



ARCHITECTURAL COMPARATIVE ANALYSIS REPORT

for the POE of Bridgepoint Active Healthcare

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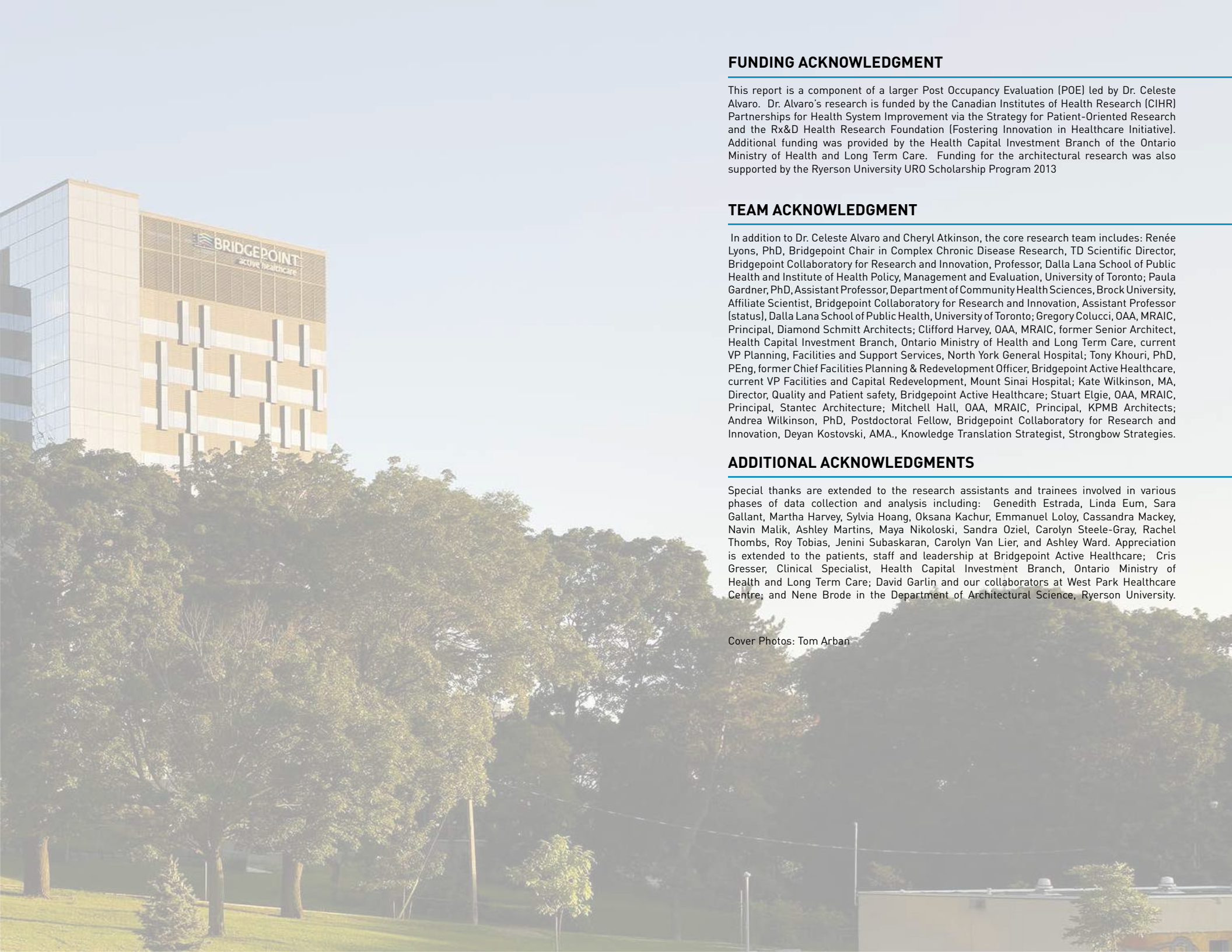
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Cover Photos: Tom Arban

INTRODUCTION

This report documents, compares, and analyses selected architectural design elements across three healthcare facilities under study in the in- progress, pre- and post- occupancy evaluation of Bridgepoint Active Healthcare. The larger program of research is a multi-year, multi-method program of research assessing the impact of architectural design on health outcomes in the context of the Bridgepoint Hospital redevelopment, led by a team of social scientists. The study utilizes a quasi-experimental research design with mixed quantitative and qualitative measures, and a control facility to compare patient, staff, and organizational outcomes across these healthcare facilities. The primary objective is to evaluate the impact of building design on well-being and improved patient outcomes for people living with multiple health conditions.

As a key component of the overall research program, this report details the environmental conditions, both built and natural, of the New Bridgepoint Active Healthcare (BAH) long term, chronic care hospital, and its predecessor, the recently demolished 1963 Bridgepoint Health (BH) facility, against the control hospital used for this POE study, West Park Healthcare Centre (WP).

This architectural documentation and analysis addresses the non-clinical spaces and design components that the architects targeted at the outset, as having potential to reduce stress, and impact in-patient psychosocial well-being during their treatment and stay.

Primary **design objectives** aimed at improving both in-patient and outpatient experience and quality of life were:

- improved patient privacy (for both hygiene and social reasons)
- improved quantity, quality and variety of patient amenity programs
- improved opportunity for social integration between patients and staff
- improved integration and connection to the local community
- improved access to daylight and view for all spaces
- improved connection to the natural environment
- improved clarity of wayfinding
- improved quality and variety of spaces and activities to create more calming and aesthetically pleasing environments, and to encourage patient mobility

DEFINITIONS

These definitions are for the purposes of this study

Amenity Space: All other non-clinical support spaces specifically for enhancing quality of life for patients (spiritual care, therapy pools, physiotherapy/gym, patient dining spaces, hair salon, cyber café)

Design Parti: Organizing planimetric diagram for the program and circulation design concept

Gross Floor Area: Program space including building envelope, stairs, elevators, service spaces

Horizontal Circulation: Halls and corridors

Meaningful View: A view to trees, parks, activities of people and animals, movement of traffic, sky, clouds

Net Floor Area: Program floor area space excluding building envelope, stairs, shafts, elevators, service spaces and shafts

Outdoor Amenity: Built exterior recreation space intended predominantly for patient use (i.e. roof terraces and porches, and immediately adjacent outdoor spaces (excludes gazebo garden in traffic circle at West Park)

Patient Care: Patient rooms and rooms dedicated to patient care

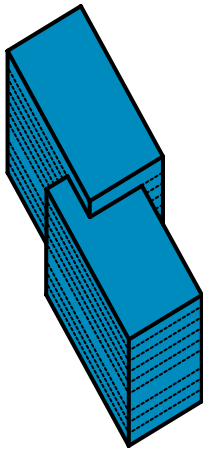
Patient Lounge: Dedicated interior lounge spaces

Public space: Common areas for unregulated use by visitors and members of the public including entry level lobbies and waiting areas, retail (café, pharmacy etc.), auditoria, cafeteria, library.

Staff Amenity: Dedicated staff lounge spaces

Staff Work Areas: Nurse stations and ancillary support areas for immediate patient care

Vertical Circulation: Stairs, elevators



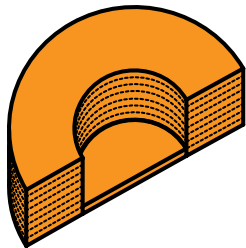
BRIDGEPOINT 2013 (BAH)

14 St Matthews Rd, Toronto, ON M4M 2B5
 Stantec Architecture; KPMB Architects; HDR Architecture; Diamond Schmitt Architects
 480 In-Patient Capacity

- + Visually prominent, high-rise, 12-storey, “commercial” looking building
- + Rectangular plan with double loaded corridor wrapping a central service core
- + Single/double occupancy rooms with en-suite WC and shared en-suite showers
- + 2 patient lounges, 1 physiotherapy space, 1 patient dining area per floor
- + 2-storey podium housing administration, and common amenity spaces
- + Large central rooftop green space, 2-5th level terraces, 4-main level terraces
- + All glass curtainwall building (clear and spandrel glass)
- + Urban location in a park setting



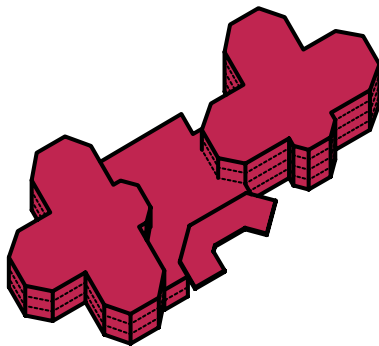
Tom Arban



BRIDGEPOINT 1963 (BH)

14 St Matthews Rd, Toronto, ON M4M 2B5
 Chapman and Hurst
 580 In-Patient Capacity

- + Mid rise, 9-storey, “residential” looking building
- + Crescent shaped double loaded corridor with central core
- + Double/triple/quad patient rooms with remote WC and bathing
- + 1 Patient lounge and physiotherapy space per floor
- + 2-storey podium housing administration, and common amenity spaces
- + Large central rooftop terrace and lower level patio
- + Brick cladding with continuous concrete balconies
- + Glass curtainwall building (clear and spandrel glass)
- + Urban location in a park setting



WEST PARK 1980 (WP)

82 Buttonwood Ave, Toronto, ON M6M 2J5
 Armstrong and Molesworth Architects
 312 In-Patient Capacity

- + Low rise, 4-storey “residential” looking building
- + 2 separate 2-storey pods with central core and T-shaped plan
- + Double, and quad patient rooms with en-suite WC and shared remote bathing
- + 1 patient lounge and physiotherapy space per floor
- + 2-storey podium housing administration, and common amenity spaces
- + Large central rooftop terrace and miscellaneous outdoor gardens
- + Brick cladding with wood trim and sloping shingled roofs
- + Suburban location in a park setting



EXECUTIVE SUMMARY

Introduction

The identified domains of this study are psychosocial wellbeing (i.e. psychological well being as a function of interactions with the social environment), including depression, connectedness, mood, stress reduction and functional health (pain, mobility) for in-patients and staff. This architectural documentation is focused on the locations where the patient surveys and interviews were conducted. These are the “non-clinical” in-patient rooms, support, therapy, amenity, and outdoor recreation and social spaces of the three hospitals.

The construction of the new Bridgepoint Active Healthcare (BAH) facility created a unique opportunity for a structured comparative Post Occupancy Evaluation (POE) addressing these criteria, because the site and population studied are similar, pre and post construction. The third control facility, West Park, was selected as an analogous facility in the same city. The key building differences between facilities are summarized graphically in the Comparative Building overview on pages 8-9 of this report. The graphic summary and building summary descriptions on pages 10-15, provide a visual executive summary of this report’s findings. The following design issues were studied:

- Building Scale (Areas and proportional differences in selected rooms and spaces)
- Site Context (location and orientation within the immediate and urban context)
- Building Typology (“Parti” or organizational patterns of movement and circulation for in-patients and staff relative to program spaces)
- Program (program extent and distribution, amenity space and social space)
- Circulation Design (proximities and relationships for patients and staff to various activities and functions)

- Fenestration (for daylight, view and wayfinding)

Rationale

It is well documented that the ambient qualities of the architecture for treatment and respite have positive impact on psychological, social and physical health. Aesthetics, material qualities, views and direct exposure to nature, and spatial organization can distract patients from pain and improve mental state (Alvaro & Atkinson 2013). It is also recognized that enhanced building program, and ambient environmental conditions are particularly important for complex chronic disease (CCD) patients, where there is long term residency, and a fully conscious patient population prone to pain, anxiety and depression.

Methodology

The architectural component of the Bridgepoint Active Healthcare study is similarly designed to augment this emerging knowledge, by creating an equally rigorous and systematic methodology for deconstructing, and measuring the myriad of specific design factors anticipated to have significant impact on CCD patients and staff. As interior environments are a complex interplay of multiple design decisions, it is critical to isolate individual design interventions to understand their potential affects. This visualized documentation and comparative analysis is intended to create substantive clarity to observed differences in patient and staff outcomes, in the larger program of research, to differences in design.

Findings

SCALE / PROGRAM / DENSITY

The new building (BAH) is twice as large in floor area and four times the volume for a similar actual in-patient capacity as the other two buildings.

The room occupancy is significantly changed to be single and double patient rooms versus a predominance of quads and doubles in the other two buildings. The new building has a significantly augmented program relative to the other two buildings, with three times as much lounge space as its predecessor, and almost three and a half times as much as West Park (WP). It has almost 7.7 times the amount of general patient amenity space per patient as its predecessor and twice as much space per patient as WP. This augmented program and the increase in both quantity, quality and variety of social and activity spaces both indoors and out, have greatly improved the privacy of patients but also significantly impacted the density per floor, of patients and staff. Whereas the original building would have had 116 patients per floor using the same central elevator and lounge, there are only 64 per floor at the new building, with four available social spaces within the same floor plate. At WP, 78 patients per floor converge on a single lounge and elevator core. This substantially impacts the frequency of casual interaction amongst patients and between staff and patients on a daily basis.

SITE/CONTEXT

All buildings are located in park settings; Bridgepoint being central and urban, and West Park, suburban. The design parti of the three buildings are similar in that they are all organized to facilitate daylight and view for in-patients' rooms. The original BAH's views were compromised by its adjacency to the old Don Jail when it was active. WP, a low rise building in a heavily treed park has restricted view. The new hospital as a high rise, has varied and distant views.

FENESTRATION/ DAYLIGHT/VIEW

The new building has significantly more window area than the other two buildings with higher ceilings and 50% of its exterior envelope glazed. Floor to ceiling windows at the amenity spaces and a combination of a tall bay, and continuous strip windows provide panorama views to

residents and help to orient internal wayfinding. The other two buildings had/have adequate daylight at most patient rooms but compromised views out, relative to BAH.

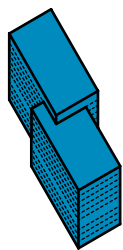
Applications and Conclusions

The data presented within this report has been designed to graphically clarify the analysis and streamline the comparisons between these facilities. These graphic templates are intended not only to facilitate this particular research project, but also to operate as universal health care facility planning and programming tools. The Ontario Ministry of Health and Long Term Care, as a research collaborator in this project may develop these templates to establish streamlined data collected on both new and existing projects. This data base can be used for the development of programming, design guidelines, and policy for new and existing complex continuing care and rehabilitation facilities.

The extent of this architectural analysis is intentionally general and holistic, addressing the more macro-scale design decisions made at the pre-design and preliminary design stages of a project. While most POE's address detail design concerns related to specific health related outcomes, this research looks at overall programming, building siting, massing, building typology, internal organizational strategies (parti) and façade design as it relates to the buildings' fenestration. We have tried to address each building comprehensively, on these levels, to suit the needs of this particular POE. These same strategies for comparison and analysis could be used at ever finer scales for specific spaces or topics of study.

BRIDGEPOINT 2013 (BAH)

AREA/VOLUME



1.63 BEDS/RM

- 100%
- TOTAL AREA: 51,076m²
- TOTAL VOLUME: 238,445m³
- + 10 STORIES
- + 480 IN-PATIENT BEDS
- + 106m² BLDG AREA/PATIENT

p 10-11

CONTEXT

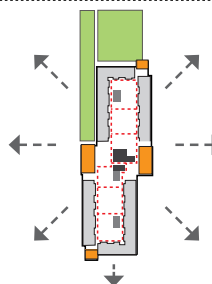


- + HIGHLY VISIBLE
- + URBAN LOCATION
- + PARK SETTING
- + TRANSIT ACCESSIBLE
- + HIGH RISE
- + DISTANT VIEWS



p 18-35

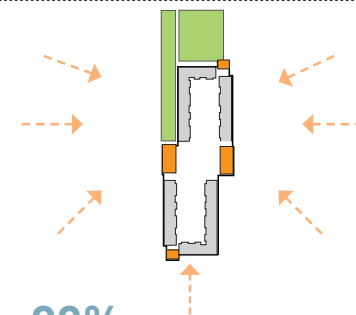
PARTI



- + Meaningful views, NSEW
- + Double loaded corridor w/ views
- + Central vertical circulation
- + Distributed lounge space
- + Central and multiple distributed terraces

p 40-41

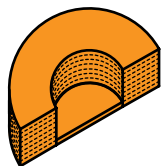
DAYLIGHT



90%
Patient Space receives more than 3 hours direct daylight/day

p 72-73

BRIDGEPOINT 1963 (BH)



3.31 BEDS/RM

- 48%
- TOTAL AREA: 24,298m²
- TOTAL VOLUME: 60,090m³
- + 8 STORIES
- + 580 IN-PATIENT BEDS
- + 42m² BLDG/PATIENT

p 12-13

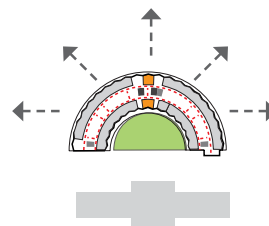


- + HIGHLY VISIBLE
- + URBAN LOCATION
- + PARK SETTING
- + TRANSIT ACCESSIBLE
- + MID RISE
- + SOME DISTANT VIEWS



p 18-35

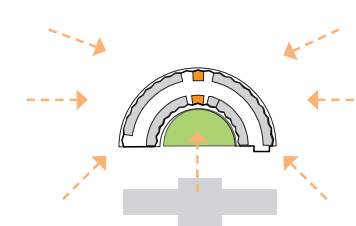
PARTI



- + Meaningful views, NSEW
- + Double loaded corridor
- + Central vertical circulation
- + Central lounge space
- + Central terrace

p 40-41

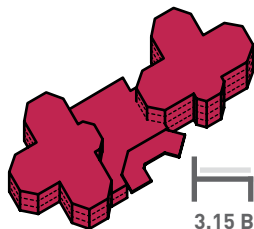
DAYLIGHT



60%
Patient Space receives more than 3 hours direct daylight/day

p 72-73

WEST PARK 1980 (WP)



3.15 BEDS/RM

- 46%
- TOTAL AREA: 23,408m²
- TOTAL VOLUME: 92,636m³
- + 3 STORIES
- + 312 IN-PATIENT BEDS
- + 75m² BLDG/PATIENT

p 14-15

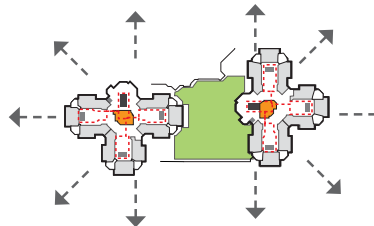


- + NO PUBLIC VISIBILITY
- + SUBURBAN LOCATION
- + PARK SETTING
- + VEHICULAR ACCESS
- + LOW RISE
- + NO DISTANT VIEWS



p 18-35

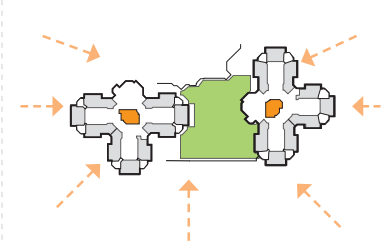
PARTI



- + Meaningful views, NSEW
- + Central vertical circulation
- + Central lounge spaces
- + Central and few distributed terraces

p 40-41

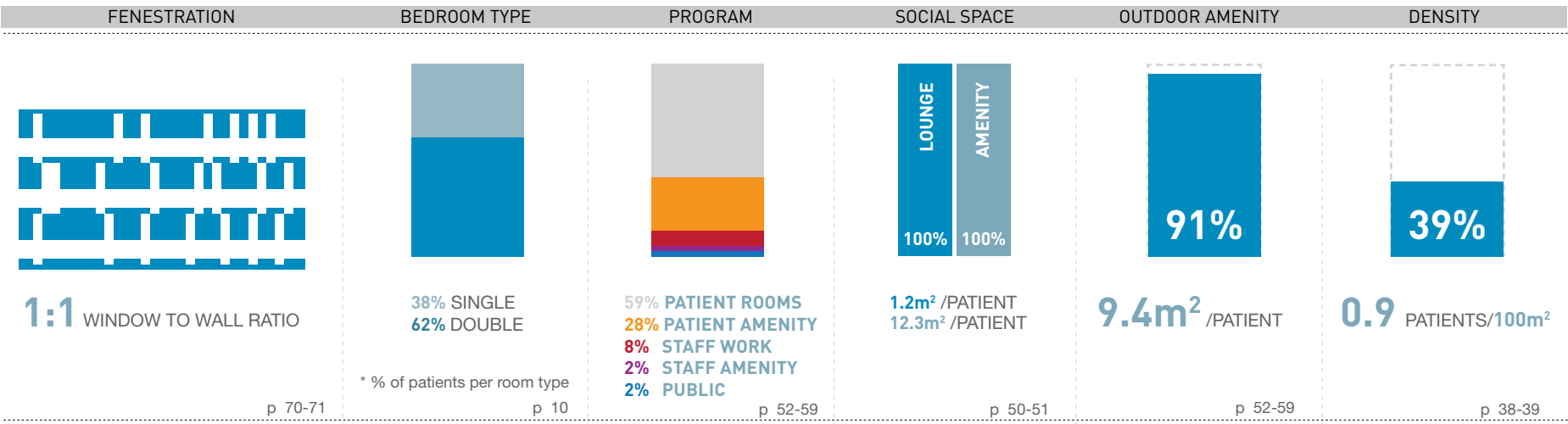
DAYLIGHT



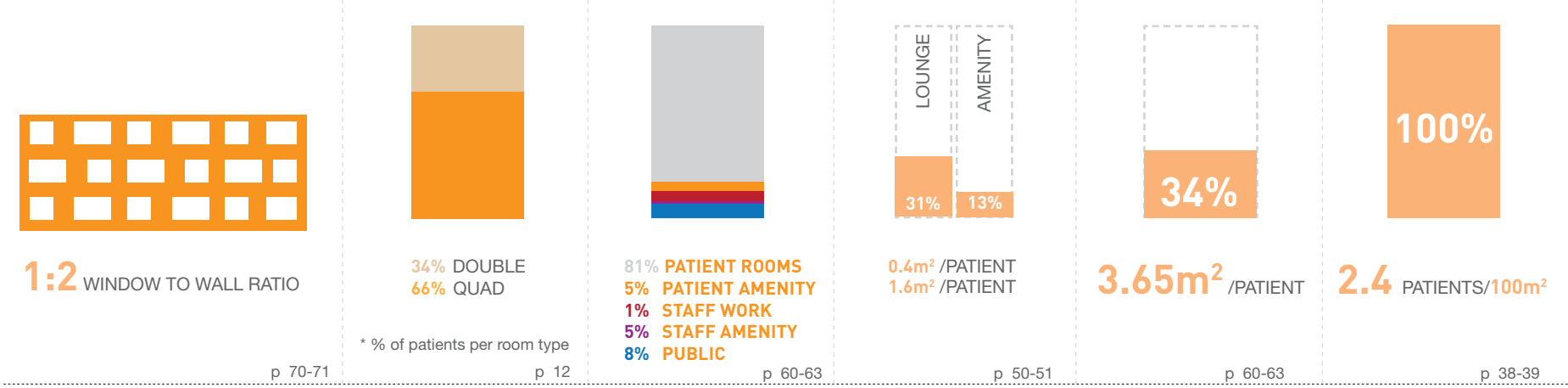
70%
Patient Space receives more than 3 hours direct daylight/day

p 72-73

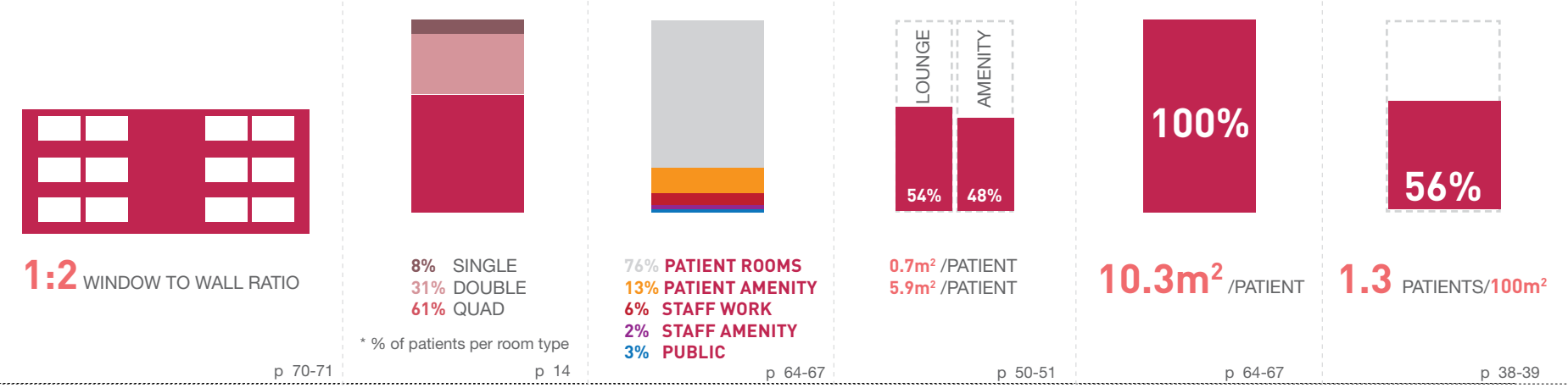
BRIDGEPOINT 2013 (BAH)



BRIDGEPOINT 1963 (BH)



WEST PARK 1980 (WP)



BRIDGEPOINT ACTIVE HEALTHCARE

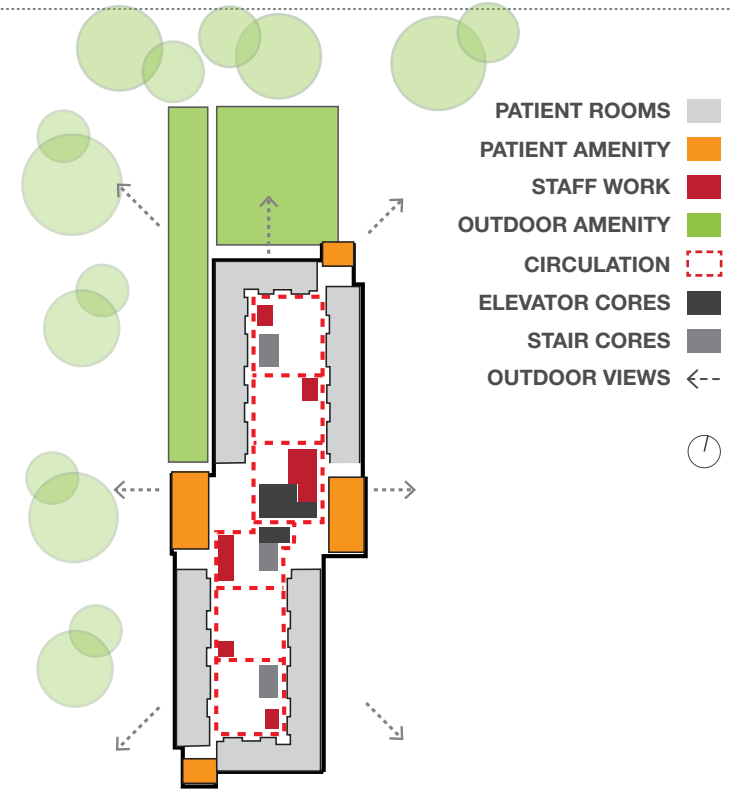


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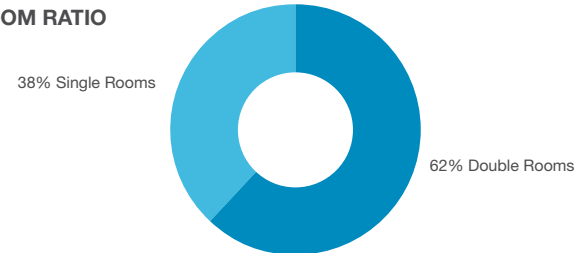
The New BAH is an **11-storey building** (9-storeys on a two storey podium). Rooms face east or west, with paired, **double-loaded corridors** containing service and clinical support spaces at the interior. The **elevator core is located centrally** in the plan where the typical floor plate is offset to create a patient dining space to the east, with two vantages east and south, and a physiotherapy space to the west, with additional vantage to the north created by the offset. Sixty percent of the 5th floor is dedicated mechanical space and above the 11th floor is a 1-storey enclosed mechanical penthouse.

Patient and staff lounges are located at opposite ends of each patient floor. A roof terrace is located on the south half of the building with an indented west facing “porch” and landscaped terrace, cascading down to another roof terrace at the north end of the building, one level above the park. There are additional roof terraces on both the east and west side of the 5th floor. The podium, partially underground, contains amenity, public, loading and service spaces. Administrative space is located in the old jail building. There is a significant increase in the quantity, scale and quality of patient amenity space in this building relative to that of the previous building. The outdoor amenity space is expressed here, as a percentage of the total patient domain studied (i.e. bedrooms and amenity spaces combined.)

DESIGN PARTI

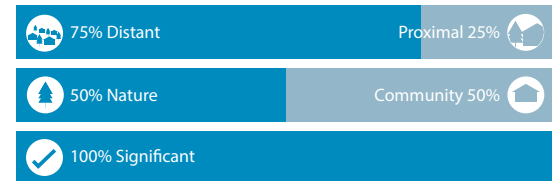


IN- PATIENT ROOM RATIO









MEANINGFUL VIEWS

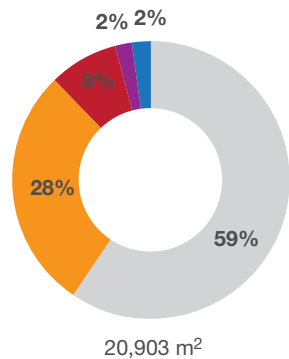
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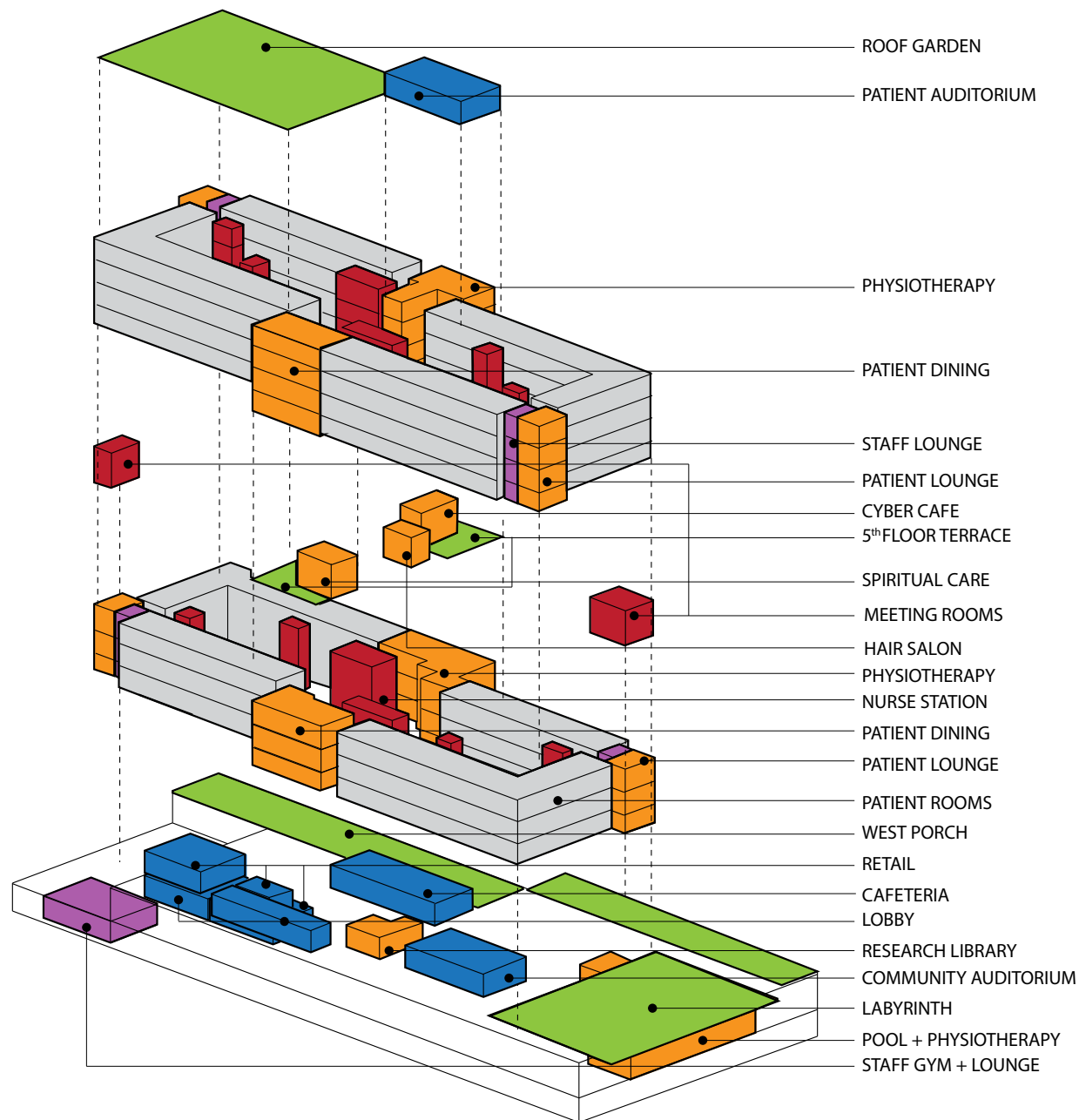
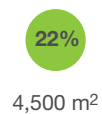
PROGRAM OVERVIEW

-  **PATIENT ROOMS**
12,335 m²
-  **PATIENT AMENITY**
5,897 m²
-  **STAFF WORK**
1,703 m²
-  **STAFF AMENITY**
450 m²
-  **PUBLIC AREA**
518 m²
-  **OUTDOOR AMENITY**
4,500 m²

INTERIOR PROGRAM BREAKDOWN



OUTDOOR AMENITY RATIO



*N.B. Indoor Program Ratio is the breakdown of the selected spaces shown in legend only (i.e. patient rooms and amenity spaces for staff and patients, net of circulation and services). Outdoor Space Ratio is expressed as a ratio of these selected spaces studied in this particular POE.

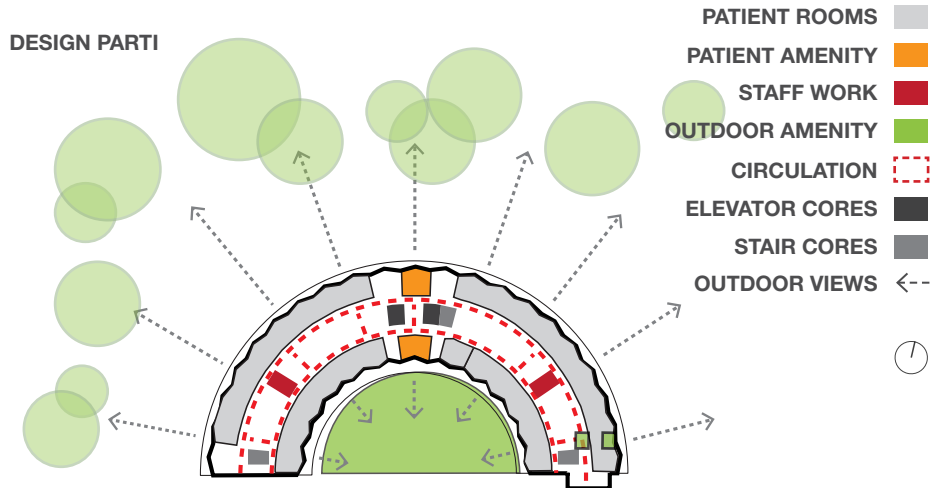
BRIDGEPOINT HEALTH



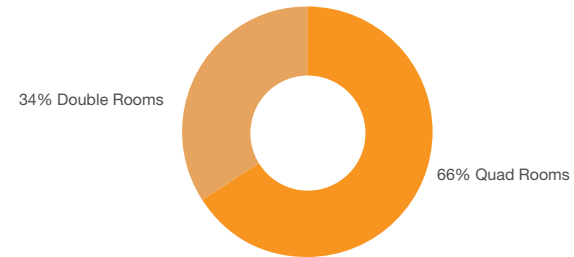
The old BH was a **9-storey** (7-storeys on a 2-storey podium), **double loaded**, **crescent-shaped plan**, oriented north/south, with the majority of patient rooms on the outer circumference overlooking the park, and minimizing views of the jail to the south. Southern room balconies overlooked and enclosed a south facing patient terrace on the roof of the podium. Patient rooms were predominantly quads and doubles. The perimeter was wrapped with cantilevered, concrete balconies that were restricted from patient use for at least the last 20 years.

The lower two floors contained cafeteria, meeting rooms, administrative space, pool, auditorium and mechanical and service space. The building was built in 1963 and was recognized for its unique shape and architectural quality. It was considered the “Taj Mahal of bed care centres” in a review by the Toronto Planning Board when it was first designed. The architect Howard Chapman of Chapman and Hurst indicated that the curved corridor was intended to make the corridor “seem less long.” (Leblanc 2012). Wood and brick were used at the interior to give it a warm and non-institutional feel.

DESIGN PARTI



PATIENT ROOM RATIO








MEANINGFUL VIEWS

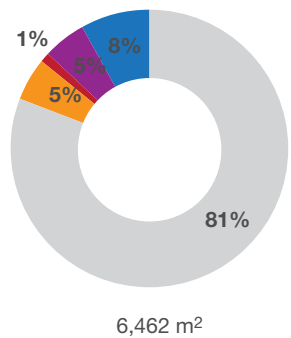
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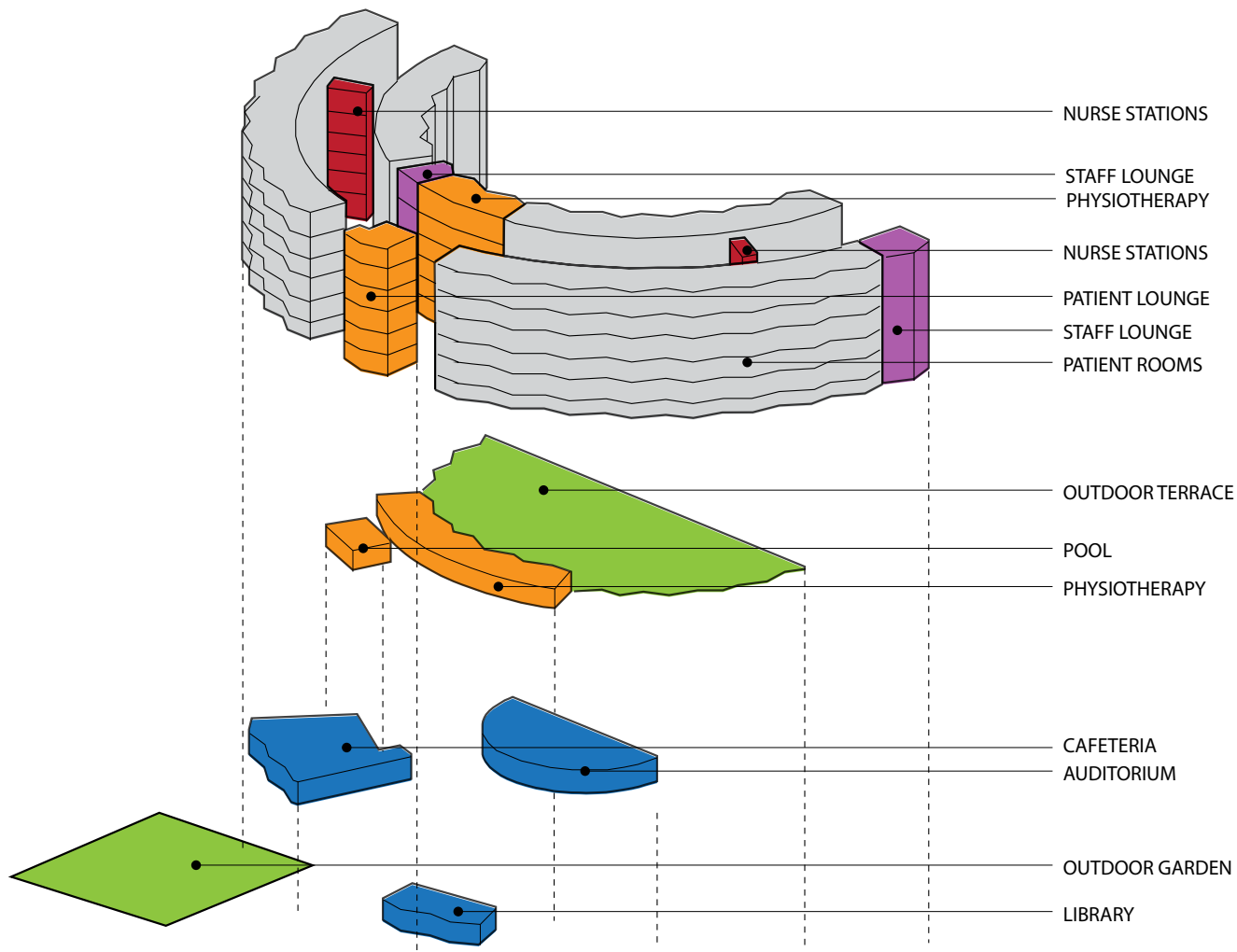
PROGRAM OVERVIEW

-  **PATIENT ROOMS**
5,256 m²
-  **PATIENT AMENITY**
310 m²
-  **STAFF WORK**
90 m²
-  **STAFF AMENITY**
310 m²
-  **PUBLIC AREA**
496 m²
-  **OUTDOOR AMENITY**
2,000 m²

INTERIOR PROGRAM BREAKDOWN

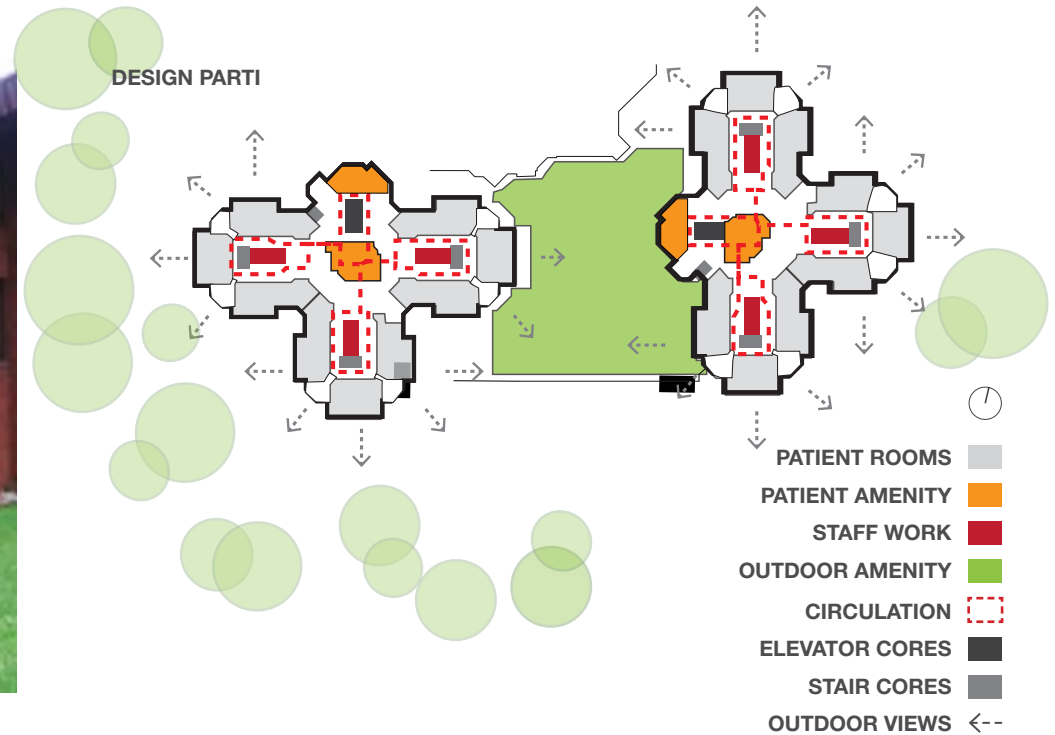


OUTDOOR AMENITY RATIO



*N.B. Indoor Program Ratio is the breakdown of the selected spaces shown in legend only (i.e. patient rooms and amenity spaces for staff and patients, net of circulation and services). Outdoor Space Ratio is expressed as a ratio of these selected spaces studied in this particular POE.

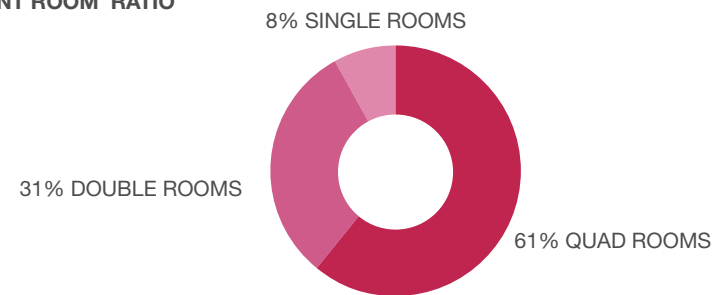
WEST PARK HEALTHCARE CENTRE



The main building at **WP** has two, 2-storey, **T-shaped pods** that each sit on a common, two-level podium, covered with a rooftop patient terrace. Each wing of the 'T' has patient rooms wrapped around a service corridor surrounding a stair, common bathing facilities and a nurses' station. Each of these three wings connect to a common elevator lobby which is adjacent to the central patient lounge that serves all three wings, next to a common therapy area. This therapy area was previously the patient lounge, with generous windows oriented in three directions. The lower lounge space has no direct access to light or view, while the upper lounge is top-lit by several individual skylights.

The lowest level contains service and support space, and patient and staff cafeteria, and is almost entirely underground. The main level is partially above and partially below grade due to the sloped nature of the site. It contains administration and outpatient services along with a common patient/public lounge. The building is red brick with sloped metal roofs, set into the landscape for minimal impact.

PATIENT ROOM RATIO









MEANINGFUL VIEWS

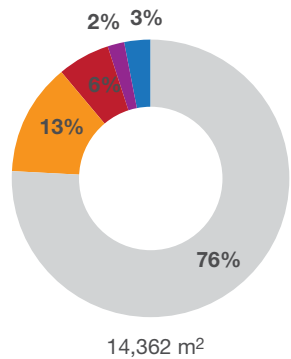
REF PG 28-29



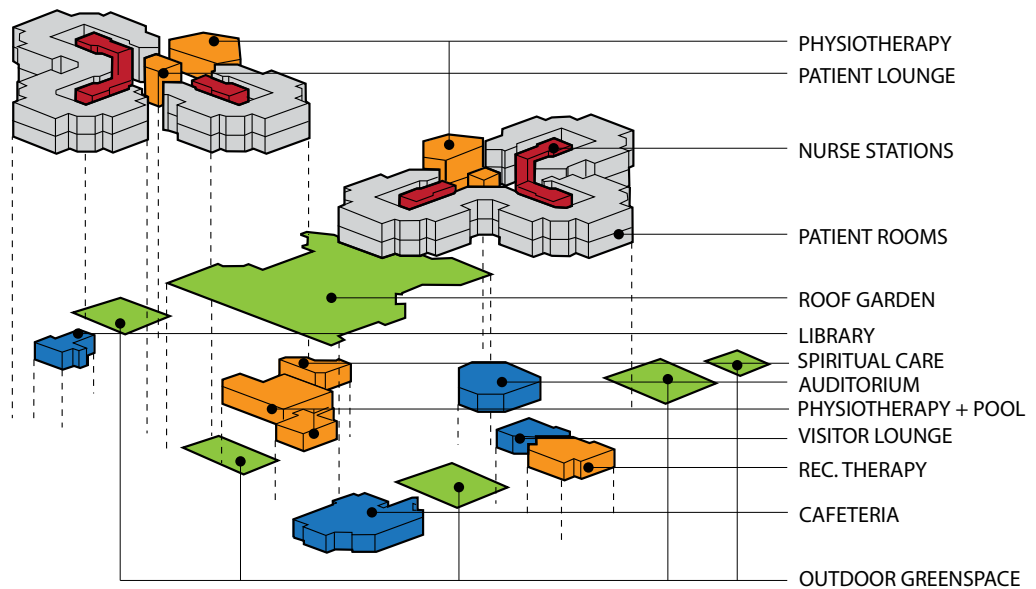
PROGRAM OVERVIEW

-  **PATIENT ROOMS**
10,849 m²
-  **PATIENT AMENITY**
1,833 m²
-  **STAFF WORK**
830 m²
-  **STAFF AMENITY**
350 m²
-  **PUBLIC AREA**
500 m²
-  **OUTDOOR AMENITY**
3,200 m²

INTERIOR PROGRAM BREAKDOWN



OUTDOOR AMENITY RATIO



*N.B. Indoor Program Ratio is the breakdown of the selected spaces shown in legend only (i.e. patient rooms and amenity spaces for staff and patients, net of circulation and services). Outdoor Space Ratio is expressed as a ratio of these selected spaces studied in this particular POE.



BRIDGEPOINT

SITE + CONTEXT



GENERAL CONTEXT + PUBLIC IMAGE

The new **BAH** and the old **BH** occupy the same general location, the new building having been built just west of the original building. The site is part of the urban, residential Riverdale neighbourhood; visually and physically close to the downtown core of Toronto, Lake Ontario, the West Donlands, the Don River and Don Valley Expressway (DVP), Riverdale Parks (East and West), the commercial intersection of Broadview and Gerrard, the Riverdale Library, and the former Don Jail. It is easily accessible from the large residential urban neighborhoods surrounding it by public transit, car or pedestrian access. The new building is quite dominant as an “iconic,” glass curtainwall building overlooking the Don Valley and visible from all directions in the local parks and neighborhood.

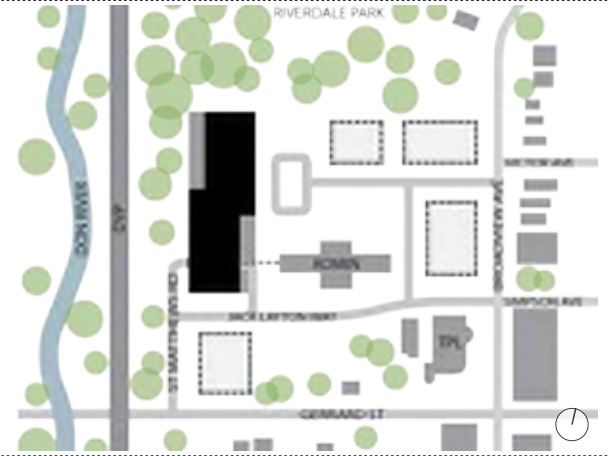
The old **BH** building, while considerably smaller in height and scale, was also quite visible from all these same vantage points. It was located further from the DVP and more central to the park, with a somewhat unfortunate overlook and proximity to the back of the Don Jail. The jail function has recently been removed, and this building has been renovated to house administrative functions for the new hospital. The predecessor building’s notable half round shape and curved cantilevered concrete balconies, made it memorable in the area and visible from the DVP.

WP is remotely located in a suburban park setting near the Humber River. Surrounded by three parks (Raymore, Fergy Brown, Eglinton Flats) Scarlett Woods Golf course, some single-family homes, and three high-rise residential buildings, this site is only accessible by car or shuttle bus. It is part of a hospital campus with grade level parking lots, winding entry roads, lightly rolling terrain, and lots of deciduous trees. The building is red brick and residential in character with its sloping roofs. The plan form breaks up the mass of the building making it appear more diminutive than it really is. Being low rise and tucked into the adjacent sloped terrain, it has very little presence in the larger neighborhood and is quite hidden amongst the trees in summer. It’s car drop-off entry canopy conceals the entrance from view, making it difficult to distinguish from a service entry.

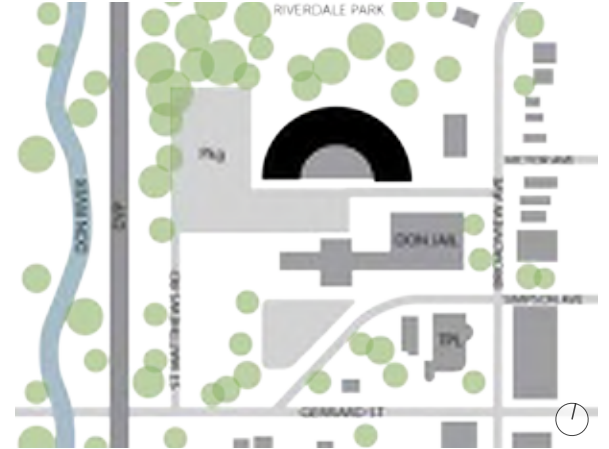
CONTEXT IMAGE

SITE PLAN

BRIDGEPOINT 2013 (BAH)



BRIDGEPOINT 1963 (BH)

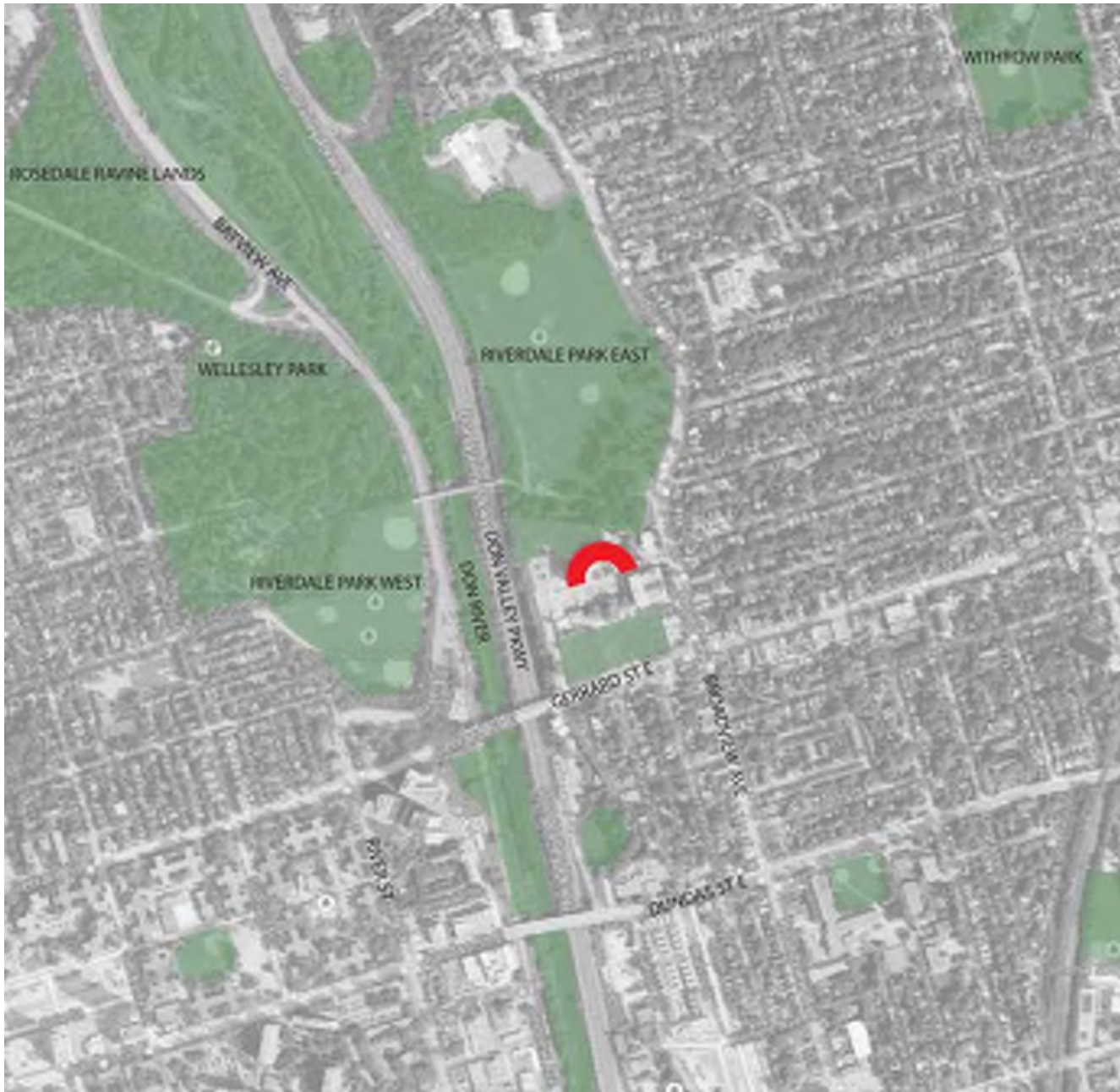


WEST PARK 1980 (WP)











THE SITES

THE SITES

- + ACCESS TO MEANINGFUL VIEWS
- + ACCESS TO NATURE
- + SITE ACOUSTIC CONTEXT

The new **BAH** has twice the amount of window, relative to wall, as the other two buildings. The building's greater height, and combination of horizontal ribbon windows and floor to ceiling "bay" windows give opportunity for all patient rooms to have a **variety of views**; both **near and far**, to ground and sky, **to both nature and the local community**, active (baseball, tobogganing, soccer) and passive park activities, and, at higher vantage points and specific orientations; to the urban skyline, Lake Ontario and the Don Valley Parkway (DVP). View is available at the ends of all corridors through glass doors and at arrival by stairs or elevators to each floor, providing orientation (wayfinding) and visual interest for patients. Patient lounge spaces located at the ends of corridors, each have **three orientations to view and daylight**. Patient amenity spaces and therapy spaces have all been designed to provide generous access to view and daylight. A **variety of outdoor terraces and gardens with different orientations, activities, and characters are provided** for patients at various levels of the building. The building's immediate proximity to the adjacent expressway means the **western facing outdoor terraces are all very noisy**, despite glass wind/noise breaks provided on roof terrace and ground floor terrace. There are no operable windows and the window system is effective at blocking noise internally.

The **old BH** was located further east into the park and was **much lower**, and integrated more into the trees, **buffering it from wind and traffic noise** from the expressway. The curved plan provided **good views** for patients at the outer ring of rooms **to the north, west and east**, but had **compromised**

views from the rooms at the inner ring of the crescent, which faced one another, or the back of the former Don Jail. Its large balcony overhangs, also **restricted views to ground level and to the sky**. Patient lounge spaces on each floor had **north views to the central portion of Riverdale Park**, with the same high sill, low window head, and balcony overhang conditions as patient rooms, **restricting sky and immediate ground views**. The therapy pool was small and without access to view or daylight. A large south-facing terrace over the podium and an outdoor smoking terrace near the building entry provided outdoor access for patients. Patients were free to venture into the public park to the north.

WP in its **suburban park** location is **very quiet**, and designed to give all patient rooms, access to view. The available **views are much less varied** than at the Bridgepoint sites due to its suburban location in a passive use park. As a **low-rise building**, in a heavily treed park, the views are predominantly **close up views to nature** and to the adjacent roof terrace and gardens, and some local low-rise, single-family homes. Its' **patient lounge spaces** are internal, with **no direct access to view**. The therapy pool is small and without access to view or light. Therapy spaces have both good view and daylight. There are **eight different outdoor spaces** for patient use surrounding the building, including vegetable and flower gardens, smoking and dining terraces. A separate perennial garden with a gazebo, exists a short walk from the main building entrance. These **various and generous outdoor spaces** are evident in the outdoor amenity space statistics shown.

OUTDOOR AMENITIES

VIEW TYPES

SITE SECTION KEY PLAN

BRIDGEPOINT 2013 (BAH)



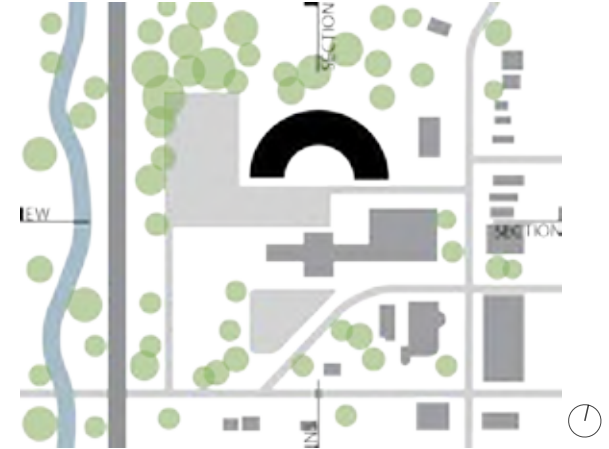
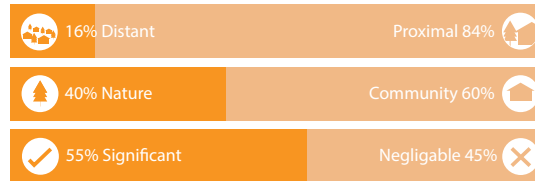
9.7m²
OUTDOOR AMENITY
AREA /PATIENT



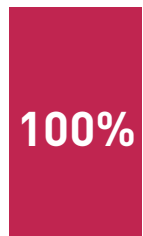
BRIDGEPOINT 1963 (BH)



3.6m²
OUTDOOR AMENITY
AREA /PATIENT



WEST PARK 1980 (WP)



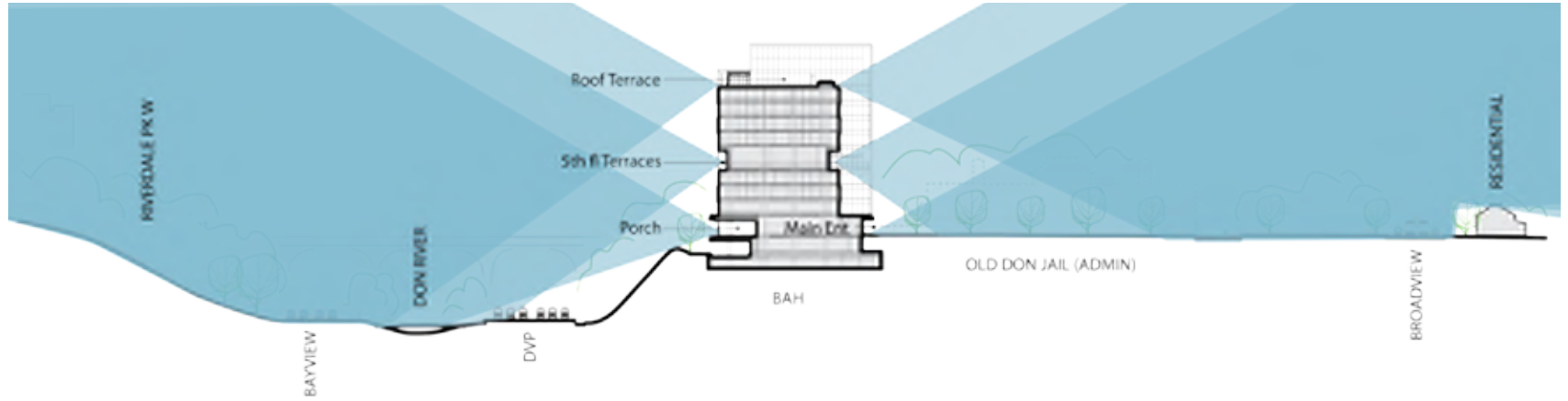
10.3m²
OUTDOOR AMENITY
AREA /PATIENT



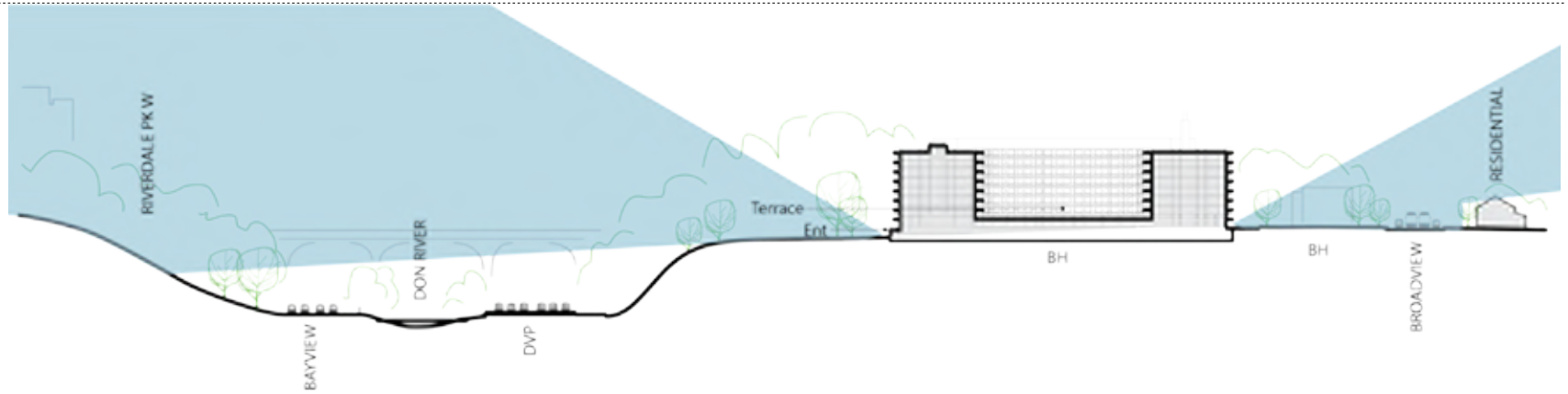
MEANINGFUL VIEWS FROM OUTDOOR SOCIAL SPACE

BRIDGEPOINT 2013 (BAH)

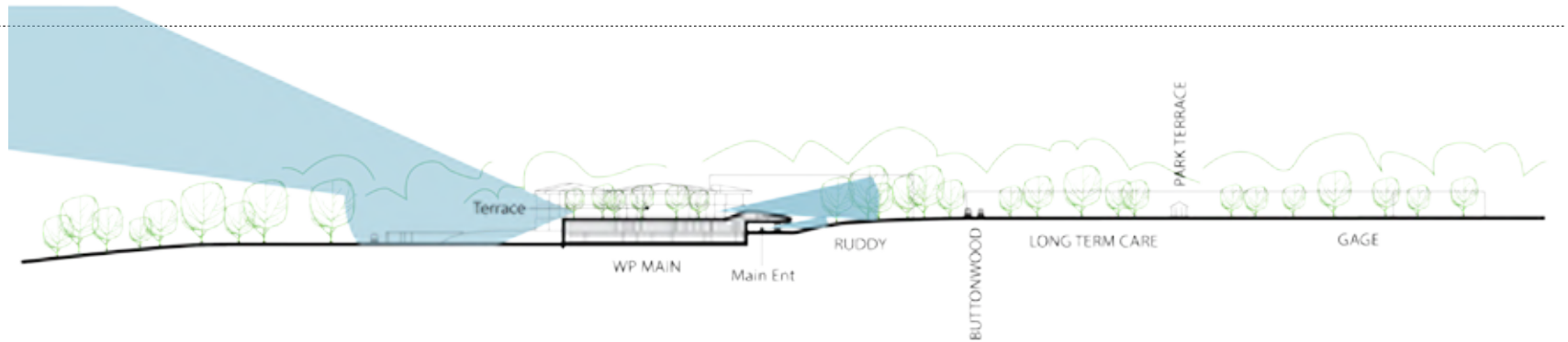
EAST-WEST SECTION



BRIDGEPOINT 1963 (BH)

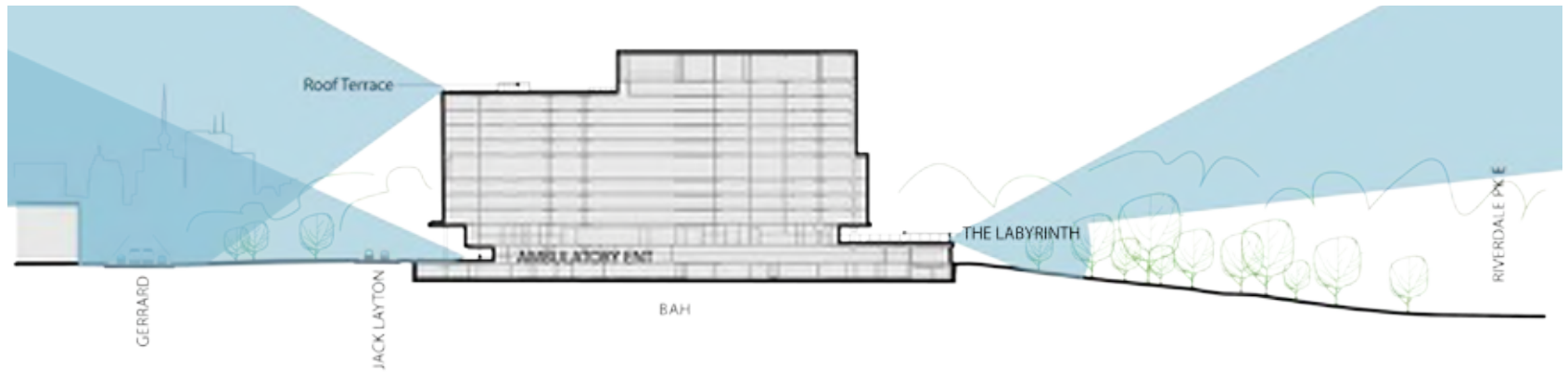


WEST PARK 1980 (WP)

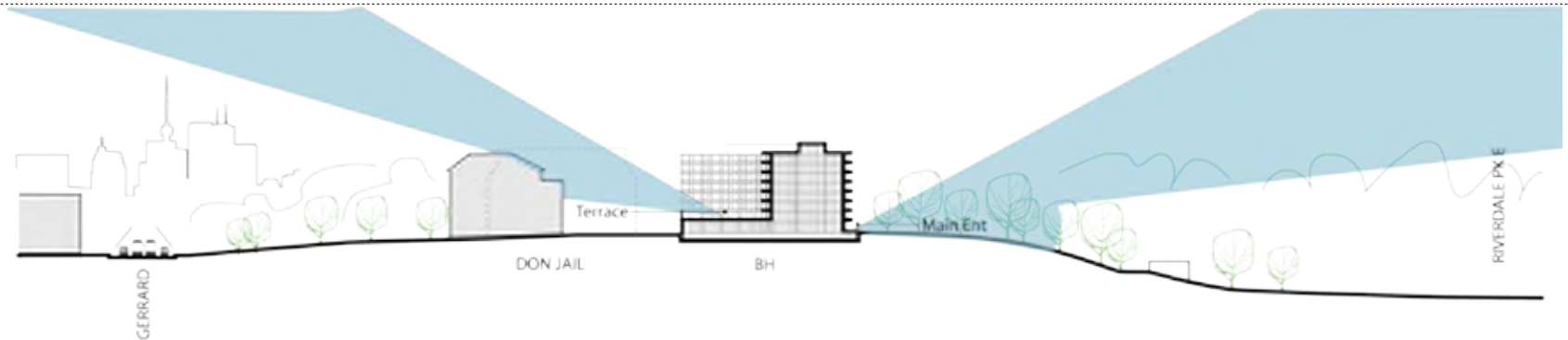


BRIDGEPOINT 2013 (BAH)

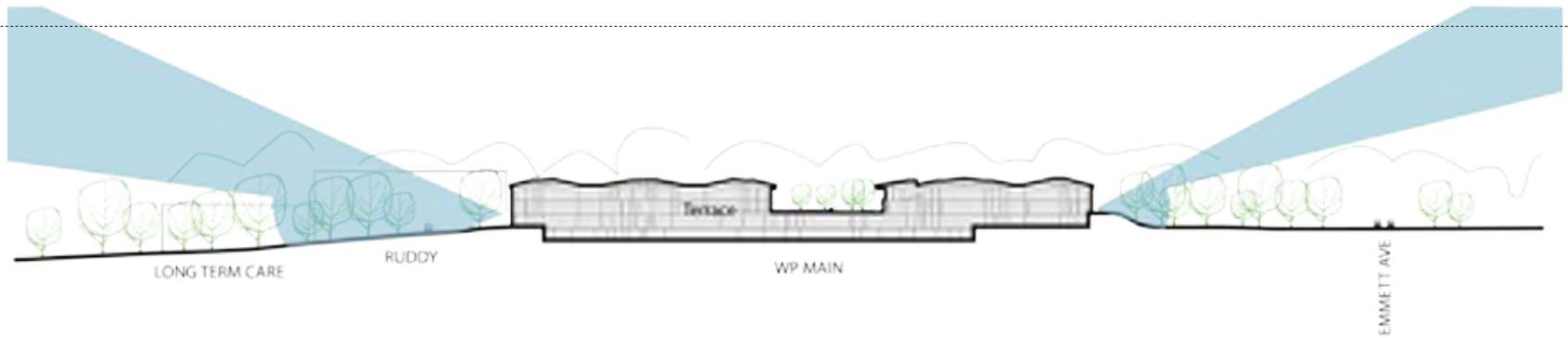
NORTH-SOUTH SECTION



BRIDGEPOINT 1963 (BH)



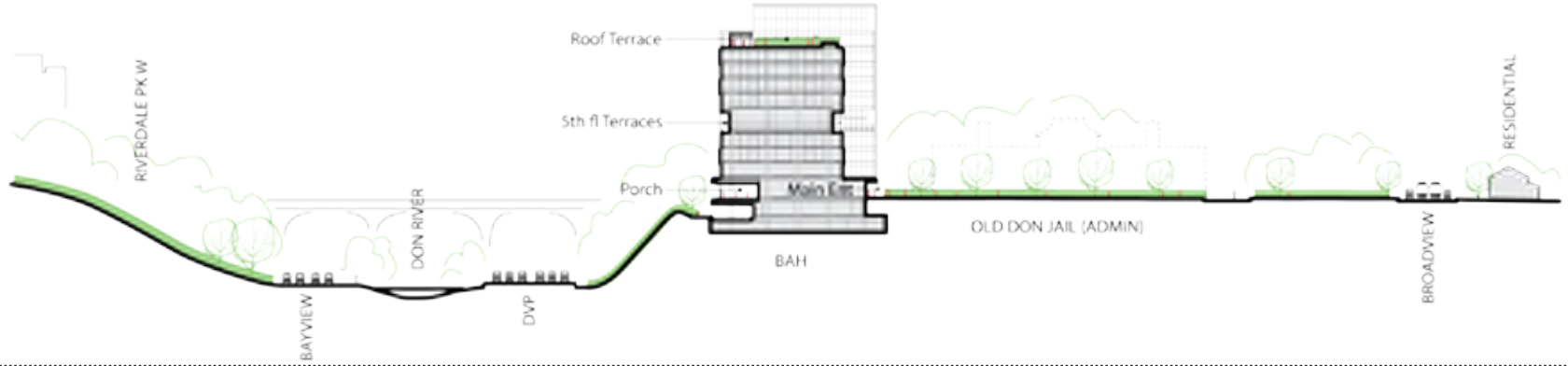
WEST PARK 1980 (WP)



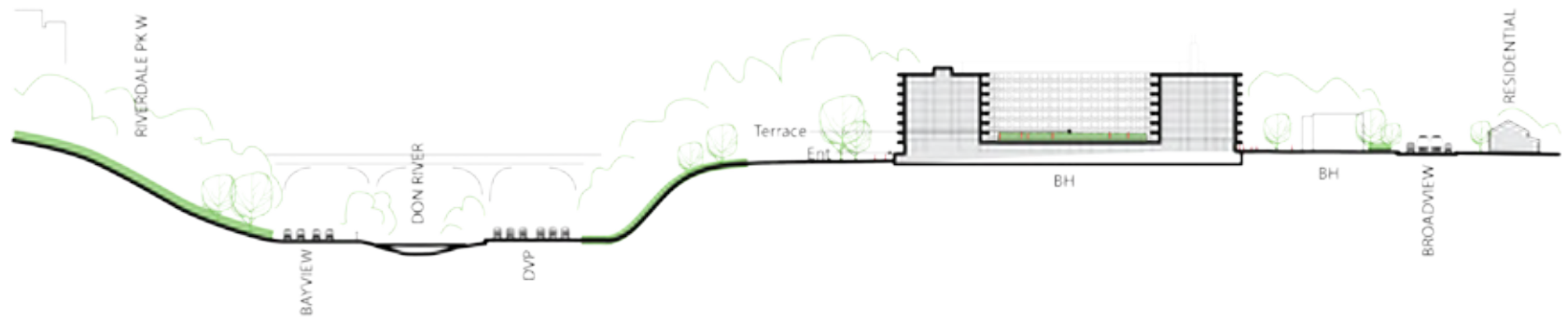
ADJACENT GREEN / SOCIAL SPACES

BRIDGEPOINT 2013 (BAH)

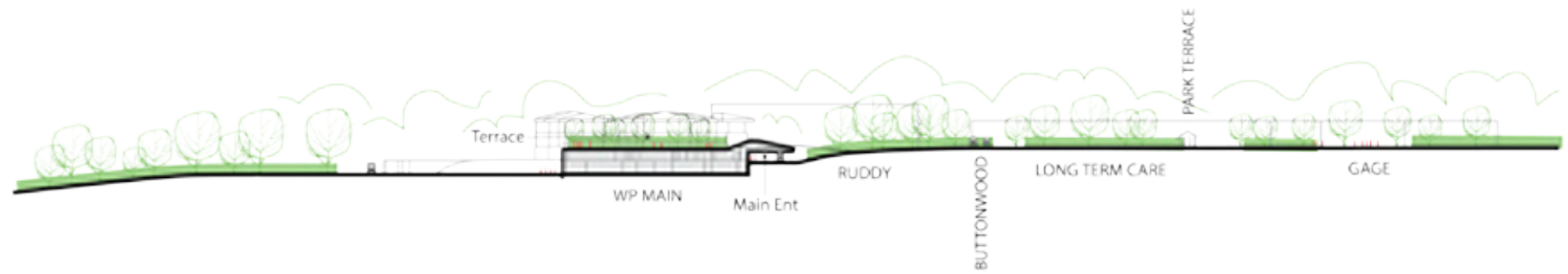
EAST-WEST SECTION



BRIDGEPOINT 1963 (BH)



WEST PARK 1980 (WP)

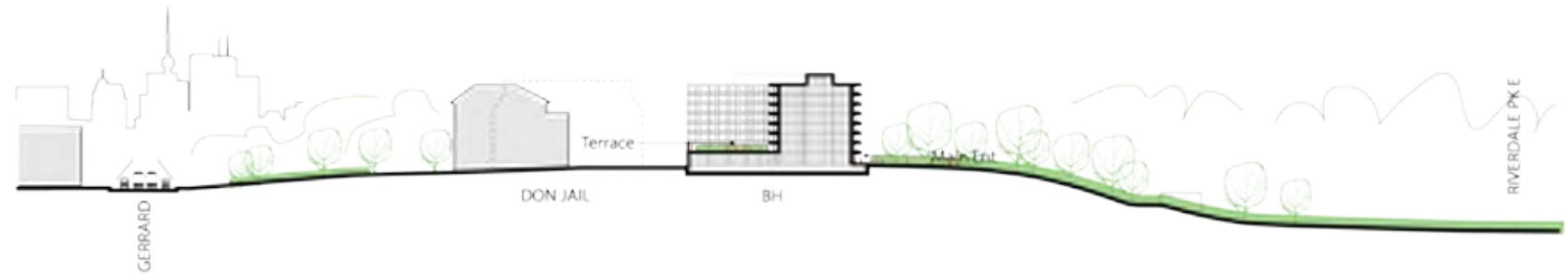


NORTH-SOUTH SECTION

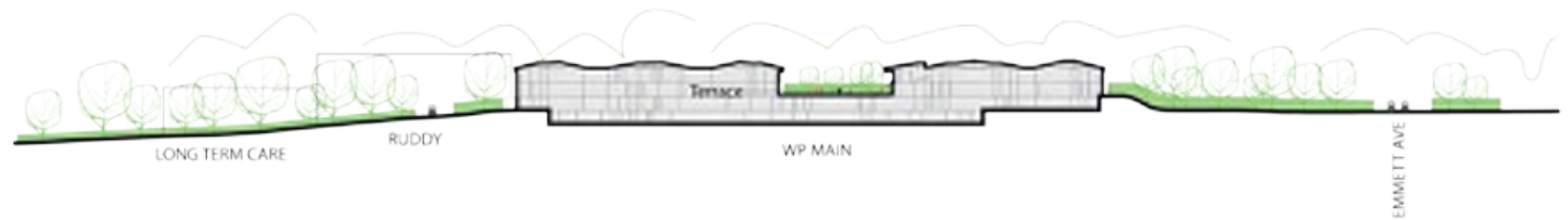
BRIDGEPOINT 2013 (BAH)



BRIDGEPOINT 1963 (BH)



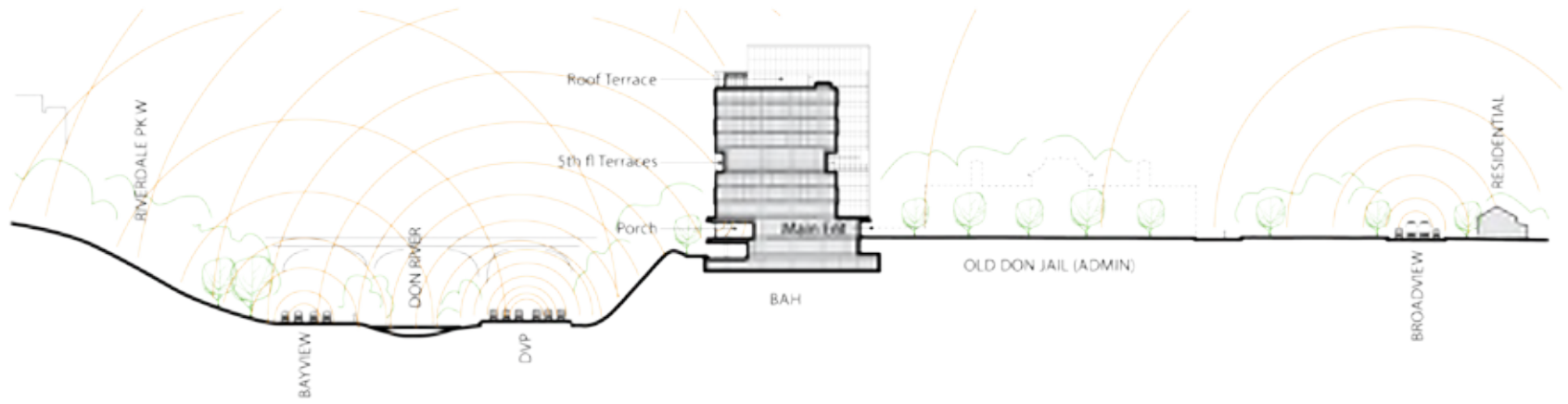
WEST PARK 1980 (WP)



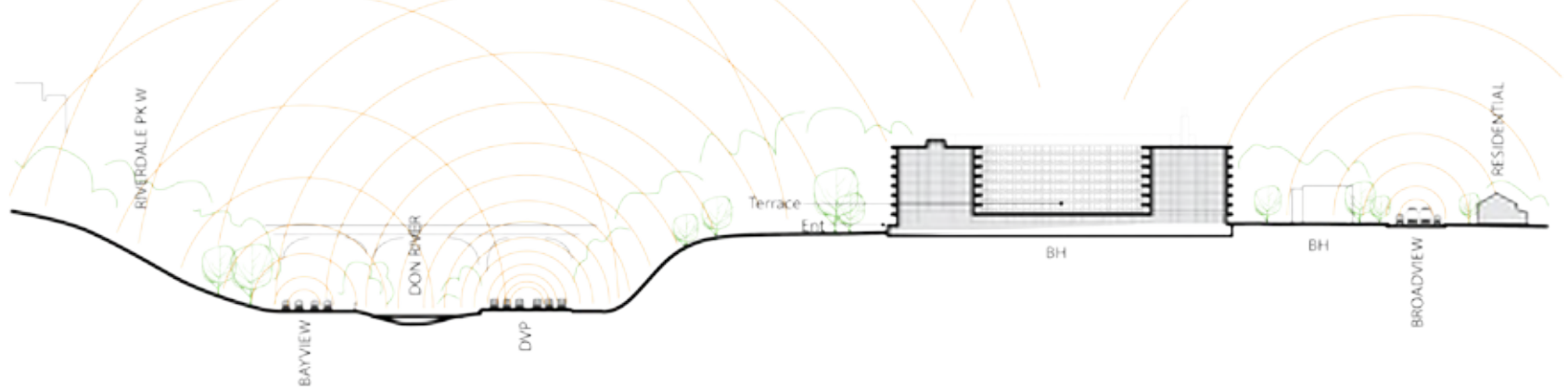
ACOUSTIC CONTEXT

BRIDGEPOINT 2013 (BAH)

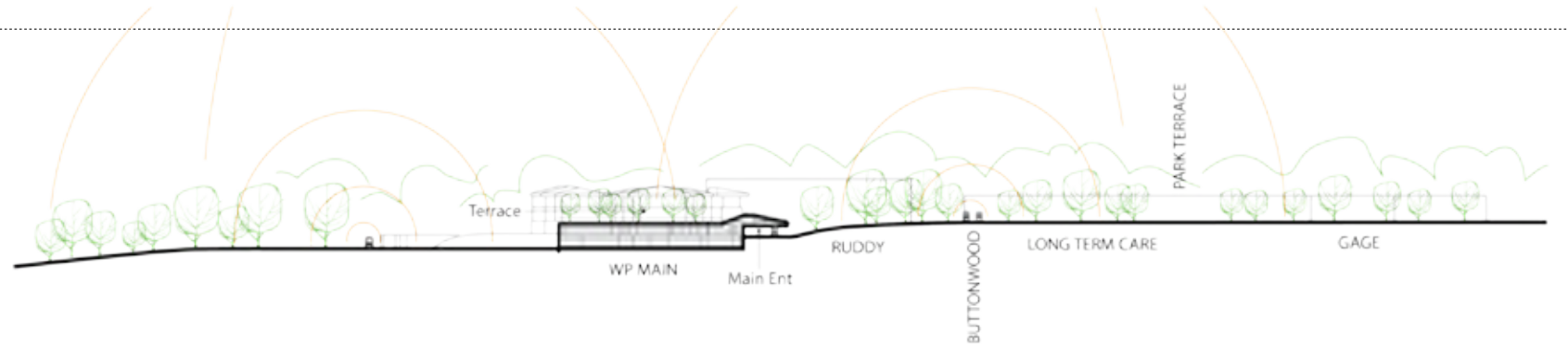
EAST-WEST SECTION



BRIDGEPOINT 1963 (BH)



WEST PARK 1980 (WP)



BRIDGEPOINT 2013 (BAH)

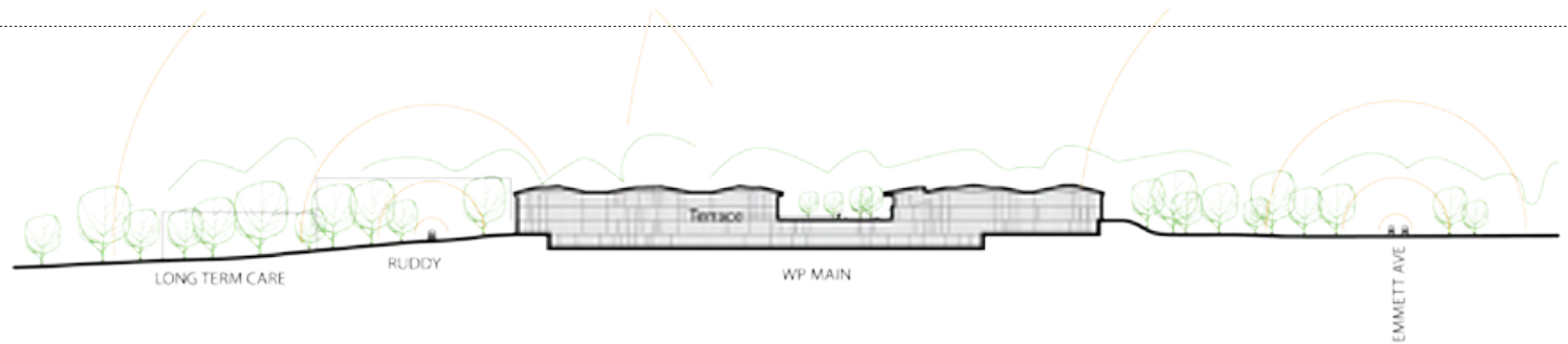
NORTH-SOUTH SECTION



BRIDGEPOINT 1963 (BH)

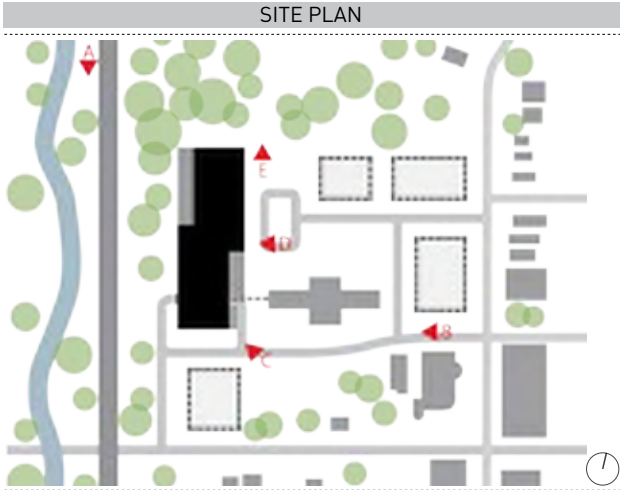


WEST PARK 1980 (WP)



NATURE: GREATER CONTEXT

BRIDGEPOINT 2013 (BAH)



BRIDGEPOINT 1963 (BH)



WEST PARK 1980 (WP)

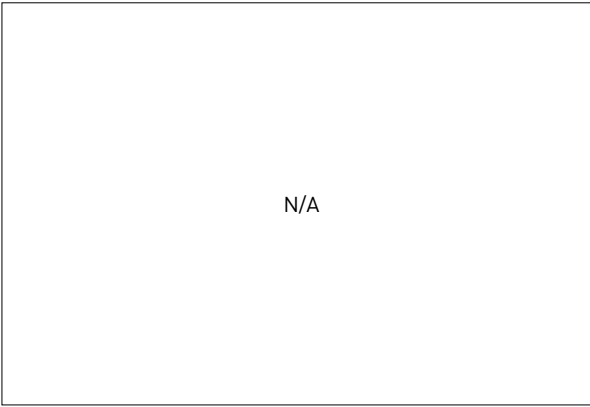


MAIN ENTRANCE

SECONDARY ENTRANCE

PARK ACCESS

BRIDGEPOINT 2013 (BAH)



C

E

BRIDGEPOINT 1963 (BH)

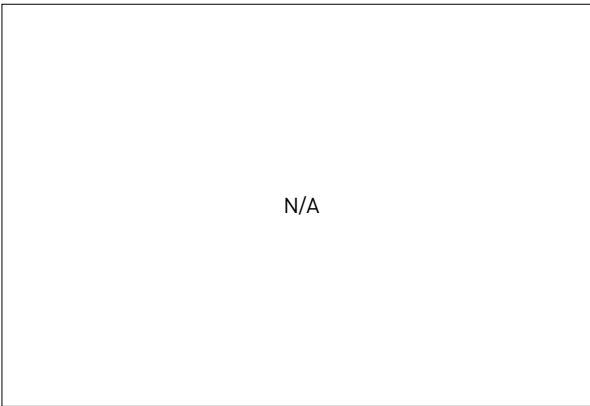


C

D

E

WEST PARK 1980 (WP)

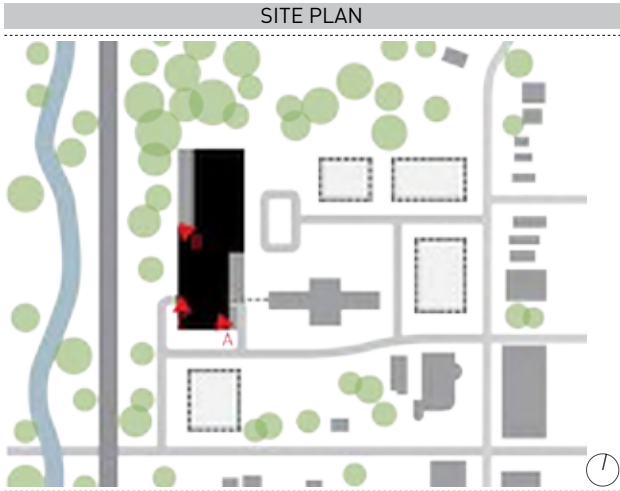


C

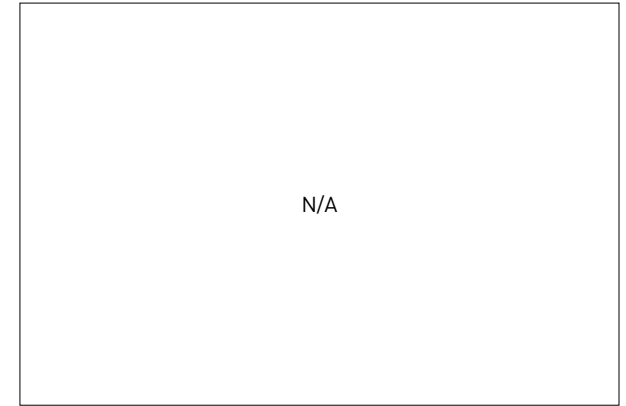
E

NATURE: IMMEDIATE CONTEXT

BRIDGEPOINT 2013 (BAH)



BRIDGEPOINT 1963 (BH)



WEST PARK 1980 (WP)



BRIDGEPOINT 2013 (BAH)

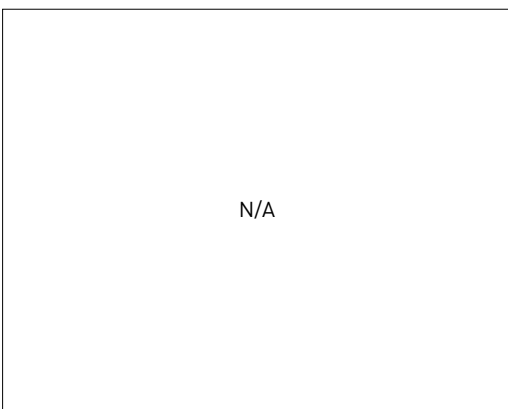
OUTDOOR DINING



ADDITIONAL OUTDOOR SPACES



BRIDGEPOINT 1963 (BH)



WEST PARK 1980 (WP)





An aerial photograph of a paved plaza. In the center, a person is pushing a shopping cart. To the left, a group of three people is gathered. To the right, another person is pushing a shopping cart. The plaza is marked with a large, light-colored circular design. The text "BUILDING TYPOLOGY" is overlaid in large, bold, orange letters across the center of the image.

BUILDING TYPOLOGY

SCALE + BUILDING AREA

SCALE + BUILDING AREA

The most obvious distinction between the new and former facility is the significant difference in both size and scale. While serving a similar in-patient population to the former facility, the new **BAH** is **twice as large** as **BH** in overall floor area, **four times as large in building volume**, and occupies a **footprint** on the site, **that is almost twice as large as the former facility**.

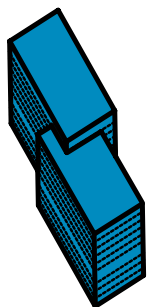
By moving from a room composition of quadruple, and double occupancy to double and single room occupancy, the **area per patient is significantly increased from the old and comparator facilities**. While the new building has a similar number of levels (10 versus 8) as its predecessor, it is more than twice as tall, due to higher floor to floor heights (4.2 m versus 3.0 m), increased programming at both upper and podium levels, and the large mechanical floors at the 5th and 11th levels. While the total population of staff and patients per floor are similar then to the old building, **they are distributed much more thinly across this much larger building (64 patients per floor sharing an elevator core and four separate social spaces versus 116 at the old building sharing two social spaces)**

WP, similar in overall floor area to the old **BH**, appears more diminutive as the much of the building is buried into the landscape below the two patient floors. The patient floor levels, in two separate buildings above the podium level, and the irregularly shaped plans, help to break down the bulk of the

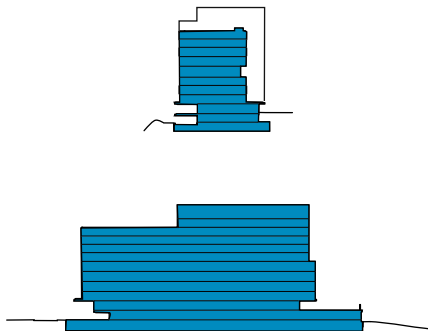
building. Its hipped roofs further help to disguise the building it into the treeline. The two separate 2 storey “pods,” each have 78 patients per floor sharing an elevator, lounge and physiotherapy space with each pod floor, only 60% as large as the new **BAH** floor.

The following parti drawings allow for a comparison of key environmental variables. These drawings allow us to see overarching organizational patterns and hierarchical relationships between circulation and social spaces, circulation and views, proximities, and relationships to fenestration for orientation, daylight and view.

BRIDGEPOINT 2013 (BAH)



238,445m³
TOTAL VOLUME

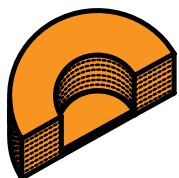


51,076m²
TOTAL BLDG AREA

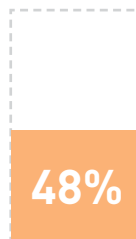
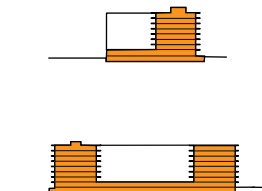


7700m²
BLDG FOOTPRINT

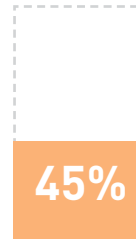
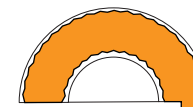
BRIDGEPOINT 1963 (BH)



60,090m³
TOTAL VOLUME

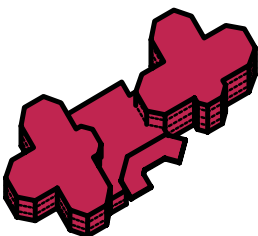


24,298m²
TOTAL BLDG AREA

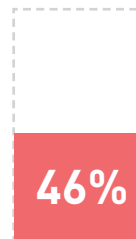
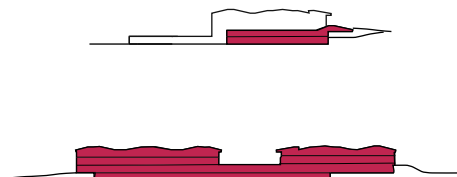


3500m²
BLDG FOOTPRINT

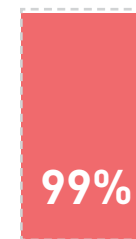
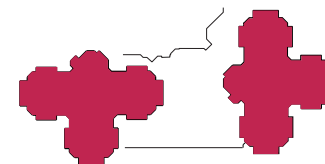
WEST PARK 1980 (WP)



92,636m³
TOTAL VOLUME



23,408m²
TOTAL BLDG AREA

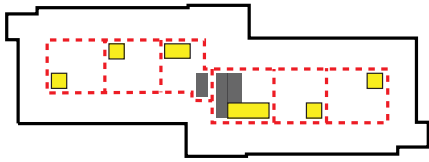


7600m²
BLDG FOOTPRINT

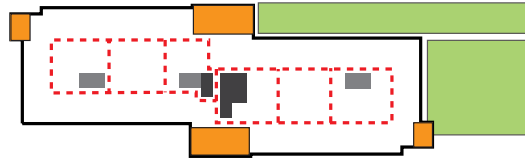
TYPICAL FLOOR - PARTI DRAWINGS

BRIDGEPOINT 2013 (BAH)

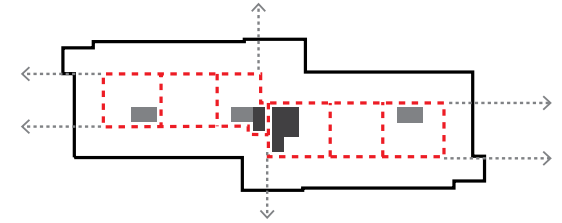
CIRCULATION AND NURSE STATIONS



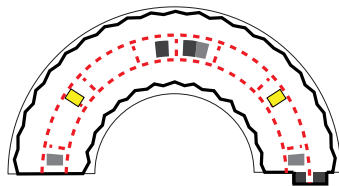
CIRCULATION AND SOCIAL SPACE



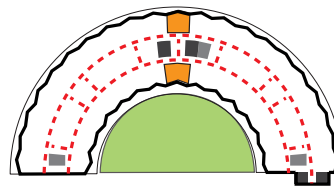
CIRCULATION AND VIEWS



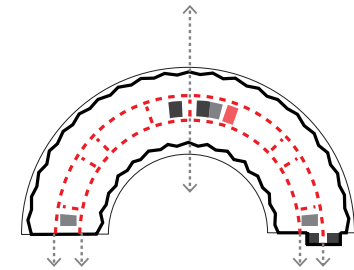
BRIDGEPOINT 1963 (BH)



DON JAIL

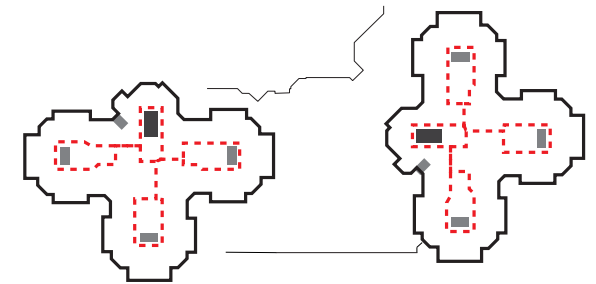
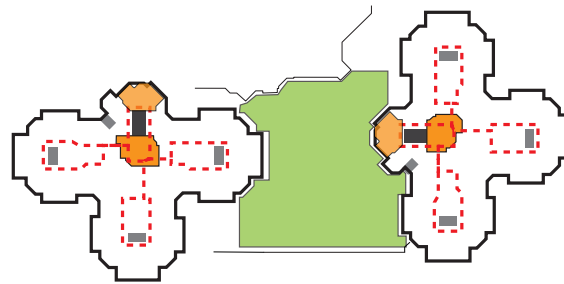
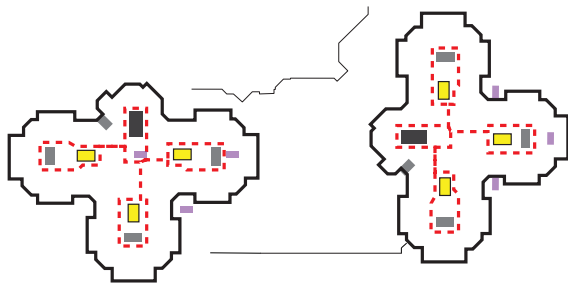


DON JAIL



DON JAIL

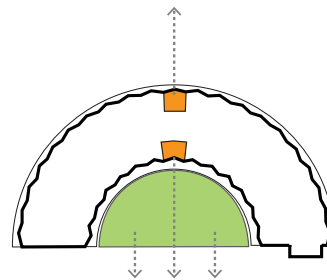
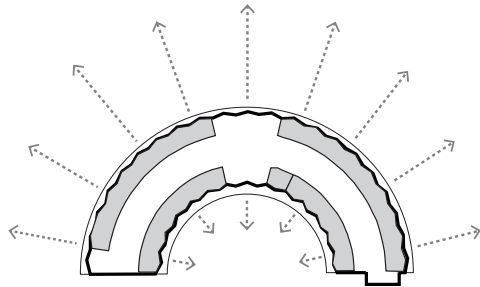
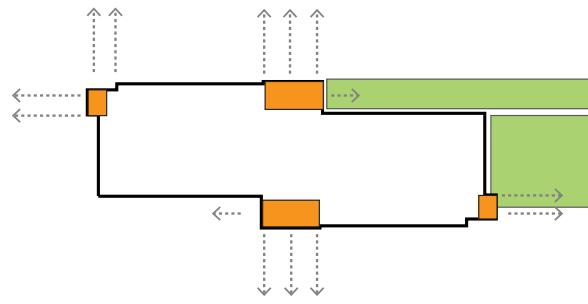
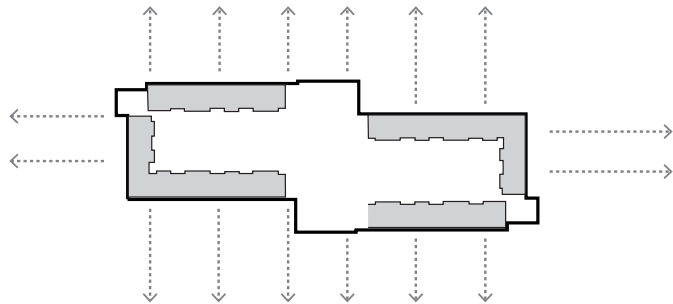
WEST PARK 1980 (WP)



PATIENT CARE (ROOMS)
 PATIENT AMENITY
 STAFF WORK AREAS
 OUTDOOR AMENITY
 CIRCULATION
 ELEVATOR CORES
 STAIR CORES
 ←←← OUTDOOR VIEWS

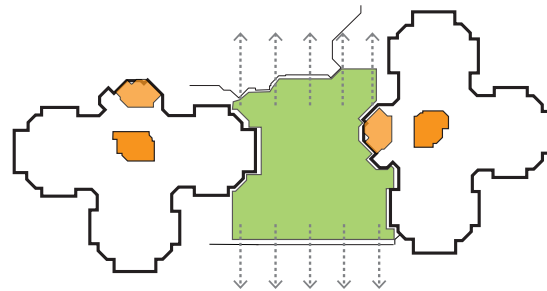
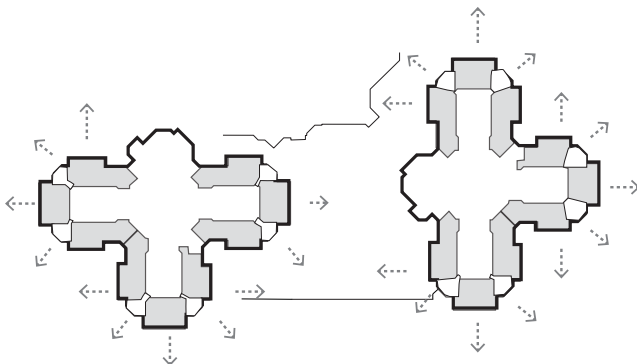
PATIENT ROOMS AND VIEWS

SOCIAL SPACE AND VIEWS



DON JAIL

DON JAIL



CIRCULATION

CIRCULATION

HORIZONTAL CIRCULATION

Despite the larger floor plate of the **new BAH** (1.7 times as large as its predecessor), the **travel distances of patients** from their rooms to social spaces, and of nursing staff stations to patient rooms are **similar between the old BH and new. At WP**, the separated pod floors with their own elevator cores, make for much **tighter travel distances generally**.

BAH: The typical patient floor circulation is one large loop around a series of central service blocks separated by perpendicular corridors. This more permeable circulation allows patient and staff crossover, and view between the two major corridors at every 15 meters. The corridors are **bright (daylit), high, and wide**. Different orientations and views which are memorable at the ends of each corridor facilitate orientation and wayfinding. This corridor system serves up to **64 patients per floor**.

BH: The double corridor space at the original building, similarly wrapped around a central service core including bathing and nursing stations. This corridor loop ran uninterrupted from the elevator core to each building end for 63 meters with no crossovers except at the nurses' stations. It was narrow, low in height, cluttered with storage and difficult to navigate for wheelchairs with these constraints and the plan curvature. The window at each end of the corridor wasn't visible from a distance also because of the curved form. This double corridor was brick lined with teak trim. It served **116* patients per floor**.



WP: The T-shaped configuration of **WP's** plan, has three circulation circuits that wrap around the nurses' stations and central service cores. They converge at the patient lounge, physiotherapy and elevator lobby. Although there are no windows or view from this space, these loops are quite short, so wayfinding is clear. This double corridor served **78 patients per floor**.

VERTICAL CIRCULATION

The patient and staff lounges at **BAH** are destinations in the plan, distant from the elevators. Patients must choose to go to these locations rather than casually encounter other patients in these spaces. At **BH** and **WP**, the single patient lounge on each floor was open and immediately adjacent to the elevators, making them amenable to casual encounter but also noisy and very public. Patient dining, physiotherapy, cyber café, hair salon, cafeteria and other amenity spaces at **BAH** are immediately adjacent to the elevators.

POPULATION DENSITY

Fewer patients and staff per floor at the new **BAH**, the greater extent, and crossover between circulation spaces, the greater variety of amenity spaces within the floor, across, and outside the building, all tend to disburse people in this hospital. There is much less density available to populate any one room or the corridors. The plan layout of the other two hospitals, by comparison, concentrated activity to many fewer destinations, increasing and focusing density and human interaction.

* as originally designed

BRIDGEPOINT 2013 (BAH)



1/3 CIRCULATION/ASSIGN



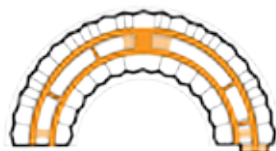
38% SINGLE
62% DOUBLE



0.9 PATIENTS/100m²
32 PATIENTS/LOUNGE

* % of patients per room type

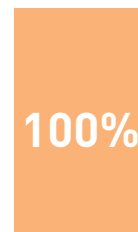
BRIDGEPOINT 1963 (BH)



4/9 CIRCULATION/ASSIGN



34% DOUBLE
66% QUAD



2.4 PATIENTS/100m²
116 PATIENTS/LOUNGE

* % of patients per room type

WEST PARK 1980 (WP)



1/3 CIRCULATION/ASSIGN



8% SINGLE
31% DOUBLE
61% QUAD



1.3 PATIENTS/100m²
78 PATIENTS/LOUNGE

* % of patients per room type

TRAVEL DISTANCES

BRIDGEPOINT 2013 (BAH)

NURSE STATION TO PATIENT ROOM



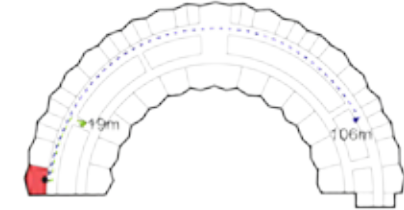
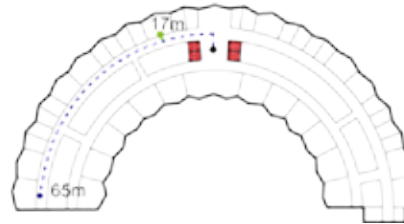
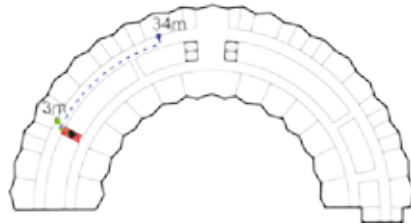
ELEVATORS TO PATIENT ROOM



NURSE STATION TO STAFF LOUNGE



BRIDGEPOINT 1963 (BH)



WEST PARK 1980 (WP)



N/A

0 5 10 20

■ DESIRED LOCATION ● CLOSEST TRAVEL ● FARTHEST TRAVEL

PATIENT ROOM TO PATIENT LOUNGE

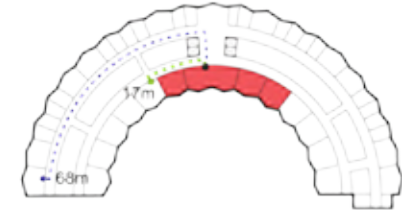
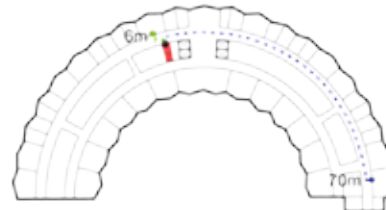
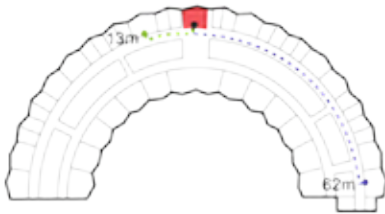
PATIENT ROOM TO PATIENT FLOOR PANTRY

PATIENT ROOM TO PATIENT THERAPY

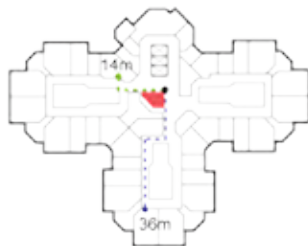
BRIDGEPOINT 2013 (BAH)



BRIDGEPOINT 1963 (BH)



WEST PARK 1980 (WP)





CAUTION
NO DIVING



PROGRAM+ AMENITIES

PROGRAM + AMENITIES

PROGRAM + AMENITIES

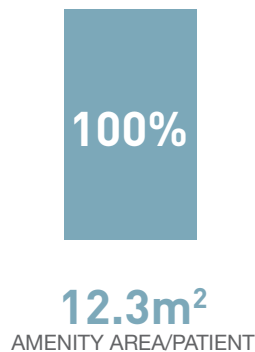
Augmented programs were included in the new **BAH** to encourage patients to get out of their rooms, to be mobile, and to engage in activities and social interactions with other patients, staff, and the general public. The new **BAH** includes **seven and a half times the amount of social and amenity space per patient as the old BH hospital and more than twice as much as WP.** **Outdoor amenity areas are also significantly greater in the new BAH.** The new **BAH** has more than twice the amount of outdoor amenity space per patient as the old **BH**, and only slightly less adjacent outdoor space per patient as **WP**.

WP has a large paved central roof terrace as well as five other garden spaces at grade (including a smoking terrace), adjacent to various rooms like the cafeteria, and entry lobby lounge.

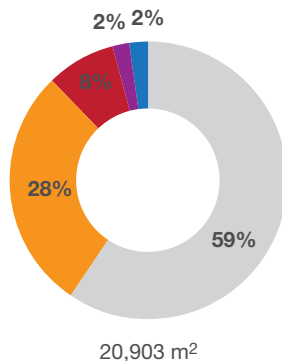
In addition to the the large roof terrace and at grade entry terraces (found in both the **BH** and **WP**) the new **BAH** also includes also a west facing porch and terraced garden, ground level terrace (Labyrinth), and two, fifth floor terraces (east and west).

PATIENT CARE (ROOMS) PATIENT AMENITY PATIENT LOUNGE STAFF WORK AREAS STAFF AMENITY PUBLIC AREA OUTDOOR AMENITIES

BRIDGEPOINT 2013 (BAH)



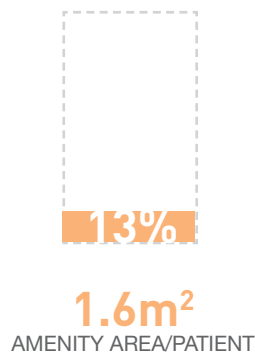
INTERIOR PROGRAM BREAKDOWN*



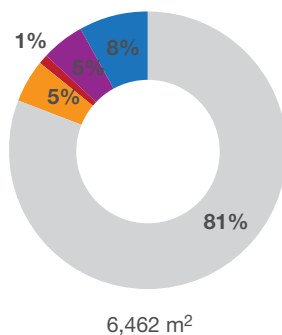
OUTDOOR SPACE RATIO*



BRIDGEPOINT 1963 (BH)



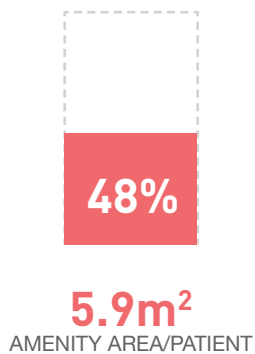
INTERIOR PROGRAM BREAKDOWN*



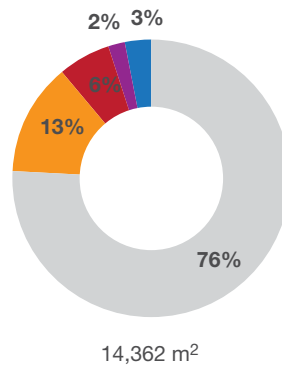
OUTDOOR SPACE RATIO*



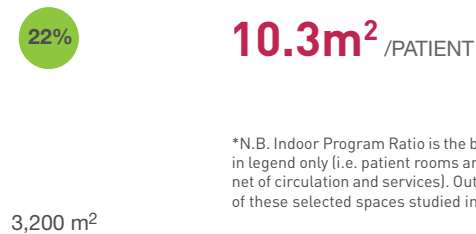
WEST PARK 1980 (WP)



INTERIOR PROGRAM BREAKDOWN*

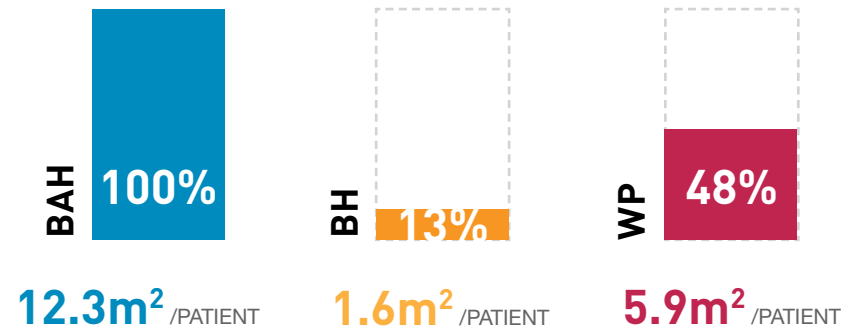


OUTDOOR SPACE RATIO*



*N.B. Indoor Program Ratio is the breakdown of the selected spaces shown in legend only (i.e. patient rooms and amenity spaces for staff and patients, net of circulation and services). Outdoor Space Ratio is expressed as a ratio of these selected spaces studied in this particular POE.

AMENITY SPACES

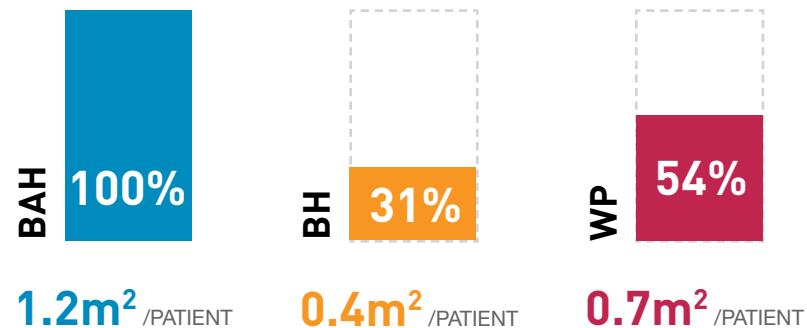


GENERAL AMENITY SPACE

BAH: Additional to the physiotherapy spaces, spiritual care, auditorium, common cafeteria, and library found in the both **BH** and **WP**, are an **extra lounge space per floor, patient dining (1 per floor), library, hair care, internet café, cafeteria, retail café, and retail pharmacy**. These spaces are located as destination points within the building with the intent to encourage patient mobility both horizontally and vertically and into the different and varied environments and orientations of the building and site. The previous **BH** and **WP**, each had only two amenity spaces per floor located centrally and immediately adjacent to their elevator /stair cores (one patient lounge space per floor, and one physiotherapy space). The new **BAH** has typically four separate amenity destinations per floor, with dining space and physiotherapy tight to the elevator lobby, and the north and south lounges at opposite ends of the floor plate. The disbursement of activity spaces at the new **BAH** is intended to create choice, variety, and destination, therefore encouraging mobility.

The ground floor level at **BAH** will be opened up much more directly to the public when the rest of the campus construction is complete, with entrance and exit points from all four sides of the building and a variety of common and public amenities intended to draw the public into the building and provide activity and destination for patients and visitors.

TOTAL AMENITY SPACE PER PATIENT



PATIENT LOUNGES

LOUNGE SPACE AREA PER PATIENT

BAH: Patient lounge spaces in the new building are separate rooms (with doors) rather than lobby extensions. Visible from the length of the corridors, and offering borrowed views and daylight to the main corridors, they each have three exterior fully glazed walls. These lounges have meaningful views to baseball games, the parks, and the city. Each of these rooms have three walls of glass, and with loose soft seating typically arranged to see the view, they are not ideal for watching television in the day due to glare. Large columns in the space also restrict a collective seating arrangement somewhat. Located at the ends of the corridors, occupants of the space are somewhat isolated from the **concentrated circulation found closer to the elevators, limiting casual social interface**. The lounge is a destination requiring a conscious decision to both travel to, and enter. There are 15 of these lounges in the entire building (2 per floor supporting 64 people (**32 people per lounge**)).

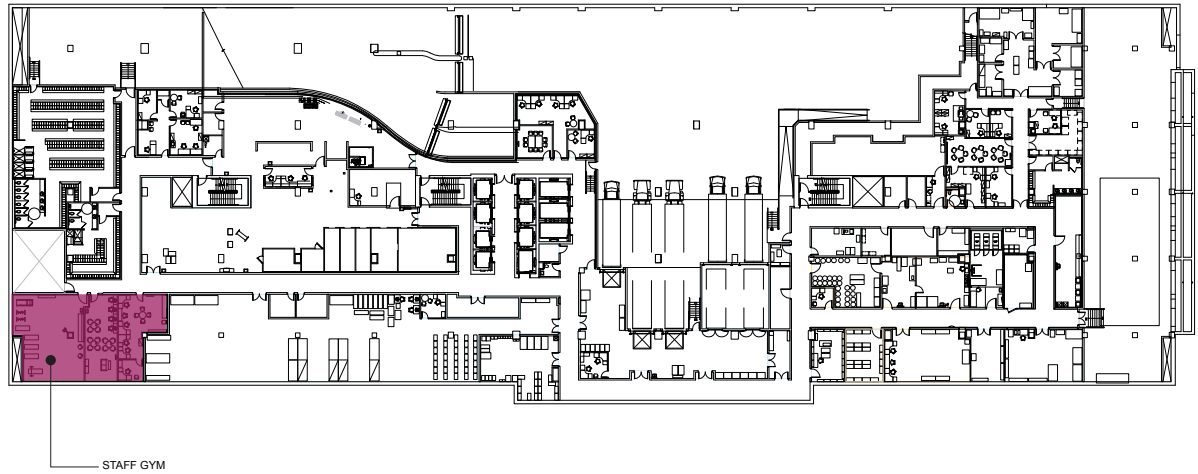
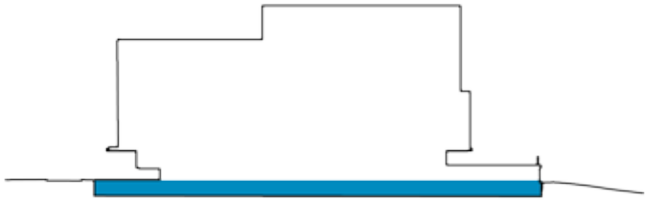
BH: The old **BH** lounges were small alcove spaces off the corridor and elevator lobby, regularly visible to passers-by and staff for casual conversation. Seating (1 couch and 1 loose chair) faced a television but also passers-by. These spaces were less conducive to patient to patient conversation as there was insufficient seating to promote a second activity to television watching. There were **5 of these lounges** (1 per floor) with **each lounge serving up to 116 patients**.

WP: The internally located lounge spaces at each pod are located at the intersection of the three wings of each floor, and are immediately adjacent to the elevator lobby. As a result, **they are acoustically loud, public, and social due to this activity and interaction**. They have furniture arranged to face the focal point, and only wall of this space, a television screen on a diagonal wall. These ample spaces accommodate a greater amount of soft seating arranged to support conversation and other activities simultaneous to watching of television. There are **four of these lounges in the entire building. Each lounge serves 78 patients**.



PATIENT CARE (ROOMS) PATIENT AMENITY PATIENT LOUNGE STAFF WORK AREAS STAFF AMENITY PUBLIC AREA OUTDOOR AMENITIES

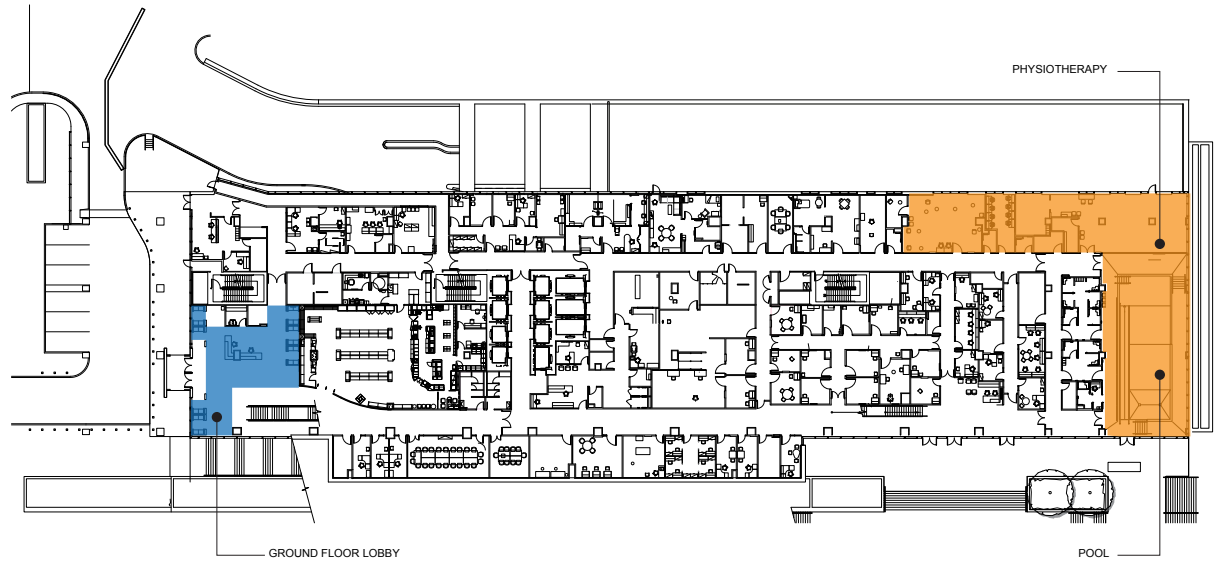
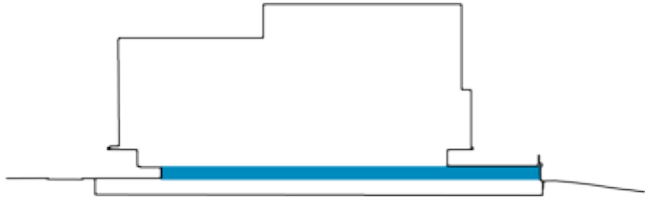
LOWER LEVEL





PATIENT CARE (ROOMS) PATIENT AMENITY PATIENT LOUNGE STAFF WORK AREAS STAFF AMENITY PUBLIC AREA OUTDOOR AMENITIES

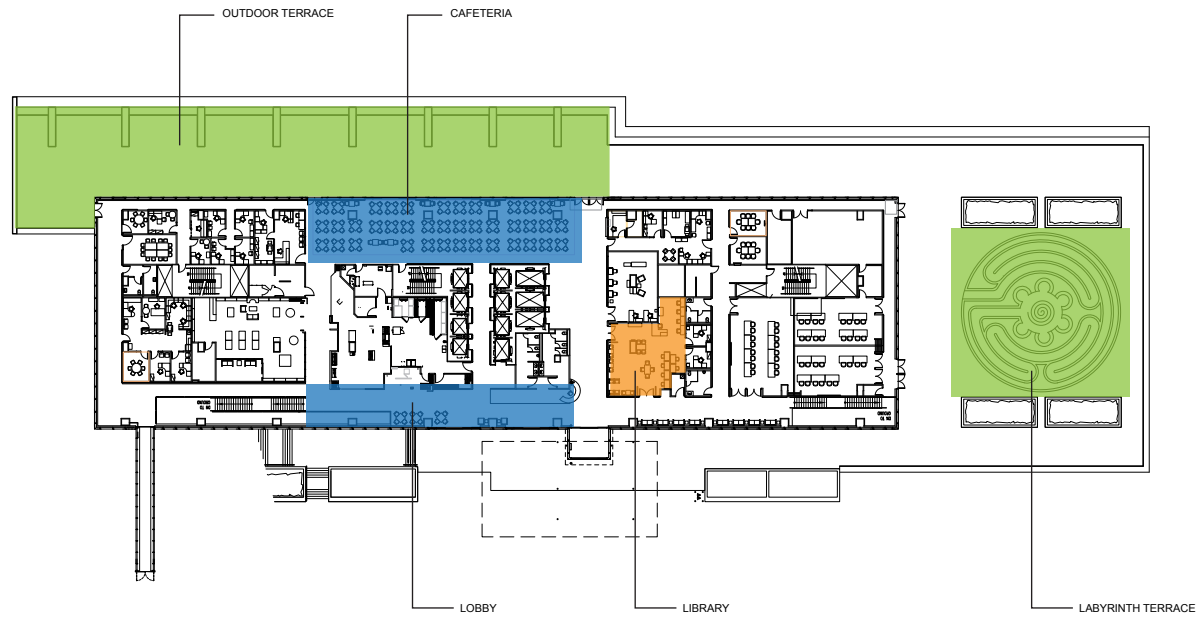
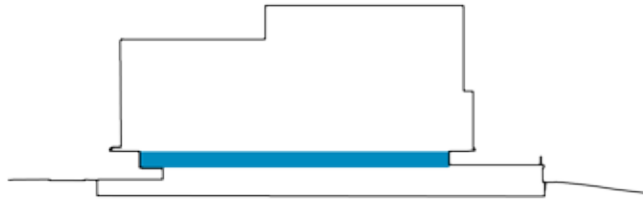
GROUND LEVEL





PATIENT CARE (ROOMS) PATIENT AMENITY PATIENT LOUNGE STAFF WORK AREAS STAFF AMENITY PUBLIC AREA OUTDOOR AMENITIES

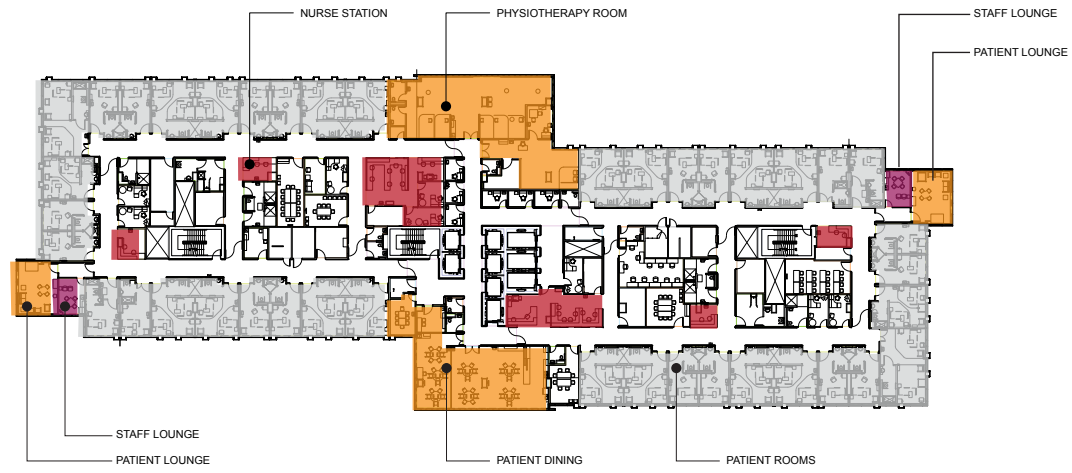
MAIN LEVEL





PATIENT CARE (ROOMS) PATIENT AMENITY PATIENT LOUNGE STAFF WORK AREAS STAFF AMENITY PUBLIC AREA OUTDOOR AMENITIES

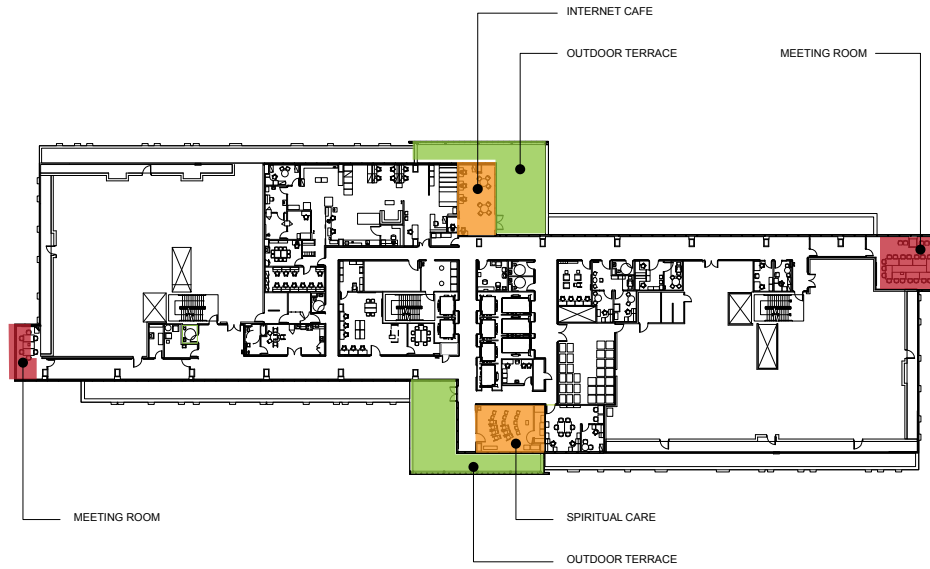
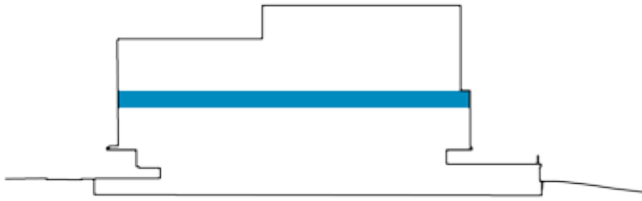
2nd, 3rd, 4th LEVELS





PATIENT CARE (ROOMS) PATIENT AMENITY PATIENT LOUNGE STAFF WORK AREAS STAFF AMENITY PUBLIC AREA OUTDOOR AMENITIES

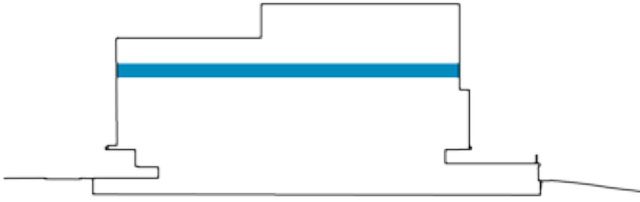
FIFTH LEVEL





PATIENT CARE (ROOMS) PATIENT AMENITY PATIENT LOUNGE STAFF WORK AREAS STAFF AMENITY PUBLIC AREA OUTDOOR AMENITIES

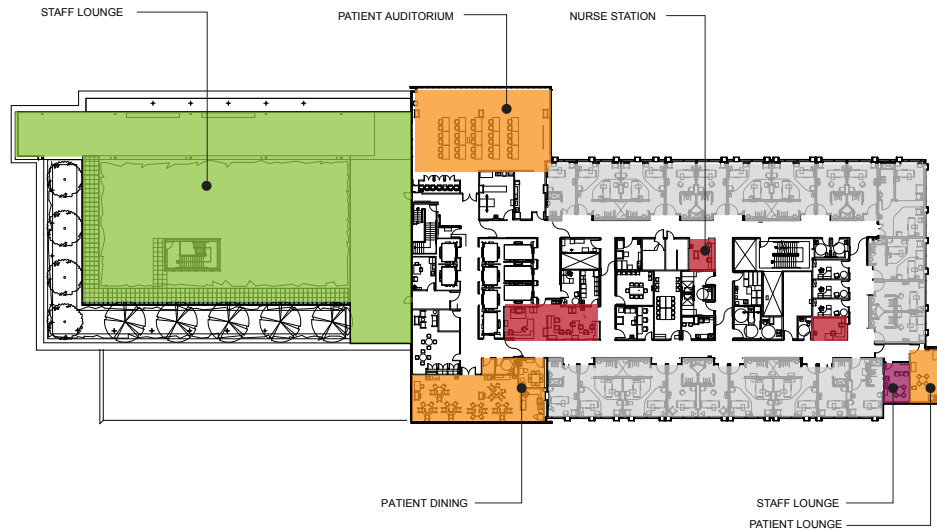
7th, 8th, 9th LEVELS





PATIENT CARE (ROOMS) PATIENT AMENITY PATIENT LOUNGE STAFF WORK AREAS STAFF AMENITY PUBLIC AREA OUTDOOR AMENITIES

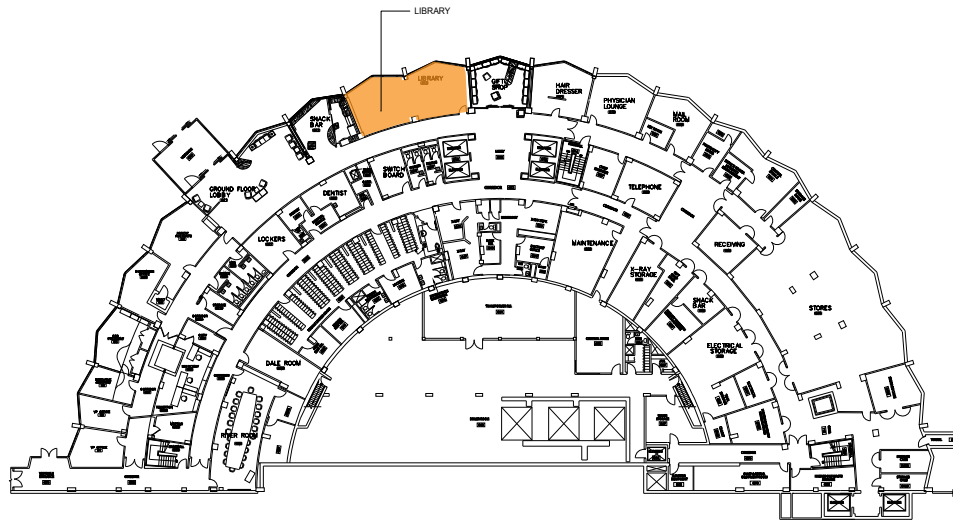
TENTH LEVEL





PATIENT CARE (ROOMS) PATIENT AMENITY PATIENT LOUNGE STAFF WORK AREAS STAFF AMENITY PUBLIC AREA OUTDOOR AMENITIES

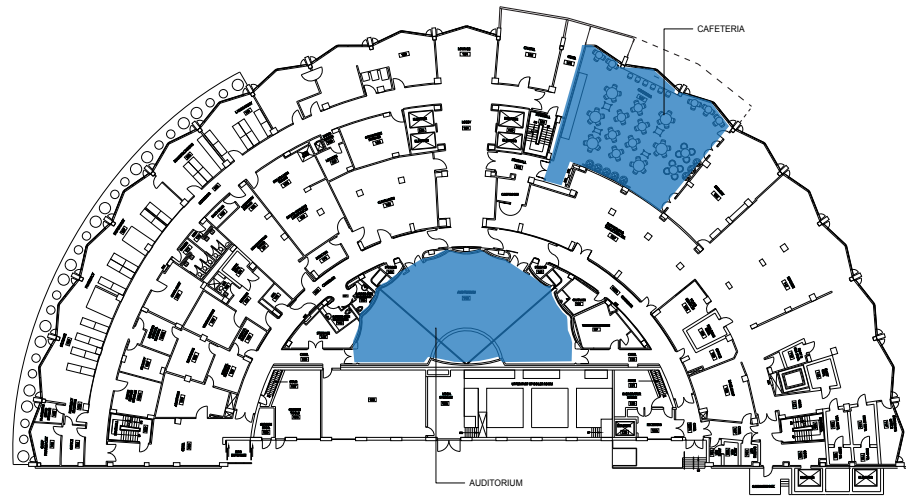
LOWER LEVEL





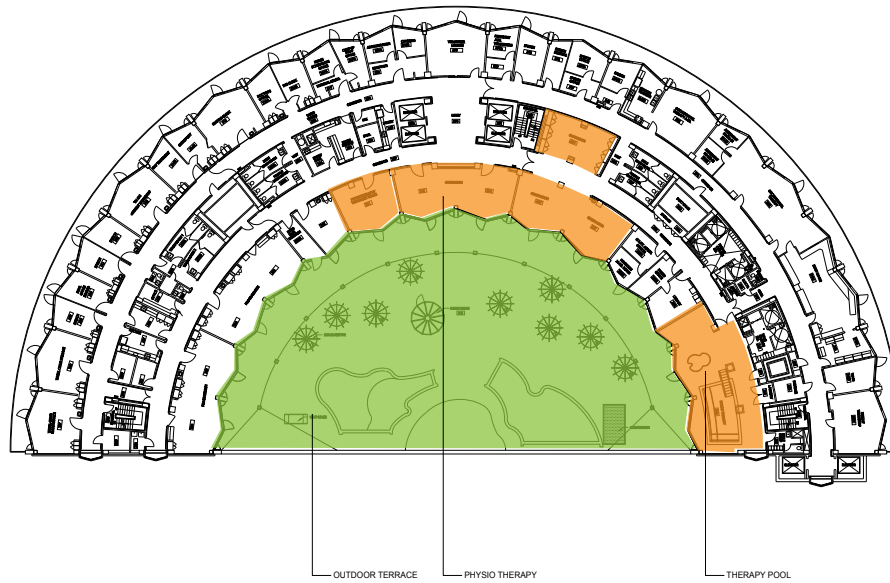
PATIENT CARE (ROOMS) PATIENT AMENITY PATIENT LOUNGE STAFF WORK AREAS STAFF AMENITY PUBLIC AREA OUTDOOR AMENITIES

MAIN LEVEL

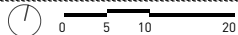




SECOND LEVEL

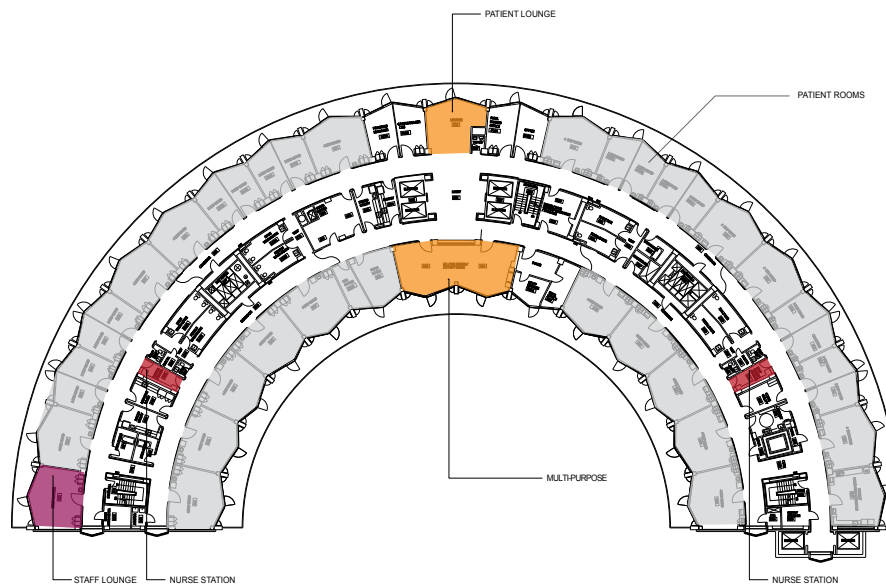


R



PATIENT CARE (ROOMS) PATIENT AMENITY PATIENT LOUNGE STAFF WORK AREAS STAFF AMENITY PUBLIC AREA OUTDOOR AMENITIES

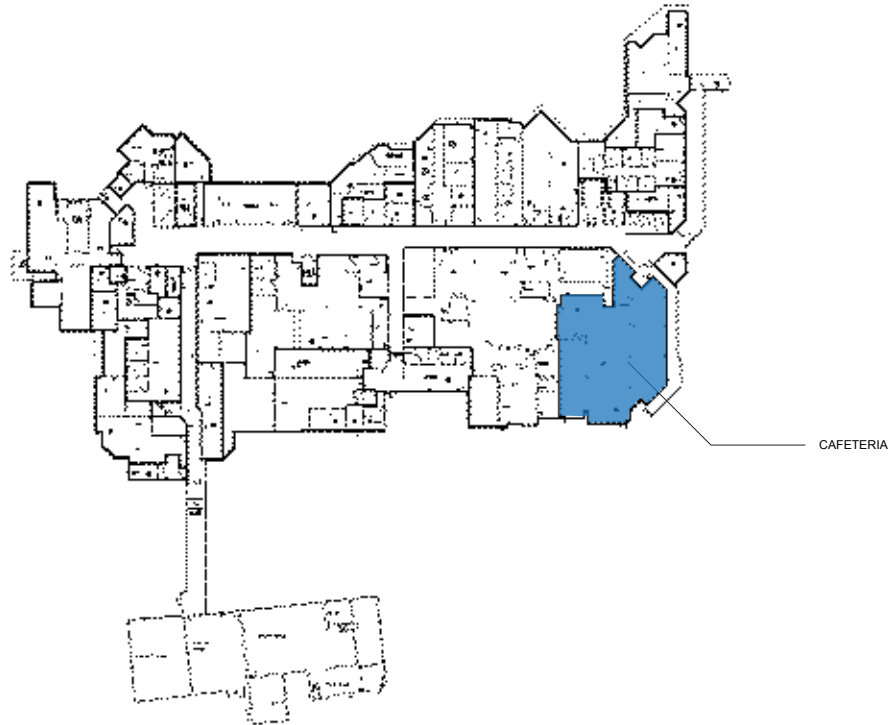
3rd, 4th, 5th, 6th, 7th LEVELS





PATIENT CARE (ROOMS) PATIENT AMENITY PATIENT LOUNGE STAFF WORK AREAS STAFF AMENITY PUBLIC AREA OUTDOOR AMENITIES

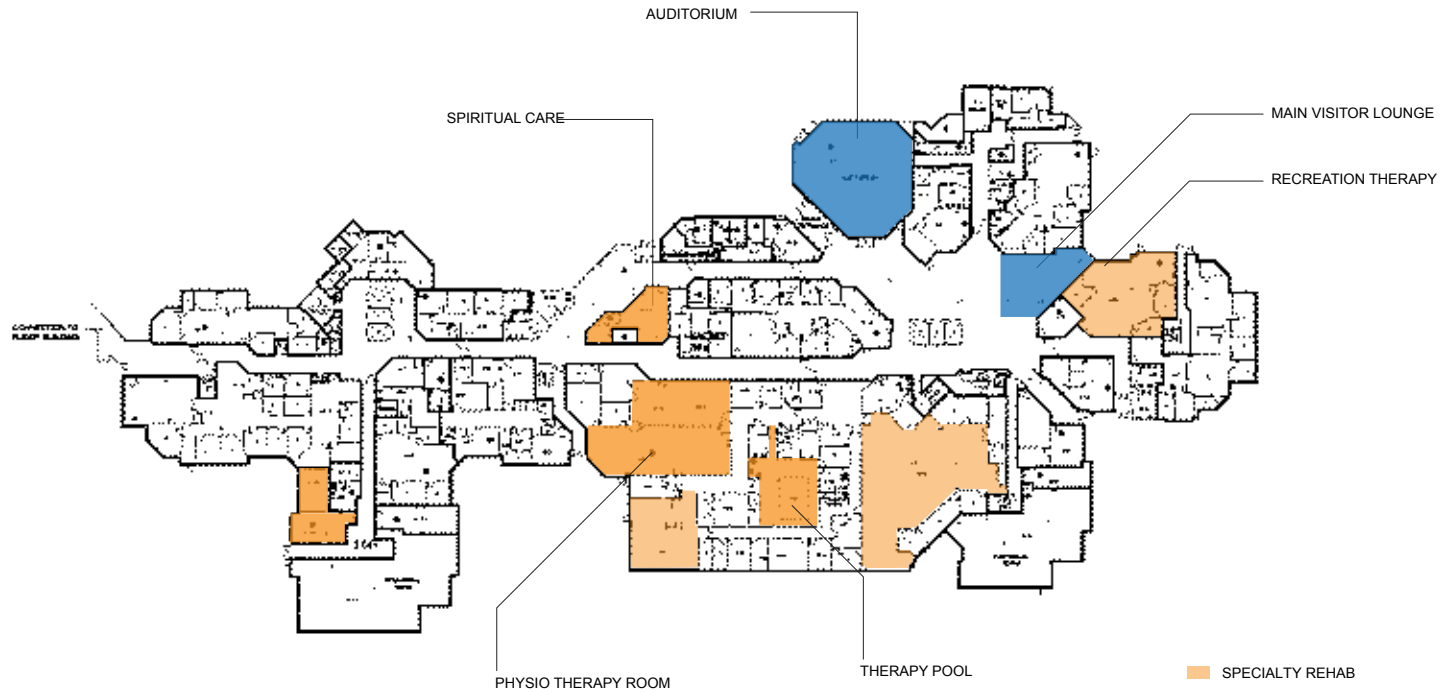
LOWER LEVEL





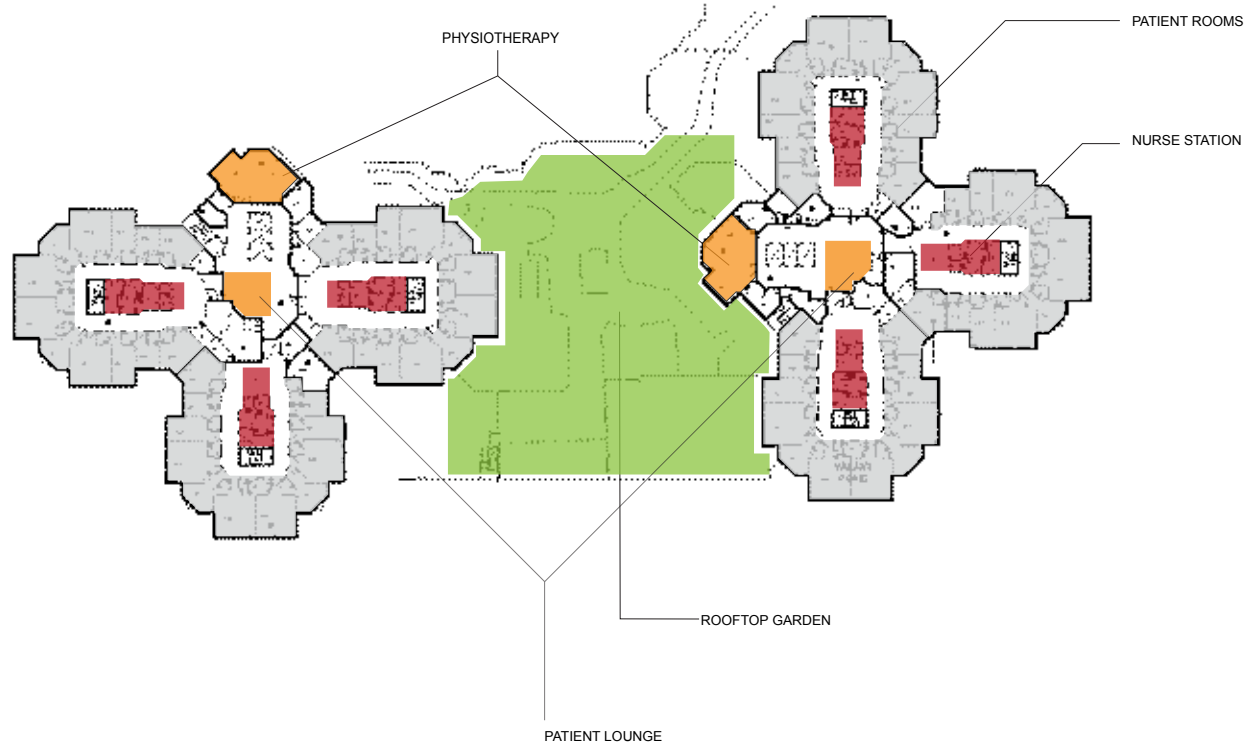
PATIENT CARE (ROOMS) PATIENT AMENITY PATIENT LOUNGE STAFF WORK AREAS STAFF AMENITY PUBLIC AREA OUTDOOR AMENITIES

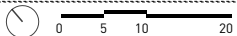
MAIN LEVEL





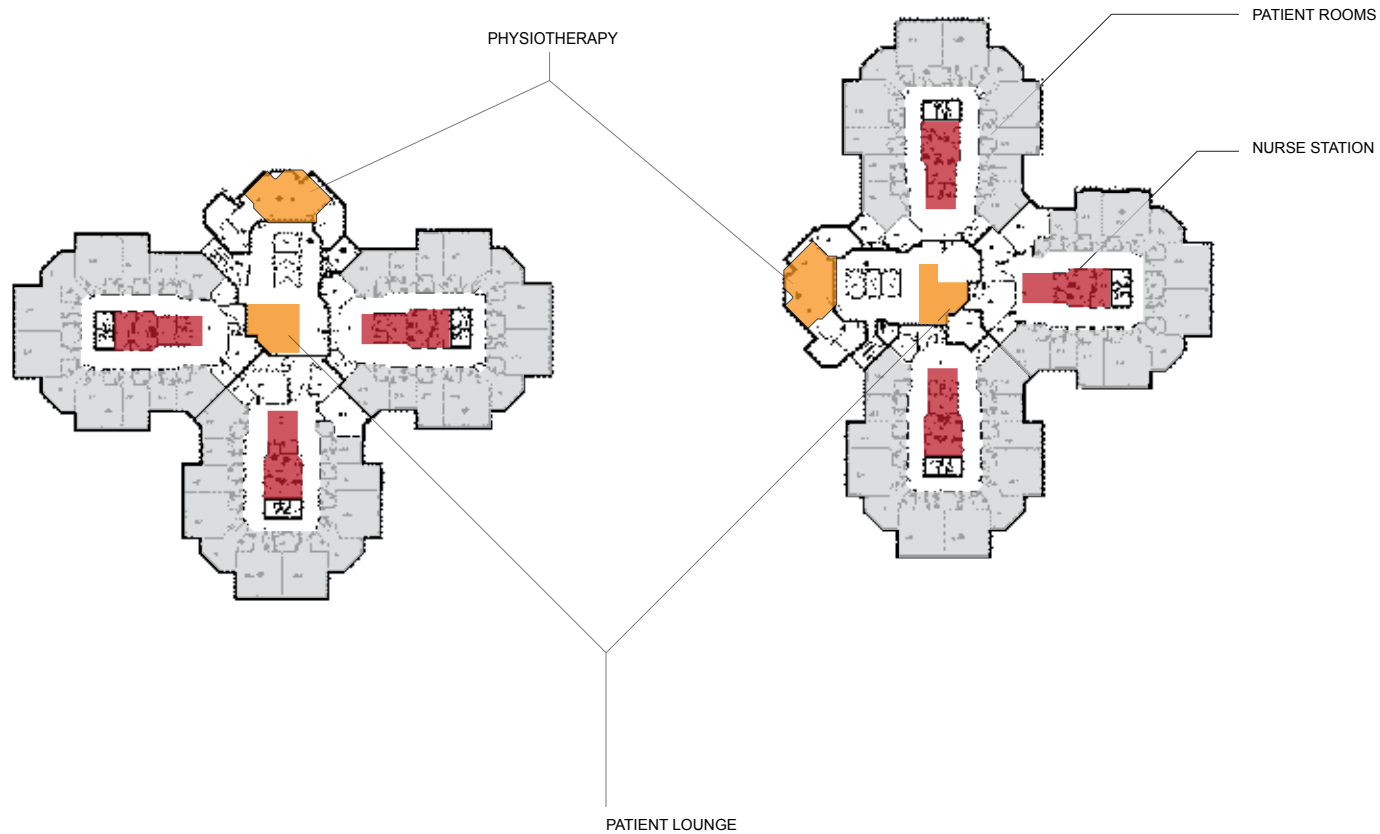
SECOND LEVEL





PATIENT CARE (ROOMS) PATIENT AMENITY PATIENT LOUNGE STAFF WORK AREAS STAFF AMENITY PUBLIC AREA OUTDOOR AMENITIES

THIRD LEVEL





FENESTRATION



FENESTRATION OVERVIEW

DAYLIGHTING + FENESTRATION

BAH: All patient rooms, lounge spaces, and patient, staff and common amenity spaces have access to direct daylight at least three hours a day over most of their entire area in plan, due to plan orientation, window configurations and proportions. The building is designed to situate many key social spaces so that they have at least two exterior orientations, extending daylight access and view even further. Even the swimming pool has access to direct daylight from two directions, situated at the north end of the building looking into the park.

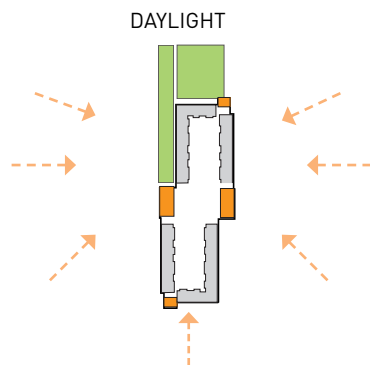
BH: Due to the north/south orientation of the building, while all patient rooms got ample access to indirect daylight, about 30 percent of the rooms (north facing), did not get direct light for more than 3 hours a day. The large balcony overhangs limited access to daylight on the southern facing rooms during the summer months (which was desirable from a heat gain perspective). The central, north facing patient lounge on each floor received only indirect north light, with good, but limited views to daylight in the park. While all rooms and lounges had balconies—they were permanently locked.

WP: Patient rooms are organized to face all orientations equally so all but the northerly (approximately 25%) rooms receive more than three hours of direct daylight per day. The internal patient lounges are all without

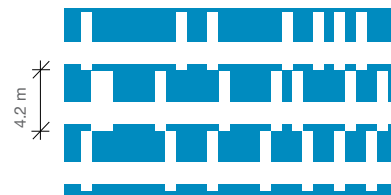
view, and the two upper level lounges have coffered ceilings with several skylights. The podium levels are very deep in plan and have limited amounts of glazing as the building is partially underground. The ground floor common lounge and cafeteria are largely internalized with one large window at their short ends, and each receive access to daylight for less than 3 hours a day, and in only a small portion of the overall spaces.

Note: Three hours a day of daylight was selected as a significant datum as it has been established as a minimum, through evidence based design research to reduce stress (Alimoglu and Donmez 2005).

BRIDGEPOINT 2013 (BAH)

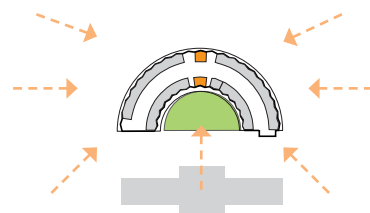


90%
Patient Space receives more than 3 hours direct daylight/day

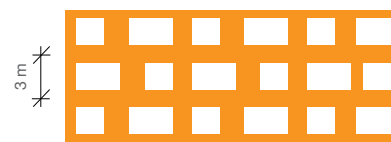


1:1
WINDOW TO WALL RATIO

BRIDGEPOINT 1963 (BH)

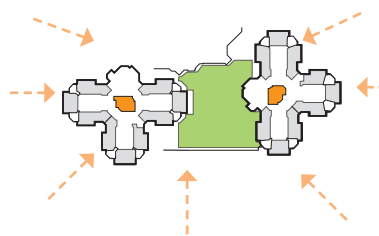


60%
Patient Space receives more than 3 hours direct daylight/day

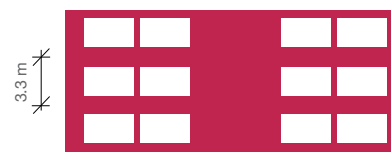


1:2
WINDOW TO WALL RATIO

WEST PARK 1980 (WP)



70%
Patient Space receives more than 3 hours direct daylight/day



1:2
WINDOW TO WALL RATIO

DAYLIGHT AND VIEWS

IN-PATIENT ROOMS : PRIVACY, DAYLIGHT AND VIEWS

BAH: Typical double rooms are organized so that each patient has direct access to view even when their roommate's privacy curtain is drawn. Rooms are typically twice as large as the two-patient rooms at the old **BH** with space for private bed-side tables, storage and a visitor chair. En-suite washroom facilities are provided for typical rooms with an integral, wheelchair accessible shower shared between each pair of rooms. Sixty percent are double rooms and forty percent are single rooms.

BH: Patient rooms on the outer crescent all had good views to either of the parks and the activities there. Beds were organized parallel to one another and the window wall, preventing view and light for the inner bed when the outer bed's privacy curtains were drawn. No en-suite toilets or washroom facilities were provided, with shared facilities located down the hall. Rooms were 55% as large as the new **BAH**, were too small to negotiate with contemporary wheelchairs, lacked storage and room for a visitor's chair, and also appeared cluttered. Sixty-six percent were quad rooms and thirty-four percent were double.

WP: Patient rooms have good views to either the park or the roof terrace and beds are organized parallel to one another and the windows, meaning the inner patient has no access to view when their roommate's privacy curtain

is drawn. Two piece, en-suite washroom facilities are provided with shared bathing facilities down the hall. Sixty-one percent are quad rooms, thirty-one percent are double, and eight percent are single rooms. Comparable rooms (i.e. doubles) are 20% smaller than new **BAH**'s (excluding WC's),

PATIENT LOUNGES : DAYLIGHT AND VIEWS

BAH: The patient lounges, dining, and physiotherapy spaces all have meaningful views to baseball and soccer games, highway traffic, several parks, and the city skyline. Each lounge has three walls each of floor to ceiling glass, affording multiple orientations, and views down to grade and up to the sky. Operable, view permeable blinds and fritted glass reduce glare. These east and west facing rooms are very bright and have glare at certain times of day when blinds are not down.

BH: The lounge space faced north with smallish windows with high sills and balcony overhangs beyond, restricting views. Physiotherapy spaces on the opposite side of the elevator lobby received south light, with views to the back of the jail or the curved ends of inactive, adjacent patient room balconies.

WP: Lounge spaces are internal, centralized and at the intersection of each patient bay and are adjacent to the elevator cores of each “pod”. Surrounded by an open corridor and this proximity to the buildings’ vertical circulation, they are a busy hub for patients and staff. Being internal, they have no view to the exterior and have no access to natural daylight except via skylight (a feature only available at two of the four patient lounges.)

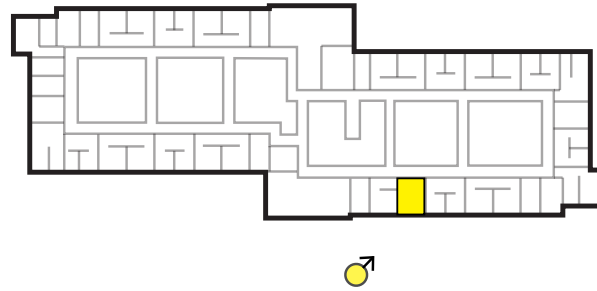
TYPICAL PATIENT ROOM : DAYLIGHTING

BRIDGEPOINT 2013 (BAH)

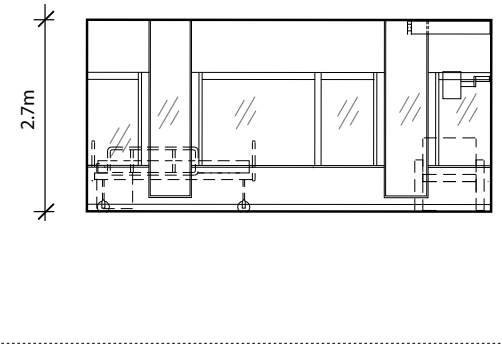


ROOM INTERIOR PHOTO

ROOM KEY PLAN 0 5 10 20

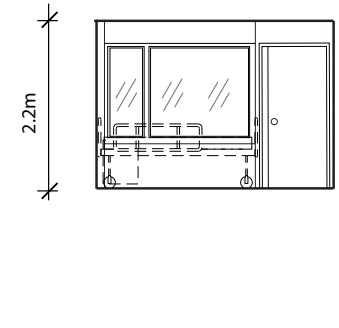
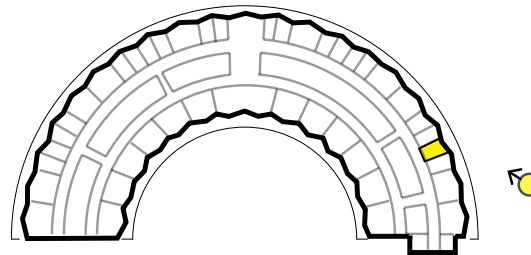


INTERIOR GLAZING ELEVATION 0 2 5

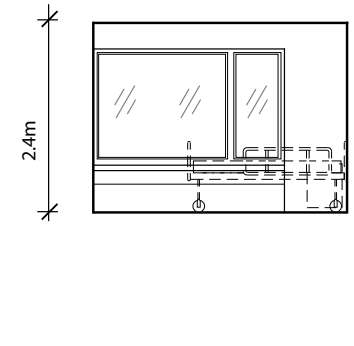
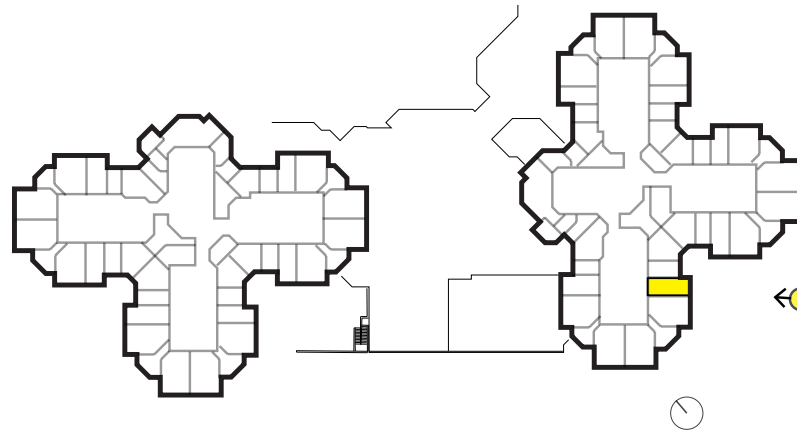
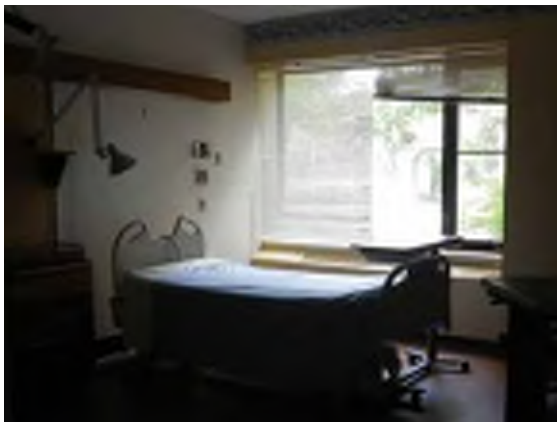


FOCUS ROOM

BRIDGEPOINT 1963 (BH)



WEST PARK 1980 (WP)

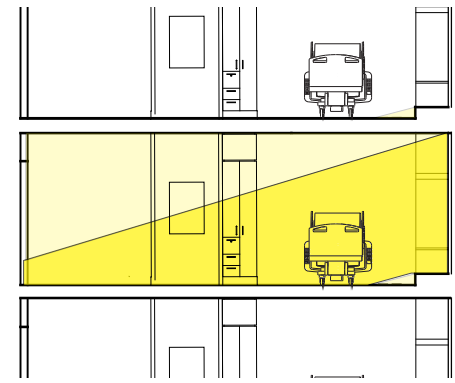
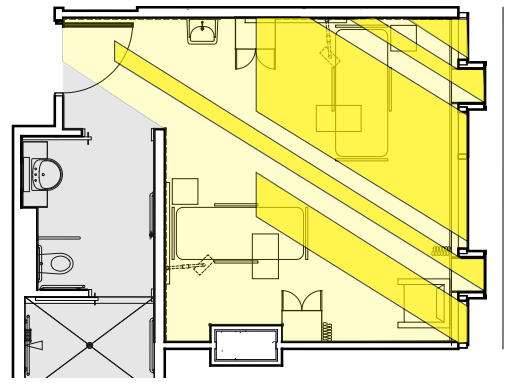




LIGHTING DATA ROOM PLAN ROOM SECTION

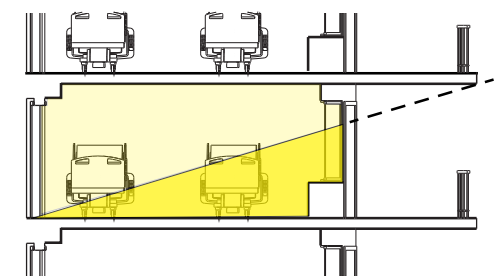
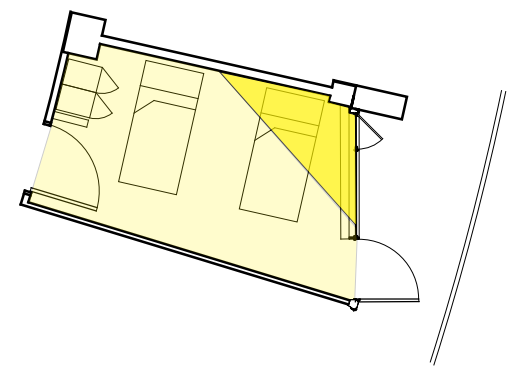
BRIDGEPOINT 2013 (BAH)

Optimal Daylight Infiltration:
 Winter Solstice
 East-Facing Rooms
 10:00 AM
 Azimuth: 148°
 Altitude: 17°



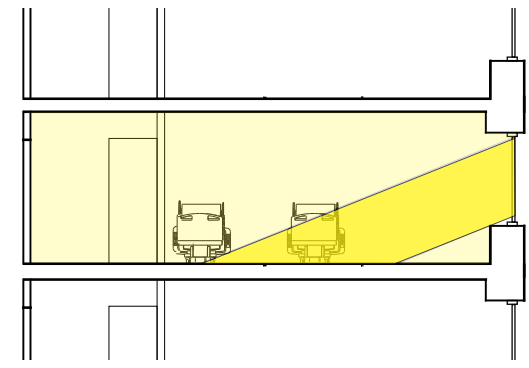
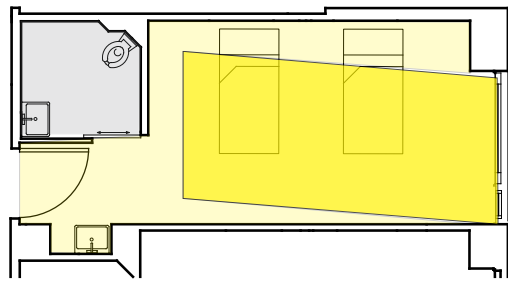
BRIDGEPOINT 1963 (BH)

Optimal Daylight Infiltration:
 Winter Solstice
 East-Facing Rooms
 10:00 AM
 Azimuth: 148°
 Altitude: 17°



WEST PARK 1980 (WP)

Optimal Daylight Infiltration:
 Winter Solstice
 South-Facing Rooms
 12:00 PM
 Azimuth: 176°
 Altitude: 23°



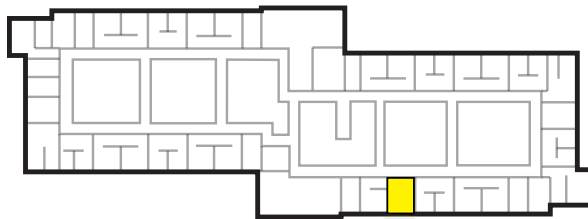
TYPICAL PATIENT ROOM : VIEWS

BRIDGEPOINT 2013 (BAH)

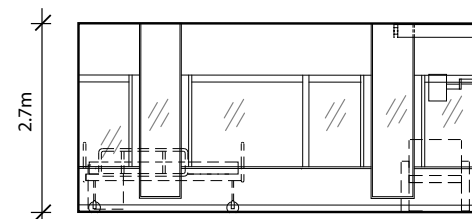


ROOM INTERIOR PHOTO

ROOM KEY PLAN 0 5 10 20

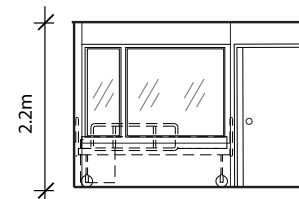
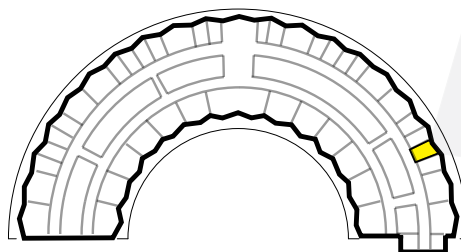


INTERIOR GLAZING ELEVATION 0 2 5

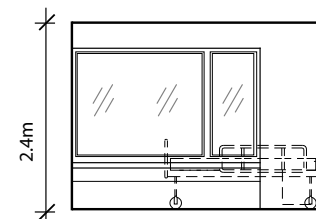
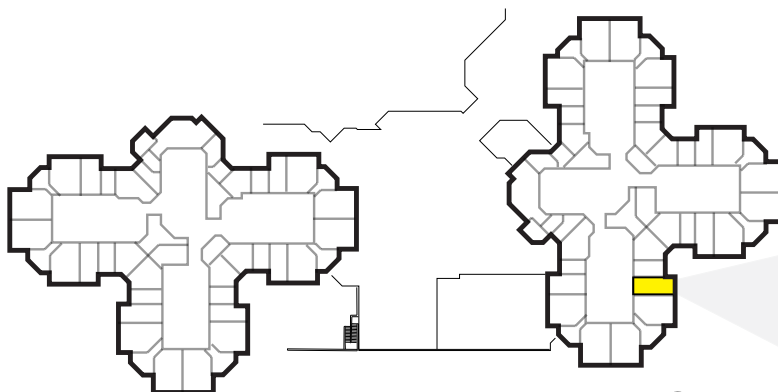
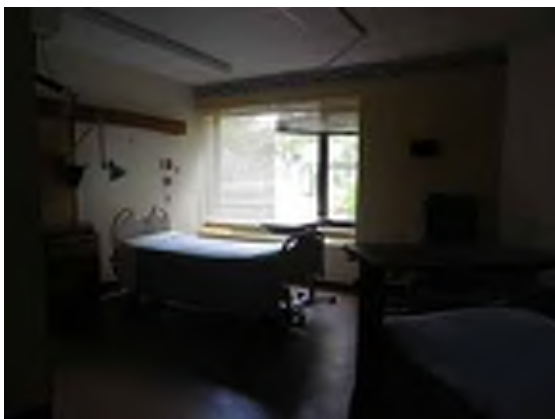


FOCUS ROOM

BRIDGEPOINT 1963 (BH)



WEST PARK 1980 (WP)



0 2 5

SHADED AREA

VIEW DATA

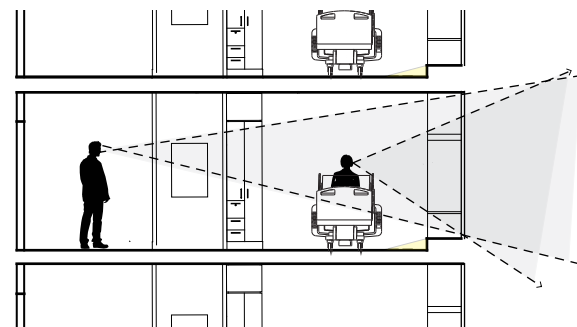
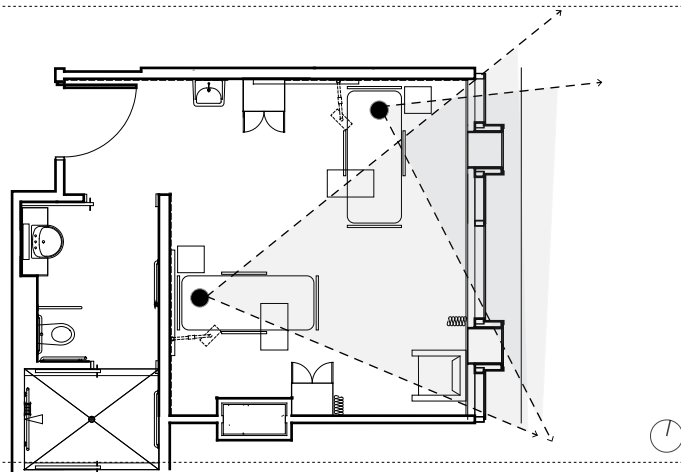
ROOM PLAN

ROOM SECTION

BRIDGEPOINT 2013 (BAH)

Typical View Conditions:

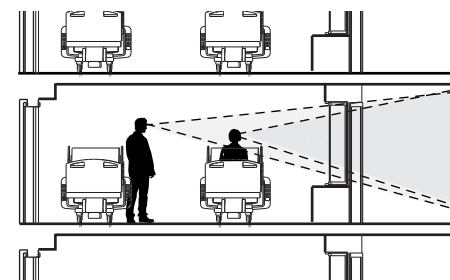
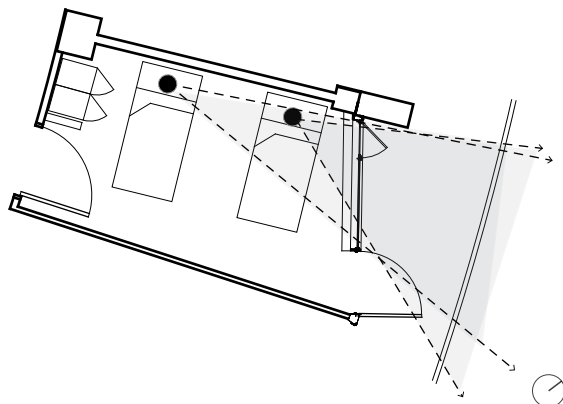
East-Facing Rooms



BRIDGEPOINT 1963 (BH)

Typical View Conditions:

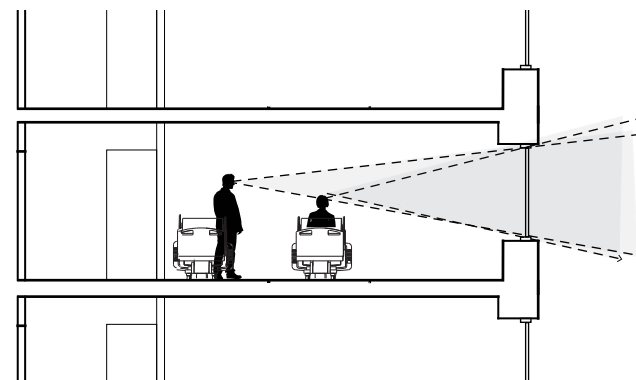
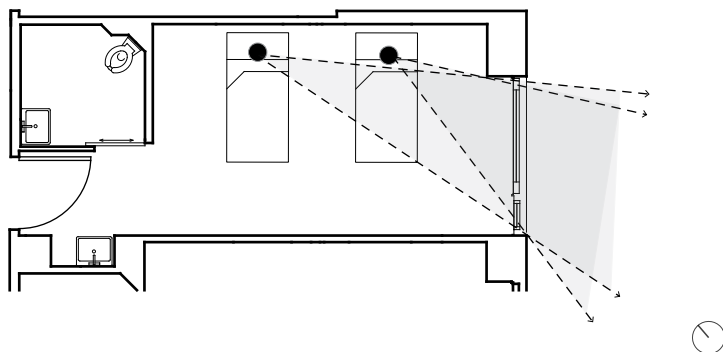
East-Facing Rooms



WEST PARK 1980 (WP)

Typical View Conditions:

East-Facing Rooms



FENESTRATION

TYPICAL PATIENT LOUNGES : DAYLIGHTING

FOCUS ROOM

ROOM INTERIOR PHOTO

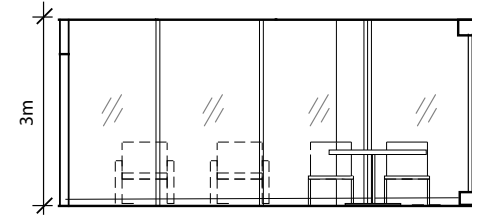
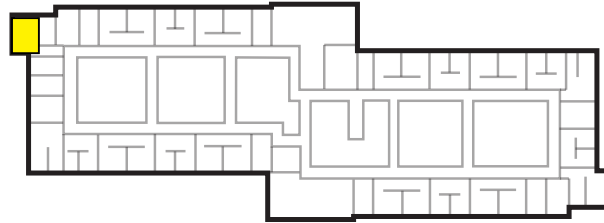
ROOM KEY PLAN

INTERIOR GLAZING ELEVATION

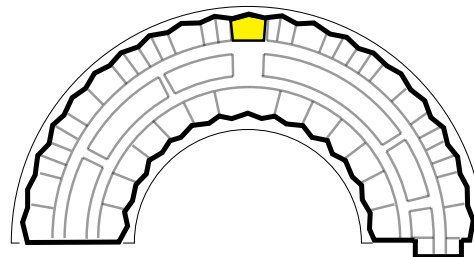
BRIDGEPOINT 2013 (BAH)



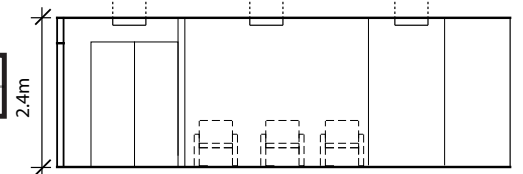
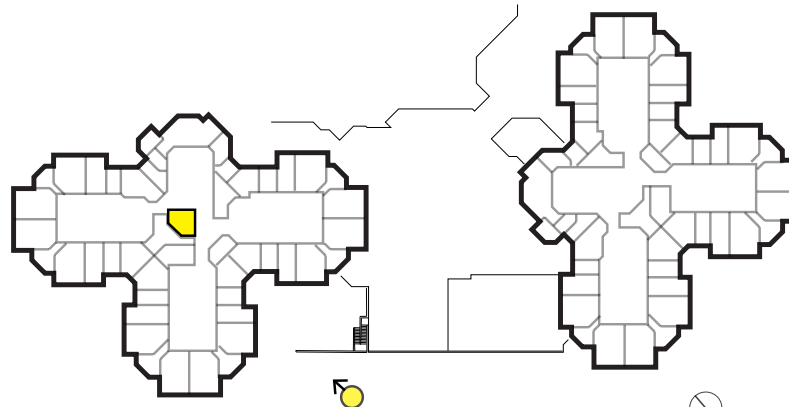
Tom Arban

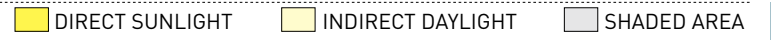


BRIDGEPOINT 1963 (BH)



WEST PARK 1980 (WP)

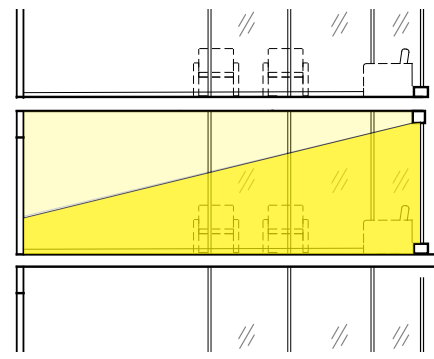
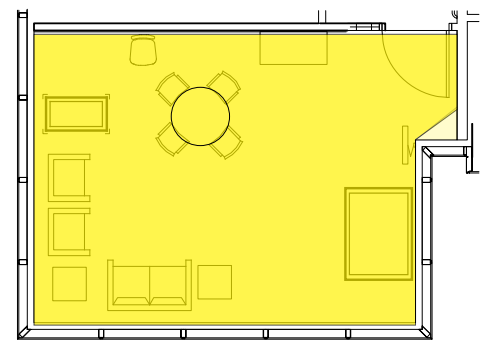




LIGHTING DATA ROOM PLAN ROOM SECTION

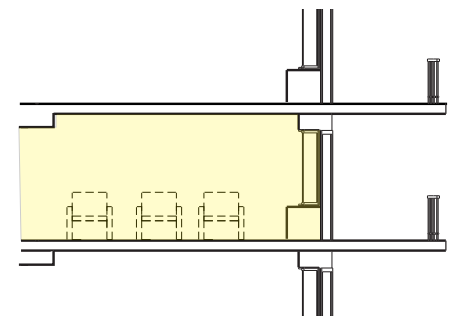
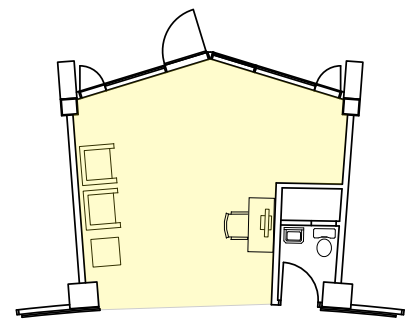
BRIDGEPOINT 2013 (BAH)

Optimal Daylight Infiltration:
 Winter Solstice
 South-Facing Rooms
 3:00 PM
 Azimuth: 219°
 Altitude: 13°



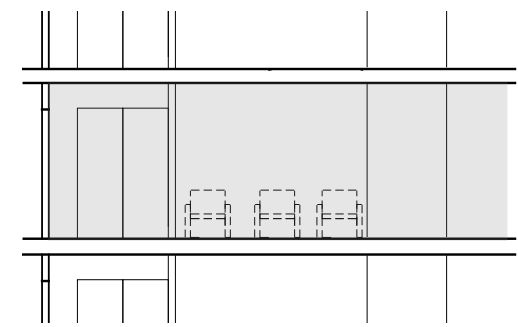
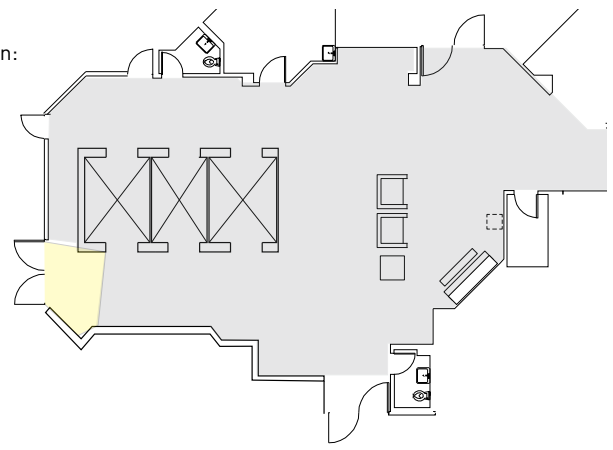
BRIDGEPOINT 1963 (BH)

Optimal Daylight Infiltration:
 Winter Solstice
 North-Facing Rooms
 3:00 PM
 Azimuth: 219°
 Altitude: 13°



WEST PARK 1980 (WP)

Optimal Daylight Infiltration:
 Winter Solstice
 Central Rooms
 3:00 PM
 Azimuth: 219°
 Altitude: 13°



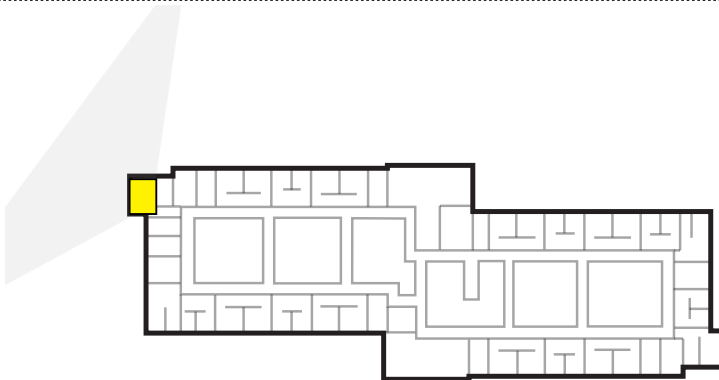
TYPICAL PATIENT LOUNGES : VIEWS

BRIDGEPOINT 2013 (BAH)

ROOM INTERIOR PHOTO

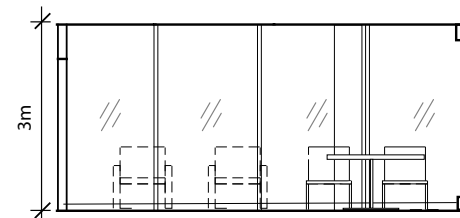


ROOM KEY PLAN

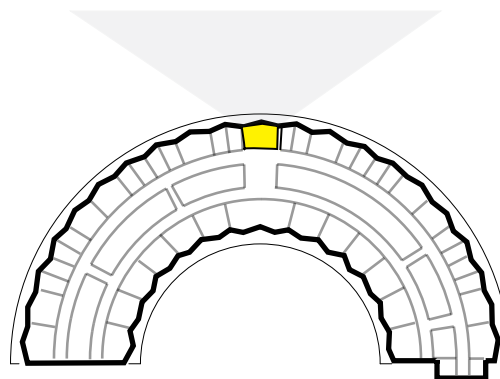


INTERIOR GLAZING ELEVATION

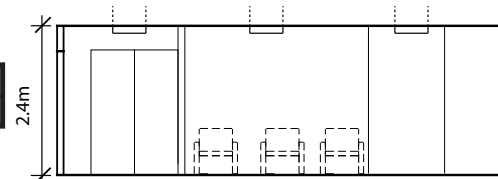
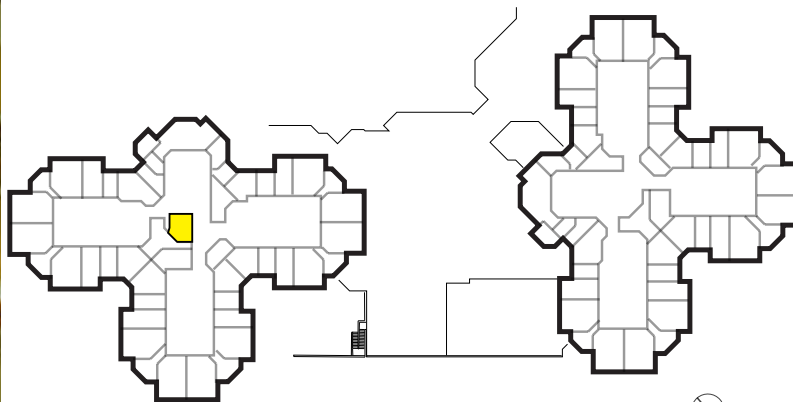
FOCUS ROOM



BRIDGEPOINT 1963 (BH)



WEST PARK 1980 (WP)



0 2 5

SHADED AREA

VIEW DATA

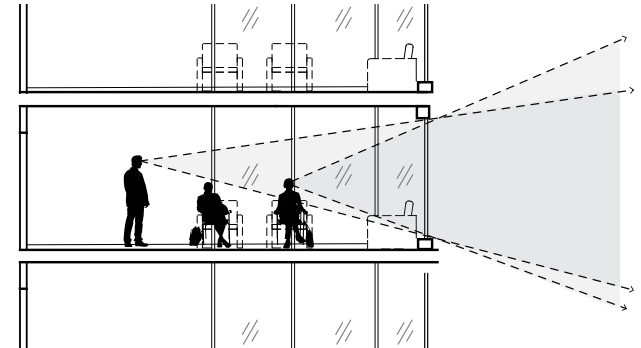
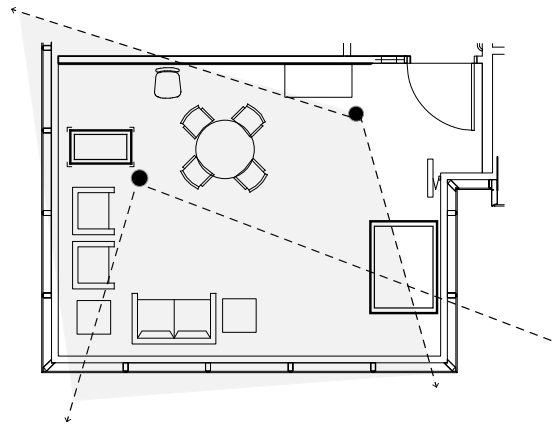
ROOM PLAN

ROOM SECTION

BRIDGEPOINT 2013 (BAH)

Typical View Conditions:

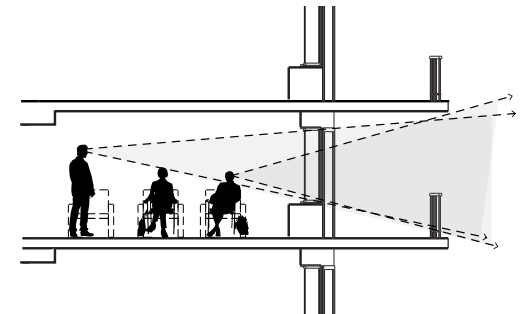
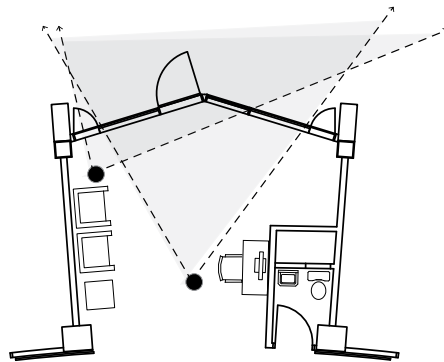
South-Facing Rooms



BRIDGEPOINT 1963 (BH)

Typical View Conditions:

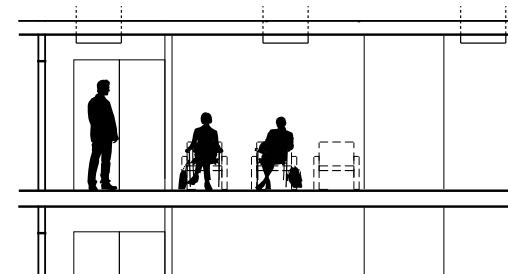
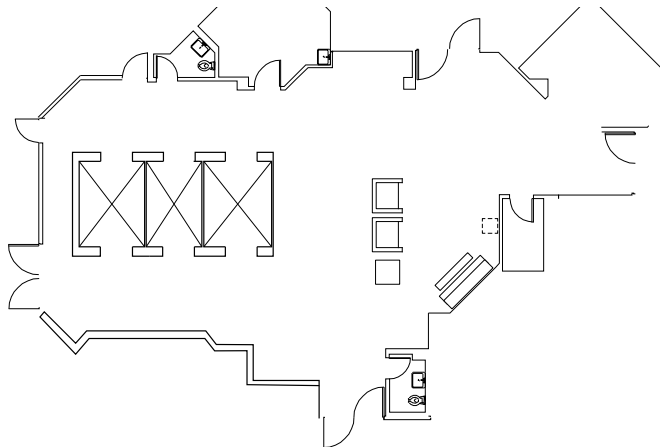
North-Facing Rooms



WEST PARK 1980 (WP)

Typical View Conditions:

Central Rooms



FENESTRATION



G
← Ambulatory Care
Registration
Diagnostic Imaging
Seating Clinic
Augmentative
Communications
Elevators
Restrooms
→ Information

ROOM DATA SHEETS



MAIN VISITOR LOUNGE/LOBBY

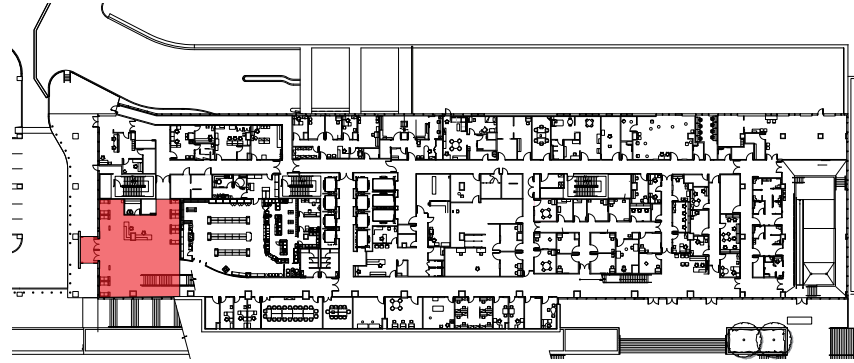
0 5 10 20

BRIDGEPOINT 2013 (BAH)

ROOM DATA

Orientations: E, S
 Patients Served: 480 ^{*1}
 Total Amount in Bldg: 1
 Amount per Floor: N/A
 Avg. Room Area: 46 m²

KEY PLAN

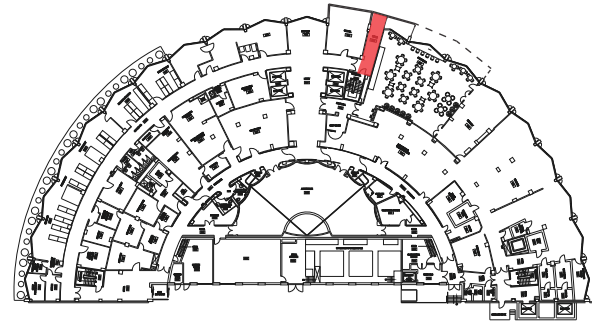


^{*1} available beds



BRIDGEPOINT 1963 (BH)

Orientations: N
 Patients Served: 580 ^{*1}
 Total Amount in Bldg: 1
 Amount per Floor: N/A
 Avg. Room Area: 21 m²

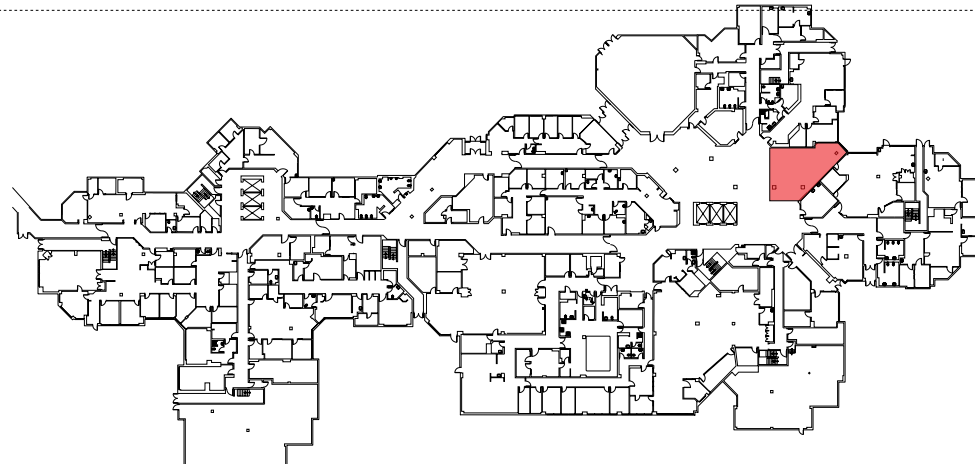


^{*1} available beds



WEST PARK 1980 (WP)

Orientations: E
 Patients Served: 312 ^{*1}
 Total Amount in Bldg: 1
 Amount per Floor: N/A
 Avg. Room Area: 21 m²

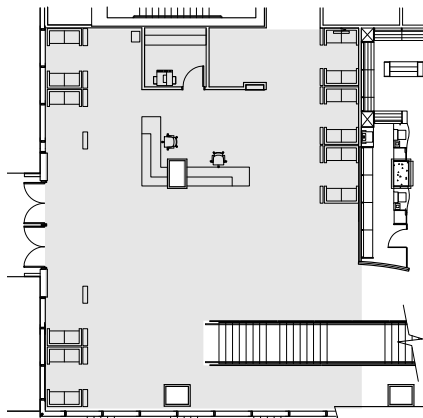


^{*1} available beds

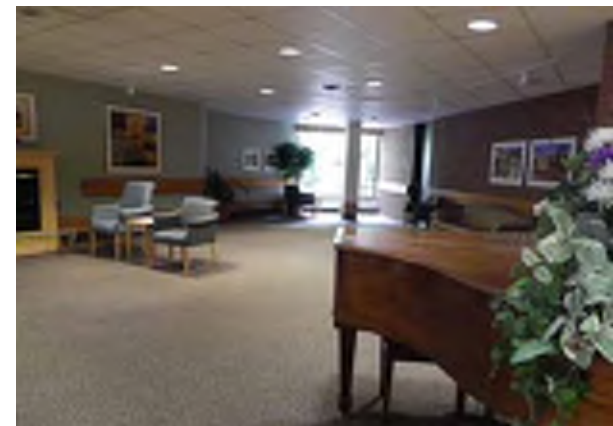
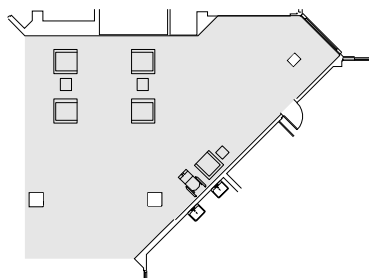
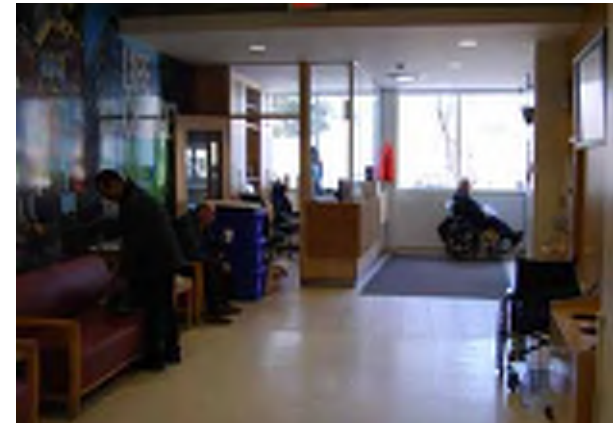
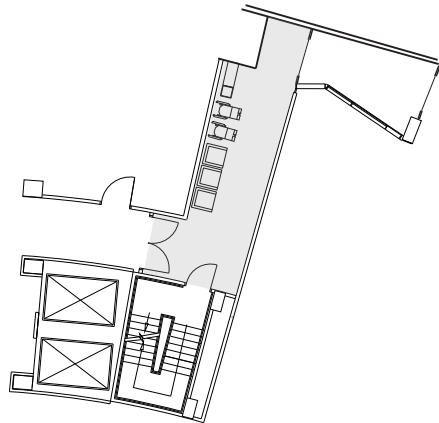


ROOM PLAN

DOCUMENTATION



Tom Arban



AUDITORIUM

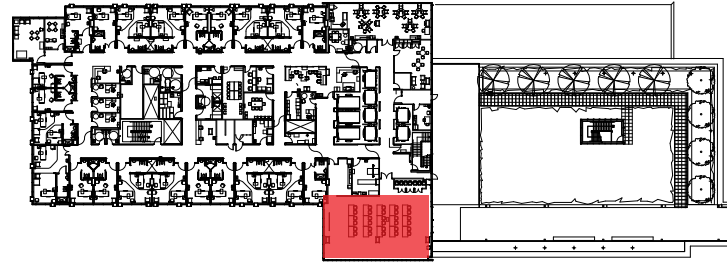
0 5 10 20

ROOM DATA

KEY PLAN

BRIDGEPOINT 2013 (BAH)

Orientations: N, S, W
 Patients Served: 480 ^{*1}
 Total Amount in Bldg: 1
 Amount per Floor: N/A
 Avg. Room Area: 210 m²

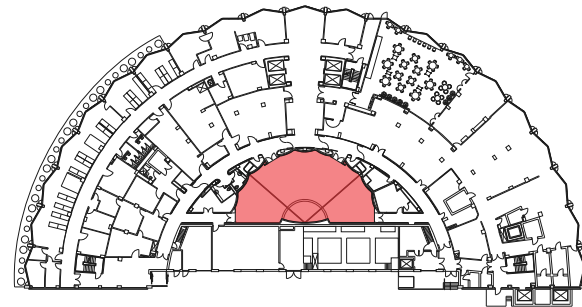


^{*1} available beds



BRIDGEPOINT 1963 (BH)

Orientations: N/A
 Patients Served: 580 ^{*1}
 Total Amount in Bldg: 1
 Amount per Floor: N/A
 Avg. Room Area: 227 m²

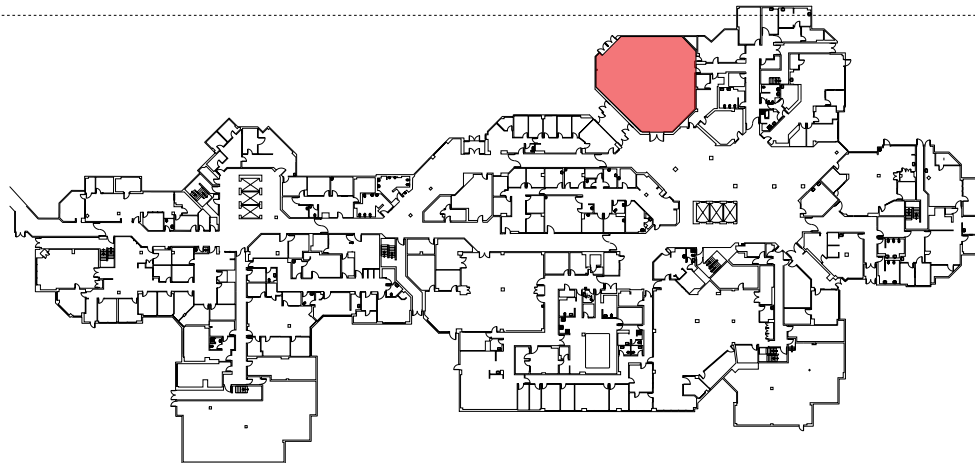


^{*1} available beds



WEST PARK 1980 (WP)

Orientations: N
 Patients Served: 312 ^{*1}
 Total Amount in Bldg: 1
 Amount per Floor: N/A
 Avg. Room Area: 369 m²

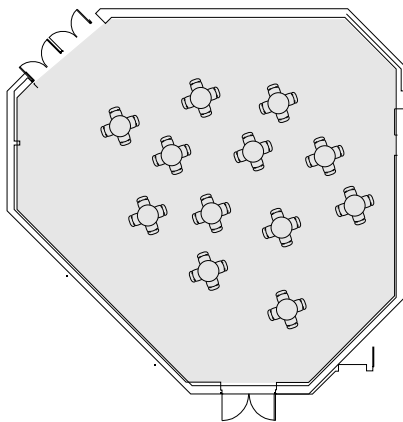
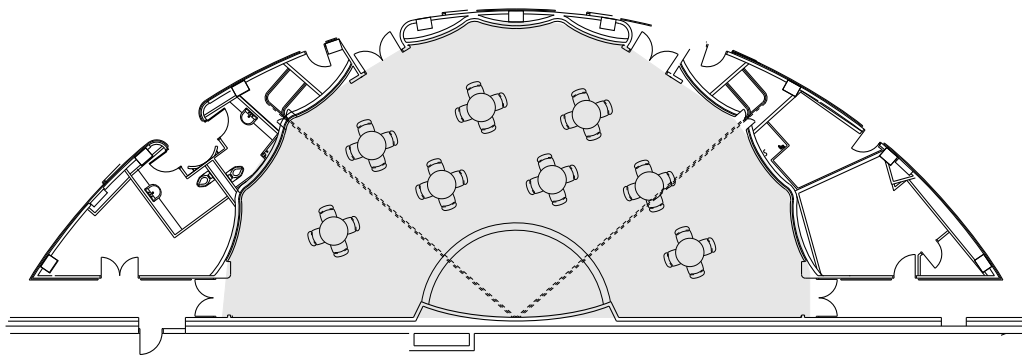
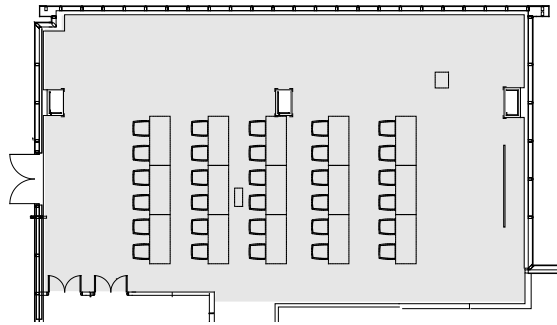


^{*1} available beds



ROOM PLAN

DOCUMENTATION



CAFETERIA

0 5 10 20

ROOM DATA

KEY PLAN

BRIDGEPOINT 2013 (BAH)

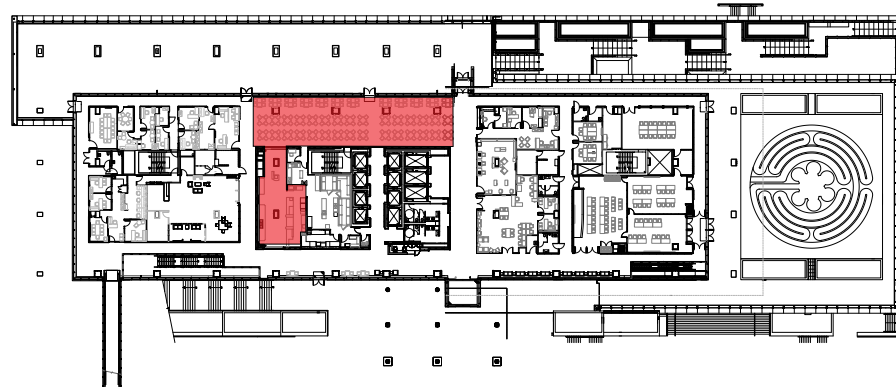
Orientations: W

Patients Served: 480 ^{*1}

Total Amount in Bldg: 1

Amount per Floor: N/A

Avg. Room Area: 350 m²



*1 available beds

BRIDGEPOINT 1963 (BH)

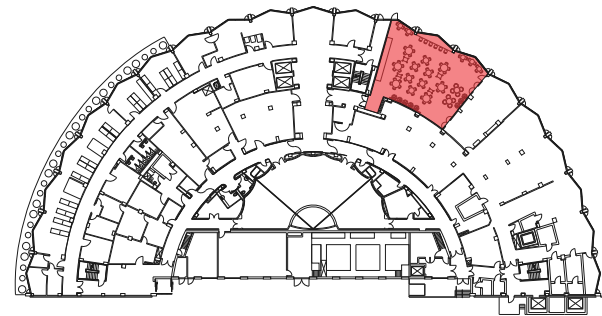
Orientations: N, E

Patients Served: 580 ^{*1}

Total Amount in Bldg: 1

Amount per Floor: N/A

Avg. Room Area: 198 m²



*1 available beds

WEST PARK 1980 (WP)

Orientations: E, S, W

Patients Served: 312 ^{*1}

Total Amount in Bldg: 1

Amount per Floor: N/A

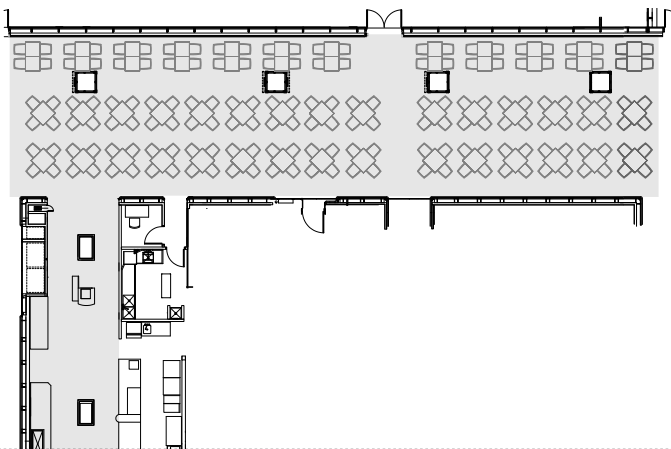
Avg. Room Area: 623 m²



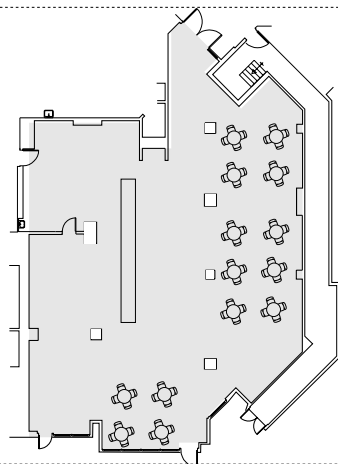
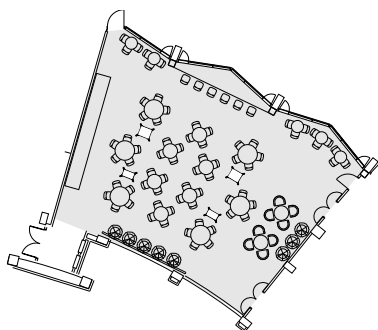
*1 available beds

ROOM PLAN

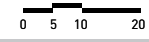
DOCUMENTATION



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LIBRARY

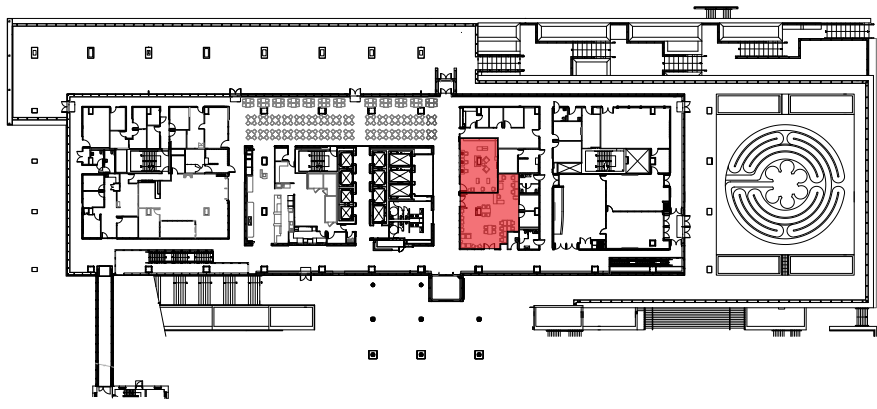


BRIDGEPOINT 2013 (BAH)

ROOM DATA

Orientations: E
 Patients Served: 480 ^{*1}
 Total Amount in Bldg: 1
 Amount per Floor: N/A
 Avg. Room Area: 164 m²

KEY PLAN

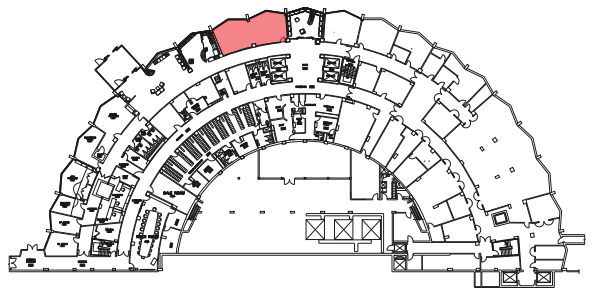


^{*1} available beds



BRIDGEPOINT 1963 (BH)

Orientations: N, W
 Patients Served: 580 ^{*1}
 Total Amount in Bldg: 1
 Amount per Floor: N/A
 Avg. Room Area: 72 m²

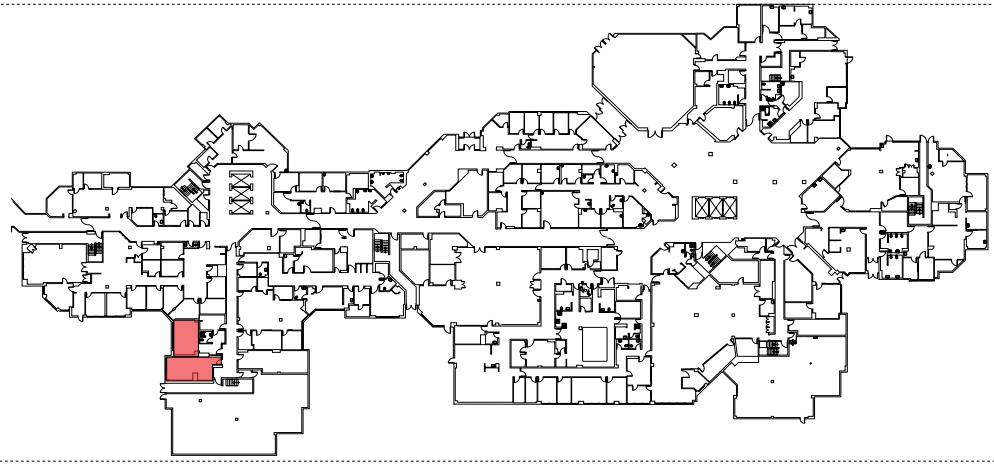


^{*1} available beds



WEST PARK 1980 (WP)

Orientations: W
 Patients Served: 312 ^{*1}
 Total Amount in Bldg: 1
 Amount per Floor: N/A
 Avg. Room Area: 95 m²

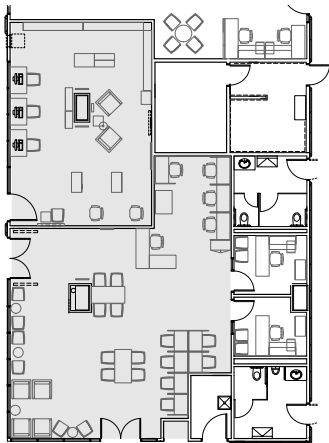


^{*1} available beds

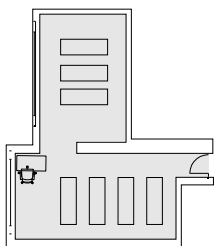
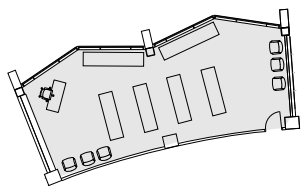


ROOM PLAN

DOCUMENTATION



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SINGLE PATIENT ROOMS

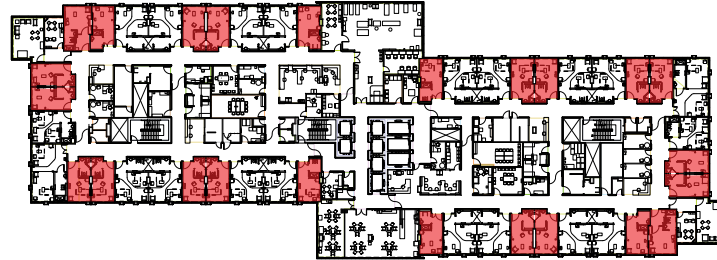
0 5 10 20

BRIDGEPOINT 2013 (BAH)

ROOM DATA

Orientations: N, E, S, W
 Patients Served: 1 x 24 = 24 per floor
 Total Amount in Bldg: 180
 Amount per Floor: 24
 Avg. Room Area: 21 m²

KEY PLAN

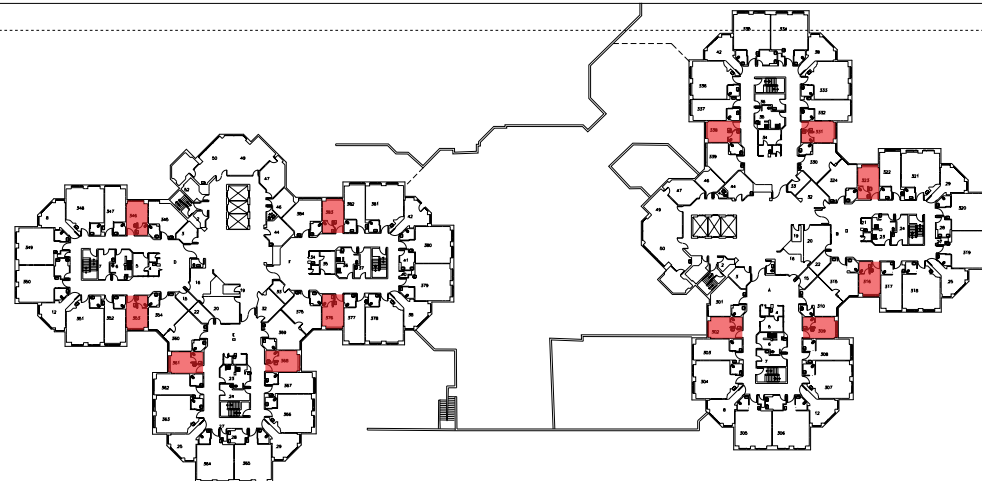


BRIDGEPOINT 1963 (BH)

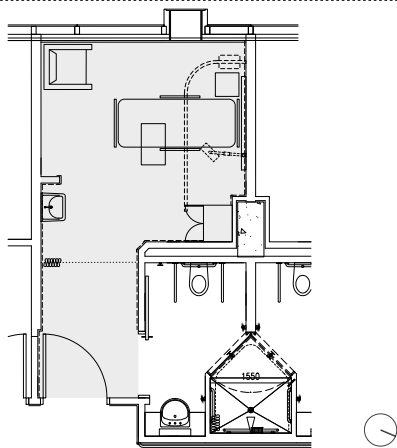
N/A

WEST PARK 1980 (WP)

Orientations: N, E, S, W
 Patients Served: 1 x 12 = 12 per floor
 Total Amount in Bldg: 24
 Amount per Floor: 12
 Avg. Room Area: 15 m²



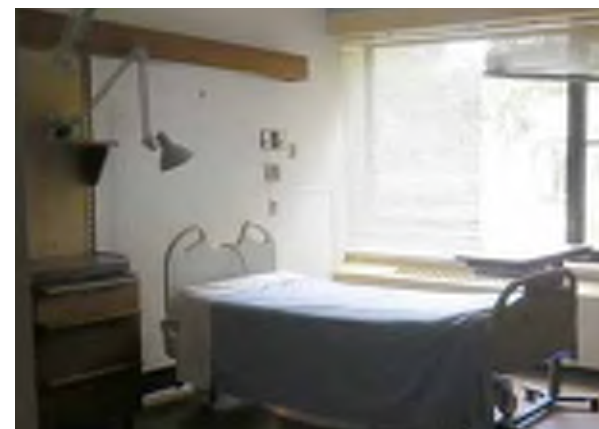
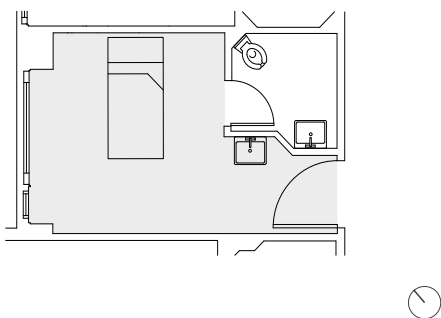
ROOM PLAN



DOCUMENTATION



Tom Arban



DOUBLE PATIENT ROOMS

0 5 10 20

ROOM DATA

KEY PLAN

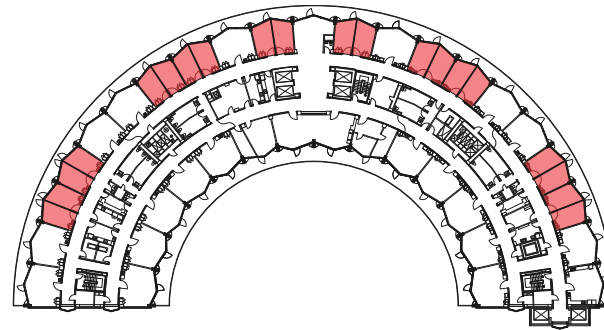
BRIDGEPOINT 2013 (BAH)

Orientations: N, E, S, W
 Patients Served: 2 x 20 = 40 per floor
 Total Amount in Bldg: 150
 Amount per Floor: 20 * 10 on 10th floor
 Room Area: 33 m²



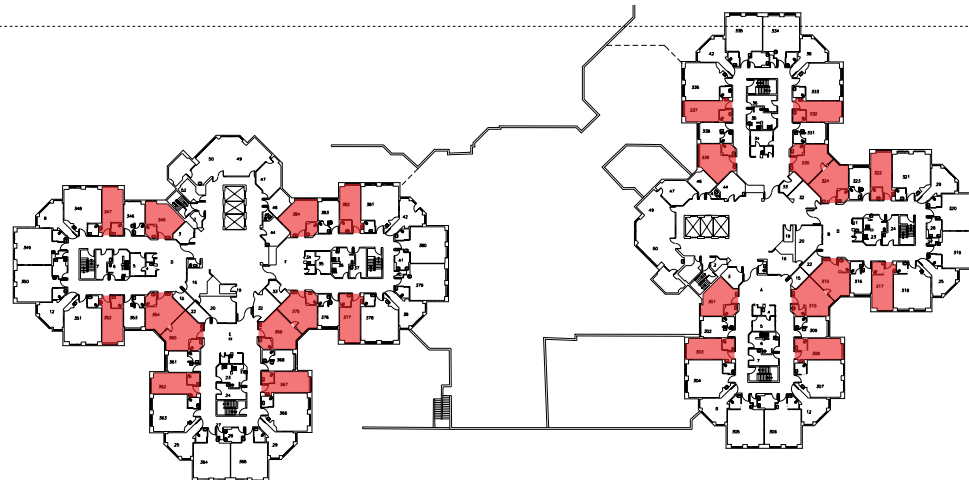
BRIDGEPOINT 1963 (BH)

Orientations: N, E, W
 Patients Served: 2 x 20 = 40 per floor
 Total Amount in Bldg: 100
 Amount per Floor: 20
 Room Area: 18 m²



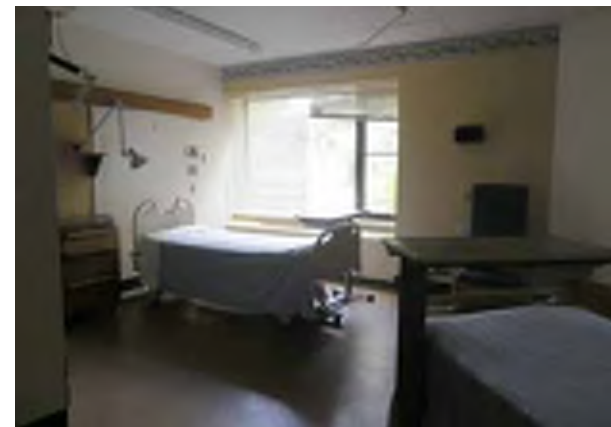
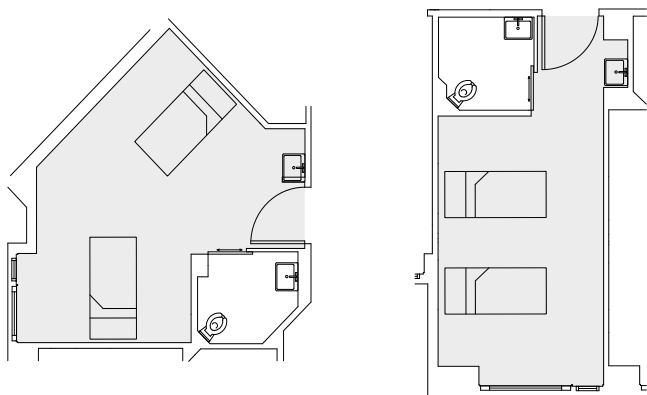
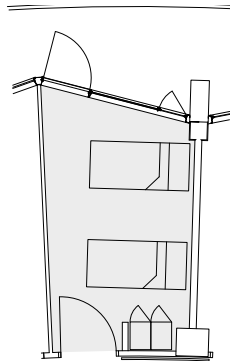
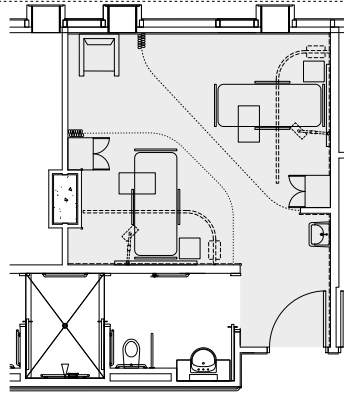
WEST PARK 1980 (WP)

Orientations: N, E, S, W
 Patients Served: 2 x 24 = 48 per floor
 Total Amount in Bldg: 48
 Amount per Floor: 24
 Room Area: ave 27 m²



ROOM PLAN

DOCUMENTATION



QUADRUPLE PATIENT ROOMS

0 5 10 20

BRIDGEPOINT 2013 (BAH)

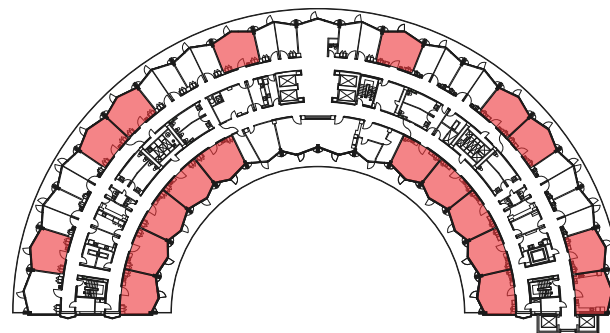
ROOM DATA

KEY PLAN

N/A

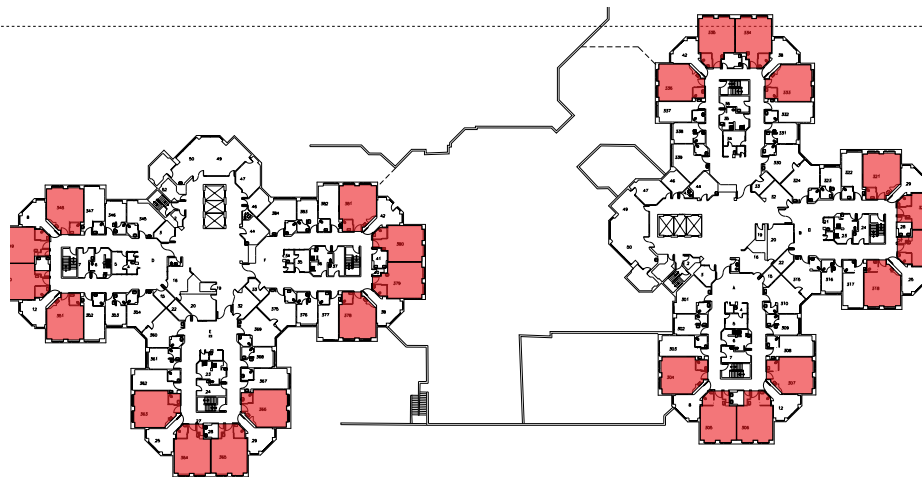
BRIDGEPOINT 1963 (BH)

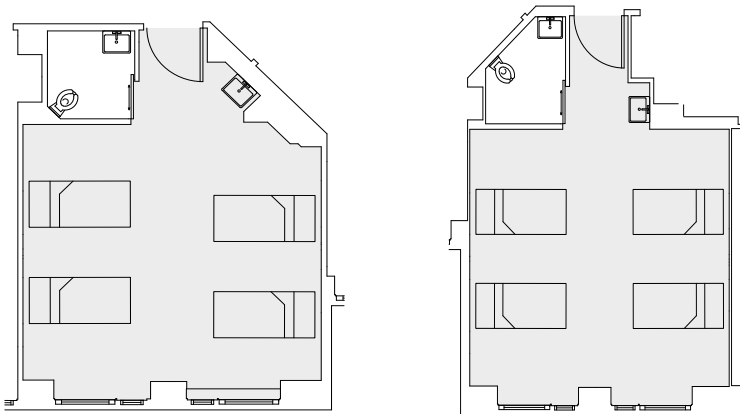
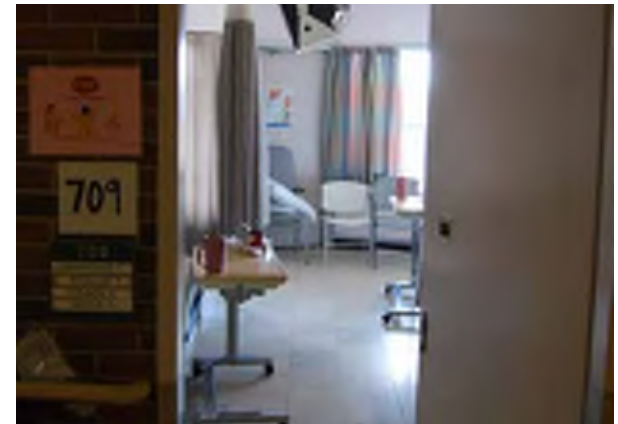
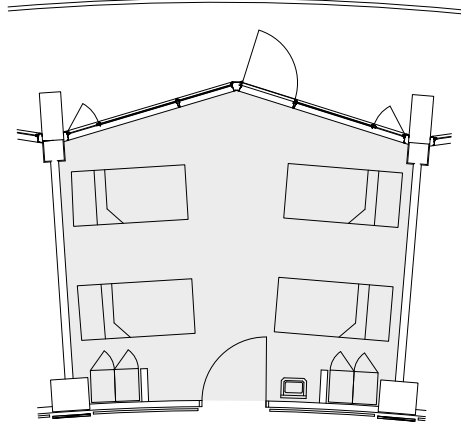
Orientations: N, E, W
 Patients Served: 4 x 19 = 76 per floor
 Total Amount in Bldg: 95
 Amount per Floor: 19
 Room Area: 36 m²



WEST PARK 1980 (WP)

Orientations: N, E, S, W
 Patients Served: 4 x 24 = 96 per floor
 Total Amount in Bldg: 48
 Amount per Floor: 24
 Room Area: 41 m²





PATIENT LOUNGES

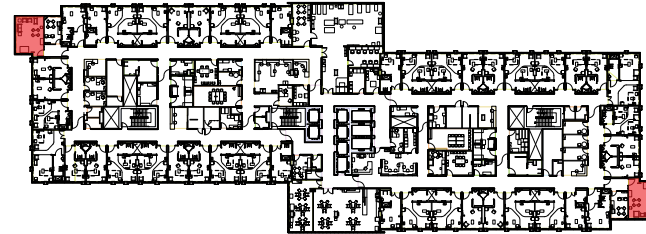
0 5 10 20

ROOM DATA

KEY PLAN

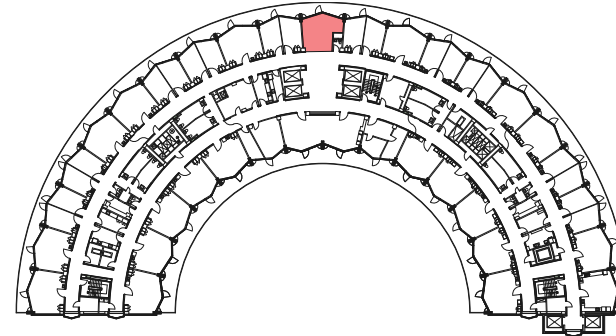
BRIDGEPOINT 2013 (BAH)

Orientations:	N, E, S, W
Patients Served:	32
Total Amount in Bldg:	15
Amount per Floor:	2
Avg. Room Area:	37 m ²



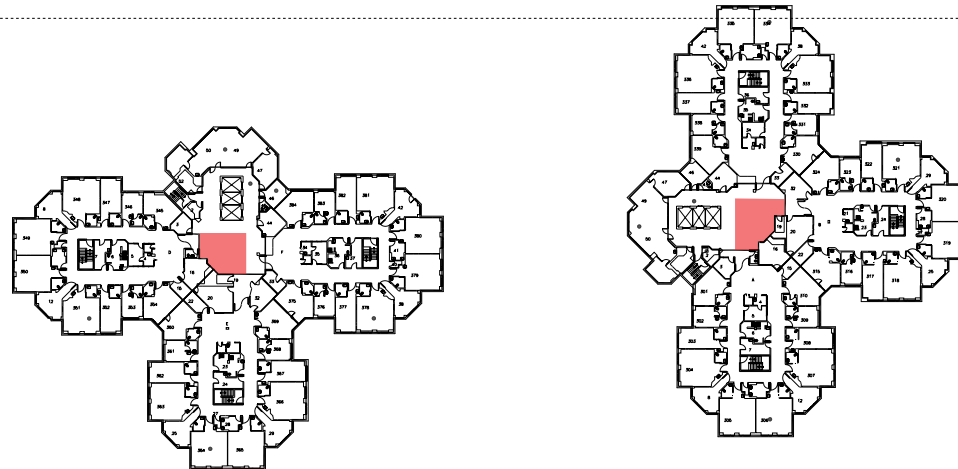
BRIDGEPOINT 1963 (BH)

Orientations:	N
Patients Served:	116
Total Amount in Bldg:	5
Amount per Floor:	1
Avg. Room Area:	32 m ²



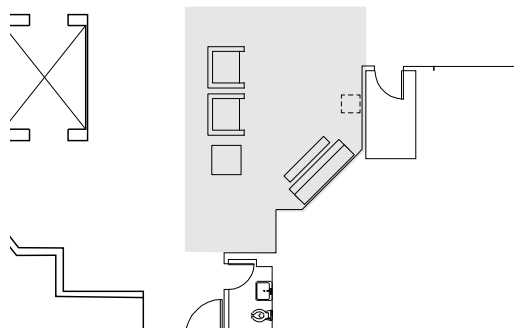
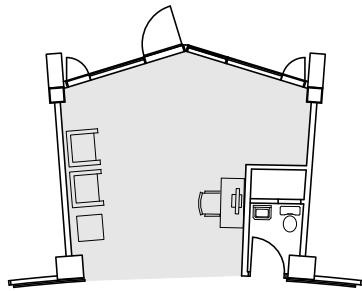
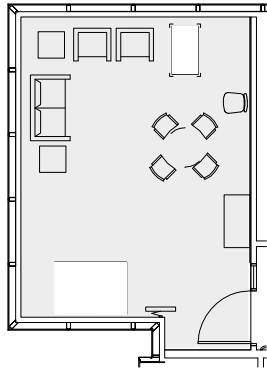
WEST PARK 1980 (WP)

Orientations:	N/A
Patients Served:	78
Total Amount in Bldg:	4
Amount per Floor:	2
Avg. Room Area:	38 m ²



ROOM PLAN

DOCUMENTATION



PATIENT FLOOR - KITCHEN/PANTRY

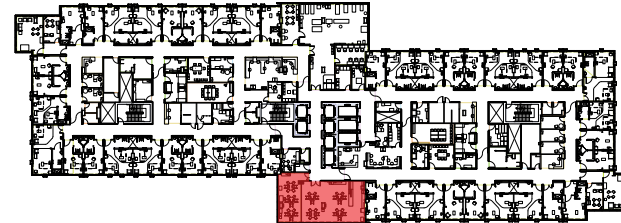
0 5 10 20

BRIDGEPOINT 2013 (BAH)

ROOM DATA

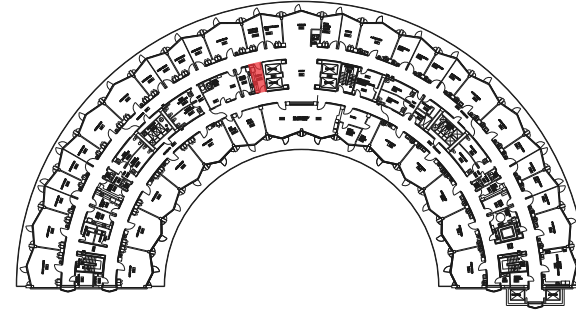
Orientations: E, S
 Patients Served: 64
 Total Amount in Bldg: 8
 Amount per Floor: 1
 Avg. Room Area: 146 m²

KEY PLAN



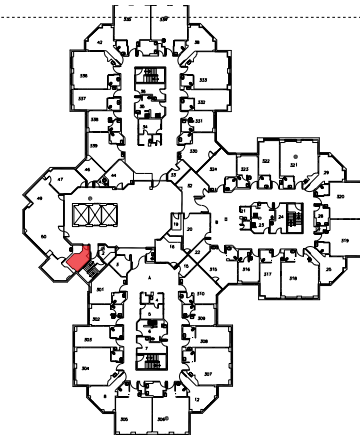
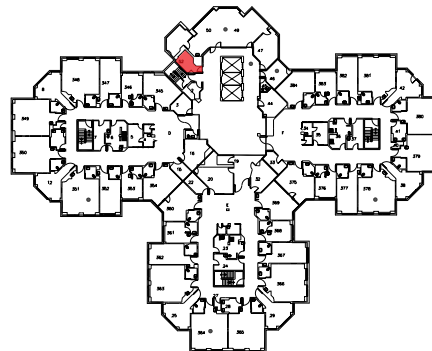
BRIDGEPOINT 1963 (BH)

Orientations: N/A
 Patients Served: 116
 Total Amount in Bldg: 5
 Amount per Floor: 1
 Avg. Room Area: 8 m²



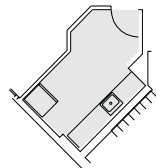
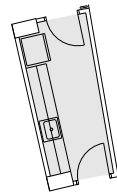
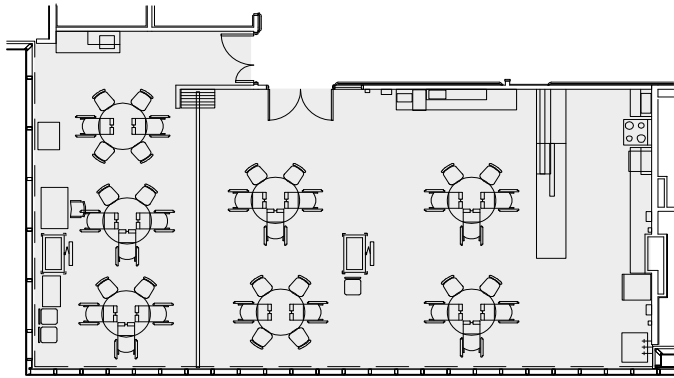
WEST PARK 1980 (WP)

Orientations: N/A
 Patients Served: 78
 Total Amount in Bldg: 4
 Amount per Floor: 2
 Avg. Room Area: 5 m²



ROOM PLAN

DOCUMENTATION



SPIRITUAL CARE

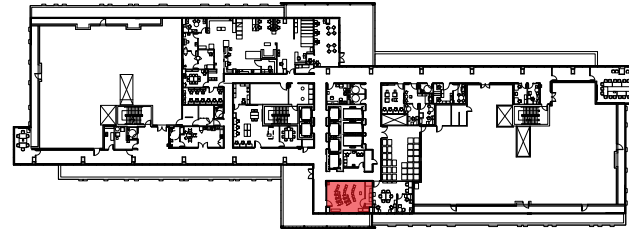
0 5 10 20

ROOM DATA

KEY PLAN

BRIDGEPOINT 2013 (BAH)

Orientations: E, S
 Patients Served: 480 ^{*1}
 Total Amount in Bldg: 1
 Amount per Floor: N/A
 Room Area: 58 m²

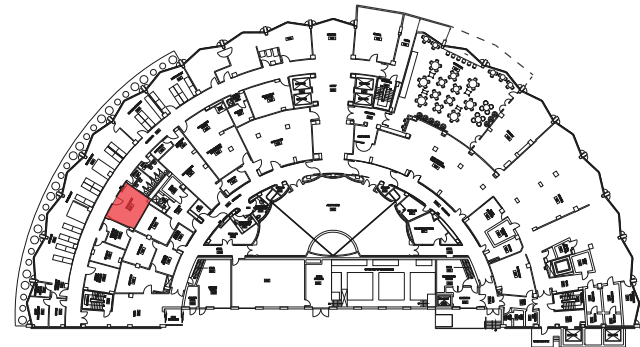


^{*1} available beds



BRIDGEPOINT 1963 (BH)

Orientations: N/A
 Patients Served: 580 ^{*1}
 Total Amount in Bldg: 1
 Amount per Floor: N/A
 Room Area: 36 m²

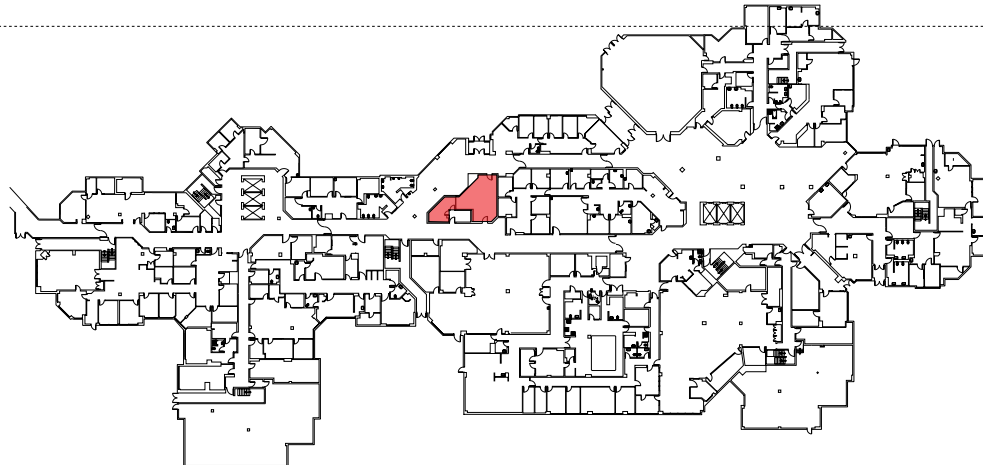


^{*1} available beds



WEST PARK 1980 (WP)

Orientations: N/A
 Patients Served: 312 ^{*1}
 Total Amount in Bldg: 1
 Amount per Floor: N/A
 Room Area: 63 m²

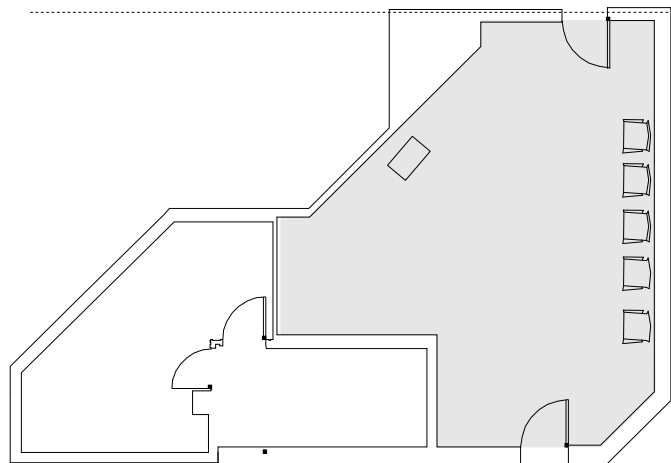
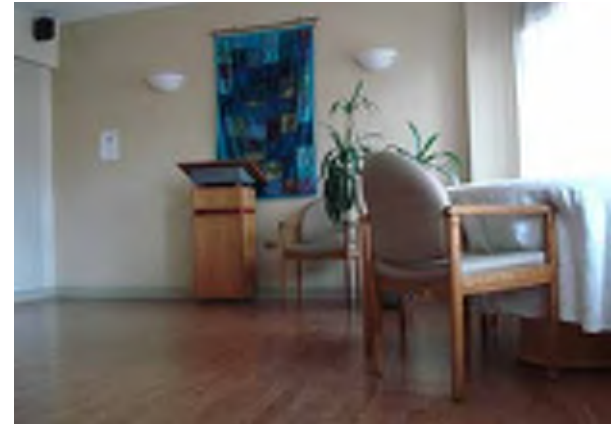
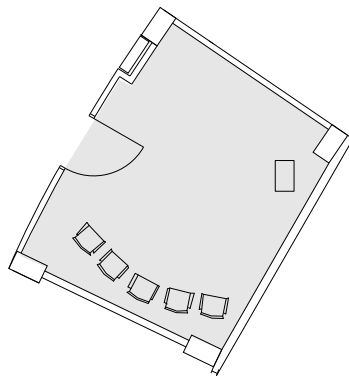
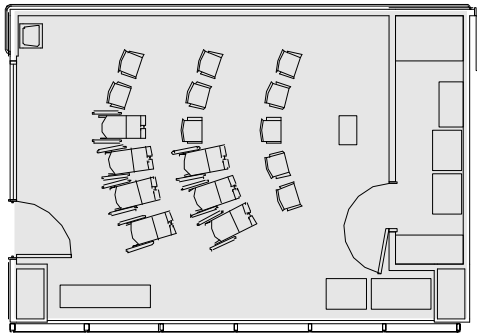


^{*1} available beds



ROOM PLAN

DOCUMENTATION



THERAPY POOL

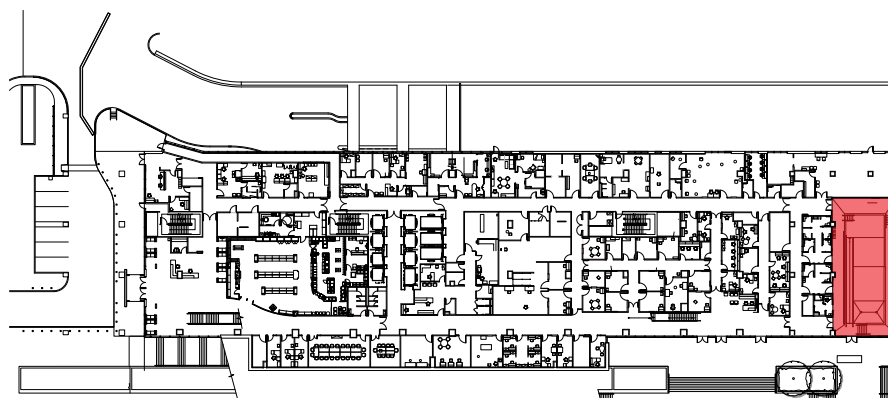
0 5 10 20

BRIDGEPOINT 2013 (BAH)

ROOM DATA

Orientations: N, E
 Patients Served: 480 ^{*1}
 Total Amount in Bldg: 1
 Amount per Floor: N/A
 Room Area: 272 m²

KEY PLAN

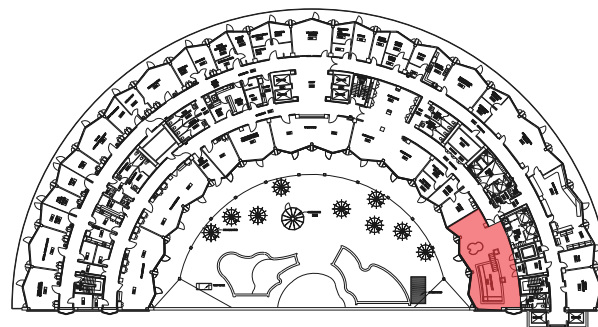


^{*1} available beds



BRIDGEPOINT 1963 (BH)

Orientations: S
 Patients Served: 580 ^{*1}
 Total Amount in Bldg: 1
 Amount per Floor: N/A
 Room Area: 120 m²

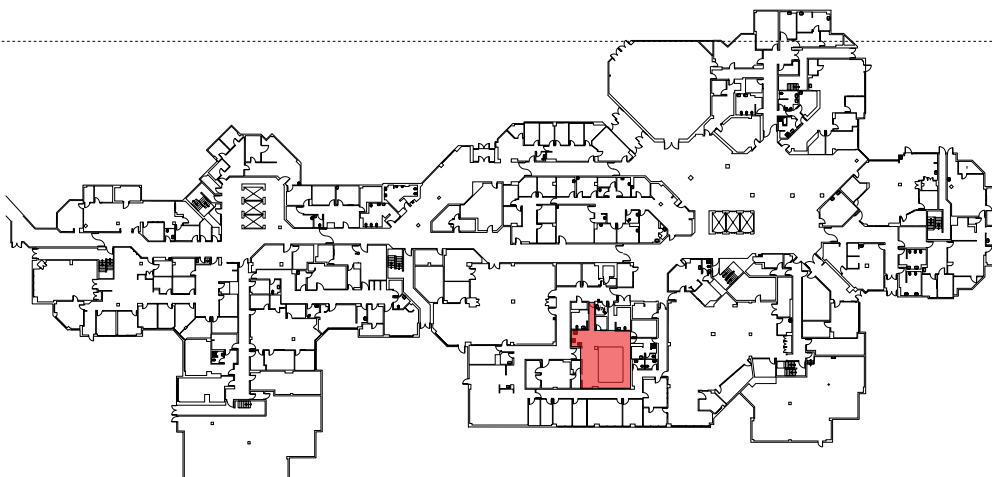


^{*1} available beds



WEST PARK 1980 (WP)

Orientations: N/A
 Patients Served: 312 ^{*1}
 Total Amount in Bldg: 1
 Amount per Floor: N/A
 Room Area: 85 m²

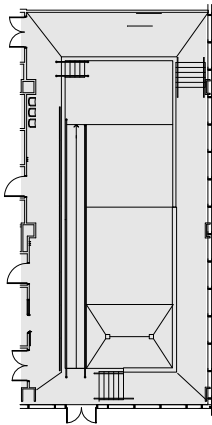


^{*1} available beds

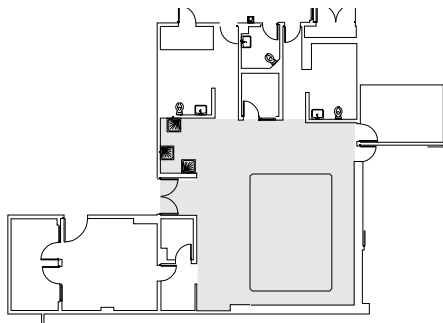
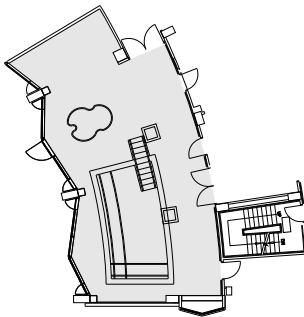


ROOM PLAN

DOCUMENTATION



Tom Arban



PATIENT PHYSIOTHERAPY

0 5 10 20

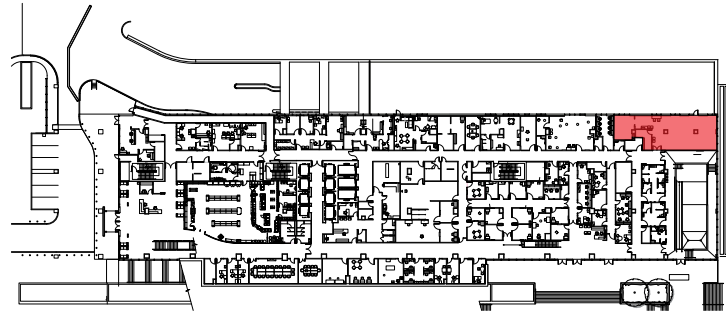
BRIDGEPOINT 2013 (BAH)

ROOM DATA

Orientations: N, W
 Patients Served: 480 ^{*1}
 Total Amount in Bldg: 1
 Amount per Floor: N/A
 Room Area: 156 m² ^{*2}

^{*1} available beds
 Note: see p. 55, 57 for additional general physiotherapy spaces on each patient floor
^{*2} + 1 @ 163 m² per floor x 7 floors = 1141 m²

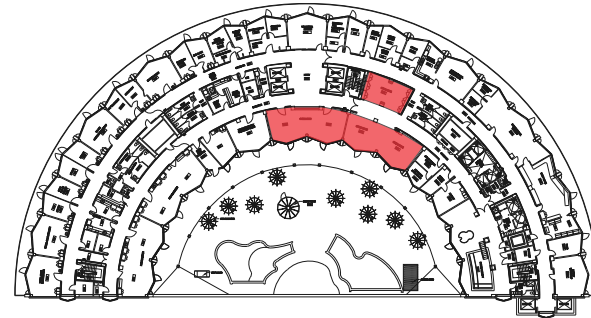
KEY PLAN



BRIDGEPOINT 1963 (BH)

Orientations: S
 Patients Served: 580 ^{*1}
 Total Amount in Bldg: 1
 Amount per Floor: N/A
 Room Area: 182 m² ^{*2}

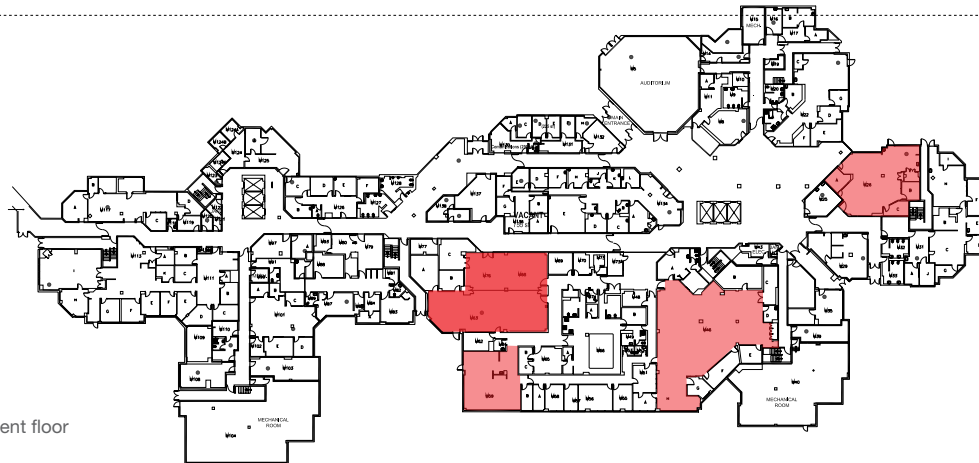
^{*1} available beds
 Note: see p. 63 for additional general physiotherapy spaces on each patient floor
^{*2} + 1 @ 72 m² per floor x 5 floors = 360 m²



WEST PARK 1980 (WP)

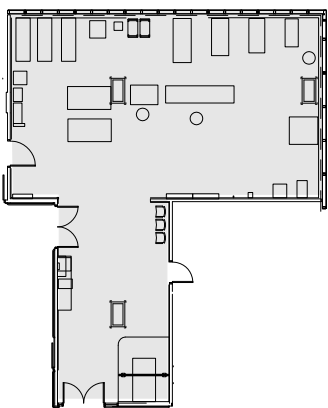
Orientations: W
 Patients Served: 312 ^{*1}
 Total Amount in Bldg: 1
 Amount per Floor: N/A
 Room Area: 148 m² ^{*2}

^{*1} available beds
 Note: see p. 66-67 for additional general physiotherapy spaces on each patient floor
^{*2} + 2 @ 84 m² per floor x 2 floors = 336 m² + 547 m² speciality rehab ■

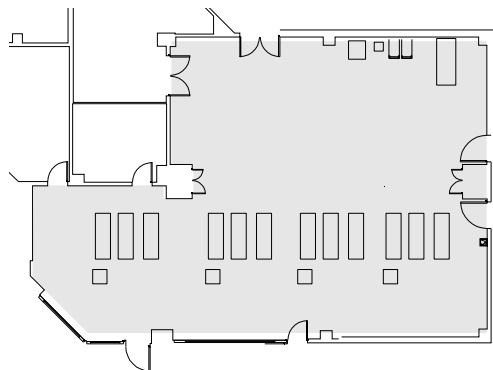
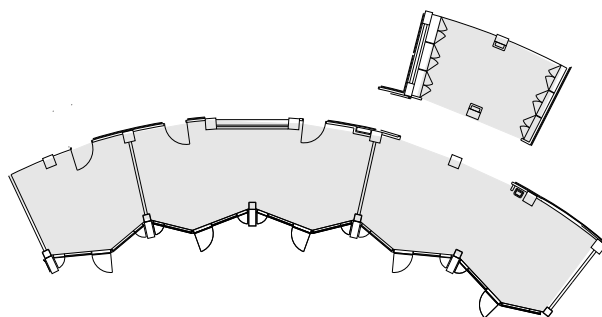


ROOM PLAN

DOCUMENTATION



Tom Arban



REFERENCES

Drawings of various design stages of the new BAH were provided courtesy of Diamond & Schmitt Architects, HDR Architecture, KPMB Architects, Stantec Architecture

Drawings of the original BH were provided by the Bridgepoint Hospital Administration and were the original construction drawings issued by the Architects, Chapman and Hurst, in 1962.

Drawings of West Park by Armstrong and Molesworth Architects 1976-1977, were provided courtesy of David Garlin, Planner, West Park Hospital.

Photographs by the authors, and, where noted as such, by Tom Arban.

Alimoglu MK, Donmez L. "Daylight exposure and the other predictors of burn- out among nurses in a university hospital." International Journal of Nursing Studies, 42(5),2005; 549–555.

Alvaro, C., & Atkinson, C. "Assessing the impact of healthcare facility design on psychosocial well-being and health: Research methods and outcome measures." World Health Design, 6 (3) 2013; Jul : 60-67.

Joseph A, Malone E, Quan X, Pati D. Healthcare Environmental Terms and Outcome Measures: An Evidence-based Design Glossary. Phase 1 Report: The Centre for Health Design; November 2011.

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