



Date: August 21, 2019  
(Updated 9/9/2019 revised date to post Short-List results + Interview notice)  
(Previously Updated 8/28/2019 – RFP Section ‘H’)

Subject: **Request for Proposals (RFP) – Architect/Engineering (A/E) Team Selection**  
3<sup>rd</sup> Floor Hospital – Main and South Addition Patient Units  
Project: HMC-10045  
Penn State Health, Milton S. Hershey Medical Center

To: Array Architects  
BDA Architecture, LLC  
CallisonRTKL  
CannonDesign  
Flad Architects  
Hellmuth, Obata & Kassabaum (HoK)  
NBBJ  
Perkins Eastman Architects DPC  
Perkins & Will  
Wilmot Sanz

## A. INTRODUCTION

The Pennsylvania State University (PSU) wants to first thank the thirty seven (37) submitting teams that expressed interest in this project. After careful review of the submitted Letters of Interest, we congratulate the ten (10) A/E teams who were selected to continue to the next step in the process: invitation to respond to this Request for Proposal (RFP). PSU uses a qualifications-based A/E Team Selection Process with three assessments: Long-list (based on Letter of Interest), Short-list (based on Proposal responses), and in-person Interviews. This specific A/E Selection process is as follows:

Proposal responses are due in my office by **Noon EST on September 13, 2019**. After review of Proposal responses, the Screening Committee will identify three firms for in-person interviews. **The Short-List/ Interview Notice will be posted to website on October 7, 2019**. In-person interviews will occur on **October 30, 2019 in State College, PA**. Non-Binding Fees will then be requested of the three Short-Listed teams, for each project, which will be due just prior to the respective Interview. The results of the AE Team selection process will be announced at the Board of Trustees meeting on November 15, 2019 and posted to the OPP website <https://opp.psu.edu/planningdesignconstruction/project-bidsproposals>.

Participation in this RFP and selection process is voluntary and at no cost or obligation to PSU. PSU reserves the right to waive any informality in any or all Proposals, and to reject or accept any Proposal or portion thereof. PSU reserves the right to modify dates as/if it deems necessary.

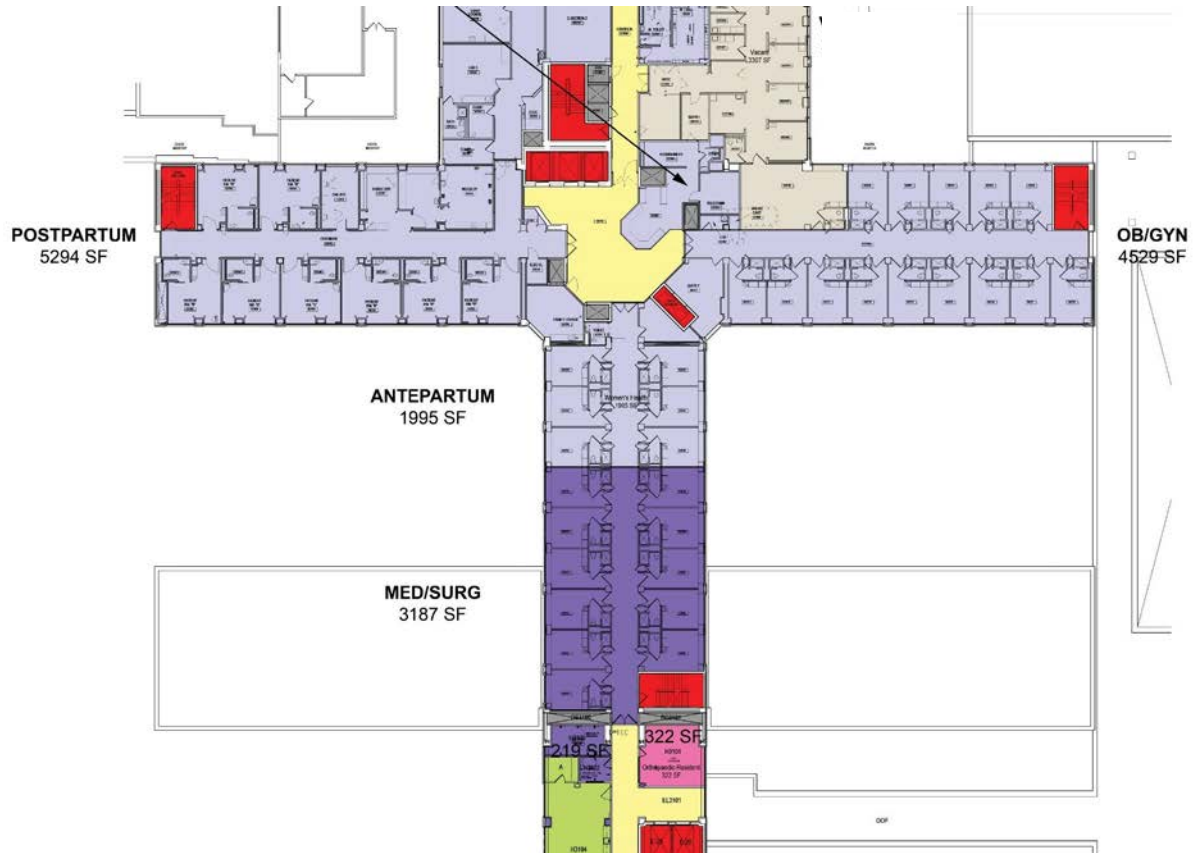
Confidentiality and Non-Disclosure. News releases pertaining to this project will not be made without prior approval from PSU, and then only in coordination with PSU. The contents of all A/E selection process correspondence are to remain confidential, and as such, not be made public.

## B. PROJECT OVERVIEW

As stated in the letter of interest, Penn State Health, Milton S. Hershey Medical Center (PSHMC) is in the process of expanding inpatient services in the local and regional market areas. The current state of the Milton S. Hershey Medical Center includes the expansion of the Children's Hospital providing 124 inpatient beds for Pediatrics and Adults. The services relocating to the Children's Hospital will vacate space on the 3<sup>rd</sup> floor of the Main hospital building providing an opportunity to "right size" the original single patient rooms. This project will also provide space to reconfigure support functions located in the South Addition hospital building. By moving these functions, the current semi-private and quad patient rooms can be renovated into single private rooms. Meeting today's standards for inpatient rooms relative to size, aesthetics and functionality is a must for Penn State Health in order to provide the highest level of customer service and maintain or improve market share.

### 3<sup>rd</sup> floor Main Hospital Space:

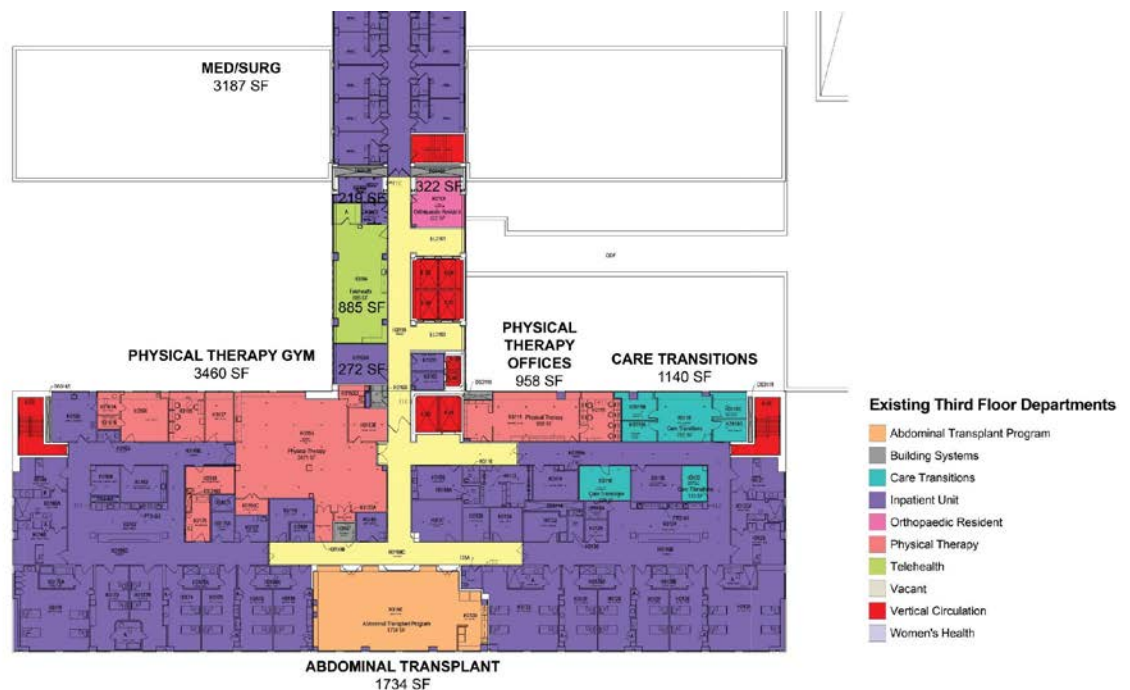
Women's Health Labor and Delivery, postpartum and antepartum services will relocate in the fall of 2020. The back-fill of the vacated space will provide an opportunity to "right size" the single private patient rooms built in 1970. A total of thirty seven (37) private beds exist in this location. The beds on the west wing (postpartum) were renovated about 2 years ago to create state of the art beds to meet FGI guidelines and the hospital's patient and family centered care model. As a result of the renovations, the total number of beds on the west wing were reduced by a total of three (3) rooms. Adequate space was created to provide appropriate nursing and ancillary support in addition to increasing the size of each patient room. The added space within each room supports the staff operations and the care of the patient.



As shown above, given the linear configuration of the existing floor plate, nursing work and support spaces are compromised. The central nurse station, or care team station, is centrally located on the floor; this is called the *rotunda* area. This location is not convenient for the nursing staff and is removed from the patient activity on each of the wings. The new model of care is to locate a central care team workstation in the center space of each wing; west, east and south. We understand that creating this critical function within each of the wings will further reduce the total number of beds; each wing shall have no less than ten (10) beds with the appropriate support functions (based on options developed in an earlier planning study).

3<sup>rd</sup> floor South Addition Hospital space:

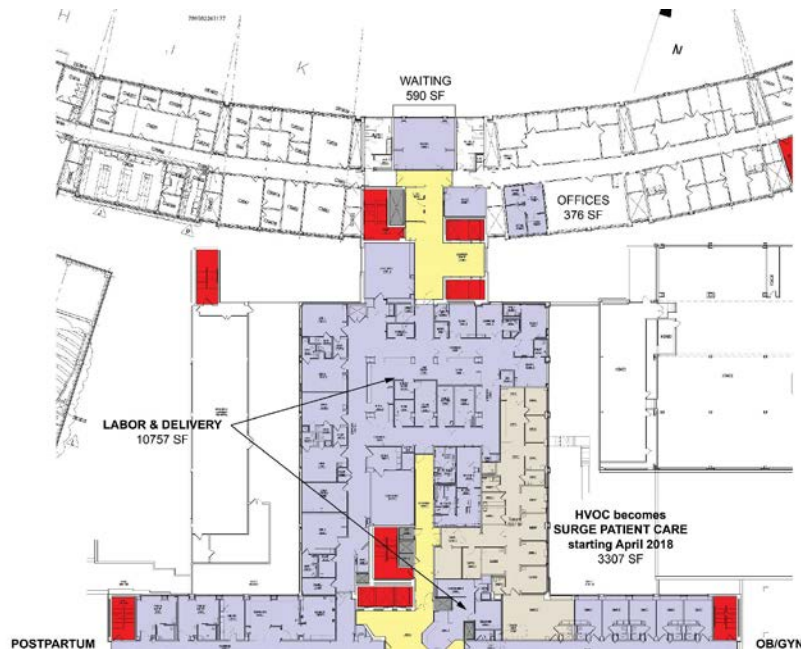
The 3<sup>rd</sup> floor South Addition Hospital building was constructed in 1991 and designed as a rehabilitation inpatient unit. This area includes thirty six (36) licensed acute care beds made up of four (4) private rooms, ten (10) semi-private rooms and three (3) quad-bed rooms. Several years ago, the rehabilitation program moved out of the hospital and the beds were maintained as acute care beds. This unit continues to be operated this way today. In addition to the acute care unit in this location, there are hospital support functions located in adjacent space on the floor. Those functions include: offices for Care Coordination, Physical Therapy Gym, and offices for the Therapists, a workroom for the Orthopedic Resident Program, offices for the Transplant Coordinator Program, and the central hub for the Telehealth Monitoring Program.



The scope of this project includes the relocation of the above mentioned support functions to the space vacated by the Women’s Health programs and north of the rotunda. By moving these services, adequate space will become available to design approximately thirty (30) state of the art private patient rooms and the appropriate nursing and ancillary support services for the unit. As part of the design process, discussions regarding the feasibility of creating a “universal” room in this location with the Senior Leadership team will be necessary.

This is a phased project that will be implemented in a series of “smaller” projects over multiple years. PSHMC has initially estimated that construction of all phases of work will not be complete until summer 2024. Maintaining operations will be complex and challenging given the physical constraints of the floor-to-floor heights, existing columns, asbestos, and impact on the MEP infrastructure. This floor is located between the main Operating Room Suite and Surgical IMC unit on the 2<sup>nd</sup> floor below, and the Neurosciences- Acute Care and ICU on the 4<sup>th</sup> floor above. Inpatient units will require minimal interruptions and most thorough coordination during construction. Patient and staff safety will be of utmost importance to maintain throughout the life of this project. Daily communications with the clinical team outlining the infection prevention protocols and unit specific interruptions such as noise are critical to the success as well.

As we plan and develop the implementation of each phase, consideration to the financial impact of the operations is as important as patient safety. Our goal is to limit the number of temporary closures to patient rooms and O.R.’s in order to reduce the financial burden to the hospital. There is an understanding that temporary closures are to be expected, however planning and communicating each closure in advance is essential to hospital leadership.



### C. PROGRAM OF REQUIREMENTS

The 3<sup>rd</sup> floor Hospital Main and South Addition renovations has been approved to move forward with the planning and design phase of the project. The project scope was finalized and approved by hospital leadership in March 2018. Since that time, Penn State Health, Milton S. Hershey Medical Center has new leadership in place. Validation of the planning assumptions will be necessary to review at the onset of the project, specifically the type of patient units that will be designed. Review of the clinical support services and office functions planned to relocate to the space north of the rotunda will also require program validation to capture current state information.

Below is a brief summary of the project

Description	Scope of work summary
Bed Renovation	Full renovation of 3 East and 3 South, Main Hospital Partial renovation to 3 West, Main Hospital Full renovation to South Addition Hospital
Clinical Support/Administrative Office Relocations	Full renovation of 3 North
Total DGsf	51,161 dgsf
Time frame to implement	~4 years (multiple phases)
Estimated Project Cost	\$34-40M
Total Beds	60

The project (as previously noted) will be a multi-phased project to begin once the expansion of the Children’s Hospital is completed in the fall of 2020. The plan is to implement renovations in order to maintain operations and bed occupancy for the majority of the floor.

In 2017, the Architectural firm Cannon Design performed a planning study of the third floor Main and South Addition Hospital space. The planning goals included maximizing the number of inpatient adult beds, increasing efficiencies in function and operations, and improving the flow and circulation of space within the 3<sup>rd</sup> floor. Cannon Design developed a program and planning document to guide the next phase of design for this project. This “Third Floor Planning and Programming” presentation dated *revised March 30, 2018* is included in the attachment section of the RFP.

The inpatient rooms in the east, west, and south wings of the 3<sup>rd</sup> floor main building are served by induction heating, ventilating, and air conditioning (HVAC) units. The outdoor air is supplied to these perimeter units and similar units on floors 4 through 7 through vertical duct risers. This project will include the replacement of the original induction units with a variable air volume reheat system. The A/E team will need to identify space for additional air handling units and design the system to minimize impact to patient rooms on other floors during construction. Domestic water, medical gases, and exhaust ductwork risers also run vertically through the areas to be renovated and have minimal means of isolation per floor.

**D. PRELIMINARY SCOPE OF WORK**

The selected A/E Team(s) will start the project with a validation of the aforementioned program, including completion of a room-by-room program based on finalized space assignments of the inpatient bed units on the 3<sup>rd</sup> floor Main and South Addition Hospital buildings and the hospital support functions that will be relocated from the South Addition space. Determining the acuity level, or universal, patient room will also require validation during this phase. The project will follow the standard design phases – SD, DD, CD and CA Phases in accordance with Penn State’s standard 1-P agreement.

**E. RFP ATTACHMENTS AND REFERENCED STANDARDS**

- **Power Point presentation: Third Floor Backfill Planning and Programming, Steering Committee Update, revised March 30, 2018**
- **Form of Agreement.** Included is the link to our Form of Agreement 1-P: <https://wikispaces.psu.edu/display/OPPDCS/Division+00+-+Procurement+and+Contracting+Requirements>.

Please review this agreement to ensure that your firm accepts all terms and conditions as written. In submitting a proposal for this project, you acknowledge that you concur, without exception, with all terms, conditions and provisions of Form of Agreement 1-P.

- **Design Phase Deliverables.** Reference this document under the heading *00 51 00 MISCELLANEOUS FORMS* at the following link:  
<https://wikispaces.psu.edu/display/OPPDCS/Division+00+-+Procurement+and+Contracting+Requirements>
- **Office of the Physical Plan (OPP) and Hershey Medical Center (HMC) Standards.** The web sites [www.opp.psu.edu](http://www.opp.psu.edu) and <https://wikispaces.psu.edu/display/OPPDCS/Design+and+Construction+Standards> provide information regarding specific design submission requirements and standards, of the University and the medical center. Please review to ensure that your team is able to deliver a compliant building.

This project will not pursue LEED certification. The project will consider sustainability or high-performance measures and innovations.

## F. SELECTION AND IMPLEMENTATION MILESTONES

### Third Floor Hospital – Main and South Addition Patient Units Milestones

• RFP Issued to Long-Listed Teams:	August 21, 2019
• <b>Submission of A/E Proposals Due:</b>	<b>Noon, September 13, 2019</b>
• <b>Post Short-List results + Interview notice:</b>	<b>October 7, 2019</b>
• <b>A/E Team Interviews:</b>	<b>October 30, 2019 (State College, PA)</b>
• Board of Trustees Selection of Team + Post Results:	November 15, 2019
• <b>Contract Award / Letter of Intent:</b>	<b>November 22, 2019</b>
• Construction Start Date (First Phase)	November, 2020
• <b>Project Occupancy</b>	<b>Summer, 2024</b>

## G. PRE-PROPOSAL SUBMISSION CONTACT

The Office of Physical Plant encourages you to visit the site and discuss the project with representatives of the user group in order to understand all goals and the major issues driving this project. **We will have scheduled tour date(s) at the following time(s).** The tours are not mandatory, but if you seek to attend a tour, you must RSVP.

- **Tour date 1: August 27, 2019, 12:00 p.m. – 1:30 p.m. (Eastern Standard Time)**
- **Tour date 1: September 3, 2019, 1:00 p.m. – 2:30 p.m. (Eastern Standard Time)**

Contact Contract Program Manager (Kelly Okken, 717-531-4525, [kokken@pennstatehealth.psu.edu](mailto:kokken@pennstatehealth.psu.edu)) to RSVP for a tour date.

Contact Assistant Director of Planning & Construction (Catherine Brower, 717-531-4525, [cbrower@pennstatehealth.psu.edu](mailto:cbrower@pennstatehealth.psu.edu)) with any questions regarding the project.

Campus Planning, design-related, or AE selection process questions should be directed to Greg Kufner, University Architect.

## H. PROPOSAL REQUIREMENTS

**Deliver 12 (twelve) hard copies of your proposal and one (1) digital copy on a thumb drive to:**

Greg Kufner, AIA, NCARB  
University Architect  
The Pennsylvania State University

**Shipping Address (Note that this address has changed):**

**The Pennsylvania State University  
One Benedict House  
University Park, PA 16802**

**Hard copies of the Proposals are due September 13, 2019 at Noon, Eastern Standard Time. A PDF version of your proposal should be included on a thumb drive with your submission. Proposals received after this date and time may be automatically rejected. Proposals shall be provided in an 8.5" x 11" format. Limit submission to thirty (30) single-sided pages maximum (15 double-sided), plus a cover letter. Double-sided printing is strongly encouraged. Font size is to be 10-point type, minimum.**

**A cover letter shall be provided from the proposed leader(s) of the Candidate Team submitting.** The cover letter should be one page maximum. The cover letter should include the following:

- A. This letter should establish the contact information (name, address, phone, and e-mail) for your team's main point of contact
- B. Primary office location of the submitting candidate team
- C. A concise summary as to why your team is best suited for this project
- D. Statement of certification that all information provided in your submittal is accurate

**Collate and bind proposals according to the following four (4) Sections:**

Proposals shall follow the below format, in the order stated to ensure that all pertinent information necessary for evaluation is included and easily comparable by Selection Committee. The cover letter, table of contents, and divider pages will not count towards the RFP page limitation. OPP encourages you to be as brief as possible without sacrificing accuracy and completeness.

**\* Note 1: As applicable throughout the proposal, provide professional credit to architectural partners (including design architect, architect of record, and academic / lab planning partners) for all projects discussed within the proposal and for all project images shown.**

**Section 1.0 –TEAM STRUCTURE**

- A. Identify prime firm, architecture and/or planning consultants, and key engineering/consultant firms. For each firm, identify the firm differentiators, size of firm, each firm's qualifications and experience on similar projects, and clearly identify each firm's role on this project. Identify past collaboration between prime firm and key consultants, including number/ value of projects, and the added benefit the key consultants provide to your team.

Penn State University values variety in the composition of consultant teams. As such, teams should demonstrate previous successful collaboration, execution of projects similar to the ones in this RFP, and the ability to incorporate owner's design standards similar to the Penn State Design and Construction Standards. While we appreciate firms with experience at PSU

we do not have a preferred vendor list and encourage the selection of the best talent possible for our projects.

- B. Provide team organizational chart. Include prime and key consultant firms, and provide the name and role of key team members. Clearly identify which team members are designated for leadership positions on the team. Please highlight Diverse Business Enterprise Program (DBE) representation on your team.
- C. Provide role descriptions and resumes of key team members identified in the organizational chart. Include registrations/ certifications, educational background, years of experience, and relevant project experience. Relevant project experience should include size, budget, program type, project overview, and define what each team member's role was on each project listed on their resume (emphasize the most relevant experience, including similarity of team member roles and projects). Include at least two client references for each key team member. **If possible, please avoid using Penn State employees as references.**

Note: If any individual(s) is fulfilling multiple project roles, identify multiple roles on the organizational chart and within individual resumes.

## **Section 2.0 – TEAM QUALIFICATIONS**

- A. Provide a summary of qualifications and expertise of the firms with specific emphasis on:
  - 1. Distinguishing factors of team differentiation.
  - 2. Experience delivering programs, studies and projects of a similar scope, scale, and complexity. **(See Note 1)**
  - 3. Expertise in the planning, design, and delivery of state-of-the-art inpatient hospital spaces with a particular emphasis on phased renovation work. **(See Note 1)**
- B. **Identify a maximum of five (5) example projects, within the last ten (10) years, which BEST exemplify qualifications and expertise listed above for the proposed team.** Include brief description of each project, project gross square feet, project budget, final project cost, and completion date of project and a client reference(s). Show illustrative representation of the example projects. **(See Note 1)**

Develop a matrix that illustrates the similarities between the example projects and this project. Please be as specific as possible.

In matrix form, show the participation of individuals from the proposed team on the identified projects. List team member's respective role on each of the example projects.

- C. List errors and omissions insurance coverage limits of the lead/ prime entity of the candidate team. Provide information on errors and omissions claims in the last seven (7) years.
- D. Acknowledgment of your review and acceptance of the attached Form of Agreement 1-P, ensuring that your firm accepts all terms and conditions as written. In submitting a proposal for this project, you concur, without exception, with all terms, conditions and provisions of this Form of Agreement.



### **Section 3.0 – PROJECT APPROACH AND SCHEDULE**

- A. Describe your team’s design approach, including:
  - 1. Project visioning and goal setting, and approach to achieving the project vision and goals.
  - 2. Validating the project program, including verifying the mix of program elements.
  - 3. Building planning, including: defining programmatic adjacencies, creation of blocking and stacking options to respond to project aspirations and requirements.
  - 4. Design approach to develop interior “look and feel”.
  
- B. Describe your team’s overall approach to:
  - 1. Planning, managing, and executing the project. Include approach to guiding the decision-making process, scheme options analysis, and consensus building.
  - 2. Innovative design.
  - 3. Use of BIM, technology, predictive modeling, and digital tools.
  - 4. Cost estimating, cost control, and quality control through the design and construction phases.
  - 5. Creating a collaborative environment between architects, clinicians, engineering consultants, and PSU stakeholders.
  
- C. Briefly describe your approach to Penn State reviews, PSU design reviews, and jurisdictional reviews. With assistance of the University, the selected AE team will be responsible for securing any/all local municipal reviews, Labor & Industry reviews and/or permits that are required. Any fees associated with permits shall be paid for by the Professional and will be reimbursed by the University.
  
- D. Approach to MEP. Narrative approach to MEP planning/ design/ delivery of facility that will contain programs and space types as noted herein. Be specific with your experience and highlight your project type expertise.
  
- E. Approach to project delivery - Construction Manager at Risk. The project will be delivered with a CM at Risk, who will be engaged at the beginning of the design process and will be involved throughout the project. Describe your approach to creating a collaborative design and construction process, including integration of the design team with the Construction Manager, design assist partners, subcontractors, and trades.
  
- F. Approach to Cost Control. Briefly describe your approach to cost control, especially considering escalating construction costs. Outline critical factors to consider with respect to the project budget. Discuss your impression of the budget and how you manage scope/budget change through the entire project.
  
- G. Project Schedule. Provide your thoughts and approach to the project schedule. Create a graphic project schedule showing phase durations, owner engagement and review periods, and identify critical path items, milestones, and schedule drivers. This can be printed on an 11x17 fold-out and will only count as a single page.

Verify the entire AE team’s availability to appropriately staff the project, given the project schedules and inclusive of project and/or firm workload.

### **Section 4.0 – PROJECT-SPECIFIC KEY DRIVERS AND IDEAS**

- A. Project Understanding. Briefly demonstrate your understanding of the project. Provide any observations of the project program or other provided information.

- B. Your firm's vision of what, beyond purely functional issues, constitutes the essence of this type of facility.
- C. To indicate your understanding of the uniqueness of this project, describe key project drivers, critical design elements, and potential constructability considerations your team has identified as a priority for this specific project. Discuss how you addressed similar issues on other projects.

If important to your team, discuss an example project(s), highly relevant to our project, in more detail than your Section 2 response may allow. Include insights into what made the example project(s) successful, including how those design intentions were translated into a meaningful and synthesized final solution.

- D. Delivering a highly active, collaborative and adaptable/flexible building is critical to project success. We seek to explore innovations and efficiencies in the planning and design of the completed facility. Describe programming, planning, benchmarking tools and methodologies that your team will use to meet these objectives.

Provide specific principles/ideas or project examples for the following programs/spaces  
**(See Note 1):**

1. Inpatient room design, including intensive care units, acute care and/or universal bed design that promotes operational efficiency for the unit as well improving patient experience.
  2. Multi-phased design and reconfiguration of space within an operational inpatient floor.
  3. Adherence to budget and schedule of a multi-phased renovation project of an inpatient unit.
- E. Provide any initial design ideas, thoughts or considerations regarding the project. We are not seeking design solutions, but rather your design thinking. Considerations may include your thoughts/opinions related to the project site, master planning and/or placemaking factors, environmental considerations, programmatic considerations, MEP considerations, and/or any other design considerations.

Thank you for your anticipated participation in this A/E Team Selection process. The Pennsylvania State University looks forward to reviewing your responsive proposal for this important project.

Please feel free to contact me with any questions you may have.

Respectfully,  
Greg Kufner, AIA, NCARB



University Architect  
The Pennsylvania State University  
206 Physical Plant Building, University Park, PA 16802  
Phone: 814-865-8177 | Mobile: 614-512-2287  
Email: [gak21@psu.edu](mailto:gak21@psu.edu)

CC: Screening Committee



**PennState Health**

Milton S. Hershey  
Medical Center

# Third Floor Backfill Planning and Programming

Steering Committee Update

March 5, 2018

*Revised March 30, 2018*

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# Today's Agenda

## 1. Executive Summary

## 2. Third Floor Options

- Unit Size & Functional Adjacencies

## 3. Engineering Summary

## 4. Concept Cost Options

## 5. Next Steps

## Third Floor Scope of Work – 3 West, 3 East, 3 South, 3 North and South Addition

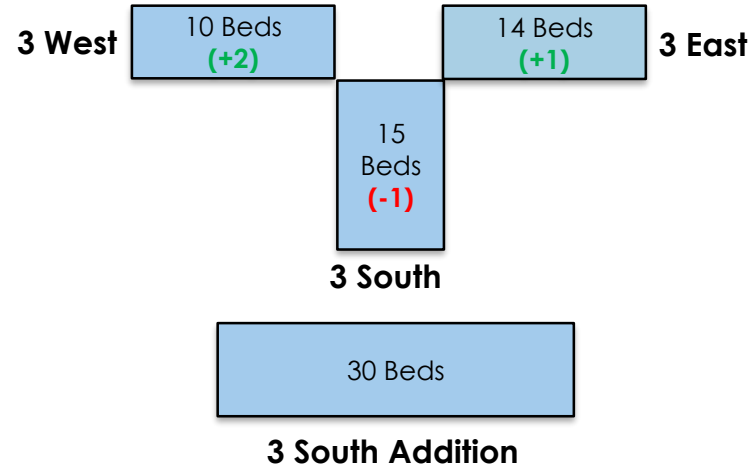
### Departments

- Inpatient Units
  - 3 East and 3 South – Acute Care (Orthopedics)
  - 3 West – Acute Care (Bariatric)
  - South Addition – Intermediate Care
- Care Transitions
- Physical Therapy (Gym and Offices)
- Orthopedic Resident Program (1<sup>st</sup>-3<sup>rd</sup> Year and APC's)
- Abdominal Transplant Coordinator Program
- Telehealth Monitoring

# Third Floor Options Beds Summary

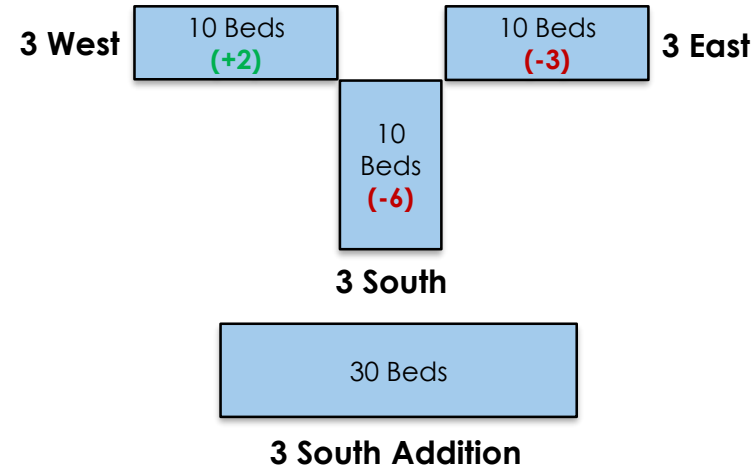
## Option 1 - Total 69 Beds

- Net Beds: +2 beds
- Main Hospital: 39 beds
  - Maximum reuse of **29 existing acute care beds;**  
3 West expands from 8 to **10 beds**
- South Addition : 30 beds
  - Renovated to **30 intermediate beds**



## Option 2 - Total 60 Beds

- Net Beds: -7 beds
- Main Hospital: 30 beds
  - 3 East & 3 South renovated to **20 acute care beds;** 3 West expands from 8 to **10 beds**
- South Addition: 30 beds
  - Renovated to **30 intermediate beds**



# Third Floor Patient Room Evaluation Summary Matrix

KEY:			Adequate		Minor Deficiency		Moderate Deficiency		Major Deficiency							
CRITERIA		FUNCTION								SPACE				OVERALL RATING	COMMENTS	
		PRIVATE PATIENT ROOMS	COMPLIANT ACUTE PATIENT ROOMS	COMPLIANT BARIATRIC PAT RMS	DOORS - ACUTE	DOORS - BARIATRIC	ADA TOILET ROOMS	HIGHER ACUITY IMC ADAPTABILITY	STANDARD OF CARE / NURSE STATION	GYM ADJACENCY TO ORTHO UNIT	BED QUANTITY	DGSF QUANTITY	PHASING			COST
<b>EXISTING</b>																
- 3 East	---									NA	NA		NA	NA		Acute meets renovation clear area. Bariatric does not meet renovation clear area
- 3 South	---									NA	NA		NA	NA		
- 3 West	8									NA	NA		NA	NA		Reuse Post-partum for Bariatric. Bariatric does meet renovation clear area
- 3 South Addition - Med / Surg	34-36									NA	NA		NA	NA		542 DGSF per bed; 77% - 88% Multi-person rooms; shared toilet rooms
<b>OPTION 1</b>		69														Main Cross - 525 DGSF per bed; target 700 DGSF
- 3 East - Orthopedics	14		AHJ													Does not meet FGI planning guidelines; not acute orthopedic bariatric patient capable; not quadriplegic capable.
- 3 South - Orthopedics	15		AHJ													
- 3 West - Orthopedics / Bariatric	10						B	AHJ						B		
- 3 South Addition - IMC	30									NA						800 DGSF per bed; 800 DGSF per bed
<b>OPTION 2</b>		60														Main Cross - 682 DGSF per bed; target 700 DGSF
- 3 East - Orthopedics	10							AHJ								Adjustment from 37 to 29 beds. ADA toilet rooms accommodate stretcher for quadriplegic patients. Phasing implications.
- 3 South - Orthopedics	10							AHJ								
- 3 West - Orthopedics / Bariatric	10						B	AHJ						B		
- 3 South Addition - IMC	30									NA						800 DGSF per bed; 800 DGSF per bed

## Project Summary

Description	Option 1	Option 2
<b>Bed Renovation</b>	Partial Renovation of 3W, 3E, 3S Full renovation of South Addition	Full Renovation of 3E and 3S Partial Renovation of 3W Full Renovation South Addition
<b>Clinical Support / Admin Renovation</b>	Full renovation of 3N  Minimal renovation to South Addition connector 13,073 dgsf proposed, 11,690 dgsf available	Full renovation of 3N  Minimal renovation to South Addition connector 13,073 dgsf proposed, 11,690 dgsf available
<b>Total DGSF</b>	56,161 dgsf	56,161 dgsf
<b>Time Frame to Implement</b>	3+ Years	3+ Years
<b>Estimated Construction Cost</b> <b>Estimated Project Cost</b>	\$21.36M \$28.84M	\$29.43M \$39.73M
<b>Total Beds</b>	69	60



# Executive Summary

## MEP Existing Conditions/Challenges

### North and West Wings

- MEP systems and infrastructure have been **completely upgraded in the 2016** renovations to these areas. As such, these systems can be reconfigured to accommodate the new room layout.

### East and South Wings

- MEP systems are still the original 1970 systems. Replacement of these systems will trigger the need for extensive asbestos abatement. However, if the systems are not replaced, the continued use of **50 year old systems will require continual maintenance and will not provide optimum performance.** If these systems are not addressed now, their **inevitable replacement**, perhaps sooner rather than later as they are well beyond their expected useful life, will require shutdown of the wings and be much more expensive to address later.

### South Addition

- MEP systems are the original systems installed in 1991, and, even though they are 27 years old, **these systems are appropriate systems even for today's patient room standards.** As such, these systems can be reconfigured to accommodate the new patient room layout.

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# Today's Agenda

1. Executive Summary

**2. Third Floor Options**

- Unit Size & Functional Adjacencies

3. Engineering Summary

4. Concept Cost Options

5. Next Steps

## How can the physical design of the environment help meet our Guiding Principles?

### Growth

Provide an ability **to flex level of care**

### Service Excellence

Space that provides exceptional patient and staff experience

Soothing environment for healing of both physical and psychological/social/spiritual

Space that allows **for increased efficiencies** within and across departments

**Patient, family, provider space in the patient rooms**

Facilities **designed for patient centeredness**

### Alignment & Integration

Aligning the physical space within the strategic priorities of the clinical research mission

### Quality & Outcomes

Improve HCAPS – especially ‘quiet at night’

Create patient and family spaces that establish a healthy, healing environment

Decrease infections

**Space that respects patients’ privacy**

### Fiscal Stewardship

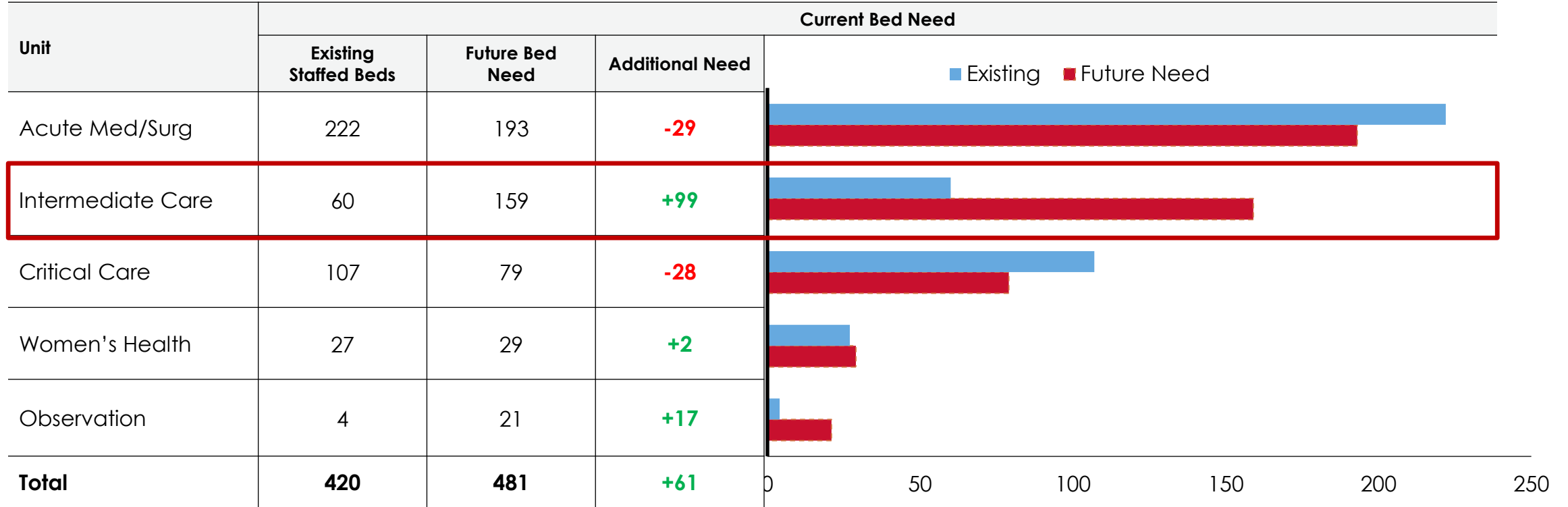
Demonstrates strong commitment to sustainability

### Operational Efficiency

**Standardization of spaces to support efficiencies**

# Key Room Needs

Inpatient Room Need from Current Staffed, **Adult**  
PSHMC, FY 2016 to FY 2026



## Third Floor Options Assumptions Established with Steering Committee on 2/12/18

### 3 West, 3 East and 3 South

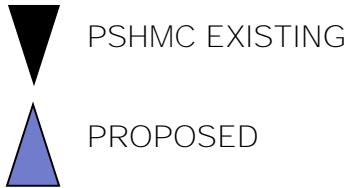
- Beds should be designed to accommodate Ortho Acute Care
- 3 East and 3 South - nurse station is desired for each
- 3 West - plan for new nurse station and two (2) new patient rooms in the post-partum area and nursery area
- Maintain family waiting in the Crescent
- Plan to maximize beds
  - Target 30 beds for Ortho (3 West -10 beds, 3 East -10 beds, 3 South -10 beds)

### South Addition

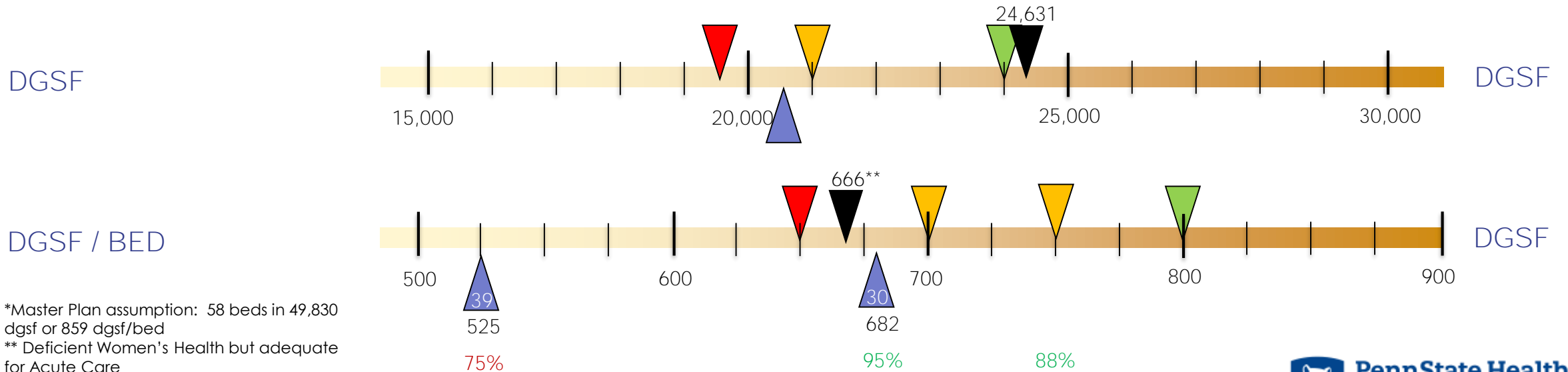
- Beds should be designed to accommodate Intermediate Care
  - Review unit configuration of First and Fourth Floors
- Third Floor South Addition – plan for 30 beds

# Acute Care Unit Square Footage Benchmark Comparison - Main Hospital

Available DGSF Adequate for 30 Beds



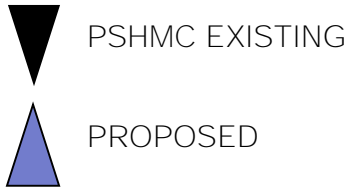
Type	Existing Rooms	Existing DGSF	Existing DGSF Per	Benchmark					
				LOW	DGSF	MID	DGSF	HIGH	DGSF
Acute Beds	30		682	650	19,500	700	21,000	800	24,000
	0								
<b>Total DGSF for Key Room Required</b>	<b>30</b>				19,500		21,000		24,000
Existing Inpatient Unit DGSF	37	24,631	666		24,631		24,631		24,631
Existing DGSF (%) of Benchmark DGSF					126%		117%		103%
Proposed Inpatient Unit DGSF	30	20,471	682		20,471		20,471		20,471
Proposed DGSF (%) of Benchmark DGSF					105%		97%		85%



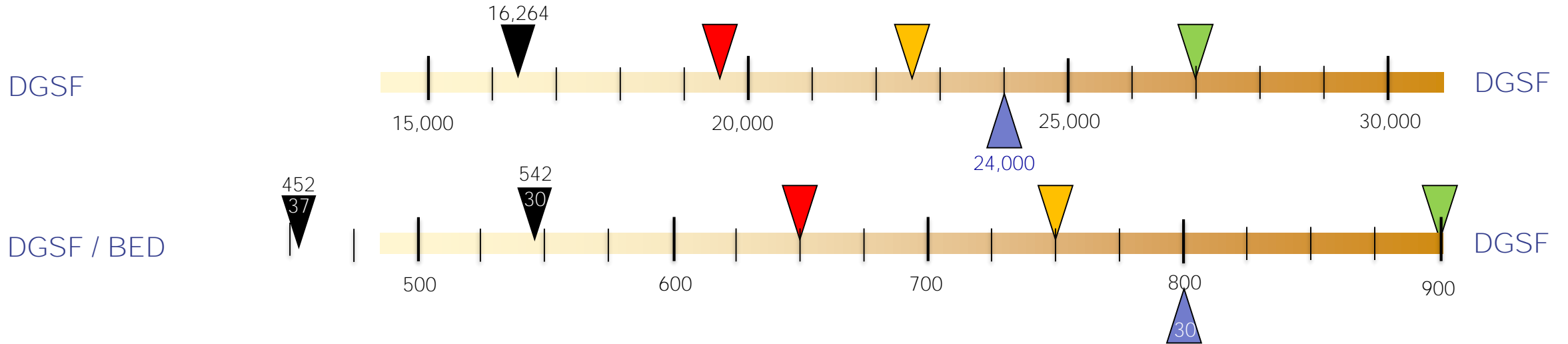
\*Master Plan assumption: 58 beds in 49,830 dgsf or 859 dgsf/bed  
 \*\* Deficient Women's Health but adequate for Acute Care

# Intermediate Care Unit Square Footage Benchmark Comparison - South Addition

Entire South Addition Footprint Required for 30 Intermediate Beds



Type	Existing Rooms	Existing DGSF	Existing DGSF Per	Benchmark					
				LOW	DGSF	MID	DGSF	HIGH	DGSF
Intermediate Beds	30		542	650	19,500	750	22,500	900	27,000
	0								
<b>Total DGSF for Key Room Required</b>	<b>30</b>				<b>19,500</b>		<b>22,500</b>		<b>27,000</b>
Existing Inpatient Unit DGSF	36	16,264	452		16,264		16,264		16,264
Existing DGSF (%) of Benchmark DGSF					83%		72%		60%
Proposed Inpatient Unit DGSF	30	24,000	800		24,000		24,000		24,000
Proposed DGSF (%) of Benchmark DGSF					123%		107%		89%



\*Master Plan assumption: 58 beds in 49,830 dgsf or 859 dgsf/bed

## Option 1 and 2 Meet the Following Criteria

### Common Criteria

- Physical Therapy Gym and Offices are adjacent to the Orthopedic unit; current state through circulation has been eliminated
- Orthopedics Residents (1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> year) and APCs are located adjacent to the Orthopedic Unit.
  - 4<sup>th</sup> and 5<sup>th</sup> year Orthopedic Residents remain in the BMR
- New nurse station concepts are implemented
- Maintain waiting area in the Crescent to support ortho inpatient unit families
- Consolidation of Care Transitions staff
- Existing TeleHealth space to remain
- Abdominal Transplant Program relocates
- Provide shared centralized staff support / conference space



# Third Floor Plan

## Existing Third Floor

Total DGSF – 52,439

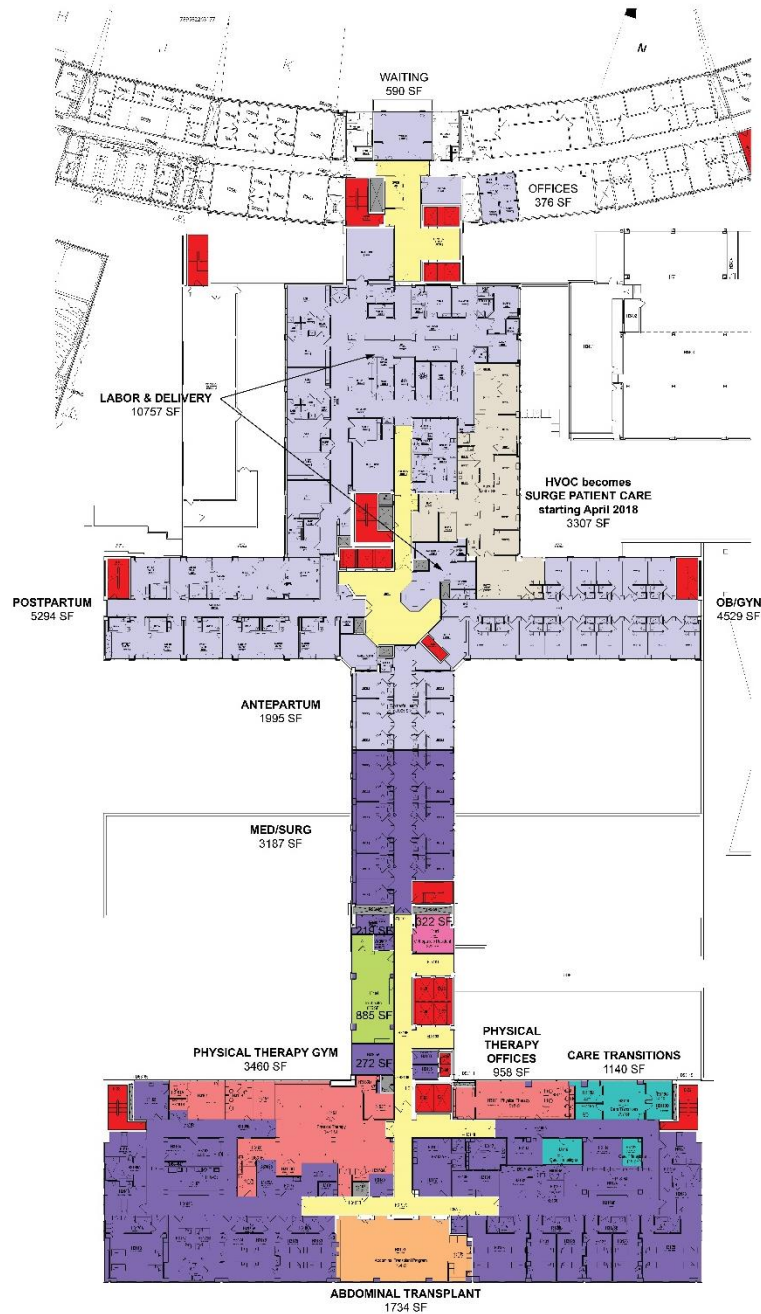
Main Hospital Total Beds

- 10 Med /Surg Beds,
- 27 Women’s Health Beds

South Addition Total Beds

- 36 Med / Surg Beds

*\*Women’s Health relocating to PSHCH expansion*



# Third Floor Plan

## Option 1 - 69 Beds

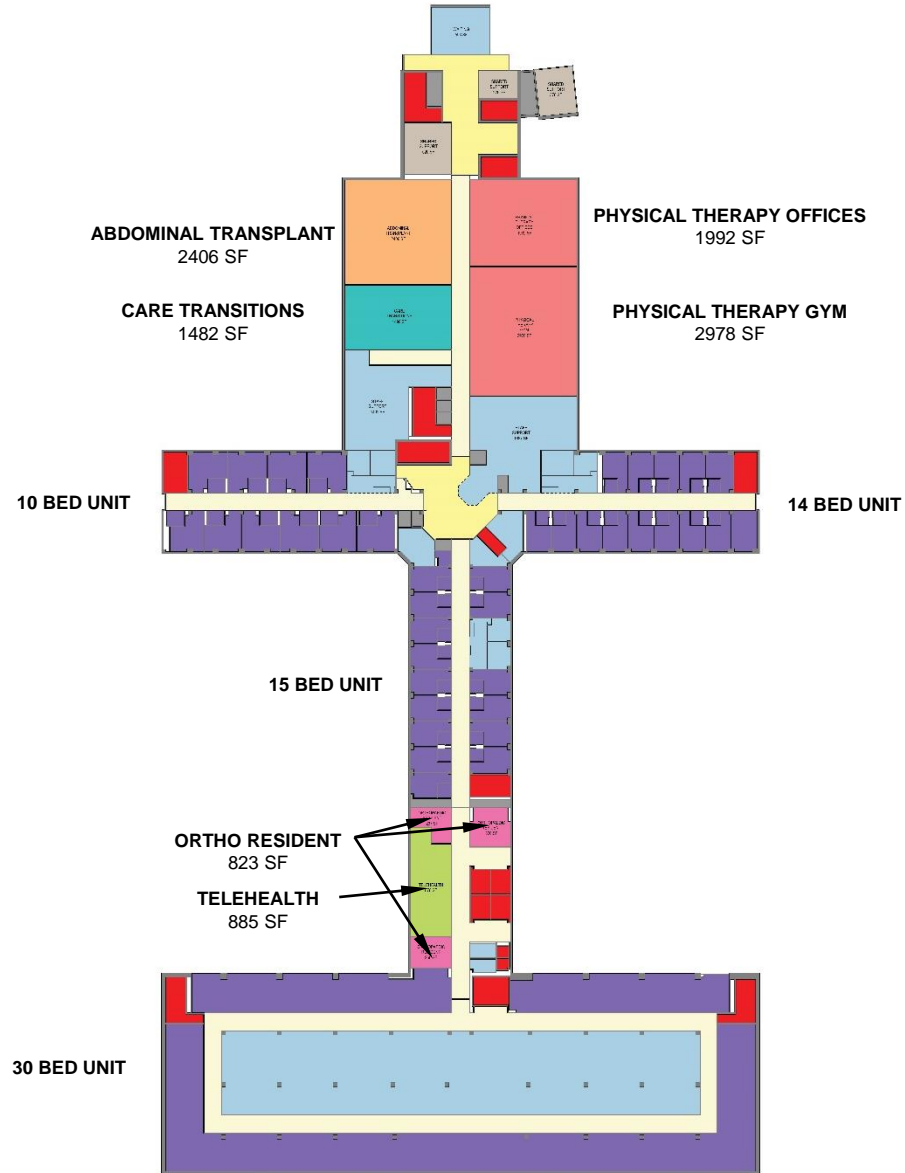
Total DGSF – 56,161

Main Hospital Total Beds

- 39 Acute Care Beds

South Addition Total Beds

- 30 Intermediate Care Beds



# Third Floor Plan

## Option 2 - 60 Beds

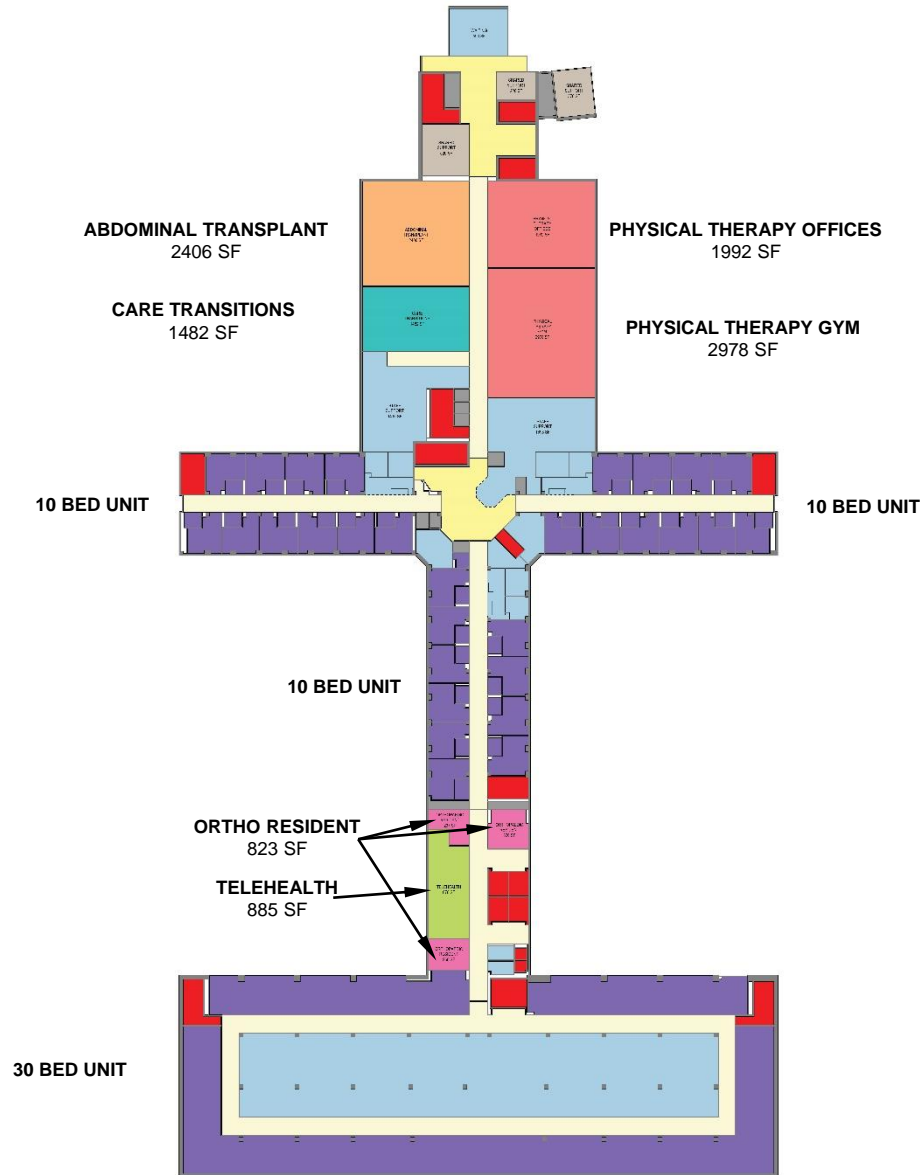
Total DGSF – 56,161

Main Hospital Total Beds

- 30 Acute Care/Bariatric Beds

South Addition Total Beds

- 30 Intermediate Care Beds



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## Today's Agenda

1. Executive Summary
2. Third Floor Options
  - Unit Size & Functional Adjacencies
- 3. Engineering Summary**
4. Concept Cost Options
5. Next Steps

# Engineering Summary

## Third Floor Option 1 and Option 2 Common Scope

### 3 North and 3 West:

- Reconfigure 2016 MEPT Systems
- 2 North and 2 West Piping Disruptions Anticipated
  - *Must attempt to minimize due to surgery operations in 2 North*

### 3 South Addition:

- Reconfigure 1991 MEPT Systems
- Connect to Existing Vertical Infrastructures
- Update Lighting to LED
- Update Fire Alarm Notification Systems
- Include New Data Room - Update to Cat 6 and PSH digital TV
- 2 South Addition Piping Disruptions Anticipated

# Engineering Summary

## Third Floor Option 1 and Option 2 Scope Differentials

### Option 1:

- 3 East and 3 South:
  - “Tired” 1970 Vintage MEPT Systems to Remain

### Option 2:

- 3 East and 3 South:
  - 1970 Vintage MEPT Systems to be reworked
  - ASBESTOS IMPACT
  - New AC Units on adjacent 2<sup>nd</sup> Floor Roofs with New VAV Duct Distribution
  - 2 East and 2 South Piping Disruptions Anticipated
  - Extend Feeders from 3 West to New Electrical Rooms in Each Wing
  - Update to Cat 6 and PSH Digital TV to Existing Data Room

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## Today's Agenda

1. Executive Summary
2. Third Floor Options
  - Unit Size & Functional Adjacencies
3. Engineering Summary
- 4. Concept Cost Options**
5. Next Steps

# Construction Cost & Project Cost Summary – Option 1 – 69 Beds

DESCRIPTION			TOTAL COSTS	1- North Clinical- Administration-	2- Main Hospital Inpatient Unit	3- Link Clinical- Administration-	4- South Addition - Inpatient Unit
<b>GROSS SQUARE FOOTAGE</b>		<b>\$/SF</b>	56,161	8,858	20,471	2,832	24,000
<b>UniFormat</b>							
A-B Structure, Enclosure Excluded		8.37	\$ 470,000	\$ -	\$ 350,000	\$ -	\$ 120,000
C 10 Interior Construction		37.57	\$ 2,110,000	\$ 420,000	\$ 300,000	\$ -	\$ 1,390,000
C 20 Stairs		-	\$ -	\$ -	\$ -	\$ -	\$ -
C 30 Interior Finishes		24.93	\$ 1,400,000	\$ 310,000	\$ 107,500	\$ 99,100	\$ 882,000
D 10 Conveying		-	\$ -	\$ -	\$ -	\$ -	\$ -
D 20 Plumbing		14.60	\$ 820,000	\$ 170,000	\$ 51,200	\$ 53,100	\$ 546,000
D 30 HVAC		28.13	\$ 1,580,000	\$ 260,000	\$ 307,100	\$ 20,500	\$ 996,000
D 40 Fire Protection		2.67	\$ 150,000	\$ 30,000	\$ 20,500	\$ 8,400	\$ 94,800
D 50 Electrical		19.59	\$ 1,100,000	\$ 240,000	\$ 30,700	\$ 45,300	\$ 780,000
D 60 Communications		6.59	\$ 370,000	\$ 90,000	\$ 20,500	\$ 29,700	\$ 234,000
D 70 Safety and Security		2.31	\$ 130,000	\$ 20,000	\$ 10,200	\$ 5,700	\$ 96,000
E10 Equipment		8.90	\$ 500,000	\$ 40,000	\$ 150,000	\$ 10,000	\$ 300,000
E20 Furnishings		11.04	\$ 620,000	\$ 90,000	\$ 20,500	\$ 28,300	\$ 480,000
F10 Hazardous Material Remediation		4.45	\$ 250,000	\$ 50,000	\$ 100,000	\$ 99,100	\$ -
F20 Demolition and Patching		21.72	\$ 1,220,000	\$ 220,000	\$ 204,700	\$ 70,800	\$ 720,000
Phasing Premium-Staging, Elevator Mat, Moving, Temp. Shutdowns & ICRA		32.23	\$ 1,810,000	\$ 290,000	\$ 453,800	\$ 71,100	\$ 995,600
<b>SUB TOTAL-COST W/O MARK-UPS</b>		<b>\$ 249.46</b>	<b>\$ 14,010,000</b>	<b>\$ 2,230,000</b>	<b>\$ 3,610,000</b>	<b>\$ 540,000</b>	<b>\$ 7,630,000</b>
DIV.1-CM INDIR. (LIABILITY 1.5%+BOND 1.5% GEN REQUIREMENTS 5% +GEN CONDITIONS 7%)	15.0%	37.21	\$ 2,090,000	\$ 330,000	\$ 540,000	\$ 80,000	\$ 1,140,000
<b>SUBTOTAL</b>		286.68	\$ 16,100,000	\$ 2,560,000	\$ 4,150,000	\$ 620,000	\$ 8,770,000
<b>CM.OVERHEAD &amp; PROFIT-3.0%</b>	3.0%	8.55	\$ 480,000	\$ 80,000	\$ 120,000	\$ 20,000	\$ 260,000
<b>SUBTOTAL</b>		295.22	\$ 16,580,000	\$ 2,640,000	\$ 4,270,000	\$ 640,000	\$ 9,030,000
<b>DESIGN, ESTIMATING &amp; CONSTRUCTION CONTINGENCY</b>	15.0%	44.34	\$ 2,490,000	\$ 400,000	\$ 640,000	\$ 100,000	\$ 1,350,000
<b>SUBTOTAL-CONSTRUCTION COST IN TODAY'S \$</b>		<b>\$ 339.56</b>	<b>\$ 19,070,000</b>	<b>\$ 3,040,000</b>	<b>\$ 4,910,000</b>	<b>\$ 740,000</b>	<b>\$ 10,380,000</b>
<b>ESCALATION TO MID PT.CONSTRUCTION-3 Yrs</b>	12.0%	40.78	\$ 2,290,000	\$ 360,000	\$ 590,000	\$ 90,000	\$ 1,250,000
<b>TOTAL CONSTRUCTION COST</b>		<b>\$ 380.34</b>	<b>\$ 21,360,000</b>	<b>\$ 3,399,000</b>	<b>\$ 5,500,000</b>	<b>\$ 830,000</b>	<b>\$ 11,630,000</b>
<b>\$ COST/SF</b>			380.34	383.72	268.67	293.08	484.58
<b>OWNER DIRECT COSTS</b>	35.0%	133.19	\$ 7,480,000	\$ 1,190,000	\$ 1,930,000	\$ 290,000	\$ 4,070,000
<b>TOTAL PROJECT COST</b>		<b>\$ 513.52</b>	<b>\$ 28,840,000</b>	<b>\$ 4,589,000</b>	<b>\$ 7,430,000</b>	<b>\$ 1,120,000</b>	<b>\$ 15,700,000</b>
<b>\$ COST/SF</b>			513.52	518.06	362.95	395.48	654.17
<b>TOTAL PROJECT RANGE</b>		HIGH	\$ 30,300,000	LOW	\$ 27,400,000	\$ -	(1,000)

Excludes Owner Costs for Financing & Major medical Equip. Refer to detail sheets for further clarifications by program.



# Construction Cost & Project Cost Summary – Option 2 – 60 Beds

DESCRIPTION			TOTAL COSTS	1. North Clinical- Administration-	2.- Main Hospital Inpatient Unit	3. Link Clinical- Administration-	4. - South Addition - Inpatient Unit
<b>GROSS SQUARE FOOTAGE</b>		<b>\$/SF</b>	56,161	8,858	20,471	2,832	24,000
<b>UniFormat</b>							
A-B Structure. Enclosure Excluded		11.04	\$ 620,000	\$ -	\$ 500,000	\$ -	\$ 120,000
C 10 Interior Construction		52.35	\$ 2,940,000	\$ 420,000	\$ 1,130,000	\$ -	\$ 1,390,000
C 20 Stairs		-	\$ -	\$ -	\$ -	\$ -	\$ -
C 30 Interior Finishes		35.79	\$ 2,010,000	\$ 310,000	\$ 716,500	\$ 99,100	\$ 882,000
D 10 Conveying		-	\$ -	\$ -	\$ -	\$ -	\$ -
D 20 Plumbing		21.37	\$ 1,200,000	\$ 170,000	\$ 429,900	\$ 53,100	\$ 546,000
D 30 HVAC		39.53	\$ 2,220,000	\$ 260,000	\$ 941,700	\$ 20,500	\$ 996,000
D 40 Fire Protection		3.56	\$ 200,000	\$ 30,000	\$ 71,600	\$ 8,400	\$ 94,800
D 50 Electrical		28.13	\$ 1,580,000	\$ 240,000	\$ 511,800	\$ 45,300	\$ 780,000
D 60 Communications		9.62	\$ 540,000	\$ 90,000	\$ 184,200	\$ 29,700	\$ 234,000
D 70 Safety and Security		2.85	\$ 160,000	\$ 20,000	\$ 40,900	\$ 5,700	\$ 96,000
E10 Equipment		15.14	\$ 850,000	\$ 40,000	\$ 500,000	\$ 10,000	\$ 300,000
E20 Furnishings		16.20	\$ 910,000	\$ 90,000	\$ 307,100	\$ 28,300	\$ 480,000
F10 Hazardous Material Remediation		8.01	\$ 450,000	\$ 50,000	\$ 301,000	\$ 99,100	\$ -
F20 Demolition and Patching		28.85	\$ 1,620,000	\$ 220,000	\$ 614,100	\$ 70,800	\$ 720,000
Phasing Premium-Staging, Elevator Mat. Moving, Temp. Shutdowns & ICRA		44.87	\$ 2,520,000	\$ 290,000	\$ 1,159,200	\$ 71,100	\$ 995,600
<b>SUB TOTAL-COST W/O MARK-UPS</b>		<b>\$ 343.65</b>	<b>\$ 19,300,000</b>	<b>\$ 2,230,000</b>	<b>\$ 8,890,000</b>	<b>\$ 540,000</b>	<b>\$ 7,630,000</b>
DIV.1-CM INDIR. (LIABILITY 1.5%+BOND 1.5% GEN REQUIREMENTS 5% +GEN CONDITIONS 7%)	15.0%	\$ 51.28	\$ 2,880,000	\$ 330,000	\$ 1,330,000	\$ 80,000	\$ 1,140,000
<b>SUBTOTAL</b>		<b>\$ 394.94</b>	<b>\$ 22,180,000</b>	<b>\$ 2,560,000</b>	<b>\$ 10,220,000</b>	<b>\$ 620,000</b>	<b>\$ 8,770,000</b>
CM.OVERHEAD & PROFIT-3.0%	3.0%	\$ 11.93	\$ 670,000	\$ 80,000	\$ 310,000	\$ 20,000	\$ 260,000
			\$ 407	\$ 298	\$ 514	\$ 226	\$ 376
<b>SUBTOTAL</b>		<b>\$ 406.87</b>	<b>\$ 22,850,000</b>	<b>\$ 2,640,000</b>	<b>\$ 10,530,000</b>	<b>\$ 640,000</b>	<b>\$ 9,030,000</b>
DESIGN, ESTIMATING & CONSTRUCTION CONTINGENCY	15.0%	\$ 61.07	\$ 3,430,000	\$ 400,000	\$ 1,580,000	\$ 100,000	\$ 1,350,000
<b>SUBTOTAL-CONSTRUCTION COST IN TODAY'S \$</b>		<b>\$ 467.94</b>	<b>\$ 26,280,000</b>	<b>\$ 3,040,000</b>	<b>\$ 12,110,000</b>	<b>\$ 740,000</b>	<b>\$ 10,380,000</b>
ESCALATION TO MID PT.CONSTRUCTION-3 Yrs	12.0%	56.09	\$ 3,150,000	\$ 360,000	\$ 1,450,000	\$ 90,000	\$ 1,250,000
<b>TOTAL CONSTRUCTION COST</b>		<b>\$ 524.03</b>	<b>\$ 29,430,000</b>	<b>\$ 3,399,000</b>	<b>\$ 13,560,000</b>	<b>\$ 830,000</b>	<b>\$ 11,630,000</b>
<b>\$ COST/SF</b>			524.03	383.72	662.40	293.08	484.58
OWNER DIRECT COSTS	35.0%	183.40	\$ 10,300,000	\$ 1,190,000	\$ 4,750,000	\$ 290,000	\$ 4,070,000
<b>TOTAL PROJECT COST</b>		<b>\$ 707.43</b>	<b>\$ 39,730,000</b>	<b>\$ 4,589,000</b>	<b>\$ 18,310,000</b>	<b>\$ 1,120,000</b>	<b>\$ 15,700,000</b>
<b>\$ COST/SF</b>			707.43	518.06	894.44	395.48	654.17
TOTAL PROJECT RANGE		HIGH	\$ 41,700,000	LOW	\$ 37,700,000	\$ -	(11,000)

Excludes Owner Costs for Financing & Major medical Equip. Refer to detail sheets for further clarifications by program.

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## Today's Agenda

1. Executive Summary
2. Third Floor Options
  - Unit Size & Functional Adjacencies
3. Engineering Summary
4. Concept Cost Options
- 5. Next Steps**
  - User Meeting #5: March 12, 2018**



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## How can the physical design of the environment help boost HCAHPS scores?

Hospitals that are safe, aesthetically pleasing and comfortable are likely to be rated high by patients, potentially influencing hospital choice, market share, and bottom-line results.

Architects, facility planners, and designers have a responsibility to understand the impact that the hospital environment can have on patients, families, and caregivers. We can respond through designing spaces that can improve outcomes.

# How can the physical design of the environment help boost HCAHPS scores?

## Concepts For Increasing Bedside Presence

### Caregiver Processes

- Patient Precautions Monitor
- Caregiver Zone
- Nurse Server
- Medication Process
- Teaching Patient & Family

## Concepts For Effective Caregiving

- Adequate caregiver space and supplies at bedside
- Specific computer orientation within the patient room
- Dedicated family/caregiver zones

## Concepts For Easing Personal Care

- Larger Patient Bathroom
- Wide and/or or double doors
- Commode chair and bedpan storage
- Lifts in bariatric bathrooms

## Concepts For Hygiene in the Patient Room:

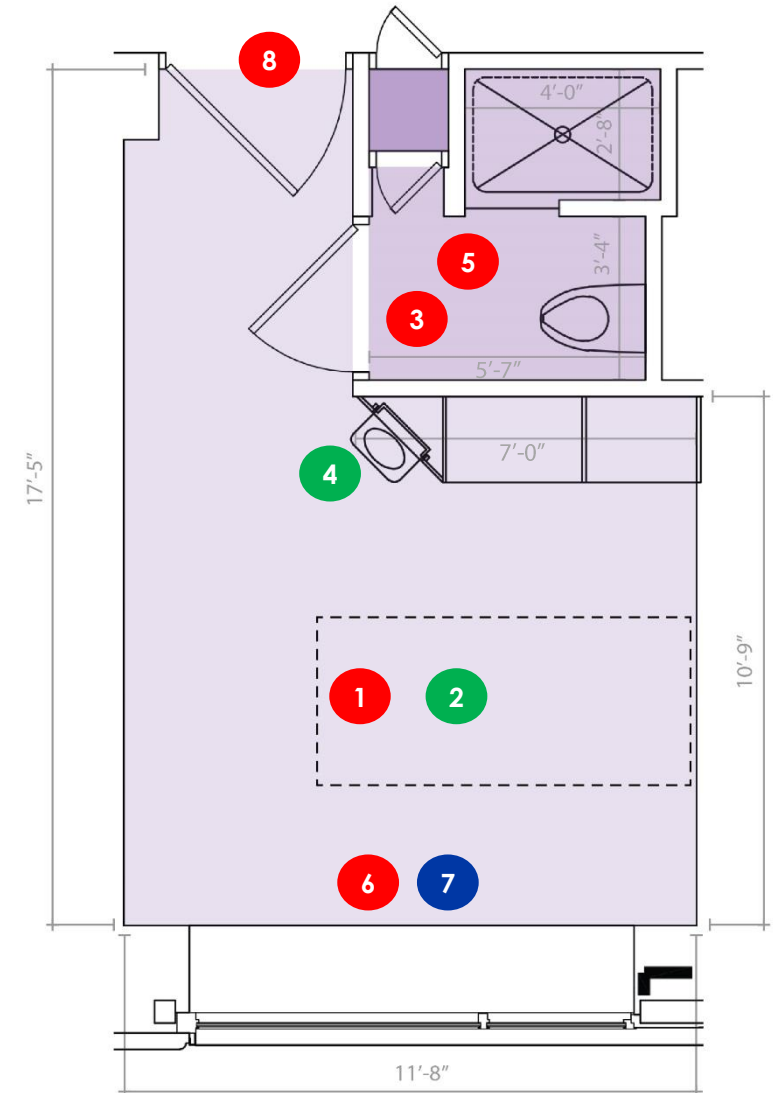
- De-institutionalizing appearance
- Storage place for every item
- Trash bins concealed

# Existing 3E & 3S Wing Patient Room - Acute Care

2014 (FGI) Facility Guidelines Institute

- 1 • Minimum clear area 120 sf, Minimum clearance of 3 feet between sides and foot of bed or any other fixed obstruction; minimum room size 12' x 13'
- 2 • For renovation to receive AHJ approval the deviation from requirement is 100 sf minimum clear area – existing 105 sf clear area
- 3 • Handwashing station must be provided in patient room in addition to patient toilet room
- 4 • For renovation; sink should be provided in patient room unless it is technically unfeasible shall be provided in the patient room
- 5 • Patient toilet room shall be equipped with a toilet and a handwashing sink and access to bathing
- 6 • Family zone shall be provided to accommodate visitation
- 7 • Patient / family centered room – minimum clear area of 250 st with minimum clear area dimension of 15 feet plus additional 30 sf per family member – existing 105 sf clear area
- 8 • Existing Door opening width is XX inches

KEY: # Adequate # Deficiency # PSHMC Info Required



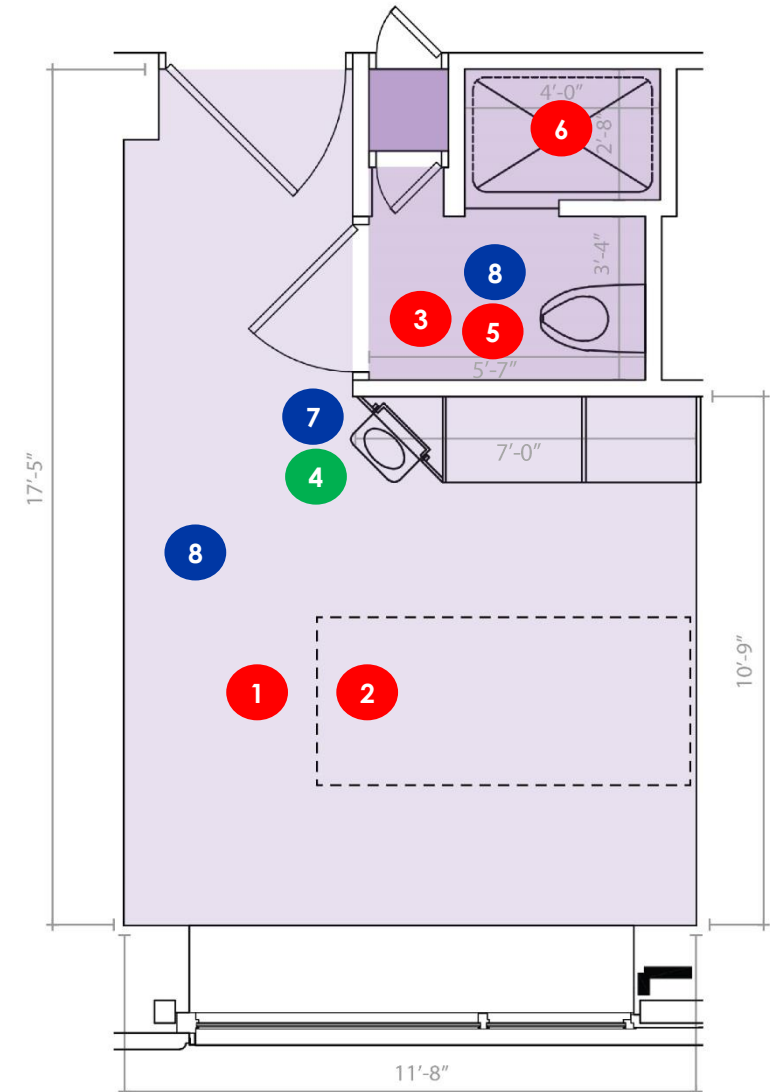
# Existing 3E & 3S Wing

## Proposed Patient Room - Bariatric

### 2014 (FGI) Facility Guidelines Institute

KEY: # Adequate # Deficiency # PSHMC Info Required

- 1 • Minimum clear area 200 sf, Minimum clearance of 5 feet between sides and foot of bed or any other fixed obstruction
- 2 • Deviation from this requirement permitted if approved by AHJ; Minimum clear area of requirement is 150 sf minimum clear area – existing 105 sf clear area
- 3 • Handwashing station must be provided in patient room in addition to patient toilet room
- 4 • For renovation; sink should be provided in patient room unless it is technically unfeasible shall be provided in the patient room
- 5 • Patient Toilet Room - Mounted 24 inches from the finished wall to centerline of toilet; 44 inches of clear space on opposite side of the toilet for wheelchair access; additional grab bar requirements
- 6 • Patient Bathing Facilities (must have access to) - Shower stall minimum of 4 feet by 6 feet; Grab bars that are capable of supporting 1,000 lbs; handheld spray nozzles mounted on side wall
- 7 • Identify minimum weight requirements; weight determines the safety and support requirements for plumbing fixtures, grab bars, patient lift equipment, furniture, etc.
- 8 • Downward state force required for hand washing station to accommodate the maximum patient weight identified



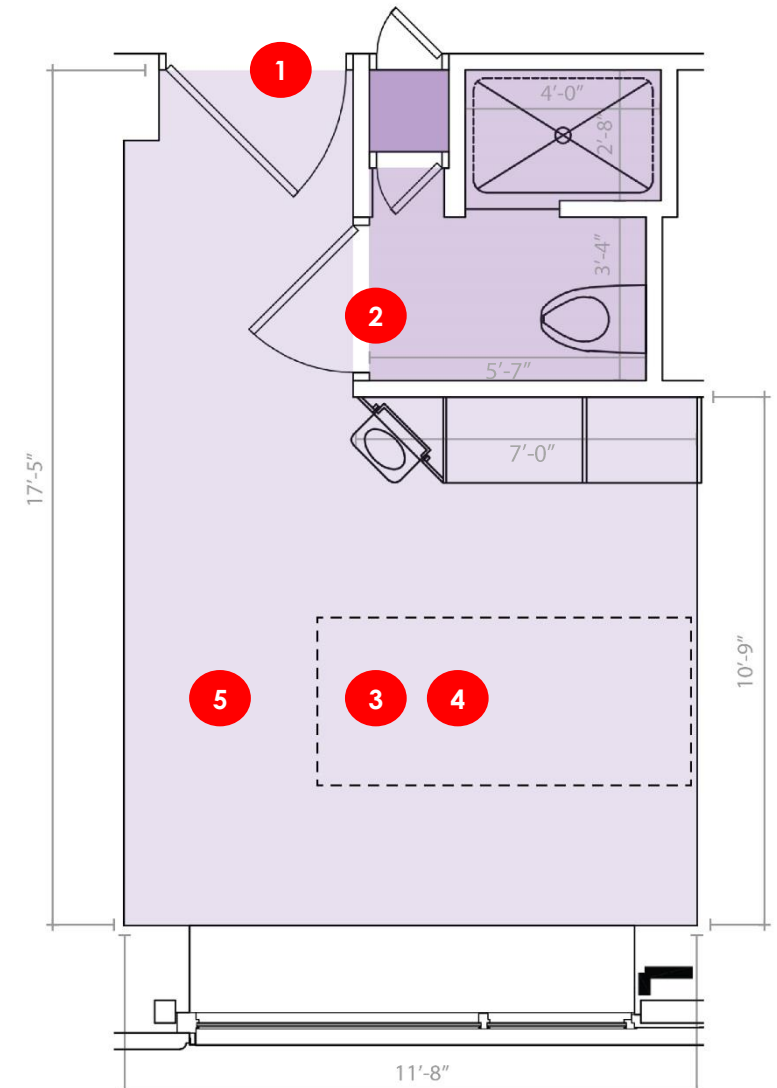
# Existing 3E & 3S Wings

## Proposed Patient Room - Bariatric

### 2014 (FGI) Facility Guidelines Institute

KEY: # Adequate # Deficiency # PSHMC Info Required

- 1 • Door opening to bariatric patient rooms shall have a minimum clear width of 54 inches and clear height of 83.5 inches. Existing door width is XX inches
- 2 • Door opening to bariatric toilet room shall have a minimum clear width of 42 inches and clear height of 83.5 inches
- 3 • In new construction all patient rooms shall be provided with a built-in mechanical lift system design to maximum patient weight identified
- 4 • In renovations, a minimum of 10% of patient rooms on bariatric unit shall be provided with a built-in mechanical lift system
- 5 • Practice – acute care patient are currently located in ICU rooms / beds due to rooms not sized to accommodate bariatric patients size and revenue hit
- Standard bariatric Dimensions
  - Bariatric Bed 40 inches, can be expanded to 50 inches
  - Bariatric stretcher width – 30 inches
  - Bariatric patient chair – 30 inch seat width
  - Bariatric family/visitor chair – up to 40"





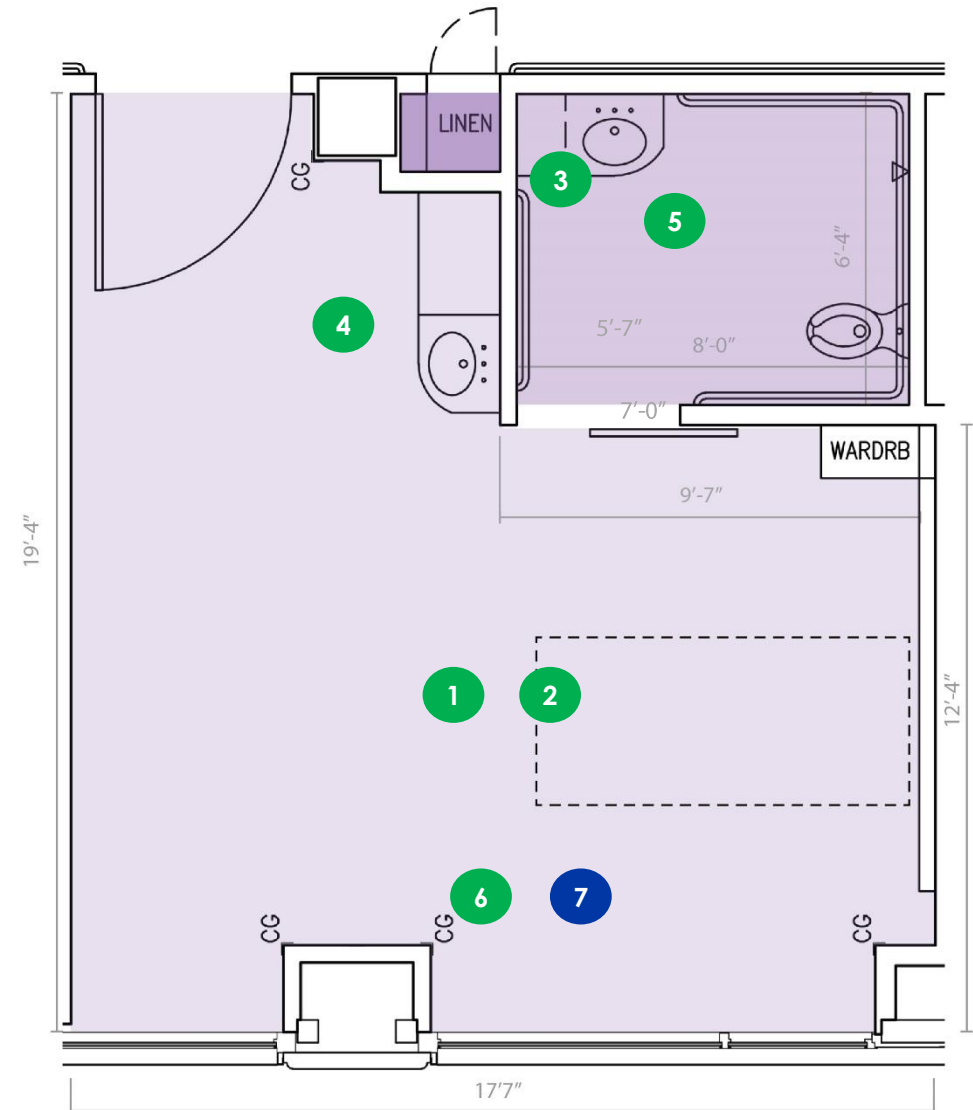
# Existing 3W Wing Patient Room

## Proposed for 3E, 3S & 3W Patient Room - Acute Care

2014 (FGI) Facility Guidelines Institute

- 1 • Minimum clear area 120 sf, Minimum clearance of 3 feet between sides and foot of bed or any other fixed obstruction; minimum room size 12' x 13'
- 2 • For renovation to receive AHJ approval the deviation from requirement is 100 sf minimum clear area – existing XXX sf clear area
- 3 • Handwashing station must be provided in patient room in addition to patient toilet room
- 4 • For renovation; sink should be provided in patient room unless it is technically unfeasible shall be provided in the patient room
- 5 • Patient toilet room shall be equipped with a toilet and a handwashing sink and access to bathing
- 6 • Family zone shall be provided to accommodate visitation
- 7 • Patient / family centered room – minimum clear area of 250 st with minimum clear area dimension of 15 feet plus additional 30 sf per family member – existing 105 sf clear area

KEY: # Adequate # Deficiency # PSHMC Info Required

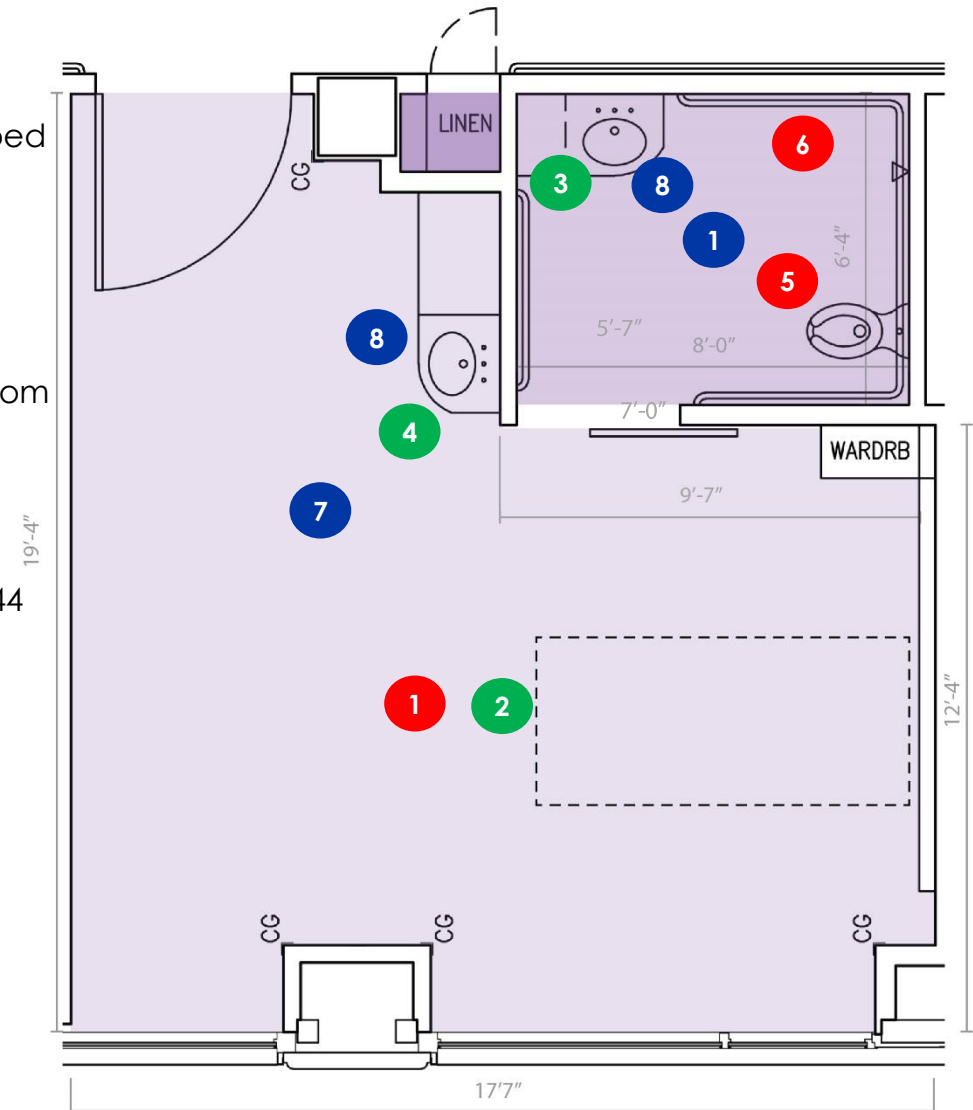


# Existing 3W Wing Patient Room Proposed for 3E, 3S & 3W Patient Room - Bariatric

## 2014 (FGI) Facility Guidelines Institute

- 1 • Minimum clear area 200 sf, Minimum clearance of 5 feet between sides and foot of bed or any other fixed obstruction
- 2 • Deviation from this requirement permitted if approved by AHJ; Minimum clear area of requirement is 150 sf minimum clear area – existing XXX sf clear area
- 3 • Handwashing station must be provided in patient room in addition to patient toilet room
- 4 • For renovation; sink should be provided in patient room unless it is technically unfeasible shall be provided in the patient room
- 5 • Patient Toilet Room - Mounted 24 inches from the finished wall to centerline of toilet; 44 inches of clear space on opposite side of the toilet for wheelchair access; additional grab bar requirements
- 6 • Patient Bathing Facilities (must have access to) - Shower stall minimum of 4 feet by 6 feet; Grab bars that are capable of supporting 1,000 lbs; handheld spray nozzles mounted on side wall
- 7 • Identify minimum weight requirements; weight determines the safety and support requirements for plumbing fixtures, grab bars, patient lift equipment, furniture, etc.
- 8 • Downward state force required for hand washing station to accommodate the maximum patient weight identified

KEY: # Adequate # Deficiency # PSHMC Info Required

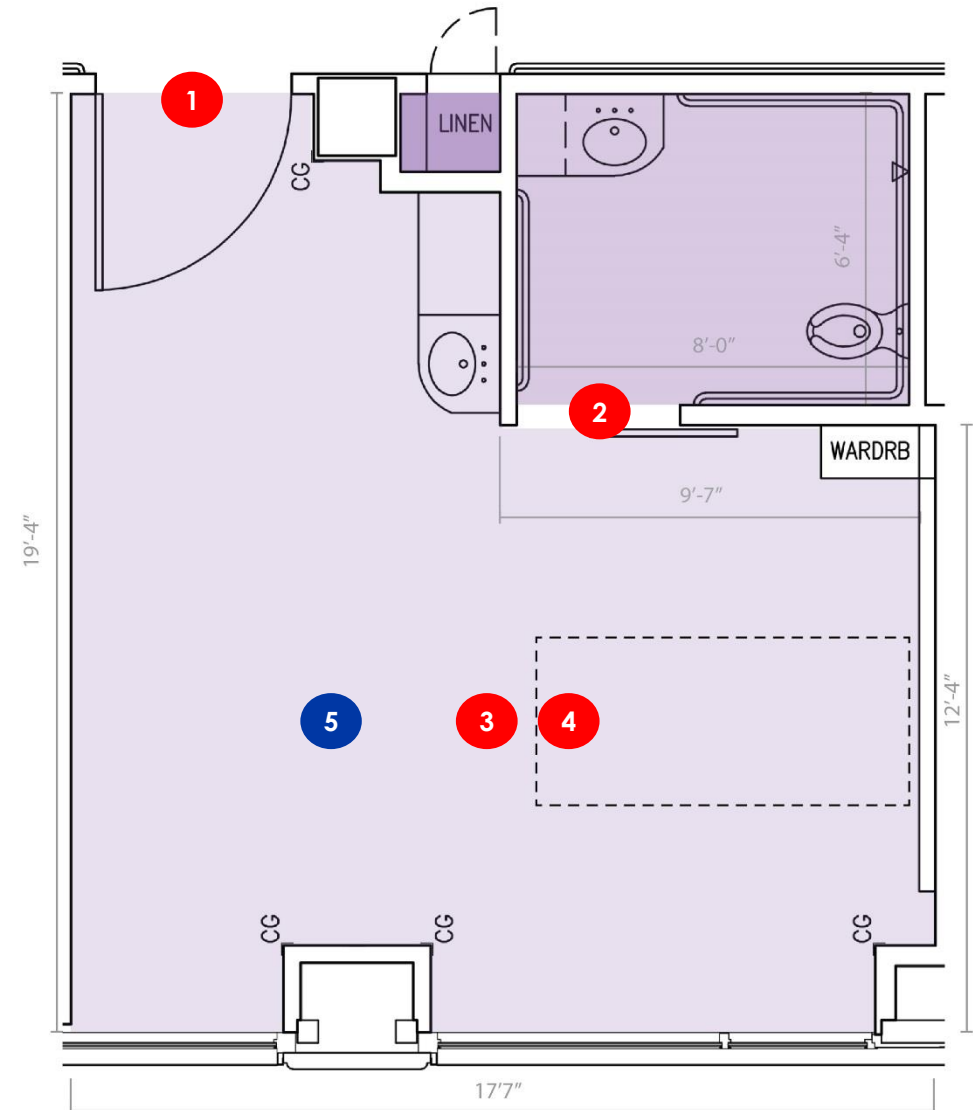


# Existing 3W Wing Patient Room Proposed for 3E, 3S & 3W Patient Room - Bariatric

2014 (FGI) Facility Guidelines Institute

- 1 • Door opening to bariatric patient rooms shall have a minimum clear width of 54 inches and clear height of 83.5 inches. Existing door opening is XX inches clear.
  - 2 • Door opening to bariatric toilet room shall have a minimum clear width of 42 inches and clear height of 83.5 inches. Existing door opening is XX inches clear.
  - 3 • In new construction all patient rooms shall be provided with a built-in mechanical lift system design to maximum patient weight identified
  - 4 • In renovations, a minimum of 10% of patient rooms on bariatric unit shall be provided with a built-in mechanical lift system
  - 5 • Practice – acute care patient are currently located in ICU rooms / beds due to rooms not sized to accommodate bariatric patients size and revenue hit
- Standard bariatric Dimensions
    - Bariatric Bed 40 inches, can be expanded to 50 inches
    - Bariatric stretcher width – 30 inches
    - Bariatric patient chair – 30 inch seat width
    - Bariatric family/visitor chair – up to 40"

KEY: # Adequate # Deficiency # PSHMC Info Required

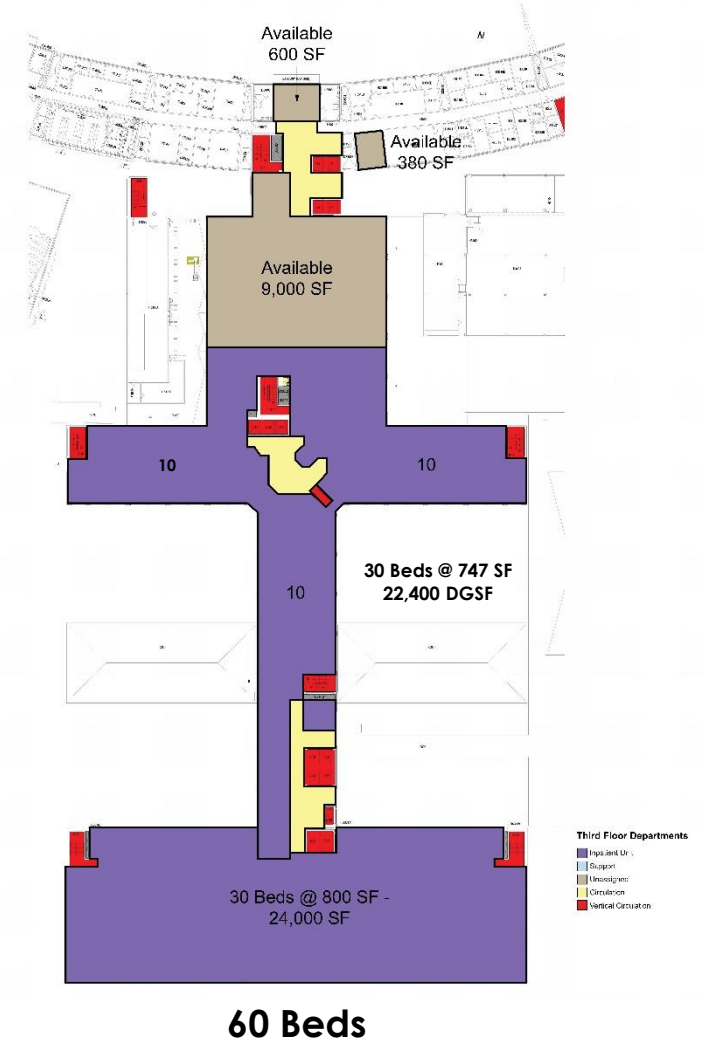
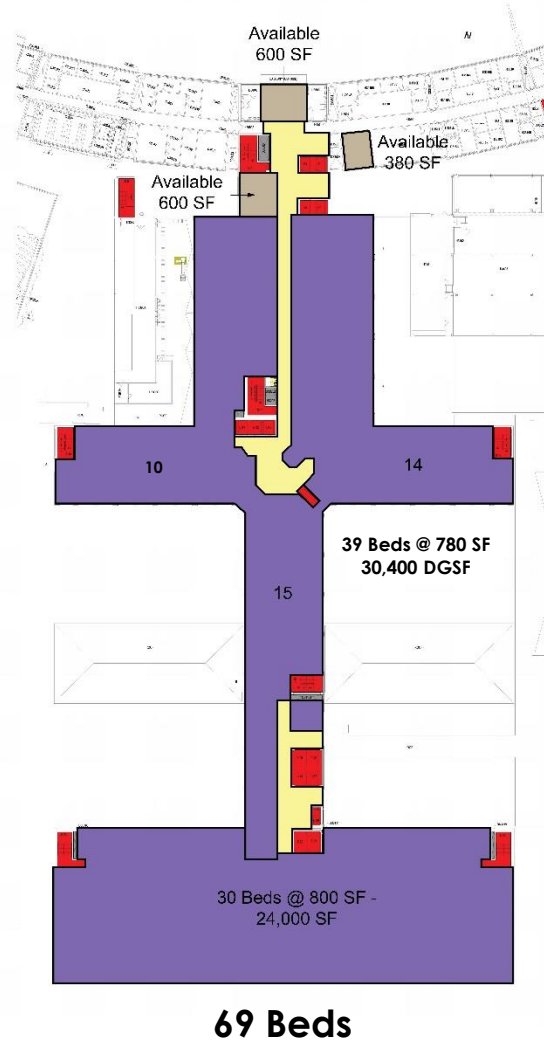
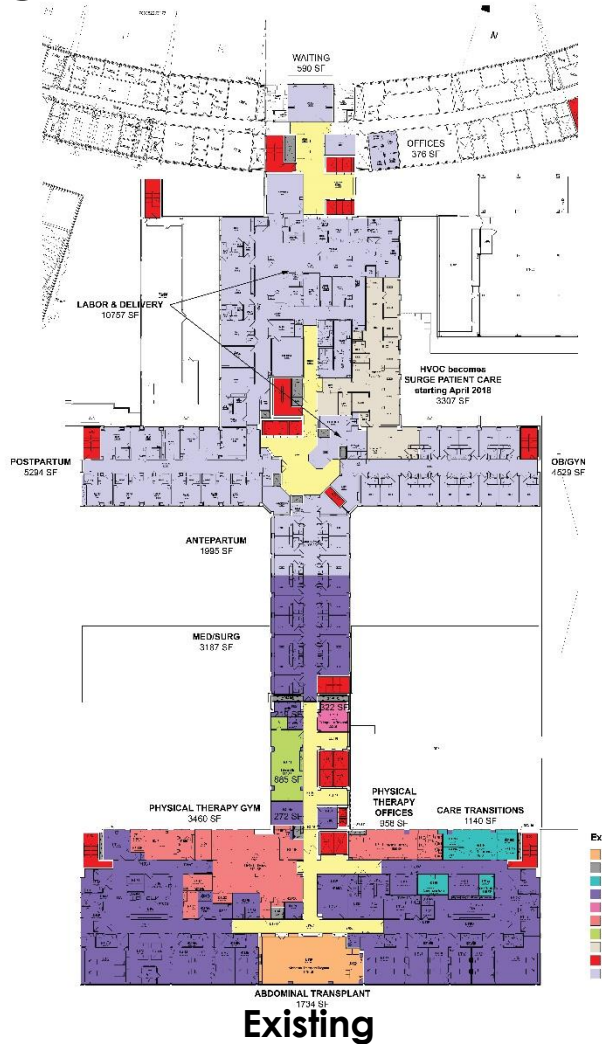


# Third Floor Preliminary Program Summary

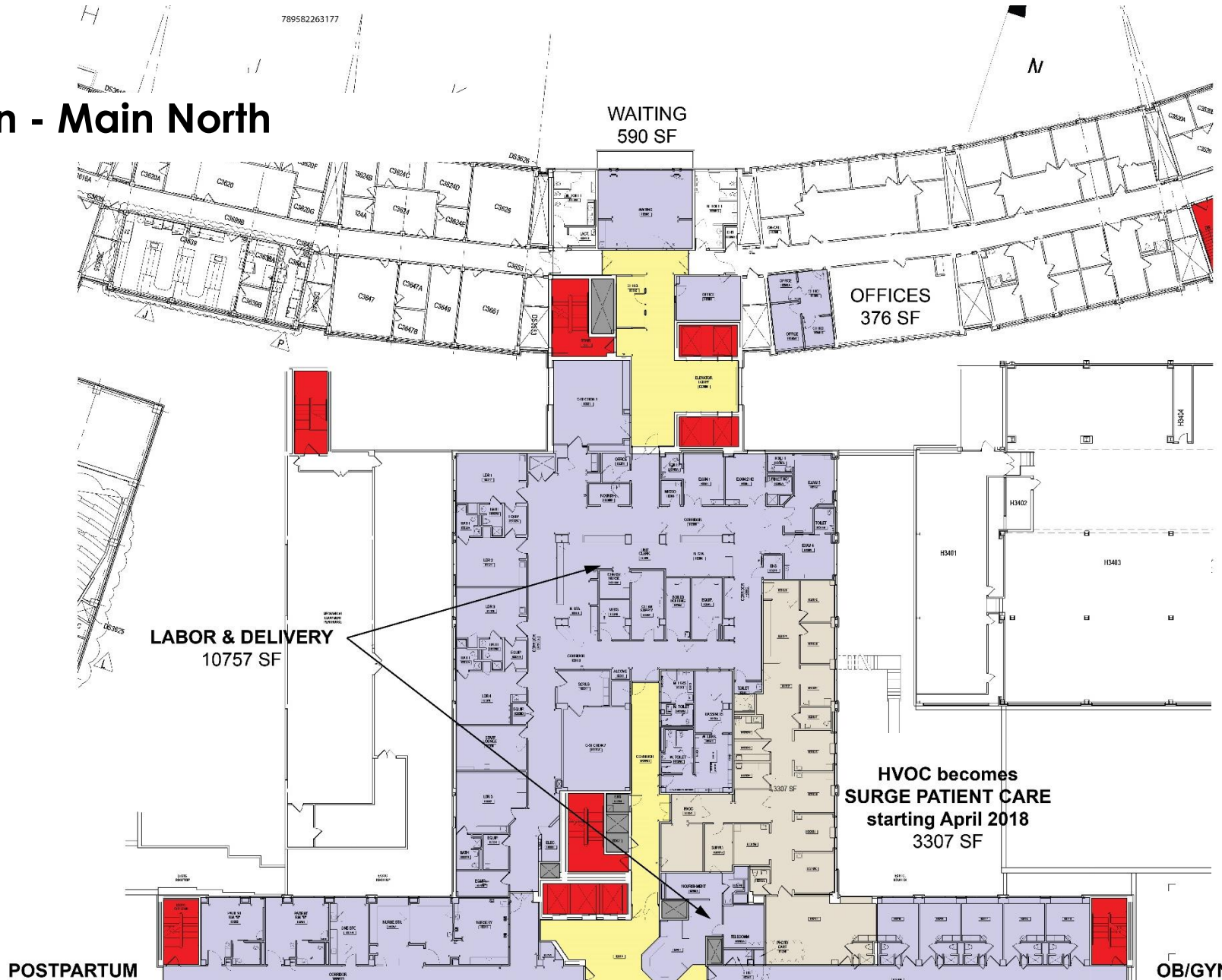
Department / Service Area	Existing DGSF	Proposed DGSF	DGSF Delta	Option 1 DGSF	Option 2 DGSF	Comments	3rd FLR MP Key Rooms
<b>MAIN HOSPITAL INPATIENT UNIT</b>							
Existing	24,631	20,339	-4,293			666 Existing DGSF per Bed	37
Inpatient Unit - Orthopedic & Bariatric				20,471		525 to proposed 700 DGSF per Bed	39
Inpatient Unit - Orthopedic & Bariatric					20,471	682 to proposed 700 DGSF per Bed	30
<b>TOTAL DGSF</b>	<b>24,631</b>	<b>20,339</b>	<b>-4,293</b>	<b>20,471</b>	<b>20,471</b>		
<b>SOUTH ADDITION INPATIENT UNIT</b>							
Inpatient Unit - Intermediate Care	16,264	22,793	6,529			542 to proposed 800 DGSF per Bed	30
				24,000		800 to proposed 800 DGSF per Bed	30
					24,000	800 to proposed 800 DGSF per Bed	30
<b>TOTAL DGSF</b>	<b>16,264</b>	<b>22,793</b>	<b>6,529</b>	<b>24,000</b>	<b>24,000</b>		
	<b>36</b>					452 Existing DGSF per Licensed Bed	36
<b>CLINICAL OPERATIONS / ADMINISTRATIVE</b>							
Physical Therapy (Gym and Offices)	4,418	6,587	2,169	4,970	4,970	Gym 2,978 SF, Offices 1,992 SF	
Social Work / Care Transitions	1,035	1,482	447	1,482	1,482		
Orthopedic Resident Program	322	819	497	823	823	Assumes BMR space is not included.	
Abdominal Transplant Program	1,734	2,405	671	2,406	2,406		
Telehealth Monitoring Program	885	780	-105	885	885		
Centralized Support Space	0	1,000	1,000	1,124	1,124	Conference, Break / Locker Areas	
Vacated HVOU	2,917	0	-2,917	0	0		
<b>TOTAL DGSF</b>	<b>11,311</b>	<b>13,073</b>	<b>1,762</b>	<b>11,690</b>	<b>11,690</b>		
Total DGSF	52,206	56,204	3,998	56,161	56,161		
Programming Contingency (5%)							
<b>TOTAL DGSF</b>	<b>52,206</b>	<b>56,204</b>	<b>3,998</b>	<b>56,161</b>	<b>56,161</b>		

# Third Floor Plan

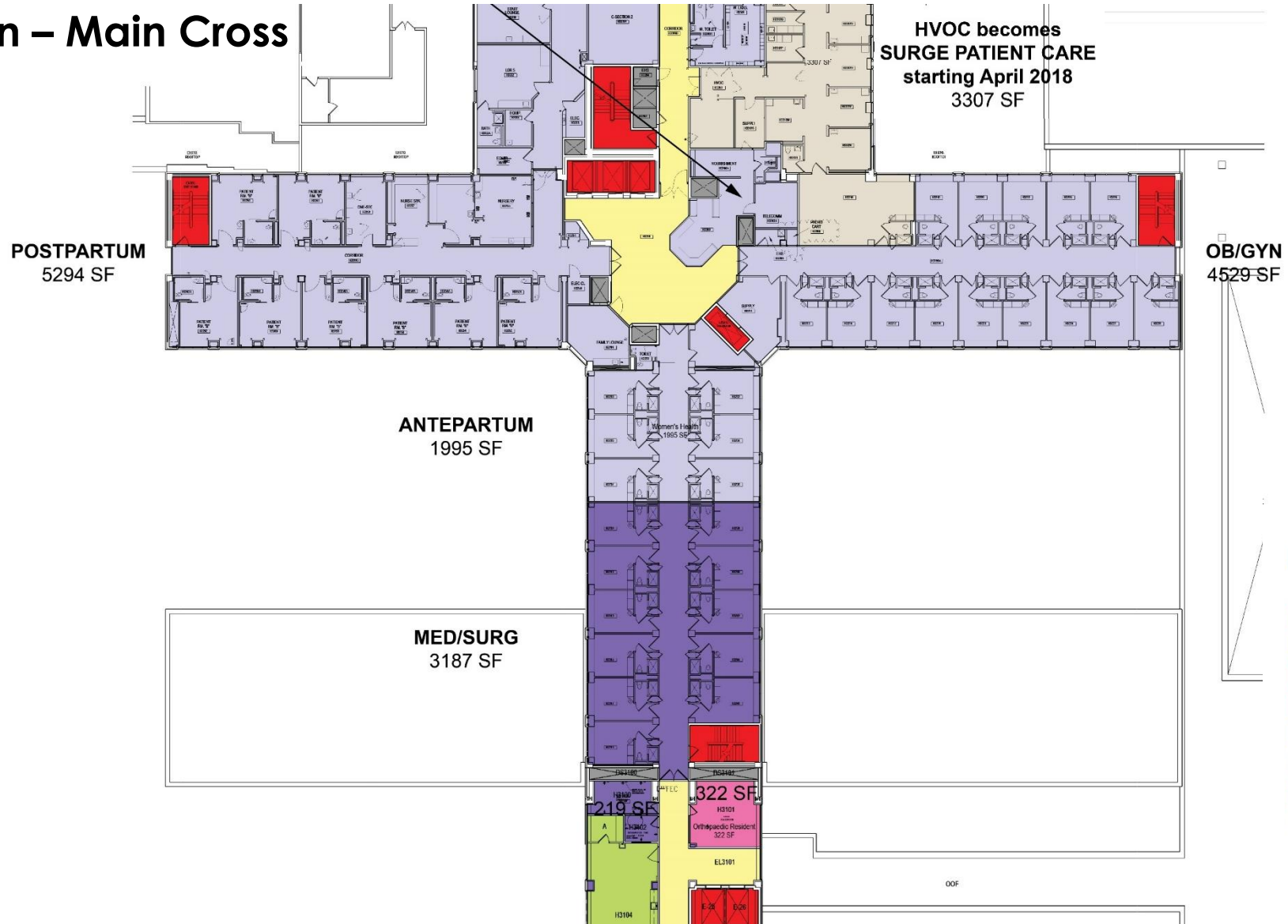
## Existing to Potential New Configurations



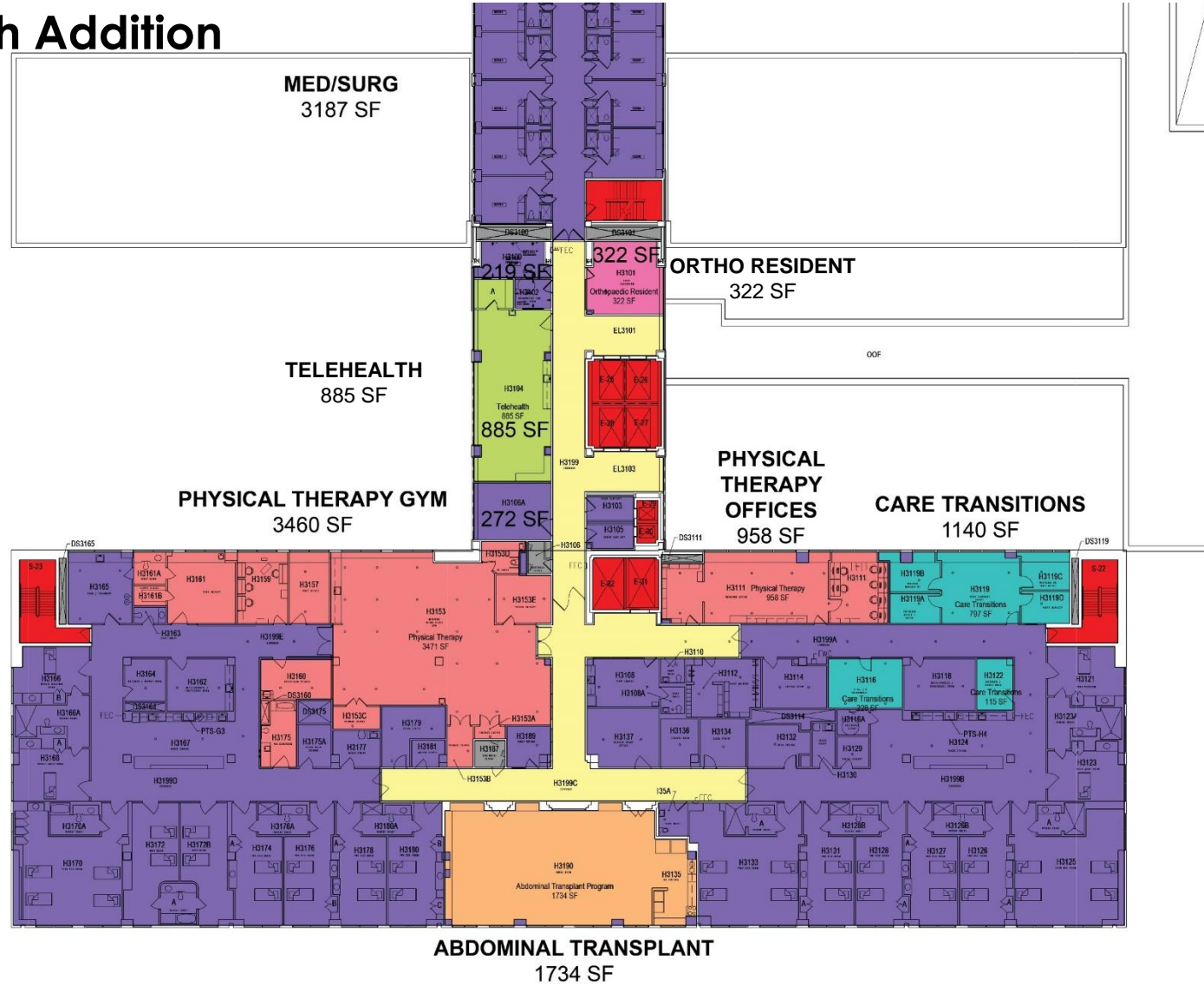
# Third Floor Plan - Main North Existing



# Third Floor Plan – Main Cross Existing



# Third Floor Plan - South Addition Existing

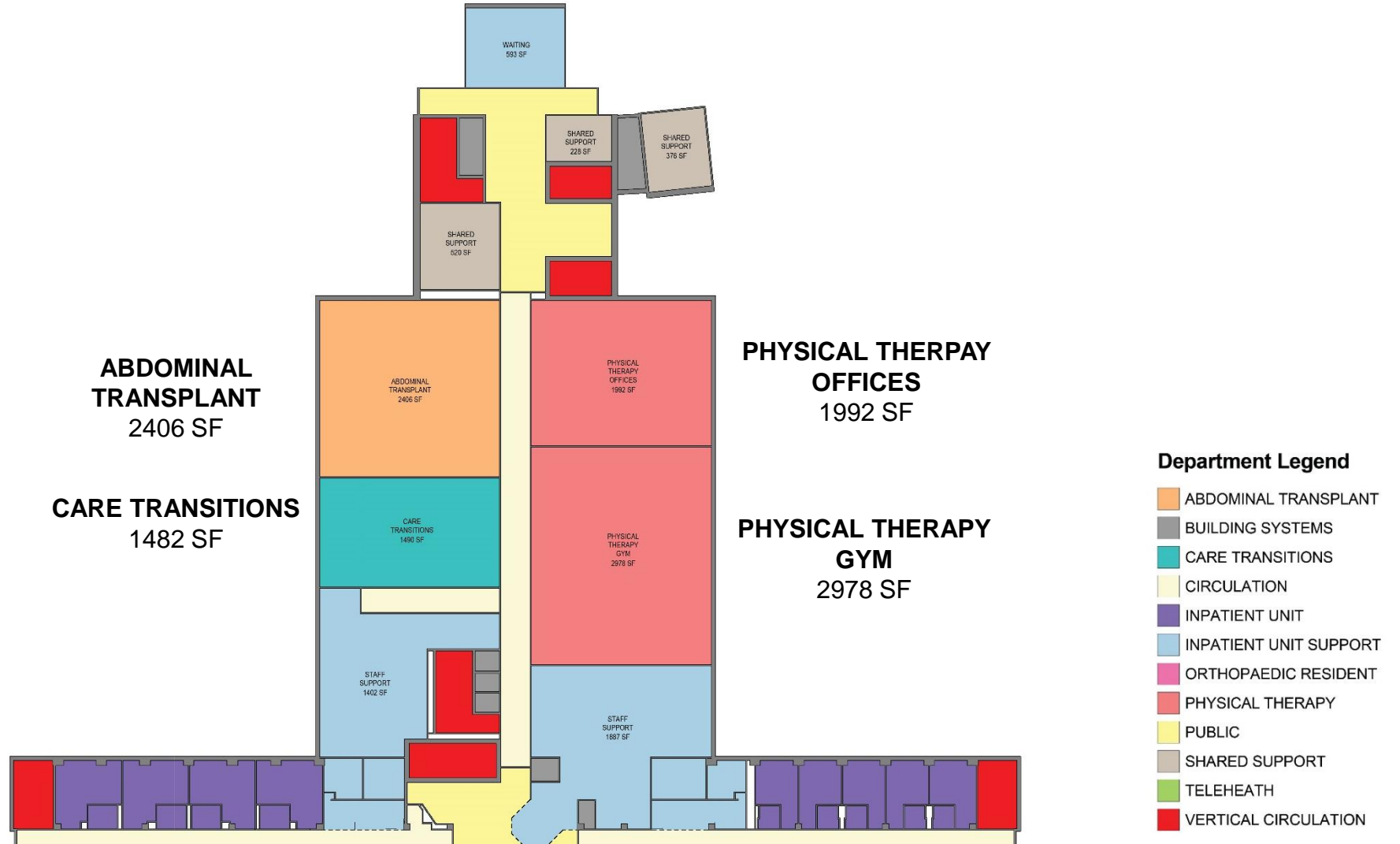


## Existing Third Floor Departments

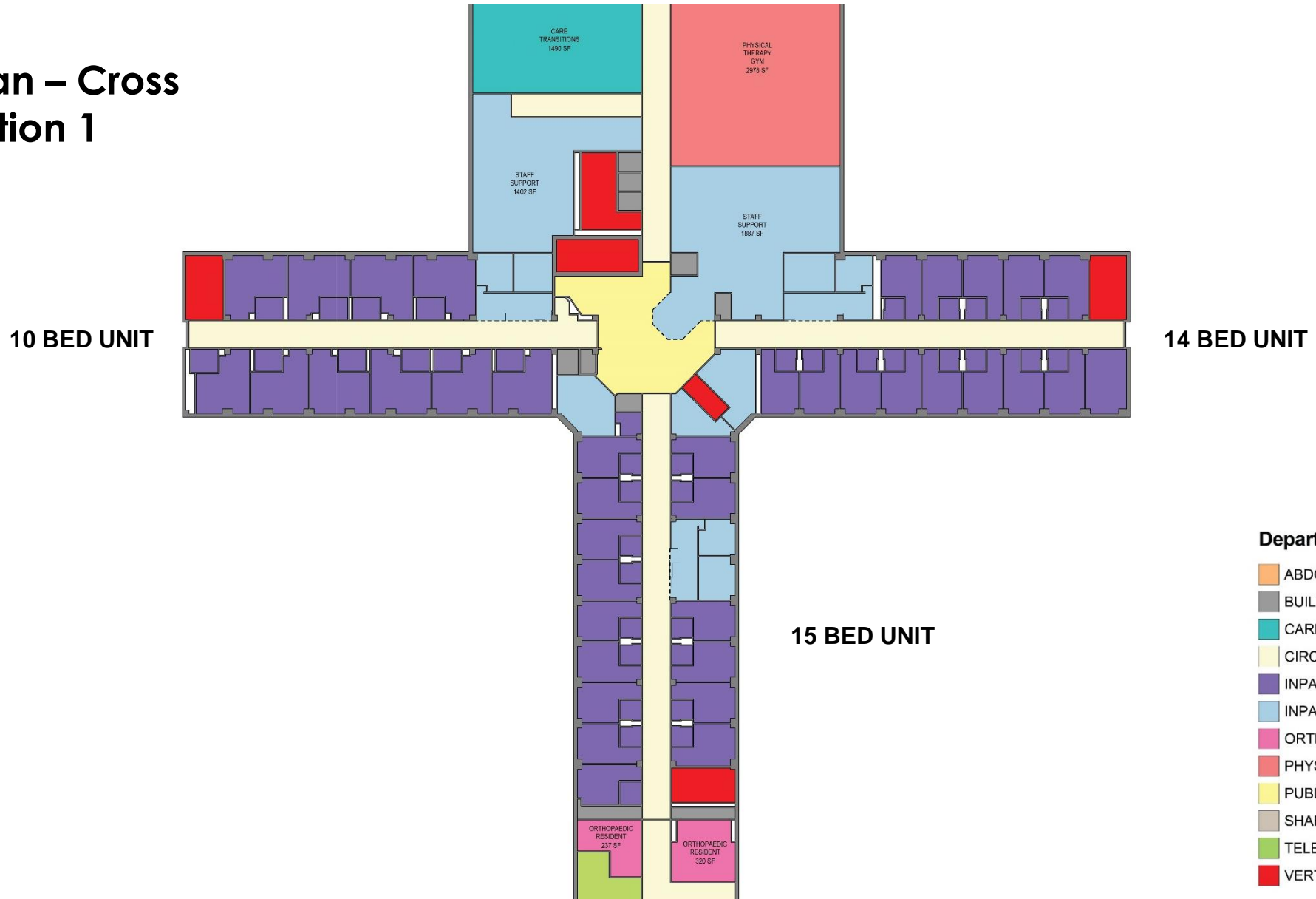
- Abdominal Transplant Program
- Building Systems
- Care Transitions
- Inpatient Unit
- Orthopaedic Resident
- Physical Therapy
- Telehealth
- Vacant
- Vertical Circulation
- Women's Health



# Third Floor Plan - Main 69 Beds - Option 1

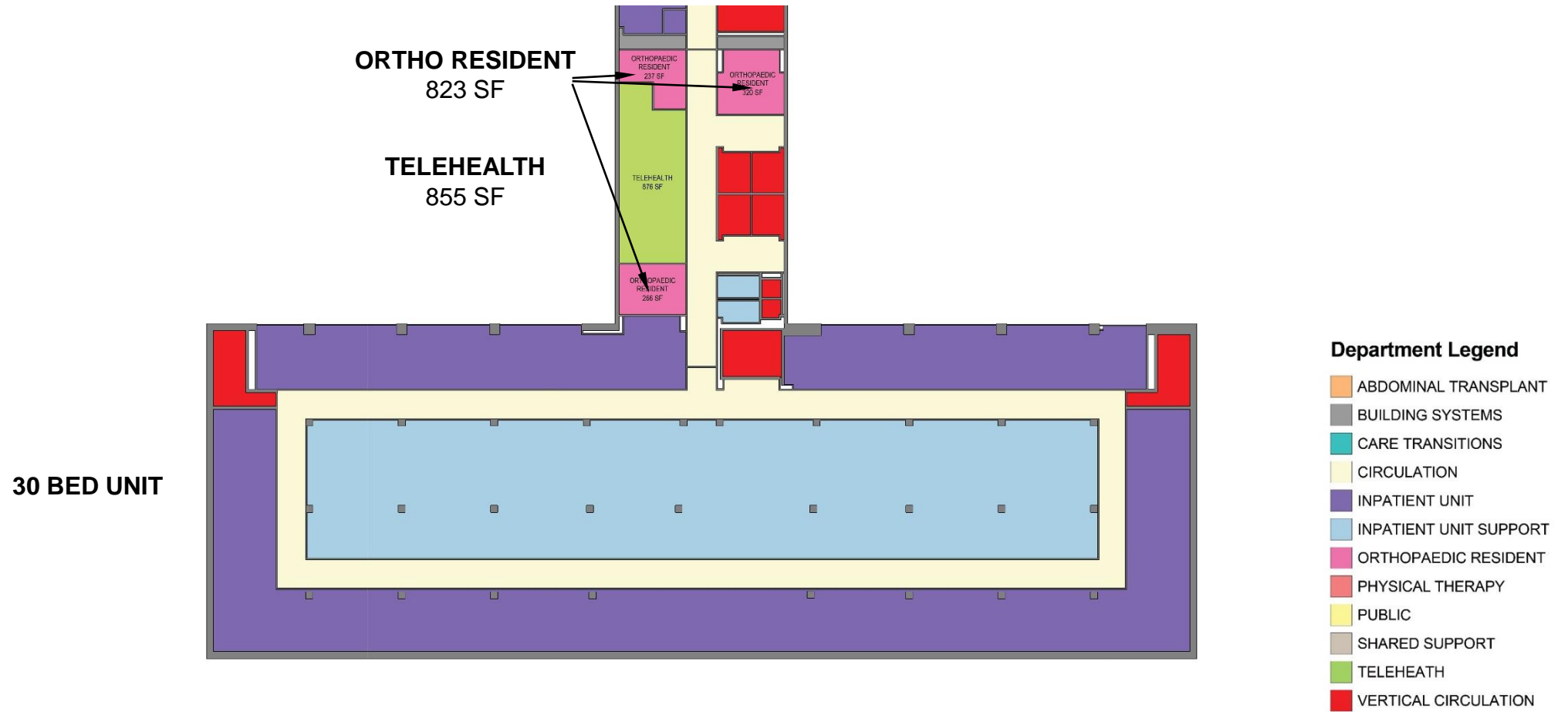


# Third Floor Plan – Cross 69 Beds - Option 1

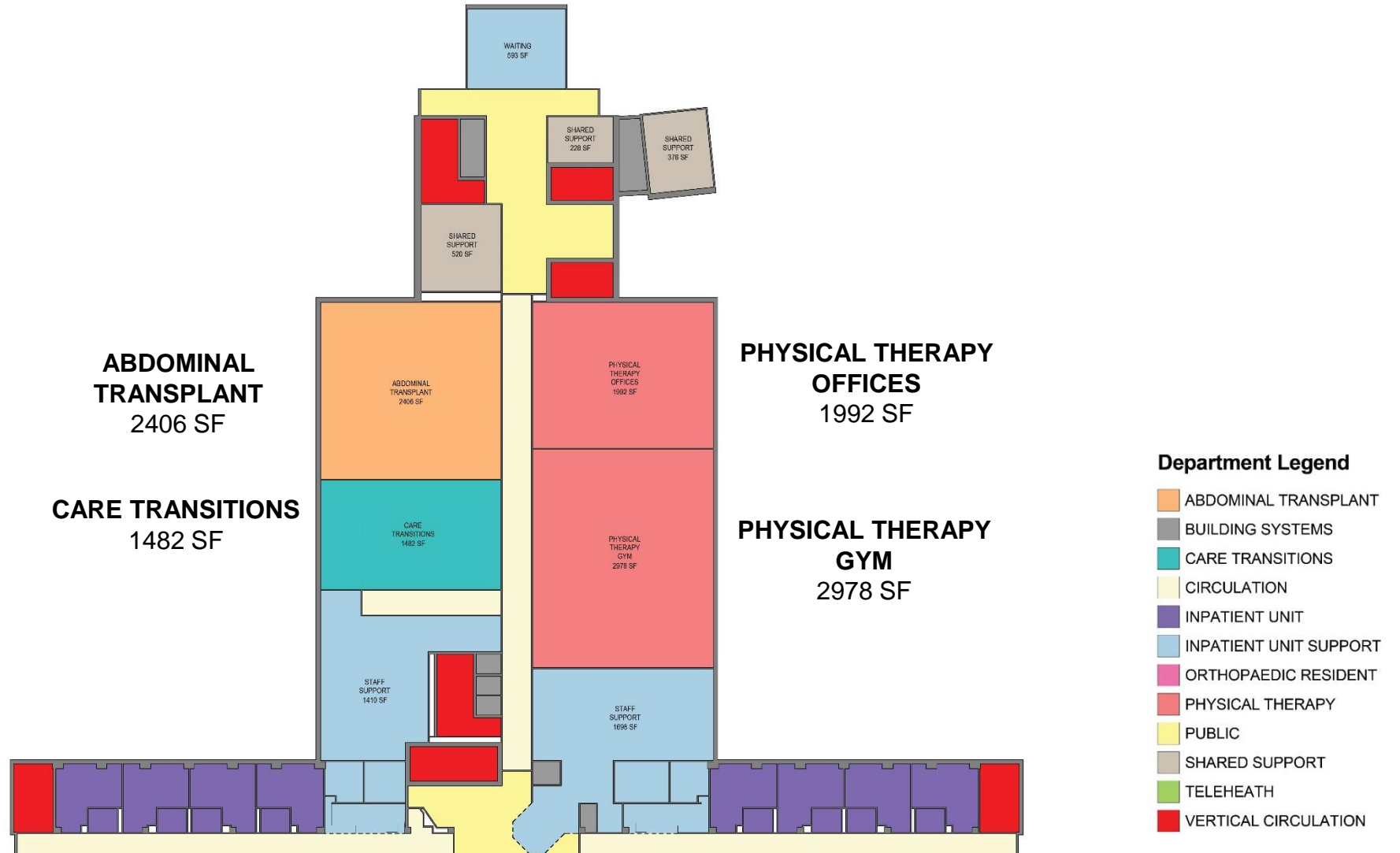


# Third Floor Plan – South Addition

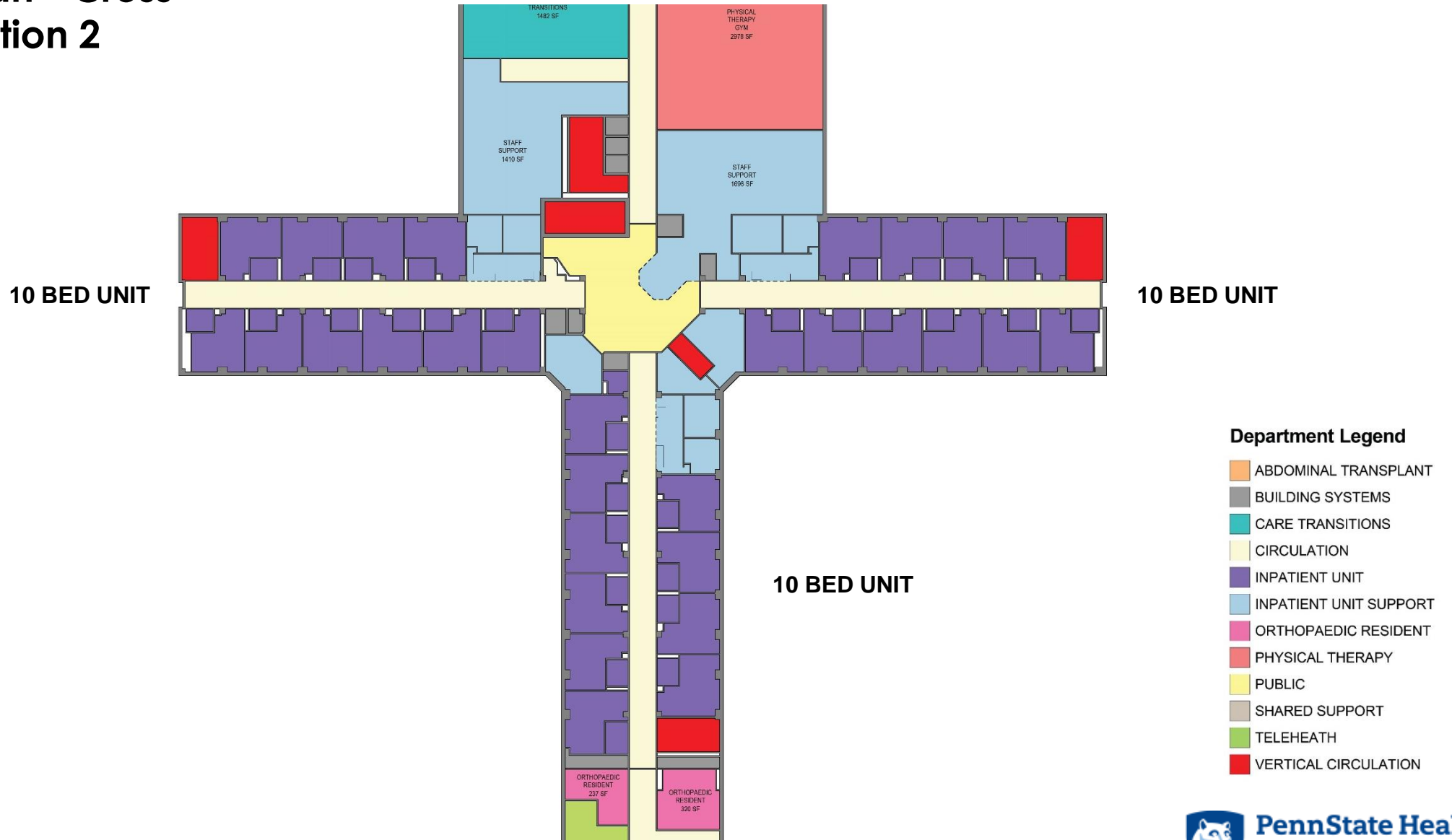
## 69 Beds – Option 1



# Third Floor Plan - Main 60 Beds – Option 2



# Third Floor Plan - Cross 60 Beds – Option 2

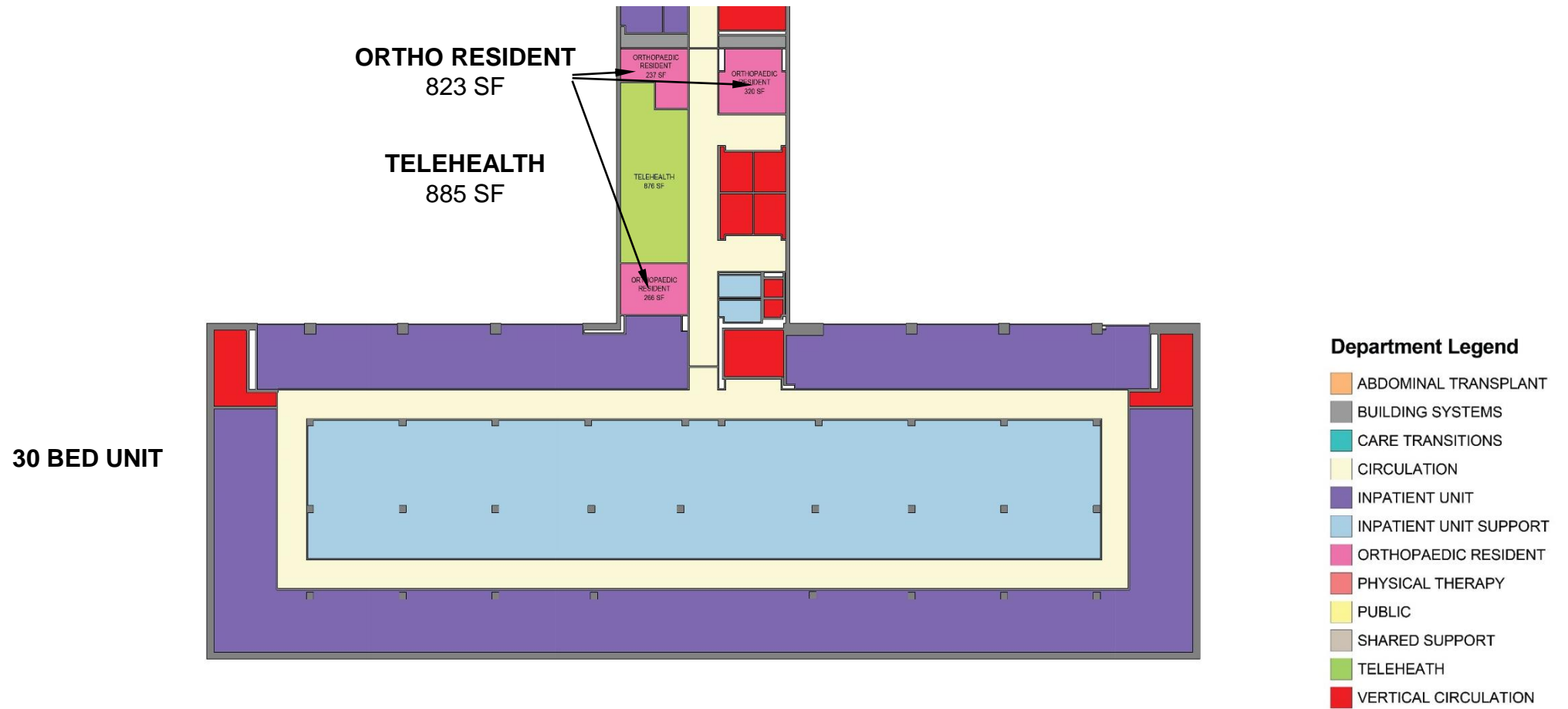


### Department Legend

- ABDOMINAL TRANSPLANT
- BUILDING SYSTEMS
- CARE TRANSITIONS
- CIRCULATION
- INPATIENT UNIT
- INPATIENT UNIT SUPPORT
- ORTHOPAEDIC RESIDENT
- PHYSICAL THERAPY
- PUBLIC
- SHARED SUPPORT
- TELEHEALTH
- VERTICAL CIRCULATION

# Third Floor Plan – South Addition

## 60 Beds – Option 2



## Third Floor Plan - Main North Maximizing Beds

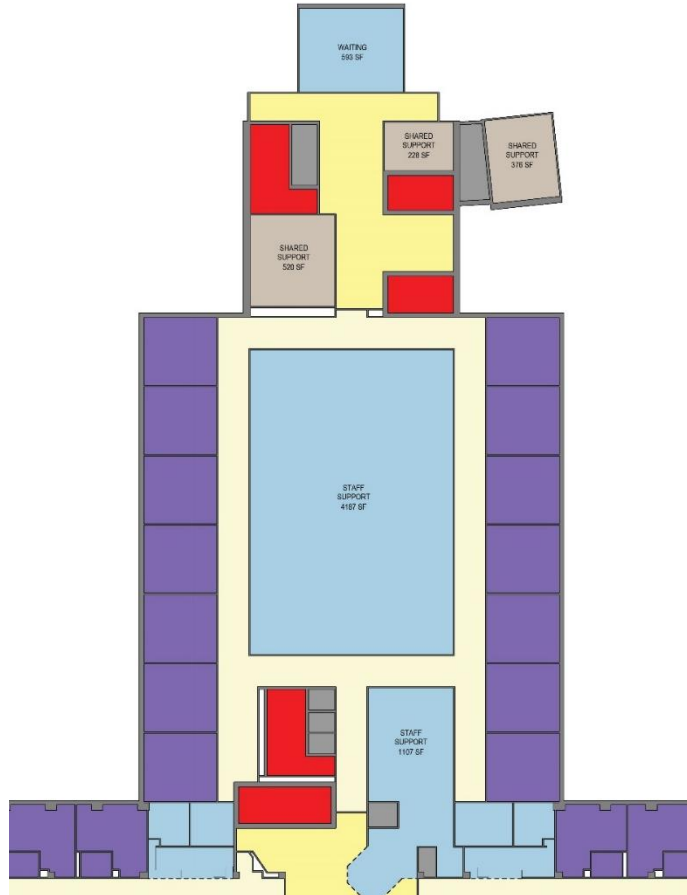
### Pros

- Additional 14 beds (74 - 83 beds)

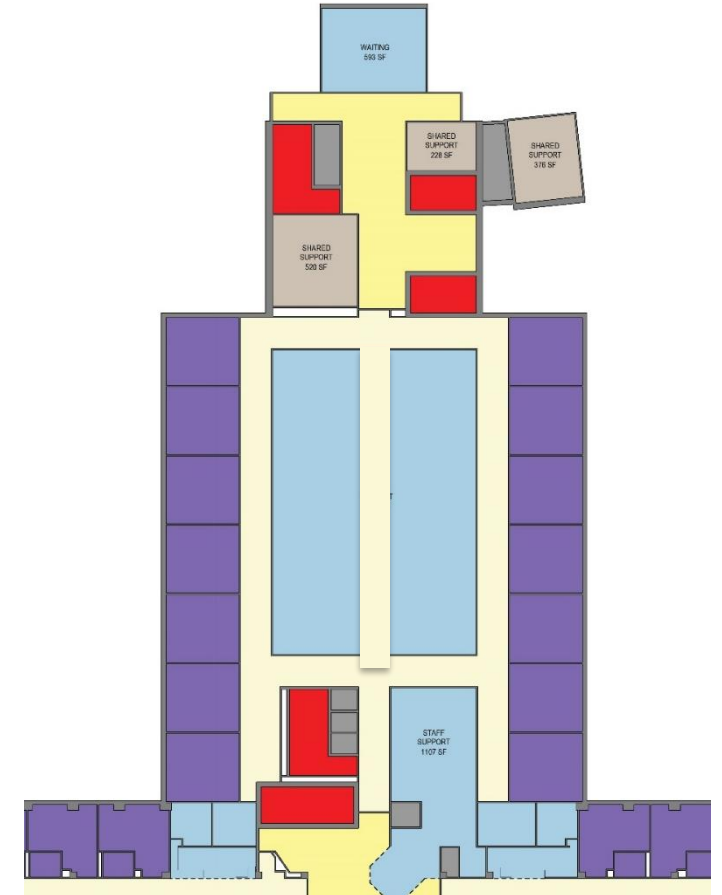
### Cons

- Unit size does not align with RN: patient ratio and model of care
- Low DGSF per Bed
- Main / public circulation through unit or past patient room
- 11,690 DGSF Program requirements do not have a home
- Excess circulation

### 14 Bed Unit



### Two 7 Bed Units



# Clinical & Administrative Support Evaluation Summary

KEY:		Adequate	Minor Deficiency	Moderate Deficiency	Major Deficiency				
CRITERIA		FUNCTION			SPACE		OVERALL RATING	COMMENTS	
LOCATION:	Is the relationship to outside entrances & functionally	LOCATION	LAYOUT / CIRCULATION	OPERATIONS	TECHNOLOGY	QUANTITY			IMAGE / QUALITY
LAYOUT/ CIRCULATION:	How does the physical arrangement within the department accommodate patients, staff, &								
OPERATIONS:	Are there operational processes and procedures that								
TECHNOLOGY:	Are systems and equipment up-to-date and enhance								
QUANTITY:	How much does the amount of existing space/square footage (SF) compare to that of								
IMAGE/ QUALITY:	Do aesthetics, image, lighting, HVAC, & furnishings								
ALL OPTIONS									
Physical Therapy - Gym									
Physical Therapy Offices									
Social Work / Care Transitions									
Orthopedic Resident Program									
Abdominal Transplant Program									
Telehealth Monitoring Program									
Centralized Support Space									

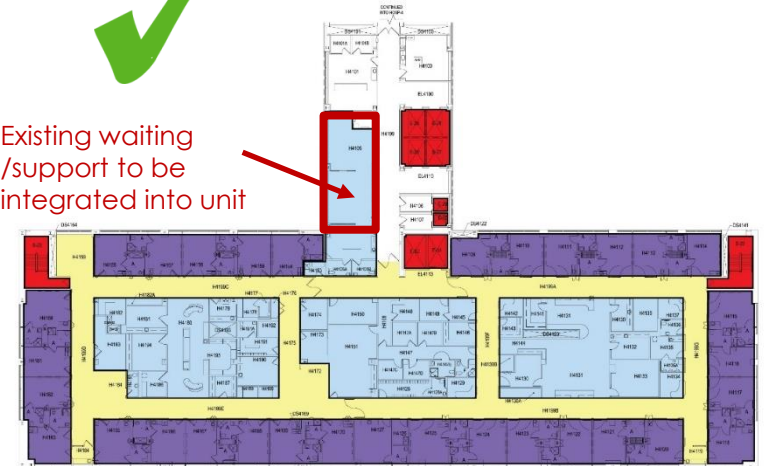


## Third Floor - South Addition Unit Planning Assumptions

- Fourth Floor Model of care Selected
- Re-plan core based on updated programming assumptions
- Add reception and integrate waiting areas
- Plan for headwall instead of boom or power column
- Maintain decentralized work cubicles
- Keep decentralized nurse stations
- Integrate security

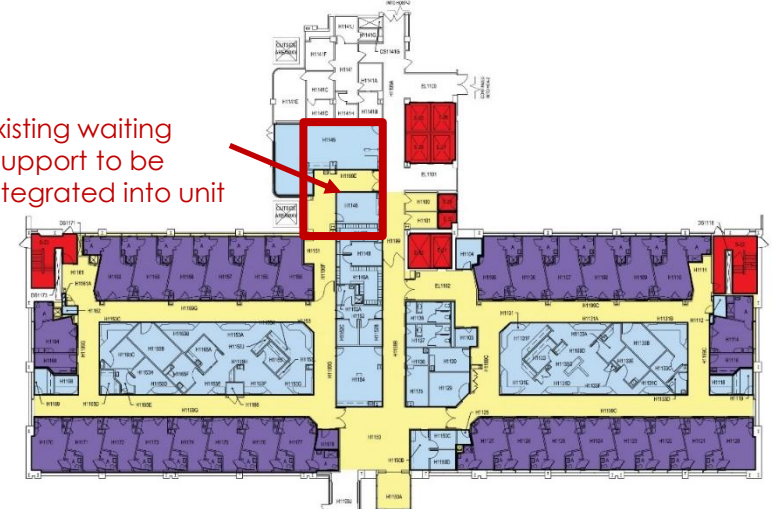
✓ **FOURTH FLOOR PLAN**

Existing waiting  
/support to be  
integrated into unit



**FIRST FLOOR PLAN**

Existing waiting  
/support to be  
integrated into unit



## Third Floor Plan Infrastructure – Inpatient Units

- PSHMC to determine major renovation versus unit/room reuse during this process
- Budget for renovation is currently prepared as if PSHMC is keeping Third Floor South and East as small rooms
- From recent PSHMC projects the renovation of a typical patient room of @ 250 sf is estimated as \$500,000 per room or @ \$2,000 / sf.
  - MEP cost associated with renovation of 3E and 3S is above that of a typical room renovation, due to the need for infrastructure upgrades outside the area of renovation.
- 3E and 3S will require new roof mounted AHUs located on second floor roof and would come in from roof - ceiling height impact to 7'-4" within 3' of exterior wall
- 3W and 3N MEP systems have been fully upgraded. Any renovation will only require reconfiguration of distribution components (i.e. gym)

# Third Floor Plan - Existing Electrical & Telecom Conditions Assessment Summary

KEY:			Adequate	Minor Deficiency	Moderate Deficiency	Major Deficiency				
Area	Original Construct Date	Renovation Date	Existing Electrical Distribution	Normal Power	Generator Power	Fire Alarm	Lighting	Nurse Call / Code Blue	Public Address / Paging	Telecom
Crescent North Area	1970	2016	Distribution recently updated							
Main Hospital North area	1970	2016	Distribution recently updated	Fed from new NW roof main distribution	Fed from new NW roof main distribution					
Main Hospital 3W Wing	1970	2016	Distribution recently updated	Fed from new NW roof main distribution	Fed from new NW roof main distribution					
Main Hospital 3E and 3S Wings	1970	No renovations	Original distribution from basement level	Original vintage fed from basement substation	Original vintage from basement distribution / limited critical power; however adequate for current services.		Fluorescent sources not yet changed to LED.			
South Addition all areas	1991	No significant renovations	Original distribution from basement level			Needs EVAC update.	Fluorescent sources not yet changed to LED			New data room recommended.

# Third Floor Plan – Option 1

## Electrical & Telecom Conditions Assessment Summary

KEY:			Adequate	Minor Deficiency	Moderate Deficiency	Major Deficiency				
Area	Original Construct Date	Renovation Date	Existing Electrical Distribution	Normal Power	Generator Power	Fire Alarm	Lighting	Nurse Call / Code Blue	Public Address / Paging	Telecom
Crescent North Area	1970	2016	Distribution recently updated	Reconfigure existing circuits	Reconfigure existing circuits	Rework existing	Rework existing	N/A	Rework existing	Rework existing
Main Hospital North area	1970	2016	Distribution recently updated	Reconfigure existing branch circuits.	Reconfigure existing branch circuits.	Updated Notifier with Voice EVAC - adjust as necessary.	Existing LED luminaires to be reused where possible.	Rework existing Rauland-Borg Responder 5 including door entry workflow stations.	Rework existing.	Rework with Cat 6 and PSH digital TV to core data room to remain.
Main Hospital 3W Wing	1970	2016	Distribution recently updated	Reconfigure existing branch circuits.	Reconfigure existing branch circuits.	Updated Notifier with Voice EVAC - adjust as necessary.	Existing LED luminaires to be reused where possible.	Rework existing Rauland-Borg Responder 5 including door entry workflow stations.	Rework existing.	Rework with Cat 6 and PSH digital TV to core data room to remain.
Main Hospital 3E and 3S Wings	1970	No renovations	Original distribution from basement level	Leave existing though 'tired'	Leave existing though 'tired'	Leave existing	Leave existing	Leave existing	Leave existing	Leave existing
South Addition all areas	1991	No significant renovations	Original distribution from basement level	Original Eaton elec. Distribution should be adequate for reuse but nearing end of life.	Extend life safety. Anticipate new critical feeders to basement MDP's for additional capacity.	Needs EVAC update - verify if in PSHMC plans/budget to update?	Older T8 luminaires to be replaced with LED's. Beds to have dimming control via nurse call handset	Rework existing Rauland-Borg Responder 5 including door entry workflow stations.	Rework existing.	Rework with Cat 6 and PSH digital TV - data room required.

# Third Floor Plan – Option 2

## Electrical & Telecom Conditions Assessment Summary

KEY:				Adequate		Minor Deficiency		Moderate Deficiency		Major Deficiency
Area	Original Construct Date	Renovation Date	Existing Electrical Distribution	Normal Power	Generator Power	Fire Alarm	Lighting	Nurse Call / Code Blue	Public Address / Paging	Telecom
Crescent North Area	1970	2016	Distribution recently updated	Reconfigure existing circuits	Reconfigure existing circuits	Rework existing	Rework existing	N/A	Rework existing	Rework existing
Main Hospital North area	1970	2016	Distribution recently updated	Reconfigure existing branch circuits.	Reconfigure existing branch circuits.	Updated Notifier with Voice EVAC - adjust as necessary.	Existing LED luminaires to be reused where possible.	Rework existing Rauland-Borg Responder 5 including door entry workflow stations.	Rework existing.	Rework with Cat 6 and PSH digital TV to core data room to remain.
Main Hospital 3W Wing	1970	2016	Distribution recently updated	Reconfigure existing branch circuits.	Reconfigure existing branch circuits.	Updated Notifier with Voice EVAC - adjust as necessary.	Existing LED luminaires to be reused where possible.	Rework existing Rauland-Borg Responder 5 including door entry workflow stations.	Rework existing.	Rework with Cat 6 and PSH digital TV to core data room to remain.
Main Hospital 3E and 3S Wings	1970	No renovations	Original distribution from basement level	Extend feeders from 3W to new wing electric rooms in 3E and 3S. ASBESTOS IMPACT	Extend feeders from 3W to new wing electric rooms in 3E and 3S. ASBESTOS IMPACT	Updated Notifier with Voice EVAC - adjust as necessary. ASBESTOS IMPACT	Older T8 luminaires to be replaced with LED's. Beds to have dimming control via nurse call handset ASBESTOS IMPACT	Rework existing Rauland-Borg Responder 5 including door entry workflow stations. ASBESTOS IMPACT	Rework existing. ASBESTOS IMPACT	Rework with Cat 6 and PSH digital TV to core data room to remain. ASBESTOS IMPACT
South Addition all areas	1991	No significant renovations	Original distribution from basement level	Original Eaton elec. Distribution should be adequate for reuse but nearing end of life.	Extend life safety. Anticipate new critical feeders to basement MDP's for additional capacity.	Needs EVAC update - verify if in PSHMC plans/budget to update?	Older T8 luminaires to be replaced with LED's. Beds to have dimming control via nurse call handset	Rework existing Rauland-Borg Responder 5 including door entry workflow stations.	Rework existing.	Rework with Cat 6 and PSH digital TV - data room required.

# Third Floor Plan - Existing Mechanical, Plumbing & Fire Protection Conditions Assessment Summary

Area	Original Construct Date	Renovation Date	Existing HVAC System Type	AHU Location	HVAC Piping and Ductwork Distribution	Sprinklered	Plumbing	Med Gas
Crescent North area	1970	2016	All air VAV/HW reheat	Existing AC-33 on 2nd flr				
Main Hospital North area	1970	2016	All air VAV/HW reheat	<u>West side:</u> AC-45 on 2nd flr. <u>East side:</u> AC-141 on roof				
Main Hospital 3W Wing	1970	2016	All air VAV/HW reheat	AC-144 in 2nd flr. MER				
Main Hospital 3E and 3S Wings	1970	No renovations	Perimeter induction units with corridor ventilation supply air	<u>East wing:</u> new AC-142 on adjacent 2nd flr. Roof <u>South wing:</u> new AC unit(s) on adjacent 2nd flr. roofs				
South Addition all areas	1991	No significant renovations	All air VAV/HW reheat	AC-93 in penthouse AC-82 on 5th flr. Verify - ACs 100, 101, 102 location.				

# Third Floor Plan – Option 1

## Mechanical, Plumbing & Fire Protection Conditions Assessment Summary

KEY:		Adequate		Minor Deficiency		Moderate Deficiency		Major Deficiency
Area	Original Construct Date	Renovation Date	Existing HVAC System Type	AHU Location	HVAC Piping and Ductwork Distribution scope	Sprinklered	Plumbing Scope	Med Gas Scope
Crescent North area	1970	2016	All air VAV/HW reheat	Existing AC-33 on 2nd flr	Reconfigure existing and provide new as required by new layout	Yes, reconfigure existing. Piping and provide new as req'd by new layout	Connect to existing risers / mains. Work in 2nd floor will be req'd	Confirm existing capacity and connect to existing mains if possible
Main Hospital North area	1970	2016	All air VAV/HW reheat	<u>West side:</u> AC-45 on 2nd flr. <u>East side:</u> AC-141 on roof	Reconfigure existing and provide new as required by new layout	Yes, reconfigure existing. Piping and provide new as req'd by new layout	Connect to existing risers / mains. Work in 2nd floor will be req'd	Confirm existing capacity and connect to existing mains if possible
Main Hospital 3W Wing	1970	2016	All air VAV/HW reheat	AC-144 in 2nd flr. MER	Reconfigure existing and provide new as required by new layout, (may be minimal.)	Yes, reconfigure existing. Piping and provide new as req'd by new layout (may be minimal)	Connect to existing risers / mains. Work in 2nd floor will be req'd (may be minimal)	Confirm existing capacity and connect to existing mains if possible (may be minimal)
Main Hospital 3E and 3S Wings	1970	No renovations	Perimeter induction units with corridor ventilation supply air	Leave existing tired system	Leave existing tired system	Leave existing	Leave existing	Leave existing
South Addition all areas	1991	No significant renovations	All air VAV/HW reheat	AC-93 in penthouse AC-82 on 5th flr. AC's 100, 101, 102 located?	Reconfigure existing and provide new as required by new layout (probably all new req'd). Work in 2nd flr perimeter will be req'd	Yes, reconfigure existing. Piping and provide new as req'd by new layout	Connect to existing risers / mains. Work in 2nd floor will be req'd	Confirm existing capacity and connect to existing mains if possible

# Third Floor Plan – Option 2

## Mechanical, Plumbing & Fire Protection Conditions Assessment Summary

KEY:		Adequate		Minor Deficiency		Moderate Deficiency		Major Deficiency
Area	Original Construct Date	Renovation Date	Existing HVAC System Type	AHU Location	HVAC Piping and Ductwork Distribution scope	Sprinklered	Plumbing Scope	Med Gas Scope
Crescent North area	1970	2016	All air VAV/HW reheat	Existing AC-33 on 2nd flr	Reconfigure existing and provide new as required by new layout	Yes, reconfigure existing. Piping and provide new as req'd by new layout	Connect to existing risers / mains. Work in 2nd floor will be req'd	Confirm existing capacity and connect to existing mains if possible
Main Hospital North area	1970	2016	All air VAV/HW reheat	<u>West side:</u> AC-45 on 2nd flr. <u>East side:</u> AC-141 on roof	Reconfigure existing and provide new as required by new layout	Yes, reconfigure existing. Piping and provide new as req'd by new layout	Connect to existing risers / mains. Work in 2nd floor will be req'd	Confirm existing capacity and connect to existing mains if possible
Main Hospital 3W Wing	1970	2016	All air VAV/HW reheat	AC-144 in 2nd flr. MER	Reconfigure existing and provide new as required by new layout, (may be minimal.)	Yes, reconfigure existing. Piping and provide new as req'd by new layout (may be minimal)	Connect to existing risers / mains. Work in 2nd floor will be req'd (may be minimal)	Confirm existing capacity and connect to existing mains if possible (may be minimal)
Main Hospital 3E and 3S Wings	1970	No renovations	Perimeter induction units with corridor ventilation supply air	<u>East wing:</u> new AC-142 on adjacent 2nd flr. Roof <u>South wing:</u> new AC unit(s) on adjacent 2nd flr. Roofs ASBESTOS IMPACT	New VAV/reheat air distribution ductwork and piping systems  ASBESTOS IMPACT	Yes, reconfigure existing. Piping and provide new as req'd by new layout  ASBESTOS IMPACT	Connect to existing risers / mains. Work in 2nd floor will be req'd  ASBESTOS IMPACT	Confirm existing capacity and connect to existing mains if possible  ASBESTOS IMPACT
South Addition all areas	1991	No significant renovations	All air VAV/HW reheat	AC-93 in penthouse AC-82 on 5th flr. AC's 100, 101, 102 located?	Reconfigure existing and provide new as required by new layout (probably all new req'd). Work in 2nd flr perimeter will be req'd	Yes, reconfigure existing. Piping and provide new as req'd by new layout	Connect to existing risers / mains. Work in 2nd floor will be req'd	Confirm existing capacity and connect to existing mains if possible



