



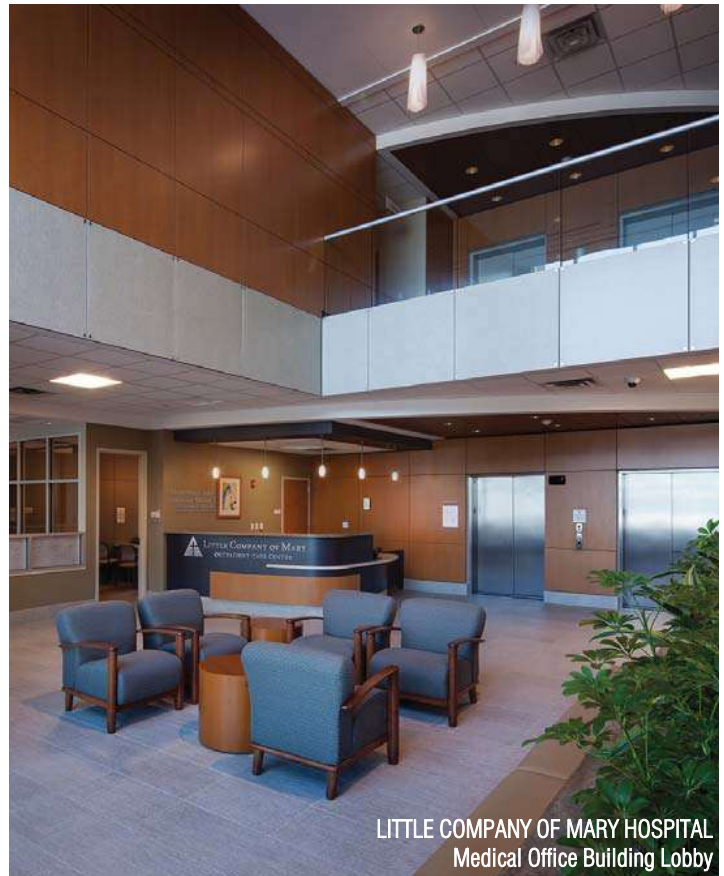
pfbarchitects
Architecture • Interiors • Planning

ARCHITECTURE INTERIORS PLANNING

Access Community Health Network Chicago IL	Northwestern Memorial Hospital Chicago IL
Alexian Brothers Behavioral Health Hospital Hoffman Estates IL	Norwegian American Hospital Chicago IL
Alexian Brothers Mental Health Center North Arlington Atrium Arlington Heights IL	Plateau Medical Center Oak Hills WV
Bethesda North Hospital Cincinnati OH	Presence Mercy Medical Center Aurora IL
Bethesda Oak Hospital Cincinnati OH	Presence St. Joseph Medical Center Joliet IL
Bourbon County General Hospital Paris KY	St. Alexius Medical Center Hoffman Estates IL
Cadence Health / Northwestern Medicine Central DuPage Hospital Winfield IL	St. Bernard Hospital and Health Care Center Chicago IL
Clinch Valley Medical Center Richlands VA	St. Luke's Hospital Bluefield WV
Deaconess Hospital Cincinnati OH	St. Luke's Hospital Richmond VA
East Ridge Hospital Chattanooga TN	St. Luke's Hospital Toledo OH
Fresenius Medical Care Salem IN Jeffersonville IN	Seven Hills Women's Health Center Cincinnati OH
Good Samaritan Hospital Cincinnati OH	Southwest Hospital Louisville KY
Greenbrier Valley Medical Center Ronceverte WV	Suburban Medical Center Louisville KY
Humana Hospital Bayside Virginia Beach VA	Three Rivers Medical Center Louisiana KY
Jewish Hospital Lexington Lexington KY	TriHealth Hospitals Partnership Cincinnati OH
Jackson Park Hospital Chicago IL	University of Chicago Medicine Chicago IL
Knox County Community Hospital Mount Vernon OH	University of Cincinnati Medical Center Cincinnati OH
Lake Cumberland Regional Hospital Somerset KY	University of Louisville Hospital Louisville KY
Lakeway Regional Hospital Morristown TN	Edwards Hines Jr. V.A. Hospital & Community-Based Outpatient Clinic Hines IL & Joliet IL
Little Company of Mary Hospital Evergreen Park IL	Jesse Brown V.A. Medical Center Chicago IL
Loretto Hospital Chicago IL	Captain James A. Lovell Federal Healthcare Center North Chicago IL

Table of Contents

- 1.0 Qualifications
- 2.0 Healthcare Experience
- 3.0 Behavioral Health Experience
- 4.0 Medical Office Experience
- 5.0 Master Planning Experience
- 6.0 Team Resumes



LITTLE COMPANY OF MARY HOSPITAL
Medical Office Building Lobby



1.0

QUALIFICATIONS

PFB ARCHITECTS



PFB Architects has been serving the Southeast and Midwest markets for over 70 years, and has expanded into a firm specializing in healthcare architecture, interiors, and planning.

Over the years, PFB Architects has evolved its practice from a smaller local presence to a regional midwest practice to a firm with projects both nationally and internationally, focused on the execution of commercial and institutional projects ranging in size from single commissions to master-plan development and implementation.

PFB Architects is committed to delivering high-quality architecture with a strong emphasis on client satisfaction. PFB has built a wealth of satisfied repeat clients by delivering quality design while maintaining budgets and schedules. Our comprehensive master planning and programming services develop strategies for growth, identify needs and refine vision while continually investigating new technology. Our staff brings diversity of knowledge and depth of experience to commercial architecture as well as design-build project delivery.

Process Approach

Standout aspects of our over 70 years of architectural experience at PFB Architects include the quality of our service package and the success of our design products. We have identified five essential elements key to the execution of each project:

- Service
- Pre-Design Research and Planning
- Design Talent and Creative Thinking
- Technical Competency
- Management



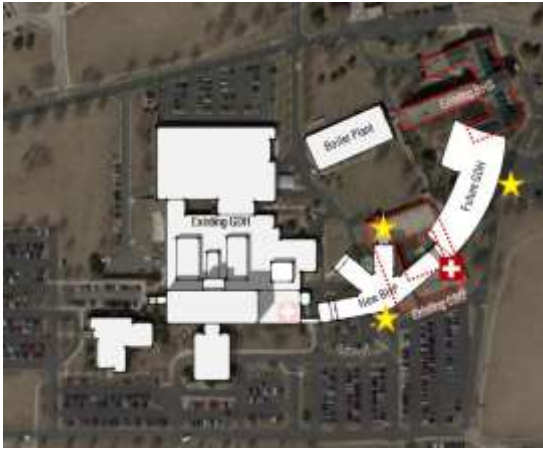
Service

PFB Architects is a service organization. Our primary goal is to serve and satisfy our clients. Each client and project is unique. To successfully serve our clients, we strive to understand their goals and motivations.

Coordination of reliable schedules and cost control are two very important aspects of our service package. Schedules and budget figures are reviewed and revised at the beginning of each phase to keep everyone current on costs. That helps to avoid unnecessary surprises at the end of the project.



PLANNING



Planning means thinking about the future and envisioning what could be. From simple site planning to complex land master planning, PFB and a team of specialty consultants can guide you through the planning and entitlement process. We have specialists in nearly every type of land development project who can provide valuable insight throughout the planning process.

The PFB team is your resource for planning, architecture, landscape architecture, and urban design solutions.

As providers of conceptual planning, landscape architecture and urban design services, we shape places that people care about ... places that endure. As a group of committed and diverse professionals, we transcend geographical boundaries and collaborate across disciplines, working together to create the best solutions for you.



- extensive healing gardens
- living roofs
- sustainable storm water management
- regulatory approvals and permits
- parking demand and capacity analyses
- public outreach and community facilitation



Planning Services

- Site Selection
- Site Planning
- Building Programming
- Master Planning
- Space Planning
- Feasibility Studies
- LEED / Sustainable Design & Planning
- Life Safety Plans

We know what it takes to bring a project from concept to reality, and we're able to work with community groups, zoning boards, and permitting offices to make this process happen. We are visionary in our ideas, realistic in our approach, and committed to the goal of creating communities that will withstand the test of time.

MASTERPLAN EXPERIENCE



The key drivers for the latest **Little Company of Mary Hospital Master Plan** were a new Women's Center location, an inpatient bed shortage, and a need for parking. PFB explored outpatient / inpatient and Community Opportunities, campus growth and addition scenarios, and Expansion Zones for Future Growth. This included a survey of existing departments to evaluate inpatient renovations and expansions, an inpatient bed analysis, and a parking study. The resulting decision matrix incorporated Cost and Timeframes for Design and Construction. Masterplan options were then developed for both 5 and 10 years in the future.



PFB worked closely with **Saint Bernard Hospital and Health Care Center** to develop several comprehensive master plans to initiate expansion and renovation of the existing hospital. PFB identified strategic planning criteria as well as designed schematic options for the "Hospital of the Future". PFB made recommendations to enhance the existing department with the hospital to greatly improve the image of the hospital in the community.



The Facility Master Plan for this 720,000 SF flagship hospital of the **Presence** (formerly Provena) system resulted in the recommendation of a 259,000 SF addition and the renovation of 213,000 SF. This comprehensive Master Plan included data gathering and planning for 52 hospital departments. The goal for this undertaking was to identify the needs for the next five years, and evaluate the institution's culture of healing and technology in an effort to improve the delivery of care.



PFB developed several Master Plan options for **Norwegian American Hospital**. To meet the current and future needs of this gentrifying neighborhood, PFB explored the site with respect to potential expansion opportunities, based on the assumptions that any expansion would be multi-phased, beginning with the updating of the Emergency Department, a new MOB to add outpatient services, followed by a full replacement of the existing patient bed floors with a 6-story, 32-bed unit tower.



The master planning process for **Mount Sinai Hospital** entailed a detailed analysis of the campus, consisting of buildings constructed from 1918 to 1983 and containing over 1.1M SF. The goal was the reorganization of the existing spaces to better accommodate departmental needs, incorporate current technology, re-evaluate how healthcare is delivered, improve efficiency, and meet market needs. Three options were generated and presented to the Hospital.

CLINICAL INTERIORS

Our interior projects include medical office buildings, ambulatory care facilities, hospitals, senior living facilities, as well as specialized interior work including physical therapy, laboratories, dental clinics, behavioral health centers, and diagnostic and testing suites. PFB understands how to make the workplace a strategic resource that, in turn, enables our clients to achieve their business goals and objectives. At PFB we anticipate trends and, through consistent innovation, help meet our clients' changing needs.

PFB Interior Services:

- Facility Needs Assessment
- Space Planning
- Material and Color Selections
- Furniture Selection & Procurement
- Furniture and Finishes Standards
- Art Selection
- Exterior and Interior Signage
- Renderings



2.0

HEALTHCARE EXPERIENCE





Siemens 3T Skyra MRI



Shielding Installation in Progress



MEP Inspection Prior to Magnet Delivery

Project Size: 2,052 SF
Firm Role: Planning, SD, DD, CD, CA
Cost: \$1,503,549
Design Time: 12 weeks

EDWARD HINES JR VA HOSPITAL
Building 200 1st Floor C-Section MRI 3 Renovation
 Hines, IL

Completed as part of an IDIQ Contract at VA Hines, the renovation for MRI3 is located in the existing Radiology Department on the 1st Floor of C-Section, Building 200 at Edward Hines Jr. VA Hospital. Central to the renovation is a new Siemens Skyra 3T MRI (MRI3) along with creating proper zoning for the new and existing MRIs.

PFB's knowledge and experience with the Radiology Department at Hines led to our recommendation to create a dedicated MRI waiting room. The new layout allows a dedicated MRI receptionist to have visual control as patients move from the waiting room, to the changing room, and to the new central patient holding alcove.

Technically, the project provided many challenges to the design team. PFB worked with our engineering partners to develop creative solutions for MRI quench vent routing, relocation of utilities and ensuring uninterrupted operation of the existing MRIs. Relocation and expansion of the existing IT closet was critical to this project's success and expanded capacity for future renovations. The project was constructed concurrently with a full building power upgrade which required collaboration between multiple contractors, designers and VA facilities.



MRI Department Floor Plan



Waiting Room



MRI Control Room



MRI Room

EDWARD HINES JR VA HOSPITAL
Building 200 1st Floor C-Section MRI 3 Renovation
continued ...



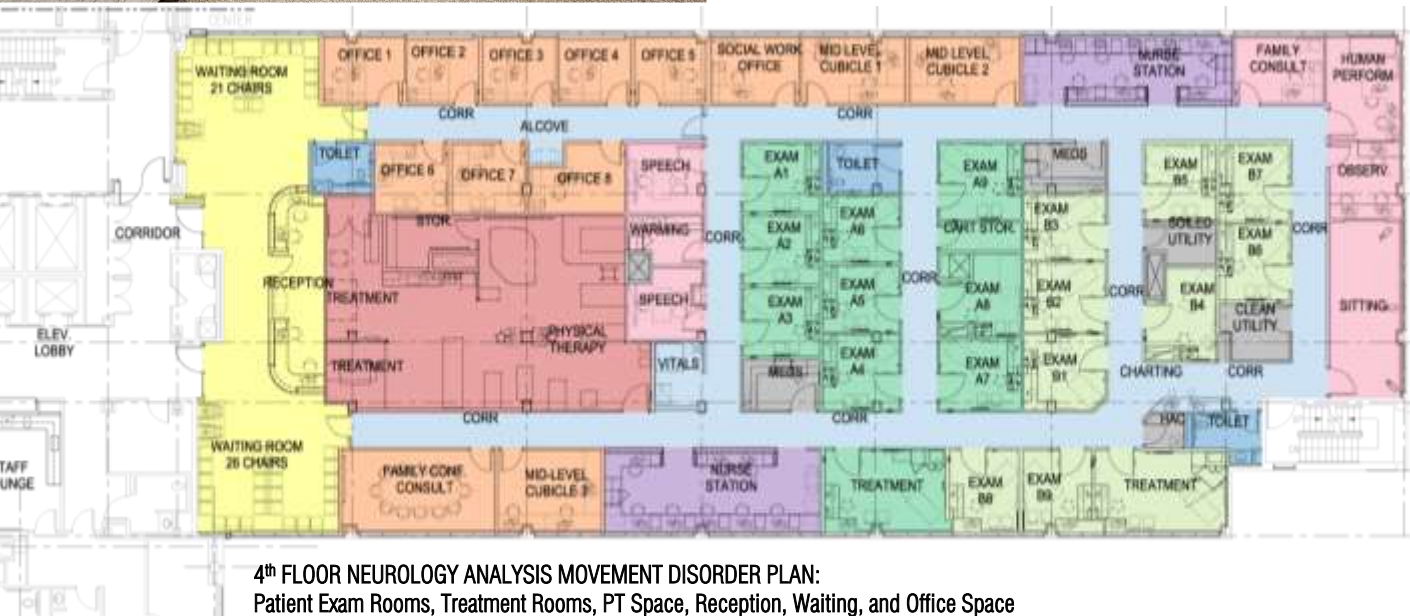
4th Floor Neurology Lobby



4th Floor Conference Room

**NORTHWESTERN MEDICINE
CENTRAL DUPAGE HOSPITAL
4th Floor Neurology**
Winfield, IL

Fourth Floor Neurology includes 2 exam pods with 9 exam rooms in each. Each Exam Pod includes a Treatment Room and Family Consult Room. Other support areas include Neuro Psych, Speech, Physical Therapy, two Nurse Stations, and a Community / Conference Room. To accommodate the extensive program requirements, the planning team promoted shared office space to encourage Physicians to be out on the floor with patients.



Project Size: 59,000 SF (Total)
10,529 SF (Neurology)

Firm Role: Planning, SD, DD, CD, CA

Cost: \$13M

Reference: Ron Powers
Construction Director
630.933.2524

NORTHWESTERN MEDICINE CENTRAL DUPAGE HOSPITAL 4th Floor Neurology

Continued ...

The existing adjacent Neurology Clinic utilizes the established Facility Finish Standards. The design team worked collectively with the facility Interior Designer to ensure the new expansion will blend seamlessly with the existing clinic as well as the rest of the campus.



Open Gym Area



Reception and Charting Station



Equipment Area

LITTLE COMPANY OF MARY HOSPITAL
Physical Therapy Suite
 Evergreen Park, IL

Project Size: 3,600 SF
Cost: \$145 / SF
Completed: June 2018

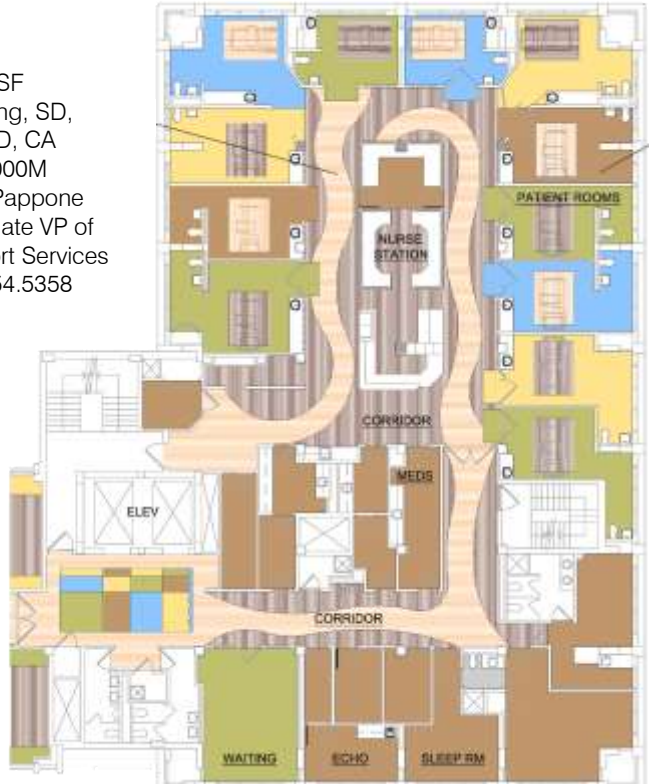
PFB was tasked with creating a functional yet dynamic space for the Physical Therapy Suite at Little Company of Mary Hospital. The challenges with this project revolved around the dimensional constraints of the space and lack of exterior views. Through the use of color, texture, and form, PFB created a space that effectively divides the individual therapy functions while also maintaining staff efficiency and improving overall patient experience.



LORETTO HOSPITAL
5th Floor ICU Renovation
 Chicago, IL

The Loretto ICU Renovation addresses the Nurse Station, Patient Rooms and Support Areas of the outdated and unwelcoming existing department. New finishes and millwork improve the aesthetics and atmosphere of the space to one more conducive to healing. New lighting fixtures increase lighting levels and along with new finishes, create a comfortable environment for the family within the patient room and the Unit. Improvements to the Nurse Station lead to an increase in functionality and overall staff satisfaction with their workplace.

Project Size: 6,663 SF
Firm Role: Planning, SD,
 DD, CD, CA
Cost: \$650,000M
Reference: John Pappone
 Associate VP of
 Support Services
 773.854.5358





Project Size: 8,200 SF
Firm Role: Planning, SD, DD
 CD, CA
Cost: \$3M
Bed Count: 20 Private
 2 fully accessible
Reference: John Pappone
 Associate VP of
 Support Services
 773.854.5358



LORETTO HOSPITAL

5th Floor Medical / Surgical Unit Renovation

Chicago, IL

One-third of a \$15M TIFF Fund from the City of Chicago was used to finance a multiple patient unit renovation project, and this 5th Floor Medical / Surgical Unit is the first full department renovation, with the goals to update the unit to comply with current state and city requirements, increase patient satisfaction, and provide additional staff work space. The renovation consists of converting the existing layout into 20 private patient rooms. Of the 20 new rooms, the renovated unit has 4 isolation rooms and 2 fully accessible rooms. Each patient room has a new headwall with increased medical gas outlets, updated finishes and furnishings, and a private toilet room with shower. The expansion of staff areas was another critical component to this project. All work areas, storage rooms, and staff dedicated spaces are centralized on the unit. Included are separate offices for doctors and nurses, an open work area with various countertop heights for standing or seated charting, and a new nourishment station. A dedicated staff lounge and separate locker room within the unit improves staff satisfaction and productivity. The unit has all new systems including increased air flow and control, a new nurse call, and patient departure alarm system. Additional power and data are included in the project to allow the unit to be adaptable for future technological growth within the facility.



Reception



Treatment Bay

EDWARD HINES JR. V.A. HOSPITAL Dental Lab and Clinic Expansion

Hines, IL

The objectives of this project on the 12th floor of Building 200 were to improve patient experience and staff efficiencies while nearly tripling the clinic from 4,500 SF to 12,400 SF.

In the expanded and improved space, general dentistry includes 12 operatories, 3 hygienist rooms, and x-ray. Oral surgery consists of 4 oral surgery rooms and 1 dual-use treatment bay.

The dental laboratory grew to include separation between model making and prosthetics, as well as a dedicated shipping and receiving area. The program also included added staff support areas such as staff locker room, break room and training room.

In addition to increases in the treatment spaces, the new clinic doubled the public areas to improve patient services. Transom lights allow daylight to filter into the public corridors, and wood veneer wall protection in key areas accent destination points and warm the atmosphere. With careful consideration to the design, the new space provides a positive patient experience to counteract the stereotypical feelings of taking a trip to the dentist.

Project Size:

12,400 SF

Firm Role:

Planning, SD, DD, CD, CA

Cost:

\$3.8M

Reference:

Jake Kanuru

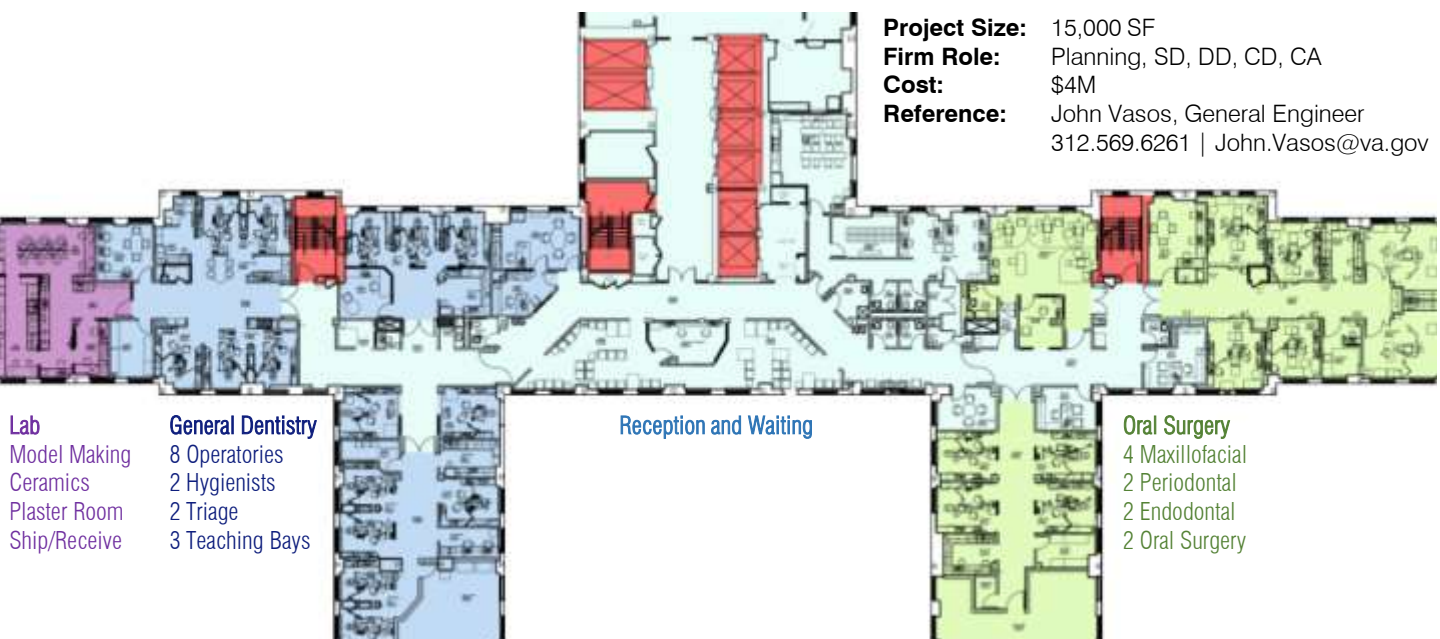
Contract Officer Representative

708.202.8387x21149 | Jake.Kanuru@va.gov

Plan Legend:

1. Reception & Waiting
2. Hygienist Area
3. General Dentistry
4. Oral Surgery
5. Classroom / Training
6. Prosthetics Lab
7. Model Making Lab





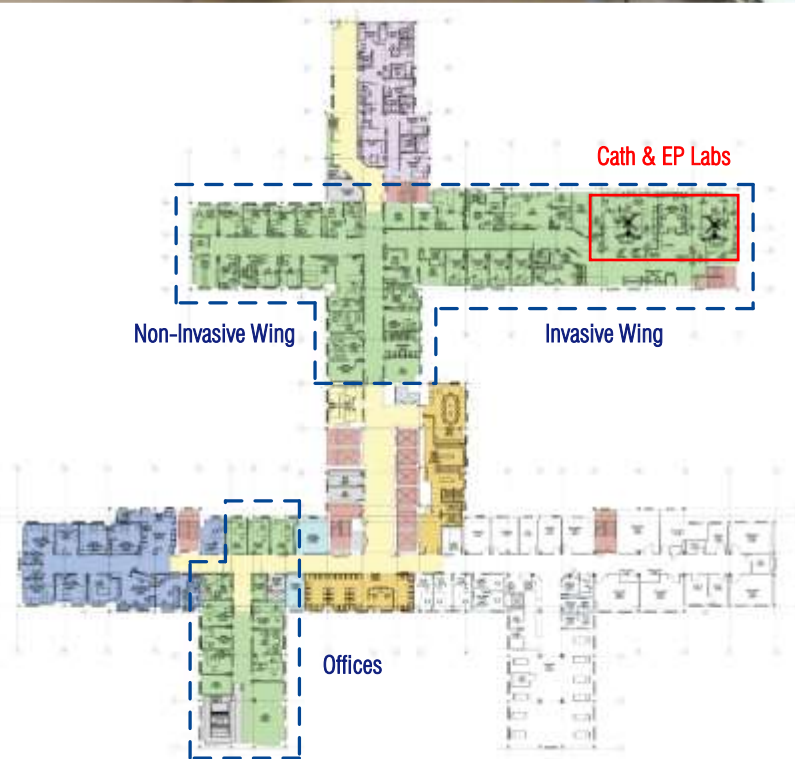
JESSE BROWN V.A. MEDICAL CENTER

Dental Lab and Clinic Expansion

Chicago, IL

The new clinic is comprised of three major components: General Dentistry, Oral Surgery, and Dental Laboratory, expanding from 7,500 SF to 15,000 SF. General Dentistry includes 8 Operatories, 2 Hygienists, 2 Triage, and a Teaching Unit of 3 Operatories. Oral Surgery includes 4 Maxillofacial treatment bays, 2 Periodontal treatment bays, 2 Endodontal Treatment bays, and 2 Oral Surgery rooms. The Dental Laboratory increases in size to include separation between Model Making and Ceramics, a larger Plaster Room, and a new Shipping and Receiving area.

Patient flow is the key element for not only positive patient experiences but also for increasing staff efficiencies.



JESSE BROWN V.A. MEDICAL CENTER

Cardiology

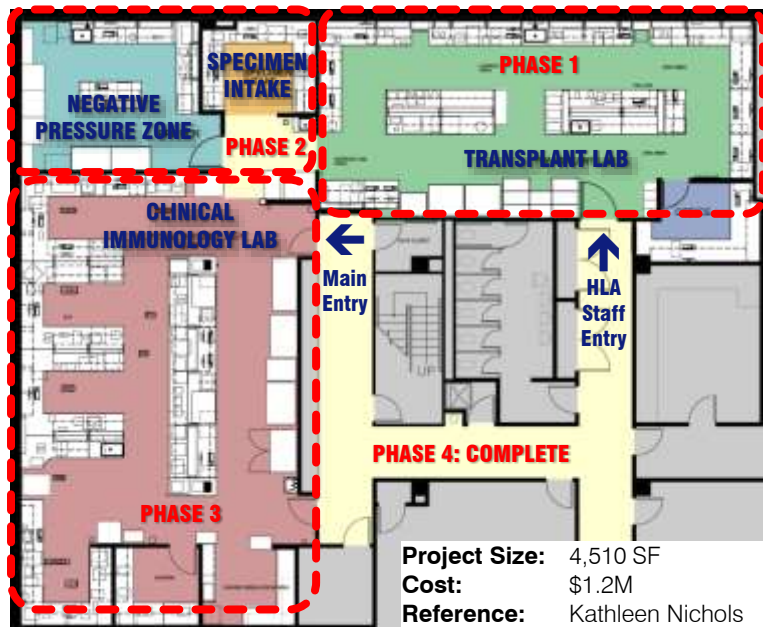
Chicago, IL

Project Size: 13,080 SF
Firm Role: Planning, SD, DD, CD, CA
Cost: \$4.5M
Program: 1 Cath Lab
 1 EP Lab
 4 Recovery Rooms
 1 Tilt & 1 TEE
 3 EKG
 3 Echo Cardiogram
Reference: John Vasos, General Engineer
 312.569.6261 | John.Vasos@va.gov

The Cardiology Relocation Project is one part of a larger 5th Floor Renovation that includes a Vascular Lab, On-Call Quarters and consolidation of shared support spaces, all of which were awarded under an IDIQ Contract. The scope for Cardiology includes a Cath and EP Lab with Shared Control Room, TEE Room, Tilt Testing Room, Echo Procedure Rooms, EKG Testing, Stress Lab, Stress Echo Lab, Offices and Support Spaces. The Cardiology plan is organized into distinct programmatic areas, which include Invasive Procedures, Non-Invasive Procedures and Offices. The Invasive Procedure wing is highlighted by state of the art Cath and EP Labs which are accessed by a sterile corridor that improves flow into and out of the procedural spaces. The Invasive Wing addresses future adaptability by planning for the TEE Procedure Room to be converted to a second Cath Lab. In addition, the design of the Recovery Bays provide unobstructed visibility from the Nurse Station to the Patient Beds. The Non-Invasive wing contains three Echo Procedure Rooms, two EKG Rooms, a Stress Lab, a Holter Reading Room and a Stress Echo Lab. Each space within the Non-Invasive Wing, as well as the Invasive Wing, is designed to provide an efficient use of space with the patient and caregiver in mind.



UNIVERSITY OF CHICAGO MEDICAL CENTER
HLA Laboratory Renovation Project
 Chicago, IL



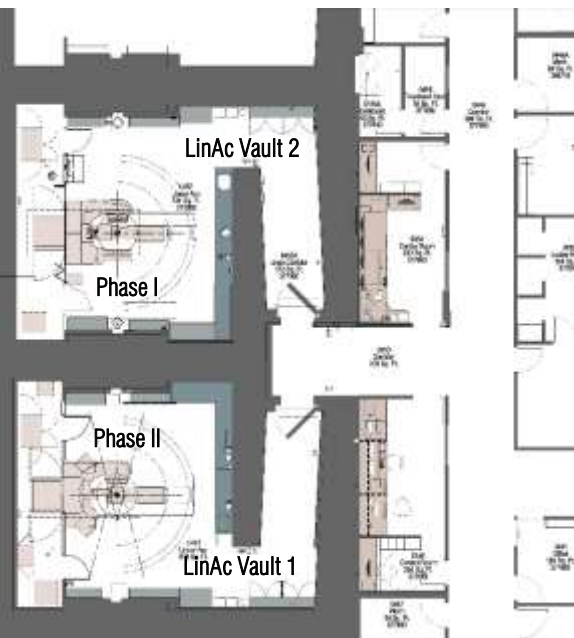
This 4,510 SF, \$1.2M project involved the renovation of the existing Clinical Immunology lab in the sub basement to make it more efficient. The scope of the project included installing new lab casework and adding additional storage units. The Transplant Immunology Lab was relocated to adjacent spaces to combine the two independent labs into a single suite with a shared Specimen Intake area. The Transplant Immunology and Immunogenetics Labs were consolidated from two separate rooms into the new single lab with a dedicated clean room and laminar fume hoods. This project also involved relocation of the Laboratory Information Services offices to the second floor of the Wyler Pavilion. This complex project required extensive coordination with users and vendors for equipment and lab casework design and installation. The project was completed in four phases in order to keep the current labs operational at all times.



Project Size: 3,160 SF (combined)
Firm Role: Planning, SD, DD, CD, CA
Cost: \$464,000 (Vault 1)
 \$412,000 (Vault 2)

UNIVERSITY OF CHICAGO MEDICAL CENTER Linear Accelerator Chicago, IL

This project involved removing the existing Linear Accelerator and replacing it with a Varian TrueBeam system. The project included installing new casework and finishes in the treatment room and control room. The second installation incorporated the Brain Lab Exact Trac Xray System which has only been installed in a handful of other facilities in the U.S.



Design Features

Prefabricated modular walls were placed on either side of the Stand and Gantry to hide the modulator and UPS after the Linear Accelerator was in place. This method freed the area around the frame during construction and was installed dust free.

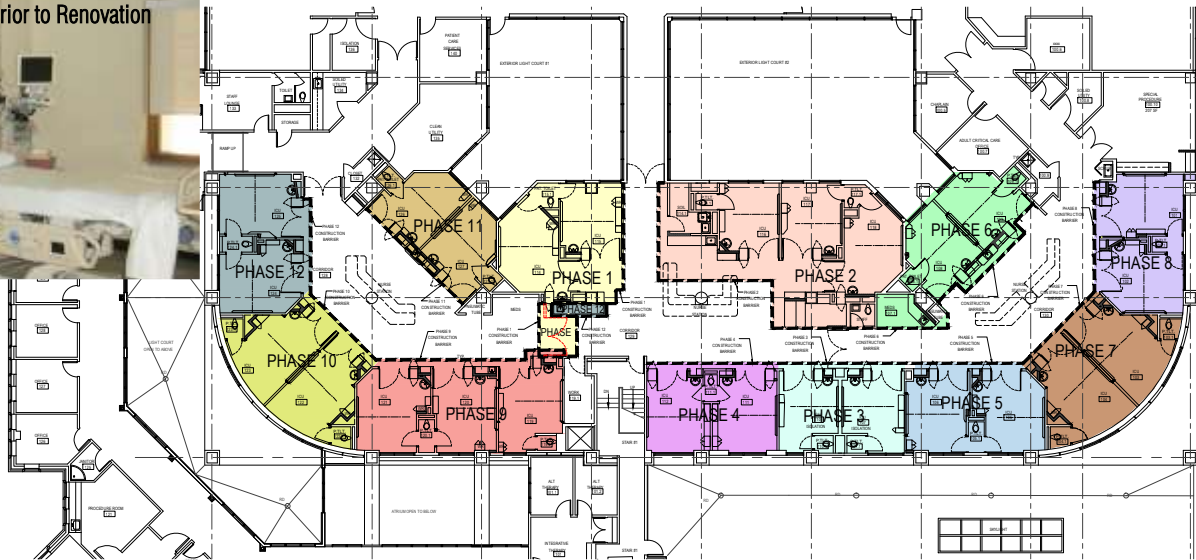




Renovated Patient Room Headwall



Patient Room Headwall Prior to Renovation



Detailed Phasing Plan Limits ICU Downtime and Impact on Patient Care

LITTLE COMPANY OF MARY HOSPITAL
2nd Floor ICU Renovation
 Evergreen Park, IL

Project Size: 10,200 SF
Cost: \$1.45M
Program: 26 ICU Beds

The 26-bed ICU is divided into three areas, each having a nurse station and patient rooms. These 3 pods were completed in 12 phases, guaranteeing that the ICU was always a functioning unit. The patient room renovations included replacing ceiling tile and flooring, replacing headwalls, upgrading lighting, renovating nurse servers, creating isolation alcove supply area and computer area accessible from outside the patient room, providing patient storage, upgrading hand washing areas, upgrading lighting and hardware in patient bathrooms, and providing wall mounted patient lift tracks.



Exterior Rendering



Reception



ICU Room



Waiting Room

TRIHEALTH BETHESDA BUTLER HOSPITAL

Inpatient Medical / Surgical Expansion

Hamilton, OH

The Medical / Surgical Expansion project represents a major improvement to the Bethesda Butler County Hospital in Hamilton, OH. The \$13M project involved three phases to complete all 58,000 sf of renovations and additions. The first phase increased staff spaces with new staff locker rooms, staff restrooms and staff lounge. It also created a new temporary surgery and inpatient entrance for patients until the final addition was completed. The second phase increased the sterile supply rooms so they could accommodate the increased use with more patient rooms being added to the hospital. The third phase is the largest of the phases with a two-story addition to the hospital. The new addition includes a new 32 bed patient floor, physical therapy, a new 6-bed ICU, pulmonary / respiratory, registration, inpatient & retail pharmacy, kitchen, cafeteria / dining areas, EVS, clinical engineering, multiple waiting areas, administrative offices and receiving.



Project Size: 151,000 SF
Cost: \$52M

MOUNT CLEMENS GENERAL HOSPITAL
Ambulatory Surgery Addition
 Mount Clemens MI

Project Manager
 Thomas Jeziorski, *while at HOK*

The new Surgery Center which includes 3 floors and a mechanical fourth, will complement the hospital's existing operating rooms and includes an atrium with a registration area, post operative discharge areas, and a private patient discharge location. About 17,000 surgeries are performed annually at the hospital.

The articulation and fenestration of the new facility uses the Medical Office Building as a reference. Horizontal banding of windows, solid areas, and stone / metal accent features have been developed in a manner similar to the MOB. Windows, where applicable, wrap around the corners; curved shapes at the lobby signal arrival and remind visitors of the presence of the Clinton River.



Project Size: 1,092 SF
Firm Role: Planning, SD, DD, CD, CA
Cost: \$500,000
Design Time: 6 weeks

**UNIVERSITY OF CHICAGO MEDICAL CENTER
 COMER CHILDREN'S HOSPITAL
 Pediatric Cardiac Catheterization Lab**
 Chicago, IL



The Pediatric Cardiac Catheterization Lab at the University of Chicago Comer Children's Hospital boasts sophisticated Toshiba equipment with real-time radiation dose tracking within a state-of-the-art multidisciplinary lab space.

PFB worked with Leopardo Construction to complete fast track design and construction in an unprecedented 5 ½ months. The project design utilized a 5-day Kaizen process to track the flow of physicians, clinicians, patients and supplies through the various procedures that will take place in the room. The Kaizen process allowed the design team to complete full construction documents in a 6-week timeframe.

The University was able to implement Lean practices for each part of the patient experience analyzing check-in, pre-op, procedure, post-op, and check-out for a variety of procedures.



Project Size: 12,864 SF
Firm Role: Planning, SD, DD, CD, CA
Cost: \$1.9M
Reference: Raj Dasai, Project Manager
 630.933.4249
Raj.Desai@cadencehealth.org

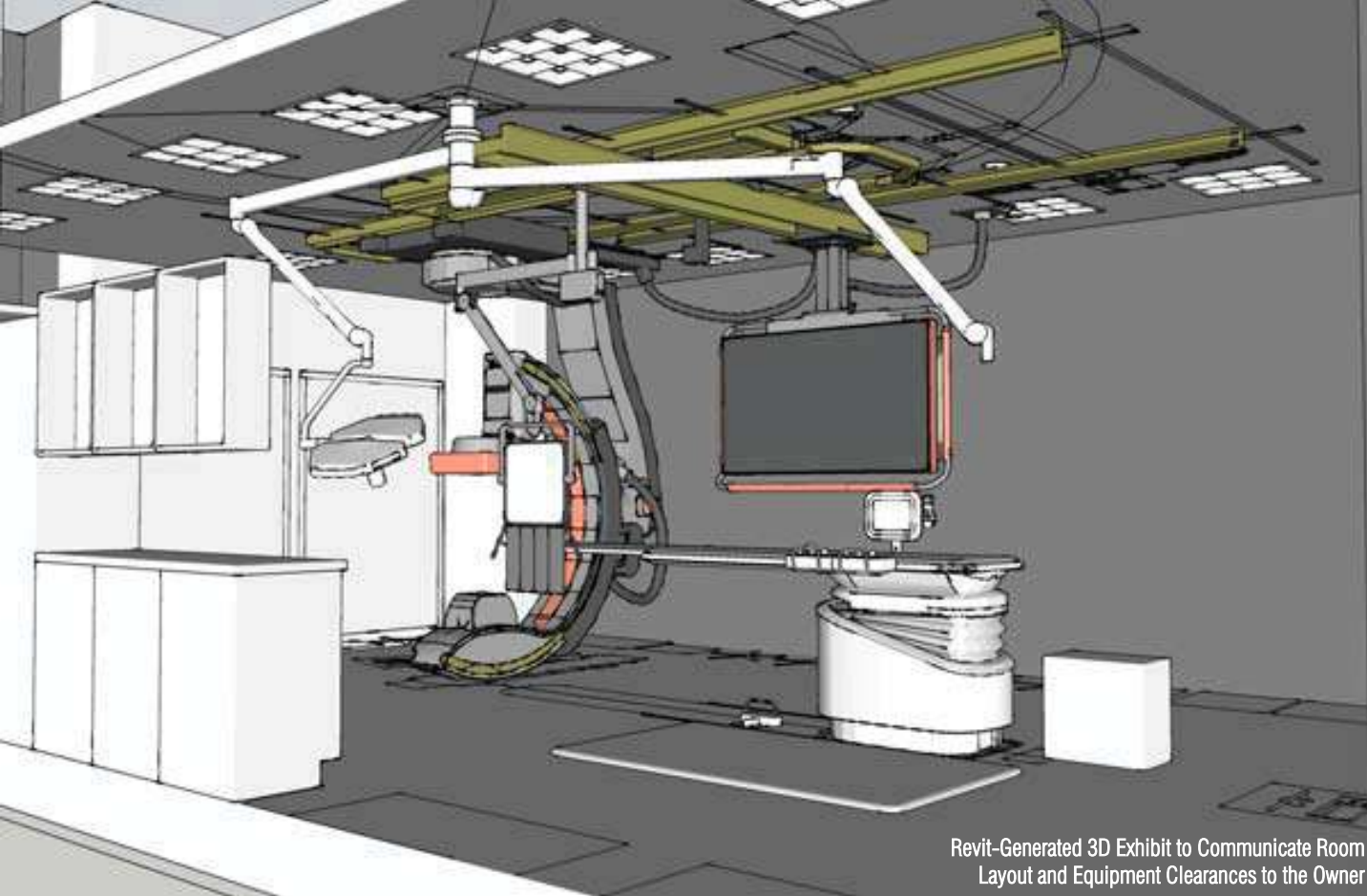
NORTHWESTERN MEDICINE CENTRAL DUPAGE HOSPITAL

GI Laboratory

Winfield, IL

This two-phased project consisted of demolishing an existing DMG Clinic to expand the GI Laboratory. The existing department featured 7 Patient Holding Bays and 8 Patient Recovery Bays supported by 6 Procedure Rooms. At the end of the expansion and renovation, in addition to upgraded common departmental support, the final plan provides 12 Patient Prep and 12 Patient Recovery Bays. When all procedure rooms are operational the compliment of 24 prep/recovery bays will be at a ratio of 3 bays:1 procedure room. Three of the bays will be designed to monitor Stage I PACU patients who will be under general anesthesia and will be under the supervision of a nurse. When not in use for Stage I patients, the bays will be used for Stage II recovery.

Pulmonary and Gastroenterology Procedures performed in the expanded unit include diagnostic, therapeutic, and interventional procedures, including bronchoscopy, endoscopic bronchial ultrasound, navigational bronchoscopy, pleurex catheter insertion, bronchial thermoplasty, and fine needle aspiration with a cytopathologist in the ante room looking at specimen under microscope, esophagogastroduodenoscopy, colonoscopy, flexible sigmoidoscopy, endoscopic ultrasound (upper and lower), feeding tube placement, endoscopic retrograde cholangiopancreatography, and procedures requiring placement of metal stents.



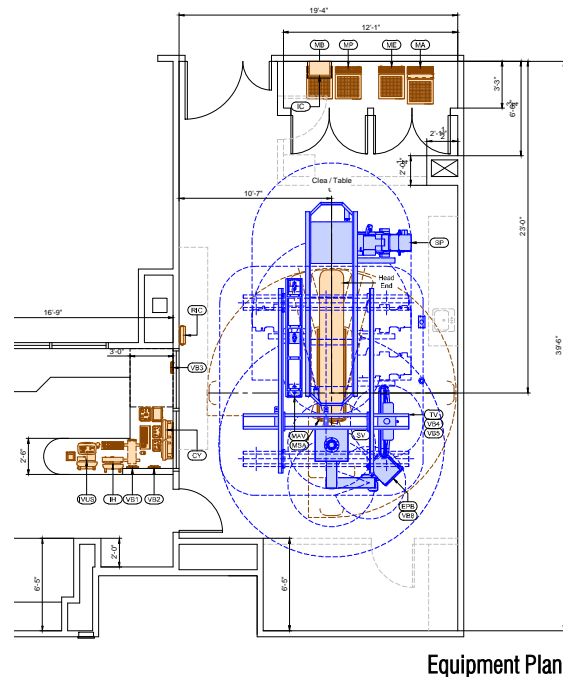
Revit-Generated 3D Exhibit to Communicate Room Layout and Equipment Clearances to the Owner

Project Size: 919 SF
Firm Role: Planning, SD, DD, CD, CA
Cost: \$4M (includes equipment)

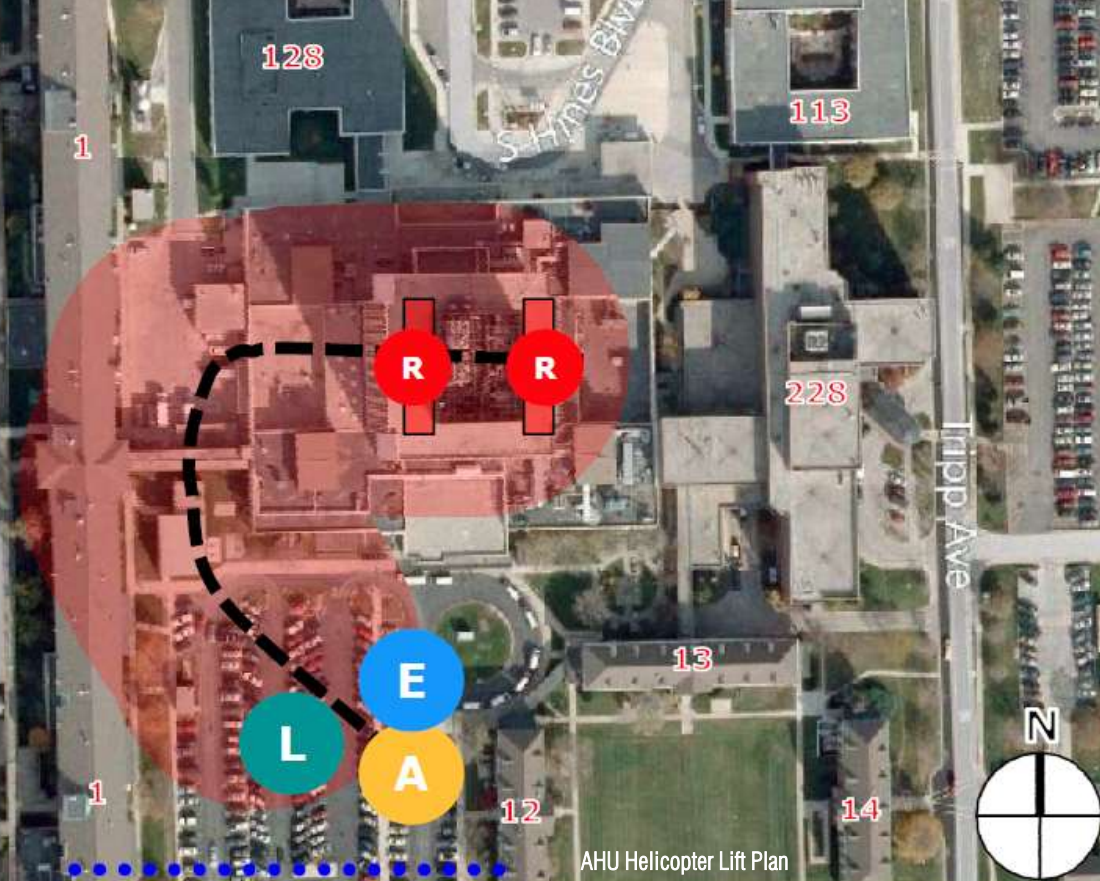
NORTHWESTERN MEMORIAL HEALTHCARE Feinberg 8th Floor Catheterization Lab 3 Renovation Chicago, IL

PFB was tasked to replace the existing Philips unit with a new Philips Single Plane Unit, a project which included the de-installation of the existing unit, leveling of the existing floor, confirmation of HVAC and power capabilities, the addition of a new medical gas column as well as a power column at the table, Trumpf surgical light boom, table-mounted contrast injector, 'Volcano' diagnostic system, new millwork, finish upgrades, ceiling / lighting modifications, and minor modifications to the existing control station.

The renovation of Cath Lab 3 presented unique challenges with regards to schedule and construction phasing in order to achieve minimal down time in this critical area of patient care. PFB Architects continues to work with our team of engineering consultants and the radiology equipment supplier to develop cutting edge solutions to the logistics and coordination challenges inherent to the renovation of a Cardiac Cath Lab. An added functional benefit to this academic medical center is the ability to hold real-time remote video conferences between the lab space and separate Conference Room. All construction documentation for the Cath Lab 3 Renovation was completed in Autodesk Revit Software. PFB Architects has the in-house capabilities to complete any project in Revit.



Equipment Plan



Plan Legend:

- L Control Room
- A Corridor
- E Support Space
- R Release Point
- Flight Path + 100' Clearance
- ... Blockade

EDWARD HINES JR. V.A. HOSPITAL HVAC Upgrade at Building 200

Hines, IL

Project Cost
\$15M

Project Scope

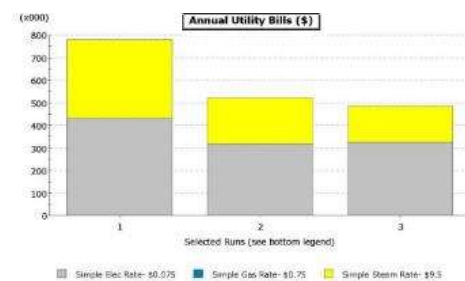
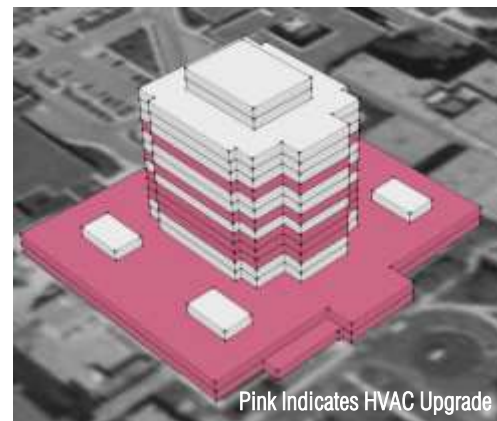
- PHASE I: Documentation, Analysis, and Report
- PHASE II: Prepare Master Plan and Design Standards
- PHASE III: Design Services
- PHASE IV: Commissioning Services

Basement and First Floor Options

- Reduce impact on day-to-day operations
- How to replace with a high-efficiency system
- Provide winter cooling & increase plant capacity

Tower Options

- New units on each floor / eliminate perimeter units
- New units on roof with provisions to change type
- New units on roof/penthouse with new duct shafts
- New above-ceiling units with dedicated air from penthouse units
- Replacement of current units with heat pumps



1. VA Hospital SD - Baseline Design (03/25/09 @ 10:40) (Annual bill: \$ 775,708)
 2. VA Hospital SD VAV - Baseline Design (03/25/09 @ 10:45) (Annual bill: \$ 522,633)
 3. VA Hospital SD VAV - 1 (03/22/09 @ 09:51) (Annual bill: \$ 463,013)



Project Size: 25,000 SF

Firm Role: Planning, SD, DD, CD, CA

Cost: \$483,904

Design Time: 4 months

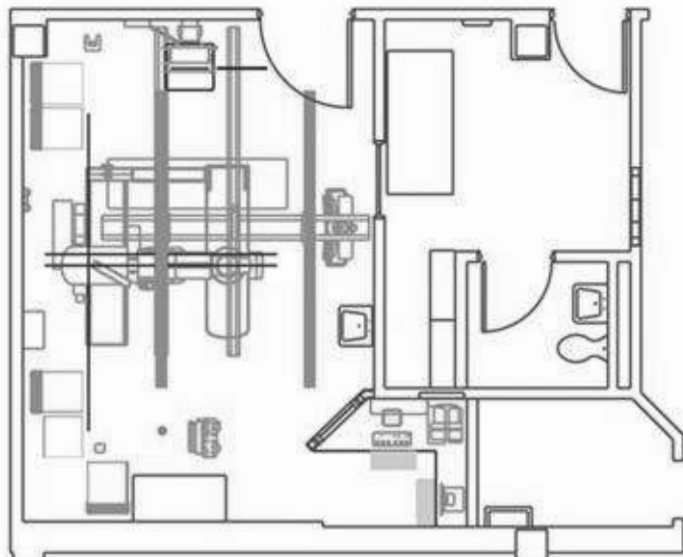
Reference: Herbert Wilson III
Assistant Director
Program & Construction
Management
Biological Sciences Division
773.834.4771



UNIVERSITY OF CHICAGO MEDICAL CENTER
Prudential Development Strategic Relocation
1 Prudential Plaza, 25th Floor
Chicago, IL

PFB worked with the University of Chicago Medicine to redesign the 25th Floor of the 1 Prudential Building, creating an office environment that properly meets the needs of the UCMC Strategic Development team inhabiting the floor. The design includes the addition of private offices along the east and west banks of the floor. Along with new private offices, PFB has also added a “Park View” gathering space, which can hold 70 people. The design also includes the repurpose of spaces, including Break Area, Work Rooms, Copy Area/Business Center, open office, reception, and additional conference rooms. PFB provided the redesign of new floor finishes, as well as ceiling redesign necessary for the new spaces.





Project Size: 2,160 SF
Cost: \$822,000
Program: 1 Digital Radiography Room
 1 Rad / Fluoroscopy Room

EDWARD HINES JR. V.A. HOSPITAL
Digital Radiography and Fluoroscopy Renovation
 Hines, IL

This project entailed the complete renovation of Radiography and Fluoroscopy Room and Controls and the installation of Two Philips MultiDiagnost ELEVA machines. In the process, the room was made ADA compliant, lighting and ancillary equipment were improved, supplemental cooling to the area from an adjacent space was added, as was a UPS for emergency shutdown and Critical Power to the Radiology Suite.



EDWARD HINES JR. V.A. HOSPITAL
ICU Consolidation
Hines, IL

Project Size: 21,000 SF
Cost: \$3.5M
Program: 28 ICU Patient Rooms

The ICU Consolidation is a 2-phase project consisting of the renovation of approximately 21,000 square feet of space on the second floor of the main hospital building 200. The project includes 28 patient rooms, expansive nurse station and work areas, physician work rooms, offices, equipment rooms, and support areas. All patient rooms include new headwall units and swivette-type toilet facilities. Extensive custom casework and colorful flooring materials provide a highly functional and vibrant atmosphere for patients and staff. Mechanical, electrical, and plumbing services include replacement of all services and installation of 2 new rooftop air-handlers and chillers supported on new structural steel framework.

The new location of the ICU is in preparation of the future relocation of surgery to the remaining portion of the second floor.



Patient Tower Rendering

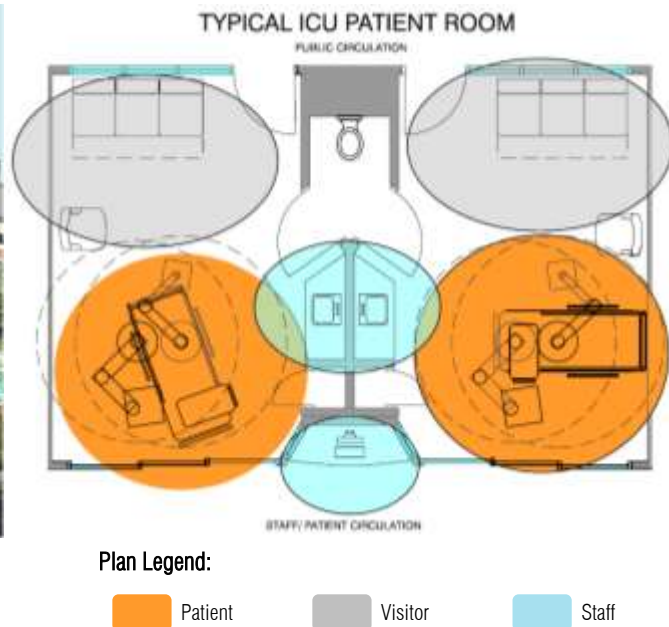
Project Size: 259,000 SF **Bed Counts:** 150 Private Beds
Cost: \$126M 48 ICU Beds

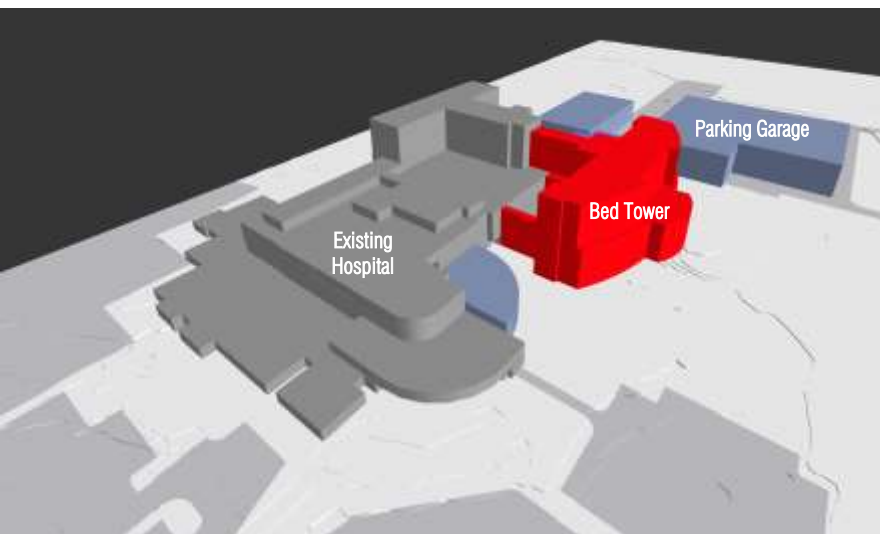
PRESENCE SAINT JOSEPH MEDICAL CENTER

Pebble Project – Bed Tower

Joliet, IL

The new 259,000 SF Bed Tower is part of the master facilities planning study of this 720,000 square foot flagship hospital. The addition and renovation create 150 new private beds, updated and replaced 48 Intensive Care Beds and provided additional nursing units. As the Design Architect, PFB guided this project through the approval process by the Center for Health Design Research as a “Pebble Project.” This makes this project the first “Pebble” concept in the State of Illinois to receive a “Certificate of Need” approval.





Project Size: 223,000 SF
4-story

Cost: \$10.3M

Spaces: 700

PRESENCE SAINT JOSEPH MEDICAL CENTER

Parking Garage

Joliet, IL

The new parking structure was designed to meet the needs of the expanding Presence campus. The four-story, 700-space structure is designed for future expansion of two additional stories. The structure is connected with the new patient bed tower and includes patient, staff, and private physician parking.

Repetitive precast concrete construction kept material costs within budget. Architectural precast with inset brick and metal panels decorated prominent elevations. A storm trap water detention system was used under the parking structure, utilizing space on a restricted site.



Pediatric ICU Corridor



Pediatric Patient Room



PRESENCE SAINT JOSEPH MEDICAL CENTER

Pediatric Unit and PICU Relocation

Joliet, IL

This project involved the relocation of 5,150 square foot of pediatric care, including a 12-bed pediatric acute care unit, a 3-bed intensive care unit – including a new nurse work area and isolation room – 1 new nurses station, and a small satellite station. A fast-track timeline, minimal budget, and broad range of appeal were project challenges.

The interior environment needed to be conducive to a wide age range of patients (newborn – 16 years) that would be staying on this unit. This was achieved by implementing bright colors and bold graphics, both in the corridors and patient rooms. Use of modular furniture in the nurse station and work area provided the client flexibility for future changes. The furniture can be taken apart and reconfigured at any time. The project was completed in 4 months from design to final occupancy.



CT Scan Room

Project Size: 44,730 SF
Firm Role: Planning, SD, DD, CD, CA
Cost: \$13.8M

Program:

5 Radiography	2 Fluoroscopy
3 Mammography	3 CT
1 Special Procedure	4 Nuclear Medicine
4 Ultrasound	1 Bone Density
1 Stereotactic	6 Holding Bays

**PRESENCE SAINT JOSEPH MEDICAL CENTER
 Radiology Department**

Joliet, IL

The reorganization of the existing Radiology Department included 39,200 square feet of renovation and a 5,500 square feet addition. This \$13.8 million dollar project was delivered in phases maintaining existing operations.

The two major challenges were to keep the Radiology Department operational and the precision of the order and delivery of medical equipment. Installation and equipment activation was critical; avoiding medical equipment sitting on trucks or in the room waiting for activation.

The Radiology Department Imaging Unit included: 5 radiographic rooms, 2 fluoroscopy rooms, and 3 mammography rooms, 3 CT rooms, 1 special procedures room, 4 nuclear medicine rooms, 4 ultra sound rooms, 1 bone density room, 1 stereotactic room, medical records area, patient support, transcription offices, and patient holding areas.



Waiting Area



PRESENCE SAINT JOSEPH MEDICAL CENTER
Radiology Department
... continued





Phase II: Renovated EP Lab



PRESENCE SAINT JOSEPH MEDICAL CENTER Cardiac Cath Renovation

Joliet, IL

Project Size: 3,800 SF
Cost: \$629,346

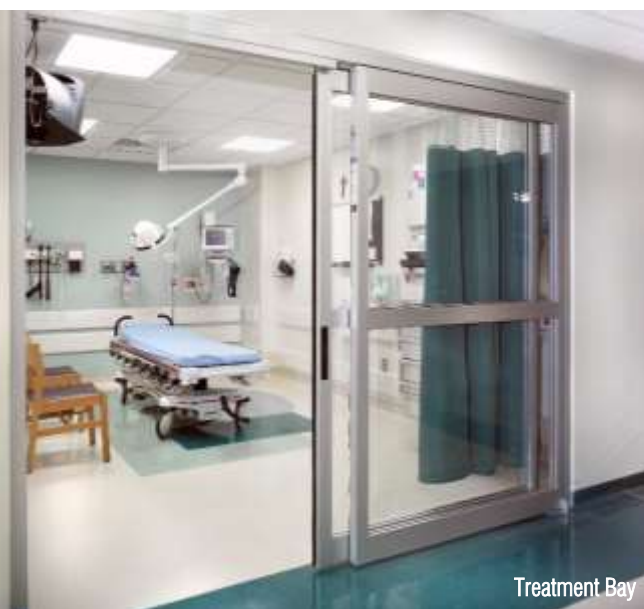
Program: 1 Cath Lab
1 EP Lab
9 Holding Bays

The renovation of the Cardiac Cath Lab has been divided into 4 phases. **Phase I** included the new Cath Lab room (600 SF), an expanded shared control room between Cath and EP Lab rooms (160 SF), and new Recovery and OP holding rooms (600 SF), with 4 holding bays and 1 new nurse station. **Phase II** included the renovated EP Lab (610 SF) as well as new Recovery and OP holding rooms (880 SF), with 5 holding bays and 1 new nurse station. **Phase III** involved the removal of the staff work area and 1 recovery bed to provide access for connection to the new bed tower. **Phase IV** included the renovated Cath Lab and Control Room (860 SF).



CT Scan Room

Project Size: 33,050 SF Renovation
6,950 SF Expansion
Cost: \$4.4M (\$110 / SF)



Treatment Bay



PRESENCE SAINT JOSEPH MEDICAL CENTER

Emergency Department Renovation and Expansion

Joliet, IL

Experiencing 4-hour wait times in their Emergency Department, a multi-phased renovation and expansion plan was developed to include 12 treatment rooms, 3 triage rooms, 2 nurse stations, and a new 64 slice CT Scan, with the goal to improve patient flow and staff efficiencies while enhancing patient care. The design team reconfigured Triage, Fast Track, and Registration / Waiting through the implementation of bed-side registration and the addition of an adaptable “peak period expansion zone” to include an 8-bed treatment bay. To further enhance staff efficiencies, creative design solutions also included planned areas at strategic locations for additional supply carts.



Completed Window Installation

Project Size: 59,000 SF
Firm Role: Planning, SD, DD, CD, CA
Cost: \$13M



NORTHWESTERN MEDICINE CENTRAL DUPAGE HOSPITAL Center Building Façade Upgrade

Winfield IL

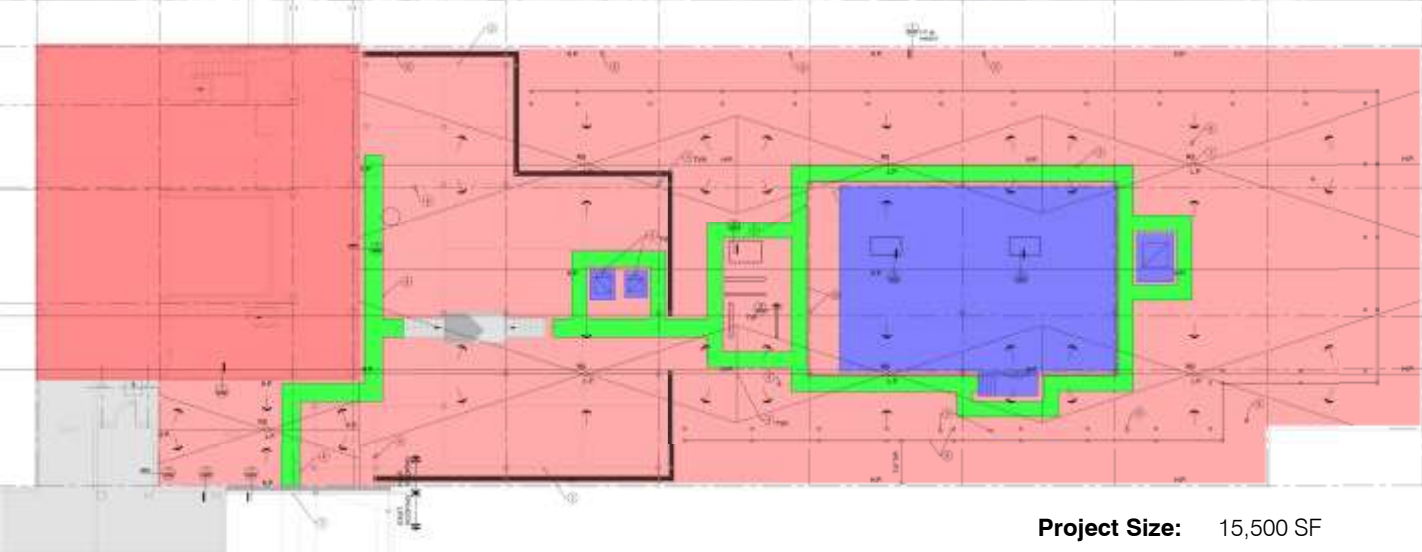


New Openings Cut / Masonry Work Progressing



Masonry Demolition Prior to Window Installation

As part of a \$13 million Behavioral Health Renovation program, the Owner directed the design team to replace all windows on the Center Building on floors three, four, and five. The new windows match the South Building, which required the removal of exterior brick between the existing windows to achieve the South Building aesthetic. The new windows improve energy efficiency, and on floors three and five – the behavioral health floors – the interior glazing is 7/16" laminated glass with integral blinds (Wausau 2187 DT SEAL Psychiatric). The design team coordinated spandrel panel locations to allow as much daylight into the patient rooms as possible. In addition to window replacement, the North and South Facades are receiving a full masonry restoration. All brick is being tuck-pointed and cast stone parapet copings are being re-pointed and sealed with a combination of mortar and color-match silicon sealant.



Project Size: 15,500 SF

Firm Role: Planning, SD, DD
CD, CA

Cost: \$13M (total)

**NORTHWESTERN MEDICINE
CENTRAL DUPAGE HOSPITAL
Center Building Roof and Penthouse Replacement**
Winfield IL

In conjunction with a renovation of the 3rd, 4th, and 5th floors of the Center Building, the Owner requested PFB assess the condition of the existing roof and plan for a new prefabricated mechanical penthouse. The existing roof is almost 20 years old and with more penetrations planned for the new mechanical penthouse and several other new rooftop exhaust units, the decision was made to replace. The old roof was torn off to the concrete deck and a full replacement with a new poly-iso insulation achieves an insulation value of R-20.

New Single-Ply Adhered
EPDM Over Rigid Insulation



New Rooftop
Mechanical Units



New Walkway Pad Adhered to
Single-Ply Membrane



Existing to Remain



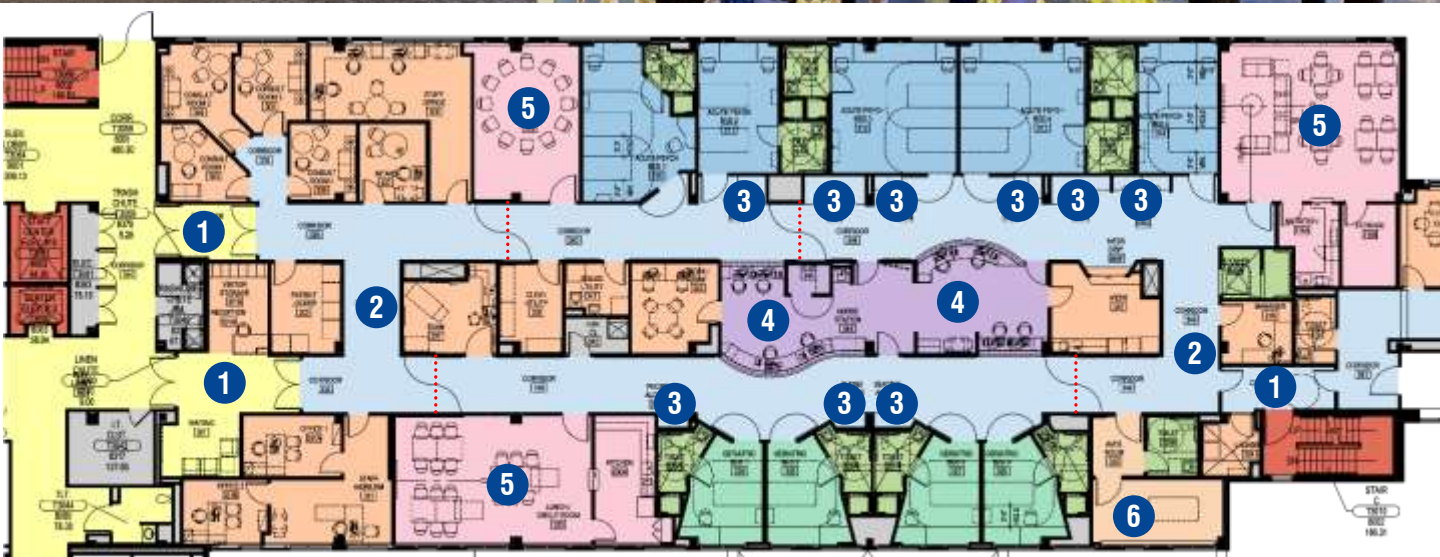


3.0

BEHAVIORAL HEALTH EXPERIENCE



Calming Alcove In View Beyond a Full-Wall Art Installation



3rd FLOOR BEHAVIORAL HEALTH PLAN:
10 Bed Acute Psych, 4 Bed General Geriatric

Plan Legend:

1. Sallyport to Minimize Elopement Risk
2. Full-Wall Tranquility Graphic
3. Alcoves for Calming Private Time
4. Double-Sided Nurses' Station to Max. Patient Room Visibility
5. Group Room
6. Quiet Room with Vestibule

NORTHWESTERN MEDICINE CENTRAL DUPAGE HOSPITAL 3rd & 5th Floors Behavioral Health Winfield, IL

Central DuPage Hospital spent more than \$15 million expanding its Behavioral Health Unit in Chicago's Western Suburbs, as more hospitals seek to meet the growing demand for Behavioral Health Treatment. The design more than tripled the unit, from 15 beds to 48 beds. New beds include 10 Acute Psychiatric and 4 Geriatric on the Third Floor of the Center Building and 14 General Psychiatric and 4 General Geriatric on the Fifth Floor of the Center Building.

The high demand for Behavioral Health Treatment at CDH resulted in an accelerated documentation schedule of 4 months from initial programming to completion of construction documents. PFB met this challenge by assigning three architectural design teams to the roof, interior build-out, and window replacement respectively. Construction Documents for 59,000 square feet were completed in 3 months and bids came in \$1.4M under budget.

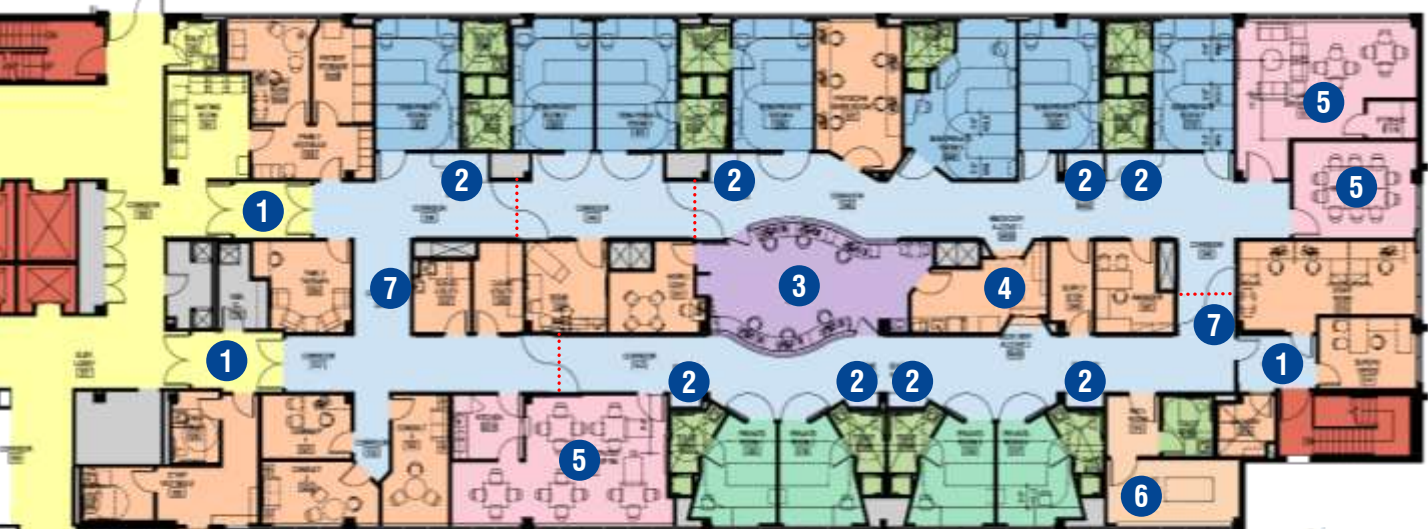


Nurse Station at Unit Corridor



Completed Semi-Private Patient Room

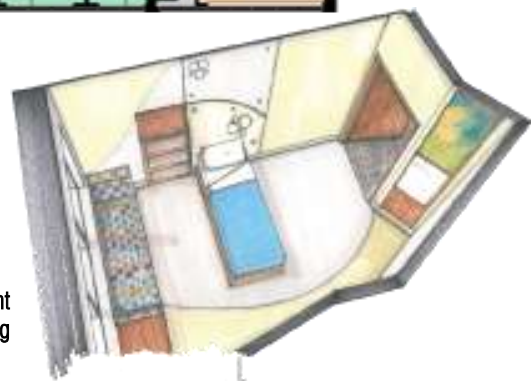
PFB's renovation of the 3rd and 5th floor Center Building at Central DuPage Hospital was featured in the Summer 2015 issue of Behavioral Healthcare Magazine.



5th FLOOR BEHAVIORAL HEALTH PLAN:
14 Bed General Psych, 4 Bed General Geriatric

Plan Legend:

- | | |
|---|-----------------------------------|
| 1. Sallyport to Minimize Elopement Risk | 4. Double-Sided Meds Distribution |
| 2. Alcoves for Calming Private Time | 5. Group Room |
| 3. Double-Sided Nurses' Station to Maximize Patient Room Visibility | 6. Quiet Room with Vestibule |
| | 7. Full-Wall Tranquility Graphic |



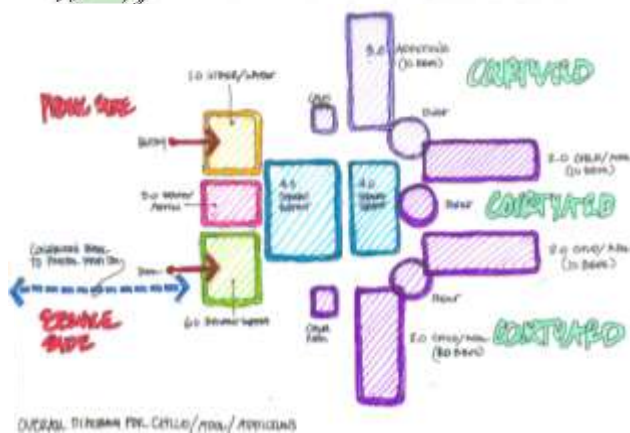
Geriatric Patient Room Rendering

**NORTHWESTERN MEDICINE
CENTRAL DUPAGE HOSPITAL**
3rd & 5th Floors Behavioral Health
Winfield, IL

On the 3rd and 5th Floor Behavioral Health Units, pocketing cross-corridor doors are located at key locations in plan. Staff can easily open or close the doors to allow for flexibility in segregating patient populations. A unit can grow or shrink on a daily basis depending on patient population acuity, age, or specific clinical needs.



[PRIVATE CLIENT]
Child and Adolescent Behavioral Health Center
Illinois



We were approached by the leadership team at a hospital network to create a schematic design concept for a new child and adolescent behavioral health building with both in- and outpatient offerings on their campus, to better meet the needs of their community. From the input of the leadership team and our design team, we developed Guiding Principles for the project:

- Connections to existing buildings should best leverage those assets
- Provide for program expansion
- Interior spaces should be filled with natural light and provide views to nature
- Spaces should comfort and support, not confine
- Provide flexibility for all spaces

We then developed, refined, and further refined a programming document in tandem with floor plans, from adjacency diagrams to individual room detailing, always keeping those Guiding Principles in mind. After exploring several options, we arrived at a sweeping “neighborhood” design adjacent to their existing adult behavioral health facility. Highlights of the final design include:

- Addictions, Adolescent, Adolescent ICU, and Child units are contiguous for flexibility and step-down potential
- Physical connections to new and existing facilities
- Centralized building support and kitchen facilities to serve both the new and existing facilities
- Common support spaces connect the entire facility
- Main entry is featured along with Family Accommodations
- Experiential Space is positioned near main entry to support after-school programs
- Beds and dining have views into courtyards, and overall plan is broken up to allow natural light and views, living, and activity spaces
- All patient populations / acuities can expand programs in this scheme
- Unit corridors are wider to support openness, group living spaces, and flexible support



[PRIVATE CLIENT]

Child and Adolescent Behavioral Health Center

continued ...

The inpatient area features Addictions, Adolescent, Adolescent ICU, and Child units, with an Autism sub-unit and the opportunity for all units to flex along the southern corridors to best adapt to changing patient populations. All units have central living room spaces, therapy areas, calming rooms, calming and charting alcoves, and a central nurses' station overlooking a computer area and dining room. The units also have access to expansive interior courtyards, classrooms, and an Experiential Wing with activity, art, technology, meditative, and gym spaces. The in-patient areas are designed with a residential aesthetic, with bountiful natural light and views; patient and staff safety are of the utmost importance, but do not hinder the healing quality of the units. The intake area includes two entries – one for walk-in patients and their families, and another for ambulance-delivered crisis cases. A family accommodations area adjacent to the main lobby provides hospitality-level amenities for overnight stays and a dining area for family interactions.

The outpatient lobby is a soaring two-story space, with separate calm and interactive play waiting areas. Patients have access to their doctors and counselors in a one-on-one office setting as well as several large group therapy rooms. Most rooms feature frosted slit windows at eye-level for natural light without the distraction of the view, as well as clerestory windows for additional light and access to nature.

The staff area provides easy access to all inpatient units while maintaining the separation necessary for decompression and focused work, and includes a break room, relaxation room, staff-only courtyard, resident and staff locker rooms, and a student nurse workroom.

Plan Legend:

■ Semi-Private Patient	■ Staff
■ Private Patient	■ Support
■ Autism Patient	■ Therapy / Family / Conference
■ Unit Circulation	■ Public Circulation



[PRIVATE CLIENT]
Child and Adolescent Behavioral Health Center
continued ...

Unit Flexibility was a critical component to the design of the Inpatient Units. Flexibility manifests in the ability to segregate patient populations by sex, age, acuity and disorder. The areas highlighted in green in the above plan allow for the Addictions, Adolescent, and Child units to independently flex based upon patient census. Cross corridor doors highlighted in red can be locked at three different locations within the connecting corridors to allow units to grow, or shrink by 3-room increments. Nurse Station locations highlighted in purple allow for visualization down the flex corridors ensuring that unit visibility is not impacted by fluctuation in unit size. Sub-charting stations located within the flex corridors allow for a touch-down station for nurses and close patient room observation.

The enlarged Unit Plan located to the right elaborates on the living room concept that has been incorporated in each “neighborhood”. Flexible seating is placed within the central open space allowing for various scales of group therapy or activities in a supervised environment.





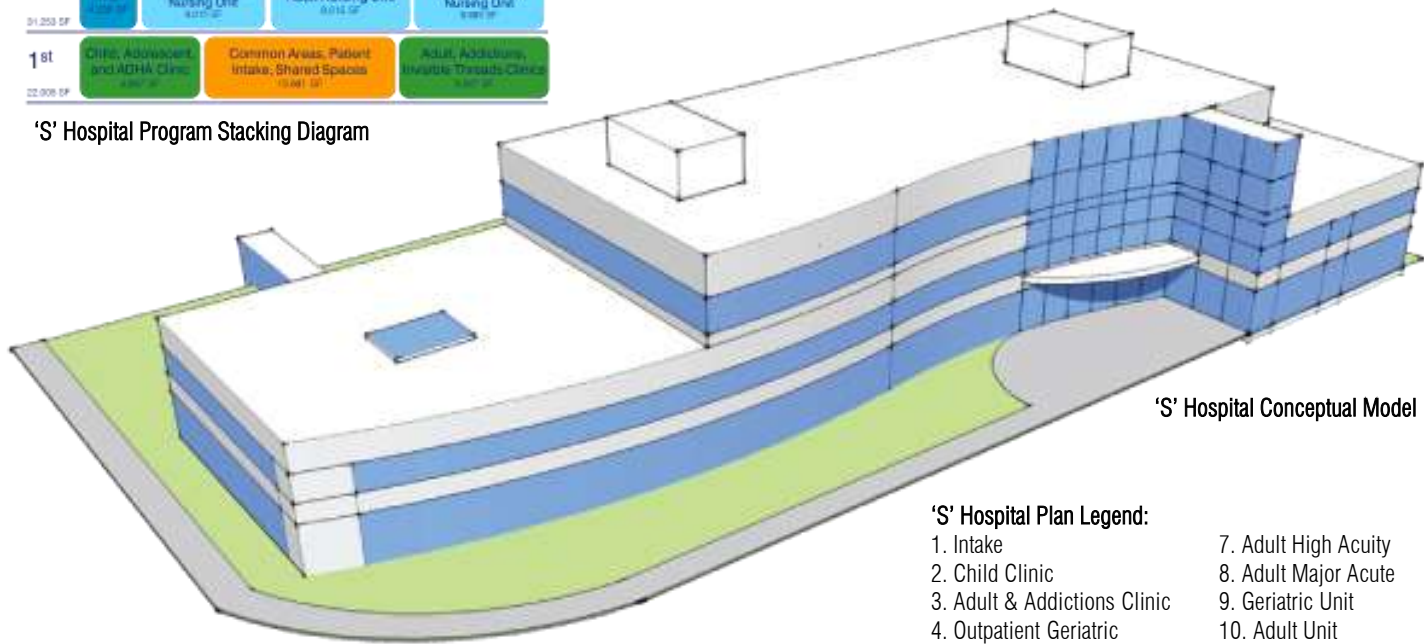
AMITA HEALTH
ADVENTIST BOLINGBROOK HOSPITAL
2nd Floor Geriatric Psychiatry Unit Renovation
 Bolingbrook IL

This 2nd Floor Psychiatry Unit Renovation required creating a ligature-resistant environment to provide safety for the patients. All patient room toilets received new vandal-resistant shrouds around plumbing, and ligature-resistant accessories. Hold down clips were added to all patient rooms with existing ACT ceilings. Outlets received new tamper-proof cover plates, thermostats received tamper-proof locking covers, and all existing millwork fasteners were replaced with tamper-proof hardware. The existing med-gas plastic laminate headwalls were removed as well as the med-gas nozzles. The med-gas outlets received tamperproof hardware. All sprinkler heads in the patient rooms were replaced with tamper- and ligature-resistant fixtures. All mechanical supply, return, and exhaust grilles were replaced with new tamperproof grilles. All light fixtures in the patient rooms were replaced with tamper- and ligature-resistant models. The existing inoperable windows in all patient areas were given added protection with impact-resistant materials.

Four existing patient rooms were converted to Lunch/Group rooms, and received new flooring and paint. The entire unit was repainted and the existing nurse station was modified to provide safety for staff. Outlets in the corridors received tamperproof hardware. Access and egress doors to the unit were equipped with fail-safe locking devices.



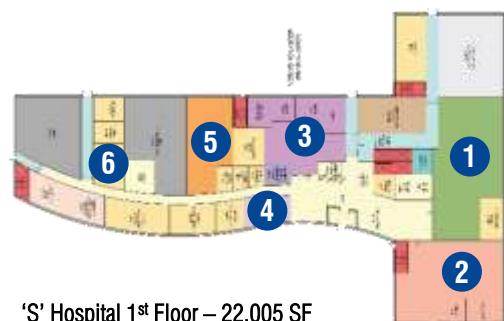
'S' Hospital Program Stacking Diagram



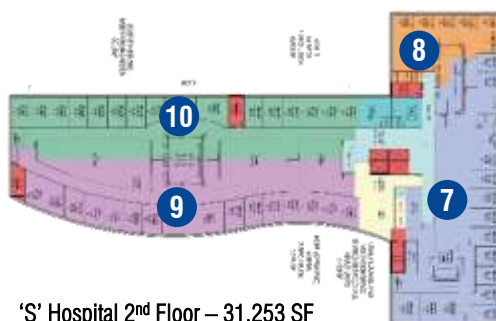
'S' Hospital Conceptual Model

'S' Hospital Plan Legend:

- | | |
|------------------------------|----------------------|
| 1. Intake | 7. Adult High Acuity |
| 2. Child Clinic | 8. Adult Major Acute |
| 3. Adult & Addictions Clinic | 9. Geriatric Unit |
| 4. Outpatient Geriatric | 10. Adult Unit |
| 5. Adolescent Clinic | 11. Adolescent Unit |
| 6. Support Space | 12. Child Side |



'S' Hospital 1st Floor – 22,005 SF



'S' Hospital 2nd Floor – 31,253 SF



'S' Hospital 3rd Floor – 10,605 SF

[PRIVATE CLIENT] Behavioral Health Building Study Illinois

PFB was commissioned to review / revise a 66-bed hospital space program for completeness and appropriateness, and provide an accurate project (construction and “soft”) cost estimate for a new facility. PFB then designed two plan studies based on the programmatic, costing, and site needs.

New Hospital Program Assumptions:

Inpatient Units:

Child / Adolescent Unit	18 Beds
Adult Unit	14 Beds
Adult High Acuity Unit	14 Beds
Geriatric Unit	14 Beds
Adult Major Acute	6 Beds
Total Beds	66

Outpatient Clinics:

Child Clinic	20 – 24 children
Adolescent Clinic	30 children
Adult Clinic	14 adults

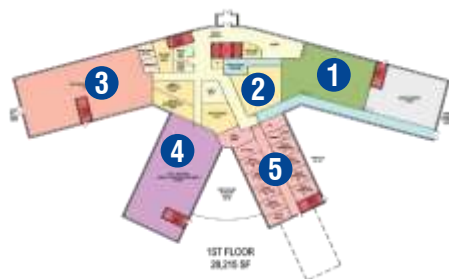
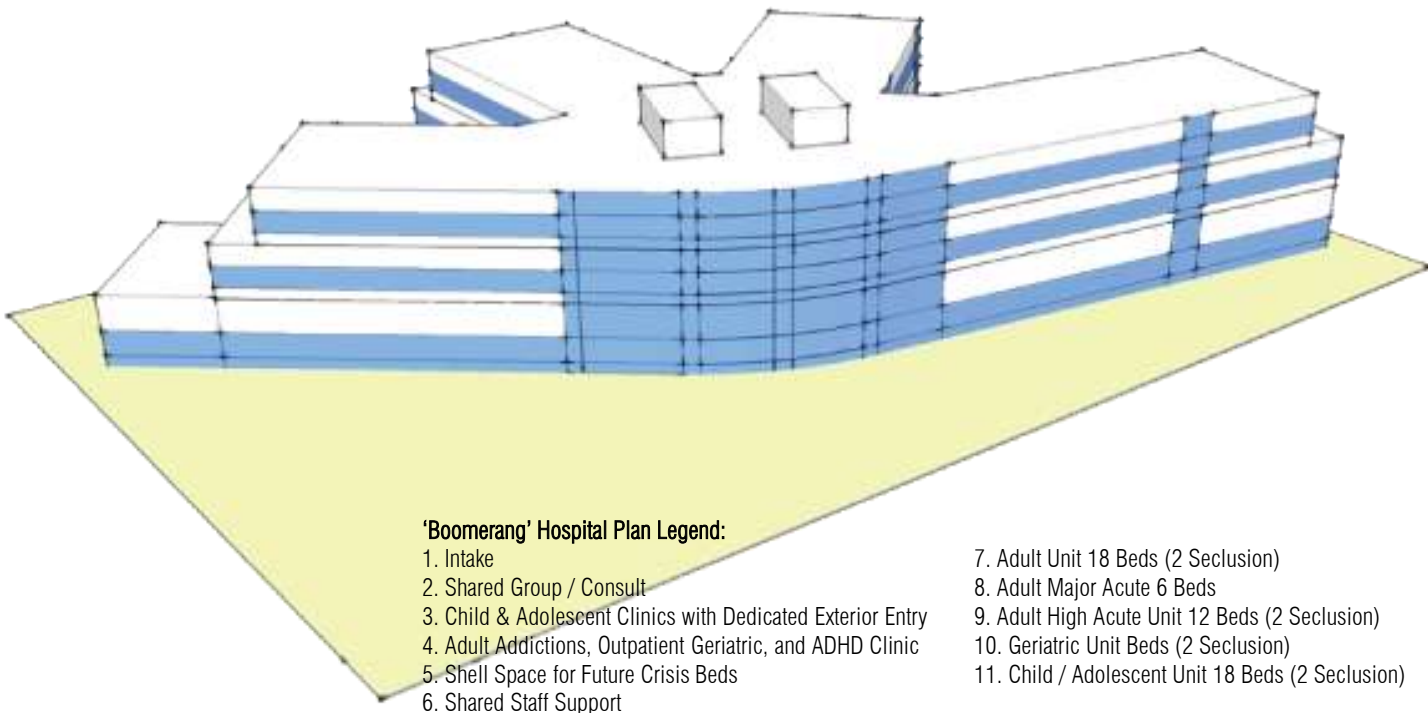
Other Clinical Programs:

Addictions, Outpatient Geriatric, ADHA



'Boomerang' Hospital Program Stacking Diagram

'Boomerang' Hospital Conceptual Model



'Boomerang' Hospital 1st Floor



'Boomerang' Hospital 2nd Floor



'Boomerang' Hospital 3rd Floor

[PRIVATE CLIENT]
Behavioral Health Building Study
 Illinois

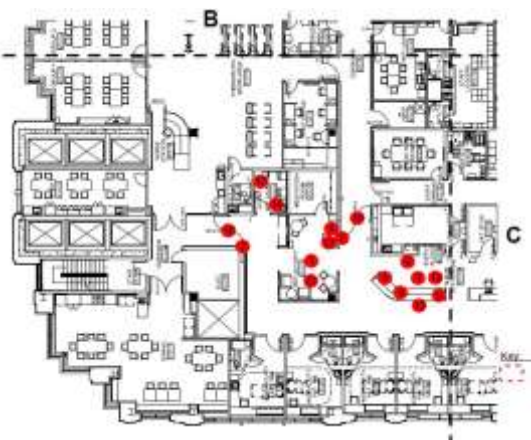
Comparing the options of renovating the hospital's existing facilities versus building a replacement Behavioral Health Pavilion, PFB determined that a replacement pavilion will achieve the desired clinical functional model that cannot be met by renovating the existing building, will provide an entirely new image for the hospital, and will reduce current energy consumption. The savings on energy and infrastructure maintenance would cover the difference between renovation versus a new building in 13 years.



Behavioral Health Scope Plan



Typical Private Room Plan



13th Floor Plan – Area A

Items Identified for Improvement - Preliminary Draft Meeting Discussion Summary				
Based Upon: New York State Office of Mental Health Patient Safety Standards, Materials and System Guidelines.				
Report Page	Galter 13 Issue location	No.	Summary Of Recommended Action	
10	Typical Private Patient Room	1	Replace screws with tamper proof screws.	
10	Typical Private Patient Room	2	Replace latch on wicket door.	
10	Typical Private Patient Room	3	Replace door stop.	
10	Typical Private Patient Room	4	Seal crack, replace bracket.	
10	Typical Private Patient Room	5	Window seat cushions used as weapon/contraband hiding.	
10	Typical Private Patient Room	6	Replace towel /soap dispenser -non anti-ligature or potential weapon.	
10	Typical Private Patient Room	7	Replace screws with tamper proof screws.	
10	Typical Private Patient Room	8	Replace window treatment with tamper resistant.	
11	Typical Private Patient Room	9	Replace access panel screws with tamperproof screws.	
11	Typical Private Bathroom	1	Patient toilet room doors replace, modify, accept?	
11	Typical Private Bathroom	2	Replace door hardware with anti-ligature type.	
11	Typical Private Bathroom	3	Provide sealant at wall bracket.	
11	Typical Private Bathroom	4	Replace soap dispenser with anti-ligature type.	
11	Typical Private Bathroom	5	Replace nurse call hardware with tamperproof screws.	
11	Typical Semi-Private Room	1	Replace screws in storage closet with tamperproof screws.	
11	Typical Semi-Private Room	2	Replace wicket door latch with anti-ligature type.	
11	Typical Semi-Private Room	3	Replace door stop wit antiligature door stop and tamperproof screws.	
12	Typical Semi-Private Room	4	Seal desk and seat back at wall. Replace non anti-ligature brackets.	
12	Typical Semi-Private Room	5	Window seat cushions used as weapon/contraband hiding.	
12	Typical Semi-Private Room	6	Replace towel /soap dispenser -non anti-ligature or potential weapon.	
12	Typical Semi-Private Room	7	Provide tamper proof screws at oxygen or nurse call equipment.	
12	Typical Semi-Private Room	8	Replace window treatment with tamper resistant.	
12	Typical Semi-Private Room	9	Replace all access panel fasteners with tamper proof screws.	
12	Typical Semi-Private Room	10	Replace all fasteners on plumbing shroud with tamper proof screws.	
12	Typical Semi-Private Bathroom	1	Patient toilet room doors replace, modify, accept?	
12	Typical Semi-Private Bathroom	2	Replace door hardware with anti-ligature type.	
13	Typical Semi-Private Bathroom	3	Seal all continuous brackets with pick-proof sealant.	
13	Typical Semi-Private Bathroom	4	Replace towel /soap dispenser -non anti-ligature or potential weapon.	
13	Typical Semi-Private Bathroom	5	Provide tamper proof screws at nurse call equipment.	
13	Corridors	1	Replace clocks with recessed polycarbonate lens model.	
13	Corridors	2	Replace fasteners on exit signs with tamper proof screws.	
13	Corridors	3	Replace door protection hardware screws with tamper proof screws.	
13	Corridors	4	Replace fasteners on fire alarm light with tamper proof screws.	
13	Corridors	5	Fire alarm pull station. Research if alternate activation is acceptable.	
13	Corridors	6	Wall mounted information signage can be pulled off walls.	
13	Corridors	7	Door at G1366 is damaged. Potential to use fragments as weapon. Replace.	
13	Corridors	8	Door G13-229 hardware, signage and faceplate fasteners require replacement.	
14	Nurse Station	1	Computers have exposed wires. Secure any exposed wires.	
14	Nurse Station	2	Millwork hardware needs to be replaced with anti-ligature hardware.	
14	Nurse Station	3	Wall mounter information signage can be pulled off the wall.	
14	Nurse Station	4	Explore covering all with a clear Lexan lockable door.	
14	Nurse Station	5	Secure and lock pedestal cabinets.	
14	Day/Evening Activity	1	Tightly secure artwork at every seam.	
14	Day/Evening Activity	2	Replace millwork hardware with non-loop able hardware.	
14	Phone Alcove, Typical	1	Tightly secure artwork at every seam.	
14	Phone Alcove, Typical	2	Lock millwork and replace fasteners with tamper proof screws.	
15	Phone Alcove, Typical	3	Furniture legs could possibly be removed and used as a weapon.	
15	Patient Laundry, Typical	1	Replace loop-able desk brackets with non loop-able type.	
15	Patient Laundry, Typical	2	Towel and soap dispenser can be removed and used as a weapon.	
15	Patient Laundry, Typical	3	Install shroud under sink to prevent pipe form being a ligature point.	
15	Seclusion Room (Ante)	1	Install ligature resistant level with tamper proof screws.	
15	Seclusion Room (Ante)	2	Install new non-ligature door stop. All fasteners to be tamperproof.	
15	Seclusion Room (Ante)	3	Correct solid surface desk ligature risk.	
15	Seclusion Room (Ante)	4	Towel and soap dispenser can be removed and used as a weapon.	
15	Seclusion Room (Ante)	5	Install lockable cover on glove box with tamperproof screws.	
16	Seclusion Room (Ante)	6	Reinstall shatterproof glazing flush to the frame with tamperproof screws.	
16	Seclusion Room (Ante)	7	Replace clocks with recessed polycarbonate lens model.	
16	Seclusion Room (Ante)	8	Replace all millwork hardware with anti-ligature type.	

Safety Assessment Scope Narrative

NORTHWESTERN MEMORIAL HEALTHCARE **Behavioral Health Safety Assessment** Chicago IL

In 2016 Northwestern Medicine requested that PFB Architects conduct a Behavioral Health Risk Assessment of the Galter 13th floor pavilion, identifying any patient / staff safety risks and develop a report of our findings. PFB conducted our assessment through several meetings with the multi-member executive team, site visits, and a thorough evaluation of the hospital's operational narrative. The results of the final assessment report address patient privacy and dignity in addition to safety and risk concerns, in order that the unit improvements address appearing less restricting and more holistic. An excerpt from the report is provided above.



Rendered North Elevation



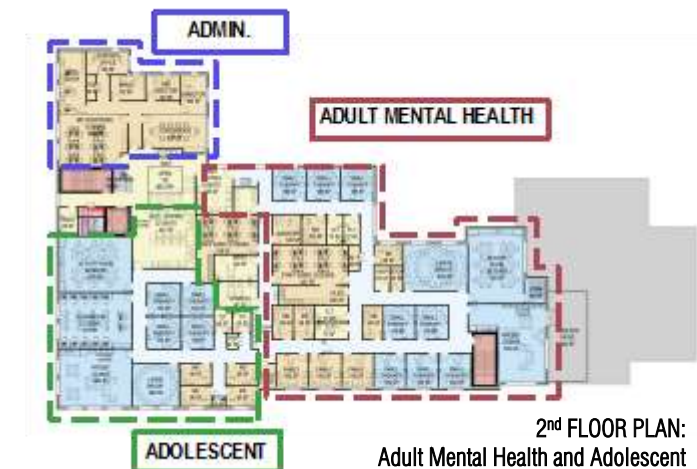
NORTHWESTERN MEDICINE CENTRAL DUPAGE HOSPITAL Outpatient Behavioral Health Building Study Winfield, IL

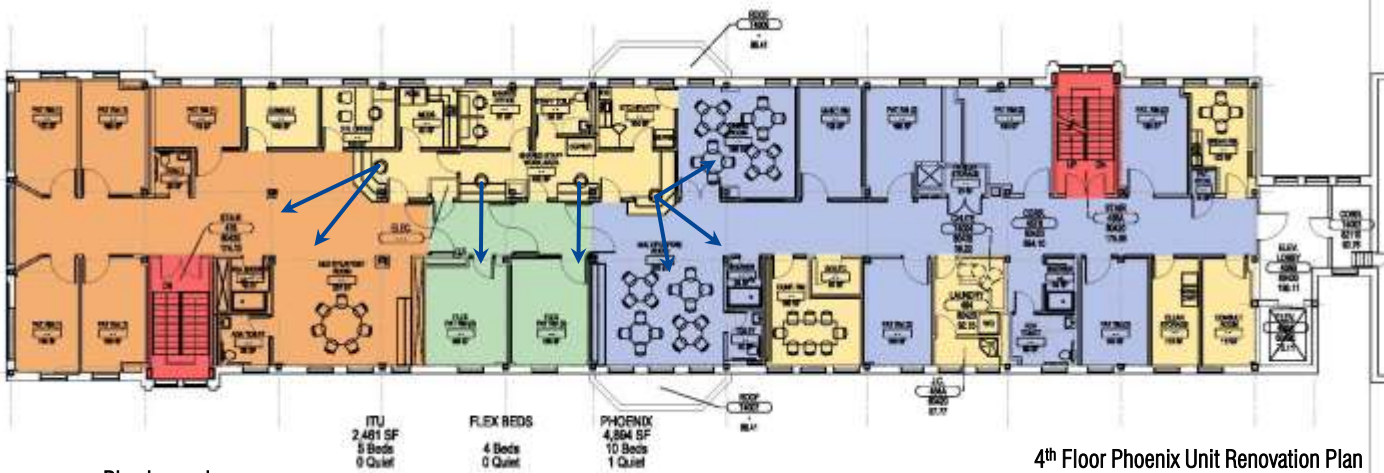
To keep pace with the rising demand for Behavioral Health Services, Cadence Health / Northwestern Medicine is spending nearly \$12M to construct a replacement standalone Outpatient Behavioral Health Building on the Central DuPage Hospital Campus.

The new two-story, 34,000 SF building will replace an outdated facility that cannot meet the needs of Physicians and Patients. Building Program includes 10 Addictions Patient Rooms with 20 beds, Suboxone Clinic, Gym, Shared Lunch Room, Adolescent Mental Health, Adult Mental Health, and leased physician space.

PFB began the project with a detailed analysis of the proposed building program. The goals of the analysis was to identify potential program overlap, oversized or undersized elements, and to develop overall space organization for the building.

Additional scope of the project includes substantial rework of parking and drive lanes at the Southeast corner of the CDH campus. Additional parking spaces on the campus will alleviate overcrowding in surface lots and parking decks.





Plan Legend:

- Creation of ITU (Intensive Therapy Unit) within existing Phoenix Unit
- Remainder of existing Phoenix Unit reorganized for shared staffing between both units

- Centralized Nurse Station and Shared Staff Spaces

- Semi-Private Flex Rooms with direct visibility from the Nurse Station can be used by either unit

- Direct visibility into Day / Activity Spaces for both units



PMMC Phoenix Unit renovation goals achieved:

- Expanded services for extremely high acute patients
- Increased staff and patient safety by separating extremely acute and violent patients from the less acute patients
- Segregated patients while maintaining same number of staff
- Centralized staff spaces for efficiencies
- Improved departmental organization to encourage productivity and staff involvement with patients
- Increased visibility throughout the unit

PRESENCE MERCY MEDICAL CENTER

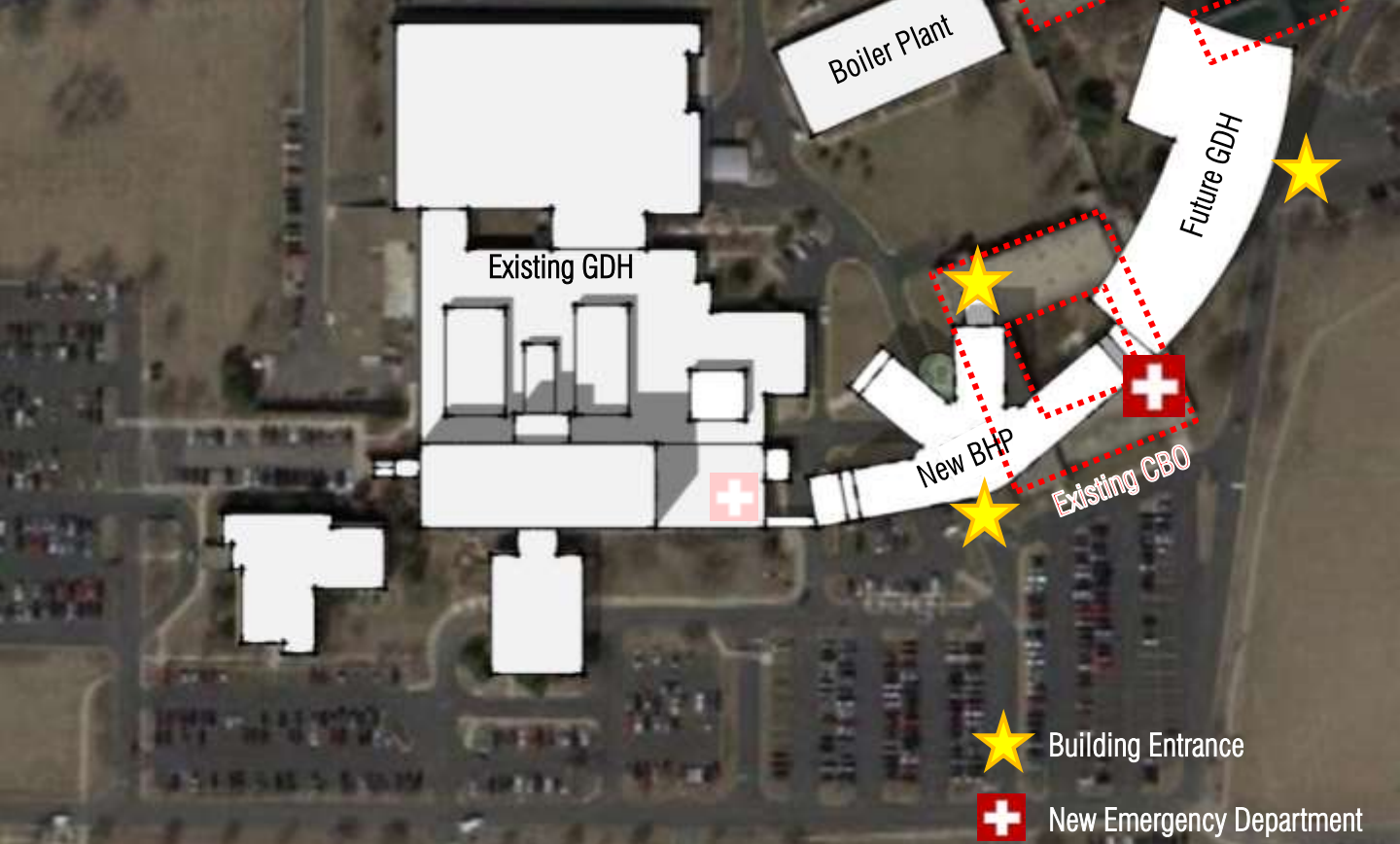
4th Floor Behavioral Health Planning Study (Phoenix Unit)

Aurora, IL

PMMC was seeking a Healthcare Architect with Behavioral Health Services experience to assist with development of a funding request for the PMMC 2014 budget. PFB was commissioned to study the development of an Intensive Treatment Unit (ITU - high acuity unit for the acutely violent and psychotic) to be accommodated within PMMC's existing Behavioral Health Services Building as a renovation project.

Challenges of the existing 86 year old Behavioral Health Services Building:

- Major infrastructure issues totaling \$18.2 million
- Energy inefficiencies
- Operating inefficiencies:
 - Travel distances on each inpatient unit exceeded 180 feet
 - Lack of staff support space on inpatient units
 - Desire to create a new unit for extremely acute patients, yet existing building layout restricts desired functionality
 - Inappropriate mixing in the General Division Hospital ED with behavioral health patients
 - Transport from the Hospital ED to BHS building is lengthy and through inappropriate service tunnels
 - Significant revenue loss during 12 - 18 months of phased construction for the renovation of the 4th floor
 - Some operational / functional improvement with a \$3.2 million investment



[PRIVATE CLIENT]
Master Plan
 Illinois

While working with a large hospital group on opportunities for Behavioral Health expansion, PFB studied the main hospital and opportunities therein, focused on future growth and facility modernization.

Phase One: Demolish existing CBO to make way for new BHS Pavilion (BHP). Relocate CBO Offices to the General Division Hospital (GDH).

Phase Two: Construct new BHP to the east of GDH with connection to the existing Emergency Department. Relocate BHS to the new Pavilion. Demolish existing BHS Building. Boiler Plant remains intact. New BHP has its own energy source.

Phase Three: Construct new GDH to the northeast of BHP with new Emergency Department connecting the BHP. Once the new GDH is complete, demo existing GDH, ED, and Boiler Plant. Ministry is transformed, creating a new campus face to the main road.



Behavioral Health Scope Plan

1. Imminent Hazards	2. Hazards
<p>REASON: Items within the Acute Adult and Geriatric Behavioral Health units and the ED that are imminent hazards to patients as they are out of sight of staff. These are highly recommended to be the first items to be corrected.</p> <p>SCOPE OF WORK:</p> <p>A. PATIENT BATHROOMS - Renovate existing patient toilet rooms to have ligature resistant doors, hinges and associated hardware, install Acorn safety shower head and controls, install a ligature resistant sink with integral faucet, controls and shroud, install floor mounted rear discharge toilet, install covers over all plumbing piping (toilet flush valve, bed-pan washer), and safety grab bars. Install security Mechanical grilles in ceiling. It may be prudent to consider installing new flooring and wall base, as well as install solid surface panels on wet-walls and paint other walls during this renovation. All equipment and accessories to utilize tamper proof screws. Ensure all access panels are secured and do not have gaps. Caulk at any gaps between any existing safety grab bars and the wall. Cover exposed floor mount bolts on toilet.</p> <p>B. ED TOILET ROOM C71 - Renovate existing toilet room to have ligature resistant doors, hinges and associated hardware, install a floor mounted toilet with rear discharge, install a shroud cover over the flush valve, and install a ligature resistant sink with integral faucet, controls and shroud. Bathroom accessories to be replaced with anti-ligature grab bars, a recessed toilet tissue dispenser, a recessed soap dish, and a security mirror. Wall bumper outside of toilet room is coming off the wall, this needs to be fixed or replaced. Install tamper proof screws on existing sink shroud. Surface mounted electrical junction box is a ligature issue and has standard (non-tamper proof) screws. Nurse call pull cord is long and could create a ligature point. Ensure all screws within the room are Tamper Proof screws.</p> <p>C. ED BAY #7 - Replace existing mechanical diffusers with security grilles and replace electrical outlets with Tamper Proof versions. Install a kick plate on door. Surface mounted data jack is a ligature issue. Remove Hand sanitizer from just outside this room. Ensure all screws within the room are Tamper Proof screws.</p> <p>D. 3B SHOWER ROOM 3BET1 - Replace the existing door to have ligature resistant doors, hinges and associated hardware, install safety shower controls, install a ligature resistant sink with integral faucet, controls and shroud, and install covers over toilet flush valve. Existing shower curtain track has a gap between it and the light fixture near the shower. Stainless steel threshold should be replaced with a new threshold secured with tamper proof screws.</p>	<p>REASON: Items within the Acute Adult and Geriatric Behavioral Health units and the ED that are potential hazards to patients, yet not in areas with limited visibility. These are recommended to be corrected.</p> <p>SCOPE OF WORK:</p> <p>A. PATIENT ROOMS - Renovate existing patient rooms to have ligature resistant doors, hinges and associated hardware, install cages on ceiling and wall mounted equipment. Cubicle curtain carriers to be changed to pop-out carriers. Ensure any sinks and faucets in patient rooms have install a ligature resistant sink with integral faucet, controls and shroud. Install security Mechanical grilles in ceiling. Protection of in-wall Mechanical units in 3A. Hold-down clips at Radiant panels in 3B. Replace existing Geriatric Patient beds in 3B to a behavioral health bed. All equipment and accessories to utilize tamper proof screws. Ensure all access panels are secured and do not have gaps.</p> <p>B. CORRIDORS - Install cover over the exposed shut-off valve on the drinking fountain in 3A. Ensure all corridor ceiling and wall Fire Alarm and Smoke Detectors have cage covers. Replace all non BHS compliant door hardware on all doors accessible off corridor. Update cross-corridor doors to remove vertical rod, push bar and closer. Replace existing mechanical diffusers with security grilles. Replace or cover Soiled Linen chute hardware. Corridor phones have surface mounted jack that is a ligature issue. 3A phone handheld and cord were left in place when not in use. Replace or cover electrical panel surface mounted locking hardware. Ensure all corridor artwork and wall mounted accessories have Tamper Proof Screws.</p> <p>C. COMMUNITY ROOMS - Utilize weighted or bolt-down furniture in group/day rooms, to include tables, side chairs, lounge chairs, TV stand. Replace electrical outlets with Tamper Proof versions. Protect patients from ligature point created at pad-lock on refrigerators and storage cabinets. Wall base in D3B3 needs to be replaced as it can be easily removed.</p> <p>D. INTAKE 330 & INTAKE 3D386 - Replace the existing door to have ligature resistant doors, hinges and associated hardware. Replace existing mechanical diffusers with security grille. Replace existing 2x4 light fixtures with a Tamper Proof 2x4 version. Install a cage cover over the thermostat. INTAKE 3D386 - Replace the existing door hinges to be continuous. Install a cage cover over the fire alarm. Ensure all artwork and wall mounted accessories have Tamper Proof Screws.</p>

Safety Assessment Scope Narrative

NORWEGIAN AMERICAN HOSPITAL

Behavioral Health Safety Assessment

Chicago, IL

PFB was asked to survey the existing Geriatric and Acute Adult Behavioral Health units as well as the Behavioral Health areas within the Emergency Department to ensure safety compliance. PFB provided a full package including notes and photos from the survey, a scope of work document that was categorized by priority and included pricing, an accompanying floor plan and recommended product and equipment cut sheets. This full package provides the facility with the necessary information to make the best decision on where to start renovations while maintaining a tight budget.



Front Entry



Direct Views from Nurse Station to Group & Patient Rooms



East Addition 2nd Floor Plan

ALEXIAN BROTHERS BEHAVIORAL HEALTH HOSPITAL

East Inpatient Addition

Hoffman Estates, IL

PFB was requested to evaluate the needs and growth potential of the ABBHH facility. Although ABBHH was offering state-of-the-art mental health care, the facility was undersized to accommodate the needs of a rising psychiatric population and was also under-recognized for its commitment to psychiatric care.

The East Addition, a 34,400 square foot, three-story facility, expanded the inpatient capacity from 95 beds to 137 beds. This new bed capacity provides:

- 28 Adolescent Beds
- 24 Adult Low Acuity Beds
- 11 Child Beds
- 10 Young Adult Beds
- 23 Geriatric High Acuity Beds
- 20 Adult High Acuity Beds
- 11 Geriatric Low Acuity Beds
- 10 Eating Disorder / SIRS Beds

Corridors, Patient Rooms, and Group Rooms all have access to natural light and views. Colors and patterns in the spaces are inviting but not disorienting. Each unit uses a three tier approach to calming agitated patients. Enhanced patient security and safety were achieved through keen attention to vandal- and abuse-resistant construction.

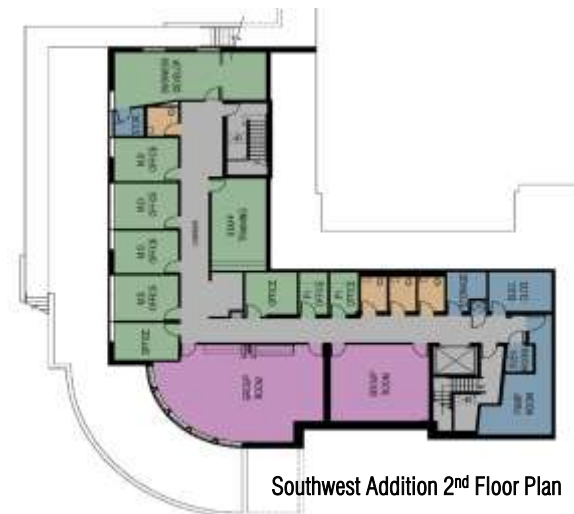
The new façade and entrance helped to deinstitutionalize the image of the existing facility. The dramatic impact of this addition resulted in increased community awareness and regional recognition as well as enhanced charitable donations to the facility.



Outpatient Entry



Exterior Courtyard



Southwest Addition 2nd Floor Plan

ALEXIAN BROTHERS BEHAVIORAL HEALTH HOSPITAL
Southwest Outpatient Addition
 Hoffman Estates, IL

The goal of the 20,500 square foot Southwest Addition is to dramatically raise the quality of care for the outpatient population as well as increase patient and staff satisfaction by joining all executive offices and outpatient functions into the new addition. Phase I includes a two story addition and Phase II adds an additional floor. The program will support all current and future outpatient functions with additional group therapy rooms, classrooms, physician interview rooms and outpatient support functions. The addition also accommodates the projected increase in hospital employees and physicians by approximately 21% by adding MD office suites and administration staff offices.

The new addition enables enhanced privacy: private interview alcoves for patient - physician interactions, independent entrance, reception and waiting, and a new dedicated parking lot for the outpatient population.

Natural light and views to garden landscaping enhance the quality of the group rooms and outpatient intake areas. Acoustical folding partitions provide the flexibility to divide large group rooms into smaller groups and still maintain privacy. Quality interior and exterior finishes provide a comfortable atmosphere for the patients as well as blend with the existing Alexian Brothers Hospital.



Corridor: Pre-Renovation



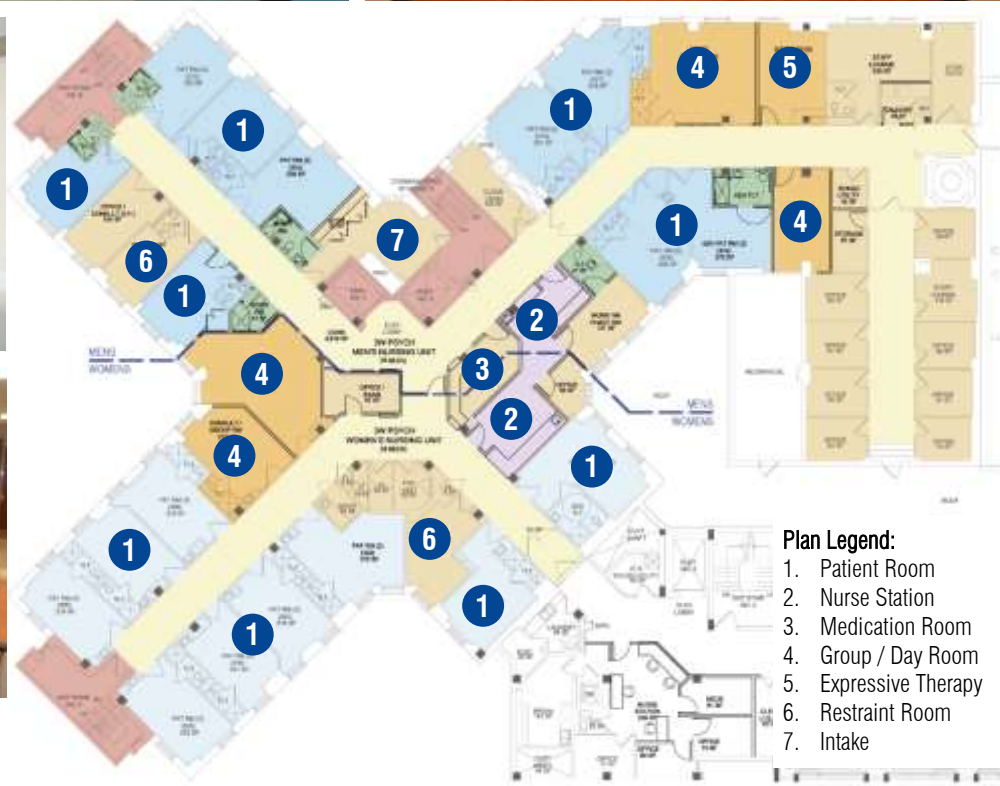
Corridor: Post-Renovation



Group Room: Pre-Renovation



Group Room: Post-Renovation



Plan Legend:

1. Patient Room
2. Nurse Station
3. Medication Room
4. Group / Day Room
5. Expressive Therapy
6. Restraint Room
7. Intake

LORETTO HOSPITAL 3W Behavioral Health Renovation Chicago, IL

The 13,000 square foot Inpatient High Acuity Behavioral Health Unit renovation was redesigned to incorporate the latest in Mental Health Environment of Care Design Criteria. The High Acuity Unit consists of 36 beds, 18 male and 18 female. The male and female units are separated with a centralized nursing station and medication room, and each unit contains a restraint room. Group Rooms and Day Rooms were enlarged to brighten the spaces, with improved finishes and better lighting to encourage patients to engage in more social activity.



Renovated Restraint Room

4.0

MEDICAL
OFFICE
EXPERIENCE





LITTLE COMPANY OF MARY HOSPITAL Outpatient Care Center

Oaklawn, IL

Project Size: 45,000 SF
Firm Role: Planning, SD, DD, CD, CA
Cost: \$8.11M (\$180 / SF) S+C
Design Time: 10 months
Reference:
 Kevin Rehder
 VP Clinical Services
 708.229.6415
 Ann Haskins
 VP Physicians Services
 708.229.5445

The new 3 story, 45,000 sf Oak Lawn medical office building has been conceived to consolidate the current Urgent Care Station and Imaging Unit, and the Physicians Association Offices as well as provide leasable space for medical offices of various types. The new comprehensive facility was designed to optimize customer convenience and comfort. Patients receiving multiple services will remain in one location. Imaging, cardiology, mammography, CT and MRI are all services offered in the building.



First Floor Plan

Project Size: 9,000 SF

Firm Role: Planning, SD, DD, CD, CA

Cost: \$1.5M est. (\$167 / SF)

Design Time: 8 weeks

Reference: Kevin Rehder
VP of Clinical Services
708.229.6415

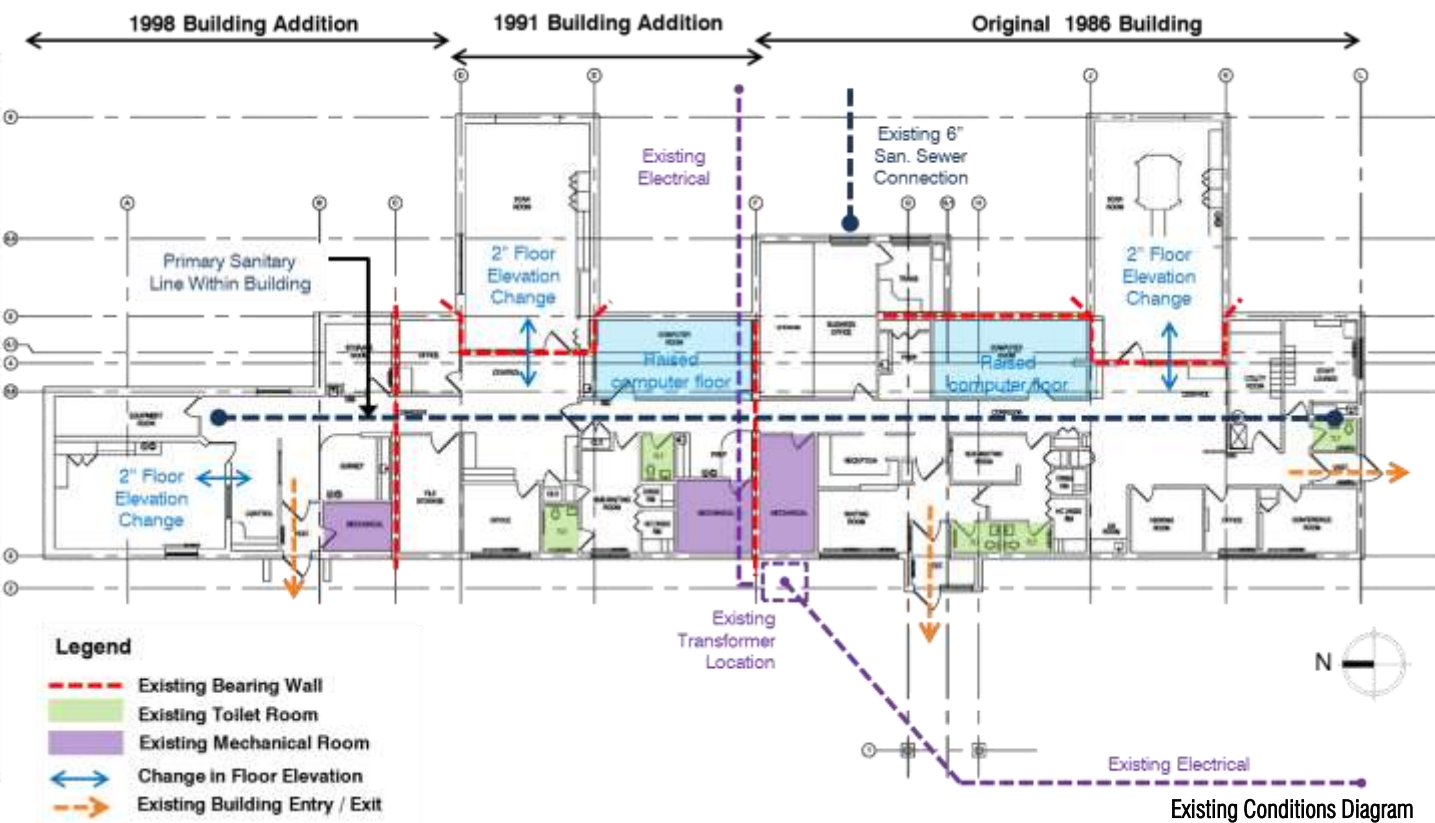
Brian Piejko
Executive Director of
Facilities and Support
Services
708.229.5072

LITTLE COMPANY OF MARY HOSPITAL

Southwest Medical Building

Oaklawn, IL

When Little Company of Mary Hospital acquired an existing medical office building, they turned to PFB Architects to assist with a full remodel, converting an MRI clinic into a medical practice for 6 physicians in two suites. The new design features 24 exam rooms in groups of 4 with ample support spaces, a phlebotomy room with adjacent toilet, and a procedure room. Existing structural walls and mechanical spaces presented design challenges for this conversion, but these challenges were overcome and the resulting design respects the existing structure while providing the physicians and the hospital a new medical office with great patient and staff flows and spaces which match the hospital standards.



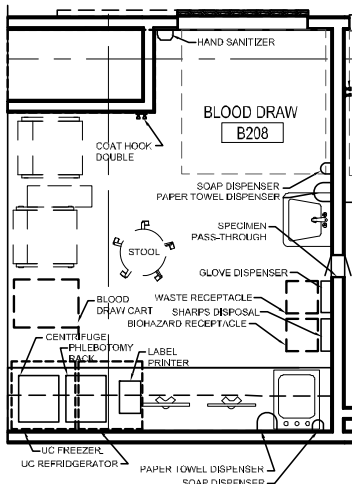
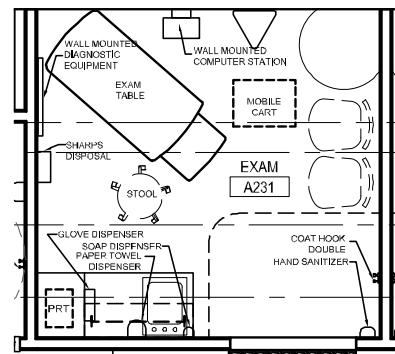
LITTLE COMPANY OF MARY HOSPITAL Southwest Medical Building

continued ...

Because of the challenges of existing structural walls and mechanical spaces in this renovated building, onsite visits throughout construction administration played a key role in the smooth conversion of this MRI clinic a functional and inviting medical practice.



Project Size: 18,000 SF
Firm Role: Design, Bid, Build
Cost: \$3.2M
Reference:
 Anthony Zamer
 Assistant Director
 Program Management
 773.702.5409
 azamer@bsd.uchicago.edu



UNIVERSITY OF CHICAGO MEDICAL CENTER SouthGate Market Outpatient Clinic Chicago, IL

PFB worked with the University of Chicago Medicine to create a two suite, 18,000 SF clinic, located at SouthGate Market, an existing shopping center in the south loop.

The project boasts a Women's Health Clinic, a Reproductive Endocrinology & Infertility Lab, a General Care Clinic, and Orthopedic Clinic. Included spaces are a state of the art X-Ray Lab, Mammography Lab, REI Lab, & Echo Lab. The suites provide UCMC with a total 34 Exam Rooms, along with private Blood Draw rooms and separate UltraSound room and Procedure Rooms. The project also provides UCMC with multiple consult rooms and private offices. Large wait areas and open space provide patients with a pleasant experience during their visit.



Design Evolution During the 3P Event

UNIVERSITY OF CHICAGO MEDICAL CENTER

SouthGate Market Outpatient Clinic

continued ...

As a part of the design process, the project team held a multi-day 3P (production, preparation, process) event. The event took a LEAN approach to creating and testing potential space designs in order to optimize flow and value for the patient. “We want to get it right the first time,” said Theresa Quinn, executive director of ambulatory services. “Undergoing this process helped us to be more efficient and understand how to best serve our patients and ensure staff needs are met to provide the best experience.”

The cross functional team utilized a technique known as “try-storming,” a space layout method that uses modular Styrofoam “walls.” Once the walls were installed, the team examined the space and made decisions regarding room size and furniture placement to name a few. The team learned:

- The flow of patients, staff and equipment must be taken into consideration with every design.
- Optimal, efficient space usage could be gained by sharing procedure, exam and storage rooms.
- Including staff and physicians who have practical work experience in each area ensured a thorough plan that would serve patients, physicians and staff.
- Understanding the demographics, needs and preferences of the patients who’ll be served in the South Loop guided decisions related to the design.

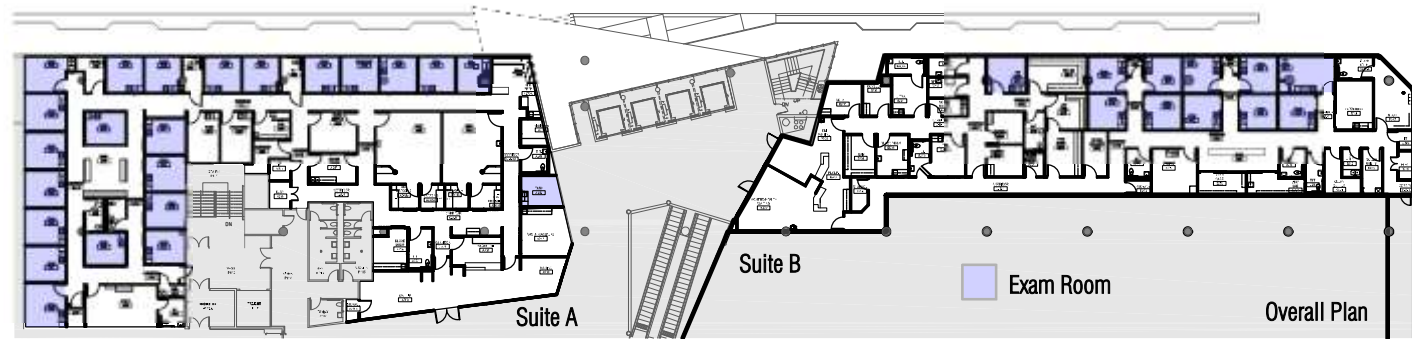
One team member noted that she enjoyed participating in the process and learned more about UChicago Medicine’s efforts to make patients its first priority. “Patients are members of our family,” she said. “This is the message we should share with the community.”



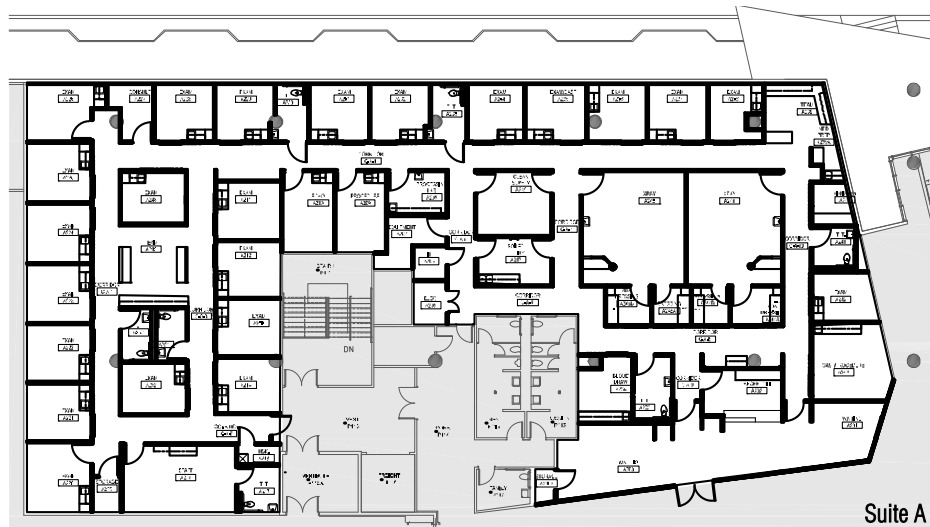
Standard Exam Room



Women's Health Suite Exam Room



Self Check-In Kiosk



Suite A

UNIVERSITY OF CHICAGO MEDICAL CENTER

SouthGate Market Outpatient Clinic

continued ...

The 18,000-square-foot Center aims to bring a range of medical services close to where patients live, work and shop. The new clinic, on the second level of Southgate Market, offers primary care, women's health, orthopedic and urology services, as well as weight management and obesity treatments, and minor surgical procedures. The clinic – which employs more than 30 physicians, nurses, phlebotomists, medical assistants, and others – offers conveniences such as same-day appointments, onsite parking, self check-in kiosks and easy access to public transportation. The South Loop site is UChicago Medicine's newest outpatient location, as the academic medical center seeks to respond to the growing demand for its services and extend into the south and southwest parts of Chicagoland and beyond.



Project Size: 60,000 SF
Firm Role: Planning, SD, DD, CD, CA
Cost: \$9M (\$140 / SF)

EDWARD HINES JR. V.A. HOSPITAL
Joliet Community Based Outpatient Clinic
 Joliet, IL

The VA Joliet Community Based Outpatient Clinic (CBOC) is a multi-phased renovation project that relocates the existing Joliet Clinic to the former 60,000 SF Silver Cross Emergency Department Pavilion in Joliet Illinois.

The first phase relocates and expands Primary Care, Mental Health, Women's Health, Telehealth, and Administrative functions to the new space. In order for the new Joliet CBOC to function as a standalone building, utilities will be separated from the existing hospital, and a separate boiler plant will be constructed to provide steam. The design team worked with the VA to meet an aggressive documentation schedule in order to achieve the proposed clinic opening date in March 2013.

The second phase of the project includes Radiology, Physical Therapy, Podiatry, Audiology, Respiratory, Eye Clinic, Pharmacy and Lab. These additions provide a marked improvement in the level of care for area Veterans.





Pediatric Waiting

Project Size: 8,000 SF

Firm Role: Planning, SD, DD, CD, CA

Cost: \$1.2M (\$150 / SF)

Design Time: 3 months

Reference: LaMar Davis
Deputy Administrator
Facilities Management
312.526.2095

ACCESS COMMUNITY HEALTH NETWORK

Cabrini Family Health Center

Chicago, IL

Access Community Health Network is the nation's largest federally-qualified health center network, and it provides high-quality, comprehensive community-based health care for the underserved in the greater Chicago area. This \$1.2M clinic is the 8,000 SF flagship treatment center for ACHN. This clinic provides a full continuum of care to its community while focusing mainly on OB/GYN and pediatric care.

The design team was challenged by ACHN to design a public lobby and restrooms to be attractive as well as durable. Even though the Cabrini Family Health Center is located in a low income area in Chicago, ACHN wanted the patients to have the feeling of quality healthcare once inside the health center by the use of quality materials that you could find in any suburban clinic.

Typical to renovated buildings, challenges with this older structure presented themselves during construction. The building had been given a new face lift 10 years ago, a new elevator, stair, and facade were added to the building, but many of the code violations were not brought up to current standards. This project not only involved the interior renovation of the space but also included stabilizing the old wood joist floors on the first floor, removing the air handling equipment from off of the large span wooden bowstring truss system on the roof, removing vacated stairwells, as well as numerous other improvements to the accessibility and proper egress from the building.



OB/GYN Waiting



Potential Sites Plan

EVALUATION MATRIX LEGEND			
▲	DESIRABLE	Evaluation Matrix - Option 1: Southeast Parking Lot at corner of W. 64th Street and S. Yale Avenue	
●	NEUTRAL		
▼	NOT DESIRABLE		
	COST		
CONSTRUCTION TIME & IMPACT ON FAST TRACK DELIVERY (OPENING AVAILABILITY)	●	CAMPUS IMAGE IMPROVEMENT	●
DISRUPTION TO CAMPUS	●	TRAVEL DISTANCE TO EXISTING HOSPITAL & MOB	▲
CONSTRUCTION SITE ACCESSIBILITY	▲	OPPORTUNITIES TO RECONFIGURE EXISTING SERVICES	▲
DESIGN FLEXIBILITY	▲	EXPANSION OF SERVICES	▲
SITE OBSTACLES	●	CONVENIENT PATIENT ACCESS	▲
REGULATORY / ZONING	▼	PARKING IMPACT	▼
ENGINEERING / INFRASTRUCTURE ISSUES	▲	NOISE & LIGHT POLLUTION	▲
ALIGNMENT WITH ST. BERNARD BUSINESS PLAN AS IDENTIFIED IN THE HEALTH CARE FUTURES REPORT	▲▲	NATURAL LIGHT / VIEWS TO THE OUTDOORS	▲



Option 1
Southeast Parking Lot



Option 2
Existing Covert Location



Option 3
Northwest Parking Lot

ST. BERNARD HOSPITAL AND HEALTH CARE CENTER

Site Options for New Ambulatory Facility Building

Chicago, IL

PFB Architects worked closely with St. Bernard Hospital to envision several expansion options for the placement of a new 45,000 square foot Ambulatory Facility Building on their existing Campus. The new Ambulatory Building's program was designed to alleviate congestion, undesirable adjacencies and spatial constraints seen in the existing Hospital. Services such as Urgent Care, Rehabilitation Services, Outpatient Pharmacy, D & T, Oncology Infusion, Express Testing, Education Classrooms and Physician Offices would be housed in the Ambulatory Building.

After carefully analyzing influences such as patient accessibility, traffic flow, connectivity to the existing hospital, staff convenience, etc., the design team recommended three sites for consideration. In order to properly analyze the benefits and shortfalls for each option, PFB Architects utilized an evaluation matrix to grade each site option. The evaluation matrix becomes a useful tool to aid the Owner in making a final site selection.



GOOD SAMARITAN HOSPITAL
TriHealth Cancer Institute
 Cincinnati, OH

Project Size: 10,765 SF
Firm Role: Planning, SD, DD, CD, CA
Cost: \$2M

The Trihealth Cancer Institute at Good Samaritan Hospital is a new, state-of-the-art infusion center. The 10,765 SF renovation cost \$2,000,000, and was designed with a single purpose in mind: creating an environment of healing. It incorporates large windows with high ceilings allowing for an open light filled space, while at the same time, offering privacy for both patients and family members.

PFB Architects created a customized infusion center nicknamed the 'carousel' which comfortably accommodates four patients while simultaneously providing each with a space dedicated solely to their needs. The unique floor plan allows for maximum patient capacity while maintaining an efficient staff flow. Each unit has a central core that provides medical gas, electrical, and HVAC capabilities to each quadrant. The design was so successful, it has become the prototype to be incorporated at all Trihealth Cancer Centers.



TRIHEALTH GOOD SAMARITAN HOSPITAL

Medical Office Building

Cincinnati, OH

The TriHealth Good Samaritan Hospital Medical Office Building is a \$23.5M five-level parking garage with a 66,000 SF three-level medical office building on top. The designers took advantage of spectacular views, creating both large and small public seating areas overlooking the city scape.

With so much lobby space required to serve this patient population design efforts to keep seating areas either with exterior views or divided into smaller family type arrangements avoiding those long rows of seats that force people to stare at each other.

Public restrooms and drinking fountains are centrally located with graphics that lend to ease of location.

Project Size:	66,000 SF
Firm Role:	Planning, SD, DD, CD, CA Garage, Shell and Core, Public Interiors, Fit-Outs
Cost:	\$23.5M (\$350 / SF)
Design Time:	20 months
Reference:	Tom Poff Project Manager 513.862.2696



Project Size: 69,000 SF

Firm Role: Shell & Core + Build-Outs

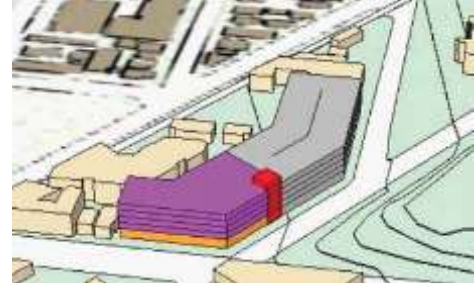
Reference: Paul Hemmer
Paul Hemmer Companies
859.341.8300

ANDERSON PROFESSIONAL CENTER Medical Office Building Anderson, OH

Buildings One and Two represent a combined 69,000 square foot of speculative medical office tenant space, constructed on the same site as the newly renovated Anderson Towne Centre. Designed for Paul Hemmer Companies, the objective was to provide an exterior image that would appeal to the professional, while incorporating the aesthetic elements of the Towne Centre. The two-story vaulted center atrium with pyramid roof provides clear identification and wayfinding for patients and visitors.

The materials, colors, and forms were all selected to be complimentary to the site context, while massing was designed to reduce these large buildings to a more human scale.





Project Size: 80,000 SF MOB
155,000 SF Total

Cost: \$39M

**COLUMBIA ST. MARY'S
Prospect Medical Commons
Medical Office Building and Clinic**
Milwaukee, WI

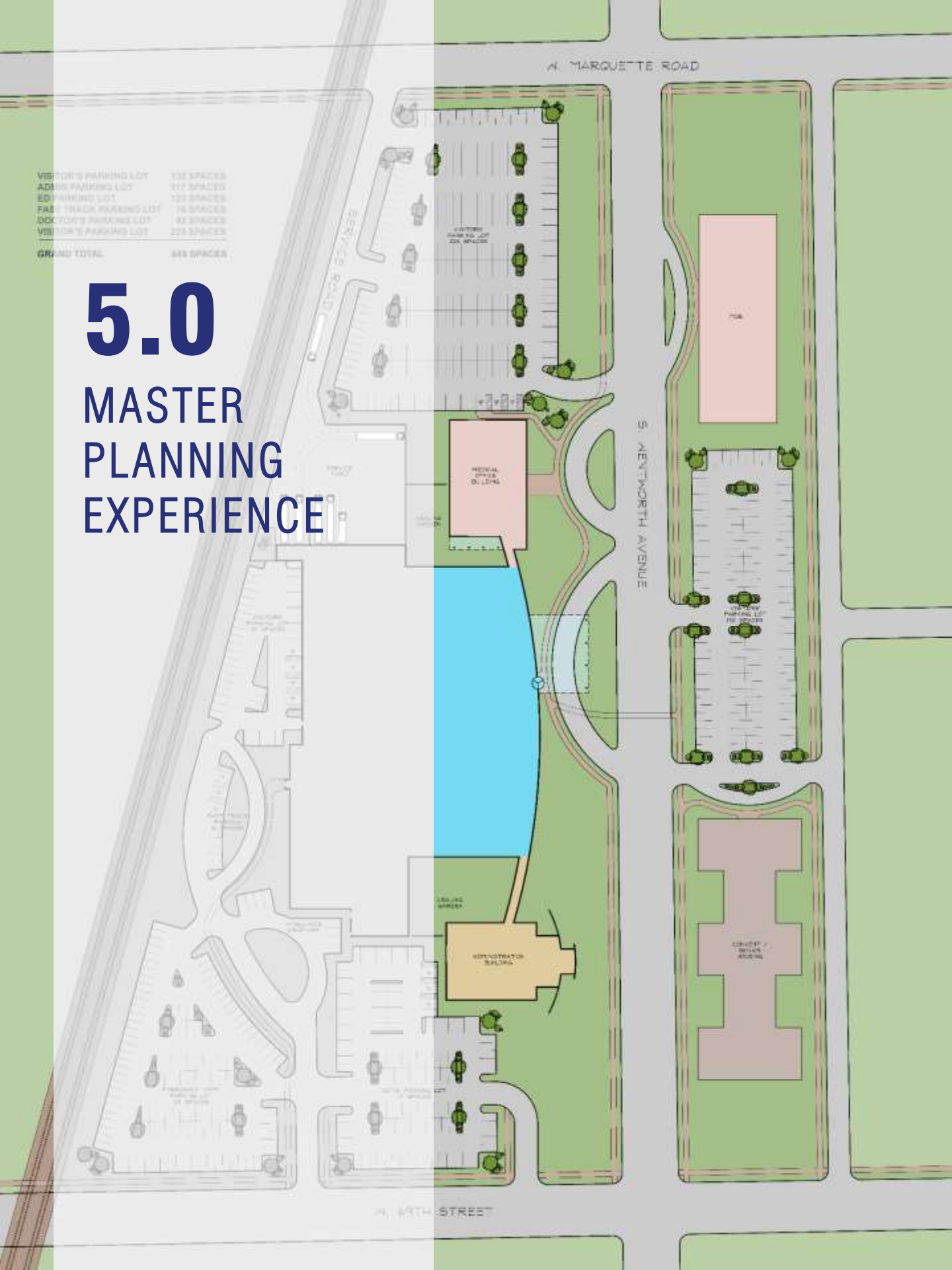
Project Manager
Thomas Jeziorski, *while at HOK*

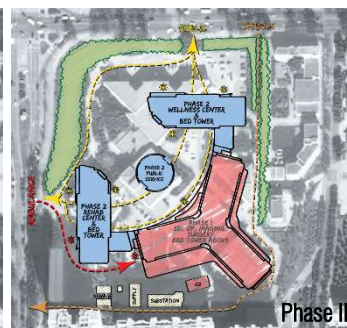
The new addition is first phase of Columbia St. Mary's new Lake Drive Campus renovation. Prospect Medical Commons is a mixed use occupancy having a 4-story medical office building with direct access to each floor of a 450 car parking deck, street level retail, and a 150 car public parking garage below grade. The Medical Office Building incorporates the hospital's goals of creating patient centered environments. Two-story spaces provide an area of respite as well as views to downtown Milwaukee and Lake Michigan. Feature Walls create a sense of place and the atriums assists in wayfinding and building organization. The technology incorporated into the facility enables physicians and staff to take care of patients more efficiently. An all-digital radiology department includes mammograms, ultrasounds, X-rays, CT scans and other tests. Also the electronic health record makes available space that medical records would have occupied.

VISITOR'S PARKING LOT	132 SPACES
ADMIN PARKING LOT	117 SPACES
ED PARKING LOT	123 SPACES
FASE TRUCK PARKING LOT	14 SPACES
DOCTOR'S PARKING LOT	82 SPACES
VISITOR'S PARKING LOT	223 SPACES
GRAND TOTAL	668 SPACES

5.0

MASTER PLANNING EXPERIENCE





PHASE I: 1,142,611 SF
Demo Pharmaceuticals and Dynamic Services Center. Construct fully operational, stand-alone hospital with ED, OP, Imaging, Surgery, Admin, and 721-Bed Tower.

PHASE II: 806,195 SF
Demo Existing Hospital and infill with additional OP functions and 784 more beds, for 1505, total.

SHENGJING HOSPITAL Replacement Hospital

Dalian, China

Project Designer
Erika Berkey, while at KaziaLi

The Dalian Branch Hospital Campus Master Plan created a multi-phased campus redevelopment plan to fully replace the existing, aging facility. Our design vision was to create a calm, open, and welcoming environment that supports the healing process.

After careful analysis of the site opportunities, we designed a hospital which maximizes views of the adjacent mountain scenery, incorporating curved, open spaces that flow seamlessly like the ocean, while embracing the power of life embedded in and represented by the surrounding aging trees. Our vision puts first the majority of our hospital's users – patients – creating a design that symbolizes health and longevity.



[PRIVATE CLIENT]
Master Plan
 Illinois

PFB worked closely with a large hospital group to determine future expansion opportunities on one of their major sites, taking into consideration the city's Riverwalk Master Plan and how that could affect circulation patterns and visibility for the hospital. We were tasked to provide two building scenarios for expansion on the perimeter of the campus, as well as consider what a surface parking layout could look like for the existing Behavioral Health Building site after the existing building is torn down.

Four hospital-owned sites were explored for expansion and two options were put forth for consideration.

Option A depicts a southern expansion, with the construction of a 3-story 54,000 SF patient care building and a 4-story, 270-space parking structure.

Option B depicts a 3-story 54,000 SF retail and office building and adjacent 4-story, 270-space parking structure to the south, with a new 3-story, 54,000 SF patient care building with three levels of parking connected to the main hospital by a pedestrian bridge to the west.



EDWARD HINES JR. V.A. HOSPITAL

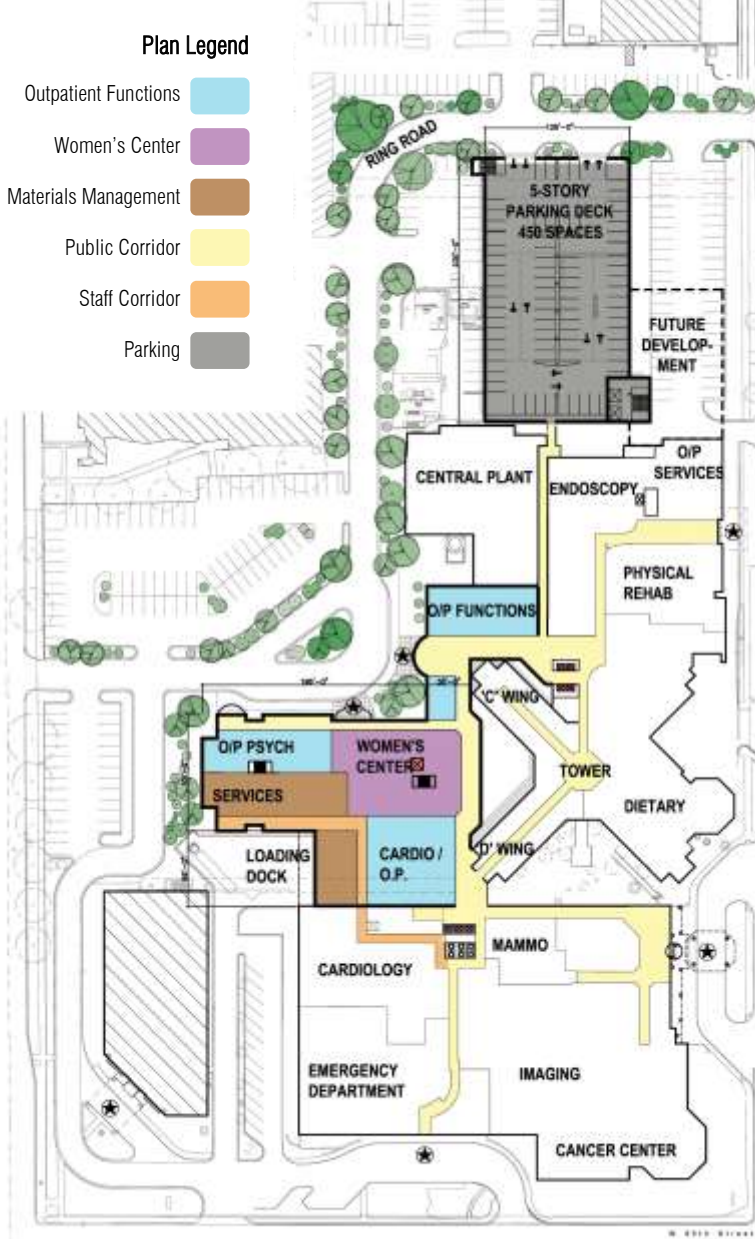
Master Plan

Hines, IL

This master planning study resulted in the recommendation of consolidated Intensive Care Units, including 20 ICU beds with support spaces and 10 Step-down ICU beds. Each patient room was proposed to be a "universal" room concept, with decentralized nurse work areas between every two rooms and a central resource nurse station. The project includes SDC relocation, Pharmacy consolidation, ED/Urgent care and Emergency Department renovation.

Plan Legend

- Outpatient Functions
- Women's Center
- Materials Management
- Public Corridor
- Staff Corridor
- Parking



LITTLE COMPANY OF MARY HOSPITAL Master Plan Evergreen Park IL

We have been involved with master planning at Little Company of Mary Hospital since 1988, with the latest master plan completed in May 2007.

The key drivers for this latest master plan were a new Women's Center location, an inpatient bed shortage, and a need for parking. We explored outpatient / inpatient and Community Opportunities, campus growth and addition scenarios, and Expansion Zones for Future Growth. It included a survey of existing departments to evaluate inpatient renovations and expansions, an inpatient bed analysis, and a parking study.

The decision matrix incorporated Cost and Timeframes Design / Construction. One option was to build a new bed building with the new Women's Center on the Ground Level.



Master Plan Additions / Renovations

WEST ADDITION
 125,000 SF Inpatient Addition
 170 private inpatient beds in 10 units
 72 additional private patient rooms
 250 person auditorium
 Education and seminar spaces
 Additional staff and patient support areas

RESIDENTIAL THERAPY CENTER
 15,000 SF New Construction

PARKING STRUCTURE

MAJOR RENOVATIONS
 Pharmacy, Food and Dietary Services,
 Access and Registration, Housekeeping,
 Storage, Engineering Facilities



EAST ADDITION
 30,000 SF Inpatient Addition
 100 to 136 AMI beds
 4 new nursing units added



SOUTHWEST ADDITION
 19,000 SF Outpatient Addition
 Consolidates group therapy programs
 Expands executive administration suite

ALEXIAN BROTHERS BEHAVIORAL HEALTH HOSPITAL

Campus Master Plan

Hoffman Estates, IL

PFB analyzed the needs and growth potential of the ABBHH facility and generated a five-year comprehensive master plan that resulted in multiple building expansion projects and various departmental renovations.

PFB applied their experience in patient centered care, enhanced patient security and safety, and healing environments to the ABBHH campus. For example, an updated study was conducted to achieve all private nursing units in the existing facility - one of the key points to patient focused design. Healing atmospheres are invoked by planning for art work, inviting landscaping, healing gardens, and water features.

As a result of the master planning and resultant renovations and additions the facility integrates different components of psychiatric care under one roof. The long term goal of ABBHH management to convert the existing facility into a nationally recognized psychiatric institute has been achieved over the course of 6 years.



ALEXIAN BROTHERS BEHAVIORAL HEALTH HOSPITAL

Facility Master Plan

Hoffman Estates, IL

Unit placement and adjacencies were paramount to the successful development of PFB Architect's Facility Master Plan for ABBHH.

- Important considerations included:
- locating Access and Registration at entrance level within a locked area
 - providing graduated environments and increased access to space based on patient's treatment progress
 - locating High Acuity Units on upper levels for safety
 - eliminating direct access to elevators; creating separate staff and patient entries
 - locating partial hospitalization units on lower levels.

Elements of the detailed Facility Master Plan include the following:

- | | |
|---|---|
| <ol style="list-style-type: none"> 1. EAST ADDITION
30,000 SF Inpatient Addition
100 to 136 Adult Mental Illness beds
4 new nursing units added 2. WEST ADDITION
125,000 SF Inpatient Addition
174 all-private inpatient beds in 10 nursing units
72 additional private patient rooms
250 person auditorium
Education and seminar spaces
Additional staff and patient support areas | <ol style="list-style-type: none"> 3. SOUTHWEST ADDITION
19,000 SF Outpatient Addition
Consolidates the various group therapy programs
Expands the executive administration suite <p>MAJOR RENOVATIONS
 Pharmacy
 Food and Dietary Services
 Access and Registration Department
 Housekeeping and Storage Departments
 Engineering Facilities</p> |
|---|---|



Site Plan



Scheme 1: Renovate Existing Facility



Scheme 2: New South Bed Tower



Scheme 3: Replacement Hospital



Existing Site



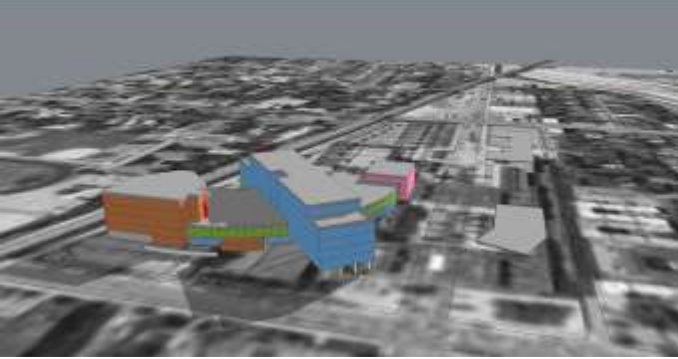
3rd Floor Stacking Diagram

ST. BERNARD HOSPITAL AND HEALTH CARE CENTER

Master Plan

Chicago, IL

PFB worked closely with the facility to develop comprehensive master plans to initiate expansion and renovation of the existing hospital. PFB identified strategic planning criteria as well as designed schematic options for the "Hospital of the Future". PFB made recommendations to enhance the existing departments within the hospital and to greatly improve the image of the hospital in the community.



Option B: Corner



Option A: Original



Option C: Lean

Considerations for New Hospital:

- Legal Fees for Land Acquisition
- Abatement and Demolition Fees
- Higher Site Development Costs
- What to do with Existing Campus
- Cost to Mothball Existing Campus
- Liabilities with Sale of Existing Campus (asbestos / containment)



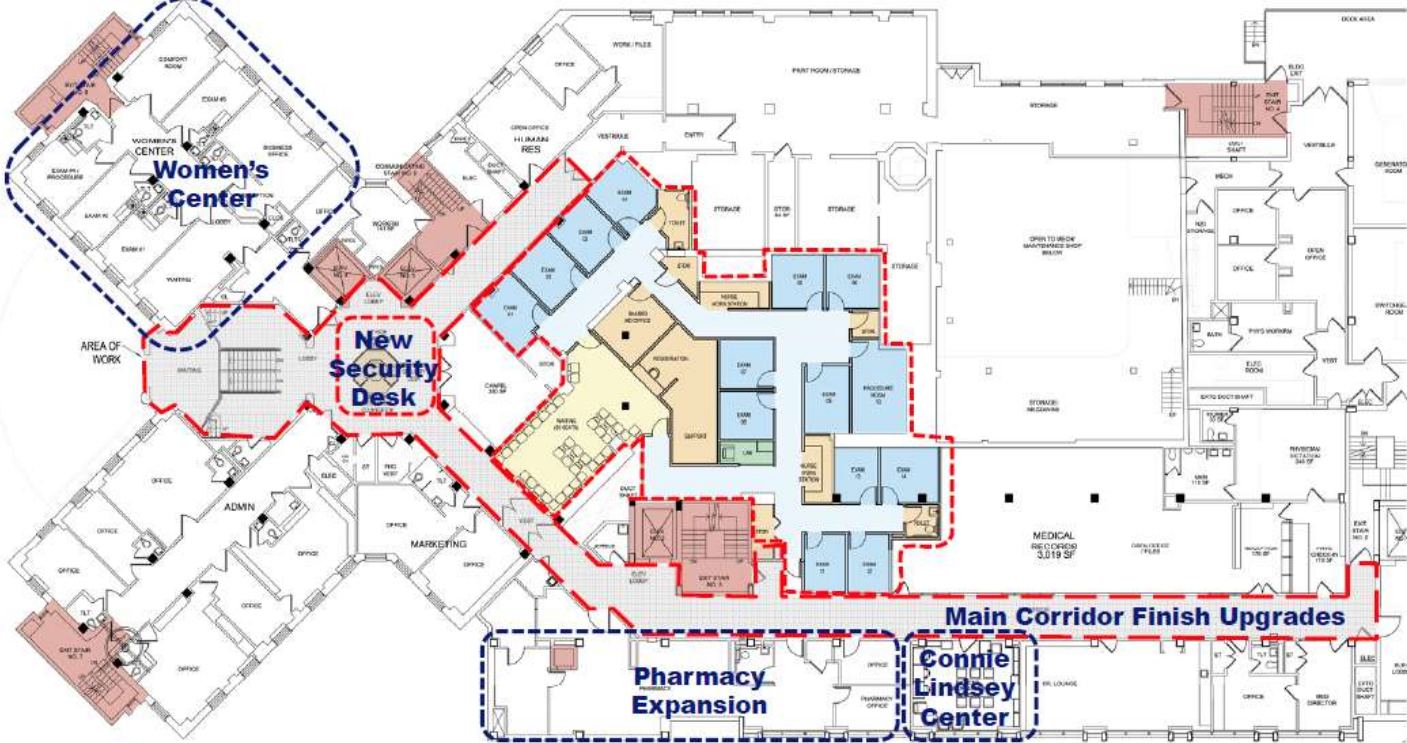
Option A Ground Floor Plan



Option A Site Plan

ST. BERNARD HOSPITAL AND HEALTH CARE CENTER Greenfield Site Master Plan Chicago, IL

In addition to the master plan which evaluated the existing St. Bernard Campus, PFB assessed options for rebuilding a new medical campus, and prepared three schemes for the new campus site. The assessment included cost analysis per scheme, possible scheduling scenarios, cost reduction “lean” strategies for building, soft cost analysis, energy savings – including savings from implementing green design – maintenance savings, and operational and staffing efficiencies.



Master Plan Project List:

5E/W Patient Room Renovation*
 ICU Renovation*
 4E Medical / Surgical Patient Rooms
 1st Floor Outpatient Center
 1st Floor Circle Family Clinic*
 1st Floor Nursing Administration Suite
 1st Floor Pharmacy Expansion*

1st Floor Connie Lindsey Center*
 7th Floor Surgery Recovery Renovation*
 3rd Floor Psychiatric Renovation*
 Lower Level Medical Records
 Outpatient Medical Office Building
 Hospital Façade Study

*Implemented Project

First Floor Master Plan

Blue Outline: Implemented Projects
 Red Outline: Future Projects



LORETTO HOSPITAL

Master Plan

Chicago, IL

PFB Architects worked closely with Loretto Hospital Facilities and Departmental Service Heads to develop the Facility Master Plan for renovations and future growth. As part of the Master Planning Process, PFB Architects developed a facility-specific questionnaire to determine existing deficiencies, identify desirable healthcare trends, and create measurable facility milestones over a period of ten years. The result of the questionnaire was a strategic implementation plan for numerous renovations within the hospital as well as a future Outpatient Medical Office Building adjacent to the main hospital.



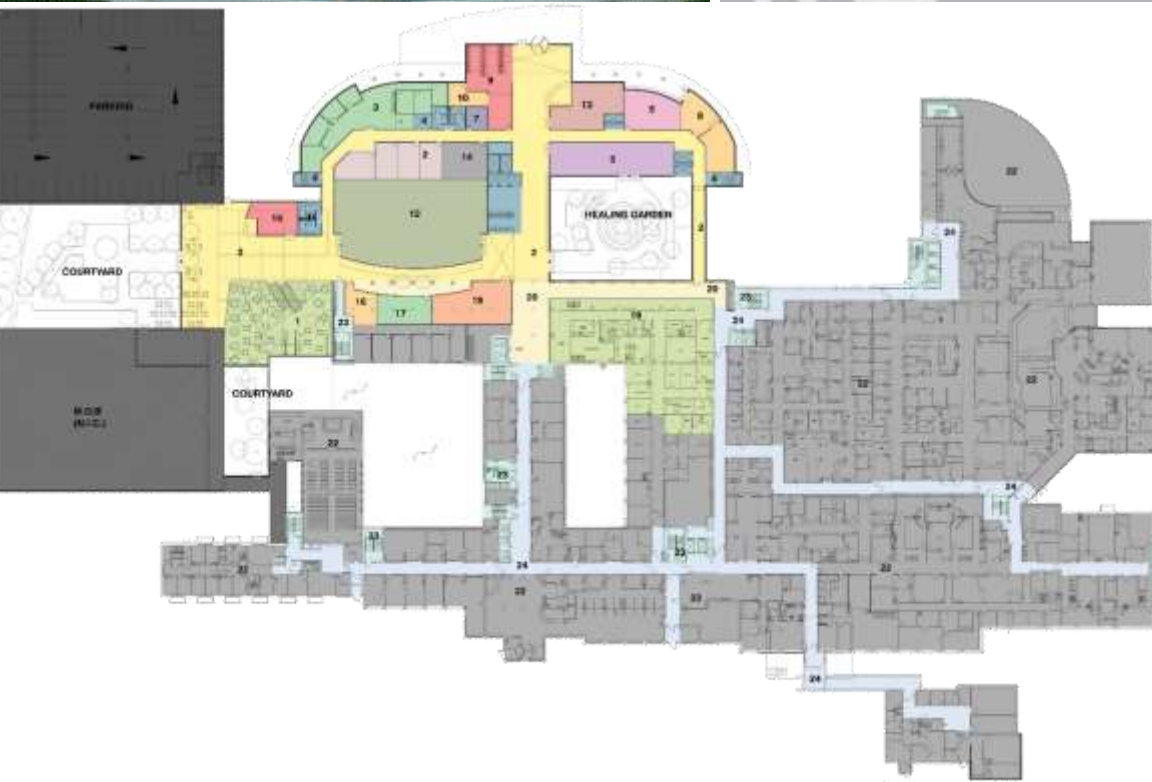
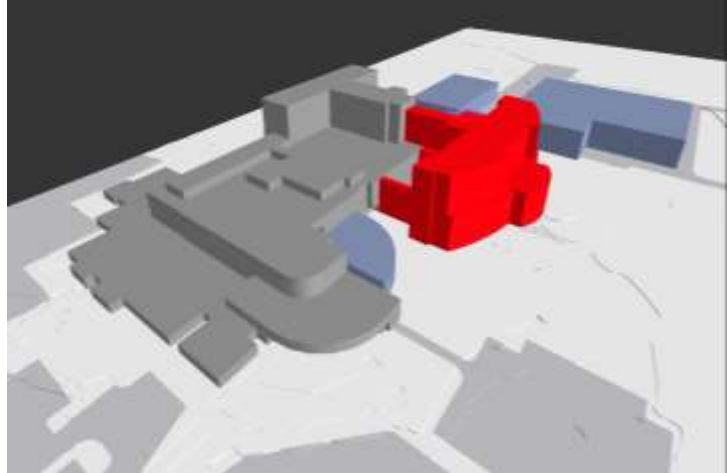
Existing Department Size Analysis and Expansion Opportunities

Department	Current Size (sq ft)	Current Beds	Current Staff	Expansion Opportunities
Emergency Department	10,000	10	20	Expand to 20 beds, add 10,000 sq ft
Obstetrics Department (LDR / LDRPs)	15,000	15	30	Expand to 30 beds, add 15,000 sq ft
Medical / Surgical Unit	20,000	20	40	Expand to 40 beds, add 20,000 sq ft



NORWEGIAN AMERICAN HOSPITAL Master Plan and Expansion Study Chicago, IL

PFB developed several Expansion Study options for Norwegian American Hospital. To meet the current and future needs of this gentrifying neighborhood, PFB explored the site with respect to potential expansion opportunities, based on the assumptions that any expansion would be multi-phased, beginning with the updating of the Emergency Department, a new MOB to add outpatient services, followed by a full replacement of the existing patient bed floors with a 6-story, 32-bed unit tower could be possible.



New Construction

1. Dining
2. Circulation
3. Executive Offices
4. Vertical Circulation
5. Women's Health Center
6. CHF Clinic
7. Security
8. Outpatient Rehab Clinic
9. Registration
10. Admissions & Discharge
11. Conference Rooms
12. Auditorium
13. Medical Resource Center
14. Training Room
15. Retail

Renovated

16. Human Resources
17. Retail
18. Gift Shop & Pharmacy
19. Neurology
20. Circulation

Existing

21. Patient Rooms
22. Support
23. Vertical Circulation
24. Circulation

PRESENCE SAINT JOSEPH MEDICAL CENTER

Master Plan

Joliet, IL

The Facility Master Plan for this 720,000 square foot flagship hospital of the Presence Health system resulted in the recommendation of a 259,000 square foot addition and the renovation of 213,000 square feet. This comprehensive Master Plan included data gathering and planning for 52 hospital departments. The goal for this undertaking was to identify the needs for the next five years, and evaluate the institution's culture of healing and technology in an effort to improve the delivery of care.

The proposed addition includes 150 private medical surgical beds, 48 intensive care beds, entry lobby, auditorium, expanded dining, women's health center, resource library, expansion of diagnostic and testing and a new patient care center. The renovation includes the expansion and consolidation of cardiac services, expansion of emergency services, and relocation of endoscopy, neurology and several administrative departments.



JACKSON PARK HOSPITAL AND MEDICAL CENTER

Master Plan

Chicago, IL

PFB was commissioned by the Jackson Park Hospital and Medical Center to perform a master facility plan of the existing campus and to develop five-year master plan options based on the Hospital's strategic direction, business volumes, and space program projections.

In a collaborative effort to improve the delivery of care at Jackson Park Hospital, PFB recommended renovating the following functions:

- Improve major public circulation between buildings on campus
- Create new “front door”/ lobby to hospital
- Expand Emergency Department
- Create fast-track treatment bays
- Provide private treatment area for behavioral health patients
- Create a Resource Library & Classrooms
- Improve Registration
- Create a Discharge Lobby
- Increase private patient rooms to 33%
- Update all patient room toilets to include showers
- Decentralize traditional nursing stations to increase staff efficiencies
- Reduce the Medical / Surgical unit size from one large unit to two smaller units
- Create new, state-of-the-art Women’s Center
- Convert existing ‘ward’ style units to a state-of-the-art private bed units

An analysis of the market drivers was conducted, during which a number of strategic initiatives were identified as guides to the master plan process, and volume projections were established.



Completed Bed Tower Addition

COLUMBIA ST. MARY'S
Ozaukee Campus
Master Plan
 Mequon, WI

Project Manager
 Thomas Jeziorski, while at HOK

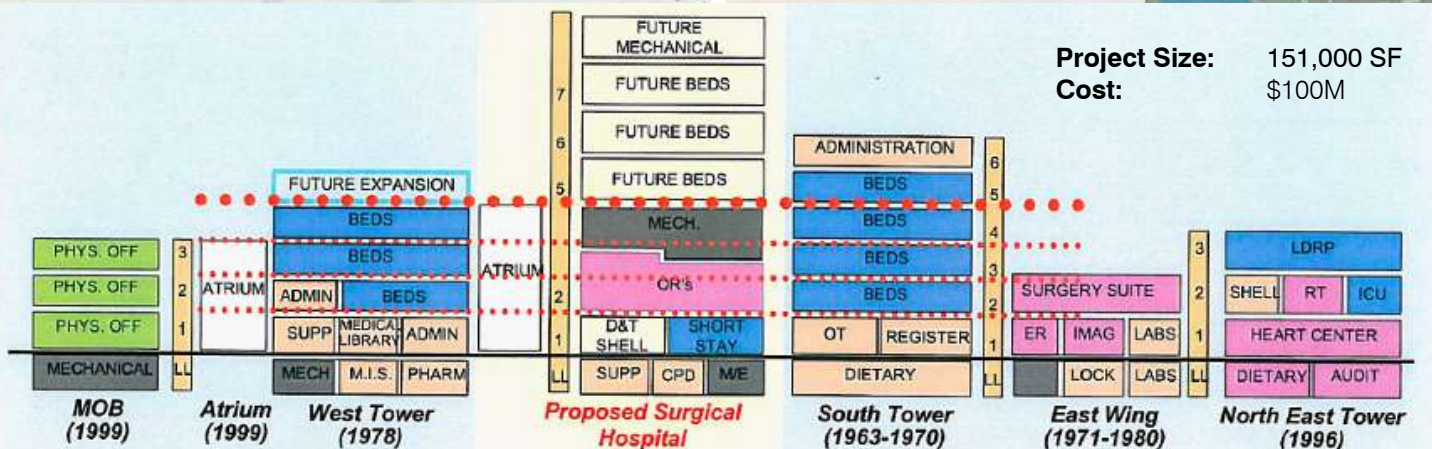
Completed in 2007, The Columbia Center, a non secular hospital within a hospital, is located within the ground floor of a new 5-story 190,000 SF bed tower addition on the Columbia St. Mary's Ozaukee campus. A future west campus is planned to co-locate outpatient services and allow further expansion of inpatient services on the severely restricted east campus site. This plan includes 266,000 SF of total new construction with 60,000 SF of renovation.



Master Plan Overview: Long-Range Site Plan



Master Plan Phase 2: Facility Redevelopment



Project Size: 151,000 SF
Cost: \$100M

MOUNT CLEMENS GENERAL HOSPITAL

Master Plan

Mount Clemens MI

Project Manager

Thomas Jeziorski, while at HOK

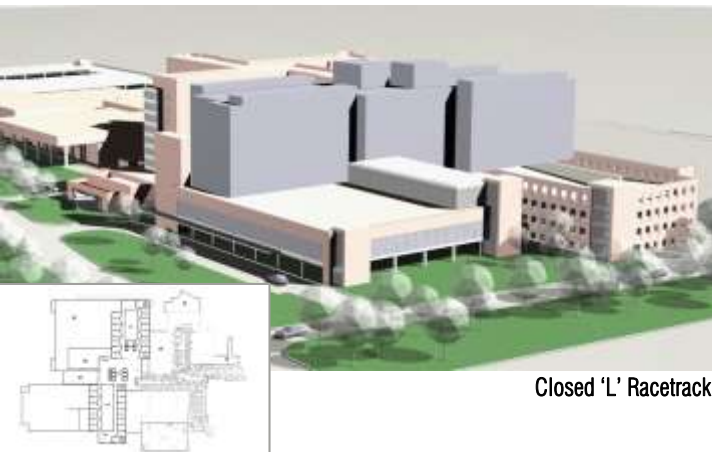
The new Surgery Center, which includes 3 floors and a mechanical fourth, will complement the hospital's existing operating rooms and includes an atrium with a registration area, post-operative discharge areas, and a private patient discharge location. Windows, where applicable, wrap around the corners; curved shapes at the lobby signal arrival and remind visitors of the presence of the Clinton River.



Traditional Racetrack



Open 'L' Racetrack



Closed 'L' Racetrack



Triangle Racetrack

OAKWOOD HOSPITAL AND MEDICAL CENTER

Master Plan

Dearborn MI

Project Manager

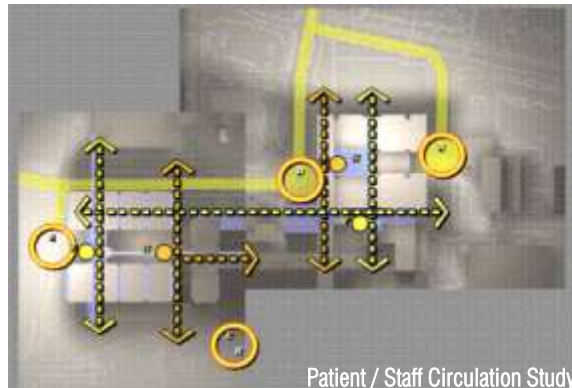
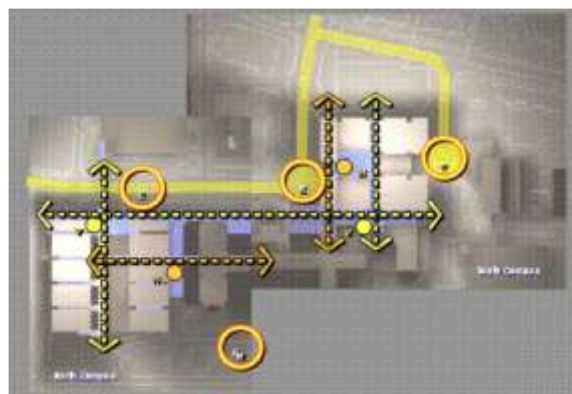
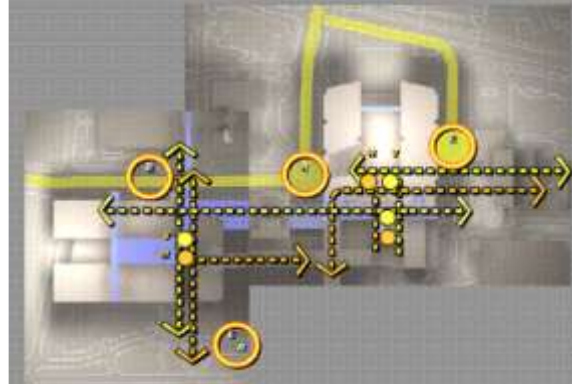
Thomas Jeziorski, while at HOK

The three-year project at Oakwood Hospital & Medical Center (OHMC) will help Oakwood continue their mission of providing excellent healthcare for their patients and the communities they serve for years to come. The masterplan included:

- A 10 suite OR surgical engine was added to the campus (as well as 2 additional shelled ORs)
- New main entry lobby and drop off
- Dedicated parking for outpatient services
- A 4 OR heart center on the first floor
- Built-in capacity for future bed addition above



Blocking And Stacking Section



Patient / Staff Circulation Study

WILLIAM BEAUMONT HOSPITAL

Master Plan

Royal Oak, MI

Project Manager

Thomas Jeziorski, while at HOK

In 1999 William Beaumont Hospital embarked on master plans for its flagship hospital in Royal Oak, Michigan as well as one of its subsidiary campuses in Troy, Michigan. The long term, multi-year plan, at the Royal Oak Campus, looked ahead to the year 2050. It consisted of two major hospital additions of approximately 500,000 SF each (one north, one south) connected by a new public concourse, expanded MOB space, a new Clinical Laboratory building, multiple dedicated parking structures, a new education and learning center, as well as a long-term plan for an extended care campus at 12th and Woodward. Parking structures opened in 2001, lab building and central plant in 2003, and the initial 560,000 SF south hospital was opened in 2004. Design of additional buildings contained in the 50 year master plan continues.

6.0

TEAM RESUMES





THOMAS C. JEZIORSKI

MANAGING PRINCIPAL

Mr. Jeziorski is one of the healthcare principals and the Managing Principal involved with the daily operations of the firm. He has been involved with medical office buildings and clinics for such local clients as St. Bernard Hospital, the Little Company of Mary Hospital Outpatient CareStation West and the Edward Hines Jr. VA Community Based Outpatient Clinic. Tom brings his ambulatory facility experience with such clients as Oakwood Hospital Surgical Pavilion, Toledo Hospital Ambulatory Care Center, University Hospitals Trust Outpatient Medical Center and several Medical Office buildings for ProMedica.

Education

The University of Toledo
Associates Degree, Architectural Technology

University of Cincinnati
Bachelors of Science, Architectural Engineering

Awards

2005 Buildings Magazine - Best Addition to an Existing Facility Award, William Beaumont Hospital

2005 Engineering Society of Detroit - Construction & Design Award, William Beaumont Hospital

2007 Sage Design for Senior Environments, Covenant Village of Northbrook Town Center

References

Raj Dasai
Project Manager
Northwestern Memorial Healthcare
630.933.4249 | Raj.Desai@cadencehealth.org

Jake Kanuru
Contract Officer Representative
Edward Hines Jr. V.A. Hospital
708.202.8387 x21149 | Jake.Kanuru@va.gov

Kevin Rehder
Vice President of Practice Management
Little Company of Mary Hospital
708.229.5893 | krehder@lcmh.org

Northwestern Medicine Central DuPage Hospital Center Building Build-Out

1st, 3rd & 5th Floors Behavioral Health
4th Floor Neurology

GI Lab Renovation and Expansion Outpatient Behavioral Health Building

Winfield IL
\$15M, 35,000 SF

13,000 SF
\$11M, 36,510 SF

University of Chicago Medical Center LDR and C-Section Renovation Brain Surgery Lab Acute Dialysis Unit HLA Laboratory Relocation

Chicago IL

Little Company of Mary Hospital Master Plan

Outpatient CareStation West Medical Office

Evergreen Park IL

45,000 SF

St. Bernard Hospital & Health Care Center Master Plan Study for Ambulatory Center

Chicago IL

Edward Hines Jr. V.A. Hospital Community-Based Outpatient Center Dental Clinic Expansion

Joliet IL
\$9M, 65,000 SF

Jesse Brown V.A. Medical Center Dental Lab and Clinic Expansion 5th Floor Cardiology, Vascular, Pain Clinic

Chicago IL

Columbus St. Mary's Ozaukee Campus Ozaukee Campus Medical Office Building

Mequon WI*
\$12M

St. Vincent Mercy Medical Center Master Plan Medical Office Building and Parking Structure Surgery Clinic Cardiac Cath Labs, Schematic Design ED Renovation / Remodel

Toledo OH*
\$14M
5,000 SF
20,000 SF
45,000 SF

* Experience with other firms

THOMAS C. JEZIORSKI

MANAGING PRINCIPAL

Tom's experience continues with:

Prospect Medical Commons Medical Office Building and Clinic	Milwaukee WI* \$39M
Toledo Hospital Ambulatory Care Center Ambulatory Surgery Center	Toledo OH* 80,000 SF 30,000 SF, 3 ORs
University Hospitals Trust Outpatient Medical Clinic Urgent Care Clinic	OH* \$45M 20,000 SF
Loretto Hospital CMS Corrections ICU Renovation 5 th Floor Patient Room Renovation	Chicago IL
Norwegian American Hospital Women's Center Renovation Nursery / On-Call Renovation	Chicago IL
St. Bernard Hospital and Health Care Center Master Plan	Chicago IL
Toledo Hospital Facilities Master Plan Surgeons Lounge / Lockers New Subacute Care Unit Croxton House Relocation / Demolition Education Center Medical Staff Lounge	Toledo OH* 7,500 SF 12,000 SF, 25 beds 85,000 SF
Toledo Mental Health Center New Boiler Facility	Toledo OH* 3,000 SF
Medical College of Ohio Surgery Expansion, Schematic Design	Toledo OH* 8-10 ORs
ProMedica Woodley Medical Office Building	Toledo OH* 32,400 SF
ProMedica Perrysburg Medical Office Building	Perrysburg OH* 18,000 SF
ProMedica Health System New Corporate Offices	10,000 SF

* Experience with other firms



JEFFERY REINKE, NCARB

CAMPUS PLANNER

Mr. Reinke brings a depth of over 30 years of healthcare planning and design experience. His projects have won numerous awards, including the Waterbury Award, and have been featured in many publications, including Modern Healthcare. He has focused most of his career on healthcare design and implementation. In particular, he loves tackling large, complicated projects and presenting them in smaller, more manageable scales. His creativity and careful attention to function and aesthetics have led to successful and innovative spaces. His relevant experience includes:

Education

University of Wisconsin
Bachelors of Science, Architectural Studies
Master of Architecture

Registrations

Registered Architect: WI, MI, IN, NCARB Certified

Previous Affiliations

AIA: American Institute of Architects
Greater North Michigan Ave Association Member
ACE Careers in Architecture
Society for College and University Planning

Current Affiliations

Education Chair and Illinois Council
Representative, Trout Unlimited
Program Lead – Project Healing Waters Fly Fishing
at James A Lovell Federal Health Center

References

Charles Cloutier
Director, Planning & Construction
Northwestern Memorial Healthcare
630.933.5609 | Charles.Cloutier2@nm.org

Joe Ruiz
Director of Design & Construction
Oakwood Hospital – Dearborn
313.593.7000 | ruizj@oakwood.org

Jay Wattenberg
Program Manager, Planning & Construction
Loyola University Health System
708.216.9045 | Jay.Wattenberg001@luhs.org

Amita Health

Adventist Bolingbrook Hospital
Geriatric Psychiatry Unit Renovation

Bolingbrook IL
\$1.6M, 15,000 SF

Mercy Hospital and Medical Center

Assessment of the Hospital and Campus

Chicago IL*

St. Bernard Hospital & Health Care Center

Replacement Hospital / Patient Tower
Renovation of Existing Facilities

Chicago IL*
300,000 SF
150,000 SF

Northwestern Memorial Hospital

Waterbury Award-winning Streetscape

Chicago IL*

Advocate Lutheran General Hospital

Campus Master Plan

Park Ridge IL*
\$700M

University of Michigan Health System

Strategic Facilities Master Plan

Ann Arbor MI*
8,500,000 SF

Virginia Commonwealth University Health System

Strategic Facilities and Campus Master Plan

Richmond VA*

Valley West Community Hospital

Medical Office Building
Master Plan and Option Development

Sandwich IL*
35,000 SF

William Beaumont Hospital

Campus Master Plan, Universal Bed Floors, Birthing Center

Royal Oak MI*

St. Francis Hospital

Campus Master Plan, Medical Office Studies

Evanston IL*

Silver Cross Hospital

Focused Campus Plans; ICU; LDR Recovery Suite

Joliet IL*

* Experience with other firms



BRIAN PUGH, RA
SENIOR PROJECT ARCHITECT

Mr. Pugh is proficient with the computer applications used in virtual building modeling. He uses programs like SketchUp as a tool to inform project stakeholders. He utilizes BIM (Building Information Modeling) to engage the design and construction team. In addition to his modeling expertise, as project architect, he is integral to all phases of the design and construction process. His relevant experience includes:

Education

University of Illinois at Urbana Champaign
Bachelors of Science, Architectural Studies
Master of Architecture

Registrations

Registered Architect: Illinois

References

Raj Dasai
Project Manager
Northwestern Memorial Healthcare
630.933.4249 | Raj.Desai@cadencehealth.org

Brian Piejko
Executive Director of Facilities & Support Services
Little Company of Mary Hospital
708.229.5072 | bpiejko@lcmh.org

Jake Kanuru
Contract Officer Representative
Edward Hines Jr. V.A. Hospital
708.202.8387 x21149 | Jake.Kanuru@va.gov

**Northwestern Medicine
Central DuPage Hospital**

Center Building Build-Out **Winfield IL**
1st, 3rd, & 5th Floors Behavioral Health, 4th Floor Neurology \$13M, 44,000 SF
Outpatient Behavioral Health Building \$11M / 36,510 SF
New 2-Story Replacement Building
GI Lab Renovation and Expansion 13,000 SF
Multi-Phase GI Lab Facility, Occupied Throughout Construction

Alexian Brothers BH Hospital

Residential Therapy Center

Hoffman Estates IL

51,674 SF

Amita Health

Adventist Bolingbrook Hospital
Geriatric Psychiatry Unit Renovation

Bolingbrook IL
\$1.6M, 15,000 SF

Presence Mercy Medical Center

Behavioral Health Services Study **Aurora IL**
BHS Study to Renovate 4th Floor: 10 Bed Acute Psychiatry, 4 Flex
Beds, 5 Bed Intensive Therapy \$5M, 15,000 SF

Private Client

Feasibility Study for Behavioral Health Clinic \$15M, 60,000 SF

Little Company of Mary Hospital

Outpatient CareStation West
ICU Renovation

Evergreen Park IL

45,000 SF

Jesse Brown V.A. Medical Center

Dental Clinic Expansion
5th Floor Cardiology, Vascular, Pain Clinic

Chicago IL

Edward Hines Jr. V.A. Hospital

Community-Based BH Outpatient Clinic

Joliet IL

\$9M, 65,000SF

Norwegian American Hospital

Women's Center Renovation
Nursery / On-Call Renovation

Chicago IL

Loretto Hospital

5th Floor Patient Room Renovations – East and West Wings

Chicago IL



BRENDA K. JENTINK, IIDA, EDAC

DIRECTOR OF INTERIORS

Ms. Jentink has over 20 years of interior design experience, and a range of expertise in commercial, institutional, hospitality, assisted living / long term care, and healthcare design. As a certified evidence-based design professional (EDAC), she applies the philosophies of patient-centered care and the transformation of healthcare settings into a healing environment that benefits both patient and staff. Her strengths include planning, programming, finishes and furniture specifications, procurement, and project management. In addition to her many years of design experience, she is also an Adjunct Faculty member at William Rainey Harper College and IADT Schaumburg, where she received the 2008 Distinguished Educator of the Year Award. Her relevant experience includes:

Education

University of Wisconsin Stout
Bachelors of Science, Art

Registrations

Registered Interior Designer, WI
NCIDQ Certified, IIDA, EDAC

Affiliations

AIA Design for Aging
POE Team Member
LeadingAge
LSN
ASHE
HESNI

Speaking Engagements

AOPHA 2008
LSN 2002, 2007, 2008

Publications

Healthcare Facilities Management
May 2005, Co-Author

Awards

Distinguished Educator of the Year, 2008

References

Kevin Rehder
Vice President of Clinical Services
Little Company of Mary Hospital
708.229.5893 | krehder@lcmh.org

Christopher Novak
COO
Alexian Brothers BH Hospital
847.755.8072 | Christopher.Novak@alexian.net

Glen Rasmussen
Program Manager
Northwestern Memorial Healthcare
312.926.6120 | Glen.Rasmussen@nm.org

Provena St. Joseph Medical Center

Joliet IL

Cardiac Cath / EP Renovation
Cafeteria
Pediatrics Unit / PICU
Emergency Department Renovation

Access Community Health Network

Chicago IL

Cabrini Family Health Center

University of Chicago Medical Center

Chicago IL

LDR and C-Section Room Renovation
Prudential Development Renovation

Edward Hines Jr. V.A. Hospital

Hines IL

Dental Lab and Clinic Expansion

Jesse Brown V.A. Medical Center

Chicago IL

Dental Lab and Clinic Expansion

Little Company of Mary Hospital

Evergreen Park IL

Outpatient CareStation West
45,000 SF
ICU Renovation
Cardiac Cath Renovation
Acute Care Unit Renovation
MRI Suite

Loretto Hospital

Chicago IL

5th Floor Patient Room Renovations – East and West Wings

William Rainey Harper College

Palatine IL

Avante Building
Biology, Chemistry, and Physics Labs

Jackson Park Hospital

Chicago IL

Facilities Master Plan

Mt. Sinai Hospital

Chicago IL

Facilities Master Plan



ERIKA BERKEY, LEED-AP PROGRAM / PLANNER

Ms. Berkey has 15 years of experience, which includes seven years practicing architectural, planning, and interior design in China for a diverse range of projects – including healthcare, senior living, mixed-use, corporate, retail, and residential. She returned to Chicago and to PFB Architects to lend her international experience in the focus of project and team management, site evaluation, master planning, programming, sustainable analysis, and interior design. She approaches each project with a focus on plan efficiencies and environmentally-sound design. Her strengths include idea generation, conceptualization, organization, documentation, and project standardization. Her relevant experience includes:

Education

International Academy of Design and Technology
Bachelors of Science, Interior Architecture

Registrations

IIDA: International Interior Design Association
Green Building Certification Institute: LEED-AP

Awards

GreenBuild Legacy Project
LEED-Platinum Certification

References

Kevin Rehder
Vice President of Clinical Services
Little Company of Mary Hospital
708.229.5893 | krehder@lcmh.org

Richard Click, AIA
Project Manager, Planning and Construction
Northwestern Memorial HealthCare
312.695.3279 | rclick@nm.org

David Erickson, PE
Director of Real Estate Development
Ryan Companies US, Inc.
630.328.1104
david.erickson@ryancompanies.com

Shengjing Hospital

Multi-Phased Replacement Hospital 180,950m² / 1,947,730 SF

Dalian CN*

Shanghai East International Hospital

Replacement Hospital 66,030m² / 710,741 SF
ED Renovation and Expansion

Shanghai CN

Tianshuigu Hot Spring Spa Resort Village

Hotel, Hot Spring Spa, Rehab Center 240,000m² / 2,583,339 SF

Fuxin CN*

Little Company of Mary Hospital

Outpatient CareStation Southwest 9,000 SF
Facilities Master Plan
Cardiac Cath Lab, MRI Suite, Sleep & Behavioral Health Units

Evergreen Park IL

Jesse Brown VA Medical Center

Dental Lab and Clinic Expansion 15,000 SF
Fan Coil Unit Replacement

Chicago IL

St. Bernard Hospital & Health Care Center

Facilities Master Plan
Replacement Hospital Master Plan

Chicago IL

Norwegian American Hospital

Facilities Master Plan
Women's Center and Nursery Renovation

Chicago IL

Northwestern Memorial HealthCare

Behavioral Health Risk Assessment and Implementation Plan

Chicago IL

Jackson Park Hospital

Facilities Master Plan

Chicago IL

Alexian Brothers BH Hospital

Southwest Outpatient Addition \$4M, 20,000SF
Acute Care Nursing Unit Expansion
Mental Health Center Master Plan

Hoffman Estates IL

College of American Pathologists

Headquarters 100,000SF

Northfield IL*

* Experience with other firms



33 N. LaSalle Street
Suite 3600
Chicago IL 60602

T: 312.376.3100
F: 312.376.3106

www.pfbchicago.com