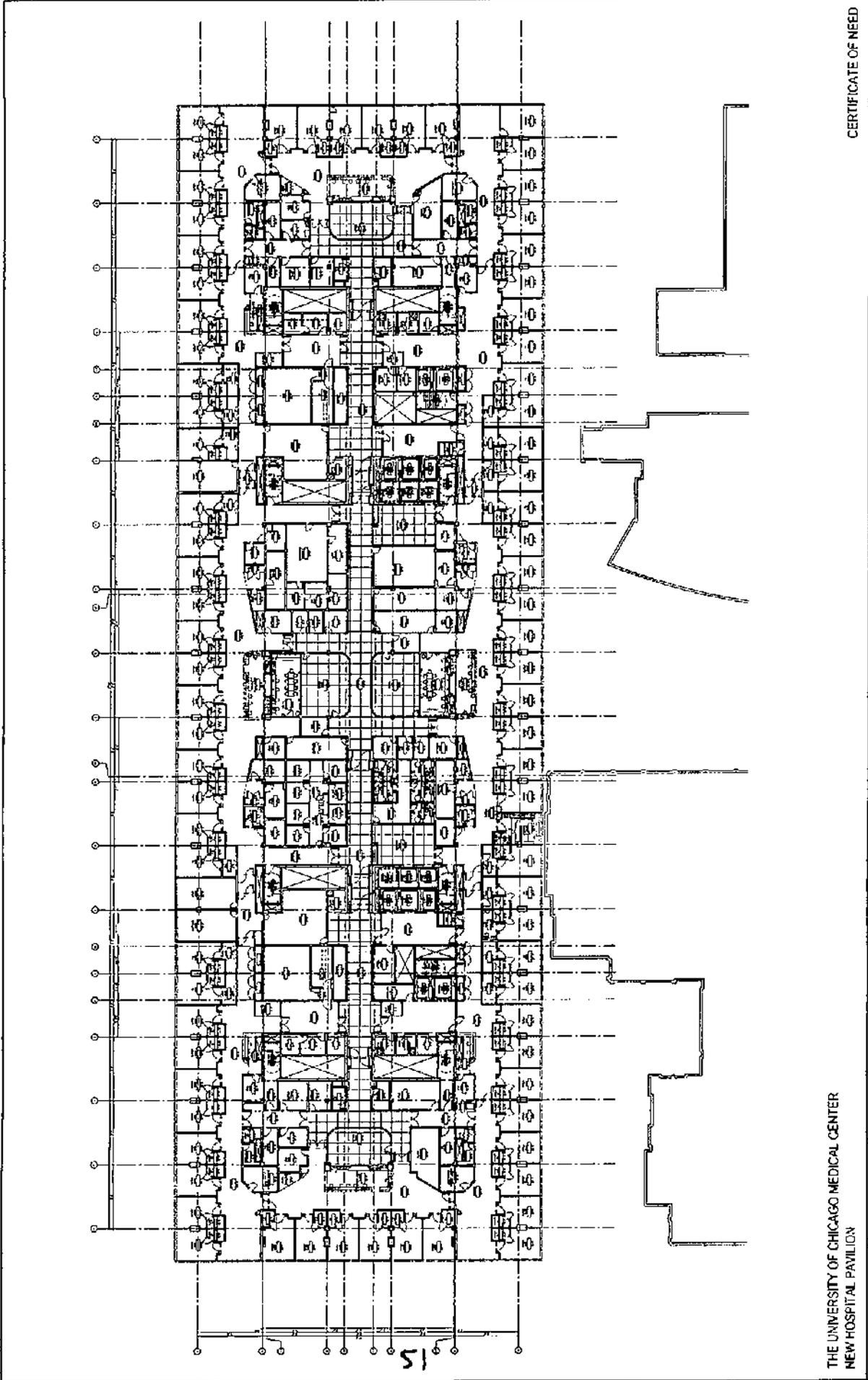
LEVEL 9 - INPATIENT



CERTIFICATE OF NEED

OCTOBER 16, 2007

ATTACHMENT INFO - 7



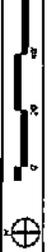
THE UNIVERSITY OF CHICAGO MEDICAL CENTER  
 NEW HOSPITAL PAVILION

RAFAEL VIÑOLY ARCHITECTS / CANNON DESIGN

CERTIFICATE OF NEED

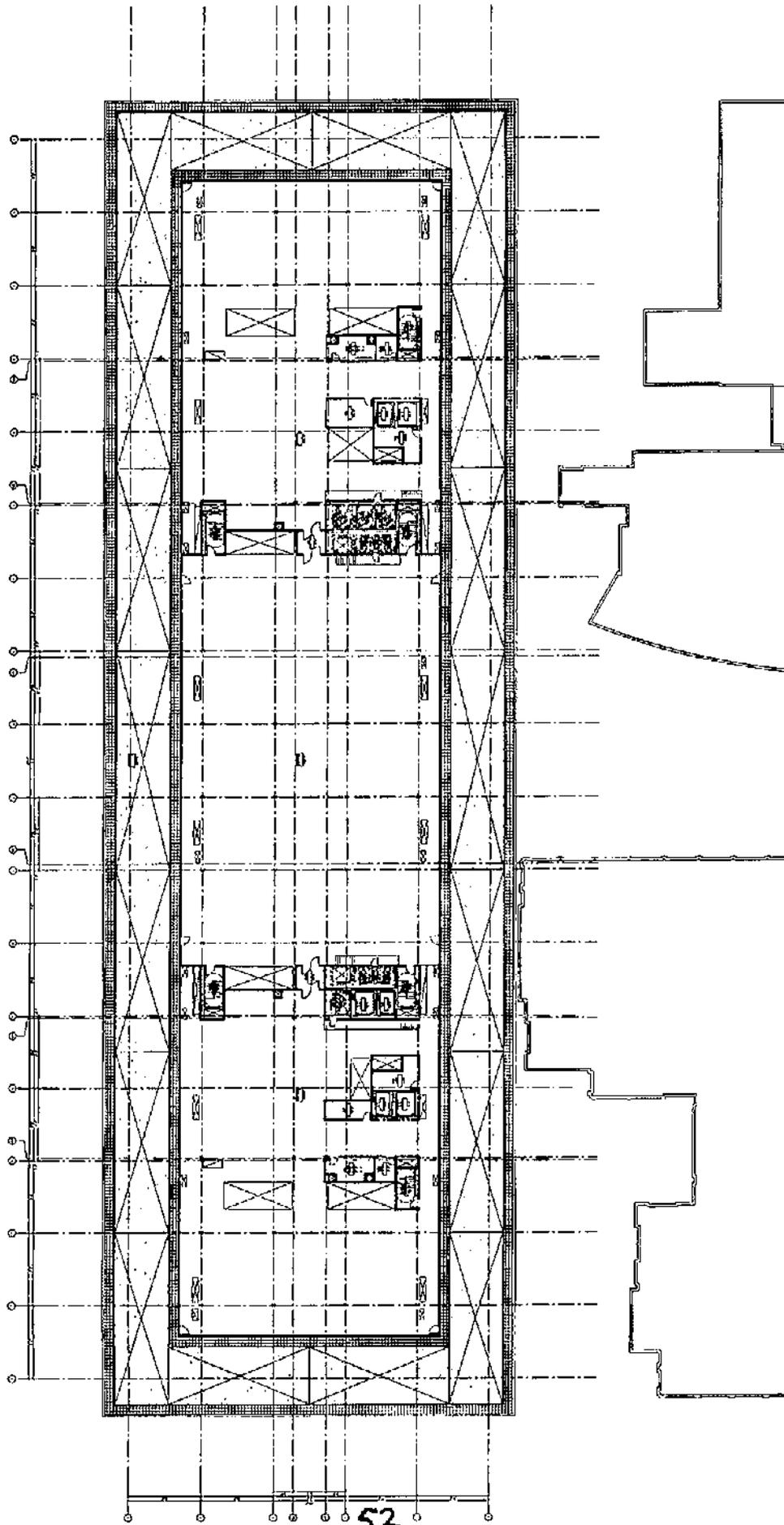
OCTOBER 15, 2007

ATTACHMENT INFO - 7



LEVEL 10 - INPATIENT

15



52

THE UNIVERSITY OF CHICAGO MEDICAL CENTER  
NEW HOSPITAL PAVILION

RAFAEL VINOXY ARCHITECTS / CANNON DESIGN

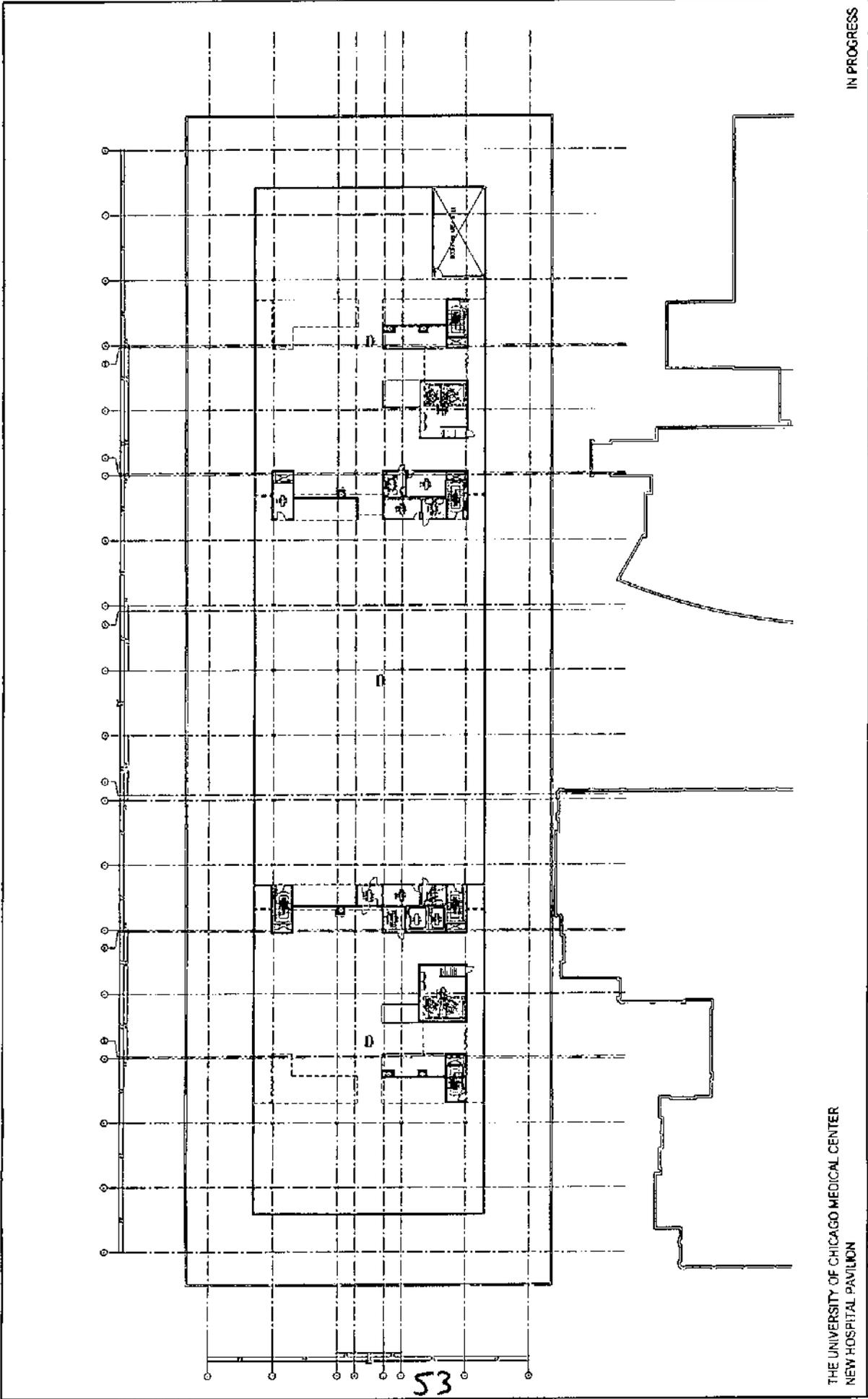
LEVEL 11 - MECH. PENTHOUSE / ROOF



IN PROGRESS

OCTOBER 15, 2007  
REVISED NOVEMBER 14, 2007

ATTACHMENT INFO - 7



53

THE UNIVERSITY OF CHICAGO MEDICAL CENTER  
NEW HOSPITAL PAVILION

RAFAEL VINOLY ARCHITECTS / CANNON DESIGN

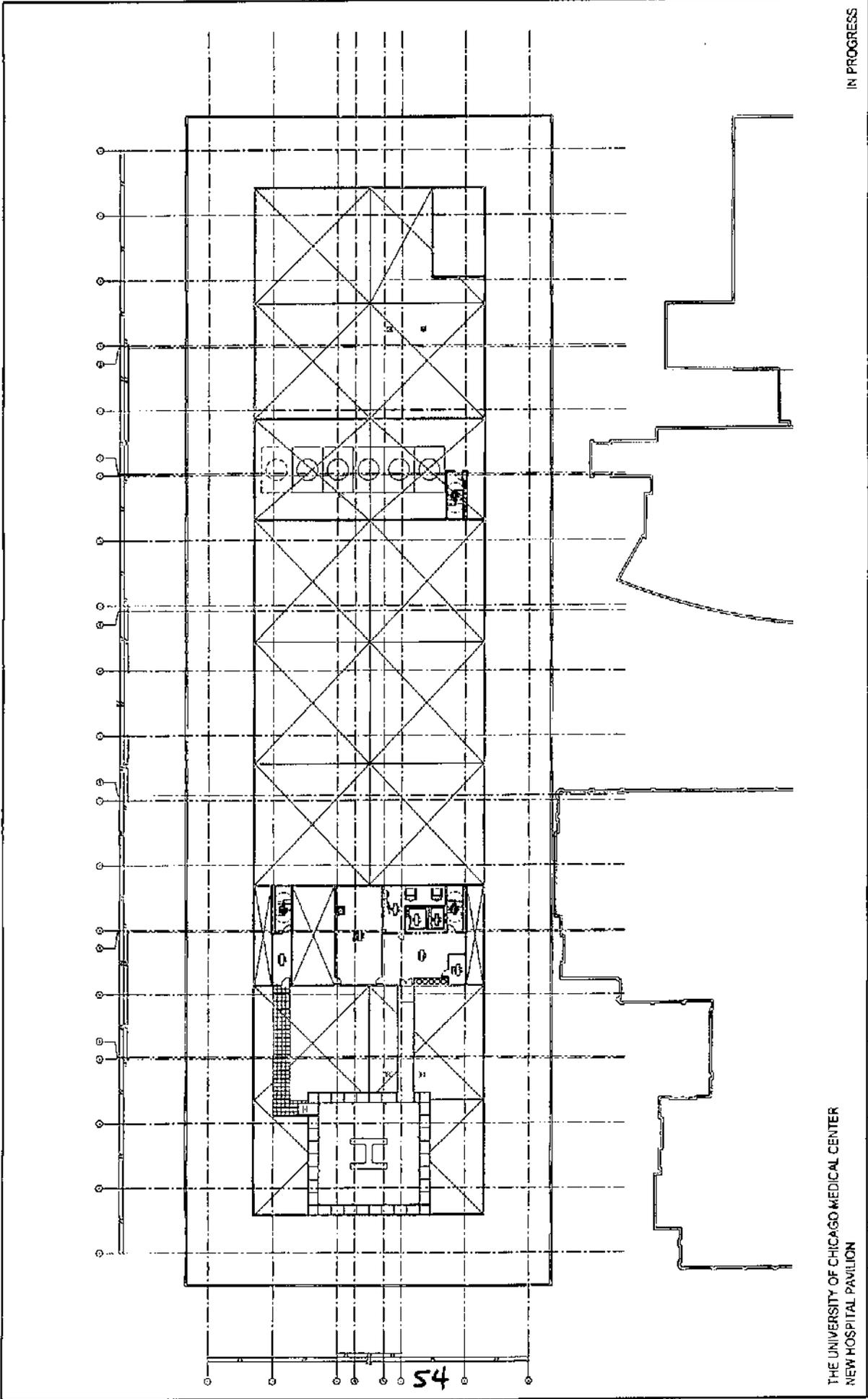
LEVEL 12 - MECH. MEZZANINE



IN PROGRESS

OCTOBER 15, 2007  
REVISED DRAWING

ATTACHMENT INFO-7



54

THE UNIVERSITY OF CHICAGO MEDICAL CENTER  
NEW HOSPITAL PAVILION

RAFAEL VINOLY ARCHITECTS / CANNON DESIGN

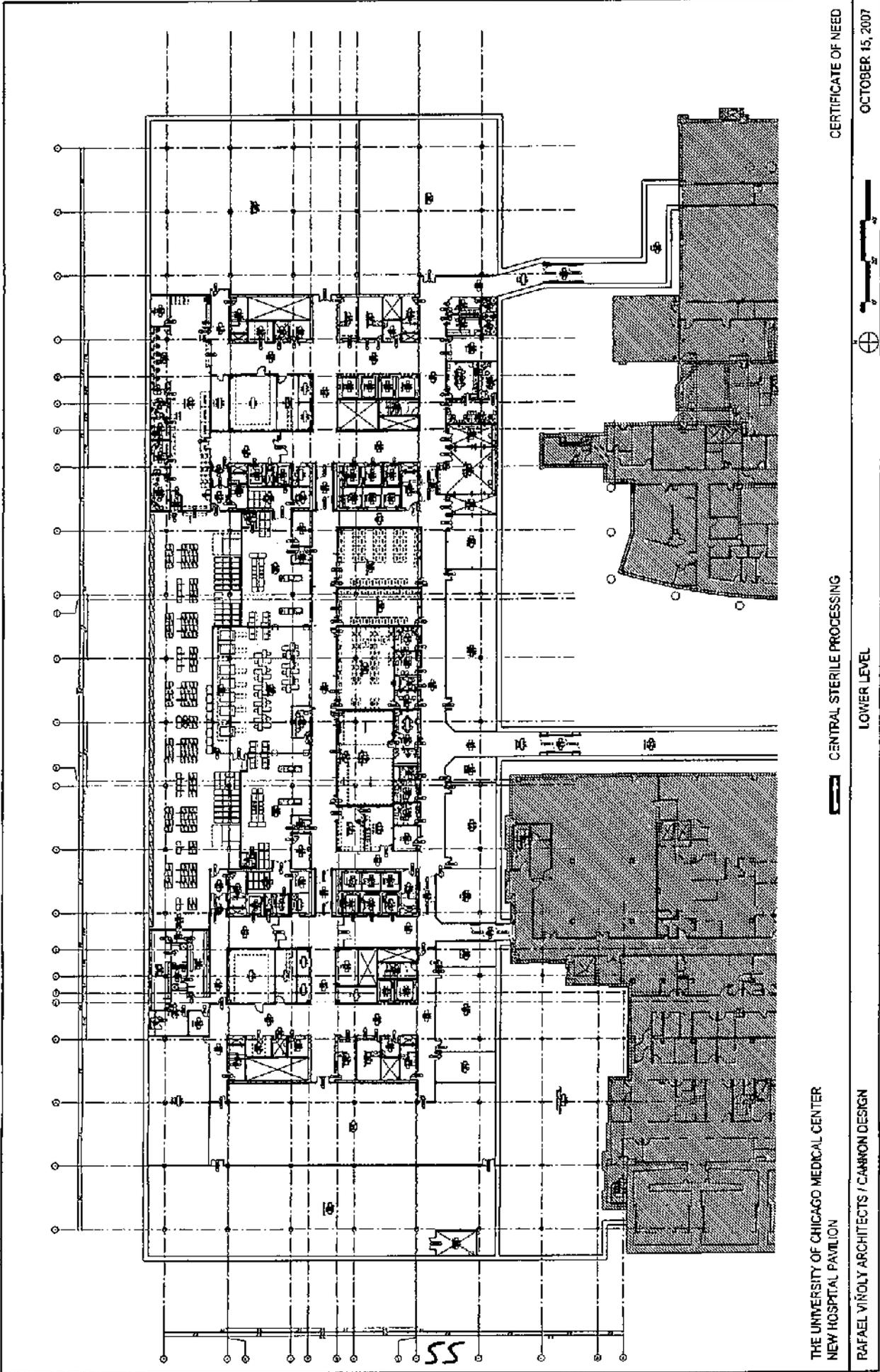
LEVEL 13 - HELIPAD / COOLING TOWER



IN PROGRESS

OCTOBER 15, 2007  
BY: [signature]

ATTACHMENT INFO - 7



THE UNIVERSITY OF CHICAGO MEDICAL CENTER  
 NEW HOSPITAL PAVILION

RAFAEL VIÑOLY ARCHITECTS / CAMRON DESIGN

CENTRAL STERILE PROCESSING

LOWER LEVEL

CERTIFICATE OF NEED

OCTOBER 15, 2007

ATTACHMENT INFO - 7

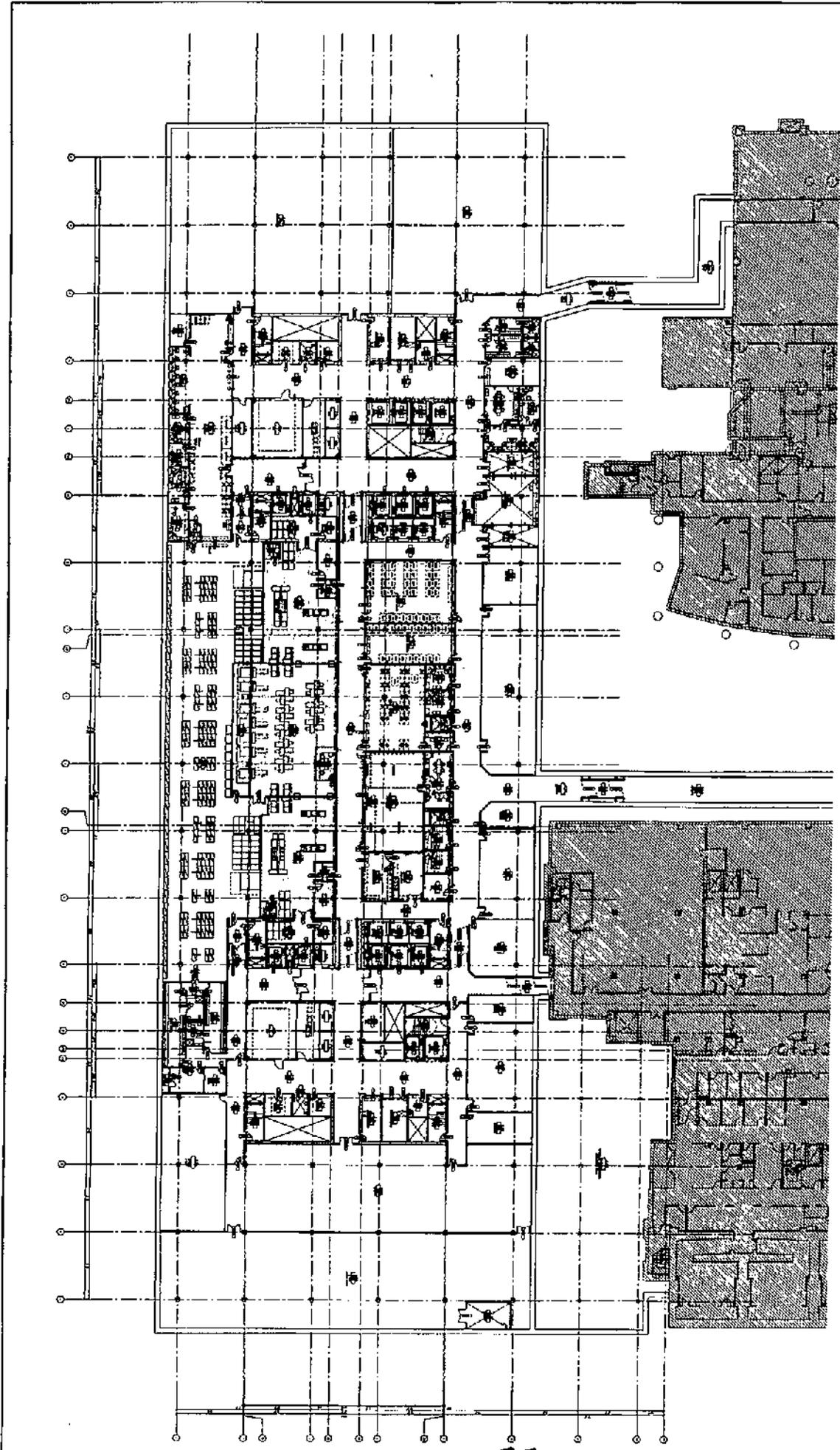
SECTION I. Q. COST/SPACE REQUIREMENTS

# **REVIEWABLE DEPARTMENTS**

**(AREA SHADED)**

ATTACHMENT INFO - 7

54<sub>a</sub>



THE UNIVERSITY OF CHICAGO MEDICAL CENTER  
 NEW HOSPITAL PAVILION

RAFAEL VINOLY ARCHITECTS / CANNON DESIGN

1-1-1 CENTRAL STERILE PROCESSING

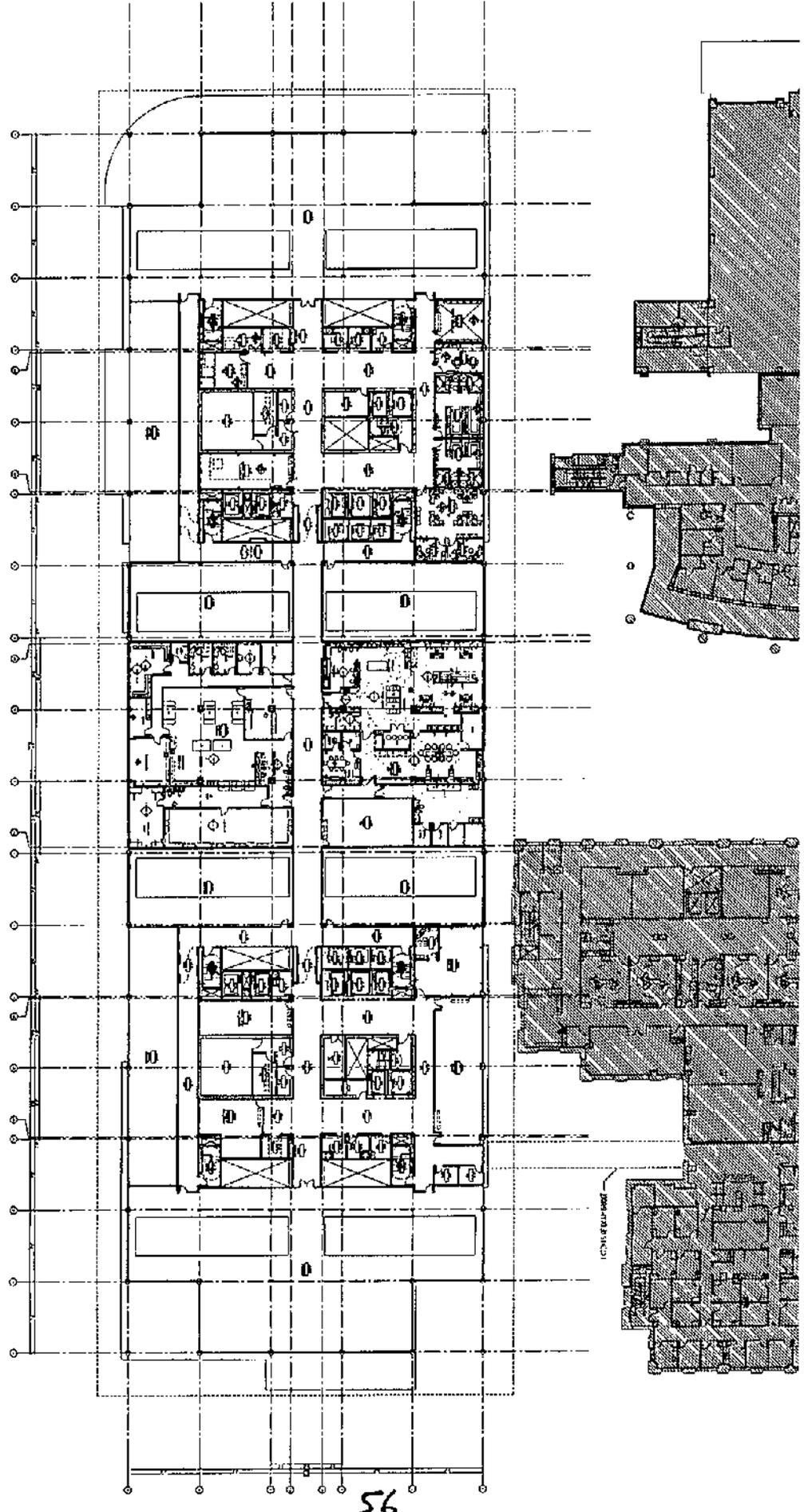
LOWER LEVEL

CERTIFICATE OF NEED

OCTOBER 15, 2007

ATTACHMENT INFO - 7

55



56

THE UNIVERSITY OF CHICAGO MEDICAL CENTER  
NEW HOSPITAL PAVILION

ANATOMIC PATHOLOGY

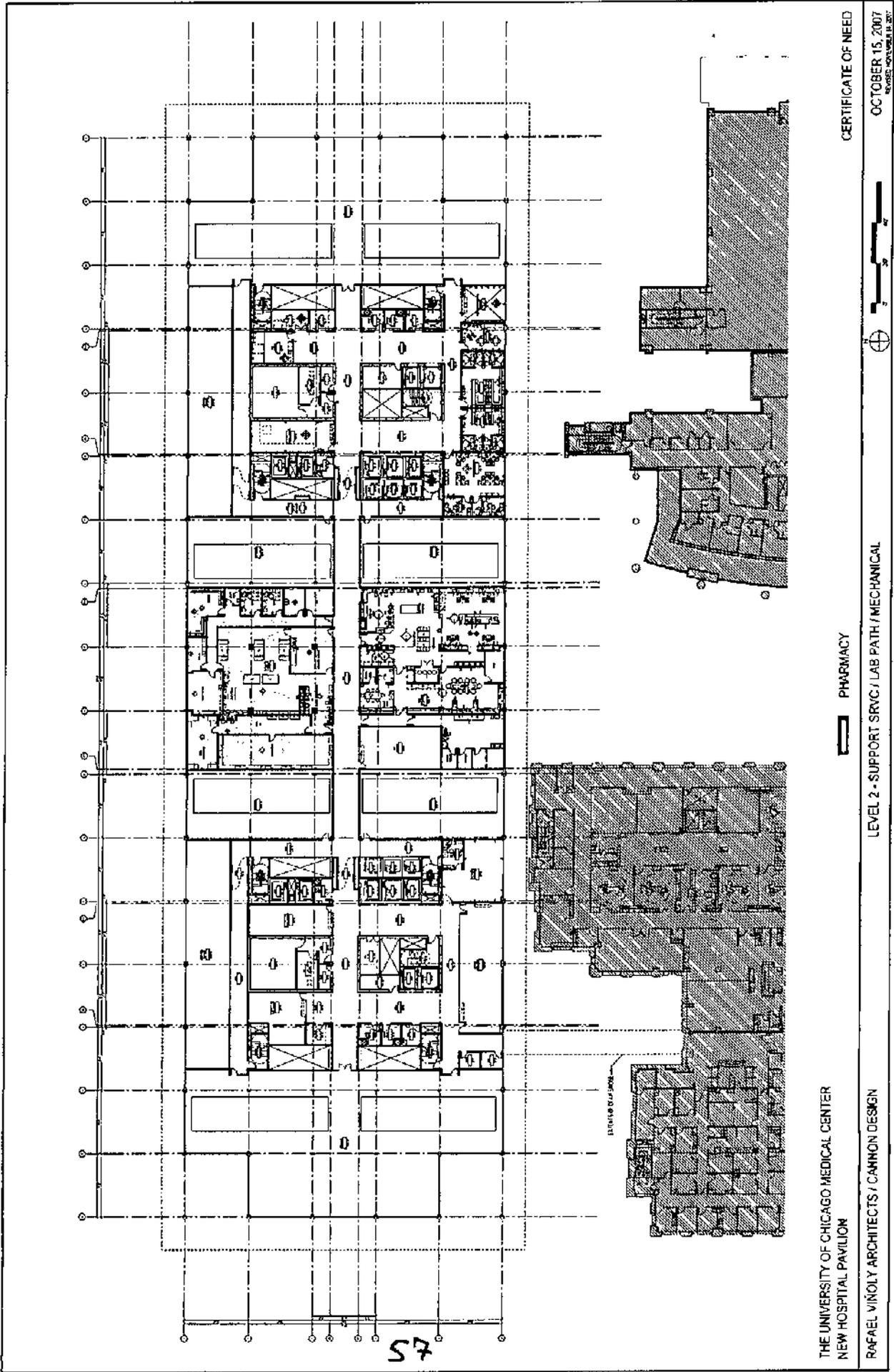
LEVEL 2 - SUPPORT SRVC / LAB PATH / MECHANICAL

RAFAEL VINOLY ARCHITECTS / CANNON DESIGN

CERTIFICATE OF NEED

OCTOBER 15, 2007  
SP-000-00000000-0000

ATTACHMENT INFO - 7



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THE UNIVERSITY OF CHICAGO MEDICAL CENTER  
NEW HOSPITAL PAVILION

PHARMACY

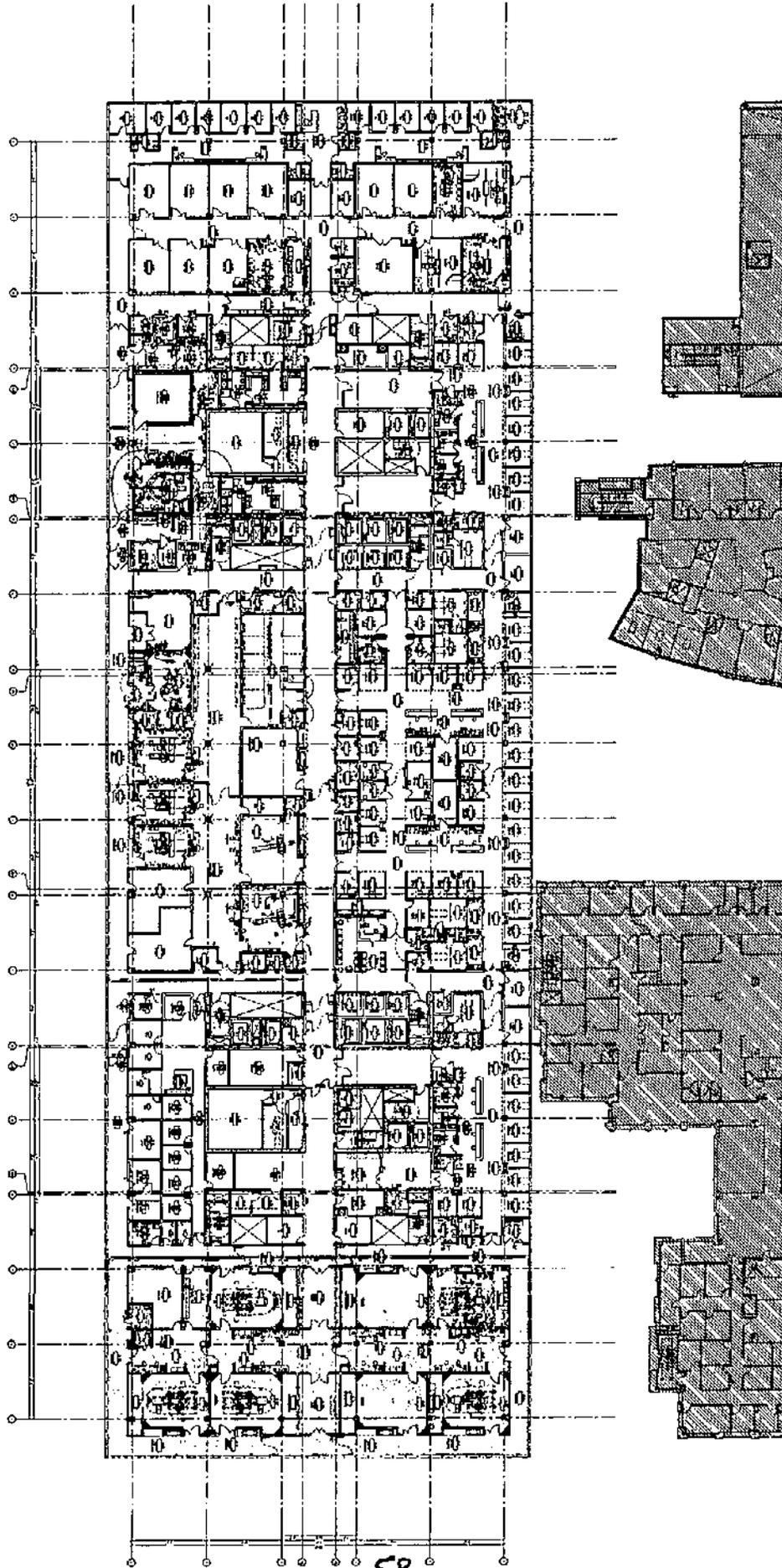
LEVEL 2 - SUPPORT SRVCS / LAB PATH / MECHANICAL

RAFAEL VIÑOLY ARCHITECTS / CANNON DESIGN

CERTIFICATE OF NEED

OCTOBER 15, 2007  
REVISED: NOVEMBER 15, 2007

ATTACHMENT INFO - 7



58

THE UNIVERSITY OF CHICAGO MEDICAL CENTER  
NEW HOSPITAL PAVILION

RAFAEL VIKOLY ARCHITECTS / CANNON DESIGN

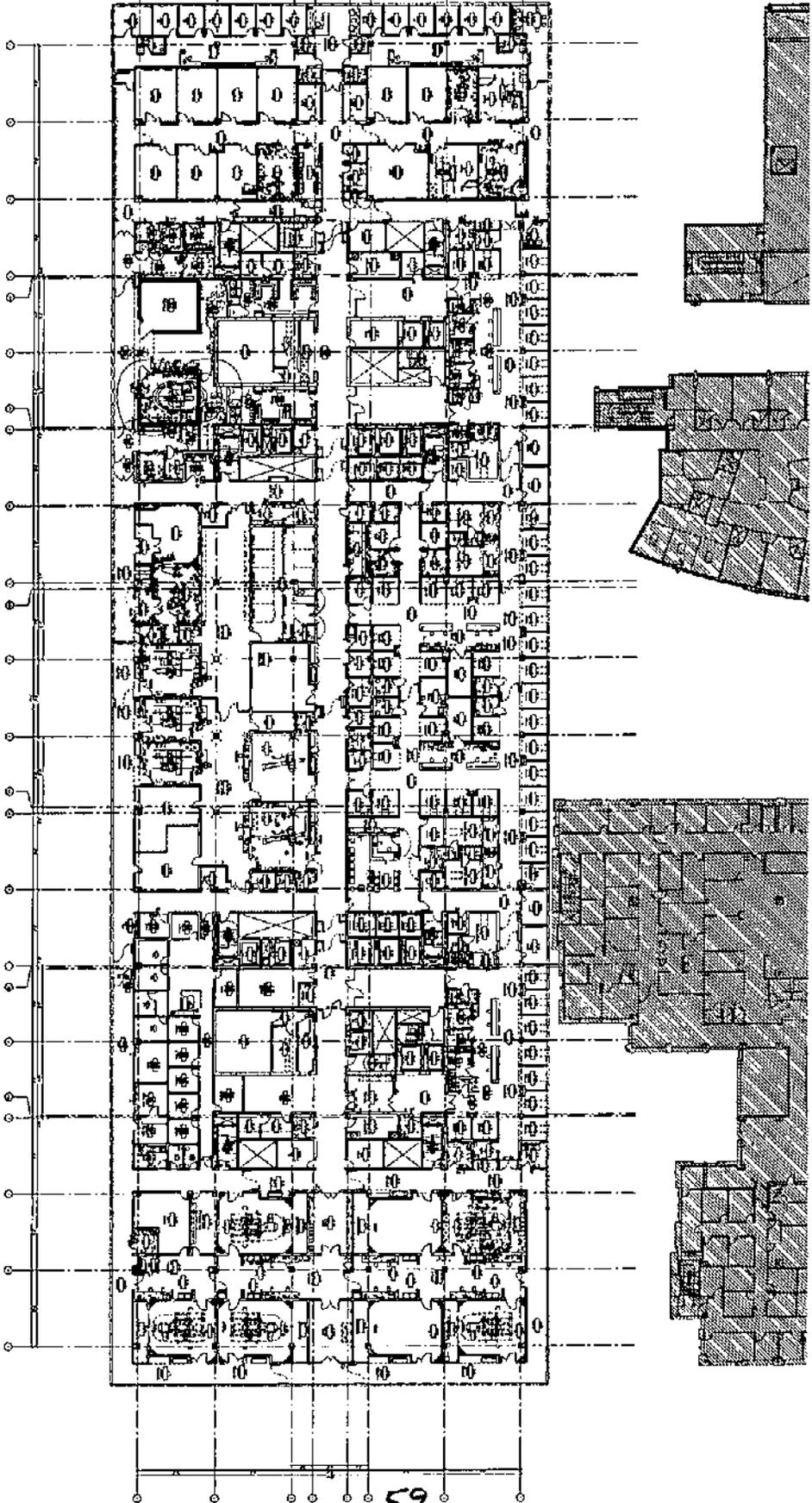
RADIOLOGY

LEVEL 5 - PROCEDURE

CERTIFICATE OF NEED

OCTOBER 15, 2007

ATTACHMENT INFO - 7



59

THE UNIVERSITY OF CHICAGO MEDICAL CENTER  
NEW HOSPITAL PAVILION

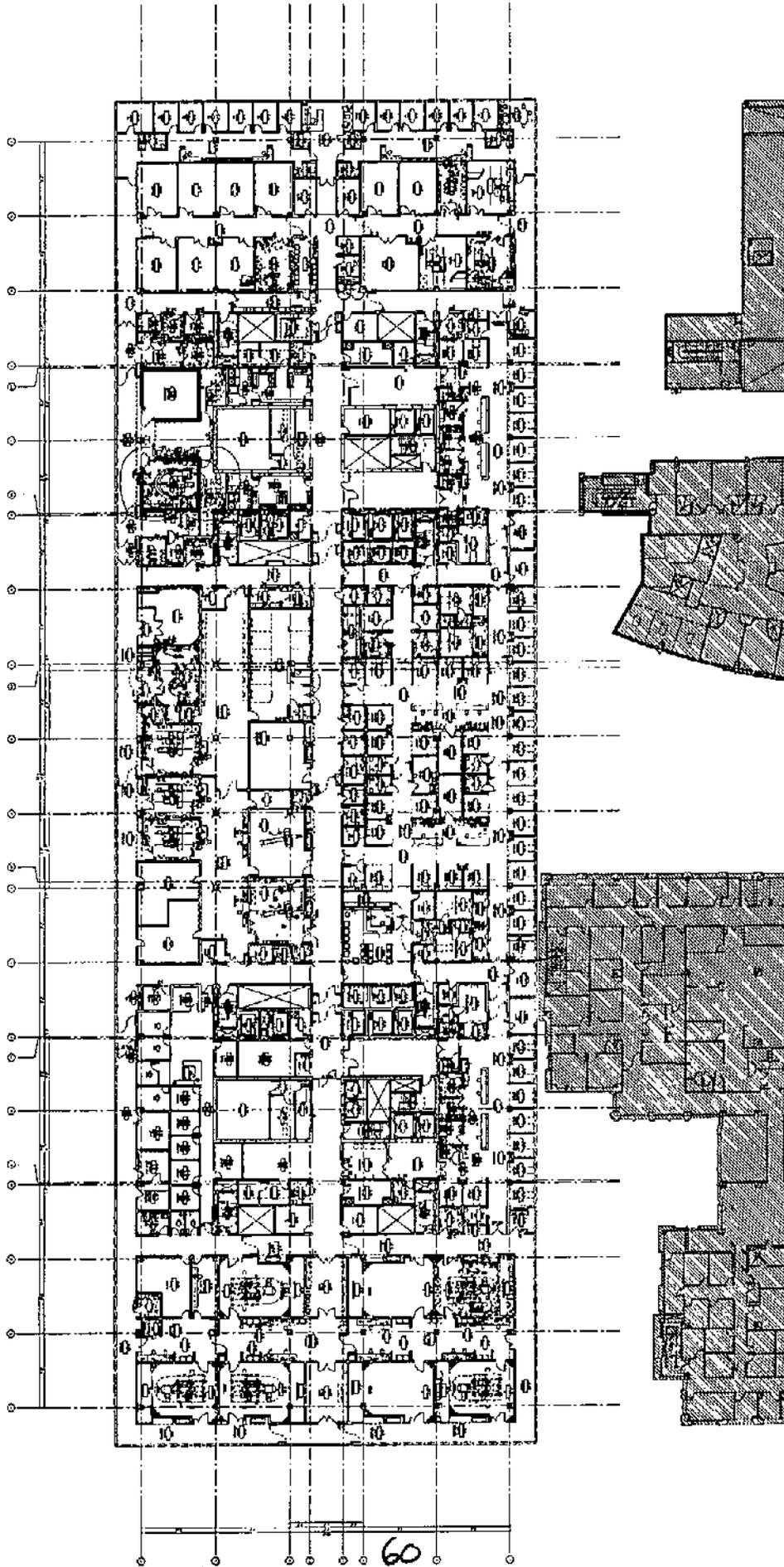
GI PROCEDURES

CERTIFICATE OF NEED

LEVEL 5 - PROCEDURE

OCTOBER 16, 2007

ATTACHMENT INFO - 7



THE UNIVERSITY OF CHICAGO MEDICAL CENTER  
NEW HOSPITAL PAVILION

RAFAEL VINOLY ARCHITECTS / CANNON DESIGN

PREP RECOVERY

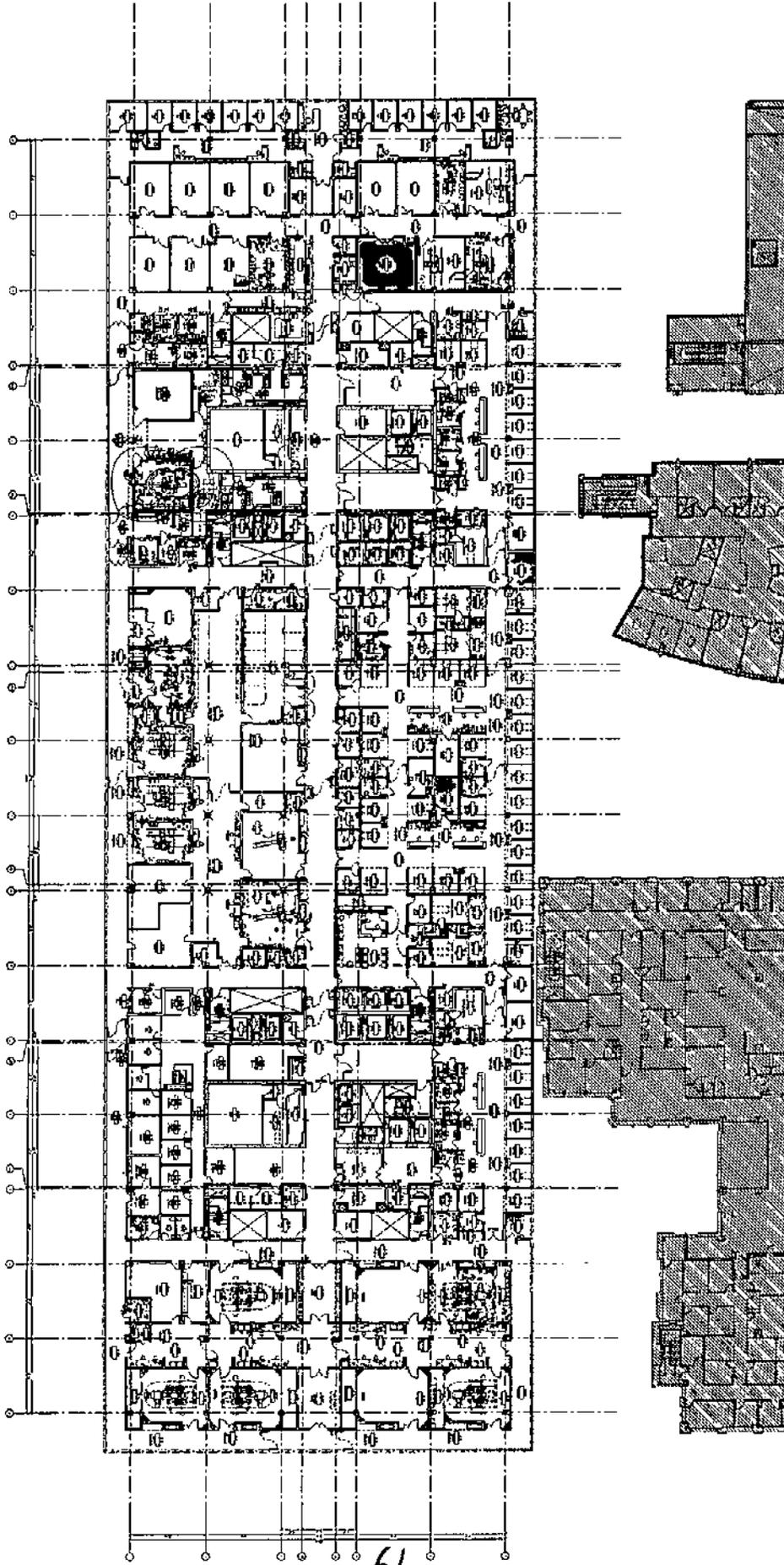
LEVEL 5 - PROCEDURE

CERTIFICATE OF NEED

OCTOBER 15, 2007

ATTACHMENT INFO - 7





61

THE UNIVERSITY OF CHICAGO MEDICAL CENTER  
NEW HOSPITAL PAVILION

CLINICAL SUPPORT

CERTIFICATE OF NEED

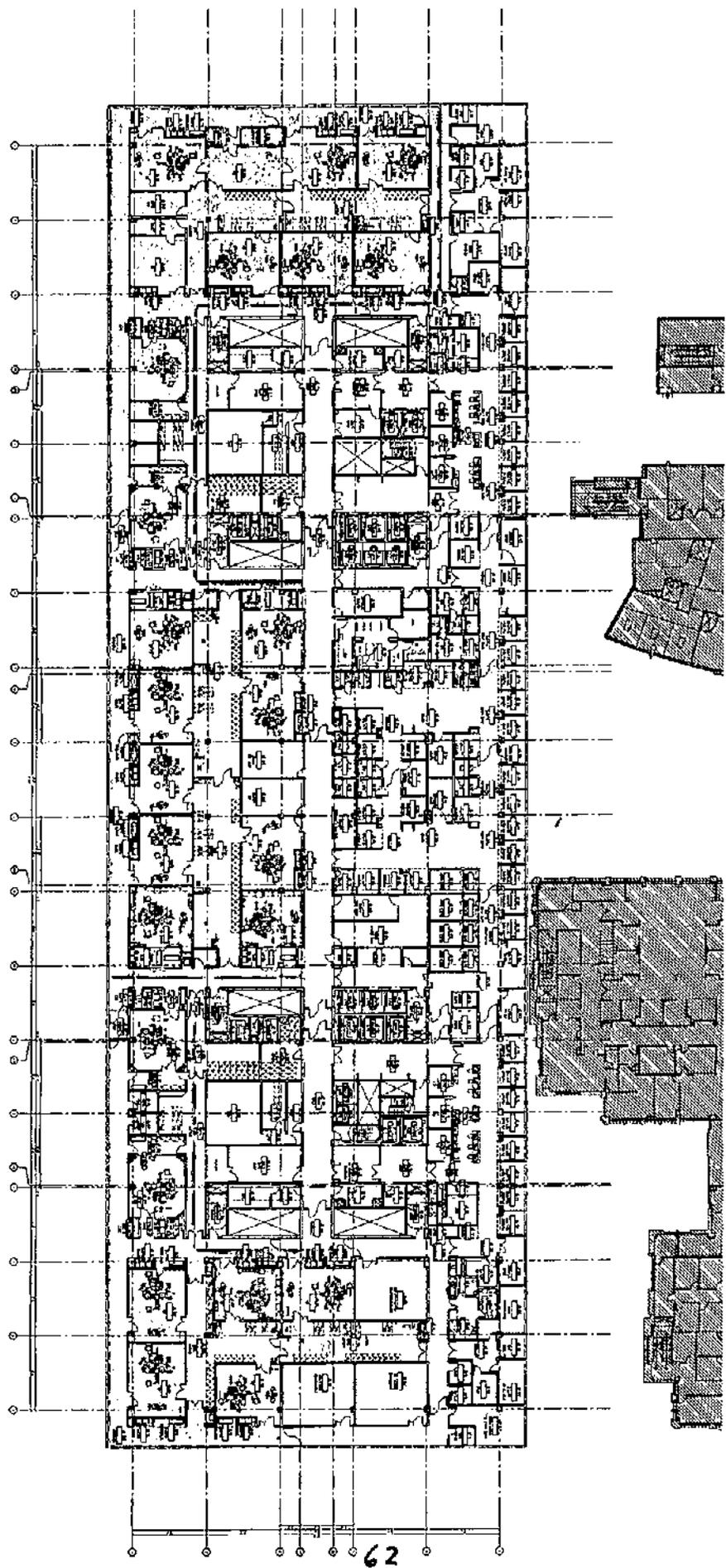
RAFAEL VIÑOXY ARCHITECTS / CANNON DESIGN

LEVEL 3 - PROCEDURE

OCTOBER 15, 2007

ATTACHMENT INFO - 7





62

THE UNIVERSITY OF CHICAGO MEDICAL CENTER  
NEW HOSPITAL PAVILION

RAFAEL VINOLY ARCHITECTS / CANNON DESIGN

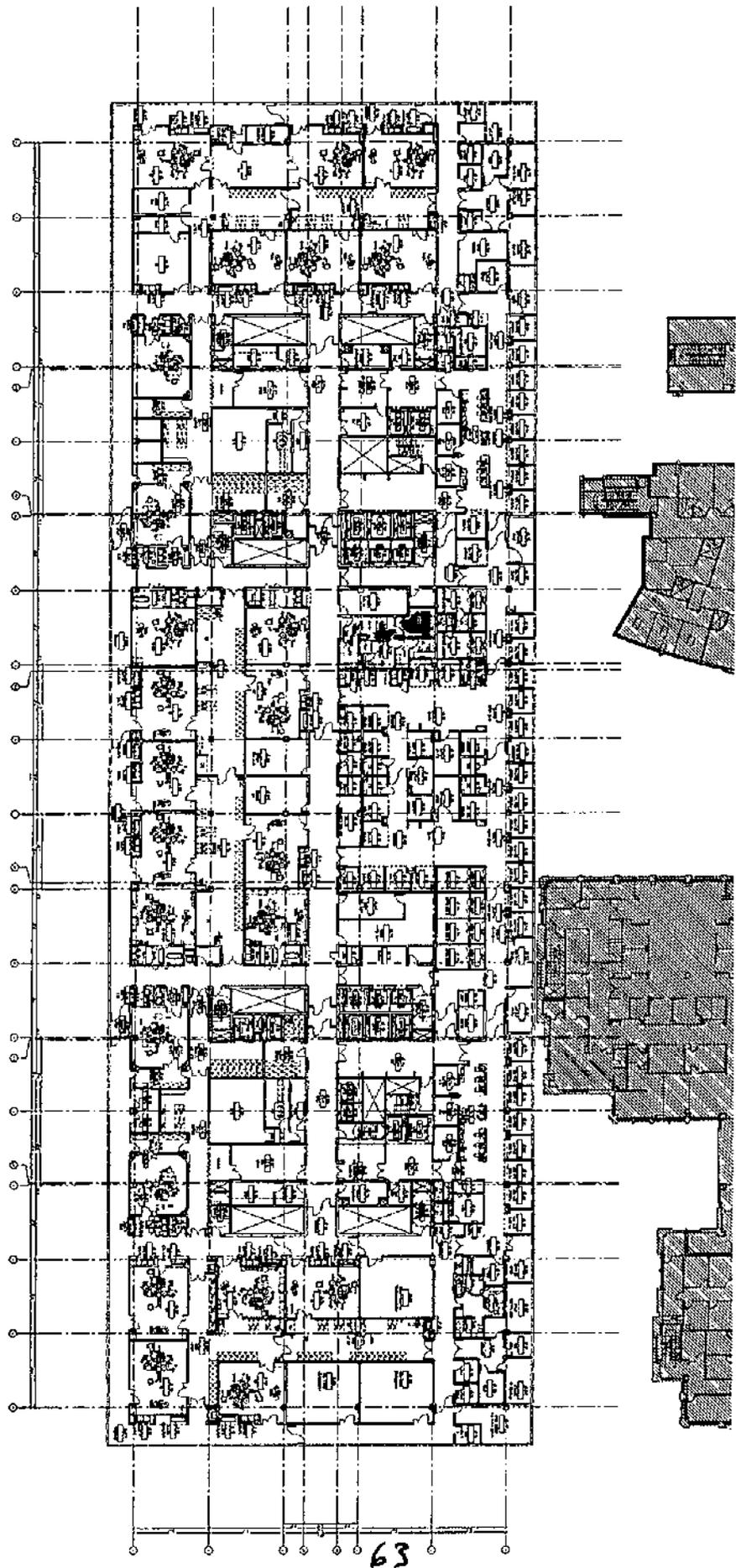
— SURGERY

LEVEL 6 - SURGERY

CERTIFICATE OF NEED

OCTOBER 15, 2007

ATTACHMENT INFO - 7



63

THE UNIVERSITY OF CHICAGO MEDICAL CENTER  
NEW HOSPITAL PAVILION

RAFAEL VINOLY ARCHITECTS / CANNON DESIGN

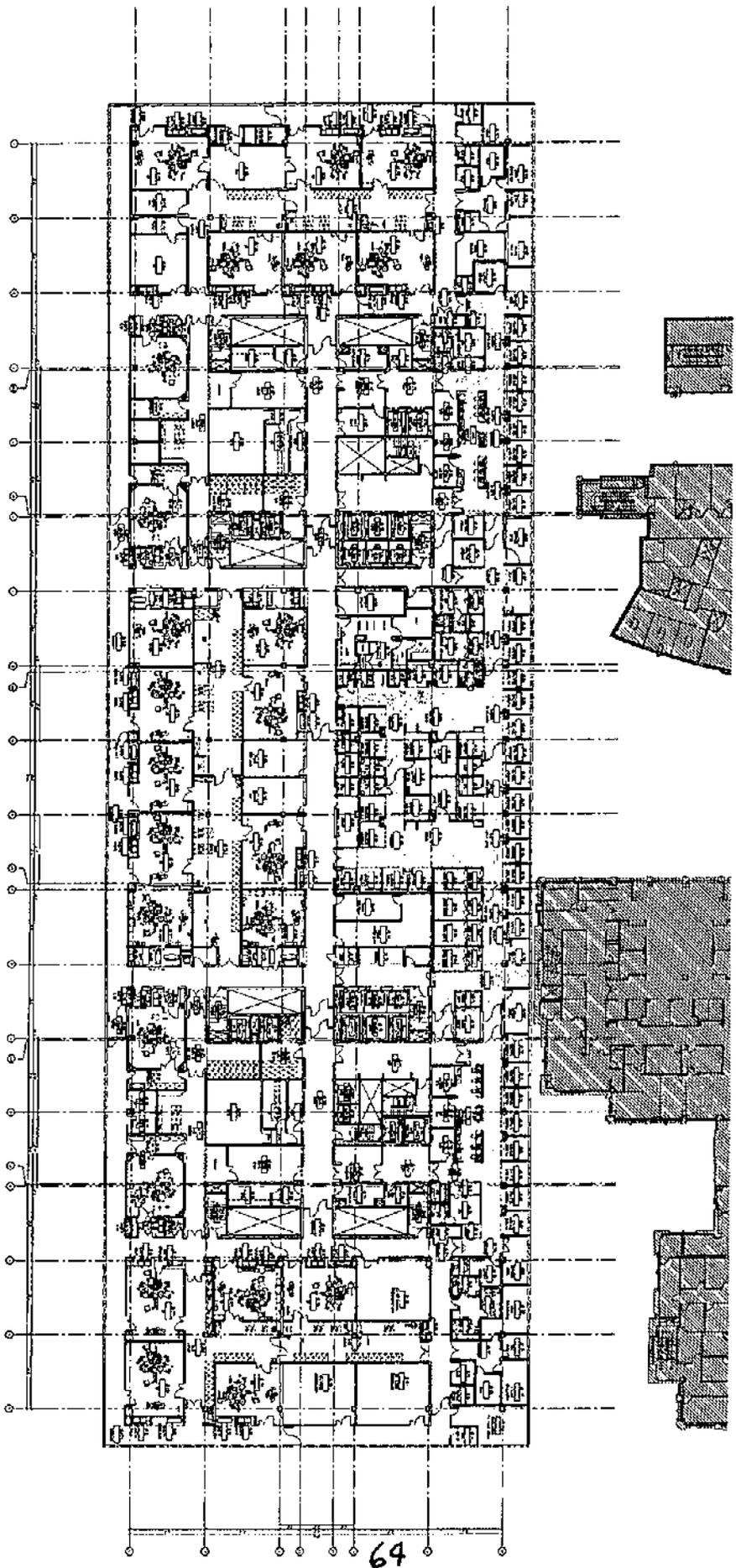
PHARMACY

LEVEL 6 - SURGERY

CERTIFICATE OF NEED

OCTOBER 16, 2007

ATTACHMENT INFO - 7



64

THE UNIVERSITY OF CHICAGO MEDICAL CENTER  
NEW HOSPITAL PAVILION

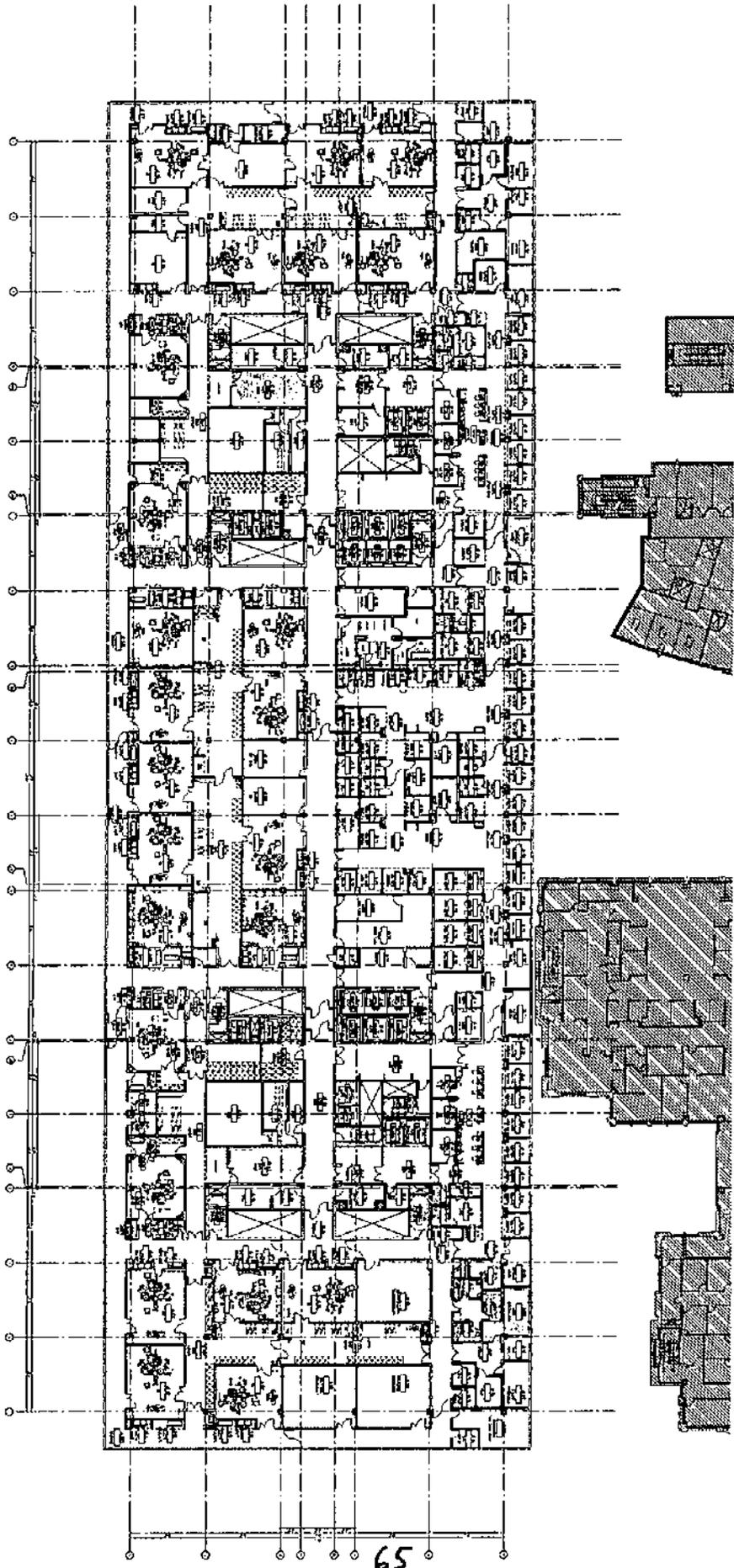
RAFAEL VIÑOLY ARCHITECTS / CANNON DESIGN

PREP RECOVERY  
LEVEL 6 - SURGERY

CERTIFICATE OF NEED

OCTOBER 15, 2007

ATTACHMENT INFO - 7



THE UNIVERSITY OF CHICAGO MEDICAL CENTER  
 NEW HOSPITAL PAVILION

RAFAEL VIÑOLY ARCHITECTS / CARRON DESIGN

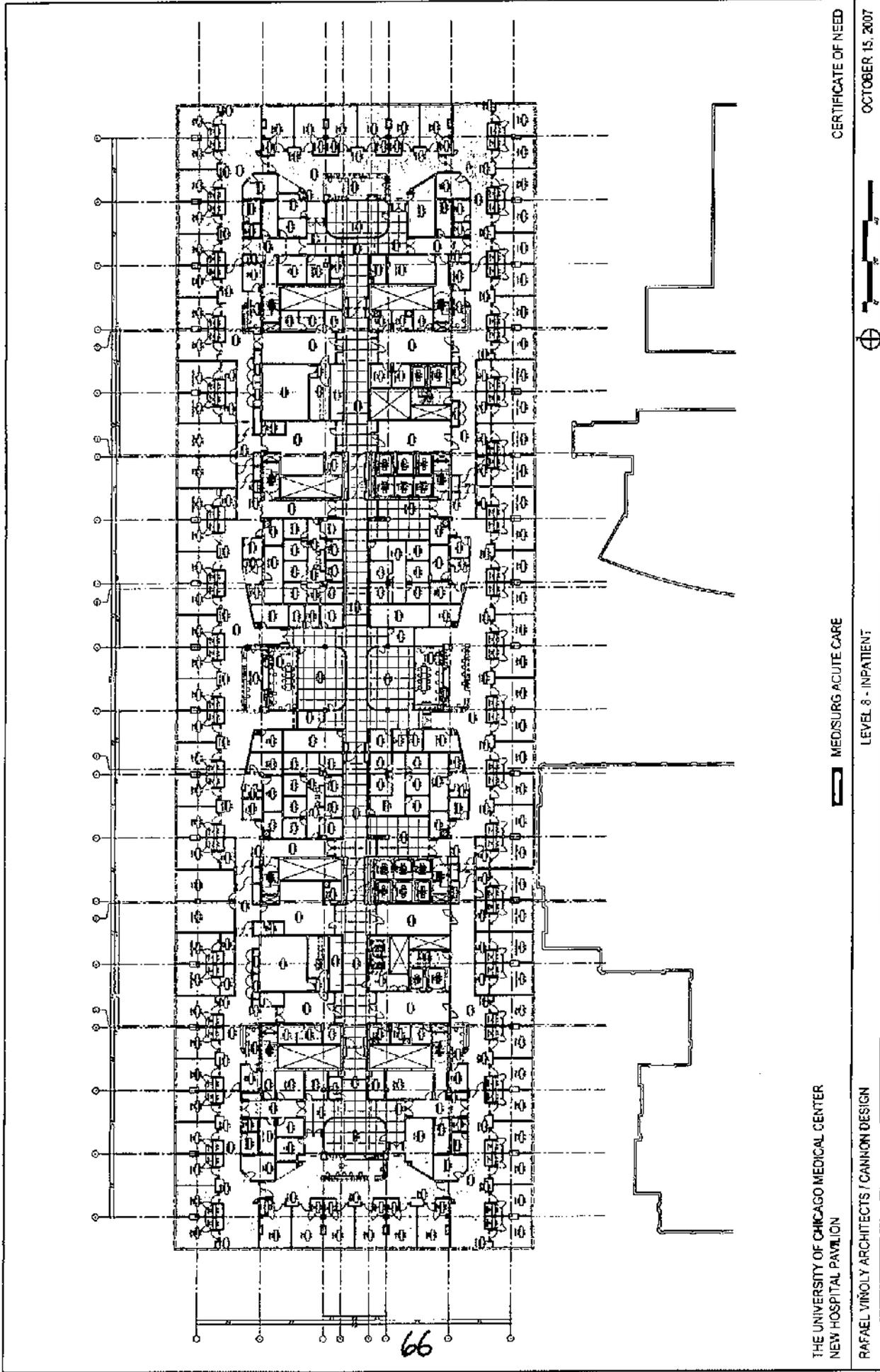
CLINICAL SUPPORT

LEVEL 6 - SURGERY

CERTIFICATE OF NEED

OCTOBER 15, 2007

ATTACHMENT INFO - 7



THE UNIVERSITY OF CHICAGO MEDICAL CENTER  
NEW HOSPITAL PAVILION

▬ MEDSURG ACUTE CARE  
▬ LEVEL 8 - INPATIENT

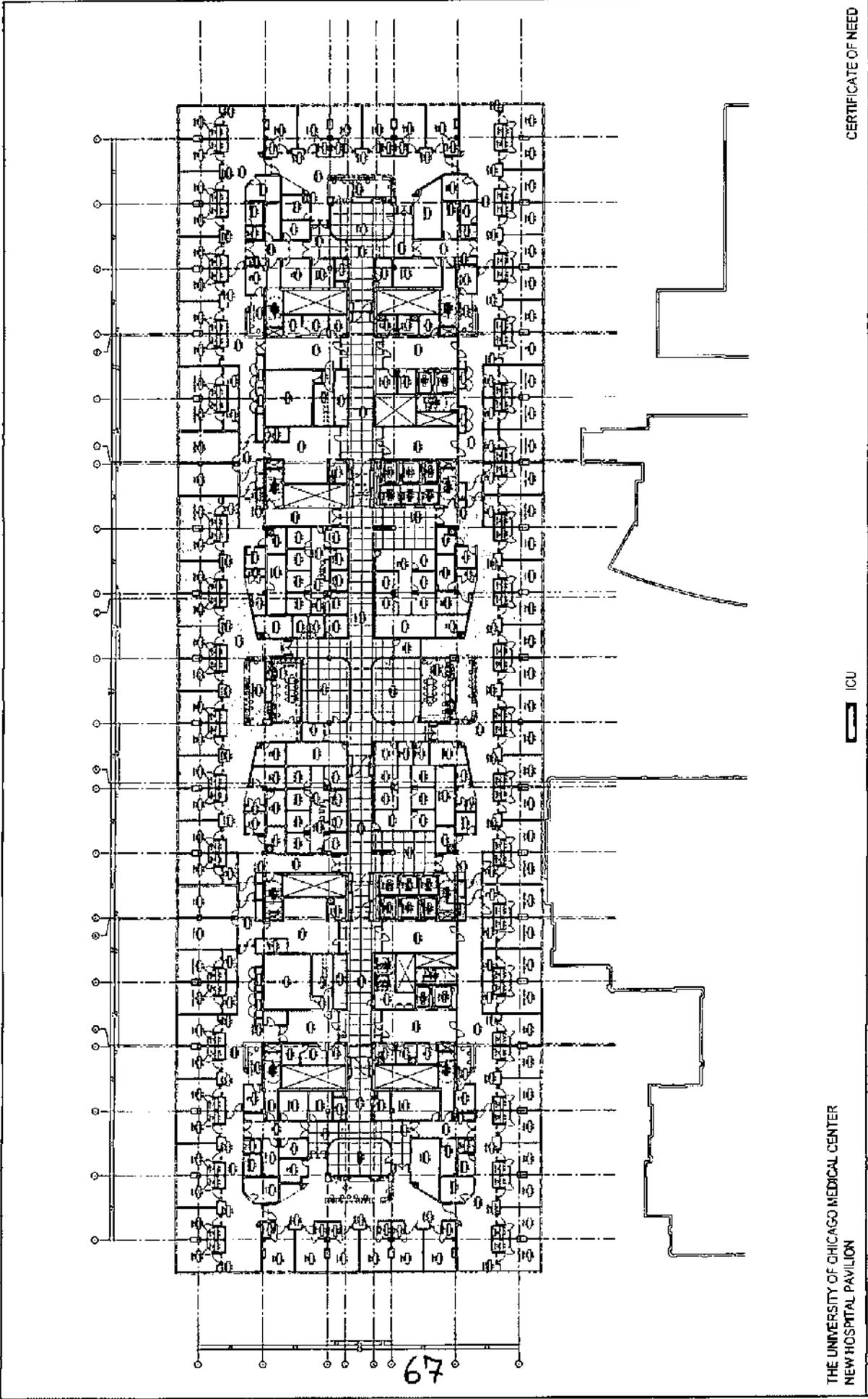
CERTIFICATE OF NEED

OCTOBER 15, 2007

ATTACHMENT INFO - 7



66



THE UNIVERSITY OF CHICAGO MEDICAL CENTER  
 NEW HOSPITAL PAVILION

RAFAEL VIÑOLY ARCHITECTS / CANNON DESIGN

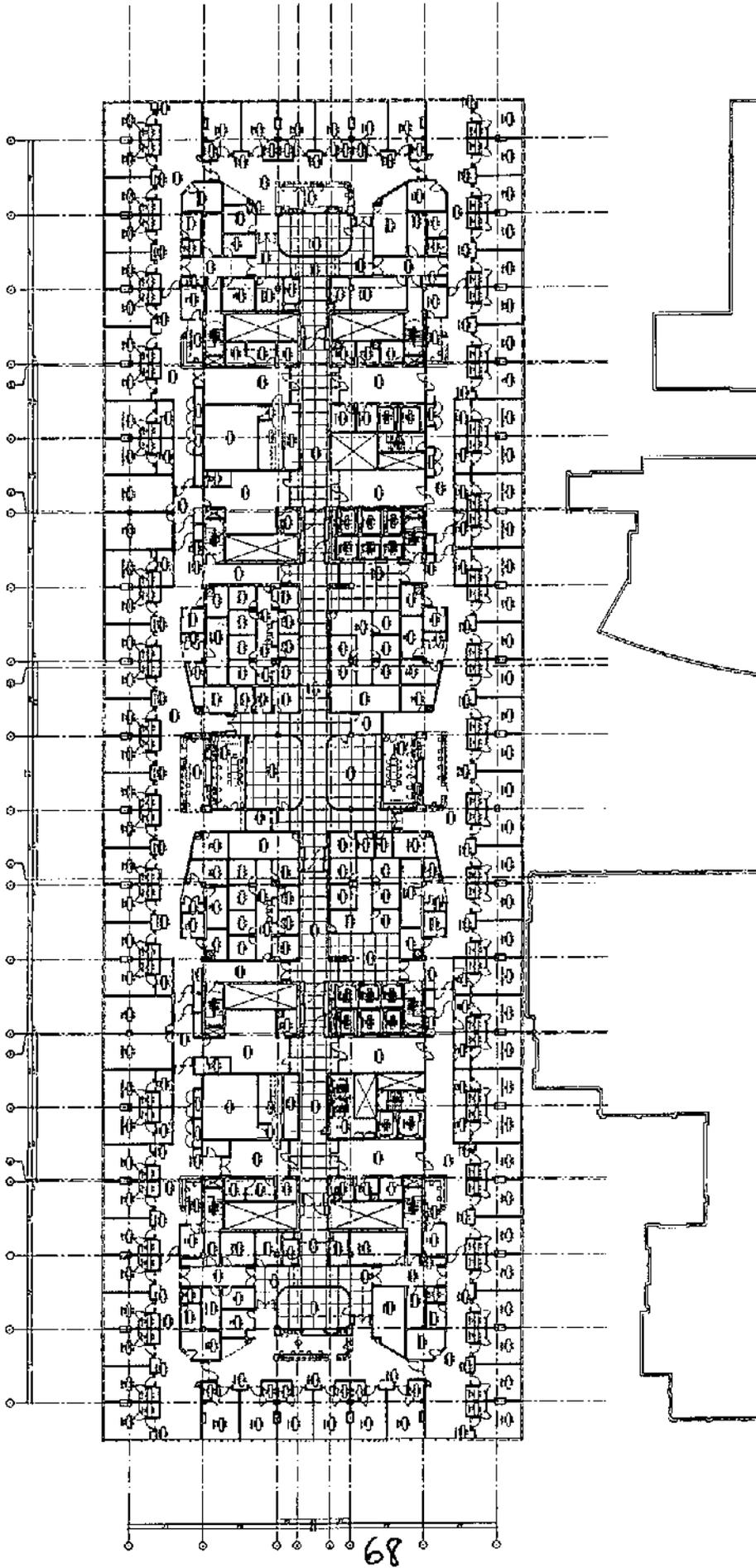
ICU

LEVEL 8 - INPATIENT

CERTIFICATE OF NEED

OCTOBER 15, 2007

ATTACHMENT INFO - 7



68

THE UNIVERSITY OF CHICAGO MEDICAL CENTER  
NEW HOSPITAL PAVILION

RAFAEL WINOLY ARCHITECTS / CANNON DESIGN

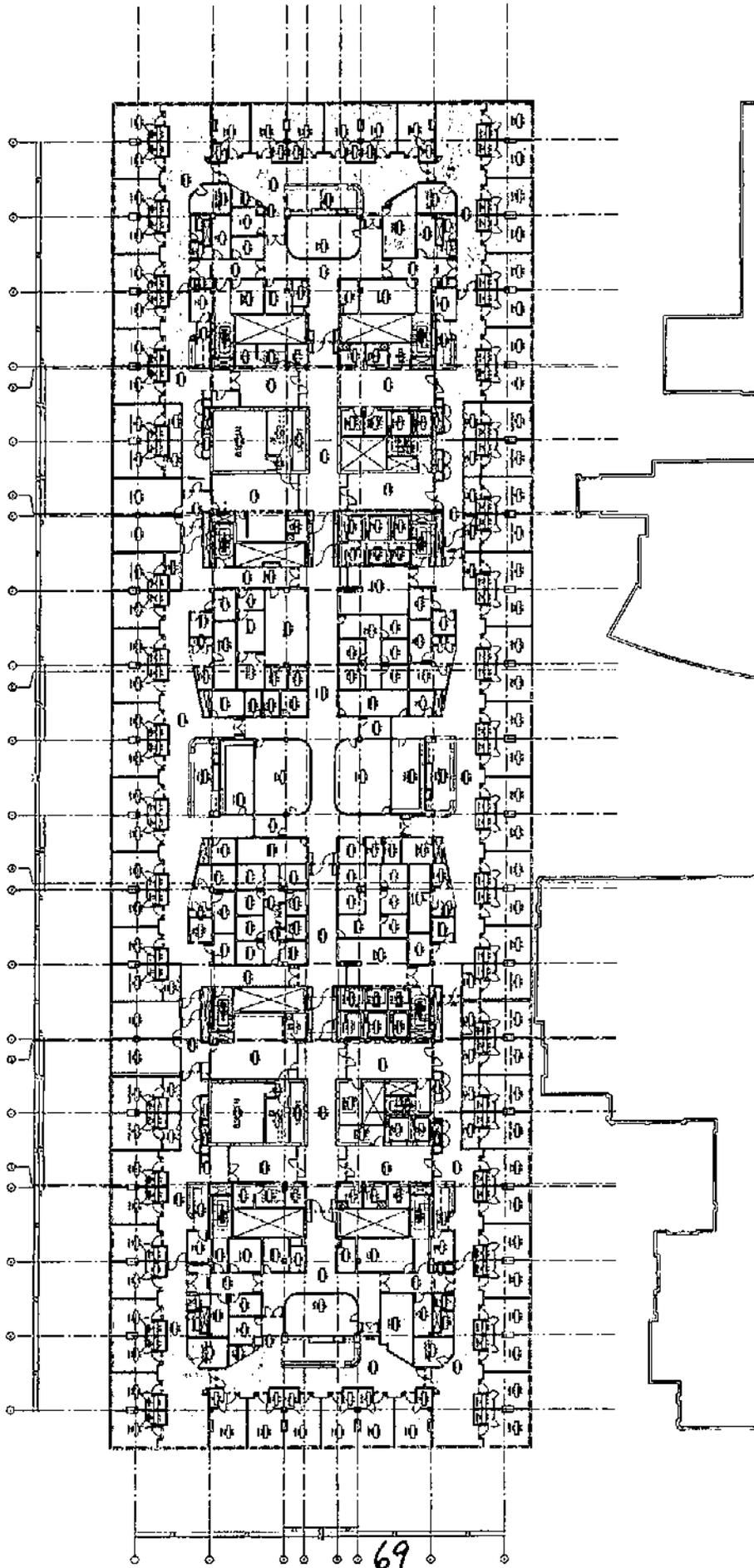
CLINICAL SUPPORT

LEVEL 8 - INPATIENT

CERTIFICATE OF NEED

OCTOBER 16, 2007

ATTACHMENT INFO - 7



69

THE UNIVERSITY OF CHICAGO MEDICAL CENTER  
NEW HOSPITAL PAVILION

RAFAEL VIÑOLY ARCHITECTS / CANNON DESIGN

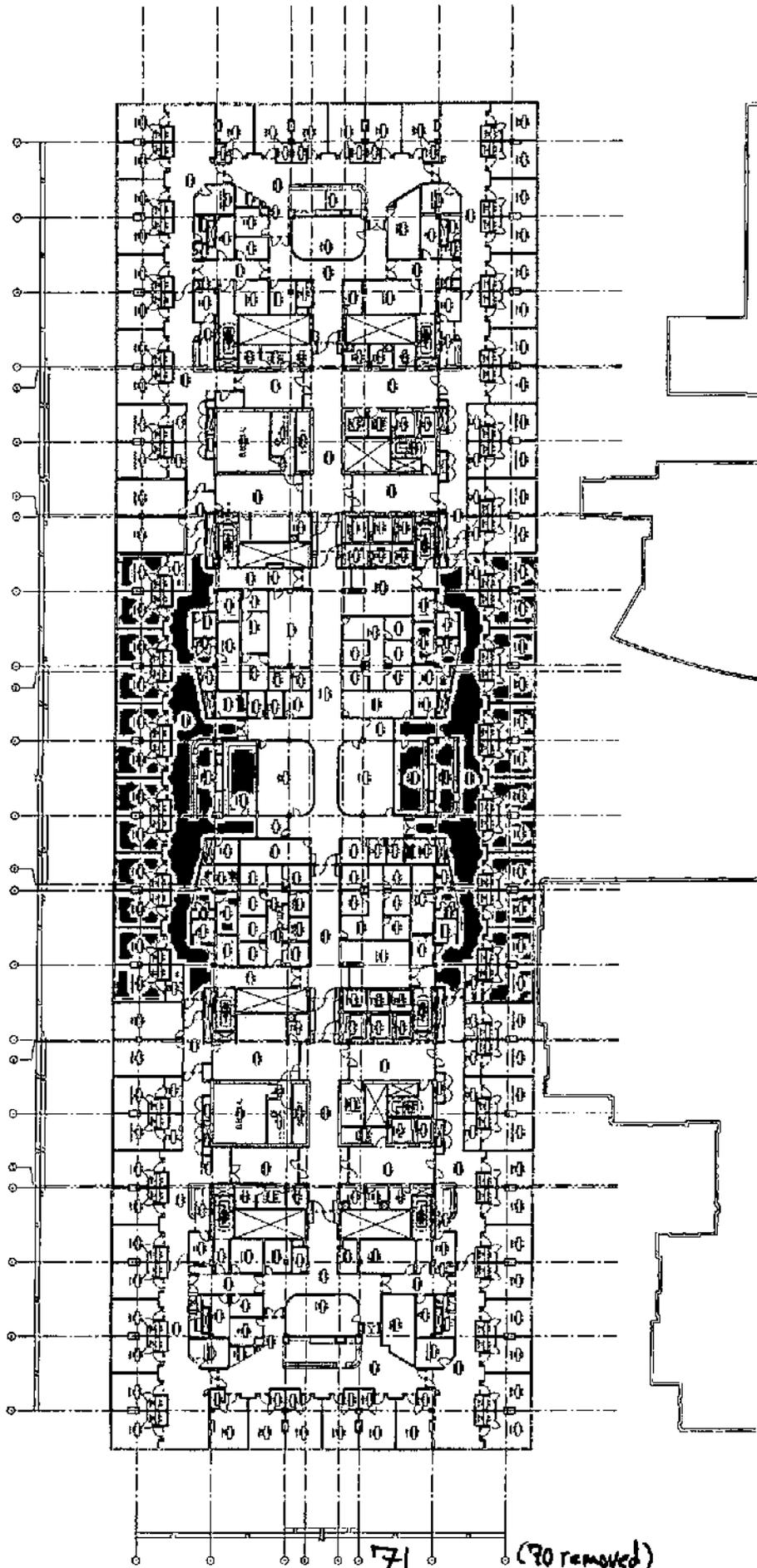
— MEDSURG ACUTE CARE

LEVEL 9 - INPATIENT

CERTIFICATE OF NEED

OCTOBER 15, 2007

ATTACHMENT INFO - 7



71 (70 removed)

THE UNIVERSITY OF CHICAGO MEDICAL CENTER  
NEW HOSPITAL PAVILION

RAFAEL VINOLY ARCHITECTS / CANNON DESIGN

ICU

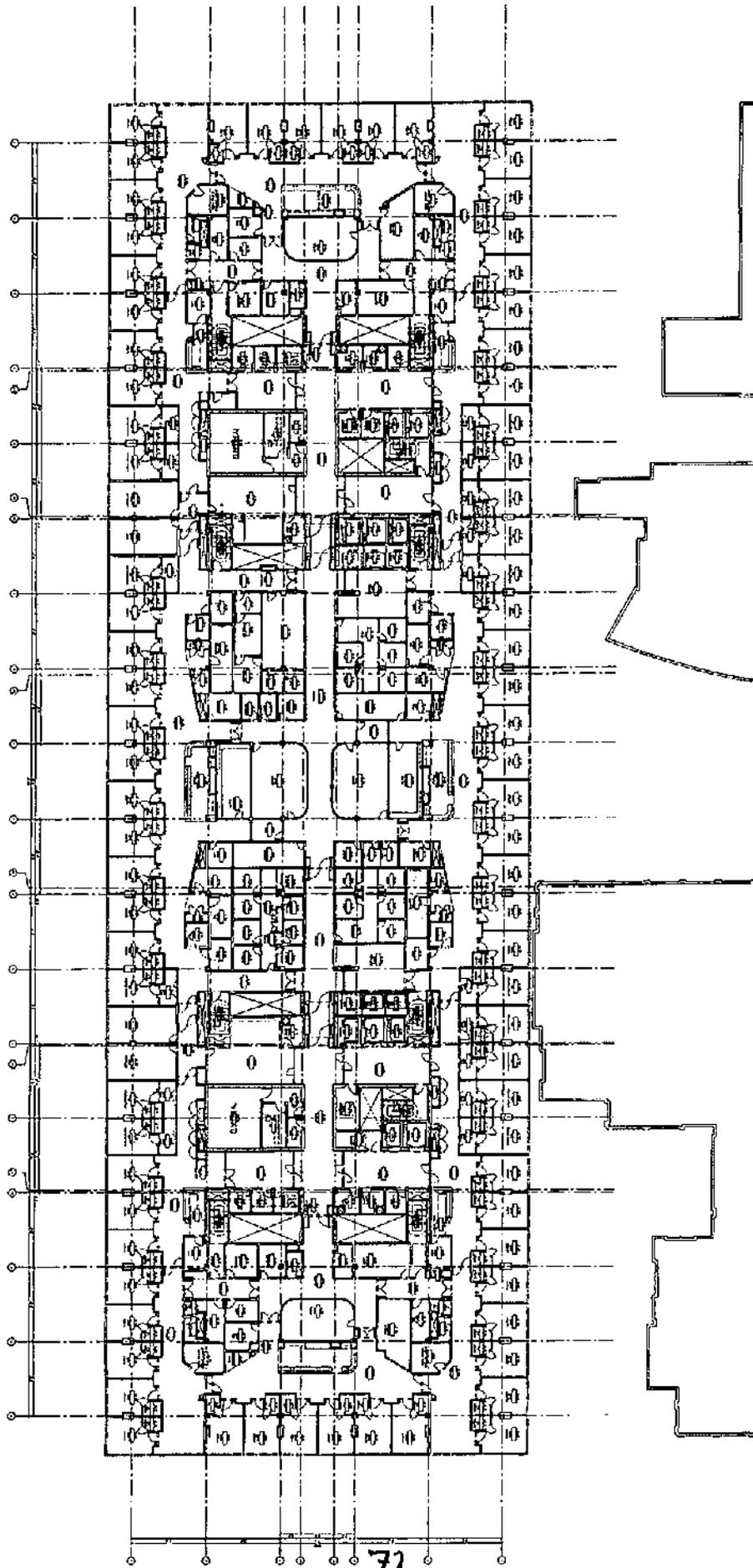
LEVEL 9 - INPATIENT



CERTIFICATE OF NEED

OCTOBER 15, 2007

ATTACHMENT INFO - 7



THE UNIVERSITY OF CHICAGO MEDICAL CENTER  
NEW HOSPITAL PAVILION

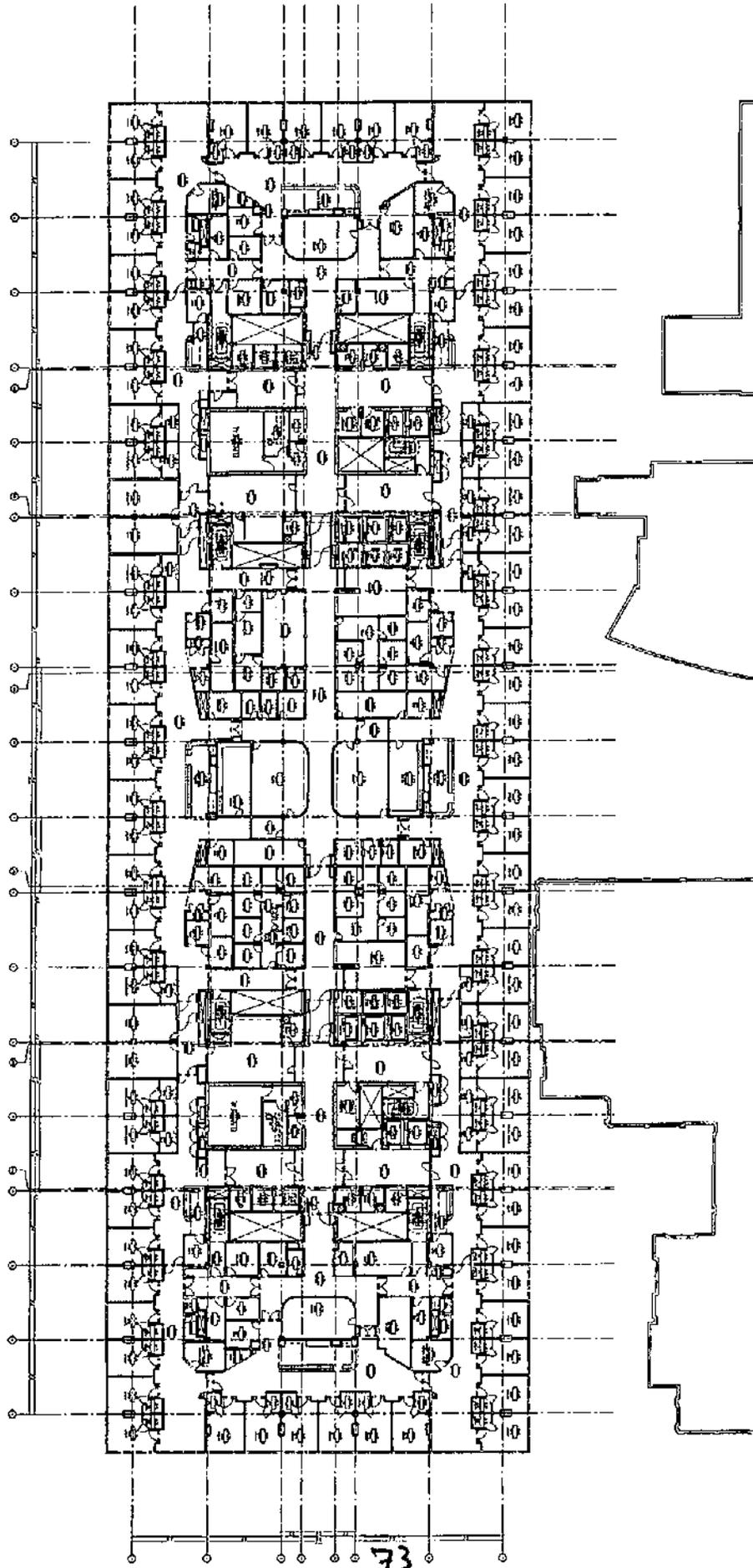
CLINICAL SUPPORT  
LEVEL 9 - INPATIENT

CERTIFICATE OF NEED

OCTOBER 15, 2007

SCALE = 1" = 20'

ATTACHMENT INFO - 7



73

THE UNIVERSITY OF CHICAGO MEDICAL CENTER  
NEW HOSPITAL PAVILION

RAFAEL VINOY ARCHITECTS / CANNON DESIGN

RESPIRATORY THERAPY

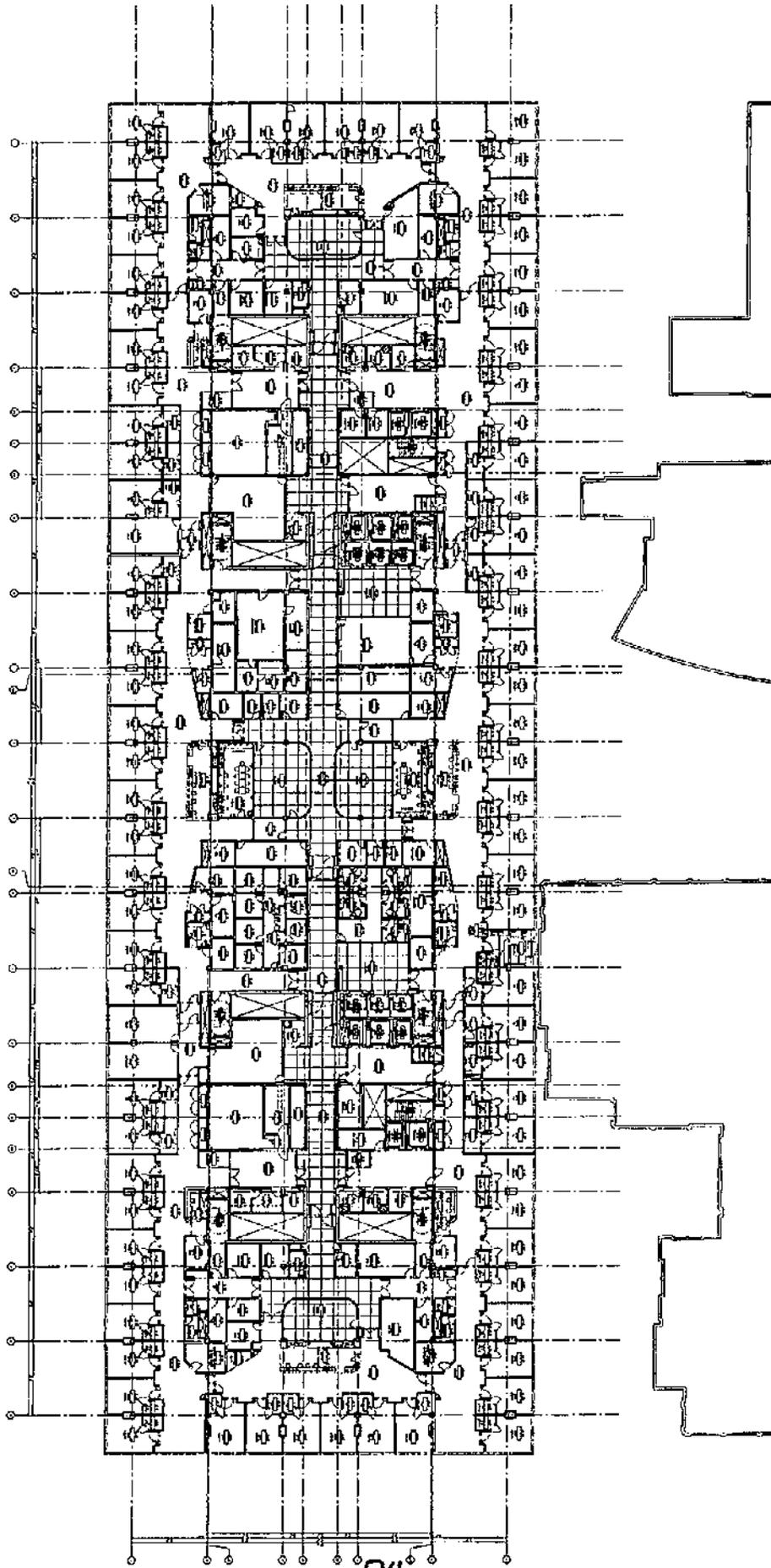
LEVEL 9 - INPATIENT

CERTIFICATE OF NEED

OCTOBER 15, 2007

ATTACHMENT INFO - 7





THE UNIVERSITY OF CHICAGO MEDICAL CENTER  
 NEW HOSPITAL PAVILION

RAFAEL VINOBY ARCHITECTS / CANNON DESIGN

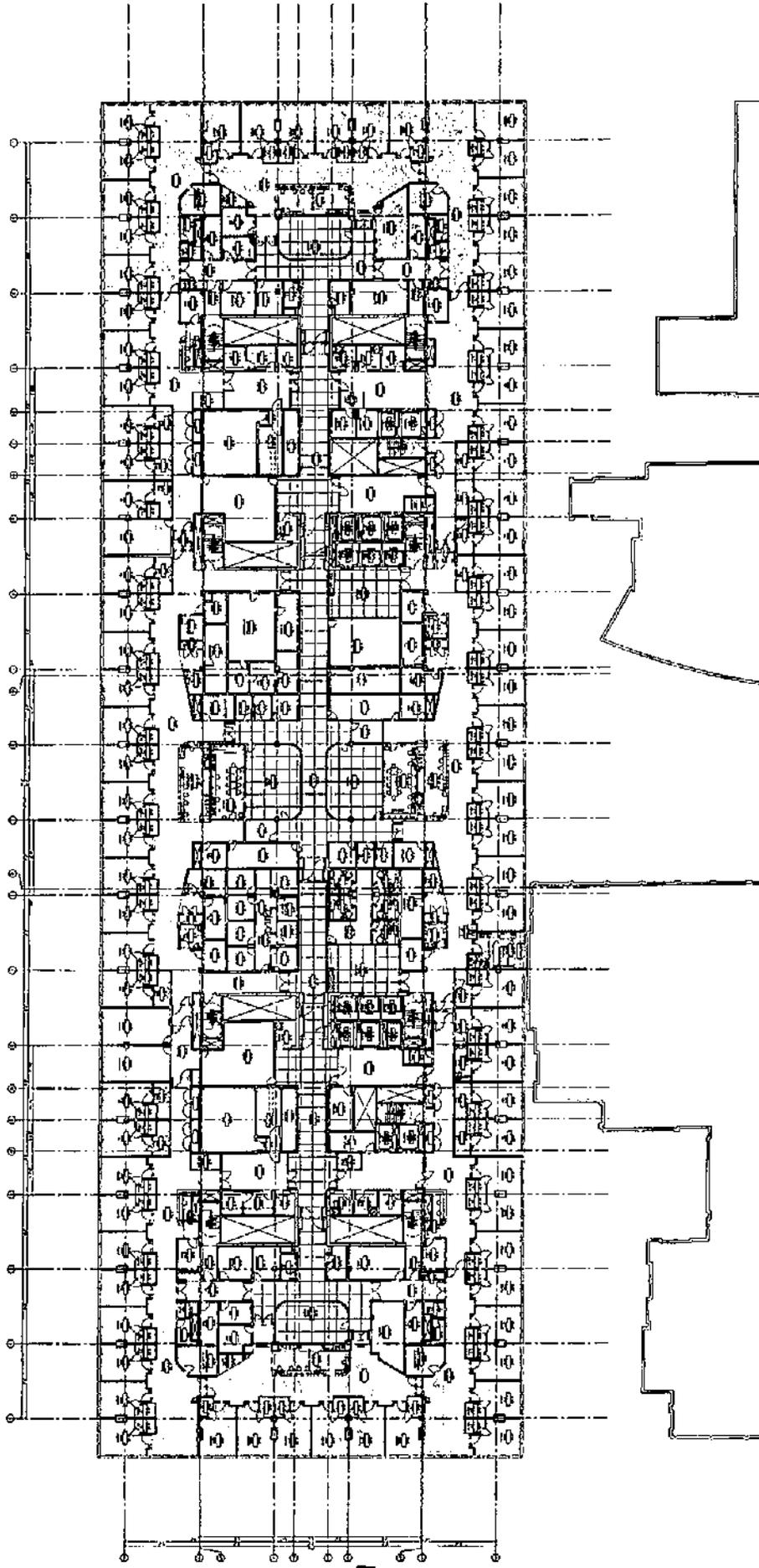
PHARMACY

LEVEL 10 - INPATIENT

CERTIFICATE OF NEED

OCTOBER 15, 2007

ATTACHMENT INFO - 7



75

THE UNIVERSITY OF CHICAGO MEDICAL CENTER  
NEW HOSPITAL PAVILION

RAFAEL VINOLY ARCHITECTS / CANNON DESIGN

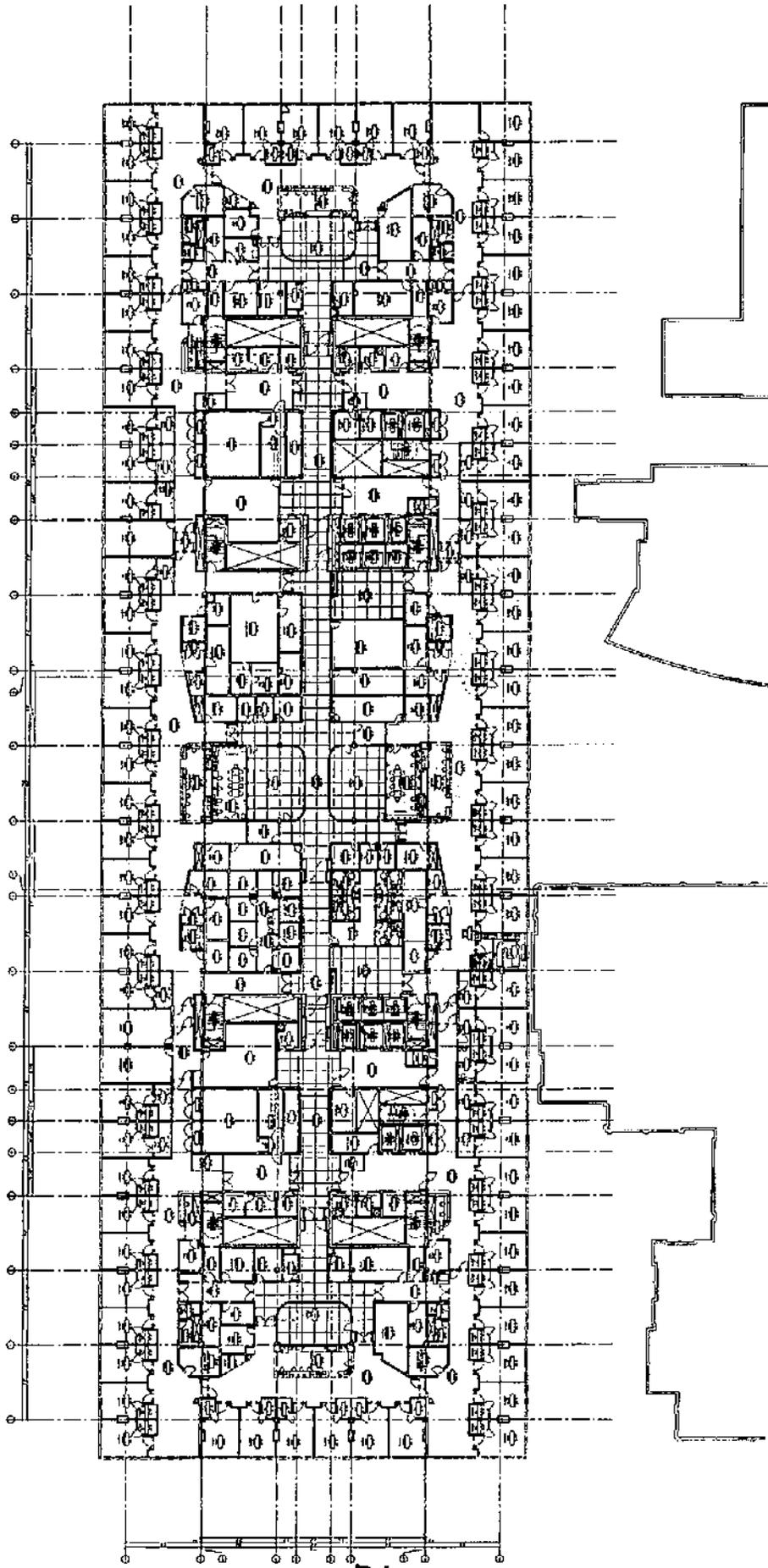
— MED/SURG ACUTE CARE

LEVEL 10 - INPATIENT

CERTIFICATE OF NEED

OCTOBER 15, 2007

ATTACHMENT INFO - 7



76

THE UNIVERSITY OF CHICAGO MEDICAL CENTER  
NEW HOSPITAL PAVILION

RAFAEL VINOLY ARCHITECTS / CANNON DESIGN

ICU

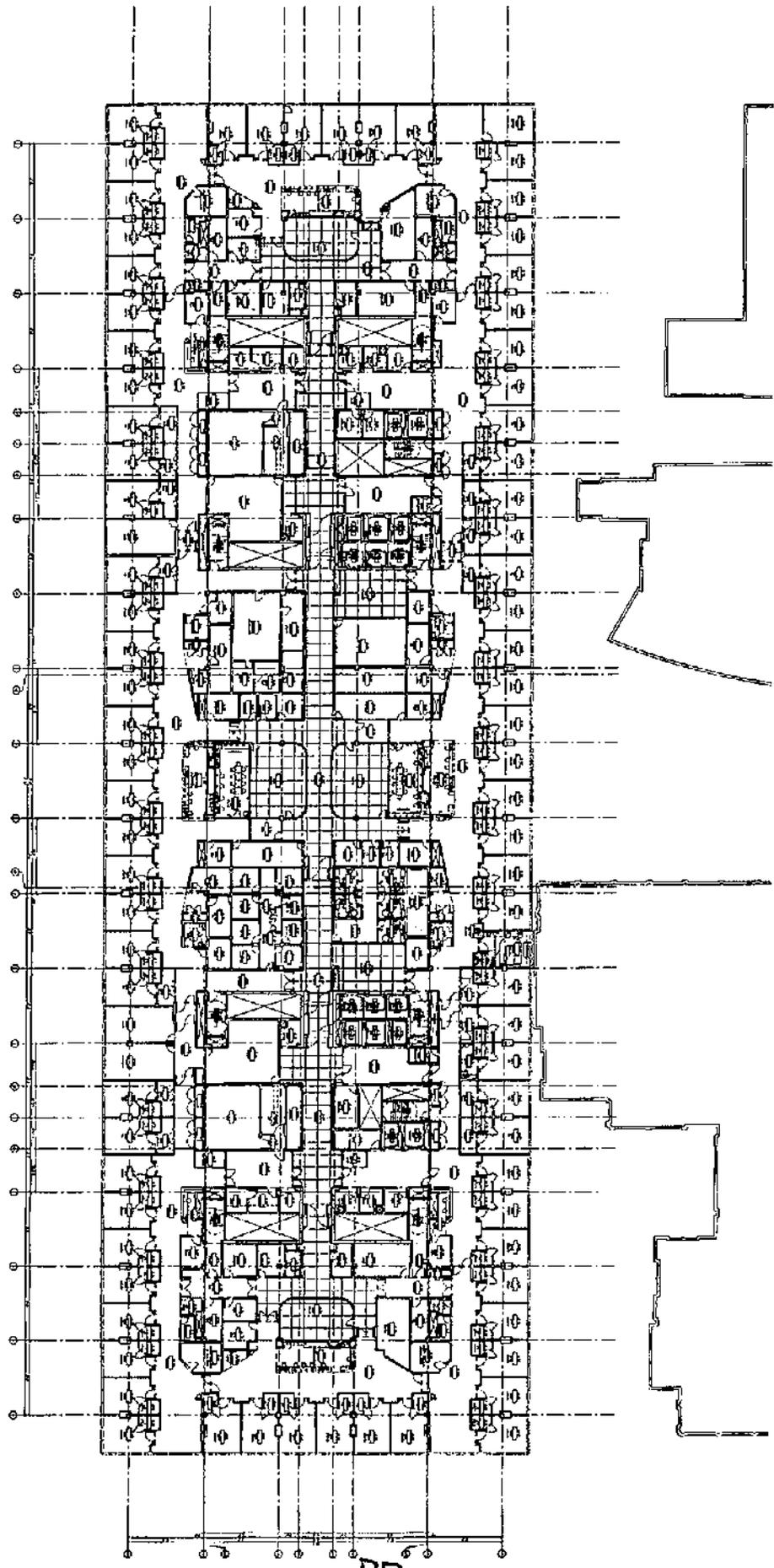


LEVEL 10 - INPATIENT

CERTIFICATE OF NEED

OCTOBER 15, 2007

ATTACHMENT INFO - 7



THE UNIVERSITY OF CHICAGO MEDICAL CENTER  
 NEW HOSPITAL PAVILION

RAFAEL VIÑOLY ARCHITECTS / CANNON DESIGN

CLINICAL SUPPORT  
 LEVEL 10 - INPATIENT

CERTIFICATE OF NEED

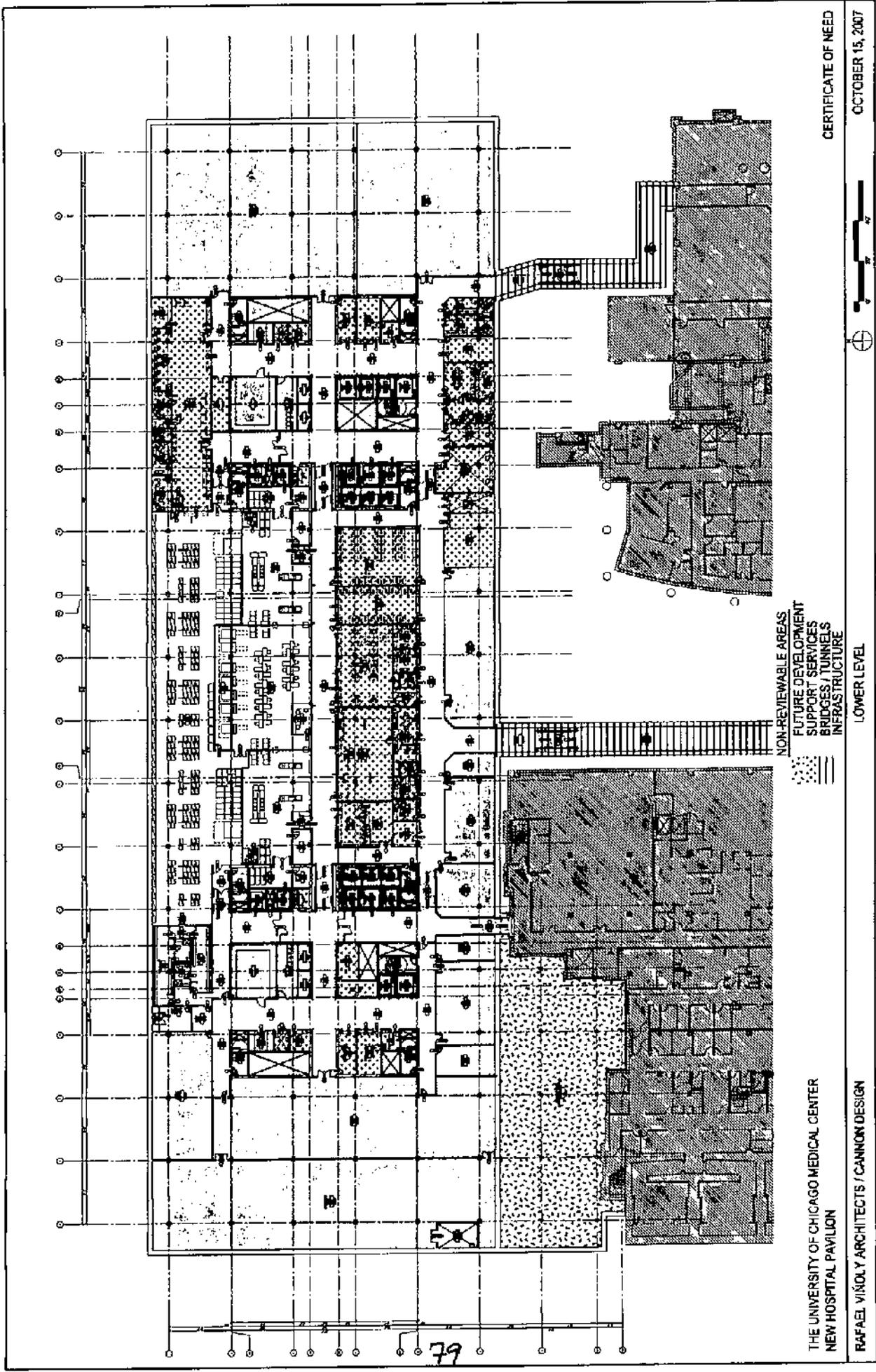
OCTOBER 15, 2007

ATTACHMENT INFO - 7

77

**NON-REVIEWABLE  
DEPARTMENTS**

**(AREA SHADED)**



CERTIFICATE OF NEED

OCTOBER 15, 2007

ATTACHMENT INFO - 7

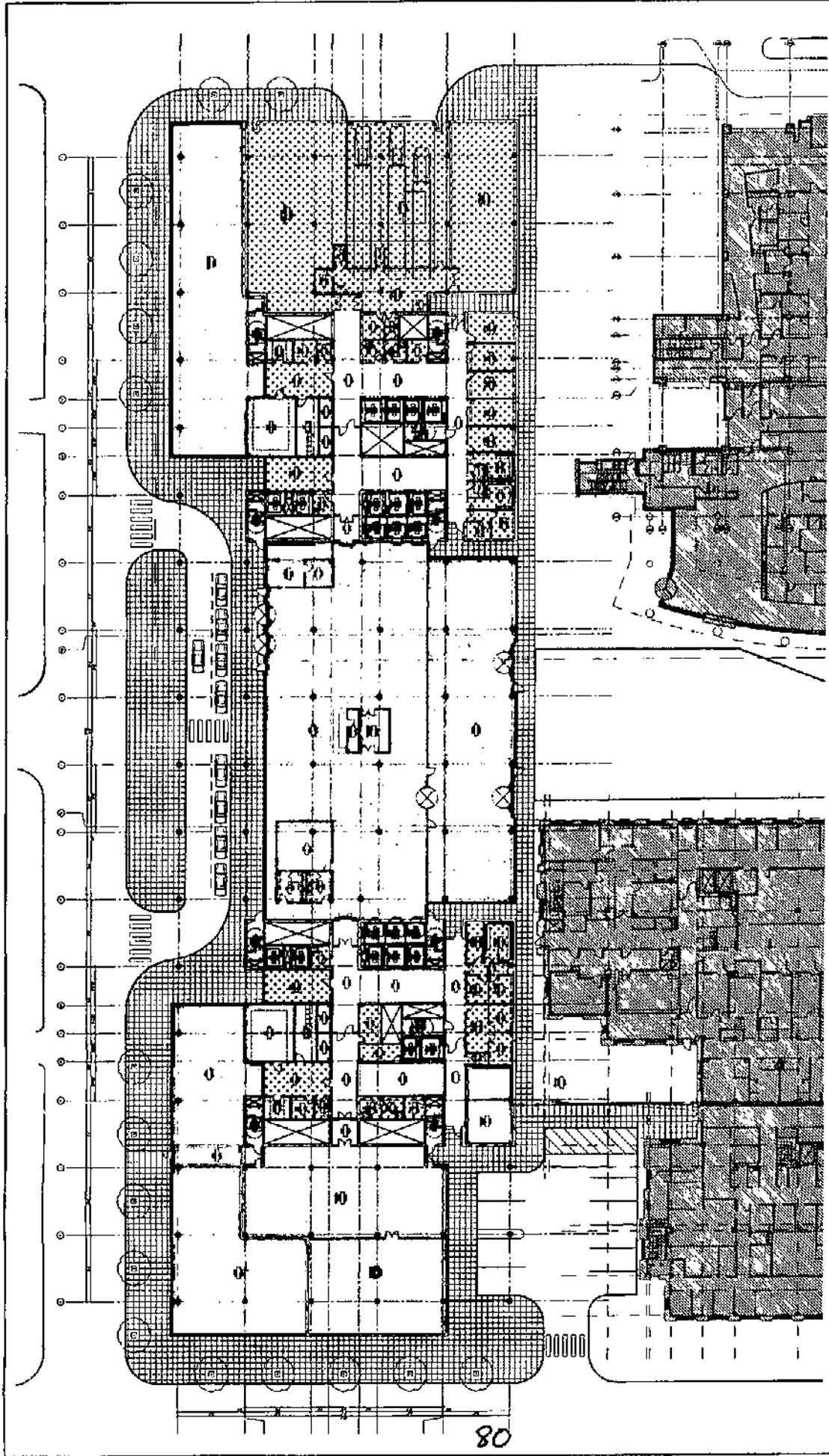
NON-REVIEWABLE AREAS  
 FUTURE DEVELOPMENT  
 SUPPORT SERVICES  
 BRIDGES / TUNNELS  
 INFRASTRUCTURE

LOWER LEVEL

THE UNIVERSITY OF CHICAGO MEDICAL CENTER  
 NEW HOSPITAL PAVILION

RAFAEL VIÑOLY ARCHITECTS / CANNON DESIGN

79



NON-REVIEWABLE AREAS  
 FAMILY AND STAFF SUPPORT  
 SUPPORT SERVICES  
 INFRASTRUCTURE

LEVEL 1 - LOBBY LEVEL WITH MARYLAND AVE. CLOSED

THE UNIVERSITY OF CHICAGO MEDICAL CENTER  
 NEW HOSPITAL PAVILION

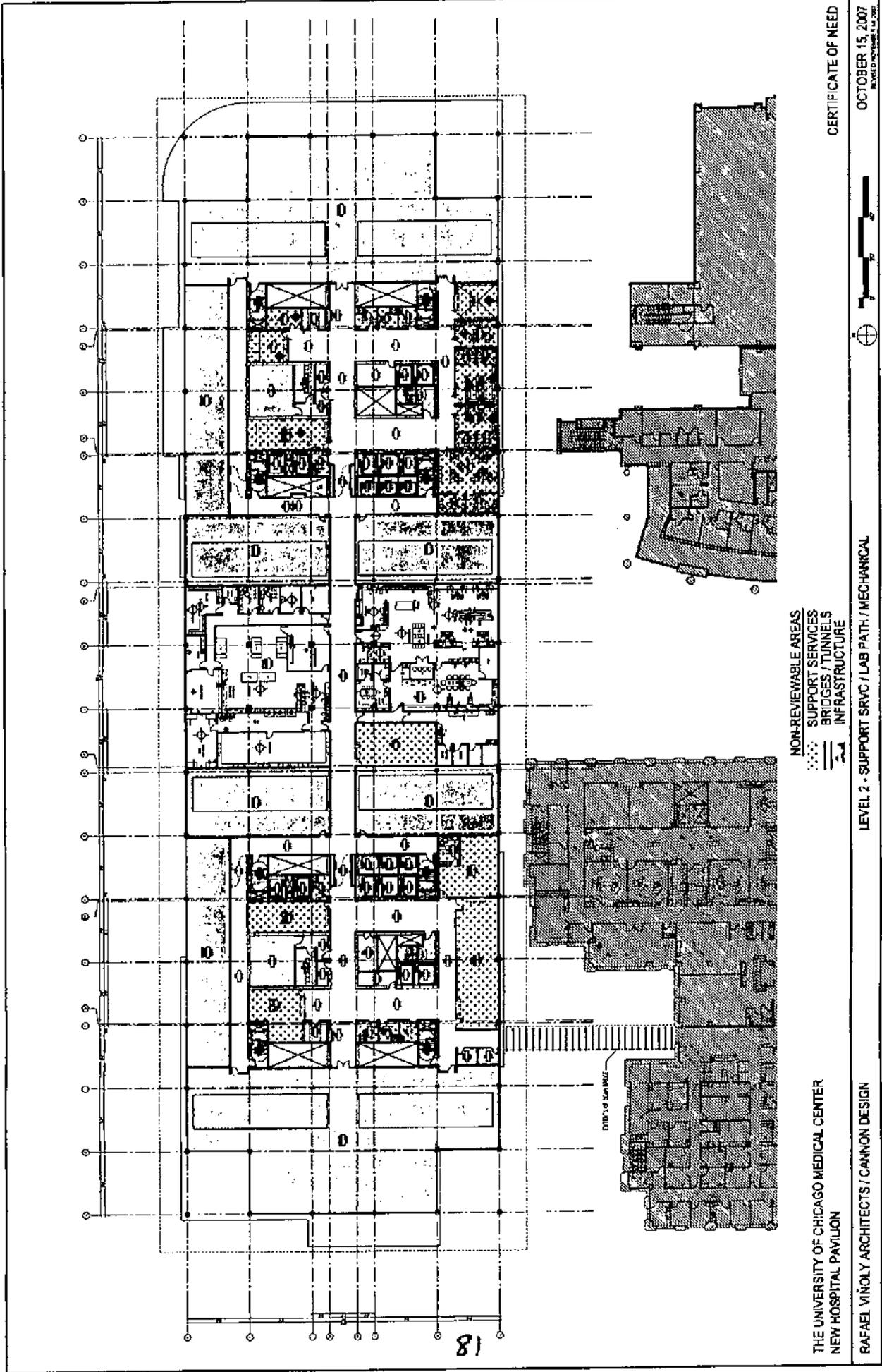
RAFAEL VIÑOLY ARCHITECTS / CANNON DESIGN

CERTIFICATE OF NEED

OCTOBER 19, 2007

ATTACHMENT INFO - 7

80



- NON-REVIEWABLE AREAS
- SUPPORT SERVICES
- BRIDGES / TUNNELS
- INFRASTRUCTURE

CERTIFICATE OF NEED

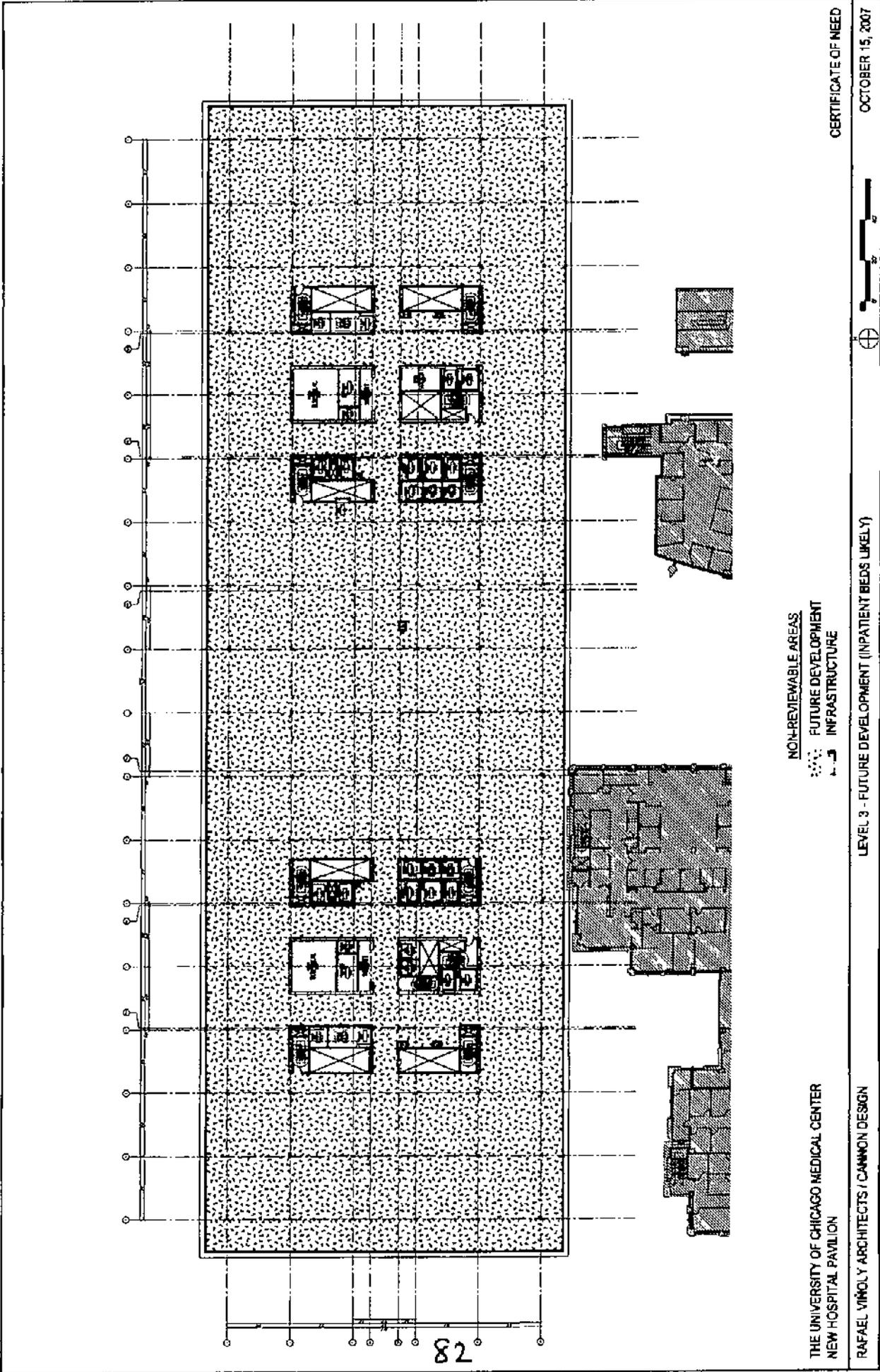
OCTOBER 15, 2007  
REVISED 10/15/07

ATTACHMENT INFO - 7

LEVEL 2 - SUPPORT SRVC / LAB PATH / MECHANICAL

THE UNIVERSITY OF CHICAGO MEDICAL CENTER  
NEW HOSPITAL PAVILION

RAFAEL VIÑOLY ARCHITECTS / CANNON DESIGN



NON-REVIEWABLE AREAS  
 FUTURE DEVELOPMENT  
 INFRASTRUCTURE

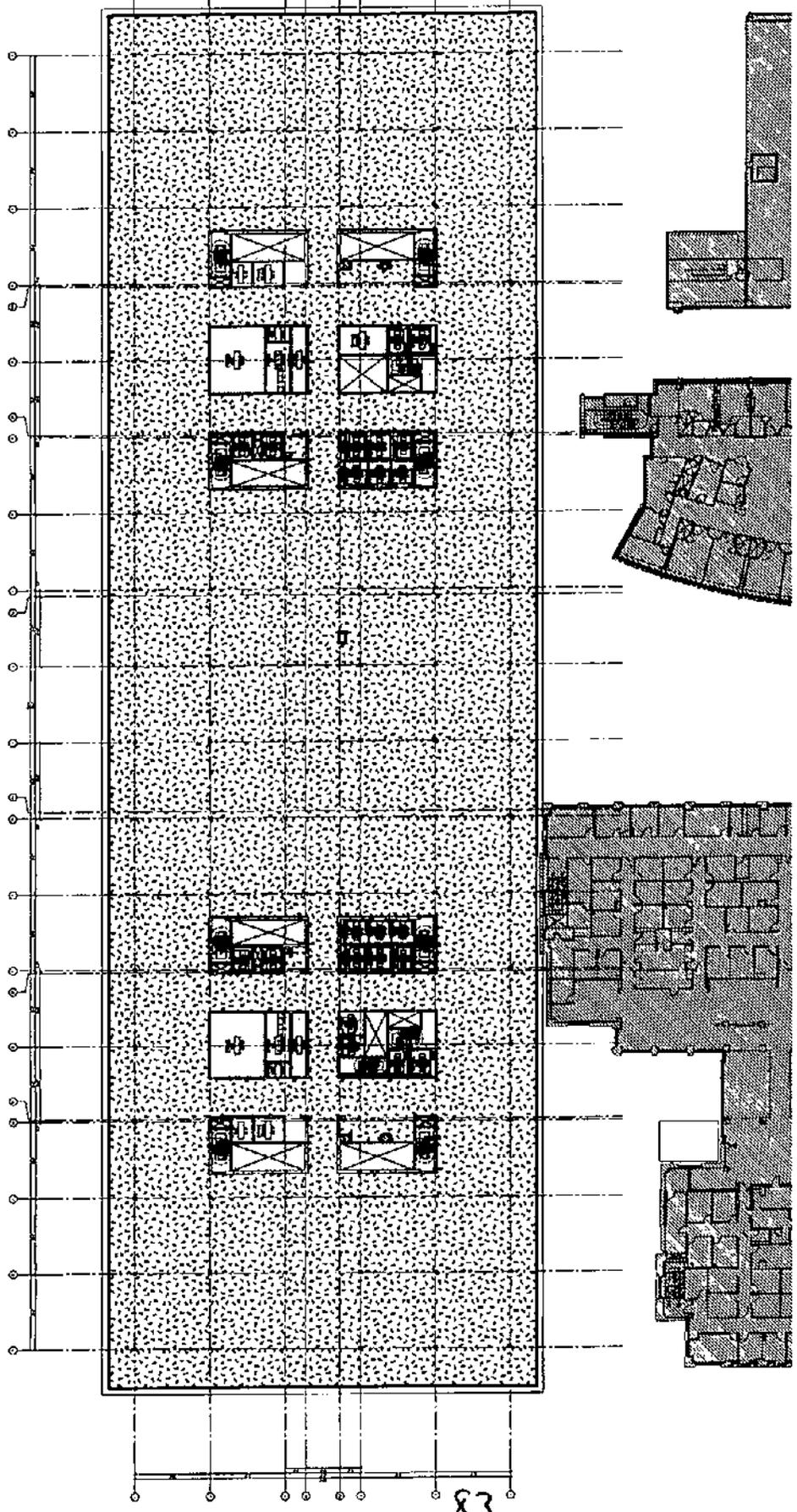
THE UNIVERSITY OF CHICAGO MEDICAL CENTER  
 NEW HOSPITAL PAVILION  
 RAFAEL VIÑOLY ARCHITECTS / CANNON DESIGN

LEVEL 3 - FUTURE DEVELOPMENT (INPATIENT BEDS LEVEL)

CERTIFICATE OF NEED

OCTOBER 15, 2007

ATTACHMENT INFO - 7



NON-REVIEWABLE AREAS  
 ■■■■ FUTURE DEVELOPMENT  
 ——— INFRASTRUCTURE

THE UNIVERSITY OF CHICAGO MEDICAL CENTER  
 NEW HOSPITAL PAVILION

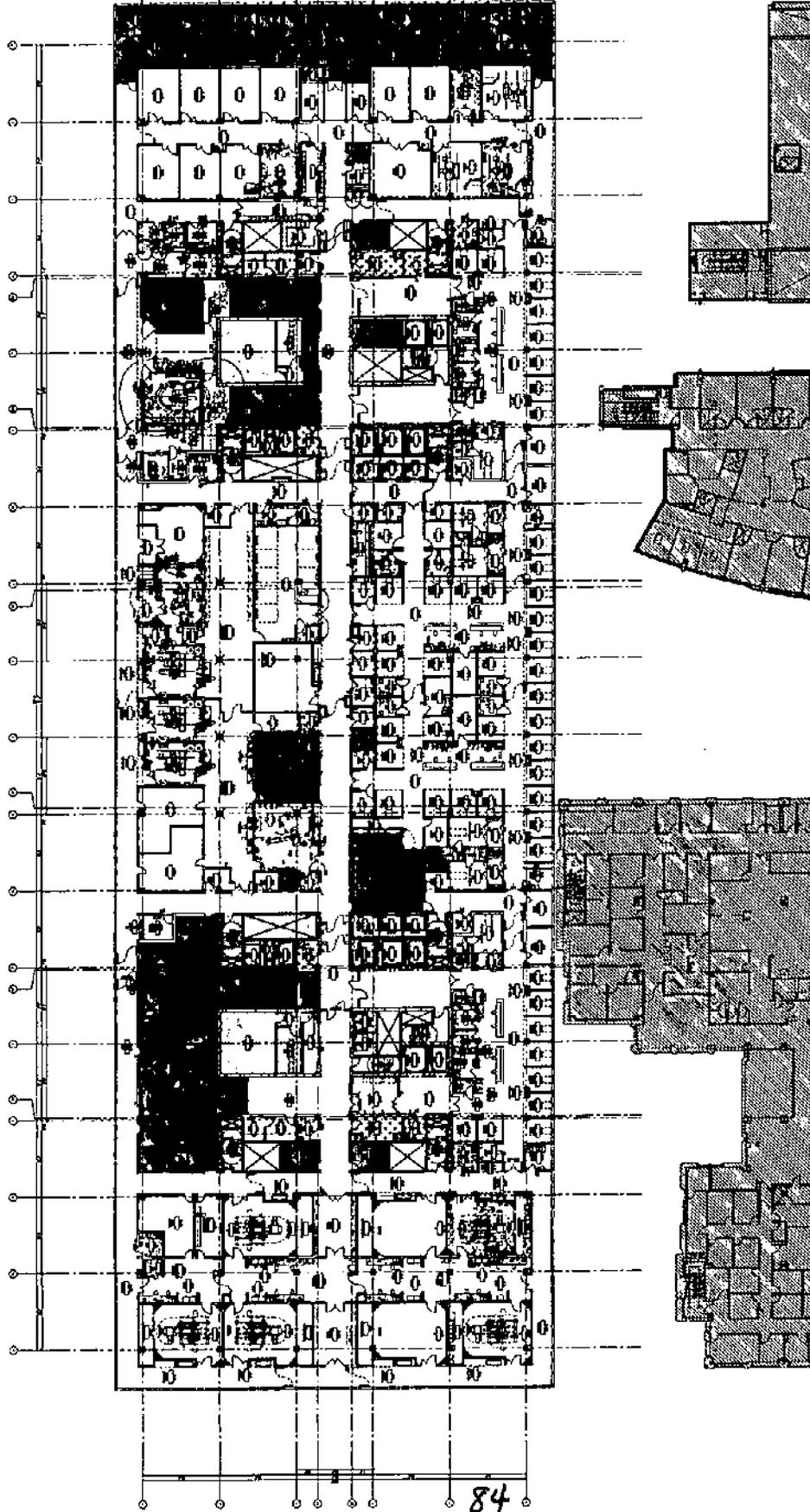
RAFAEL VIÑOLY ARCHITECTS / CANNON DESIGN

LEVEL 4 - FUTURE DEVELOPMENT (CARDIOLOGY/DIAGNOSTIC TREATMENT LIKELY)

CERTIFICATE OF NEED

OCTOBER 15, 2007

ATTACHMENT INFO . 7



84

- NON-REVIEWABLE AREAS
- FAMILY AND STAFF SUPPORT
- SUPPORT SERVICES
- INFRASTRUCTURE

LEVEL 5 - PROCEDURE

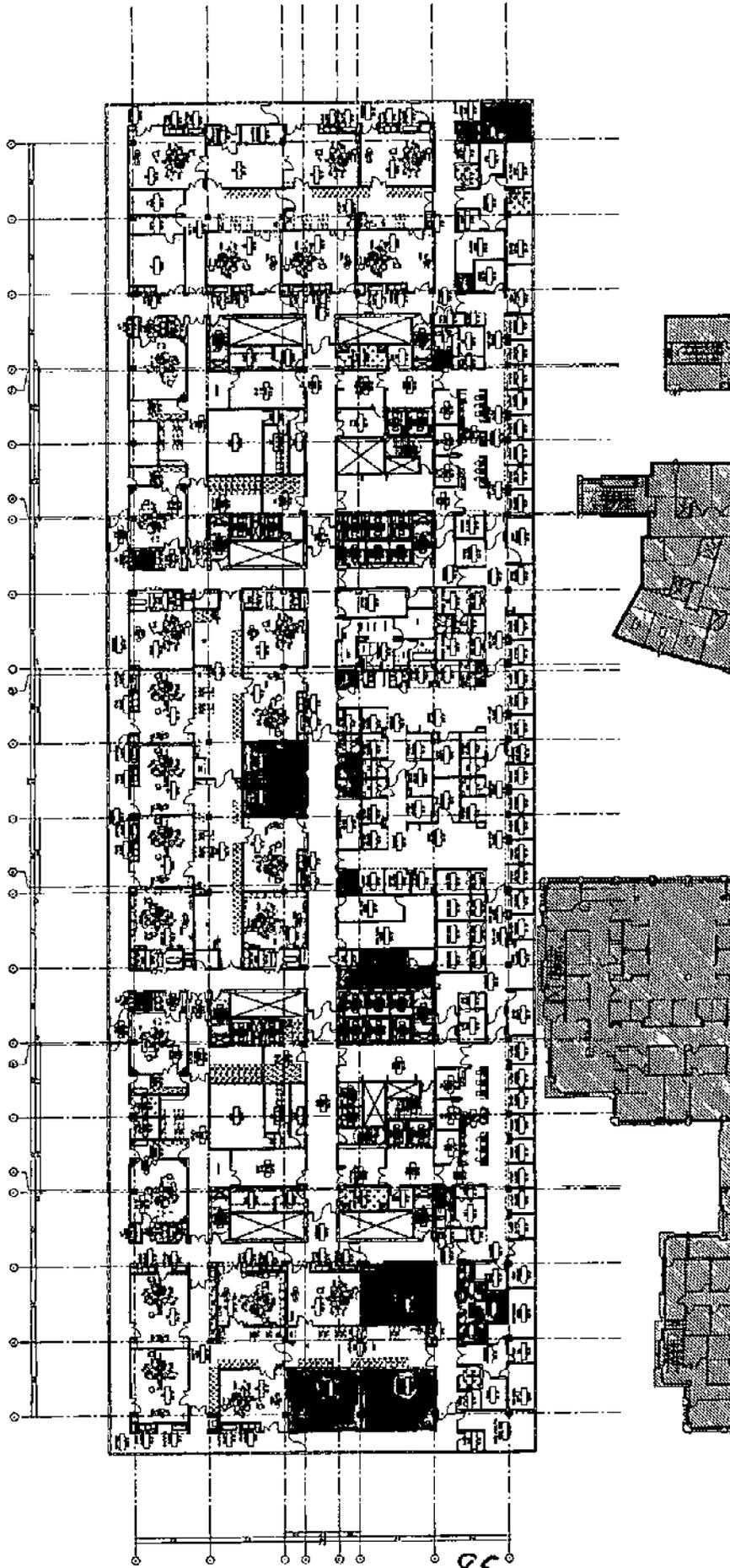
THE UNIVERSITY OF CHICAGO MEDICAL CENTER  
NEW HOSPITAL PAVILION

RAFAEL VIÑOLY ARCHITECTS / CANNON DESIGN

CERTIFICATE OF NEED

OCTOBER 15, 2007

ATTACHMENT INFO - 7



NON-REVIEWABLE AREAS  
 FAMILY AND STAFF SUPPORT  
 SUPPORT SERVICES  
 INFRASTRUCTURE

THE UNIVERSITY OF CHICAGO MEDICAL CENTER  
 NEW HOSPITAL PAVILION

RAFAEL VIÑOLY ARCHITECTS / CANNON DESIGN

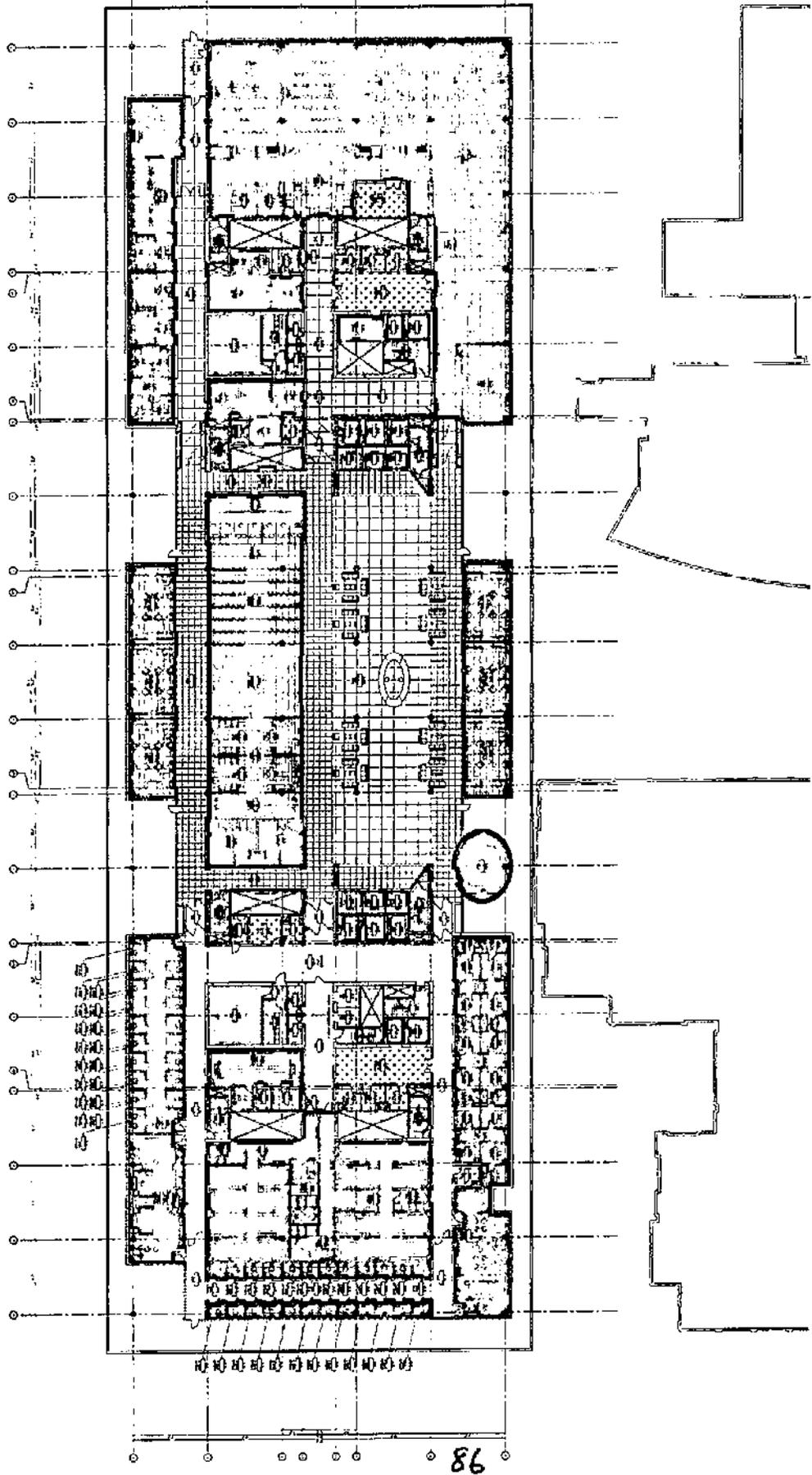
LEVEL 6 - SURGERY

CERTIFICATE OF NEED

OCTOBER 15, 2007

ATTACHMENT INFO - 7





NON-REVIEWABLE AREAS  
 FAMILY AND STAFF SUPPORT  
 SUPPORT SERVICES  
 INFRASTRUCTURE

LEVEL 7 - SKY LOBBY

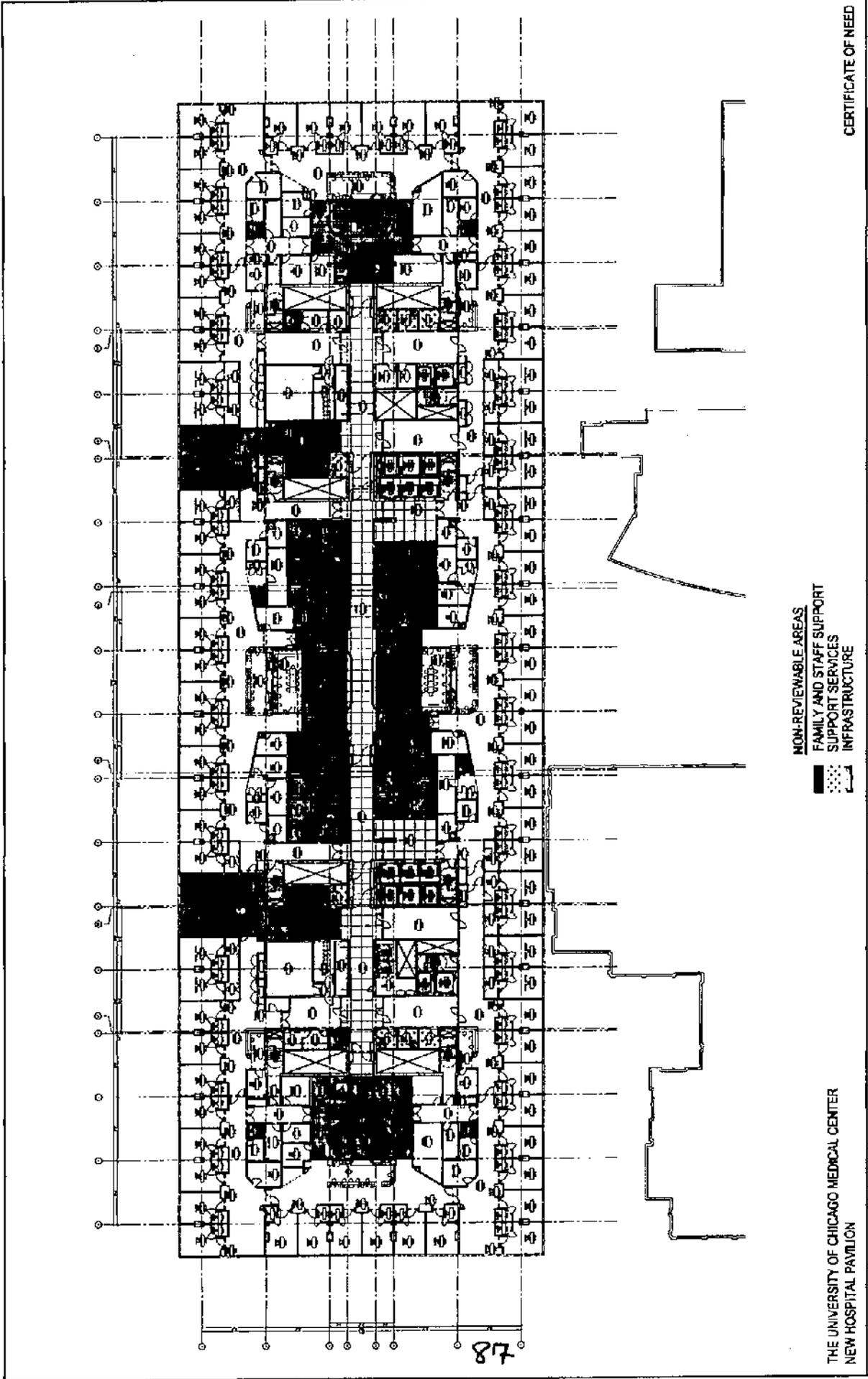
THE UNIVERSITY OF CHICAGO MEDICAL CENTER  
 NEW HOSPITAL PAVILION

RAFAEL VIÑOLY ARCHITECTS / CANNON DESIGN

CERTIFICATE OF NEED

OCTOBER 15, 2007  
 PROJECT NO. 04-01-002

ATTACHMENT INFO - 7



THE UNIVERSITY OF CHICAGO MEDICAL CENTER  
 NEW HOSPITAL PAVILION

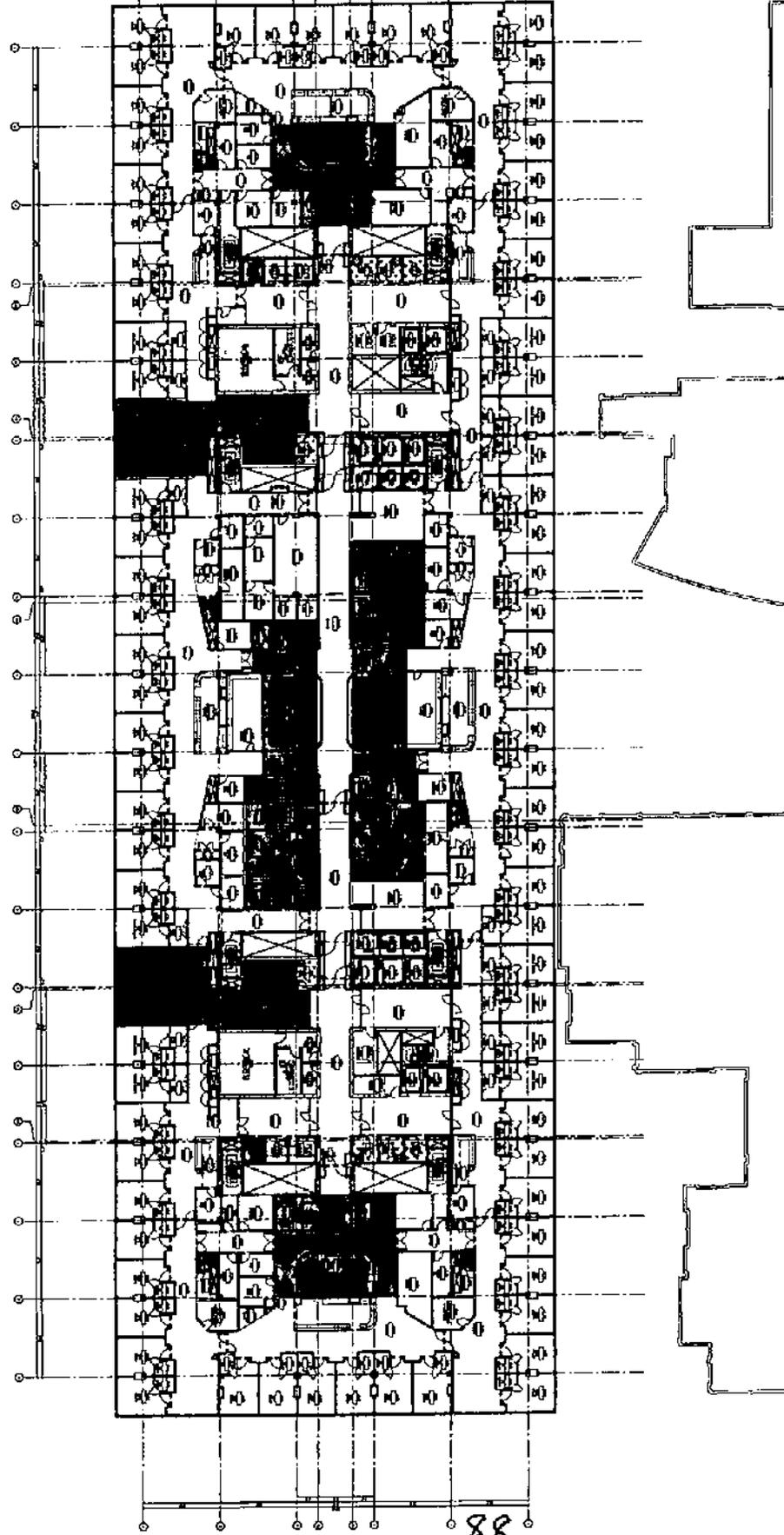
RAFAEL VIÑOLY ARCHITECTS / CANNON DESIGN

LEVEL 8 - INPATIENT

CERTIFICATE OF NEED

OCTOBER 15, 2007

ATTACHMENT INFO - 7



NON-REVIEWABLE AREAS  
 FAMILY AND STAFF SUPPORT  
 SUPPORT SERVICES  
 INFRASTRUCTURE

LEVEL 9 - INPATIENT

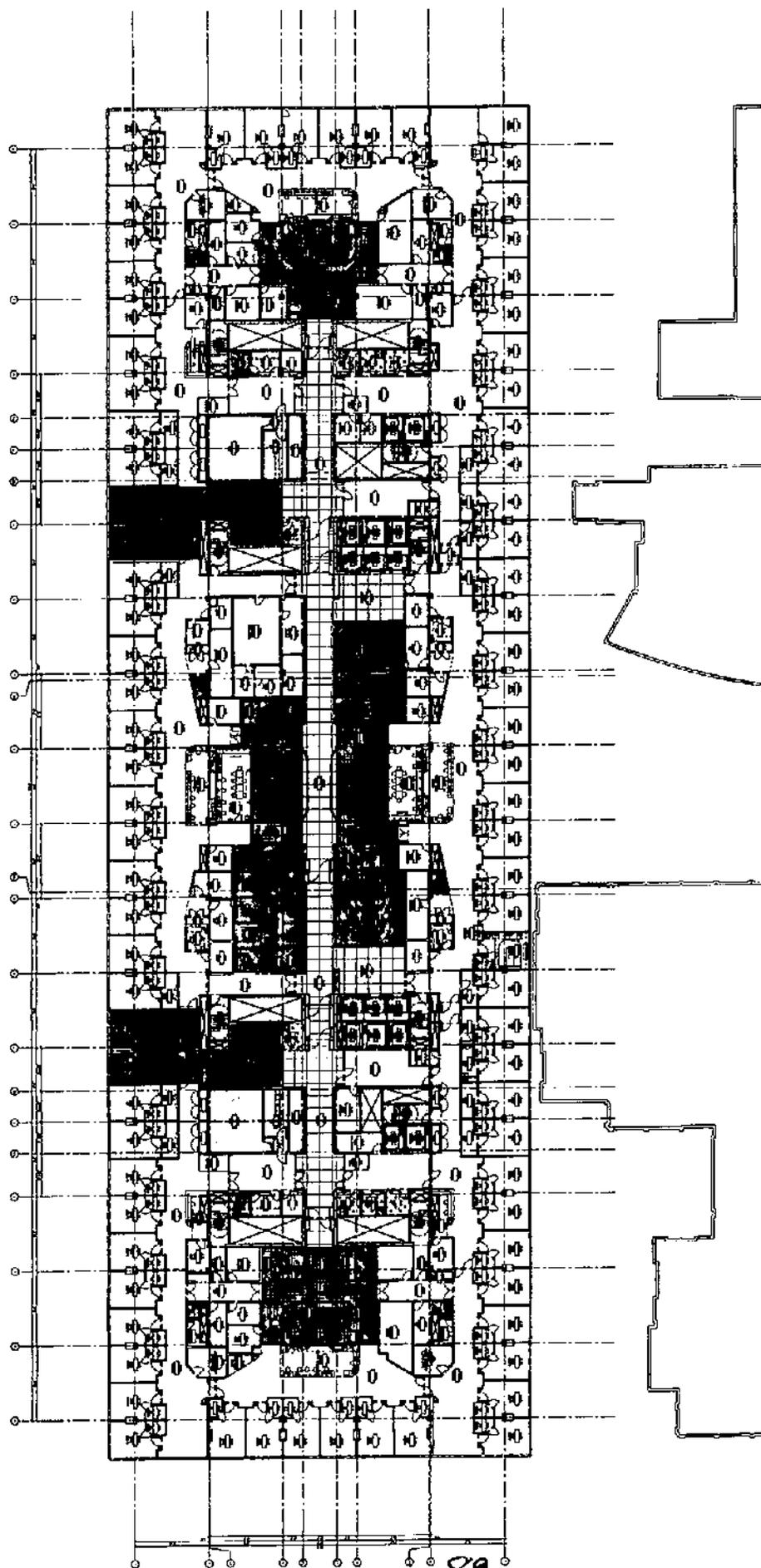
THE UNIVERSITY OF CHICAGO MEDICAL CENTER  
 NEW HOSPITAL PAVILION

RAFAEL VIÑOLY ARCHITECTS / CANNON DESIGN

CERTIFICATE OF NEED

OCTOBER 15, 2007

ATTACHMENT INFO - 7



- NON-REVIEWABLE AREAS
- FAMILY AND STAFF SUPPORT
- SUPPORT SERVICES
- INFRASTRUCTURE

THE UNIVERSITY OF CHICAGO MEDICAL CENTER  
NEW HOSPITAL PAVILION

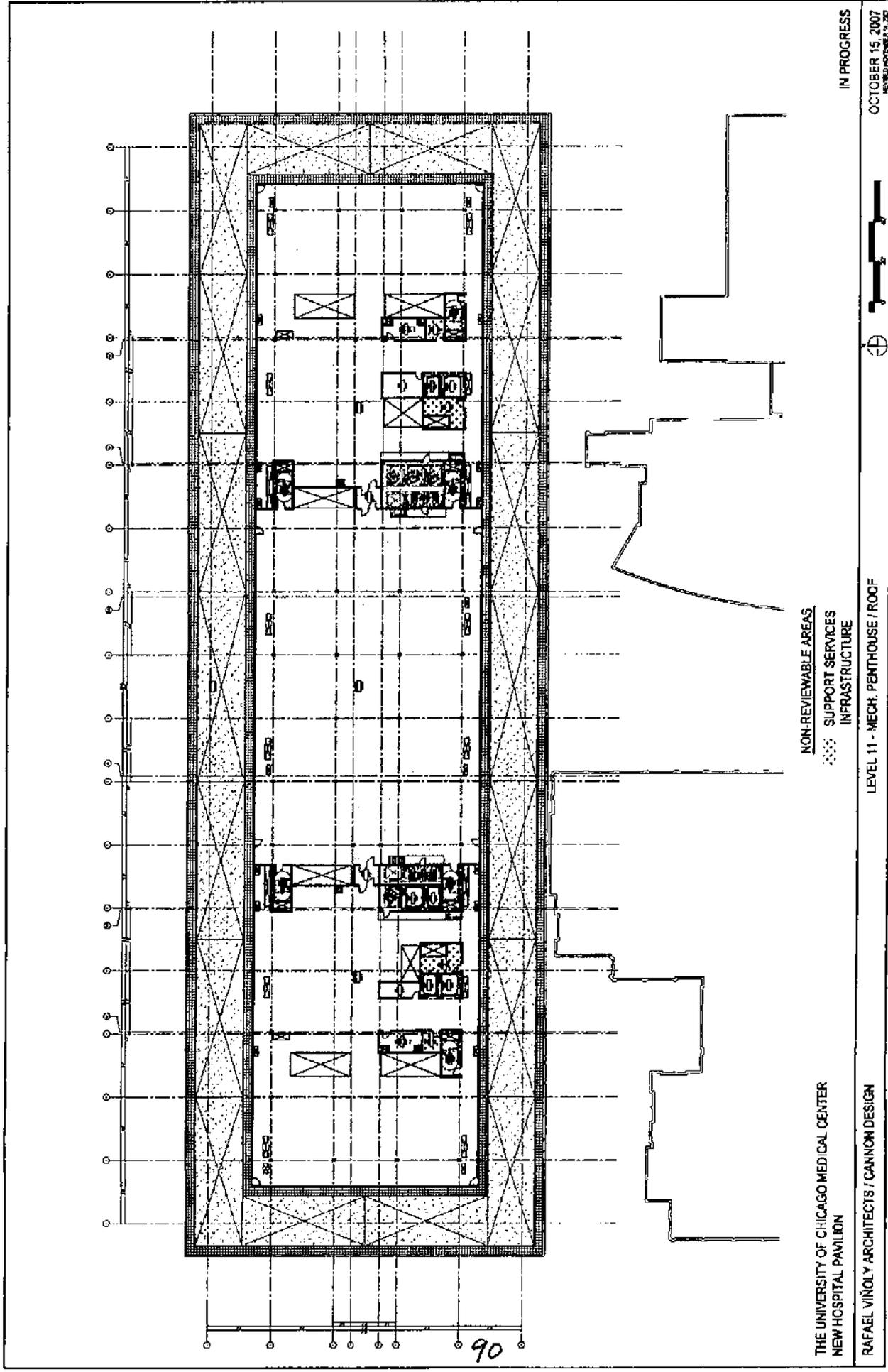
RAFAEL VIÑOLY ARCHITECTS / CANNON DESIGN

LEVEL 10 - INPATIENT

CERTIFICATE OF NEED

OCTOBER 16, 2007

ATTACHMENT INFO - 7



NON-REVIEWABLE AREAS  
 SUPPORT SERVICES  
 INFRASTRUCTURE

LEVEL 11 - MECH. PENTHOUSE / ROOF

IN PROGRESS

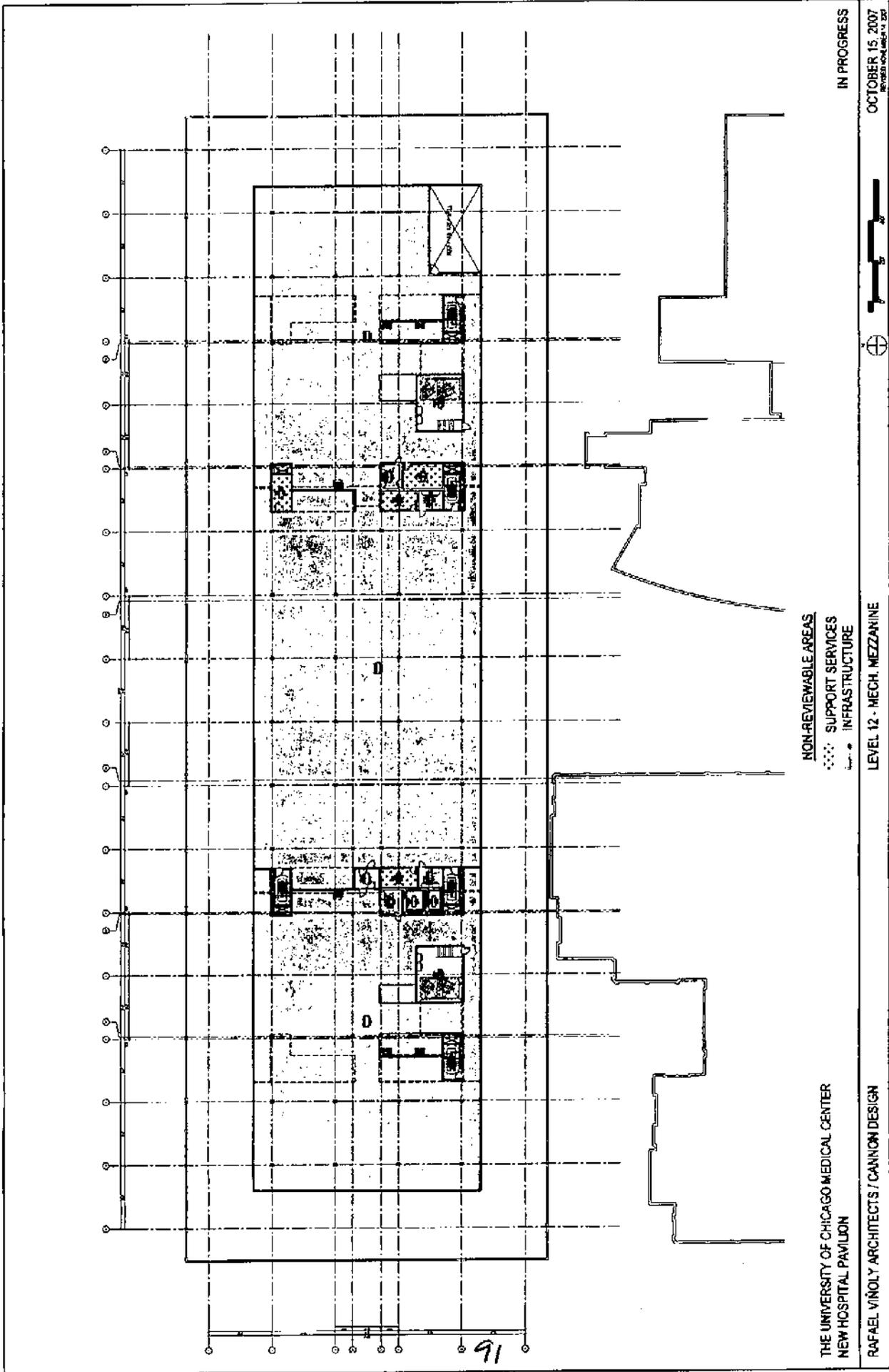
OCTOBER 15, 2007

ATTACHMENT INFO - 7

THE UNIVERSITY OF CHICAGO MEDICAL CENTER  
 NEW HOSPITAL PAVILION

RAFAEL VIÑOLY ARCHITECTS / CANNON DESIGN

90



NON-REVIEWABLE AREAS  
 ..... SUPPORT SERVICES  
 - - - - - INFRASTRUCTURE

LEVEL 12 - MECH. MEZZANINE

THE UNIVERSITY OF CHICAGO MEDICAL CENTER  
 NEW HOSPITAL PAVILION

RAFAEL VIÑOLY ARCHITECTS / CANNON DESIGN

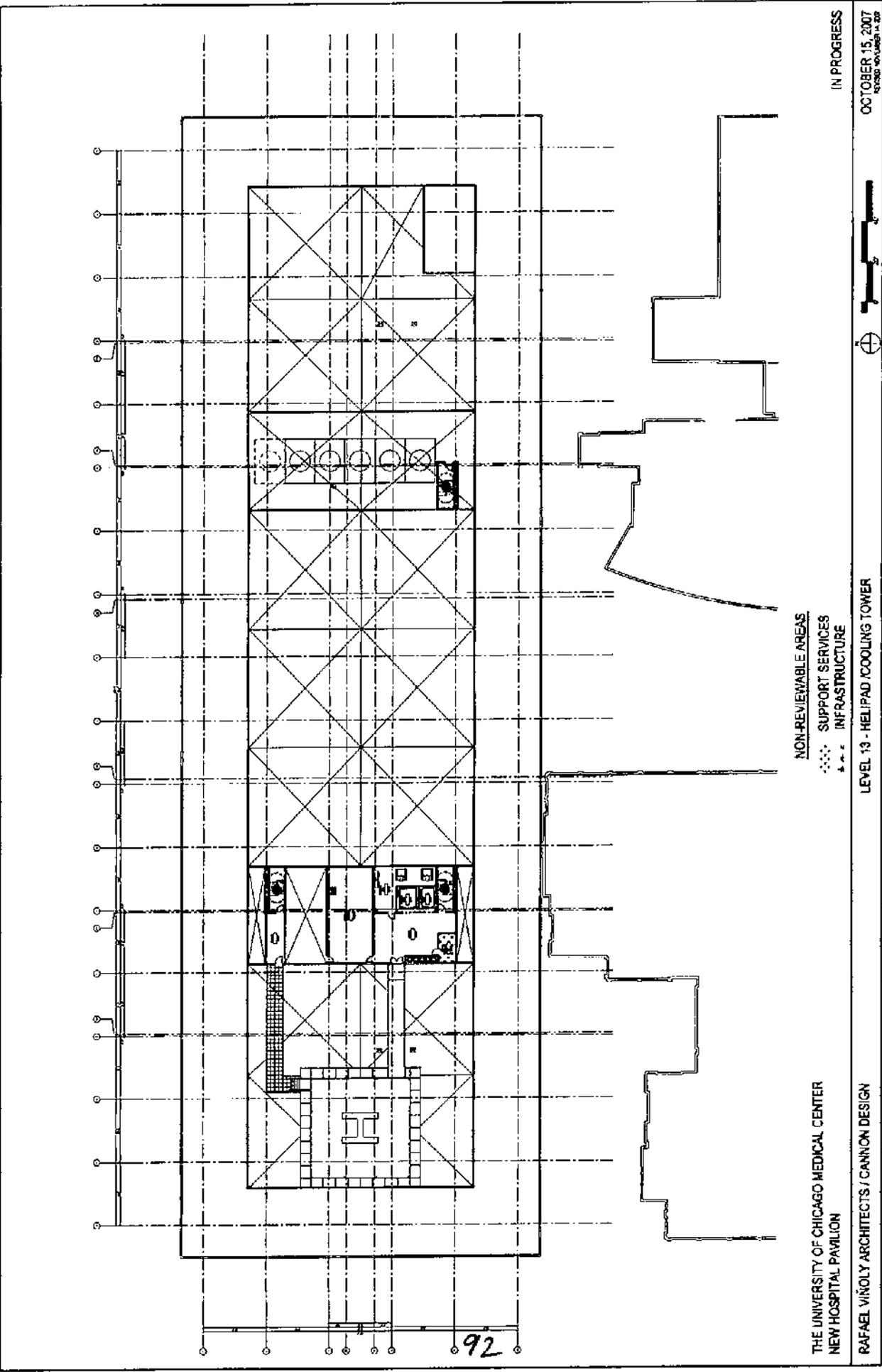
IN PROGRESS

OCTOBER 15, 2007

ATTACHMENT INFO - 7



91



NON-REVIEWABLE AREAS  
 ..... SUPPORT SERVICES  
 - - - - INFRASTRUCTURE

THE UNIVERSITY OF CHICAGO MEDICAL CENTER  
 NEW HOSPITAL PAVILION  
 RAFAEL VIÑOLY ARCHITECTS / CANNON DESIGN

IN PROGRESS

OCTOBER 15, 2007  
 137580-00-00001-1-007

ATTACHMENT INFO - 7

LEVEL 13 - HELIPAD COOLING TOWER

92

## SECTION III. GENERAL REVIEW CRITERIA

**SECTION III. GENERAL REVIEW CRITERIA**

This section is applicable to all projects EXCEPT those projects that are solely for discontinuation with no project costs and those projects that are non-substantive and subject only to a Part 1120 review. Refer to Part 1110.40 for the requirement for non-substantive projects.

**A. Criterion 1110.230.a, Location**

Check if the project will result in any of the following:  establishment of a health care facility;  establishment of a category of service;  acquisition of major medical equipment (for treating inpatients) that is not or will not be located in a health care facility and is not being acquired by or on behalf of a health care facility. If NO boxes are checked, this criterion is not applicable. If any box is checked, read the criterion and submit the following:

1. A map (8 1/2" x 11") of the area showing:
  - a. the location of the applicant's facility or project;
  - b. the name and location of all the other facilities providing the same service within the planning area and surrounding planning areas within 30 minutes travel time of the proposed facility;
  - c. the distance (in miles) and the travel time (under normal driving conditions) from the applicant's facility to each of the facilities identified in b. above;
  - d. an outline of the proposed target population area.
2. For existing facilities, provide patient origin data for all admissions for the last 12 months presented by zip code. Note this information must be based upon the patient's legal residence other than a health care facility for the last 6 months immediately prior to admission. For all other projects for which referrals are required patient origin data for the referrals must be provided.
3. The ratio of beds to population (population will be based upon the latest census data by zip code) within 30 minutes travel time of the proposed project.
4. The status of the project in the zoning process. Provide letter(s) from the appropriate local officials.
5. Evidence of legal site ownership, possession, or option to purchase or lease.

**APPEND DOCUMENTATION AS ATTACHMENT GRC-1 AFTER THE LAST PAGE OF THIS SECTION.**

**B. Criterion 1110.230.b, Background of Applicant**

Read the criterion and submit the following information:

1. A listing of all health care facilities owned or operated by the applicant, including licensing, certification and accreditation identification numbers, if applicable.
2. Proof of current licensing and, if applicable, certification and accreditation of all health care facilities owned or operated by the applicant.
3. A certification from the applicant listing any adverse action taken against any facility owned or operated by the applicant during the three (3) years prior to the filing of the application.

### SECTION III. GENERAL REVIEW CRITERIA

#### A. Location

This criterion is not applicable since the project is an expansion of an existing hospital and does not propose the establishment of a new service or acquisition of major medical equipment located elsewhere.

December 3, 2007

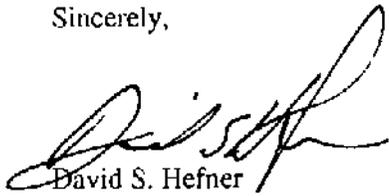
Illinois Health Facilities Planning Board  
525 West Jefferson Street, 2nd Floor  
Springfield, Illinois 62761

In Re: Section III. B. Background of Applicant - Adverse Action

We hereby certify that no adverse action has been taken against The University of Chicago Hospitals within the past three years. As defined by your rules, "adverse action" means conviction of any felony or any misdemeanor involving fraud or dishonesty; any supervision, probation, suspension, revocation, termination, or denial of a license or certificate or registration; imposition of a conditional license; termination or suspension from participation in any program involving payment authorized under Title XVIII (Medicare) or Title XIX (Medicaid) of the Social Security Act, as amended; or denial, suspension, revocation, or termination of accreditation by a nationally recognized organization.

We the undersigned are officers of the University of Chicago Medical Center, the applicant.

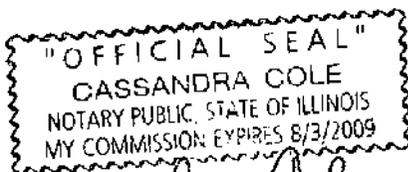
Sincerely,



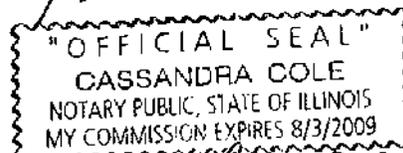
David S. Hefner  
President



Lawrence J. Furnstahl  
Chief Financial & Strategy Officer



*Cassandra Cole*  
12/6/07



*Cassandra Cole*  
12/6/07

ATTACHMENT GRC - 2



March 2, 2005

Michael C. Riordan  
President and CEO  
University of Chicago Hospitals  
5841 South Maryland Avenue  
Chicago, IL 60637

Joint Commission ID #: 7315  
Accreditation Activity Completed: 3/2/2005  
Accreditation Activity: Evidence of  
Standards Compliance

Dear Mr. Riordan:

The Joint Commission would like to thank your organization for participating in the Joint Commission's accreditation process. This process is designed to help your organization continuously provide safe, high-quality care, treatment, and services by identifying opportunities for improvement in your processes and helping you follow through on and implement these improvements. We encourage you to use the accreditation process as a continuous standards compliance and operational improvement tool.

The Joint Commission is granting your organization an accreditation decision of Accredited for all services surveyed under the applicable manual(s) noted below:

- Comprehensive Accreditation Manual for Hospitals

We encourage you to share this accreditation decision with your organization's appropriate staff, leadership, and governing body. You may also want to inform the Centers for Medicare and Medicaid Services (CMS), state or regional regulatory services, and the public you serve of your organization's accreditation decision.

Please be assured that the Joint Commission will keep the report confidential, except as required by law. To ensure that the Joint Commission's information about your organization is always accurate and current, our policy requires that you inform us of any changes in the name or ownership of your organization or the health care services you provide.

Please visit [Quality Check®](#) on the Joint Commission web site for updated information related to your accreditation decision.

Sincerely,

A handwritten signature in cursive script that reads "Russell P. Massaro".

Russell P. Massaro, MD, FACPE  
Executive Vice President  
Division of Accreditation Operations

← DISPLAY THIS PART IN A CONSPICUOUS PLACE

REMOVE THIS CARD TO CARRY AS AN IDENTIFICATION

State of Illinois 1813327

Department of Public Health

LICENSE, PERMIT, CERTIFICATION, REGISTRATION

UNIVERSITY OF CHICAGO HOSPITALS

EXPIRATION DATE	CLASSIFICATION	IC NUMBER
06/30/08	BGBD	0003897

FULL LICENSE

GENERAL HOSPITAL

EFFECTIVE: 07/01/07

05/05/07

UNIVERSITY OF CHICAGO HOSPITALS  
5841 SOUTH MARYLAND  
MC 1112  
CHICAGO IL 60637

FEE RECEIPT NO.

State of Illinois 1813327

Department of Public Health

LICENSE, PERMIT, CERTIFICATION, REGISTRATION

The person, firm or corporation whose name appears on this certificate has complied with the provisions of the Illinois Statutes, rules and regulations and is hereby authorized to engage in the activity as indicated below.

ERIC E. WHITAKER, M. D.  
DIRECTOR

Issued under the authority of  
The State of Illinois  
Department of Public Health

EXPIRATION DATE	CLASSIFICATION	IC NUMBER
06/30/08	BGBD	0003897

FULL LICENSE

GENERAL HOSPITAL

EFFECTIVE: 07/01/07

BUSINESS ADDRESS

UNIVERSITY OF CHICAGO HOSPITALS  
5841 SOUTH MARYLAND  
MC 1112  
CHICAGO IL 60637

The face of this license has a colored background. Printed by Authority of the State of Illinois • 4/97 •

# CITY OF CHICAGO

## LICENSE CERTIFICATE

### NON-TRANSFERABLE

BY THE AUTHORITY OF THE CITY OF CHICAGO, THE FOLLOWING SPECIFIED LICENSE IS HEREBY GRANTED TO:

NAME: THE UNIVERSITY OF CHICAGO HOSPITALS

DBA: BERNARD MITCHELL HOSPITAL  
AT: 3915 S. MARYLAND AVE.  
CHICAGO, IL 60637

LICENSE NO: 14446                      CODE: 1375                      FEE: \$\*\*2,108.33  
LICENSE: Hospital

1000 Beds Max.

PRINTED ON : 08/16/2007

\$\*\*2,108.33

THIS LICENSE IS ISSUED AND ACCEPTED SUBJECT TO THE REPRESENTATIONS MADE ON THE APPLICATION THEREFOR, AND MAY BE SUSPENDED OR REVOKED FOR CAUSE AS PROVIDED BY LAW. LICENSEE SHALL OBSERVE AND COMPLY WITH ALL LAWS, ORDINANCES, RULES AND REGULATIONS OF THE UNITED STATES GOVERNMENT, STATE OF ILLINOIS, COUNTY OF COOK, CITY OF CHICAGO AND ALL AGENCIES THEREOF.

WITNESS THE HAND OF THE MAYOR OF SAID CITY AND THE CORPORATE SEAL THEREOF  
THIS 15 DAY OF AUGUST, 2007

EXPIRATION DATE:

08/15/2009

ATTEST:

*Raul M. Daley*  
MAYOR

*Miguel del Valle*  
CITY CLERK

REV NO. 8538    SITE: 4  
TRANS NO.

THIS LICENSE MUST BE POSTED IN A CONSPICUOUS PLACE UPON THE LICENSED PREMISES.

**CITY OF CHICAGO**

**LICENSE CERTIFICATE**

**NON-TRANSFERABLE**

BY THE AUTHORITY OF THE **CITY OF CHICAGO**, THE FOLLOWING SPECIFIED LICENSE IS HEREBY GRANTED TO

NAME: **THE UNIVERSITY OF CHICAGO MEDICAL CENTER**

DBA: **CHICAGO LYING-IN HOSPITAL**  
AT: **5815 S. MARYLAND AVE.**  
**CHICAGO, IL 60637**

LICENSE NO: CODE: **9100** FEE: **\$\*\*\*\*\*40.00**  
LICENSE: **Change of Legal Name**

**THE UNIVERSITY OF CHICAGO HOSPITALS**

PRINTED ON : **08/17/2007**

**\$\*\*\*\*\*40.00**

THIS LICENSE IS ISSUED AND ACCEPTED SUBJECT TO THE REPRESENTATIONS MADE ON THE APPLICATION THEREFOR, AND MAY BE SUSPENDED OR REVOKED FOR CAUSE AS PROVIDED BY LAW. LICENSEE SHALL OBSERVE AND COMPLY WITH ALL LAWS, ORDINANCES, RULES AND REGULATIONS OF THE UNITED STATES GOVERNMENT, STATE OF ILLINOIS, COUNTY OF COOK, CITY OF CHICAGO AND ALL AGENCIES THEREOF.

WITNESS THE HAND OF THE MAYOR OF SAID CITY AND THE CORPORATE SEAL THEREOF

THIS **17** DAY OF **AUGUST**, **2007**

EXPIRATION DATE:

ATTEST:



*Richard M Daley*  
MAYOR

*Miguel del Valle*  
CITY CLERK



REV NO. **6533** SITE: **1**  
TRANS NO.

THIS LICENSE MUST BE POSTED IN A CONSPICUOUS PLACE UPON THE LICENSEE:

ATTACHMENT GRC - 2

100

# CITY OF CHICAGO

## LICENSE CERTIFICATE NON-TRANSFERABLE

BY THE AUTHORITY OF THE CITY OF CHICAGO, THE FOLLOWING SPECIFIED LICENSE IS HEREBY GRANTED TO:

NAME: THE UNIVERSITY OF CHICAGO HOSPITALS

DBA: CHICAGO LYING-IN HOSPITAL  
AT: 5815 S. MARYLAND AVE.  
CHICAGO, IL 60637

LICENSE NO: 1226308      CODE: 1375      FEE: \$\*\*2,108.33  
LICENSE: Hospital

Side Max.

PRINTED ON : 08/16/2007

\$\*\*2,108.33

THIS LICENSE IS ISSUED AND ACCEPTED SUBJECT TO THE REPRESENTATIONS MADE ON THE APPLICATION THEREFOR, AND MAY BE SUSPENDED OR REVOKED FOR CAUSE AS PROVIDED BY LAW. LICENSEE SHALL OBSERVE AND COMPLY WITH ALL LAWS, ORDINANCES, RULES AND REGULATIONS OF THE UNITED STATES GOVERNMENT, STATE OF ILLINOIS, COUNTY OF COOK, CITY OF CHICAGO AND ALL AGENCIES THEREOF.

WITNESS THE HAND OF THE MAYOR OF SAID CITY AND THE CORPORATE SEAL THEREOF  
THIS 15 DAY OF AUGUST, 2007

EXPIRATION DATE: July 15, 2008

ATTEST:

*Richard M Daley*  
MAYOR

*Michael DeWalle*  
CITY CLERK

REV NO. 6533      SHE: 1  
TRANS NO.

THIS LICENSE MUST BE POSTED IN A CONSPICUOUS PLACE UPON THE LICENSED PREMISES.



# CITY OF CHICAGO

## LICENSE CERTIFICATE

### NON-TRANSFERABLE

BY THE AUTHORITY OF THE CITY OF CHICAGO, THE FOLLOWING SPECIFIED LICENSE IS HEREBY GRANTED TO

NAME: THE UNIVERSITY OF CHICAGO HOSPITALS

LOC: THE UNIVERSITY OF CHICAGO CORNER CHILDREN'S HOSPI  
AT: 5839 S. MARYLAND AVE.  
CHICAGO, IL 60637

LICENSE NO.: 14444

CODE: 1375

FEE: \$\*\*2,108.33

LICENSE: Hospital

1000 Beds Max.

PRINTED ON : 08/16/2007

\$\*\*2,108.33

THIS LICENSE IS ISSUED AND ACCEPTED SUBJECT TO THE REPRESENTATIONS MADE ON THE APPLICATION THEREFOR, AND MAY BE SUSPENDED OR REVOKED FOR CAUSE AS PROVIDED BY LAW. LICENSEES SHALL OBSERVE AND COMPLY WITH ALL LAWS, ORDINANCES, RULES AND REGULATIONS OF THE UNITED STATES GOVERNMENT, STATE OF ILLINOIS, COUNTY OF COOK, CITY OF CHICAGO AND ALL AGENCIES THEREOF.

WITNESS THE HAND OF THE MAYOR OF SAID CITY AND THE CORPORATE SEAL THEREOF  
THIS 15 DAY OF AUGUST .2007

EXPIRATION DATE: July 31, 2009

ATTEST:

*Rick M Daley*  
MAYOR

*Margaret Daley*  
CITY CLERK

DEPT NO. 5538 SITE: 3

TRANS NO.

THIS LICENSE MUST BE POSTED IN A CONSPICUOUS PLACE UPON THE LICENSED PREMISES



# CITY OF CHICAGO

## LICENSE CERTIFICATE NON-TRANSFERABLE

BY THE AUTHORITY OF THE CITY OF CHICAGO, THE FOLLOWING SPECIFIED LICENSE IS HEREBY GRANTED TO

NAME: THE UNIVERSITY OF CHICAGO HOSPITALS

DBA: DUCHOSSOIS CENTER FOR ADVANCED MEDICINE  
AT: 5758 S. MARYLAND AVE.  
CHICAGO, IL 60637  
HOSPITAL

LICENSE NO.: 1226404

CODE: 1375

FEE: \$\*\*2,108.33

LICENSE: Hospital

Trade Tax.

PRINTED ON : 08/16/2007

\$\*\*2,108.33

THIS LICENSE IS ISSUED AND ACCEPTED SUBJECT TO THE REPRESENTATIONS MADE ON THE APPLICATION THEREON, AND MAY BE SUSPENDED OR REVOKED FOR CAUSE AS PROVIDED BY LAW. LICENSEE SHALL OBSERVE AND COMPLY WITH ALL LAWS, ORDINANCES, RULES AND REGULATIONS OF THE UNITED STATES GOVERNMENT, STATE OF ILLINOIS, COUNTY OF COOK, CITY OF CHICAGO AND ALL AGENCIES THEREOF.

WITNESS THE HAND OF THE MAYOR OF SAID CITY AND THE CORPORATE SEAL THEREOF

THIS 15 DAY OF AUGUST, 2007

EXPIRATION DATE:

August 15, 2009

ATTEST:

*Rubal M. Baker*  
MAYOR

*Miguel del Valle*  
CITY CLERK

REV. NO. 6533 WK: 8  
TRANS. NO.

THIS LICENSE MUST BE POSTED IN A CONSPICUOUS PLACE UPON THE LICENSED PREMISES



December 3, 2007

Illinois Health Facilities Planning Board  
525 West Jefferson Street 2nd Floor  
Springfield, Illinois 62761

In Re: Section III. B. Background of Applicant - Adverse Action

We hereby certify that no adverse action has been taken against The University of Chicago Hospitals within the past three years. As defined by your rules, "adverse action" means conviction of any felony or any misdemeanor involving fraud or dishonesty; any supervision, probation, suspension, revocation, termination, or denial of a license or certificate or registration; imposition of a conditional license; termination or suspension from participation in any program involving payment authorized under Title XVIII (Medicare) or Title XIX (Medicaid) of the Social Security Act, as amended; or denial, suspension, revocation, or termination of accreditation by a nationally recognized organization.

We the undersigned are officers of the University of Chicago Medical Center, the applicant.

Sincerely,

David S. Hefner  
President

Lawrence J. Furnstahl  
Chief Financial & Strategy Officer

ATTACHMENT GRC - 2

## SECTION III. GENERAL REVIEW CRITERIA

### C. Alternatives to the Proposed Project

#### 1. Comparisons of Alternatives Considered

##### **Doing Nothing**

The New Hospital Pavilion ("NHP") is proposed in response to gradually growing demand for adult Med/Surg beds, adult ICU beds, surgeries performed in our main operating room suite, Interventional Radiology cases, and GI Procedures. The project will result in:

- the relocation of 180 Med/Surg beds and the reduction of 27 overall
- the relocation of 38 ICU beds and the addition of 22
- the relocation of 15 operating rooms and the addition of 9
- the relocation of 5 Interventional Radiology rooms and the addition of 2
- the relocation of 11 GI procedure rooms and the addition of 6

To support these services, preparation and recovery, Central Sterile Processing, and Anatomic Pathology facilities will be relocated and expanded, and imaging modalities that serve the patients treated by the aforementioned services will be increased. The alternative of doing nothing has been rejected.

UCMC and our patients have experienced the difficulties encountered when beds are not available to admit or transfer patients. For 2007 ER bypass hours, primarily due to no monitored beds being available, totaled 1,989 hours. There were many ICU and Med/Surg patient transfers we could not accept and admission requests from our faculty we could not allow because no beds were available. The OR is heavily used and elective cases must be scheduled many weeks in advance. There are similarly long backlogs in Interventional Radiology and GI Procedures, as these areas have greatly increased the use of innovative, non-invasive techniques but have outgrown their present locations.

In addition to expanding the facilities to make these services more available, the NHP will give us a clean slate to develop modern spaces with adequate area and improved functional layouts to accommodate new equipment and procedures. The resultant modern facilities will help us provide excellent and safe medical care. In Attachment MOD – 3 there are in-depth discussions for each clinical area of the problems faced currently (the Do Nothing scenario) and alternatives examined in each case.

Since 2002, UCMC has studied how to deal with aging buildings and overcrowded facilities. Six options have been examined in detail. These are summarized in the accompanying table Alternatives Considered

## SECTION III. GENERAL REVIEW CRITERIA

### Cost/Benefits.

#### **Option A - Wyler Site Fill-in**

Wyler Children's Hospital had housed the inpatient pediatric beds until Comer Children's Hospital became operational in February, 2005. A plan was considered in which this 42 year-old building would be expanded into adjacent courtyard space. The research laboratories and faculty offices on the top three floors would be relocated. We would add 64 adult beds, the main OR, kitchen and dining areas, and the Adult ER. This plan would address the tight bed situation, expand and modernize the 29 year-old OR, and allow Radiology to be reconfigured. These changes would cost \$557 million. The drawbacks are that this plan would produce a tight grid and inefficient layout, especially for the OR which needs 100,000 square feet on one level. Due to the constrained site, the OR would be spread over several floors, which is a logistical nightmare for this sensitive and demanding function. To reconstruct this old building for these departments would involve numerous phases and would be disruptive to the adjoining Mitchell Hospital and Rubloff Tower, which house our adult beds. In addition, this plan does not resolve the very considerable problem of where to relocate the three floors of research laboratories and faculty offices, since this plan contains no space for these uses. Finally, the floors in Wyler do not align horizontally to those in the adjoining clinical buildings. At the end, UCMC would spend a large amount to get a fixed-up older building that would potentially compromise patient care.

#### **Option B - Wyler Site New Building**

In this option, Wyler would be demolished and a new, larger building would be constructed, extending into surrounding courtyards. We could add 54 beds, an OR, Radiology, and kitchen and dining. The cost would be \$508 million. The drawbacks are that the OR would be on two levels because the site is still constrained even with new construction. Potential bed space is limited. Traffic becomes very concentrated because this is immediately adjacent to Mitchell Hospital, our main inpatient building. This costly new construction would result in a building with a potential life much greater than Mitchell Hospital, which is in its 23<sup>rd</sup> year. In the intermediate future we would be looking to replace Mitchell elsewhere in campus but most likely far from the rebuilt Wyler replacement. Thus, the smaller, newly built Wyler clinical building would become marooned when Mitchell functions are built new elsewhere.

#### **Option C - South Garage New Building**

The South Garage provides parking for 1,800 cars and is across Maryland Avenue to the west of Wyler and Mitchell Hospitals. The receiving dock, bulk stores, a production kitchen, and chiller plant are located in this structure and those would be retained, but the parking space would be demolished. In its place would be built a 458,000 square foot building that could house 72

### SECTION III. GENERAL REVIEW CRITERIA

beds with a potential for 72 more, the OR, Adult ER, and kitchen and dining. This plan would help to decompress Mitchell, where almost all adult beds are located with many in multi-occupancy rooms. The cost is \$602 million. The drawbacks include no room for Radiology expansion or GI Procedures. Another major concern is that the 1,800 parking spaces would have to be replaced. The parking replacement is a big problem because we are hemmed in on all sides by public parks and existing hospital buildings, so parking would at best be several blocks removed from the inpatient buildings.

#### **Option D - New Hospital North of 57<sup>th</sup> Street**

The only adjacent expansion area for UCMC is the north side of 57<sup>th</sup> Street. This alternative looked at constructing a new hospital here. Immediately to the south would be the Duchoissois Center for Advanced Medicine ("DCAM"), our ambulatory care facility, and Comer Children's Hospital. This option would include a comprehensive building with advantages of optimized layout and no costly investment in older buildings. The cost would be \$780 million. In addition to the high cost of construction, the residential buildings existing on the site would have to be acquired at high cost and over a lengthy and prolonged period. At best, this project wouldn't be completed before 2015. Located at the farthest point north of the Medical Center, it would be disconnected from most of the other hospital-related buildings and also inconvenient for physicians whose offices are several blocks to the south. Parking would be two blocks away, arguably inaccessible to the infirm. Finally, we would be developing this land "out of order" since the block on which Comer Hospital sits is not fully developed. A primary objective in constructing hospital facilities is to maximize adjacencies of functions that work together. Skipping over underdeveloped space to add a major building spreads functions further apart.

#### **Option E - Drexel Avenue New Hospital**

The block east of the DCAM includes Comer Children's Hospital on one side and the 4-story building housing the Pediatric Emergency Department on the other. The Illinois Health Facilities Planning Board will recall that the upper three floors of this building are shelled (Project #04-054). The City of Chicago strongly advised us to build out this entire structure because it would be very problematic for them to approve construction later that is located above an operational, 24-hour clinical facility. At the time we sought State approval it was our intention that the upper floors would be used as part of a larger building extending north on Drexel for the entire eastern side of the block. This building would house the OR, patient beds, and Interventional Radiology. Option Five's advantages are the site is available and ready, and that there is reasonable adjacency to Mitchell. The major drawback is that it is a narrow but long footprint, which is of limited use for a modern hospital -- particularly for the OR which is best served by a large, square shape. As a result, the OR would have to be located on two levels, again creating an operational challenge. The narrow site and a campus zoning requirement that

## SECTION III. GENERAL REVIEW CRITERIA

no structure exceed 200 feet in height limits program area in this \$570 million building. Parking is a significant problem since the site is two and a half blocks away and insufficient for patient needs.

In addition, we are concerned that using the three upper floors in the Pediatric Emergency department building for adult services would prevent any expansion of the pediatric inpatient hospital. Although the Comer Children's Hospital (immediately adjacent to the west) was completed just one year ago, there are plans underway to relocate the Pediatrics Specialty Clinics from the DCAM to this building and locate other pediatrics functions here. Gary and Francis Comer pledged a gift of \$41 million for this purpose.

### **Master Design NHP**

Given the problems associated with the other planning alternatives that were considered, UCMC began developing plans for the NHP two years ago. Because the cost for architectural planning would exceed the CON review threshold, we were obligated to obtain a Master Design permit. At that early stage of planning, we proposed a building sited between Drexel Avenue to the east and Cottage Grove to the west, extending over Maryland Avenue. It would rest on "pedestals" on either end that would provide 1,000 parking spaces. This configuration gave us a very useful 100,000 square feet per level. This large space would allow us to build the OR on one level. We could also place 176 beds on two levels, 96 new and 80 relocated from Mitchell Hospital. This plan permitted us to convert all double occupancy rooms in Mitchell to private rooms, which patients greatly prefer and which allow for more efficient use since it will prevent problems with patients sharing one room, e.g. gender mismatches, infectious disease, etc. The plan also included room to relocate and expand both Interventional Radiology and GI Procedures. Importantly, we would be able to have attractive and commodious dining facilities for our patients, visitors, and staff. There would be numerous meeting rooms for conferences and a floor for staff education -- services that are currently provided in old, substandard space located four blocks away. The location is ideal in that it will be across the street from the area for future expansion, rather than marooned like most of the other options here. This was a costly option at \$752 million.

This was not so much an option that we rejected, but one that we continued to develop and refine. While the convenience of the parking inside the building was very desirable, as we looked at the attendant problems we ultimately decided to forego these four floors. There were life safety concerns related to exhaust fumes and fire safety with so many gasoline combustion engines being operated in the lower floors of a hospital building. IDPH architects were very clear that they didn't think parking was acceptable in the building. We foresaw problems getting parking permitted by the Chicago Building Code as well. The Department of Homeland Security recommended against parking in public buildings. There were also considerable concerns about

### SECTION III. GENERAL REVIEW CRITERIA

building vibration caused by moving vehicles, what with highly powerful microscopes, devices such as 3T MRI's that are acutely sensitive, and delicate surgical procedures that will occur in the OR. While parking within hospital buildings has been accomplished elsewhere, in the end we concluded that the difficulties that it brought outweighed the convenience of the parking.

#### **Solution - Proposed New Hospital Pavilion (NHP)**

The option that was chosen refined the plan that was conceptually described in the Master Design application. In addition to eliminating the four floors of parking, we added a patient bed floor and chose to reduce by 5 our total Med/Surg and ICU beds rather than increase them by 96. Regarding the bed total, our analysis of growing inpatient days and discussions with local community hospitals informed us that the increases were caused in large part, from local residents who were coming to UCMC for primary and secondary care, instead of to other more proximate community providers. UCMC's concentration is in highly complex and specialized care -- it is what we do best. While we have a relatively high cost operational platform that are typically found in academic medical centers, we are able to treat difficult cases successfully and people seek care here from even great distance for that reason. We do offer general care in our roll as community resource and also to give our students and residents exposure to that aspect of medical treatment. As our ER increasingly treated patients with no other medical home -- coming not for emergency care but what is better dealt with in a physician's office or a community health center -- and as our beds filled with cases that could more economically be treated in community hospitals, we re-examined our facility plans. We concluded that rather than expand our bed count by 96, we needed to partner with community providers to find medical homes for patients with general, less intensive health care needs. We also began strengthening ties with community hospitals and we are in the process of redeploying some primary and secondary services, along with attending physicians and residents, to area hospitals with open beds. This redirection relieves our congestion, helps strengthen community providers, results in overall lower cost of care, and permits us to rebalance our mix of patients, as measured by their complexity.

We propose three floors of patient beds totaling 240, in the NHP, versus two floors and the 176 beds that were proposed in the Master Design. Overall, the current plan is to reduce Med/Surg by 27 beds and increase ICU by 22, rather than increases of 40 and 56, respectively. Thus, while we will now have 64 more beds in the NHP, there will be 165 fewer remaining in Mitchell and a net change between the two plans of 101 fewer beds. The current proposal results in modernizing a greater proportion of the beds, 62 percent versus 34 percent of combined Med/Surg and adult ICU beds.

The other significant change is the inclusion of shelled space, that will total two floors, plus 8,000 feet below grade. The previous building was planned in

### SECTION III. GENERAL REVIEW CRITERIA

such a way that if additional space was needed in later years, the floor planned for our teaching institute or some of the parking floors could have been converted. As parking was dropped from the program and our plans were refined, we had several levels that were essentially an open air space, with central building cores connecting lower and upper active floors. Potentially, the air space could be built out at a later date as needs developed. We chose instead to construct the perimeter walls initially, "shelling in" the space, to return to the Planning Board later to seek their approval when we decide what functions would be located there. We estimated a cost savings of \$14 million with the shelled space approach. (See Attachment GRC - 5L for a full discussion of shelled space.)

In conclusion, we rejected each of the six aforementioned options for reasons of insufficient space, inefficient floor plates, suboptimal adjacencies, and comparatively lower benefits to cost. While the proposed project has the highest cost, it creates the greatest amount of modern, highly functional space and has the best prospect of serving us well for many years.

#### 2. Using Other Area Facilities or Resources

This project is a response to aging and undersized facilities. In response to steadily increasing adult bed utilization and the lack of beds for new admissions or transfers, we have begun discussions with local hospitals. Patients from our Primary Service Area ("PSA") are coming to us in ever-larger numbers for primary care. While we do provide a significant amount of primary care services, we have a high cost structure. Our cost structure is different from many hospitals because of our key role in training physicians and in providing highly specialized clinical services. We recognize that neighboring community hospitals can more economically provide primary care, and they are benefited when we refer them many of these cases. It is more efficient for us to provide very specialized services than routine, primary care services.

UCMC is also working with 16 community health centers in arranging for family physicians and non-hospital primary care for the many patients who present at our Emergency Room seeking primary care services. Since it is inefficient and costly to use the ER for primary care, our entire community benefits when we appropriately integrate family physicians and health care centers in the delivery of care. This keeps the health care continuum robust and active. Regular checkups and preventive care is a superior approach than accessing care at the crisis stage.

Our planning area, A-03 is remarkable in Chicago for having significant out-migration of adult Med/Surg patients as contrasted to A-1 and A-2 which show large in-migrations. While many of the community hospitals in A-03 operate their licensed beds at relatively low utilization rates, we believe much

## SECTION III. GENERAL REVIEW CRITERIA

of the out-migration is because many A-03 hospitals are in difficult financial straits and cannot afford to operate their beds and other services fully. Hence, patients bypass their proximate hospital, come to us, or travel outside of A-03 to other hospitals. We propose to modernize beds so that we have them available when patients come to us. These beds will improve access since so many patients go outside the area for inpatient care. While we are working with other local hospitals to refer patients that we cannot accommodate, we have limited ability to redirect patients to other hospitals. Many of our patients come because they feel this is the best hospital for their care.

With regard to more intense and more specialized care, UCH is the only academic hospital in A-03 with a full range of specialty services. Within our planning area there is no other hospital that can treat the most complex cases. Our circumstances are not unique: Rush University Medical Center and Children's Memorial Hospital have recently submitted applications for replacement and renewal, and recently Loyola University Medical Center began a large modernization project. The University of Illinois Medical Center at Chicago is actively developing ambitious modernization plans. Northwestern Memorial Hospital recently completed two very large replacement projects. UCMC's peer academic hospitals are also trying to respond to high utilization and insufficient facilities. They do not have the capacity, any more than we presently do, to accept a significant number of referrals. The best alternative is to modernize and expand here to accommodate the patients who come to us.

### 3. Using Underutilized Beds or Other Space in the Facility

In Attachment MOD - 3A and B we document our need to modernize 180 Med/Surg beds and 60 ICU beds. These beds comprise the 240 proposed for the NHP. The new bed units will require 190,725 gsf of space. We now operate 50 OB beds at below the State's target rate of 78 percent. These units occupy 10,460 gsf of space. Using some portion of this underutilized space would take care of very little of the space needed. Psychiatric beds are also operated below the standard. However, our 16 Psych beds occupy 6,458 gsf, again too small an area to offer much help. (The need is 190,725 gsf and these two areas total 17,000 gsf.) In addition, use of this space would cause a programmatic mismatch -- ensconcing adult Med/Surg patients on an OB or Psych unit. In the case of Psych, this service is located in Gilman Smith Hospital, which is not near the other Mitchell bed units and staff.

The one area of significant size that is not developed - for that matter not even constructed - will be the upper three floors of the building housing the Pediatric Emergency Department. These three floors are 24,146 gsf each, or a total of 72,438 gsf. This additional space would provide 38 percent of the space needed for the 240 beds planned for NHP. However, placing new beds in this location would be counterproductive to care. Most of the NHP beds

### SECTION III. GENERAL REVIEW CRITERIA

are planned for patients coming from the OR. If we were to house them in a separate building, we would have to transport them over a great distance, increasing the risk of infection and other adverse events. The most important reason for not placing these beds in these three upper floors is that this space is already slated for relocation of pediatric services. As mentioned in part 2 of this section, this building is immediately adjacent to Comer Children's Hospital. To the extent that its upper floors are used for non-pediatric services, the potential for further expansion of pediatric services becomes constrained. UCMC is extremely fortunate to have been given a gift of \$41 million from Gary and Francis Comer for the development of three upper floors for pediatric services. We plan to relocate the Pediatric Specialty Clinics from the DCAM to the 4<sup>th</sup> Floor. The Planning Board recently approved our application for this project. Soon we will submit an application to relocate offices for Pediatrics faculty and the pediatric chemo-infusion unit to floors 2 and 3.

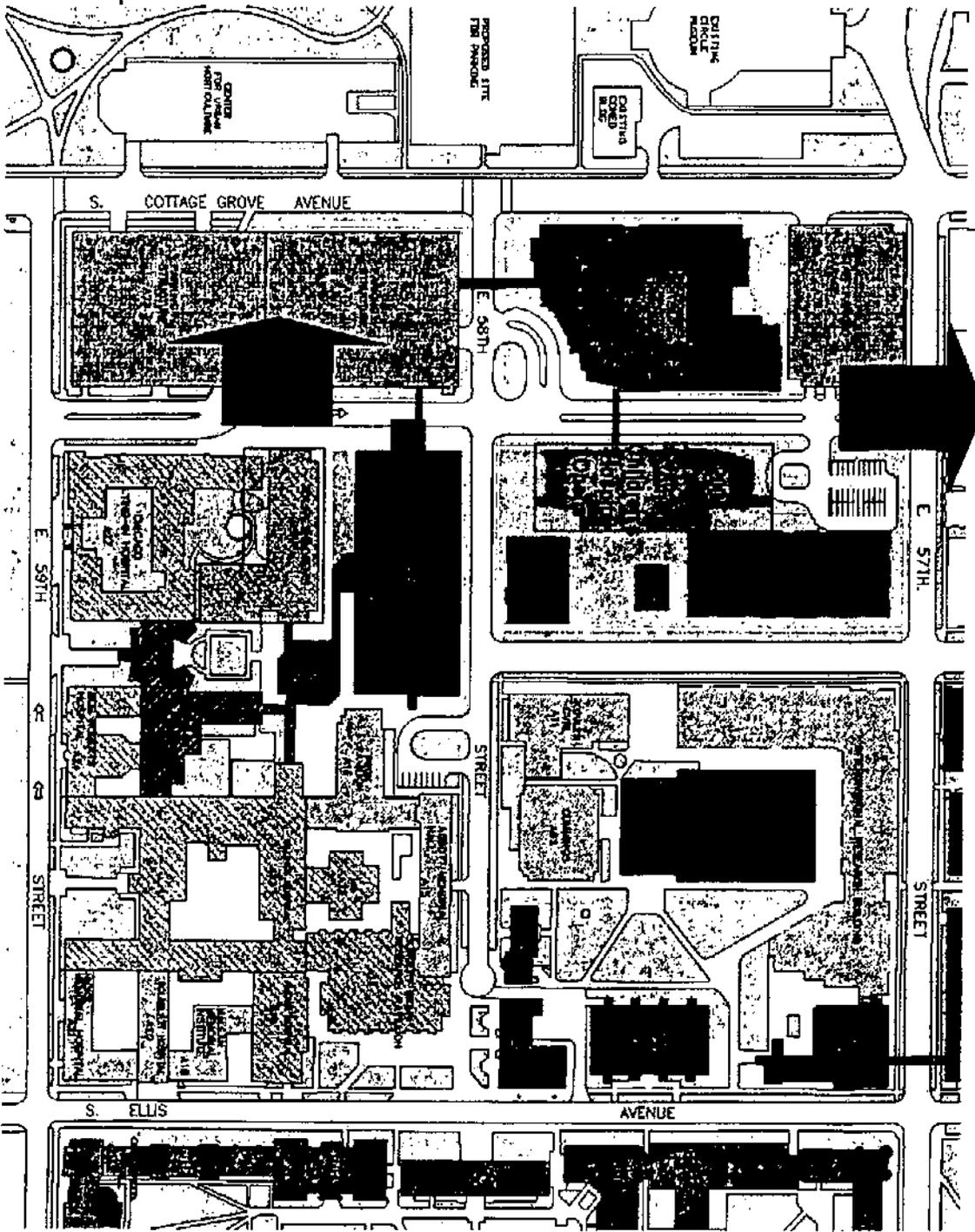
#### 4. Improved Quality of Care

It is not applicable, but through the construction of modern and functional facilities, the quality of care will be improved.

## ALTERNATIVES CONSIDERED COST/BENEFITS

	A	B	C	D	E	NHP
Options:	Wylter Site <u>Fill-in</u>	Wylter Site <u>New Building</u>	South Garage <u>New Building</u>	North of 57th St. <u>New Hospital</u>	Drexel Avenue <u>New Hospital</u>	Master Design <u>NHP</u>
<b>Plan</b>	Build in courtyards Relocate research labs, faculty offices	Demolish Wylter, re-use site, relocate research labs, offices, expand into courtyards	Demolish 1,800 space South Garage	Build north of 57th St.	Build along Drexel Ave Incorporate Peds ED bldg	Build across Maryland Ave. south of 57th St. 1,000 parking spaces 176 beds - net +96
<b>Benefits</b>	Add 64 beds, OR, Adult ED, Kitchen and Dining, Adult ER	Add 54 beds, OR New Radiology Kitchen and dining Adult ER	Add 72 beds, potential for 72 more, OR, Adult ED, Kitchen and dining Decompresses Mitchell	Comprehensive, no inv. in old buildings, no costly enabling projects	Site is available Good adjacency to Mitchell	64 more modern beds No facility problems w/parking in building Expansion capability
<b>Drawbacks</b>	Tight grid, bad layout Multi-floor OR Floors don't align Complex, disruptive Invest in poor bldg. Poor return on invest.	Limited beds Exceeds Mitchell life OR on two levels Concentrates traffic	Parking relocated to distant location. Doesn't address radiology, other interventional space needs.	Clinically disconnected from remainder of Med Center. Major property acquisition. Parking is not convenient. Completion delayed (2015)	Floor plate too narrow OR on two levels No parking Limited program area	Completion in 2013 No parking nearby Vehicles in building - noise, fumes, vibration, fire hazard
<b>Squ. Feet</b>	515,900	603,300	457,900	826,580	540,000	1,194,607
<b>Cost</b>	\$557 million	\$508 million	\$602 million	\$780 million	\$570 million	\$786 million

Option A - WYLER SITE FILL-IN

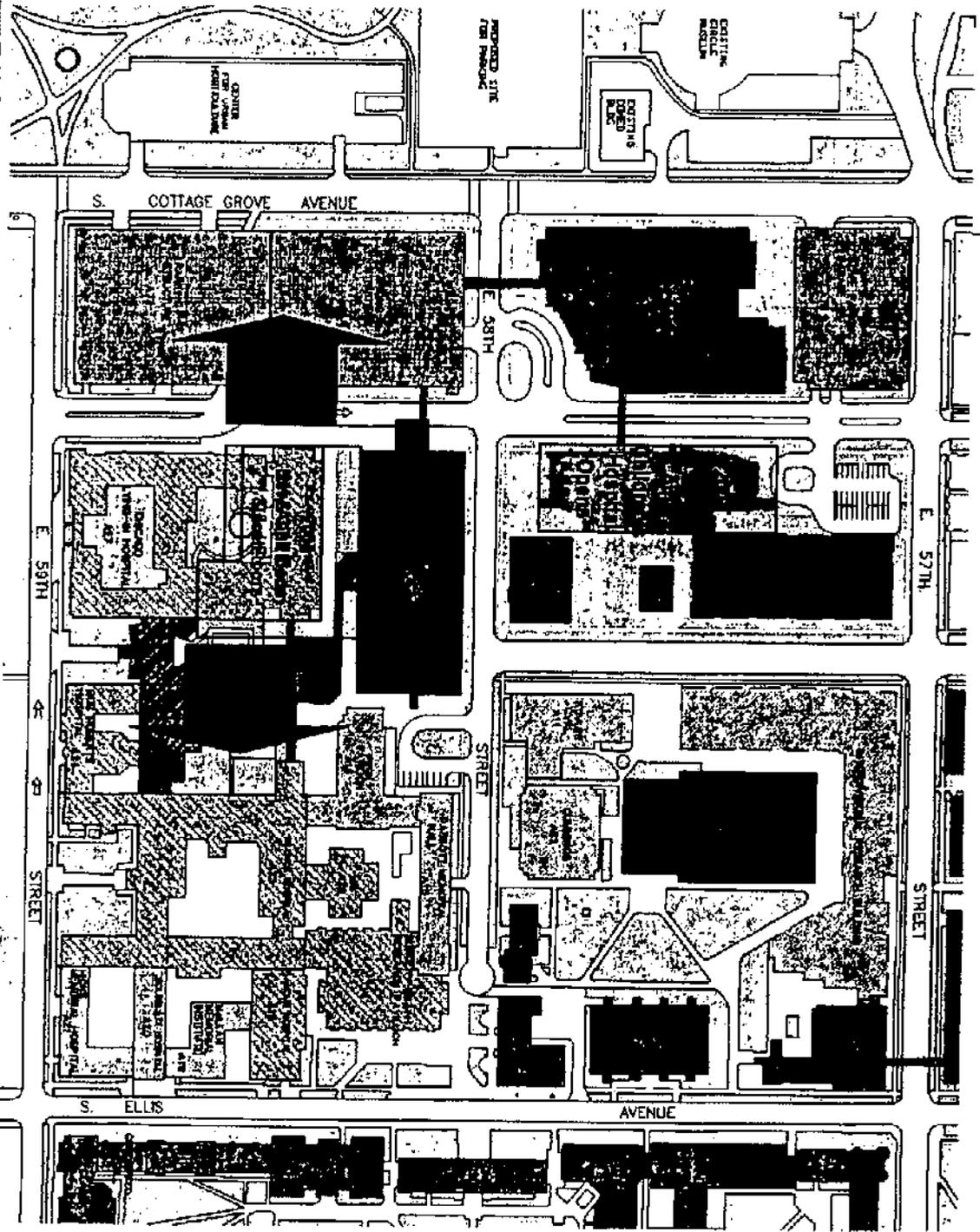


THE UNIVERSITY OF CHICAGO  
HOSPITALS & HEALTH SYSTEM  
and  
The Division of Biological Sciences  
and the Pritzker School of Medicine

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**KSA** | PERKINS  
& WILLL | **AEI**

# Option B WYLLER SITE NEW BUILDING



**THE UNIVERSITY OF CHICAGO  
HOSPITALS & HEALTH SYSTEM**  
The Division of Biological Sciences  
and the Pritzker School of Medicine

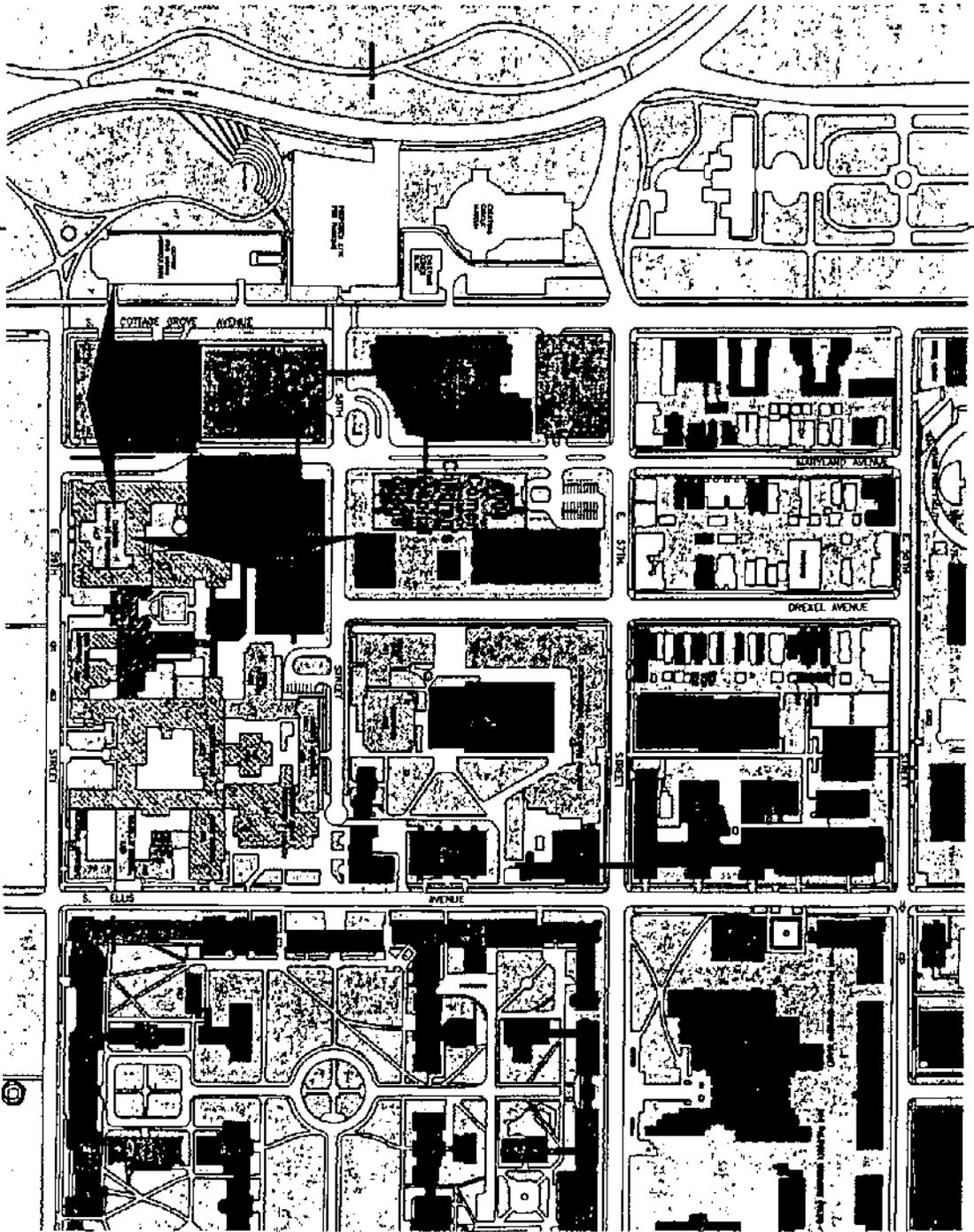
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**KSA**

**PERKINS  
& WILLL**

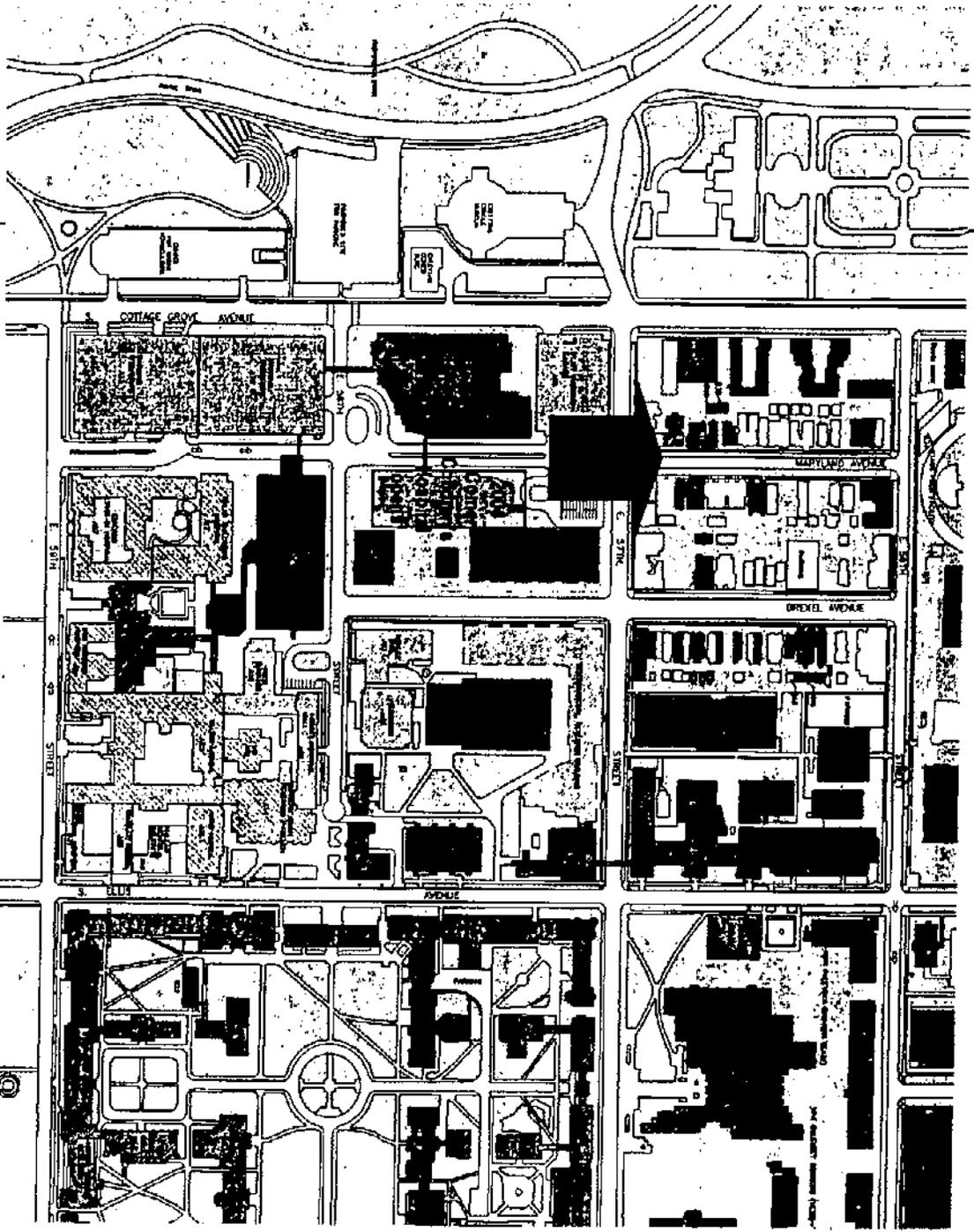
**AEI**

Option C SOUTH GARAGE NEW BUILDING



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HOSPITALS & HEALTH SYSTEM  
and  
The Division of Biological Sciences  
and the Pritzker School of Medicine

Option D, NEW HOSPITAL NORTH OF 57TH



THE UNIVERSITY OF CHICAGO  
HOSPITALS & HEALTH SYSTEM  
and  
The Division of Biological Sciences  
and the Pritzker School of Medicine

**Option E**

**DREXEL AVENUE NEW HOSPITAL**

*Future Hospital  
Development*







**SECTION III. GENERAL REVIEW CRITERIA**

This section is applicable to all projects EXCEPT those projects that are solely for discontinuation with no project costs and those projects that are non-substantive and subject only to a Part 1120 review. Refer to Part 1110.40 for the requirement for non-substantive projects.

**A. Criterion 1110.230.a, Location**

Check if the project will result in any of the following:  establishment of a health care facility;  establishment of a category of service;  acquisition of major medical equipment (for treating inpatients) that is not or will not be located in a health care facility and is not being acquired by or on behalf of a health care facility. If NO boxes are checked, this criterion is not applicable. If any box is checked, read the criterion and submit the following:

1. A map (8 1/2" x 11") of the area showing:
  - a. the location of the applicant's facility or project;
  - b. the name and location of all the other facilities providing the same service within the planning area and surrounding planning areas within 30 minutes travel time of the proposed facility;
  - c. the distance (in miles) and the travel time (under normal driving conditions) from the applicant's facility to each of the facilities identified in b. above;
  - d. an outline of the proposed target population area.
2. For existing facilities, provide patient origin data for all admissions for the last 12 months presented by zip code. Note this information must be based upon the patient's legal residence other than a health care facility for the last 6 months immediately prior to admission. For all other projects for which referrals are required patient origin data for the referrals must be provided.
3. The ratio of beds to population (population will be based upon the latest census data by zip code) within 30 minutes travel time of the proposed project.
4. The status of the project in the zoning process. Provide letter(s) from the appropriate local officials.
5. Evidence of legal site ownership, possession, or option to purchase or lease.

**APPEND DOCUMENTATION AS ATTACHMENT GRC-1 AFTER THE LAST PAGE OF THIS SECTION.**

**B. Criterion 1110.230.b, Background of Applicant**

Read the criterion and submit the following information:

1. A listing of all health care facilities owned or operated by the applicant, including licensing, certification and accreditation identification numbers, if applicable.
2. Proof of current licensing and, if applicable, certification and accreditation of all health care facilities owned or operated by the applicant.
3. A certification from the applicant listing any adverse action taken against any facility owned or operated by the applicant during the three (3) years prior to the filing of the application.

- 4. Authorization(s) permitting the State Board and Agency access to information in order to verify any documentation or information submitted in response to the requirements of this subsection or to obtain any documentation or information that the State Board or Agency finds pertinent to this subsection. **Failure to provide such authorization shall constitute an abandonment or withdrawal of the application without any action by the State Board.**

**APPEND DOCUMENTATION AS ATTACHMENT GRC-2 AFTER THE LAST PAGE OF THIS SECTION.**

**C. Criterion 1110.230.c, Alternatives to the Proposed Project**

Read the criterion and provide the following information:

- 1. Provide a comparison of all of the alternatives considered including the alternative of doing nothing. The comparison must address cost benefit analyses, patient access, quality, and short and long-term financial benefits.
- 2. Discuss why the alternative of using other area facilities or resources to meet the needs identified in your project is not feasible.
- 3. Discuss why the alternative of utilizing underutilized bed or other space in the facility is not feasible.
- 4. If the alternative selected is based solely or in part on improved quality of care, provide empirical evidence (including quantified outcome data) that verifies improved quality of care.

**APPEND DOCUMENTATION AS ATTACHMENT GRC-3 AFTER THE LAST PAGE OF THIS SECTION.**

**D. Criterion 1110.230.d, Need for the Project**

Is the need for the project based upon need assessment per Part 1100 or a variance?  Yes  No.

If no is indicated, read the criterion and submit the following as applicable:

- 1. Copies of area market studies including explanations regarding how and when these studies were performed.
- 2. Calculation of the need for the beds or services including the models used to estimate the need (all assumptions used in the model and the mathematical calculations must be included).
- 3. Identification of the individuals likely to use the proposed beds or service by:

Provide letters from physicians or hospitals which document how many patients were referred for this service in the past 12 months, where the patients were referred and how many patients will be referred annually to the proposed project.

- 4. If the project is for the acquisition of major medical equipment that does NOT result in the establishment of a category of service, provide documentation that the equipment will achieve or exceed the applicable target utilization levels specified in Appendix B of Part 1110 within 12 months after acquisition.

**APPEND DOCUMENTATION AS ATTACHMENT GRC-4 AFTER THE LAST PAGE OF THIS SECTION.**

## SECTION III. D. NEED

The following table summarizes the assessment of need as measured by State standards. The standards exist for Med/Surg beds, ICU beds, Surgery, and Radiology. These departments represent nearly 79 percent of the reviewable costs and over 94 percent when closely supporting departments such as Preparation/Recovery, Anatomic Pathology Lab, and Clinical Support are included. The State need standard is met by 2015, two years after project completion, in all cases where a standard exists. In fact, for all but Med/Surg beds and Radiology General Procedures, the standards are met for post-project facilities using 2007 actual utilization. Actual performance is the strongest evidence of the need for our services and therefore, this project.

UCMC is one of a select few academic medical centers in Illinois. Though the medical school was begun in the 19<sup>th</sup> century and was affiliated with Rush University, we opened our hospital on campus in 1927. Our history has been one of steady, sustained growth and also one of remarkable accomplishment. Eleven Noble Prize winners in medicine or physiology have been affiliated with the University of Chicago. We are frequently named Best of the Best Hospitals in a survey conducted for U.S. News & World Report, included in the Honor Roll 10 times in the past 12 years. The survey takes into account outcomes versus expected mortality, technology in the hospital, patient/community services, procedure volume, nursing honors, and reputation among specialists in treating difficult cases.

We are among the largest hospitals in Illinois, with 9,500 employees in the Medical Center, 775 attending physician faculty members, 620 residents and fellows, and over 1,000 nurses. Among the nation's leading academic medical centers, we are relatively small, though we rank highly in such intensity factors as NIH research funding per investigator (5<sup>th</sup> nationally), Howard Hughes Medical Institute Investigators per Capita (1<sup>st</sup>), and National Academy of Science Membership per 100 faculty (5<sup>th</sup>). The Pritzker School of Medicine is relatively small but very select, with 6,000 applicants each year for 104 admitted. We are known for the high proportion of our students who pursue careers in academic medicine. In addition to well-regarded faculty and students, our nurses have achieved the status of Magnet recognition Program by the American Nurses Credentialing Center, one of only 235 hospitals nationwide. This award is recognition of excellence in nursing practice and adherence to national standards for the organization and delivery of nursing services.

We work to advance the understanding and treatment of disease and have many notable accomplishments, which are detailed in ATTACHMENT MOD – 3A Med/Surg Beds. There is an ongoing effort to achieve gains through research and we strive to bring novel treatment approaches “from the bench to the bedside” through special programs such as:

- National Cancer Institutes – designated Cancer Research Center

### SECTION III. D. NEED

- National Diabetes Research and Training Center (one of six in the country)
- National Institutes of Health – funded General Clinical Research Center (among the first such centers nationwide)
- The MacLean Center for Clinical Medical Ethics (considered the leading ethics training program in the United States)
- The Jack Miller Center for Peripheral Neuropathy
- The Gwenn Knapp Center for Lupus and Immunology Research
- The Tang Center for Herbal Medicine Research
- The Center for Health and Social Sciences
- Joseph P. Kennedy, Jr. Mental Retardation Research Center
- Howard Hughes Medical Institute (for research in molecular biology and molecular genetics)
- The Brain Research Institute
- The Institute for Cardiovascular Research
- The Institute for Biophysical Dynamics

We offer services in a comprehensive array of specialties and have many investigation trials underway at all times for new drugs or other therapies for the most vexing diseases. We treat more than 26,000 inpatients each year and see 515,000 outpatient visits in our Emergency departments and outpatient clinics. We are the largest provider of care in South Chicago and people come to us from the majority of states and over 90 foreign countries with especially rare and difficult conditions. There is an obvious and ongoing need for our services and the modernization of our facilities will enable us to continue to fulfill our role.

SECTION III. D. Need for the Project

<u>Reviewable Department</u>	<u>State Standard for Utilization</u>	<u>Post project use rates based on:</u>		
		<u>Actual 2007</u>	<u>2nd Year After Completion 2015</u>	<u>Meets Standard?</u>
Med/Surg Acute Care	88% occupancy	81%	90%	yes
ICU	60% occupancy	67%	75%	yes
Surgery	1,500 hours/year	1,656	1,779	yes
Radiology				
Interventional Radiology	400 cases/year	2,263	2,431	yes
MRI	2,000 cases/year	2,319	2,491	yes
CT	2,000 cases/year	7,367	7,914	yes
General Procedures	6,500 cases/year	6,265	6,730	yes
Preparation/Recovery	no standard			
Anatomic Pathology Lab	no standard			
Central Sterile Process.	no standard			
GI Procedures	no standard			
Pharmacy	no standard			
Respiratory Therapy	no standard			
Clinical Support	no standard			

"Actual 2007" column reflects post-project beds, stations, procedure rooms, etc. at 2007 actual patient volumes.

"Meets Standard" column is for FY15, second year after project completion.

## SECTION III E. 1. Size of Project

## Comparison With Applicable Standards

<u>Dept.</u>	<u>Category</u>	<u>State Standard</u>	<u>Units</u>	<u>BGSF</u>	<u>Total Dept. Standard</u>	<u>Proposed</u>	<u>Variance</u>
<b>Radiology</b>					21,502	36,422	(14,920)
	Procedure rooms	1,386/room	5	6,930			
	MRI	3,400/room	1	3,400			
	Interventional Rad.	1,596/room	7	11,172			
<b>GI Procedure</b>					24,948	13,839	11,109
	Bronchoscopy	1,386/room	2	2,772			
	Fluoroscopy	1,386/room	3	4,158			
	Motility	1,386/room	1	1,386			
	General Procedure	1,386/room	10	13,860			
	Liver Procedure	1,386/room	2	2,772			
<b>Surgery</b>					54,658	61,389	(6,731)
	Operating Room	2,078/room	24	49,872			
	OR MRI	3,400/room	1	3,400			
	OR CT	1,386/room	1	1,386			
<b>Preparation/Recovery</b>					18,360	37,038	(18,678)
	Procedure Floor 5	180/room	53	9,540			
	Surgery Floor 6	180/room	49	8,820			
<b>Anatomic Pathology</b>					8,640	8,254	386
	Floor 2	36/bed	240	8,640			
<b>Med/Surg Acute Care Beds</b>					72,180	141,552	(69,372)
	Floors 8, 9, 10	401/bed	180	72,180			
<b>ICU Beds</b>					36,180	49,173	(12,993)
	Floors 8, 9, 10	603/bed	60	36,180			
<b>Respiratory Therapy</b>					2,136	1,959	177
	Floor 9	8.9/bed	240	2,136			
<b>Pharmacy</b>					2,880	11,602	(8,722)
	Floors 2, 10	12/bed	240	2,880			
<b>Central Sterile Processing</b>					4,320	9,296	(4,976)
	Lower Level	18/bed	240	4,320			

Negative variances are those that exceed the State standard and are explained in the following pages.

## SECTION III. Size of Project

### 1. A. Medical/Surgical Acute Care Beds

- a. The patient beds will be located on the 8<sup>th</sup>, 9<sup>th</sup>, and 10<sup>th</sup> floors of the new pavilion. We have designed a solid rectangular building, which yields an ideally flexible floorplate for procedure areas such as the Operating Rooms, GI Procedure, and Interventional Radiology. We have observed that the utilization of these services has grown steadily over the past decades, while patient bed utilization has declined. Therefore, to plan a building that will be efficient and highly adaptable to changes in health care, we chose not to construct these upper floors in more typical, double-loaded corridors often seen for patient bed towers. Instead, rather than airways separating the bed wings, we will build out the center core. The core will be comprised of on-call rooms, offices, equipment storage, and support activities such as pharmacy and respiratory therapy. Presently, these functions are acutely short of space. Unlike in 1983 when Mitchell Hospital opened, today there is much more need for space at desks and computer terminals so as to electronically process and document clinical care. On-call rooms have long been in short supply, requiring double-bunking which is problematic given the increasing number of women we have as students and residents. The use of clinical equipment at bedside has increased greatly over the years and we are chronically short of storage areas. The fully developed core area provides for these needs.

Our design positions patient rooms are arrayed along the perimeter of the building, meeting the requirement that each patient room have a window to the outside. All rooms are private, which is the modern standard since people overwhelmingly prefer the privacy this affords. While requiring more space, this plan makes it easier to fill all beds since we don't have to worry about gender matches and other impediments to bed use. The most significant design feature is the size of the patient room. At 311 nsf, it is significantly larger than the 154 nsf single rooms and 240 nsf double occupancy rooms most commonly found in Mitchell Hospital. The larger room considers the area needed to accommodate the doctors, residents, nurses, and technologists who all work at the bedside in a teaching hospital. This increased size also provides for the numerous pieces of equipment that are commonly found in a patient's room. In any given patient's stay, there might be a ventilator, dialysis machine, multiple IV poles with many infusion pumps, portable x-ray machines, and other diagnostic aids, in varying combinations. A current frustration is where to position these devices while also giving access to the patient by the doctor or nurse. Special attention has been paid to the head of the bed where the nurse does most of his or her work.

In an effort to make this building as flexible as possible so that it can have a long life as a hospital, we have created rooms and unit layouts such that each room could be re-licensed as needed as an ICU room. Over the last 30 years we have seen a tremendous change in the mix of acute care and intensive care in our hospital. This change particularly affects tertiary care, academic centers. In 1977, we had 478 Med/Surg beds and 34 ICU beds, a ratio of 1 ICU bed for

### SECTION III. Size of Project

every 14 Med/Surg bed. In 2007, we have a mix of 327 and 92 respectively, a ratio of 1:3.6. We propose with this new hospital 300 Med/Surg and 114 ICU, or a 1:2.6 ratio. Given the long term trend we have experienced, it makes most sense to plan the unit to be as adaptable to change as possible.

Over the course of the last 30 years, the families of patients expect to spend long periods of time in the room offering comfort and encouragement to the patient. "Rooming in" has become the norm, especially since inpatient care has progressively become more acute and the inpatient's health status is more fragile. With the current, limited space, rooming in can only be done with great difficulty, forcing us to bring in cots during the evening and removing them the next morning. When the doctors make their rounds and many people are in the room, family members must frequently stand in the hallway. The planned rooms have a zone at the window for sleeper chairs and recliner chairs. There will also be wardrobes large enough for the patient's clothes and other belongings and also family coats and supplies.

The bathrooms are larger, and all are handicapped accessible. They also have showers. In addition, there are visitor bathrooms on the floor and separate staff toilets.

Outside every two patient bedrooms, a charting alcove has been designed where the nurses can sit and work at a computer. The alcove is positioned so that the nurse can observe the patient, but being outside the room, it gives the patient and family some degree of privacy. We believe this alcove arrangement will help the nurses stay in close contact with their patients throughout the day. The central nurse stations are also situated such that visualization is possible in most rooms from each station. Each 28 bed unit has a central station and two satellite stations to enable this. A guiding principle for design is that central monitoring, nurse call, and other systems are helpful, but nothing is preferable to visualization of our patients.

There are 38 isolation rooms planned. Infection control is a serious and growing problem in hospitals with the increased incidence of drug-resistant infections. The 10<sup>th</sup> Floor bed units will be devoted to Hematology/Oncology patients, with compromised immune systems. On the surgical floors will be organ transplant patients, also with weakened immune systems. This building, at this stage, is devoted to our most acutely ill patients and this large number of isolation rooms acknowledges their needs.

Opposite the patient beds are clean and soiled utility rooms, janitor closets, nourishment rooms, stretcher alcoves, linen rooms, multidisciplinary work rooms, and medication rooms. The medication rooms are single use, restricted access, to give the nurses a quiet place to gather medications without noise and distraction. We believe that this arrangement will help reduce medication errors. The multidisciplinary work rooms provide areas where nurses, residents, and

### SECTION III. Size of Project

technologists can work together to facilitate communication and team building.

At 141,552 bgsf for acute care bed units, this project exceeds the State norm of 401 bgsf per bed, or 72,180 bgsf for the 180 beds. We summarize the reasons for this variance in the following table "Medical/Surgical Beds Space Explanation". The greatest factor for deviation from the State's standard is the area within each patient room. The State minimum area, given 3 feet circulation around three sides of a patient bed, is 100 nsf. The bed dimension used by IDPH is smaller than current hospital beds. We have planned the rooms using AIA guidelines, which suggest 5 feet depth for the caregiver side, 4 feet on the side of the family zone, and 5 feet from the foot of the larger bed. We have a hand washing sink in the room, though it is not mandated by the State. It is included for infection control, and it is located near the room entrance so caregivers can wash their hands upon entering and/or exiting. There is a storage area for towels, gloves, other supplies, and waste receptacles. For the family zone, recommended by AIA, we devote 32 nsf. In total, these factors account for 122 gsf beyond the State minimum. Converted to bgsf, this is nearly 37,000 bgsf or more than half of the variance.

Each bathroom has a shower, though this is not required. The toilet area is handicapped accessible in all rooms, while ADA regulations stipulate only 10 percent of all patient rooms need to be handicapped accessible.

Regulations call for one isolation room on every unit. This requirement would amount to 7 rooms, while we will build 38 isolation rooms. Each room is planned with an ante room of 81 nsf, so the additional 31 isolation rooms account for an additional 2,511 nsf.

More space will be required because all rooms will be private. Had we included both single and double occupancy rooms at the current ratio, there would be 102 singles and 39 doubles. The 311 nsf rooms could be used as doubles, so fewer rooms would be needed. We adjust this space premium number downward so as not to double count the excess space considered above with the AIA guidelines, resulting in 9,501 nsf space premium for providing all private rooms.

The Chicago Building Code requires that there be no more than 100 feet distance to exit a space vertically (stairs) or horizontally (through fire doors). The NHP will be 180 feet wide and 580 feet long. This must be divided into three building compartments since the Chicago Building Code does not allow any individual building compartments to exceed 39,000 nsf (our floors will be 104,455 nsf). Within the three building compartments there must be separations to meet the 100 feet travel distance, dividing each building compartment into smaller fire compartments. We estimate that an additional 8 feet by 100 feet of corridor was needed in each of the three building compartments to meet the 100 feet requirement, for a total of 2,400 nsf.

### SECTION III. Size of Project

The IDPH architects have been involved in our project design and they have offered many helpful suggestions. Some of these suggestions will require additional space. For instance, an extra wide 12 feet central corridor was recommended for the Surgery floor since equipment is often in the Surgery hallways and 8 feet clear corridor room is required at all times. We plan to have this extra wide central corridor on each clinical floor for the same reason it was recommended for Surgery. The central corridor will be 390 feet in length on these floors, resulting in 1,560 nsf extra per floor. The State architects also encouraged us to plan for extra deep elevator lobbies used by patients and material transport so that there is enough area to maneuver carts while patients are wheeled by in other directions. The lobbies in question would be 15 feet deep rather than the 8 feet minimum, which produces an additional space requirement of 2,406 per floor.

The total of the additional area required to meet extraordinary code and related requirements is 6,366 nsf, or 6.1 percent of the typical 104,455 floor area. Applying this factor to Med/Surg patient units area yields an addition of 13,620 bgsf.

In total, these factors total 79,700 bgsf of area. This exceeds the 69,372 that we are at variance with the State norm. We believe that these design elements will be good for patient care, will be pleasing to our patients and families, will work well for our clinicians, and are worth the cost. This modern design is seen in projects at comparable academic medical centers across the country. The following table summarized eight recent projects with substantial patient bed unit components. The patient room sizes range from 270 nsf to 330 nsf, with an average of 302 nsf. This compares to our average room size (including toilet) of 318 nsf. For an entire patient unit, the eight other projects averaged 858 dgsf compared to 674 dgsf per unit for the NHP.

Also included for comparison is the recommendation from the American Institute of Architects (AIA) health care group to the IDPH. This group was comprised of health care architects that convened several years ago to study space needs in modern hospital design. The group suggested optimum sizes of 950 dgsf for universal, multi-acuity units and 800 dgsf for Med/Surg units.

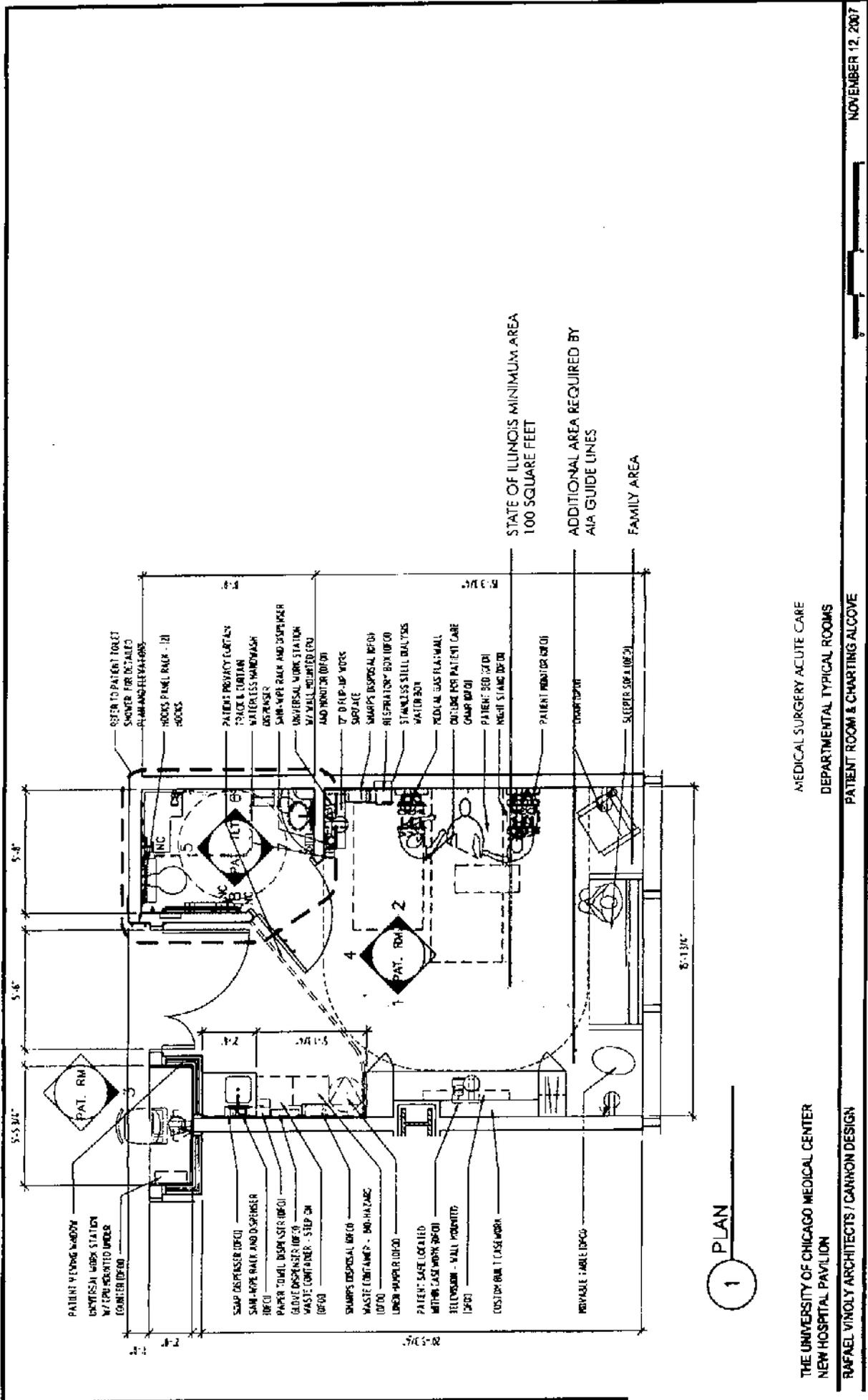
- b. We cite the IDPH General Hospital Standards, paragraph 250.2440.d)1)B which mandate a minimum of 100 nsf per acute care patient room in making our argument in section a above. We also considered the AIA Guidelines for the Design and Construction of Healthcare Facilities (sections 2.1-3.1 and 2.1-A3.1.2.c).
- c. There are a number of objectives of this project, but primary among them is the modernization of our main surgical operating suite, GI procedure area, and Interventional Radiology. Each is in a separate building and each has outgrown its space, with no easy way to expand in its current location. The best solution is

### SECTION III. Size of Project

a new building large enough to accommodate these key departments. Most of the patients treated in these departments will be admitted to in-patient bed units to recover. Since the new building will be located a block away from our adult in-patient beds in Mitchell Hospital, and the transport of these patients will involve a trip of 12 to 15 minutes, it is desirable to have patient beds in the same building.

Another key factor in our planning is that Mitchell Hospital is of insufficient size for modern in-patient bed units. The floorplate is 36,403, with beds located on top four floors. Our plan is to relocate the beds from the top two floors to the NHP. In Mitchell, the present area per bed is 418 sqsf, and there is a mix of one double occupancy room for every 2.6 single rooms. The NHP area per bed is 786 sqsf. If we were to provide all private rooms with this modern design in Mitchell, that plan would yield 46 beds per floor, or 92 beds on the available two floors. This bed complement is half of the 180 acute care beds that we need in the NHP, and for this reason, we consider using the present building architecturally insufficient..

- d. Not applicable.



SECTION III. Size of Project

**MEDICAL/SURGICAL BEDS SPACE EXPLANATION**

	<u>bgsf/</u>	<u>Room</u>	<u>Rooms</u>	<u>Total</u>
				<u>bgsf</u>
State standard for Med/Surg Acute Care Beds Patient beds	401	180		72,180
Proposed NHP Med/Surg Bed Units	2,359	60		141,552
			<b>Excess Above State Standard</b>	<b>69,372</b>

**Explanation:**

Interior Patient Room

IDPH General Hospital Standards for Med/Surg rooms  
NHP Med/Surg rooms (15' 2.75" x 23' 11")

<u>nsf/Room</u>	<u>Rooms</u>
100	
311	

To meet AIA Guidelines:

- Clearance around bed for caregivers
- Additional space for hand wash station
- Additional area for towels, gloves, waste, biohazard
- Additional area for millwork for patient/family storage
- Family space
- Total additional area to meet AIA Guidelines

57	
5	
10	
18	
<u>32</u>	
122	180

- All private rooms versus present mix of 28% double
- Provision for shower, which is not required
- All toilets are handicapped accessible (min. is 10%)
- Nurse charting alcoves for computer work
- Higher ratio of isolation rooms beyond one per unit

12	180	9,501
9	162	2,129
24	90	1,377
81	31	2,160
<u>122</u>	<u>31</u>	<u>2,511</u>
122		39,683
		1.67
		66,079

nsf subtotal  
bgsf/nsf factor  
bgsf

Chicago/IDPH requirements in excess of codes

13,620
<b>Total Excess Space Explained</b>
<b>79,700</b>

# COMPARISON OF PATIENT BED AREA WITH OTHER RECENT PROJECTS

Hospital	Private Rooms in Unit	Pat. Rom + Toilet NSF	DGSF Per Bed	Unit Type
Brigham & Women's Hospital, Boston, MA	28	303	930	Universal, multi-acuity
I U / Clarion Cancer Hospital, Indianapolis, IN	28	310	928	Universal, multi-acuity
Baptist Hospital Jacksonville, FL	44	305	760	Medical / Surgical
All above Cannon Design				
Yale New Haven Cancer Center, New Haven, CT	28	300	870	Medical / Surgical
Shepley Bulfinch Richardson & Abbott				
Northwestern Memorial Hosp. Women's Pavilion, Chicago, IL	36	320	980	Medical / Surgical, Postpartum
VOA + OWPP				
Northwestern Memorial Hosp. Women's Pavilion, Chicago, IL	30	280	650	Medical / Surgical
Ellerbe Becket + HOK				
U. of Alabama Birmingham, New University Hosp., Birmingham	74	270	810	Medical / Surgical and ICU, broken down into three 20-28 bed units
HOK				
University of Chicago Comer Children' Hospital, Chicago, IL	28	330	912	Medical / Surgical
HLM / Stanley Beaman Sears				
			302	858
Average Area				
AIA Recommendation to Illinois Department of Public Health (did not differentiate between Academic and Community Hosp.)			950	Optimal area for Universal, Multi-acuity (800 DGSF minimum)
			800	Optimal area for Medical / Surgical (500 DGSF minimum)
University of Chicago Medical Center NHP Proposed	28	318	674	

## SECTION III. Size of Project

### 2. A. Medical/Surgical Acute Care Bed Units

- a. Historical and projected utilization of our Med/Surg acute care beds is summarized in the following table. In 2002, there were 80,869 days of care. In 2007 we reached 86,694 days. This is an average annual rate of increase of 1.4 percent. We note that this is a decline from the previous year's total of 93,597 days. This reduction is the result of our intentional plan to refer patients to local community hospitals to buttress their patient activity and to ensure that a less acute level of care is provided in lower cost settings. In addition to these days, we also saw 3,393 observation days in 2007. Usually these are patients who do not stay overnight but occupy a bed during the day so that they can be observed following invasive procedures, e.g. an Interventional Radiology procedure, or observed for other reasons. These patients constitute a utilization of the inpatient beds, even though their stay is not included in the usual count of days. The State Agency has customarily allowed these days to be counted in demonstrating bed utilization. Adding these days, and projecting the total to increase at the 1.4 percent annual growth rate, produces utilization rates of 89 to 90 percent of the resultant 300 beds in the first two years after the NHP opens. This conforms to the utilization standard of 88 percent for modernizing beds in a hospital of 200 or more Med/Surg beds.
  
- h. The projections are based on a simple linear projection based on performance over the past five years. We do not concentrate greatly on local area population composition and trends as suggested in the Planning Board's rules. These are limiting and somewhat beside the point for an academic medical center that draws from a broad area. In a recent year we saw patients from 41 of the 50 states and 46 foreign countries. During the year ending October 31, 2007, only 49 percent of our adult patients came from our primary services area, which corresponds closely to the A-3 Planning Area. Another 43 percent come from the Chicago Metro area which extends to the border with Wisconsin and into the northwest corner of Indiana. The final 9 percent of patients came from beyond Metro area.

In considering the projection of patient days here, several factors are material. UCMC is the largest hospital in A-3 Chicago South. We are the last remaining tertiary level hospital in this area. As other hospitals, community centers, and other types of providers in this area have been in decline, patients have come to us for their care. This does not always result in the best economic results for the health care system -- since much of the care people need can be provided quite well and at less cost in local clinics, private physician offices, or community hospitals. We were involved in the creation of the South Side Health Collaborative with a large number of community health centers to find medical homes for patients who come to our Emergency Room for care that could be better provided in community settings.

Beyond our primary service area, UCMC attracts many patients through our

### SECTION III. Size of Project

relationships with physicians in other city and suburban areas. We receive many self-referrals, at a time when people are more likely to educate themselves on their medical condition and where they can get the best, most advanced and effective treatment for it. We are renowned for a wide variety of our programs and rank highly in the well-regarded U.S. News & World Reports annual survey of hospitals in the United States. In the most recent survey, we earned the distinction of being named one of the best 18 hospitals in the country. These results stem from strong clinical programs that represent hundreds of physicians and many more nurses, technologists, and other caregivers. Because of the reputation of excellence that we have built and maintain over the years, UCMC's past success and patient demand is the best indicator of future strength.

- c. We expect to hire new faculty members as needed to replace those who retire or are recruited away to other medical centers, or as needed to strengthen programs.
- d. We continue to refine current procedures and try new approaches in an ongoing effort to advance medical science. Our clinical faculty and researchers are known for their skill and accomplishment and this underlies our ability to attract patients from even great distances.

SECTION III. E. 2. Size of Project - Utilization

**PROJECTION OF MED/SURG PATIENT DAYS**  
(Reaching 90% Occupancy of Proposed Beds)

Historical		M/S Beds	M/S Days	Observation	Total	Occup
				Days (1)	M/S Days	
	2002	324	80,869			
	2003	324	85,334			
	2004	324	87,968	3,980		
	2005	327	92,044	3,434		
	2006	327	93,597	2,452		
	2007	327	86,694	3,393		
	12 mo. end Sep. 06	327	92,210	3,883	96,093	81%
	12 mo. end Sep. 07	327	85,644	2,972	88,616	74%
Avg. Yearly Increase			1.4%			
<b>Projected</b>						
	2008	327			89,546	75%
	2009	327			90,800	76%
	2010	327			92,071	77%
	2011	327			93,360	78%
	2012	327			94,667	79%
Open new beds	2013	300			95,993	88%
	2014	300			97,337	89%
	2015	300			98,699	90%

Note:

Observation days are actual counts of patients occupying a bed at the noon census but not counted as an inpatient day. These would be patients recovering from a procedure or being observed for another reason but not admitted as an inpatient.

**Conclusion: Total demand for M/S beds is conservatively measured by actual census plus observation patients. Given a base of 88,616 days in 2007, if this demand were to grow by 1.4% per year (the compounded average rate over the past five years) we would reach 98,357 or 90% occupancy in 2015.**



## SECTION III. Size of Project

### I. B. Intensive Care Beds

- a. The proposed intensive care beds will be on the 8<sup>th</sup>, 9<sup>th</sup>, and 10<sup>th</sup> floors, two 12 bed units on 8 and 9 and one 12 bed unit on 10. The 10<sup>th</sup> Floor is devoted to Hematology/Oncology service, which does not require the same proportion of intensive care beds as the other floors. The design objectives for the patient bed units is fully explained in Attachment GRC – 5A for Med/Surg beds and will be discussed in more summary form here.

The design objectives centered on providing a bed unit so that the best possible medical care can be practiced long into the future. We took note of long term trends such as the steady increase in equipment that is brought to the bedside, as well as the trend toward caring for more acutely ill patients and more obese patients, the challenge of dealing with difficult infections that can be drug resistant, and the strong desire among patients for family to be in the room, as well as the expectation of privacy. In response to these needs, the design has larger rooms, specifically 311 nsf compared to 178 nsf in the Rubloff ICU Tower opened in 1983. There are two isolation rooms on each of the five units. There is enough area around the bed for equipment and the many physicians, residents, medical students, and nurses that treat our patients, often in groups. There is a family zone in the rooms with a chair that folds out to be a bed and a reclining chair. There is a wardrobe for the patient's possessions as well as room for coats and other supplies the family might bring. There are bathrooms in each room, but also room at the bedside for a commode for the patients too ill to move to the bathroom. The bathrooms are all handicapped-accessible and large enough for bariatric patients.

The nurses station is large and extended, so that there are good sightlines into the rooms, which are laid out in a linear manner. There are charting alcoves outside of every two rooms where nurses can sit and do work at the computer, while being able to look into the room to monitor the patient. Though the patients are monitored by machines, it is of utmost importance that the nurses can see the patients easily.

At 49,173 bgsf, we exceed the State norm of 603 bgsf per bed, or 36,180 bgsf for the proposed 60 beds. We summarize the reasons for this variance in the following table ICU Beds Space Explanation. The IDPH minimum area requirement is 120 nsf, while we plan 311 nsf. We used AIA guidelines for space and features within the room and determined that their recommendation of 5 feet of circulation for the caregivers around the bed on one side and at the foot and 4 feet on the family side was 38 nsf per room larger than the State minimum. There is a storage area for towels, gloves, other supplies, and waste receptacles, which amounts to 18 nsf per room. For the family zone, which is recommended by AIA, we devote 32 nsf. In total, these factors account for 98 nsf beyond the State minimum. Converted to bgsf, this is 9,744 bgsf or three-quarters of the variance to the State standard.

### SECTION III. Size of Project

Each bathroom has a shower, though this is not required. The toilet area is handicapped accessible in all rooms, while ADA regulations stipulate only 10 percent of all patient rooms.

Regulations call for one isolation room on every unit. This would amount to 5 rooms, while we will provide 10 isolation rooms. Each room is planned with an ante room of 81 nsf, so the additional 5 isolation rooms accounts for an additional 405 nsf.

The City of Chicago life safety code for fire safety is more stringent than the requirements of most municipalities in the State. Our plan also includes the strong recommendations of the IDPH architects by creating large center core circulation on each clinical floor and elevator lobbies that are twice as deep as minimally required. These factors result in a space premium of 6.1 percent of total area, or 4,732 nsf for the ICUs.

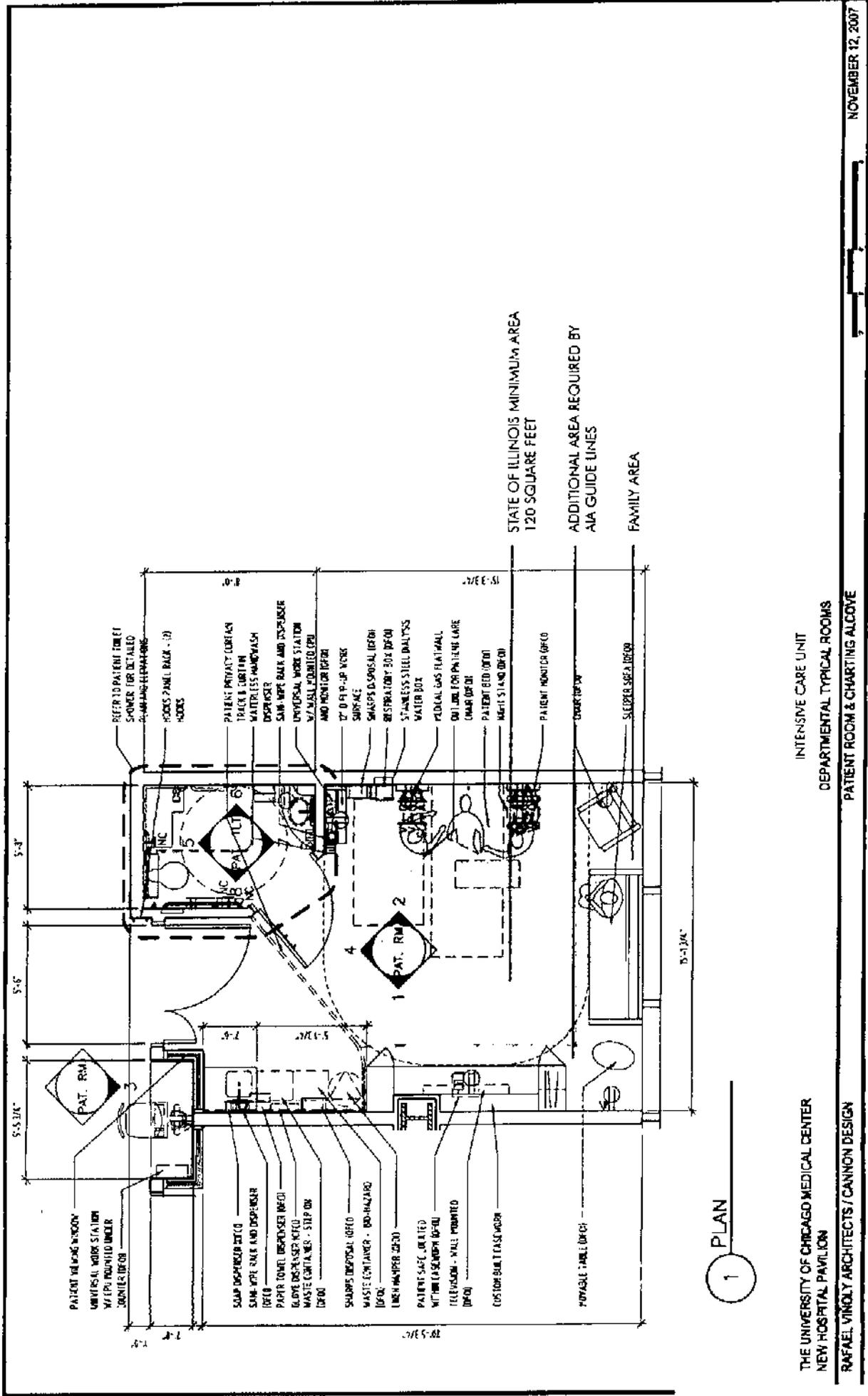
These factors result in additional space that totals 16,328 bgsf, exceeding the State norm of 12,993.. Our design is good for patient care, is pleasing to our patients and families, will work well for our clinicians, and is worth the cost. This is a modern design that is seen in projects of comparable academic medical centers across the country. In the following table, we provide a comparison of patient unit sizes in recent hospital projects. The patient room and toilet sizes in the 8 hospital comparison group ranged from 270 nsf to 330 nsf. We propose 318 in the typical ICU room. For the entire unit, the group average is 858 dgsf per bed while we propose 674 dgsf. Also noted is the AIA recommendation to IDPH of 950 dgsf for an optimally sized universal, multi-acuity unit.

- b. We cite the IDPH General Hospital Standards, paragraph 250.2440.e)2)A)i which mandates a minimum of 120 nsf per acute care patient room in making our argument in section a above. We also considered the AIA Guidelines for the Design and Construction of Healthcare Facilities (sections 2.1-3.4.2.1(1)(a).
- c. The ICU beds support the surgical patients to be treated in the NHP Operating Room as well as the other invasive procedure areas. In addition, some ICU beds are interrelated to the oncology service on the 10<sup>th</sup> floor. The travel distance from the NHP to the Rubloff ICU Tower which houses most of the beds to be relocated is 12 to 15 minutes. That distance is too long a trip for transporting the most critical patients.

The floorplate of the Rubloff ICU Tower is 6,153 bgsf, or 615 bgsf per bed. The NHP area per ICU hed is 820 bgsf. Thus, the present building could only hold 7 beds per floor using this design and the 60 heds would require 9 floors. This plan is unworkable since Rubloff has only five floors are two are occupied by units that won't be relocating.

SECTION III. Size of Project

d. Not applicable.



STATE OF ILLINOIS MINIMUM AREA  
120 SQUARE FEET

ADDITIONAL AREA REQUIRED BY  
AIA GUIDE LINES

FAMILY AREA

1 PLAN

INTENSIVE CARE UNIT  
DEPARTMENTAL TYPICAL ROOMS  
PATIENT ROOM & CHARTING ALCOVE

THE UNIVERSITY OF CHICAGO MEDICAL CENTER  
NEW HOSPITAL PAVILION  
RAFAEL VINOLY ARCHITECTS / CANNON DESIGN

NOVEMBER 12, 2007

ATTACHMENT INFO - 7

SECTION III. Size of Project

ICU BEDS SPACE EXPLANATION

	<u>bgsf/</u> <u>Room</u>	<u>Rooms</u>	<u>Total</u> <u>bgsf</u>
State standard for ICU Beds Patient beds	603	60	36,180
Proposed NHP ICU Bed Units	820	60	49,173
<b>Excess Above State Standard</b>			<b>12,993</b>

Explanation:

Interior Patient Room

IDPH General Hospital Standards for ICU rooms  
NHP ICU rooms (15' 2.75" x 23' 11")

<u>nsf/Room</u>	<u>Rooms</u>
120	
311	

To meet AIA Guidelines:

Clearance around bed for caregivers  
Additional area for towels, gloves, waste, biohazard  
Additional area for millwork for patient/family storage  
Family space

38	
10	
18	
32	
<u>98</u>	60

Total additional area to meet AIA Guidelines

Provision for shower, which is not required

12	60	710
----	----	-----

Higher ratio of isolation rooms beyond one per ICU

81	5	405
----	---	-----

nsf subtotal  
bgsf/nsf factor  
bgsf

6,985
1.66
11,596

Chicago/IDPH requirements in excess of codes

Total Excess Space Explained	<u>4,732</u>	<u>16,328</u>
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# COMPARISON OF PATIENT BED AREA WITH OTHER RECENT PROJECTS

Hospital	Private	Pat. Rom	DGSF	Unit Type
	Rooms in Unit	+ Toilet NSF		
Brigham & Women's Hospital, Boston, MA IU / Clarion Cancer Hospital, Indianapolis, IN Baptist Hospital Jacksonville, FL <i>All above Cannon Design</i>	28	303	930	Universal, multi-acuity
	28	310	928	Universal, multi-acuity
	44	305	760	Medical / Surgical
Yale New Haven Cancer Center, New Haven, CT <i>Shepley Bulfinch Richardson &amp; Abbott</i>	28	300	870	Medical / Surgical
Northwestern Memorial Hosp. Women's Pavilion, Chicago, IL <i>VOA + OWPP</i>	36	320	980	Medical / Surgical, Postpartum
Northwestern Memorial Hosp. Women's Pavilion, Chicago, IL <i>Ellerbe Becket + HOK</i>	30	280	650	Medical / Surgical
U. of Alabama Birmingham, New University Hosp., Birmingham <i>HOK</i>	74	270	810	Medical / Surgical and ICU, broken down into three 20-28 bed units
University of Chicago Comer Children' Hospital, Chicago, IL <i>HLM / Stanley Beaman Sears</i>	28	330	932	Medical / Surgical
<b>Average Area</b>			<b>302</b>	<b>858</b>
AIA Recommendation to Illinois Department of Public Health (did not differentiate between Academic and Community Hosp.)			950	Optimal area for Universal, Multi-acuity (800 DGSF minimum)
			800	Optimal area for Medical / Surgical (500 DGSF minimum)
University of Chicago Medical Center NHP Proposed	28	318	674	

## SECTION III. Size of Project

### 2. B. Intensive Care Bed Units

- a. Historical and projected utilization of our intensive care beds is summarized in the following table. In 2002, there were 25,775 days of care. In 2007 we reached 27,795 days. This is an average annual rate of increase of 1.5 percent. We note that this is a decline from the previous year's total of 29,946 days. This decline reflects our intentional decision to refer patients to local community hospitals to buttress their patient activity and to ensure that the less acute levels of care is received in lower cost settings. In addition to these days, we also saw 303 observation days in 2007. Usually these are patients who do not stay overnight but occupy a bed during the day so that they can be observed following invasive procedures, e.g. an Interventional Radiology, or observed for other reasons. These patients constitute a utilization of the inpatient beds, even though their stay is not included in the usual count of days. The State Agency has customarily allowed these days to be counted in demonstrating bed utilization. Adding these days, and projecting the total to increase at the 1.5 percent annual growth rate produces utilization rates of 74 to 75 percent of the resultant 114 beds in the first two years after the NHP opens. This conforms to the utilization standard of 60 percent for modernizing ICU beds.
- b. The projections are based on a simple linear projection based on performance over the past five years. We do not concentrate greatly on local area population composition and trends as suggested in the Planning Board's rules. These are limiting and somewhat beside the point for an academic medical center that draws from a broad area. In a recent year we saw patients from 41 of the 50 states and 46 foreign countries. During the year ending October 31, 2007, only 49 percent of our adult patients came from our primary services area, which corresponds closely to the A-3 Planning Area. Another 43 percent come from the Chicago Metro area which extends to the border with Wisconsin and into the northwest corner of Indiana. The final 9 percent of patients came from beyond Metro area.

In considering the projection of patient days, several factors are material. UCMC is the largest hospital in A-3 Chicago South. We are the last remaining tertiary level hospital in this area. As other hospitals, community centers, and other types of providers in this area have been in decline, patients have come to us for their care. This does not always result in the best economic results for the health care system, since much of the care people need can be provided quite well and at less cost in local clinics, private physician offices, or community hospitals. We were involved in the creation of the South Side Health Collaborative with a large number of community health centers to find medical homes for patients who come to our Emergency Room for care that could be better provided in community settings.

Beyond our primary service area, UCMC attracts many patients through our relationships with physicians in other city and suburban areas. We receive many

### SECTION III. Size of Project

self-referrals, at a time when people are more likely to educate themselves on their medical condition and where they can get the best, most advanced and effective treatment for it. We are renowned for a wide variety of our programs and rank highly in the well-regarded U.S. News & World Reports annual survey of hospitals in the United States. In the most recent survey we earned the distinction of being named one of the best 18 hospitals in the country. These results stem from strong clinical programs that represent hundreds of physicians and many more nurses, technologists, and other caregivers. Because of the reputation of excellence that we have built and maintained over the years, our past success and patient demand is the best indicator of future strength.

- c. We expect to hire new faculty members as needed to replace those who retire or are recruited away to other medical centers, or as needed to strengthen programs.
- d. We continue to refine current procedures and try new approaches in an ongoing effort to advance medical science. Our clinical faculty and researchers are known for their skill and accomplishment and this underlies our ability to attract patients from even great distances.

SECTION III. E. 2. Size of Project - Utilization

**PROJECTION OF ICU PATIENT DAYS**

(Reaching 75% Occupancy of Proposed Beds)

Historical	ICU		Observation	Total	Occup
	Beds (1)	ICU Days	Days (2)	ICU Days	
2002	92	25,775		25,775	
2003	92	26,692			
2004	92	28,037			
2005	92	28,981			
2006	92	29,946	208		
2007	92	27,795	303		
12 mo. end Sep. 06	92	29,645	273	29,918	89%
12 mo. end Sep. 07	92	27,545	287	27,832	83%
Avg. Yearly Increase		1.5%			
<b>Projected</b>					
2008	92			28,145	84%
2009	92			28,567	85%
2010	92			28,996	86%
2011	92			29,431	88%
2012	92			29,872	89%
Open new beds 2013	114			30,320	73%
2014	114			30,775	74%
2015	114			31,238	75%

Notes:

Observation days are actual counts of patients occupying a bed at the noon census but not counted as an inpatient day. These would be patients recovering from a procedure or being observed for another reason but not admitted as an inpatient.

**Conclusion: Total demand for ICU beds is conservatively measured by actual census plus observation patients. Projecting ICU bed usage to increase by the average annual increase seen between 2002 and 2007 of 1.5%, we expect 31,122 days by 2015 or 75 percent occupancy of the proposed 114 ICU beds.**

## SECTION III. Size of Project

### I. C. Surgery

- a. The space determined for Surgery was the product of three years of planning. Initially, long range forecasts of activity were made in consultation with our surgeons and other clinical staff of the department. Space needs were determined based on assumptions of workload throughput, expected acuity of cases, the development of new technologies, our practice of academic medicine, and other factors influencing the need for space. There has been constant interaction with the staff and our internal planners and architects. Site visits were made to recently completed projects in tertiary care facilities comparable to our own to get an understanding of state of the art designs. Among the places visited were UCLA, University of Alabama – Birmingham, M.D. Anderson Cancer Center, Houston, Barnes-Jewish Center for Advanced Medicine, St. Louis, McDonalds Pediatric and Cancer Research Building, Washington University, St. Louis, Van Andel Institute, Michigan, and Institute for Integrative Genomics, New York City. Our architectural firm, Rafael Vinoly Architects/Cannon Design brings extensive experience in hospital design and with steady and frequent interaction with our staff have developed a design that will provide us with excellent and adaptable facilities for many years to come. To facilitate this interaction, we have provided on site space in the Medical Center where the architects work side-by-side with our staff.

The main driver of the space is the number of operating rooms. We have operated at 15 in the General Operating Room that this facility will replace. We propose 24. The resultant operating rooms are justified based on current hours, which have been gradually increasing. In addition to the ORs, we plan a CT and an MR room, dedicated to patients in the OR. We do not count these in the numbers reported for Radiology since their special dedication to the OR greatly restricts their usage and productivity. The patients might be scanned before their operation to provide up-to-the-minute verification of condition as seen in the image. Alternatively, they could be scanned after their operation to ensure that no further work is required. This capability will avoid our current problem: now, when a patient is closed up then imaged the next day, further work these back-to-back surgeries cause, necessitates a separate operation. Obviously, this burdens the patient, both physically, emotionally, as well as financially. Clearly, having these imaging devices within the operating room will be a great improvement. Presently, the transport of a patient before his surgery to Radiology for the imaging is expensive in terms of staff time and it can result in inefficient use of the OR since it is uncertain when the patient will return and be available for surgery. Our design will likely positively affect the quality of surgery. For example, a surgeon can be more conservative and sparing in removing suspected cancerous tissue if he knows that immediate follow-up imaging can indicate whether or not more tissue should be removed.

Attachment GRC – 5, “Summary Comparison with Applicable Standards”, establishes that we exceed the State’s standard for space in Surgery. The State

### SECTION III. Size of Project

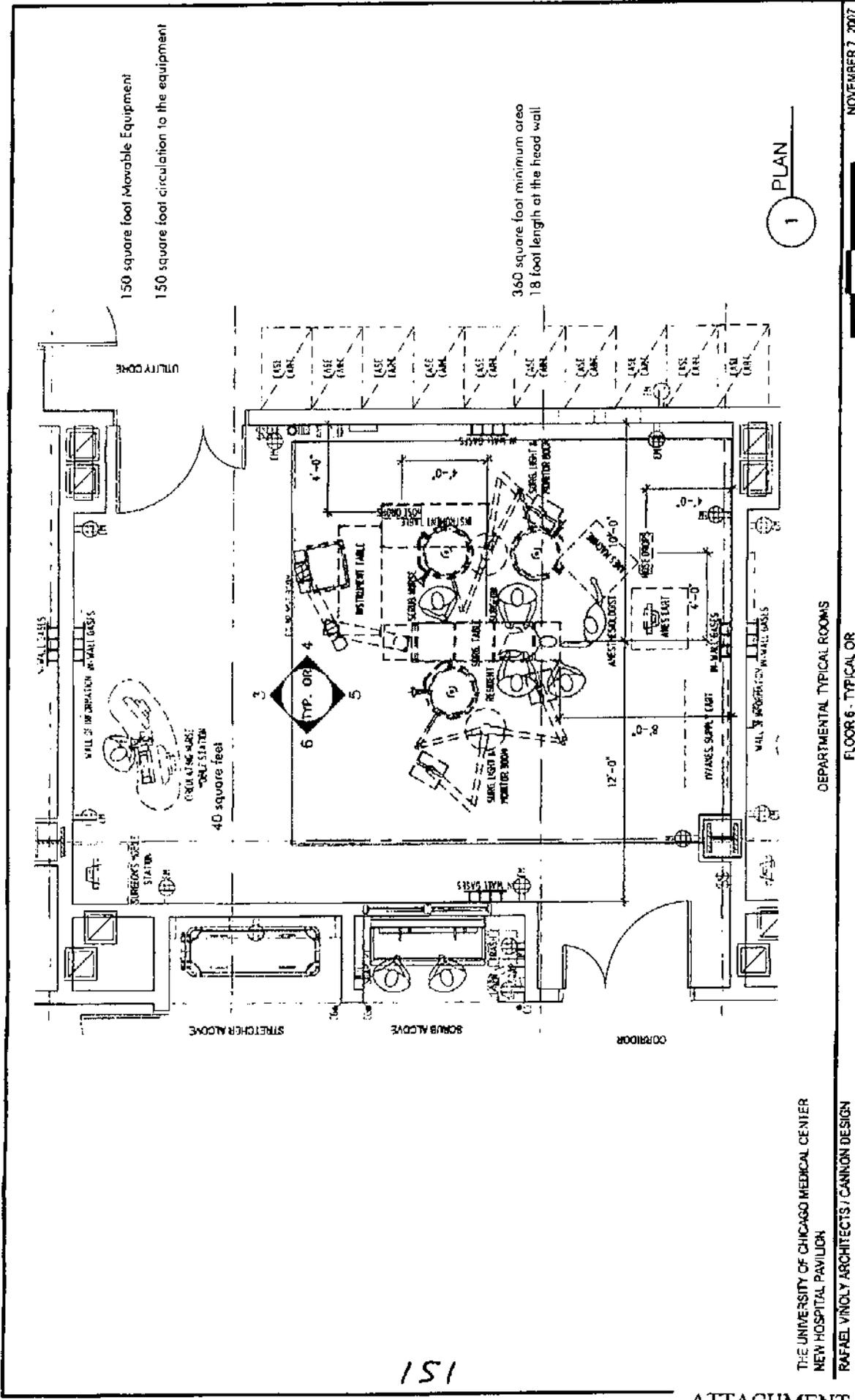
standard, including allotments for the CT and MR rooms, is 6,731 bgsf less than our proposed area. To justify this variance, we consider the minimum 360 nsf from IDPH's General Hospital Standards. In the layout of a typical OR included in the section, there is room for the table, anesthesiologist, and surgeons around the table, along with overhead booms. Because we are a teaching hospital, we must accommodate residents and fellows at the side of the attending surgeons. The 360 square foot minimum area is shaded, and beyond, we will locate equipment on wheels, such as video camera, ultrasound, utility cart, surgical case carts, IV supply cart, Mayo stand, kick bucket, lead shield, instrument table, double basin stand, and suction canister stand. We estimate 150 nsf needed for mobile equipment in the room plus 150 nsf for circulation around the equipment. The clear, long-term trend is for more movable equipment, so we need to be sure that the rooms will be large enough to handle ever more equipment. The current OR in Surgery Brain Research Pavilion ("SBRP") was built in 1977, with many rooms approaching 400 nsf. At the time they were constructed, these rooms were considered quite large, and because we planned well, this operating suite has served us well for 30 years.

Opposite the surgical table of each OR is a station for the circulating nurse. This nurse sits at a movable table with a computer, telephone, writing implements, and all of the pagers of the physicians in the room. The circulating nurse documents all activities in the room, including when the patient enters and leaves, who else is present in the room, what skin preparation is done, the condition of the skin under the Bovie pad, all equipment in the room identified by serial number for each device, when anesthesia is started, what the pre-operative diagnosis is, what medications are administered from the field, when the incision is made, what specimens are taken and where they are sent, if a tourniquet is used and under what pressure, and identifies any implants used. The nurse counts all needles, sponges, and instruments used. She or he makes frequent calls to the family advising them of progress and relaying information the surgeons give, calls Pathology Lab, Blood Bank, Pharmacy, or other departments to check on orders or at the request of surgeons, answers all pagers, calls Bed Access Desk to arrange for beds and inform them of timing, calls the Lift Team if they are needed, and contacts the appropriate staff regarding room cleanup time. We estimate that, including circulation, 40 nsf of area is needed for the circulating nurse mobile station.

The accompanying table Surgery Space Explanation quantifies the excess space factors described above. The total area for mobile equipment (150 nsf), circulation around the equipment (150 nsf), and the circulating nurse mobile station (40 nsf) is 340 per room, or 8,160 nsf for the 24 proposed rooms. The bgsf/nsf factor is 1.52, so there is 12,365 bgsf accounted for by the explanation above. The proposed area exceeds the State norm by 6,731 bgsf, which we justify by the requirements for more space within each operating room.

### SECTION III. Size of Project

- b. We cite the IDPH General Hospital Standards, paragraph 250.2440.i)1), which mandates a minimum of 360 nsf per operating room in connection with section a above.
- c. Regarding architectural impediments in the existing building, SBRP – where the General Operating Rooms are presently located -- has an area of 25,663 bgsf. The floor of the NHP on which Surgery and Preparation/Recovery will be located is 102,455 bgsf. To accommodate the proposed area would require four floors of SBRP. This space is not available since there are research wet laboratories on the other floors in the building. Spreading these departments over several floors would create terrible inefficiencies due to the time spent waiting for and riding in elevators moving from floor to floor. A critical factor in planning the shape and location of the NHP was the imperative in placing Surgery and Preparation/Recovery on one floor.
- d. Not applicable.



1 PLAN

NOVEMBER 7, 2007

ATTACHMENT INFO - 7

DEPARTMENTAL TYPICAL ROOMS

FLOOR 6 - TYPICAL OR

THE UNIVERSITY OF CHICAGO MEDICAL CENTER

NEW HOSPITAL PAVILION

RAFAEL VINOLY ARCHITECTS / CANNON DESIGN

151

## SURGERY SPACE EXPLANATION

State standard for OR	<u>BGSF/room</u>	<u>Rooms</u>	<u>Total BGSF</u>
	2,078	24	49,872

Proposed NHP OR		24	61,389
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## Deduct:

OR-dedicated MR	3,400	1	(3,400)
OR-dedicated CT	1,386	1	(1,386)

Net Applicable Area	<u>56,603</u>
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Excess Above State Standard	<b>6,731</b>
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## Explanation:

Minimum area	<u>NSF/room</u>	<u>Rooms</u>	<u>Total NSF</u>	General Hospital Standards 250.2440.i
	360	24		

Additional area for moveable equipment	150	24	3,600
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Circulation for moveable equipment	150	24	3,600
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Nurse mobile station plus circulation	40	24	960
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Excess NSF Beyond Minimum Size	<u>8,160</u>
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BGSF/NSF Factor	1.52
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Excess BGSF Beyond Minimum	<b>12,365</b>
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## SECTION III. Size of Project

### 2. C. Surgery

- a. Projected Surgery utilization, as measured by OR hours, for the first two years after project completion is shown in the accompanying table. OR cases are projected to increase slightly from 20,412 in 2007 to 21,926 by 2015. OR hours will reach 65,812 in 2015, up from 61,270 in 2007. Using the State standard of 1,500 hours per OR, our hours in 2007 justify 41 ORs, more than the 37 ORs we propose to have open after project completion.
- b. While OR cases increased by 4 percent per year between 2005 and 2007, we conservatively projected them to increase by only 1 percent per year, based on approximately 1 percent per year increases expected for both inpatient admissions and outpatient visits. The ratio of OR inpatient cases to admissions and OR outpatient cases to visits is expected to remain at the same proportion as experienced in 2007, again a conservative assumption since these ratios – more cases per admission/visit -- have been increasing. Similarly, we project OR hours to increase on the same basis as OR cases increase.
- c. We expect to hire new faculty members to support Surgery as needed to replace those who retire or are recruited away to other medical centers, or as needed to improve programs.
- d. We continue to refine current procedures and try new approaches in an ongoing effort to advance medical science. We foresee no significant impact to workload in this regard that should be addressed here.

## OR FACILITY UTILIZATION

	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2014</u>	<u>2015</u>
Admissions	26,401	26,926	26,205	27,843	28,145
Visits	507,154	505,664	514,873	548,199	553,133
OR Cases					
Inpatient	10,204	12,412	10,318	10,963	11,082
Outpatient	9,009	9,736	10,094	10,747	10,844
Total	19,213	22,148	20,412	21,710	21,926
OR Hours					
Inpatient	40,666	41,523	39,884	42,377	42,836
Outpatient	17,718	20,189	21,386	22,770	22,975
Total	58,384	61,712	61,270	65,148	65,812
Operating Rooms	28	28	28	37	37
Hours/OR	2,085	2,204	2,188	1,761	1,779
Rooms at 1,500 Hrs.	39	41	41	43	44

## SECTION III. Size of Project

### 1. D. Preparation/Recovery

- a. The Preparation/Recovery areas are located on the 5<sup>th</sup> Floor to support Interventional Radiology and GI Procedures and the 6<sup>th</sup> Floor to support Surgery operating rooms. Several of the key design decisions were driven by infection control considerations. With MRSA and other drug-resistant infections a serious and growing problem, it is critical for hospitals to place a high priority on preventing the spread of infection. Much of this can be accomplished by staff training, but smart facility design also plays an important role. Rather than having recovery stretchers separated by curtains as has customarily been done, we chose to build approximately 10 foot by 11 foot rooms with hard walls. This provides much more substantial separation from neighboring stations. In addition, among the total 103 stations, we plan for 14 isolation rooms with separate toilets and ante rooms. This number includes 5 block rooms, where anesthesia lines can be established prior to the patient going to an OR. These rooms are also set up with ante rooms and can serve as isolation rooms.

Both floors served by Preparation/Recovery have large surgical/procedure operations and are generally busy, but there are times of the day when activity is less. To make most efficient use of the staff, the basic layout of the stations is linear, stretching from east to west most of the length of the building. As procedure activities decline as the day proceeds, the end portions of Preparation/Recovery can be closed off so that the staff can be concentrated in a smaller area. The linear layout is also the arrangement whereby travel times are minimized between the recovery stations and the OR/Procedure rooms.

Owing to the ebb and flow of activities on these floors and our desire to accommodate changes in the future, we have designed each station so that it can be used either for preparation, and Phase 1 or Phase 2 recovery. The State minimum size for Phase 2 recovery is 50 nsf and for Phase 1 is 70 nsf, but rather than restrict the usage by sizing the stations differently, we kept them of similar size and large enough to serve in any capacity. Having this high degree of flexibility will help us avoid having to place Phase 1 recovery patients in the same vicinity as Phase 2 or Preparation patients.

The rooms are sized significantly larger than the State architectural minimum requirement. Because we want them to be interchangeable, all are large enough to accommodate a family member in Phase 2 recovery. This element of family-centered care is important for the patient and their loved ones. We also find the 70 nsf minimum too small for the equipment that might be needed in the room. The hard-walled rooms afford greater privacy as well, since medical histories, physicals, or last minute assessments are often taken in this department. The patient's privacy is compromised if there are only curtains separating stations. These rooms will also provide more comfortable accommodation when the beds are full and patients are delayed in moving from Recovery to a bed unit. We do our best to manage bed availability, but during the busy seasons finding open

### SECTION III. Size of Project

beds becomes a challenge.

There are 5 block rooms on the Surgery floor. These rooms are used for cases when more involved anesthesia will be used. Epidural or central lines are established in these rooms. Placing these lines in the block rooms rather than the OR room itself minimizes the time spent in the very costly, highly staffed OR.

The area proposed for this department is 37,038 bgsf, which exceeds the State norm of 18,540. We provide the following table "Preparation/Recovery Space Explanation" to explain the reasons for this difference. The IDPH General Hospital Standards propose 70 nsf minimum requirement, while the proposed rooms are 108.9 nsf larger. In providing a hard wall enclosure, with a 2' 9" wide stretcher and three feet on either side for equipment and circulation, room width approaches 10 feet. The length of 11 feet is needed for 3 feet of circulation at the foot of the bed. The room layout provided in this section gives a sense of how well this larger room will be used. The State 70 nsf minimum size is shaded within the room. If cubicle curtains were to be used, circulation space to either side could be as little as 2 feet, since a nurse needing slightly more room could intrude into the curtain, but with hard walls at least 3 feet of circulation on either side is required. Our current OR Recovery area uses cubicle curtains, and the staff do not enjoy the many occasions when they are working bottom-to-bottom. The proposed room dimensions contribute 4,002 additional nsf beyond the minimum required.

Ante rooms for isolation rooms are not required. We choose to specify them because we believe they are more effective than a moveable screen is. The ante rooms contribute 1,052 additional nsf.

In aggregate, the 6.6 square feet space differential caused by hard walls amounts to 680 additional nsf for the 103 stations. The wall thickness also extends the rooms farther than if there were cubicle curtains, which entails additional corridor length in the amount of 2,225 nsf.

The extremely linear alignment of the rooms minimized transport distances from the ORs and helps in "collapsing" the department, as activity declines during the day. However, there is a cost in circulation space. There is a requirement that nurses at the central station be able to see into each station, so their station must be set back further from the stations to have a sight line down the long linear run of stations. We estimate the space premium of this setback at 1,200 nsf.

As discussed above, we made all rooms large enough to meet the most demanding usage, Phase 1 recovery. The minimum size for Phase 2 is 50 nsf rather than 70 nsf for Phase 1. There are 39 stations most likely to routinely be used for Phase 1 recovery, leaving 64 that could have been sized smaller. The goal of having ultimate room flexibility has a space premium of 1,280 nsf.

### SECTION III. Size of Project

Finally, we have had many meetings to date with officials from the City of Chicago and IDPH architects, both of whom have requirements that must be met. The City has some requirements peculiar to it that are more rigorous than found elsewhere in Illinois. Some of these requirements were put in place after tragic fires. These City requirements do exceed what is required elsewhere in the State, and it is likely the State space norms are weighted to some extent by the non-Chicago hospital projects that comprise the data set.

The City of Chicago Building code requires that there be no more than 100 feet distance to exit a space vertically (stairs) or horizontally (through fire doors). The NHP will be 180 feet wide and 580 feet long. This space must be divided into three building compartments since Chicago code does not allow any individual building compartments to exceed 39,000 nsf (our floors will be 104,455 nsf). Within the three building compartments there must be separations to meet the 100 feet travel distance, dividing each building compartment into smaller fire compartments. We estimate that an additional 8 feet by 100 feet of corridor was needed in each of the three building compartments to meet the 100 feet requirement, for a total of 2,400 nsf.

The IDPH architects are well involved in our project design and have offered many helpful suggestions. Some of these suggestions will require additional space. For instance, an extra wide 12 feet central corridor was recommended for the Surgery floor since equipment is often in the Surgery hallways and 8 feet clear corridor room is required at all times. We plan to have this extra wide central corridor on each clinical floor for the same reason it was recommended for Surgery. The central corridor will be 390 feet in length on these floors, producing 1,560 nsf extra per floor. The State architects also encouraged us to plan for extra deep elevator lobbies used by patients and material transport so that there is enough area to maneuver carts while patients are wheeled by in other directions. The lobbies in question will be 15 feet deep rather than the 8 feet minimum, which produces an additional space requirement of 2,406 per floor.

The total of the additional area required to meet extraordinary code and related requirements is 6,366 nsf, or 6.1 percent of the typical 104,455 floor area. Applying this factor to the Preparation/recovery department area yields an addition of 2,256 nsf.

In sum, the total additional space in this department is 12,694 nsf, or 19,668 bgsf. This accounts for the difference in area between the State norm and our building plan.

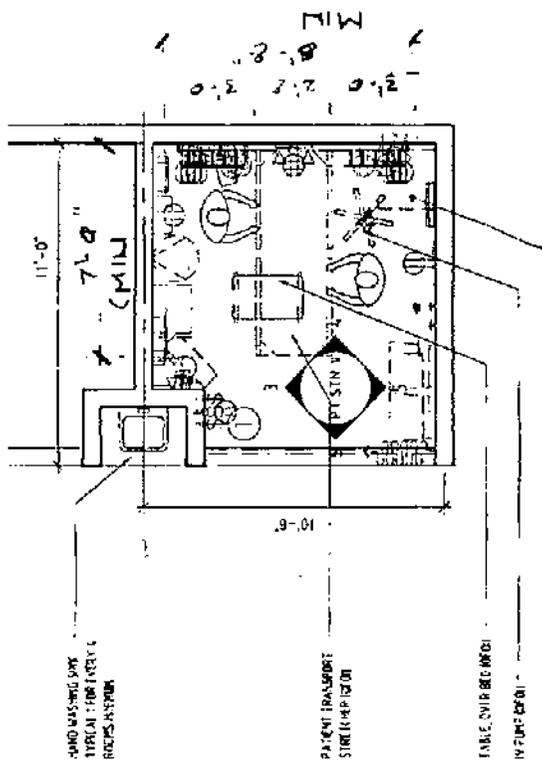
- b. We cite the IDPH General Hospital Standards, Section 250.2440 c)i)4) which mandates a minimum of 70 nsf per Phase 1 recovery station and 50 nsf per Phase 2 station, used in making our argument in section (a) above.

### SECTION III. Size of Project

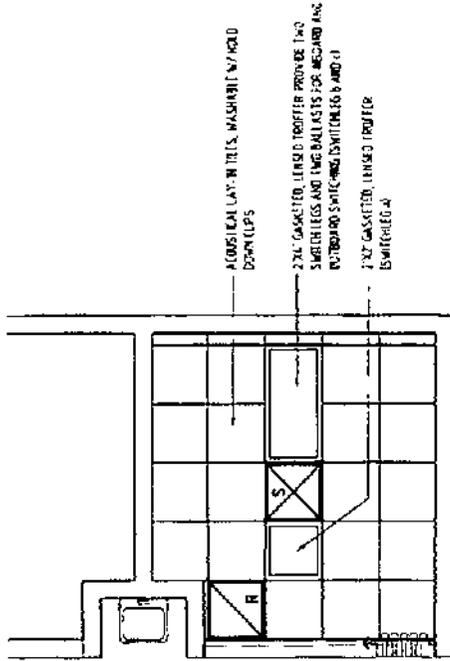
- c. Regarding architectural impediments in the existing building, SBRP, in which the Preparation/Recovery stations supporting the General Operating Room are presently located, has an area of 25,663 bgsf. The floor of the NHP on which Surgery and Preparation/Recovery will be located is 102,455 bgsf. To accommodate the proposed area would require four floors of SBRP. This space is not available since there are research wet laboratories on the other floors in the building. Spreading these departments over several floors would create significant inefficiencies caused by elevator transport and its resulting delays. A critical factor in planning the shape and location of the NHP was the imperative of placing Surgery and Preparation/Recovery on the same floor.

Interventional Radiology is presently located in Mitchell Hospital. The architectural impediment in that building is one of insufficient space. The GI Procedure Unit is located in the DCAM outpatient building where a lack of space is also the major impediment. By combining these two procedure departments on one floor, they can share the Preparation/Recovery function which is much more efficient than the current separate operations.

- d. Not applicable.



1 PLAN



2 REFLECTED CEILING PLAN

- 1. CONDITIONS / SPECIFICATIONS FOR POWER
- 2. ELECTRICAL CODES / LOCAL CODES / COUNCILS
- 3. PRELIMINARY QUANTITIES AND TYPE / VERIFICATION
- 4. PATIENT LIGHTING REQUIREMENTS
- 5. ACCESSORY FIXTURES
- 6. BEYOND / BUFFER ROOMS
- 7. GROUNDING / RUP AT HEADWALL
- 8. STEP DOWN WITH HAND RAIL / LOCATION / TYPE ROOM
- 9. SFP WALL PROTECTION / CORNER
- 10. BAY NUMBER / SYSTEM / FUNCTIONAL / INTERIOR / BAY
- 11. MAIN / TRIP

THE UNIVERSITY OF CHICAGO MEDICAL CENTER  
 NEW HOSPITAL PAVILION  
 DANIEL WAGLEY ARCHITECTS / CANNON DESIGN

DEPARTMENTAL TYPICAL ROOMS

PATIENT STATION II (INTERIOR CONDITION)

SEPTEMBER 17, 2007

## PREPARATION/RECOVERY SPACE EXPLANATION

	bgsf/ Room	Rooms	Total bgsf
State standard for Preparation/Recovery	180	103	18,540
Proposed NHP Preparation/Recovery		103	37,038
			<b>Excess Above State Standard 18,498</b>
<b>Explanation:</b>			
Minimum prep/recovery area Our dimension of 9'10.75" x 11			70 108.9
Increment for equipment, family visitor			<u>38.9</u>
Additional space for family member	<u>Rooms</u>	<u>Per Room</u>	<u>Excess</u>
	103	38.9	4,002
Provision of ante rooms not required	14	75.1	1,052
Area accounted for by wall thickness in excess of cubicle curtains.	103	6.6	680
Additional corridor area due to larger area necessitated by walls vs. curtains	103	21.6	2,225
Excess circulation area for linear layout			1,200
Additional room size for maximum flexibility	64	20	1,280
Chicago/IDPH requirements in excess of codes			2,256
	Total Excess Space Explained		<u>12,694</u>
	bgsf factor		1.55
	Explanation of Additional Space Total		19,668

### SECTION III. Size of Project

#### 2. D. Preparation/Recovery

- a. We are unclear if this is considered a utilization standard, but the Appendix B State and National Norms indicate a standard of no more than 4 Preparation/Recovery stations per OR. In the following table, we show that for 2007 there were 45 OR and procedure rooms (GI Procedure and Interventional Radiology) supported by 71 preparation/recovery stations. Upon project completion, we will have 128 stations supporting 62 ORs and procedure rooms, a ration of 2.1 stations per room, which is within the State standard of 4.
- b. Projected numbers of rooms and stations are based on project plans and the expectation that ORs in the DCAM and Comer Children's Hospital will not increase.
- c. Not applicable.
- d. Not applicable.

## RECOVERY FACILITY UTILIZATION

	<u>2007</u>	<u>2014</u>	<u>2015</u>
Operating Rooms	28	37	37
Angiography Labs	5	7	7
GI Procedure Rooms	12	18	18
Recovery Stations:			
Serving ORs	39	75	75
Recovery Stations/OR	1.4	2.0	2.0
Serving Angio Labs	12	18	18
Recovery Stations/Angio	2.4	2.6	2.6
Serving GI Procedure	20	35	35
Recovery Stations/GI Rm.	1.7	1.9	1.9
Total ORs, Angio, GI Rms.	45	62	62
Total Recovery Stations	71	128	128
Recovery Station/OR, etc.	1.6	2.1	2.1
State Standard			
Total OR/Procedure Rooms	45	62	62
Standard	4	4	4
Rooms at Standard	180	248	248

## SECTION III. Size of Project

### I. E. Anatomic Pathology

- a. Anatomic Pathology will occupy 8,933 bgsf on the 2<sup>nd</sup> Floor. It consists of separate areas for Surgical Pathology and Cytopathology. Both serve the procedure areas on the 5<sup>th</sup> Floor and the OR's on the 6<sup>th</sup> Floor. Tissue and fluid samples will be delivered via dedicated dumbwaiters. For some GI procedures, the gastroenterologists prefer having the Cytopathology specialist in the procedure room so that there is immediate communication about the assessment of the sample and so that all can see the image under the microscope, with the remainder of this work performed in the lab area. It is important for this function to be located where tissue samples can be sent quickly from the OR to the lab. Vertical transportation is often quicker than horizontal and having dedicated dumbwaiters will ensure speedy delivery. The surgeons, anesthetist, nurses, and other staff participating in the surgery will all be waiting while the sample is sent and assessed in the lab. More important, the patient will be on the table, under anesthetic, so it is critical that the lab assessment happen as fast as possible.

The space is planned based on the work sequence in the labs. For Surgical Pathology, there is an accession desk where samples are received and logged in for tracking. The grossing station is used to trim away superfluous matter. The tissue is then moved to the cryo-preservation area where it is flash frozen. It is then cut by a microtome into a very thin slice. This frozen section is then coverslipped and sent to the microscope area where it is studied. This process involves different activities and equipment, which is what guides the design. The layout is planned to minimize the time needed to move the sample from station to station, while keeping enough separation to minimize noise and distractions.

The planned area of 8,933 bgsf slightly exceeds the State standard of 36 bgsf/bed, which, when applied to the 240 beds in NHP produces a target area of 8,640. We exceed this standard by 293 bgsf. We have created enough circulation for Pathology residents and medical students to watch and participate in the lab's work, which could account for this excess.

We feel that the State standard may be outdated, using a general size measure of beds in determining an appropriate space norm, while not accounting for an increasing amount of surgical procedures taking place in tertiary level medical centers. At UCMC, we had 19,000 hours of surgery in 1977 and operated 719 beds. Thirty years later we had 61,000 hours and 596 beds. This represents an increase in surgical intensity of 287 percent and demonstrates that a space measure predicated merely on beds does not consider the increasing intensity of surgical workload over time. The Surgical Pathology component of Anatomic Pathology is almost entirely devoted to support Surgery, so as Surgery has grown and requires more space, so has this department.

SECTION III. Size of Project

- b. There do not appear to be applicable planning standards in the IDPH General Hospital Standards Section 250.2440.
- c. Architectural impediments in the existing building are not germane. Since the plan is to relocate the main OR suite to the NHP, the Anatomic Pathology facility should be as close as possible so as to provide the quickest analysis possible for the OR. This objective is achieved with the NHP building in that these departments are connected by elevators or dumbwaiters, the most efficient arrangement.
- d. Not applicable.

**ANATOMIC PATHOLOGY LABS SPACE EXPLANATION**

	<u>bgsf/</u> <u>Room</u>	<u>Rooms</u>	<u>Total</u> <u>bgsf</u>
State standard for Laboratories Square footage per patient bed	36	240	8,640

Proposed NHP Anatomic Pathology Labs

8,933

Excess Above State Standard 293

**Explanation:**

Additional circulation space to accommodate residents and medical students - 10% factor

864

Total Excess Space Explained 864

## SECTION III. Size of Project

### 1. F. Central Sterile Processing

- a. The location and layout of Central Sterile Processing ("CSP") is dictated by the floorplan for Surgery. Surgery will be located on the 6<sup>th</sup> floor, using the entire floor. The most efficient arrangement is to have CSP in the same building, with dedicated elevators to move soiled and clean instruments and other equipment between the areas. Because the Surgery floor is so large -- 540 feet from end to end -- IDPH architects recommended that two sets of elevators on either side of the building be used to connect the departments. This plan minimizes travel times on the Surgery floor for the movement of clean and soiled instruments, and also minimizes the chance of contamination over longer transport distances. As a result, the CSP spans the distance between the two infrastructure cores of the building, with two separate intake points and decontamination areas. Soiled instruments are received, cleaned of large debris, then sent through washers into the central clean work area. Here the instruments are sorted and picked to assemble new trays, which are wrapped, placed on carts, then put into sterilizers, to be moved to the adjacent clean holding area. When needed, these carts of instruments are taken to clean elevators and moved to the Surgery floor.

The State standard for CSP is 18 bgsf per bed, producing 4,320 bgsf for this building housing 240 beds. We have designed an area of 9,296 bgsf. One factor that accounts for the difference in area is the two decontamination zones. Were there but one intake point rather than two, an area 33 percent less could provide enough space for this step in the cleaning process (1,422 bgsf of the 4,311 bgsf decontamination area). Perhaps one-third of the 3,076 bgsf (1,015 bgsf) clean workroom is available for installing additional washers and sterilizers should more operating rooms be created on the 6<sup>th</sup> Level. It is possible, by relocating certain staff support functions, to increase OR's from 24 to 28. If other procedure areas in the building expand their workload, this would also put additional demands on CSP. We are trying to be forward thinking with this project, so that we will have a building that will meet our needs for at least the next 30 or 40 years. This need accounts for approximately half of the variance.

We are uncertain about how the State standard for this area was determined, but the small size it yields suggests that it came before current case carts systems were in use. At UCMC, large carts are filled with trays of instruments. The soiled instruments are brought to CSP in the carts, the instruments are cleaned and sterilized separately, and the carts go through a cart washer, before being loaded again. The many large carts that come through CSP must be accommodated with extra circulation space, carts washers, and space to park the carts. We estimate a 30 percent of the area for these purposes. Prior to case cart systems, the cleaning/sterilizing facilities were in the OR proper and staff simply brought trays of instruments or individual instruments to the cleaning area. Case carts account for most of the rest of the space variance.

We feel that the State standard is archaic, using a general size measure of beds,

### SECTION III. Size of Project

which does not account for ambulatory surgery and outpatient procedures which require instrument cleaning. The State's standard also does not account for an increasing amount of surgical procedures taking place in tertiary level medical centers. At UCMC, we had 19,000 hours of surgery in 1977 and operated 719 beds. Thirty years later we had 61,000 hours and 596 beds. This represents an increase in surgical intensity of 287 percent and demonstrates that a space measure predicated merely on beds doesn't consider the increasing intensity of surgical workload over time.

- b. There do not appear to be applicable planning standards, other than a list of rooms by function found in IDPH General Hospital Standards Section 250.2440. We will provide these functions.
- c. Architectural impediments in the existing building are not germane. Since the plan is to relocate the main OR suite to the NHP, the Central Sterile processing facility should be as close as possible so as to minimize transport time and costs between the two departments. This is achieved with the NHP building in that these departments are connected by elevators and results in the most efficient arrangement.
- d. Not applicable.

## CENTRAL STERILE PROCESSING SPACE EXPLANATION

	<u>Room</u>	<u>Rooms</u>	<u>Total</u>
State standard for Central Sterile Processing Procedure rooms (2 CT, 1 Fluoro, 2 Rad)	18	240	4,320
Proposed NHP Central Sterile Processing			9,296

**Excess Above State Standard 4,976**

**Explanation:**

Additional space for two separate Decontamination intake areas, needed to accommodate large floorplate for Surgery.

1,070

Area available to accommodate additional washers and sterilizers to service greater OR and procedure activity in the building over time.

1,015

Case cart system requires much larger area for the many large carts, cart washers - 30% factor

2,789

**Total Excess Space Explained 4,873**

## SECTION III. Size of Project

### I. G. Radiology

- a. Radiology is found on the 5<sup>th</sup> Floor and includes 2 CT rooms, 1 MR room, 2 General Radiographic rooms, 1 Fluoroscopic room, and 7 Interventional Radiology rooms. (There is an MR and a CT room dedicated to patients in the OR on the 6<sup>th</sup> Floor. Owing to the restrictive use of these devices, they are discussed as part of Surgery found in Attachments GRC-5C and MOD-3C.) Interventional Radiology is an obvious choice for the Procedure Floor since it can share the Preparation/Recovery area with GI Procedures also on this floor. The other imaging rooms can be easily accessed by patients in the bed units on 8, 9 and 10 since they are very close to the patient elevators. The rooms are situated close together and all share an On Deck area that has 7 cubicles for patients on gurneys waiting for imaging rooms. Because the patient units are a quick trip away, they can be brought down soon before their procedure to avoid long waits away from the comforts of their room. Thus, the staging area is relatively small. We have done extensive tests for vibration since we foresee 3T and higher MRI's on this floor that are very susceptible to vibrations. These rooms will be located in an area least prone to vibration. Interventional Radiology and the other imaging rooms each have a wide utility core that serve the procedure rooms and provide work areas for Radiology staff. Corridors are arranged so that patients have their own separate travel routes separate from the staff work areas. This design addresses concerns about infection control as well as providing privacy and comfort of the patients. There are three large reading rooms serving both areas, as well as a number of stretcher alcoves and clean and soiled utility rooms.

As is summarized in the following table, we have planned 36,422 bgsf for Radiology, which exceeds the State standard of 21,502 by 14,920 bgsf. A good share of this variance can be accounted for in Interventional Radiology. These rooms are built to conform to OR standards since we believe this is safer for the patient and considers the direction that this service has taken as it has developed. The AIA standard (AIA Guidelines for the Design and Construction of Healthcare Facilities, paragraph 2.1-5.4.1.2) for this type of room is a minimum of 400 nsf, while we have designed ours at 661 nsf. As can be seen in the room layout diagram, this additional area is needed for circulation around the table and equipment along the room's periphery. Because there will be fellows, residents, and medical students in the room, the extra circulation area is necessary. In building the rooms to OR standards, we have placed the support equipment room outside the procedure room so that this equipment does not have to be wiped down and cleaned after each case. Scrub sinks are located outside of them room, rather than inside. There is also a material transfer room just outside of the "red zone" to keep materials transporters and their carts out of the sterile zone. The wide Control/Utility Core between the rooms is 18 feet wide to accommodate the residents and medical students who must leave the procedure room when images are taken. The equipment control stations with their monitors are outside the room and there has to be sufficient area around the monitors for the residents to

### SECTION III. Size of Project

gather around. This utility core could be half as wide were it not for the teaching responsibility here. The reading rooms are also similarly oversized to handle the students and residents who accompany the radiologists.

The CT rooms are 679 nsf, in excess of the AIA Guidelines 400 nsf minimum. As can be seen in the CT room diagram in this section, the extra space around the scanner is needed for staff, residents and students, and supplies, carts, and other equipment that might be in the room. The Radiographic and Fluoroscopy rooms are based on the AIA minimum of 250 nsf, but are increased to 427 nsf for the same reasons (diagram in this section). The Control/Utility core is 19.9 feet wide but could be half as wide if not for the teaching needs. The Reading Room is also oversized.

The following table shows these calculations for the additional space needed. The total explained is 15,912, which accounts for the excess above the State standard.

- b. We are employing architects with expertise in hospital design. To plan for Radiology space, they draw from their work on other recent hospital projects. They also consult manufacturers such as Philips, Siemens, and General Electric to learn of the requirements for each type of equipment regarding room dimensions, electrical and HVAC support, and other factors. Finally, there is a careful and thorough iterative process of discussing the plans with radiologists and technologists to understand how the space is to function and assure that nothing is forgotten. This collaboration is an ongoing dialogue for each stage of the architectural process and our experience is that it results in finished facilities that function well and can accommodate changing requirements.
- c. The architectural impediment of the other buildings where Radiology is now housed is that these locations would not be convenient for the patients in the NHP. Transporting a patient from the upper floors of the NHP to Mitchell Hospital, where the inpatient Radiology facilities are now located would be a lengthy trip. There would be elevator rides in both buildings and a 900 foot ride through the basement of the adjoining DCAM, through a tunnel under Maryland Avenue and 58<sup>th</sup> Street, then down a tunnel alongside Mitchell and into the Mitchell basement. This route would take 12 to 15 minutes, involving the transport of our most acutely ill patients. On many trips a nurse and sometimes a physician would have to accompany the patient to monitor vital signs. This long and circuitous transport is risky, would be uncomfortable for the patient, and is a costly use of staff time.
- d. Not applicable.

SECTION III. Size of Project

**RADIOLOGY SPACE EXPLANATION**

	bgsf/ <u>Room</u>	<u>Rooms</u>	Total bgsf
State standard for Radiology			
Procedure rooms (2 CT, 1 Fluoro, 2 Rad)	1,386	5	6,930
MRI	3,400	1	3,400
Interventional Radiology (use Cath Lab std.)	1,596	7	11,172
			<u>21,502</u>
Proposed NHP Radiology			36,422

**Excess Above State Standard 14,920**

**Explanation:**

**Interventional Radiology:**

- Procedure room excess over AIA minimum 400 nsf
- Building to OR standards
  - Equipment room outside procedure room
  - Scrub sinks outside procedure room
  - Material transfer room outside sterile zone
- Academic Medical Center added space for teaching
  - Control/Utility core could be narrower than 18 feet
  - Reading rooms could be smaller

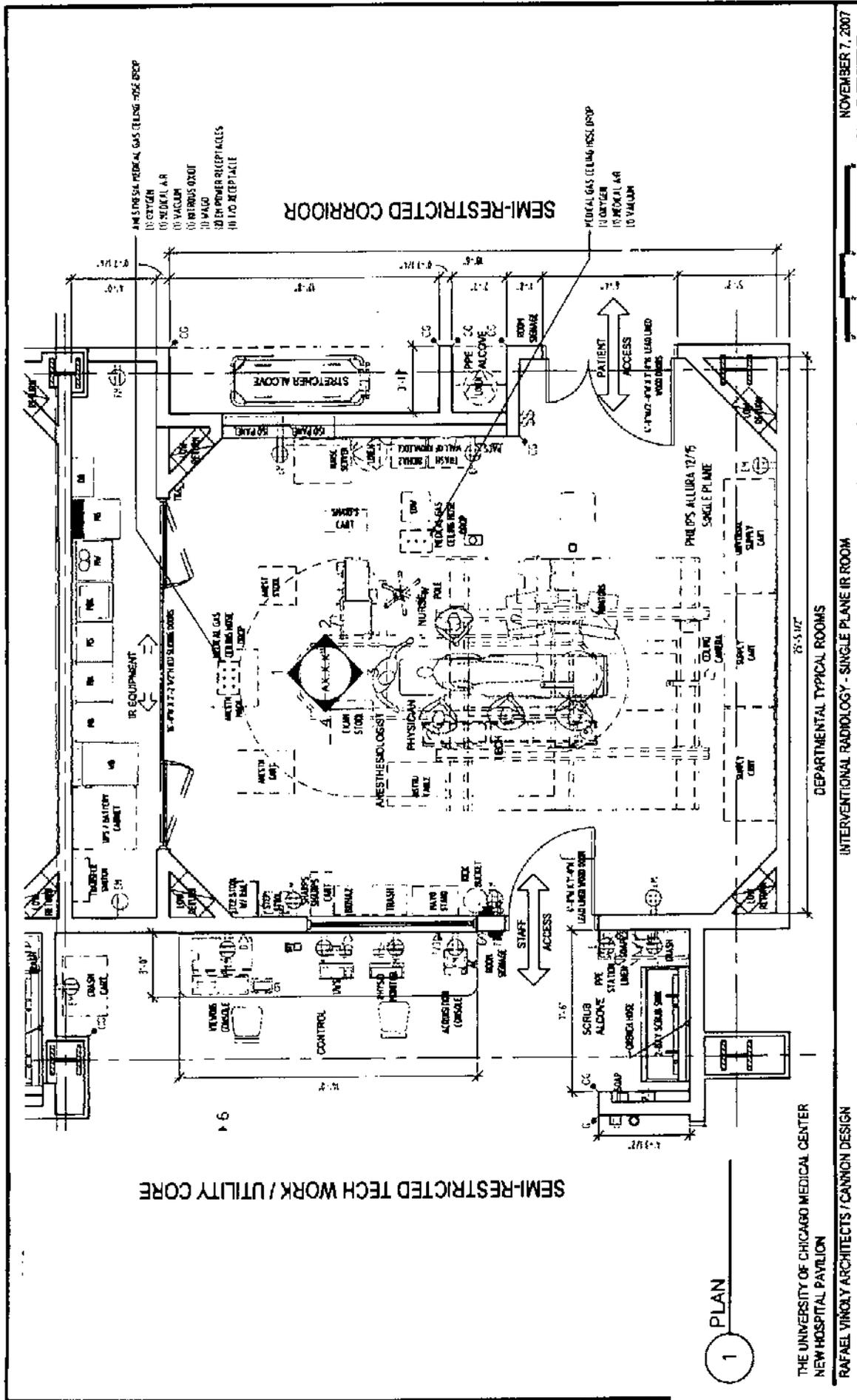
**Other Radiology**

- Procedure room excess over AIA minimum
  - CT AIA 400 nsf
  - Rad, Fluoro 250 nsf
- Academic Medical Center added space for teaching
  - Control/Utility core could be narrower than 19.9 feet
  - Reading room could be smaller

Chicago/DPH requirements in excess of codes

Total Excess Space Explained 15,912

171



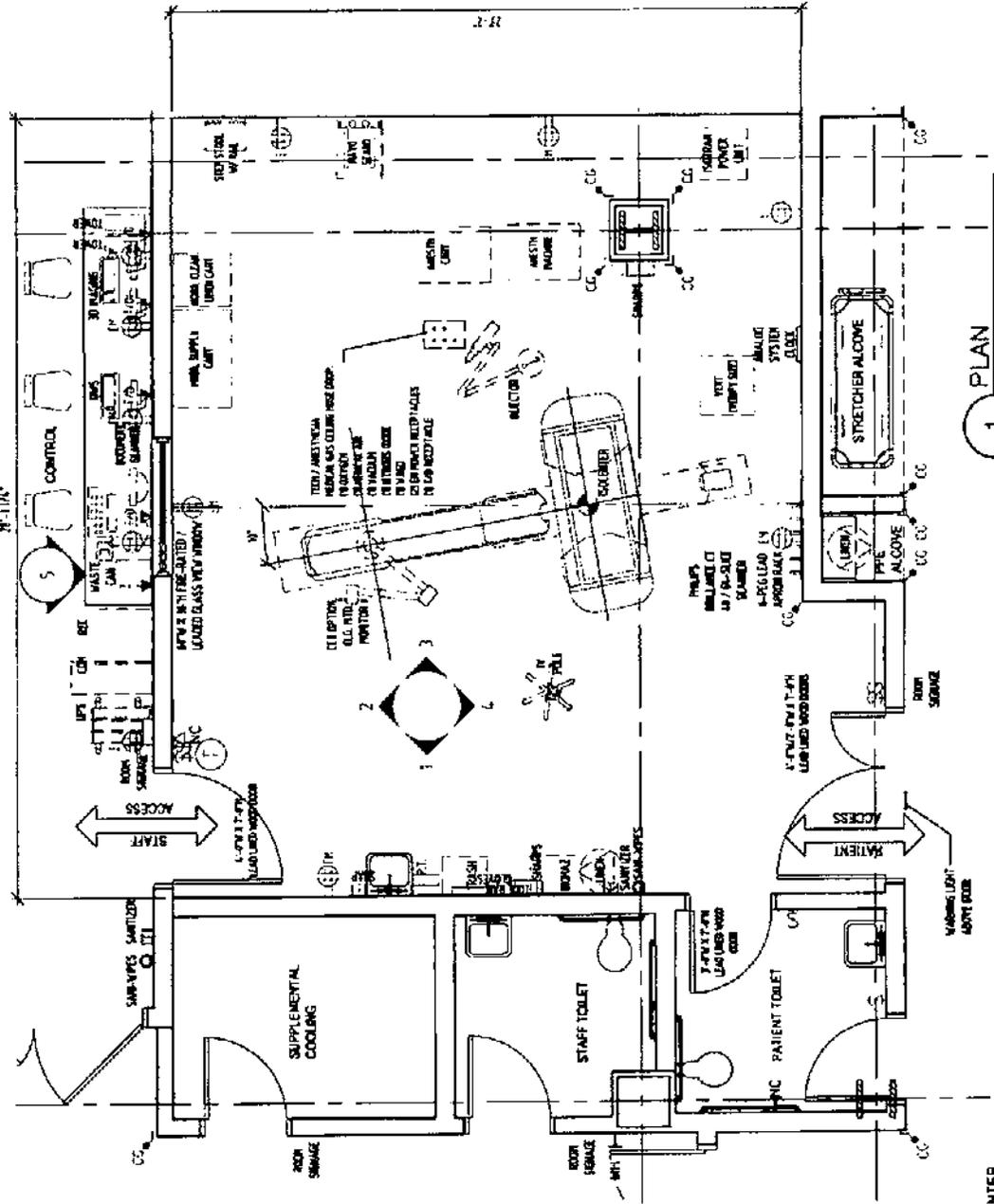
1 PLAN

THE UNIVERSITY OF CHICAGO MEDICAL CENTER  
 NEW HOSPITAL PAVILION  
 RAFAEL VIRGILY ARCHITECTS / CANNON DESIGN

NOVEMBER 7, 2007

DEPARTMENTAL TYPICAL ROOMS  
 INTERVENTIONAL RADIOLOGY - SINGLE PLANE IR ROOM

AREA = 678 nsf

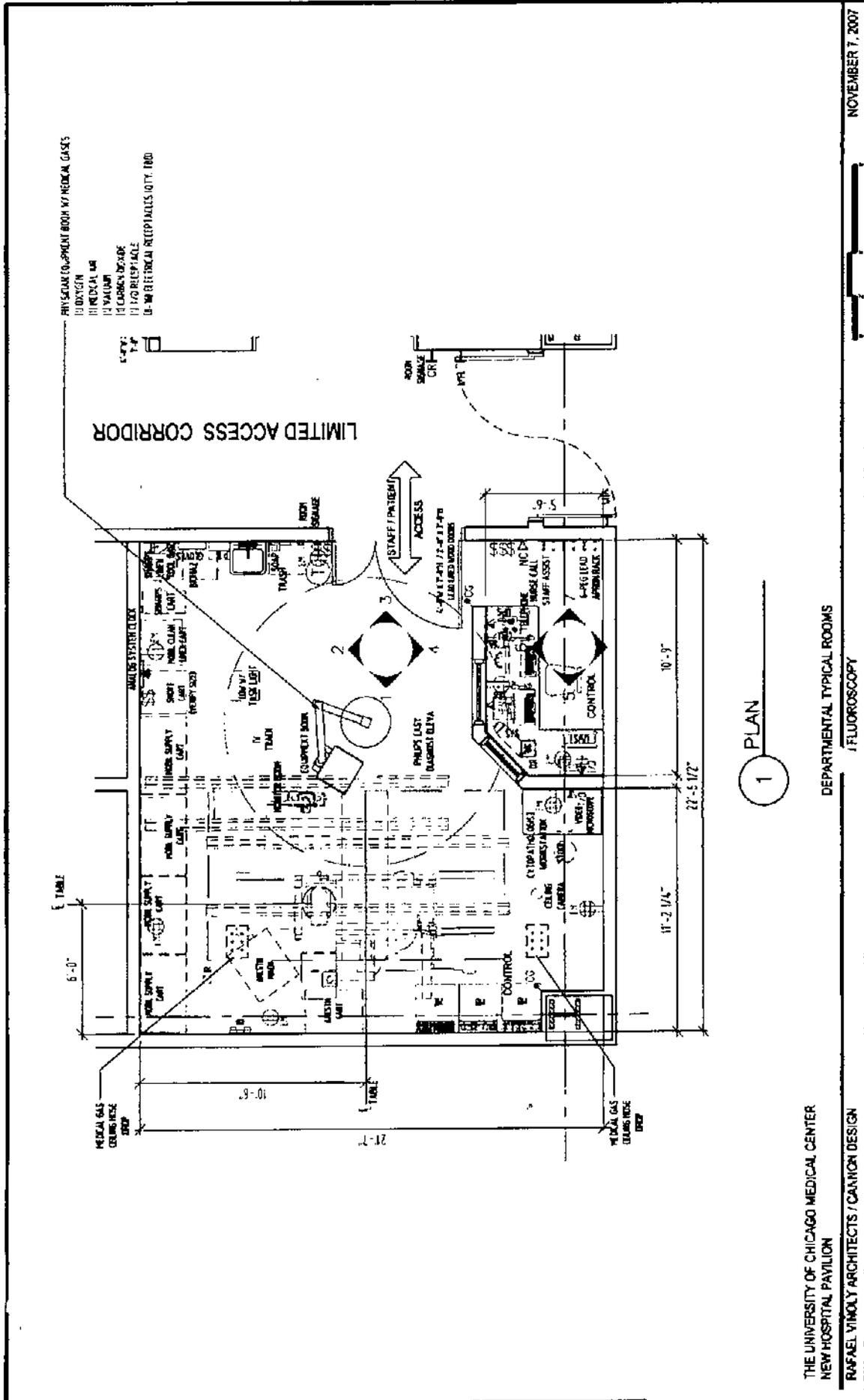


1 PLAN

DEPARTMENTAL TYPICAL ROOMS  
COMPUTED TOMOGRAPHY (CT)

THE UNIVERSITY OF CHICAGO MEDICAL CENTER  
NEW HOSPITAL PAVILION  
RAFAEL VINOLY ARCHITECTS / CANNON DESIGN

NOVEMBER 7, 2007



NOVEMBER 7, 2007

THE UNIVERSITY OF CHICAGO MEDICAL CENTER  
 NEW HOSPITAL PAVILION  
 RAFAEL VIMOLY ARCHITECTS / CANNON DESIGN

## SECTION III. Size of Project

### 2. G. Radiology

- a. Projected Radiology utilization for 2014 and 2015 are shown in the following table. General Procedures will average 6,730 cases per room, meeting the State target of 6,500. CT cases will be 7,914 per room, ahead of the target of 2,000. MRI will reach 2,491 per machine, also surpassing the State target of 2,000. Finally, Interventional Radiology will be at 2,431 per room, far exceeding the State norm of 400.
- b. Projections of Radiology utilization were made on the conservative assumption that 2007 actual levels would remain at the same proportion to inpatient admissions and outpatient visits. Admissions are expected to increase by about 1.4 percent per year, the rate of increase seen between 2002 and 2007. Visits will increase by 0.9 percent, the average compounded rate of increase between 2002 and 2007. Actual growth will likely be greater, since General procedures and Interventional Radiology cases increased by about 17 percent the last four years and CT and MR by about 48 percent, while projecting at merely the growth rate expected for admissions and visits shows an increase over the next 8 years of only 7 percent. Even with this modest assumption, all State standards are met.
- c. We expect to hire new faculty members to support Radiology as needed to replace those who retire or are recruited away to other medical centers, or as needed to strengthen programs.
- d. We continue to refine current procedures and try new approaches in an ongoing effort to advance medical science. We foresee no significant impact to workload in this regard that should be addressed here.

## RADIOLOGY FACILITY UTILIZATION

	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2014</u>	<u>2015</u>
Admissions	26,401	26,926	26,205	27,843	28,145
Visits	507,154	505,664	514,873	548,199	553,133
<b>General Procedures</b>					
Inpatient	81,304	83,758	76,903	81,711	82,596
Outpatient	61,228	58,935	67,200	71,550	72,194
Total	142,532	142,693	144,103	153,260	154,789
Rooms	21	18	19	23	23
Cases/Room	6,787	7,927	7,584	6,663	6,730
State Standard					6,500
<b>CT</b>					
Inpatient	16,593	17,601	19,035	20,225	20,444
Outpatient	31,836	35,166	39,905	42,488	42,870
Total	48,429	52,767	58,940	62,713	63,314
Rooms	6	6	6	8	8
Cases/Room	8,072	8,795	9,823	7,839	7,914
State Standard					2,000
<b>MRI</b>					
Inpatient	3,239	3,370	4,124	4,382	4,429
Outpatient	10,205	10,877	12,108	12,892	13,008
Total	13,444	14,247	16,232	17,274	17,437
Rooms	6	6	6	7	7
Cases/Room	2,241	2,375	2,705	2,468	2,491
State Standard					2,000
<b>Interventional (Angio)</b>					
Inpatient	8,107	8,873	8,433	8,960	9,057
Outpatient	6,602	7,495	7,410	7,890	7,961
Total	14,709	16,368	15,843	16,850	17,018
Rooms	4	5	5	7	7
Cases/Room	3,677	3,274	3,169	2,407	2,431
State Standard					400

## SECTION III. Size of Project

### 1. 1. Pharmacy

- a. Pharmacy is located in 7 different buildings, with the main production facility plus administrative offices in Mitchell Hospital. There are satellite pharmacy operations in many buildings so that pharmacists can work more collaboratively with physicians and nurses treating patients. There are pharmacy operations within the three different surgical suites, on the Hematology/Oncology floor, and other areas where drugs are used intensively.

We propose 11,602 bgsf of Pharmacy space in the NHP, a main production facility on the 2<sup>nd</sup> Floor, and smaller preparation areas in the OR and on the 10<sup>th</sup> Floor Hematology/Oncology patient unit. The latter two areas are a continuation of bringing the preparation/dispensing functions as close as possible to where the drugs are administered. This plan reduces delivery time, minimizes errors since communication is more direct, and places the pharmacists close to the caregivers so that real collaboration can occur. The pharmacist makes rounds with the physicians and can suggest adjustments to the drug regimen based on the condition of the patient and how the patient is responding to the medications he is receiving. The 8,254 bgsf area on the 2<sup>nd</sup> Floor may become the Medical Center's main production facility and the Mitchell Hospital operation will be reduced, with administrative offices and conference rooms expanding. The NHP will house the most acutely ill patients, and these patients receive more medications than the other patients. In particular, the Hematology/Oncology and Transplantation services will be in the NHP. These patients are most likely to be receiving novel investigational drugs that require special attention and handling, thus it makes sense to locate the production close to where they will be administered. Some of these drugs are physically fragile and must be transported gingerly, without undue shaking, lest the drugs break apart and become unusable. Others require special refrigeration at specific temperature ranges, so long delivery times are not feasible.

The State standard is 12 bgsf per bed. We are uncertain how this was derived, but in consulting with our Pharmacy staff, we have concluded that it must have been developed many years ago. This standard, when applied to the 240 beds in the NHP produces a target area of 2,880 bgsf, far less than the 11,602 bgsf proposed. The satellite operations in the OR and Hem/Onc patient floor alone exceed this amount. For that matter, the robotic device that picks and assembles drug orders requires a 32 feet by 10 feet footprint and 800 nsf circulation, or 4,000 nsf in total. Grossing this up produces 4,760 bgsf on the 2<sup>nd</sup> Floor, or 65 percent greater than the State norm for the entire building. This space requirement is just for the robot, our main production machine, and space is needed for many other production functions plus the satellite operations. The State standard is so far off from what Pharmacy needs in a tertiary level teaching and research hospital, that we have not done a quantitative analysis bridging the wide gap between our proposed area and the standard. The difference is so significant that it suggests that the standard and where we are now are several

### SECTION III. Size of Project

generations removed. Instead, we will examine what changes have occurred in Pharmacy over the last 30 years and how these require space.

Pharmacy has grown greatly in size and complexity. One indication is that our Drug Formulary has increased three fold to approximately 5,000 drugs from 1977 to 2007. Cost of drugs now exceeds \$60 million annually. Staff has doubled in number, owing to much greater specialization needed. In terms of complexity, we have 10 different freezers and refrigerators, because we store drugs that require different temperature ranges. We do a lot of special drug compounding and many require special handling, such as the drugs employing recombinant DNA technology. Investigational drugs are often used in clinical trials, notably in Hematology/Oncology and Transplant Surgery. These entail special preparation, tracking, and reporting.

For the more routine, high use drugs, we use a robotic device. Essentially, the drugs are bar coded in unit dose packages, placed on hundreds of spindles, then a mechanical arm receives instructions from a computer to gather drugs for the patients. (The large area required for this system is described above.) There are 3,000 different drug orders each day for our inpatients. The medical bins for each patient are larger since more medications are provided and the unit-dose packaging uses more space. The larger bins require larger delivery carts, which in turn take up more space in the production area as they are filled. Drugs that are used less frequently are dispensed by staff, who need room to count and package the drugs. Space is also required for the bottles containing the drugs. There are the compounding areas for special products that need preparation. Crash carts have become the responsibility of Pharmacy since a certain number of drugs are placed on the cart. Staging for cart inventorying, assembly, and storage requires space. Intravenous admixtures are prepared in special clean rooms with laminar flow hoods above the work area. These products also require clean storage areas.

Hospitals have evolved toward a more integrative approach to pharmacy service whereby satellite operations exist on the patient units and ORs so that the pharmacist or pharmacologist can work as a true member of the team of clinicians. The pharmacist can see how the patient is doing on his medications and engage in a dialogue with the physicians about whether dosages or drugs should be changed. Thus, the special knowledge of the pharmacist is brought to bear in a more useful way. This interaction is a critical change in reducing medication errors, which is a serious quality of care issue in hospitals since drugs are used more intensively and can be more harmful if mistakes are made. These satellite operations require space, sometimes just an office for the pharmacist, sometimes compounding/assembly and storage areas for drugs prepared for use in the area.

In conclusion, while we are at variance with the State norm of 2,880 bgsf, we believe that the State standard is wholly inadequate in a modern academic

### SECTION III. Size of Project

medical center. The 11,602 bgsf planned for the NHP is what is required for complex pharmaceutical services to be provided safely, quickly, and effectively.

- b. The IDPH General Hospital Standards Section 250.2440c)4 address Pharmacy. There are not specific sizes cited, but state that the area demands are dependent on the size and type of pharmacy services to be provided, the drug distribution method, and whether pharmacy services are shared with other entities. The Pharmacy space we have designed meets the particular needs for our service.
- c. The main Pharmacy area is located in Mitchell Hospital and occupies 8,863 bgsf. This area is undersized for our current needs. Pharmacy shares the Mitchell basement level with Clinical Laboratories, Central Sterile Processing, and Patient Transportation and there is not room for expansion, though each of these functions needs more space. The unavailability of space is the architectural impediment.
- d. Not applicable.

## SECTION III. Size of Project

### 1. L. Future Development

- a. We seek the Board's approval of the construction of 198,478 bgsf of space for future development. Most of this shelled space will be found on the 2<sup>nd</sup> and 3<sup>rd</sup> Floors, with another 10,653 bgsf built on the Lower Level. We have had a long history with the Planning Board with the approval of shelled space and the responsible review and development of that space later. In 1993, we received approval to construct the 505,000 bgsf Duchossois Center for Advanced Medicine ("DCAM"). Included in this approval was the entire 3<sup>rd</sup> floor of 66,000 bgsf of shelled space. Four years later we appeared before the Board with an application to finish this floor for General Medicine, OB/Gyn, and Pediatric clinics. We were not ready to develop these clinics four years earlier, but because we had built a floor in the original construction, we saved many additional millions of dollars, to say nothing about having the ideal location for outpatient facilities.

In 2004, we proposed the Comer Center for Children and Specialty Care, a four-story building adjacent to the Comer Children's Hospital. It would house the Pediatric Emergency Department on the first floor, yet we were not ready to develop additional space. As we have discussed, it would be wasteful and shortsighted to tie up a prime site location with a one-story structure. We had been advised by the City of Chicago that it was unlikely that they would approve an addition above the Emergency Department at a later date, due to safety concerns. The Health Facilities Planning Board expressed its reluctance to approve the 75,000 bgsf of shelled space, since it amounted to approving facilities that might later be developed without its review. But the agency granted approval with the stipulation that we return for its review of the shelled space, whether it be for a reviewable purpose or not. We returned in 2007 for relocation of Pediatric Clinics to the 4<sup>th</sup> Floor of this building. We plan to submit an application in the next few months to locate faculty offices (not ordinarily reviewable) and the pediatric chemo-infusion unit and support pharmacy in the remaining space. This plan is evidence that shelled space can be built, then properly reviewed by the Board, which retains its full authority while granting the applicant critical flexibility. We are most appreciative of the Board's accommodation and commend them for proposing new rules to allow for shelled space along the terms stipulated for our 2004 project. In that spirit, we respectfully ask the Board to approve the shelled space proposed in the NHP.

The likely use of one of the two full floors to be shelled is for inpatient beds. We are relocating 180 Med/Surg beds, 38 ICU beds, and adding 22 ICU beds. Left behind in Mitchell Hospital will be 120 Med/Surg beds, 28 ICU beds, and 50 OB beds. The three patient bed floors proposed for NHP house 80 beds per floor, so some combination of the bed categories remaining in Mitchell would be built in NHP at a later date.

The other full NHP floor will likely be used for a consolidation of our cardiac

### SECTION III. Size of Project

diagnostic and treatment services. These services, which include Cardiac Catheterization, Heart Station, Echocardiology, Electrophysiology, and Cardiac Rehabilitation, are spread among six separate buildings on our campus. UCMC's cardiac diagnostics is a strong program, and it is undergoing a revitalization via the recruitment of new section chiefs and cardiologists.

The last area is at the Lower Level, adjacent to the DCAM where Radiation Oncology and Cellular Biology is located. This department has been in its present space since 1996 and on its present utilization trajectory, it will need space for growth after the completion of the NHP in 2013. This is a smaller area, comprising 10,653 bgsf. Because there is space outside the upper floor building dimension below grade that was open, it made sense to extend the building's foundation to capture it. The location is ideal for Radiation Oncology since it is adjacent and underground, ideal for housing its linear accelerators.

The main reasons for creating shelled space are location and cost savings. Hospitals are unique among businesses in that they are comprised of a multitude of different functions, and most have a high need to be close to one another for operating efficiencies, improved communication, and professional interaction. One of the big challenges hospitals have had over the past 60 years is as they have expanded, they have done so in suboptimal ways in terms of layout, creating buildings one after the other, with inevitable long travel times between buildings, operational inefficiencies, and confusing wayfinding for patients and visitors. From a design perspective, the ideal is to start over every 30 or so years with a huge building, but the constraints of site and cost generally prevent this approach. Several years ago Northwestern Memorial Hospital and Cook County Hospital ushered in a new era when they built very large replacement hospitals. Recently, Rush Presbyterian St. Luke's and Children's Memorial have proposed equally large and ambitious projects, representing significant, and in the case of Children's, a complete replacement of their facilities. The architectural gains that these large projects represent are considerable, since layouts can be optimized versus the cobbled together approach of years past. With the NHP, we expect to achieve these gains.

By shelling space, we have assured ourselves of future space located within this large, modern building. Thus, the problems of impossible-to-achieve adjacencies, long travel times, and dislocation of existing operations are reduced. Because our resources are finite, we choose not to develop all the space immediately. Besides the cost savings, we avail ourselves of easily available new space that can be developed in future years when new technologies, new programs, and changed priorities present opportunities that aren't known now. We believe that this is smart planning. There are obvious cost advantages as well.

Several years ago during the Master Design Phase, we considered a building with open spaces and support pillars between the first and fourth floors. In the

### SECTION III. Size of Project

building core would be elevators, stairways, pneumatic tubes, ventilation shafts, and electrical and plumbing risers. With this approach, the open space could be built out at a later date. We thought long and hard about what advantages and challenges this would present us. There was concern about the additional costs for encasing the concrete support columns in stainless steel or other costly material to protect them from the elements. There was also the need to create a waterproof floor and ceiling to prevent leaks and degradation of the building. These would be extra costs versus enclosing the area. Then there were the concerns about doing the complete buildout once the building was occupied. The staging would be complicated in a heavily trafficked site, delivering large quantities of materials. The noise and physical impact of putting steel girders in place in a building housing our main surgical suite, vibration-sensitive devices such as MRI's, CT scanners, microscopes, and acutely ill patients was a huge worry. More quantifiable was the cost premium for building out the exterior later.

We had our construction manager, Gilbane/O'Neill analyze the cost under the two scenarios -- shell in now or build it later. We learned that some of the additional cost is due to the inefficiencies of doing a separate, small project compared to sharing in the general conditions (site staffing, quarters, cranes and hoists, etc.) of a large project. Inefficiencies also occur in terms of material procurement and delivery and use of labor because there is less downtime on a large job. Of great importance is the effect of construction inflation. Considering that we expect 8 percent annual construction cost inflation in Chicago, the costs in 2009 versus 2015 are much different. While increase in cost is shared in most sectors of business, our major payors (Medicaid, Medicare, Blue Cross) are large enough to restrict rate increases for their patients, so we do not expect our revenue to increase at the rate of construction inflation. The cost premium for building out Floors 2 and 3 in 2009 versus 2015 is estimated at \$11.8 million. (See following document for calculation.)

Were we to create the 11,000 nsf area below grade at a later date, we would experience the inefficiencies discussed here, as well as the cost of demolishing the Medivan pavement and plaza, the storm water system, and interim landscaping. There would be the problem of finding an alternate location for Medivan dropoff, most likely near the material dock on the opposite end of the complex. The cost of rebuilding this place to make it suitable is not included. The estimated cost premium to return in 2015 to create the small, lower level space is \$1.8 million. (See following document for calculation.)

We believe the best approach is to shell the proposed area with the original construction. **We hereby commit to submit an application for permit for the development of any and all of the shelled space, regardless of whether or not the use would be reviewable by the Planning Board.**

### SECTION III. Size of Project

- b. Not applicable.
- c. Regarding architectural impediments in the existing building, the most likely use of the shelled space will be the relocation of existing functions. One floor will probably be used for patient bed units. Presently, most of the adult beds are located in Mitchell Hospital. The 1983 Mitchell building does not have a large enough floor plate for modern inpatient units. There are 313 Med/Surg beds in Mitchell, 173 in single rooms of 156 nsf each and 140 beds in two-bed rooms with a typical area of 240 nsf, resulting in an average of 180 nsf per bed. In contrast, the NHP will average 371 nsf per bed. (Both the current and proposed spaces include a bathroom.) In addition to the bed rooms themselves, the support space, including nurses station, work area, clean and soiled utility, equipment alcoves, and hand wash sinks, represent 52 nsf per bed in Mitchell but 86 nsf in the NHP -- nearly 65 percent more. Circulation space as represented by corridors, is also higher, with 139 nsf per bed in Mitchell and 182 nsf in NHP, 31 percent more. Assuming 60 Med/Surg beds on one floor in the NHP, consistent with the plan for floors 8, 9, and 10, we require 1.25 floors in Mitchell to provide the same amount of floor area. This conclusion is a mathematical "fit", but, in actuality, the fit is problematic since much of the office/support space in Mitchell is found in the center of the H-shaped building, which is convenient to the beds themselves that are arrayed away from the core. In the NHP, the floor plate at 104,000 bgsf versus 36,000 bgsf for Mitchell, the support areas to be located closer to the beds, and creating a more efficient layout.

The other NHP floor is likely to contain cardiac diagnostic and therapeutic services. Presently, there are cardiac catheterization labs located in Mitchell, Rubloff ICU Tower, Billings Hospital, Comer Children's Hospital, Echocardiology in Billings, Electrophysiology in the DCAM outpatient building, Nuclear Cardiology in DCAM, Heart Station in DCAM and Comer, and Cardiac Rehabilitation in Gilman-Smith Hospital. These closely related services are spread among many buildings, inconvenient for patients, staff, and physicians. This disbursement limits the opportunities for shared staffing, easy consultations, and professional interaction are compromised. These programs have been built in non-proximate buildings over a period of many years, taking advantage of space as it became available. Architecturally, the 100,000 bgsf floor plate the NHP offers cannot be found anywhere else in the Medical Center. Moreover, creating open space -- even in several locations -- is expensive since it would require relocating many other activities.

The 10,653 bgsf of space created at the Lower Level is planned for the Radiation Oncology development. This department is located in the Lower Level of DCAM, adjacent to where this space would be created. This department is hemmed in by mechanical areas, a server room for computers, the PET suite, and Central Sterile Processing serving the DCAM outpatient Surgery. There are no other open areas for these functions, so it is economical to create the needed adjacent space as part of the NHP project. Because of the substantial shielding

SECTION III. Size of Project

requirements of Radiation Oncology, it is only feasible to build these facilities below ground.

- d. Not applicable.

November 8, 2007

CORE AND SHELL CONSTRUCTION - LEVELS 3 and 4

<b>Item 1</b>	<b>Addition of and shell / non-occupied L3, L4</b>	<b>\$13,040,000</b>
Structure:	Complete	
Enclosure:	Fully enclosed w/ CW type 3/5	
FP	Core and Shell - Fire Protection	
Plumbing	Existing capacity at cores	
HVAC	Minimal HVAC to temper (heat)	
Electrical	Code related electrical, lighting	
F/A	Core and Shell - F/A	

<b>Item 2</b>	<b>MEP Impact - duct risers, shafts, AHU capacities - ALLOWANCE</b>	<b>\$661,000</b>
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**SUBTOTAL \$13,721,000**

**Indirect Costs**

CM General Conditions/Fee	7.20%	\$988,000
Construction Contingency	3.50%	\$460,000
Escalation - 1st Quarter 2009 Start	13.20%	\$1,811,000
Design Contingency	5.60%	\$768,000

**Total Cost for 1st Quarter 2009 Start: \$17,768,000**

Premiums for Inefficiencies and Logistics for Out of Sequence Work	10.30%	\$1,830,000
General Requirements for Remobilization	2.00%	\$355,000
Escalation from 1st Quarter 2009 to 1st Quarter 2015	48.00%	\$8,577,000

**Subtotal: \$11,762,000**

**Total Cost for 1st Quarter 2015 Start: TOTAL \$29,530,000**

**Premium for constructing in 2015 rather than 2009 \$11,762,000**

November 6, 2007

RADIOLOGY ONCOLOGY BASEMENT PROGRAM

8/16/2007 S D E S T I M A T E S D R 2

	QUANTITY	UNIT	UNIT COST	TOTAL COST
<b>Rad/Onc Expansion - Core and Shell from Base Estimate:</b>				
	8,640	GSF		
Rad/Onc - Excavation	1	ls	\$ 316,843.80	\$ 316,844
Rad/Onc - Calissons	1	ls	\$ 102,713.10	\$ 102,713
Rad/Onc - Retention	1	ls	\$ 177,568.32	\$ 177,568
Rad/Onc - Concrete/Foundations	1	ls	\$ 184,802.34	\$ 184,802
Rad/Onc - Concrete/SOG	1	ls	\$ 66,690.40	\$ 66,690
Rad/Onc - Steel/Deck	1	ls	\$ 414,334.20	\$ 414,334
Rad/Onc - Interior Construction	1	ls	\$ 200,071.19	\$ 200,071
Rad/Onc - FP	1	ls	\$ 55,575.33	\$ 55,575
Rad/Onc - HVAC	1	ls	\$ 77,905.46	\$ 77,905
Rad/Onc - Electrical	1	ls	\$ 144,495.86	\$ 144,496
CM General Conditions/Fee			7.20%	\$ 125,358
Construction Contingency			3.51%	\$ 61,026
Escalation - 1st Quarter 2008 Start			13.20%	\$ 229,799
Design Contingency			5.55%	\$ 96,625
<b>Total Cost for 1st Quarter 2009 Start Core and Shell:</b>				<b>\$ 2,253,708</b>

<b>Logistical Premium for Out of Sequence Work</b>				
General Requirements for Remobilization			8.30%	\$ 187,000
Escalation from 1st Quarter 2009 to 1st Quarter 2015			2.00%	\$ 45,000
			48.00%	\$ 1,193,000
<b>Subtotal Premiums for 2015 Start Core and Shell:</b>				<b>\$ 1,425,000</b>
<b>Total Cost for 1st Quarter 2015 Start Core and Shell:</b>				<b>\$ 3,678,708</b>

	QUANTITY	UNIT	UNIT COST	TOTAL COST
<b>Affected Sitework - If Radiology/Oncology is built after completion of NRP</b>				
Med/van / Plaza Demolition (Assuming on grade pre-RAD/ONC)	4,331	SF	\$	\$ 9,528
Demo Concrete Pavement				

<b>Recap</b>				
Cost for 2009 buildout				\$2,253,708
Premium for 2015 buildout				1,425,000
Additional sitework for 2015				400,454
Total cost 2015				4,079,162
Premium over 2009				\$1,825,454



November 8, 2007

RADIOLOGY ONCOLOGY BASEMENT PROGRAM

6/15/2007 \$D ESTIMATE SDR3

	QUANTITY	UNIT	UNIT COST	TOTAL COST
Demo Concrete Sidewalk	1,187	sf	\$ 2.20	\$ 2,611
Demo Curbs	202	lf	\$ 3.15	\$ 636
Demo Bituminous Pavement	2,100	sf	\$ 1.55	\$ 3,255
Miscellaneous Site Cleaning and Excavation	1	aln	\$ 20,000.00	\$ 20,000
<b>Paving/ Waterproofing (Reconstruct on structure post RADONC construction)</b>				
Bituminous Paving	2,100	sf	\$ 3.35	\$ 7,035
Pavement Striping	1	ls	\$ 800.00	\$ 800
Concrete Drive Overlay Pavement over Basement Structure	4,331	sf	\$ 7.30	\$ 31,616
Concrete Sidewalks over Basement Structure	1,187	sf	\$ 5.45	\$ 6,469
Concrete Curb - Cast in Place	202	lf	\$ 18.70	\$ 3,777
Waterproofing Under Exterior Pavements over Basement Structure	8,640	sf	\$ 4.15	\$ 35,856
Rigid Insulation over Below Grade Structures	8,640	sf	\$ 2.50	\$ 21,600
Landscaping	3,707	sf	\$ 3.00	\$ 11,121
Storm Water System	4,331	sf	\$ 8.15	\$ 35,298
Storm Lines, Structures - Median Pavement				
<b>Indirect Costs</b>				
CM General Conditions/Fee			7.20%	\$ 13,653
Construction Contingency			3.51%	\$ 6,646
Escalation - 1st Quarter 2009 Start			13.20%	\$ 25,028
Design Contingency			5.55%	\$ 10,524

Total Cost for 1st Quarter 2009 Start Sitework: \$ 245,454

Logistical Premium for Out of Sequence Work	8.30%	\$ 20,000
General Requirements for Remobilization	2.00%	\$ 5,000
Escalation from 1st Quarter 2009 to 1st Quarter 2015	48.00%	\$ 130,000

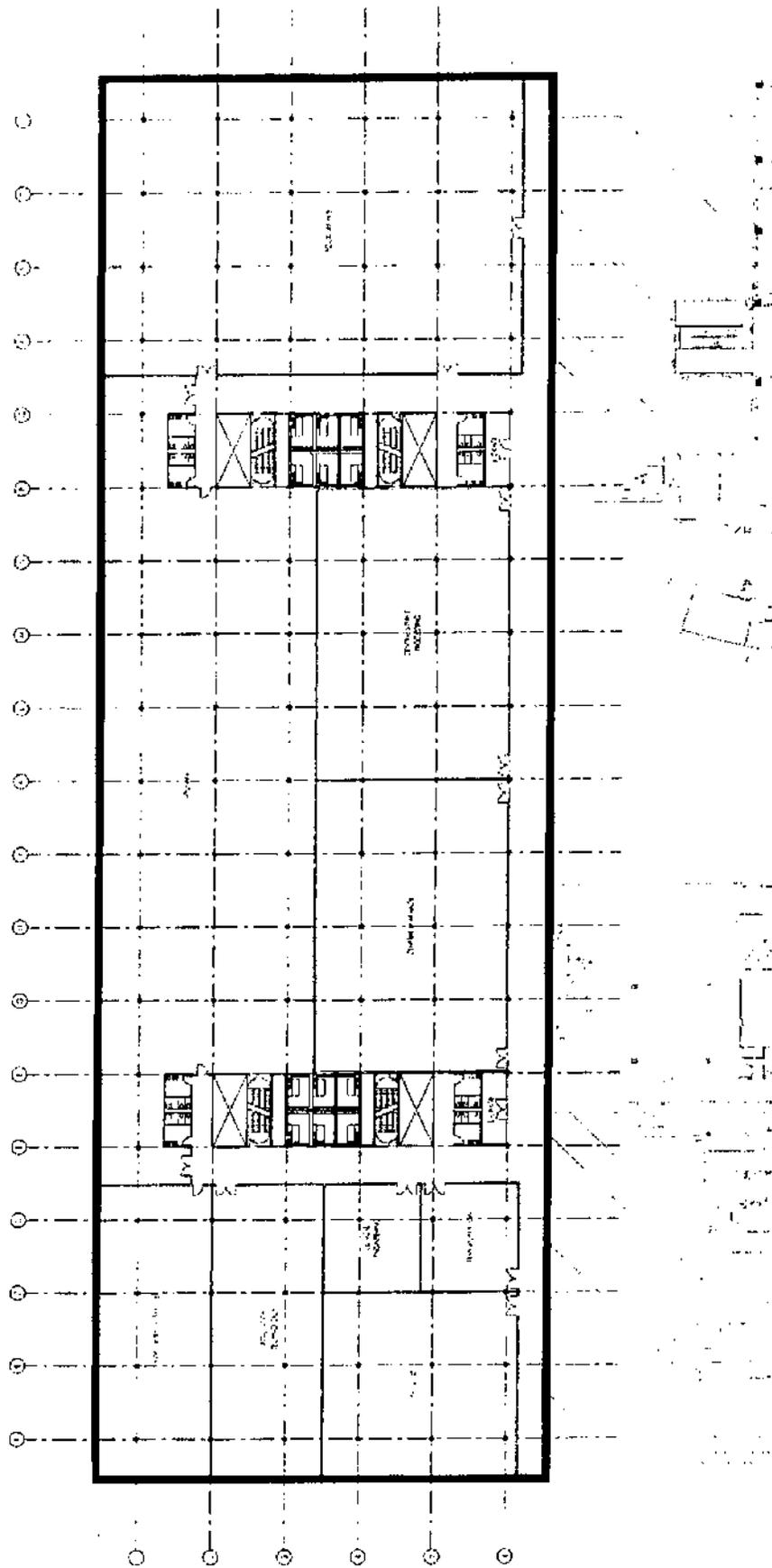
Subtotal Premiums for 2015 Start Sitework: \$ 155,000

Total Cost for 1st Quarter 2015 Start Sitework: \$ 400,454

187

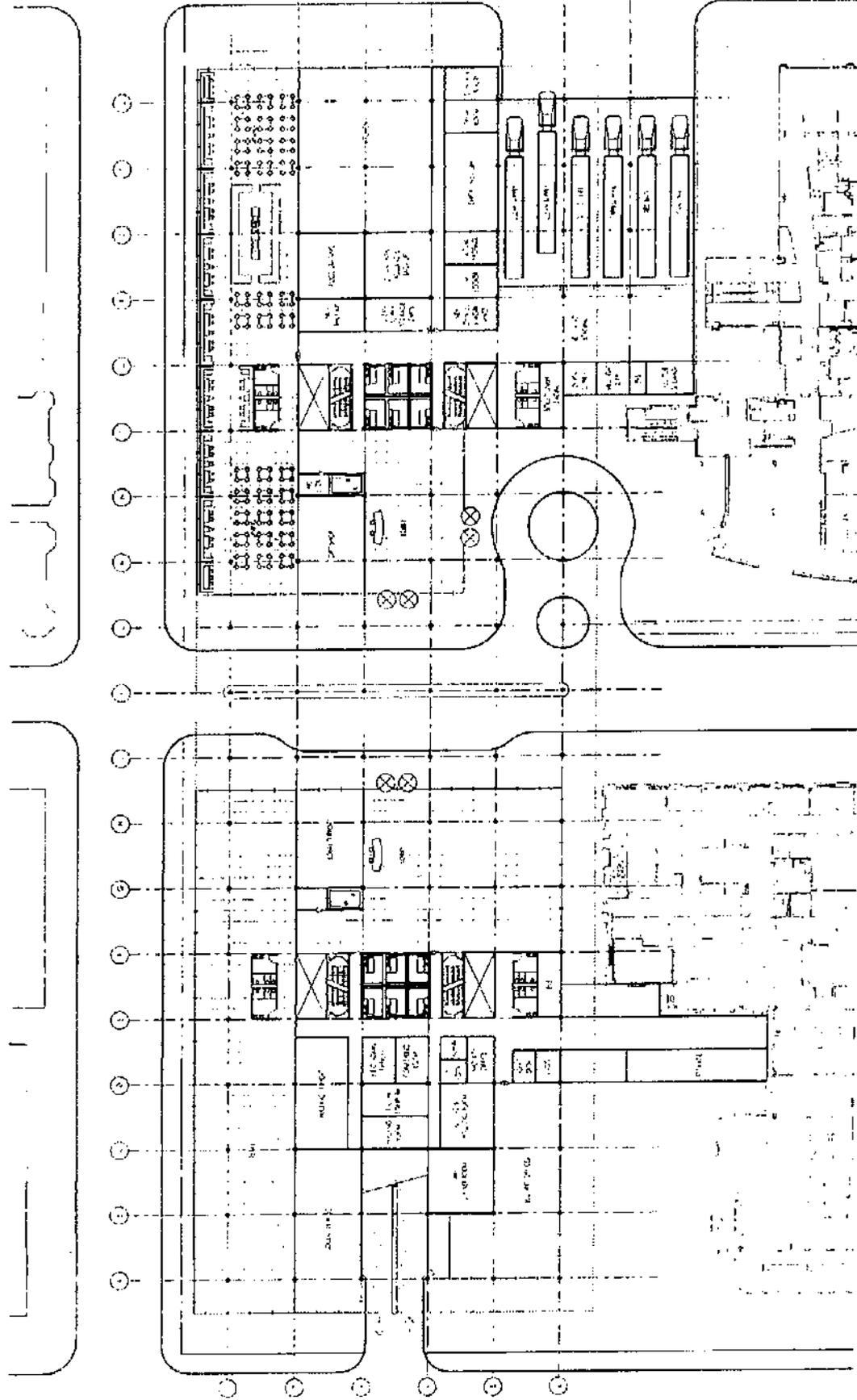
SECTION IV. MASTER DESIGN AND RELATED  
PROJECTS





BASEMENT

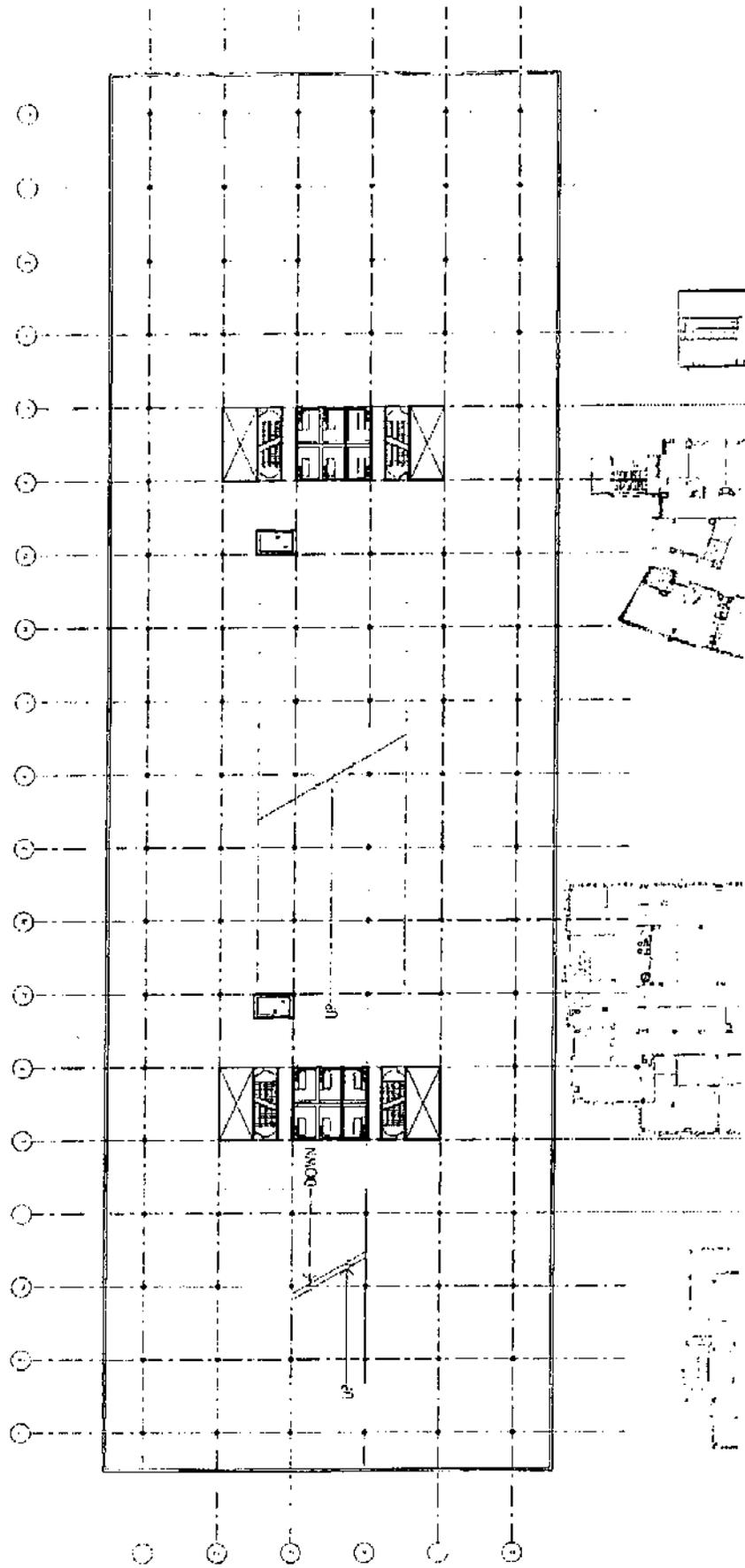
190



LOBBY - GROUND FLOOR 

**RAFAEL VINOLY ARCHITECTS PC**  
**LEONARDO**

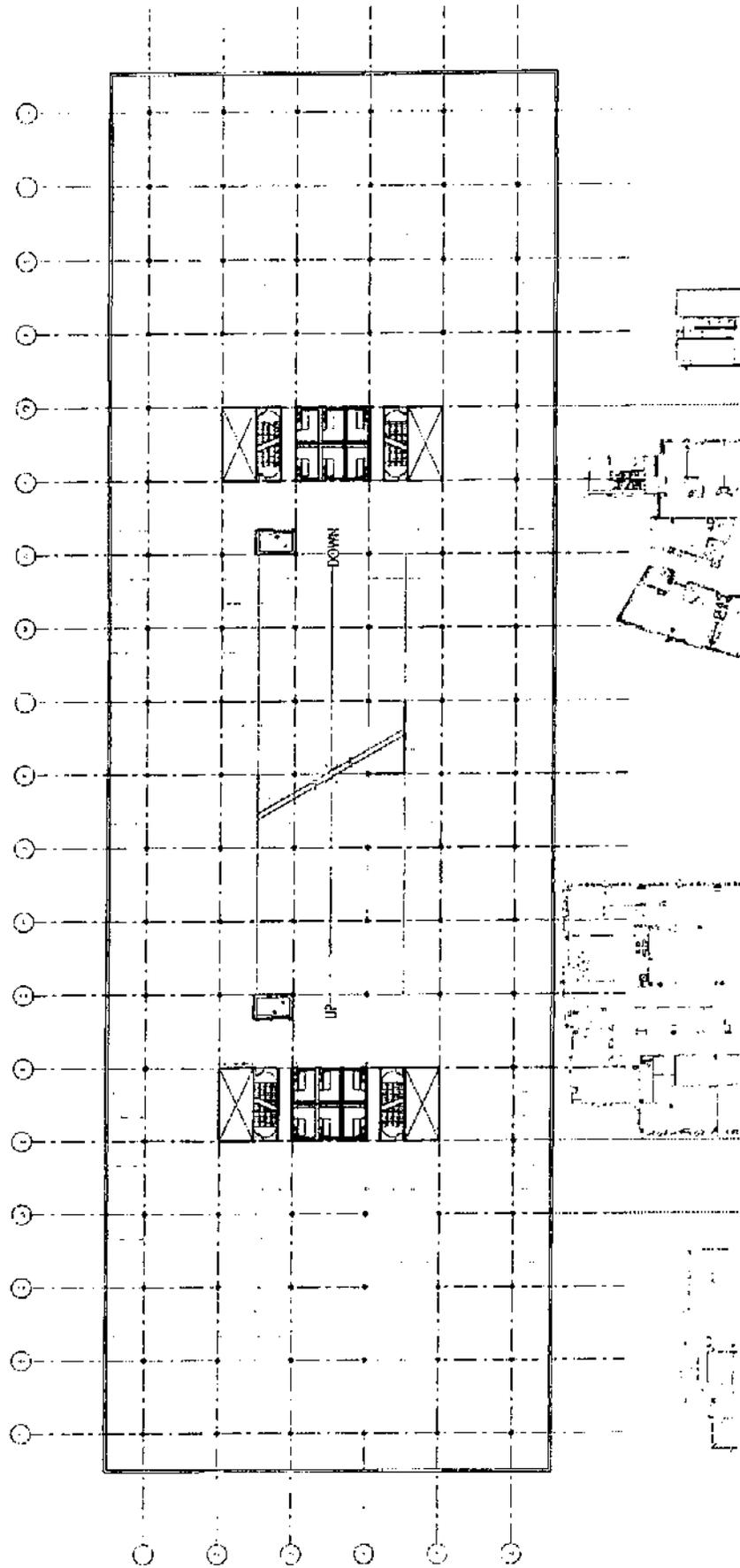
**The University of Chicago Hospitals New Hospital Pavilion**



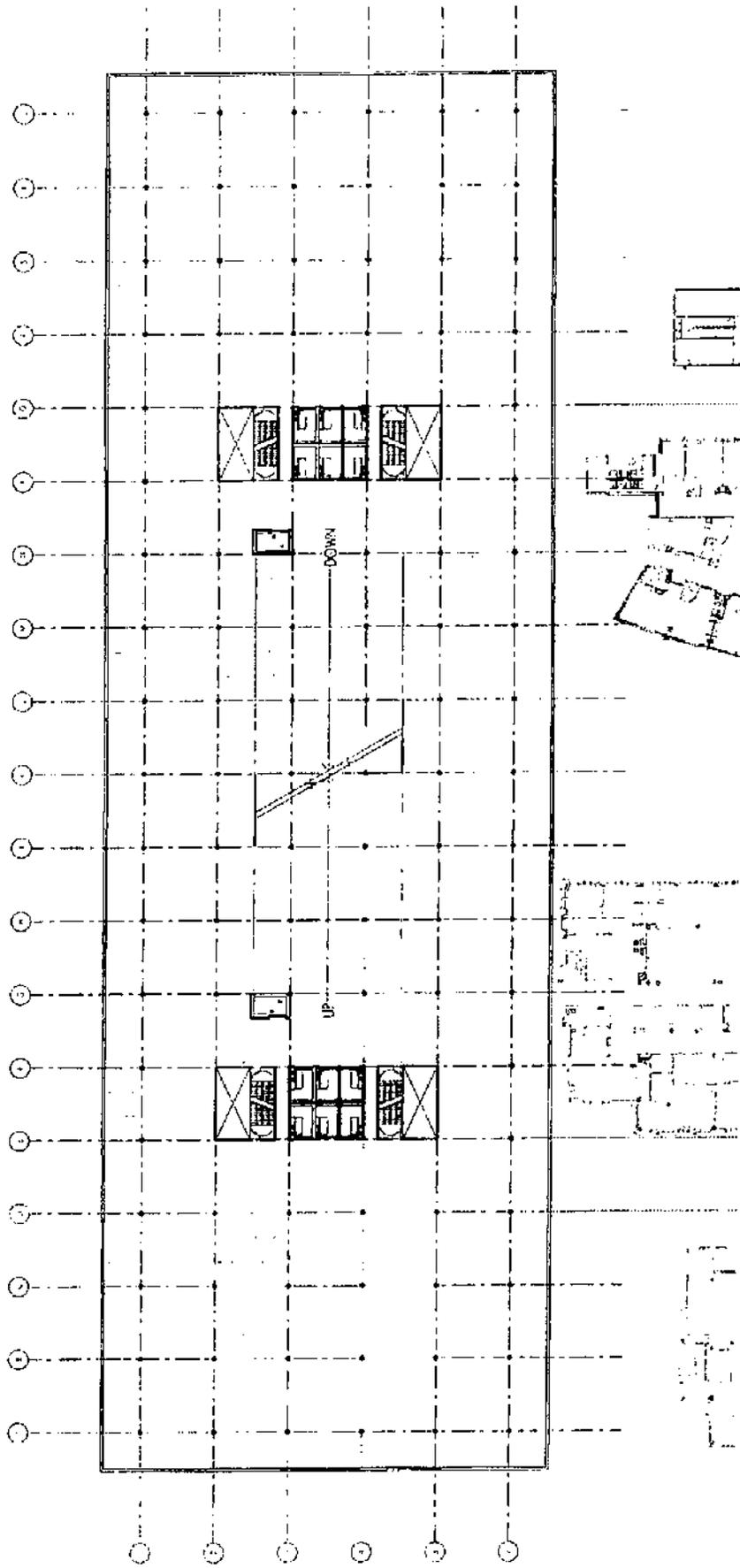
PARKING - FLOOR 1  
 PARKING SPACES 262

RAFAEL VINOLY ARCHITECTS PC  
 CHICAGO, ILLINOIS

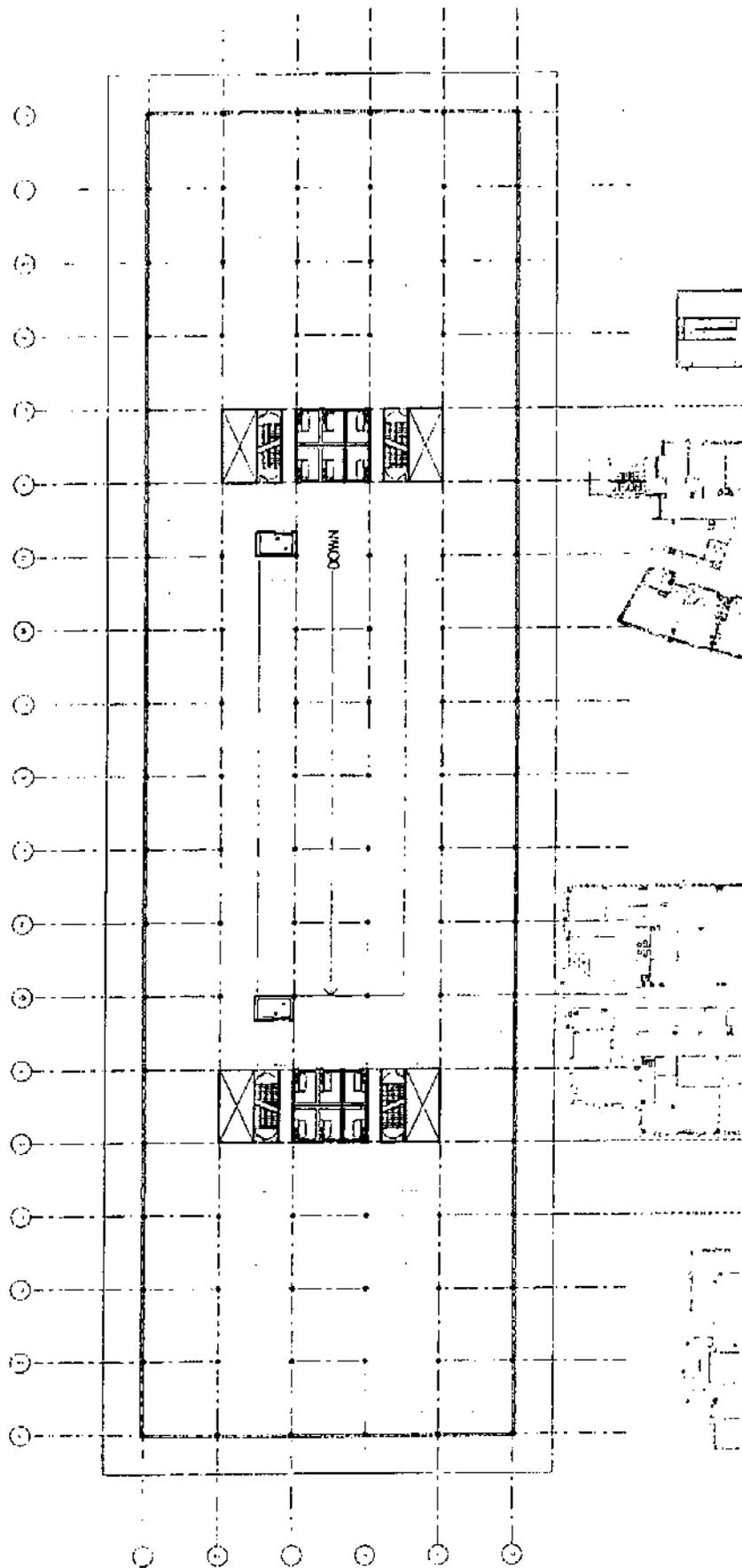
The University of Chicago Hospitals New Hospital Pavilion



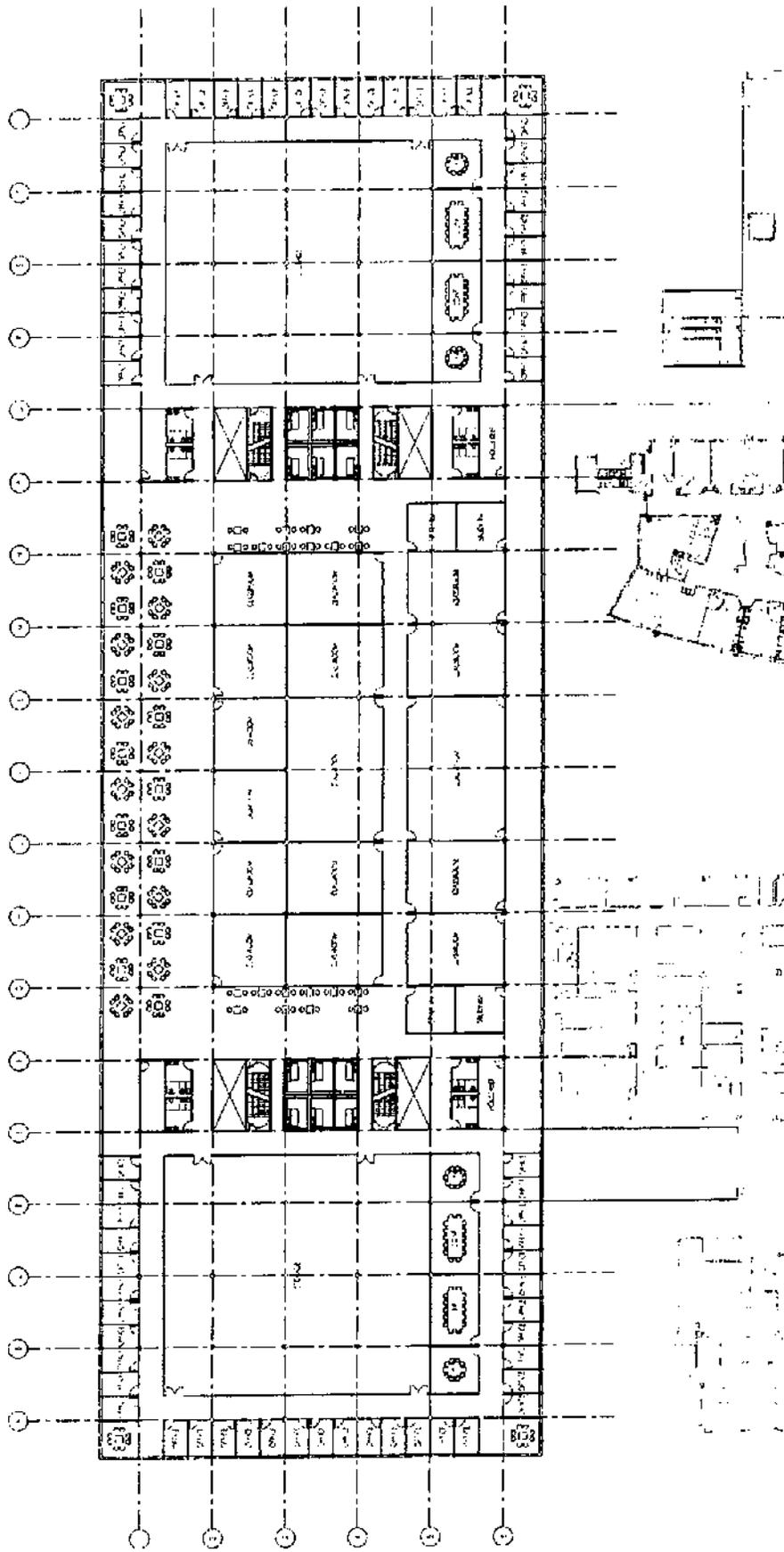
PARKING - FLOOR 2  
 PARKING SPACES 262



PARKING - FLOOR 3  
 PARKING SPACES 262

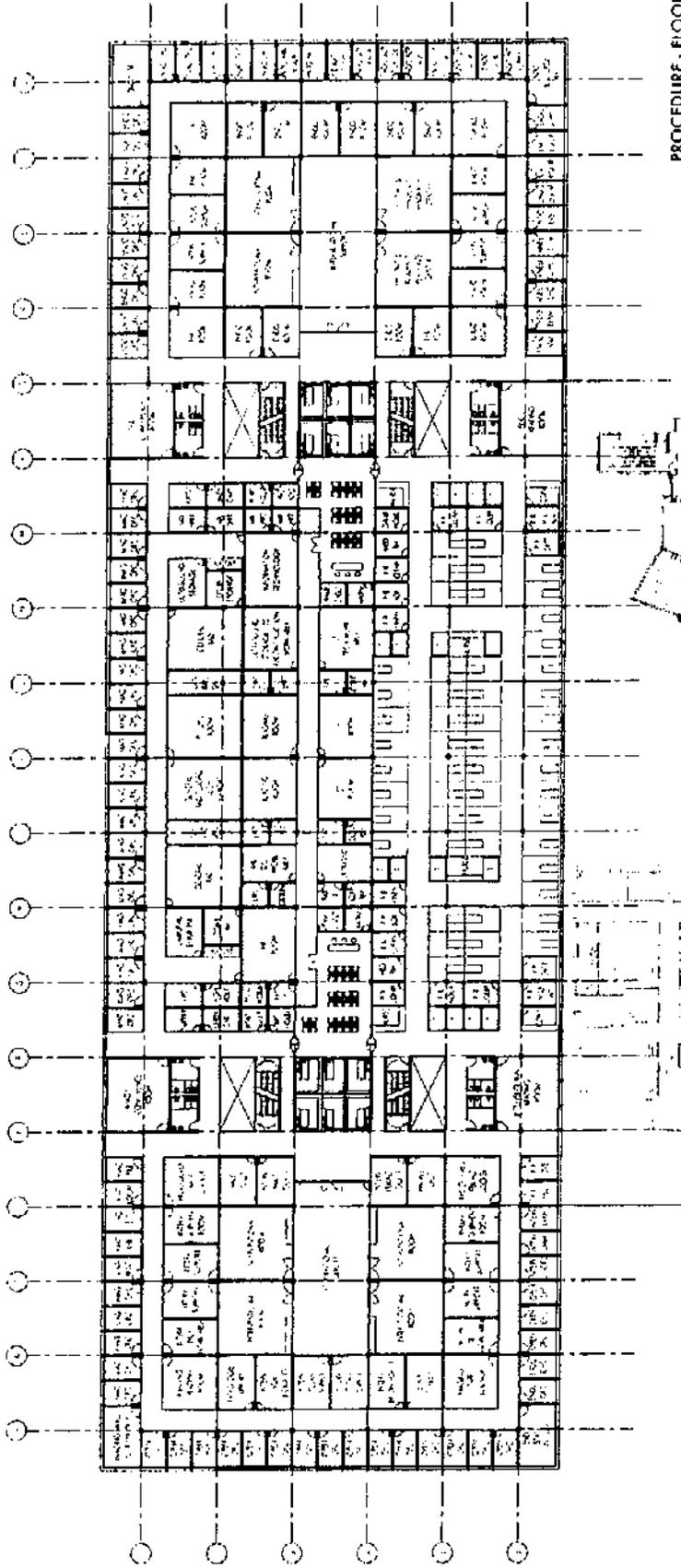


PARKING - FLOOR 4  
 PARKING SPACES 192



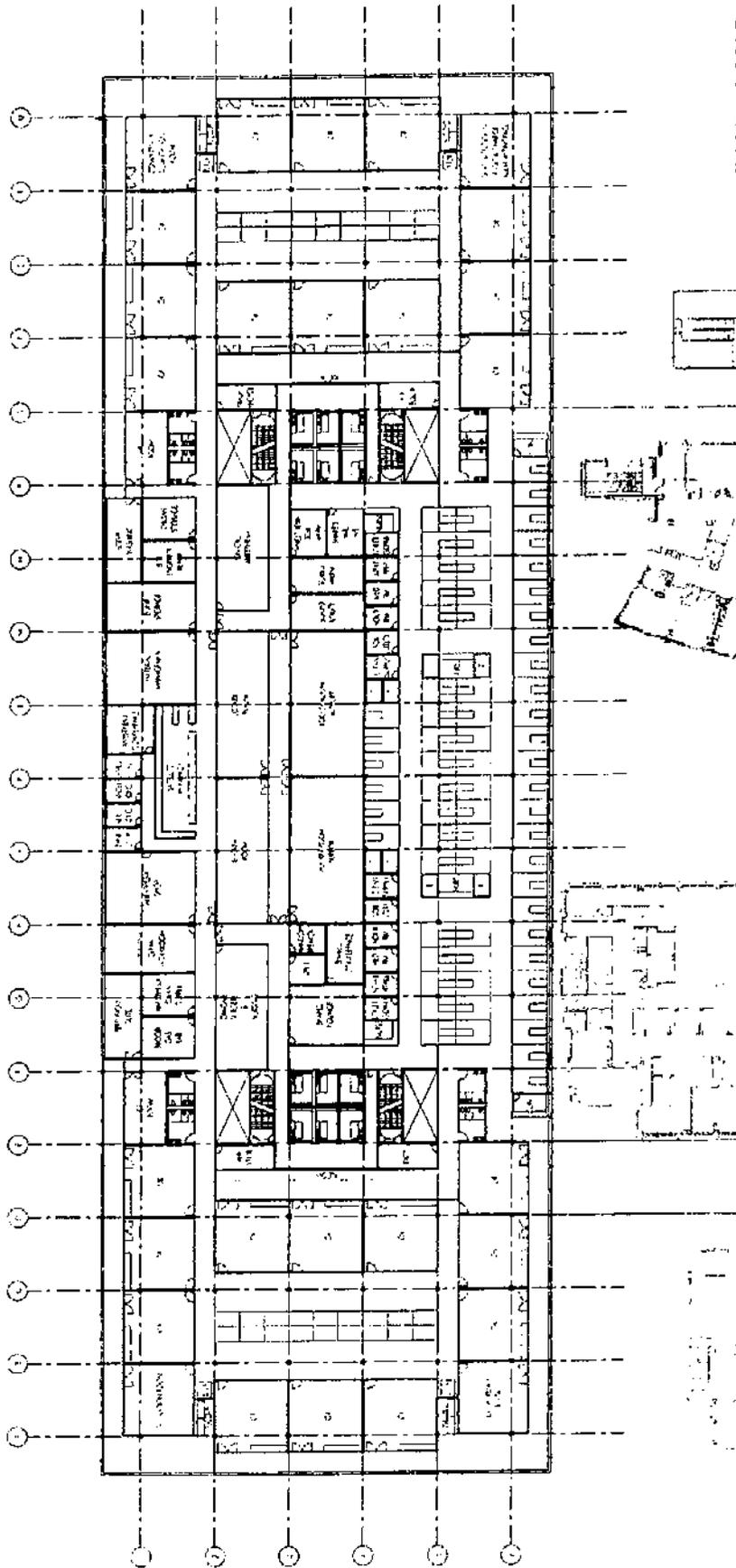
ACADEMY - FLOOR 3

SARAFI VINOLY ARCHITECTS PC  
 CONNOR  
 The University of Chicago Hospitals New Hospital Pavilion

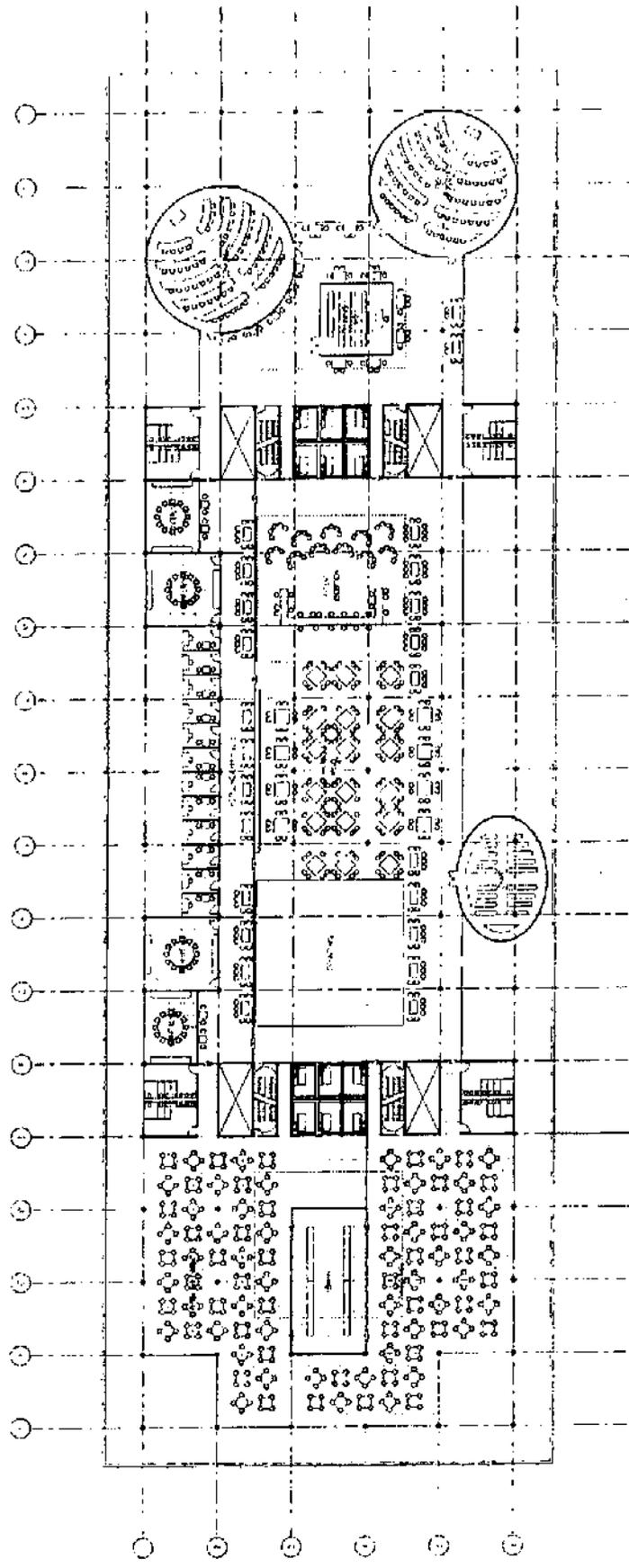


- PROCEDURE - FLOOR 4
- GI/ENDO ROOM 16
- CT ROOMS 2
- MRI ROOM 3
- GENERAL/CHEST/FUORO ROOMS 1
- ULTRASOUND ROOM 6
- INTERVENTIONAL ROOMS 6


 RAFAEL VINOLY ARCHITECTS PC  
 CANADONSON  
 The University of Chicago Hospitals New Hospital Pavilion

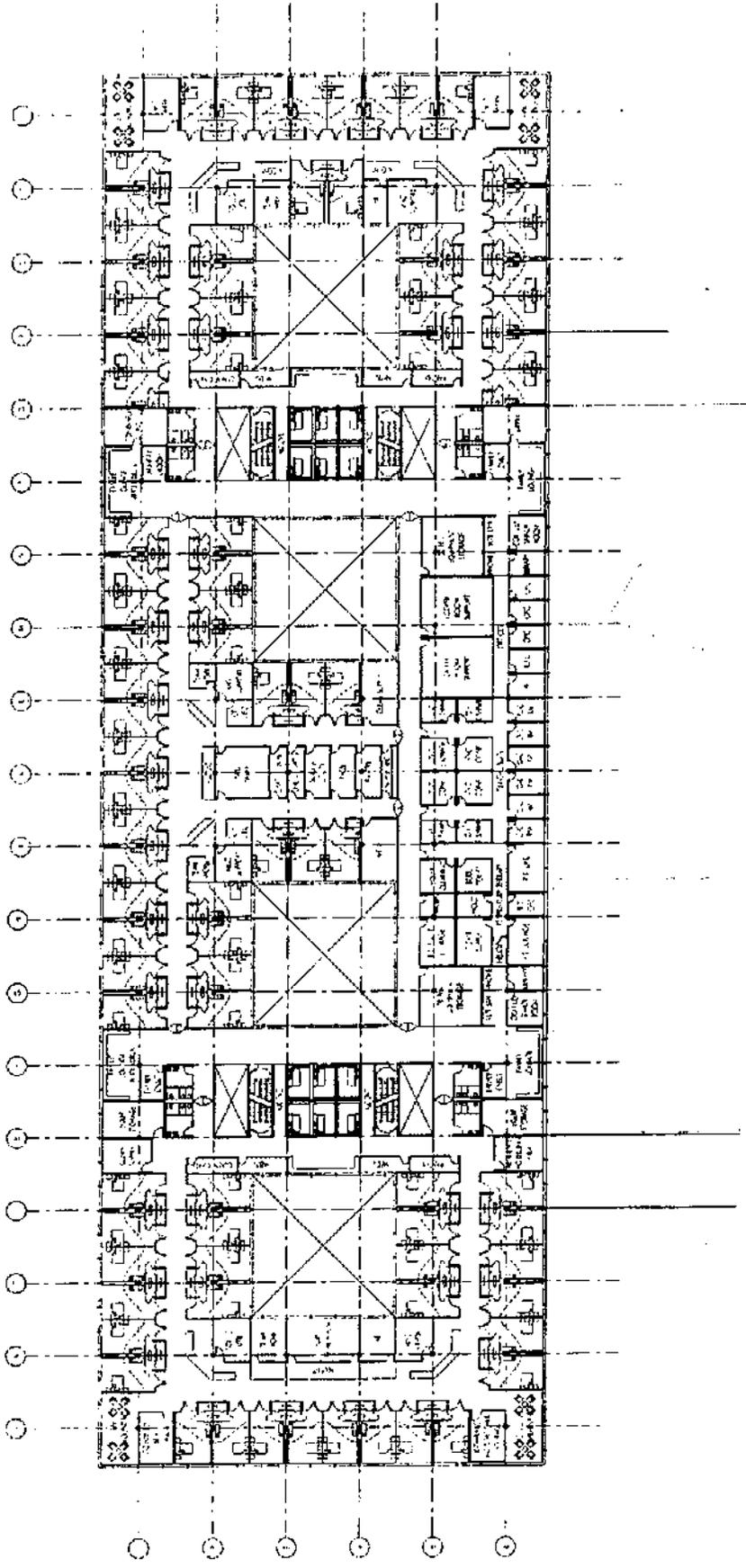


SURGERY - FLOOR 7  
 OR 24  
 CT ROOM 1  
 MRI ROOM 1



SKY GARDEN - FLOOR 8

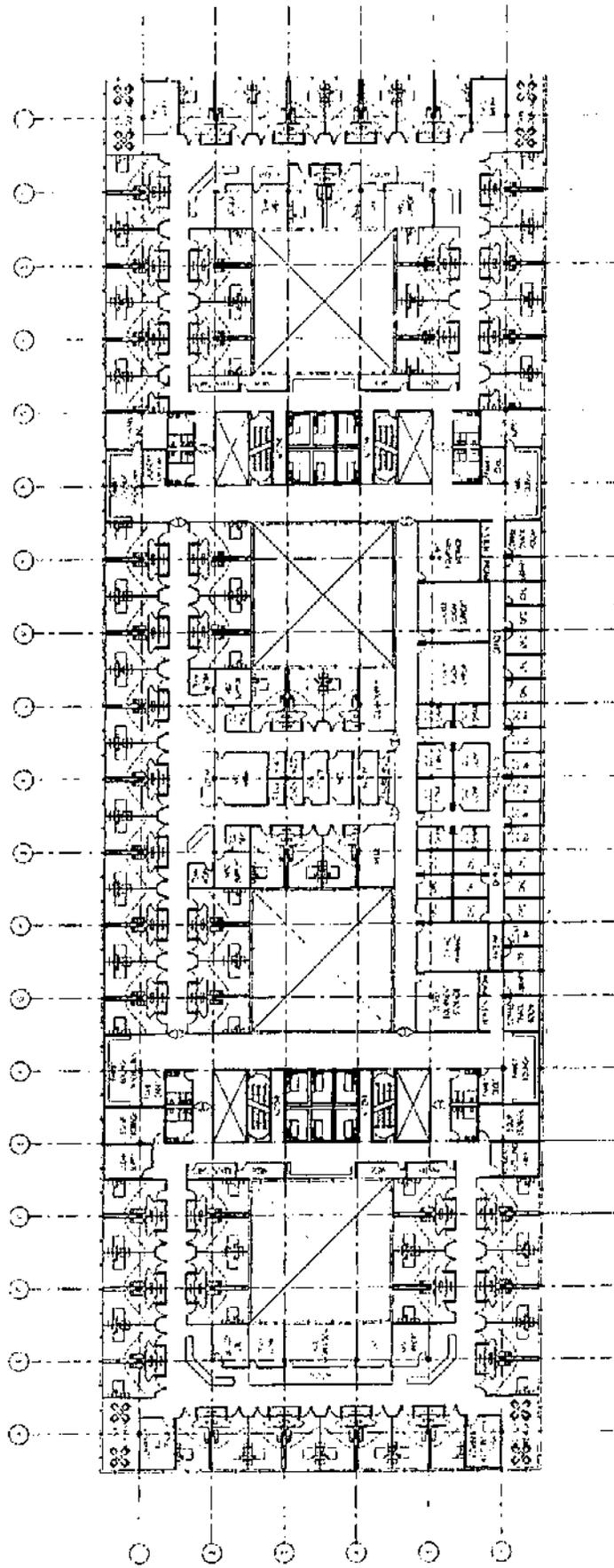
RAFAEL VINOLY ARCHITECTS PC  
 CANADIAN  
 The University of Chicago Hospitals New Hospital Pavilion



INPATIENT - FLOOR 9  
88 BEDS

RAFAEL VINOLY ARCHITECTS PC  
& DANQUSON

The University of Chicago Hospitals New Hospital Pavilion



INPATIENT - FLOOR 10  
88 BEDS

The University of Chicago Hospitals New Hospital Pavilion

STAFEL VINILO ARCHITECTS PC  
CANNON DESIGN

SECTION IV. C. 2. Project Cost Comparison

	<u>Master Design</u>	<u>This Project</u>	<u>Difference</u>
Preplanning Costs	\$1,094,000	\$0	(\$1,094,000)
Site Survey and Soil Investigation	215,000	170,000	(45,000)
Site Preparation	8,022,000	9,070,311	1,048,311
Off Site Work	0	90,758	90,758
New Construction Contracts	392,811,000	432,425,625	39,614,625
Contingencies	39,281,000	43,242,563	3,961,563
Architectural/Engineering Fees	25,500,000	21,379,756	(4,120,244)
Consulting and Other Fees	24,845,000	30,075,000	5,230,000
Movable or Other Equipment (not in constr. contracts)	120,984,000	167,888,276	46,904,276
Bond Issuance Expense (project related)	16,690,987	17,411,699	720,712
Net Interest Expense During Construction (project)	55,812,068	45,297,000	(10,515,068)
Other Costs To Be Capitalized	10,370,000	18,695,000	8,325,000
<b>ESTIMATED TOTAL PROJECT COSTS</b>	<b>\$695,625,055</b>	<b>\$785,745,988</b>	<b>\$90,120,933</b>

Discussion:

The \$90 million difference in estimated costs can be found principally in Construction and Equipment. The construction intensity factor for the Master Design estimate was 0.9539 versus 1.0707 for the proposed project. Much of the difference is attributable to the 410,000 square foot parking area that was in the Master Design but not in the proposed project. Parking has a low intensity factor. The intensity difference contributes to \$30 million in additional construction costs. The proposed project is 35,000 sf larger, which translates to \$14 million more in costs. Contingency in both estimates is 10 percent of construction, so the larger Construction amount in the proposed project accounts for \$4 million more in Contingency. In the proposed project, the Information Systems portion of Equipment is \$25 million greater, based on an in-depth study and estimate by a company expert in this area. Patient room furnishings are \$6 million higher, due mainly to specifying ICU-level beds in all rooms for flexibility. Radiology is \$4 million higher, due to larger quantities. In Equipment generally, the estimate is more detailed, thorough, and inclusive and costs are subsequently higher.

The Construction and Equipment categories account for 96 percent of the cost difference.

SECTION IV. C. 3. Construction Elements Comparison

Element	Master Design	This Project	Difference
Site	57th & Maryland	57th & Maryland	none
Buildings	1	1	0
Area	1,158,694	1,194,607	35,913
Floors:			
Lower	MEP/Support	MEP/Support	
1	Lobby/Retail	Lobby/Retail	
2	Parking	MEP/Support	
3	Parking	Future Development	
4	Parking	Future Development	
5	Parking	Procedure, Imaging	
6	Academy	Surgery	
7	Procedure, Imaging	Sky Lobby	
8	Surgery	Beds	
9	Sky Lobby	Beds	
10	Beds	Beds	
11	Beds	MEP	
12	MEP Penthouse	MEP	
13		MEP Penthouse	

SECTION IV. C. 4. Beds, Services Comparison

Department	Master Design		This Project		Difference
	Area (bgsf)	Elements	Area (bgsf)	Elements	
Med/Surg Acute Care	104,244		141,552		37,308
ICU	53,739		49,173		(4,566)
Surgery	77,082		61,389		(15,693)
Preparation/Recovery	37,003		37,038		35
Anatomic Pathology Lab	0		8,254		8,254
Central Sterile Process.	11,104		9,296		(1,808)
Radiology	55,651		36,422		(19,229)
GI Procedures	34,079		13,839		(20,240)
Pharmacy	12,006		11,602		(404)
Respiratory Therapy	0		1,959		1,959
Clinical Support	8,772		16,069		7,297
Total	<u>393,680</u>		<u>386,593</u>		<u>(7,087)</u>

Med/Surg Acute Care	beds	120	beds	180	60
ICU	beds	56	beds	60	4
Surgery	OR's	24	OR's	24	0
Preparation/Recovery	stations	128	stations	103	(25)
Radiology					
- MR	rooms	1	rooms	1	0
- CT	rooms	2	rooms	2	0
- Gen. Procedure	rooms	4	rooms	3	(1)
- Interventional (angio)	rooms	6	rooms	7	1
GI Procedures	rooms	18	rooms	17	(1)

SECTION VI. ESTABLISHMENT OF  
ADDITIONAL BEDS

## SECTION VI. ESTABLISHMENT OF ADDITIONAL BEDS

### B. Addition of Beds to Existing Facilities

1. UCMC is operating below State bed occupancy standards for Pediatrics, Obstetrics, Psychiatry, and Med/Surg. We propose 60 ICU beds for the NHP building, 38 relocated and 22 additional. Pediatrics is just 2 beds under the standard of 75 percent which is insufficient given the number of ICU beds needed.

The Psychiatry unit is 16 beds. It is located in Gilman-Smith Hospital, which is several blocks from the NHP. There is not enough space for the 60 ICU beds planned for the NHP. The Psychiatry unit occupies 5,693 bgsf. The 12 bed ICU's planned for the NHP will require 9,682 bgsf each. At this rate, architectural limitations aside, only 7 ICU beds would fit in the Psychiatry unit. More importantly, locating them in a building that is a 15 minute trip from where they support the OR and other procedure areas is not appropriate.

Obstetrics beds are licensed at 50 but 30 are needed to meet the State standard, freeing 20 beds. These beds are located in Mitchell Hospital, a 12 to 15 minute trip to the NHP and a risky trip for our most acutely ill patients.

Med/Surg beds are operating at 78 percent, which for the proposed 300 beds is 34 beds below the State's 88 percent target for this category. While some ICU beds conceivably could be located in the remaining open Mitchell bed floors, programmatically the NHP ICU beds are planned for the NHP to support the surgical, other procedure, and hematology/oncology services to be moved there.

2. Regarding space within the bed rooms for additional beds, each room is 311 nsf, approximately 15 feet by 21 feet. Though the IDPH minimum area for each ICU bed is 120 nsf and mathematically two beds could be placed within the 311 nsf area, we believe these minimums do not provide enough space. We follow AIA guidelines that recommend circulation/work areas around the bed of 5 feet on the caregiver side, 5 feet at the foot, and 4 feet on the family side of the room. This space amounts to 156, given a 7 feet by 4 feet ICU bed dimension. With two beds, these work zones could not both exist in the same room without substantial overlap, which is not workable if both patients need attention at the same time. With the increase of serious, drug-resistant infections in hospitals, placement of two patients in such close proximity is not advisable. Finally, moving to private rooms is the strong preference of patients and their families. Consequently, it is highly unlikely we would place two beds in these rooms.
3. The appropriate length of stay comparison surveys the academic medical centers in the Chicago metropolitan area. Using data reported in the IDPH Annual Questionnaire – 2006, for direct admissions and related days, the group average is 4.0 days versus our 4.9 average length of stay. The group,

## SECTION VI. ESTABLISHMENT OF ADDITIONAL BEDS

consisting of University of Illinois Medical Center at Chicago, Rush University Medical Center, Northwestern Memorial Hospital, and Foster G. McGaw Hospital – Loyola University, had lengths of stay ranging from 2.8 to 7.1 days (see table later in this section).

The wide range of ALOS among academic medical centers suggests that data collection is failing to acknowledge difficulties between operating and other characteristics among these hospitals. The small sample size also presents limitations in terms of assessing UCMC's length of stay. That said, most reimbursement is at fixed or negotiated rates, and hospitals that do not rigorously work to minimize length of stay will suffer financially. Our physicians assess the ICU patients several times each day to determine if they can be transferred to Med/Surg beds. Our ICU beds have been occupied at 85 percent the last 24 months and the pressure is constant to transfer patients to make sure beds are available for new patients.

SECTION VI. ADDITION OF BEDS

COMPARISON OF ICU LENGTH OF STAY

	Direct		
	<u>Adm.</u>	<u>Days</u>	<u>ALOS</u>
UCMC	3,812	18,679	4.9
UIMC - Chicago	2,970	21,232	7.1
Rush Univ. Medical Center	3,707	14,485	3.9
Northwestern Memorial	4,191	17,217	4.1
McGaw Hosp.- Loyola Univ.	7,103	19,727	2.8
Total Comparison Group	17,971	72,661	4.0

## SECTION VII. MODERNIZATION

**SECTION VII. REVIEW CRITERIA RELATING TO ALL MODERNIZATION PROJECTS (MOD)**

This section is applicable to all projects proposing modernization. Modernization includes, but is not limited to: expanding a department, acquiring major medical equipment, remodeling, or constructing additions or new buildings.

**A. Specific Information Requirements**

Indicate if the following areas or departments are to be modernized and provide the information as applicable.

1. AMBULATORY CARE (Include all outpatient clinics) -- Is this area being modernized? Yes  No

If yes, provide:

- a. The number of visits for each of the last three years:

Year	_____	_____	_____
Number	_____	_____	_____

- b. The number of treatment/examination rooms: Existing \_\_\_\_\_ Proposed \_\_\_\_\_

2. AMBULATORY SURGERY TREATMENT CENTERS-- Is this area being modernized? Yes  No

If yes, provide:

- a. The number of procedures for each of the last three years:

Year	_____	_____	_____
Number	_____	_____	_____

- b. The number of visits for each of the last three years:

Year	_____	_____	_____
Number	_____	_____	_____

- c. The number of operating rooms for each of the last three years:

Year	_____	_____	_____
Number	_____	_____	_____

3. CARDIAC CATHETERIZATION -- Is this area being modernized? Yes  No

If yes, provide the number of inpatient, outpatient, and total procedures (patient visits) performed on adults and on pediatric patients for each of the past three years:

	ADULT				PEDIATRIC		
Year	_____	_____	_____	Year	_____	_____	_____
Inpatient	_____	_____	_____	Inpatient	_____	_____	_____
Outpatient	_____	_____	_____	Outpatient	_____	_____	_____
Total	_____	_____	_____	Total	_____	_____	_____

4. BEG DEPARTMENT OR AREA -- Is this area being modernized? Yes  No

If yes, provide the number of inpatient, outpatient, and total procedures for each of the past three years:

Year	_____	_____	_____
Inpatient	_____	_____	_____
Outpatient	_____	_____	_____
Total	_____	_____	_____

5. EKG DEPARTMENT OR AREA -- Is this area being modernized? Yes  No

If yes, provide the number of inpatient, outpatient, and total procedures for each of the past three years:

Year	_____	_____	_____
Inpatient	_____	_____	_____
Outpatient	_____	_____	_____
Total	_____	_____	_____

6. HEMODIALYSIS SERVICES -- Is this area being modernized? Yes  No

If yes, provide the following information:

- a. The number of treatment stations: existing \_\_\_\_\_ proposed \_\_\_\_\_
- b. The number of treatments performed for each of the last three years:

Year	_____	_____	_____
Treatments	_____	_____	_____

7. LABOR-DELIVERY-RECOVERY -- Is this area being modernized? Yes  No

If yes, provide the following information:

- a. The number of
- |                         |       |
|-------------------------|-------|
| Labor rooms             | _____ |
| Delivery/birthing rooms | _____ |
| Recovery stations       | _____ |
| LDR's                   | _____ |
| LDRP rooms              | _____ |
- b. The number of procedures and deliveries for each of the last three years:
- |            |       |       |       |
|------------|-------|-------|-------|
| Year       | _____ | _____ | _____ |
| Procedures | _____ | _____ | _____ |
| Deliveries | _____ | _____ | _____ |

8. LABORATORY SERVICES -- Is this area being modernized? Yes  No  *Anatomic Pathology*

If yes, provide the number of equivalent full-time employees (FTE's) employed in the laboratory 38

9. MAGNETIC RESONANCE IMAGING -- Is this area being modernized? Yes  No

If yes, provide the following information for each of the last three years:

Year	<u>2005</u>	<u>2006</u>	<u>2007</u>
Number of visits	<u>13,444</u>	<u>14,247</u>	<u>16,232</u>
Number of scans	<u>17,084</u>	<u>18,550</u>	<u>21,320</u>

10. NURSERY (other than neonatal intensive care units) -- Is this area being modernized? Yes  No   
 If yes, provide the following for each of the last three years:

Year	_____	_____	_____
Number of newborns	_____	_____	_____
Number of patient days	_____	_____	_____

11. OCCUPATIONAL THERAPY -- Is this area being modernized? Yes  No   
 If yes, provide the following information for each of the last three years:

Year	_____	_____	_____
Inpatient treatments	_____	_____	_____
Outpatient treatments	_____	_____	_____
Number of visits	_____	_____	_____

12. PHYSICAL THERAPY -- Is this area being modernized? Yes  No   
 If yes, provide the following information for each of the last three years:

Year	_____	_____	_____
Inpatient treatments	_____	_____	_____
Outpatient treatments	_____	_____	_____
Total treatments	_____	_____	_____
Number of visits	_____	_____	_____

13. PULMONARY FUNCTION -- Is this area being modernized? Yes  No   
 If yes, provide the following information for each of the last three years:

Year	_____	_____	_____
Inpatient procedures	_____	_____	_____
Outpatient procedures	_____	_____	_____
Total procedures	_____	_____	_____
Number of visits	_____	_____	_____

14. RECOVERY (SURGICAL) -- Is this area being modernized? Yes  No   
 If yes, provide the existing and proposed number of stations by type:

	Existing	Proposed
Inpatient	<u>23</u>	<u>113</u>
Outpatient Stage I	<u>22</u>	<u>15</u>
Outpatient Stage II	<u>-</u>	<u>-</u>

15. RESPIRATORY THERAPY -- Is this area being modernized? Yes  No   
 If yes, provide the following information for each of the last three years:

Year	<u>2005</u>	<u>2006</u>	<u>2007</u>
Inpatient treatments	<u>305,878</u>	<u>264,227</u>	<u>275,454</u>
Outpatient treatments	<u>5,231</u>	<u>7,789</u>	<u>9,261</u>
Total treatments	<u>311,109</u>	<u>272,016</u>	<u>284,715</u>
Number of visits	<u>10,149</u>	<u>11,664</u>	<u>12,480</u>

16. DIAGNOSTIC RADIOLOGY -- Is this area being modernized? Yes  No   
If yes, provide the following information classifying procedure rooms as general or special according to the type of machines employed.

## General machines are:

- Radiographic
- Fluoroscopic
- Radiographic/Fluoroscopic
- Tomographic (linear)
- Tomographic (multi-directional)

## Special machines are:

- Angiographic
- CT Scanner
- Mammography
- Sonographic (ultrasound)

- a. Provide the number of existing and proposed general procedure rooms by machine type.
- b. Provide the number of existing and proposed special procedure rooms by machine type.

**APPEND DOCUMENTATION AS ATTACHMENT MOD-1A AFTER THE LAST PAGE OF THIS SECTION.**

17. EMERGENCY SERVICES -- Is this area being modernized? Yes  No   
If yes, provide the following information:

- a. The number of existing and proposed treatment/examination rooms;
- b. A list of any of the above rooms that are or will be used for purposes other than general treatment;
- c. The number of visits for each of the last three years.

**APPEND DOCUMENTATION AS ATTACHMENT MOD-1B AFTER THE LAST PAGE OF THIS SECTION.**

18. INPATIENT BED AREA -- Is this area being modernized? Yes  No   
If yes, provide the following information:

- a. The number of existing and proposed private rooms, semi-private rooms, and three or more occupancy rooms (by category of service for each type of room) for the entire facility and for the project;
- b. Line drawings showing the configuration of the unit(s) being modernized.

**APPEND DOCUMENTATION AS ATTACHMENT MOD-1C AFTER THE LAST PAGE OF THIS SECTION.**

19. NUCLEAR MEDICINE -- Is this area being modernized? Yes  No   
If yes, provide the following information:

- a. A list of the existing and proposed major pieces of equipment;
- b. The existing and proposed number of procedure rooms;
- c. The number of inpatient, outpatient, and total procedures done for each of the last three years;
- d. A breakdown of the procedures into types of procedures and machine time/procedure for the last year.

**APPEND DOCUMENTATION AS ATTACHMENT MOD-1D AFTER THE LAST PAGE OF THIS SECTION.**

20. RADIATION THERAPY -- Is this area being modernized? Yes  No   
If yes, provide the following information:

- a. The number of treatments and the number of "courses of treatment" for each of the last three years;
- b. A list of the existing and proposed pieces of megavoltage equipment.

**APPEND DOCUMENTATION AS ATTACHMENT MOD-1E AFTER THE LAST PAGE OF THIS SECTION.**

21. SURGERY -- Is this area being modernized? Yes  No   
If yes, provide the following information:

- a. The existing and proposed number of procedure rooms. Indicate the use of these rooms such as general, open heart, eye, endoscopy, and cystology. Indicate how many rooms are dedicated solely to outpatient surgery, solely to inpatient surgery, and how many are used for both.
- b. The inpatient, outpatient, and total hours of utilization (including clean-up and set-up time) for each of the last three years;
- c. The total hours of utilization (including clean-up and set-up time) for each type of procedure room for each of the last three years;
- d. The number of inpatient, outpatient, and total surgical visits for each type of surgical specialty for each of the last three years.

**APPEND DOCUMENTATION AS ATTACHMENT MOD-1F AFTER THE LAST PAGE OF THIS SECTION.**

22. OTHER DEPARTMENTS OR AREAS -- Are any other areas being modernized? Yes  No   
If yes, identify the area(s) and provide workload data for each area for each of the last three years.

**APPEND DOCUMENTATION AS ATTACHMENTS MOD-1G, MOD-1H, MOD-1I, MOD 1J, etc. AFTER THE LAST PAGE OF THIS SECTION.**

**B. Criterion 1110.420.b, Modern Facilities**

A criterion must be claimed for EACH department or area to be modernized. The justification for each department or area must be on a separate page. Choose the criterion or criteria which most clearly approximates the reason for proposing the modernization.

At least ONE of the following two criteria must be claimed for EACH department or area proposed for modernization.

1. Read criterion 1110.420.b.1. **This criterion cannot be used to justify any increase in square footage. If expansion of a department is proposed, criterion 1110.420.b.2 must be claimed.**

Indicate if this criterion is claimed and submit the following:

- a. the age of the building or piece of equipment;
- b. the downtime experienced on the piece of equipment for each of the last three years;
- c. the cost of repair experienced on the piece of equipment for each of the last three years;

SECTION VII. A. Modernization - Information

21. Diagnostic Radiology

a. General Procedure Rooms

1. Existing (Total = 19)

a.. Radiographic

Digital chest	TC134
Digital chest	D1557
Radiographic	TC114
Radiographic	TE101
Radiographic	TC132
Radiographic	D1554
Radiographic	D1555
Radiographic	D3126
Radiographic	D4109
Radiographic	D4110
Radiographic	D4111
Radiographic	D4112
Radiographic	K125C

b. Fluoroscopic

None

c. Radiographic/Fluoroscopic

R/F	D1551
R/F	D1552
R/F	D1553
R/F	D3128
R/F	TC112
R/F	K125F

d. Tomographic (linear)

None

2. Proposed (Total =23)

a.. Radiographic

Digital chest	TC134
Digital chest	D1557
Radiographic	TC114
Radiographic	TE101
Radiographic	TC132
Radiographic	D1554
Radiographic	D1555
Radiographic	D1557
Radiographic	D4109
Radiographic	D4110
Radiographic	D4111
Radiographic	D4112
Radiographic	K125C
Radiographic	New - Comer 2
Radiographic	New - Comer 2

SECTION VII. A. Modernization - Information

21. Diagnostic Radiology

a.. Radiographic (continued)

Radiographic NHP  
Radiographic NHP

b. Fluoroscopic

Fluoroscopic NHP

c. Radiographic/Fluoroscopic

R/F D1551  
R/F D1552  
R/F D6763  
R/F TC112  
R/F K125F

d. Tomographic (linear)

None

b. Special Procedure Rooms

1. Existing (Total = 30)

a. Angiographic

Angiographic TW126  
Angiographic TW128  
Angiographic TW132  
Angiographic TW134  
Angiographic TW136

b. CT Scanner

CT TW118  
CT TW120  
CT TW122  
CT D1537  
CT D1538  
CT K130D

c. Mammography

Mammo D1574A  
Mammo D1574B  
Mammo D1574D  
Mammo D2407  
Mammo D2419  
Mammo D2412

d. Ultrasound

US K125J  
US K125K  
US TW106  
US TW132  
US TW134

SECTION VII. A. Modernization - Information

21. Diagnostic Radiology

d. Ultrasound (continued)

US	D1568
US	D1571
US	D1572
US	D2225
US	D2408
US	D2409
US	D3130

c. PET

PET	DCAM
-----	------

2. Proposed (Total = 35)

a. Angiographic (7)

Angiographic	NHP

b. CT Scanner (8)

CT	TW118
CT	TW120
CT	TW122
CT	D1537
CT	D1538
CT	K130D
CT	NHP
CT	NHP

c. Mammography (6)

Mammo	D1574A
Mammo	D1574B
Mammo	D2407
Mammo	D2419
Mammo	D2412
Mammo	D2418

d. Ultrasound (13)

US	K125J
US	K125K
US	TW106
US	TW132
US	TW134
US	D1568
US	D1571

SECTION VII. A. Modernization - Information

21. Diagnostic Radiology

d. Ultrasound (continued)

US	D1572
US	D2225
US	D2408
US	D2409
US	Comer 2
US	Comer 2

c. PET (1)

PET	DCAM
-----	------

SECTION VII. A. 18. Inpatient Bed Area

a. Existing and Proposed Rooms

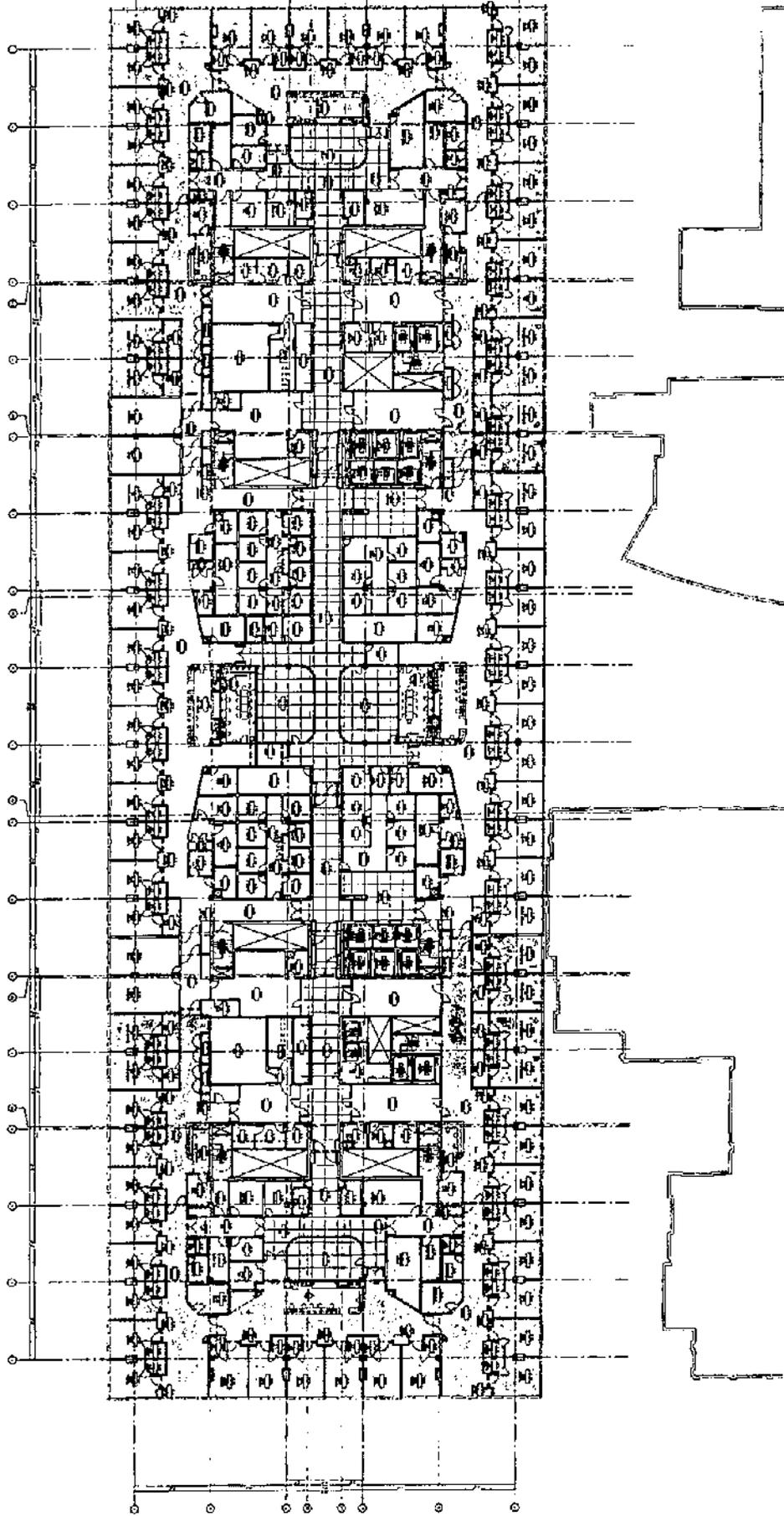
<b>Existing</b>													<b>Total</b>
<b>Beds in Room:</b>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>12</u>	<u>Beds</u>	<u>Beds</u>
Psych		8											16
ICU	92												92
OB	20	12	2										50
Neonatal	4					2	1	3					47
Pediatrics	48	8											64
Med/Surg	183	70		1									327
<b>Total</b>	<b>347</b>	<b>98</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>2</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>		<b>596</b>

<b>Proposed</b>													<b>Total</b>
<b>Beds in Room:</b>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>12</u>	<u>Beds</u>	<u>Beds</u>
Psych		8											16
ICU	114												114
OB	20	12	2										50
Neonatal	4					2	1	3					47
Pediatrics	48	8											64
Med/Surg	300	0											300
<b>Total</b>	<b>486</b>	<b>28</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>1</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>		<b>591</b>

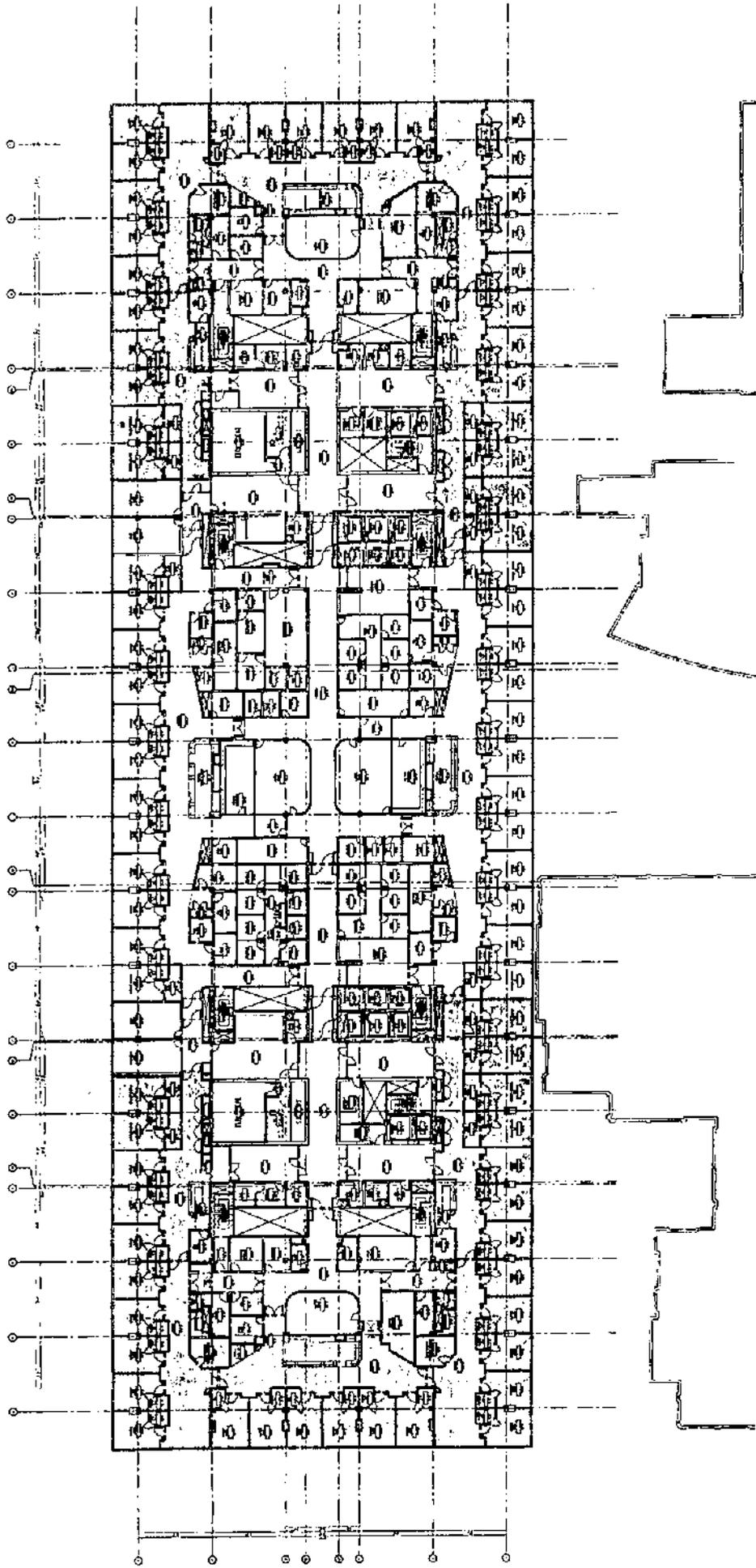
<b>Modernized Beds Are:</b>													<b>Total</b>
	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>16</u>	<u>18</u>	<u>Beds</u>	<u>Beds</u>
ICU	60												60
Med/Surg	180												180
<b>Total</b>	<b>240</b>												<b>240</b>

b. See line drawings of the units being modernized on the following pages.

SECTION VII. 18. b. Inpatient Bed Area Line Drawing



SECTION VII. 18. b. Inpatient Bed Area Line Drawing



THE UNIVERSITY OF CHICAGO MEDICAL CENTER  
NEW HOSPITAL PAVILION

RAFAEL VIÑOY ARCHITECTS / CANNON DESIGN

MED/SURG ACUTE CARE

LEVEL 9 - INPATIENT

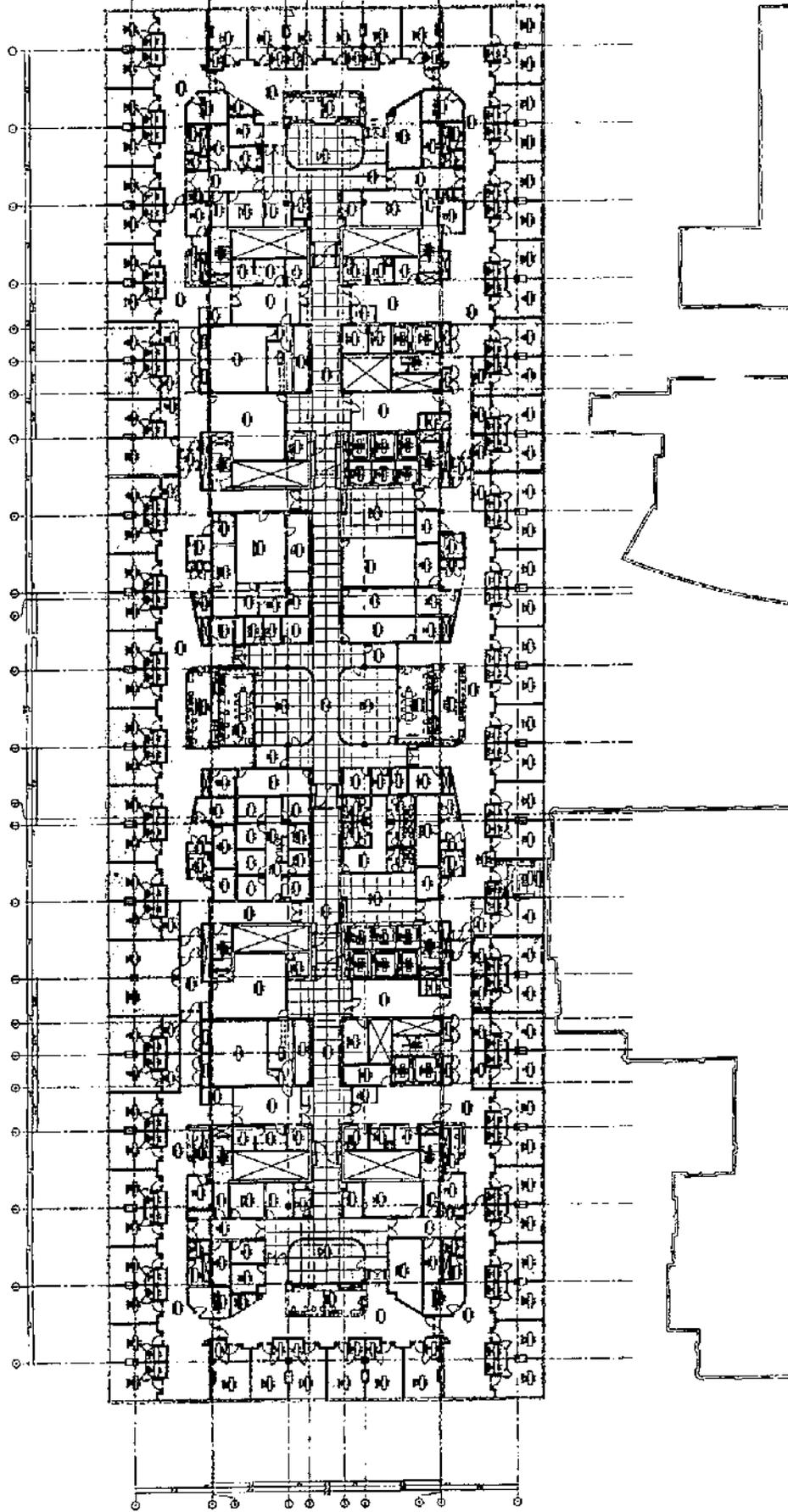
CERTIFICATE OF NEED

OCTOBER 15, 2007

ATTACHMENT INFO - 7

ATTACHMENT MOD - 1C

SECTION VII. 18. b. Inpatient Bed Area Line Drawing



THE UNIVERSITY OF CHICAGO MEDICAL CENTER  
NEW HOSPITAL PAVILION

RAFAEL WINOOLY ARCHITECTS / CANNON DESIGN

MED/SURG ACUTE CARE

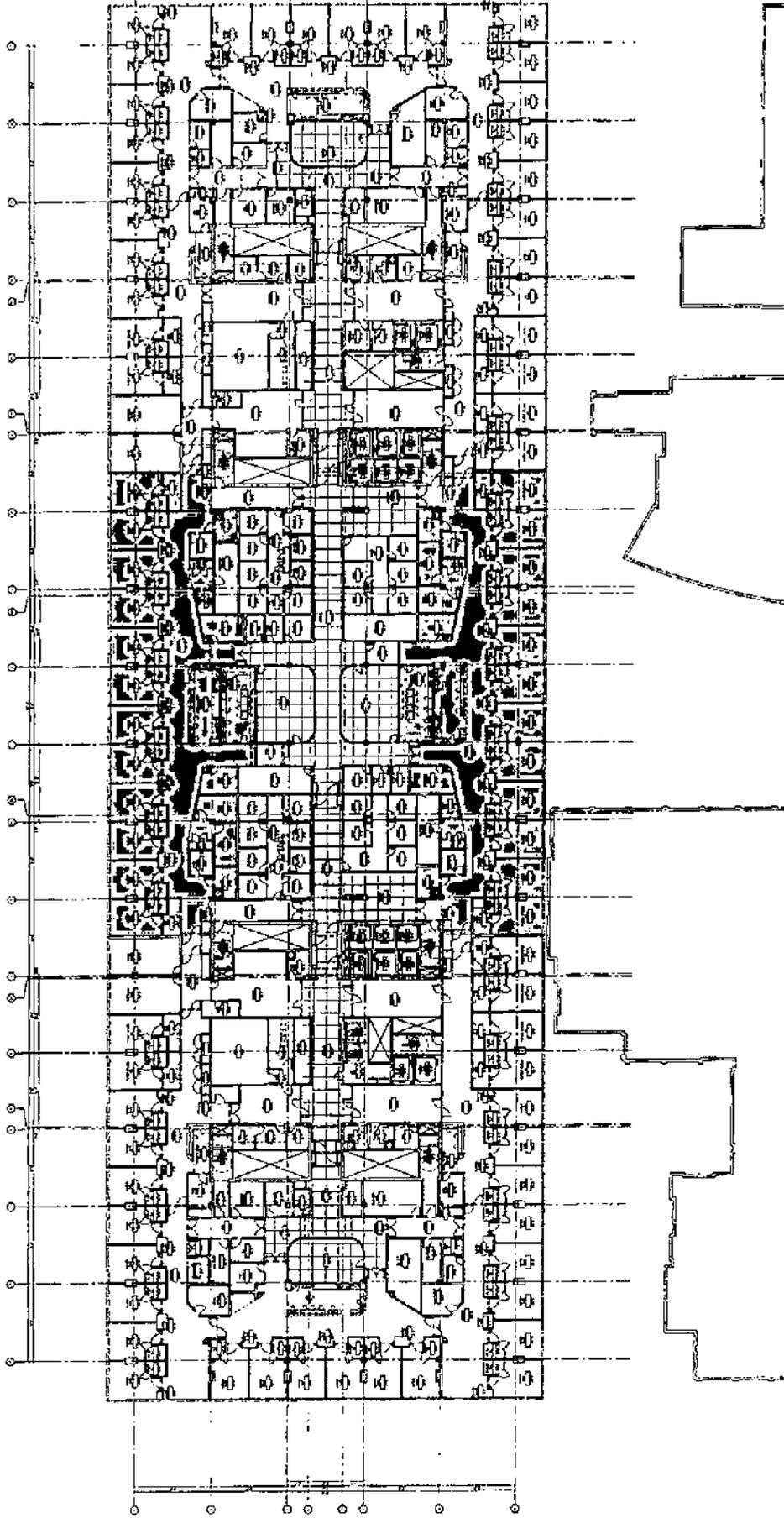
LEVEL 10 - INPATIENT

CERTIFICATE OF NEED

OCTOBER 15, 2007

ATTACHMENT INFO - 7

SECTION VII. 18. b. Inpatient Bed Area Line Drawing



THE UNIVERSITY OF CHICAGO MEDICAL CENTER  
NEW HOSPITAL PAVILION

ICU

RAFAEL VINOLY ARCHITECTS / CANNON DESIGN

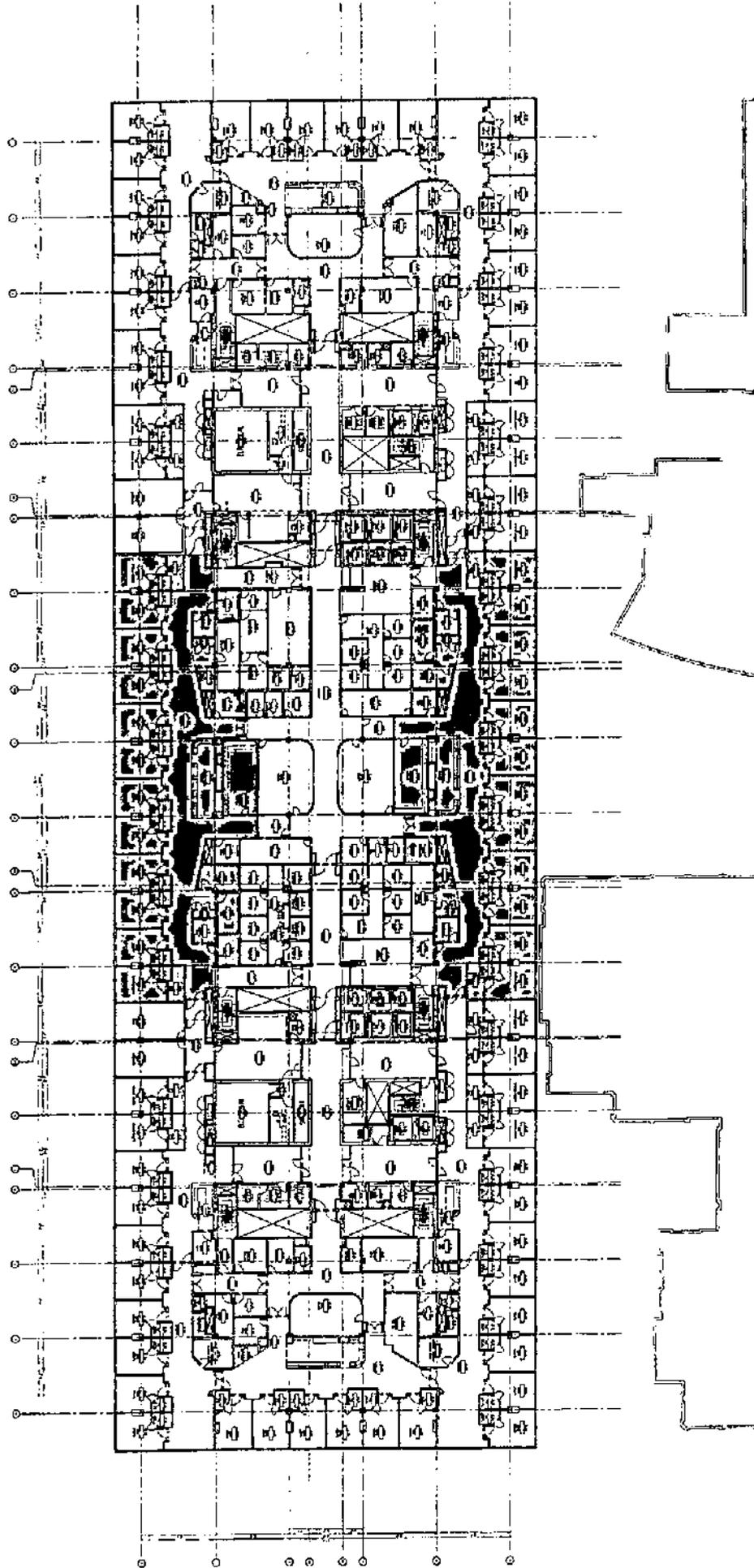
LEVEL 8 - INPATIENT

CERTIFICATE OF NEED

OCTOBER 15, 2007

ATTACHMENT INFO - 7

SECTION VII. 18. b. Inpatient Bed Area Line Drawing



THE UNIVERSITY OF CHICAGO MEDICAL CENTER  
NEW HOSPITAL PAVILION

ICU

LEVEL 9 - INPATIENT

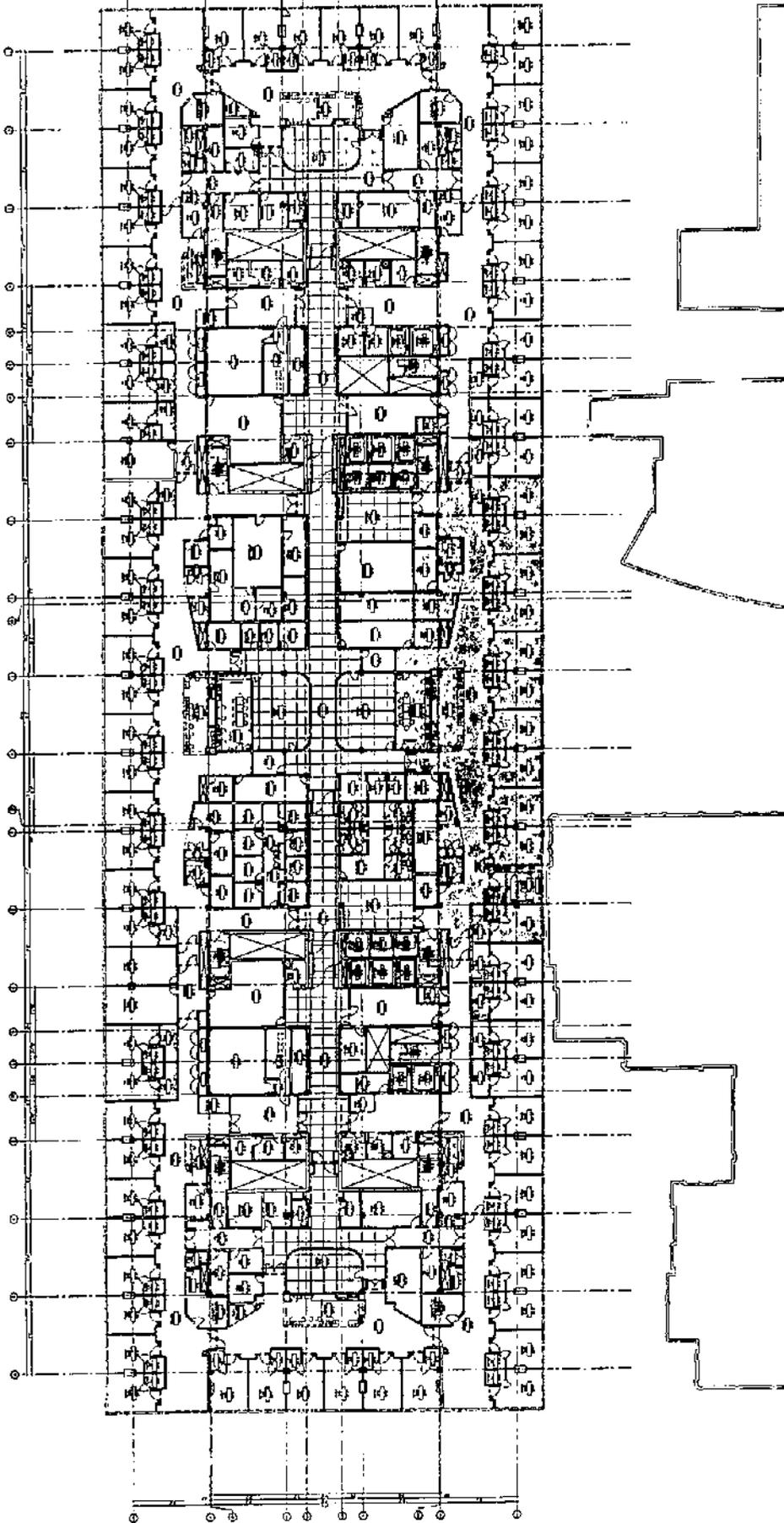
CERTIFICATE OF NEED

OCTOBER 15, 2007

ATTACHMENT INFO - 7



SECTION VII. 18. b. Inpatient Bed Area Line Drawing



THE UNIVERSITY OF CHICAGO MEDICAL CENTER  
NEW HOSPITAL PAVILION

RAFAEL VINOLY ARCHITECTS / CANNON DESIGN

ICU

LEVEL 10 - INPATIENT

CERTIFICATE OF NEED

OCTOBER 16, 2007

ATTACHMENT INFO-7

ATTACHMENT MOD - 1C

SECTION VII. Modernization A. Specific Information Requirements

21. Surgery

a. Existing and Proposed Procedure Rooms

Existing:

GOR - SBRP	15
DCAM	8
Comer	5

Special Use: 1 cystology

No further special designations, by specialty or IP vs. OP

Proposed:

GOR - NHP	24
DCAM	8
Comer	5

b. Hours of Utilization

	<u>Inpatient</u>	<u>Outpatient</u>	<u>Total</u>
2005	40,666	17,718	58,384
2006	41,523	20,189	61,712
2007	39,884	21,386	61,270

c. Hours of Utilization by Room Type

To maximize efficiency of room use, we are able to perform virtually any case in any room, except for one room designated to cystology cases. This determination to avoid restrictive room use will carry over to the proposed new OR.

Surgical Hours by Service:

	<u>2005</u>		<u>2006</u>		<u>2007</u>	
	<u>Inpatient</u>	<u>Outpatient</u>	<u>Inpatient</u>	<u>Outpatient</u>	<u>Inpatient</u>	<u>Outpatient</u>
Cardiovascular	1,067	11	1,500	43	1,312	65
Open Heart	3,228	0	3,322	0	2,309	290
Dermatology	0	0	0	0	0	0
General	20,860	7,520	13,056	5,697	13,675	5,682
Gastroenterology	21	38	41	54	31	59
Neurological	6,009	968	5,933	1,165	5,151	1,016
O/B/Gynecology	in General		3,484	1,078	3,237	1,265
Oral / Maxillofacial	0	7	4	5	0	0
Ophthalmology	130	1,578	108	1,858	54	1,670
Orthopedic	4,039	3,756	4,253	3,557	4,450	3,922
Otolaryngology	1,457	2,511	1,857	3,229	2,061	3,404
Plastic	2,818	1,122	2,865	1,170	2,888	1,530
Podiatry	0	0	0	0	0	0
Thoracic	1,037	207	1,107	177	939	207
Urology	in General		3,993	2,156	3,777	2,276
Total	40,666	17,718	41,523	20,189	39,884	21,386
Annual Combined Total		58,384		61,712		61,270

SECTION VII. Modernization A. Specific Information Requirements

21. Surgery (continued)

d. Surgical Visits by Specialty

	2005		2006		2007	
	Inpatient	Outpatient	Inpatient	Outpatient	Inpatient	Outpatient
Cardiovascular	288	5	388	20	351	33
Open Heart	468	0	425	0	290	0
Dermatology	0	0	0	0	0	0
General	5,536	3,806	3,469	2,475	3,509	2,453
Gastroenterology	7	23	14	38	8	31
Neurological	1,337	372	1,342	427	1,110	375
OB/Gynecology	in General		3,051	693	1,402	757
Oral / Maxillofacial	0	2	1	2	0	0
Ophthalmology	44	953	37	1,046	23	976
Orthopedic	1,107	1,822	1,190	1,732	1,259	1,955
Otolaryngology	460	1,520	607	1,747	616	1,841
Plastic	698	412	691	418	646	512
Podiatry	0	0	0	0	0	0
Thoracic	259	94	263	84	233	101
Urology	in General		934	1,054	871	1,060
Total	10,204	9,009	12,412	9,736	10,318	10,094
Annual Combined Total		19,213		22,148		20,412

## SECTION VII. MODERNIZATION

### B. Modern Facilities

#### 2. Necessary Expansion – Medical/Surgical Acute Care Beds

##### a. Rationale for Expansion

One of the major elements of this project is the relocation of Med/Surg beds. We propose 180 Med/Surg beds for the NHP, located on the 8<sup>th</sup>, 9<sup>th</sup>, and 10<sup>th</sup> Floors. These beds will serve patients treated in the OR on the 6<sup>th</sup> Floor and also patients seen in Interventional Radiology and GI. There is a dedicated Hematology/Oncology floor for cancer patients. The majority of our most acutely ill patients with complex conditions will be seen in the NHP.

We are licensed for 327 Med/Surg beds, mostly in Mitchell Hospital. We build 180 beds in the NHP. We will close 126 beds, mostly in Mitchell, and in addition convert 21 double occupancy rooms to single occupancy. In total, 27 beds will be removed from our licensed count.

##### **Historical Utilization**

Med/Surg days have been steadily increasing. In 2000, there were 80,977 patient days while in 2007, there were 86,694, for an average annual increase of 1.5 percent. The most recent 24 month period, ending September 30<sup>th</sup>, saw 92,210 days in 2006 and 85,644 for 2007. This recent decline reflects our intentional decision to relieve serious crowding at UCMC while encouraging patients with primary level diagnoses to seek care in lower intensity local community hospitals. These patients will receive good care in a setting that is significantly lower cost than at UCMC. This initiative is part of our larger plan to find medical homes for many persons who come to our Emergency Room with a wide variety of medical issues. These patients are without family doctors or other arrangements for receiving routine checkups, advice on preventative measures, and other sensible interventions to address medical conditions in early stages, rather than presenting at our ER with advanced but preventable conditions. Many are unaware that there are other physicians or medical clinics in their immediate area. Many of these other providers have sliding scale charge structures so that patients who are indigent could pay as little as \$5 for a visit. Many of these providers receive special reimbursement rates, higher than UCMC can obtain in our clinics. The expectation is that a robust network of local providers can address medical conditions more economically and effectively than if the patients are unseen for long periods until they reach a crisis point and require extensive care. Over recent years, UCMC has seen steady and significant growth in Med/Surg admissions and many are patients who will be better served at an earlier level of the health care continuum.

SECTION VII. B. 2. Modernization - Med/Surg Beds

**PROJECTION OF MED/SURG PATIENT DAYS**  
 (Reaching 90% Occupancy of Proposed Beds)

Historical		M/S Beds	M/S Days	Observation	Total	Occup
				Days (1)	M/S Days	
	2002	324	80,869			
	2003	324	85,334			
	2004	324	87,968	3,980		
	2005	327	92,044	3,434		
	2006	327	93,597	2,452		
	2007	327	86,694	3,393		
	12 mo. end Sep. 06	327	92,210	3,883	96,093	81%
	12 mo. end Sep. 07	327	85,644	2,972	88,616	74%
Avg. Yearly Increase			1.4%			
<b>Projected</b>						
	2008	327			89,546	75%
	2009	327			90,800	76%
	2010	327			92,071	77%
	2011	327			93,360	78%
	2012	327			94,667	79%
Open new beds	2013	300			95,993	88%
	2014	300			97,337	89%
	2015	300			98,699	90%

Note:

Observation days are actual counts of patients occupying a bed at the noon census but not counted as an inpatient day. These would be patients recovering from a procedure or being observed for another reason but not admitted as an inpatient.

**Conclusion: Total demand for M/S beds is conservatively measured by actual census plus observation patients. Given a base of 88,616 days in 2007, if this demand were to grow by 1.4% per year (the compounded average rate over the past five years) we would reach 98,357 or 90% occupancy in 2015.**

## SECTION VII. MODERNIZATION

But simple annual totals do not tell the story of how this gradual increase has affected UCMC from an operational and patient care perspective. UCMC, like most hospitals in Illinois, is much busier in late fall and winter than the rest of the year. This period from November through March, corresponds to the season for upper respiratory infections that exacerbates the health problems of medically vulnerable people, many with chronic conditions. During this period, most UCMC Med/Surg beds are occupied, with rates of occupancy above 90 percent. In effect, we are running at full capacity since 100 percent is literally impossible because many of our beds are in double occupancy rooms that are often blocked due to gender match problems and infectious disease. Like other hospitals, UCMC experiences a slight slowdown on the weekend when most physicians are off duty, normal OR operations cease, and ancillary departments are partially staffed.

The days reported here do not include observation patients, who occupy a bed but are not admitted as inpatients since their stay is expected to be brief. Most often these are patients who have had a procedure, often invasive in nature and requiring anesthesia. These patients need to be observed until they are fully recovered and can be safely sent home. Most ancillary departments do not have recovery with the capacity to keep these patients for longer periods, so they are moved to inpatient beds. The Emergency Department has exam stations and some observation bays, but when those are filled, patients overflow into inpatient beds. Observation patients found in inpatient beds when the noon census is taken totaled 3,883 days for 2006 and 2,972 for 2007.

The accompanying table (Projection of Med/Surg Patient Days) shows the days for the last 6 years and observation days. For 2007, this amount totals 88,616 Med/Surg days.

### **Projection of Patient Days**

If UCMC's historic, documented demand for Med/Surg beds were to increase by 1.4 percent per year (the rate experienced since 2002), we would reach 96,000 days and 88 percent occupancy in 2013 when the additional beds will become operational.

### **Reasons for Growth**

There are many factors that underlie the growth we have experienced during the last five years and what we project in the future. As the population grows and there are shifts in age categories, there will be impacts on hospital admissions. While we do not give these facts disproportionate weight in our internal planning, the CON criteria ask that it be addressed. UCMC engaged Forum Analytics, L.L.C. to analyze the impact on UCMC of population changes. They used U.S. Census Bureau

## SECTION VII. MODERNIZATION

data from the 1970, 1980, 1990, and 2000 census. The Bureau projects population for the country and for Illinois but provides limited additional detail. As a result we directed Forum Analytics to make projections, adjusted to account for changes in housing starts and other aspects of economic vitality. The expectation is that as these factors trend up or down, population changes will follow. Our primary service area population is estimated at 518,168 for 2005 and is expected to increase 3.1 percent to 534,484 by 2015, two years after the NHP begins operation. For the broader local region, encompassing the Chicago Metropolitan area and northwest Indiana, the population is expected to increase from 5.9 million to 6.7 million, or 13 percent for the same ten-year period.

The population was divided among five-year adult age groupings. Historical hospital discharge rates for these categories were applied and assumed to remain unchanged for 2015. Finally, historical market share for UCMC for each age group was applied and assumed unchanged for the out year. The study's conclusion, summarized in the accompanying table entitled NHP Project Market Data, is that population growth alone would suggest a patient day increase of 12,803 by 2015 and a need for an additional 42 beds, using a blended Med/Surg and ICU target occupancy rate based on our 2005 ratio of the days for these bed types. Again, the assumption is that there is no change in market share or use rates by age group between 2005 and 2015. Strictly from expected population increases, UCMC will have a need for 42 additional beds. We propose to reduce Med/Surg beds from 327 to 300 and increase ICU beds from 92 to 114, a total reduction of 5 beds. Thus, viewing population growth alone as the only determinant, there should be more than enough demand to support the beds we plan for the NHP. It is our expectation that much of the additional demand for patient beds arising from population growth, especially in the primary service area, will be satisfied by community hospitals, while UCMC focuses on the complex and difficult cases that are our strength.

This focus in regional population trends does not account for an important segment of our market share that comes from longer distances. Fully 9 percent of UCMC admissions are from areas beyond the region and these patients usually come for highly specialized care. Observing general population trends for these very specialized services is a relatively inexact analytical approach since changes in the number of people who will seek out these services at a specific hospital are not driven so much by population changes, as by the recognized excellence of these particular services at the hospital.

The University of Chicago Medical Center is among the preeminent academic teaching hospitals in the country. We are renowned for excellence in many areas of medicine. We see this in the ranking of



## NHP Project Market Data

	Discharges						
	PSA	Other Metro	Out Metro	Total			
2005 Adult Med/Surg (age 20+)	8,599	7,188	1,917	17,704			
2005 Adult Med/Surg (18-19)	66	138	45	249			
<b>Total 2005 Adult Med/Surg</b>	<b>8,665</b>	<b>7,326</b>	<b>1,962</b>	<b>17,953</b>			
2015 Adult Med/Surg (age 20+)	8,870	8,124	2,511	19,505			
2005 Adult Med Surg (18-19)	66	138	58	319			
<b>Total 2015 Adult Med/Surg</b>	<b>8,936</b>	<b>8,262</b>	<b>2,569</b>	<b>19,824</b>			
<b>Incremental Activity from population growth</b>	<b>271</b>	<b>936</b>	<b>607</b>	<b>1,871</b>			
	Days					Beds/Day	Staffed Beds
	PSA	Other Metro	Out Metro	Total			
2005 Adult Med/Surg (age 20+)	47,578	49,101	14,394	111,073	304	368	
2005 Adult Med/Surg (18-19)	352	818	354	1,524	4	5	
<b>Total 2005 Adult Med/Surg</b>	<b>47,930</b>	<b>49,919</b>	<b>14,748</b>	<b>112,597</b>	<b>308</b>	<b>373</b>	
2015 Adult Med/Surg (age 20+)	49,076	55,496	18,877	123,450	338	409	
2005 Adult Med Surg (18-19)	352	818	453	1,951	5	6	
<b>Total 2015 Adult Med/Surg</b>	<b>49,428</b>	<b>56,314</b>	<b>19,331</b>	<b>125,400</b>	<b>344</b>	<b>415</b>	
<b>Incremental Activity</b>	<b>1,498</b>	<b>6,395</b>	<b>4,583</b>	<b>12,803</b>	<b>35</b>	<b>42</b>	

Growth in PSA Market Share  
1999-2005

2.3% from 7.7% in 1995 to 10% in 2005

SECTION VII. MODERNIZATION  
Effect of Population Changes

FORECAST ADULT MEDSURG - REGIONAL MARKET

AGE	2005 POPULATION			2005 DISCHARGES			2005 DISCHARGE RATE			2005 DAYS			2005 DAYS USE RATE		
	PSA	OTHER	TOTAL	PSA	OTHER	TOTAL	PSA	OTHER	TOTAL	PSA	OTHER	TOTAL	PSA	OTHER	TOTAL
20-24	51,477	557,201	608,678	2,069	14,931	17,000	4.0%	2.7%	2.8%	9,324	56,568	65,892	18.1%	10.2%	10.8%
25-29	48,459	568,508	616,967	2,265	17,309	19,574	4.7%	3.0%	3.2%	11,094	67,271	78,365	22.9%	11.8%	12.7%
30-34	51,011	624,893	675,904	3,267	22,426	25,693	6.4%	3.6%	3.8%	14,185	85,283	99,468	27.8%	13.6%	14.7%
35-39	52,381	649,126	701,507	4,506	29,364	33,870	8.6%	4.5%	4.8%	20,039	113,659	133,698	38.3%	17.5%	19.1%
40-44	53,733	664,415	718,148	6,389	41,761	48,150	11.9%	6.3%	6.7%	29,167	169,253	198,420	54.3%	25.5%	27.6%
45-49	50,439	625,585	676,024	7,890	51,858	59,748	15.6%	8.3%	8.8%	37,876	222,823	260,699	75.1%	35.6%	38.6%
50-54	44,373	540,087	584,460	7,825	54,769	62,594	17.6%	10.1%	10.7%	41,288	254,910	296,198	93.0%	47.2%	50.7%
55-59	40,095	439,386	479,481	7,358	56,340	63,678	18.3%	12.8%	13.3%	40,854	277,439	318,293	101.0%	63.1%	66.4%
60-64	34,394	325,841	360,235	7,633	55,590	63,223	22.2%	17.1%	17.6%	44,828	291,625	336,453	130.3%	89.5%	93.4%
65-69	28,690	254,482	283,172	8,200	60,189	68,389	28.6%	23.7%	24.2%	48,732	336,508	385,240	169.9%	132.2%	136.0%
70-74	22,769	214,557	237,326	7,995	67,288	75,283	35.1%	31.4%	31.7%	48,577	386,127	434,704	213.5%	180.0%	183.2%
75-79	18,142	187,652	205,794	7,846	77,046	84,892	43.2%	41.1%	41.3%	49,363	459,027	508,390	272.1%	244.6%	247.0%
80-84	11,812	136,576	148,388	6,233	73,805	80,038	52.8%	54.0%	53.9%	39,000	444,922	483,922	330.2%	325.8%	326.1%
85+	10,393	122,631	133,024	6,270	80,957	87,227	60.3%	66.0%	65.6%	39,864	475,876	515,740	383.6%	388.1%	387.7%
TOTAL	518,168	5,910,940	6,429,108	85,726	703,633	789,359	16.5%	11.9%	12.3%	474,191	3,641,291	4,115,482	91.5%	61.6%	64.0%

AGE	2015 POPULATION			*2015 DISCHARGES			2005 DISCHARGE RATE			*2015 DAYS			2005 DAYS USE RATE		
	PSA	OTHER	TOTAL	PSA	OTHER	TOTAL	PSA	OTHER	TOTAL	PSA	OTHER	TOTAL	PSA	OTHER	TOTAL
20-24	50,745	646,943	697,688	2,040	17,336	19,486	4.0%	2.7%	2.8%	9,191	65,679	75,528	18.1%	10.2%	10.8%
25-29	42,321	618,549	660,870	1,978	18,833	20,967	4.7%	3.0%	3.2%	9,689	73,192	83,941	22.9%	11.8%	12.7%
30-34	41,990	584,089	626,079	2,689	20,962	23,799	6.4%	3.6%	3.8%	11,677	79,714	92,136	27.8%	13.6%	14.7%
35-39	48,282	576,819	625,101	4,153	26,093	30,181	8.6%	4.5%	4.8%	18,471	100,998	119,136	38.3%	17.5%	19.1%
40-44	53,326	624,105	677,430	6,341	39,227	45,420	11.9%	6.3%	6.7%	28,946	158,984	187,170	54.3%	25.5%	27.6%
45-49	50,885	652,653	703,539	7,960	54,102	62,180	15.6%	8.3%	8.8%	38,211	232,464	271,310	75.1%	35.6%	38.6%
50-54	49,396	666,217	715,612	8,711	67,560	76,640	17.6%	10.1%	10.7%	45,961	314,441	362,664	93.0%	47.2%	50.7%
55-59	49,212	616,698	665,910	9,007	79,076	88,437	18.3%	12.8%	13.3%	50,144	389,398	442,050	101.0%	63.1%	66.4%
60-64	45,708	514,185	559,893	10,144	87,722	98,264	22.2%	17.1%	17.6%	59,575	460,191	522,930	130.3%	89.5%	93.4%
65-69	37,454	409,659	447,113	10,705	96,891	107,982	28.6%	23.7%	24.2%	63,618	541,702	608,272	169.9%	132.2%	136.0%
70-74	25,227	286,228	311,455	8,858	89,765	98,798	35.1%	31.4%	31.7%	53,821	515,110	570,484	213.3%	180.0%	183.2%
75-79	17,828	208,793	226,621	7,710	85,726	93,483	43.2%	41.1%	41.3%	48,508	510,742	559,841	272.1%	244.6%	247.0%
80-84	11,460	143,333	154,793	6,047	77,456	83,493	52.8%	54.0%	53.9%	37,839	466,934	504,811	330.2%	325.8%	326.1%
85+	10,651	132,539	143,190	6,426	87,498	93,893	60.3%	66.0%	65.6%	40,853	514,324	555,155	383.6%	388.1%	387.7%
TOTAL	534,484	6,680,809	7,215,293	88,425	795,278	885,886	16.5%	11.9%	12.3%	489,122	4,115,550	4,618,745	91.5%	61.6%	64.0%

\*based on 2005  
discharge rate

\*based on 2005  
days use rate

SECTION VII. MODERNIZATION  
Effect of Population Changes

AGE	2005 UCH DISCHARGES			2005 UCH DISCHARGES MARKET SHARE			2005 UCH DAYS			2005 UCH DAYS MARKET SHARE		
	PSA	OTHER	TOTAL	PSA	OTHER	TOTAL	PSA	OTHER	TOTAL	PSA	OTHER	TOTAL
20-24	238	279	517	11.5%	1.9%	3.0%	1,127	2,000	3,127	12.1%	3.5%	4.7%
25-29	308	274	582	13.6%	1.6%	3.0%	1,640	1,958	3,598	14.8%	2.9%	4.6%
30-34	360	342	702	11.0%	1.5%	2.7%	1,741	2,197	3,938	12.3%	2.6%	4.0%
35-39	465	485	950	10.3%	1.7%	2.8%	2,360	2,929	5,289	11.8%	2.6%	4.0%
40-44	558	555	1,113	8.7%	1.3%	2.3%	2,947	3,347	6,294	10.1%	2.0%	3.2%
45-49	744	706	1,450	9.4%	1.4%	2.4%	4,310	4,782	9,092	11.4%	2.1%	3.5%
50-54	657	767	1,424	8.4%	1.4%	2.3%	3,770	5,028	8,798	9.1%	2.0%	3.0%
55-59	781	830	1,611	10.6%	1.5%	2.5%	4,410	5,885	10,295	10.8%	2.1%	3.2%
60-64	705	762	1,467	9.2%	1.4%	2.3%	3,990	5,897	9,887	8.9%	2.0%	2.9%
65-69	838	746	1,584	10.2%	1.2%	2.3%	5,230	5,063	10,293	10.7%	1.5%	2.7%
70-74	817	579	1,396	10.2%	0.9%	1.9%	4,409	4,219	8,628	9.1%	1.1%	2.0%
75-79	827	442	1,269	10.5%	0.6%	1.5%	4,648	3,055	7,703	9.4%	0.7%	1.5%
80-84	622	254	876	10.0%	0.3%	1.1%	3,466	1,758	5,224	8.9%	0.4%	1.1%
85+	679	167	846	10.8%	0.2%	1.0%	3,530	983	4,513	8.9%	0.2%	0.9%
TOTAL	8,599	7,188	15,787	10.0%	1.0%	2.0%	47,578	49,101	96,679	10.0%	1.3%	2.3%

AGE	*2015 UCH DISCHARGES			2005 UCH DISCHARGES MARKET SHARE			*2015 UCH DAYS			2005 UCH DAYS MARKET SHARE		
	PSA	OTHER	TOTAL	PSA	OTHER	TOTAL	PSA	OTHER	TOTAL	PSA	OTHER	TOTAL
20-24	235	324	593	11.5%	1.9%	3.0%	1,111	2,322	3,584	12.1%	3.5%	4.7%
25-29	269	298	623	13.6%	1.6%	3.0%	1,432	2,130	3,854	14.8%	2.9%	4.6%
30-34	296	320	650	11.0%	1.5%	2.7%	1,433	2,054	3,648	12.3%	2.6%	4.0%
35-39	429	431	847	10.3%	1.7%	2.8%	2,175	2,603	4,713	11.8%	2.6%	4.0%
40-44	554	521	1,050	8.7%	1.3%	2.3%	2,925	3,144	5,937	10.1%	2.0%	3.2%
45-49	751	737	1,509	9.4%	1.4%	2.4%	4,348	4,989	9,462	11.4%	2.1%	3.5%
50-54	731	946	1,744	8.4%	1.4%	2.3%	4,197	6,202	10,772	9.1%	2.0%	3.0%
55-59	959	1,165	2,237	10.6%	1.5%	2.5%	5,413	8,260	14,298	10.8%	2.1%	3.2%
60-64	937	1,202	2,280	9.2%	1.4%	2.3%	5,303	9,306	15,367	8.9%	2.0%	2.9%
65-69	1,094	1,201	2,501	10.2%	1.2%	2.3%	6,828	8,150	16,252	10.7%	1.5%	2.7%
70-74	905	772	1,832	10.2%	0.9%	1.9%	4,885	5,628	11,323	9.1%	1.1%	2.0%
75-79	813	492	1,397	10.5%	0.6%	1.5%	4,568	3,399	8,483	9.4%	0.7%	1.5%
80-84	603	267	914	10.0%	0.3%	1.1%	3,363	1,845	5,450	8.9%	0.4%	1.1%
85+	696	180	911	10.8%	0.2%	1.0%	3,618	1,062	4,858	8.9%	0.2%	0.9%
TOTAL	8,870	8,124	17,718	10.0%	1.0%	2.0%	49,076	55,496	108,501	10.0%	1.3%	2.3%

\*based on 2005

\*based on 2005

UCH discharge market share      UCH days market share

Med/Surg	93,750	Days	11,822
ICU	29,963	Days Out of Region	981
Total	123,713	Beds Increase	42

Target Occup.	82.7%
75.8%	Days Increase
24.2%	Plus Out of Region
Blended	Beds Increase

## Forum Analytics, L.L.C.

### 15 Year Population Projections

#### Data Sources:

1970 Census Pop by Age Data  
1980 Census Pop by Age Data  
1990 Census Pop by Age Data  
2000 Census Pop by Age Data  
2005 Pop by Age Estimates Developed by Forum Analytics, L.L.C.  
2010 Pop by Age Estimates Developed by Forum Analytics, L.L.C.  
1990 to 2002 National Association of Realtors Housing Start by Census Tract Summaries  
1998 to 2002 U.S. Economic Census Zipcode Statistics by NAICS Code

#### Methodology Executive Summary

We developed trend data at the zipcode level for all age cohorts. This trend data was computed for:

- \* Population Change from 1970 to 2010 in 5 year increments
- \* Economic Vitality Change
- \* Housing Start Change

We developed a weighting scheme to adjust the population projections by age cohort up to the year 2015. This scheme weighted heavily the most current 5 year population growth trend by age group. However, if the zipcode fell within a census tract with housing starts beyond the 1st standard deviation of the entire regional tract sample a small positive/negative adjustment was made to the population projections for 2010 and 2015 accordingly. The same methodology was used for the economic vitality data which was available for each zipcode. If the percentage change in economic growth fell beyond the 1st standard deviation for the entire sample of zipcodes we then applied a small positive or negative weight.

Great care was used in re-creating the age cohorts for the census data from 1970 and 1980 which did not match the age groups from the 1990 and 2000 census. As a result, a lower weighting scheme was used for the growth trends developed for the larger age cohorts for those older years of data.

Overall, our forecasts tend to trend on the higher side across the entire target geography than what other sources predict. The standard deviation of the percent difference between our forecasts and those of other independent sources increases with further out future projections and tends to range from 8% to 18% which is well within the acceptable range for predictions 10 years from current data. It is also important to remember that even 2005 data is a prediction based on numbers from the 2000 Census, the last real collection of population data.

Finally, in testing our data we analyzed not only the age range trends at the zipcode level, we also tested aggregations of our data at the County level against other known County forecasts. The results of these tests are included in the "Testing" sheet.

PROJECTIONS ARE UNCERTAIN AND FUTURE DATA MAY DIFFER SUBSTANTIALLY FROM THESE PROJECTIONS. FORUM ANALYTICS, L.L.C. DOES NOT GUARANTEE THE ACCURACY OF THE PROJECTIONS OR HISTORICAL DATA CONTAINED IN THESE TABLES.

## SECTION VII. MODERNIZATION

hospitals conducted by U.S. News & World Report. Of the 5,462 hospitals in the U.S., 173 of the best are ranked for excellence among 17 specialties. Of these, 18 made up the Honor Roll of hospitals at or near the top in at least six specialties. We are proud to make the Honor Roll year-after-year. Two hundred specialists in each of the specialty fields are asked to list "the five hospitals they consider best in their specialty for difficult cases". In addition, quality is considered by examining mortality data and other factors (such as technology). For 2007, UCMC earned the following rankings:

### U.S. News & World Report Ranking

Cancer	7 <sup>th</sup>
Digestive Disorders	6 <sup>th</sup>
Ear, Nose, & Throat	25 <sup>th</sup>
Geriatrics	24 <sup>th</sup>
Gynecology	39 <sup>th</sup>
Heart & Heart Surgery	23 <sup>rd</sup>
Endocrinology	11 <sup>th</sup>
Kidney Disease	22 <sup>nd</sup>
Neurology & Neurosurgery	14 <sup>th</sup>
Respiratory Disorders	50 <sup>th</sup>

The cornerstone of any academic medical center is its faculty. At UCMC, we have a particular emphasis on research. The great majority of funding for research in our universities comes from the National Institutes for Health (NIH). We rank 5<sup>th</sup> nationally in NIH grant dollars per faculty member (see accompanying chart), a measure generally of overall funding but more specifically the intensity of research effort.

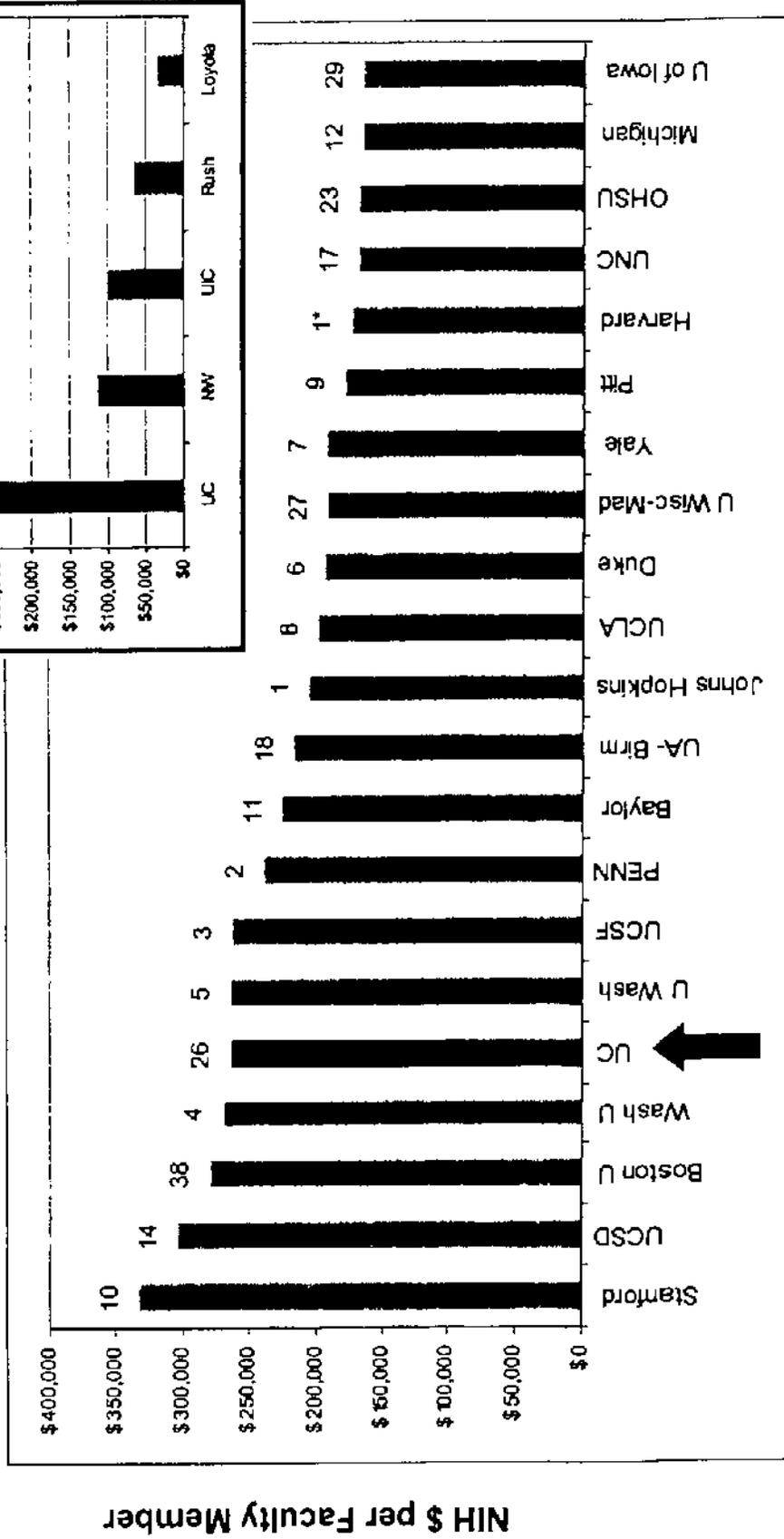
We rank first in Howard Hughes Medical Institute (HHMI) researchers per 100 faculty (see accompanying chart). The HHMI is one of the world's largest philanthropies and conducts medical research activities through scientists at the leading universities and other laboratories. In 2006, they distributed over \$781 million in grants and they have an endowment of over \$16 billion.

Another indicator of the research intensity here is that we rank fifth nationally in the number of National Science Academy members per 100 faculty. The accompanying chart shows the national comparison as well as a local comparison.

The accomplishments of University of Chicago faculty are numerous and important. Among our medical firsts are:

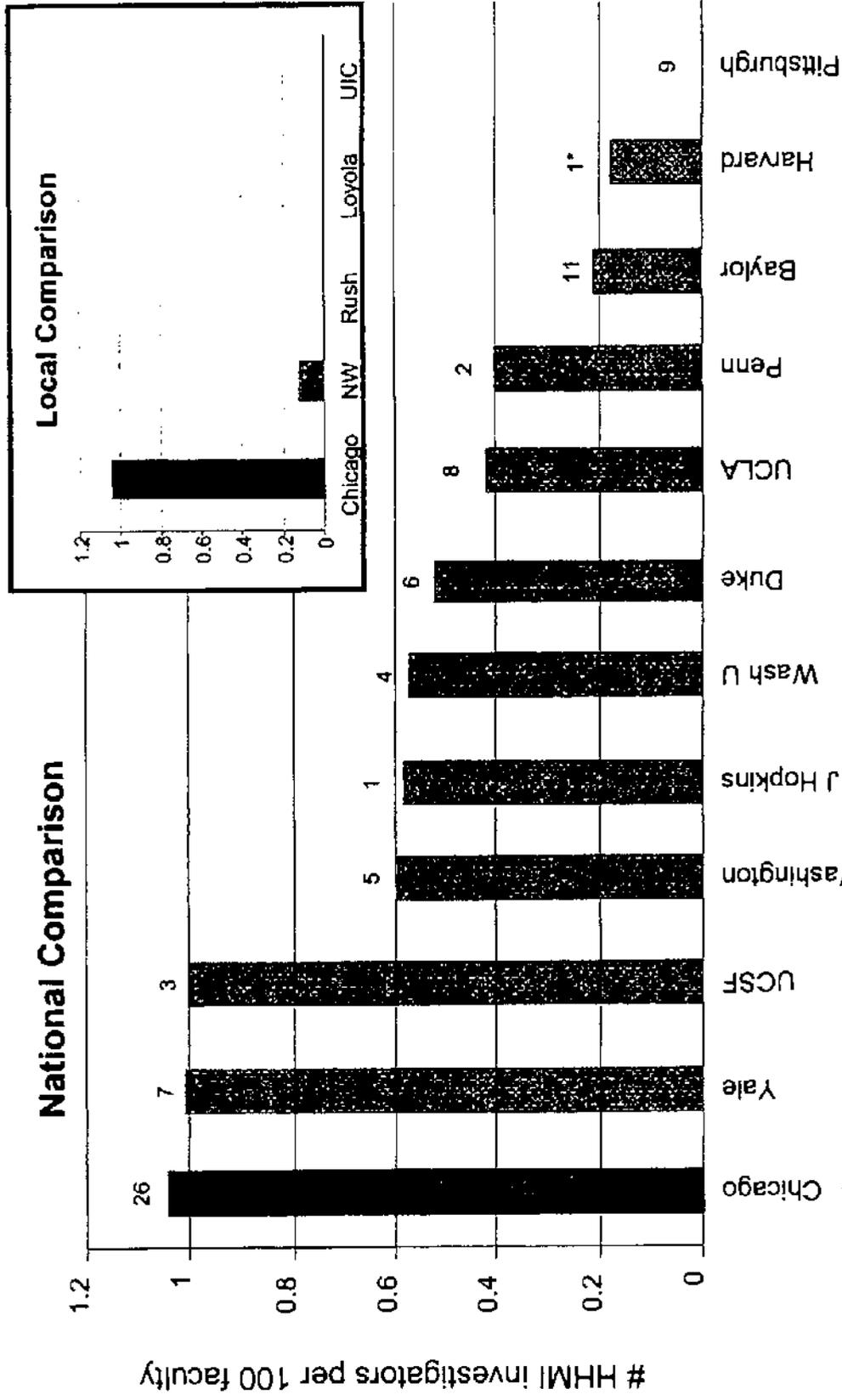
# Quality: Per Capita Funding Comparison

**Total NIH \$ per Faculty Member**



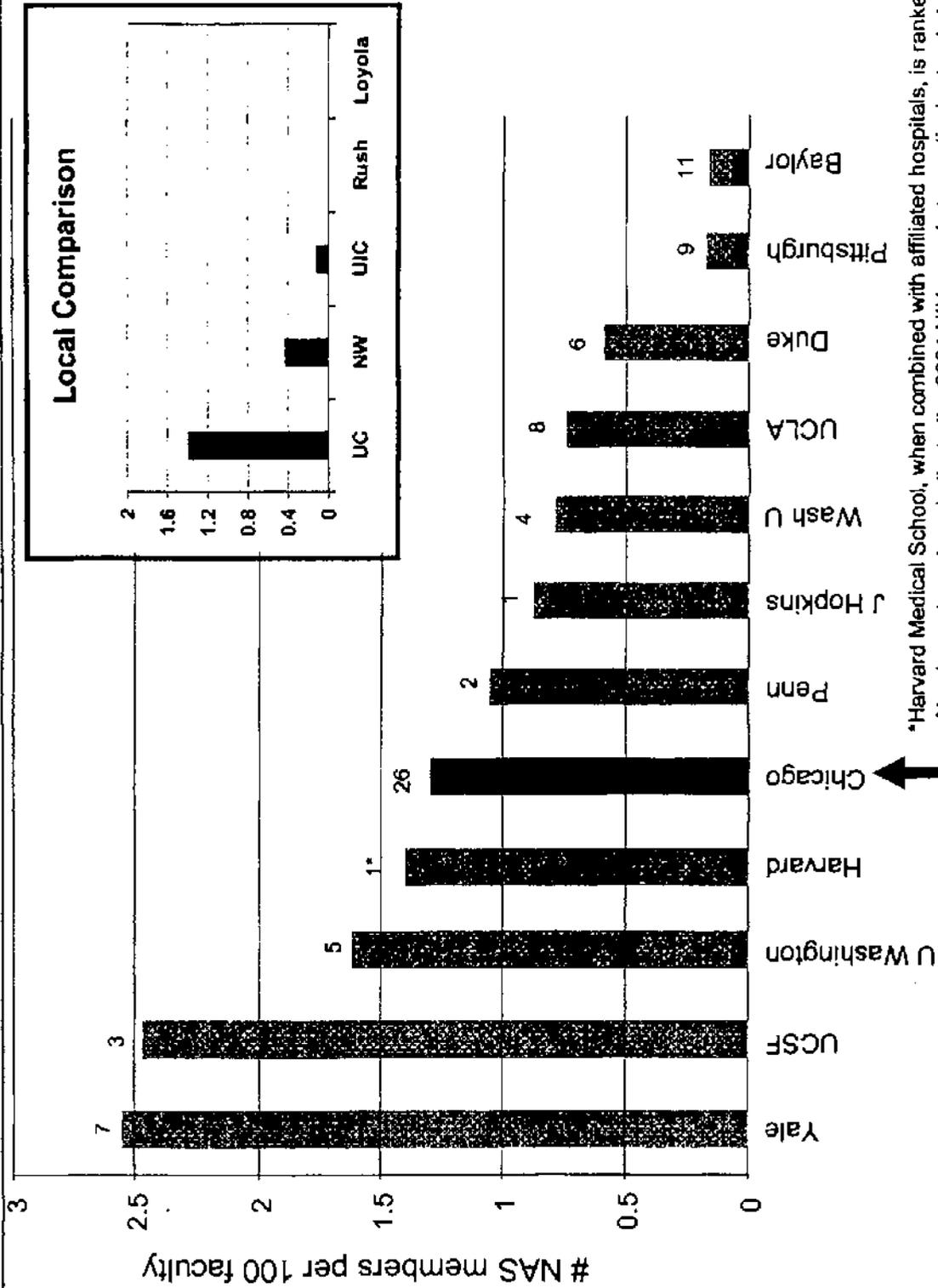
Numbers above bars indicate the 2004 NIH awards to medical schools by rank.

# HHMI Investigators per Capita



\*Harvard Medical School, when combined with affiliated hospitals, is ranked first. Numbers above bars indicate the 2004 NIH awards to medical schools by rank.

# National Academy of Sciences Membership



## SECTION VII. MODERNIZATION

- 1904 First successful organ transplant on a dog
- 1906 Insulin-producing cells isolated, speeding the discovery of insulin
- 1912 Alexis Carrel wins the Nobel Prize for his work on vascular suture and the transplantation of blood vessels and organs
- 1916 Oswald Robinson, M.D. discovers a way to preserve blood, establishes the first blood bank in Britain during World War I
- 1925 World's first sleep laboratory created by Nathaniel Kleitman, PhD
- 1935 Cause of surgical shock discovered
- 1943 Ulcer operation is developed
- 1943 First successful cancer chemotherapy developed
- 1946 Hermann J. Muller, PhD, wins the Nobel Prize for the discovery of mutations by X-ray irradiation
- 1953 REM sleep is identified
- 1958 Edward L. Tatum, PhD and George W. Beadle, PhD, win the Nobel Prize for their discovery that genes act by regulating definite chemical events
- 1961 University of Chicago study leads to the fluoridation of drinking water
- 1962 James D. Watson, PhD, wins the Nobel Prize for discoveries concerning the molecular structure of nucleic acids and its significance for information transfer in living material
- 1963 Alan Rechtschaffen, PhD, and Gerry Vogel, PhD publish paper on narcolepsy, the first true sleep disorder to be defined

## SECTION VII. MODERNIZATION

- 1963 John Eccles, PhD, wins the Nobel Prize for discoveries concerning the ionic mechanisms involved in excitation and inhibition in the peripheral and central portions of the nerve cell membrane
- 1964 Konrad E. Bloch, PhD, wins the Nobel Prize for discoveries concerning the mechanism and regulation of cholesterol and fatty acid metabolism
- 1966 Charles Huggins, M.D. wins the Nobel Prize for his discoveries concerning the hormonal treatment of prostatic cancer
- 1967 Samuel Refetoff, M.D., defines syndrome with resistance to thyroid hormone ("Refetoff syndrome"), later traced to gene mutation
- 1967 George Wald, PhD, receives the Nobel Prize for discoveries concerning the primary physiological and chemical visual processes in the eye
- 1969 Discovery of how insulin is made, allowing for synthetic insulin production
- 1972 Chromosome exchanges known as translocations are discovered by Janet Rowley, M.D.
- 1981 Roger Sperry, PhD, receives the Nobel Prize for his discoveries concerning the functional specialization of the cerebral hemispheres
- 1986 Nation's first reduced size liver is transplanted at UCH
- 1988 Nation's first split liver transplant is performed at UCH
- 1989 Nation's first successful living donor liver transplant is performed at UCH
- 1992 Discovery of gene mutation that can cause type 2 diabetes
- 1993 First unrelated living donor liver transplant in U.S. is performed at UCH
- 1995 Chicago researchers begin clinical use of the world's first computer-assisted mammography system

## SECTION VII. MODERNIZATION

- 1997 First fetal tissue transplant for macular degeneration is performed
- 1998 Janet Rowley, M.D., wins the Lasker Award and the National Medal of Science
- 1998 Researchers reported on cases of community-acquired methicillin-resistant staphylococcus aureus (CA-MRSA). Prior to this the infection was known only to occur in hospitals.
- 1999 A research team led by Eve Van Cauter, PhD, showed that chronic partial sleep loss can reduce the capacity for young adults to perform basic metabolic functions.
- 1999 University research shows blocking growth factor (VEGF) can dramatically boost radiation therapy in mice
- 1999 Valluvan Jeevanandum, M.D., and Michael Millis, M.D., lead teams that perform the world's only successful heart-liver-kidney transplant
- 2001 Researchers from the University of Chicago and University of Michigan and others identified the first genetic abnormality that increases susceptibility to Crohn's disease
- 2002 Martha McClintock and Carole Ober for the first time demonstrated that people can inherit preferences, which provides a mechanism for understanding the biological basis for several human behaviors.
- 2003 UCMC researchers show that low doses of inhaled nitric oxide can decrease the risk of chronic lung disease and death by nearly one-fourth in premature infants who have respiratory distress syndrome.
- 2004 The Lasker Award for Basic medical research was presented to Elwood Jensen, PhD, one of three scientists whose discoveries "revolutionized the fields of endocrinology and metabolism"
- 2005 Medical oncologist Funmi Olopade, MD, showed that women of African ancestry are more likely to be diagnosed with a more virulent form of breast cancer than women of European ancestry. Dr. Olopade won the McArthur

## SECTION VII. MODERNIZATION

Prize for her work.

- 2005 Nation's first 64-slice CT scanner is installed, scanning an entire body in 30 seconds
- 2006 Jonathan Pritchard and other University of Chicago researchers found more than 700 genetic variants that may be targets of recent natural positive selection during the past 10,000 years of human evolution

The many accomplishments highlighted above exemplify our role in pushing forward the frontier of medical discovery. We cultivate an atmosphere of openness to innovation, a willingness and enthusiasm for collaborating across scientific disciplines and medical specialties, and a determination to advance medical science. This synergy creates a powerful environment for teaching medical students, physicians-in-training, and young researchers and helps us attract the brightest minds. We have long been known as a "teacher of teachers" by which a high percentage of our graduates pursue careers in academic medicine. The emphasis on scientific inquiry translates readily to developing and employing the best methods to diagnose and treat the most complex and challenging medical conditions. We are, by the intensity and far-reaching nature of our research enterprise and the special emphasis on academic medicine in our teaching mission, one of a select few such institutions in the country. The role of the University of Chicago Medical Center in the national health care system is similarly special.

UCMC provides a full range of services in nearly all medical disciplines, in large part to expose our medical students, interns, residents, and fellows to a comprehensive and in-depth learning experience. By design we offer care for a full spectrum of illness and injury, from simple, straightforward medical conditions to the most complex and rare cases.

The simpler cases can be cared for in most all hospitals but are handled here for several reasons. In training physicians, we must avail them of experience in all levels of care. Further, we are the largest hospital in South Chicago and are playing an increasing roll in caring for this population. In 1999, our share of the adult medical/surgical admissions in our area was 7.7 percent. By 2005 this share increased 30 percent to 10 percent of our admissions. Over the last few decades, our planning area has lost a number of hospitals, including Woodlawn, Chicago Osteopathic, and Doctor's Hospital of Hyde Park. In 2002, over half of the other nine hospitals in the A-03 Planning Area had Med/Surg bed occupancy rates ranging from only 17 to 35 percent. In response to serious financial problems, many of these hospitals have had to cut back services. A number of specialist physicians have left the community to practice elsewhere due to heavy malpractice insurance costs in Illinois. We fear that this situation for area hospitals will continue to worsen and likely will

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force the closure of additional hospitals. While we are taking concerted actions to refer primary care cases to neighboring hospitals to bolster them and alleviate our bed shortage, we must implement facility planning that will insure that the people of our community will have beds available to them. This belief is a principal reason for our Med/Surg bed modernization and ICU bed expansion.

The rare, complex cases we treat are by definition few in number. Because they are few in number, a physician practicing in a community setting will encounter such cases infrequently. Responsible practice recommends referring these patients to physicians that specialize in these uncommon cases. While the community-based physician might encounter only a handful of these cases in his or her career, the specialist will see many times more. In this way the specialist builds experience in these rare illnesses and improves his skill in diagnosis and treatment.

The difficult and complex cases often require intervention by specialists from different disciplines. These specialists are found in academic hospitals where there is a culture of interdisciplinary practice essential to providing the best outcome for the patient. In addition to the physicians, the resources required to practice this level of medicine are formidable. The physicians are assisted by teams of highly skilled nurses and technologists, who themselves build expertise in these rare cases. The capital costs are high, ranging from hematology/oncology patient units with extensive facility requirements for protecting immuno-suppressed patients to imaging facilities using cutting-edge modalities such as 64-slice CT scanners. Many innovative, ground breaking clinical approaches are pioneered in academic hospitals and eventually many of these techniques are employed in community hospitals as they become perfected and then taught to other physicians through outreach seminars and one-on-one interaction. This sharing of knowledge is a critical dynamic in maintaining excellence in our health care system. Still, the academic centers remain the best places to treat the unusual, rare cases due to their advantages described.

Our market area is somewhat concentrated in our primary service area of South Chicago. Forty-nine of our adult admissions in FY08 reside in this zone. Another 43 percent of these patients live in the region, which includes South Chicago, South and Southwest Suburbs, Northwest Indiana, Western Suburbs, North Chicago, and North and Northwest Suburbs. The final 9 percent are extremely dispersed. From a geographic perspective, the accompanying map show the Primary Service Area (PSA) and the wide dispersion across the region and country of our patients. The regional area is over 200 miles across. Last year patients came from 41 of the 50 states. In addition, residents of the following 93 countries came to UCMC for treatment:

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**PATIENTS FROM THE FOLLOWING COUNTRIES  
WERE TREATED AT UCMC IN THE PAST YEAR**

Albania	England	Malaysia	Singapore
Argentina	Ethiopia	Mexico	Slovenia
Armenia	France	Mongolia	South Africa
Australia	Germany	Morocco	Spain
Austria	Greece	Nepal	Sweden
Bahrain	Grenada	Netherlands	Switzerland
		New	
Baku	Guatemala	Zealand	Syria
Bangladesh	Guyana	Nigeria	Taiwan
Belgium	Honduras	Norway	Thailand
Belize	Hungary	Oman	Trinidad
Bolivia	India	Pakistan	Tunisia
Brazil	Indonesia	Palestine	Turkey
Cameroon	Iran	Panama	UAE
Canada	Ireland	Peru	Ukraine
Cayman			
Islands	Israel	Phillipines	Uruguay
Chile	Italy	Poland	Uzbekistan
China	Jamaica	Portugal	Venezuela
Colombia	Japan	Puerto Rico	Vietnam
Cyprus	Jordan	Qatar	Virgin Islands
Denmark	Korea	Rawanda	West Africa
Dominican			
Repub.	Kuwait	Romania	Zambia
Ecuador	Lebanon	Russia	
Egypt	Liberia	Saudi Arabia	
El			
Salvador	Lithuania	Serbia	

This wide dispersion across the country and world is evidence both of the rare and unusual cases we treat as well as our reputation for excellence. Earlier in this application we noted that our planning does not strongly focus on population trends in the immediate area because UCMC attracts patients from such a wide area that come to us because of our extraordinary capability rather than geographic proximity. Our niche in the market is a specialized one. We are able to earn higher rates of reimbursement on these rare, complex cases because we have a proven track record of providing efficient care with good outcomes. This comparative advantage is illustrated in the accompanying table that shows that our operating margin is highest among the U.S. News & World Report Honor Roll hospitals. This specialization is critical to our success. Our strategy is that by bringing the best and brightest minds together, and providing them with the facilities and equipment, UCMC will be recognized as one of the few hospitals where the most difficult cases can be treated successfully.

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Our special capabilities in complex care have powered much of our growth to this point and we expect that continue. We are continuously adding talented physicians and researchers to our faculty, building programs of high stature. Our patients recognize our exceptional abilities and seek care here. The NHP project will result in the modernization of 180 Med/Surg beds and the relocation of 38 ICU beds and the addition of 22 ICU beds. These modernized beds will allow us to continue to serve the demand explained and documented in this section. We consider our hospital an important medical resource for Illinois and hope that our proposal is supported by the Planning Board.

### b. Alternatives Considered

1. We studied the alternative of adding beds in existing buildings. The cost for the patient bed portion of the project is significant - \$133 million or 17 percent of the total. We rejected this alternative for the following reasons:

a). **Insufficient Space in Existing Buildings** – The Medical Center in total now measures 2.7 million square feet. UCMC occupies 57 percent of that area with the remainder used by the Biological Sciences Division (“BSD”). The BSD is comprised of the attending physicians, the medical school, and researchers. That space is fully occupied and BSD is constructing a major new research laboratory building for expansion. The BSD has grown space of UCMC. When Mitchell Hospital was built in 1983, vacated space in Billings and Chicago Lying-in was re-assigned to BSD for expansion. The construction of the Duchoissois Center for Advanced Medicine (DCAM) in 1996 relocated the outpatient clinics from Billings Hospital. The space vacated was allocated to BSD for research labs and offices. Comer Hospital was completed in 2005 and BSD will make use of the vacated areas in Wyler. In general, as UCMC constructed new buildings, it relinquished the space in the old buildings for these other uses.

As for the hospital’s current space, this is for the most part fully utilized, hence the need to expand through the NHP. As we have grown in size over the years we have added buildings and also relocated some departments offsite. For example, both the Information Services and Finance Departments are principally located in Darien, Illinois. In addition, we occupy several sites in Hyde Park for such functions as Human Resources, the Academy (staff training), Internal Audit, Marketing, and Development. These offsite locations are evidence that we have no available space in the medical center complex. We have renovated the American School (formerly American School for Correspondence) located across the street from Mitchell and DCAM. This building is used for office space for Information Services, Planning, Design, and Construction, Medical Center Communications, and Capital Budget and Control, as well as the project team offices for the NHP. There is no available space for constructing the

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240 beds planned for the NHP.

b). **Departmental Adjacencies Would Be Suboptimal** – Were it possible to build these beds in existing buildings, they would be located remotely from those other hospital services preventing full integration of patient care. The most challenging aspect of constructing hospital facilities is locating the new elements in the best place relative to related functions. For example, the Surgery should be close to Patient Intake and Preparation, Recovery should be close to Surgery, and surgical inpatient beds should be close to Recovery. These functions are integrally connected and ideally the distance between them should be minimal. These spatial relationships can be optimized if one is building a new and complete hospital. However, the usual situation is adding buildings to an existing complex and the adjacencies are compromised. The NHP will house complementary departments such as Sterile Processing, Preparation and Recovery, Surgery, and inpatient beds for surgical patients. The flows between these can be optimized, whereas if the supporting beds were located in other buildings there would be the problem of long patient transports and having the clinical staff attend to their patients over a wide area.

The only open space currently is floors 2 and 3 of the Comer Center for Children and Specialty Care. Total area is 48,000 bgsf, far short of the 141,552 bgsf planned for Med/Surg beds and 49,173 bgsf for ICU beds that ideally should be located near the Med/Surg beds. Beside the insufficiency of the Comer space, that location is not ideal since it is in a separate, although adjacent building. The final consideration is that the building is to be devoted to pediatric care, in agreement with the Comer family which has underwritten much of the building's cost.

2. Also considered was the alternative of referring patients to other hospitals in the area. As noted earlier in this application, we have undertaken a plan to refer primary care patients to Mercy Hospital & Medical Center and Little Company of Mary Hospital. These hospitals have the capacity to receive additional patients. Other hospitals, especially in our A-03 planning area, have available beds in the sense that they use many fewer than their licensed count. But due to financial pressures, staff reductions, and program cutbacks, this capacity is not fully available. It is likely that in some hospitals beds have been "mothballed" for many years and might not be in a condition to be returned to operation.

The other hospitals in our planning area do not offer tertiary level services. These services are available at other area hospitals such as Northwestern, Rush, and Loyola, but these hospitals are also fully utilized and are in various stages of addressing their space needs through the CON process. It is doubtful that these hospitals could take significant numbers of our

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tertiary cases. Moreover, our strong preference is treating patients who come to us ourselves.

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### B. Modern Facilities

#### 2. Necessary Expansion – ICU Beds

##### a. Rationale for Expansion

The need for ICU beds has grown steadily and significantly at UCMC over the past 30 years. In 1977, we had 34 ICU beds and 378 Med/Surg beds, a ratio of 1 ICU bed for every 14 Med/Surg beds. Over the next 30 years, while inpatient admissions have steadily increased, length of stay decreased overall, so that now UCMC has 327 licensed Med/Surg beds. The intensity of cases resulting from our specialty programs has grown more robust and we attract more referrals from a wider area. We currently have 92 ICU beds, reducing the ratio four-fold to 1 ICU bed to 3.6 Med/Surg beds. We propose to add 22 ICU beds and reduce by 27 Med/Surg beds to better fit our expected mix of intensity, reducing the ratio further to one ICU bed for every 2.6 Med/Surg beds.

As we've strengthened our programs and added more specialty services, we have attracted patients with complex diseases that only a select few hospitals can treat. In the recent year, we have seen patients from the majority of states and over 90 foreign countries. Patients are growing in sophistication about medical treatment and either self-refer or encourage their local doctors to refer them to top regional hospitals when a serious illness is diagnosed. We address our reputation among academic medical centers in Attachment MOD – 3A for Med/Surg Beds and we believe that our strong reputation is continuing and will result in strong utilization of our ICU beds.

As can be seen in the following table, Projection of ICU Patient Days, UCMC's 92 beds were utilized at a rate of 85 percent over the past two years, which would amount to a rate of 69 percent of the proposed 114 beds, exceeding the State standard of 60 percent. Since 2002, ICU days have increased by an average annual compounded rate of 1.5 percent. Adding the nearly 300 annual observation days and projecting forward, we would reach 75 percent of ICU beds in 2015, the second full year after project completion.

As discussed in Attachment GRC – 5B, the 60 ICU beds proposed for the NHP, which includes 22 additional beds, will support the patients treated in the OR, Interventional Radiology, and GI Procedure areas of that building. Twelve of these beds will be available for the most acutely ill patients in the 10<sup>th</sup> Floor Hem/Onc service. These beds need to be close to the procedure areas and also in the immediate proximity of the Med/Surg beds to minimize transport times and attendant risks to the patients.

##### b. Alternatives Considered

The science of hospital planning deals extensively with adjacencies, locating

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services that are connected close to one another to decrease risks to the patients and maximize staffing efficiencies. Thus, there are no attractive alternatives insofar as different locations. Once we open the NHP, we will close the top two floors of Mitchell Hospital. This would open up area that could house the additional 22 ICU beds, but that location would be inappropriate. By definition, the ICU's care for the most seriously ill and fragile patients. Transporting the surgical patients from the NHP OR back to the Mitchell ICU would involve a trip of two city blocks, two elevator rides, and nearly 12 to 15 minutes of time. This distance would create unacceptable risk to the patients and a poor use of our valuable staff. In many cases, the patient would need to be accompanied by a physician and nurse.

Another possibility would be to send these patients to hospitals close by. We are the only tertiary level hospital in the A-3 planning area, so local hospitals would not be suitable for most patients. The other academic medical centers in Chicago have similarly high ICU occupancy rates with limited capacity. Finally, transport by ambulance or helicopter to another tertiary hospital is a suboptimal solution for our patients.

SECTION VII. B. 2. Modernization - ICU

**PROJECTION OF ICU PATIENT DAYS**  
 (Reaching 75% Occupancy of Proposed Beds)

Historical	ICU		Observation	Total	Occup
	Beds (1)	ICU Days	Days (2)	ICU Days	
2002	92	25,775		25,775	
2003	92	26,692			
2004	92	28,037			
2005	92	28,981			
2006	92	29,946	208		
2007	92	27,795	303		
12 mo. end Sep. 06	92	29,645	273	29,918	89%
12 mo. end Sep. 07	92	27,545	287	27,832	83%
Avg. Yearly Increase		1.5%			
<b>Projected</b>					
2008	92			28,145	84%
2009	92			28,567	85%
2010	92			28,996	86%
2011	92			29,431	88%
2012	92			29,872	89%
Open new beds 2013	114			30,320	73%
2014	114			30,775	74%
2015	114			31,238	75%

**Notes:**

Observation days are actual counts of patients occupying a bed at the noon census but not counted as an inpatient day. These would be patients recovering from a procedure or being observed for another reason but not admitted as an inpatient.

**Conclusion: Total demand for ICU beds is conservatively measured by actual census plus observation patients. Projecting ICU bed usage to increase by the average annual increase seen between 2002 and 2007 of 1.5%, we expect 31,122 days by 2015 or 75 percent occupancy of the proposed 114 ICU beds.**

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### B. Modern Facilities

#### 2. Necessary Expansion – Surgery

##### a. Rationale for Expansion

One of the principal drivers of the NHP project is the need to expand the Surgery operating rooms (OR). The main OR suite is located in Surgery Brain Research Pavilion (“SBRP”), a building that opened in 1977. At the time of its opening, all of UCMC’s ORs were located there. With the construction of the outpatient DCAM building in 1997, we situated Ambulatory Surgery in 8 ORs there. Comer Children’s Hospital was finished in 2005 and contains 5 pediatric ORs. There are 15 ORs in SBRP and these will be replaced in the NHP with a 24 OR suite.

The present main OR is 29 years old. There have been many significant changes in OR technology and design since that time. The facility is deficient in terms of space, both within the ORs and support areas, and in its layout. One of the most significant changes since 1977 has been the huge growth in the amount of special equipment that is brought into the operating theater. In addition, we have witnessed the rapid development of minimally invasive endoscopic surgery which is safer and has shorter recovery. The equipment ideally is suspended from booms overhead, but at present we have only one room that is outfitted in this way. As a result, there are endoscopy towers that move on wheels and have the light source, camera, endoscope, and monitor as a combined apparatus that must be wheeled into the OR.

We have two large robotic devices and expect to acquire more. The robots allow the surgeon to manipulate handles which move a surgical instrument inside the patient. Miniature cameras are also involved that permit the surgeon to see what he is doing. The devices that enter the patient are small, so a small incision can be made rather than a much larger one required by traditional surgery. Recently we began performing cardiac surgery using this less invasive technique. Traditionally, this surgery is done after a sternotomy, which splits the breastbone and requires a large incision down the center of the chest. This procedure requires a long hospital stay and recuperation. Using a robotic device, the surgery can be done through 4 or 5 dime-size incisions or a 3 to 5 inch incision on the side of the chest. Hospital stays are reduced by as much as 50 percent and the patient can return to work within 10 days rather than several weeks. There is also less chance of infection, less pain, elimination of the heart-lung bypass machine, and minimal blood loss. Surgical robots require a large OR.

Lasers for surgery that did not exist when the current OR was originally designed are now commonly used and are on large carts. Harmonic scalpels and ligatures that cut and sear at the same time also require carts.

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Neurosurgery, for example, employs a wide range of surgical microscopes that also must be moved about. In order to make the limited number of rooms as flexible as possible, we do not "fix" equipment in any one room.

Stereotactic radiosurgery equipment for localizing tumors in the cranium, radiofrequency ablation devices used in cryosurgery for liver and lung tumors and CUSA machines that irrigate and aspirate are all carted. Ultrasound units are employed more frequently for seeing "behind" organs or inside the patient during laparoscopies. The anesthesia used in surgery often requires fiberoptic intubation or echocardiography equipment for inserting lines when there are constrictions or other problems in the airway. Finally, every OR has a personal computer on a cart for recording patient information and supplying data for the scheduling system.

None of this equipment was in use three decades ago when UCMC's OR was designed and its use now present a significant spacial problem within an OR, as well as adequate space for the attending surgeon, residents, anesthesiologists and nurses. Storing this equipment when it is not in use is also a challenge. Because storage is woefully inadequate within the OR area, equipment is now stored outside the OR and that space is inadequate and less accessible. The OR space now needs to accommodate a virtual expressway of machinery and people.

The current OR suite does not embody the design elements considered essential for a modern surgical facility. The current traffic flows are extremely problematic. The flow of patients from pre-op, the ORs, recovery, and back to inpatient units all bottleneck through one very busy intersection. The proper, modern flow would be to segregate patients in different areas so that these flows do not cross. Also, there is an absence of a central support core that should be positioned to minimize the distance between all ORs and the supplies. The current arrangement involves case carts placed here and there, but they cause congestion and blockage in the corridors that are already over-taxed. Placing supplies in the ORs creates an operational problem since it consumes scarce space and increases room turnover time when the supplies have to be restocked. The support space for the staff is negligible. The lounge/lunch room has a capacity of 14 to 16 people, while there are 85 staff members working at any one time. The surgeon's lounge accommodates 12, while there are 45 in the department on a typical shift. Ideally, we need enough space so the staff could remain in the sterile area for lunch and breaks.

Another current design flaw is the location of the OR in relation to the patient beds. When constructed, the SBRP was immediately adjacent to Billings Hospital where the adult beds were located. When Mitchell Hospital replaced Billings in 1983, the travel time from the OR increased. The ICU tower is 290 feet from the entrance to the OR to a patient's bedside. For the acute care Medical/Surgical units in Mitchell, the distance is 616 feet on average.

## SECTION VII. MODERNIZATION

Patients on monitors must be accompanied by Recovery unit nurses when transported to the patient units, and sometimes an anesthetist must join them. This travel distance increases the risk to the patient and is an inefficient use of staff time when they are needed. Travel time might range from 6 to 12 minutes, depending on waiting time for elevators.

Because the facility is approaching 30 years of age, many of the infrastructure systems are worn and increasingly subject to breakdowns. Repairs are very costly since the schedule and the sterile conditions dictates that they be done during the night and on the weekend. Additionally, there are wet labs for research on the floors above and these cause plumbing problems for the OR.

In addition to the size, design, and aged facility issues, our steadily increasing workload dictates an expansion of the number of ORs. As shown in the accompanying table (OR Facility Utilization), in 2007 OR hours were 61,270 for the 28 rooms. This utilization generates an average per room of 2,188 hours. Applying the State standard of 1,500 hours per room per year, UCMC shows a need for 41 ORs. We propose 37 rooms after the completion of the NHP.

### b. Alternatives Considered

Over the past 29 years we have modified the main OR to handle growth and improve supply and equipment storage. Some years ago a pre-op area was converted to an endoscopy OR. Offices have gradually been converted to storage space. Equipment storage was recently created down a corridor, outside of the OR suite. Bulk supply storage was moved five floors below to a basement area where case carts are stocked and brought up to the OR. We spent several years increasing electrical power to the area and increasing the number of outlets in each room. We have done as much as practically possible to make this facility work as best it can, but due to being landlocked, cannot improve things much further.

The hours of operation are 7:30 a.m. to 5:30 p.m., with late cases extending into the evening hours. There are occasional cases on Saturday. We offer emergency surgery at any hour as needed. It would be impractical to extend the hours to relieve congestion. Our physicians have duties in the clinics, with research, and teaching. In addition many travel to area hospitals to perform surgery or teach other surgeons new techniques. We must accommodate travel to seminars outside of Chicago and to other academic medical centers. Extending the hours our clinical staff needs to cover the OR would not be possible given the already-full schedules. We would also incur sharply increased costs were we to increase overtime for the support staff or schedule late shifts at premium rates. Because Surgery relies on the considerable support of departments such as Respiratory Therapy, Pharmacy, Laboratories, Anesthesia as well as manufacturers' representatives for surgical devices and implants, operating beyond the normal workday would require keeping the

## SECTION VII. MODERNIZATION

necessary support by these other parties.

The best solution is to build a replacement OR in the NHP that is designed by modern standards and located close to inpatient beds.

## OR FACILITY UTILIZATION

	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2014</u>	<u>2015</u>
Admissions	26,401	26,926	26,205	27,843	28,145
Visits	507,154	505,664	514,873	548,199	553,133
OR Cases					
Inpatient	10,204	12,412	10,318	10,963	11,082
Outpatient	9,009	9,736	10,094	10,747	10,844
Total	<u>19,213</u>	<u>22,148</u>	<u>20,412</u>	<u>21,710</u>	<u>21,926</u>
OR Hours					
Inpatient	40,666	41,523	39,884	42,377	42,836
Outpatient	17,718	20,189	21,386	22,770	22,975
Total	<u>58,384</u>	<u>61,712</u>	<u>61,270</u>	<u>65,148</u>	<u>65,812</u>
Operating Rooms	28	28	28	37	37
Hours/OR	2,085	2,204	2,188	1,761	1,779
Rooms at 1,500 Hrs.	39	41	41	43	44

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### B. Modern Facilities

#### 2. Necessary Expansion – Preparation/Recovery

##### a. Rationale for Expansion

Preparation and Recovery areas are to be located on the 5<sup>th</sup> (Imaging/Procedures) and 6<sup>th</sup> (Surgery) floors. These uses will occupy 37,038 bgsf of space. These areas will be used to prepare patients for Surgery, Interventional Radiology, or GI Procedures and patients will recover from their procedures in these areas. As these areas exist to support the Operating Rooms, Interventional Radiology, and GI Procedures, the rationale for expansion can be found in those parts of this section.

The following Attachment MOD – 3D shows that in 2007 there are 28 operating rooms served by 39 recovery stations. These are located in SBRP, DCAM, and Comer Children's Hospital. Those stations in SBRP would be closed and replaced by the proposed OR and recovery areas in the NHP. We propose to increase the SBRP ORs from 15 to 24 rooms and the preparation/recovery stations from 15 to 50. After project completion, there would be a total of 37 operating rooms and 75 preparation/recovery stations, a ratio of 2.0 stations per OR. This ratio is within the State standard of 4 stations per OR.

The current 4 Interventional Radiology labs are served by 12 preparation/recovery stations. We propose to open 7 labs in the NHP. We estimate that 18 preparation/recovery stations would serve the 7 Interventional Radiology units adequately at a ratio of 2.6 stations per lab. Again, this ratio is below the State standard of 4 stations.

Finally, the 18 planned GI Procedure rooms will be supported by 35 preparation/recovery bays, a ratio of 2.1:1. Thirty five bays should be adequate for our needs and is within the State's guideline.

The present preparation/recovery facilities are quite crowded in each of the three areas. All are constrained by the surrounding departments and cannot be expanded. As the volume of activity in these areas has grown, the operation of the recovery areas has gotten more congested. Scheduling is arranged so that these rooms are used in large part for preparation early in the day and recovery later, since there is not capacity to do both at once at our high volume. There is constant jockeying involved to get the most efficient use of these facilities, but the time has come to develop facility space that is adequate.

##### b. Alternatives Considered

The key alternative considered was to expand hours of operation to meet the

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increased volumes. To that end, the GI Procedures department has recently expanded its week day hours to 7 a.m. to 6 p.m. Interventional Radiology works a similar schedule, and, in addition, provides 24 hours/7 days coverage for emergency cases.

The operating rooms also have around -the-clock coverage, but the main scheduling block is from 7:30 a.m. to 5:30 p.m. each weekday. We have looked carefully at expanding these hours as room availability has increased wait times. One constraint is that our surgeons are finite in number and have a multitude of duties, ranging from performing surgery, rounding on patients with residents, and other academic responsibilities that include teaching, research, and travel relating to their disciplines. It is not reasonable for us to require our clinicians, who already work very long days, to perform surgery in the evening or on weekends. Patients and their families much prefer having surgery earlier in the day. Similarly, fasting before surgery orders are a hardship for those with late afternoon and evening cases. Of course, there is a limit to the number of hours OR and Recovery nurses, technicians, and anesthetists can work. Beyond the immediate staff of the OR, many other ancillary support staff to the operating rooms - patient transporters, pharmacists, respiratory therapists, and floor nurses - all must be on duty in appropriate numbers if the OR is active. The OR also depends on resources outside of the hospital, such as providers of specialized equipment like lasers and lithotripters who bring in these devices for single cases. Also, representatives of drug and medical supply companies who bring in implantable devices, special drugs, and other items that are impractical to stock. All of these non-UCMC people work normal hours and expanding their hours could not easily be done without requiring non-hospital staff to change their work hours. Critically, costs would significantly increase if we needed to pay a premium for overtime or for those starting after 3 p.m. UCMC has stretched the hours of operation as much as possible and the only feasible option is to expand our facilities.

## RECOVERY FACILITY UTILIZATION

	<u>2007</u>	<u>2014</u>	<u>2015</u>
Operating Rooms	28	37	37
Angiography Labs	5	7	7
GI Procedure Rooms	12	18	18
Recovery Stations:			
Serving ORs	39	75	75
Recovery Stations/OR	1.4	2.0	2.0
Serving Angio Labs	12	18	18
Recovery Stations/Angio	2.4	2.6	2.6
Serving GI Procedure	20	35	35
Recovery Stations/GI Rm.	1.7	1.9	1.9
Total ORs, Angio, GI Rms.	45	62	62
Total Recovery Stations	71	128	128
Recovery Station/OR, etc.	1.6	2.1	2.1
State Standard			
Total OR/Procedure Rooms	45	62	62
Standard	4	4	4
Rooms at Standard	180	248	248

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### B. Modern Facilities

#### 2. Necessary Expansion – Anatomic Pathology

##### a. Rationale for Expansion

Anatomic Pathology is the main support laboratory for Surgery and GI Procedures. Surgical Pathology (a subset of Anatomic Pathology) is located in SBRP, two floors above Surgery. The lab is connected via a dumbwaiter so that tissue samples taken during surgery can be sent quickly to the lab for preparation and analysis. The tissue is received, trimmed of superfluous matter, flash frozen so that a very thin section can be sliced, prepared as a slide, and delivered to the pathologist on duty for his assessment. The frozen section does not provide the best view of the cells in the tissue, but is a very quick process so that the surgeon can receive guidance about the surgery in process.

With the closure of the OR in SBRP and its relocation in the NHP, Surgical Pathology must be relocated to be nearby. The first consideration is to move the tissue sample quickly to the lab, understanding that the patient is often still in the OR, under anesthesia, and the surgeons, anesthetist, nurses, and technical staff are in the OR waiting for the test results. The possibility of sending samples via pneumatic tube has been considered but it is considered risky since fluids could spill in the tube and require shutdown and careful cleaning. In addition, the tissue to be analyzed may not fit in the pneumatic cartridge. Finally, some surgeons want to view the prepared slide under the microscope and discuss the evaluation with the pathologist. The SBRP location will be a 12 to 15 minute walk, with several elevator rides from the NHP to SBRP, so that plan would preclude the surgeon from viewing the slide. Moving the samples by cart between the two buildings is also infeasible due to the length of time involved and our concern about tissue degradation if the time in transport is too long.

The other component of the Anatomic Pathology facility in the NHP will be the Cytopathology Lab. This lab works on fluids or minute tissue samples. It serves primarily Interventional Radiology and GI, evaluating biopsy samples. The present lab is located in the Mother's Aid Research Pavilion, a 10 minute trip from the NHP. Again, speed is important because the patient will still be on the procedure table, waiting until an adequacy examination can be made by the technologist. This evaluation assures that the tissue the physician wants to obtain for biopsy has been successfully aspirated.

Both laboratories must relocate part of their operation to the NHP due to the necessity of being close to Surgery. Some parts of the present labs will remain where they are to perform other work that doesn't have to happen as

## SECTION VII. MODERNIZATION

quickly.

b. Alternatives Considered

We considered transport of samples by pneumatic tube but decided the risk of spillage and losing the tissue was unacceptable. We also considered staff transport or even robotic material movers, but both alternatives are too costly and slow for the needs of the OR.

## SECTION VII. MODERNIZATION

### B. Modern Facilities

#### 2. Necessary Expansion – Central Sterile Processing

##### a. Rationale for Expansion

Central Sterile Processing (“CSP”) is the main support department for the OR’s. CSP retrieves, cleans, packs instrument trays, sterilizes, and delivers the instruments back to Surgery. With the main OR suite being expanded from 15 to 24 rooms and relocated to the NHP, it follows that the CSP would be expanded and relocated as well.

The present CSP that serves the main OR is 7,301 bgsf and we plan the new CSP to be 9,296 bgsf, a 27 percent increase. (This increase is more modest than the 60 percent increase planned for OR rooms.) As the main support department for the OR, it makes sense to relocate it. It will be located on the Lower Level and will be connected to the OR on the 6<sup>th</sup> Floor by two separate sets of dedicated service elevators. The elevator banks are on either ends of the floor to minimize travel distance between them and the individual operating rooms. Each elevator bank has a soiled and a clean elevator. While the most efficient arrangement might be to have the CSP adjacent to the OR on the same floor, the OR consumes an entire floor so this isn’t possible. The planned design is reasonably close in efficiency since the elevators are dedicated and will be readily available for transport. Vertical transport is considered faster than horizontal, as long as there aren’t long waits for elevators. The added benefit is that the instruments will either be in the OR or CSP or on dedicated elevators, which minimizes the chance for contamination. This arrangement is preferable to the present 10 minute walk through basement corridors.

##### b. Alternatives Considered

We considered continuing to use the CSP facility in Mitchell Hospital that serves the current OR’s. The present OR’s were constructed in 1977 in Surgery Brain Research Pavilion (“SBRP”). The other floors of this building were slated for wet research labs and faculty offices, so we continued to use the CSP that was in Billings Hospital. When Mitchell Hospital was built in 1983, we relocated and expanded CSP in that building. It was not the best location, as it was located one block away from SBRP but it was preferable to the other options. The proposed NHP will be one block to the north of Mitchell, accessed through tunnels that will be 1,200 feet in length and a 7 floor elevator ride. We estimate this trip will take 9 minutes for the walking portion and 2 minutes for the elevator ride. This route is a similar distance to what we have now and is an inefficient plan that consumes staff time delivering and retrieving instruments. We need to maintain a larger instruments inventory to ensure availability. We have 24 years of experience with this inconvenient location and a full understanding of the extra costs and

## SECTION VII. MODERNIZATION

frustration of having the principal support department for Surgery so far away. For this reason we reject the alternative of keeping CSP at its present location.

## SECTION VII. MODERNIZATION

### B. Modern Facilities

#### 2. Necessary Expansion – Radiology

##### a. Rationale for Expansion

The central purpose of this project is to relocate inpatient beds, Surgery, GI Procedures, and Interventional Radiology into modern facilities. Radiology will be located in the NHP to support these services. We will add 2 CT Rooms, 1 MR, 2 General Radiographic, and 1 Fluoroscopic Room. The entire Interventional Radiology area will be relocated and expanded from 5 to 7 procedure rooms.

The CTs, MR scanner, radiographic, and fluoroscopic rooms will serve the inpatients staying in the 240 beds proposed for the NHP. The inpatient Radiology facilities are located in Mitchell Hospital and will remain, though in less space, to serve the patients in the 214 beds that will be proximate. Outpatient Radiology facilities are located in the DCAM building which is dedicated to ambulatory care. We have concluded that it does not make sense to transport patients from the NHP to DCAM or Mitchell for radiology services, as there will be enough patients to utilize these services in the NHP. As noted in the accompanying table, "Radiology Facility Utilization", all State standards will be met for general procedures (6,730/room vs. 6,500 standard), CT (7,914 versus the standard of 2,000), and MR (2,491 versus the standard of 2,000) in 2015, the second full year of operation of the NHP. Not having to transport the patients to a separate building will be safer for the patient and will achieve faster results from Radiology.

It would be inefficient and would increase the risk to the patient if a patient had to be transported to the Mitchell Radiology facilities. Mitchell will be approximately one block away and time of transport would range from 12 to 20 minutes depending on elevator wait times and traffic in the patient corridors. This route would also require two elevator rides. The patient would have to be wheeled to an elevator in the NHP, down to the basement level, into the DCAM, across the entire length of this building, under two streets and into Mitchell Hospital, then up one level in an elevator. This lengthy trip would often have to be made with a nurse and sometimes physician accompanying due to the unstable condition of the patient. The patients planned for the NHP beds would be in the Hematology/Oncology, Transplant Surgery, and General Surgery services and it cannot be emphasized too strongly how acutely ill most of these patients are, raising our concerns about infection control. Best practices dictates that Radiology services be provided in the NHP to minimize these trips.

We note that there is a CT and MR proposed to be located in the NHP OR, in the sterile zone. This equipment will be dedicated devices, used either just

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before the patient undergoes surgery, or during surgery to assess results and determine whether further surgery is required. This will be a significant improvement over the current situation where patients must be sent to Radiology. Delays can result because these machines, which can play havoc with the very tight OR schedule. During surgery, the patient cannot be taken out of the sterile zone to Radiology, so this important capability cannot be considered. The more advanced medical centers in the country are now locating MRs and CTs in the OR. Due to the restricted nature of these devices and the unlikelihood that heavy throughput can be accomplished in the OR setting, we have not included these machines in the totals here.

Interventional Radiology has grown remarkably since Mitchell Hospital opened in 1983. At that time, UCMC had two machines and 752 cases were performed annually. By contrast, UCMC currently operates 5 angiography labs and, in 2007, our volume totaled 15,843 cases. It has been extremely challenging to accommodate this tremendous growth in Mitchell Hospital. Congestion was eased in 1996, when the outpatient Radiology facilities were opened in the DCAM. That relocation freed up some expansion room in the Mitchell Radiology area. However, space is still tight for this particular service, especially as the complexity of cases has grown, requiring better facilities for recovering outpatients. While we just completed a project that provides 11 preparation/recovery bays to serve the current 4 labs, we have a continuing challenge handling the nearly 15,000 annual cases in this facility. The new space in the NHP will have 6 labs and approximately 22 recovery bays, which is a more workable ratio than we have at present. As the proportion of outpatients grows, there is increasing demand for recovery space since outpatients spend longer recovering in the angiography area. (Inpatients, by contrast, can be taken back to their bed to complete recovery.) The very heavy use of our current facility is best demonstrated by the relatively high ratio of 3,677 cases per lab seen in 2005, compared to the State standard of 450 per lab. The expanded area in the NHP will allow us to operate in a less hectic manner and accommodate the steady growth that this technology has enjoyed.

### b. Alternatives Considered

Radiology is landlocked on the first level of Mitchell, in that the departments that are contiguous can not be moved or reduced. The Adult Emergency Department that cannot relinquish any space since its visits continue to increase. It is a challenge to treat the number of patients we do in Interventional Radiology, currently averaging 3,169 cases per year per lab, many times greater than the State standard of 400 per lab. Proper preparation and recovery space has long been a vexing problem, especially as the percentage of outpatients grows, putting more demand on recovery space. We have considered expanding the 50-hour weekly schedule, but feel that our radiologists and support staff already work long, intense hours as it is and we are reluctant to ask more of these exceptional professionals. In addition,

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scheduling for second and weekend shifts is very costly and it is challenging to find good technologists who will work the off-hours even with higher pay. In addition, we would also need to schedule radiologists, who already must take turns being on call for emergency cases for all non-scheduled hours.

## RADIOLOGY FACILITY UTILIZATION

	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2014</u>	<u>2015</u>
Admissions	26,401	26,926	26,205	27,843	28,145
Visits	507,154	505,664	514,873	548,199	553,133
<b>General Procedures</b>					
Inpatient	81,304	83,758	76,903	81,711	82,596
Outpatient	61,228	58,935	67,200	71,550	72,194
Total	142,532	142,693	144,103	153,260	154,789
Rooms	21	18	19	23	23
Cases/Room	6,787	7,927	7,584	6,663	6,730
State Standard				6,500	
<b>CT</b>					
Inpatient	16,593	17,601	19,035	20,225	20,444
Outpatient	31,836	35,166	39,905	42,488	42,870
Total	48,429	52,767	58,940	62,713	63,314
Rooms	6	6	6	8	8
Cases/Room	8,072	8,795	9,823	7,839	7,914
State Standard				2,000	
<b>MRI</b>					
Inpatient	3,239	3,370	4,124	4,382	4,429
Outpatient	10,205	10,877	12,108	12,892	13,008
Total	13,444	14,247	16,232	17,274	17,437
Rooms	6	6	6	7	7
Cases/Room	2,241	2,375	2,705	2,468	2,491
State Standard				2,000	
<b>Interventional (Angio)</b>					
Inpatient	8,107	8,873	8,433	8,960	9,057
Outpatient	6,602	7,495	7,410	7,890	7,961
Total	14,709	16,368	15,843	16,850	17,018
Rooms	4	5	5	7	7
Cases/Room	3,677	3,274	3,169	2,407	2,431
State Standard				400	

## SECTION VII. MODERNIZATION

### B. Modern Facilities

#### 2. Necessary Expansion – GI Procedure

##### a. Rationale for Expansion

UCMC has long had an internationally preeminent program in gastroenterology. The most recent hospital survey by U.S. News & World Report ranked our GI Department 6<sup>th</sup> nationally. An integral part of our program is a full array of diagnostic tests and therapies that are used to detect and treat digestive and liver problems, including state-of-the-art screenings that are not commonly available. These include:

- Esophageal motility and manometry
- 24-hour pH monitoring
- Upper GI endoscopy
- Proctoscopy, flexible sigmoidoscopy, and colonoscopy
- Liver biopsy
- Video enteroscopy, an advanced technique to study the causes of gastrointestinal bleeding.
- Pancreatic and biliary tract studies, including endoscopic retrograde cholangiopancreatography (“ERCP”).
- Advanced techniques for diagnosis and sampling of abnormal tissues in the esophagus, pancreas, stomach and rectum. These techniques include endoscopic ultrasound (“EUS”) and interventional endoscopy of the esophagus, stomach, pancreas, and colon, as well as fine needle aspiration and mucosal resection of superficial tumors.
- Genetic screening tests for genetic hemochromatosis, the most common genetic disorder in the United States.
- Genetic screening and family counseling for hereditary colon cancer and polyposis syndromes.
- Laser therapy for vascular bleeding of the rectum, as in proctitis and other conditions.
- Small intestine transplantation, in collaboration with our surgeons, for people with severely damaged intestines. This procedure is done in the OR, not the GI Procedure unit.

This area of medicine has grown remarkably since the current GI Procedure unit was built in the outpatient DCAM building in 1997. Several years ago flexible sigmoidoscopy was the most commonly used approach for screening for cancer of the colon. However, it was determined that colonoscopy was a more effective approach and subsequently Medicare offered coverage for screening tests for patients 50 years and older. This change in treatment dramatically changed our facility requirements since sigmoidoscopy had been done with conscious sedation, colonoscopy requires more anesthesia and more staff people. Between 2000 and 2007, sigmoidoscopies declined from 1,900 to 433, while colonoscopies have

## SECTION VII. MODERNIZATION

increased from 2,970 to 5,500. As an indication of our capacity needs there is now a 2 to 3 month wait for screening colonoscopies.

Other clinical developments that have affected our space needs relate to the use of endoscopic ultrasounds, as part of fine needle aspiration for cancer detection and to mark tumors and ERCP for pancreatic, biliary tract, and gall bladder studies and treatment. Endoscopic ultrasound procedures have increased 53 percent in the last two years and ERCP cases have risen 38 percent. We have also advanced the double balloon enteroscopy procedure for accessing the small bowel. Carol Semrad, M.D. of our staff is the most active practitioner of this procedure in the country, having performed 85 cases in 2007. These interventional procedures represent the greatest growth in our GI program and are important in that they can treat disease endoscopically and avoid open surgery, hospitalization, and lengthier recovery periods. But they are putting great pressure on our present facilities since they require general anesthesia, more preparation and recovery time, and more time in the procedure room. While upper GI procedures and colonoscopies require 30 to 45 minutes of room time, the interventional procedures can take one to three hours.

The DCAM facility was designed to handle 25 patients per day, but our caseload has grown to 50 patients which leads to longer periods for elective patients to be seen. The current facility often gets backed up during busy periods. Procedures requiring conscious sedation take 30 minutes recovery time, but the rapidly growing interventional cases with 1 to 2 hours of recovery time cause bottlenecks in the limited number of recovery bays, which backs up the procedure rooms and causes long waits by patients in the preparation bays. Further delays are caused by emergency procedures for patients presenting in the ER, most often with bleeding.

With the expansion of our lung program -- including transplantation -- physicians from Pulmonary Medicine are using this facility for bronchoscopies, since the Pulmonary Lab does not have space for appropriate preparation and recovery. All of these services require anesthesia, which means preparation and recovery bays are needed and the length of time for procedures expands. Since most of the patients are outpatients, their recovery is extended since they must be observed until it is safe for them to return home, whereas inpatients can be transported back to their rooms. Bronchoscopy equipment is very similar to that used in GI rooms, the patients undergo similar anesthesia and require the same caliber of nursing, so it makes sense to have them folded into this larger operation rather than replicating it inefficiently in a smaller operation for Pulmonary Medicine.

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<u>Treatment Room</u>	<u>Current</u>	<u>Proposed</u>
GI procedure	6	8
ERCP/EUS	2	5
Bronchoscopy	1	2
Liver Biopsy	<u>2</u>	<u>2</u>
Total	11	17

In summary, the GI Procedure unit has seen a dramatic increase in utilization, concentrating on more intensive procedures that require more space and time. We plan to address this need by building an expanded unit in the NHP. The procedure rooms will increase from 11 to 17, and from 14 prep/recovery stations increase to 40, as discussed in Attachment MOD - 3D.

### b. Alternatives Considered

In response to growing workloads we have expanded the number of exam, treatment, and recovery rooms by converting offices and other support space to clinical areas. There now remains no suitable spaces for further expansion. The adjoining diagnostic/treatment department on this floor is Chemotherapy, which is already too small for its needs. This department had been operating between 7 a.m. and 7 p.m. This long day is the practical limit, since overtime expenses are high and scheduling double shifts is difficult. Moreover, most physicians work twelve hour days now and could not be expected to cover longer scheduled hours. The most feasible alternative is to relocate and expand the department in the proposed NHP.

## GI PROCEDURES FACILITY UTILIZATION

	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2014</u>	<u>2015</u>	
Admissions	0	0	0	0	0	
Visits	507,154	505,664	514,873	527,253	529,045	
Flexible sigmoidoscopy	534	412	433	443	445	
Colonoscopy	5,106	5,974	5,499	5,631	5,650	
Upper GI	2,478	2,886	3,276	3,355	3,366	
ERCP	538	543	742	1,419	1,424	high growth
Ileoscopy	38	33	31	32	32	
PEG's	76	99	63	65	65	
Anoscopy	0	0	0	0	0	
Endoscopic ultrasound	453	537	694	1,368	1,373	high growth
Bronchoscopies	434	680	1,001	3,102	3,113	high growth
Colon decompression	1	0	0	0	0	
Motility	60	45	78	80	80	
24 hour PH monitoring	33	32	40	41	41	
Capsule endoscopy	72	100	87	89	89	
Dilation	219	192	185	189	190	
Liver biopsy	258	269	262	268	269	
Hemorroid destruction	20	8	13	13	13	
Paracentesis	0	0	231	237	237	
Double balloon enteroscopy	na	na	85	250	251	high growth
Total	10,320	11,810	12,720	16,583	16,639	

## SECTION VII. MODERNIZATION

### B. Modern Facilities

#### 2. Necessary Expansion – Pharmacy

- a. Pharmacy will be expanded from 14,918 bgsf to 26,520 bgsf. This department has had just a slight growth in area since the construction of Mitchell Hospital in 1983. The department is hemmed in by Clinical laboratories, Central Sterile Processing, and Patient Transportation in the basement of Mitchell, all of which are also short of space and would expand themselves if adjacent area would become available. The advent of the NHP project provides an opportunity to effectively address the space constraints that have plagued Pharmacy for many years.

Pharmacy has grown greatly in size and complexity since Mitchell was opened. One indication is that our Drug Formulary has increased three fold to approximately 5,000 drugs. Cost of drugs now exceeds \$60 million annually, 16 percent of all supplies. Staff has doubled in number, owing to much greater specialization needed. In 1983 there were very few computers, but now most employees require a computer station and access to a printer and fax machine.

Beside just the absolute increase in the number of drugs, there is also the complexity. We have ten different freezers and refrigerators, because we store drugs that require different temperature ranges. We do a lot of special drug compounding and many require special handling, such as the drugs employing recombinant DNA technology. Investigational drugs are often used in clinical trials, notably in Hematology/Oncology and Transplant Surgery. These processes entail special preparation, tracking, and reporting.

For the more routine, high use drugs, we use a robotic device. Essentially, the drugs are bar coded in unit dose packages, placed on hundreds of spindles, then a mechanical arm receives instructions from a computer to gather drugs for the patients. The robot requires a 32 feet by 10 feet footprint and 800 nsf circulation, or 4,000 nsf in total. Grossing this up produces a need for 4,760 bgsf. There are 3,000 different drug orders each day for our inpatients. The medical bins for each patient are larger since more medications are provided and the unit-dose packaging uses more space. The larger bins require larger delivery carts, which in turn take up more space in the production area as they are filled. While some drugs come to us already in units dose packaging, others we must package ourselves, which requires additional space. While the unit dose approach helps reduce errors and wasted drugs, they require more area for storage and transport with each individual dose wrapped separately. Drugs that are used less frequently are dispensed by people, who need room to count and package the drugs. Space is also required for the bottles containing the drugs. There are the compounding areas for special products that need

## SECTION VII. MODERNIZATION

preparation. Crash carts have become the responsibility of Pharmacy since a certain number of drugs are placed on the cart. Staging for cart inventorying, assembly, and storage requires space. With the requirement of USP 797 standards for sterile work areas for the preparation of IV admixtures, these must be prepared in special clean rooms with laminar flow hoods above the work area. The work areas will need ante rooms for changing clothes in and out of the sterile area. The IV admixtures produced require clean storage areas.

Hospitals have evolved toward a more integrative approach to pharmacy service whereby satellite operations exist on the patient units and ORs so that the pharmacist or pharmacologist can work as a true member of the team of clinicians. The pharmacist can see how the patient is doing on his medications and engage in a dialogue with the physicians about whether dosages or drugs should be changed. Thus, the special knowledge of the pharmacist is brought to bear in a more useful way. This is a critical change in reducing medication errors, which is a serious quality of care issue in hospitals since drugs are used more intensively and can be more harmful if mistakes are made. These satellite operations require space, sometimes just an office for the pharmacist, sometimes compounding/assembly and storage areas for drugs prepared for use in the area.

These many factors over the past several decades have increased Pharmacy's need for space and underlie this expansion.

### b. Alternatives Considered

Pharmacy could possibly have remained in Mitchell, using some space to be vacated by Central Sterile Processing. It makes more sense to build the expanded central production area to NHP. This gives a clean, new space in which to build rather than the difficulty of building among active departments and the dislocations of other departments that would arise in creating one larger area for Pharmacy.

The Surgery and Hem/Onc beds will serve the majority of our most acutely ill patients. Consequently, these are the patients who will receive the most medications and also the drugs that require special preparation and handling. Rather than transport these drugs from Mitchell, a 12 to 15 minute trip, and risk ruining or compromising the fragile and temperature sensitive drugs, it is better to prepare these drugs close to the patients. Nearly 30 percent of the space for Pharmacy in NHP will be for the OR pharmacy and Hem/Onc pharmacy. Both areas are frequent users of medications so it is more efficient and safer to have them prepared and dispensed close to where they are needed. This improves delivery time, but more importantly improves communication since pharmacists are on hand to receive orders and ask questions, thereby reducing the chance for errors.

## SECTION VII. MODERNIZATION

### B. Modern Facilities

#### 2. Necessary Expansion – Respiratory Therapy

##### a. Rationale for Expansion

Respiratory Therapy will occupy 1,959 bgsf in the center core of the 9<sup>th</sup> Floor. The majority of our most acutely ill patients will be treated in the NHP. These are the patients most likely to need ventilator support at some time during their inpatient stay, therefore Respiratory Therapy will locate their main operation here and leave a satellite facility to serve the patients remaining in Mitchell Hospital.

The area will contain the blood gas laboratory with 4 analyzers. Ventilators will be processed here, where they are broken into component parts, the parts cleaned in a special machine, then re-assembled and tested. Supplies will be stored in the area, along with whatever ventilators that aren't being deployed.

##### b. Alternatives Considered

The primary alternative considered was continuing to operate out of the present location, one room in Mitchell and a storeroom in Gilman-Smith Hospital. This bifurcated arrangement is problematic for supporting Mitchell Hospital patients, so continuing this for the NHP doesn't make sense. The NHP will be a 12 to 15 minute walk from Mitchell and most of the ventilator needs will be in NHP, so the NHP project presents an opportunity to create better space closer to the patients using this service.

## SECTION VII. MODERNIZATION

### B. Modern Facilities

#### 2. Necessary Expansion – Clinical Support

##### a. Rationale for Expansion

Clinical support consists of off stage equipment workrooms, equipment storage, and bed storage primarily. Proposed clinical support space totals 16,069 and compares to 44,422 presently. More than one third of the present support space is in the recently constructed Comer Children's Hospital.

The ratio of these equipment storage rooms per bed in the NHP is 50 bgsf. In Mitchell Hospital, the ration is 22 bgsf per bed, Med/Surg and ICU beds combined. This reflects the different quantity and variety of equipment needed at the bedside presently compared to the early 1980's when Mitchell was planned. On the patient bed floors of the NHP, there is a large central core where there is sufficient space to store equipment. Equipment storage in Mitchell is lacking and inadequate and is consistently emphasized by the nurses and physicians involved in planning the new clinical areas. Frequently, equipment that is in demand is parked in corridors, which creates a problem if the required 8 foot clearance isn't maintained. We have a similar problem in the main OR, where space in the OR proper is fully programmed so storage is outside of the area. As noted, there is the ongoing pressure to keep the equipment close at hand, which can create circulation problems.

##### b. Alternatives Considered

Equipment storage is a balancing act. It is an off-stage rather than on-stage function, in that the areas where the patients are situated have many higher priorities than storage of large items. But one doesn't want the equipment rooms to be too far from the patients since it is inefficient to send staff to retrieve equipment from remote locations. The NHP provides a good solution since there are large center core areas on the three patient bed floors with adequate storage room. The alternative of storing on the Lower Level is a possibility, but is unattractive due to the time that would be spent moving the equipment to and from the patients.

SECTION VIII. MEDICAL/SURGICAL,  
PEDIATRIC, OBSTETRICS, AND INTENSIVE  
CARE SERVICES

**SECTION VIII. REVIEW CRITERIA RELATING TO MEDICAL-SURGICAL, PEDIATRIC, OBSTETRICS,  
AND INTENSIVE CARE SERVICES (ACUTE)**

The section is applicable to all projects proposing the addition of Medical/Surgical, Obstetric, Pediatric, or ICU beds.

**A. Criterion 1110.530.a, Unit Size**

Read the criterion and indicate if the existing or proposed facility is located within a MSA. Yes  No

**B. Criterion 1110.530.b, Variances to Computed Bed Need**

Read the criterion and, if applicable, address one of the following variances.

1. Criterion 1110.530.b.1, High Occupancy. Indicate if chosen and submit the following information:
  - a. patient days and admissions for each of the last two years for the service involved;
  - b. explain why it is not feasible to convert underutilized services to meet the identified demand;
  - c. document that the number of beds proposed will not exceed the number needed to meet the target occupancy.
  - d. if projections are utilized to support the need for beds, document the following:
    - 1) the projections are based upon population projections from the U.S. Bureau of the Census;
    - 2) the projections are for a period of not more than 5 years from the date the application is submitted;
    - 3) the projections are zip code based and age specific; and
    - 4) the projections are based upon the applicant's service area as defined by historical patient origin, and do not include any projected change in market share.

**APPEND DOCUMENTATION AS ATTACHMENT ACUTE-1 AFTER THE LAST PAGE OF THIS SECTION.**

2. Criterion 1110.530.b.2, Medically Underserved Population. Indicate if chosen and submit the following information:
  - a. a map showing the location of all other area providers;
  - b. a list of the travel times to other area providers;
  - c. a detailed description of the admission restrictions of the other area facilities;
  - d. documentation that access is restricted in the planning area;
  - e. documentation that the number of beds proposed will not exceed the number needed, at the target occupancy rate, to meet the health care needs of the population identified;
  - f. an explanation of how the proposed project will improve the access to care;

**APPEND DOCUMENTATION AS ATTACHMENT ACUTE-2 AFTER THE LAST PAGE OF THIS SECTION.**

SECTION VIII. D. ADDITION OF INTENSIVE CARE BEDS

1. High Occupancy

- a. Patient utilization of ICU beds in the 24 months ending September 30, 2007:

<u>Year</u>	<u>Admissions</u>	<u>Days</u>
2006	3,870	29,645
2007	3,890	27,545

- b. We are operating below State bed occupancy standards for Pediatrics, Obstetrics, Psychiatry, and Med/Surg. We propose 60 ICU beds for the NHP building, 38 relocated and 22 additional. Pediatrics is just 2 beds under the standard of 75 percent which is insufficient given the number of ICU beds needed, regardless of the fact that locating adult beds in a pediatric hospital is undesirable. Psychiatry beds will be discontinued. Obstetrics beds are licensed at 50 but 30 are needed to meet the State standard, freeing 20 beds. These beds are located in Mitchell Hospital, a 12 to 15 minute trip to the NHP and a risky trip for our most acutely ill patients. Med/Surg beds are operating at 78 percent, which for the proposed 300 beds is 34 beds below the State's 88 percent target for this category. In Attachment MOD - 3A, we justify the 300 Med/Surg beds based on a conservative projection of patient volume increases. Thus, in 2013 when the NHP opens, Med/Surg beds will operate at 88 percent occupancy and the needed 22 additional ICU beds will not be available.
- c. Based on the average 28,651 annual ICU days experienced for the past 24 months, the proposed 114 ICU beds would be utilized at 69 percent. This is above the State's target occupancy of 60 percent. Based on long term trends, we expect ICU days to gradually increase, but even if they stay at present levels we achieve the standard use rate. Thus, our proposal is not excessive.
- d. Projections are not needed to justify these beds since the target occupancy is achieved using historic patient days.

## SECTION XXIV. FINANCIAL FEASIBILITY

**SECTION XXIV. REVIEW CRITERIA RELATING TO FINANCIAL FEASIBILITY**

This section applies to all projects subject to Part 1120.

Does the applicant (or the entity that is responsible for financing the project or is responsible for assuming the applicant's debt obligations in case of default) have a bond rating of "A" or better? Yes No

If yes is indicated, submit proof of the bond rating of "A" or better (that is less than two years old) from Fitch's, Moody's, or Standard and Poor's rating agencies and go to Section XXX. If no is indicated, submit the most recent three years' audited financial statements including the following:

- 1. Balance sheet
- 2. Income statement
- 3. Change in fund balance
- 4. Change in financial position

**APPEND THE REQUIRED DOCUMENTS AS ATTACHMENT FINANCIALS AND PLACE AFTER ALL OTHER APPLICATION ATTACHMENTS INCLUDING THE REMAINING ATTACHMENTS FOR THIS SECTION AND FOR SECTION XXX.**

**A. Criterion 1120.210.a, Financial Viability**

**1. Viability Ratios**

If proof of an "A" or better bond rating has not been provided, read the criterion and complete the following table providing the viability ratios for the most recent three years for which audited financial statements are available. Category B projects must also provide the viability ratios for the first full fiscal year after project completion or for the first full fiscal year when the project achieves or exceeds target utilization (per Part 1100), whichever is later.

Provide Data for Projects Classified as:	Category B - Projected			
Enter Historical and/or Projected Years:	2005	2006	2007	2015
Current Ratio	4.3	4.0	4.8	10.2
Net Margin Percentage	12.4%	8.5%	12.9%	11.5%
Percent Debt to Total Capitalization	39%	38%	32%	26%
Projected Debt Service Coverage	9.5 times	6.3 times	8.6 times	5.8 times
Days Cash on Hand	266	263	285	658
Cushion Ratio	33.2	27.5	31.8	43.5

Provide the methodology and worksheets utilized in determining the ratios detailing the calculation and applicable line items amounts from the financial statements. Complete a separate table for each co-applicant and provide worksheets for each. Insert the worksheets after this page.

- 2. Compare the ratios to the Part 1120 Appendix A review standards. If any of the standards for the applicant or for any co-applicant are not met, provide documentation that a person or organization will assume the legal responsibility to meet the debt obligations should the applicant default. The person or organization must demonstrate compliance with the ratios in Appendix A.

**APPEND DOCUMENTATION AS ATTACHMENT FIN-1 AFTER THE LAST PAGE OF THIS SECTION.**

**B. Criterion 1120.210.b, Availability of Funds**

If proof of an "A" or better bond rating has not been provided, read the criterion and document that sufficient resources are available to fund the project and related costs including operating start-up costs and operating deficits. Indicate the dollar amount to be provided from the following sources:

\$185.7m Cash & Securities

Provide statements as to the amount of cash / securities available for the project. Identify any security, its value and availability of such funds. Interest to be earned or depreciation account funds to be earned on any asset from the date of application submission through project completion are also considered cash.

\_\_\_\_\_ Pledges

For anticipated pledges, provide a letter or report as to the dollar amount feasible showing the discounted value and any conditions or action the applicant would have to take to accomplish goal. The time period, historical fund raising experience and major contributors also must be specified.

\$100m Gifts and Bequests

Provide verification of the dollar amount and identify any conditions of the source and timing of its use.

\$500m Debt Financing (indicate type(s) tax-exempt bond issue )

For general obligation bonds, provide amount, terms and conditions, including any anticipated discounting or shrinkage) and proof of passage of the required referendum or evidence of governmental authority to issue such bonds;

For revenue bonds, provide amount, terms and conditions and proof of securing the specified amount;

For mortgages, provide a letter from the prospective lender attesting to the expectation of making the loan in the amount and time indicated;

For leases, provide a copy of the lease including all terms and conditions of the lease including any purchase options.

\_\_\_\_\_ Governmental Appropriations

Provide a copy of the appropriation act or ordinance accompanied by a statement of funding availability from an official of the governmental unit. If funds are to be made available from subsequent fiscal years, provide a resolution or other action of the governmental unit attesting to such future funding.

\_\_\_\_\_ Grants

Provide a letter from the granting agency as to the availability of funds in terms of the amount, conditions, and time of receipt.

\_\_\_\_\_ Other Funds and Sources

Provide verification of the amount, terms and conditions, and type of any other funds that will be used for the project.

\$785.7m TOTAL FUNDS AVAILABLE

**APPEND DOCUMENTATION AS ATTACHMENT FIN-2 AFTER THE LAST PAGE OF THIS SECTION.**

**C. Criterion 1120.210.c, Operating Start-Costs**

If proof of an "A" or better bond rating has not been provided, indicate if the project is classified as a Category B project that involves establishing a new facility or a new category of service? Yes **No** . If yes is indicated read the criterion and provide in the space below the amount of operating start-up costs (the same as reported in Section I of this application) and provide a description of the items or components that comprise the costs. Indicate the source and amount of the financial resources available to fund the operating start-up costs (including any initial operating deficit) and reference the documentation that verifies sufficient resources are available.

## SECTION XXV. B. Availability of Funds

### **Cash and Securities**

The audited financial statements for 2007 show Board designated investments totaling \$677 million, which would be adequate to meet the \$185.7 million cash outlay for this project. We also anticipate contributions from net income, which has averaged \$105 million per year the last three years.

### **Gifts and Bequests**

We have an initial goal of raising \$100 million through charitable donations. UCMC has a long history of successfully meeting and exceeding fundraising goals. In the early 1990's, we conducted the Campaign for Biology and Medicine which started with a \$120 million goal and raised \$202 million. Between 1999 and 2004, the Campaign for Children which initially sought to raise \$50 million, ended at \$72 million, including naming gifts of \$40 million from Gary and Francis Comer. That campaign was instrumental in financing the Comer Children's Hospital and the Comer Center for Children and Specialty Care. Beginning in 2000, the Campaign Spark Discovery began with a goal of \$550 million. We have currently raised \$720 million and the campaign will continue to June, 2008, by which time we expect \$815 million will be raised. Included in this amount is an additional \$42 million gift from the Comers that is targeted for pediatric facilities. We are very fortunate and grateful for this record of success and we believe the \$100 million planned for the NHP is achievable.

### **Debt Financing**

We intend to raise debt capital with the issuance of tax-exempt bonds through the Illinois Educational Facilities Authority. We have successfully raised money through such issues many times over the past 30 years and our strong financial performance indicates we will have the debt capacity for an issue of \$500 million in 2009. The cost of issuance is estimated at \$6 million and there will be insurance costs of \$11 million. An interest rate of 3.856 percent is fixed for \$325 million and a rate of 5 percent is estimated for the remaining \$175 million. Estimates for this issue are provided in the following pages. These were prepared by J.P. Morgan Securities Inc., which has served as our financial advisor for debt financing in recent years. The anticipated date of issue is February, 2009. Because this issuance is 16 months away, we are using current market rates for interest and actual costs may vary from this estimate.

SECTION XXIV. FINANCIAL FEASIBILITY

A. Financial Viability – Calculation of Ratios

1. Current Ratio

**Historical:**

$$2005 = (\text{current assets} + \text{Board designated investments}) / \text{current liabilities} = (\$203,851\text{K} + \$496,373\text{K}) / \$161,490 = 4.34$$

$$2006 = (\$183,952\text{K} + \$566,425\text{K}) / \$187,096\text{K} = 4.01$$

$$2007 = (\$247,629\text{K} + \$677,043\text{K}) / \$194,165\text{K} = 4.76$$

Source for historic ratios: audited financial statements, Combining Balance Sheets, Attachment Financials.

**First Full Year After Project Exceeds Target Utilization:**

$$2015 = (\text{current assets} + \text{Board designated investments}) / (\text{current liabilities}) = (\$386\text{m} + \$2,516\text{m.}) / (\$284\text{m}) = 10.2$$

Source for forecast ratios: projected financial statistics

Note: We employ very active management of our cash assets, moving all but the minimum needed to meet day to day obligations into Board designated for construction and long term investments (TRIP – University managed program). The latter category was begun in 1995 and resulted in transferring money from the Board designated for construction fund. In either area, the cash is invested in relatively liquid securities that are widely traded and could be converted to cash within 30 days. For these reasons, we include these categories in the calculation of our current ratio.

## SECTION XXIV. FINANCIAL FEASIBILITY

### A. Financial Viability – Calculation of Ratios

#### 2. Net Margin Percentage

##### **Historical:**

2005 = revenue in excess of expenses / net patient service revenues =  
 $\$102,278\text{K} / \$827,809 = 12.36\%$

2006 =  $\$74,236\text{K} / \$875,977\text{K} = 8.47\%$

2007 =  $\$143,158\text{K} / \$1,113,836\text{K} = 12.85\%$

Source for historic ratios audited financial statements Combining Statement of Revenues and Expenses, Attachment Financials.

##### **First Full Year After Project Exceeds Target Utilization:**

2015 = revenue in excess of expenses / net patient service revenues (inpatient + outpatient) =  $\$203\text{m} / \$1,758\text{m} = 11.5\%$

Source for forecast ratios: projected financial statistics

#### 3. Debt Capitalization Ratio

##### **Historical:**

2005 = long term debt / (long term debt + general fund balance) =  $342,931\text{K} / (\$342,931\text{K} + \$533,922\text{K}) = 39\%$

2006 =  $\$364,120\text{K} / (\$364,120\text{K} + \$598,150\text{K}) = 38\%$

2007 =  $\$395,200\text{K} / (\$395,200\text{K} + \$856,245\text{K}) = 32\%$

Source for historic ratios: audited financial statements, Combining Balance Sheets, Attachment Financials.

##### **First Full Year After Project Exceeds Target Utilization:**

2015 =  $\$852\text{m} / (\$852\text{m} + \$2,430\text{m}) = 26\%$

Source for forecast ratios: projected financial statistics.

## SECTION XXIV. FINANCIAL FEASIBILITY

### A. Financial Viability – Calculation of Ratios

#### 4. Debt Service Coverage Ratio

##### **Historical:**

$$2005 = (\text{revenue in excess of expenses} + \text{depreciation} + \text{interest}) / (\text{interest} + \text{principal}) = (\$102,278\text{K} + \$43,626\text{K} + \$9,191\text{K}) / (\$9,191\text{K} + \$7,120\text{K}) = \mathbf{9.51 \text{ times}}$$

$$2006 = (\$74,236\text{K} + \$46,369\text{K} + \$13,994\text{K}) / (\$13,994\text{K} + \$7,390\text{K}) = \mathbf{6.29 \text{ times}}$$

$$2007 = (\$143,158\text{K} + \$48,588\text{K} + \$15,465\text{K}) / (\$15,465\text{K} + \$8,535\text{K}) = \mathbf{8.63 \text{ times}}$$

Source for historic ratios: audited financial statements, Combining Statements of Operations, notes on long-term debt for principal amounts, Attachment Financials.

##### **First Year After Project Exceeds Target Utilization:**

$$2015 = (\$203\text{m} + \$117\text{m} + \$35\text{m}) / (\$35\text{m} + \$26\text{m}) = \mathbf{5.8 \text{ times}}$$

Source for forecast ratios: projected financial statistics.

#### 5. Days Cash On Hand

##### **Historical:**

$$2005 = (\text{Cash and cash equivalents} + \text{Board designated investments}) / ((\text{Operating expense} - \text{Depreciation}) / 365 \text{ days}) = (\$46,731\text{K} + \$496,373\text{K}) / ((\$787,712 - \$43,626\text{K}) / 365) = \mathbf{266 \text{ days}}$$

$$2006 = (\$20,718\text{K} + \$566,425\text{K}) / ((\$861,019 - 46,369) / 365) = \mathbf{263 \text{ days}}$$

$$2007 = (\$86,698\text{K} + \$677,043) / ((\$1,026,032 - \$48,588\text{K}) / 365) = \mathbf{285 \text{ days}}$$

Source for historic ratios: audited financial statements, Combining Balance Sheets and Combining Statement of Operations, Attachment Financials.

SECTION XXIV. FINANCIAL FEASIBILITY

A. Financial Viability – Calculation of Ratios

**First Year After Project Exceeds Target Utilization:**

$$2015 = (\$136m + \$2,516m) / ((\$1,588m - \$117m) / 365) = 658 \text{ days}$$

Source for forecast ratios: projected financial statistics.

6. Cushion Ratio

**Historical:**

$$2005 = (\text{Cash} + \text{Board designated investments}) / \text{Maximum annual debt service} \\ = (\$46,731K + \$496,373K) / (9,191K + \$7,120K) = 33.2$$

$$2006 = (\$20,718K + \$566,425K) / (\$13,994K + \$7,390K) = 27.5$$

$$2007 = (\$86,698K + \$677,043) / (\$15,465 + \$8,535K) = 31.8$$

Source for historic ratios: audited financial statements, Combining Balance Sheet, Combining Statement of Operations, notes on long-term debt for principal amounts, Attachment Financials.

**First Year After Project Exceeds Target Utilization:**

$$2015 = (\$136m + \$2,516m) / (\$26m + \$35m) = 43.5$$

Source for forecast ratios: projected financial statistics.

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SOURCES AND USES OF FUNDS

University of Chicago Medical Center  
Series 2009 - Wrapped  
100bps Insurance  
14bps Liquidity, 8bps Remarketing  
1.25% COI

\$325MM Swap Effective 8.9.2011, Fixed Rate Yields as of 10.19.07  
\$325MM Insured VRDDs w/ Liq. & \$175MM Insured Fixed Rate Bonds

Dated Date           02/01/2009  
Delivery Date       02/01/2009

Sources:

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Bond Proceeds:	
Par Amount	500,000,000.00
Premium	6,024,240.75
	<hr/>
	506,024,240.75

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Uses:

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Project Fund Deposits:	
Project Fund	432,677,929.34
Other Fund Deposits:	
Capitalized Interest	55,934,612.63
Delivery Date Expenses:	
Cost of Issuance	6,250,000.00
Insurance	11,161,698.78
	<hr/>
	17,411,698.78
	<hr/>
	506,024,240.75

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**BOND MATURITY TABLE**

University of Chicago Medical Center  
Series 2009 - Wrapped  
100bps Insurance  
14bps Liquidity, 8bps Remarketing  
1.25% COI

\$325MM Swap Effective 8.9.2011, Fixed Rate Yields as of 10.19.07  
\$325MM Insured VRDBs w/ Liq. & \$175MM Insured Fixed Rate Bonds

Maturity Date	Swapped Bonds through 2044	Unswapped Bonds through 2044	Total
08/01/2010			
08/01/2011			
08/01/2012			
08/01/2013			
08/01/2014			
08/01/2015			
08/01/2016			
08/01/2017			
08/01/2018			
08/01/2019			
08/01/2020			
08/01/2021			
08/01/2022			
08/01/2023			
08/01/2024			
08/01/2025			
08/01/2026			
08/01/2027	9,200,000	4,455,000	13,655,000
08/01/2028	9,500,000	4,765,000	14,265,000
08/01/2029	11,100,000	5,665,000	16,765,000
08/01/2030	11,600,000	5,915,000	17,515,000
08/01/2031	12,100,000	6,200,000	18,300,000
08/01/2032	12,500,000	6,620,000	19,120,000
08/01/2033	13,100,000	6,875,000	19,975,000
08/01/2034	13,700,000	7,175,000	20,875,000
08/01/2035	14,200,000	7,610,000	21,810,000
08/01/2036	15,900,000	8,555,000	24,455,000
08/01/2037	21,700,000	9,505,000	31,205,000
08/01/2038	22,600,000	12,445,000	35,045,000
08/01/2039	23,600,000	13,020,000	36,620,000
08/01/2040	24,600,000	13,670,000	38,270,000
08/01/2041	25,600,000	14,390,000	39,990,000
08/01/2042	26,600,000	15,185,000	41,785,000
08/01/2043	27,800,000	15,865,000	43,665,000
02/01/2044	29,600,000	17,085,000	46,685,000
	<b>325,000,000</b>	<b>175,000,000</b>	<b>500,000,000</b>

**BOND SUMMARY STATISTICS**

University of Chicago Medical Center  
 Series 2009 - Wrapped  
 100bps Insurance  
 14bps Liquidity, 8bps Remarketing  
 1.25% COI

\$325MM Swap Effective 8.9.2011, Fixed Rate Yields as of 10.19.07  
 \$325MM Insured VRDBs w/ Liq. & \$175MM Insured Fixed Rate Bonds

Dated Date	02/01/2009
Delivery Date	02/01/2009
First Coupon	03/01/2009
Last Maturity	02/01/2044
Arbitrage Yield	4.309267%
True Interest Cost (TIC)	4.396989%
Net Interest Cost (NIC)	4.216694%
All-in TIC	4.569555%
Average Coupon	4.258328%
Average Life (years)	28.940
Duration of Issue (years)	15.993
Par Amount	500,000,000.00
Bond Proceeds	506,024,240.75
Total Interest	616,169,877.58
Net Interest	610,145,636.83
Bond Years from Dated Date	14,469,762,500.00
Bond Years from Delivery Date	14,469,762,500.00
Total Debt Service	1,116,169,877.58
Maximum Annual Debt Service	47,019,281.66
Average Annual Debt Service	31,890,567.93
Underwriter's Fees (per \$1000)	
Average Takedown	
Other Fee	
Total Underwriter's Discount	
Bid Price	101.204848

Bond Component	Par Value	Price	Average Coupon	Average Life	PV of 1 bp change
Swapped Bonds through 2044	325,000,000.00	100.000	3.856%	28.862	
Unswapped Bonds through 2044	175,000,000.00	103.442	5.000%	29.083	148,641.75
	500,000,000.00			28.940	148,641.75

BOND SUMMARY STATISTICS

University of Chicago Medical Center  
 Series 2009 - Wrapped  
 100bps Insurance  
 14bps Liquidity, 8bps Remarketing  
 1.25% COI

\$325MM Swap Effective 8.9.2011, Fixed Rate Yields as of 10.19.07  
 \$325MM Insured VRDBs w/ Liq. & \$175MM Insured Fixed Rate Bonds

	TIC	All-In TIC	Arbitrage Yield
Par Value	500,000,000.00	500,000,000.00	500,000,000.00
+ Accrued Interest			
+ Premium (Discount)	6,024,240.75	6,024,240.75	6,024,240.75
- Underwriter's Discount			
- Cost of Issuance Expense		-6,250,000.00	
- Other Amounts	-11,161,698.78	-11,161,698.78	-11,161,698.78
Target Value	494,862,541.97	488,612,541.97	494,862,541.97
Target Date	02/01/2009	02/01/2009	02/01/2009
Yield	4.396989%	4.569555%	4.309267%

**BOND PRICING**

University of Chicago Medical Center  
 Series 2009 - Wrapped  
 100bps Insurance  
 14bps Liquidity, 8bps Remarketing  
 1.25% COI

\$325MM Swap Effective 8.9.2011, Fixed Rate Yields as of 10.19.07  
 \$325MM Insured VRDBs w/ Liq. & \$175MM Insured Fixed Rate Bonds

Bond Component	Maturity Date	Amount	Rate	Yield	Price	Yield to Maturity	Premium (-Discount)
Swapped Bonds through 2044:							
	08/01/2027	9,200,000	3.890%		100.000 C	3.819%	
	08/01/2028	9,500,000	3.890%		100.000 C	3.822%	
	08/01/2029	11,100,000	3.890%		100.000 C	3.824%	
	08/01/2030	11,600,000	3.890%		100.000 C	3.826%	
	08/01/2031	12,100,000	3.890%		100.000 C	3.828%	
	08/01/2032	12,500,000	3.890%		100.000 C	3.830%	
	08/01/2033	13,100,000	3.890%		100.000 C	3.831%	
	08/01/2034	13,700,000	3.890%		100.000 C	3.832%	
	08/01/2035	14,200,000	3.890%		100.000 C	3.834%	
	08/01/2036	15,900,000	3.890%		100.000 C	3.835%	
	08/01/2037	21,700,000	3.890%		100.000 C	3.836%	
	08/01/2038	22,600,000	3.890%		100.000 C	3.837%	
	08/01/2039	23,600,000	3.890%		100.000 C	3.838%	
	08/01/2040	24,600,000	3.890%		100.000 C	3.839%	
	08/01/2041	25,600,000	3.890%		100.000 C	3.840%	
	08/01/2042	26,600,000	3.890%		100.000 C	3.840%	
	08/01/2043	27,800,000	3.890%		100.000 C	3.841%	
	02/01/2044	29,600,000	3.890%		100.000 C	3.841%	
		<u>325,000,000</u>					
Unswapped Bonds through 2044:							
	08/01/2027	4,455,000	5.000%	4.430%	104.779 C	4.615%	212,904.45
	08/01/2028	4,765,000	5.000%	4.460%	104.520 C	4.647%	215,378.00
	08/01/2029	5,665,000	5.000%	4.490%	104.263 C	4.676%	241,498.95
	08/01/2030	5,915,000	5.000%	4.510%	104.092 C	4.697%	242,041.80
	08/01/2031	6,200,000	5.000%	4.530%	103.921 C	4.717%	243,102.00
	08/01/2032	6,620,000	5.000%	4.540%	103.836 C	4.729%	253,943.20
	08/01/2033	6,875,000	5.000%	4.550%	103.750 C	4.741%	257,812.50
	08/01/2034	7,175,000	5.000%	4.560%	103.665 C	4.752%	262,963.75
	08/01/2035	7,610,000	5.000%	4.570%	103.580 C	4.762%	272,438.00
	08/01/2036	8,555,000	5.000%	4.580%	103.495 C	4.772%	298,997.25
	08/01/2037	9,505,000	5.000%	4.580%	103.495 C	4.775%	332,199.75
	08/01/2038	12,445,000	5.000%	4.590%	103.410 C	4.784%	424,374.50
	08/01/2039	13,020,000	5.000%	4.600%	103.326 C	4.792%	433,045.20
	08/01/2040	13,670,000	5.000%	4.610%	103.241 C	4.800%	443,044.70
	08/01/2041	14,390,000	5.000%	4.620%	103.156 C	4.808%	454,148.40
	08/01/2042	15,185,000	5.000%	4.630%	103.072 C	4.815%	466,483.20
	08/01/2043	15,865,000	5.000%	4.640%	102.987 C	4.822%	473,887.55
	02/01/2044	17,085,000	5.000%	4.650%	102.903 C	4.828%	495,977.55
		<u>175,000,000</u>					<u>6,024,240.75</u>
		<u>500,000,000</u>					<u>6,024,240.75</u>

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BOND PRICING

University of Chicago Medical Center  
Series 2009 - Wrapped  
100bps Insurance  
14bps Liquidity, 8bps Remarketing  
1.25% COI

\$325MM Swap Effective 8.9.2011, Fixed Rate Yields as of 10.19.07  
\$325MM Insured VRDBs w/ Liq. & \$175MM Insured Fixed Rate Bonds

Dated Date	02/01/2009	
Delivery Date	02/01/2009	
First Coupon	03/01/2009	
Par Amount	500,000,000.00	
Premium	6,024,240.75	
Production	506,024,240.75	101.204848%
Underwriter's Discount		
Purchase Price	506,024,240.75	101.204848%
Accrued Interest		
Net Proceeds	506,024,240.75	

BOND DEBT SERVICE

University of Chicago Medical Center  
 Series 2009 - Wrapped  
 100bps Insurance  
 14bps Liquidity, 8bps Remarketing  
 1.25% COI

\$325MM Swap Effective 8.9.2011, Fixed Rate Yields as of 10.19.07  
 \$325MM Insured VRDBs w/ Liq. & \$175MM Insured Fixed Rate Bonds

Dated Date 02/01/2009  
 Delivery Date 02/01/2009

Period Ending	Principal	Coupon	Interest	Debt Service
12/31/2009			16,770,833.30	16,770,833.30
12/31/2010			20,124,999.96	20,124,999.96
12/31/2011			20,519,333.30	20,519,333.30
12/31/2012			21,392,499.96	21,392,499.96
12/31/2013			21,392,499.96	21,392,499.96
12/31/2014			21,392,499.96	21,392,499.96
12/31/2015			21,392,499.96	21,392,499.96
12/31/2016			21,392,499.96	21,392,499.96
12/31/2017			21,392,499.96	21,392,499.96
12/31/2018			21,392,499.96	21,392,499.96
12/31/2019			21,392,499.96	21,392,499.96
12/31/2020			21,392,499.96	21,392,499.96
12/31/2021			21,392,499.96	21,392,499.96
12/31/2022			21,392,499.96	21,392,499.96
12/31/2023			21,392,499.96	21,392,499.96
12/31/2024			21,392,499.96	21,392,499.96
12/31/2025			21,392,499.96	21,392,499.96
12/31/2026			21,392,499.96	21,392,499.96
12/31/2027	13,655,000	**	21,198,956.64	34,853,956.64
12/31/2028	14,265,000	**	20,609,270.00	34,874,270.00
12/31/2029	16,765,000	**	19,965,723.32	36,730,723.32
12/31/2030	17,515,000	**	19,240,033.32	36,755,033.32
12/31/2031	18,300,000	**	18,481,810.04	36,781,810.04
12/31/2032	19,120,000	**	17,688,933.36	36,808,933.36
12/31/2033	19,975,000	**	16,859,653.32	36,834,653.32
12/31/2034	20,875,000	**	15,993,533.32	36,868,533.32
12/31/2035	21,810,000	**	15,088,120.04	36,898,120.04
12/31/2036	24,455,000	**	14,117,446.68	38,572,446.68
12/31/2037	31,205,000	**	12,980,146.64	44,185,146.64
12/31/2038	35,045,000	**	11,600,096.68	46,645,096.68
12/31/2039	36,620,000	**	10,076,156.68	46,696,156.68
12/31/2040	38,270,000	**	8,483,316.64	46,753,316.64
12/31/2041	39,990,000	**	6,817,910.00	46,807,910.00
12/31/2042	41,785,000	**	5,076,353.32	46,861,353.32
12/31/2043	43,665,000	**	3,255,469.96	46,920,469.96
12/31/2044	46,685,000	**	334,281.66	47,019,281.66
	500,000,000		616,169,877.58	1,116,169,877.58

DETAILED BOND DEBT SERVICE

University of Chicago Medical Center  
 Series 2009 - Wrapped  
 100bps Insurance  
 14bps Liquidity, 8bps Remarketing  
 1.25% COI

\$325MM Swap Effective 8.9.2011, Fixed Rate Yields as of 10.19.07  
 \$325MM Insured VRDBs w/ Liq. & \$175MM Insured Fixed Rate Bonds

Dated Date 02/01/2009  
 Delivery Date 02/01/2009

Swapped Bonds through 2044 (SWAP)

Period Ending	Principal	Coupon	Interest	Debt Service
12/31/2009			9,479,166.70	9,479,166.70
12/31/2010			11,375,000.04	11,375,000.04
12/31/2011			11,769,333.37	11,769,333.37
12/31/2012			12,642,500.04	12,642,500.04
12/31/2013			12,642,500.04	12,642,500.04
12/31/2014			12,642,500.04	12,642,500.04
12/31/2015			12,642,500.04	12,642,500.04
12/31/2016			12,642,500.04	12,642,500.04
12/31/2017			12,642,500.04	12,642,500.04
12/31/2018			12,642,500.04	12,642,500.04
12/31/2019			12,642,500.04	12,642,500.04
12/31/2020			12,642,500.04	12,642,500.04
12/31/2021			12,642,500.04	12,642,500.04
12/31/2022			12,642,500.04	12,642,500.04
12/31/2023			12,642,500.04	12,642,500.04
12/31/2024			12,642,500.04	12,642,500.04
12/31/2025			12,642,500.04	12,642,500.04
12/31/2026			12,642,500.04	12,642,500.04
12/31/2027	9,200,000	3.890%	12,523,206.68	21,723,206.68
12/31/2028	9,500,000	3.890%	12,161,436.64	21,661,436.64
12/31/2029	11,100,000	3.890%	11,771,140.00	22,871,140.00
12/31/2030	11,600,000	3.890%	11,332,866.68	22,932,866.68
12/31/2031	12,100,000	3.890%	10,875,143.36	22,975,143.36
12/31/2032	12,500,000	3.890%	10,399,266.68	22,899,266.68
12/31/2033	13,100,000	3.890%	9,905,236.68	23,005,236.68
12/31/2034	13,700,000	3.890%	9,387,866.64	23,087,866.64
12/31/2035	14,200,000	3.890%	8,848,453.32	23,048,453.32
12/31/2036	15,900,000	3.890%	8,274,029.96	24,174,029.96
12/31/2037	21,700,000	3.890%	7,580,313.32	29,280,313.32
12/31/2038	22,600,000	3.890%	6,724,513.36	29,324,513.36
12/31/2039	23,600,000	3.890%	5,832,406.68	29,432,406.68
12/31/2040	24,600,000	3.890%	4,901,400.04	29,501,400.04
12/31/2041	25,600,000	3.890%	3,931,493.36	29,531,493.36
12/31/2042	26,600,000	3.890%	2,922,686.68	29,522,686.68
12/31/2043	27,800,000	3.890%	1,872,386.68	29,672,386.68
12/31/2044	29,600,000	3.890%	191,906.66	29,791,906.66
	325,000,000		361,696,754.13	686,696,754.13

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DETAILED BOND DEBT SERVICE

University of Chicago Medical Center  
Series 2009 - Wrapped  
100bps Insurance  
14bps Liquidity, 8bps Remarketing  
1.25% COI

\$325MM Swap Effective 8.9.2011, Fixed Rate Yields as of 10.19.07  
\$325MM Insured VRDBs w/ Liq. & \$175MM Insured Fixed Rate Bonds

Bond Variable Rate Table

<u>Begin Date</u>	<u>End Date</u>	<u>Interest Rate</u>
02/01/2009	08/09/2011	3.500%
08/09/2011	02/01/2044	3.890%

DETAILED BOND DEBT SERVICE

University of Chicago Medical Center  
 Series 2009 - Wrapped  
 100bps Insurance  
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 1.25% COI

\$325MM Swap Effective 8.9.2011, Fixed Rate Yields as of 10.19.07  
 \$325MM Insured VRDDs w/ Liq. & \$175MM Insured Fixed Rate Bonds

Dated Date 02/01/2009  
 Delivery Date 02/01/2009

Unswapped Bonds through 2044 (UNSWAP)

Period Ending	Principal	Coupon	Interest	Debt Service
12/31/2009			7,291,666.70	7,291,666.70
12/31/2010			8,750,000.04	8,750,000.04
12/31/2011			8,750,000.04	8,750,000.04
12/31/2012			8,750,000.04	8,750,000.04
12/31/2013			8,750,000.04	8,750,000.04
12/31/2014			8,750,000.04	8,750,000.04
12/31/2015			8,750,000.04	8,750,000.04
12/31/2016			8,750,000.04	8,750,000.04
12/31/2017			8,750,000.04	8,750,000.04
12/31/2018			8,750,000.04	8,750,000.04
12/31/2019			8,750,000.04	8,750,000.04
12/31/2020			8,750,000.04	8,750,000.04
12/31/2021			8,750,000.04	8,750,000.04
12/31/2022			8,750,000.04	8,750,000.04
12/31/2023			8,750,000.04	8,750,000.04
12/31/2024			8,750,000.04	8,750,000.04
12/31/2025			8,750,000.04	8,750,000.04
12/31/2026			8,750,000.04	8,750,000.04
12/31/2027	4,455,000	5.000%	8,675,750.04	13,130,750.04
12/31/2028	4,765,000	5.000%	8,447,833.36	13,212,833.36
12/31/2029	5,665,000	5.000%	8,194,583.32	13,859,583.32
12/31/2030	5,915,000	5.000%	7,907,166.64	13,822,166.64
12/31/2031	6,200,000	5.000%	7,606,666.68	13,806,666.68
12/31/2032	6,620,000	5.000%	7,289,666.68	13,909,666.68
12/31/2033	6,875,000	5.000%	6,954,416.64	13,829,416.64
12/31/2034	7,175,000	5.000%	6,605,666.68	13,780,666.68
12/31/2035	7,610,000	5.000%	6,239,666.68	13,849,666.68
12/31/2036	8,555,000	5.000%	5,843,416.64	14,398,416.64
12/31/2037	9,505,000	5.000%	5,399,833.32	14,904,833.32
12/31/2038	12,445,000	5.000%	4,875,583.32	17,320,583.32
12/31/2039	13,020,000	5.000%	4,243,750.04	17,263,750.04
12/31/2040	13,670,000	5.000%	3,581,916.68	17,251,916.68
12/31/2041	14,390,000	5.000%	2,886,416.64	17,276,416.64
12/31/2042	15,185,000	5.000%	2,153,666.68	17,338,666.68
12/31/2043	15,865,000	5.000%	1,383,083.36	17,248,083.36
12/31/2044	17,085,000	5.000%	142,375.00	17,227,375.00
	175,000,000		254,473,125.78	429,473,125.78

NET DEBT SERVICE

University of Chicago Medical Center  
 Series 2009 - Wrapped  
 100bps Insurance  
 14bps Liquidity, 8bps Remarketing  
 1.25% COI

\$325MM Swap Effective 8.9.2011, Fixed Rate Yields as of 10.19.07  
 \$325MM Insured VRDBs w/ Liq. & \$175MM Insured Fixed Rate Bonds

Period Ending	Total Debt Service	Remarketing - 8 bps	Liquidity - 14 bps	Capitalized Interest	Net Debt Service
12/31/2009	16,770,833.30	238,333.33	417,083.33	17,426,249.96	
12/31/2010	20,124,999.96	260,000.00	455,000.00	20,839,999.96	
12/31/2011	20,519,333.30	260,000.00	455,000.00	21,234,333.30	
12/31/2012	21,392,499.96	260,000.00	455,000.00		22,107,499.96
12/31/2013	21,392,499.96	260,000.00	455,000.00		22,107,499.96
12/31/2014	21,392,499.96	260,000.00	455,000.00		22,107,499.96
12/31/2015	21,392,499.96	260,000.00	455,000.00		22,107,499.96
12/31/2016	21,392,499.96	260,000.00	455,000.00		22,107,499.96
12/31/2017	21,392,499.96	260,000.00	455,000.00		22,107,499.96
12/31/2018	21,392,499.96	260,000.00	455,000.00		22,107,499.96
12/31/2019	21,392,499.96	260,000.00	455,000.00		22,107,499.96
12/31/2020	21,392,499.96	260,000.00	455,000.00		22,107,499.96
12/31/2021	21,392,499.96	260,000.00	455,000.00		22,107,499.96
12/31/2022	21,392,499.96	260,000.00	455,000.00		22,107,499.96
12/31/2023	21,392,499.96	260,000.00	455,000.00		22,107,499.96
12/31/2024	21,392,499.96	260,000.00	455,000.00		22,107,499.96
12/31/2025	21,392,499.96	260,000.00	455,000.00		22,107,499.96
12/31/2026	21,392,499.96	260,000.00	455,000.00		22,107,499.96
12/31/2027	34,853,956.64	256,953.78	449,669.11		35,560,579.53
12/31/2028	34,874,270.00	249,494.44	436,615.28		35,560,379.72
12/31/2029	36,730,723.32	241,364.67	422,388.17		37,394,476.16
12/31/2030	36,755,033.32	232,319.11	406,558.44		37,393,910.87
12/31/2031	36,781,810.04	222,873.56	390,028.72		37,394,712.32
12/31/2032	36,808,933.36	213,061.11	372,856.94		37,394,851.41
12/31/2033	36,834,653.32	202,862.44	355,009.28		37,392,525.04
12/31/2034	36,868,533.32	192,183.78	336,321.61		37,397,038.71
12/31/2035	36,898,120.04	181,058.22	316,851.89		37,396,030.15
12/31/2036	38,572,446.68	169,135.33	295,986.83		39,037,568.84
12/31/2037	44,185,146.64	154,494.89	270,366.06		44,610,007.59
12/31/2038	46,645,096.68	136,836.89	239,464.56		47,021,398.13
12/31/2039	46,696,156.68	118,425.78	207,245.11		47,021,827.57
12/31/2040	46,753,316.64	99,214.67	173,625.67		47,026,156.98
12/31/2041	46,807,910.00	79,203.56	138,606.22		47,025,719.78
12/31/2042	46,861,353.32	58,392.44	102,186.78		47,021,932.54
12/31/2043	46,920,469.96	36,715.11	64,251.44		47,021,436.51
12/31/2044	47,019,281.66	2,039.11	3,568.44		47,024,889.21
	1,116,169,877.58	7,504,962.22	13,133,683.88	59,500,583.22	1,077,307,940.46

AGGREGATE DEBT SERVICE

University of Chicago Medical Center  
 Series 2009 - Wrapped  
 100bps Insurance  
 14bps Liquidity, 8bps Remarketing  
 1.25% COI

\$325MM Swap Effective 8.9.2011, Fixed Rate Yields as of 10.19.07

\$325MM Insured VRDBs w/ Liq. & \$175MM Insured Fixed Rate Bonds

Period Ending	Series 2009 - Wrapped	Outstanding Debt Service	Aggregate Debt Service
12/31/2009	16,770,833.30	26,434,370.13	43,205,203.43
12/31/2010	20,124,999.96	26,378,308.75	46,503,308.71
12/31/2011	20,519,333.30	26,416,173.70	46,935,507.00
12/31/2012	21,392,499.96	26,457,935.87	47,850,435.83
12/31/2013	21,392,499.96	26,484,441.12	47,876,941.08
12/31/2014	21,392,499.96	26,362,723.81	47,755,223.77
12/31/2015	21,392,499.96	27,154,792.57	48,547,292.53
12/31/2016	21,392,499.96	27,102,452.13	48,494,952.09
12/31/2017	21,392,499.96	27,204,608.52	48,597,108.48
12/31/2018	21,392,499.96	27,318,179.93	48,710,679.89
12/31/2019	21,392,499.96	27,518,454.93	48,910,954.89
12/31/2020	21,392,499.96	27,692,218.19	49,084,718.15
12/31/2021	21,392,499.96	27,845,350.32	49,237,850.28
12/31/2022	21,392,499.96	27,583,205.04	48,975,705.00
12/31/2023	21,392,499.96	27,812,614.96	49,205,114.92
12/31/2024	21,392,499.96	28,115,299.77	49,507,799.73
12/31/2025	21,392,499.96	28,187,190.40	49,579,690.36
12/31/2026	21,392,499.96	28,442,655.05	49,835,155.01
12/31/2027	34,853,956.64	11,465,350.01	46,319,306.65
12/31/2028	34,874,270.00	11,465,998.76	46,340,268.76
12/31/2029	36,730,723.32	9,629,972.21	46,360,695.53
12/31/2030	36,755,033.32	9,631,714.99	46,386,748.31
12/31/2031	36,781,810.04	9,629,180.06	46,410,990.10
12/31/2032	36,808,933.36	9,627,506.18	46,436,439.54
12/31/2033	36,834,653.32	9,631,648.87	46,466,302.19
12/31/2034	36,868,533.32	9,627,220.07	46,495,753.39
12/31/2035	36,898,120.04	9,628,280.02	46,526,400.06
12/31/2036	38,572,446.68	7,988,928.04	46,561,374.72
12/31/2037	44,185,146.64	2,413,690.61	46,598,837.25
12/31/2038	46,645,096.68		46,645,096.68
12/31/2039	46,696,156.68		46,696,156.68
12/31/2040	46,753,316.64		46,753,316.64
12/31/2041	46,807,910.00		46,807,910.00
12/31/2042	46,861,353.32		46,861,353.32
12/31/2043	46,920,469.96		46,920,469.96
12/31/2044	47,019,281.66		47,019,281.66
	1,116,169,877.58	591,250,465.01	1,707,420,342.59

PROJECT FUND

University of Chicago Medical Center  
 Series 2009 - Wrapped  
 100bps Insurance  
 14bps Liquidity, 8bps Remarketing  
 1.25% COI

\$325MM Swap Effective 8.9.2011, Fixed Rate Yields as of 10.19.07  
 \$325MM Insured VRDBs w/ Liq. & \$175MM Insured Fixed Rate Bonds

Date	Deposit	Interest @ 4.25%	Principal	Scheduled Draws	Balance
02/28/2009	432,677,929.34	1,364,971.50	31,635,028.50	33,000,000.00	401,042,900.84
03/31/2009		1,420,360.27	8,579,639.73	10,000,000.00	392,463,261.11
04/30/2009		1,389,974.05	-1,389,974.05		393,853,235.16
05/31/2009		1,394,896.87	-1,394,896.87		395,248,132.03
06/30/2009		1,399,837.13	13,600,162.87	15,000,000.00	381,647,969.16
07/31/2009		1,351,669.89	-1,351,669.89		382,999,639.05
08/31/2009		1,356,457.05	-1,356,457.05		384,356,096.10
09/30/2009		1,361,261.17	18,638,738.83	20,000,000.00	365,717,357.27
10/31/2009		1,295,248.97	-1,295,248.97		367,012,606.24
11/30/2009		1,299,836.31	-1,299,836.31		368,312,442.55
12/31/2009		1,304,439.90	23,695,560.10	25,000,000.00	344,616,882.45
01/31/2010		1,220,518.13	-1,220,518.13		345,837,400.58
02/28/2010		1,224,840.79	-1,224,840.79		347,062,241.37
03/31/2010		1,229,178.77	28,770,821.23	30,000,000.00	318,291,420.14
04/30/2010		1,127,282.11	-1,127,282.11		319,418,702.25
05/31/2010		1,131,274.57	-1,131,274.57		320,549,976.82
06/30/2010		1,135,281.17	38,864,718.83	40,000,000.00	281,685,257.99
07/31/2010		997,635.29	-997,635.29		282,682,893.28
08/31/2010		1,001,168.58	-1,001,168.58		283,684,061.86
09/30/2010		1,004,714.39	43,995,285.61	45,000,000.00	239,688,776.25
10/31/2010		848,897.75	-848,897.75		240,537,674.00
11/30/2010		851,904.26	-851,904.26		241,389,578.26
12/31/2010		854,921.42	49,145,078.58	50,000,000.00	192,244,499.68
01/31/2011		680,865.94	-680,865.94		192,925,365.62
02/28/2011		683,277.34	-683,277.34		193,608,642.96
03/31/2011		685,697.28	54,314,302.72	55,000,000.00	139,294,340.24
04/30/2011		493,334.12	-493,334.12		139,787,674.36
05/31/2011		495,081.35	-495,081.35		140,282,755.71
06/30/2011		496,834.76	59,503,165.24	60,000,000.00	80,779,590.47
07/31/2011		286,094.38	-286,094.38		81,065,684.85
08/31/2011		287,107.63	-287,107.63		81,352,792.48
09/30/2011		288,124.47	64,711,875.53	65,000,000.00	16,640,916.95
10/31/2011		58,936.58	-58,936.58		16,699,853.53
11/30/2011		59,145.31	-59,145.31		16,758,998.84
12/31/2011		59,354.79	16,758,998.84	16,818,353.63	
	432,677,929.34	32,140,424.29	432,677,929.34	464,818,353.63	

Average Life (years): 1.7491  
 Yield To Receipt Date: 4.2844625%  
 Arbitrage Yield: 4.3092670%  
 Value of Negative Arbitrage: 175,976.33

CAPITALIZED INTEREST

University of Chicago Medical Center  
 Series 2009 - Wrapped  
 100bps Insurance  
 14bps Liquidity, 8bps Remarketing  
 1.25% COI

\$325MM Swap Effective 8.9.2011, Fixed Rate Yields as of 10.19.07

\$325MM Insured VRDDs w/ Liq. & \$175MM Insured Fixed Rate Bonds

Date	Deposit	Interest @ 4.25%	Principal	Scheduled Draws	Balance
02/28/2009	55,934,612.63	191,026.69	-191,026.69		56,125,639.32
03/31/2009		193,378.61	1,602,871.38	1,796,249.99	54,522,767.94
04/30/2009		187,359.79	1,489,723.54	1,677,083.33	53,033,044.40
05/31/2009		182,083.68	1,494,999.65	1,677,083.33	51,538,044.75
06/30/2009		176,788.89	1,679,044.44	1,855,833.33	49,859,000.31
07/31/2009		170,842.28	1,506,241.05	1,677,083.33	48,352,759.26
08/31/2009		165,507.67	1,511,575.66	1,677,083.33	46,841,183.60
09/30/2009		160,154.18	1,695,679.15	1,855,833.33	45,145,504.45
10/31/2009		154,148.65	1,522,934.68	1,677,083.33	43,622,569.77
11/30/2009		148,754.92	1,528,328.41	1,677,083.33	42,094,241.36
12/31/2009		143,342.09	1,712,491.24	1,855,833.33	40,381,750.12
01/31/2010		137,277.02	1,539,806.31	1,677,083.33	38,841,943.81
02/28/2010		131,837.68	1,545,245.65	1,677,083.33	37,296,698.16
03/31/2010		126,692.77	1,729,140.56	1,855,833.33	35,567,557.60
04/30/2010		120,226.75	1,556,856.58	1,677,083.33	34,010,701.02
05/31/2010		114,712.88	1,562,370.45	1,677,083.33	32,448,330.57
06/30/2010		109,179.49	1,746,653.84	1,855,833.33	30,701,676.73
07/31/2010		102,993.42	1,574,089.91	1,677,083.33	29,127,586.82
08/31/2010		97,418.52	1,579,664.81	1,677,083.33	27,547,922.01
09/30/2010		91,823.88	1,764,009.45	1,855,833.33	25,783,912.56
10/31/2010		85,576.34	1,591,506.99	1,677,083.33	24,192,405.57
11/30/2010		79,939.76	1,597,143.57	1,677,083.33	22,595,262.00
12/31/2010		74,283.21	1,781,550.12	1,855,833.33	20,813,711.88
01/31/2011		67,973.55	1,609,109.78	1,677,083.33	19,204,602.10
02/28/2011		62,288.76	1,614,794.57	1,677,083.33	17,589,807.53
03/31/2011		56,897.54	1,798,935.79	1,855,833.33	15,790,871.74
04/30/2011		50,184.32	1,626,899.01	1,677,083.33	14,163,972.73
05/31/2011		44,422.39	1,632,660.94	1,677,083.33	12,531,311.79
06/30/2011		38,640.05	1,817,193.28	1,855,833.33	10,714,118.51
07/31/2011		32,204.16	1,644,879.17	1,677,083.33	9,069,239.34
08/31/2011		26,378.54	1,650,704.79	1,677,083.33	7,418,534.55
09/30/2011		20,267.11	1,913,024.56	1,933,291.67	5,505,509.99
10/31/2011		13,395.38	1,769,312.95	1,782,708.33	3,736,197.04
11/30/2011		7,129.07	1,775,579.26	1,782,708.33	1,960,617.78
12/31/2011		840.55	1,960,617.78	1,961,458.33	
	55,934,612.63	3,565,970.59	55,934,612.63	59,500,583.22	

Average Life (years):	1.4998
Yield To Receipt Date:	4.2883432%
Arbitrage Yield:	4.3092670%
Value of Negative Arbitrage:	16,520.95

## SECTION XXV. ECONOMIC FEASIBILITY

**SECTION XXV. REVIEW CRITERIA RELATING TO ECONOMIC FEASIBILITY**

This section is applicable to all projects subject to Part 1120.

**A. Criterion 1120.310.a, Reasonableness of Financing Arrangements**

Is the project classified as a category B project? **Yes** **No** If no is indicated this criterion is not applicable. If yes is indicated, has proof of a bond rating of "A" or better been provided? **Yes** **No** If yes is indicated this criterion is not applicable, go to item B. If no is indicated, read the criterion and address the following:

Are all available cash and equivalents being used for project funding prior to borrowing? **Yes** **No**

If no is checked, provide a notarized statement signed by two authorized representatives of the applicant entity (in the case of a corporation, one must be a member of the board of directors) that attests to the following:

1. a portion or all of the cash and equivalents must be retained in the balance sheet asset accounts in order that the current ratio does not fall below 2.0 times; or
2. borrowing is less costly than the liquidation of existing investments and the existing investments being retained may be converted to cash or used to retire debt within a 60 day period.

**APPEND DOCUMENTATION AS ATTACHMENT ECON-1 AFTER THE LAST PAGE OF THIS SECTION.**

**B. Criterion 1120.310.b, Conditions of Debt Financing**

Read the criterion and provide a notarized statement signed by two authorized representatives of the applicant entity (in the case of a corporation, one must be a member of the board of directors) that attests to the following as applicable:

1. The selected form of debt financing the project will be at the lowest net cost available or if a more costly form of financing is selected, that form is more advantageous due to such terms as prepayment privileges, no required mortgage, access to additional debt, term (years) financing costs, and other factors;
2. All or part of the project involves the leasing of equipment or facilities and the expenses incurred with such leasing are less costly than constructing a new facility or purchasing new equipment.

**APPEND DOCUMENTATION AS ATTACHMENT ECON-2 AFTER THE LAST PAGE OF THIS SECTION.**

**C. Criterion 1120.310.c, Reasonableness of Project and related Costs**

Read the criterion and provide the following:

1. Identify each department or area impacted by the proposed project and provide a cost and square footage allocation of new construction and/or modernization using the following format (insert after this page).

COST AND GROSS SQUARE FEET BY DEPARTMENT OR SERVICE									
Department (list below)	A	B	C	D	E	F	G	H	Total Cost (G + H)
	Cost/Square Foot New Mod.		Gross Sq. Ft. New Circ. *		Gross Sq. Ft. Mod. Circ. *		Const. \$ (A x C)	Mod. \$ (B x E)	
Contingency									
<b>TOTALS</b>									

\*Include the percentage (%) of space for circulation

- 2. For each piece of major medical equipment included in the proposed project, the applicant must certify one of the following:
  - a. that the lowest net cost available has been selected; or
  - b. that the choice of higher cost equipment is justified due to such factors as, but not limited to, maintenance agreements, options to purchase, or greater diagnostic or therapeutic capabilities.

**APPEND DOCUMENTATION AS ATTACHMENT ECON-3 AFTER THE LAST PAGE OF THIS SECTION.**

- 3. List the items and costs included in preplanning, site survey, site preparation, off-site work, consulting, and other costs to be capitalized. If any project line item component includes costs attributable to extraordinary or unusual circumstances, explain the circumstances and provide the associated dollar amount. When fair market value has been provided for any component of project costs, submit documentation of the value in accordance with the requirements of Part 1190.40.

**APPEND DOCUMENTATION AS ATTACHMENT ECON-4 AFTER THE LAST PAGE OF THIS SECTION.**

**D. Criterion 1120.310.d, Projected Operating Costs**

Read the criterion and provide in the space below the facility's projected direct annual operating costs (in current dollars per equivalent patient day or unit of service, as applicable) for the first full year of operating after project completion or for the first full fiscal year when the project achieves or exceeds target utilization pursuant to 77 Ill. Adm. Code 1100, whichever is later. If the project involves a new category of service, also provide the annual operating costs for the service. Direct costs are the fully allocated costs of salaries, benefits, and supplies. Indicate the year for which the projected operating costs are provided.

See Attachment ECON - 5 for projected operating costs after project completion.

**E. Criterion 1120.310.e, Total Effect of the Project on Capital Costs**

Is the project classified as a category B project? Yes No . If no is indicated, go to item F. If yes is indicated, provide in the space below the facility's total projected annual capital costs as defined in Part 1120.130.f (in current dollars per equivalent patient day) for the first full fiscal year after project completion or for the first full fiscal year when the project achieves or exceeds target utilization pursuant to 77 Ill. Adm. Code 1100, whichever is later. Indicate the year for which the projected capital costs are provided.

2015 depreciation	\$70,302,295	
2015 interest	28,764,633	
2015 total cap. cost	\$99,065,928	
2015 equivalent days	611,633	(based on ratio of OP/IP Revenue of 0.6788)
2015 capital cost/equiv. days	= \$162	

**F. Criterion 1120.310.f, Non-patient Related Services**

Is the project classified as a category B project and involve non-patient-related services? Yes No If no is indicated, this criterion is not applicable. If yes is indicated, read the criterion and document that the project will be self-supporting and not result in increased charges to patients/residents or that increased charges are justified based upon such factors as, but not limited to, a cost benefit or other analysis that demonstrates the project will improve the facility's viability.

See Attachment ECON - 5

**APPEND DOCUMENTATION AS ATTACHMENT ECON-5 AFTER THE LAST PAGE OF THIS SECTION.**

December 3, 2007

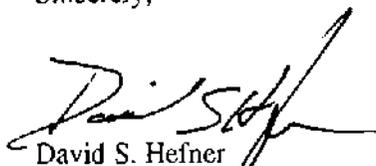
Illinois Health Facilities Planning Board  
525 West Jefferson Street, 2nd Floor  
Springfield, Illinois 62761

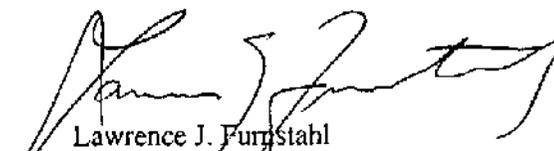
In Re: XXV. A. Reasonableness of Financing Arrangements  
New Hospital Pavilion

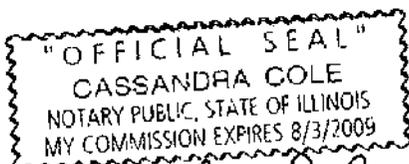
We propose to borrow \$500 million of the \$786 million cost of this project. The remainder is financed by cash earned from operations and charitable donations. Borrowing at an average rate of interest of 4.6 percent is less costly than the earnings we would forego by selling investments. In FY05 our investment yield was 10.8 percent, FY06 was 8.1 percent, and in FY07 was 17.0 percent. We expect this differential to hold in the future. In the event that investments must be liquidated to meet debt obligations, a sufficient amount to do so can be liquidated within a 60 day period.

We the undersigned are officers of the University of Chicago Medical Center, the applicant.

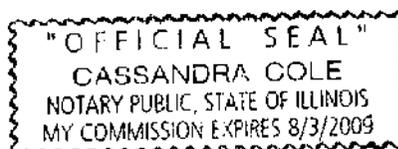
Sincerely,

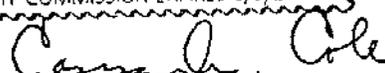
  
David S. Hefner  
President

  
Lawrence J. Furstahl  
Chief Financial & Strategy Officer



  
12/6/07



  
12/6/07

ATTACHMENT ECON-1

December 3, 2007

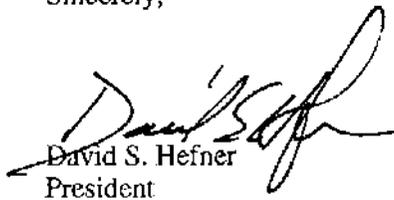
Illinois Health Facilities Planning Board  
525 West Jefferson Street, 2nd Floor  
Springfield, Illinois 62761

In Re: XXV. B. Conditions of Debt Financing  
New Hospital Pavilion

The proposed method of debt financing for the New Hospital Pavilion is the lowest cost method available. We estimate the cost of the tax-exempt bond issue is 4.3 percent per year. Our cash reserves have averaged an investment return of 12.0 percent the past three years, so financing from cash reserves is significantly more costly.

We the undersigned are officers of the University of Chicago Medical Center, the applicant.

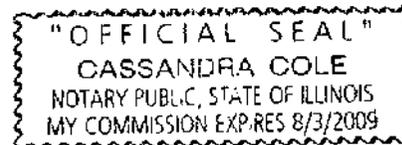
Sincerely,

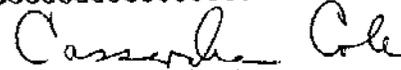
  
David S. Hefner  
President

  
Lawrence J. Furstahl  
Chief Financial & Strategy Officer



  
12/6/07



  
12/6/07

ATTACHMENT ECON-2

## SECTION XXV. ECONOMIC FEASIBILITY

## C.I. Reasonableness of Project Costs

COST AND GROSS SQUARE FEET BY DEPARTMENT OR SERVICE												
Department (list below)	A	B	C		D		E		F	G	H	Total
	Cost/Sq.	Foot	Gross Sq. Ft.		Gross Sq. Ft.		Gross Sq. Ft.			Const. \$	Mod. \$	Costs
	New	Mod.	New	Circ.	Mod	Circ.				(A x C)	(B x E)	(G + H)
<b>Reviewable:</b>												
Med/Surg Acute Care	\$350.48		141,552	32%						49,611,812		\$49,611,812
ICU	414.52		49,173	32%						20,383,395		20,383,395
Surgery	430.62		61,389	29%						26,434,934		26,434,934
Preparation/Recovery	494.92		37,038	29%						18,330,921		18,330,921
Anatomic Pathology Lab	543.32		8,254	34%						4,484,460		4,484,460
Central Sterile Processing	326.40		9,296	38%						3,034,124		3,034,124
Radiology	422.98		36,422	42%						15,405,717		15,405,717
GI Procedures	422.98		13,839	42%						5,853,425		5,853,425
Pharmacy	318.76		11,602	46%						3,698,355		3,698,355
Respiratory Therapy	300.58		1,959	32%						588,882		588,882
Clinical Support	286.45		16,069	32%						4,602,877		4,602,877
Contingency	39.43		0	37%						15,242,890		15,242,890
<b>Reviewable Total</b>	<b>\$433.72</b>		<b>386,593</b>							<b>167,671,792</b>		<b>\$167,671,792</b>
<b>Non-reviewable:</b>												
Family and Staff Support	\$286.45		189,051	33%						54,152,794		\$54,152,794
Support Services	286.45		85,955	34%						24,621,354		24,621,354
Mechanical/Electrical/Plumbi	543.65		326,805	25%						177,666,002		177,666,002
Bridges/Tunnels	322.61		7,726	38%						2,492,483		2,492,483
Future Development	106.13		198,478	34%						21,064,091		21,064,091
Contingency	34.65		0	37%						27,999,672		27,999,672
<b>Non-reviewable Total</b>	<b>286.45</b>		<b>808,014</b>							<b>307,996,396</b>		<b>307,996,396</b>
<b>TOTALS</b>	<b>\$398.18</b>		<b>1,194,607</b>							<b>475,668,188</b>		<b>475,668,188</b>

## SECTION XXV. C. Reasonableness of project Costs – Comparison to State Standard

The projected construction cost is \$434 per square foot, exceeding the non-weighted State norm of \$379. The State norm is understated in several regards. In recent months, the State Agency does not appear to have been using project weighting factors, which assign cost weighting according to the project components. Areas that are complex and costly to construct receive weightings such as 1.32 for Surgery and 1.30 for Radiology, while less costly areas receive lesser weights, i.e. 0.88 for offices. These factors have been employed by the State Agency for most of its 33 year history and our experience is that they produce reasonably accurate cost estimates in large projects with many departments. The weighting factors, when applied to the reviewable portions of the project produce an overall cost factor of 1.2164 as shown in the table that follows. Applying this factor to the State norm produces a weighted cost amount of \$458. This is higher than our estimated \$434.

Another factor that should be examined is expected construction cost inflation. The State Agency uses 3 percent per year. Experience over the past three years and expectations for the next several years suggest that 3 percent is much too low. Our construction manager, Gilbane/O'Neill studied construction inflation in Chicago, examining indices and forecasts from several sources. The Turner Construction Cost Index showed increases of 9.5 percent in 2005, 10.6 percent in 2006, and an annual increase of 7.7 percent through the third quarter of 2007. The ENR-BCI Index reports 6.2 percent for Chicago, nearly twice their 20 city average of 3.2 percent. RSMeans CCI indicates annualized cost growth of 7.2 percent. AGC Construction Inflation Alert (report included in this section) discusses the fact that while the CPI might stay in the 1.5 to 3 percent range, rising costs of construction inputs such as oil indicate that a 6 to 8 percent price growth is likely in 2008. Reed Construction Data forecasts a 5 to 7 percent increase for 2008. Gilbane/O'Neill assesses these forecasts and based on their sense of the local market, expects 8 percent inflation in Chicago construction costs each of the next few years. If 8 percent is used to calculate the State norm rather than 3 percent, it becomes \$440, which is greater than our expected cost.

SECTION XXV.C. Reasonableness of Project Costs - Comparison to State Standard

Cost Weighting of Reviewable Departments

Reviewable Department	<u>GSF</u>	<u>Cost</u> <u>Factor</u>	<u>GSF x</u> <u>Factor</u>	<u>Constr.</u> <u>Cost</u>
Med/Surg Acute Care	141,552	1.0738	151,998	\$49,611,812
ICU	49,173	1.2700	62,450	20,383,395
Surgery	61,389	1.3193	80,990	26,434,934
Preparation/Recovery	37,038	1.5163	56,161	18,330,921
Anatomic Pathology Lab	8,254	1.6646	13,739	4,484,460
Central Sterile Processing	9,296	1.0000	9,296	3,034,124
Radiology	36,422	1.2959	47,199	15,405,717
GI Procedures	13,839	1.2959	17,933	5,853,425
Pharmacy	11,602	0.9766	11,331	3,698,355
Respiratory Therapy	1,959	0.9209	1,804	588,882
Clinical Support	16,069	0.8776	14,102	4,602,877
	<u>386,593</u>	<u>1.2080</u>		<u>152,428,902</u>
Contingency				15,242,890
Construction Total				<u>\$167,671,792</u>

Comparison of Project \$/sf with State Norm

State Norm \$/gsf			
R.S. Means 3rd Quartile	\$345		
Chicago Adjustment	above		
Component weighting	1.2080	Not being used recently.	
Inflation to midpoint	1.098	From 3/07 to 5/10 at 3%/yr.	
State Standard \$/gsf	\$379		If 6%      If 8%
With component wtg.	\$458		1.203      1.276
Project Cost /gsf			\$415      \$440
Construction	\$152,428,902		
Contingency	15,242,890		
Total Construction	<u>\$167,671,792</u>		
Project gsf	386,593		
Constr. Cost/gsf	\$434		

## **Construction Cost Escalation Summary**

In the Chicago market we have experienced escalation in the 8 percent range for the prior twelve months. Going forward, we anticipate a similar level of increase based on strength in commodity prices, increasing labor costs and overall growth of the non-residential market sector.

Material costs have been experiencing a decreasing rate of escalation recently. However, there is speculation that recent interest rate cuts could ignite demand and lead to increased material prices. Additionally, the weakness of the US dollar translates into additional upward trending of cost components. Note in particular the statement by AGC (October 2007 Inflation Alert) that CPI figures may lag actual experienced construction costs by 5 percent and the potential detrimental position of those that rely upon CPI for projecting future costs..

We have included a synopsis of various cost tracking indexes below. Each reflects a variation based on how the data is collected and interpreted. It is interesting to note which indexes are tracking actual costs, such as the Turner Cost Index, versus using construction inputs to make estimations as to market valuation. The indexes generally validate a 6 – 8 percent escalation range in the prior twelve months from the data date.

### **Turner Construction Cost Index**

The Turner Construction Cost Index shows growth of 10.6% for 2006 followed 9.5% for 2005. The 3<sup>rd</sup> Quarter 2007 year-over-year growth indicates 7.7%

The Turner Cost Index provides an indication of the bidding environment reflecting the market for which the University of Chicago New Healthcare Pavilion is categorized which is generally larger private and public projects and limited residential influence.

<http://www.turnerconstruction.com/corporate/content.asp?d=20>

### **The ENR-BCI Index**

The ENR-BCI Index indicates annualized cost growth of 6.2% as of their September 2007 reporting for Chicago. Note that the Chicago market is almost twice that of the 20 city average of 3.2%.

The ENR 20 city average is typically less than what we have actually experienced in the commercial market locally since it contains no factors for exterior enclosure, glass, masonry, site work and particularly mechanical and electrical systems. MEP alone can represent over 40% of the construction cost.

### **RSMeans Construction Cost Index (CCI) U.S. 30-City Average – October 2006**

The RSMeans CCI indicates an annualized cost growth of 7.2%

### **AGC Construction Inflation Alert - October 2007**

The October 2007 AGC Construction Inflation Alert states the following:

“Overall PPI for construction inputs may continue to rise faster than the CPI on a year-over-year basis. The CPI appears likely to stay in the 1.5 – 3 percent growth range that has characterized most of the past several years. But several construction inputs experienced steep drops in the second half of 2006 that may not be repeated in late 2007. For instance, the price of diesel fuel

## **Construction Cost Escalation Summary**

would have to fall to 55 cents per gallon by January 2008 to match the January 2007 level. Such a sudden decline is possible but unlikely when crude oil prices have recently been setting record highs."

"The PPI for construction inputs could well increase 6 – 8 percent per year in 2008 – 12 as it did in 2004, 2005 and 2006. The CPI is likely to remain in the 1 – 3 percent range, so any construction budget projection that relies on the CPI will rapidly fall short of actual costs"

### **Reed Construction Cost Data - Construction Materials Prices January 25, 2007 (Construction Materials Prices Update)**

Expect a buyers' market for most materials, at least through the winter, when materials demand will be restrained by the tail-end of a period of inventory reduction and further small demand cuts by homebuilders. Inflation resumes later in the year. Reed Construction Data (RCD) forecasts a 5% to 7% annual inflation pace late in 2007 and through 2008.

<http://www.buildingteamforecast.com/article/CA6410004.html?industryid=43720>

### **Construction Spending Forecast**

2007 spending total had been predicted to increase only up 2%; however this is a blended figure with residential construction spending down 10% and non residential spending up 12%. Even with the worst housing slump in 16 years, total construction activity is still increasing due to non residential activity.

### **Reed Construction Data – January 25, 2007 - Construction Starts**

2008 results indicate the Midwest construction starts at 25% growth year over year with the Northeast a distant second at 12%.

This trend appears to have had a significant impact on the strength of labor cost increases in the Chicago market. Increases for local commercial labor are currently negotiated in the 4.5 – 5 percent range annually and agreements are from two to five years. Labor expenditures are generally 40 – 45 percent of the total construction cost.

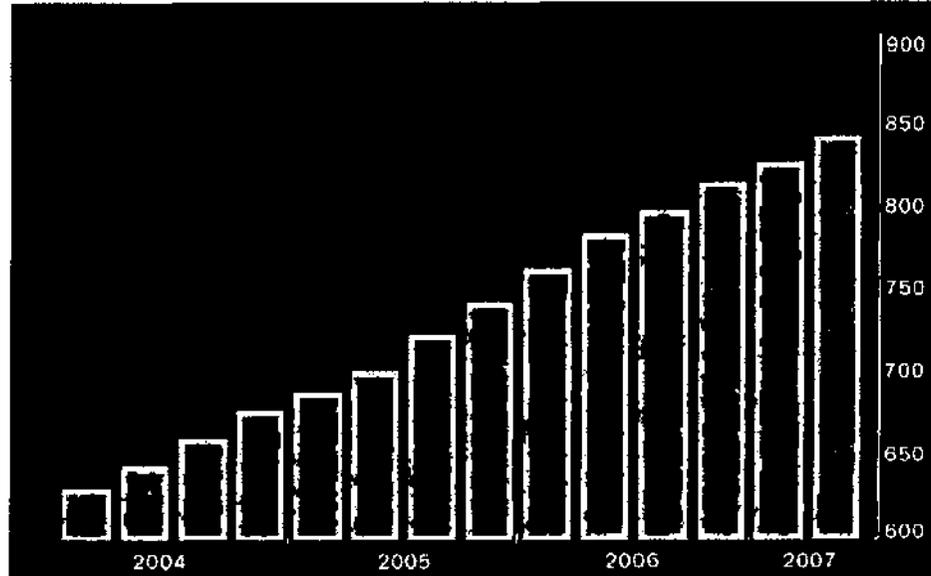
In addition to productivity losses that stem from tight labor availability, labor wage cost is being supplemented in some cases with added bonuses to attract and keep skilled labor. This escalates the project labor costs beyond that seen in labor agreement increases reported above.

### **Summary**

Based on supporting data sources referenced we believe it is responsible and reasonable to forecast 8% escalation for prospective labor and material cost increases on major non-residential construction projects in the institutional market for urban settings.

# TURNER BUILDING COST INDEX

"Construction costs continue to be driven by the increasing level of activity in the non-residential building sector and a lack of available skilled labor to deliver projects. Although drywall prices have turned down, structural steel, copper and petroleum based products are on the upswing again. Manufacturers and suppliers are also passing along increased transportation costs in their pricing structures."



Karl F. Almstead  
Vice President



Turner's Building Cost Index is determined by the following factors considered on a nationwide basis: labor rates and productivity, material prices and the competitive condition of the marketplace.

Quarter	Index	▲ %
2nd Quarter 2007	847	1.9
1st Quarter 2007	831	1.6
4th Quarter 2006	818	2.1
3rd Quarter 2006	801	1.8



Florida International University Lakeview Housing, Miami, FL

Year	Average Index	▲ %
2006	793	10.6
2005	717	9.5
2004	655	5.4
2003	621	0.3
2002	619	1.0
2001	613	3.0
2000	595	4.4
1999	570	3.8
1998	549	4.6
1997	525	4.0
1996	505	2.6

To find this index and its accompanying press release online please visit:

[www.turnerconstruction.com/costindex](http://www.turnerconstruction.com/costindex)

This site links to cost indices since the first quarter of 2000.

Building the Future

Turner

# AGC's CONSTRUCTION INFLATION ALERT

REPORTED BY AGC CHIEF ECONOMIST KEN SIMONSON



October 2007

*Building Your Quality of Life*

## Construction Costs: End of the Calm Is Coming Soon

Nonresidential construction has had a banner year so far in 2007. Spending on nearly every segment has increased compared to 2006, despite the plunge in homebuilding. Meanwhile, the materials cost surges that plagued the industry in 2004-2006 have slowed dramatically, and labor remains available in most markets.

Unfortunately, many observers expect that the end of the calm is coming soon. The worsening slide in homebuilding and turmoil in the credit markets threaten some types of nonresidential construction. At the same time, some materials costs are beginning to turn up again, and labor costs have started to accelerate.

This report analyzes the most pertinent data to answer questions about supplies of labor, materials and capital such as: will the Federal Reserve's half-point cut in interest rate targets help keep nonresidential construction going? Or was the move too late, or irrelevant? Are construction costs getting back to "normal"? Or is the recent slowdown in materials price increases only a pause before escalation resumes? Will the recent run-up in construction wages continue? Or will a slowing economy bring down labor costs?

For the first time, this report shows the cumulative price change since December 2003 and trends in construction wages. Also new to this report is a sampling of comments on credit market turmoil. Finally, the report examines the trends in construction activity, materials and labor costs over the past several years as well as the record so far in 2007 to draw conclusions about what contractors and owners should expect in 2008 and beyond. The report relies on publicly available data to give contractors, owners, budget planners, media and others an independent basis for understanding what has happened and will happen next.

### Summary

The strong growth of nonresidential construction in 2006 and 2007 has been obscured by the steep falloff in residential work. Nonresidential construction recovered more slowly than many sectors after the business

*The Construction Inflation Alert is the fifth in a series of continuing economic reports educating contractors and owners on construction materials prices.*

[www.agc.org](http://www.agc.org)

The Associated General  
Contractors of America  
2300 Wilson Boulevard  
Arlington, Virginia 22201

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ATTACHMENT ECON - 3

*"We have experienced a slowdown in our business and project starts in general due to financing. The developers are encountering difficulties in obtaining financing even when they have appropriate sales."*

*-deep foundation contractor, Miami, FL*

slump of 2000-2001. But in 2006, nonresidential spending jumped 12 percent from 2005. In the first eight months of 2007, nonresidential spending climbed another 14 percent compared to the same period of 2006. Meanwhile, spending on residential construction has tumbled since early 2006, with no letup in sight.

The housing meltdown and the more recent credit market turmoil do have some spillover effects on nonresidential construction. Retail, suburban office and local government construction are especially affected by the drop in homebuilding, home sales, and property values, respectively. Tighter lending standards and financial-firm layoffs will trim construction of offices and other income-producing properties, such as hotels and warehouses.

The Fed's cuts in short-term lending rates and encouragement to banks to borrow through the Fed's "discount window" appear to have restored the flow of some commercial lending. That may help some home buyers and commercial developers. But the move also raises the risk of greater inflation and, especially, higher prices for petroleum products and imported materials. The net impact on nonresidential construction is unclear.

After years of minimal cost increases, prices of many construction materials skyrocketed from 2004 to mid-2006. Since mid-2006, some input prices have moderated, while others have fallen. But the cumulative increase in the producer price index (PPI) for construction inputs since December 2003 (28 percent through August 2007) remains more than double the 13 percent increase in the most common measure of overall inflation, the consumer price index (CPI) for all urban consumers. Labor costs, in contrast, have risen at similar rates for construction and for the private sector as a whole.

The cumulative difference matters because the estimates for many projects now being bid, especially public facilities, were prepared in 2003-2005 under the assumption that construction costs would escalate at the same rate as the CPI. That divergence explains why some projects are being canceled, delayed or redesigned.

In the next several months, the PPI for construction inputs, which covers items used up in construction such as diesel fuel as well as materials that go into a project, is expected to accelerate to a 3-5 percent annual rate of increase from the recent 1.5-3 percent range. By the end of 2008, and indefinitely thereafter, construction input costs are likely to be rising at 6-8 percent. Labor cost increases could top 5 percent by the end of 2007 and 5-6 percent in subsequent years.

## Construction Spending

### Recent History

In 2006, construction spending as reported by the Census Bureau ([www.census.gov/constructionspending](http://www.census.gov/constructionspending)) set a record of \$1.19 trillion, up 5 percent from 2005. Private residential construction was unchanged after 10 straight years of strong growth. Private

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nonresidential construction, which fell from 2000 to 2003, surged 15 percent, and public construction rose 9 percent.

**Table 1****Construction Spending by Segment, 2006 and August 2007**

Segment	2006	8/07
<b>Total</b>	\$1.19 tril.	\$1.17 tril.
<b>% of total</b>	<b>100%</b>	<b>100%</b>
<b>Private residential</b>	<b>54%</b>	<b>45%</b>
<i>New single-unit</i>	35	26
<i>New multi-unit</i>	4	4
<i>Improvements</i>	14	15
<b>Private nonresidential</b>	<b>25</b>	<b>30</b>
<b>Public</b>	<b>21</b>	<b>25</b>

Note: Detail may not add to 100% due to rounding.

August 2007 total is seasonally adjusted at annual rate.

Source: U.S. Census Bureau

The market has shifted radically during 2007. (See Table 1.) Although total spending fell only 2 percent from 2006 (full year total) to August 2007 (seasonally adjusted monthly total, expressed at an annual rate), the share represented by single-unit construction plunged from 35 percent of the total to 26 percent. New multi-unit construction and improvements to existing single- and multi-unit residential structures remained nearly constant, while nonresidential construction continued to grow rapidly.

So far in 2007, nearly every category of nonresidential construction has risen, many at double-digit rates. (See Table 2.) Some segments are still rebounding from the long slowdown earlier in the decade (lodging, power, manufacturing). Others are growing in response to changing technological, demographic and other market factors (healthcare, education, communication).

The plunge in homebuilding and home sales and the deceleration or drop in residential property values have had limited effects to date on nonresidential construction. With the development of fewer subdivisions, there has been a slowdown in related retail (convenience stores, neighborhood shopping centers), office (real estate agents and mortgage brokers), religious and public construction (schools, playgrounds, streets, water and sewer). The slump has also led retailers that sell homebuilding, yard and

**Table 2****Nonresidential Construction Spending by Segment, 2006 and Change, January-August 2007**

Segment	2006 Spending (bil. \$) (%)		% Change 2006-2007
Educational	86	16	+14
Commercial	76	14	+15
Highway & street	72	13	+5
Office	55	10	+21
Healthcare	40	7	+15
Power	39	7	+22
Manufacturing	34	6	+6
Transportation	27	5	+11
Sewage & waste disposal	23	4	+6
Communication	21	4	+20
Amusement & recreation	18	3	+9
Lodging	18	3	+64
Water supply	15	3	+6
Public safety	8	1	+27
Religious	8	1	-2
Conservation & develop.	5	1	+5
<b>Total</b>	<b>5545</b>	<b>100%</b>	<b>+14%</b>

Note: Details may not add to totals due to rounding. 2006-2007 change is for January-August.

Source: U.S. Census Bureau

*"I am beginning to see the turmoil in the financial markets have an effect on infant projects, and my view of this is financing for certain projects is in question."*

*- air conditioning contractor;  
Colorado*

garden supplies and furniture and furnishings to trim construction. But the bulk of retail construction has been driven by rising personal incomes and continuing low unemployment.

Recent turmoil in credit markets also has had relatively little effect on nonresidential construction, according to contractors reporting to AGC or to the Federal Reserve's "Beige Book" surveys conducted in July and late August. However, some developers have reported that it has become much harder to secure financing for income-producing properties, such as retail, warehouses, hotels, apartments and mixed-use projects.

### The Outlook

The moves by the Federal Reserve to lower short-term interest rate targets and encourage banks to borrow from its "discount window" will enable more families to buy or hang onto houses. In addition, companies will have more access to credit. But lending standards are likely to remain tighter than before the turmoil began. In addition, the lowering of U.S. interest rates may depress the dollar further, making imports such as petroleum products more expensive and possibly pushing up inflation rates. Thus, it is not clear that the Fed's actions will aid construction.

Currently, it appears that segments of nonresidential construction that are relatively insulated from short-term interest rates or changing loan standards, such as power, communications, hospitals and some public construction, will continue to expand rapidly through 2008. Income-producing properties will slow sharply as current projects are completed. Highway construction also is likely to slow, as federal and state highway funds become depleted by a combination of high materials costs and sluggish growth of gas tax receipts.



### Materials Costs

#### Recent history

Construction materials costs, like consumer prices, were relatively stable during the business slowdown of 2000-2001 and the early years of recovery. The CPI for all urban consumers (posted monthly by the Bureau of Labor Statistics at [www.bls.gov/cpi](http://www.bls.gov/cpi)) went up about 2 percent per year in 2001 through 2003. The PPI (posted monthly at [www.bls.gov/ppi](http://www.bls.gov/ppi)) for inputs to construction industries, comprising materials that go into finished structures and also those consumed in construction (principally diesel fuel) declined 0.9 percent in the 12 months through December 2001, then rose 0.7 percent in 2002 and 3 percent in 2003. Nearly every major construction input had at least one year in which prices declined in that three-year period.

But since December 2003, the PPI for inputs to construction industries has far outrun both

the broader, more familiar PPI for finished goods and the CPI for all urban consumers (CPI-U). (See Chart 1, page 6.)

A combination of steadily rising gross domestic product (GDP) in the United States, an upturn in both residential and nonresidential construction, and demand from fast-growing economies such as China and India led to sharp price escalation for numerous construction inputs in 2004. From December 2003 to December 2004 there were increases of 20-49 percent in the PPIs for steel mill products, diesel fuel, copper and brass mill shapes and gypsum products. The overall PPI for construction inputs jumped 9.1 percent, compared to a 3.3-percent rise in the CPI.

Some of these prices subsided in 2005 but the damage to oil and gas production facilities caused by Hurricanes Katrina and Rita produced even larger increases in the cost of diesel fuel, asphalt and plastic construction products. High energy and transportation costs, in turn, pushed up the price of energy-intensive and imported materials, including cement and copper ore. From December 2004 to December 2005, there were increases of 10-47 percent for diesel fuel, copper and brass mill shapes, plastic construction products, gypsum products, asphalt paving mixtures and blocks, and concrete products. The overall PPI for construction inputs climbed 8.2 percent, vs. 3.4 percent for the CPI.

In 2006, prices continued rising for several months but peaked in the late spring or early summer. For instance, the futures price for copper on the Comex division of the New York Mercantile Exchange more than doubled, from \$1.90 per pound in December 2005 to \$4 per pound in May 2006, before retreating steeply over the next eight months. Retail diesel prices rose to a near-record \$3.06 per gallon in mid-August 2006, according to a weekly survey of truckstops posted by the Energy Information Administration ([www.eia.doe.gov/mogas](http://www.eia.doe.gov/mogas)), before tumbling to \$2.41 per gallon by January 2007. For the 12 months ending in December 2006, the PPI for inputs to construction rose 4.6 percent, less than in the previous two years but again outpacing the CPI, which climbed just 2.5 percent.

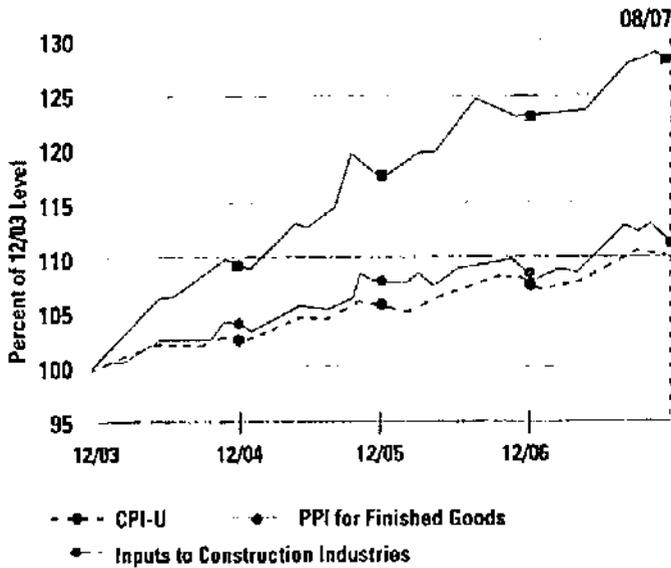
Construction input prices have been mixed so far in 2007 but generally have varied less in both directions than in the previous three years. Large price increases for iron and steel scrap pushed up the price of structural steel, which is made almost entirely from scrap, in the first four months of the year, but those prices leveled off by mid-year. An enormous jump in nickel prices, along with higher steel prices, sent stainless steel soaring in the first half of the year before retreating somewhat in the summer. Retail diesel prices rose more than 40 cents per gallon but remained slightly lower than year-ago prices during the first eight months of 2007. The PPI for gypsum products peaked in July 2006 but tumbled 20 percent in the subsequent 12 months under the combined weight of new plant openings and a dive in demand from residential construction. As a result of these more moderate—or negative—movements, the PPI for construction inputs was up 1.6 percent from August 2006 to August 2007, even less than the 2.5 percent rise in the CPI.



**Chart 1**

**Cumulative Change in Consumer, Producer & Construction Prices**

(All PPIs = 100 in 12/03)



**Cumulative change**

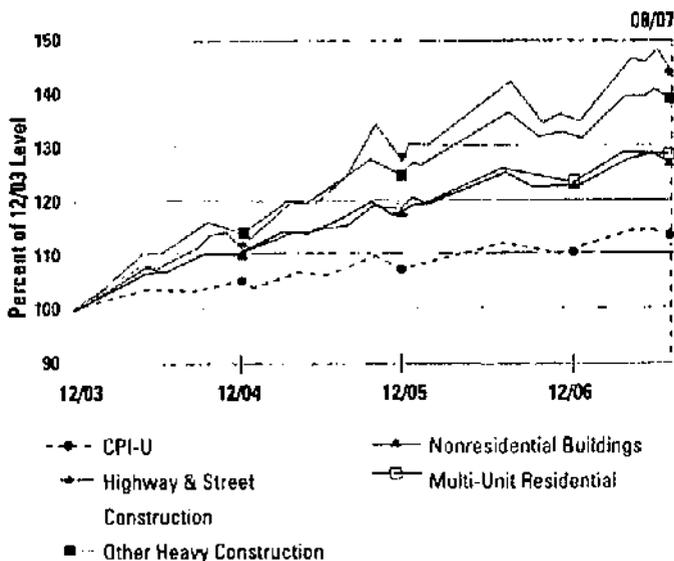
Despite the recent narrowing in construction materials and consumer price changes, the *cumulative* change in the construction PPI since December 2003—28 percent—dramatically exceeds the 13 percent change in the CPI over that span, as Chart 1 shows. The disparity is even greater for some types of construction, depending on the predominant inputs. (See Chart 2.)

The PPI for highway and street construction inputs soared 43 percent from December 2003 through August 2007; the index for “other heavy construction,” 36 percent. Both of those types rely more than building construction does on diesel fuel, steel, concrete and—in the case of highways—asphalt. All four of those indexes rose more rapidly than the overall construction inputs PPI: 140 percent for diesel fuel, 61 percent for steel mill products, 31.5 percent for concrete products, and 49 percent for asphalt paving mixtures and blocks. (See Chart 3.)

**Chart 2**

**Cumulative Change in PPIs for Construction Types**

(All PPIs = 100 in 12/03)



The cumulative change in the PPIs for nonresidential and multi-unit residential buildings each rose 27 percent (See Chart 2), while the index for single-unit residential buildings climbed 22 percent—less than the increase in nonbuilding construction but well above the 13 percent change in the CPI. The building indexes were pulled up somewhat by the rise in steel, concrete and diesel prices. In addition, builders experienced above-average increases in the PPIs for copper and brass mill shapes (used in wiring, plumbing and roofing), 168 percent; gypsum products (wallboard and plaster), 27.5 percent; and construction plastic products (principally polyvinyl chloride, or PVC, pipes), 30 percent. Countering these large increases were the PPIs for brick and structural clay tile, up 20 percent; insulation materials, 11.5 percent; and lumber and plywood, -3 percent. (See Charts 4 and 5, pages 8 and 9, for selected inputs.)

The cumulative change matters for two reasons. First, many public agencies use the CPI or a similar index as the basis for projecting future costs. Jurisdictions that passed bond issues or adopted multi-year capital budgets in 2003-2005 using the CPI have encountered “sticker shock” when they opened bids in 2006 or 2007 that reflect

the reality of construction cost increases since then. Second, the current slowdown in construction cost increases may lead owners of projects currently under design or planning to assume that the 2004-2006 price run-up was an aberration that has ended, and that a CPI-like projection rate for construction costs will be appropriate again. Is that assumption valid?

### Materials Costs vs. Consumer Prices

Two factors distinguish construction input costs from the CPI. First, construction depends heavily on a relatively fixed set of materials. The choice of materials to enclose a given space or pave a mile of highway is limited and relatively unresponsive to price changes. Furthermore, many of the materials used by the U.S. construction industry are in strong demand in China, India and other developing countries. Those countries are simultaneously building infrastructure, industrial capacity and housing with modern conveniences. Many of the goods they are producing for their own new consumer class and for export also add to demand for materials needed for construction in the U.S.

Unfortunately, the supply of some of these inputs expands erratically, at best. An example is copper, used in construction, consumer and commercial electronics, motors, automobiles and many other products worldwide. There are relatively few mines that produce most of the world's supply. In 2006, strikes, labor unrest and political turmoil kept supplies from expanding in line with surging demand.

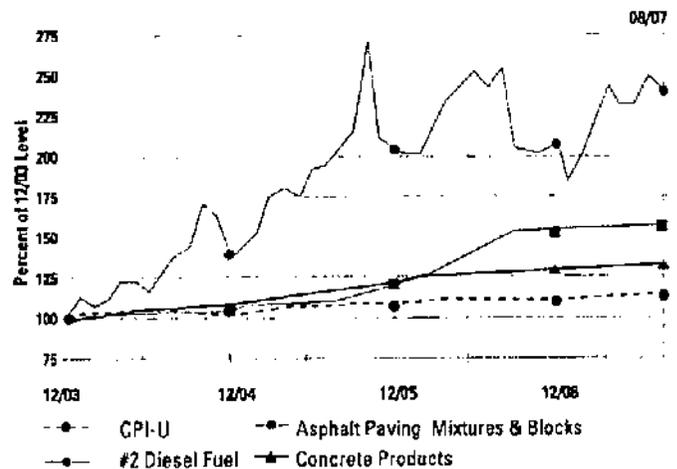
Also, many construction materials incorporate relatively little processing or "value added." Thus, an increase in copper ore prices shows up with little delay or mitigation in the price of wire, pipe and flashings.

In contrast, the consumer expenditure "basket" is dominated by services and by goods for which substitutes are often readily available or for which the cost of the raw materials is a minor fraction of the consumer price. Even for an input that is important to both contractors and consumers, such as oil, there

Chart 3

### Cumulative Change in PPIs for Selected Highway Inputs

(All PPIs = 100 in 12/03)



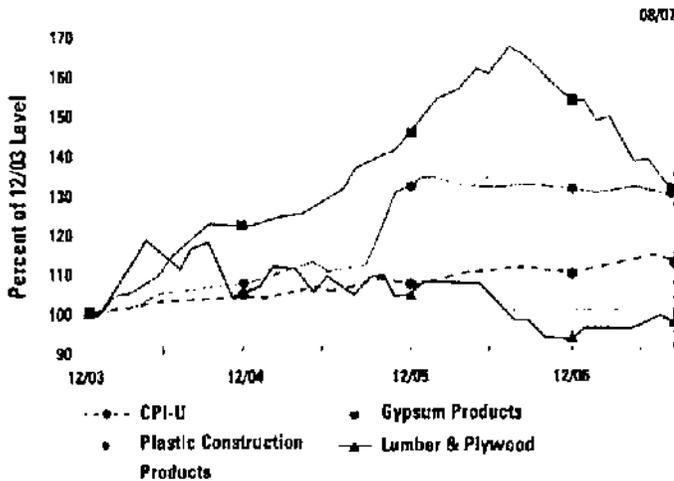
*"The 2-3 percent cement increase implemented mid-summer is hurting us, and the corrugate increase of anywhere from 6.5-12 percent which the corrugators are trying to implement by September 20 are deeply damaging our cost structure."*

*— stone supplier, Colorado*

**Chart 4**

**Cumulative Change in PPIs for Selected Building Inputs**

(All PPIs = 100 in 12/03)



is big difference in how they are affected. Highway contractors cannot readily reduce their use of asphalt or of diesel fuel to operate earthmoving equipment and dump trucks when crude-oil price increases make petroleum products more expensive. But consumers do eliminate some discretionary travel, switch to transit or carpools, and use more fuel-efficient vehicles when rising crude-oil prices push up the cost of gasoline.

Second, construction projects are more sensitive than consumers to the cost of transportation. Every job site requires hundreds, if not thousands, of deliveries of equipment and materials, plus the hauling away of dirt, debris and equipment. In addition, the materials tend to be heavy or bulky and often relatively low-value, so that transportation costs are a significant share of the delivered price.

A recent example is cement, which is mixed with water and aggregate (sand and crushed stone) to make concrete. In 2004 and 2005, shortages of cement were reported in more than 30 states, as demand from homebuilders (for foundations and driveways), building and parking-structure contractors, and highway, water and sewer projects outran domestic capacity. The PPI for cement climbed 12 percent in 2005. In 2006, after a vigorous lobbying campaign led by AGC, the U.S. and Mexico ended a longstanding dispute that had triggered duties of \$29 per ton or more on Mexican cement. (The duty was cut to less than \$4 in April 2006 and is scheduled to be repealed altogether in April 2009.) Also in 2006, China more than doubled its cement exports to the U.S. But high demand for the ships to carry cement (dry bulk carriers, which also carry scrap iron and steel, copper and nickel ore and other materials) meant that shipping rates soared. The PPI for cement climbed another 10.5 percent in 2006, despite more abundant foreign supplies.

**The Outlook**

In the next few months, construction input costs may remain subdued. The U.S. economy looks likely to grow less rapidly than in 2004-2006, lowering the growth in

demand for materials, fuel and freight transportation from other sectors. Homebuilding seems mired in a deep trough that will maintain downward pressure on prices for lumber and plywood and gypsum products, and will ease demand for other materials used in both residential and nonresidential construction. Tighter credit standards on the part of lenders may trim the number of new office, retail and hotel projects that are started, which will also help bring supply and demand for construction materials into balance.

Nevertheless, the overall PPI for construction inputs may continue to rise faster than the CPI on a year-over-year basis. The CPI appears likely to stay in the 1.5-3 percent growth range that has characterized most of the past several years. But several construction inputs experienced steep price drops in the second half of 2006 that may not be repeated in late 2007. For instance, the price of diesel fuel would have to fall 55 cents per gallon by January 2008 to match the January 2007 level. Such a sudden decline is possible but unlikely at a time when crude oil prices have recently been setting record highs. Thus, **the PPI for construction inputs appears likely to continue rising 3-5 percent, year-over-year, by late 2007 and early 2008.** In other words, construction input costs will exceed the CPI, but not dramatically.

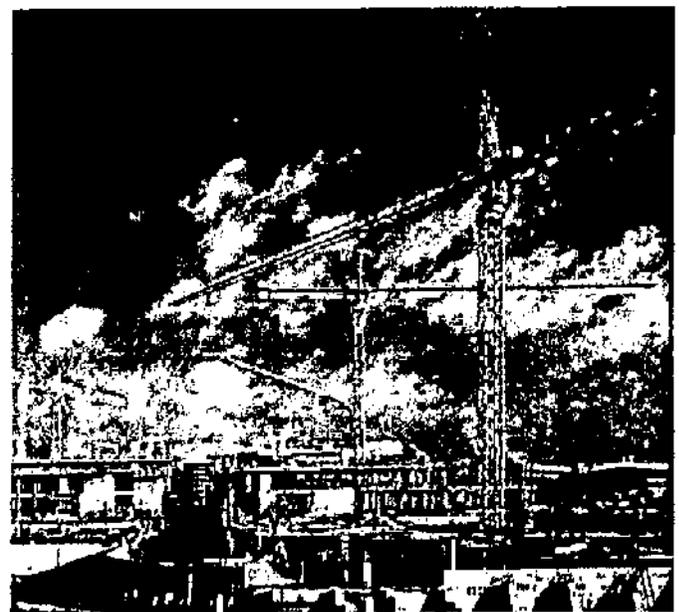
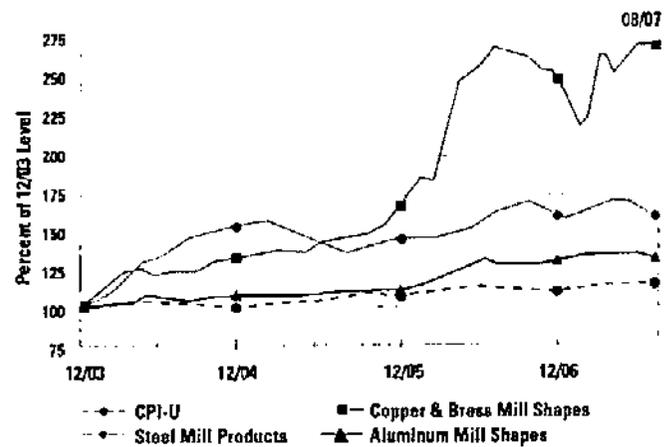
For the longer term—1-5 years—construction input prices are likely to outstrip the CPI by a larger margin. As homebuilding revives, perhaps beginning in the second half of 2008, the downward pressure on residential building materials will end. Continuing expansion in fast-developing economies in Asia will put further demand on raw materials and shipping. But the supply of those inputs will remain subject to interruptions and bottlenecks, causing frequent price spikes, some of them as steep as the surges that affected steel, copper, asphalt and plastics in recent years.

Hence, **the PPI for construction inputs could well increase 6-8 percent per year in 2008-12,** as it did in 2004, 2005 and much of 2006. The CPI is likely to remain in the 1-3 percent range, so any construction budget projection that relies on the CPI will rapidly fall short of actual costs.

Chart 5

## Cumulative Change in PPIs for Selected Metal Products

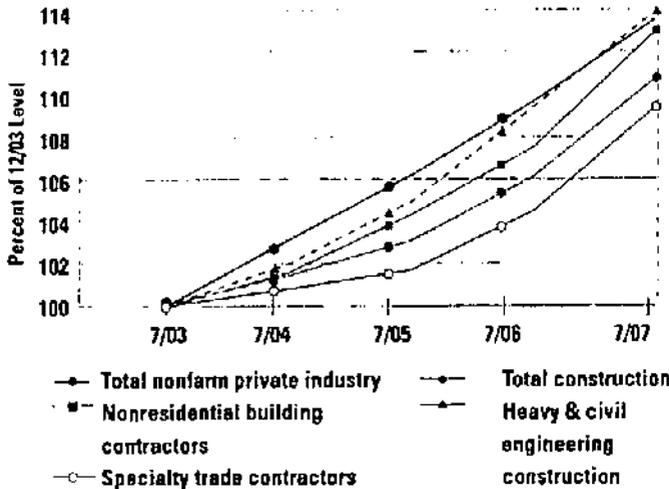
(All PPIs = 100 in 12/03)



**Chart 6**

**Average Hourly Earnings- Construction Types**

*(not seasonally adjusted; all indexes = 100 in 12/03)*



**Labor Inputs**

Labor represents roughly half the cost of construction, although the proportions of labor and materials vary from project to project. For several years, nonresidential contractors have worried about the shrinking pool of new entrants into the construction labor market, as more teens head to college and then to office, retail or other service-sector jobs.

Yet, from 2003 until early 2007, average hourly wages in construction rose less than in private industry as a whole (See Chart 6), even though construction employment rose more rapidly than overall nonfarm payroll employment (See Chart 7). Construction employment was propelled first by a buoyant homebuilding market and more recently by strong growth in private and public nonresidential construction.

**Recent job trends**

Even as recently as August 2007, nonresidential construction was outpacing the overall economy in job creation. BLS reported that the combined employment growth among nonresidential building contractors, nonresidential specialty trade contractors and heavy and civil engineering construction from August 2006 to August 2007 was 1.5 percent, vs. 1.3 percent for total nonfarm payroll employment.

In fact, the BLS estimate may substantially understate the growth in nonresidential construction jobs. BLS reports that *employment* among residential building and specialty trade contractors fell 4.5 percent over the same span. But Census figures show residential construction *spending* fell 16 percent from August 2006 to August 2007, while nonresidential construction spending rose 15 percent. Furthermore, homebuilders appeared poised to cut spending—and presumably employment—even more: building permits, a reliable indicator of near-term building plans, were down 24 percent from August 2006 to August 2007. It is not credible that homebuilders would hold onto so many workers with spending down so much already and likely to get worse.



The reality is that a large number of "residential" specialty trade contractors, as their companies were classified when they entered the BLS data sample, have turned to nonresidential work. Indeed, general contractors have reported a much greater availability in once-tight labor markets of electricians, plumbers, wallboard installers and concrete finishers who formerly had been too busy with residential projects to bid on commercial work.

Reclassifying 400,000 specialty trade contractors from residential to nonresidential would produce a drop in residential employment of 16 percent and an increase of nonresidential employment of 11 percent, figures that are much more consistent with the spending changes than are the official totals.

**Recent wage trends**

Wages (average hourly earnings) in construction as a whole show divergent patterns when separated into segments. (See Chart 6.) Specialty trade contractors' wages have risen less rapidly than overall construction wages, while wages in nonresidential building or heavy and civil engineering have gone up faster.

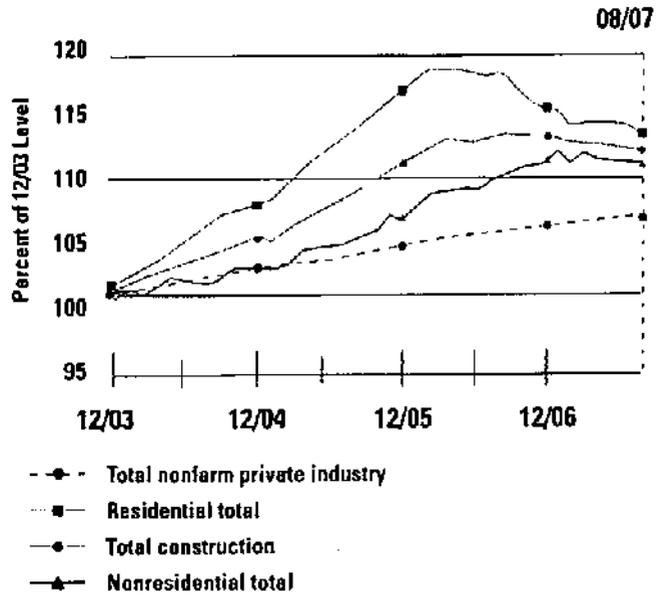
But recently, from July 2006 to July 2007, specialty wages rose 4.7 percent, despite the downturn in residential work. This suggests that the pool of specialty workers is getting shallower and general contractors are increasing the wages they pay by greater amounts than before in order to get the workers required. That accords with what many contractors themselves have reported.

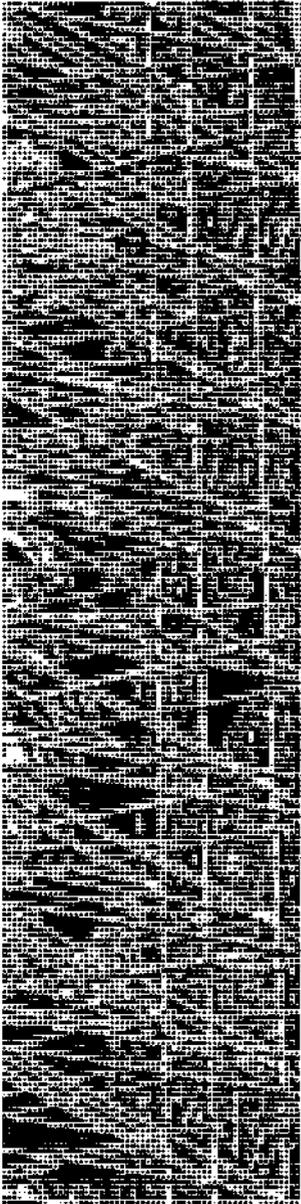
Although there were 2.3 million workers classified as residential specialty trade contractors in August 2007, many of them are not able to do the work that nonresidential contractors need. There is no counterpart in single-family construction for tower-crane and other specialized building-equipment operators, steel erectors or other crafts required for high-rise or technically sophisticated projects. In addition, in some parts of the country, nonresidential work is predominantly unionized, and there are virtually no union members to be pulled from single-family residential jobs. Also, many

**Chart 7**

**Employment Change-  
Total, Res. & Nonres. Construction**

*(seasonally adjusted; all indexes = 100 in 12/03)*





*"I am turning down  
work in four New  
England states right  
now due to lack of  
skilled labor."*

*— New England  
contractor*

workers in single-family construction and remodeling may lack the language skills, familiarity with nonresidential methods or documentation required for nonresidential work sites.

### **Labor Outlook**

Nonresidential construction spending has not shown any signs of slackening in recent months. Although measured employment growth (1.5 percent from August 2006 to August 2007) is only slightly faster than for the entire nonfarm economy (1.3 percent), it appears that actual growth, including workers counted by BLS as residential, remains vigorous.

Several other indicators suggest nonresidential construction will keep expanding. BLS figures on architectural and engineering services employment increased 2.9 percent from August 2006 to August 2007, much faster than the rate of employment growth overall or in nonresidential construction. Generally, architects and engineers are hired only if an owner plans to do construction. A monthly survey by the American Institute of Architects of 300 architectural firms has consistently reported higher billings throughout 2007 for nonresidential practices. And monthly reports from Reed Construction Data and McGraw-Hill Construction (the "Dodge Report") show a generally rising trend for nonresidential construction.

All of these signals portend a further increase in hiring and an acceleration of wage increases beyond the 4.5 percent recorded from August 2006 to August 2007. It is likely that average hourly earnings in construction will rise at an annual rate of 5-5.5 percent during the next several months. If residential construction revives in the second half of 2008, specialty trade workers will be at even more of a premium, especially if there is a crackdown on immigration. In that case, wages could rise as much as 6 percent annually by the end of 2008.

### **Putting the Pieces Together**

Nonresidential construction so far has shrugged off years of high materials costs, a steep downturn in homebuilding, and, most recently, turmoil in credit markets. At the moment, it appears the industry will continue to expand in 2008, though most likely at single-digit rates, not the 14 percent growth in spending that occurred in January-August 2007 compared to January-August 2006.

The rate of cost increases for construction inputs slowed from 8-10 percent in 2004 through mid-2006 to only 1.6 percent in the 12 months ending in August 2007. But this slowdown was in comparison to record-high prices, for many inputs in the spring and summer of 2006. The cumulative increase since December 2003 in the PPI for construction inputs remains more than double the increase in the CPI, 28 percent vs. 13 percent. Moreover, the price plunge of late 2006 is unlikely to be repeated. Instead, materials price comparisons in late 2007 and early 2008 probably will show increases of 3-5 percent rather than the 1.5-3 percent range for the CPI.

Meanwhile, the nonresidential industry has benefited from greater availability of specialty trade workers who have lately shifted from residential work. But wages have begun rising more steeply for specialty trade contractors, suggesting that the number of workers suitable to switch is close to exhaustion. In the next several months, the rate of wage increases is likely to reach 5-5.5 percent, up from a recent 4.5 percent gain.

Residential construction may start to pick up in the second half of 2008. If so, the tumble in gypsum and wood products prices that has held down the overall price index for construction materials inputs would end. Because construction depends on materials that are in hot demand worldwide and "sticky" supply, and because transport and fuel costs are an important element of the delivered price of construction materials, renewed growth in construction during a period of high worldwide demand could mean construction input prices rise 6-8 percent a year for several years beginning in mid-2008.

Labor costs are likely to accelerate further as well if residential building begins to draw back specialty trade contractors in late 2008. Construction wages could go up 5-6 percent annually for several years beginning in late 2008.

**The bottom line:** Owners, budget setters and contractors should expect larger materials and labor cost increases in 2008 than they have experienced in the past 12 months. Nonresidential construction activity is still likely to grow, as will demand for construction materials that are used in other industries and other countries.



Table 3: Changes in Consumer, Producer &amp; Construction Prices

BLS Series ID		12 months through December:						to August 2007 since:				
		2001	2002	2003	2004	2005	2006	7/07	5/07	8/06	12/03	
CUUR0000SA0	Consumer price index (CPI-U)	1.6	2.4	1.9	3.3	3.4	2.5	-0.2	0.0	2.5	12.8	
WPUSOP3000	Producer price index (PPI) for finished goods	-1.6	1.2	4.0	4.2	5.4	1.1	-1.4	-1.2	2.2	14.7	
WPUSOP2200	PPI for materials and components for construction	0.0	0.8	3.0	10.1	6.1	4.3	-0.1	0.4	1.5	24.1	
PCU236221236221	New warehouse construction	not available before 2005					7.5	8.1	0.3	1.4	5.4	n.a.
PCU236222236222	New school construction	not available; series began 12/05						17.3	-0.2	0.4	11.6	n.a.
PCU236222236223	New office construction	not available; series began June 2006							0.0	0.3	5.4	n.a.

Table 4: Changes in PPIs Weighted by Construction Types

BLS Series ID		12 months through December:						to August 2007 since:			
		2001	2002	2003	2004	2005	2006	7/07	5/07	8/06	12/03
PCUBCON	Inputs to construction industries	-0.9	0.7	3.0	9.1	8.2	4.6	-0.8	-0.1	1.6	27.9
PCUBHWY	Highway and street construction	-3.6	1.0	2.6	10.8	14.1	6.2	-2.0	-1.3	1.5	42.6
PCUBHVV	Other heavy construction	-2.6	1.0	2.6	13.4	8.8	5.5	-1.1	-0.4	2.0	36.4
PCUBBLD	Nonresidential buildings	-0.5	0.7	2.4	9.3	7.4	4.0	-0.8	0.0	1.5	26.5
PCUBRSM	Multi-unit residential	-0.1	0.4	2.7	8.9	7.8	4.9	-0.6	0.1	1.9	26.8
PCUBRS1	Single-unit residential	-0.4	0.6	3.5	7.0	6.9	4.2	-0.3	0.4	1.7	22.1

Table 5: Changes in PPIs for Basic Inputs Important to Construction

BLS Series ID		12 months through December:						to August 2007 since:			
		2001	2002	2003	2004	2005	2006	7/07	5/07	8/06	12/03
WPU056	Crude petroleum (domestic production)	-42.4	60.6	14.3	30.5	49.6	-0.1	1.3	16.5	-0.3	137.9
WPU0553	Industrial natural gas	-36.7	12.2	20.3	20.1	31.5	-13.2	-5.2	-6.8	-1.3	26.2
WPU066	Plastic resins and materials	-9.8	9.2	6.4	28.6	10.8	-7.8	0.0	2.3	-1.7	38.1
WPU1321	Construction sand/gravel/crushed stone	3.3	2.5	2.4	4.3	7.7	9.3	0.6	1.1	7.8	31.4
WPU1322	Cement	1.0	1.3	-1.1	7.9	12.2	10.5	-0.3	-1.0	4.0	36.9
WPU1011	Iron ore	1.5	-1.3	1.6	6.7	15.5	7.5	0.0	0.5	-4.5	34.3
WPU1012	Iron and steel scrap	-5.6	27.8	64.9	50.8	-10.8	2.9	3.0	-1.1	17.5	67.7
WPU101212	Stainless and alloy steel scrap	no data from 1996 until September 2006						22.8	-44.7	n.a.	
WPU102102	Copper ores (through 7/07; no data for 8/07)	-19.6	3.6	37.4	65.1	39.3	53.1	-1.0	12.9	-2.7	292.2
WPU102301	Copper base scrap	-17.4	11.2	30.7	34.5	51.9	50.0	-3.8	-8.2	5.4	232.4

Updated 9/19/07 Source: Bureau of Labor Statistics (BLS): [www.bls.gov/cpi](http://www.bls.gov/cpi) for CPI, [www.bls.gov/ppi](http://www.bls.gov/ppi) for PPIs  
 Compiled by Ken Simonson ([simonsonk@agc.org](mailto:simonsonk@agc.org)), Chief Economist, Associated General Contractors of America, [www.agc.org](http://www.agc.org)

Table 6: Changes in PPIs for Specific Construction Inputs

BLS Series ID		12 months through December:						to August 2007 since:			
		2001	2002	2003	2004	2005	2006	7/07	5/07	8/06	12/03
WPU057303	#2 diesel fuel	-44.7	54.4	13.0	37.9	46.7	2.3	-3.3	3.9	-5.9	140.0
WPU05810112	Asphalt (at refinery)	not available		10.0	18.3	17.8	34.9	-5.7	1.2	-18.6	107.0
WPU13940113	Asphalt paving mixtures and blocks	not available			4.2	14.4	27.7	0.1	0.9	3.6	49.3
WPU136	Asphalt felts and coatings	4.6	-0.6	6.3	4.1	15.3	5.0	1.9	0.6	0.5	26.2
WPU1361	Prepared asphalt & tar roofing & siding products	5.0	-1.7	5.3	4.6	16.2	5.2	1.9	-0.1	2.3	27.4
WPU133	Concrete products	2.5	-0.3	1.5	7.6	10.1	8.1	0.0	0.2	3.5	31.5
WPU1331	Concrete block and brick	2.3	1.6	3.2	4.7	8.1	6.8	0.2	0.3	3.0	24.8
WPU1332	Concrete pipe	4.4	1.7	1.4	5.5	7.5	2.5	-0.1	0.5	1.8	18.4
WPU1333	Ready-mixed concrete	2.5	-1.1	2.1	8.7	11.3	10.1	0.0	0.5	3.4	36.5
WPU1334	Precast concrete products	0.7	0.3	2.5	6.0	6.0	4.7	0.3	-0.5	4.9	22.3
WPU1335	Prestressed concrete products	5.3	1.8	-0.2	8.2	14.3	4.9	0.4	-1.2	1.0	30.1
WPU1342	Brick and structural clay tile	5.3	1.9	0.7	3.0	9.4	6.0	0.2	0.2	1.1	19.8
WPU072106	Plastic construction products	-2.7	3.1	3.2	7.2	21.0	-0.7	0.2	0.7	-0.9	29.6
WPU137	Gypsum products	0.4	3.4	2.8	20.0	18.8	5.5	-2.6	-5.9	-21.8	27.5
WPU1392	Insulation materials	0.4	-1.5	2.0	8.6	2.6	2.1	-0.1	-1.1	-3.9	11.5
WPUS1004011	Lumber and plywood	-2.9	1.4	13.1	5.0	-1.1	-10.8	-1.5	1.5	-0.4	-2.8
WPU062101	Architectural coatings	2.9	0.6	3.9	5.3	9.2	6.3	0.1	-0.1	4.6	27.3
WPU1017	Steel mill products	-6.1	11.1	1.7	48.8	-3.8	11.6	-2.7	-5.3	-0.6	61.3
WPU101704	Hot-rolled bars, plates, & structural shapes	-4.3	2.1	11.3	53.8	-1.0	7.5	-2.0	-1.6	9.2	80.3
WPU101706	Steel pipe and tube	-3.7	9.1	3.3	66.0	1.2	5.5	0.4	0.3	-1.2	74.7
WPU102502	Copper and brass mill shapes	-9.5	-1.6	11.6	29.6	31.0	44.4	-1.2	2.8	2.6	168.3
WPU102501	Aluminum mill shapes	-2.9	-0.9	-0.5	9.9	5.0	12.7	-0.2	-1.6	3.4	32.0
WPU107405	Fabricated structural metal	-1.3	-2.4	0.1	24.7	2.8	3.6	-0.1	0.0	2.9	37.5
WPU10740501	Fabricated structural metal for buildings	-1.5	-3.3	-0.1	20.0	3.1	3.3	-0.1	0.2	2.9	32.6
WPU107408	Architectural and ornamental metalwork	-0.1	3.7	0.7	23.5	3.1	4.9	1.0	1.3	4.7	36.4
WPU107409	Fabricated iron & steel pipe, tube, & fittings	0.6	0.1	1.2	32.6	5.5	-2.8	0.7	-1.2	-6.3	36.3
WPU1076	Fabricated steel plate	0.6	-1.0	0.6	7.6	0.6	8.6	2.0	3.1	5.3	22.8
WPU1079	Prefabricated metal buildings	0.0	4.0	-0.7	35.5	2.0	5.5	0.8	1.3	2.7	47.7
WPU112	Construction machinery and equipment	-0.1	1.9	1.3	6.0	4.9	3.6	0.1	0.5	2.6	17.2



## AGC Resources for Tracking Construction Economic Information

AGC provides a variety of materials to help contractors, owners and the public learn what is happening to construction costs. The Data DiGest is a weekly one-page email newsletter covering economic developments, including cost and supply issues, affecting construction. It is posted at [www.agc.org](http://www.agc.org); for a free subscription, email [simonsonk@agc.org](mailto:simonsonk@agc.org).

Once a month, tables of PPIs for construction materials and segments are sent along with The Data DiGest (See Table 3-6, pages 14-15). AGC also offers fact sheet comparing construction by state at [www.agc.org/factsheets](http://www.agc.org/factsheets). Back issues of AGC's Construction Inflation Alert are posted at [www.agc.org](http://www.agc.org). Audio conferences with experts on construction economics and specific materials and segments are held twice a year and can be purchased for download; go to [www.agc.org/audioconference](http://www.agc.org/audioconference).

### About the Author

Ken Simonson has been Chief Economist for AGC of America since 2001. In that role, he provides a multitude of information, through written materials, personal appearances, and media interviews, about the role of construction in the economy and about economic developments affecting construction nationally and locally.

Ken was appointed in 2006 to the Blue Ribbon Panel of experts advising the National Surface Transportation Policy and Revenue Study Commission. Ken is a board member of the National Association for Business Economics (NABE) and chairs its quarterly Industry Survey.

Among his many publications is "Digging into Construction Data," published in NABE's journal, *Business Economics*. Since 1982, he has co-chaired the Tax Economists Forum, a professional meeting group he co-founded for leading researchers and policy makers among tax economists. He is a member of several other professional organizations for economists.

Ken has a BA in economics from the University of Chicago, an MA in economics from Northwestern University, and has taken advanced graduate economics courses at the Université de Paris, Johns Hopkins and Georgetown.

SECTION XXV. ECONOMIC FEASIBILITY

C. 1. Reasonableness of Project Costs

	<u>Total Costs</u>	<u>Comments</u>
<b>Site Survey and Soil Investigation</b>	<b>170,000</b>	
Survey	55,000	
Testing	65,000	
Soils Analysis/Environmental	50,000	
<b>Site Preparation</b>	<b>9,070,311</b>	
Demolition and Site Clearing	1,529,517	Demo parking garage \$800K
Site Utilities	4,019,275	Relocation of existing utilities
Site Work	1,620,749	Storm water system \$810K
Landseaping	428,672	Parkway trees, sod, interior bushes
Temporary Utilities	307,215	
Watermain Connections	214,336	
Electrical Terminations	121,457	
Asbestos Abatement	100,000	
Detention Basin	729,090	
<b>Offsite Work</b>	<b>90,758</b>	
<b>Consulting and Other Fees</b>	<b>30,075,000</b>	
Acoustic	175,000	
Affirmative action	650,000	Aggressive MWBE targets
City approval	95,000	
Commissioning	1,100,000	
Communications	150,000	
CON	65,000	
Construction management	8,750,000	Gilbane/O'Neill partnership
Curtainwall & structural peer review	100,000	
Drug testing	135,000	
Elevator	55,000	
Environmental	65,000	
Equipment	2,225,000	RTKL
Fire stop inspection	265,000	Flood Testing (?)
Food service	160,000	
Furniture	225,000	
Geotechnical services	20,000	
Information technology	65,000	
Injury prevention	20,000	
Landmark	15,000	
Landscape	90,000	
Lighting	45,000	
Materials testing and inspection	2,250,000	Concrete, steel, other material
Parking	25,000	
Plan expeditor	35,000	
Pneumatic tube	65,000	Swisslog
Preconstruction services	2,200,000	Gilbane/O'Neill
Program management	10,250,000	U.S. Equities/PMA Consultants

SECTION XXV. ECONOMIC FEASIBILITY

C. 1. Reasonableness of Project Costs

**Consulting and Other Fees (continued)**

Radiation protection	55,000	
Security	43,000	
Signage	235,000	
Special features	50,000	
Traffic	47,000	
Utility study	75,000	
Vibration monitoring	275,000	MRI, OR concerns

**Other Costs to be Capitalized**

**18,695,000**

Internal project management salaries, supplies	5,500,000	Staffing costs to 2016. 12 FTE max.
Project office furniture, renovations	50,000	
Excess Facility Charge (Electrical)	1,400,000	Com Ed charge for backup capacity
Legal and documentation	350,000	
Insurance - Builder's Risk	1,375,000	
Insurance - OPIP (errors and omissions)	3,500,000	For design errors, omissions
CON fee	220,000	In case of amendments, alterations
IDPH plan review	200,000	
City fees	75,000	
Building permits	250,000	
Traffic direction - U of C Police	225,000	Congested area
Mock-ups	1,250,000	In Comer Center
Document printing	250,000	
Exterior signage (includes offsite)	1,750,000	Around building plus roadway
Environmental services - project cleaning	650,000	Clinical clean after construction clean
Equipment warehousing, delivery, installation	800,000	Receiving, inventorying, delivery
Moving	850,000	Relocate existing operations

SECTION XXV. Economic Feasibility

D. Projected Operating Costs

Projected direct operating costs for the reviewable departments in the NHP for 2015, in 2007 dollars.

	<u>Cost Per Unit</u>	<u>Unit</u>
Medical/Surgical Units	\$2,692	M/S admissions
Intensive Care Units	\$8,202	ICU admissions
Operating Room	\$1,286	OR cases
Recovery Room	\$378	OR cases
Central Sterile Processing	\$233	OR cases
Anatomic Pathology	\$156	OR cases
Radiology		Cases
- General Procedures	\$29	
- CT	\$73	
- Ultrasound	\$17	
- Interventional Radiol.	\$292	
MRI	\$165	Cases
GI Procedures	\$549	Procedures
Pharmacy	\$1,284	Admissions
Respiratory Therapy	\$699	RT Visits

## SECTION XXV. ECONOMIC FEASIBILITY

### E. Non-Patient Related Services

The NHP will have non-patient care related services that include food service, gift shop, and other retail services provided for the convenience of patients, visitors, and staff. The food service will be provided to patient families and other visitors and hospital staff in dining areas on the Level 1 and the Sky Garden (Level 7). As with current food service operations in our complex, these would be retail businesses, not owned by UCMC, and will not be subsidized by patient service revenue.

Similarly, the gift shop planned for Level 1 will likely operate like gift shops located in Mitchell and the DCAM buildings. These are operated by companies that specialize in this retail business and they operate without subsidy from our patient service operations.

## CHARITY CARE

While we report in our financial statements charity care of approximately \$12 million a year, this is but a small share of our total cost for providing care to the medically indigent. Because Medicaid reimburses us just 26 percent of our costs for inpatient care and 12.5 percent for outpatient, we lose about \$70 million a year on Medicaid patients. Because we provide more care to the indigent than any other private Illinois hospital (as of 2005), we must work actively to seek support for the many patients we treat who do not have insurance or other means to pay. For these patients we pursue MANG assistance, which stands for medical assistance – no grant, meaning it provides Medicaid only for medical care. Since February, 2006 when we began tracking the information, we submitted 5,325 MANG applications for medical care of \$375 million. We obtained coverage for \$285 million and there is \$39 million worth in the application process. That leaves \$51 million, of which documentation of income and assets was received from the patient such that we could formally categorize the care as charity. Many patients and their families are unable or unwilling to provide this information, so the remaining \$39 million is categorized as self pay or bad debt. In this sense, the amount reported as charity care is but a fraction of actual loss to patients who cannot pay.

# THE UNIVERSITY OF CHICAGO MEDICAL CENTER

## Charity Care

	<u>2005</u>	<u>2006</u>	<u>2007</u>
Costs of charity care	\$11,371,000	\$11,519,000	\$12,272,000
Excess of cost and provider tax for reimbursement for Medicaid patients	\$49,812,000	\$75,649,000	\$69,236,000
Net Patient Service Revenue (NPR)	\$827,809,000	\$832,773,000	\$1,070,638,000
Charity/NPR	1.4%	1.4%	1.1%
(Charity + Medicaid Loss)/NPR	7.4%	10.5%	7.6%
Provision for Doubtful Accounts	\$50,677,000	\$43,573,000	\$55,330,000

## Annual Non Profit Hospital Community Benefits Plan Report

Hospital or Hospital System: University of Chicago Medical Center

Mailing Address: 5841 S. Maryland, G-108 Chicago, IL 60637  
(Street Address/P.O. Box) (City, State, Zip)

Physical Address (if different than mailing address): \_\_\_\_\_  
(Street Address/P.O. Box) (City, State, Zip)

Reporting Period: 7 / 1 / 05 through 6 / 30 / 06 Taxpayer Number: FEIN 36-3488183  
Month Day Year Month Day Year

If filing a consolidated financial report for a health system, list below the Illinois hospitals included in the consolidated report.

<u>Hospital Name</u>	<u>Address</u>	<u>FEIN #</u>

1. **ATTACH Mission Statement:**  
The reporting entity must provide an organizational mission statement that identifies the hospital's commitment to serving the health care needs of the community and the date it was adopted.
  
2. **ATTACH Community Benefits Plan:**  
The reporting entity must provide its most recent Community Benefits Plan and specify the date it was adopted. The plan should be an operational plan for serving health care needs of the community. The plan must:
  1. Set out goals and objectives for providing community benefits including charity care and government-sponsored indigent health care.
  2. Identify the populations and communities served by the hospital.
  3. Disclose health care needs that were considered in developing the plan.
  
3. **REPORT Charity Care:**  
Charity care is care for which the provider does not expect to receive payment from the patient or a third-party payer. Charity care does not include bad debt. In reporting charity care, the reporting entity must report the actual cost of services provided, based on the total cost to charge ratio derived from the hospital's Medicare cost report (CMS 2552-96 Worksheet C, Part I, PPS Inpatient Ratios), not the charges for the services.

Charity Care ..... \$ 10,389,228

**ATTACH Charity Care Policy:**  
Reporting entity must attach a copy of its current charity care policy and specify the date it was adopted.

4. **REPORT Community Benefits actually provided other than charity care:**  
 See instructions for completing Section 4 of the Annual Non Profit Hospital Community Benefits Plan Report.

Community Benefit Type

Language Assistant Services .....	\$ <u>542,122</u>
Government Sponsored Indigent Health Care .....	\$ <u>137,631,649</u>
Donations .....	\$ <u>379,787</u>
Volunteer Services	
a) Employee Volunteer Services .....	\$ <u>20,600</u>
b) Non-Employee Volunteer Services .....	\$ <u>210,496</u>
c) Total (add lines a and b) .....	\$ <u>231,096</u>
Education .....	\$ <u>42,018,301</u>
Government-sponsored program services .....	\$ _____
Research .....	\$ <u>7,500,000</u>
Subsidized health services .....	\$ _____
Bad debts .....	\$ <u>43,573,000</u>
Other Community Benefits .....	\$ <u>88,625</u>

Attach a schedule for any additional community benefits not detailed above.

5. **ATTACH Audited Financial Statements for the reporting period.**

Under penalty of perjury, I the undersigned declare and certify that I have examined this Annual Non Profit Hospital Community Benefits Plan Report and the documents attached thereto. I further declare and certify that the Plan and the Annual Non Profit Hospital Community Benefits Plan Report and the documents attached thereto are true and complete.

Benjamin D. Gibson, Dir. Govt. Affairs  
 Name / Title (Please Print)

  
 Signature

Benjamin D. Gibson  
 Name of Person Completing Form

benjamin.gibson@uchospitals.edu  
 Electronic / Internet Mail Address

773.834.3906  
 Phone: Area Code / Telephone No.

12-21-06  
 Date.

773.834.3906  
 Phone: Area Code / Telephone No.

773.834.3903  
 FAX: Area Code / FAX No.

University of Chicago Medical Center

Mission Statement

The purposes of The University of Chicago Medical Center shall be to assist and aid the sick, injured and convalescent; to prevent and cure disease and suffering; to provide health care, advice and services; to train and educate, and assist in any manner in the education or training of, persons in or associated with the medical profession or associated with any aspect of health care; to engage in medical and basic biological research; to build, maintain and conduct, and to assist in any manner in building, maintaining and conducting, hospitals, clinics, dispensaries, sanatoria and research and educational institutions; and to provide a setting appropriate for education, training and research activities in medicine and the health sciences.

(Section 1.1 of the Bylaws)

The University of Chicago Medical Center  
Policy and Procedure Manual

**FINANCIAL ASSISTANCE POLICY**

Policy: A01-22

Issued: December 2006

Revised: October 2007

Reviewed: October 2007

**PURPOSE:**

UCMC is committed to providing superior healthcare in a compassionate manner, ever mindful of each patient's dignity and individuality. In furtherance of this charitable mission, UCMC will provide both (i) emergency treatment to any person requiring such care; and (ii) essential, *non-emergent* care in accordance with UCMC Administrative Policy A03-01 ("Inpatient Admission Policy") and UCMC Administrative Policy A02-12 ("Outpatient Treatment Policy"). Elective procedures normally will not be considered essential, non-emergent care and will normally not be eligible for Financial Assistance.

**POLICY:**

1. The University of Chicago Medical Center (UCMC) is a not-for-profit, tax-exempt entity with a charitable mission of providing medically necessary, high-quality health care to all patients, including those who are economically disadvantaged. Consistent with this commitment, UCMC has developed this Financial Assistance Policy (the "Policy") to identify and assist those individuals who do not have the means to pay for medically necessary services provided by UCMC and provide such services in a manner that affords such individuals dignity and respect. "Financial Assistance" shall be in the form of free care or reduced patient financial obligation where: (i) there is limited or no health insurance available; (ii) the patient fails to qualify for governmental assistance (for example, Medicare or Medicaid); (iii) the patient fully cooperates with UCMC in providing all requested information; and (iv) the patient demonstrates financial need; or (v) UCMC, in accordance with its policies, makes an administrative determination that Financial Assistance is appropriate. "Bad debt" shall not be included within UCMC Financial Assistance calculations. Instead, "bad debt" shall include uncollectible billed charges for patients who do not qualify for Financial Assistance.
2. This Policy appears in the University of Chicago Physician Group (UCPG) policy manual. Where possible, information relating to eligibility for Financial Assistance will be jointly shared between UCMC and UCPG to avoid requiring the patient to complete two different applications for Financial Assistance.
3. All UCMC staff and personnel shall refer patients seeking Financial Assistance to Hospital Finance so that a determination on granting Financial Assistance may be made.

**The University of Chicago Medical Center**  
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**PROCEDURE:**

**A. ELIGIBILITY CRITERIA**

1. Any patient requesting Financial Assistance is eligible for consideration without regard to race, color, creed, disability or other criteria not related to his/her ability to pay for services provided. A patient will be eligible for Financial Assistance for emergency treatment and essential, non-emergent care if the patient: (i) has limited or no health insurance; (ii) applies for but is deemed ineligible for governmental assistance (for example, Medicare or Medicaid); (iii) cooperates with UCMC in providing the requested information; and (iv) demonstrates "financial need"; *or* (v) UCMC, in accordance with its policies, makes an administrative determination that Financial Assistance is appropriate. A patient will be eligible for Financial Assistance in the event Hospital Administration, in its discretion, deems such eligibility appropriate under a patient's unique circumstances. Periodic confirmation of eligibility will occur for lengthy service programs.
  
2. **Financial Need:** There are two ways a patient may be deemed to have financial need:
  - (i) by a determination that the patient's income and available assets are below certain federal poverty guidelines<sup>1</sup> ("income" includes salaries, legal judgments, unemployment compensation, dividends, and interest checks; "assets" include savings certificates of deposit, individual retirement accounts and property other than a patient's primary residence) – such a patient will be designated as "indigent" or "financial hardship"; and
  - (ii) medical hardship. Patients that may qualify on the basis of both financial hardship and medical hardship will be given the benefit of the larger discount. UCMC personnel shall be responsible solely for making a good faith effort to quantify patient's assets under this Policy, including reviewing the information set forth in the Application for Financial Assistance, attached hereto. UCMC will only take assets into account when administering this Policy if assets total over \$1,000.
    - a. **Indigency/Financial Hardship:** If a patient's income and assets combined are below 400% of the federal poverty guidelines, the patient will receive some form of Financial Assistance, which will be either a complete waiver of all patient responsibility or reduced patient obligation, depending on the patient's income.
      - (1) If a patient's income and assets combined falls at or below 200% of the federal poverty guidelines, the patient will have no financial responsibility for the care provided by UCMC. This means that both the fees for services as well as the co-payment and deductible amounts are completely waived.
      - (2) If a patient's income and assets combined falls between 201% and 400% of the federal poverty guidelines, the patient is eligible for Financial Assistance in the form of a scaled reduction in charges, as illustrated in Exhibit 1.
    - b. **Medical Hardship:** In addition to income and assets, UCMC also will consider Financial Assistance where a patient's medical bills are of such an amount that

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<sup>1</sup> Federal poverty guidelines for the current year are available at <http://aspe.hhs.gov/poverty/index.shtml> UCMC's use of federal poverty guidelines will be updated annually in conjunction with the federal poverty guideline updates published by the United States Department of Health and Human Services.

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payment threatens the patient's financial survival. A patient is considered medically indigent when the patient due portion of total UCMC-affiliated professional and hospital account balances exceed 20% of the family's total gross annual income as defined by the adjusted gross income of the most recent annual IRS tax filing. The patient responsibility would be the lesser of the total patient due balance or 20% of the family's total gross annual income.

- c. In determining the balance of the patients' account to be written-off, total UCPG and UCMC balances will be combined based on the total patient balances due for the episode of care. Any amounts written-off or discounted will be pro-rated between UCPG and UCMC based upon the ratio of the total patient due balance for each party to the combined patient due balance from both parties. Amounts remaining as the financial liability of the patient after any write-off or discount will be made directly to UCPG or UCMC, as applicable.
  3. Documentation: To determine whether a patient is eligible for Financial Assistance, the patient will be required to complete the Application for Financial Assistance (Exhibit 2). UCMC will assist patients with this form, as reasonably requested by the patient.
  4. Because a patient is generally not eligible under this Policy until he/she has applied for and been deemed ineligible for federal and State governmental assistance programs, UCMC, either directly through Hospital Finance or through its contractor(s), will assist any inpatient in enrolling in federal and State governmental assistance programs. Notwithstanding anything to the contrary, in the event UCMC staff is certain that a patient does not qualify for aid under federal and/or State governmental assistance programs, UCMC may waive the requirement that the patient apply for such assistance prior to becoming eligible for assistance under this Policy.
  5. UCMC Representatives will provide assistance required in completing the Application for Financial Assistance (Exhibit 3) or with completing any other materials required by UCMC under this Policy if requested during in-person inquiries. UCMC may also make available translation services necessary to complete the Application for Financial Assistance. The information the patient provides when completing the Application for Financial Assistance, as well as any other information the patient provides pursuant to this Policy will be maintained in accordance with UCMC's policies governing confidentiality.
- B. Procedures and Obligations for Determining Eligibility for Financial Assistance
1. Applications for Financial Assistance will be distributed to all persons upon request. In addition, UCMC will make available Applications for Financial Assistance in the Hospital Finance, Registration Department, and the Emergency Department.
  2. A patient may request consideration at any time after he/she has accrued an outstanding balance, and UCMC will evaluate a patient's eligibility under this Policy, up to and including consideration during the collections and judgment phase. Patients are

*Administrative Policy 01-22 Financial Assistance Policy*

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encouraged to contact UCMC if their circumstances change or if additional need is identified by patients. UCMC will review all information provided and relevant circumstances bearing upon the need for Financial Assistance, will make a determination of eligibility, and will promptly notify the patient of his/her financial obligations, if any, as set forth below.

3. Eligibility Determination Procedure

- a. Hospital Finance staff and/or UCPG will immediately forward a copy of the pre-admission record to UCMC's Finance representatives for any patient/guarantor who has no insurance. UCMC Finance Representatives will contact the patient/guarantor to schedule a financial interview as soon as is practicable. For emergency services, UCMC will not delay screening or treatment of an emergency medical condition pending this financial interview.
- b. Patients are required to complete the Application for Financial Assistance (Exhibit 2) and return it to Hospital Finance or UCPG. Failure to timely supply required information may result in denial of a patient's request for provision of Financial Assistance. Patients are obligated to cooperate and provide all information needed in a timely manner. Note, however, if assistance is needed in assessing a particular financial situation and answering questions on the Application as part of the Financial Assistance qualifying process, patients are encouraged to contact one of UCMC's Finance representatives. UCMC Finance Representatives are also available to assist patients with assessing their financial situations, gathering information requested by UCMC, and assisting with similar tasks.
- c. As part of the financial interview process, UCMC Finance representatives will request the following documentation in order to process and validate Financial Assistance applications:
  - (1) Confirmation of annual income and assets:
    - Last four pay stubs and/or W2 form, social security award, unemployment compensation letter.
    - Most recent income tax return.
    - Most recent checking and savings account statements for all accounts upon which patient is listed as an accountholder.
    - Banking/investment account statements.
  - (2) Confirmation of last four digits of patient's social security number and birth date. Proof must be in the form of one of the following:
    - Birth certificate
    - Baptismal certificate
    - Military discharge papers
    - Drivers license

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- (3) Confirmation of residence in the form of the following:
- Mortgage book
  - Current rent receipt
  - Current lease
  - Tax bill
  - Room and board statement
  - Written verification from landlord
4. Although the information above is required from patients seeking Financial Assistance, UCMC may choose not to require some or all of the documentation, depending upon circumstances and the patient's ability to obtain documentation.
5. Patients have an obligation to provide information reasonably requested by UCMC so that UCMC can make a determination of a patient's eligibility for Financial Assistance. If a patient claims he/she has no means to pay but fails to provide the information reasonably requested by UCMC, there will be no Financial Assistance extended and normal collection efforts will be pursued in UCMC's sole discretion.
6. Eligibility and Notification Process:
- a. Upon receipt of a patient's Application for Financial Assistance, the Hospital Finance department, Patient Access Center and/or UCPG will review the patient's application to determine that it is complete, including all required documentation. If it is not complete, the application will be returned to the patient for completion. UCMC's Finance representatives will offer to meet with the patient to assist him/her in completing the application so that UCMC has all of the necessary information to make a determination on the patient's eligibility for Financial Assistance.
  - b. Designated Hospital Finance department, Patient Access Center, and/or UCPG representatives will complete the Financial Assistance Eligibility Determination Form attached as Exhibit 3, and will determine for management approval the amount the patient owes, if any. Designated management staff within Finance, Patient Access Center, and/or UCPG will review and approve or deny the proposed discount to be provided following policy standards. Based on management approval or denial, staff will inform the patient of his/her eligibility for Financial Assistance, and the amount of such Financial Assistance, if any, in a timely manner.
  - c. The Vice President of Finance, in collaboration with the Executive Director of UCPG and the Executive Director of Patient Access and Advocacy, will annually review and assign the designated management staff who have authority to approve or deny proposed financial assistance discounts.
  - d. A determination of eligibility under this Policy will be eligible for a length of time approved by Hospital Finance and/or UCPG; provided, however, such determination shall apply only to the care provided that is related to the original question that warranted consideration under this Policy.

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C. **COMMUNICATION** - UCMC will communicate the availability of Financial Assistance to its patients by placing signage in the Admissions Department, the Emergency Department, as well as patient registration areas. The signage and brochures will be in English and Spanish, which are the languages appropriate to the community UCMC serves. UCMC will post information about this Policy on its website, including a notice that Financial Assistance is available as well as a description of the Financial Assistance process and an Application for Financial Assistance. In addition, UCMC will include with its bills and statements information regarding how a patient can request Financial Assistance from UCMC. UCMC will assist inpatients and outpatients (upon request) in need with making applications to all other sources of assistance, including Medicaid. Patients are encouraged to contact UCMC's Finance representatives should they require assistance with making applications for other sources of financial assistance. This contact telephone number will be located strategically throughout UCMC so that patients have a resource for obtaining support with financial assistance questions they may have related to this Policy.

D. **RECORDKEEPING**

1. The Hospital Finance department will maintain all documentation of Financial Assistance within the UCMC Financial Assistance file. The Financial Assistance file will include a cumulative total of Financial Assistance cases, together with supportive documentation required by law. Supportive documentation may include the following:
  - a. the number of applicants for free and reduced cost services,
  - b. the number of approved applicants, and
  - c. the total charges and costs of the amount of free and reduced cost care provided. The foregoing list of required supporting documentation will be revised from time to time to comply with any applicable State law or regulation.
2. The Vice President of Finance with the Executive Directors of Hospital Finance will review the status of the Financial Assistance program with the President, the Chief Executive Officer, or their respective designee(s), on a regular basis. The President or his/her designee will be responsible for presenting this Policy to the Board of Directors at least annually. Such presentation will include a detailed statement on what the UCMC Policy is on Financial Assistance, the impact of this Policy on UCMC's operations, and the level of need and benefits being conferred to the community specifically under the UCMC Financial Assistance program.

E. **PATIENT RIGHTS AND RESPONSIBILITIES**

1. To be eligible for Financial Assistance, the patient must cooperate with UCMC by providing the necessary information and documentation to apply for appropriate federal and State governmental assistance and other financial resources that may be available to pay for his/her health care. Each patient must certify that the information he/she provides in any Application for Financial Assistance is true and correct to the best of his/her knowledge. Prior to being considered eligible for Financial Assistance from UCMC, the

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patient must apply for all other appropriate sources of financial assistance. UCMC will assist patients with making such applications by providing assistance in completing the relevant forms and by assisting the patient with understanding how his/her income and assets relate to the UCMC Charitable Assistance Guidelines. Consistent with this Policy, where UCMC is aware that a patient will not qualify for a particular type of federal or State governmental assistance, UCMC may waive the requirement that the patient apply for such assistance prior to becoming eligible for Financial Assistance.

2. Any request for Financial Assistance shall be made by or on behalf of a patient. Patients may apply for, and will be encouraged to apply for, Financial Assistance during or within a reasonable time after care is provided at UCMC. In the event a patient does not initially qualify for any Financial Assistance, the patient may re-apply upon a showing of change in circumstances.
3. Patients who are deemed eligible for any Financial Assistance must: (i) cooperate with UCMC to establish a reasonable payment plan, which takes into account all available income and assets, the amount of the discounted bill and any prior payments; and (ii) make good faith efforts to honor any agreed to payment plan for their discounted hospital bills. Patients are responsible for communicating to UCMC any change in financial status that may impact their ability to pay their discounted hospital bill or to honor the provisions of their payment plans.
4. Notwithstanding anything in this Policy to the contrary, in the event a patient's financial circumstances become more favorable while receiving assistance under the UCMC Financial Assistance program, the patient is required to notify UCMC of such change in circumstances.

**F. COLLECTION PRACTICES**

1. UCMC will not pursue litigation for nonpayment of bills for any patient receiving Financial Assistance so long as such patient is making payments in accordance with his/her established payment plan. In the event the patient is unable to maintain such payments, UCMC will, upon request by the patient, consider whether an adjustment is appropriate. UCMC will not be precluded from taking legal action against those patients receiving Financial Assistance to enforce the terms of an existing payment plan where there is evidence that the patient receiving Financial Assistance (or his/her family and/or guarantor, if applicable) has sufficient income and assets to meet his/her obligations under the existing payment plan; provided, however, UCMC will not pursue legal action for non-payment of bills against any patient receiving Financial Assistance who has clearly demonstrated that he/she does not have sufficient income and assets to meet his/her financial obligations to UCMC. This paragraph shall not in any way limit UCMC's right to send patient accounts to a collection agency for monitoring compliance with the terms of any payment plan established by the patient and UCMC.
2. It is UCMC's policy to prohibit the use of certain types of legal action to obtain payment on UCMC bills consistent with the UCMC Collection Policy.

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3. UCMC will use its best efforts to ensure that any third-party collection agency that it contracts with to obtain payment on existing financial accounts will comply with this Policy. UCMC will enter into written agreements with such third-party collection agents that specifically incorporate the terms of the UCMC Collection Policy.

G. **EFFECTIVE DATE** - This Policy shall remain effective for a period of thirty (30) days following any revision hereto. Revisions to this Policy shall be made and publicized in a manner consistent with this Policy.

**INTERPRETATION, IMPLEMENTATION, AND REVISION:**

The Hospital Finance and University of Chicago Physician Group shall be responsible for the interpretation, implementation, and revision of this Policy.

**REFERENCES:**

P.A. 94-0885

**CROSS-REFERENCES:**

UCMC Administrative Policy A03-01 "Inpatient Admission Policy"  
UCMC Administrative Policy A02-12 "Outpatient Treatment Policy"

**ATTACHMENTS:**

Exhibit 1	Charitable Assistance Guidelines
Exhibit 2	Application for Financial Assistance
Exhibit 3	Financial Assistance Eligibility Determination Form

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David S. Hefner  
President

Policy: A01-22  
Issued: December 2006  
Revised: October 2007  
Reviewed: October 2007

*Administrative Policy 01-22 Financial Assistance Policy*

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EXHIBIT 1

**CHARITABLE ASSISTANCE GUIDELINES**

<u>% of Poverty Guideline</u>	<u>% of UCMC Discount</u>
At or below 2 times	100%
3 times	75%
3.5 times	50%
4 times	25%

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**EXHIBIT 2**

**APPLICATION FOR FINANCIAL ASSISTANCE**

Patient Name \_\_\_\_\_  
 Med Hist.No. \_\_\_\_\_  
 Resp. Party \_\_\_\_\_  
 Address \_\_\_\_\_

Date \_\_\_\_\_  
 ID No \_\_\_\_\_  
 Date of Birth \_\_\_\_\_  
 Telephone (\_\_\_\_) \_\_\_\_\_  
 Last four digits of SSN \_\_\_\_\_

Guarantor Name \_\_\_\_\_  
 Address \_\_\_\_\_

Date \_\_\_\_\_  
 Date of Birth \_\_\_\_\_  
 Telephone (\_\_\_\_) \_\_\_\_\_  
 Last four digits of SSN \_\_\_\_\_

**MONTHLY INCOME**

**OCCUPATION**

**AMOUNTS**

Patient \_\_\_\_\_  
 Spouse \_\_\_\_\_  
 Other \_\_\_\_\_

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_ **Total**

**ASSETS**

Checking Account \_\_\_\_\_  
 Savings Account \_\_\_\_\_  
 Stocks, bonds, CD, money market \_\_\_\_\_  
 Other Accounts \_\_\_\_\_

If you own any of the following items, please list the type and approximate value.

Secondary Home<sup>2</sup>/Vacation Home \_\_\_\_\_  
 Automobile \_\_\_\_\_  
 Additional Vehicle(s) (make/year) \_\_\_\_\_  
 Other property \_\_\_\_\_

\_\_\_\_\_ **Total**

**MONTHLY EXPENSES**

**DESCRIPTION**

Food \_\_\_\_\_  
 Utilities \_\_\_\_\_  
 Auto/Gas \_\_\_\_\_  
 Telephone \_\_\_\_\_  
 Clothing \_\_\_\_\_  
 Child Care \_\_\_\_\_  
 Other \_\_\_\_\_

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_ **Total**

<sup>2</sup> Note: PLEASE DO NOT INCLUDE PRIMARY RESIDENCE HERE.  
 Administrative Policy 01-22 Financial Assistance Policy

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**CREDITORS**

Rent/Mortgage	_____	_____
Medical/Doctor	_____	_____
Medical/Hospital	_____	_____
Medical/Other	_____	_____
Insurance/Auto	_____	_____
Insurance/Life	_____	_____
Insurance/Health	_____	_____
Credit Card	_____	_____
Credit Card	_____	_____
		<b>Total</b>

<b>TOTAL MONTHLY INCOME</b>	_____
<b>PLUS ASSETS OVER \$1,000</b>	_____ (+)
<b>LESS TOTAL MONTHLY EXPENDITURES</b>	_____ (-)
<b>AVAILABLE CONTRIBUTION</b>	_____ (=)

I hereby certify that the information that I have furnished above is true and correct to the best of my knowledge. Should my circumstances change, I hereby agree that I will immediately notify The University of Chicago Medical Center at (773) 702-6664. I understand that, by my signature below, I authorize UCMC and/or its affiliates and designees to access records from various credit requesting bureaus.

Signature: \_\_\_\_\_

Printed Name: \_\_\_\_\_

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**EXHIBIT 3**

**FINANCIAL ASSISTANCE ELIGIBILITY DETERMINATION FORM**

Date: \_\_\_\_\_

UCMC has conducted an eligibility determination for Financial Assistance for:

Name: \_\_\_\_\_

Medical Record Number: \_\_\_\_\_

Your completed request for Financial Assistance was submitted on: \_\_\_\_\_

Based upon the information you supplied, the following determination has been made:

\_\_\_\_\_ Your request for Financial Assistance has been denied because your income and assets exceed those set forth in UCMC's Charitable Assistance Guidelines.

\_\_\_\_\_ Your request for Financial Assistance has been approved for services rendered on \_\_\_\_\_. The entire balance will be treated as free care.

\_\_\_\_\_ You qualify for a cost reduction consistent with UCMC's sliding scale. This office will contact you to establish a payment plan.

\_\_\_\_\_ Your request has been denied for the following reason (explain in detail):

\_\_\_\_\_ Other (please explain in detail):

Should you have any questions about this determination, please do not hesitate to contact our UCMC Finance Representatives at (773) 702-6664 for additional information.

**The University of Chicago  
Medical Center  
Combined Financial Statements  
(With Combining Financial Information)  
June 30, 2007 and 2006**

**The University of Chicago Medical Center**  
**Index**  
**June 30, 2007 and 2006**

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**Report of Independent Auditors**

To the Board of Trustees of  
The University of Chicago Medical Center:

In our opinion, the accompanying combined balance sheets and the related combined statements of operations, changes in net assets and cash flows present fairly, in all material respects, the financial position of The University of Chicago Medical Center (UCMC) at June 30, 2007 and 2006, and the results of their operations, their changes in net assets and their cash flows for the years then ended in conformity with accounting principles generally accepted in the United States of America. These financial statements are the responsibility of UCMC's management. Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits of these statements in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

As described in Note 2 to the combined financial statements, The University of Chicago Medical Center adopted Staff Accounting Bulletin No. 108, *Considering the Effects of Prior Year Misstatements when Quantifying Misstatements in Current Year Financial Statements*. In accordance with the transition provisions of this pronouncement, the 2007 combined financial statements include the cumulative effect of adopting this standard.



September 14, 2007

**The University of Chicago Medical Center**  
**Combined Balance Sheets**  
**June 30, 2007 and 2006**  
(in thousands of dollars)

	2007	2006
<b>Assets</b>		
Current assets		
Cash and cash equivalents	\$ 88,056	\$ 21,726
Accounts receivable, less allowance for doubtful accounts for 2007 - \$29,160 and 2006 - \$35,125	94,157	109,911
Current portion of investments limited to use	633	776
Current portion of pledges receivable	3,950	11,438
Other current assets	62,868	41,924
Total current assets	<u>249,664</u>	<u>185,775</u>
Investments limited to use, less current portion		
Construction and capitalized interest funds	14,121	7,048
Donor-restricted	28,852	27,149
Self-insurance	11,855	10,867
Board designated investments	677,043	566,425
Property, plant and equipment, net	533,450	497,344
Pledges receivable, less current portion	14,480	15,708
Other assets, net	23,112	10,413
Total assets	<u>\$ 1,552,577</u>	<u>\$ 1,320,729</u>
<b>Liabilities and Net Assets</b>		
Current liabilities		
Accounts payable and accrued expenses	\$ 124,725	\$ 95,816
Current portion of long-term debt	8,535	7,390
Current portion of other long-term liabilities	1,436	1,340
Current portion of estimated third-party payor settlements	41,975	65,588
Due to University of Chicago	18,864	18,477
Total current liabilities	<u>195,535</u>	<u>188,611</u>
Other liabilities		
Self-insurance liabilities	6,557	6,934
Long-term debt, less current portion	395,200	364,120
Other long-term liabilities, less current portion	44,723	85,312
Total liabilities	<u>642,015</u>	<u>644,977</u>
Net assets		
Unrestricted	857,589	599,411
Temporarily restricted	46,943	70,525
Permanently restricted	6,030	5,816
Total net assets	<u>910,562</u>	<u>675,752</u>
Total liabilities and net assets	<u>\$ 1,552,577</u>	<u>\$ 1,320,729</u>

The accompanying notes are an integral part of the combined financial statements.

**The University of Chicago Medical Center**  
**Combined Statements of Operations**  
**Years Ended June 30, 2007 and 2006**  
(in thousands of dollars)

	2007	2006
<b>Operating revenues</b>		
Net patient service revenue	\$ 1,077,534	\$ 908,950
Other operating revenues and net assets released from restrictions	44,517	44,482
Total operating revenues	<u>1,122,051</u>	<u>953,432</u>
<b>Operating expenses</b>		
Salaries, wages and benefits	440,843	439,559
Supplies and other	390,365	371,086
Insurance	23,593	25,380
Provision for doubtful accounts	56,022	44,236
Interest	15,465	13,994
Medicaid provider tax	61,541	-
Depreciation	48,835	46,647
Total operating expenses	<u>1,036,664</u>	<u>940,902</u>
Income from operations	85,387	12,530
<b>Nonoperating gains (losses)</b>		
Investment income and unrestricted gifts, net	55,122	59,402
Other, net	285	(196)
Excess of revenues over expenses	<u>140,794</u>	<u>71,736</u>
<b>Other changes in net assets</b>		
Change in unrealized gains on investments	49,190	2,248
Transfers to University of Chicago	(15,000)	(15,000)
Net assets released for capital purchases	26,447	4,857
Cumulative effect of change in accounting principles	52,683	(7,939)
Adjustment to minimum pension liability	2,210	7,607
Other, net	1,854	555
Increase in unrestricted net assets	<u>\$ 258,178</u>	<u>\$ 64,064</u>

The accompanying notes are an integral part of the combined financial statements.

**The University of Chicago Medical Center**  
**Combined Statements of Changes in Net Assets**  
**Years Ended June 30, 2007 and 2006**  
(In thousands of dollars)

	2007	2006
<b>Unrestricted net assets</b>		
Excess of revenues over expenses	\$ 140,794	\$ 71,736
Change in unrealized gains on investments	49,190	2,248
Transfers to University of Chicago	(15,000)	(15,000)
Net assets released for capital purchases	26,447	4,857
Cumulative effect of change in accounting principles	52,683	(7,939)
Adjustment to minimum pension liability	2,210	7,607
Other, net	1,854	555
Increase in unrestricted net assets	<u>258,178</u>	<u>64,064</u>
<b>Temporarily restricted net assets</b>		
Contributions	5,188	41,712
Net assets released from restrictions used for operating purposes	(2,323)	(2,249)
Net assets released for capital purchases	<u>(26,447)</u>	<u>(4,857)</u>
Increase (decrease) in temporarily restricted net assets	<u>(23,582)</u>	<u>34,606</u>
<b>Permanently restricted net assets</b>		
Contributions and other	<u>214</u>	<u>159</u>
Increase in net assets	234,810	98,829
Net assets at beginning of year	<u>675,752</u>	<u>576,923</u>
Net assets at end of year	<u>\$ 910,562</u>	<u>\$ 675,752</u>

The accompanying notes are an integral part of the combined financial statements.

**The University of Chicago Medical Center**  
**Combined Statements of Cash Flows**  
**Years Ended June 30, 2007 and 2006**  
(in thousands of dollars)

	2007	2006
<b>Cash flows from operating activities</b>		
Increase in net assets	\$ 234,810	\$ 98,829
Adjustments to reconcile change in net assets to net cash provided by operating activities		
Net change in unrealized gains on investments	(49,190)	(2,248)
Transfers to University of Chicago	15,000	15,000
Restricted contributions	(5,402)	(41,871)
Other changes in unrestricted net assets	(39,356)	(44,714)
Cumulative effect of a change in accounting principle	(52,683)	7,939
Loss on disposal of assets	150	197
Depreciation and amortization	48,881	46,728
Increase (decrease) in cash resulting from a change in:		
Patient accounts receivable, net	15,754	(740)
Other assets	(22,249)	1,571
Accounts payable and accrued expenses	28,909	3,316
Due to the University of Chicago	1,286	507
Estimated settlements with third-party payors	(21,213)	17,283
Self-insurance liabilities	(377)	(304)
Other liabilities	(430)	(8,087)
Net cash provided from operating activities	<u>153,890</u>	<u>93,406</u>
<b>Cash flows from investing activities</b>		
Purchases of property, plant and equipment	(83,950)	(77,851)
Decrease in notes receivable	-	56
Deposits to construction and capitalized interest funds	(13,971)	(28,814)
Uses of construction and capitalized interest funds	6,926	21,741
Purchases of investments	(109,642)	(169,230)
Sales of investments	82,187	94,758
Net cash used in investing activities	<u>(118,450)</u>	<u>(159,340)</u>
<b>Cash flows from financing activities</b>		
Proceeds from issuance of long-term debt	41,000	29,000
Payments on long-term obligations	(9,423)	(7,306)
Transfers paid to the University of Chicago, net	(14,805)	(14,492)
Restricted contributions	14,118	32,510
Net cash used in financing activities	<u>30,890</u>	<u>39,712</u>
Net increase (decrease) in cash	66,330	(26,222)
<b>Cash and cash equivalents</b>		
Beginning of year	21,726	47,948
End of year	<u>\$ 88,056</u>	<u>\$ 21,726</u>

The accompanying notes are an integral part of the combined financial statements.

# The University of Chicago Medical Center

## Notes to Combined Financial Statements

June 30, 2007 and 2006

(in thousands of dollars)

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### 1. Organization

The University of Chicago Medical Center ("UCMC" or the "Medical Center"), an Illinois not-for-profit corporation, operates the Bernard Mitchell Hospital, the Chicago Lying-In Hospital, the University of Chicago Comer Children's Hospital, the Duchossois Center for Advanced Medicine, and various other outpatient clinics and treatment areas. Prior to August 7, 2006, the Medical Center corporation was named The University of Chicago Hospitals. QV, Inc. ("QV") is an affiliated not-for-profit corporation operating outpatient clinics in the Chicago area, and has certain Board members common to UCMC.

The University of Chicago (the "University"), as the sole corporate member of UCMC, elects UCMC's Board of Trustees and approves its By-Laws. The Chief Executive Officer, who is the Vice President for Medical Affairs at the University, shall be appointed by the President of the University, subject to the consent of the Medical Center Executive Committee and final approval of the University's Board of Trustees. The relationship between UCMC and the University is defined in the Medical Center By-Laws, an Affiliation Agreement, an Operating Agreement, and several Leases.

The combined financial statements include the assets, liabilities and operating results of the hospital and outpatient clinic operations of UCMC and QV. The Medical Center also manages the University's faculty physician practice, medical malpractice self-insurance program, and an employee health benefit plan, which are organized as unincorporated units of the University, and are not included within these financial statements. See Note 3 for agreements and transactions with the University.

UCMC and QV are tax-exempt organizations under Section 501(c)3 of the Internal Revenue Code. Accordingly, no provision for income taxes related to these entities has been made.

### 2. Summary of Significant Accounting Policies

#### Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates. The most significant estimates are made in the areas of patient accounts receivable, accruals for settlements with third-party payors, and accrued compensation and benefits.

#### Fair Value of Financial Instruments

The fair value of financial instruments approximates the carrying amount reported in the combined balance sheets for cash and cash equivalents, investments, investments limited as to use, patient accounts receivable, accounts payable and long-term debt.

#### Cash and Cash Equivalents

Cash and cash equivalents represent money market and highly liquid debt instruments with a maturity at the date of purchase of three months or less.

**The University of Chicago Medical Center**  
**Notes to Combined Financial Statements**  
**June 30, 2007 and 2006**  
**(in thousands of dollars)**

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**Inventory**

UCMC values inventories at the lower of cost or market.

**Investments**

Marketable investments are measured at fair value based on quoted market prices. Investment income or loss (including realized gains and losses on investments, impairment losses, interest and dividends) is included in the excess of revenues over expenses unless the income or loss is restricted by the donor or the law. The change in net unrealized gains and losses on investments is excluded from the excess of revenues over expenses.

Private equity, real estate and absolute return investments are measured on the equity method. The value of these investments is based on valuations provided by external investment managers. These valuations necessarily involve estimates, appraisals, assumptions and methods which are reviewed by management. All changes in the value of these investments are included in the excess of revenues over expenses.

Some of UCMC's investments are part of the University's Total Return Investment Pool (TRIP). UCMC accounts for its investments in TRIP based on its share of the underlying securities and records the investment activity as if UCMC owned the investments directly.

**Investments Limited as to Use**

Investments limited as to use primarily include assets held by trustees under debt and other agreements and designated assets set aside by the Board of Trustees for future capital improvements and other specific purposes, over which the Board retains control and may at their discretion subsequently use for other purposes.

**Derivative Instruments**

UCMC has entered into a forward starting swap transaction against contemplated variable rate borrowing for a new hospital pavilion. The notional amount of this swap is \$325,000 and the effective start date is August, 2011. Management has determined that the interest rate swap was effective as defined by Statement of Financial Accounting Standards (SFAS) No. 133, "Accounting for Derivative Instruments and Certain Hedging Activities" and accordingly had utilized hedge accounting. Therefore, the change in the fair value of the interest rate swap was excluded from excess of revenues over expenses and reported as a change in unrestricted net assets.

**Property, Plant and Equipment**

Property, plant and equipment are reported on the basis of cost less accumulated depreciation and amortization. Donated items are recorded at fair market value at the date of contribution. The carrying value of property, plant and equipment is reviewed if the facts and circumstances suggest that it may be impaired. Depreciation of property, plant and equipment is calculated by use of the straight-line method at rates intended to depreciate the cost of assets over their estimated useful lives, which generally range from three to forty years. Interest costs incurred on borrowed funds during the period of construction of capital assets, net of any interest earned, are capitalized as a component of the cost of acquiring those assets.

**The University of Chicago Medical Center**  
**Notes to Combined Financial Statements**  
**June 30, 2007 and 2006**  
**(in thousands of dollars)**

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**Asset Retirement Obligation**

On June 30, 2006 UCMC adopted Financial Accounting Standards Board Interpretation No. 47 (FIN 47), "Accounting for Conditional Asset Retirement Obligations." FIN 47 requires that a liability be recognized for the fair value of a legal obligation to perform asset retirement activities that are conditional on a future event if the amount can be reasonably estimated. Upon recognition of a liability, the asset retirement cost is recorded as an increase in the carrying value of the related long-lived asset and then depreciated over the life of the asset. The UCMC asset retirement obligations arise primarily from regulations that specify how to dispose of asbestos if facilities are demolished or undergo major renovations or repairs. UCMC's obligation to remove asbestos was estimated using site-specific surveys where available and a per square foot estimate where surveys were unavailable.

As a result of an evaluation of available asbestos remediation estimates, UCMC recorded liabilities of \$8,000 for the asset retirement obligations. Accumulated depreciation was measured from the date the liability and capitalized asset would have been recognized if FIN 47 were in effect when UCMC incurred the liability. Based on this, all the assets were fully depreciated at June 30, 2006. Accordingly, the entire \$8,000 cumulative effect of this change in accounting principle was recorded as a reduction in unrestricted net assets in 2006.

**Pledges Receivable**

Pledges are recorded at the present value of their estimated future cash flow. Estimated future cash flows due after one year are discounted using interest rates commensurate with estimated collection risks.

**Other Assets**

Other assets include deferred financing costs, which are amortized over the term of the related obligations.

**Net Assets**

Permanently restricted net assets include the historical dollar amounts of gifts that are required by donors to be permanently retained. Temporarily restricted net assets include gifts, which can be expended but for which restrictions have not yet been met. Such restrictions include purpose restrictions where donors have specified the purpose for which the net assets are to be spent, or time restrictions imposed by donors or implied by the nature of the gift (such as pledges to be paid in the future) or by interpretations of law.

Realized gains and losses are classified as unrestricted net assets unless they are restricted by the donor or law. Unrestricted net assets include all the remaining net assets of UCMC. See Note 12 for further information on the composition of restricted net assets.

**Gifts and Grants**

Unconditional promises to give cash and other assets to UCMC are reported at fair value at the date the promise is received. Conditional promises to give are recognized when the conditions are substantially met. The gifts are reported as either temporarily or permanently restricted support if they are received with donor stipulations that limit the use of the donated assets. Donor-restricted contributions whose restrictions are met within the same year received are reported as unrestricted gifts in the accompanying financial statements.

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Gifts of cash or other assets that must be used to acquire long-lived assets are reported as additions to temporarily restricted net assets if the gifts are not expended or placed in service during the year.

**Statement of Operations**

All activities of UCMC deemed by management to be ongoing, major and central to the provision of healthcare services, are reported as operating revenues and expenses. Other activities deemed to be nonoperating include unrestricted gifts and certain investment income (including realized gains and losses).

UCMC recognizes changes in accounting estimates related to third-party payor settlements as more experience is acquired. Adjustments to prior year estimates for these items resulted in an increase in net patient service revenues of \$8,000 in 2007 and \$8,000 in 2006. In addition, UCMC recognized \$11,000 in 2007 as a settlement of various Medicare appeal issues for years from 1996 through 2006. In 2006, UCMC received \$12,000 in settlement of claims against a bankrupt HMO dating from the early 1990's.

In September 2006, the Securities and Exchange Commission staff issued Staff Accounting Bulletin ("SAB") No. 108, "Considering the Effects of Prior Year Misstatements when Quantifying Misstatements in Current Year Financial Statements." Although the SAB is directly applicable to public companies, UCMC has elected to follow the prescribed guidance.

SAB 108 establishes a "dual approach" to the quantification and assessment of materiality of misstatements, requiring use of both the "rollover" method (focused primarily on the impact on the statement of operations) and the "iron curtain" method (focused primarily on the impact on the balance sheet). Prior to SAB 108, UCMC used the rollover method.

Following the guidance of SAB 108, UCMC has elected to recognize the cumulative effect of its initial application of SAB 108 as an adjustment to the opening balance of unrestricted net assets. The adoption resulted in a decrease in non-current liabilities of \$35,000 related to third party settlements, and an increase in non-current assets of \$11,800 related to the valuation of a trust. Adjustments of other differences resulted in a decrease of \$3,300 in current liabilities, an increase in investments of \$1,400 and an increase of \$1,200 in property, plant and equipment. The impact of these adjustments resulted in a \$52,700 increase in other changes in net assets on the Statement of Operations.

The statement of operations includes excess of revenues over expenses. Changes in unrestricted net assets that are excluded from excess of revenues over expenses include changes in unrealized gains and losses on investments, transfers to the University, contributions of long-lived assets released from restrictions (including assets acquired using contributions which by donor restriction were to be used for acquisition of UCMC assets) and additional minimum pension liabilities.

**Net Patient Service Revenue, Accounts Receivable and Allowance for Doubtful Accounts**

UCMC maintains agreements with the Social Security Administration under the Medicare Program, Blue Cross and Blue Shield of Illinois, Inc. (Blue Cross), and the State of Illinois under the Medicaid Program and various managed care payors that govern payment to UCMC for services rendered to patients covered by these agreements. The agreements generally provide for per case or per diem rates or payments based on allowable costs, subject to certain limitations, for inpatient care and discounted charges or fee schedules for outpatient care.

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Net patient service revenue is reported at estimated net realizable amounts from patients, third-party payors, and others for services rendered and includes estimated retroactive revenue adjustments due to future audits, reviews, and investigations. Retroactive adjustments are considered in the recognition of revenue on an estimated basis in the period the related services are rendered, and UCMC estimates are adjusted in future periods as adjustments become known or as years are no longer subject to UCMC audits, reviews and investigations. Contracts, laws and regulations governing Medicare, Medicaid, and Blue Cross are complex and subject to interpretation. As a result, there is at least a reasonable possibility that recorded estimates will change by a material amount in the near term. A portion of the accrual for settlements with third-party payors has been classified as long-term because UCMC estimates will not be paid within one year.

The process for estimating the ultimate collectibility of receivables involves significant assumptions and judgment. UCMC has implemented a standardized approach to this estimation based on the payor classification and age of outstanding receivables. Account balances are written off against the allowance when management feels it is probable the receivable will not be recovered. The use of historical collection experience is an integral part of the estimation of the reserve for doubtful accounts. Revisions in the reserve for doubtful accounts are recorded as adjustments to the provision for doubtful accounts.

Net patient service revenues and supplies and other expenses have each been increased by \$69,400 in the 2006 financial statements to conform to the 2007 presentation of outpatient clinic revenues and expenses.

**Hospital Assessment Program/Medicaid Provider Tax**

In December 2004, the State of Illinois, after receiving approval by the federal government, implemented a hospital assessment program. The program assessed hospitals a provider tax based on occupied bed days and provided increases in hospitals' Medicaid payments. The Centers for Medicare and Medicaid Services (CMS) had not yet approved the hospital assessment program at June 30, 2006 and, as a result, no amounts were recorded in 2006. CMS approved the program for 2006 and 2007 in 2007. Accordingly, amounts related to both 2006 and 2007 are included in 2007. The program results in a net increase of \$35,400 in the 2007 income from operations, which represents \$97,000 in additional Medicaid payments offset by \$61,600 in Medicaid provider tax.

**3. Agreements and Transactions with the University**

The Affiliation Agreement with the University provides, among other things, that all members of the medical staff will have academic appointments in the University. The Affiliation Agreement has an initial term of 40 years ending October 1, 2026 unless sooner terminated by mutual consent or as a result of a continuing breach of a material obligation therein or in the Operating Agreement. The Affiliation Agreement automatically renews for additional successive 10-year terms following expiration of the initial term, unless either party provides the other with at least two years' prior written notice of its election not to renew.

The Operating Agreement, as amended, provides, among other things, that the University gives UCMC the right to use and operate certain facilities. The Operating Agreement is coterminous with the Affiliation Agreement.

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The Lease Agreements provide, among other things, that UCMC will lease from the University certain of the health care facilities and land that UCMC operates and occupies. The Lease Agreements are coterminous with the Affiliation Agreement.

UCMC purchases various services from the University, including certain employee benefits, utilities, security, telecommunications and insurance. In addition, certain UCMC accounting records are maintained by the University. During the years ended June 30, 2007 and 2006, the University charged UCMC approximately \$43,600 and \$44,500, respectively, for utilities, security, telecommunications, insurance and overhead.

The University's Division of Biological Sciences ("BSD") provides physician services for UCMC. In 2007 and 2006, UCMC recorded \$108,600 and \$92,600, respectively, in expense related to these services.

UCMC's Board of Trustees adopted a plan of support under which it would provide annual net asset transfers to support BSD's academic programs. All commitments under this plan are subject to the approval of UCMC's Board of Trustees and do not represent legally binding commitments until that approval. Unpaid portions of commitments approved by the UCMC Board of Trustees are reflected as current liabilities. In 2007 and 2006, UCMC recorded net asset transfers of \$15,000 to the BSD.

**4. Investments and Investments Limited as to Use**

Construction and capitalized interest funds consist primarily of bonds and cash and cash equivalents.

The composition of investments and investments limited as to use is as follows:

	2007	2006
Separately invested		
Domestic fixed income	\$ 175,279	\$ 154,403
Domestic public equities	297,861	232,847
Real estate	1,618	6,011
Private equity	17,289	19,241
International public equities	1,992	2,037
Cash equivalents	1,776	1,407
	<u>495,815</u>	<u>415,946</u>
Invested with TRIP		
Domestic fixed income	15,945	16,571
Domestic public equities	22,375	23,659
Real estate	22,678	19,454
Private equity	27,652	21,876
International public equities	55,726	46,919
Absolute return	63,078	48,607
Cash equivalents	2,626	542
	<u>210,080</u>	<u>177,628</u>
Total investments	<u>\$ 705,895</u>	<u>\$ 593,574</u>

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Investments and investment limited as to use are recorded as follows:

	2007	2006
Investments limited to use, less current portion		
Donor restricted	\$ 28,852	\$ 27,149
Board designated investments	<u>677,043</u>	<u>566,425</u>
Total investments	<u>\$ 705,895</u>	<u>\$ 593,574</u>

Board designated funds limited to use consist of:

	2007	2006
Board designated for capital renewal	\$ 171,619	\$ 150,878
Board designated for endowment	296,334	238,558
Board designated for academic renewal	4,800	4,800
Board designated endowment in TRIP	<u>204,290</u>	<u>172,189</u>
	<u>\$ 677,043</u>	<u>\$ 566,425</u>

The composition of net investment income and unrestricted gifts is as follows for the years ended June 30, 2007 and 2006:

	2007	2006
Interest and dividend income, net	\$ 18,884	\$ 14,213
Realized gains (losses) on sales of securities and equity adjustment in private equities, net	36,785	44,491
Unrestricted gifts	946	698
Investment impairments	<u>(1,493)</u>	<u>-</u>
	<u>\$ 55,122</u>	<u>\$ 59,402</u>

UCMC also invests in private equity limited partnerships. As of June 30, 2007, UCMC has commitments of \$35,900 to fund private equity limited partnerships, approximately \$32,800 of which have been funded.

**5. Property, Plant and Equipment**

The components of property, plant and equipment as of June 30, 2007 and 2006, are as follows:

	2007	2006
Land and land rights	\$ 33,093	\$ 33,093
Buildings and improvements	565,718	512,399
Equipment	345,667	317,205
Construction in progress	<u>88,830</u>	<u>91,560</u>
	1,033,308	954,257
Less accumulated depreciation	<u>(499,858)</u>	<u>(456,913)</u>
Total property, plant and equipment, net	<u>\$ 533,450</u>	<u>\$ 497,344</u>

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UCMC's net property, plant and equipment cost includes approximately \$16,400 representing assets under capital leases with the University, which are stated at the University's historical cost. The cost of buildings that are jointly used by the University and UCMC is allocated based on the lease provisions. In addition, land and land rights includes approximately \$25,000, which represents the unamortized portion of initial lease payments made to the University.

Interest costs aggregating \$300 and \$200 were capitalized in 2007 and 2006, respectively.

**6. Long-Term Debt**

Long-term debt as of June 30, 2007 and 2006, consists of the following:

	2007	2006
Illinois Health Facilities Authority Bonds		
Revenue bonds, Series 2003 Serial Bonds, 4.0% to 5.0%, maturing from August 15, 2004 to August 15, 2014	\$ 50,515	\$ 55,840
Revenue bonds, Series 2001 Serial Bonds, 5.05%, maturing from August 15, 2005 to August 15, 2023	34,440	35,605
Revenue bond, Series 2001 Term Bond, 5.0%, maturing August 15, 2031	28,100	28,100
Revenue bond, Series 2001 Term Bond, 5.1%, maturing August 15, 2036	24,065	24,065
Variable Rate Demand Revenue Bonds, Series 1998, 4.0%, maturing through August 1, 2026	112,000	112,900
Adjustable Rate Revenue Bonds, Series 1994C, 3.9% at June 30, 2006, maturing through August 15, 2026	55,400	55,400
Illinois Educational Facilities Authority Bonds		
Commercial Paper Revenue Note, Series 2007 (pooled financing program), 3.7% at June 30, 2007, maturing July 1, 2037	41,000	-
Commercial Paper Revenue Note, Series 2005 (pooled financing program), 3.7% at June 30, 2007, maturing September 1, 2035	29,000	29,000
Commercial Paper Revenue Note, Series 1998 (pooled financing program), 3.7% at June 30, 2007, maturing November 1, 2028	27,004	27,866
Unamortized premium	2,211	2,734
Total obligations	403,735	371,510
Less current maturities	(8,535)	(7,390)
Long-term portion	\$ 395,200	\$ 364,120

The carrying value of long-term debt does not differ materially from its estimated fair value as of June 30, 2007 and 2006, based on the quoted market prices for the same or similar issues.

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Scheduled annual repayments for fiscal years 2008 through 2012 are as follows:

	2008	2009	2010	2011	2012	Thereafter
Revenue Bonds, Series 2003	\$ 5,135	\$ 5,845	\$ 5,615	\$ 6,185	\$ 6,490	\$ 21,235
Revenue Bonds, Series 2001	2,000	2,000	1,400	1,470	1,530	78,205
Revenue Bonds, Series 1998	1,400	1,000	1,600	1,300	1,400	105,300
Revenue Bonds, Series 1994C	-	-	-	-	-	55,400
Pooled Financing 1998	-	-	-	-	-	27,004
Pooled Financing 2005	-	-	-	-	-	29,000
Pooled Financing 2007	-	-	-	-	-	41,000
	<u>\$ 8,535</u>	<u>\$ 8,845</u>	<u>\$ 8,615</u>	<u>\$ 8,965</u>	<u>\$ 9,420</u>	<u>\$ 357,144</u>

In August 2003, the Illinois Health Facilities Authority ("IHFA") issued \$65,290 of fixed rate Revenue Refunding Bonds, Series 2003 on behalf of UCMC in order to redeem Revenue Refunding Bonds, Series 1993A, 1993B-1, and 1993B-2. The Series 2003 bonds are due between August 15, 2004 and August 15, 2014 and bear interest at rates between 4% and 6%. The Series 2003 bonds are subject to redemption after August 15, 2013.

In September 2001 the IHFA issued \$36,725 of Revenue Bonds Series 2001 (Serial Bond) and \$28,100 of Revenue Bonds Series 2001 (Term Bond 2031) and \$24,065 of Revenue Bonds Series 2001 (Term Bond 2036), (collectively, the "Series 2001 Bonds") on behalf of UCMC for the construction and equipping of the new University of Chicago Comer Children's Hospital. The Series 2001 Serial Bonds, due August 15, 2023, and the Term Bond 2031, due August 15, 2031, are subject to redemption after August 15, 2011. The Term Bond 2036, due August 15, 2036, is subject to redemption after August 15, 2008.

In August 1998, the IHFA issued \$119,500 of Variable Rate Demand Revenue Bonds, Series 1998 (the "Series 1998 Bonds") on behalf of UCMC to advance refund the Series 1994A and 1994B revenue notes. The variable rate of interest on the Series 1998 Bonds may be changed or converted to a fixed interest rate at any time subject to certain requirements set forth in the Bond Indenture. The Series 1998 Bonds may be redeemed at certain times prior to their maturity and at certain premiums, depending on the mode of interest that is in effect. In connection with the issuance of the Series 1998 Bonds, UCMC had entered into an interest rate exchange agreement in which UCMC paid a fixed rate of 4.5% and received a variable rate based upon the BMA index. The interest rate exchange agreement expired on September 1, 2004.

In June, 1994, IHFA issued \$55,400 of Adjustable Rate Revenue Bonds Series 1994C ("Series 1994C Bonds") (collectively the "Series 1994 Bonds") on behalf of UCMC to redeem the outstanding adjustable rate Revenue Bonds, and to provide funding for the development of the Duchossois Center for Advanced Medicine (the "DCAM"). Interest on the Series 1994C Bonds is payable in one of seven variable modes of interest determination, as defined in the Series 1994 Bond Indenture ("Bond Indenture"). The variable modes of interest may be changed at any time at the discretion of UCMC, subject to certain requirements set forth in the Bond Indenture. The Series 1994C Bonds may be subject to mandatory conversion to a fixed interest rate in certain circumstances, as defined in the Bond Indenture. The Series 1994C Bonds are subject to redemption under certain conditions as defined in the Bond Indenture. The Series 1994C Bonds may be redeemed with a descending premium beginning at 2%.

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Each of the IHFA bond series is collateralized by gross revenues and subject to certain restrictions. The Series 1994, Series 1998, Series 2001 and Series 2003 Bonds are guaranteed by a municipal bond insurance policy. The restrictions under the respective debt agreements include financial ratio requirements, the most restrictive of which is to maintain a minimum debt service coverage ratio of 1.1:1.

In April 2007 the Illinois Educational Facilities Authority (IEFA) issued \$41,000 of variable rate demand revenue bonds on behalf of UCMC to finance a parking garage, office building renovation and renovation of the labor and delivery area. The bonds can be redeemed at any time without penalty. These bonds mature through July 2037.

In September 2005 the IEFA issued \$29,000 of variable rate demand revenue bonds on behalf of UCMC to finance an addition to the Comer Children's Hospital. The bonds can be redeemed at any time without penalty. These bonds mature through September 2035.

In November 1998 the IEFA issued \$27,866 of variable rate demand revenue bonds on behalf of UCMC to finance a parking garage and additional clinic space in the DCAM. The bonds can be redeemed at any time without penalty. These bonds mature through November 2028.

Payment on each of the IEFA bonds is collateralized by a letter of credit maturing November 2008. The letter of credit is subject to certain restrictions, which include financial ratio requirements and consent to future indebtedness. The most restrictive financial ratio is to maintain a debt service coverage ratio of 1.1:1.

The original issue discount related to the Series 2001 issue is \$1,080 and the original premium related to the Series 2003 issue is \$4,966, respectively. These amounts are amortized over the term of the bonds, and are included in interest expense in the accompanying statements of operations.

UCMC paid interest of approximately \$14,200 and \$13,100 in 2007 and 2006, respectively.

UCMC has a \$15,000 line of credit from a commercial bank. As of June 30, 2007 and 2006, no amount was outstanding.

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**7. Commitments**

**Leases**

UCMC has capital and noncancelable operating leases for certain buildings and equipment. Future minimum payments required under noncancelable operating and capital leases as of June 30, 2007 and 2006 are as follows:

	Operating	Capital
Year ending June 30		
2008	\$ 1,998	\$ 1,680
2009	1,738	1,688
2010	1,419	1,161
2011	736	1,109
2012 and thereafter	1,364	-
Total minimum lease payments	<u>\$ 7,255</u>	<u>5,638</u>
Less - Amount representing interest		<u>640</u>
Present value of net minimum capital lease payments		<u>\$ 4,998</u>

The amount of total assets capitalized under these leases at June 30, 2007 and 2006, is \$12,000 and \$12,700, respectively, with related accumulated depreciation of \$9,100 and \$9,000, respectively. Rental expense was approximately \$6,300 and \$6,000 for the years ended June 30, 2007 and 2006, including a \$500 annual rental of a parking garage from the University.

**Construction Projects**

UCMC is constructing a new ten-story staff parking garage that will include office space. The total estimated cost of the new parking garage is approximately \$53,400, and it is expected to open in November, 2007. As of June 30, 2007, total outstanding commitments on the project amounted to approximately \$41,400, of which approximately \$23,700 has been recorded in construction in progress. A portion of this project will be reimbursed by the University.

**8. Charity Care**

UCMC's policy is to treat patients in immediate need of medical services without regard to their ability to pay for such services, including patients transferred from other hospitals under the provisions of the Emergency Medical Treatment and Active Labor Act (EMTALA). UCMC also accepts patients through the Perinatal and Pediatric Trauma Networks without regard to their ability to pay for services. UCMC maintains records to identify and monitor the level of charity care they provide. These records include the amount of charges forgone for services and supplies furnished under their charity-care policy as well as the estimated cost of services and supplies. The estimated difference between the cost of services provided to Medicaid patients including those seen in the Physician-Directed Practice Clinics and the reimbursement from the Medicaid programs for this patient care are also considered to be charity care.

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During the years ended June 30, 2007 and 2006, the following levels of charity care were provided:

	2007	2006
Estimated costs incurred for charity care	\$ 12,272	\$ 11,519
Excess of cost over reimbursement for Medicaid patients before the effect of the provider tax	<u>69,236</u>	<u>75,649</u>
	<u>\$ 81,508</u>	<u>\$ 87,168</u>

In 2007 UCMC recorded a net increase in operating income of \$17,700 for 2006 and \$17,700 for 2007 for the State of Illinois Medicaid Provider Tax Program. In 2006 UCMC recorded no income for this program. See Note 2 for further information on the Medicaid Provider Tax.

**9. Insurance**

UCMC and QV are included under certain of the University's insurance programs. Since 1977, the University has maintained a self-insurance program for its medical malpractice liability. This program is supplemented with commercial excess insurance. The University's self-insurance retention was \$10,000 per claim and unlimited in annual aggregate for the year ended June 30, 2007. Claims in excess of \$10,000 are subject to an additional self-insurance retention limited to \$15,000 per claim and \$15,000 in annual aggregate. The self-insurance retention for the year ended June 30, 2006 was \$15,000 per claim and unlimited in annual aggregate with claims in excess of \$15,000 subject to an additional self-insurance retention limited to \$10,000 per claim and \$10,000 in annual aggregate.

The estimated liability for medical malpractice self-insurance is actuarially determined based upon UCMC-estimated claim reserves and various assumptions, and represents the estimated present value of self-insurance claims that will be settled in the future. It considers anticipated payout patterns as well as interest to be earned on available assets prior to payment. Management believes that an adequate provision has been recorded in the combined financial statements for estimated liabilities.

A comparison of the estimated liability for incurred malpractice claims (filed and not filed) and net assets for the combined University, UCMC and QV self-insurance program as of June 30, 2007 and 2006, is presented below:

	2007	2006
Actuarial present value of self-insurance liability for medical malpractice	<u>\$ 181,550</u>	<u>\$ 162,547</u>
Net assets available for claims	<u>\$ 225,487</u>	<u>\$ 172,636</u>

If the present-value method were not used, the ultimate liability for medical malpractice self-insurance claims would be approximately \$45,500 and \$41,300 higher than the amounts presented above at June 30, 2007 and 2006, respectively. The interest rates assumed in determining the present value for 2007 and 2006 was 6.25%. UCMC recognizes as malpractice expense its negotiated pro-rata share of the actuarially determined normal contribution, with gains and losses amortized over six years, with no retroactive adjustment, as provided for in the Operating Agreement.

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Included in other current assets is \$22,900 of malpractice premium prepaid to the University at June 30, 2006.

UCMC designated \$11,900 and \$10,900 as of June 30, 2007 and 2006 as a workers' compensation self-insurance reserve trust fund. The self-insurance program investments consist of 60% bonds and 40% marketable equities. The specifically identified claim requirements and actuarially determined reserve requirements for unreported workers' compensation claims were \$6,600 and \$6,900 as of June 30, 2007 and 2006, respectively. The University also charges UCMC for its portion of other commercial insurance and self-insurance costs.

**10. Pension Plans**

**Active Plans**

A majority of UCMC's personnel participate in the University's defined benefit and contribution pension plan. Under the defined benefit portion of this plan, benefits are based on years of service and the employee's compensation during the last five years of employment. UCMC and the University make annual contributions to this portion of the plan at a rate necessary to maintain plan funding on an actuarially recommended basis. UCMC recognizes its negotiated share of annual contributions as expense. Contributions of \$1,500 and \$5,000 were made in the fiscal years ended June 30, 2007 and 2006, respectively. UCMC expects to make contributions of \$11,300 for the fiscal year ended June 30, 2008.

Under the defined contribution portion of the plan, UCMC and plan participants make contributions that accrue to the benefit of the participants at retirement. UCMC's contributions, which are based on a percentage of each covered employee's salary, totaled approximately \$2,700 and \$2,900 for the years ended June 30, 2007 and 2006, respectively.

The benefit obligation, fair value of plan assets and funded status for the combined University and UCMC defined benefit and contribution pension plan as of June 30, 2007 and 2006, are shown below:

	<b>2007</b>	<b>2006</b>
Projected benefit obligation	\$ 423,208	\$ 403,771
Fair value of plan assets	363,093	324,998
Deficit of plan assets over benefit obligation	<u>\$ (60,115)</u>	<u>\$ (78,773)</u>

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The weighted-average assumptions used in the accounting for the plan are shown below:

	2007	2006
Discount rate	6.4 %	6.4 %
Expected return on plan assets	8.0 %	8.0 %
Rate of compensation increase	4.2 %	4.2 %

Effective with the June 30, 2005 fiscal year end, the measurement date for the University plan was changed from March 31 to June 30. The weighted average asset allocation for the plan is as follows:

	2007	2006
Domestic equities	65 %	66 %
International equity	21	20
Fixed income	14	14
	<u>100 %</u>	<u>100 %</u>

Total benefits and plan expenses paid by the plan are \$27,900 and \$25,100 for the fiscal years ended June 30, 2007 and 2006, respectively.

Expected future benefit payments excluding plan expenses are as follows:

Fiscal Year	
2008	\$ 19,819
2009	19,657
2010	20,873
2011	22,032
2012	23,791
2013-2016	147,021

Certain UCMC personnel participate in a contributory pension plan. Under this plan, UCMC and plan participants make annual contributions to purchase annuities equivalent to retirement benefits earned. UCMC's pension expense for this plan was \$3,600 and \$3,200 for the years ended June 30, 2007 and 2006, respectively.

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**Curtailed and Frozen Plan**

In June, 2002, UCMC assumed sponsorship of a plan which covers employees of a former affiliate. Participation and benefit accruals are frozen. All benefit accruals are fully vested.

Components of net periodic pension cost and other amounts recognized in unrestricted net assets include the following:

	<b>Years Ended June 30,</b>	
	<b>2007</b>	<b>2006</b>
Net periodic pension cost		
Interest cost	\$ 2,987	\$ 2,753
Expected return on plan assets	(2,926)	(2,877)
Amortization of unrecognized net actuarial loss	75	331
Net periodic pension cost	<u>136</u>	<u>207</u>
Other changes in plan assets and benefit obligations recognized in unrestricted net assets		
Additional minimum liability	(2,210)	(7,607)
Net other changes in unrestricted net assets	<u>(2,210)</u>	<u>(7,607)</u>
Total recognized in net periodic pension cost and unrestricted net assets	<u>\$ (2,074)</u>	<u>\$ (7,400)</u>

In accordance with Statement of Financial Accounting Standards No. 87, Employer's Accounting for Pensions, UCMC recorded an additional minimum pension liability for the underfunding of the plan, representing the excess of the accumulated benefit obligation over the fair value of the plan assets, adjusted for previously recorded pension liabilities. For the years ended June 30, 2007 and 2006, the additional minimum pension liability was decreased by \$2,210 and \$7,607, respectively. The amounts are reflected as a change in additional minimum pension liability in other changes in net assets in the accompanying consolidated statements of operations.

On June 30, 2007, UCMC adopted Statement of Financial Accounting Standards Number 158, "Employer's Accounting for Defined Benefit Pension and Other Postretirement Plans." There was no transition period benefit cost.

**The University of Chicago Medical Center**  
**Notes to Combined Financial Statements**  
**June 30, 2007 and 2006**  
(in thousands of dollars)

The following tables set forth additional required pension disclosure information for this plan:

	<b>Years Ended June 30,</b>	
	<b>2007</b>	<b>2006</b>
<b>Change in projected benefit obligation</b>		
Benefit obligation at beginning of year	\$ 49,010	\$ 56,602
Interest cost	2,987	2,753
Unrecognized net actuarial (gain) loss	161	(7,815)
Benefits paid	<u>(2,635)</u>	<u>(2,530)</u>
	<u>49,523</u>	<u>49,010</u>
<b>Change in plan assets</b>		
Fair value of plan assets at beginning of year	37,312	37,504
Actual return on plan assets	5,222	2,338
Employer contribution	2,077	-
Benefits paid	<u>(2,635)</u>	<u>(2,530)</u>
	<u>41,976</u>	<u>37,312</u>
Funded status at end of year	<u>\$ (7,547)</u>	<u>\$ (11,698)</u>

Amounts recognized in the balance sheet are included in noncurrent liabilities.

Accumulated plan benefits equal projected plan benefits. Assumptions used in the accounting for the net periodic pension cost were as follows:

	<b>2007</b>	<b>2006</b>
Discount rate	6.2 %	6.3 %
Expected return on plan assets	8.0 %	8.0 %
Rate of compensation increase	N/A	N/A

Weighted average asset allocations for plan assets are as follows:

	<b>2007</b>	<b>2006</b>
Cash	2 %	2 %
Fixed income	32	37
Domestic equities	51	49
International equities	<u>15</u>	<u>12</u>
	<u>100 %</u>	<u>100 %</u>

The target asset allocation is 60% equities and 40% fixed income. The expected return on plan assets is based on historical investment returns for similar investment portfolios.

**The University of Chicago Medical Center**  
**Notes to Combined Financial Statements**  
**June 30, 2007 and 2006**  
(in thousands of dollars)

UCMC expects to make contributions of \$4,000 to the plan in the fiscal year ending June 30, 2008. Expected future benefit payments are:

<b>Fiscal Year</b>	
2008	\$ 3,305
2009	3,400
2010	3,469
2011	3,506
2012	3,573
2013-2016	18,707

**11. Concentration of Credit Risk**

As a hospital, UCMC is potentially subject to concentration of credit risk from patient accounts receivable and certain investments. Investments, which include government and agency securities, stocks and corporate bonds and private equities, are not concentrated in any corporation or industry or with any single counter-party. UCMC receives a significant portion of its payments for services rendered from a limited number of government and commercial third-party payors, including Medicare, Medicaid, and Blue Cross. UCMC has not historically incurred any significant credit losses outside the normal course of business.

**12. Restricted Net Assets**

Temporarily restricted net assets are available for the following purposes as of June 30, 2007 and 2006:

	<b>2007</b>	<b>2006</b>
Pediatric health care	\$ 3,557	\$ 2,780
Adult health care	833	1,498
Educational and scientific programs	771	704
Capital and other purposes	41,782	65,543
Total	<u>\$ 46,943</u>	<u>\$ 70,525</u>

Income from permanently restricted net assets at June 30, 2007 and 2006 is restricted for:

	<b>2007</b>	<b>2006</b>
Pediatric health care	\$ 1,807	\$ 1,594
Adult health care	1,928	1,927
Educational and scientific programs	2,295	2,295
Total	<u>\$ 6,030</u>	<u>\$ 5,816</u>

**The University of Chicago Medical Center**  
**Notes to Combined Financial Statements**  
**June 30, 2007 and 2006**  
(In thousands of dollars)

**13. Functional Expenses**

Total operating expenses by function are as follows:

	2007	2006
Health care services	\$ 936,010	\$ 850,776
General and administrative	100,654	90,126
Total	<u>\$ 1,036,664</u>	<u>\$ 940,902</u>

**14. Contingencies**

UCMC is subject to complaints, claims and litigation which have risen in the normal course of business. In addition, UCMC is subject to reviews by various federal and state government agencies to assure compliance with applicable laws, some of which are subject to different interpretations. While the outcome of these suits cannot be determined at this time, management, based on advice from legal counsel, believes that any loss which may arise from these actions will not have a material adverse effect on the financial position or results of operations of UCMC.

**15. Friend Family Health Center (FFHC)**

FFHC was incorporated in June 1997 to provide primary care to economically challenged and medically high-risk populations on Chicago's South Side, and was designated a Federally Qualified Health Center in October 1998. FFHC is a separate not-for-profit Illinois corporation which is not controlled by UCMC.

UCMC subleases facilities to FFHC in the Friend Building located near its main facilities, and provides security and information services to FFHC at cost. Certain members of UCMC's medical staff provide physician services at FFHC.

UCMC has provided \$7,800 of cumulative support to offset FFHC operating losses, towards which \$2,000 has been provided by the Emanuel Friend Trust, a charitable trust established in Chicago in the 1930s. Support from the Trust is provided under a 1994 agreement with UCMC.

**Report of Independent Auditors on the Accompanying Combining Information**

To the Board of Trustees of  
University of Chicago Medical Center:

The report on our audit of the combined financial statements of The University of Chicago Medical Center as of June 30, 2007 and 2006 and for the years then ended appears on page one of this document. Those audits were conducted for the purpose of forming an opinion on the combined financial statements taken as a whole. The combining information is presented for purposes of additional analysis of the combined financial statements rather than to present the financial position and results of operations of the individual entities. Accordingly, we do not express an opinion on the financial position and results of operations of the individual entities. However, the combining information has been subjected to the auditing procedures applied in the audits of the combined financial statements and, in our opinion, is fairly stated in all material respects in relation to the combined financial statements taken as a whole.

*PricewaterhouseCoopers LLP*

September 14, 2007

**The University of Chicago Medical Center**  
**Combining Balance Sheet**  
**June 30, 2007 (with comparative combined balances as of June 30, 2006)**  
(in thousands of dollars)

	June 30, 2007			June 30, 2006
	Hospitals & Clinics	QV	Eliminations	
<b>Assets</b>				
Current assets				
Cash and cash equivalents	\$ 86,698	\$ 1,356	\$ -	\$ 88,056
Accounts receivable, less allowance for doubtful accounts 2007 - \$29,160 and 2006 - \$35,125	93,679	478	-	94,157
Current portion of investments limited to use	633	-	-	633
Current portion of pledges receivable	3,950	-	-	3,950
Other current assets	62,669	199	-	62,868
<b>Total current assets</b>	<b>247,629</b>	<b>2,035</b>	<b>-</b>	<b>249,664</b>
Investments limited to use, less current portion				
Construction and capitalized interest funds				
Donor-restricted	14,121	-	-	14,121
Self-insurance	28,852	-	-	28,852
Board designated investments	11,855	-	-	11,855
Property, plant and equipment, net	677,043	-	-	677,043
Pledges receivable, less current portion	532,755	695	-	533,450
Other assets, net	14,480	-	-	14,480
	23,062	50	-	23,112
<b>Total assets</b>	<b>\$ 1,549,797</b>	<b>\$ 2,780</b>	<b>\$ -</b>	<b>\$ 1,552,577</b>
				<b>\$ 1,320,729</b>

**The University of Chicago Medical Center  
Combining Balance Sheet**

**June 30, 2007 (with comparative combined balances as of June 30, 2006)**  
(in thousands of dollars)

	June 30, 2007			June 30, 2006
	Hospitals & Clinics	QV	Eliminations	Combined
<b>Liabilities and Net Assets</b>				
<b>Current liabilities</b>				
Accounts payable and accrued expenses	\$ 123,745	\$ 980	\$ -	\$ 124,725
Current portion of long-term debt	8,535	-	-	8,535
Current portion of other long-term liabilities	1,402	34	-	1,436
Current portion of estimated third-party payor settlements	41,975	-	-	41,975
Due to University of Chicago	18,508	356	-	18,864
Total current liabilities	194,165	1,370	-	195,535
<b>Other liabilities</b>				
Self-insurance liability	6,557	-	-	6,557
Long-term debt, less current portion	395,200	-	-	395,200
Other long-term liabilities, less current portion	44,657	66	-	44,723
Total liabilities	640,579	1,436	-	642,015
<b>Net assets</b>				
Unrestricted	856,245	1,344	-	857,589
Temporarily restricted	46,943	-	-	46,943
Permanently restricted	6,030	-	-	6,030
Total net assets	909,218	1,344	-	910,562
Total liabilities and net assets	\$ 1,549,797	\$ 2,780	\$ -	\$ 1,552,577
				\$ 1,320,729



**The University of Chicago Hospitals  
and Health System**

**Combined Financial Statements  
(With Combining Financial Information)  
June 30, 2006 and 2005**

**The University of Chicago Hospitals and Health System**  
**Index**  
**June 30, 2006 and 2005**

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**Report of Independent Auditors**

To the Board of Trustees of  
The University of Chicago Hospitals and Health System:

In our opinion, the accompanying combined balance sheets and the related combined statements of operations, changes in net assets and cash flows present fairly, in all material respects, the financial position of The University of Chicago Hospitals and Health System (UCHHS) at June 30, 2006 and 2005, and the results of their operations, their changes in net assets and their cash flows for the years then ended in conformity with accounting principles generally accepted in the United States of America. These financial statements are the responsibility of UCHHS' management. Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits of these statements in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

*PricewaterhouseCoopers LLP*

September 19, 2006

**The University of Chicago Hospitals and Health System**  
**Combined Balance Sheets**  
**June 30, 2006 and 2005**  
(in thousands of dollars)

	2006	2005
<b>Assets</b>		
Current assets		
Cash and cash equivalents	\$ 21,726	\$ 47,948
Accounts receivable, less allowance for doubtful accounts for 2006 - \$35,125 and 2005 - \$38,760	109,911	109,171
Current portion of investments limited to use	776	685
Current portion of pledges receivable	11,438	9,455
Other current assets	41,924	38,956
Total current assets	185,775	206,215
Investments limited to use, less current portion		
Construction and capitalized interest funds	7,048	-
Donor-restricted	27,149	5,242
Self-insurance	10,867	9,776
Board designated investments	566,425	468,187
Property, plant and equipment, net	497,344	466,455
Pledges receivable, less current portion	15,708	8,330
Other assets, net	10,413	15,230
Total assets	\$ 1,320,729	\$ 1,179,435
<b>Liabilities and Net Assets</b>		
Current liabilities		
Accounts payable and accrued expenses	\$ 95,816	\$ 92,500
Current portion of long-term debt	7,390	7,120
Current portion of other long-term liabilities	1,340	1,678
Current portion of estimated third-party payor settlements	65,588	44,452
Due to University of Chicago	18,477	17,970
Total current liabilities	188,611	163,720
Other liabilities		
Self-insurance liabilities	6,934	7,238
Long-term debt, less current portion	364,120	342,931
Other long-term liabilities, less current portion	85,312	88,623
Total liabilities	644,977	602,512
Net assets		
Unrestricted	599,411	535,347
Temporarily restricted	70,525	35,919
Permanently restricted	5,816	5,657
Total net assets	675,752	576,923
Total liabilities and net assets	\$ 1,320,729	\$ 1,179,435

The accompanying notes are an integral part of the combined financial statements.

**The University of Chicago Hospitals and Health System**  
**Combined Statements of Operations**  
**Years Ended June 30, 2006 and 2005**  
(in thousands of dollars)

	2006	2005
<b>Operating revenues</b>		
Net patient service revenue	\$ 839,509	\$ 834,809
Other operating revenues and net assets released from restrictions	44,482	33,706
Total operating revenues	<u>883,991</u>	<u>868,515</u>
<b>Operating expenses</b>		
Salaries, wages and benefits	439,559	393,709
Supplies and other	301,645	265,397
Insurance	25,380	20,905
Provision for doubtful accounts	44,236	50,947
Interest	13,994	9,191
Medicaid provider tax	-	14,612
Depreciation	46,647	43,994
Total operating expenses	<u>871,461</u>	<u>798,755</u>
Income from operations	12,530	69,760
<b>Nonoperating gains (losses)</b>		
Investment income and unrestricted gifts, net	59,402	29,959
Other, net	(196)	76
Excess of revenues over expenses	<u>71,736</u>	<u>99,795</u>
<b>Other changes in net assets</b>		
Change in unrealized gains on investments	2,248	16,145
Transfers to University of Chicago	(15,000)	(15,000)
Net assets released for capital purchases	4,857	12,402
Cumulative effect of change in accounting principle - conditional asset retirement obligation	(7,939)	-
Adjustment to minimum pension liability	7,607	(8,471)
Other, net	555	2,206
Increase in unrestricted net assets	<u>\$ 64,064</u>	<u>\$ 107,077</u>

The accompanying notes are an integral part of the combined financial statements.

**The University of Chicago Hospitals and Health System**  
**Combined Statements of Changes in Net Assets**  
**Years Ended June 30, 2006 and 2005**  
(in thousands of dollars)

	2006	2005
<b>Unrestricted net assets</b>		
Excess of revenues over expenses	\$ 71,736	\$ 99,795
Change in unrealized gains on investments	2,248	16,145
Transfers to University of Chicago	(15,000)	(15,000)
Net assets released for capital purchases	4,857	12,402
Cumulative effect of change in accounting principle - conditional asset retirement obligation	(7,939)	-
Adjustment to minimum pension liability	7,607	(8,471)
Other, net	555	2,206
Increase in unrestricted net assets	<u>64,064</u>	<u>107,077</u>
<b>Temporarily restricted net assets</b>		
Contributions	41,712	1,367
Net assets released from restrictions used for operating purposes	(2,249)	(1,984)
Net assets released for capital purchases	(4,857)	(12,402)
Increase (decrease) in temporarily restricted net assets	<u>34,606</u>	<u>(13,019)</u>
<b>Permanently restricted net assets</b>		
Contributions and other	159	(7)
Increase in net assets	98,829	94,051
Net assets at beginning of year	576,923	482,872
Net assets at end of year	<u>\$ 675,752</u>	<u>\$ 576,923</u>

The accompanying notes are an integral part of the combined financial statements.

**The University of Chicago Hospitals and Health System**  
**Combined Statements of Cash Flows**  
**Years Ended June 30, 2006 and 2005**  
(in thousands of dollars)

	2006	2005
<b>Cash flows from operating activities</b>		
Increase in net assets	\$ 98,829	\$ 94,051
Adjustments to reconcile change in net assets to net cash provided by operating activities		
Net change in unrealized gains on investments	(2,248)	(16,427)
Transfers to University of Chicago	15,000	15,000
Restricted contributions	(41,871)	(1,360)
Other changes in unrestricted net assets	(49,571)	6,265
Cumulative effect of a change in accounting principle	7,939	-
Loss on disposal of assets	197	217
Depreciation and amortization	46,728	44,070
Increase (decrease) in cash resulting from a change in:		
Patient accounts receivable, net	(740)	(6,767)
Other assets	1,571	(3,477)
Accounts payable and accrued expenses	3,316	7,628
Due to the University of Chicago	507	3,642
Estimated settlements with third-party payors	17,283	2,879
Self-insurance liabilities	(304)	492
Other liabilities	(3,230)	(960)
Net cash provided from operating activities	<u>93,406</u>	<u>145,253</u>
<b>Cash flows from investing activities</b>		
Purchases of property, plant and equipment	(77,851)	(98,366)
Decrease in notes receivable	56	2,494
Deposits to construction and capitalized interest funds	(28,814)	-
Uses of construction and capitalized interest funds	21,741	15,817
Purchases of investments	(169,230)	(122,914)
Sales of investments	94,758	66,440
Net cash used in investing activities	<u>(159,340)</u>	<u>(136,529)</u>
<b>Cash flows from financing activities</b>		
Proceeds from issuance of long-term debt	29,000	-
Payments on long-term obligations	(7,306)	(7,203)
Transfers paid to the University of Chicago, net	(14,492)	(15,000)
Restricted contributions	32,510	9,944
Net cash used in financing activities	<u>39,712</u>	<u>(12,259)</u>
Net increase (decrease) in cash	(26,222)	(3,535)
<b>Cash and cash equivalents</b>		
Beginning of year	47,948	51,483
End of year	<u>\$ 21,726</u>	<u>\$ 47,948</u>

The accompanying notes are an integral part of the combined financial statements.

**The University of Chicago Hospitals and Health System**  
**Notes to Combined Financial Statements**  
**June 30, 2006 and 2005**  
(In thousands of dollars)

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**1. Organization**

The University of Chicago Hospitals ("UCH"), an Illinois not-for-profit corporation, operates the Bernard Mitchell Hospital, the Chicago Lying-in Hospital, the University of Chicago Comer Children's Hospital and the Duchossois Center for Advanced Medicine ("DCAM"). Effective August 7, 2006, The University of Chicago Hospitals was renamed The University of Chicago Medical Center (the "Medical Center").

The University of Chicago (the "University"), as the sole corporate member of UCH, elects UCH's Board of Trustees (the "Board"). The Chief Executive Officer, who will be the Vice President for Medical Affairs at the University, shall be appointed by the President of the University, subject to the consent of the Medical Center Executive Committee and final approval of the University's Board of Trustees. The relationship between UCH and the University is defined in an Affiliation Agreement and an Operating Agreement, both dated October 1, 1986. The Operating Agreement was amended and a Lease Agreement between the University and UCH was entered into as of June 30, 1987 (see Note 3). Additional lease agreements have been entered into from time to time.

QV, Inc. ("QV") is an affiliated not-for-profit corporation operating clinics in the Chicago area. QV has certain Board members common to UCH. UCH and QV are collectively referred to as the University of Chicago Hospitals and Health System ("UCHHS"). The combined financial statements include the assets, liabilities and operating results of UCH and QV. Significant intercompany accounts and transactions have been eliminated.

UCH and QV are tax-exempt organizations under Section 501(c)(3) of the Internal Revenue Code. Accordingly, no provision for income taxes related to these entities has been made.

**2. Summary of Significant Accounting Policies**

**Use of Estimates**

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates. The most significant estimates are made in the areas of patient accounts receivable, accruals for settlements with third-party payors, and accrued compensation and benefits.

**Fair Value of Financial Instruments**

The fair value of financial instruments approximates the carrying amount reported in the combined balance sheets for cash and cash equivalents, investments, investments limited as to use, patient accounts receivable, accounts payable and long-term debt.

**The University of Chicago Hospitals and Health System**  
**Notes to Combined Financial Statements**  
**June 30, 2006 and 2005**  
(In thousands of dollars)

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**Cash and Cash Equivalents**

Cash and cash equivalents represent money market and highly liquid debt instruments with a maturity at the date of purchase of three months or less.

**Inventory**

UCH values inventories at the lower of cost or market. In 2006 and 2005, UCH began inventorying certain operating room supplies that had been previously expensed as purchased. The cumulative effect of this accounting change related to prior years was approximately \$100 and \$1,300 and is reflected in other changes in net assets in the accompanying statement of operations for the years ended June 30, 2006 and 2005, respectively.

**Investments**

Marketable investments are measured at fair value based on quoted market prices. Investment income or loss (including realized gains and losses on investments, impairment losses, interest and dividends) is included in the excess of revenues over expenses unless the income or loss is restricted by the donor or the law. The change in net unrealized gains and losses on investments is excluded from the excess of revenues over expenses.

Private equity, real estate and absolute return investments are measured on the equity method. The value of these investments is based on valuations provided by external investment managers as of March 31, adjusted for cash receipts, cash disbursements and securities distributions through June 30. These valuations necessarily involve estimates, appraisals, assumptions and methods which are reviewed by management. All changes in the value of these investments are included in the excess of revenues over expenses.

Some of UCH's investments are part of the University's Total Return Investment Pool (TRIP). UCH accounts its investments in TRIP based on its share of the underlying securities and records the investment activity as if UCH owned the investments directly.

**Investments Limited as to Use**

Investments limited as to use primarily include assets held by trustees under debt and other agreements and designated assets set aside by the Board of Trustees for future capital improvements and other specific purposes, over which the Board retains control and may at their discretion subsequently use for other purposes.

**Derivative Instruments**

UCH had an interest rate swap agreement to manage its exposure to interest rate movements by effectively converting a portion of its debt to a fixed rate from a variable interest rate. This agreement involved the exchange of variable rate payments for fixed rate payments on a stated notional amount, and expired in September 2004. Management had determined that the interest rate swap was effective as defined by Statement of Financial Accounting Standards (SFAS) No. 133, "Accounting for Derivative Instruments and Certain Hedging Activities" and accordingly had utilized hedge accounting. Therefore, the change in the fair value of the interest rate swap was excluded from excess of revenues over expenses and reported as a change in unrestricted net assets.

**The University of Chicago Hospitals and Health System**  
**Notes to Combined Financial Statements**  
**June 30, 2006 and 2005**  
**(in thousands of dollars)**

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**Property, Plant and Equipment**

Property, plant and equipment are reported on the basis of cost less accumulated depreciation and amortization. Donated items are recorded at fair market value at the date of contribution. The carrying value of property, plant and equipment is reviewed if the facts and circumstances suggest that it may be impaired. Depreciation of property, plant and equipment is calculated by use of the straight-line method at rates intended to depreciate the cost of assets over their estimated useful lives, which generally range from three to forty years. Interest costs incurred on borrowed funds during the period of construction of capital assets, net of any interest earned, are capitalized as a component of the cost of acquiring those assets.

**Asset Retirement Obligation**

On June 30, 2006 UCH adopted Financial Accounting Standards Board Interpretation No. 47 (FIN 47), "Accounting for Conditional Asset Retirement Obligations." FIN 47 requires that a liability be recognized for the fair value of a legal obligation to perform asset retirement activities that are conditional on a future event if the amount can be reasonably estimated. Upon recognition of a liability, the asset retirement cost is recorded as an increase in the carrying value of the related long-lived asset and then depreciated over the life of the asset. The UCH asset retirement obligations arise primarily from regulations that specify how to dispose of asbestos if facilities are demolished or undergo major renovations or repairs. UCH's obligation to remove asbestos was estimated using site-specific surveys where available and a per square foot estimate where surveys were unavailable.

As a result of an evaluation of available asbestos remediation estimates, UCH recorded liabilities of \$8,000 for the asset retirement obligations. Accumulated depreciation was measured from the date the liability and capitalized asset would have been recognized if FIN 47 were in effect when UCH incurred the liability. Based on this, all the assets were fully depreciated at June 30, 2006. Accordingly, the entire \$8,000 cumulative effect of this change in accounting principle was recorded as a reduction in unrestricted net assets in fiscal 2006.

**Pledges Receivable**

Pledges are recorded at the present value of their estimated future cash flow. Estimated future cash flows due after one year are discounted using interest rates commensurate with estimated collection risks.

**Other Assets**

Other assets include deferred financing costs, which are amortized over the term of the related obligations.

**Net Assets**

Permanently restricted net assets include the historical dollar amounts of gifts that are required by donors to be permanently retained. Temporarily restricted net assets include gifts, which can be expended but for which restrictions have not yet been met. Such restrictions include purpose restrictions where donors have specified the purpose for which the net assets are to be spent, or time restrictions imposed by donors or implied by the nature of the gift (such as pledges to be paid in the future) or by interpretations of law.

**The University of Chicago Hospitals and Health System**  
**Notes to Combined Financial Statements**  
**June 30, 2006 and 2005**  
**(in thousands of dollars)**

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Realized gains and losses are classified as unrestricted net assets unless they are restricted by the donor or law. Unrestricted net assets include all the remaining net assets of UCH. See Note 12 for further information on the composition of restricted net assets.

**Gifts and Grants**

Unconditional promises to give cash and other assets to UCH are reported at fair value at the date the promise is received. Conditional promises to give are recognized when the conditions are substantially met. The gifts are reported as either temporarily or permanently restricted support if they are received with donor stipulations that limit the use of the donated assets. Donor-restricted contributions whose restrictions are met within the same year received are reported as unrestricted gifts in the accompanying financial statements.

Gifts of cash or other assets that must be used to acquire long-lived assets are reported as additions to temporarily restricted net assets if the gifts are not expended or placed in service during the year.

**Statement of Operations**

All activities of UCH deemed by management to be ongoing, major and central to the provision of healthcare services, are reported as operating revenues and expenses. Other activities deemed to be nonoperating include unrestricted gifts and certain investment income (including realized gains and losses).

UCH recognizes changes in accounting estimates related to third-party payor settlements as more experience is acquired. Adjustments to prior year estimates for these items resulted in an increase in net patient service revenues of \$8,000 in 2006 and \$10,000 in 2005. In addition, UCH received \$12,000 in 2006 in settlement of claims against a bankrupt HMO dating from the early 1990's.

The statement of operations includes excess of revenues over expenses. Changes in unrestricted net assets that are excluded from excess of revenues over expenses include changes in unrealized gains and losses on investments, transfers to the University, contributions of long-lived assets released from restrictions (including assets acquired using contributions which by donor restriction were to be used for acquisition of such assets) and additional minimum pension liabilities.

**Net Patient Service Revenue, Accounts Receivable and Allowance for Doubtful Accounts**

UCH maintains agreements with the Social Security Administration under the Medicare Program, Blue Cross and Blue Shield of Illinois, Inc. (Blue Cross), and The State of Illinois under the Medicaid Program and various managed care payors that govern payment to UCH for services rendered to patients covered by these agreements. The agreements generally provide for per case or per diem rates or payments based on allowable costs, subject to certain limitations, for inpatient care and discounted charges or fee schedules for outpatient care.

Net patient service revenue is reported at estimated net realizable amounts from patients, third-party payors, and others for services rendered and includes estimated retroactive revenue adjustments due to future audits, reviews, and investigations. Retroactive adjustments are considered in the recognition of revenue on an estimated basis in the period the related services

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are rendered, and such amounts are adjusted in future periods as adjustments become known or as years are no longer subject to such audits, reviews and investigations. Contracts, laws and regulations governing Medicare, Medicaid, and Blue Cross are complex and subject to interpretation. As a result, there is at least a reasonable possibility that recorded estimates will change by a material amount in the near term. A portion of the accrual for settlements with third-party payors has been classified as long-term because such amounts will not be paid within one year.

The process for estimating the ultimate collectibility of receivables involves significant assumptions and judgment. UCH has implemented a standardized approach to this estimation based on the payor classification and age of outstanding receivables. Account balances are written off against the allowance when management feels it is probable the receivable will not be recovered. The use of historical collection experience is an integral part of the estimation of the reserve for doubtful accounts. Revisions in the reserve for doubtful accounts are recorded as adjustments to the provision for doubtful accounts.

**Hospital Assessment Program/Medicaid Provider Tax**

In December 2004, the State of Illinois, after receiving approval by the federal government, implemented a hospital assessment program. This program was approved for the period May 8, 2004 through June 30, 2005. The program assessed hospitals a provider tax based on occupied bed days and provided increases in hospitals' Medicaid payments. Since this program was not approved in 2004, no amounts were included in the 2004 statement of operations. Included in the 2005 statement of operations is a net increase in the performance indicator of approximately \$15,200 which represents approximately \$29,800 in additional Medicaid payments offset by approximately \$14,600 in a Medicaid provider tax. At the printing of this report, the Centers for Medicare and Medicaid Services (CMS) had not yet approved the hospital assessment program for 2006 and, as a result, no amounts were recorded in the 2006 financial statements.

**3. Agreements and Transactions with the University**

The Affiliation Agreement with the University provides, among other things, that all members of the medical staff will have academic appointments in the University. The Affiliation Agreement has an initial term of 40 years ending October 1, 2026 unless sooner terminated by mutual consent or as a result of a continuing breach of a material obligation therein or in the Operating Agreement. The Affiliation Agreement automatically renews for additional successive 10-year terms following expiration of the initial term, unless either party provides the other with at least two years' prior written notice of its election not to renew.

The Operating Agreement, as amended, provides, among other things, that the University gives UCH the right to use and operate certain facilities. The Operating Agreement is coterminous with the Affiliation Agreement.

The Lease Agreements provide, among other things, that UCH will lease from the University certain of the health care facilities and land that UCH operates and occupies. The Lease Agreements are coterminous with the Affiliation Agreement.

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UCH purchases various services from the University, including certain employee benefits, utilities, security, telecommunications and insurance. In addition, certain UCH accounting records are maintained by the University. During the years ended June 30, 2006 and 2005, the University charged UCH approximately \$44,500 and \$39,100, respectively, for utilities, security, telecommunications, insurance and overhead.

The University's Division of Biological Sciences ("BSD") provides physician services for UCHHS. In 2006 and 2005, UCHHS recorded \$69,500 and \$56,200, respectively, in expense related to these services.

UCHHS' Board of Trustees adopted a plan of support under which it would provide \$15,000 annually to support BSD's programs. All commitments under this plan are subject to the approval of UCHHS' Board of Trustees and do not represent legally binding commitments until such approval. Unpaid portions of commitments approved by the UCHHS Board of Trustees are reflected as current liabilities. In 2006 and 2005, UCH committed to net asset transfers of \$15,000 to the BSD.

**4. Investments and Investments Limited as to Use**

Construction and capitalized interest funds consist primarily of bonds and cash and cash equivalents.

The composition of investments and investments limited as to use is as follows:

	2006	2005
Separately invested		
Domestic fixed income	\$ 154,403	\$ 108,230
Domestic public equities	232,847	186,386
Real estate	6,011	4,924
Private equity	19,241	17,994
International public equities	2,037	445
Cash equivalents	1,407	135
	<u>415,946</u>	<u>318,114</u>
Invested with TRIP		
Domestic fixed income	16,571	18,299
Domestic public equities	23,659	35,167
Real estate	19,454	11,751
Private equity	21,876	25,288
International public equities	46,919	28,566
Absolute return	48,607	27,967
High yield bonds	-	7,561
Cash equivalents	542	716
	<u>177,628</u>	<u>155,315</u>
Total investments	<u>\$ 593,574</u>	<u>\$ 473,429</u>

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Investments and investment limited as to use are recorded as follows:

	2006	2005
Investments limited to use, less current portion		
Donor restricted	\$ 27,149	\$ 5,242
Board designated investments	566,425	468,187
Total investments	<u>\$ 593,574</u>	<u>\$ 473,429</u>

Board designated funds limited to use consist of:

	2006	2005
Board designated for capital renewal	\$ 150,878	\$ 138,488
Board designated for endowment	238,558	174,882
Board designated for academic renewal	4,800	4,800
Board designated endowment in TRIP	172,189	150,017
	<u>\$ 566,425</u>	<u>\$ 468,187</u>

The composition of investment income and unrestricted gifts, net is as follows for the years ended June 30, 2006 and 2005:

	2006	2005
Interest and dividend income, net	\$ 14,213	\$ 12,155
Realized gains (losses) on sales of securities and equity adjustment in private equities, net	44,491	17,306
Unrestricted gifts	698	531
Investment impairments	-	(33)
	<u>\$ 59,402</u>	<u>\$ 29,959</u>

UCH also invests in private equity limited partnerships. As of June 30, 2006, UCH has commitments of \$35,900 to fund private equity limited partnerships, approximately \$31,600 of which have been funded.

**5. Property, Plant and Equipment**

The components of property, plant and equipment as of June 30, 2006 and 2005, are as follows:

	2006	2005
Land and land rights	\$ 33,093	\$ 26,415
Buildings and improvements	512,399	500,512
Equipment	317,205	302,129
Construction in progress	91,560	53,061
	<u>954,257</u>	<u>882,117</u>
Less accumulated depreciation	<u>(456,913)</u>	<u>(415,662)</u>
Total property, plant and equipment, net	<u>\$ 497,344</u>	<u>\$ 466,455</u>

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UCH's net property, plant and equipment cost includes approximately \$17,400 representing assets under capital leases with the University, which are stated at the University's historical cost. The cost of buildings that are jointly used by the University and UCH is allocated based on the lease provisions. In addition, land and land rights includes approximately \$26,300, which represents the unamortized portion of initial lease payments made to the University.

Interest costs aggregating \$200 and \$3,100 were capitalized in 2006 and 2005, respectively.

**6. Long-Term Debt**

Long-term debt as of June 30, 2006 and 2005, consists of the following:

	2006	2005
Illinois Health Facilities Authority Bonds		
Revenue bonds, Series 2003 Serial Bonds, 4.0% to 5.0%, maturing from August 15, 2004 to August 15, 2014	\$ 55,840	\$ 60,740
Revenue bonds, Series 2001 Serial Bonds, 5.05%, maturing from August 15, 2005 to August 15, 2023	35,605	36,725
Revenue bond, Series 2001 Term Bond, 5.0%, maturing August 15, 2031	28,100	28,100
Revenue bond, Series 2001 Term Bond, 5.1%, maturing August 15, 2036	24,065	24,065
Variable Rate Demand Revenue Bonds, Series 1998, 4.0%, maturing through August 1, 2026	112,900	114,000
Adjustable Rate Revenue Bonds, Series 1994C, 4.0% at June 30, 2006, maturing through August 15, 2026	55,400	55,400
Illinois Educational Facilities Authority Bonds		
Commercial Paper Revenue Note, Series 2005 (pooled financing program), 3.5% at June 30, 2006, maturing September 1, 2035	29,000	-
Commercial Paper Revenue Note, Series 1998 (pooled financing program), 3.5% at June 30, 2006, maturing November 1, 2028	27,866	27,866
Unamortized premium	2,734	3,155
Total obligations	<u>371,510</u>	<u>350,051</u>
Less current maturities	<u>(7,390)</u>	<u>(7,120)</u>
Long-term portion	<u>\$ 364,120</u>	<u>\$ 342,931</u>

The carrying value of long-term debt does not differ materially from its estimated fair value as of June 30, 2006 and 2005, based on the quoted market prices for the same or similar issues.

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Scheduled annual repayments for fiscal years 2006 through 2010 are as follows:

	2007	2008	2009	2010	2011	Thereafter
Revenue Bonds, Series 2003	\$ 5,325	\$ 5,135	\$ 5,845	\$ 5,615	\$ 6,195	\$ 27,725
Revenue Bonds, Series 2001	1,165	2,000	2,000	1,400	1,470	79,735
Revenue Bonds, Series 1998	900	1,400	1,000	1,600	1,300	106,700
Revenue Bonds, Series 1994C	-	-	-	-	-	55,400
Pooled Financing 2005	-	-	-	-	-	29,000
Pooled Financing 1998	-	-	-	-	-	27,866
	<u>\$ 7,390</u>	<u>\$ 8,535</u>	<u>\$ 8,845</u>	<u>\$ 8,615</u>	<u>\$ 8,965</u>	<u>\$ 326,426</u>

In August 2003, the Illinois Health Facilities Authority ("IHFA") issued \$65,290 of fixed rate Revenue Refunding Bonds, Series 2003 on behalf of UCHHS in order to redeem Revenue Refunding Bonds, Series 1993A, 1993B-1, and 1993B-2. The Series 2003 bonds are due between August 15, 2004 and August 15, 2014 and bear interest at rates between 4% and 6%. The Series 2003 bonds are subject to redemption after August 15, 2013.

In September 2001 the IHFA issued \$36,725 of Revenue Bonds Series 2001 (Serial Bond) and \$28,100 of Revenue Bonds Series 2001 (Term Bond 2031) and \$24,065 of Revenue Bonds Series 2001 (Term Bond 2036), (collectively, the "Series 2001 Bonds") on behalf of UCH for the construction and equipping of the new University of Chicago Comer Children's Hospital. The Series 2001 Serial Bonds, due August 15, 2023, and the Term Bond 2031, due August 15, 2031, are subject to redemption after August 15, 2011. The Term Bond 2036, due August 15, 2036, is subject to redemption after August 15, 2008.

In August 1998, the IHFA issued \$119,500 of Variable Rate Demand Revenue Bonds, Series 1998 (the "Series 1998 Bonds") on behalf of UCH to advance refund the Series 1994A and 1994B revenue notes. The variable rate of interest on the Series 1998 Bonds may be changed or converted to a fixed interest rate at any time subject to certain requirements set forth in the Bond Indenture. The Series 1998 Bonds may be redeemed at certain times prior to their maturity and at certain premiums, depending on the mode of interest that is in effect. In connection with the issuance of the Series 1998 Bonds, UCH had entered into an interest rate exchange agreement in which UCH paid a fixed rate of 4.5% and received a variable rate based upon the BMA index. The interest rate exchange agreement expired on September 1, 2004.

In June, 1994, IHFA issued \$55,400 of Adjustable Rate Revenue Bonds Series 1994C ("Series 1994C Bonds") (collectively the "Series 1994 Bonds") on behalf of UCH to redeem the outstanding adjustable rate Revenue Bonds, and to provide funding for the development of the Duchossois Center for Advanced Medicine (the "DCAM"). Interest on the Series 1994C Bonds is payable in one of seven variable modes of interest determination, as defined in the Series 1994

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Bond Indenture ("Bond Indenture"). The variable modes of interest may be changed at any time at the discretion of UCH, subject to certain requirements set forth in the Bond Indenture. The Series 1994C Bonds may be subject to mandatory conversion to a fixed interest rate in certain circumstances, as defined in the Bond Indenture. The Series 1994C Bonds are subject to redemption under certain conditions as defined in the Bond Indenture. The Series 1994C Bonds may be redeemed with a descending premium beginning at 2%.

Each of the IHFA bond series is collateralized by accounts receivable and subject to certain restrictions. The Series 1994, Series 1998, Series 2001 and Series 2003 Bonds are guaranteed by a municipal bond insurance policy. The restrictions under the respective debt agreements include financial ratio requirements, the most restrictive of which is to maintain a minimum debt service coverage ratio of 1.1:1.

In September 2005 the Illinois Educational Facilities Authority (IEFA) issued \$29,000 of variable rate demand revenue bonds on behalf of UCH to finance a new Pediatric Emergency Department. The bonds can be redeemed at any time without penalty. These bonds mature through September 2035.

In November 1998 the IEFA issued \$27,866 of variable rate demand revenue bonds on behalf of UCH to finance a parking garage and additional clinic space in the DCAM. The bonds can be redeemed at any time without penalty. These bonds mature through November 2028.

Payment on each of the IEFA bonds is collateralized by a letter of credit maturing November 2008. The letter of credit is subject to certain restrictions, which include financial ratio requirements and consent to future indebtedness. The most restrictive financial ratio is to maintain a debt service coverage ratio of 1.1:1.

The original issue discount related to the Series 2001 issue is \$1,080 and the original premium related to the Series 2003 issue is \$4,966, respectively. These amounts are amortized over the term of the bonds, and are included in interest expense in the accompanying statements of operations.

UCHHS paid interest of approximately \$13,100 and \$11,800 in 2006 and 2005, respectively.

UCHHS has a \$15,000 line of credit from a commercial bank. As of June 30, 2006 and 2005, no amount was outstanding.

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**7. Commitments**

**Leases**

UCH has capital and noncancelable operating leases for certain buildings and equipment. Future minimum payments required under noncancelable operating and capital leases as of June 30, 2006 and 2005 are as follows:

Year ending June 30	Operating	Capital
2007	\$ 2,202	\$ 1,654
2008	1,748	1,603
2009	1,579	1,618
2010	1,292	1,120
2011 and thereafter	1,993	1,109
Total minimum lease payments	<u>\$ 8,814</u>	<u>7,104</u>
Less - Amount representing interest		984
Present value of net minimum capital lease payments		<u>\$ 6,120</u>

Rental expense was approximately \$6,000 and \$5,500 for the years ended June 30, 2006 and 2005, including a \$500 annual rental of a parking garage from the University. The amount of total assets capitalized under these leases at June 30, 2006 and 2005, is \$12,700 and \$12,500, respectively, with related accumulated depreciation of \$6,800 and \$5,700, respectively.

**Construction Projects**

UCH is constructing a new building that will include a Pediatrics Emergency Department on the first floor and three floors of shelled space. The total estimated cost of the new building is approximately \$51,800, and it is expected to open in December, 2006. As of June 30, 2006, total outstanding commitments on the project amounted to approximately \$39,200, of which approximately \$26,000 has been recorded in construction in progress.

UCH is constructing a new ten story parking garage that will include office space and 1,009 parking spaces for UCH staff. The total estimated cost of the new parking garage is approximately \$49,900, and it is expected to open in May, 2007. As of June 30, 2006, total outstanding commitments on the project amounted to approximately \$40,500, of which approximately \$3,600 has been recorded in construction in progress. A portion of this project will be reimbursed by the University.

**8. Charity Care**

UCH's policy is to treat patients in immediate need of medical services without regard to their ability to pay for such services, including patients transferred from other hospitals under the provisions of the Emergency Medical Treatment and Active Labor Act (EMTALA). UCH also accepts patients through the Perinatal and Pediatric Trauma Networks without regard to their ability to pay for services. UCH maintains records to identify and monitor the level of charity care they provide. These records include the amount of charges forgone for services and

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supplies furnished under their charity-care policy as well as the estimated cost of services and supplies. The estimated difference between the cost of services provided to Medicaid patients including those seen in the Physician-Directed Practice Clinics (along with the Medicaid Provider Tax discussed in Note 2) and the reimbursement from the Medicaid programs for this patient care are also considered to be charity care.

During the years ended June 30, 2006 and 2005, the following levels of charity care were provided:

	2006	2005
Estimated costs incurred for charity care	\$ 11,519	\$ 11,371
Excess of cost over reimbursement for Medicaid patients before the effect of the provider tax	75,649	49,812
	<u>87,168</u>	<u>61,183</u>
Effect of the provider tax	-	(15,216)
	<u>\$ 87,168</u>	<u>\$ 45,967</u>

**9. Insurance**

UCH and QV are included under certain of the University's insurance programs. Since 1977, the University has maintained a self-insurance program for its medical malpractice liability. This program is supplemented with commercial excess insurance. The University's self-insurance retention was \$15,000 per claim and unlimited in annual aggregate for the years ended June 30, 2006 and 2005, respectively. An inner aggregate of \$10,000 also apply to the years then ended. For the year ended June 30, 2001, the University purchased an extended reporting endorsement for claims occurring prior to July 1, 2001 but reported after that date. The retention applicable under this policy is \$4,000 per claim and \$20,000 in annual aggregate.

The estimated liability for medical malpractice self-insurance is actuarially determined based upon UCH-estimated claim reserves and various assumptions and represents the estimated present value of self-insurance claims that will be settled in the future. It considers anticipated payout patterns as well as interest to be earned on available assets prior to payment. Management believes that an adequate provision has been recorded in the combined financial statements for estimated liabilities.

A comparison of the estimated liability for incurred malpractice claims (filed and not filed) and net assets for the combined University, UCH and QV self-insurance program as of June 30, 2006 and 2005, is presented below:

	2006	2005
Actuarial present value of self-insurance liability for medical malpractice	\$ 162,547	\$ 154,907
Net assets available for claims	<u>\$ 172,636</u>	<u>\$ 145,425</u>

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If the present-value method were not used, the ultimate liability for medical malpractice self-insurance claims would be approximately \$41,300 and \$51,000 higher than the amounts presented above at June 30, 2006 and 2005, respectively. The interest rates assumed in determining the present value for 2006 and 2005 were 6.25% and 7.6%, respectively. In addition, the actuarial present value of self-insurance for medical malpractice was stated at a 50% confidence level and a 75% confidence level at June 30, 2006 and June 30, 2005, respectively. UCHHS recognizes as malpractice expense its negotiated pro rata share of the actuarially determined normal contribution, with gains and losses amortized over six years, with no retroactive adjustment, as provided for in the Operating Agreement.

Included in other current assets is \$22,900 and \$24,500 of malpractice premium prepaid to the University at June 30, 2006 and 2005, respectively.

UCH designated \$10,900 and \$9,800 as of June 30, 2006 and 2005 as a workers' compensation self-insurance reserve trust fund. The self-insurance program investments consist of 60% bonds and 40% marketable equities. The specifically identified claim requirements and actuarially determined reserve requirements for unreported workers' compensation claims were \$6,900 and \$7,200 as of June 30, 2006 and 2005, respectively. The University also charges UCH for its portion of other commercial insurance and self-insurance costs.

**10. Pension Plans**

A majority of UCH's personnel participate in the University's defined benefit and contribution pension plan. Under the defined benefit portion of this plan, benefits are based on years of service and the employee's compensation during the last five years of employment. UCH and the University make annual contributions to this portion of the plan at a rate necessary to maintain plan funding on an actuarially recommended basis. UCH recognizes its negotiated share of annual contributions as expense. Contributions of \$5,000 and \$7,000 were made in the fiscal years ended June 30, 2006 and 2005, respectively. Based on conversations with the University, UCH does not expect to be required to make contributions for the fiscal year ended June 30, 2007.

Under the defined contribution portion of the plan, UCH and plan participants make contributions that accrue to the benefit of the participants at retirement. UCH's contributions, which are based on a percentage of each covered employee's salary, totaled approximately \$2,900 and \$2,400 for the years ended June 30, 2006 and 2005, respectively.

The benefit obligation, fair value of plan assets and funded status for the combined University and UCH defined benefit and contribution pension plan as of June 30, 2006 and 2005, are shown below:

	2006	2005
Benefit obligation	\$ 403,771	\$ 455,920
Fair value of plan assets	324,998	304,643
Deficit of plan assets over benefit obligation	<u>\$ (78,773)</u>	<u>\$ (151,277)</u>

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The weighted-average assumptions used in the accounting for the plan are shown below:

	2006	2005
Discount rate	6.4 %	5.0 %
Expected return on plan assets	8.0 %	8.0 %
Rate of compensation increase	4.2 %	4.2 %

Effective with the June 30, 2005 fiscal year end, the measurement date for the University plan was changed from March 31 to June 30. The weighted average asset allocation for the plan is as follows:

	2006	2005
Domestic equities	66 %	66 %
International equity	20	20
Fixed income	14	14
	<u>100 %</u>	<u>100 %</u>

Total benefits and plan expenses paid by the plan are \$25,100 and \$23,200 for the fiscal years ended June 30, 2006 and 2005, respectively.

Expected future benefit payments are as follows:

Fiscal Year	
2007	\$ 19,190
2008	19,083
2009	20,135
2010	21,328
2011	22,458
2012-2015	139,082

Certain UCH personnel participate in a contributory pension plan. Under this plan, UCH and plan participants make annual contributions to purchase annuities equivalent to retirement benefits earned. UCH's pension expense for this plan was \$3,200 and \$2,700 for the years ended June 30, 2006 and 2005, respectively.

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In addition, in June, 2002, UCH assumed sponsorship of the Weiss Pension Plan, which covers former employees of Louis A. Weiss Memorial Hospital. Participation and benefit accruals are frozen. All benefit accruals are fully vested. The measurement date for this plan is June 30. Net periodic pension cost includes the following components:

	Years Ended June 30,	
	2006	2005
Interest cost	\$ 2,753	\$ 2,897
Expected return on plan assets	(2,877)	(2,864)
Amortization of unrecognized net actuarial loss	331	44
Net periodic pension cost	\$ 207	\$ 77

The following tables set forth additional required pension disclosure information for this plan:

	Years Ended June 30,	
	2006	2005
Change in projected benefit obligation		
Benefit obligation at beginning of year	\$ 56,602	\$ 47,698
Interest cost	2,753	2,897
Unrecognized net actuarial (gain) loss	(7,815)	8,437
Benefits paid	(2,530)	(2,430)
	49,010	56,602
Change in plan assets		
Fair value of plan assets at beginning of year	37,504	37,149
Actual return on plan assets	2,338	2,785
Employer contribution	-	-
Benefits paid	(2,530)	(2,430)
	37,312	37,504
Funded status at end of year	(11,698)	(19,098)
Unrecognized net actuarial loss	6,849	14,456
Accrued pension cost, prior to adjustment for minimum pension liability	(4,849)	(4,642)
Minimum pension liability	(6,849)	(14,456)
	\$ (11,698)	\$ (19,098)

In accordance with Statement of Financial Accounting Standards No. 87, Employer's Accounting for Pensions, UCH recorded an additional minimum pension liability for the underfunding of the Weiss Pension Plan, representing the excess of the accumulated benefit obligation over the fair value of the plan assets, adjusted for previously recorded pension liabilities. For the years ended June 30, 2006 and 2005, the additional minimum pension liability was increased (decreased) by (\$7,607) and \$8,471, respectively. The amounts are reflected as a change in additional minimum pension liability in other changes in net assets in the accompanying consolidated statements of operations.

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Accumulated plan benefits equal projected plan benefits. Assumptions used in the accounting for the net periodic pension cost were as follows:

	2006	2005
Discount rate	6.3 %	5.0 %
Expected return on plan assets	8.0 %	8.0 %
Rate of compensation increase	N/A	N/A

Weighted average asset allocations for plan assets are as follows:

	2006	2005
Cash		
Fixed income	2 %	2 %
Domestic equities	37	40
International equities	49	51
	12	7
	<u>100 %</u>	<u>100 %</u>

The target asset allocation is 60% equities and 40% fixed income. The expected return on plan assets is based on historical investment returns for similar investment portfolios.

UCH expects to make no contributions to the plan in the fiscal year ending June 30, 2007. Expected future benefit payments are:

Fiscal Year	
2007	
2008	\$ 3,195
2009	3,268
2010	3,362
2011	3,431
2012-2015	3,475
	<u>18,507</u>

**11. Concentration of Credit Risk**

As a hospital, UCH is potentially subject to concentration of credit risk from patient accounts receivable and certain investments. Investments, which include government and agency securities, stocks and corporate bonds and private equities, are not concentrated in any corporation or industry or with any single counter-party. UCH receives a significant portion of its payments for services rendered from a limited number of government and commercial third-party payors, including Medicare, Medicaid, and Blue Cross. UCH has not historically incurred any significant credit losses outside the normal course of business.

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**12. Restricted Net Assets**

Temporarily restricted net assets are available for the following purposes as of June 30, 2006 and 2005:

	2006	2005
Pediatric health care	\$ 2,780	\$ 2,960
Adult health care	1,498	1,632
Educational and scientific programs	704	681
Capital and other purposes	65,543	30,646
Total	<u>\$ 70,525</u>	<u>\$ 35,919</u>

Income from permanently restricted net assets at June 30, 2006 and 2005 is restricted for:

	2006	2005
Pediatric health care	\$ 1,594	\$ 1,437
Adult health care	1,927	1,926
Educational and scientific programs	2,295	2,294
Total	<u>\$ 5,816</u>	<u>\$ 5,657</u>

**13. Functional Expenses**

Total operating expenses by function are as follows:

	2006	2005
Health care services	\$ 781,335	\$ 709,440
General and administrative	90,126	89,315
Total	<u>\$ 871,461</u>	<u>\$ 798,755</u>

**14. Contingencies**

UCH is subject to complaints, claims and litigation which have risen in the normal course of business. In addition, UCH is subject to reviews by various federal and state government agencies to assure compliance with applicable laws, some of which are subject to different interpretations. While the outcome of these suits cannot be determined at this time, management, based on advice from legal counsel, believes that any loss which may arise from these actions will not have a material adverse effect on the financial position or results of operations of UCH.

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**15. Friend Family Health Center (FFHC)**

FFHC was incorporated in June 1997 to provide primary care to economically challenged and medically high-risk populations on Chicago's South Side, and was designated a Federally Qualified Health Center in October 1998. FFHC is a separate not-for-profit Illinois corporation which is not controlled by UCHHS.

UCHHS subleases facilities to FFHC in the Friend Building located near its main facilities, and provides security and information services to FFHC at cost. Certain members of UCHHS' medical staff provide physician services at FFHC.

UCHHS has provided \$7,300 of cumulative support to offset FFHC operating losses, towards which \$1,800 has been provided by the Emanuel Friend Trust, a charitable trust established in Chicago in the 1930s. Support from the Trust is provided under a 1994 agreement with UCHHS.

**16. Subsequent Event**

In August, 2006 UCH entered into a forward starting swap transaction as a hedge against contemplated variable rate borrowing for a new hospital pavilion. The notional amount of the swap is \$325,000 and the effective start date is August, 2011. Restrictions under the swap include financial ratio requirements, the most restrictive of which is an annual debt service coverage ratio of 1.75:1.

**Report of Independent Auditors on Accompanying Combining Information**

To the Board of Trustees of  
University of Chicago Hospitals and Health System:

The report on our audit of the combined financial statements of the University of Chicago Hospitals and Health System as of June 30, 2006 and 2005 and for the years then ended appears on page one of this document. Those audits were conducted for the purpose of forming an opinion on the combined financial statements taken as a whole. The combining information is presented for purposes of additional analysis of the combined financial statements rather than to present the financial position and results of operations of the individual entities. Accordingly, we do not express an opinion on the financial position and results of operations of the individual entities. However, the combining information has been subjected to the auditing procedures applied in the audits of the combined financial statements and, in our opinion, is fairly stated in all material respects in relation to the combined financial statements taken as a whole.



September 19, 2006

**The University of Chicago Hospitals and Health System**  
**Combining Balance Sheet**  
**June 30, 2006**  
(in thousands of dollars)

	June 30, 2006			June 30, 2005
	UCH	QV	Eliminations	Combined
<b>Assets</b>				
Current assets				
Cash and cash equivalents	\$ 20,718	\$ 1,008	\$ -	\$ 21,726
Accounts receivable, less allowance for doubtful accounts 2006 - \$35,125 and 2005 - \$38,760	109,339	572	-	109,911
Current portion of investments limited to use	776	-	-	776
Current portion of pledges receivable	11,438	-	-	11,438
Other current assets	41,681	302	(59)	41,924
Total current assets	183,952	1,882	(59)	185,775
Investments limited to use, less current portion Construction and capitalized interest funds	7,048	-	-	7,048
Donor-restricted	27,149	-	-	27,149
Self-insurance	10,867	-	-	10,867
Board designated investments	566,425	-	-	566,425
Property, plant and equipment, net	496,373	971	-	497,344
Pledges receivable, less current portion	15,708	-	-	15,708
Other assets, net	10,331	82	-	10,413
Total assets	\$ 1,317,853	\$ 2,935	\$ (59)	\$ 1,320,729
				\$ 1,179,435

**The University of Chicago Hospitals and Health System**  
**Combining Balance Sheet**  
**June 30, 2006**  
(in thousands of dollars)

	June 30, 2006				June 30, 2005
	UCH	QV	Eliminations	Combined	
<b>Liabilities and Net Assets</b>					
<b>Current liabilities</b>					
Accounts payable and accrued expenses	\$ 94,571	\$ 1,304	\$ (59)	\$ 95,816	\$ 92,500
Current portion of long-term debt	7,390	-	-	7,390	7,120
Current portion of other long-term liabilities	1,306	34	-	1,340	1,678
Current portion of estimated third-party payor settlements	65,588	-	-	65,588	44,452
Due to University of Chicago	18,241	236	-	18,477	17,970
Total current liabilities	187,096	1,574	(59)	188,611	163,720
<b>Other liabilities</b>					
Self-insurance liability	6,934	-	-	6,934	7,238
Long-term debt, less current portion	364,120	-	-	364,120	342,931
Other long-term liabilities, less current portion	85,212	100	-	85,312	88,623
Total liabilities	643,362	1,674	(59)	644,977	602,512
<b>Net assets</b>					
Unrestricted	598,150	1,261	-	599,411	535,347
Temporarily restricted	70,525	-	-	70,525	35,919
Permanently restricted	5,816	-	-	5,816	5,657
Total net assets	674,491	1,261	-	675,752	576,923
Total liabilities and net assets	\$ 1,317,853	\$ 2,935	\$ (59)	\$ 1,320,729	\$ 1,179,435

**The University of Chicago Hospitals and Health System**  
**Combining Statement of Operations**  
**Year Ended June 30, 2006**  
(in thousands of dollars)

	June 30, 2006				June 30, 2005
	UCH	QV	Eliminations	Combined	
<b>Operating revenues</b>					
Net patient service revenue	\$ 832,773	\$ 6,736	\$ -	\$ 839,509	\$ 834,809
Other operating revenues and net assets released from restrictions	43,204	1,278	-	44,482	33,706
	<u>875,977</u>	<u>8,014</u>	<u>-</u>	<u>883,991</u>	<u>868,515</u>
<b>Operating expenses</b>					
Salaries, wages and benefits	433,659	5,900	-	439,559	393,709
Supplies and other	298,044	3,601	-	301,645	265,397
Insurance	25,380	-	-	25,380	20,905
Provision for doubtful accounts	43,573	663	-	44,236	50,947
Interest	13,994	-	-	13,994	9,191
Medicaid provider tax	-	-	-	-	14,612
Depreciation	46,369	278	-	46,647	43,994
	<u>861,019</u>	<u>10,442</u>	<u>-</u>	<u>871,461</u>	<u>798,755</u>
Total operating expenses	14,958	(2,428)	-	12,530	69,760
Income (loss) from operations	59,367	35	-	59,402	29,959
Investment income and unrestricted gifts, net	(89)	(107)	-	(196)	76
Other, net	<u>74,236</u>	<u>(2,500)</u>	<u>-</u>	<u>71,736</u>	<u>99,795</u>
<b>Excess (deficit) of revenues over expenses</b>					
<b>Other changes in net assets</b>					
Change in unrealized gains on investments	2,248	-	-	2,248	16,145
Transfers to University of Chicago	(15,000)	-	-	(15,000)	(15,000)
Net assets released for capital purchases	4,857	-	-	4,857	12,402
Cumulative effect of change in accounting principle - Conditional asset retirement obligation	(7,939)	-	-	(7,939)	-
Adjustment to minimum pension liability	7,607	-	-	7,607	(8,471)
Net asset transfers to UC Health System	(2,336)	2,336	-	-	-
Other, net	555	-	-	555	-
	<u>64,228</u>	<u>(164)</u>	<u>-</u>	<u>64,064</u>	<u>2,206</u>
<b>Increase (decrease) in unrestricted net assets</b>					
	<u>\$ 64,228</u>	<u>\$ (164)</u>	<u>\$ -</u>	<u>\$ 64,064</u>	<u>\$ 107,077</u>