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Revolutionary Rooms

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REVOLUTIONARY ROOMS

Community Hubs Redefined



Revolutionary Rooms
Social Hubs Redefined

This Final Project is presented to
The Faculty of the School of Architecture
by
Briana Fountain

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Project Title: Revolutionary Rooms: Collective Hubs

Thesis Summary: Residence Halls are a social center on college campuses. The common spaces within a residence hall are a space for informal collectivism. However, they have become increasingly task specific and redundant. How do social constructs influence design? Should common spaces within the residence hall typology influence the design of the entire domicile? This thesis develops a methodology that prioritizes sociospatial relationships in the design of residence halls. This was accomplished through the exploration of college culture, socio-spatial relationships, and notions from sister typologies.

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Terms Used

Bursens: student housing organized and run by monks in Germany

Collective Space: a space in which collective activities happen.

Domus Pauperums: hostel for poor students at Oxford University

Formal Collectivism: the practice of giving a group spatial priority over each individual in it through fixed programming

Formal Space: A formal space as defined by Julia Nugent is one that is not flexible and does not allow for multiple activities in one space.

Functional Distance: the distance that is actually traveled rather than the measured physical distance.

Informal Collectivism: the practice of giving an individual spatial priority over a group through multiple fixed or variable programming

Informal Space: a space that is flexible and does allow for multiple activities in one space.

Paedagogies: student run housing at Oxford University

Seidlung: settlements that were garden cityesque in design and focused on mass production.

Zellenbau: parallel blocks aligned north to south at right angles

CHAPTER I

Thesis Statement

Residence Halls are a social center on college campuses. Most people have fond memories of college, and a lot of that nostalgia originates from the housing experience. Hanging with friends in the lobby, studying in the little office down the hallway and chance encounters in the hallway are the shared experiences of Dorm life. However, today, many students do not get this experience. Contemporary student housing design overlooks a student's needs for informal interactions and has begun to prioritize Themed Communities or Living Learning Communities as the new trend in residence life. This is when students live in a community based on generalized interests or needs. As a result, themed social hubs have led to a lack of design inquiry into the role of individual experience within the collective resulting in a loss of student interest in university housing.

Dorms first emerged in Bologna, Italy where students attending universities had nowhere to sleep. Through the 1900s, this typology evolved filtering through the ideas of efficiency and process given to us by CIAM and the Greys, and semiotics and interaction given to us by Team X and the New York Five. CIAM emerged with a preference towards defining the collective at the expense of the individual. During this period Dorms changed from being a place to sleep to a more domestic style of living.

We must now ask ourselves, what happened to those social interactions and opportunities that were once beloved; the ones that occupy our memory of college life. Did the evolution of the dorm typology, now called residence halls, sacrifice the individual through prioritization of distinct user groups?

In contemporary practice, residence halls are designed in four styles:

- traditional style with common bathrooms,
- suite style with shared bathrooms,
- apartments with kitchens and living rooms,
- or a combination of two or more of these.

Although some of these styles allow for the individual to find expression within the collective, the overall building organization may not be in communication with these goals. This had led to a dismissal in understanding how common spaces influence design in relationship to the individual.

Common spaces have become over the top as seen in luxury Residence Halls where items like pools, rock climbing walls, and dining halls from other uses on campus are placed within the commons spaces. We no longer have areas of informal collectivism. This had led to a few questions. How do social constructs influence design? And with this in mind should common spaces within the residence hall typology influence the design of the entire domicile? Through the exploration of college culture, socio-spatial relationships, and notions from sister typologies, I will propose a new methodology in Residence Hall design as well as call for the abandonment of Luxury Residence Halls.

To understand how to go about designing residence halls, one must look at the series of interactions that architects have investigated that have resulted in their projects. These are:

Criteria of Site Location to Site



Site to Building



Building to Common Space



Common Space to Room



Room to the Individual



Photo by Author



Photo by Author

Common Space: Social Hubs Defined

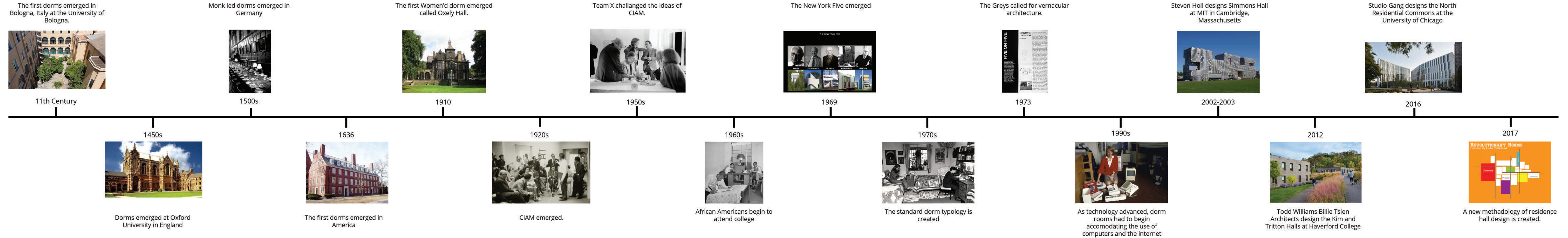
"Students find it less intimidating to enter a space where many things are happening"

- Julia Nugent

Julia Nugent is a principal at HMFH Architects where she leads the firm's Higher Education practice. She has been practicing for more than 30 years and is a long time faculty of Boston Architectural College. Nugent is a member of the Society for College and University Planning with LEED . Her work focuses on planning and design for student life facilities with an emphasis on how architecture can support academic success and student development. In her Post Occupancy Evaluations of residence halls, she speaks on formal and informal collective spaces.

A formal collective space as defined by Julia Nugent is one that is not flexible and does not allow for multiple activities in one space. With the emergence of Theme Communities

or Living Learning Communities, the formalizing of common space is becoming too prominent. for instance, a community meant for gamers will be designed in a manner that the common space will have many televisions. However, students who are not interested in gaming would never go into that room because they would not feel comfortable there. In large multiactivity spaces where items such as televisions, kitchens, and study areas are present, students will bounce from group to group spreading thoughts and ideas. (Nugent 02).



Timeline by Author

History: Residence Halls Defined

Dorms first emerged in Bologna, Italy where students attending universities had nowhere to sleep. In response, students began living in rented homes that were eventually taken over by the universities. During the next few hundred years, dorms spread to England and Germany. A few centuries later in the 1450s, Oxford had student run housing called *paedagogies* and for their poorer students, they had hostels called *domus pauperums*. In Germany, their schools had *bursens* which were organized and run by monks. In 1636, we saw the emergence of dorms in America at what are now called the Ivy League schools. By the early 1900s we began to see women in dorms, and by the 1960s, we began to see the emergence of minorities in dorms.

Through the 1900s, this typology evolved filtering through the ideas of efficiency given to us by CIAM who believed in the minimul dwelling for residents, the Greys who called for vernacular architecture that was not divorced from its users and their daily lives, semiotics given to us by the New York Five who studied architecture as a process of language, and Team X who believed architecture to be more social constructs.

Residence Halls are no longer a typology seen in Europe. Now, they are mainly seen in the United States. In order for these typologies to act in a manner that works, groups and departments known as Residence Life are managing the upkeep and activities within the building. Nationally, Residence Life around the United States provide a residential experience through collaborative efforts that assist in the holistic development of its students on campus. Residence Life is the department that creates a residential experience.

Residence Life seeks to enrich the lives of its students through enhancing living and learning experiences. The goals that are to be achieved include:

- Cultivate academic success by engaging students in scholastic achievement and integrating in and out of classroom learning. (Koonz, 2016)

- Advance opportunities for the personal development of students by providing safe, secure, and well-maintained facilities, promoting healthy living, and focusing on overall well-being. (Koonz, 2016)

- Provide inclusive communities by helping students understand themselves and others through social responsibility, while celebrating the value of human difference. (Koonz, 2016)

The goal is for students to become more productive members of society. Because of this students have a greater likelihood of leaving college being mentally and physically healthy, social members engaged in their communities. They will have healthy interpersonal relationships, advanced understandings of their academics, their first step in the door of their dream career, and an understanding of financial literacy.

With this in mind, one must question whether the building is in compliance with these issues. Why are the common spaces not designed in a manner that compliments the people that live and work within it and their goals?



Photo by Author



Photo by Author



Figure 1.1



Figure 1.2

Informal Collectivism: Social Hubs Redefined

Informal collectivism is the practice of giving an individual spatial priority over a group through multiple fixed or variable programming created in a collective space. These can also be called common spaces.

Common spaces are the most important part of a residence hall. This is where the greatest sense of community is created. Strategic placement of common spaces can become a catalyst of academic, personal, and social growth.

Visual Connectivity

The first element in a successful common space is its

location. Common spaces should be placed where one can see and be seen. This calls for a space which can be a destination and a part of the circulation. This becomes a space in which people can either pass through or stay (Cotter 31).

Open spaces are more likely to be active than closed spaces. Secluded rooms at the end of a hallway discourage student use because one may feel as though they are an intrusion. If there needs to be a barrier, then it should be made of glass (Nugent 5). This creates a physical and sound barrier, but allows for a visual connection.

Multiple Activities

Secondly, common spaces should be home to multiple activities. This will draw in different people and encourage interaction among different social groups. In order to accomplish this, common spaces should be a variety of sizes to welcome the different activities. Spaces typically only seen for service such as laundry, vending, or recycling areas should be designed with other programming to become hubs of social activities. Common spaces should be large enough to house multiple activities, but small enough to encourage activity (Nugent 3).

Quality of Space

Lastly, common spaces should have a good quality of space. This comfort is based upon light, color, and furniture. The best lighting schemes are those that combine daylight and hidden artificial sources of light. Color schemes should be warm, and materials such as drywall, wood, and stones are softer to touch and acoustically. If color is used, then it should be used to articulate architectural features or to create a specific mood. Furniture in these spaces should be comfortable and flexible. In spaces where multiple activities are happening, furniture determines the manners in which students interact (Nugent 5).

Study rooms are the most frequent common spaces within residence halls. Study rooms need to be controlled environments. To achieve this, it should be visually connected to more activated spaces. This will allow for it to be free from noises such as telephones, plumbing, and video games. In order to encourage interaction without limiting privacy study rooms should be larger in size with smaller nooks (Heilweil 392).

The intent of the design of collective space is to conduct an investigation of specific design processes using "If-then" scenarios. The end result will be a residence hall on a specific campus that demonstrates this process.

To understand how to go about designing residence halls, one must look at the series of interactions that architects have investigated that have resulted in their projects. These are:

Criteria of Site Location to Site



Site to Building



Building to Common Space



Common Space to Room



Room to the Individual

I will be filtering the ideas of visual connectivity, multiple activities, and quality of space through the design process to the right.. This will ensure that the idea of Informal collective space flows at every scale. An informal collective space is a space that is flexible and does allow for multiple activities in one space.

While looking at how this is done through architectural history. We can begin by looking at CIAM. CIAM believed in the Neue Sachlichkeit or new objectivity which emerged after WWI in which there was need for rational appropriateness due to the lack of economy. They believed in the minimal dwelling, the minimal dwelling for residents. The Greys called for vernacular architecture

that was not divorced from its users and their daily lives. Buildings should represent the locations in which they were placed and that culture. The New York Five who studied architecture as a process of language. They used phenomenal transparency, a clear separation of public and private spaces, the deep structure within the syntax of architecture, and the symbolic.

Team X who believed architecture to be more social constructs. At The Heart of the City conference, members proposed a city based on the qualitative thought of the urban core. The urban core is considered the social space. The city is to be a series of social relationships (Fountain 2). Team X and their ideas comes out as the prevailing logic that fits this thesis.

Informal Collectivism: Case Studies



Figure 1.3



Figure 1.4



Figure 1.5

Steven Holl Simmons Hall @ MIT

The first precedent examined is a residence hall designed by Steven Holl. Simmons Hall is a joint venture combining MIT's desire of focusing on use and function and Holl's desire to have a building that would be memorable.

Because Simmons Hall was to be a small city within a building, its need to be near the center of the MIT campus was not necessary. Instead, the hall was placed as a bar building in between a road and rail lines flanked by a field and parking lots. Holl wanted a memorable building. The result of this was a design that begins with an series of voids that create a porous structure that resembles a sponge. These voids would soak up light and filter it into the social spaces for students

(Perez). These social spaces were the most important to MIT. The common spaces consist of a dining hall, a library, a game room, a music room, a chapel, concert hall, a cafe, and lecture room spread throughout the building. This building fails to create individualized experiences because of the formal social spaces. All of the extra programming within the residence hall is encouraging stagnation. Students will only leave the building to attend class, and because of this there will be a loss of social interaction on the campus level.

Figure 1.03
Figure 1.04
Figure 1.05

Photo of Simmons Hall
Photo of Simmons Hall
Photo of Simmons Hall

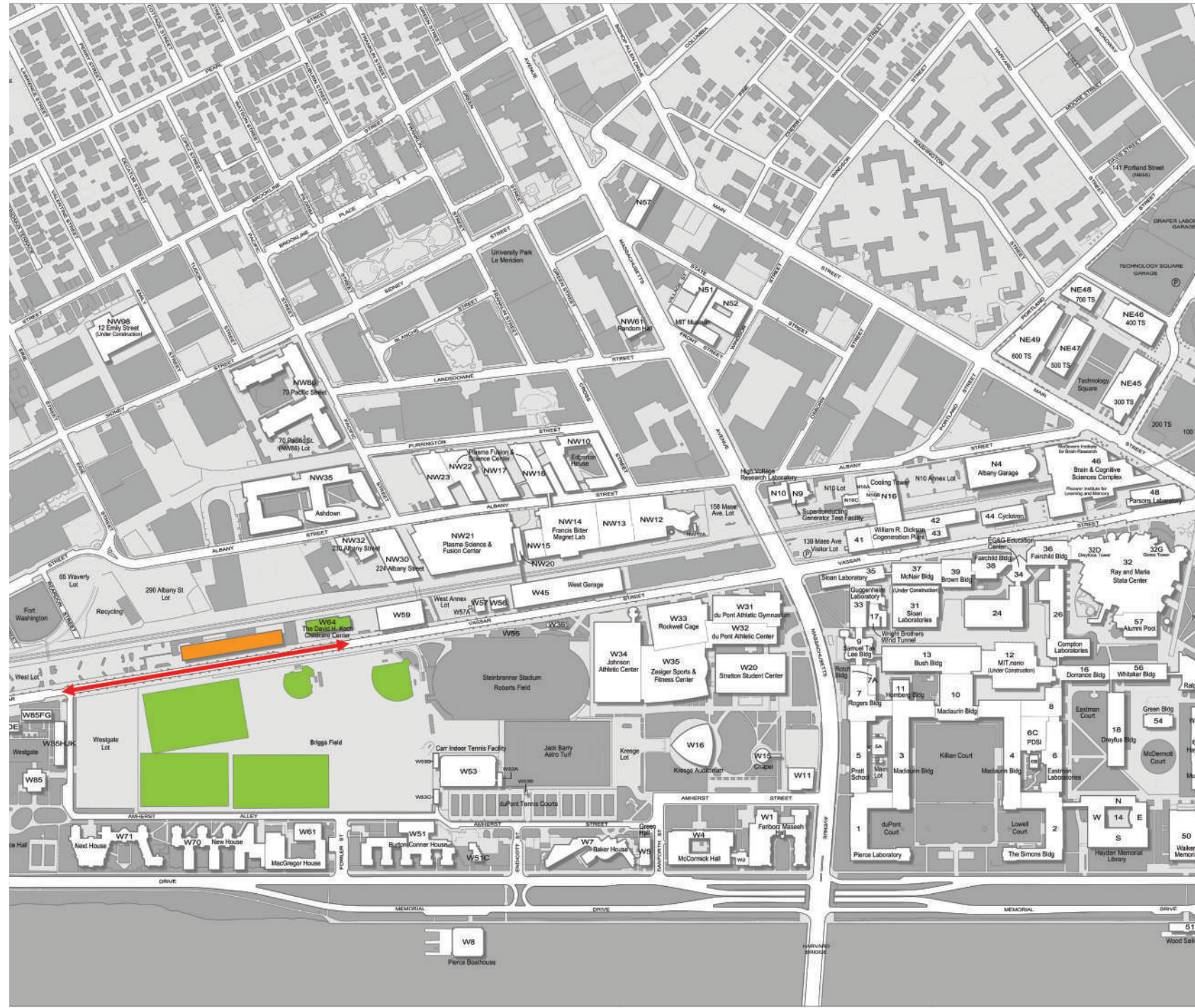


Figure 1.06
Figure 1.07

Site Diagram
Section Diagram

Figure 1.6

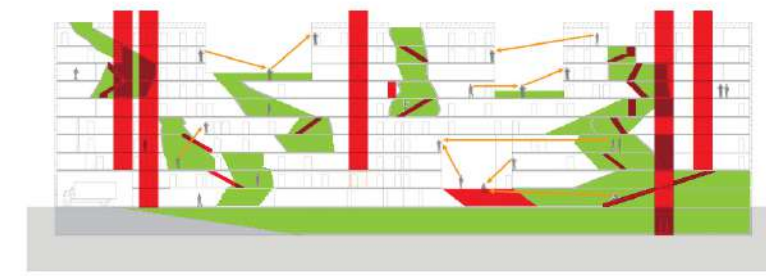


Figure 1.7

Steven Holl was given a site on the edge of MIT's campus. On the rear is a parking lot, in the front there is a street, and the sides are flanked with an academic building and more parking. Because of its isolation on campus, activating the first two levels was important. With an understanding of how the building and site interact, Holl looked at the building and how to organize space within it. Holl envisioned a building that would stand out on campus. The voids that he created became the focal points for social spaces. The vertical circulation also became part of these social spaces.

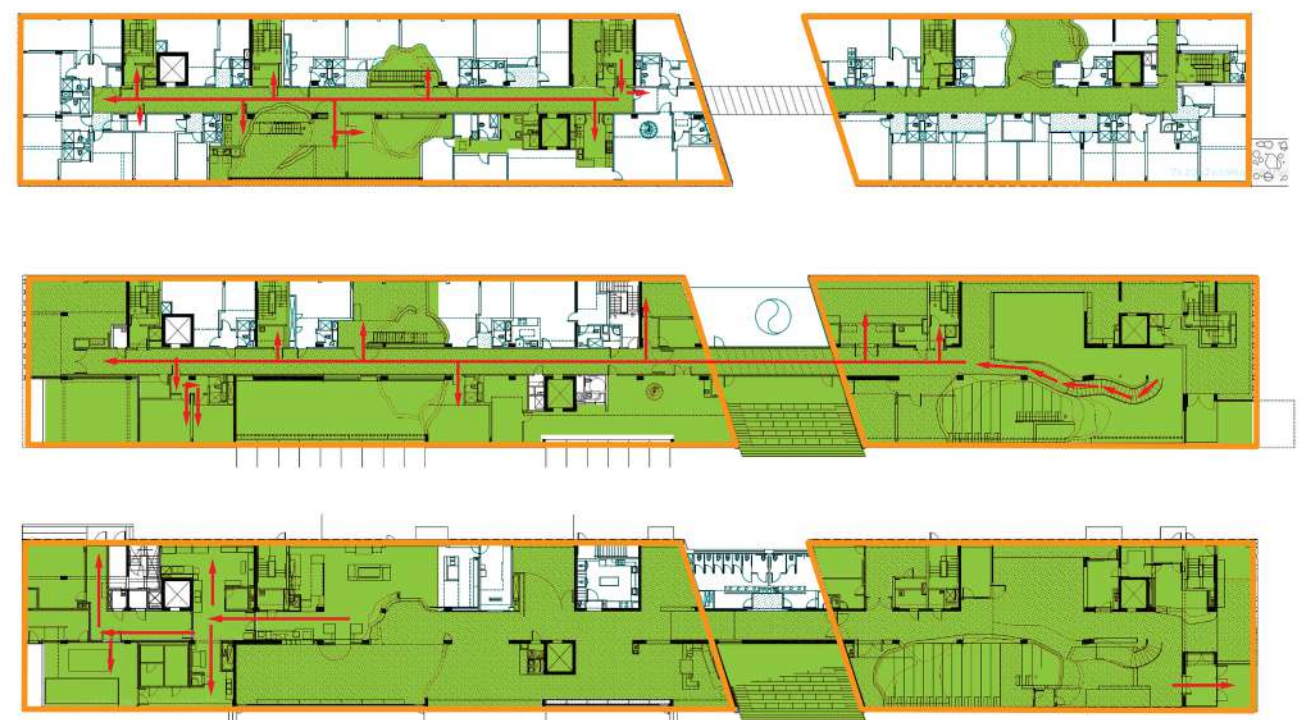


Figure 1.8

These social spaces dissolve as you move upwards towards the residences. However, the proportion of room to common area is still high. The common spaces are placed on the circulation paths and have direct access to vertical circulation.

Within the rooms, students are given a desk, dresser, and a bed. Each room has nine operable windows to let in fresh air and light. There is limited ways to move the furniture, which can make the spaces feel like a hotel rather than a dorm room.



Figure 1.9

At the site level, Simmons Hall does not allow for informal collectivism. This does begin to change as it changes scale. At the building level, informal collectivism happens on the first two floors, this becomes more apparent as we move from the building to the common space all the way to the individual rooms.

Figure 1.08
Figure 1.09

Diagram of Floor Plan
Diagram of Room



Figure 1.10



Figure 1.11



Figure 1.12

**Tod Williams
Billie Tsien
Kim and Tritton Hall
@ Haverford College**

The second precedent examined is a residence halls designed by Tod Williams and Billie Tsien. The duo was commissioned by Haverford College to add 160 dormitory rooms to the school. The campus is a registered arboretum, so the design need to keep nature in mind.

The design started with dealing with unusable fill on the site. Because it would have been too expensive to haul off the fill, the architects decided to instead use it in the design of the buildings. They created a berm that allows for access to the second floor of the buildings which in turn eliminated the need for stairs or elevators.

Because the campus has roots in the Quaker lifestyle, a consensus was the method of decision making that determined the shift from double rooms to single rooms (Moran 2016). These rooms were then arranged in around the shell of the building which allowed for the common spaces to be placed at the center of the building. An open courtyard is at the center with lounges and kitchens on either side.

Because of the desire to keep nature entangled in the design, large sliding glass doors can be opened to connect inside and outside in every courtyard. Materials such as light grey brick and dark brown cladding visually connects the buildings to the surrounding masonry structures.

Figure 1.10
Figure 1.11
Figure 1.12

Photo of Kim and Tritton Hall
Photo of Exterior Entrance
Photo of Triton Hall



Figure 1.13

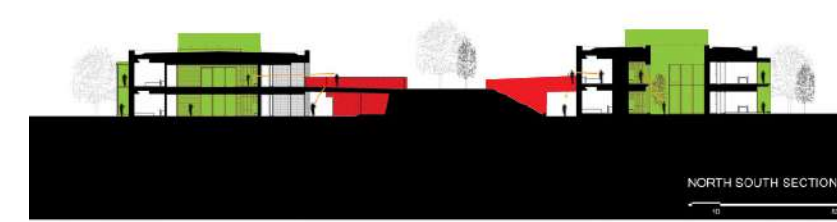


Figure 1.14

TWBT architects was given a site on the edge of Haverford's campus. On the rear is a wooded trail, in the front there is the academic buildings, and the sides are flanked with green space and wooded areas. Because the site was located on unusable fill, the architects decided to use that to create a berm. This berm allows access to the second floor of the building and eliminates the need for elevators and stairs. With an understanding of how the building and site interact, Tsien looked at the building and how to organize space within it. The design became one in which the common areas are placed in the core of



Figure 1.15

the building allowing for the rooms to be placed on the perimeter. The proportion of room to common area is about half and half. This is different from the traditional double loaded corridor.

Each room has an operable window to let in fresh air and light. Each room is for a single resident. They are furnished with a desk, a dresser, and a bed.

The combination of the single rooms and common areas at the core allows for students to be both collective as well as individual.



Figure 1.16

The twin buildings allow for interaction of more students, this is emphasized by the berm that connects both buildings. Inside the core to shell organization enhances collectivism by giving each person ownership of the collective space. The only drawback is that rooms do not allow for individuals to interact with one another.

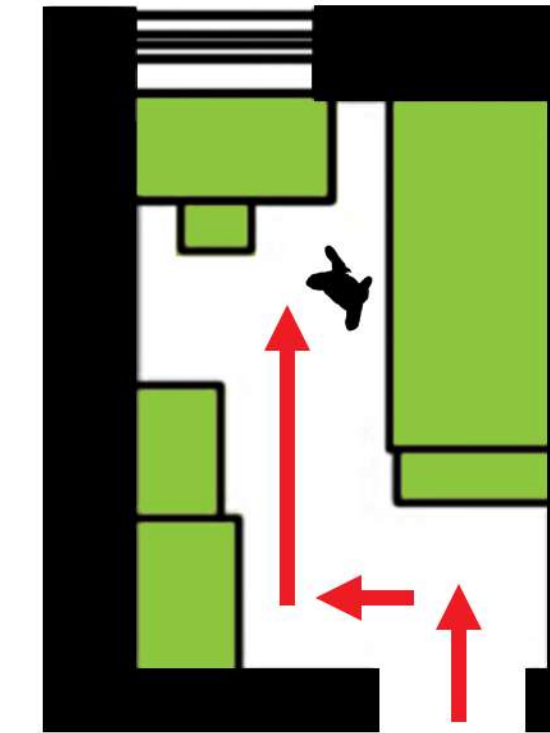


Figure 1.17



Figure 1.18



Figure 1.19



Figure 1.20

Studio Gang North Residential Commons @ The University of Chicago

The third precedent examined is a residence hall designed by Studio Gang. This building is placed at the North end of the complex and opens up the university to the greater Hyde Park community. Because the architect wanted semi-private and public outdoor spaces, it is designed by placing four narrow buildings in an urban fabric.

The architect designed the halls after gaining an understanding of the existing House system that the university has adopted. A house system is when three floors are taken and shared amongst a group of students of different years (Gang).

The Houses are designed around three story communal hubs that support the social and academic success of its residents. These hubs are host to studying, cooking, and playing by both groups and individuals, or movie watching. Household chores and group activities planned by Resident Assistants also take place here.

Figure 1.18
Figure 1.19
Figure 1.20

Photo of North Residential Commons
Rendering of North Residential Commons
Rendering of North Residential Commons

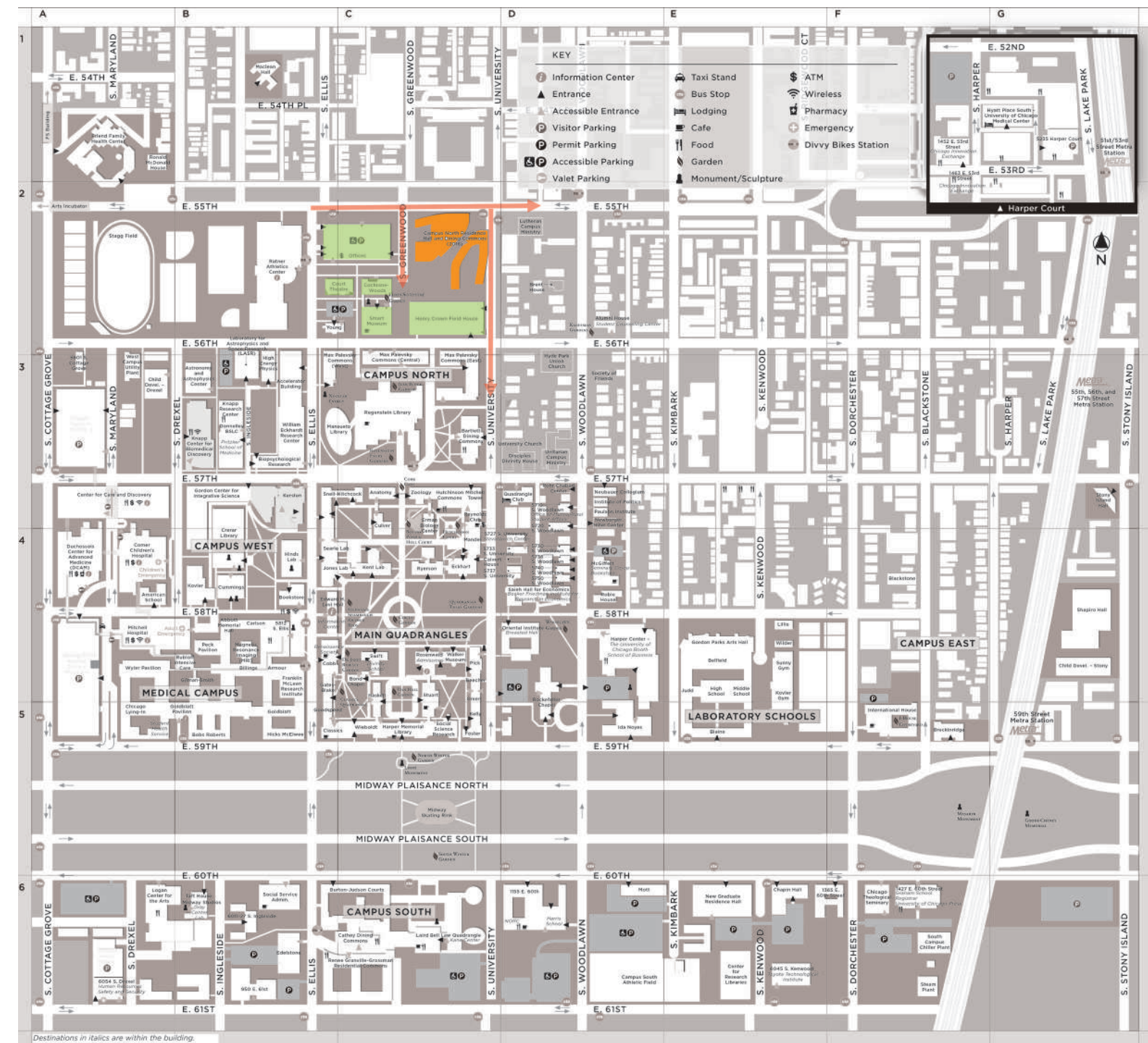


Figure 1.21

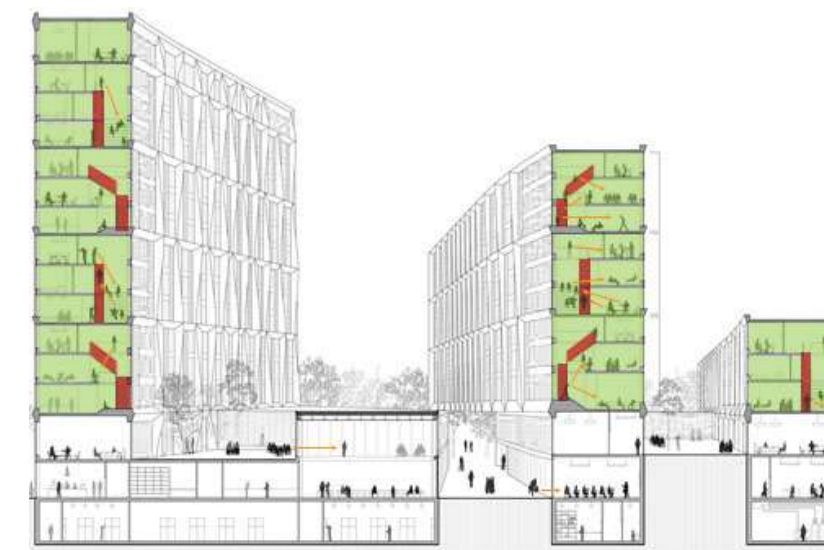


Figure 1.22

Studio Gang was given a site on the edge of The University Of Chicago's campus. The north and east facades face the city and the south and west facades face nonacademic buildings on campus. The exterior is made to be an abstraction of the school's neo-gothic style. It also fits into the surrounding fabric with building heights that complete the urban edge. With an understanding of how the building and site interact, Gang looked at the building and how to organize space within it. The design became one in which the common areas are based on the existing house system. Each common space is three stories



Figure 1.23

tall. placed in the core of the building allowing for the rooms to be placed on the perimeter. There is a low proportion of rooms to common areas. They are placed in the center of a traditional double loaded corridor.

There are many types of rooms here. There are both single and double suites as well as apartments.

The combination of the rooms and common areas allow for different levels of interaction among the residents who live here on single floors as well as across floors.

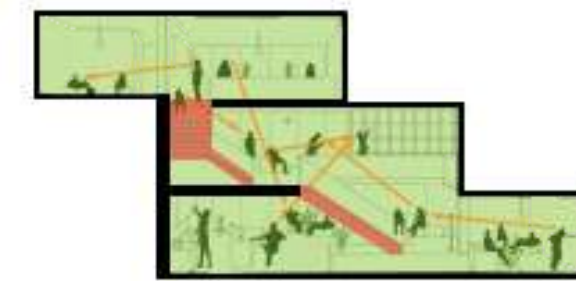


Figure 1.24

This site allows for informal interaction in between the two buildings. The stacked house system allows for interaction across multiple floors and different neighborhoods. Even the rooms allow for interaction as they have multiple people living in it.

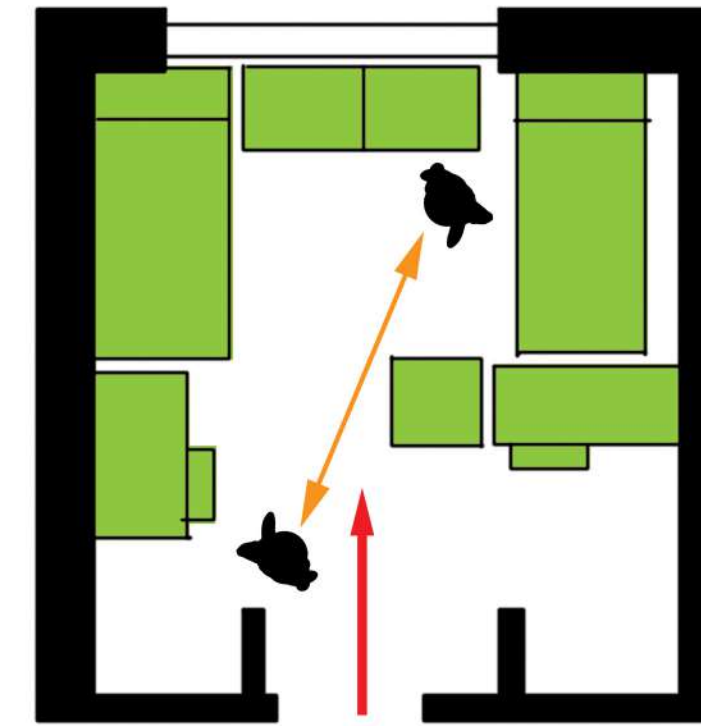


Figure 1.25

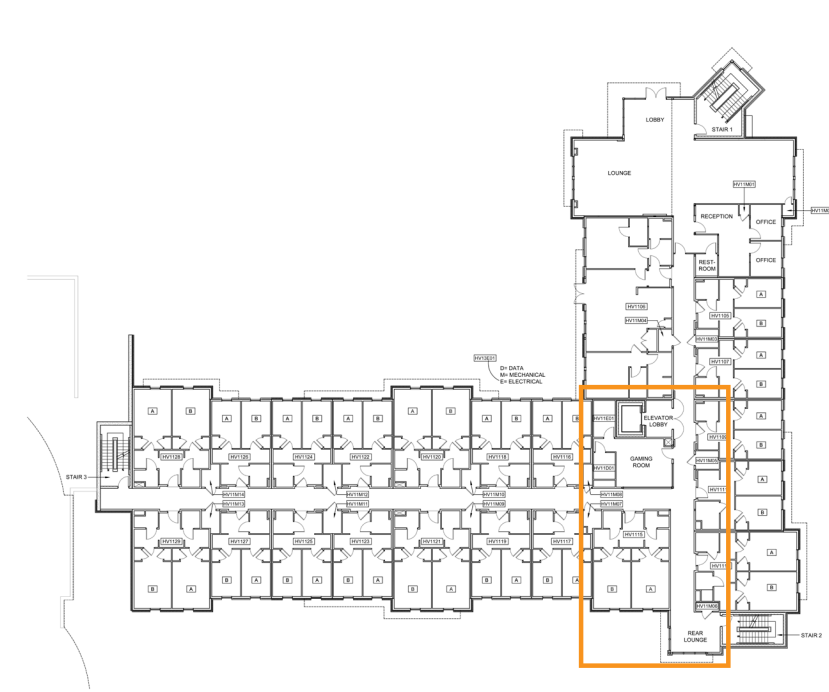


Figure 1.26



Figure 1.27

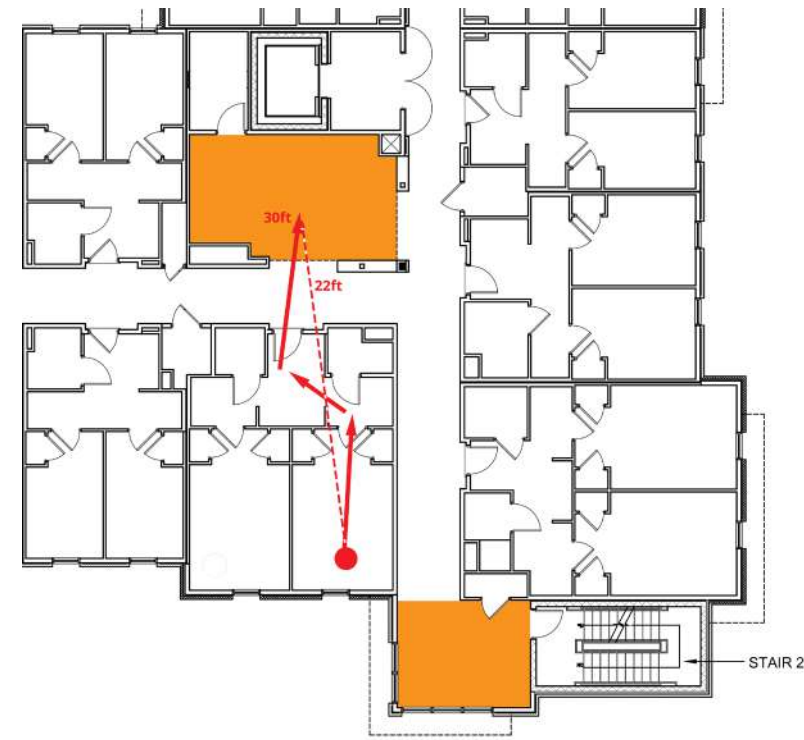
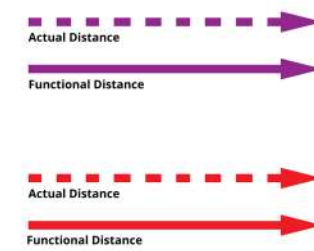


Figure 1.28



Sociospatial Relationship

As stated by Heilweil, formal common spaces had led to forced interactions. As a result, feelings of alienation, hostility, and a loss of a sense of place have occurred. Therefore, the prevention of these conditions can be corrected through the understanding of relations of patterns of adjacency and traffic flows, and how these lend themselves to environmental programming. Hallways become important because they are not only a social hub, but they influence environmental planning.

Traffic flows, also called circulation, help determine who meets whom, how often, and how casually.

Circulation between two spaces can be measured in Functional Distance. Functional Distance is the distance that is actually traveled rather than the measured physical distance. Using this logic, it can be determined that separate and poorly connected adjacent areas are more functionally distant than distant remote areas that are well connected.

Students will use the entrance closest to their room, therefore, limiting the amount of entrances can help direct traffic flow into precise areas. This will help increase incidental socialization (Heilweil 385).



Figure 1.29

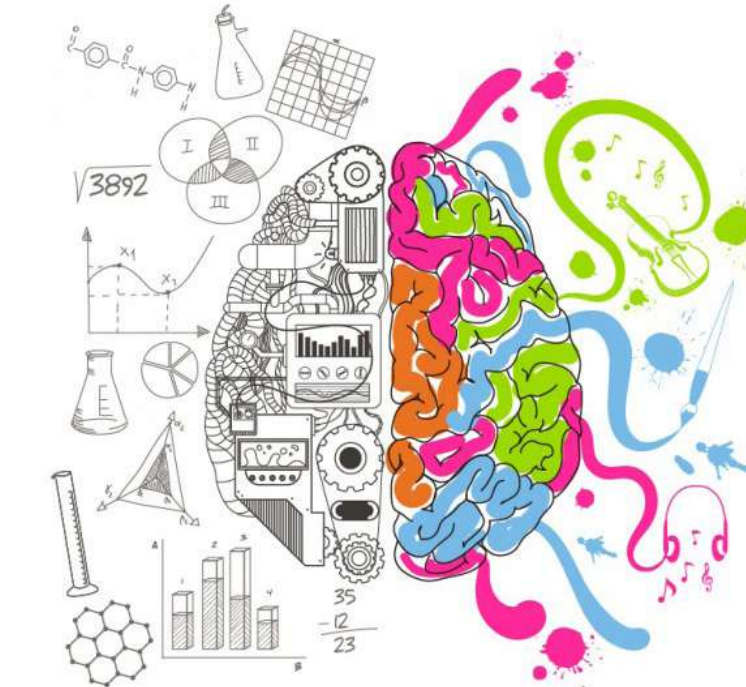


Figure 1.30



Figure 1.31

College Culture

Most American colleges can be classified in two manners: Liberal Arts or Technical. A liberal arts school consists of majors that provides an overview of the arts, humanities, social sciences, mathematics and natural sciences. Technical school provide courses in a range of practical subjects, such as information technology, applied sciences, engineering, agriculture, and secretarial skills.

Other types of institutions are Junior College, military school, nursing school, gender specific and historically black colleges and universities (HBCUs).

In addition to universities, students can be described in four ways. This is based on their involvement in academics and college life.

- Academics** are involved with the ideas or learning via school, classes, papers, and content being learned.
- Collegiates** are concerned primarily with extracurricular activities in the form of Greek life, sports, and student organizations.
- Non-conformist** are concerned with the idea of learning, but not with the university because of its bureaucracy.
- Vocational** are concerned with the ways in which college can help them get a job (Heilweil 392).



Figure 1.32



Figure 1.33



Figure 1.34

Sister Typologies Multifamily Housing

Residence Halls are considered a type of multifamily housing. Because of this, one can look at them to get an understanding of public/private relationships, sociospatial relationships, and efficiency. By understanding the methodologies used, one can expand their understanding of how others have looked at informal collectivism.

The five buildings I am studying are

- Unite de Habitacion
- Hook of Holland
- ATBAT Collective House
- Keeling House
- Habitat 67



Figure 1.35

Le Corbusier Unite d' Habitation Marseilles, France

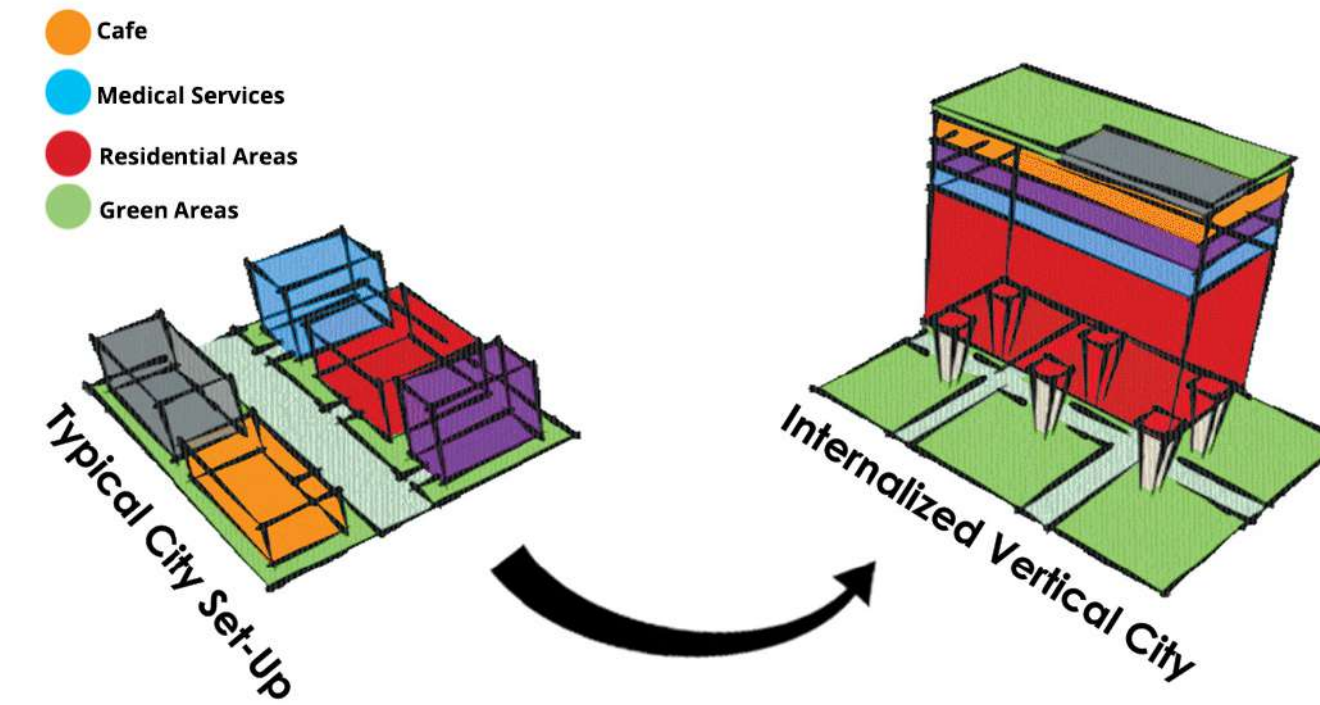


Figure 1.36

Unite d'Habitation was built after World War Two as a place for those displaced by war in Marseilles, France. This was one of the first buildings of its magnitude for Le Corbusier. He began his design by placing multiple uses in one building rather than spreading program across the landscape. Because he was known for his villas, Le Corbusier incorporated that into the design of the units within the body. This allowed for private spaces to be given to the inhabitants (Kroll 2016).

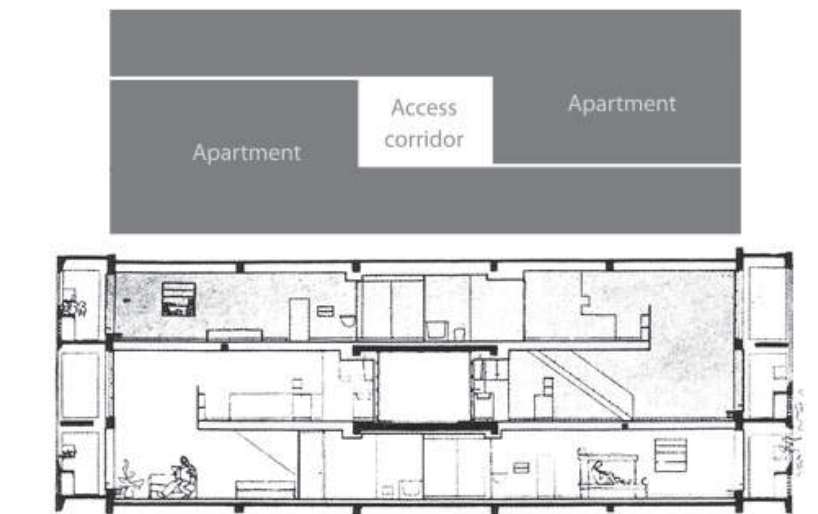


Figure 1.37

Le Corbusier took a new approach to how communal spaces are designed here. Because there was such an emphasis on the accomodation of private spaces, a majority of the common spaces were placed on the roof. The roof was also comprised of a running track, a club, a school for kindergarten, a pool, a shallow pool, and a gym.

He also uses a free facade which allows for the facade to not be dependent on the structure. This means that the facade no longer has to reflect the program inside.

Figure 1.35
Figure 1.36
Figure 1.37

Photo of Exterior of Unite d'Habitation
Diagram of the Program
Section and Diagram of two apartments



Figure 1.38

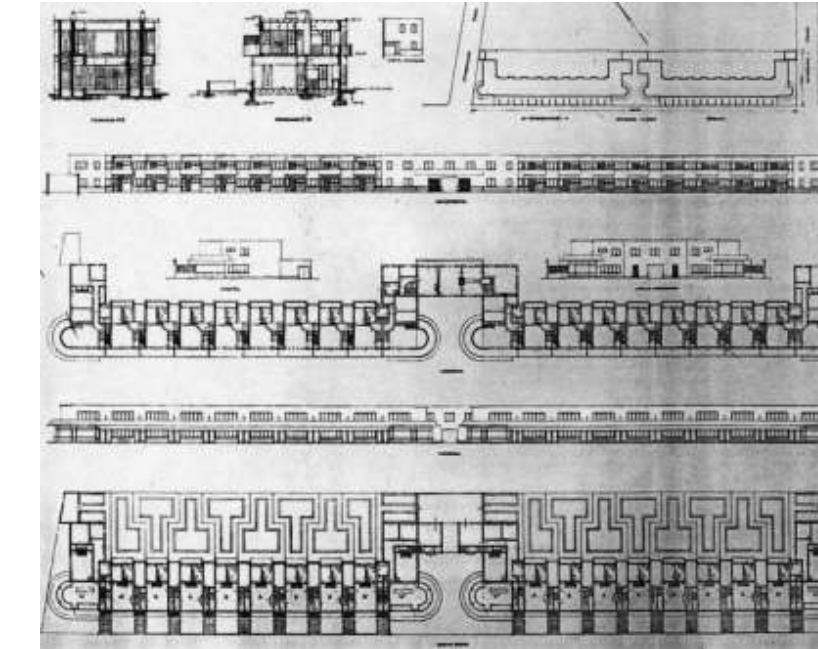


Figure 1.39

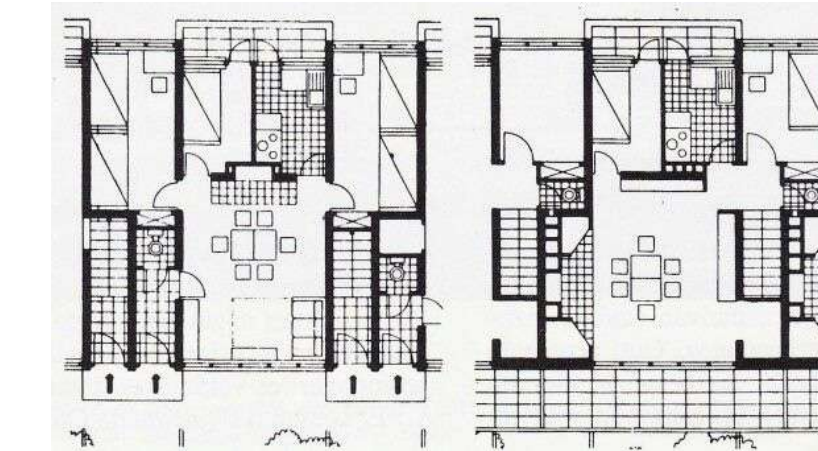


Figure 1.40

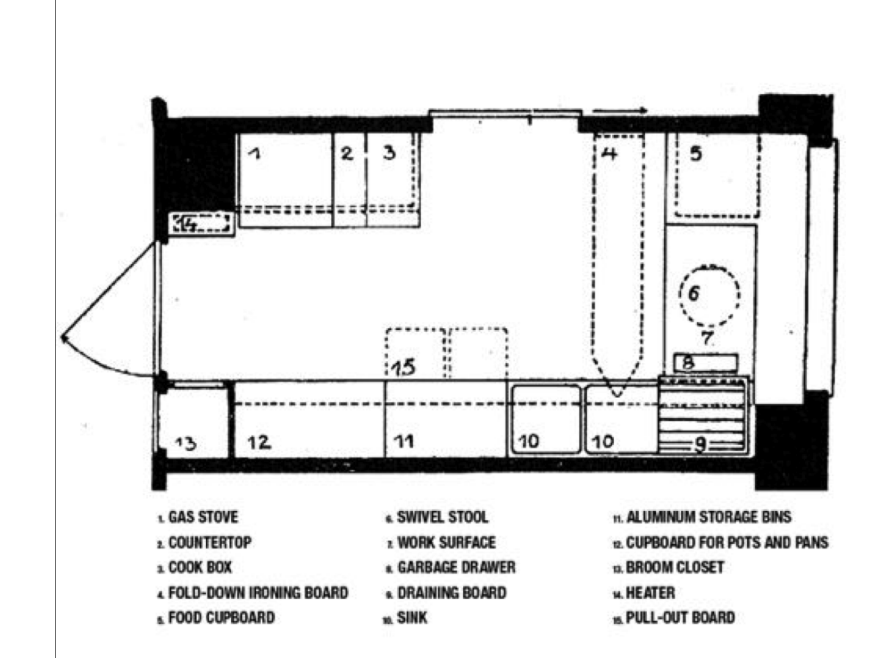


Figure 1.41

JPP Oud Hook of Holland Holland, Netherlands

Siedlungs, given to us by Team X, emerged at the edges of European cities. These settlements were garden cityesque in design and focused on mass production. They were to have a larger density, be two to five stories, and have green space for its residence. They were to be easily replicable meaning everyone gets the same thing.

Large *seidlungs* would have public services such as schools and hospitals. The basis of construction would be concrete floors, cinderblock walls covered in plaster, and wood framed windows. (Fountain 01)

These also featured the Frankfort kitchen which not only maximizes the space in the kitchen, but also increases the efficiency of the space by minimizing the stress on the woman.

Hook of Holland was designed by JPP Oud is the first of the *seidlungs* designed. It was deigned around the idea of rational appropriateness and the minimum dwelling. Each unit gave to its residents exactly what they needed and not much more.



Figure 1.42



Figure 1.43



Figure 1.44



Figure 1.45

Shadrach Woods ATBAT Collective Housing Casablanca, Morocco

Team X members took social sciences and put them at the forefront of their architecture. There was a change from the minimum dwelling to habitat based on geography, anthropology, and civilization. Dutch and English architects proposed a city based on the qualitative thought of the urban core. The urban core is considered the social space. The city is to be a series of social relationships. It was to be the physical design of human relationships.

Shadrach Wood took into account the human need of air, sunlight, and green space. A courtyard, galleries, and private rooms emphasized the Team X idea of levels of socializing. Galleries are “streets in the sky” as coined by Alison Smithson, a leader of CIAM. These streets are reminiscent of alleys at kasbah. Private and public spaces are clearly defined within the space. This is most notably seen in the design of the balconies. Each tenant has access to their own, but cannot get to another room or view into another unit’s balcony (Fountain 01).

Figure 1.42 Exterior of ATBAT Collective House
Figure 1.43 Exterior of ATBAT Collective House
Figure 1.44 Exterior of ATBAT Collective House
Figure 1.45 Exterior of ATBAT Collective House in color



Figure 1.46



Figure 1.47

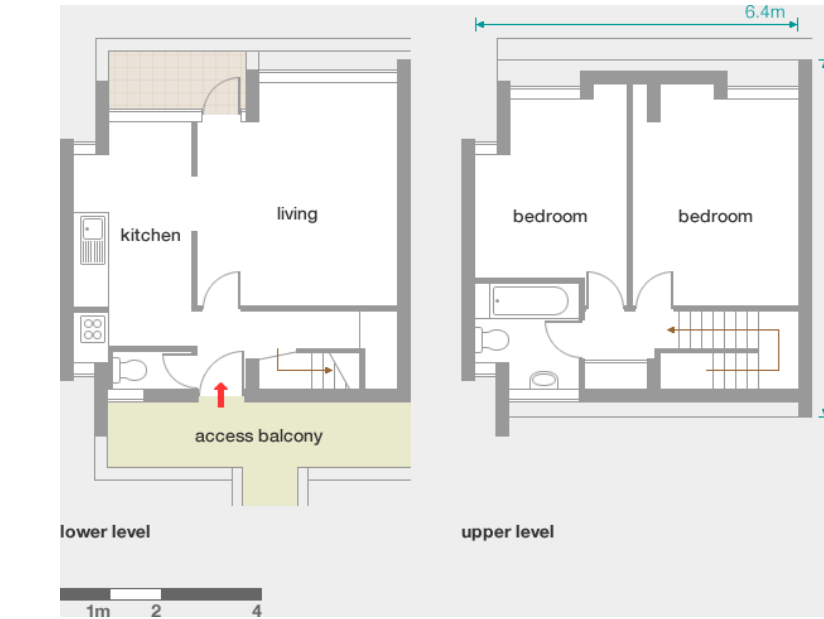


Figure 1.48

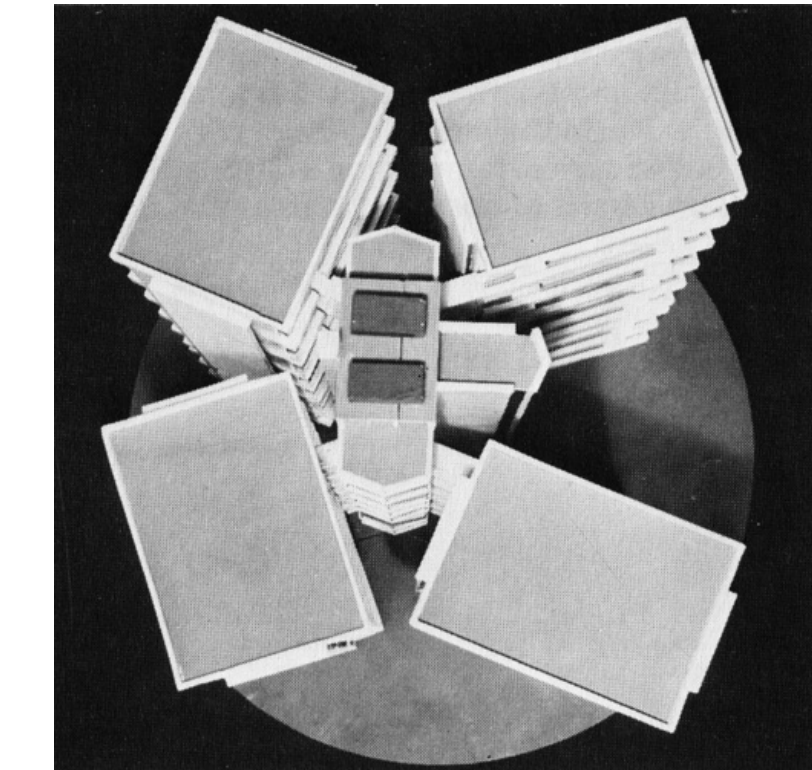


Figure 1.49

Denys Lasdun Keeling House London, England

Denys Lasdun was born in 1914 to an engineer. He went to study architecture at the Architectural Association in London. Lasdun worked with the Royal Engineers Airfield Construction Company during the Second World War. By 1959, Lasdun established his own practice. By the time of his death, he was considered a pioneer of post war modernism (Libera 2016).

The Keeling House project is a set of four wings connected by a common elevator core. The angles of these wings were based upon maximizing natural lighting into the four wings. Denys Lasdun believed that previous theories on mass housing a neighborhood designs were flawed. He reintroduced the idea of the *genus loci* giving the residents a sense of place within the building. The tenants of the building have a communal laundry room which is supposed to encourage social interaction. The units are supposed to be more home-y. To accomplish this, Lasdun designed them as maisonettes, penthouses, and bedsits, a one-room apartment. This idea will be brought forth as a design strategy.

Figure 1.46 Photo of Exterior of Keeling House
Figure 1.47 Diagram of Room Placement
Figure 1.48 Floor Plan of Apartment
Figure 1.49 Top View of Keeling House Model



Figure 1.50

Habitat 67 Moshe Safdie Montreal, Canada

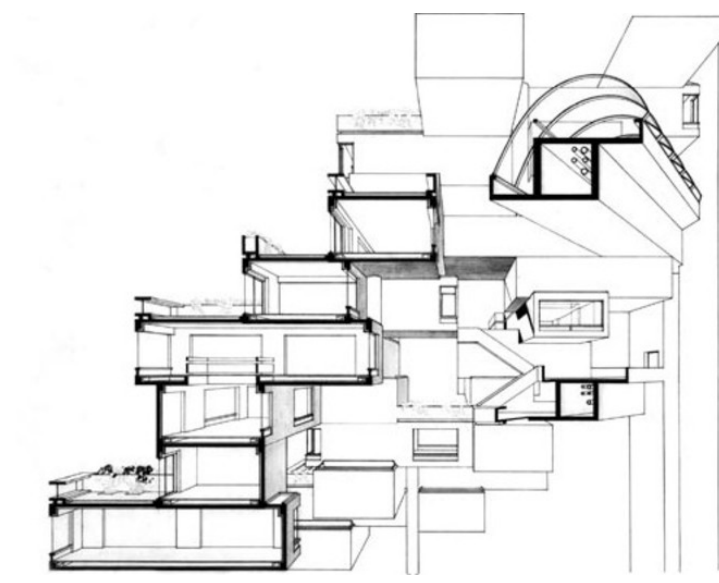


Figure 1.51

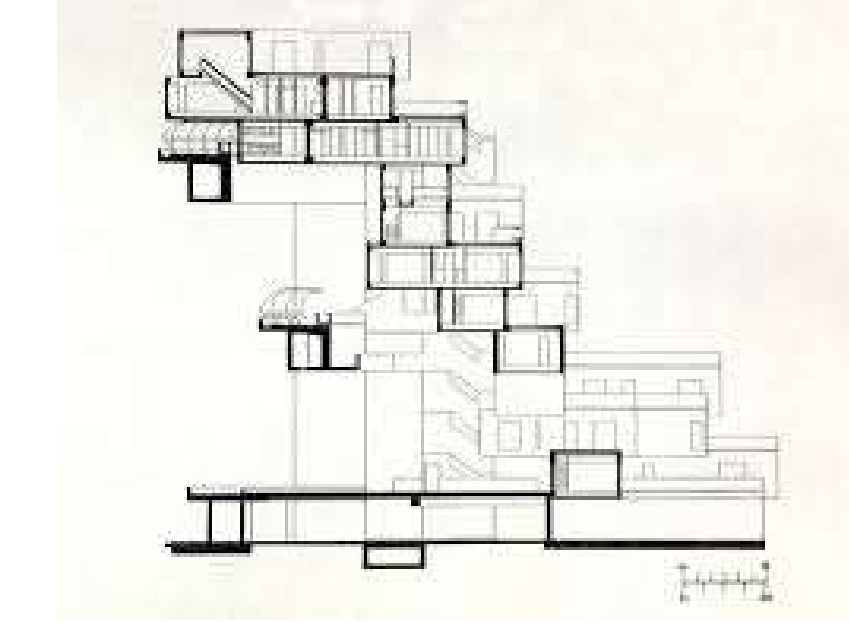


Figure 1.52



Figure 1.53

Habitat 67 began as a the thesis project of Moshe Safdie in 1961. Under its original name "A Three-Dimensional Modular Building System" the master plan consisted of a school, shopping centers, and over 1000 units. However, after its acceptance into the World Exposition, the Canadian government reduced the number of housing units to 158 and eliminated the common spaces. Although it is the only one still standing, Habitat 67 was one of many to be built. The others were built in New York, Isreal, Tehran, and Rochester.

Habitat consists of 146 residences with different sizes and configurations. These residences are made of one to eight concrete units. These units are made from 354 prefabricated concrete forms that are identical. Safdie's goals in designing this piece was 1) affordable housing and 2) a suburban home feel in an urban context. He wanted the complex to be multileveled and for the tenants to have access to a garden and fresh air (Merin 2016).

This increased visual connectivity and informal linkages can be used as part of the design strategies of neighborhoods within a residence hall.

Figure 1.50
Figure 1.51
Figure 1.52
Figure 1.53

Photo of Exterior of Habitat 67
Section Perspective of Habitat 67
Section of Habitat 67
Plan of a Single Unit

Outcomes

With the information taken from this chapter, there are a few conclusions that can be made. First, there are multiple ways that the underlying principles of visual connectivity, multiple activities in a single space, and quality of space can be used to create a methodology for design. For Steven Holl, his methodology was influenced by combining his wants for a iconic building with MITs needs for an abundance of common areas. Lighting and common spaces along vertical circulation is a good building to common space relationship.

Tod Williams and Billie Tsien used a methodology that incorporated the site and student culture. This was also

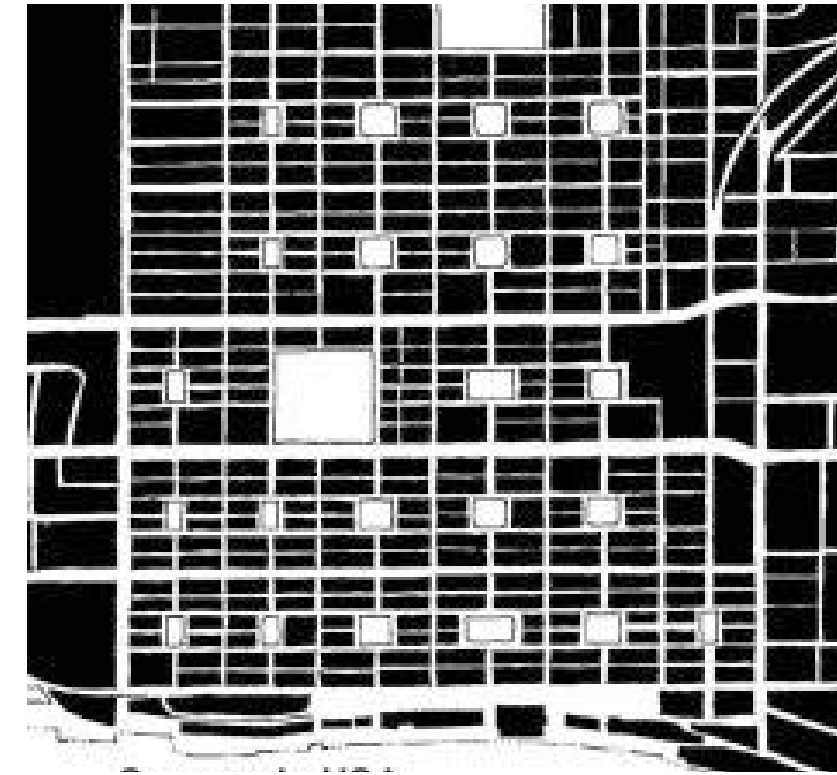
used by StudioGang in their methodology. This allowed for the neighborhoods and rooms to become extremely interactive.

Second, and understanding of common space, and how they can become formal and informal has been defined along with sociospatial relationships and college culture. Lastly, multifamily housing was looked at to see what methods were used in their design.

With this information we can go about creating a system of options to be used in the design of a residence hall as we work our way through the underlying principles.

CHAPTER IV

Site



Formal + Formal

Figure 2.01

The city of Savannah in Georgia is one in which both its use and its design is formal. Streets are set up in a quadrant with squares placed on every few blocks. Wayfinding and navigating through the city is simple. In use, it is formal. City squares are flanked with restaurants and boutiques. There is not a diverse set of programming.



Formal + Informal

Figure 2.02

The green at the University of Cincinnati is designed formally, but its use is informal. Students are greeted with a basic grid system that is interrupted with a series of winding pathways that make the space more dynamic. Its use is informal. There is no set programming which allows for multiple activities to happen within this site.



Informal + Informal

Figure 2.03

The Continuous Movement by Super Studio is informal in both its design and its use. It really has no formal design. It is just a raised flat surface. It also has no formal use.

Site to Building



Formal + Formal

Figure 2.04

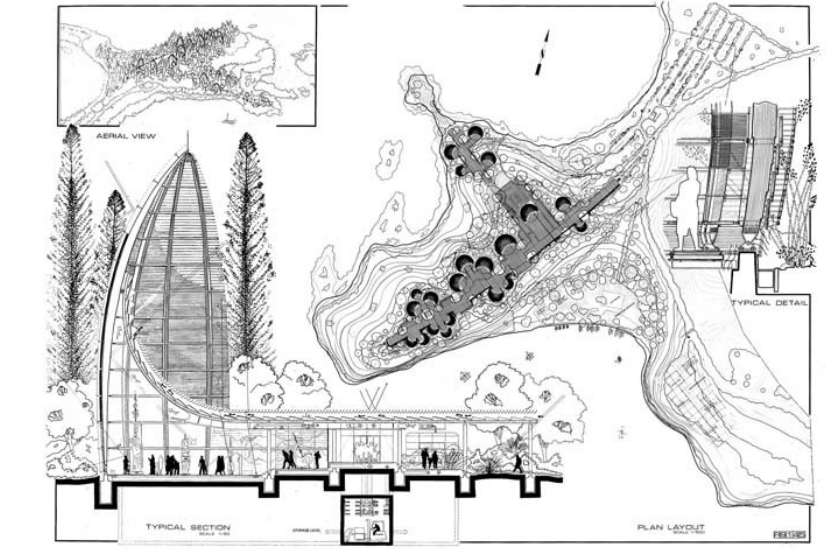
Washington DC is formal in its site to building relationship. Each monument is laid out to be either on axis or terminates one. In its use, it has become a destination for both the government and tourist.



Formal + Informal

Figure 2.05

The Caltrans District 7 Headquarters by Morphosis is a site to building its formal in its design and informal in its use. Thom Mayne formally laid out the site as an extension of the building itself. However, no uses are assigned to this space.



Informal + Informal

Figure 2.06

Centre Culturel Tjibaou is informal in both its design and its use. Piano designed it in such a manner that parking is in the back. When one parks, they have to wander to the front to enter the building. As they move to the front, there is no set programming that is encountered along the way.

Facade to Structure



Formal + Formal

Figure 2.07

The Seagrams Building is both formal in its design and its relationship to the structure. The structure is pushed to the exterior of the building making it part of the facade. This was a fairly new system created by Mies van der Rohe. It is also formal in its design. The facade is a uniform, repetitive system (Fountain 01).



Formal + Informal

Figure 2.08

The facade at Kait Kobo is a storefront system free of the structure. This makes it formal in its design but informal in its use in terms of the structure. The structure itself is informal. There is not set grid to the columns which creates unique spaces within.



Informal + Informal

Figure 2.09

Works by Le Corbusier are informal in both their design and their uses. Because LeCorbusier created a facade system free of the structure, the facade can be designed to do whatever it wants. That makes it informal in its design and its use (Fountain 01).

Facade to Program



Formal + Formal

Figure 2.10

Mckim, Mead, and White were at the forefront of the skyscraper movement. Here, the facade was designed to represent the reflect what is happening on the inside. It first starts with the basement. On top of that is the ground floor which has storefronts for shops. Offices are located on what is called the mezzanine level. The facade on this level is identical windows. The top floor which holds the mechanical systems is fully covered on the facade (Rizutto 01).



Formal + Informal

Figure 2.11

The Guild House is formal in how it reflects the interior program on the exterior, but informal in how it is designed. The exterior represents the floor plates and living spaces happening on the interior of the building. The facade becomes informal because of its use of the broken arch on the front facade along with the column in the middle of the entrance (Fountain 01).



Informal + Informal

Figure 2.12

Works by Le Corbusier are informal in both their design and their uses. Because LeCorbusier created a facade system free of the structure, the facade can be designed to do whatever it wants. Its relationship becomes informal in its use because multiple types of windows can be used and they do not have to reflect what is on the inside (Fountain 01).

Figure 2.07
Figure 2.08
Figure 2.09

Photo of the Seagrams Building
Photo of the interior of Kait Kobo
Photo of Exterior of the Villa Savoye

Figure 2.10
Figure 2.11
Figure 2.12

Photo of the Insurance Building
Photo of the Exterior of the Guild House
Photo of Exterior of the Villa Savoye

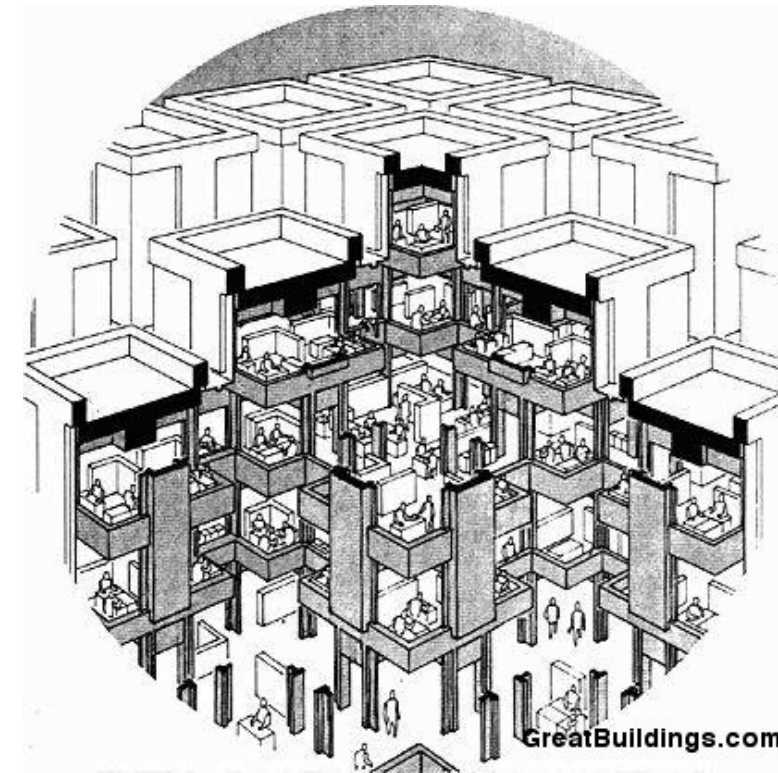
Program to Room



Formal + Formal

Figure 2.13

The Paris Opera House is a building in which both the programming is formal and the rooms that are in it formal. Rooms are placed upon a series of perspective paths that guide visitors from room to room until they are in the theater (Fountain 01)..



Formal + Informal

Figure 2.14

The Central Office Beheer has a formal relationship between its programming and the rooms that it is comprised of. However, the design is informal allowing rooms to open up into a interior courtyard (Fountain 01).

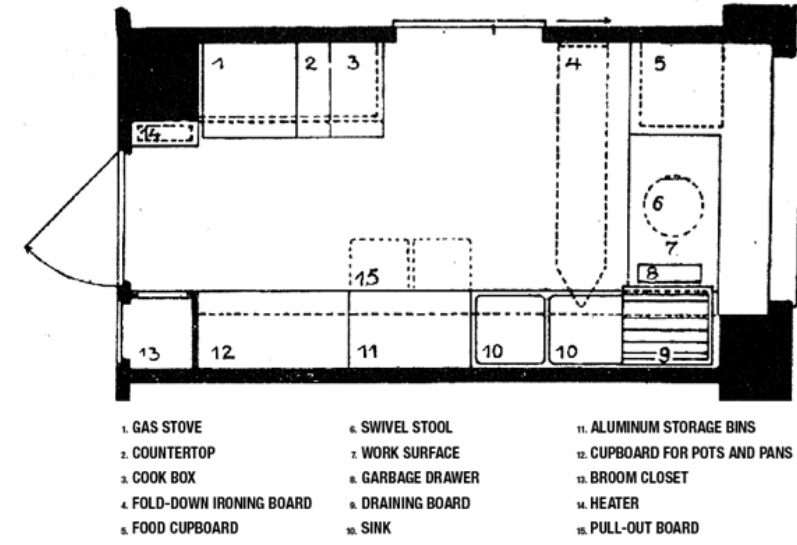


Informal + Informal

Figure 2.15

Kai t Kobo has an informal relationship between program and room. First, there is no set programming, although the building is currently an office. This is only enhanced by the lack of formal layout of rooms within the space.

Room to Individual



Formal + Formal

Figure 2.16

The Frankfort Kitchen is a formal relationship between a person and a room. In fact, this design was based on max efficiency of a person in this space. It is an extremely choreographed experience.



Formal + Informal

Figure 2.17

The Brick House 1908 is an informal room with a formal design. There is multiple activities in this room allowing its users to do many things, but there is a formally designed way in which these actions are choreographed.



Informal + Informal

Figure 2.18

House NA is a series of informal spaces in one room. It is also informal in its design. Each room is a floating platform where many actions can take place. One can eat, sleep, socialize, etc.

CHAPTER III

Site Context Defined



Photo by Author

Site Selection Criteria College

A site relationship to its building is important to create informal collectivism. This was a weak relationship in the case studies because of their lack of multiple activities and visual connectivity, and should be corrected for this project.

The following are the criteria for location:

- weather must consist of all four seasons.
- It must be 20 to 40 miles from an urban center.

The following are the criteria for the College:

- must be experiencing rapid growth
- >8,000 students
- must have at least two existing residence halls, but no more than five
- comprehensive university*
- Public Institution*



Figure 3.01

Ceiling R-value	30
Wood Frame Wall R-value	13
Mass Wall R-value ⁱ	5/8
Floor R-value	19
Basement Wall R-value ^c	5/13^f
Slab R-value ^d , Depth	0
Crawlspace Wall R-value ^c	5/13
Fenestration U-Factor ^b	0.50^j
Skylight U-Factor ^b	0.65
Glazed fenestration SHGC ^{b, e}	0.30

Figure 3.02

Site Selection Seasonal Variation

The site for this project must be in a place where the climate is a Humid Subtropical Climate. This climate is considered mild and lies in between 20° to 40° degrees north or south of the equator. It is considered mild because all four seasons are distinct. Temperatures in the summer range from 86° and 100° and winter temperatures range from 41° and 54°. However, winters in this zone can be severely cold. These areas also received an average of 48 inches of rain annually. (TEOEB) This is also Climate Zone 3 in the IECC.

This will benefit the project because it has given us an opportunity to design spaces for informal collectivism on the exterior of the building. With that in mind these spaces can be designed programatically to respond to the seasons. Exterior common spaces can then become a way in which the building can interact with the site, and the site with the campus.

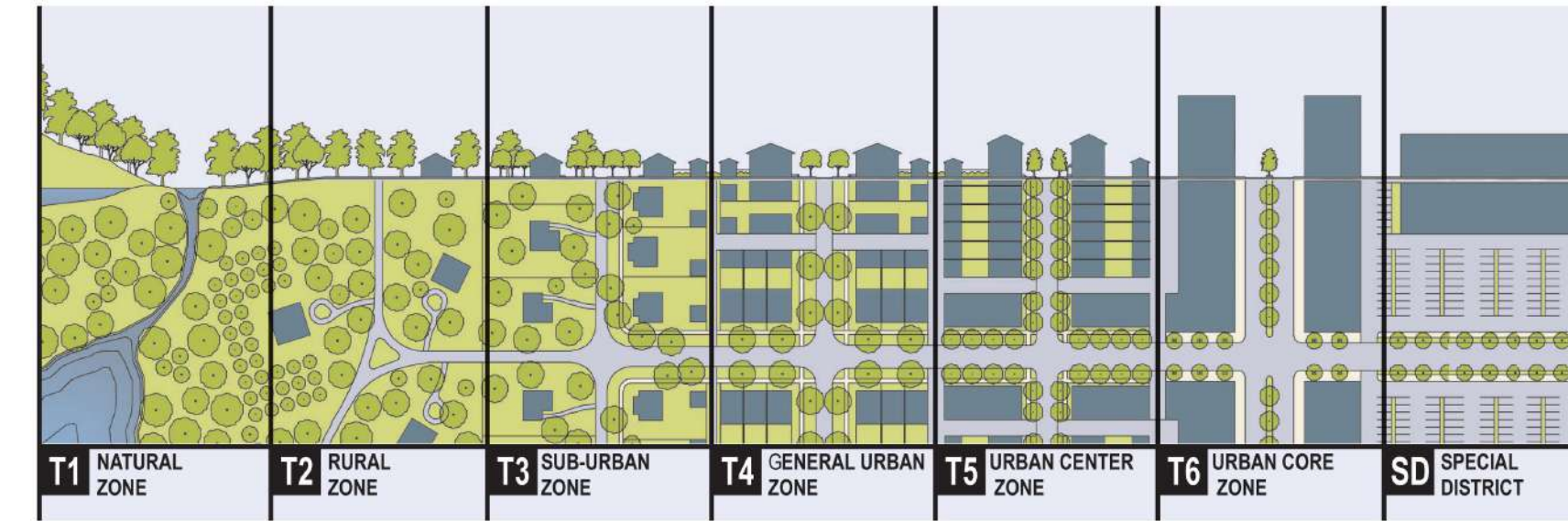


Figure 3.03

Site Selection Rural, Urban, Suburban

The site for this project must be on a suburban campus 20 to 40 miles from an urban center. I extended my radius from city centers to suburban peripheral cities. This will create a self contained campus free from the influence of non campus entities. Suburban colleges can be described as those located in small cities, large towns, or in residential areas near cities. This type of college or university has 5000 to 15000 students in attendance.

I will be exploring a zone between the T3 and T4.



Figure 3.04

This type of college will benefit the project because the college will be self contained which will help foster a sense of community and aid in informal collectivism. Students will also have access to a city without actually having to be in one. Suburban colleges are usually safer and have access to nature. At a school of this size, academics and a social life are what entertain you giving these informal collective spaces more importance (CB).

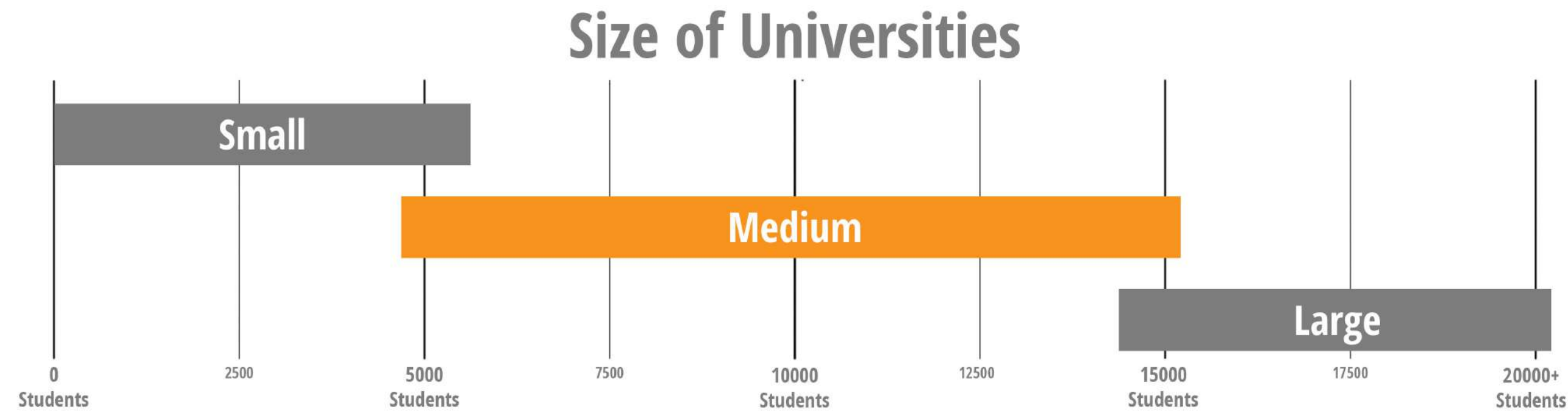


Figure 3.05

Site Selection Small to Medium

The site for this project must be at a college or university whose enrollment is in between 5000 and 15000 students. Satellite campuses with enrollment whose enrollment falls within the small to medium category may also be considered (College Data).

This type of college will benefit the project because the size creates a strong sense of comraderie among its students. Most buildings are in walking distance which allows for more campus "hotspots". These social centers can become the informal spaces within a residence hall.

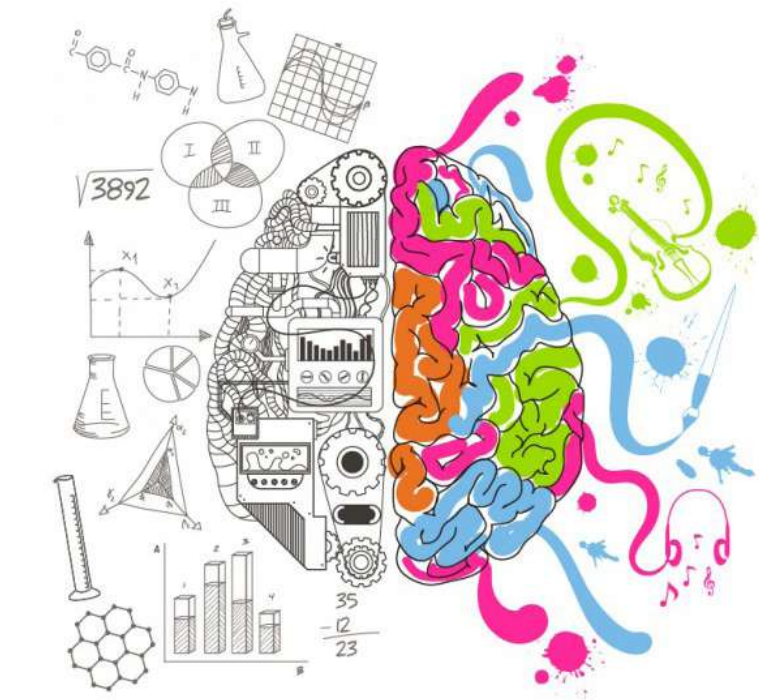


Figure 3.06

Site Selection Comprehensive Universities

Liberal Arts Universities are ones in which the primary degree in an undergraduate degrees in the arts, humanities, and social sciences. Research universities who offer a both undergraduate and graduate degrees. However, the focus of teaching is through research. Military academies are ones in which degrees in business, engineering, technology, and military science are offered. The main goal of a military academy is to prepare officers for the armed forces. Technical colleges are ones in which the primary degree recieved is one in the fields of engineering, technology, and the physical sciences. Most degrees here are completed in five years. The site for this project must be at a comprehensive university. This type of college or university is one in which both theoretical and vocational training is offered at the undergraduate, graduate, and doctoral level (Meyer).

This type of university has a diverse set of students due to the diversity in academic programs. This will help with creating informal collective spaces that are not tailored to specific uses based on academics. This will increase ones self awareness. This type of university has a diverse set of students due to the diversity in academic programs. This will help with creating informal collective spaces that are not tailored to specific uses based on academics. This will increase ones self awareness.



Figure 3.07



Figure 3.08

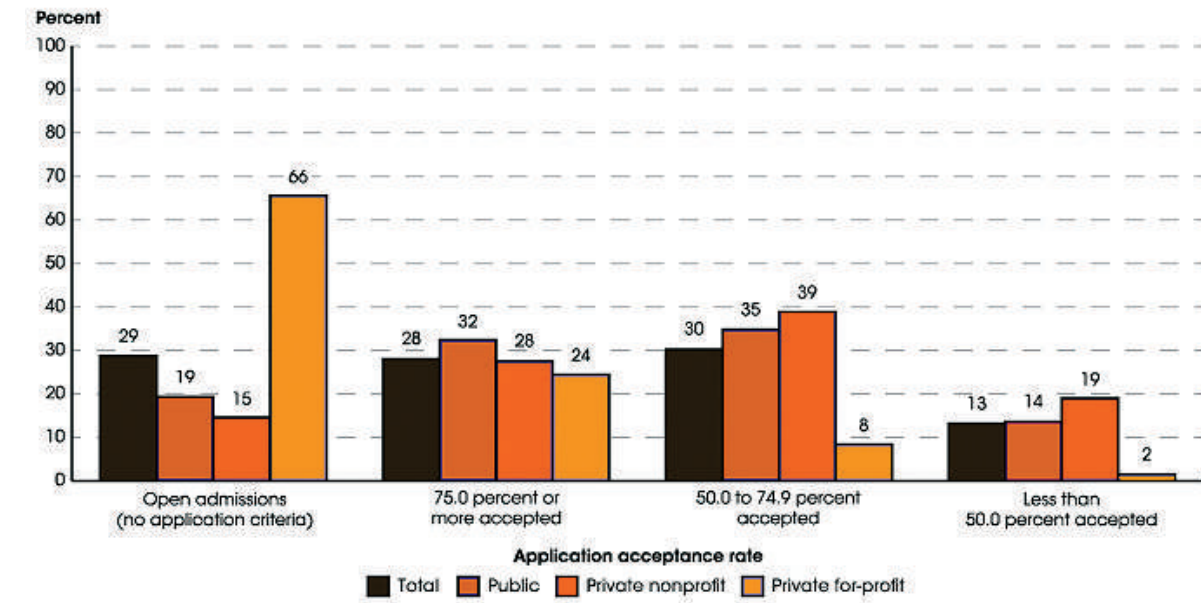


Figure 3.09

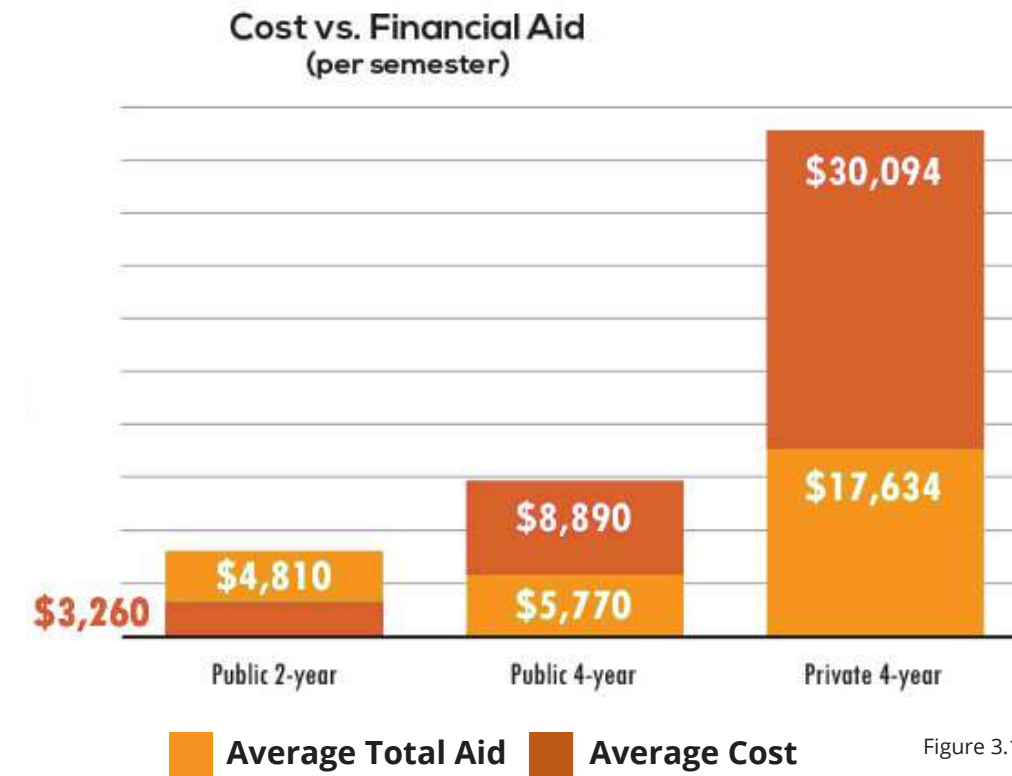


Figure 3.10

Site Selection Public Universities

The site for this project must be at a college or university that is considered a public institution. These are colleges or universities that operate under the supervision of state governments and are funded in part by tax dollars and subsidies from the state (Staff).

This type of college will benefit the project because there is an increase in diversity of students. Because a majority of private institutions have a higher cost and higher admissions requirements, they become tailored for a specific type of student.

Site Selection Process of Elimination

Weather must have seasonal variation.

The following states were selected for consideration. Of these selections, for the process of site visitation and analysis, the state of Georgia is chosen because of its proximity.

- Alabama
- Florida
- Georgia
- Kentucky
- Mississippi
- North Carolina
- South Carolina
- Tennessee
- Virginia
- West Virginia

It must be in a suburban area.

Starting with the major cities, I worked my way outwards and found suburban universities. Major Cities in Georgia. Being in a suburban area allows for mixed populations without the interruption of non campus programming.

- Atlanta
 - Kennesaw State University- Marietta
 - West Georgia University
 - Life University
- Columbus
 - Columbus State University
- Augusta
 - Augusta University
 - Medical College of Georgia
- Macon
 - Mercer University
 - Middle Georgia State University
- Savannah
 - Savannah College of Art and Design
 - Savannah State University
 - Armstrong State University
- Athens
 - University of Georgia

Site Selection College Criteria

It must be a medium sized college.

Universities with student enrollment between 5000 and 15000 were chosen to continue.

- Kennesaw State University- Marietta

- West Georgia University

- Life University

- Columbus State University

- Augusta University

- Medical College of Georgia

- Mercer University

- Middle Georgia State University

- Savannah College of Art and Design

- Savannah State University

- Armstrong State University

- University of Georgia

It must have less than 8000 students.

This allows for more significant interaction within the dorm.

- Kennesaw State University- Marietta

- West Georgia University

- Life University

- Columbus State University

- Mercer University

- Savannah State University

It must have no more than five Residence Halls but no less than two.

This allows for the opportunity to diversify the types of residence halls on campus.

- Kennesaw State University- Marietta

- Life University

- Columbus State University

- Savannah State University

It should be a comprehensive university.

This allows for more significant interaction within the dorm.

- Kennesaw State University- Marietta

- Life University

- Columbus State University

- Kennesaw State University- Marietta

Site Selection Criteria Site on KSU Marietta

The following are the criteria for location on campus:

- It must be on the campus master plan as a renovation or proposed building site

- It must be in a five minute walking distance from a campus hotspot.

- It must be in an area where the existing residence halls do not have enough space to fit student needs.

- It must be on previously disturbed land

- The site must allow for the building itself to become an informal collective space.

The site should be one that is in line with the future plans of the campus. This lends us the opportunity to work on previously disturbed land, or land that has already been set aside for a building to be placed on it. For this project we are looking at existing residence halls that are on the plan to be renovated, long term sites designated for residence halls, and undesignated building sites.

Site Selection Campus Master Plan

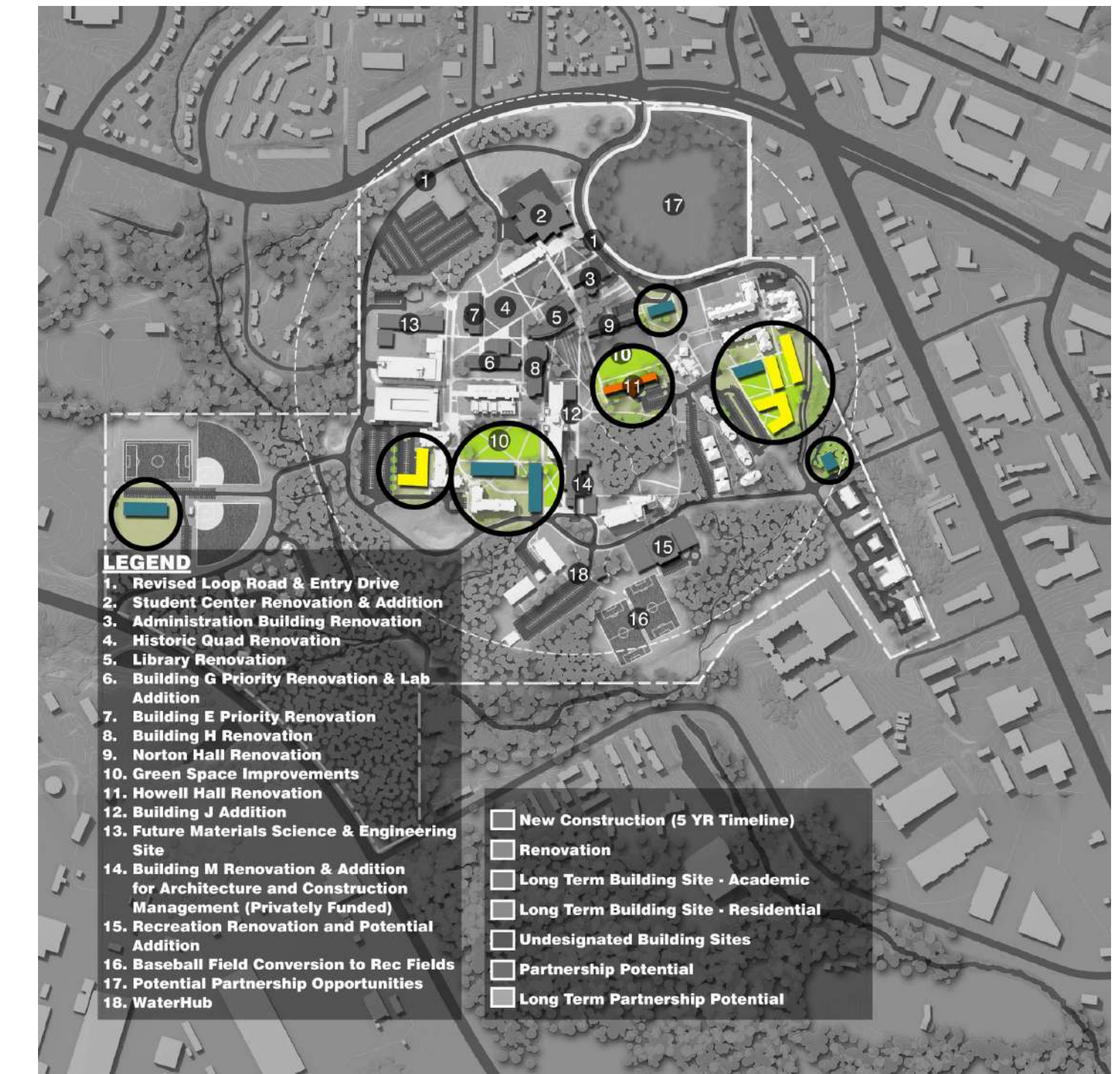


Figure 3.11

Because residence halls should not contain any superfluous programming, it is important for the site to be placed near additional programming aspects on campus. The master planners of this campus has noted that the students have chosen campus hotspots. Hotspots are areas of increased social interaction. On this campus they are the student center, Stingers dining hall, the green between Howell Hall and Norton Hall, and the Atrium Building.

Site Selection Campus Hot Spot

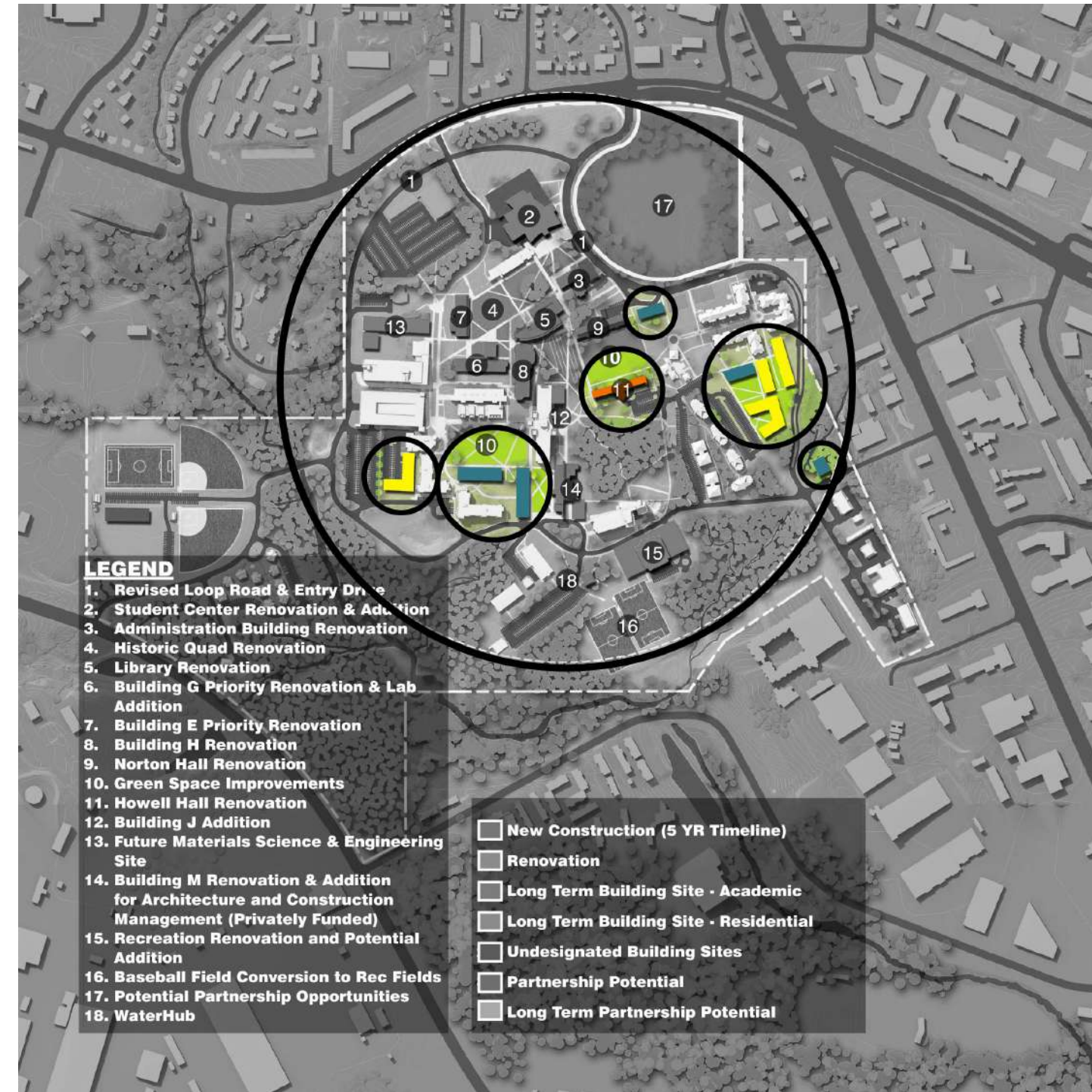


Figure 3.12

It should be noted that the university is experiencing rapid growth. This growth has led to an inadequate amount of student housing. Placing the new residence hall near one that has an overflow of students will allow for the building to respond to student needs. The Marietta Campus has a live on requirement for freshman. Freshman residence halls such as Howell and Hornet Village 200 has reached capacity.

Each percentage of occupied space is as follows

Commons:	274/288	=	95.1%
Courtyard	394/413	=	95.4%
Howell Hall	269/281	=	95.7%
HV100	263/284	=	92.6%
HV200	304/318	=	95.6%

Data by Chris Bruno

Site Selection Overflow Opportunity

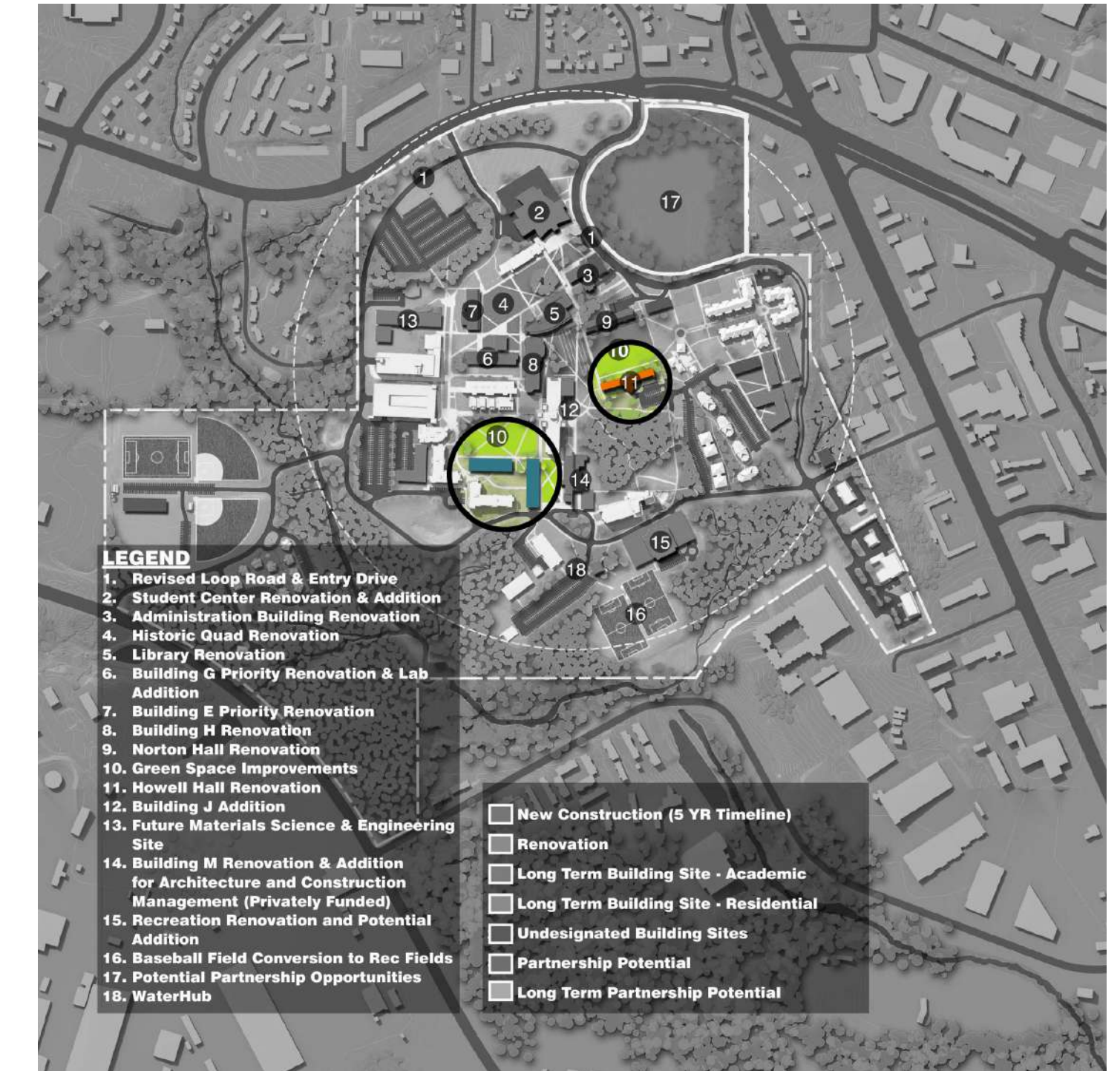


Figure 3.13

The idea of informal collectivism should also take place at macro scale. The residence hall should be placed on a site which would allow it to become an informal collective space. In order to achieve this, the activities happening around the site should be diverse.

Site Selection Diversity through Informal Collectivism

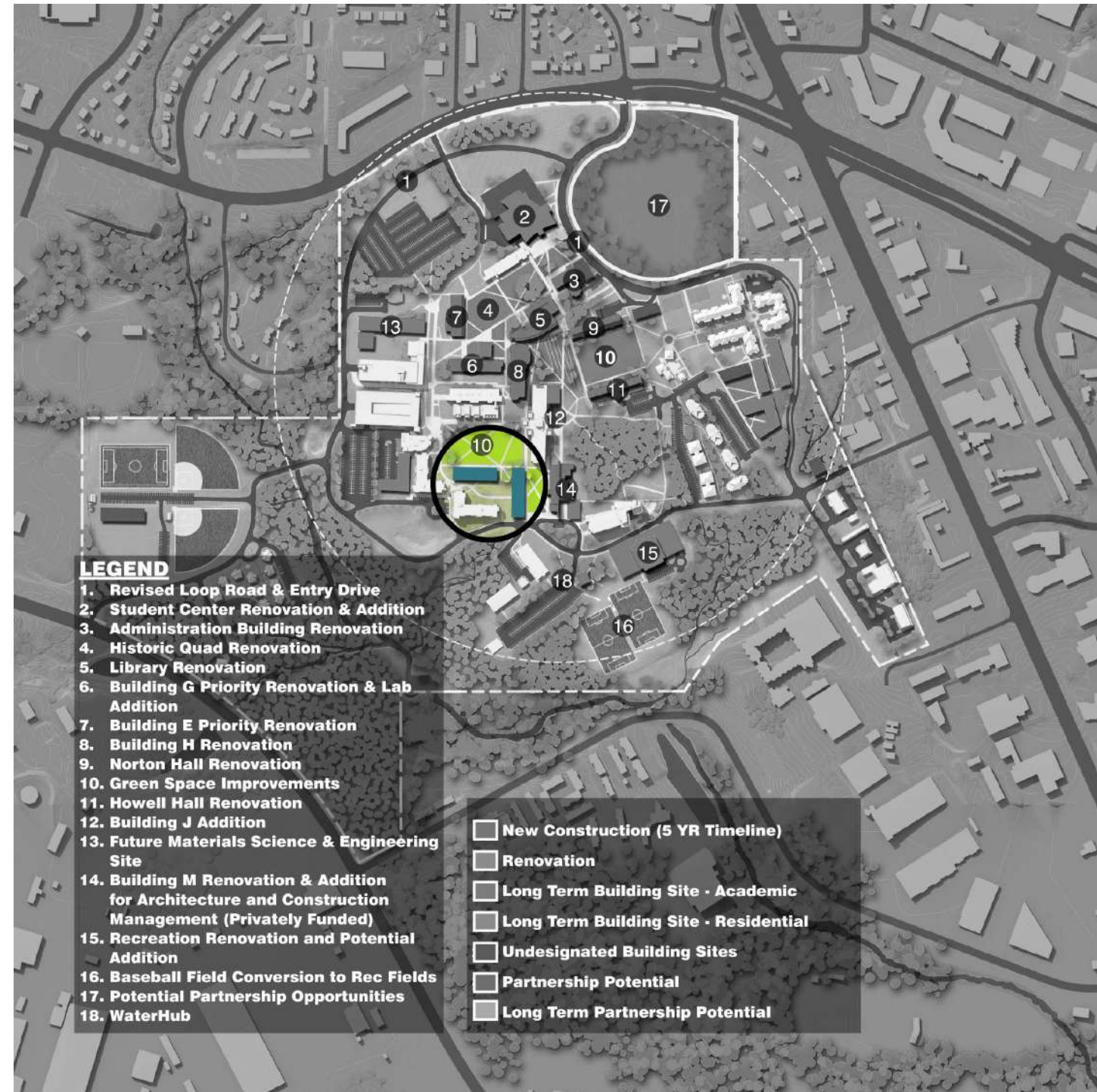


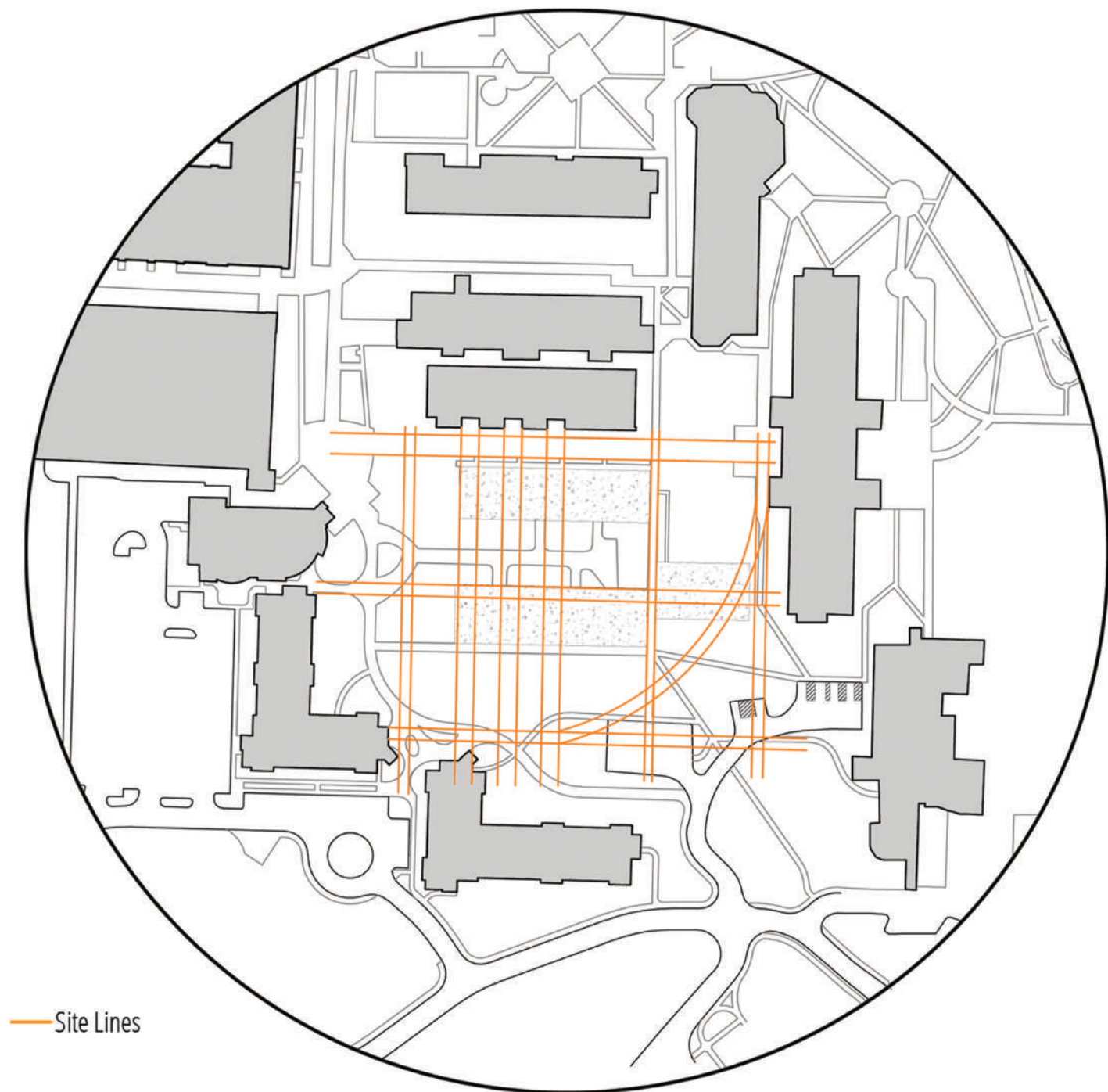
Figure 3.14



Figure 3.15 Site Plan

CHAPTER IV

Site
Site Analysis



Site Organization

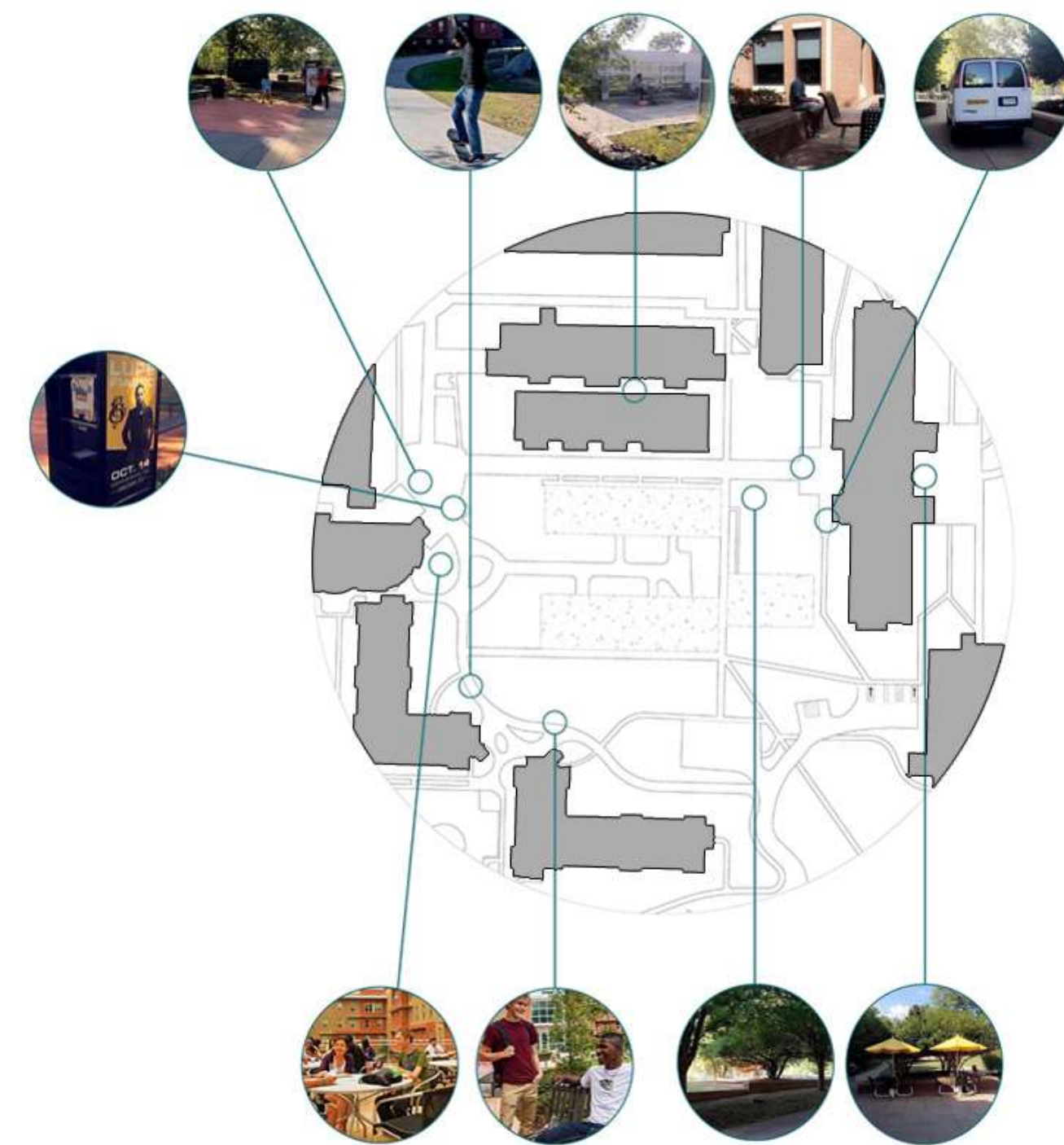
Figure 4.01
Figure 4.02

Site Organization Diagram
Site Forces Diagram

Figure 4.01

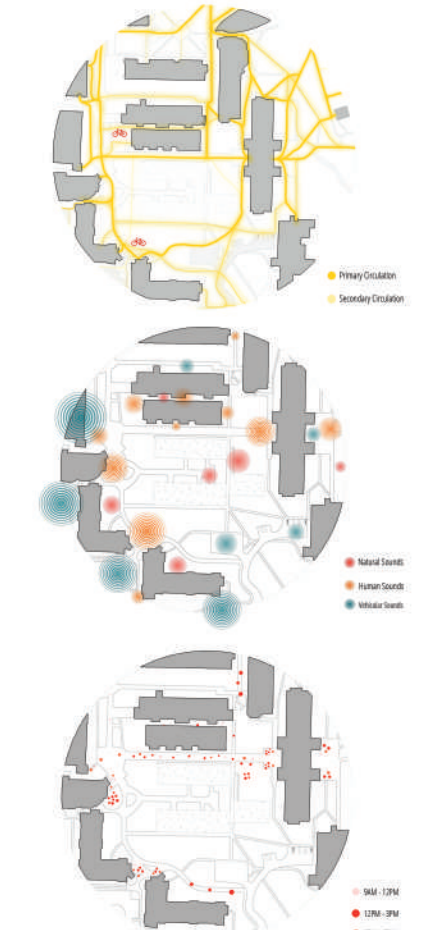


Figure 4.02



Social and Behavioral Studies

Figure 4.03



This site shows what it means for a space to become an informal collector. Multiple Activities are happening along a circulation paths.

Figure 4.03
Figure 4.04

Social and Behavioral Diagram
Social and Behavioral Force Diagrams

Figure 4.04



Vegetation and Materiality

Figure 4.05



Brick

Concrete

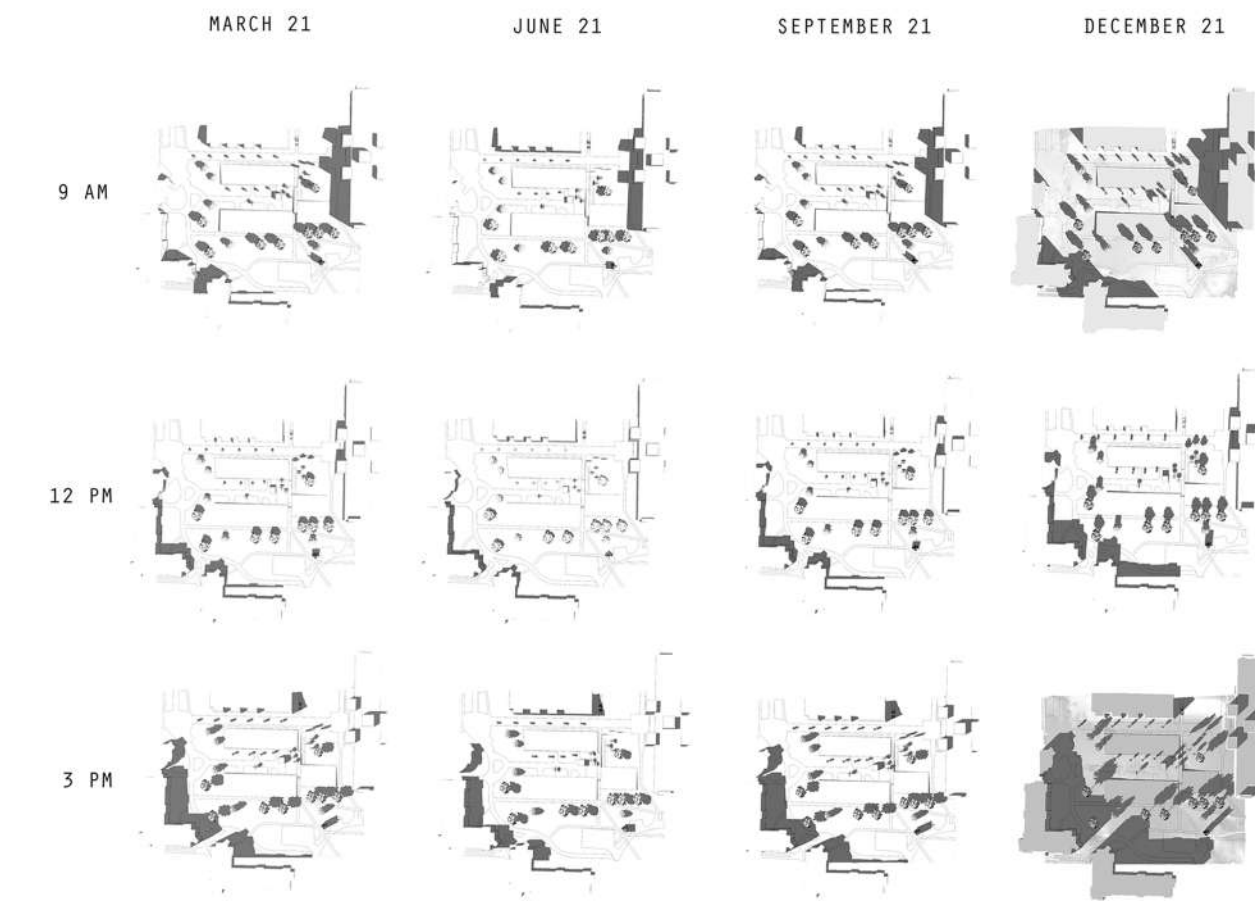
Wood

Grass

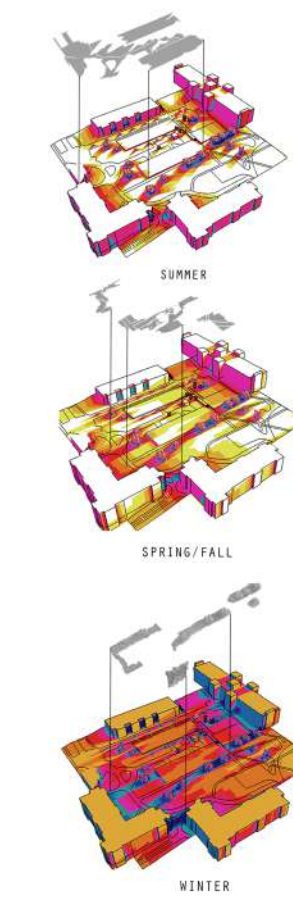
These materials enhance the quality of space. The color schemes are warm, natural, and softer to touch. This enhances the space and make it more welcoming.

Figure 4.06

Sun Analysis



Light Intensity



Here, we can see that there is more intense light during the summer. Finding ways of cooling these areas becomes important. In the winter, there is a more even spread of light.

Figure 4.07

Sun Analysis and Light Intensity



Most of the wind comes from the Northwest. This will help with passive cooling of the building. Windows can become operable. Adding plants will help cool the air and reduce humidity.

Wind Analysis

Figure 4.10

Building Placement: Option 1

Benefits:

- Creates a quad to the north and a collective space to the south
- Creates multiple entrance opportunities
- Has two frontages that face common spaces
- Allows for a collective space shared between the three residence halls
- Fills "dead" area
- Falls within site lines
- Has a lot of natural sun
- Has a relatively small footprint
- Near a lot of human sound

Drawbacks:

- Has little connection to the campus
- Leaves open end on the south east side
- Placed upon circulation paths
- Trees on the south end become collateral damage

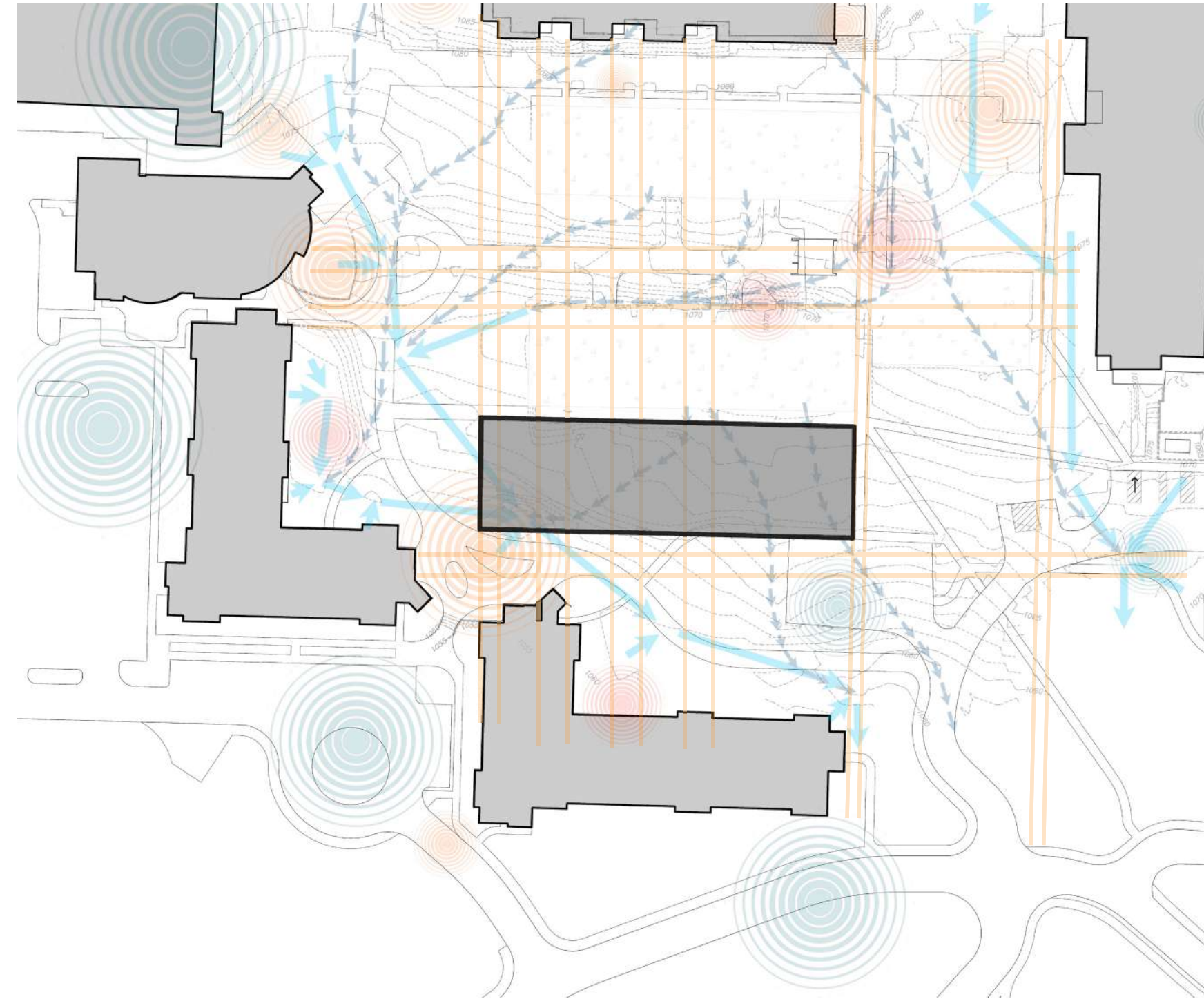


Figure 4.11

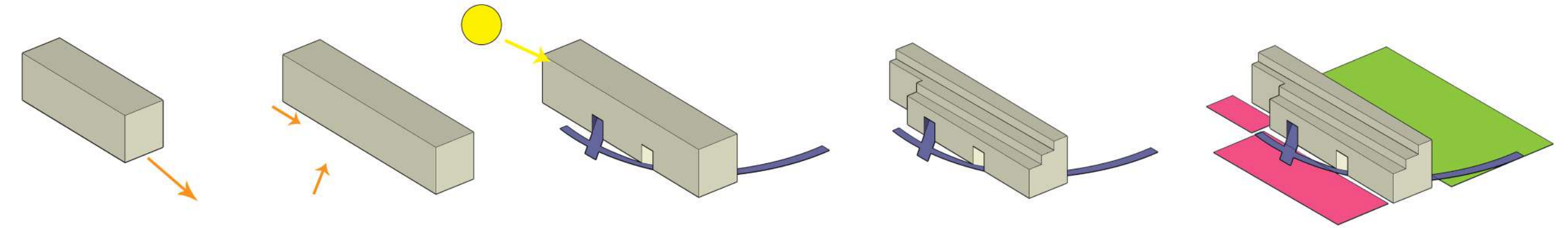
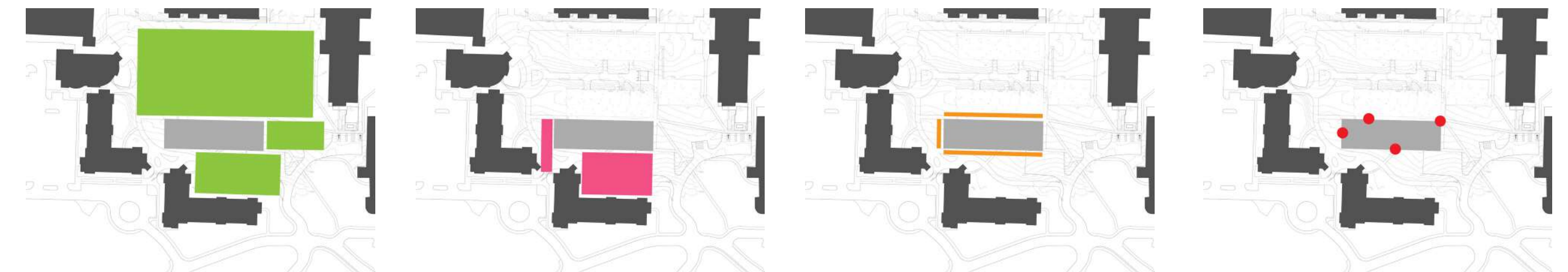


Figure 4.12



Green Space
Figure 4.13

Collective Space
Figure 4.14

Frontages
Figure 4.15

Entrances
Figure 4.16

Building Placement: Option 2

Benefits:

- Creates multiple entrance opportunities
- Allows for a collective space shared between it and HV200
- Fills dead area
- Falls within site lines
- Has a lot of natural light
- Has a relatively small footprint
- Opportunities for natural ventilation

Drawbacks:

- Has little connection to the campus
- Leaves open end on the west side
- Has one frontage that faces common spaces
- Does not create multiple collective spaces
- Not near human sound

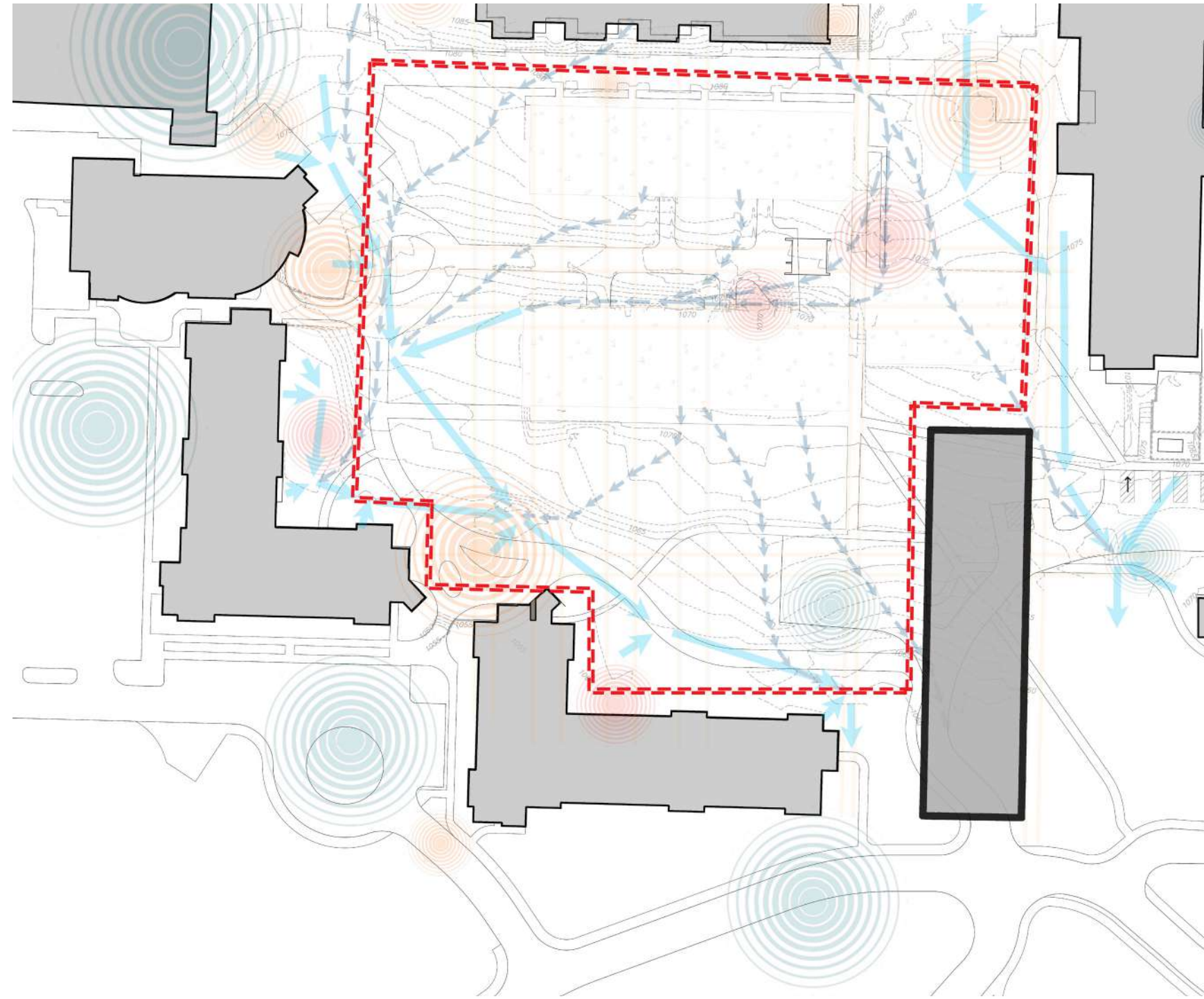


Figure 4.17

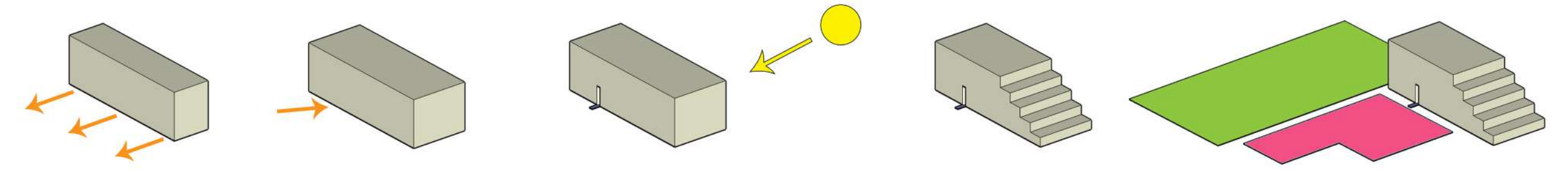
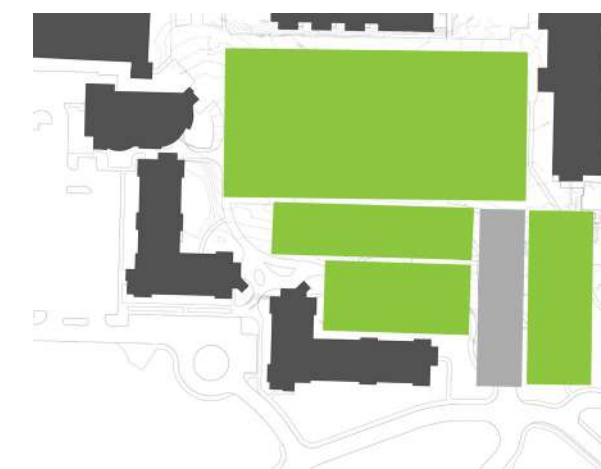
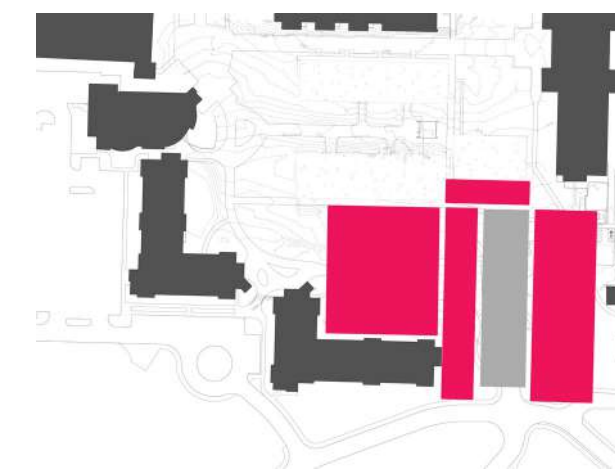


Figure 4.18



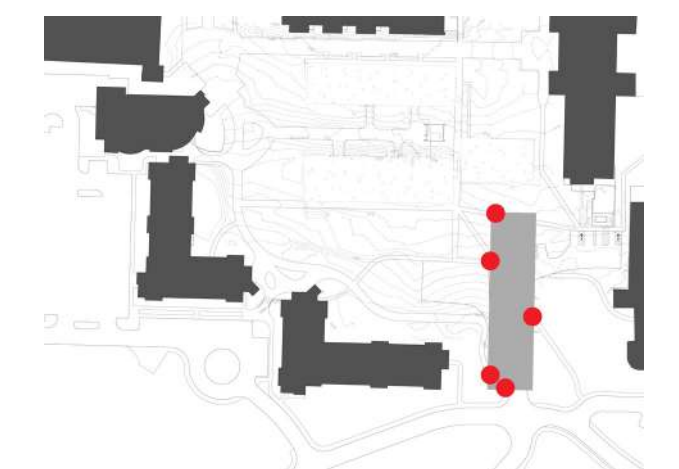
Green Space
Figure 4.19



Collective Space
Figure 4.20



Frontages
Figure 4.21



Entrances
Figure 4.22

Building Placement: Option 3

Benefits:

- Creates a quad to the north and a collective space to the south
- Creates multiple entrance opportunities
- Has three frontages that face common spaces
- Allows for a collective space shared between the three residence halls
- Connects to the campus
- Fills dead space
- Falls within site lines
- In a quiet area
- Has a lot of natural light
- Trees on the south end become collateral damage
- Near human sound
- Opportunities for natural ventilation

Drawbacks:

- Very large footprint

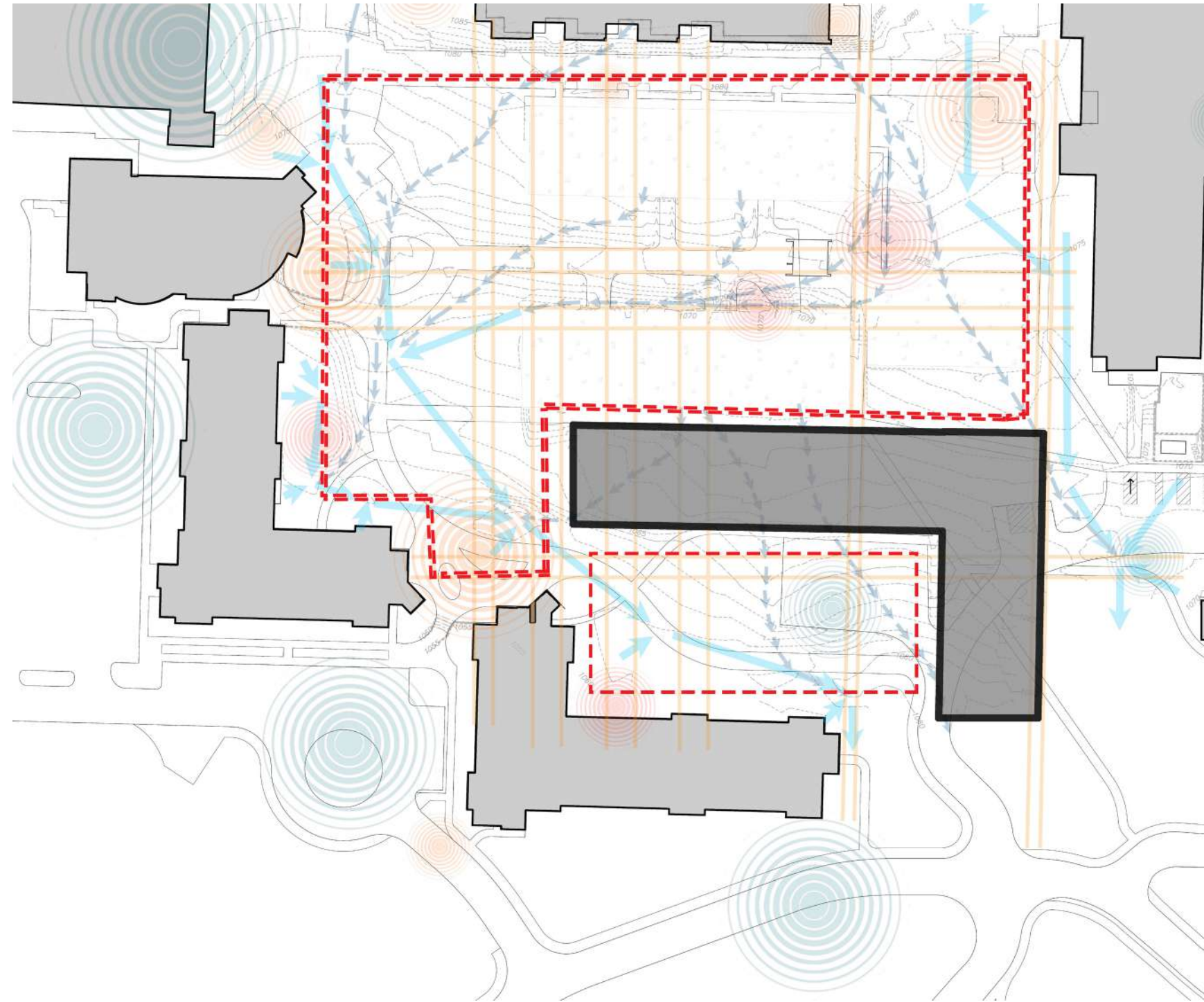


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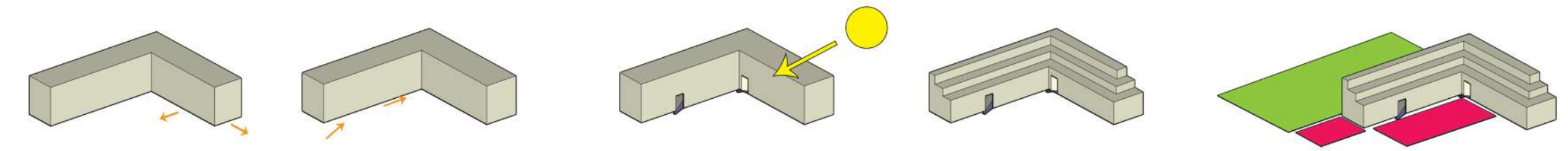
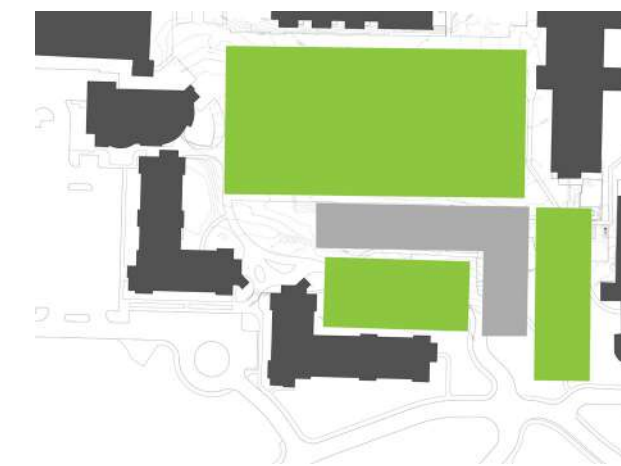
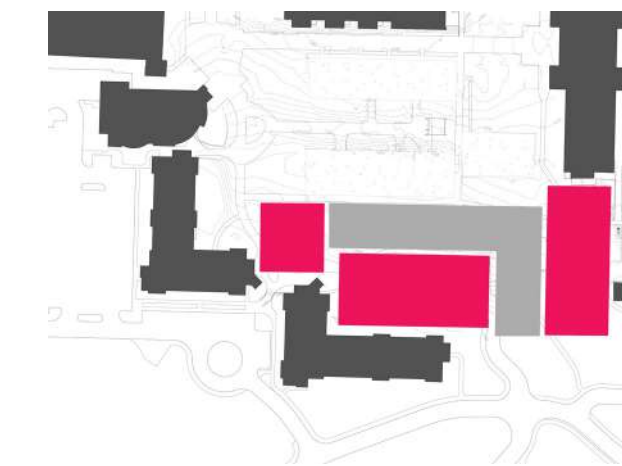


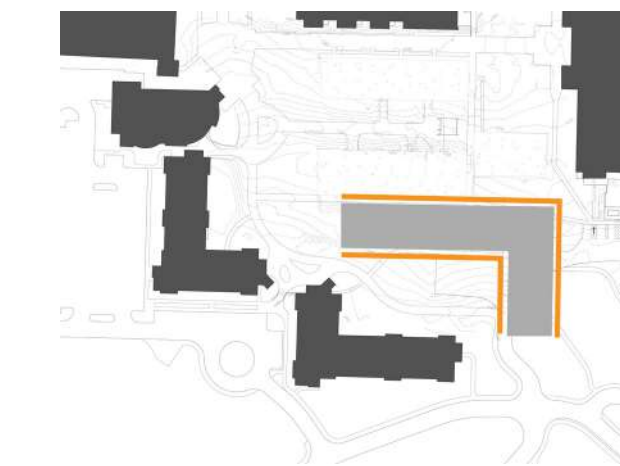
Figure 4.24



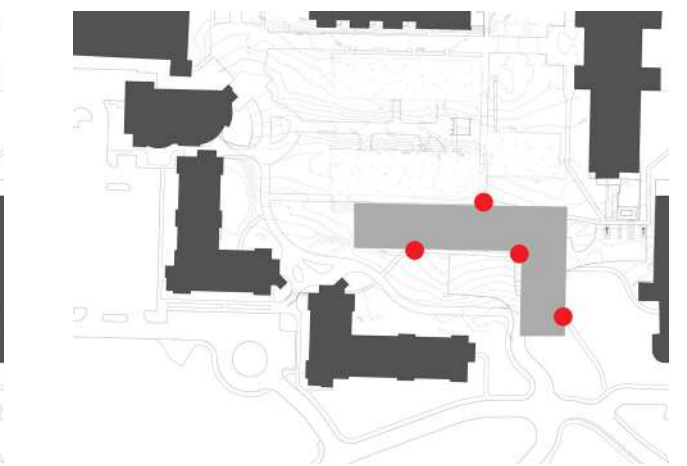
Green Space
Figure 4.25



Collective Space
Figure 4.26



Frontages
Figure 4.27



Entrances
Figure 4.28

CHAPTER V

Building Analysis Rethinking Rooms

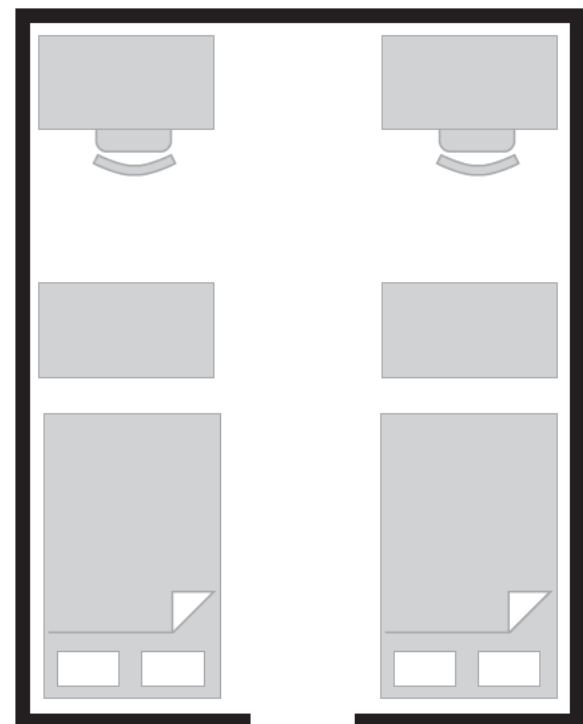


Figure 5.01

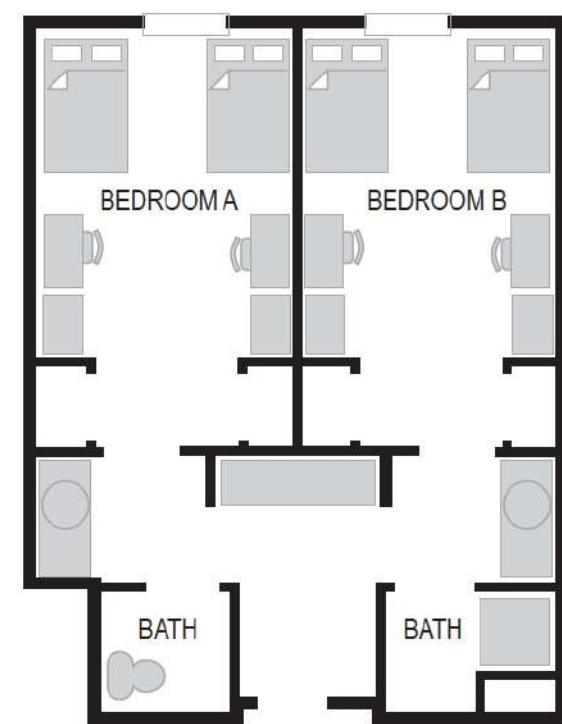
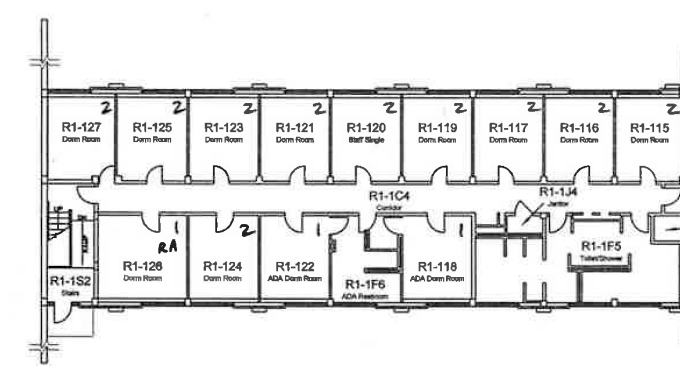


Figure 5.02

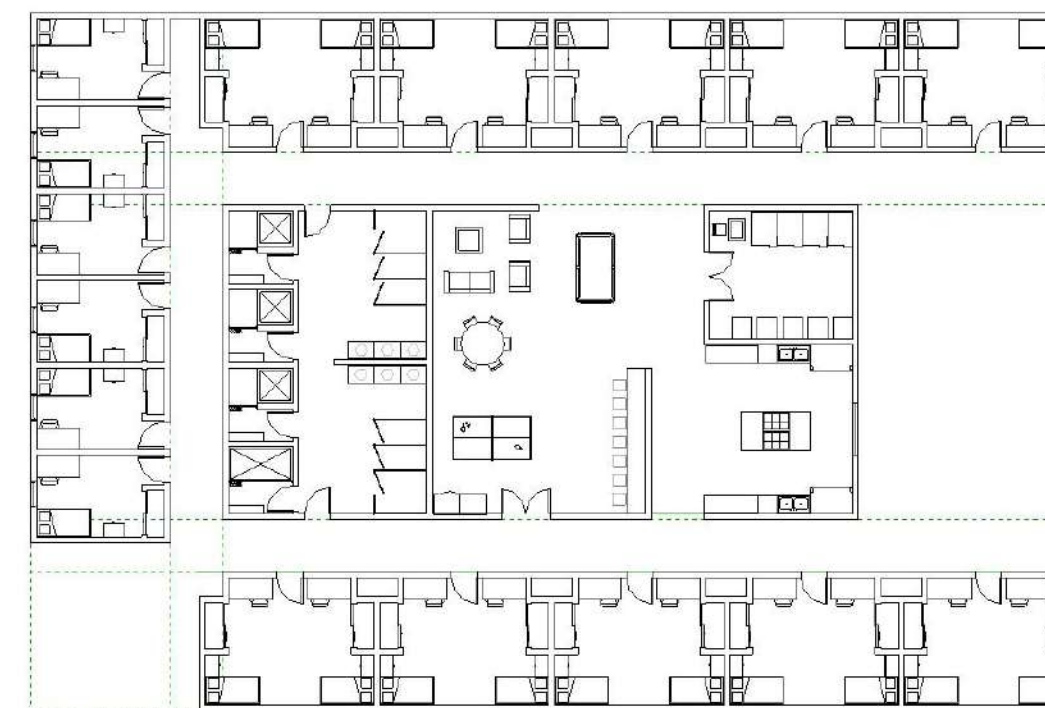


Figure 5.03



Current

Figure 5.04



Proposed

Figure 5.05

Building Analysis

Building Styles

In contemporary practice, residence halls are designed in four styles:

- traditional style with common bathrooms
- suite style with shared bathrooms
- apartments with kitchens and living rooms
- or a combination of two or more of these.

The size of these rooms are based the size of the bedrooms within them. A single is a room in which one person lives within a single space. A double is a room in which two people live within a single space. he formula for these room sizing is as follows:

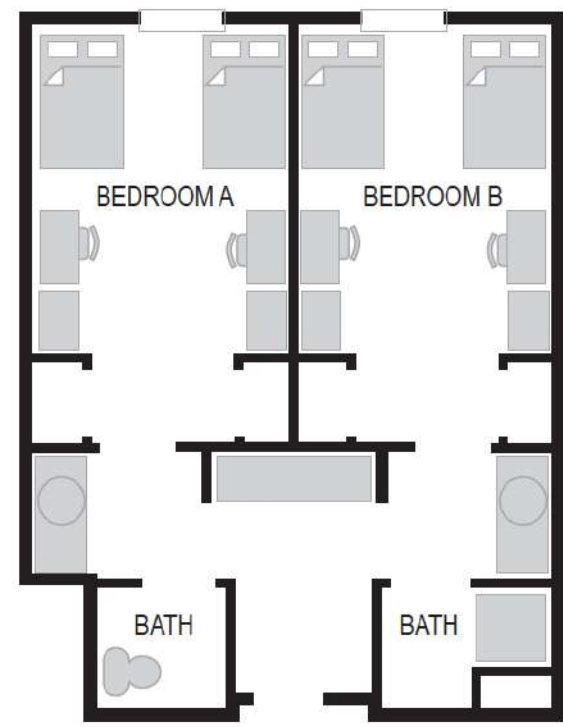
Single: $100\text{ft}^2 = 100\text{ft}^2$ per person (Heilweil 402)

Double: $180\text{ft}^2 = 90\text{ft}^2$ per person (Heilweil 402)

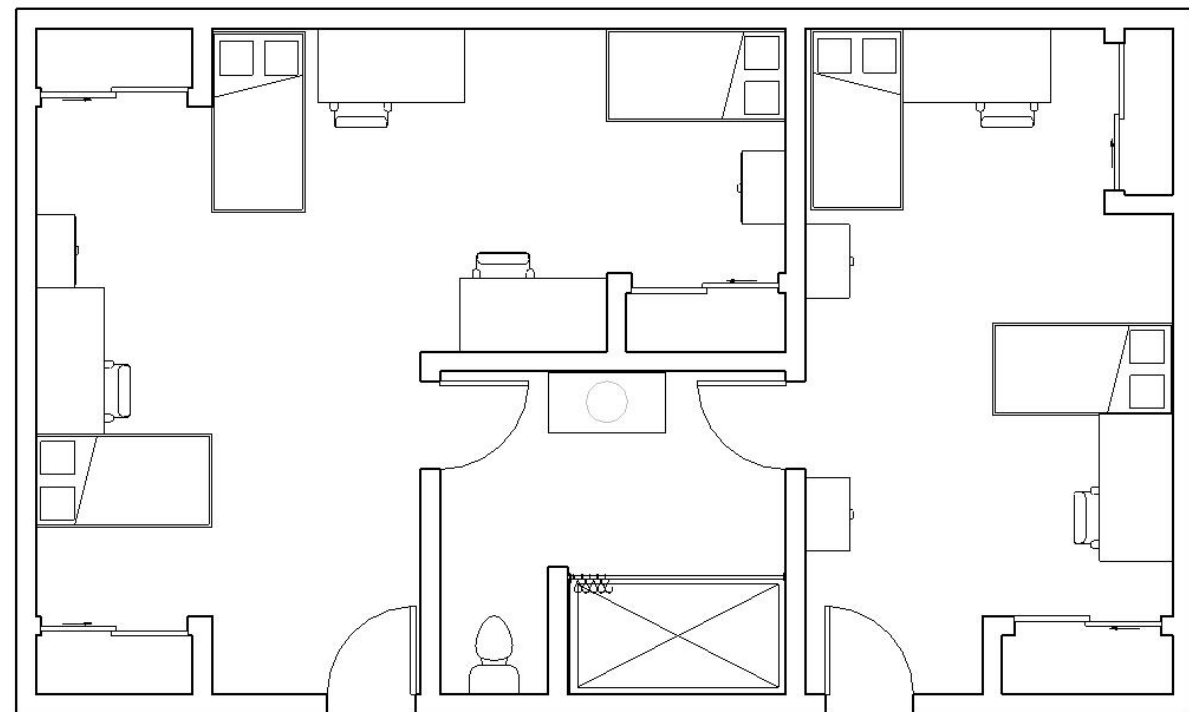
Building Analysis

Traditional Style

The bedroom in a Traditional style residence hall is one in which the individual rooms have no common space placed within it. Instead, more private areas such as bathrooms are placed as a common space within the neighborhood. Traditional style rooms are more community oriented and social. (Heilweil 404)



Current
Figure 5.06



Proposed
Figure 5.07

Building Analysis Suite Style

The bedroom in a Suite style residence hall is one in which the individual rooms have a shared bathrooms. Suites allow for a quasi public area within them. Suites have become more favorable because of their privacy (Heilweil 405).



Current
Figure 5.08

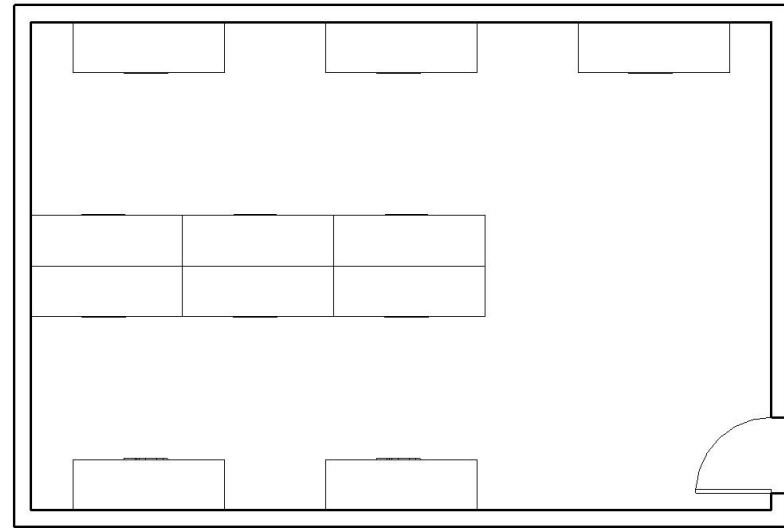
Building Analysis Apartment Style

The bedroom in a Apartment style residence hall is one in which the individual rooms have a bathroom, kitchen, and living room placed within the dwelling. Apartments have a different level of comfort than a suite or traditional style because some of the common spaces become personal areas (Heilweil 407). There is more ownership of these spaces because less people use them. The neighborhood however is still home to other common areas such as game rooms and study areas.

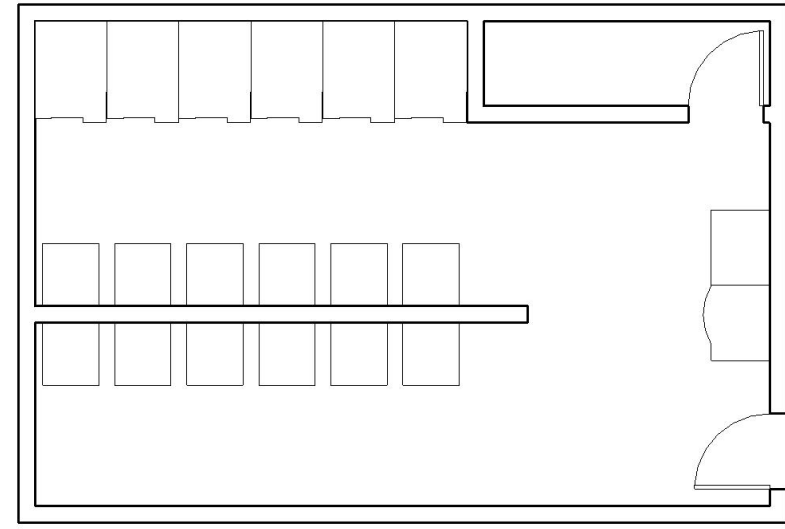


Proposed
Figure 5.09

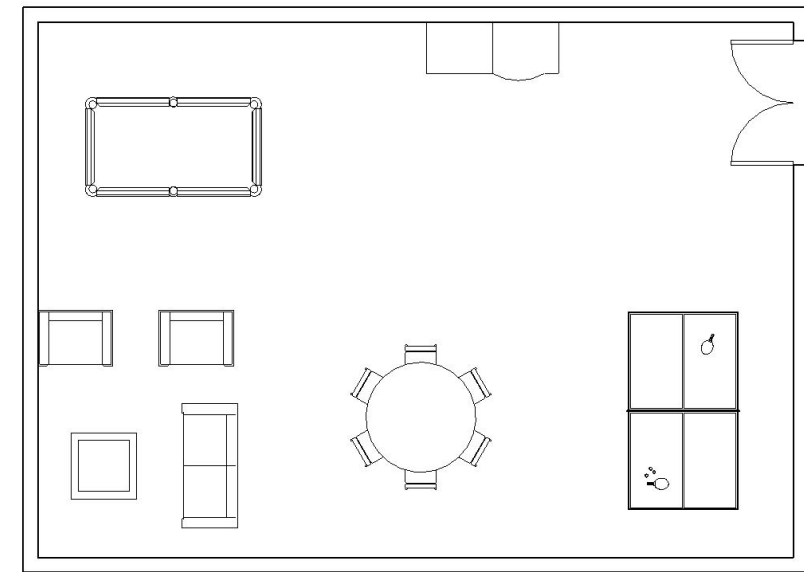
Because these are considered the most private spaces, it is best to be placed at the top of a building.



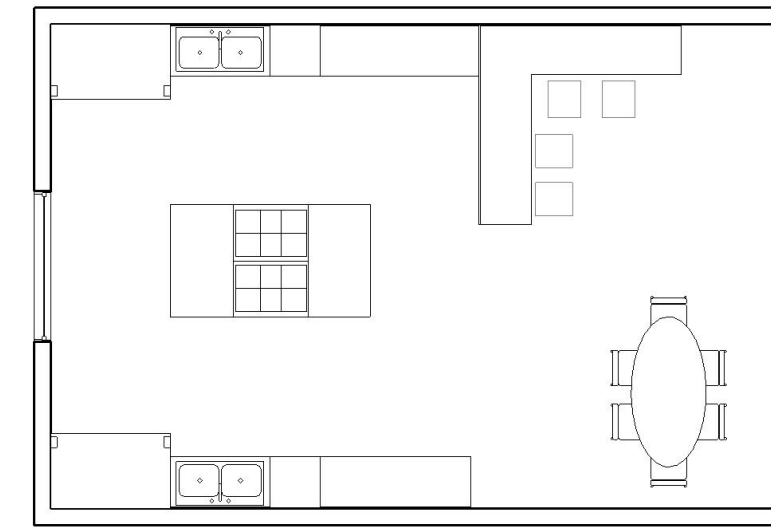
Recycling Room
Figure 5.10



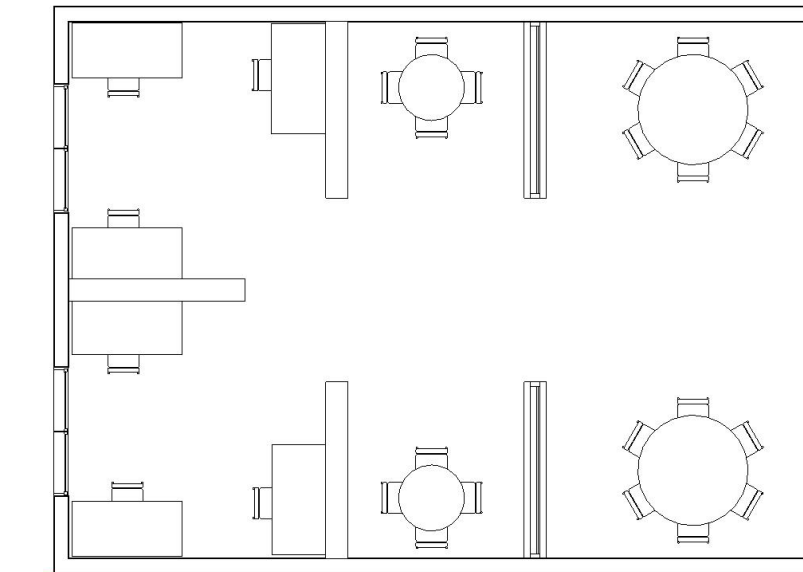
Laundry Room
Figure 5.11



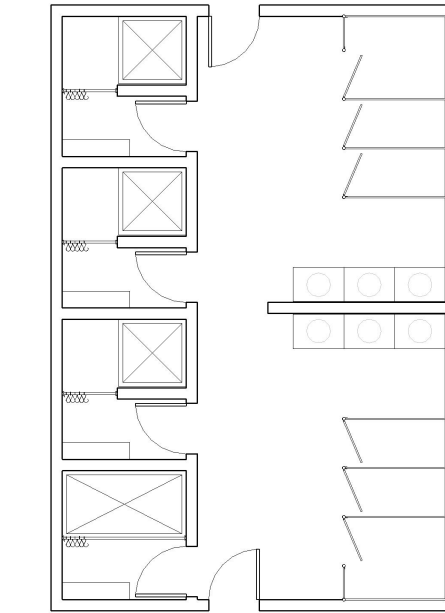
Game Room
Figure 5.12



Kitchen / Dining Room
Figure 5.13



Study Room
Figure 5.14



Bathroom
Figure 5.15

Building Analysis Common Spaces

Common spaces are the most important part of a residence hall. This is where the greatest sense of community is created. Strategic placement of common spaces can become a catalyst of academic, personal, and social growth.

Visual Connectivity

The first element in a successful common space is its location. Common spaces should be placed where one can see and be seen. This calls for a space which can be a destination and a part of the circulation. This becomes a space in which people can either pass through or stay (Cotter 31).

Open spaces are more likely to be active than closed spaces. Secluded rooms at the end of a hallway discourage student use because one may feel as though they are an intrusion. If there needs to be a barrier, then it should be made of glass (Nugent 5). This creates a physical and sound barrier, but allows for a visual connection.

Multiple Activities

Secondly, common spaces should be home to multiple activities. This will draw in different people and encourage interaction among different social groups. In order to accomplish this, common spaces should

be a variety of sizes to welcome the different activities. Spaces typically only seen for service such as laundry, vending, or recycling areas should be designed with other programming to become hubs of social activities. Common spaces should be large enough to house multiple activities, but small enough to encourage activity (Nugent 3).

Quality of Space

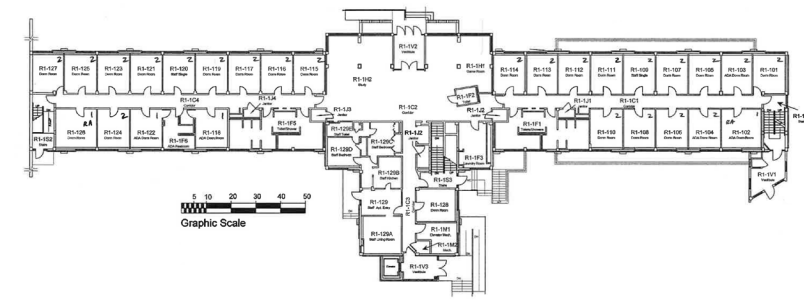
Lastly, common spaces should have a good quality of space. This comfort is based upon light, color, and furniture. The best lighting schemes are those that combine daylight and hidden artificial sources of light.

Color schemes should be warm, and materials such as drywall, wood, and stones are softer to touch and acoustically. If color is used, then it should be used to articulate architectural features or to create a specific mood. Furniture in these spaces should be comfortable and flexible. In spaces where multiple activities are happening, furniture determines the manners in which students interact (Nugent 5).

Study rooms are the most frequent common spaces within residence halls. Study rooms need to be controlled environments. To achieve this, it should be visually connected to more activated spaces. This will allow for it to be free from noises such as telephones, plumbing, and video games. In order to encourage interaction without limiting privacy study rooms should be larger in size with smaller nooks (Heilweil 392).

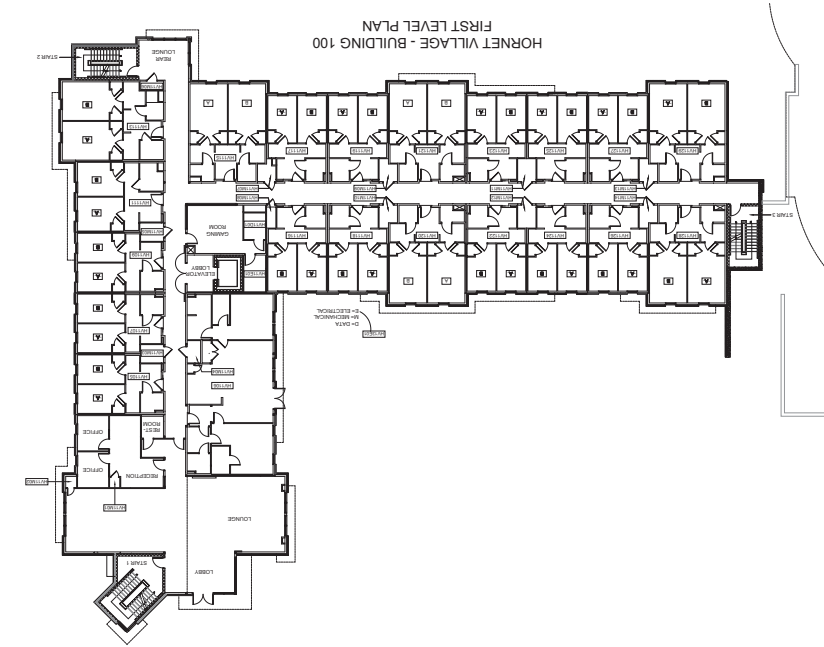
The intent of the design of collective space is to conduct an investigation of specific design processes using "If-then" scenarios. The end result will be a residence hall on a specific campus that demonstrates this process.

Current



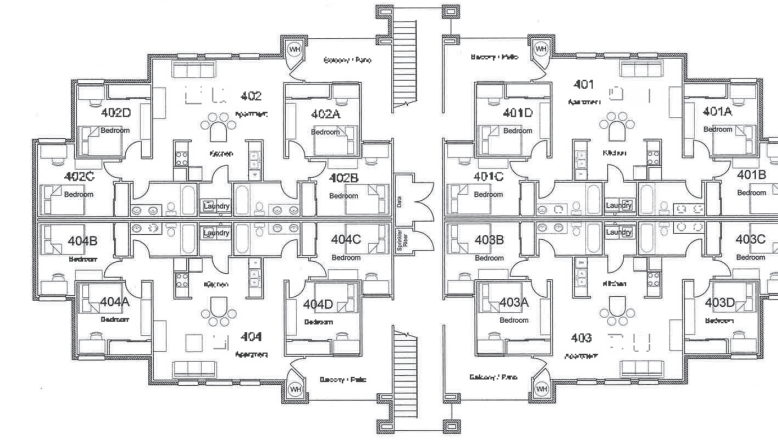
Double Loaded Corridor Traditional Style

Figure 5.16



Double Loaded Corridor Suite Style

Figure 5.17



Double Loaded Corridor Apartment Style

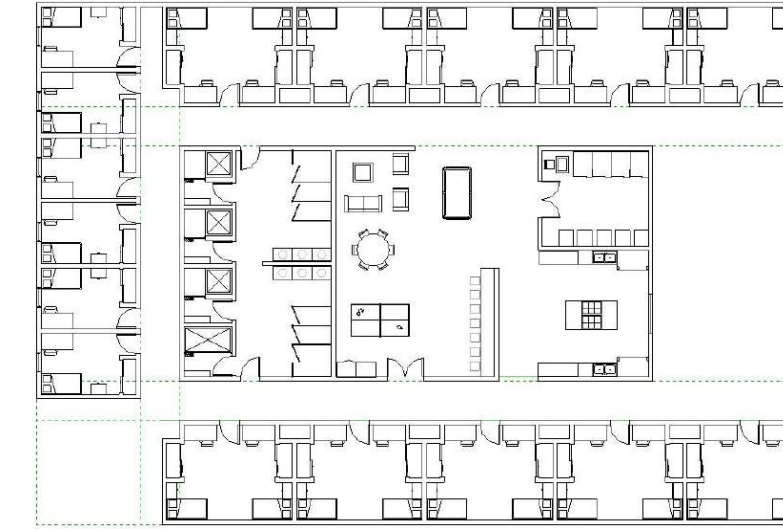
Figure 5.18

Building Analysis Neighborhood

A Neighborhood or House is a grouping of residents. Residents are grouped in 25 to 40 people bundles based on stair placement, the number of residents can handle, and the number of residents for effective community building (Heilweil 410). This community feeling corresponds with the nod line. The nod line is the line at which people are comfortable to nod at one another. In a residence hall, the nod line is 10 feet.

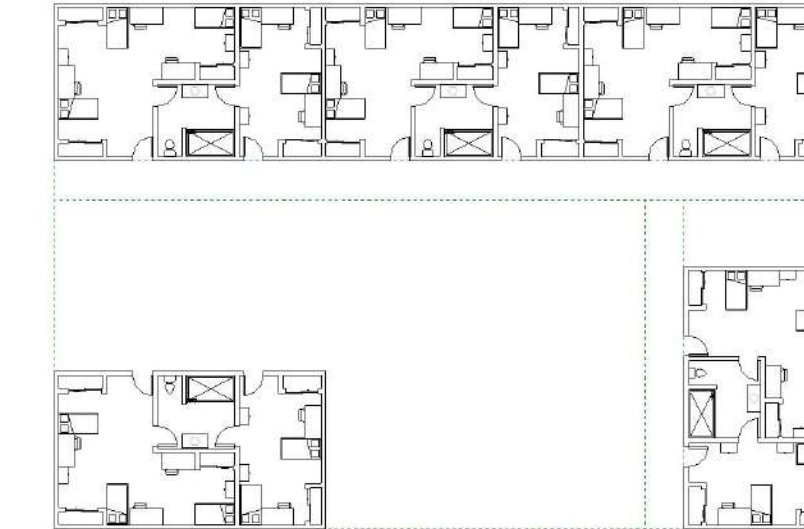
This residence hall has taken on a tripartite system in which three neighborhoods are placed on a floor. This allows for three smaller communities within a bigger one.

Proposed



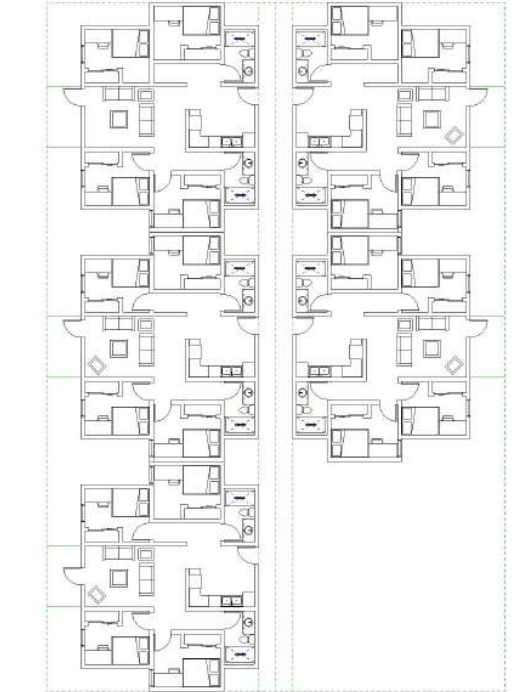
Shell to Core Traditional Style

Figure 5.19



Double Loaded Suite Style

Figure 5.20



Double Loaded Apartment Style

Figure 5.21

Hallways become important because they are not only a social hub, but they influence environmental planning.

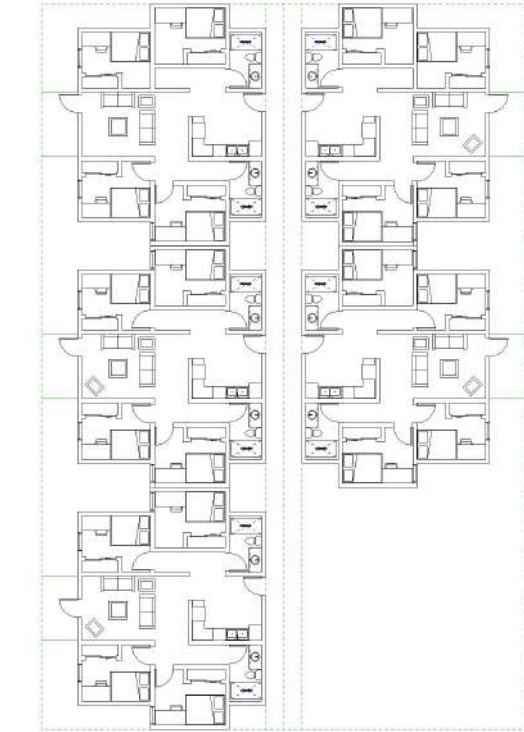
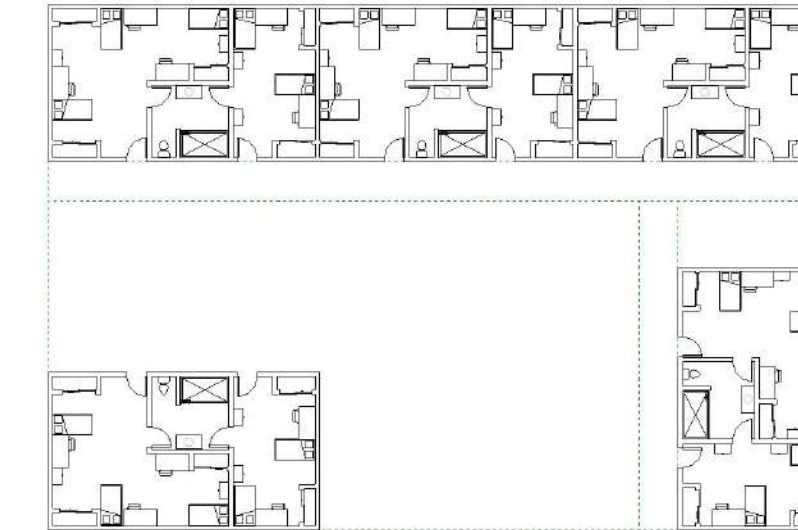
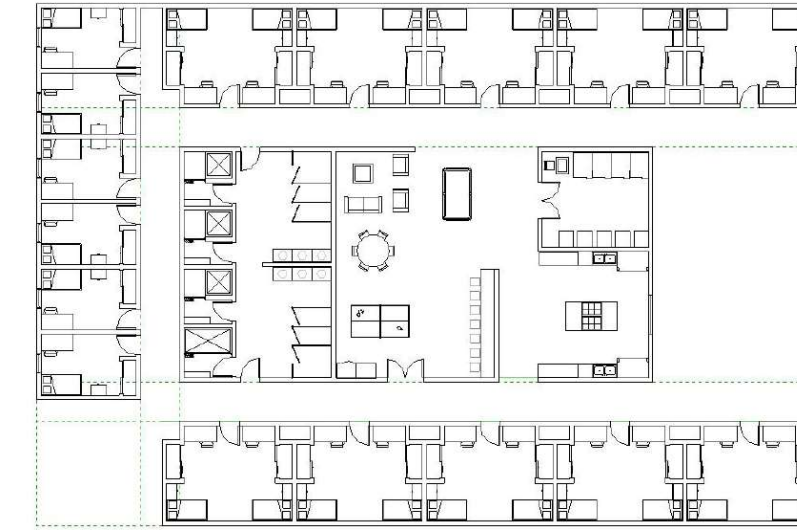
Traffic flow helps decide whom meets whom and how casual these encounters are.

Hallways become important because they are not only a social hub, but they influence environmental planning.

Traffic flow helps decide whom meets whom and how casual these encounters are. Functional Distance is the distance that must be traveled rather than the sheer physical distance.

Because of this, separate and poorly connected areas that are adjacent are more functionally distant than distant remote areas that are well connected (Heilweil 392).

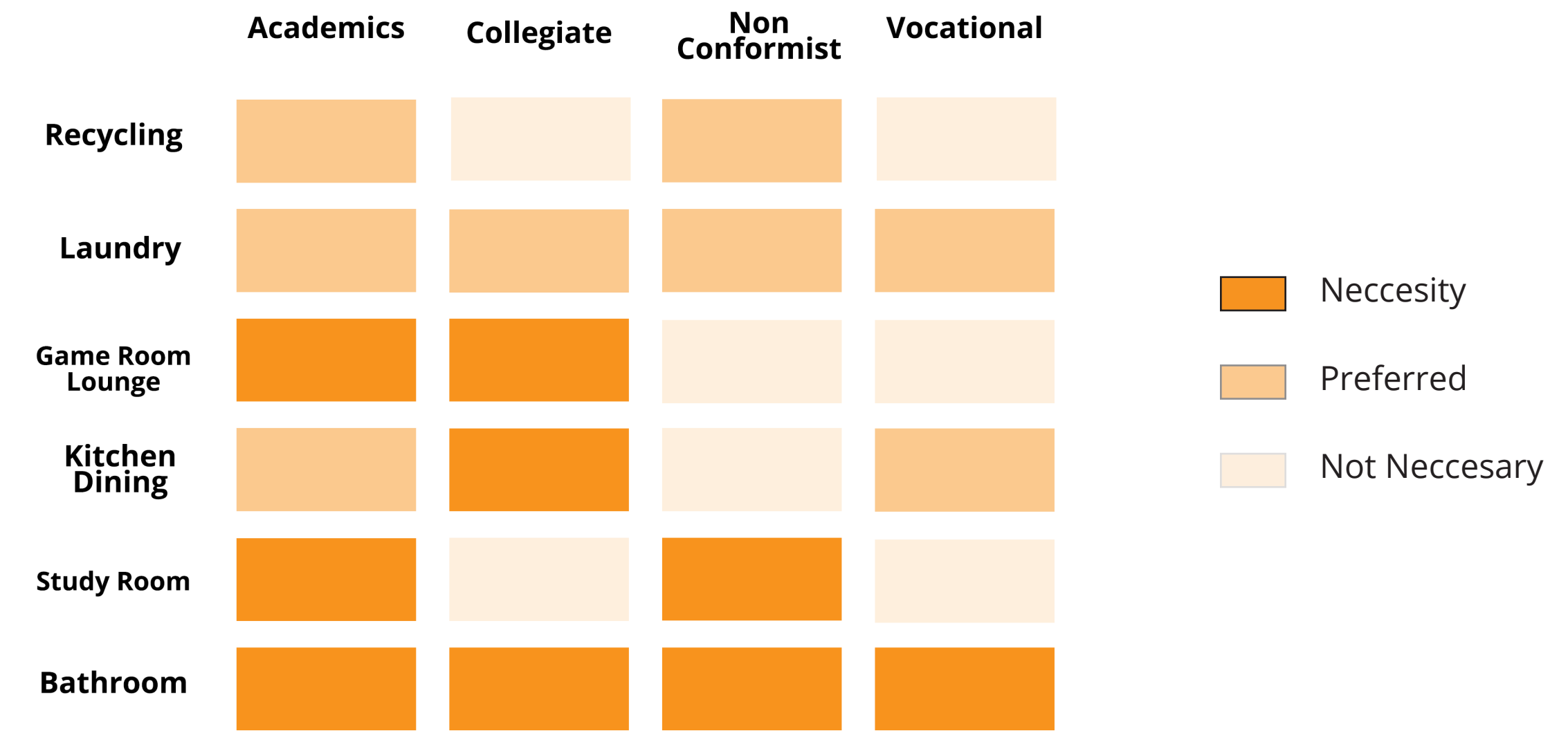
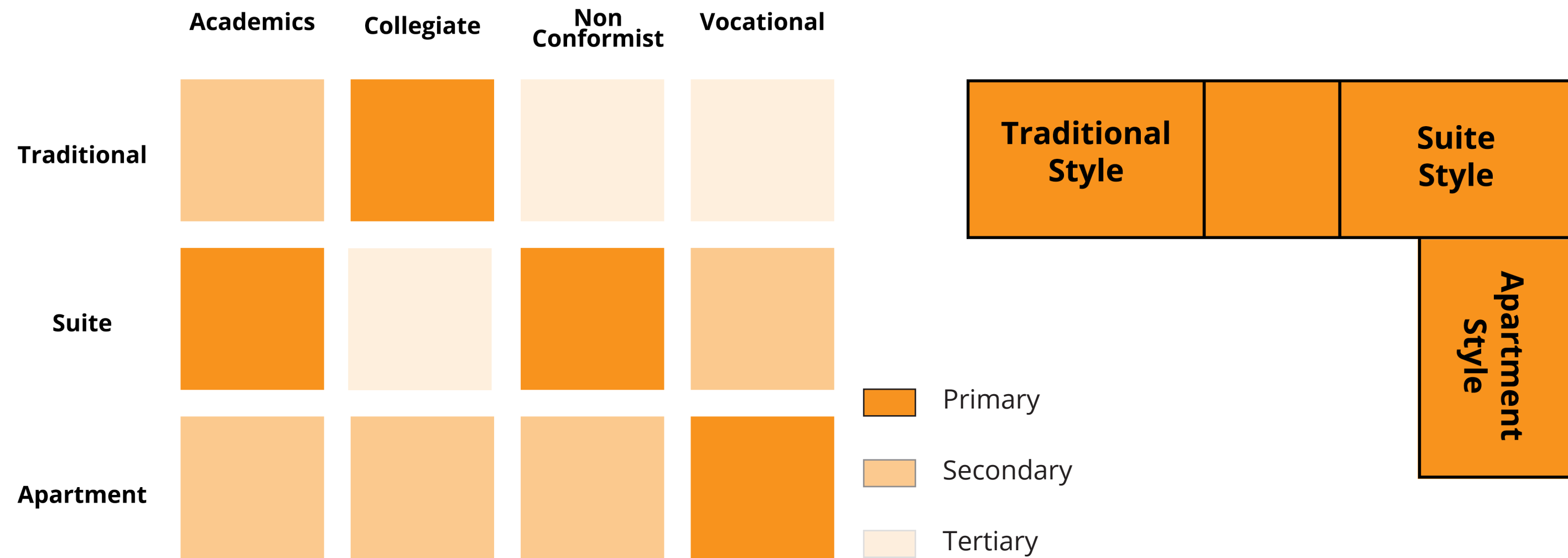
CHAPTER VI



Spatial Program and Organization Program Organization

Spatial organization in relation to sociospatial relationships calls for

- small, individual spaces to foster involvement and interaction
- buildings with no more than five stories
- No more than 500 students
- Halls holding 10 to 12 rooms opening up to a common space



Spatial Program and Organization Program Organization + Student Types

To maximize the diversity of student types in this residence hall, different neighborhood typologies will be used.

Academics will prefer a suite because they will want the ability to socialize but will also want a more private room to learn.

Collegiates will want to live in a traditional living community. This is because of their need to socialize.

Nonconformist will want to live in a suite. They will

need a space to learn, but will want a more private space to seclude themselves.

Vocational students will prefer apartments. Here they will have privacy to continue to be apathetic towards learning and socializing.

Spatial Program and Organization Collective Space + Student Types

To maximize the usage of collective spaces in each neighborhood, they will be tailored to the students who use them.

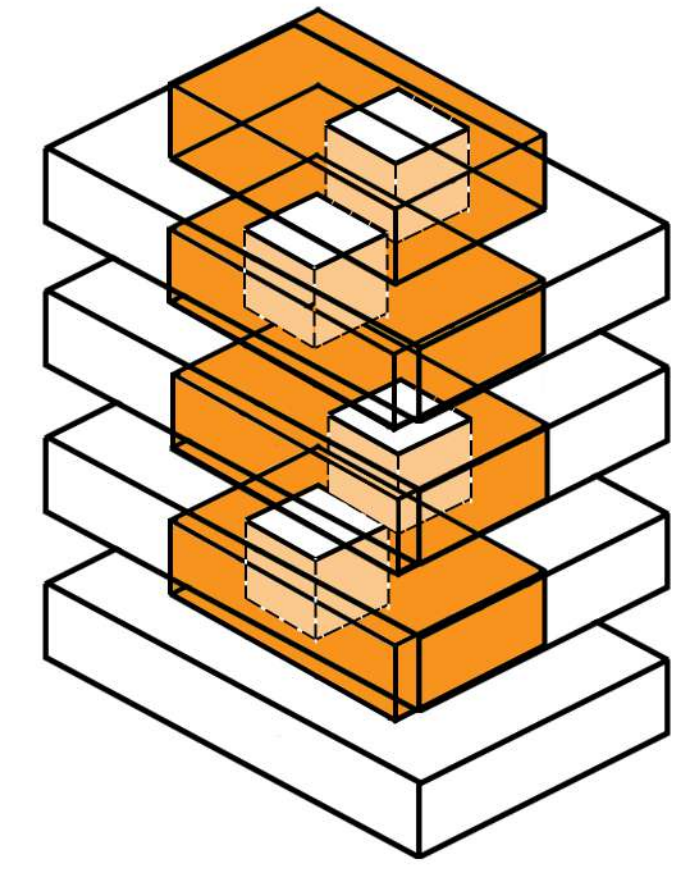
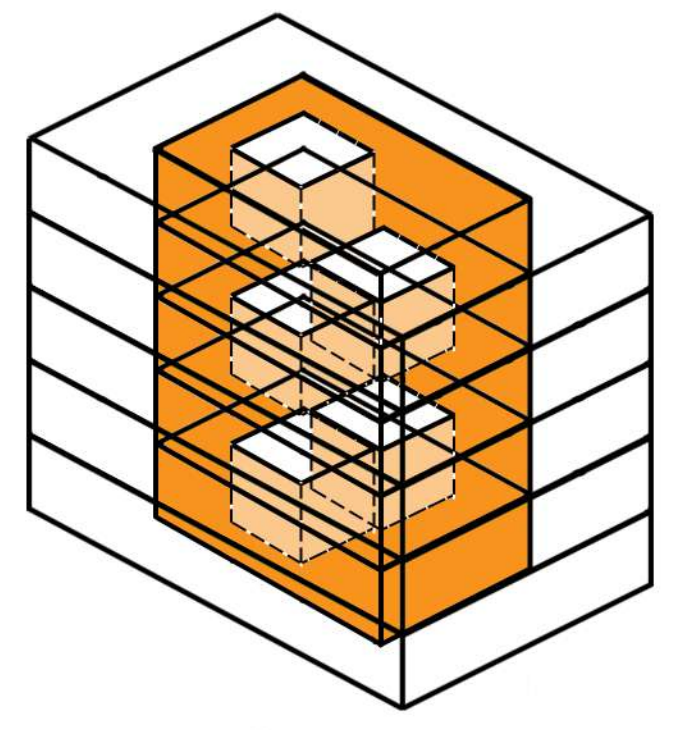
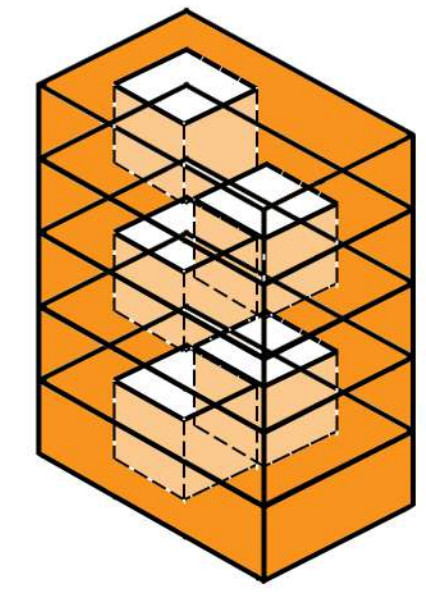
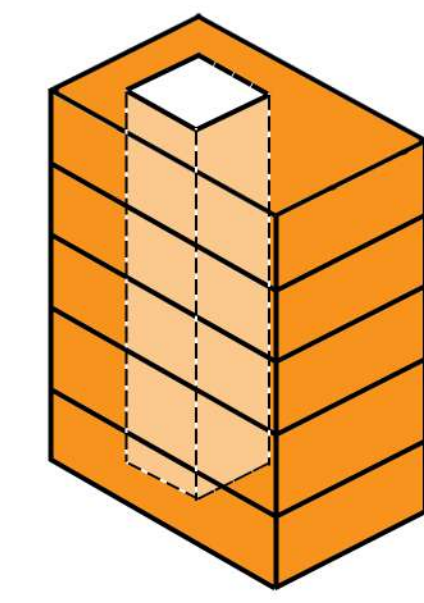
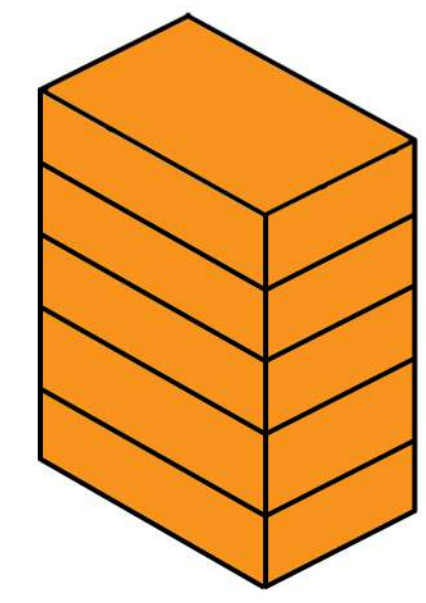
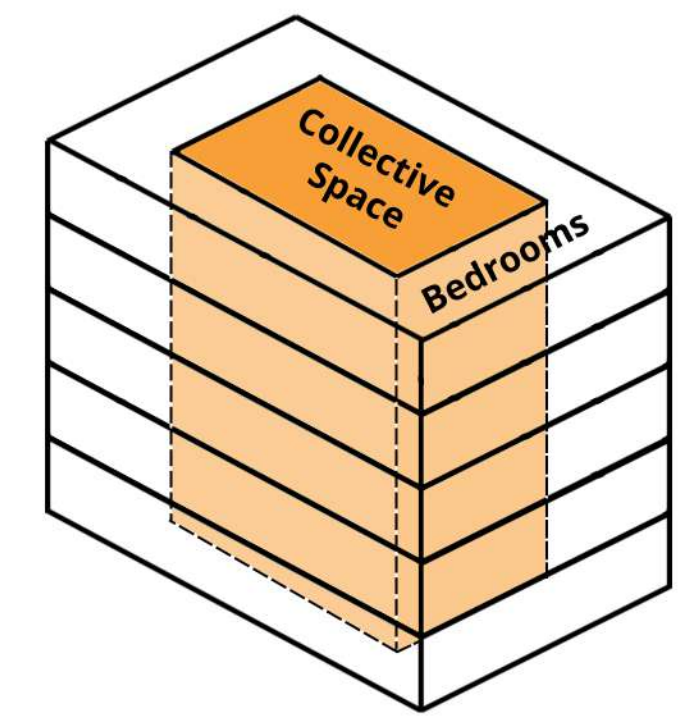
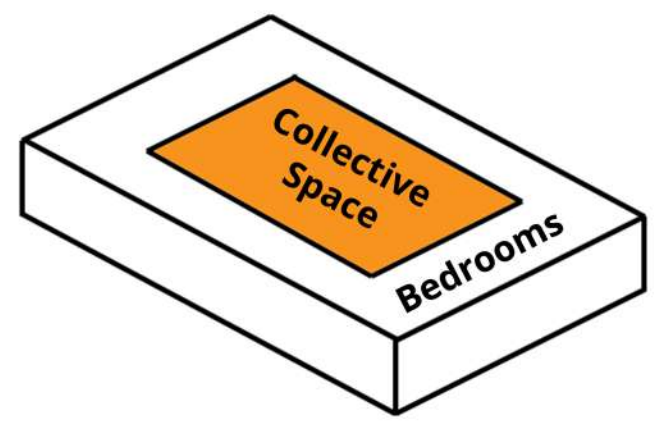
All four types of students will need a bathroom and laundry facility.

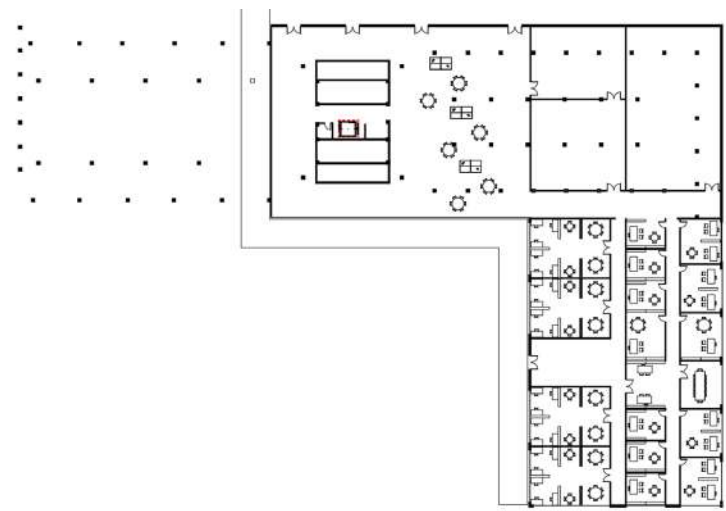
Academics will migrate towards spaces that allow for studying and socialization. Lounges will be a primary collective space that will be used by these types of students.

Collegiates focus on socialization therefore spaces such as lounges and kitchens will draw students in.

Nonconformist focus on their education and because of that will use spaces like study rooms.

Vocational students are not focused on learning or socialization, therefore they are not drawn to a specific collective space, however, a kitchen is one that will be used.

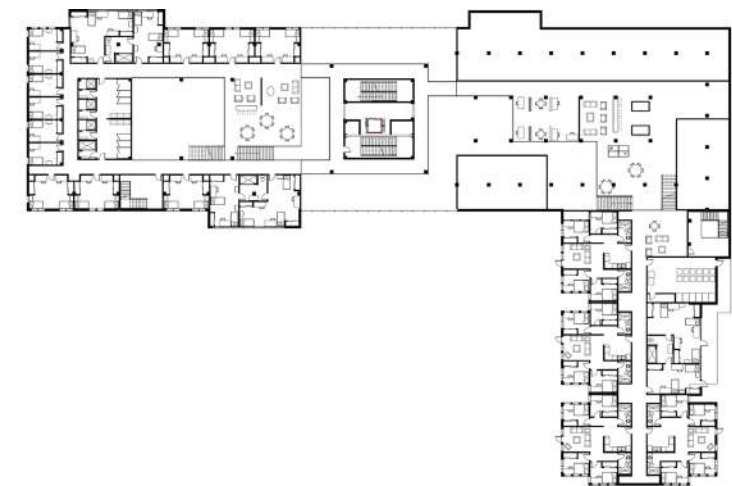




First Floor



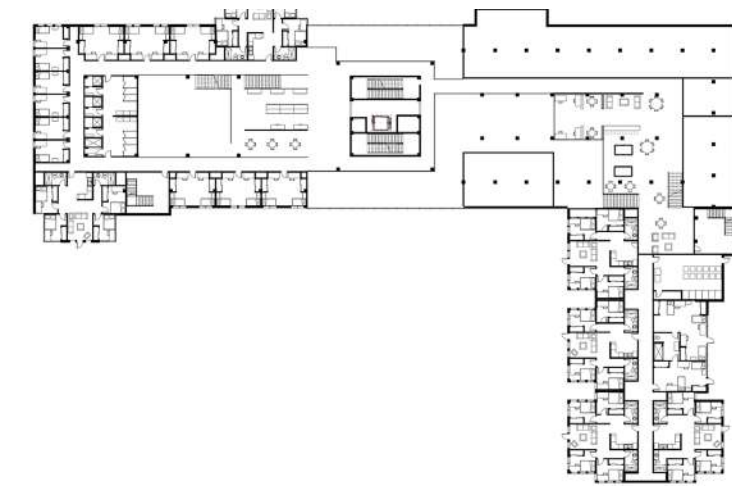
Second Floor



Third Floor



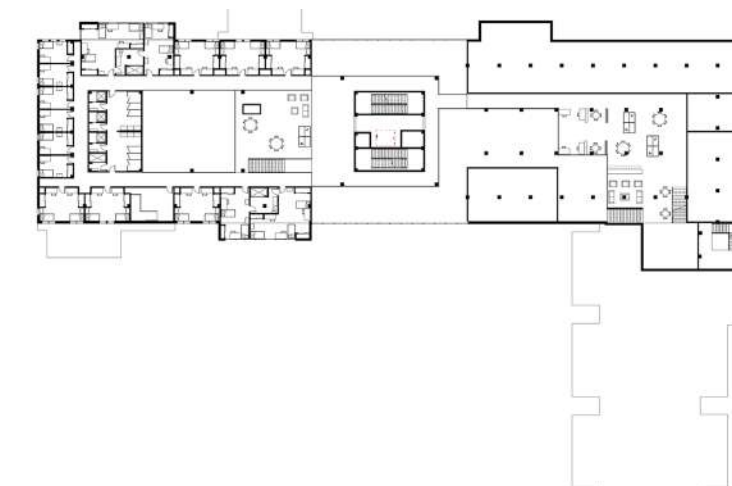
Fourth Floor



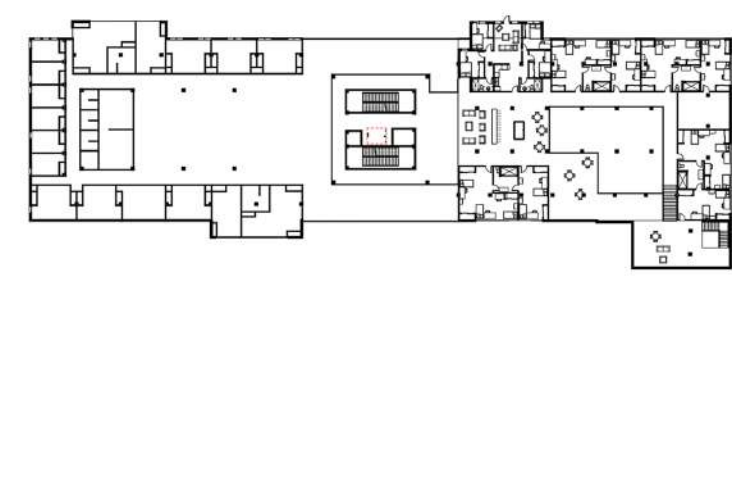
Fifth Floor



Sixth Floor



Seventh Floor



Eighth Floor



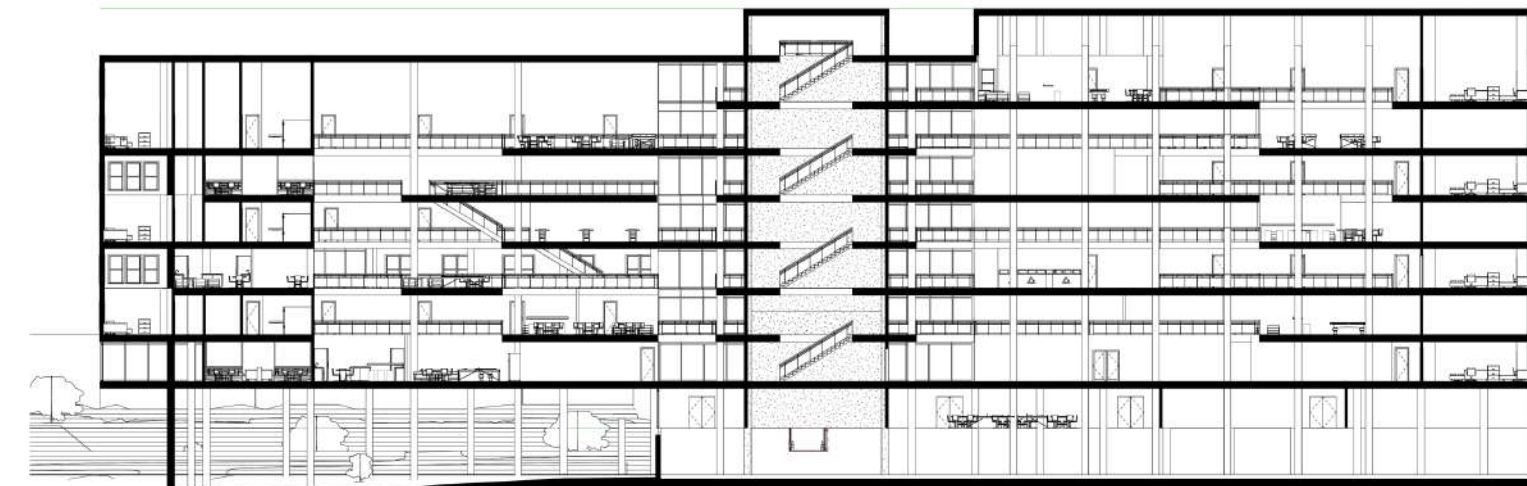
West Elevation



South Elevation



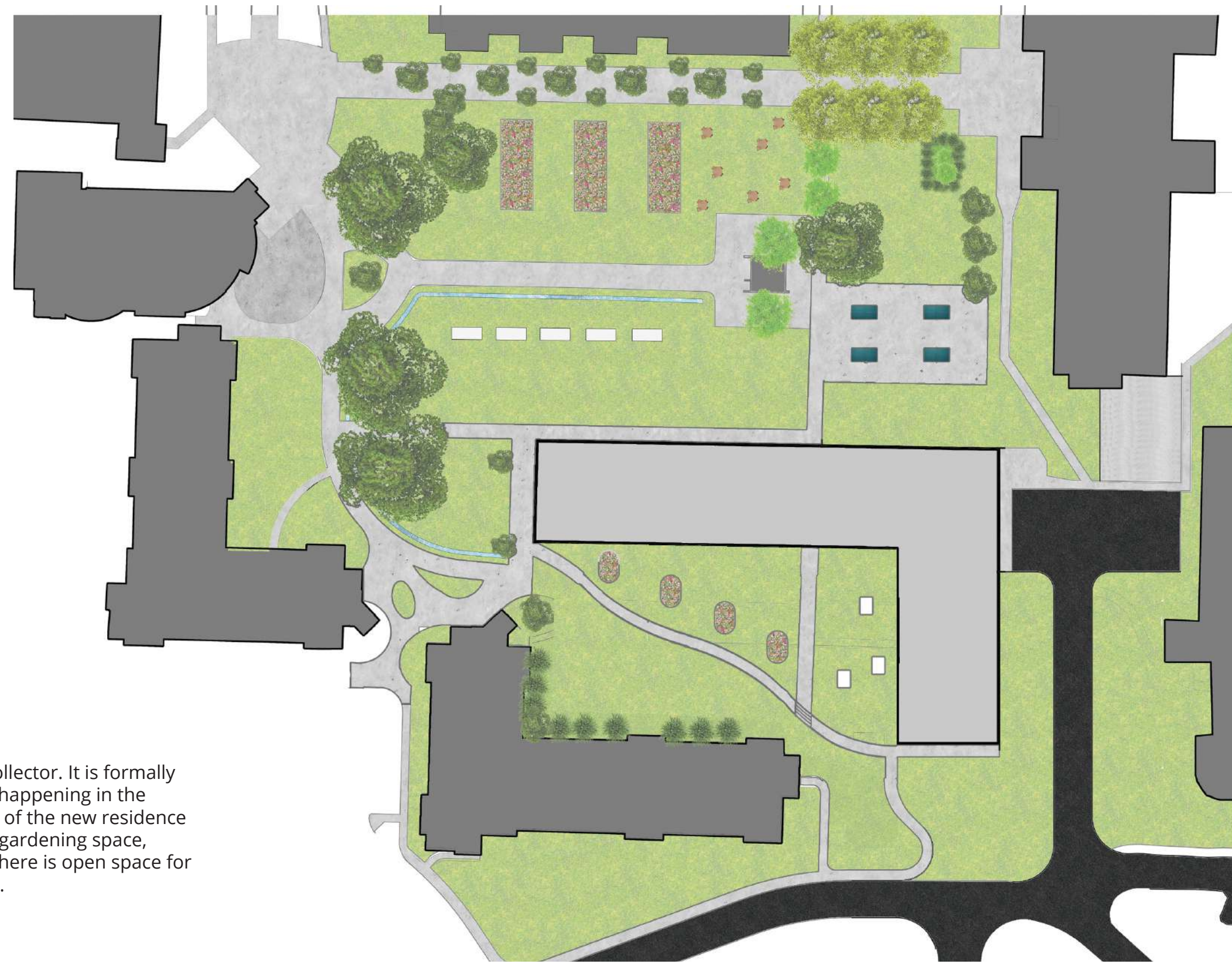
Section AA



Section BB

Site

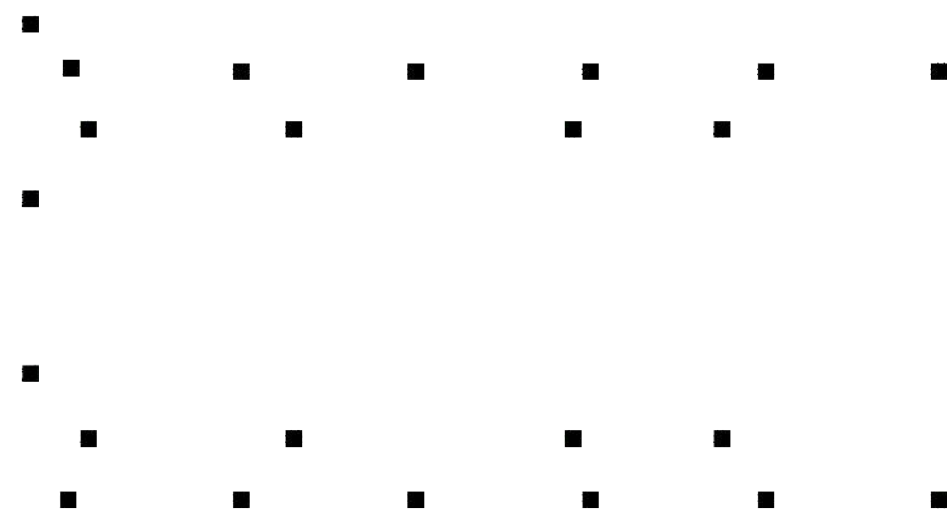
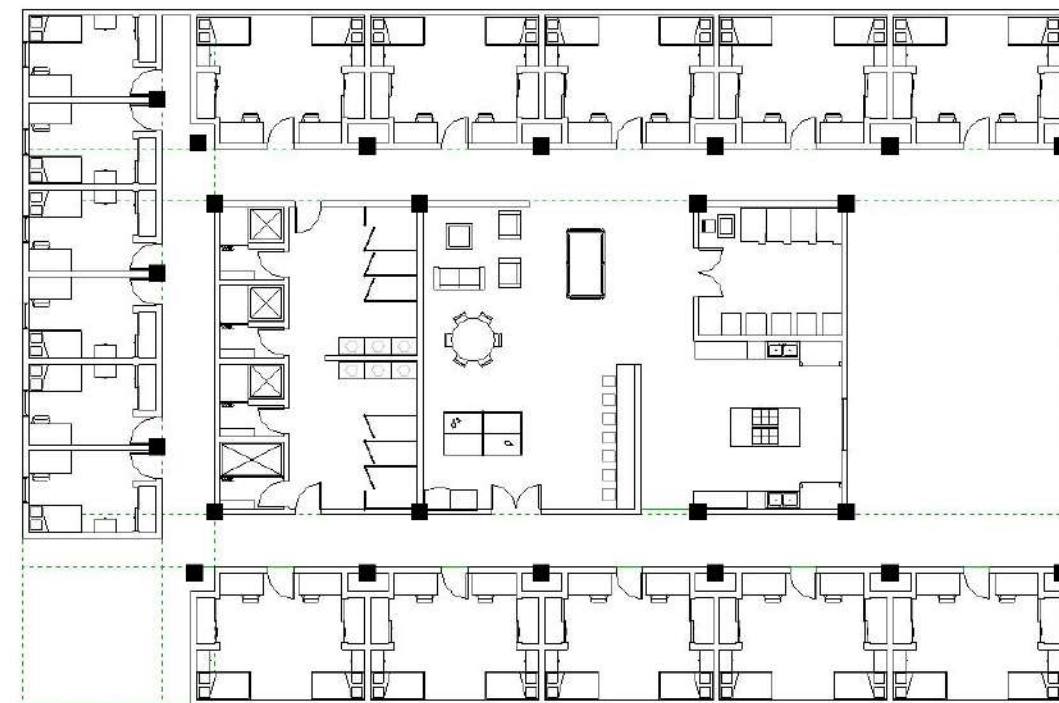
The site becomes an informal collector. It is formally designed with multiple activities happening in the programmed green space north of the new residence hall. To the south there is more gardening space, grilling, and on the lower level, there is open space for students to do what they please.



Site to Building

The site becomes an informal collector. It is formally designed with multiple activities happening in the programmed green space north of the new residence hall. The programming on the ground floor supports these activities. The pond is placed at west end of the building making it a formal edge. A cafe supports the market and garden to the north.





Facade to Structure

The goal is to create a facade system free of the structure. The facade can be designed to do whatever it wants. That will make it informal in its design and its use. This gives greater control in lighting and materiality as well.

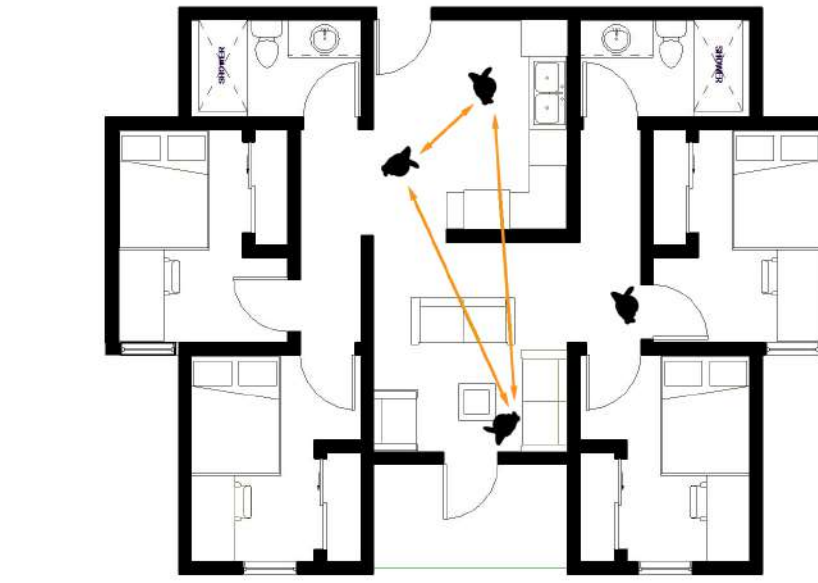


Facade to Program

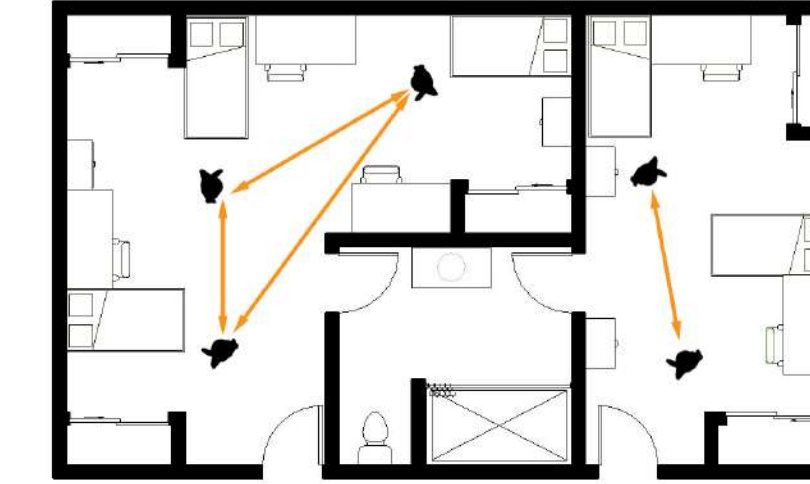
Because the facade can be designed to do whatever it wants, each neighborhood can respond differently to the needs of its residents. This will make it informal in its design and its use. This gives greater control in lighting and materiality as well. Natural light should be filtered into the collective spaces.

Program to Room

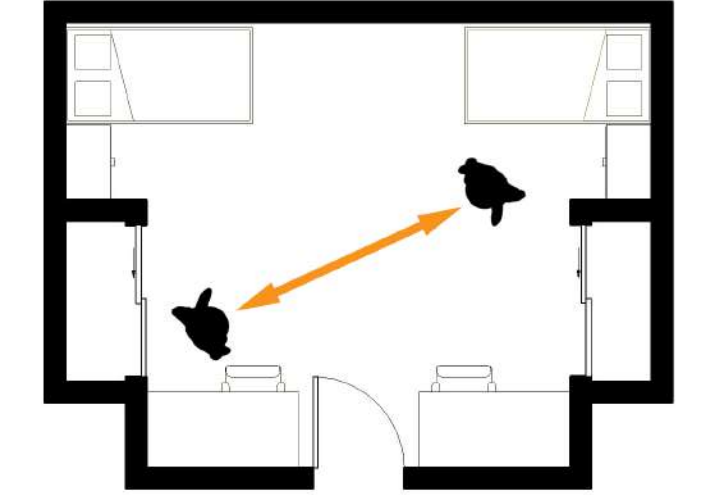
The goal of this project is for each neighborhood to consist of collective space and bedrooms. The collective space is surrounded by the bedrooms and takes up about half of the floorplate. This will enhance the collectivism as each collective space is placed upon circulation paths and has multiple programming pieces within.



Apartment



Suite



Traditional

Room to Individual

The goal of the design of each bedroom type was to increase the amount of interaction happening between individuals. In an apartment four people can interact. In a suite two to five people can collect, and in a traditional room, two people share a space.



Conclusion

This design proposal posits a framework of inquiry to understanding collective space as a design tool for residence halls. The project shown herein demonstrates one of many possible solutions to integrate these criteria into a design and begins to reevaluate how residence halls are designed for future inquiries.

Terms Used

Bursens: student housing organized and run by monks in Germany

Collective Space: a space in which collective activities happen.

Domus Pauperums: hostel for poor students at Oxford University

Formal Collectivism: the practice of giving a group spatial priority over each individual in it through fixed programming

Formal Space: A formal space as defined by Julia Nugent is one that is not flexible and does not allow for multiple activities in one space.

Functional Distance: the distance that is actually traveled rather than the measured physical distance.

Informal Collectivism: the practice of giving an individual spatial priority over a group through multiple fixed or variable programming

Informal Space: a space that is flexible and does allow for multiple activities in one space.

Paedagogies: student run housing at Oxford University

Seidlung: settlements that were garden cityesque in design and focused on mass production.

Zellenbau: parallel blocks aligned north to south at right angles

Glossary

Index

Chapter One Figures

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