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An Architecture of Movement: the New Headquarters for USA Dance

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An Architecture of Movement

The New Headquarters for USA Dance

Bethany Robertson

Graduate Thesis Design



An Architecture of Movement

The New Headquarters for USA Dance

Graduate Thesis Project submitted to:

Roger Williams University
School of Architecture, Art, and Historic Preservation

In fulfillment of the requirements for the BS/MArch Dual Degree

Submitted By:

Bethany Robertson

Date

Stephen White
Dean
SAAHP

Date

Andrew Cohen
Thesis Advisor
SAAHP

Date

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Introduction

“offer it to a big public without condescension, making it an adventure for those who formerly thought it irrelevant or unapproachable, if not exactly stand-offish.”

Johnathan Glancey, “Give Us A Swirl,” *The Guardian*

Architecture is the culmination of the arts, mathematics, and the sciences. Furthermore, it is the application of all of these fields of knowledge to a concrete and tangible product to be experienced by others. It is a combination of expression and the laws of physics. Of hard fact and spiritual belief. In essence, it is the built paradox of the human condition; wont to artistic expression, but bound by the limitations of reality. Through architecture, and because of it, the collaborators who create our built environment have a responsibility to ensure these environments maintain individual health, both mental and physical.

A dance center provides a medium to explore all the manifestations of architecture’s connection to the arts. And while most traditional dance forms, such as ballet, are widely taught and fairly well known, ballroom dance is one style of dance which, until recently, has been mostly ignored in the United States. The recent popularity of this particular dance form has allowed the national dance association, now known as USA DanceSport, to make great strides toward bringing this art to more people around the country in both showcases and in getting more people involved.



Problem Statement

Architecture to Inspire Movement



In modern society, dance has fallen out of favor with the general public as a common social event. Common occurrences of social dancing are limited to clubs, which engenders little real social interaction as the music drowns any possible conversation in every corner of the dimly lighted dance club. Classic dance is seen as a life-long career or is otherwise limited to young children, primarily girls who need an after school activity.

Despite the minimal presence of social dancing, studies have found that it holds numerous health benefits from the obvious physical activity to being a signifier of higher intelligence and helping to ward off dementia in the elderly. In particular, ballroom dance has been observed to provide the highest benefit.

Thanks to recent television programs such as “Dancing with the Stars,” more and more people have become interested in ballroom dance as a past time and as a social event and demand is rising. In addition, USA Dance, the national governing body of ballroom dance, is in the process of seeking a position for ballroom dance as an Olympic sport.



Project Statement



Thanks to this rising demand for ballroom dance, more and more dance studios are opening, and older studios are expanding to accommodate higher numbers. Weekend social dances are more populated and need larger spaces to host dances. Even the competitive side of the sport has increased, with many of the growing collegiate dance competitions needing to not only find larger venues, but to split the competitions across two days in order to accommodate the vast number of dancers.

As it exists today, dance studios which teach ballroom dance are disjointed and wide spread. There are multiple different styles and most studios only function as individuals. There is an opportunity for a greater community to be developed for ballroom dance which will join all styles together and create a richer experience for dancers.

By providing a headquarters for the national ballroom dance organization in the United States, this project will provide a practice, performance, and interaction space for all levels of dancers. Furthermore, this building can also provide a social space both inside and out not only for the dancers who use the building, but for the local residents.

USA Dance Sport Center

Program	Suggested Program		
	#	nsf	total nsf
1 Performance Spaces			
Large Ballroom	1	5000	5000
Small Ballroom	1	2000	2000
Theater	1	5000	5000
Outdoor Theater	1		
Auditorium	1	3500	3500
Ticket Office	1	400	400
Total Performance Spaces			15900
2 Practice/Lesson Space			
Formal Dance Studio	4	1000	4000
Smooth/Standard Studio	6	1500	9000
Rhythm/Latin Studio	6	1200	7200
Group Practice Room	4	1500	6000
Individual Practice Room	4	800	3200
Changing Room/Locker	2	600	1200
Instructor Office	10	350	3500
Total Practice/Lesson Spaces			34100
3 Commercial Space			
Café	1	1500	1500
Dance Supply Store	1	1000	1000
Specialty Tailor	1	1000	1000
Total Commercial Space			3500
4 Administrative Space			
Office	5	200	1000
Meeting Room	2	600	1200
Kitchen	1	300	300
Lavatory	2	100	200
Reception	1	50	50
Total Administrative Space			2750
5 Support Space			
Reception	1	100	100
Lobby	1	800	800
Men's Public Toilets	2	300	600
Women's Public Toilets	2	300	600
Janitor Closet	2	100	200
Storage	2	200	400
Kitchen	1	500	500
Total Support Space			3200
Total NSF			59450
Total Gross Area		135%	80258

Program

The program of this building is intended to act as a dance training center, with lessons in more common forms of dance as well as ballroom, and as a headquarters for USA DanceSport. Since the main mission of USA DanceSport is dance education, the majority of the space defined is dedicated to studio spaces for lessons and practices. There is the idea that when you learn to dance, you will eventually use those skills whether its solely in social dances or if you compete or participate in showcases. With this in mind, there are a number of different performance spaces included to accommodate the different types of dances as well as the different formats of performance. On this note, there are certain businesses which could be mutually beneficial, such as a dance supply store, which will also serve as a source of income for the building in addition to the performances.

In addition to the building itself, the USA DanceSport Center would have a number of outdoor components. These would include outdoor performance spaces as well as a public space to serve not only the dance center, but the theaters in the immediate area as well.

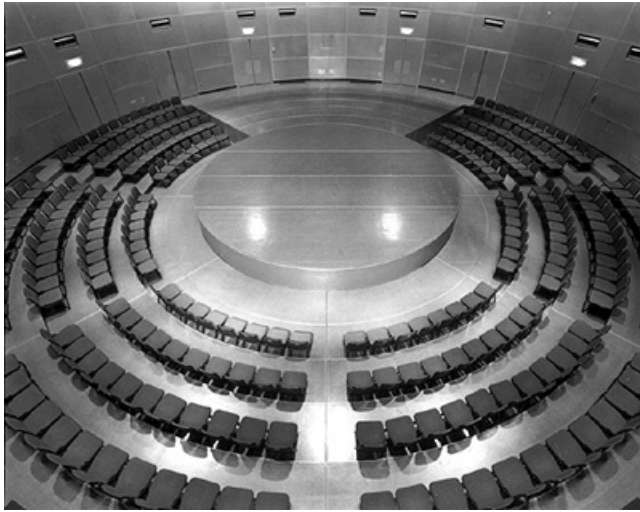
Ballrooms

These spaces are multifunctional. Large group classes, such as those given by professional champions, as well as competitions and social dances can be held here.



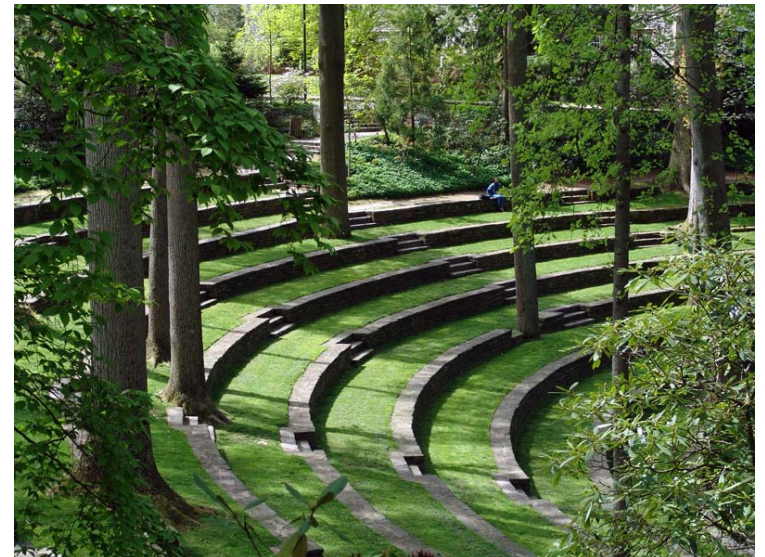
Theater

A theater in the round allots a perfect venue for showcases and exhibitions from students, teachers, and visiting professionals and champions.



Outdoor Theater

An outdoor performing area allows for easy displays to the public to engender further interest in the activities and programs offered by the dance center.



Smooth/Standard Studio

Ballroom dancing is split into two styles, and each style has two types of dance. International style has standard and latin types of dancing. The American style names them smooth and rhythm instead. Essentially, the standard and smooth dances are the same and the latin and rhythm dances are similar. These differ in technique and in some figures.

Smooth and rhythm dances differ greatly from one another. Smooth dances encompass the well known waltz and tango. These dances glide across the floor and travel around the room. Rhythm dances consist of fast paced dances such as the cha-cha and swing and do not generally travel.

As these dances use space differently, it is inherent that the types of rooms used to teach them will need different specifications. A class of ten couples may need a long rectangular space to learn figures in the waltz, but only need a small square space to learn swing.

Therefore, the Smooth/Standard studios and the Rhythm/Latin studios will be tailored to the specific needs of the two types of dances.



Rhythm/Latin Studio

Group Practice Room

A large ballroom studio which provides practice space for showcase and exhibition groups,. Also, this space can be used by nearby college ballroom clubs as practice space for competitions as well.



Individual Practice Room

A set of smaller practice rooms suitable for a single couple to practice figures and technique taught in lessons.



Cafe

An always popular amenity, a cafe will not only help to support the facility, it will also prove useful during showcases and competitions

One of the most difficult things to find for ballroom dance are well fitting costumes, which frequently have to be purchased online and then tailored to the dancer. By providing a tailor shop, which can include a fabric store and craft shop to appeal to the larger public, the dancers will have a all inclusive facility.

Tailor



Dance Supply Store

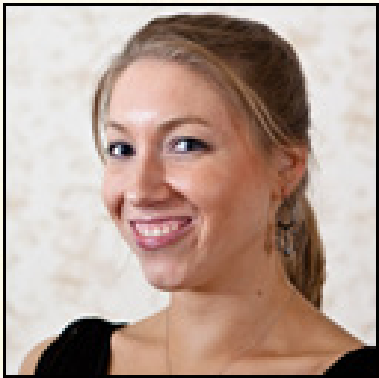
As a generator of further revenue, a dance supply store can not only supply specific ballroom shoes and accessories, but also those for classical and contemporary dance as well.

Users



Seth Porter
10 Years Old
Dance Student

Seth participates in the USA Dance's after school dance program. His day at the building begins when he meets up with his friends in the main lobby. Although the space is filled with places to hang out, these young boys have chosen a particular spot to meet up every day. For most of his time here, Seth will be in one of the larger practice spaces with a group of about 20 local students learning the basics to most of the typical ballroom dances. Once the program has finished, Seth typically waits for his ride home in the park space just in front of the building.



Rachael Capodanno
26 Years Old
Dance Instructor

As a veteran dancer and long time instructor, Rachael has her own small office in the Headquarters facility. She keeps her records for each student in here as well as any of her dance accoutrements. Rachael will spend her day moving between the practice rooms teaching individual lessons in the smaller spaces and group classes in the larger rooms later in the day. For dinner, she typically visits the cafe located in the retail section of the building on the first floor. When there are upcoming showcases or competitions, Rachael prefers to use the theater to practice.



Lydia Scardina
55 Years Old
National President of USA Dance

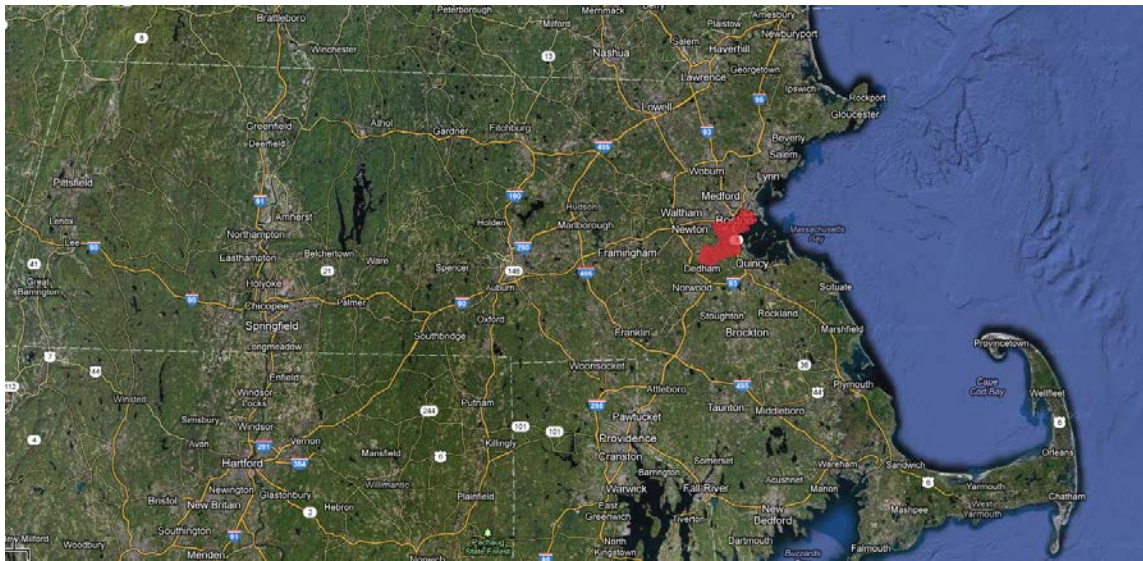
As the head of the national organization, Lydia spends the majority of her time in the office area of the building. Her office's proximity and view into the lobby allows her to see all the comings and goings of the day. Lydia enjoys taking her lunch in as many different places as possible to meet as many people in the building as she can. Also, she enjoys moving between the practice studios and catching up with students and instructors in the many different informal meeting spaces along the way.

Clients



USA DanceSport has about 178 chapters across the country with members ranging in age from pre-schoolers to seniors. This organization has many missions and goals for the future of DanceSport in the United States. In particular, they promote ballroom dancing as a recognized sport, educate the public about the benefits of dancing, as well as aim to have DanceSport recognized as an official medal sport in the Olympic Games.

Site

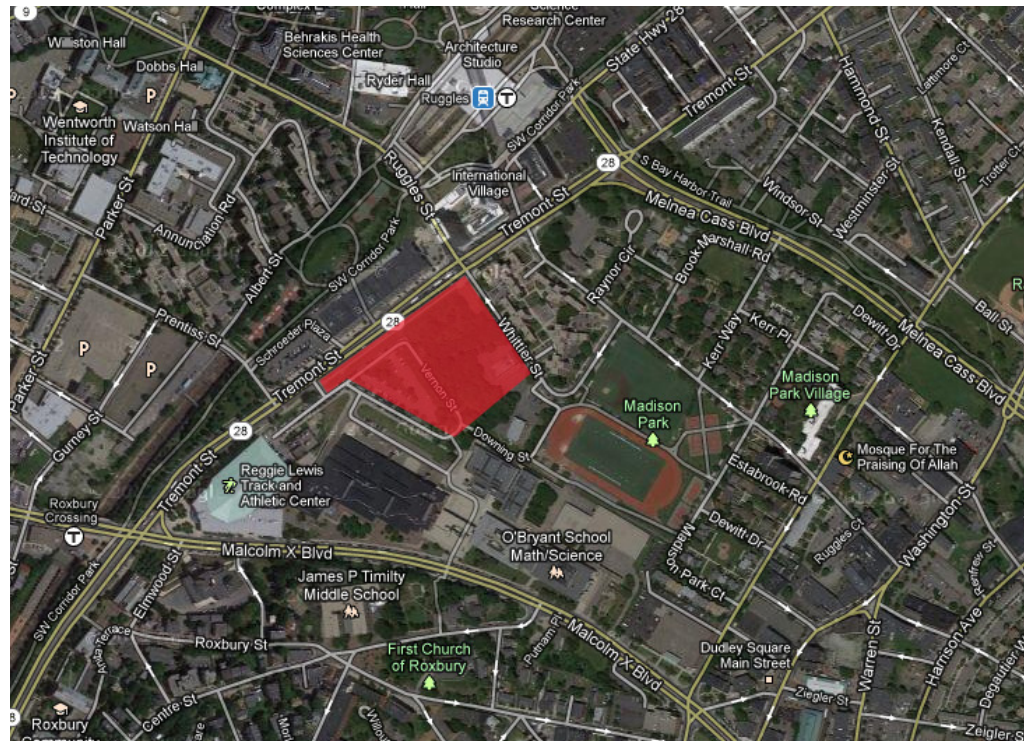


Boston Area



Roxbury

Across from the Boston Police Headquarters, this site is currently home to a fenced off field and an abandoned building. The unused site provides a perfect location, due to its proximity to public transit routes, to create the new headquarters for USA DanceSport.





View of the site from Tremont Street which is also Route 28.



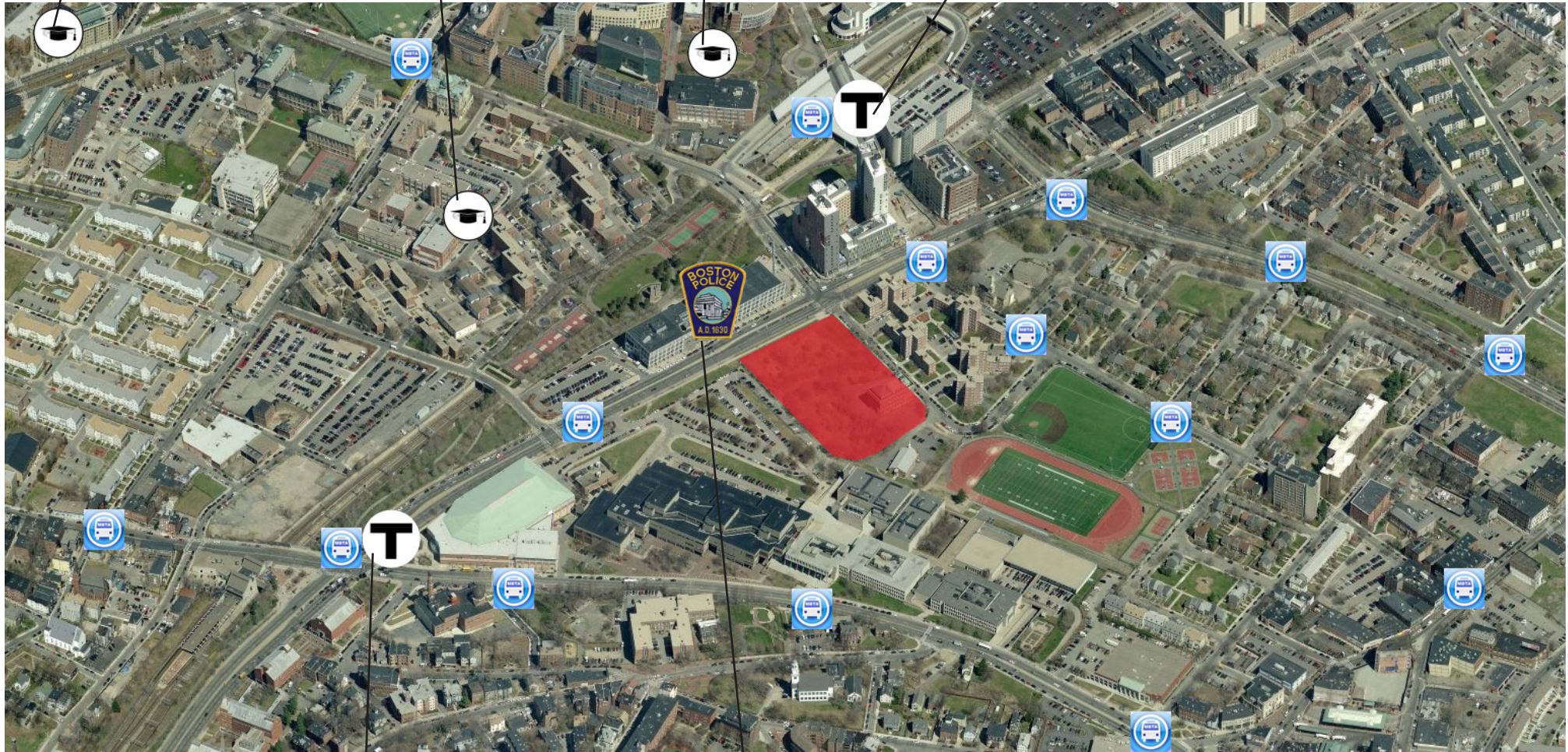
View of the site towards the Boston Police Headquarters.

MA College of Art
& Design

Wentworth

Northeastern
University

Ruggles Station



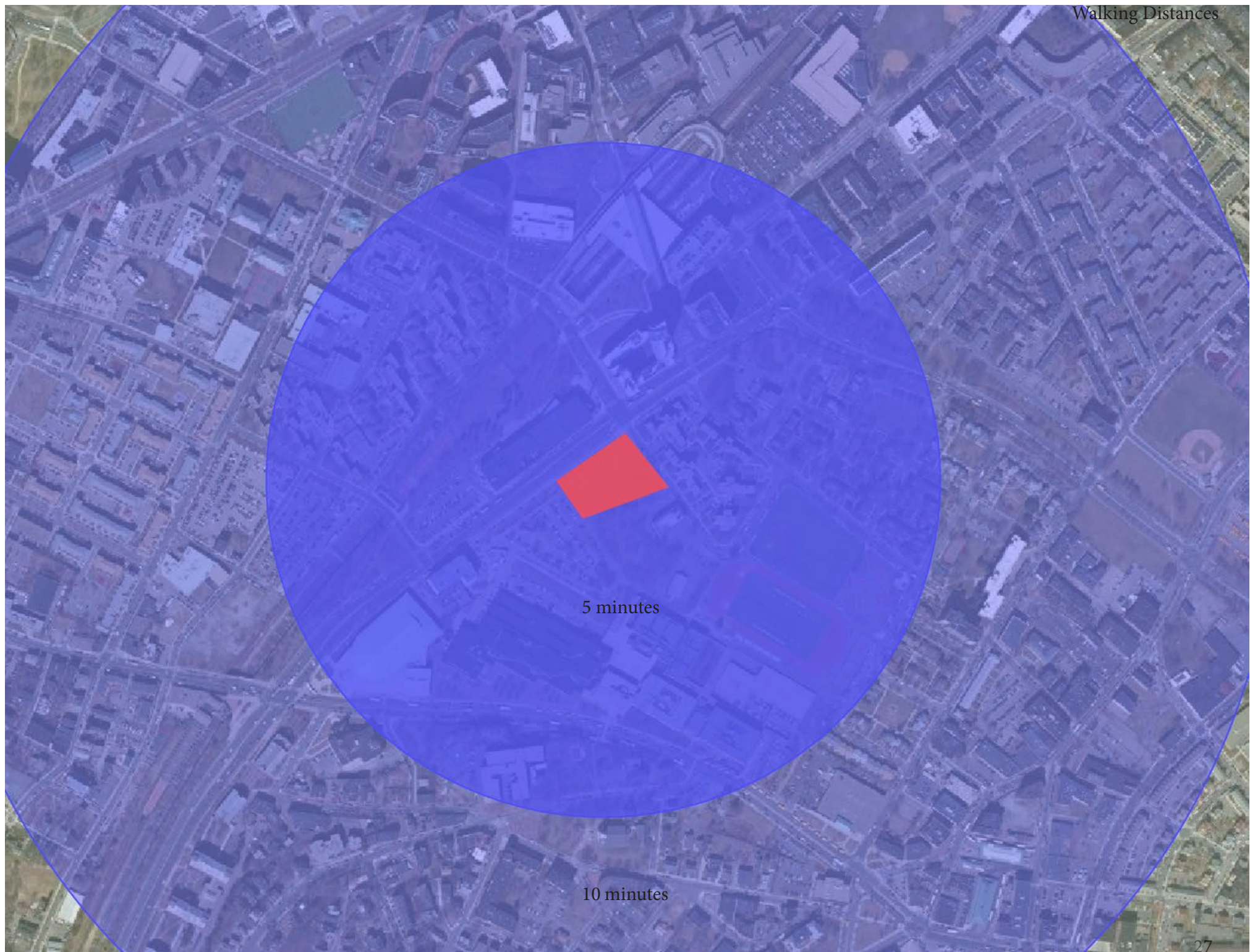
Roxbury Crossing

Boston Police
Headquarters

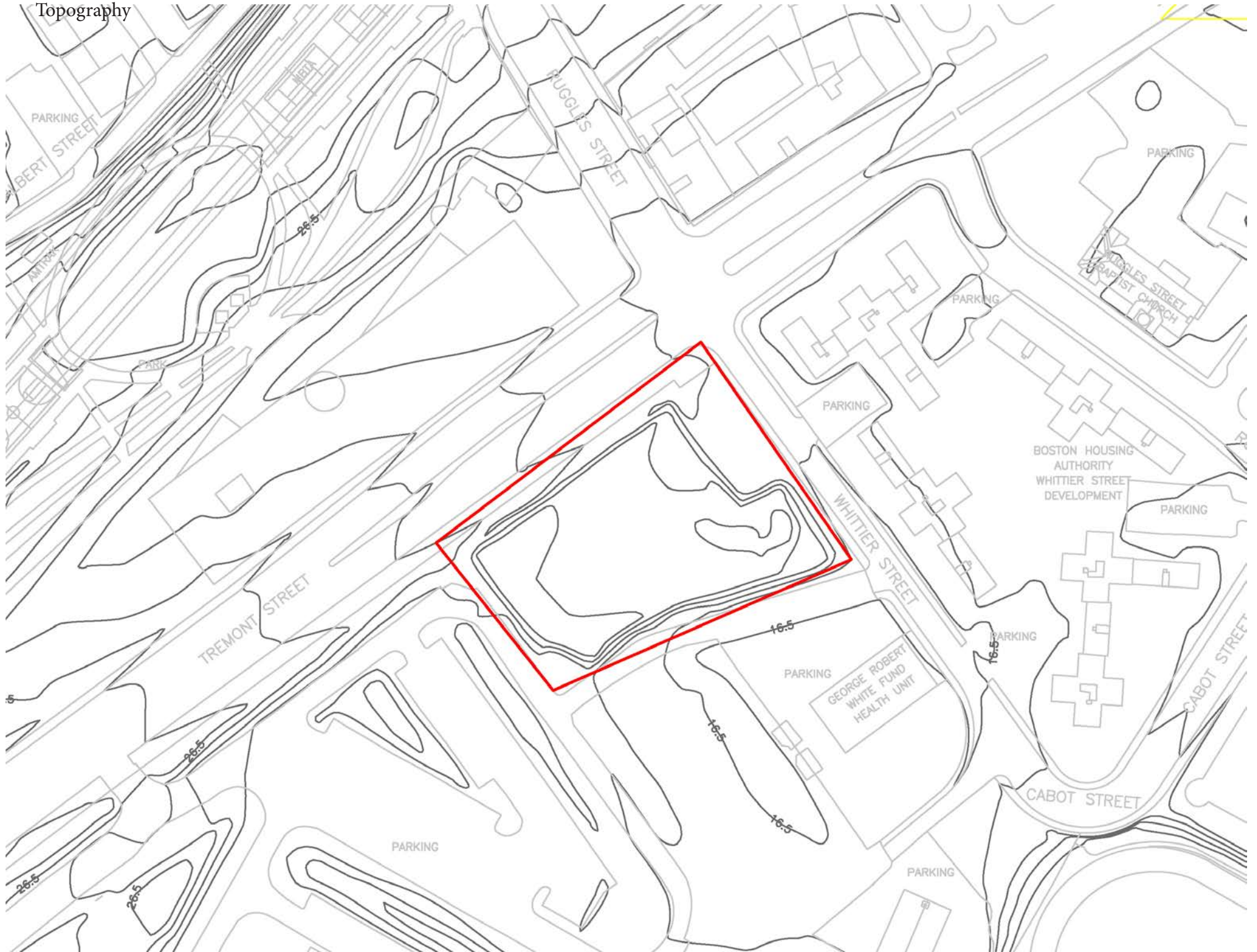
Site Dimensions



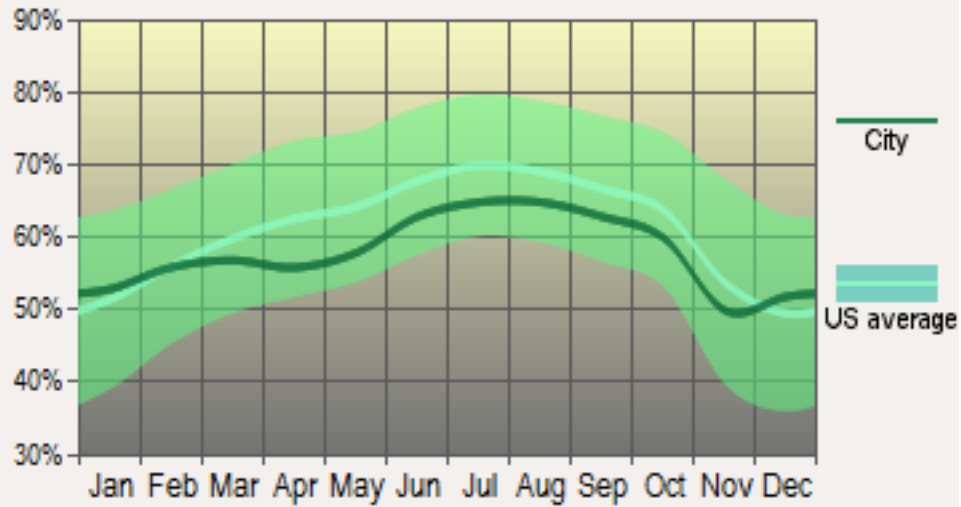
Total Area= 1,017 SF



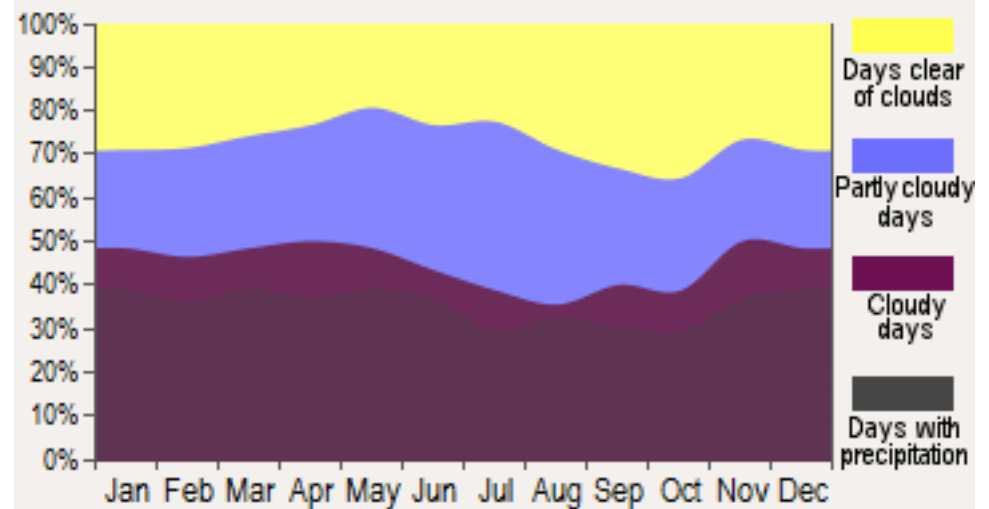
Topography



Sunshine



Cloudy Days





Panoramic View towards the abandoned Health Unit Building on the edge of the site.





Panoramic View at the intersection
of Tremont Street and Whittier
Street.



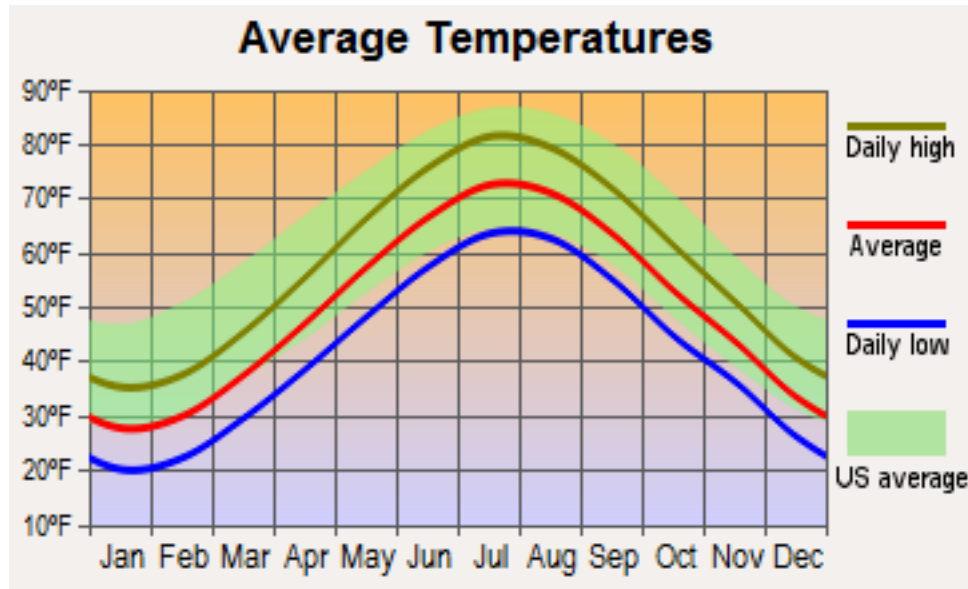
View includes new Boston Police Headquarters as well as some new development diagonally across the intersection from the site.



Panoramic View North on Tremont Street showing the new development to the left and the untouched site to the right.



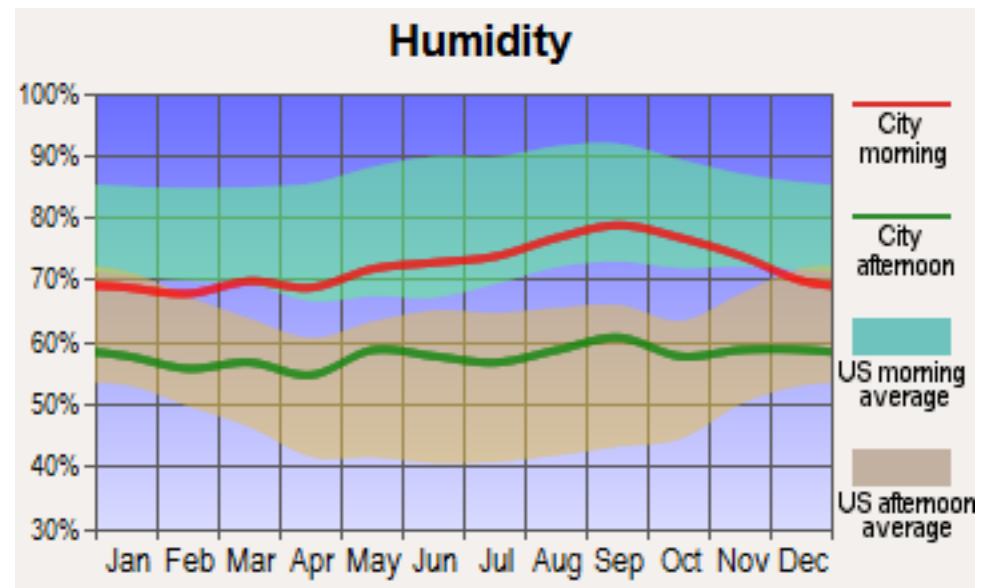
Regulatory Environment



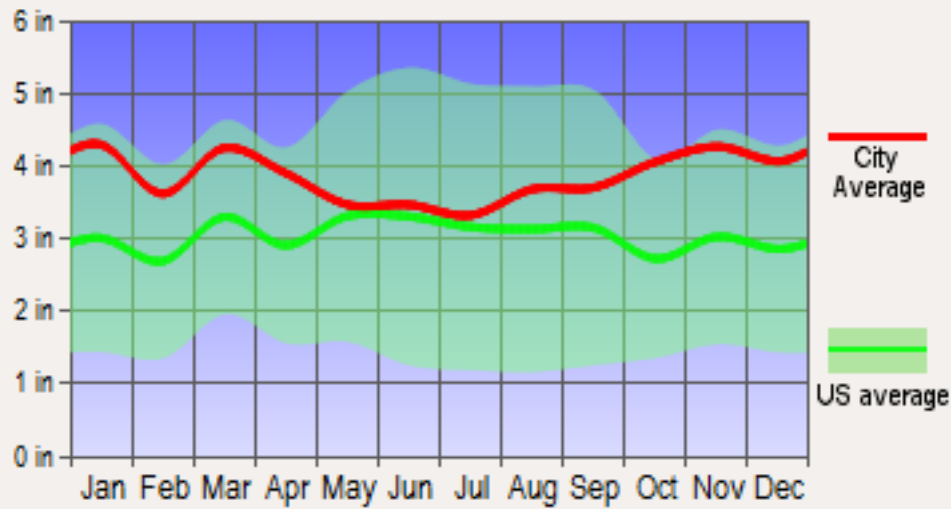
Average Temperature:
Annual: 51.6 F
January: 29.3 F
July 73.9 F

CLIMATE

Fog and humidity are by-products of Boston's proximity to water. Rain is frequent throughout the spring and summer, while snow falls regularly throughout the winter, making Boston one of the nation's wettest cities.



Precipitation

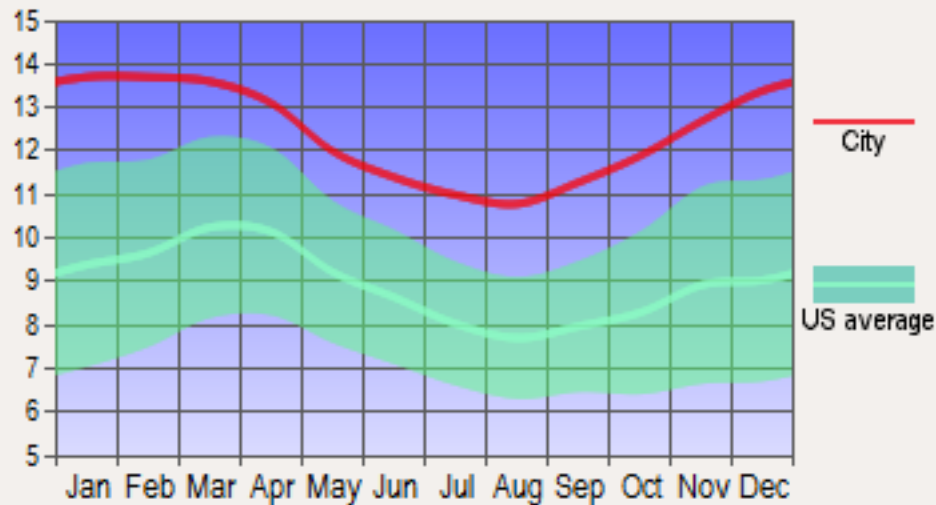


Average Rainfall:
42.53 Inches

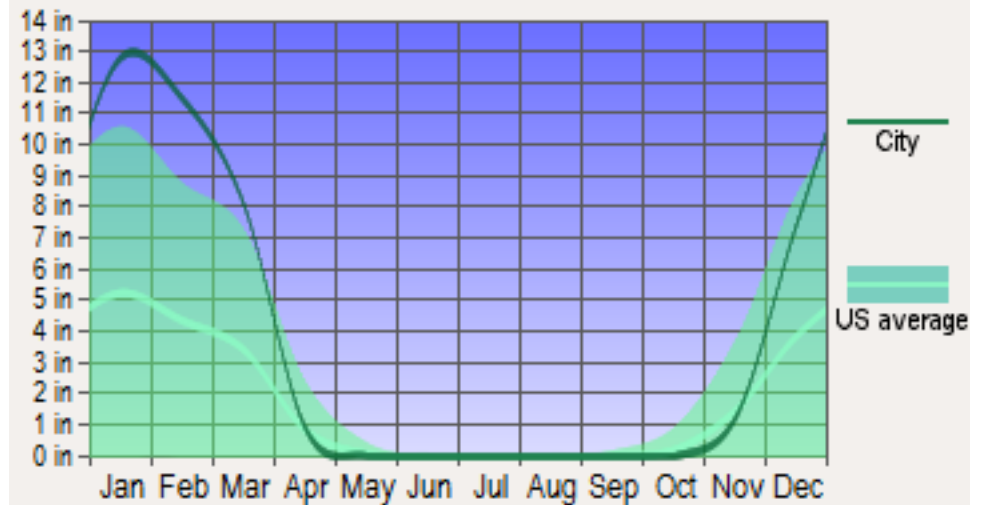
Atlantic Ocean breezes keep Boston's climate relatively mild compared to other cities in the northeastern United States. Those same Atlantic breezes, however, help rank Boston among the country's windiest cities and occasionally blow into full-fledged storms called "nor'easters."

Average Snowfall:
42.6 Inches

Wind Speed (mph)



Snowfall







Ruggles/Northeastern

Ruggles/Northeastern University

Roxbury

Legend

- 1 Family Residential
- 2 Family Residential
- 3 Family Residential
- Apartments/Condos
- Mixed Use (Res./Comm.)
- Commercial
- Institutional
- Industrial
- Open Space
- Surface Parking
- Main Streets District
- MBTA Stations
- MBTA Surface Subway Lines
- MBTA Underground Subway Lines
- Commuter Rail
- Below Ground Commuter Rail
- Water Transit Facilities
- Water Transit Routes
- Bus Routes



SECTION 50-11. **Dimensional Regulations Applicable in EDAs.** Within the Greater Roxbury EDA, the maximum allowed Building Height is sixty-five (65) feet and the maximum allowed Floor Area Ratio is two (2). Within the Dudley Square EDA, the maximum allowed Building Height is fifty-five (55) feet and the maximum allowed Floor Area Ratio is two (2). The minimum allowed Lot Size, Lot Width, Lot Frontage, Front Yard, Side Yard, Rear Yard, and Usable Open Space are set forth in Table C of this Article.

SECTION 50-12. **Establishment of Area Within Which Planned Development Areas May be Permitted.** Within the Greater Roxbury EDA and the Dudley Square EDA, Planned Development Areas ("PDAs"), as described in Section 3-1A.a, may be permitted on the following parcels:

TABLE 1

Parcels Upon Which PDA Development May Be Permitted

<u>Location</u>	<u>Parcel</u>
Greater Roxbury EDA	Douglass Plaza
	Northeastern Garage
	School Athletic Track Facility
	Ruggles Center
	Parcel 3
	Parcel 22
Dudley Square EDA	Blair Site
	Dudley Terminal
	Parcel 9
	Parcel 10
	Post Office

PDAs are not permitted elsewhere in the Roxbury Neighborhood District. The purposes for establishing these areas within which PDAs may be permitted are: to establish a more flexible zoning law and encourage private development on underutilized sites in the Roxbury Neighborhood District while ensuring quality design by providing planning and design controls; to encourage economic development and commercial expansion; and to provide connections for Roxbury to the downtown economy.

[^]SECTION 50-13. **Planned Development Areas: Public Benefits.** The Boston Redevelopment Authority may approve a Development Plan as meeting the requirement of Section 80C-4 (Standards for Planned Development Area Review) for compliance with the applicable planning and development criteria of this Article

SECTION 50-14. **Planned Development Areas: Use and Dimensional Regulations.** The dimensional regulations for PDAs are established by this Section.

1. **Use Regulations.** A Proposed Project within a PDA is subject to the use regulations set forth in Table A of this Article, except as the same may be modified in the Development Plan.
2. **Dimensional Regulations.** A Proposed Project within an established PDA shall comply with the Building Height and FAR standards set forth in Table 2 of this Article. The Building Height and FAR for such a Proposed Project shall not exceed the maximum Building Height and FAR standards stated in Table 2.

TABLE 2

**Roxbury Neighborhood District
Planned Development Areas
Dimensional Regulations**

	<u>Maximum Building Height</u>	<u>FAR</u>
Blair Site	65'	2
Douglass Plaza	65'	3
Dudley Terminal	65'	2
Northeastern Garage	65'	3
Parcel 3	65'	3
Parcel 9	65'	3
Parcel 10	65'	3
Parcel 22	65'	3
Post Office	65'	2
School Athletic Track Facility	65'	3
Ruggles Center	225'	6

SECTION 50-15. [Planned Development Areas: Standards for Development Plan Approval.] Deleted on May 9, 1996 by Text Amendment No. 230. (For approval standards for Planned Development Area Development Plans, see Section 80C-4, Standards for Planned Development Area Review Approval.)

[^]SECTION 50-16. **Planned Development Area Review Requirement.** See Article 80 concerning the applicability of Planned Development Area Review to the

TABLE C

**Roxbury Neighborhood District
Dimensional Regulations in Economic Development Areas**

	<u>Dudley Square EDA</u>	<u>Greater Roxbury EDA</u>
Maximum Floor Area Ratio	2.0	2.0
Maximum Building Height	55 ¹	65 ¹
Minimum Lot Size	none	none
Minimum Usable Open Space (Square Feet per Dwelling Unit)	none	50
Minimum Lot Width	none	none
Minimum Lot Frontage	none	none
Minimum Front Yard ³	none ²	none ²
Minimum Side Yard	none	none
Minimum Rear Yard	20	20

TABLE H - Continued

**Roxbury Neighborhood District
Off-Street Parking Requirements¹
Public Assembly Uses**

	If there are seats (spaces per seat) ^{2,3}	If there are no seats (spaces per 1,000 square feet of public floor area in structures) ²
<u>Entertainment Uses</u>	0.15	4.0
<u>Funerary Uses</u>		
Funeral home	0.1	3.0
Mortuary chapel	0.1	3.0
All other funerary uses	none	none
<u>Places of Worship</u>	0.1	3.0
<u>Restaurant Uses</u>	0.15	4.0

Architectural Intentions



The overall intent is for this building to create a social and cultural center within the city to attract the nearby residents as well as far flung members of the dancing community. To create this center, the building will focus on connections within and without. Today, the world focuses on being “green” and “sustainable” in terms of energy consumption. In the building industry, being sustainable is now essentially a mandate. However, simply being “green” does not make a building sustainable. There are more aspects to sustainability than just energy consumption. This building will set out to examine the concepts of being socially sustainable.

Design Process

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Mid-Review	68
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Final Review	76

Revision of Proposed Project + Preliminary Review

PROPOSED BUILDING

USABLE FOOTPRINT: 29540 SF

ORIGINAL PROGRAM

Element	Square Feet	Building Levels
Large-Format Retail	500,000 s/f	4 Levels
Smaller Retail (Fronting Tremont Street)	50,000 s/f	1 Level (two building structures)
Office	200,000 s/f	9 Levels
Multifamily, Residential	200,000 s/f (240 units)	11 Levels
Museum / Cultural Center	58,000 s/f	3 Levels
Parking	592,000 s/f	8 Levels (plus one partially underground)

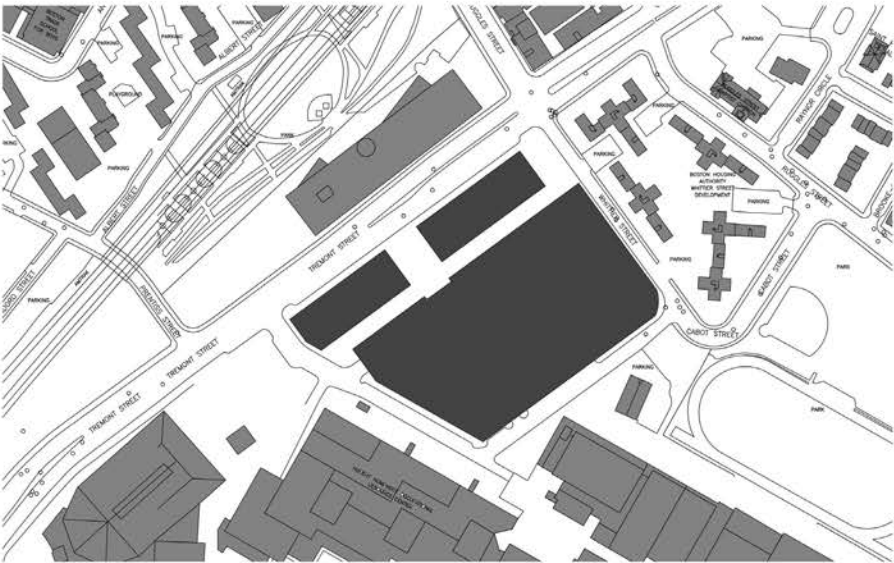
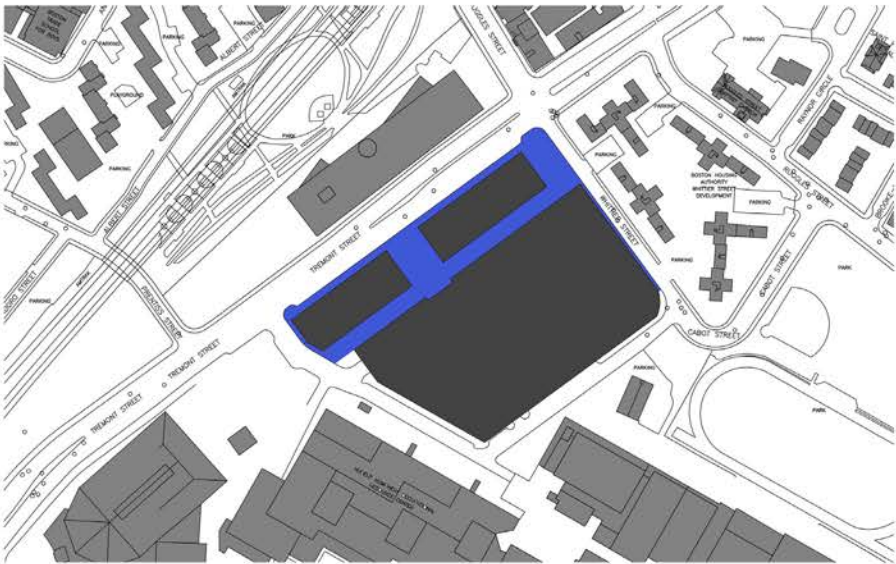
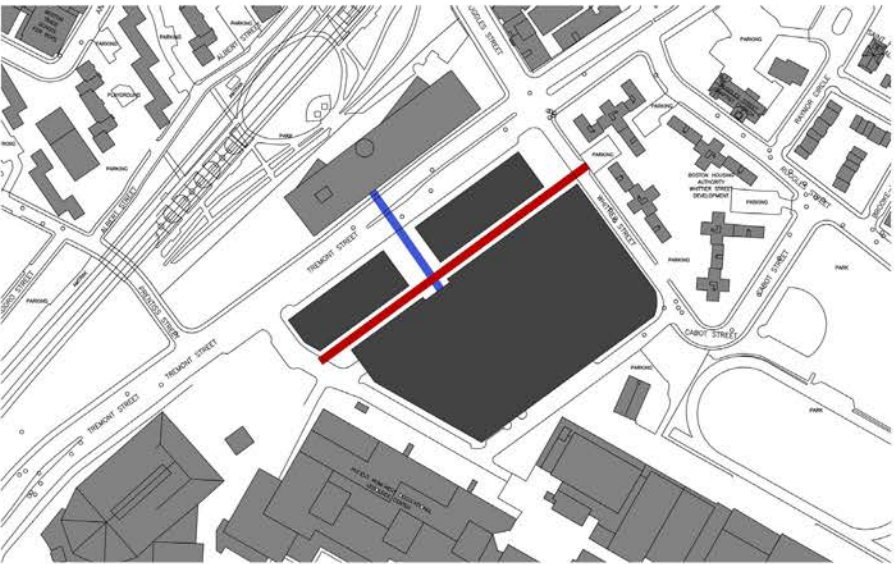


FIGURE GROUND



PEDESTRIAN ACCESS



AXIS

PROPOSED BUILDING
ALTERNATIVE 1

USABLE FOOTPRINT:22670 SF

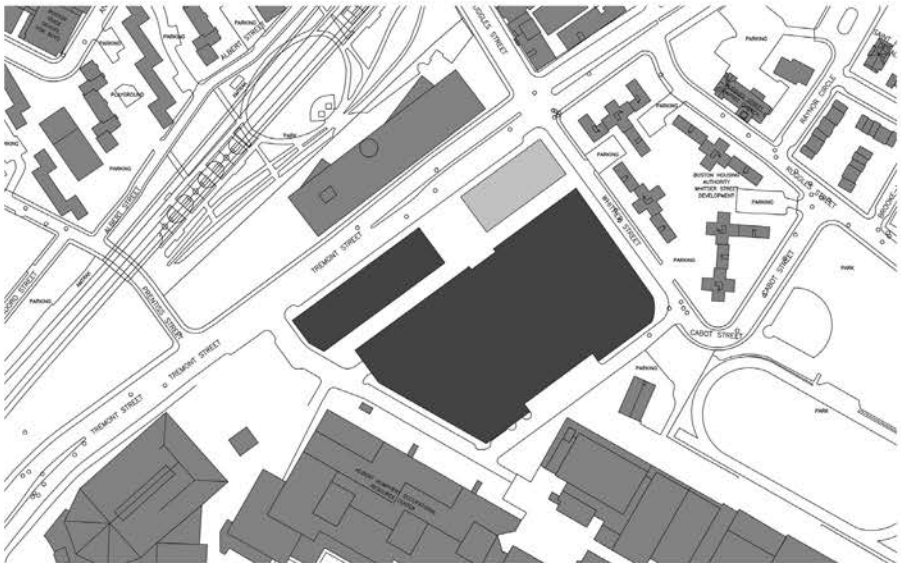
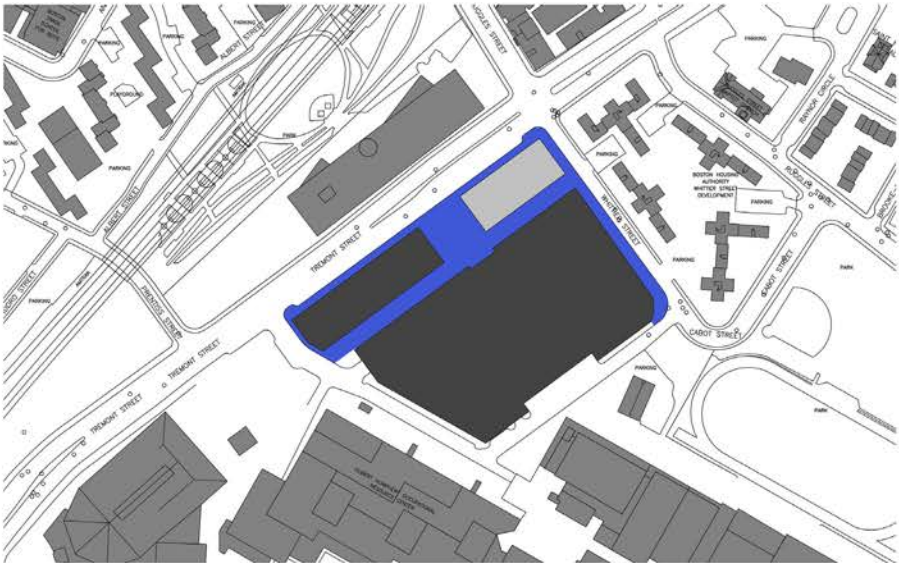
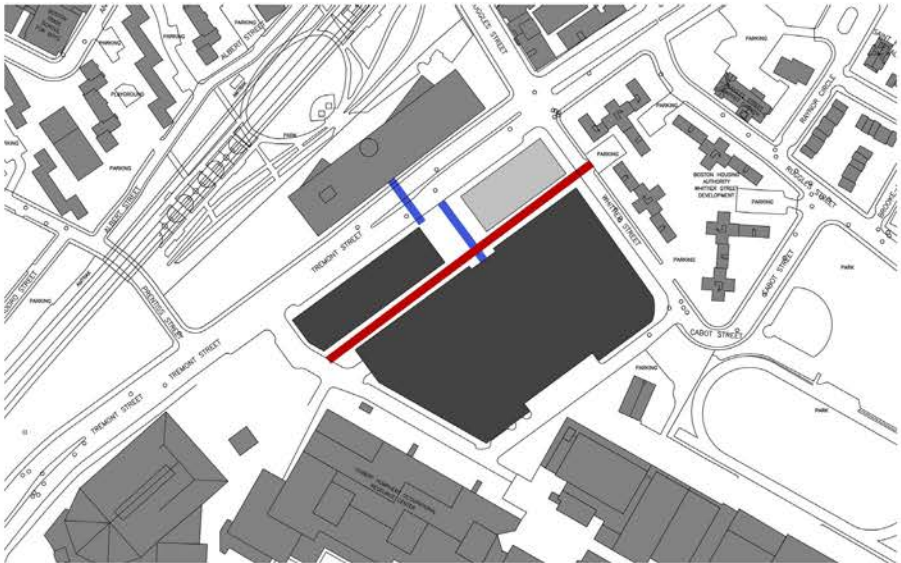


FIGURE GROUND



PEDESTRIAN ACCESS



AXIS

PROPOSED BUILDING
ALTERNATIVE 2

USABLE FOOTPRINT:46135SF

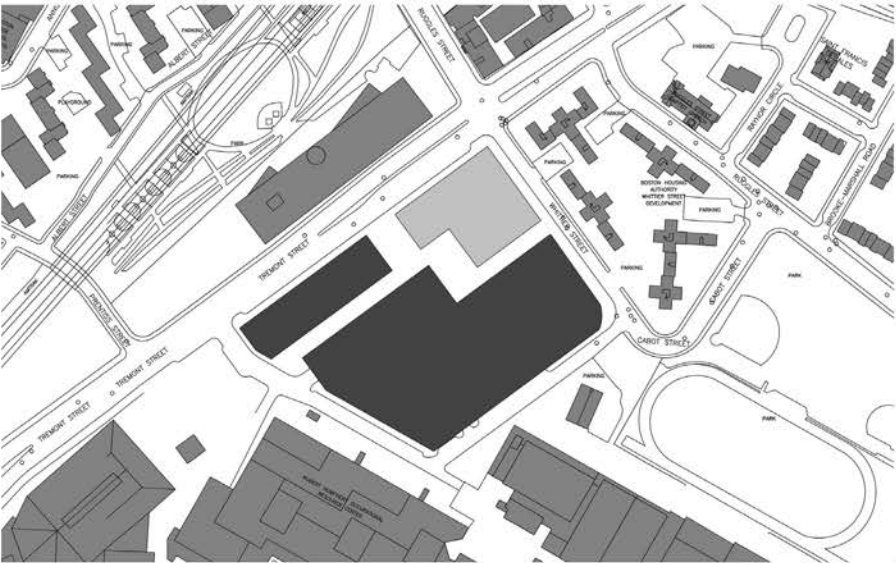
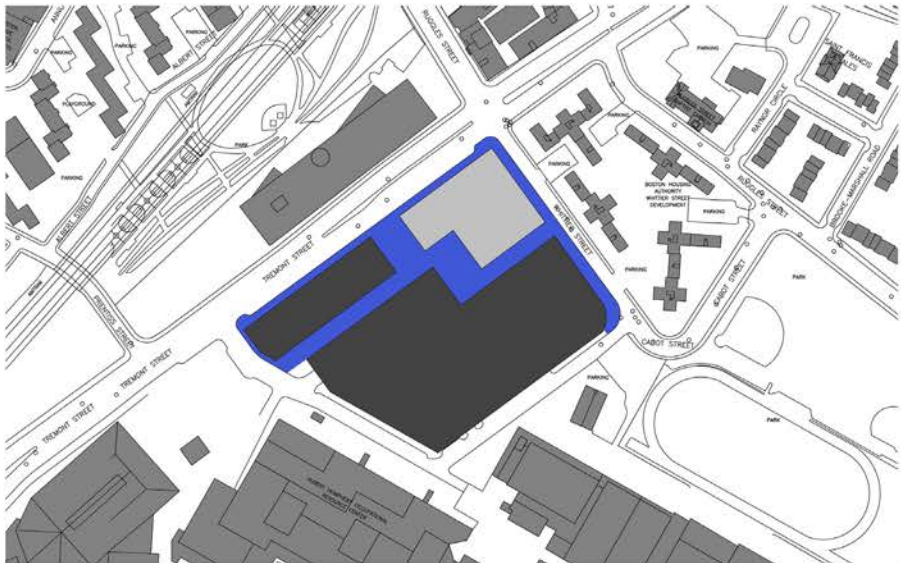
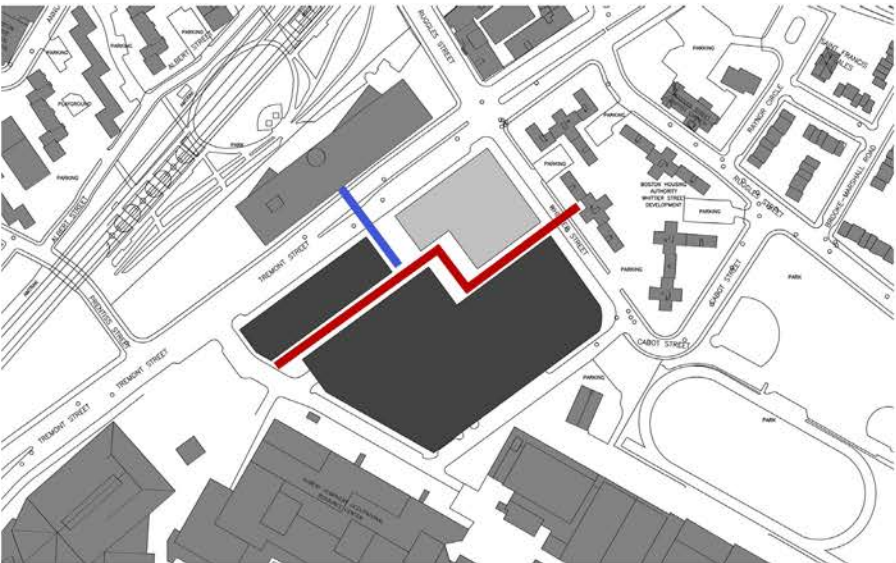


FIGURE GROUND



PEDESTRIAN ACCESS



AXIS

PROPOSED BUILDING
ALTERNATIVE 3

USABLE FOOTPRINT: 45645 SF

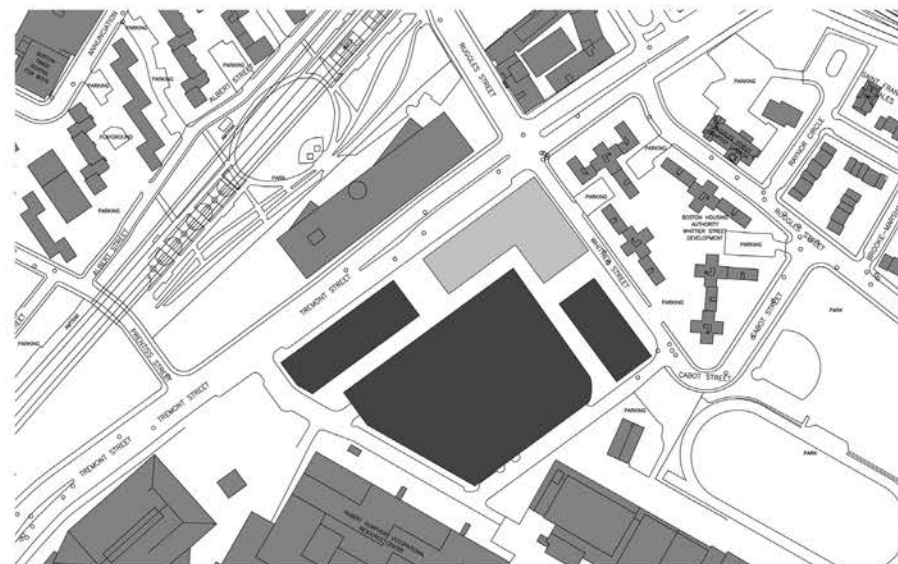
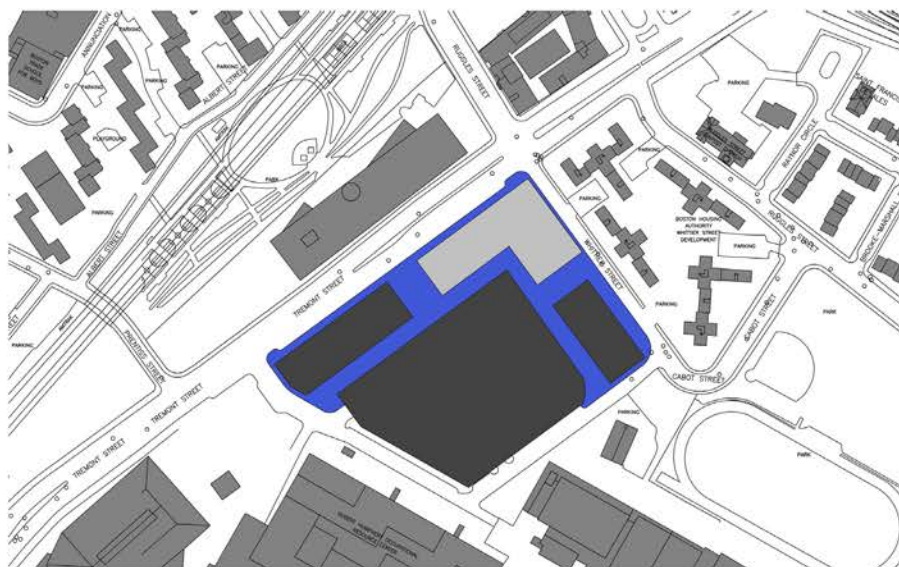
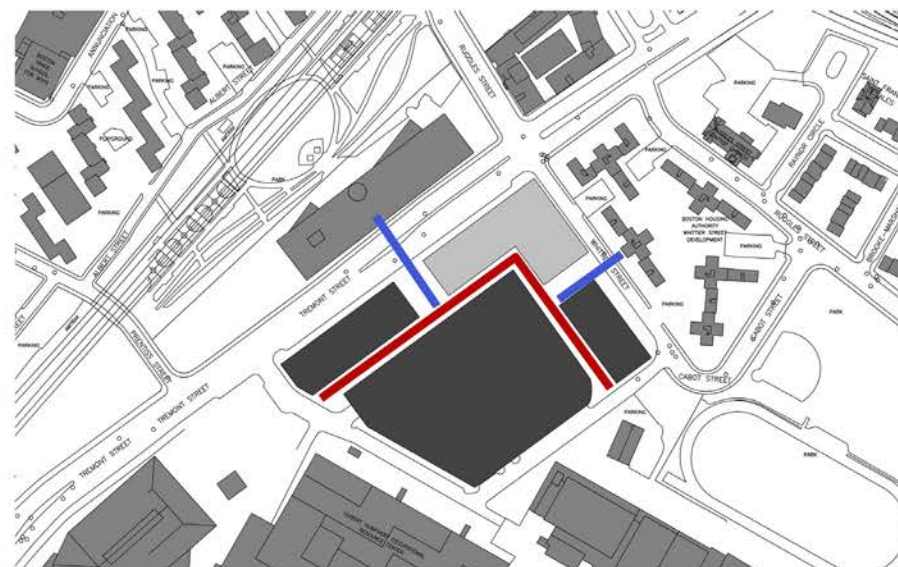


FIGURE GROUND



PEDESTRIAN ACCESS



AXIS

PROPOSED BUILDING
ALTERNATIVE 4

USABLE FOOTPRINT: 30000 SF

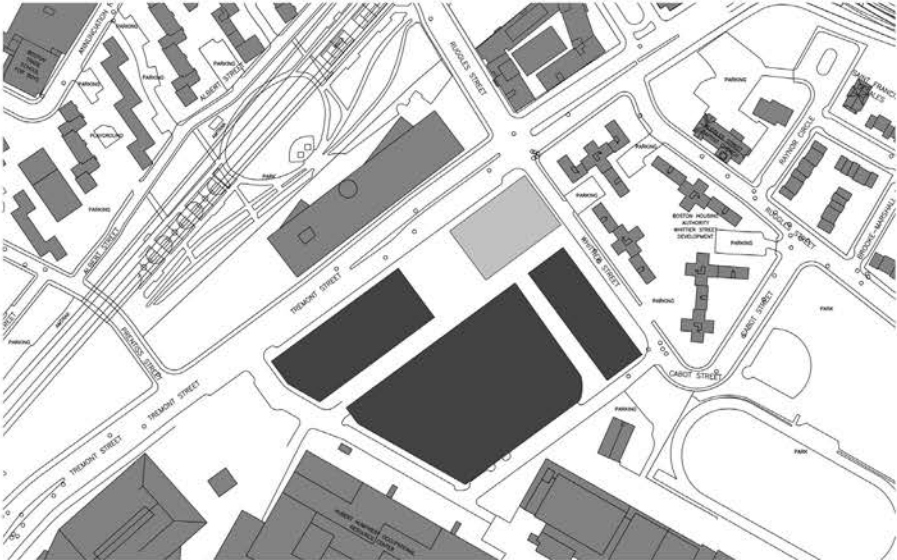
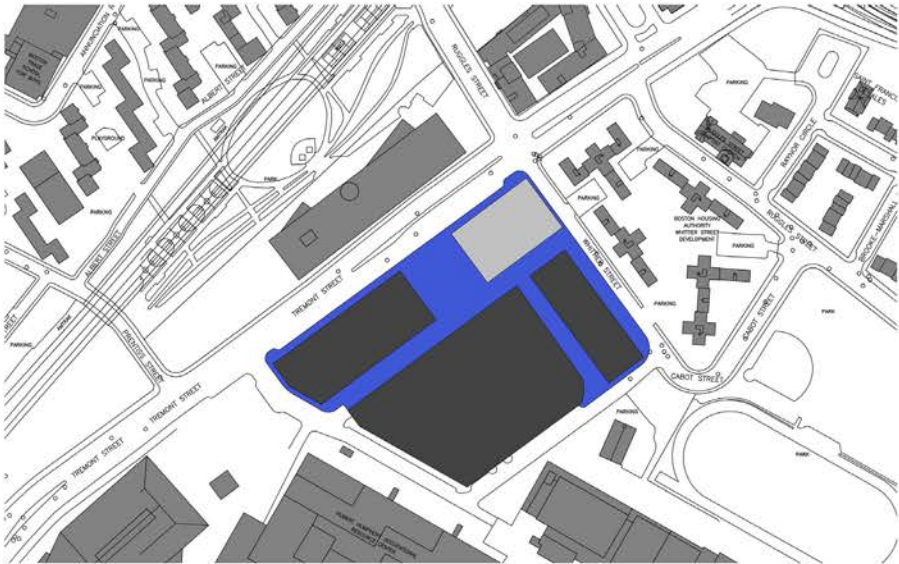
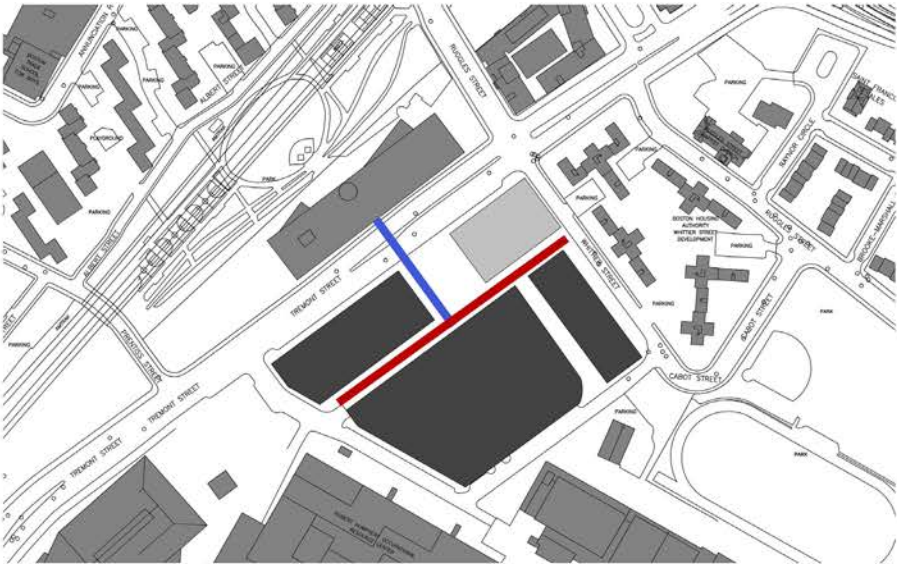


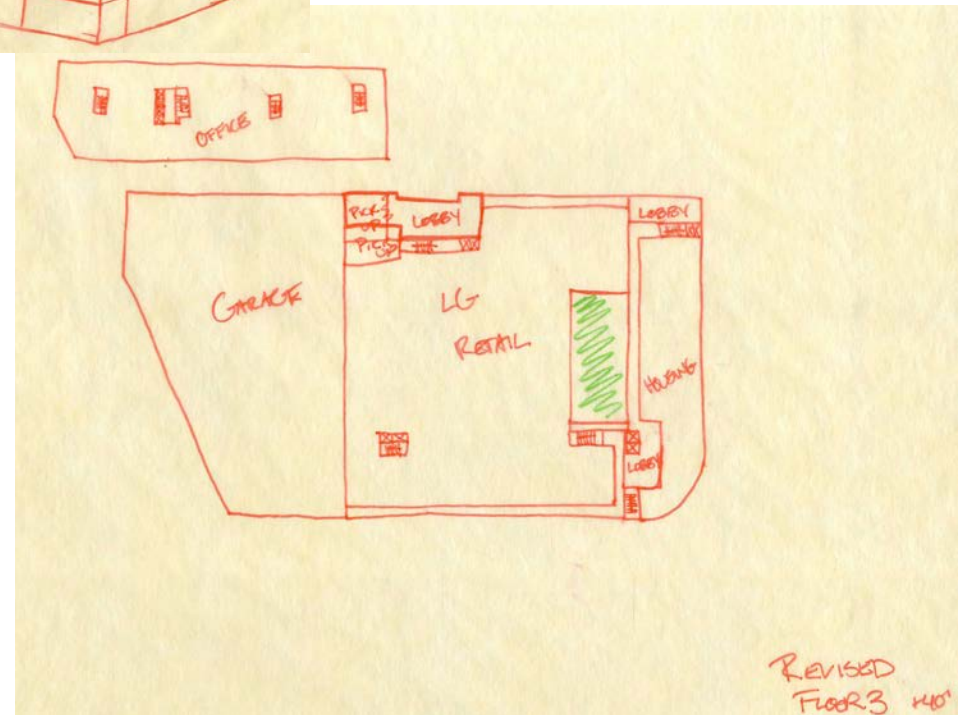
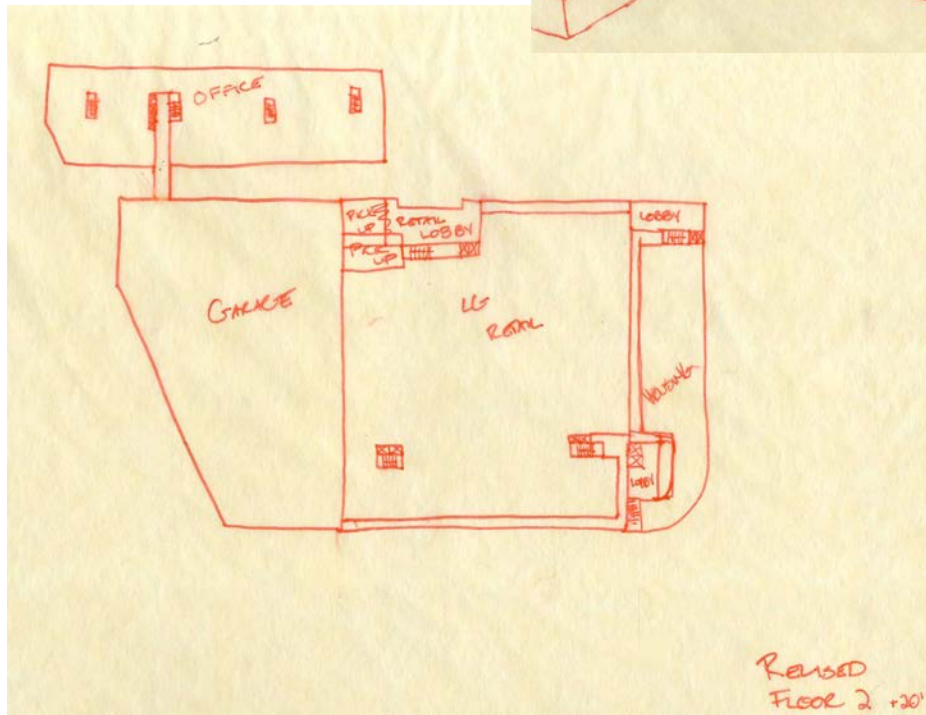
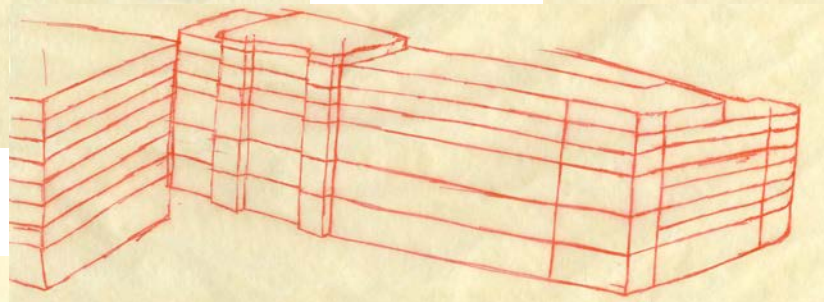
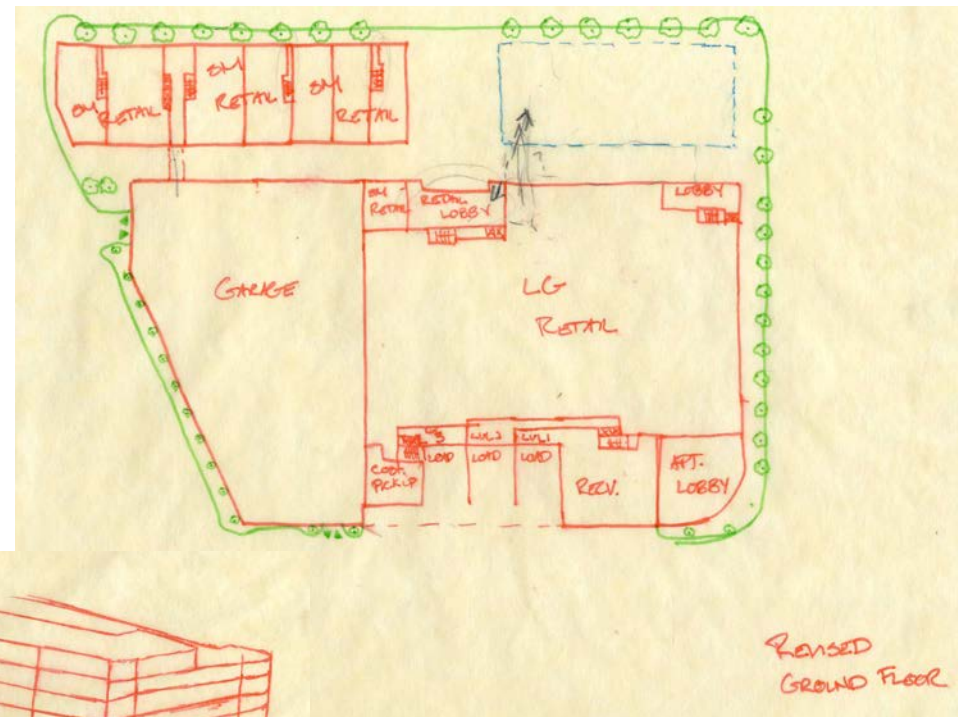
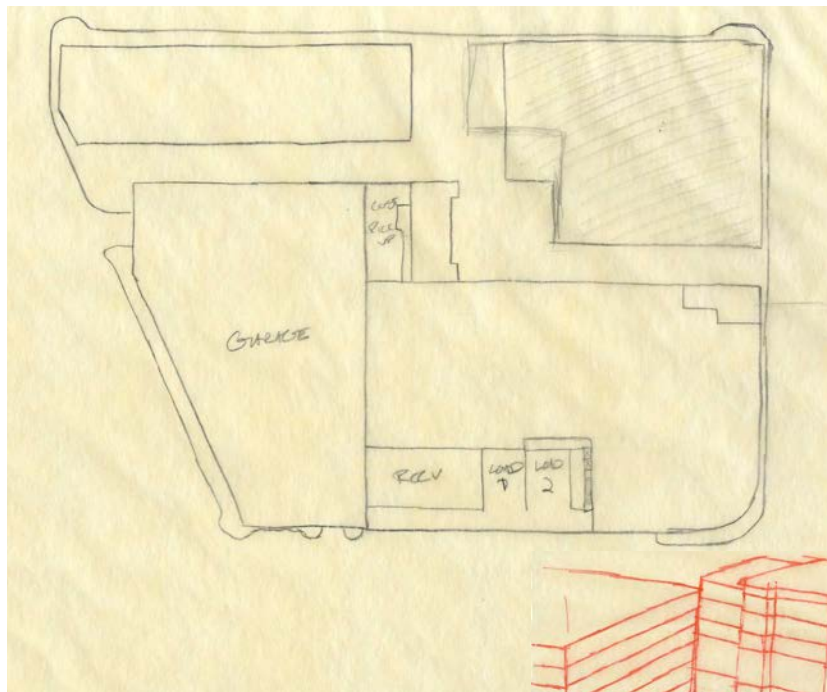
FIGURE GROUND



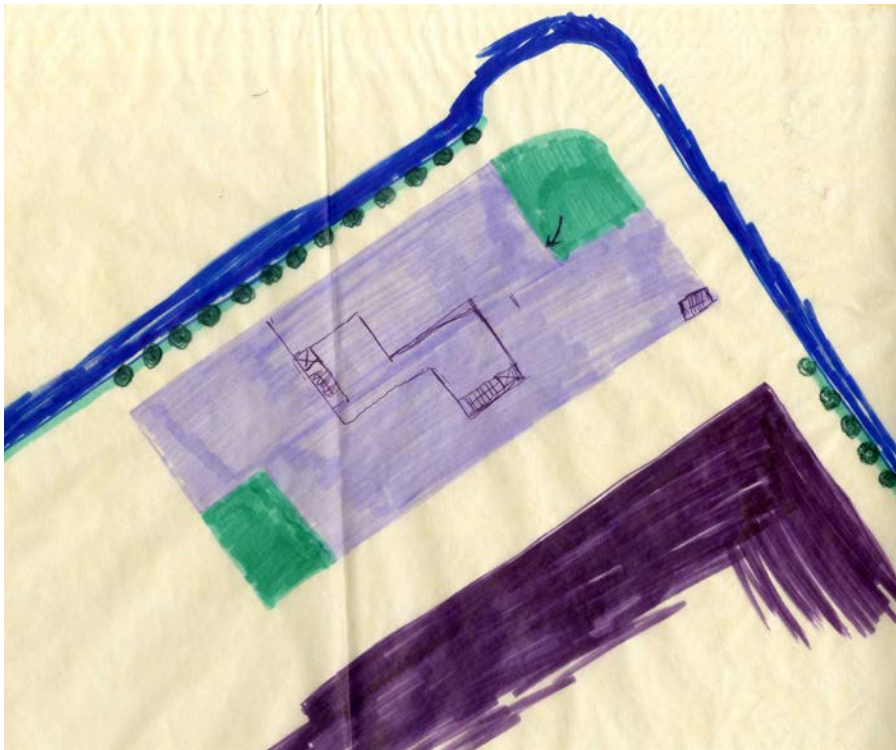
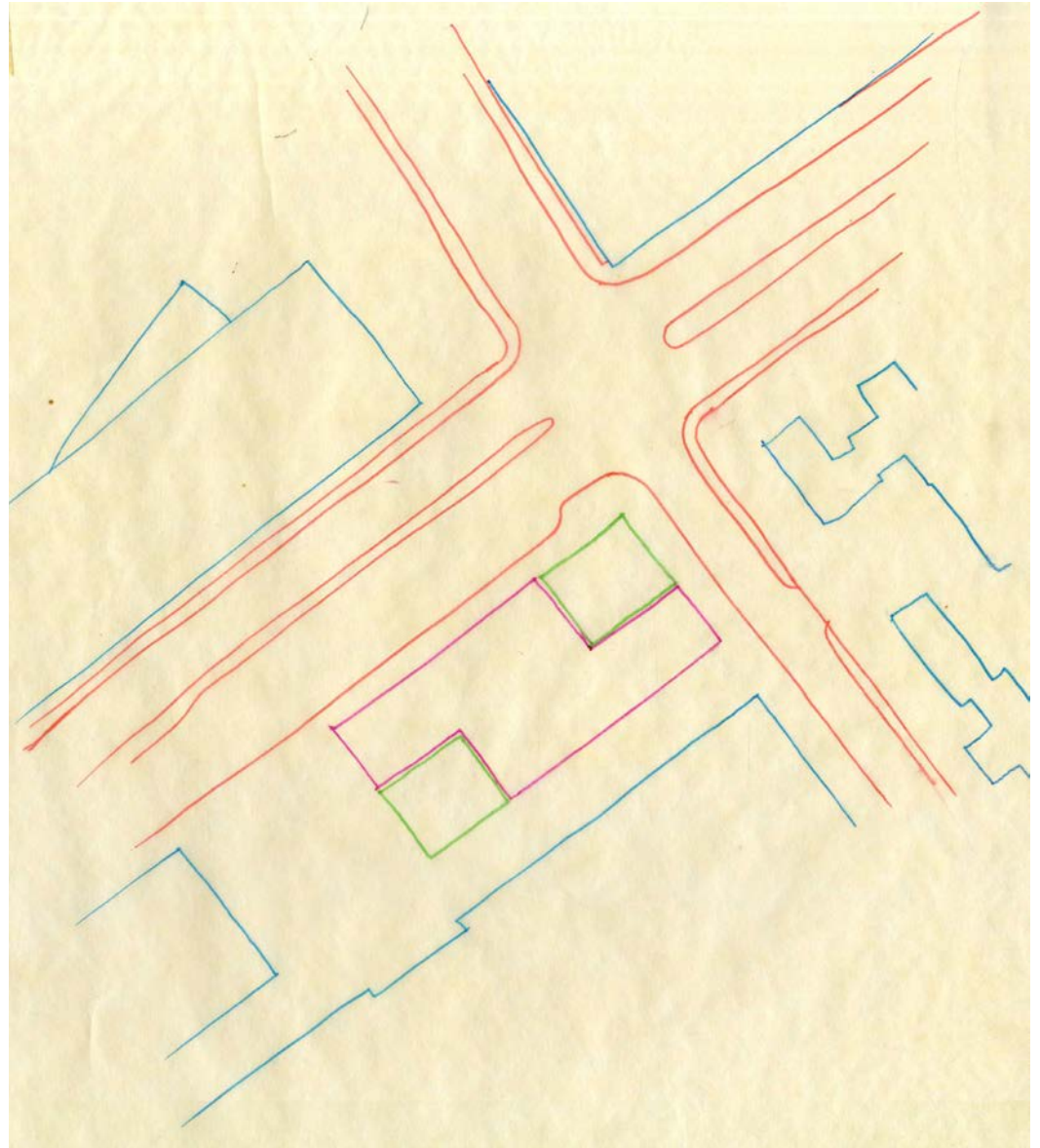
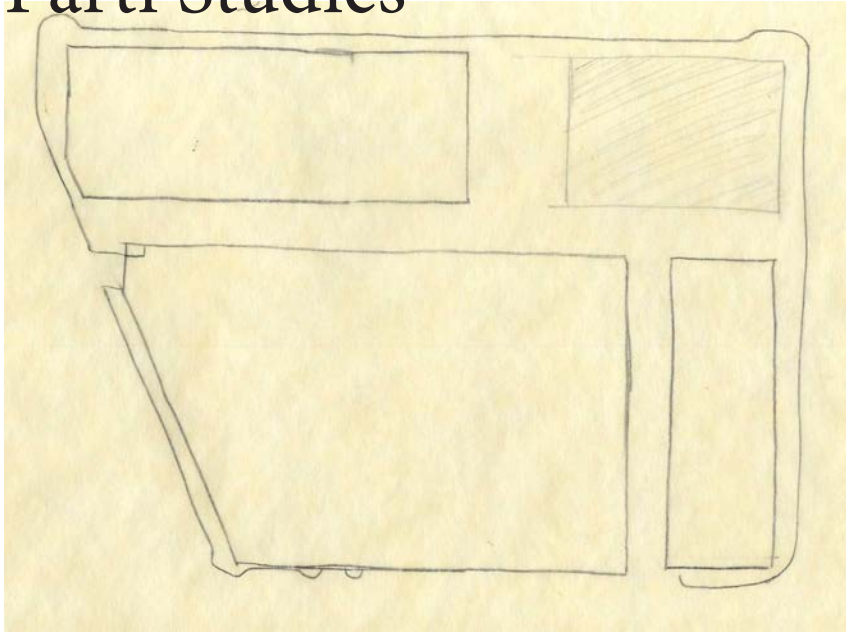
PEDESTRIAN ACCESS

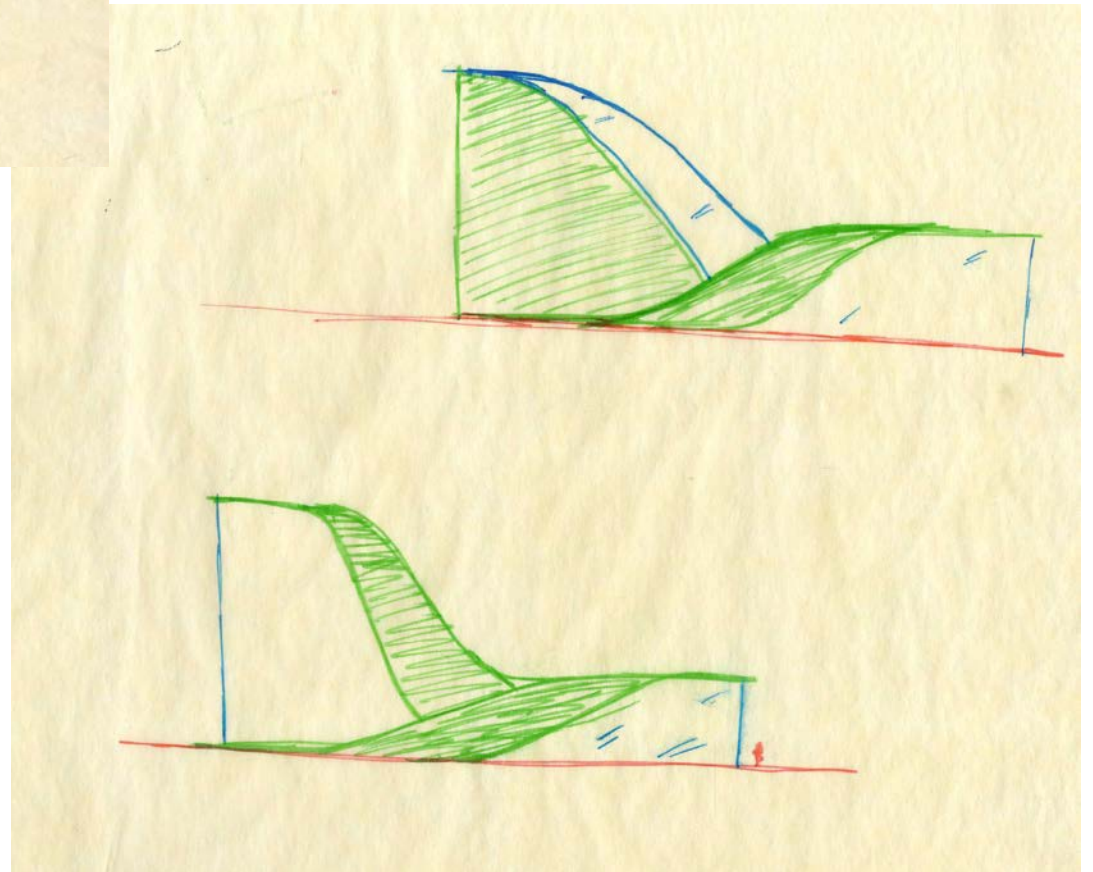
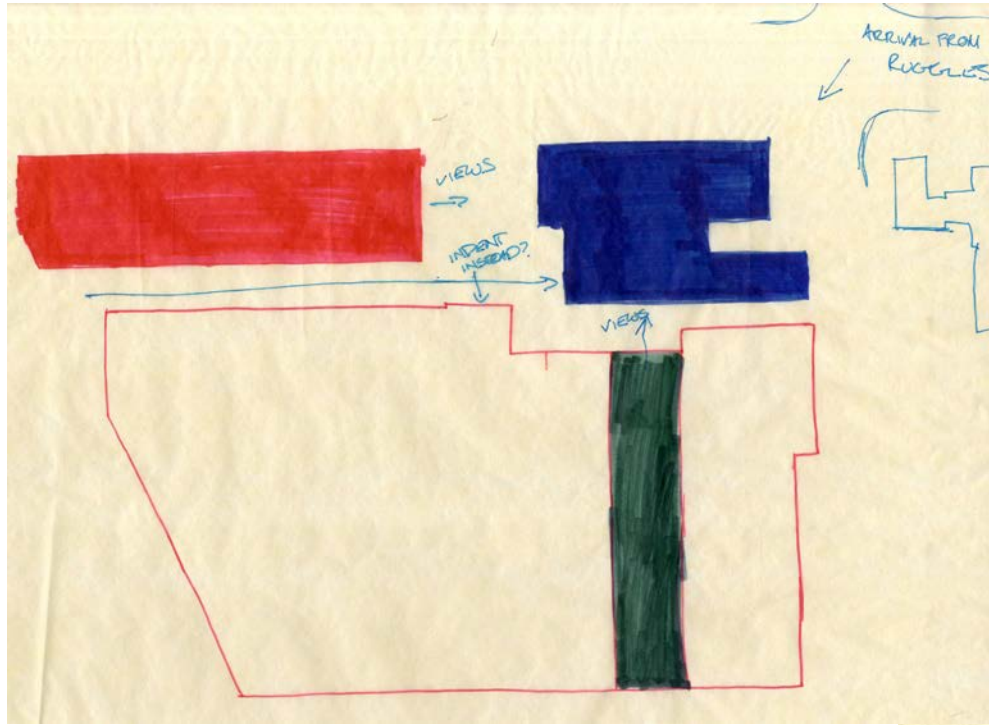


AXIS

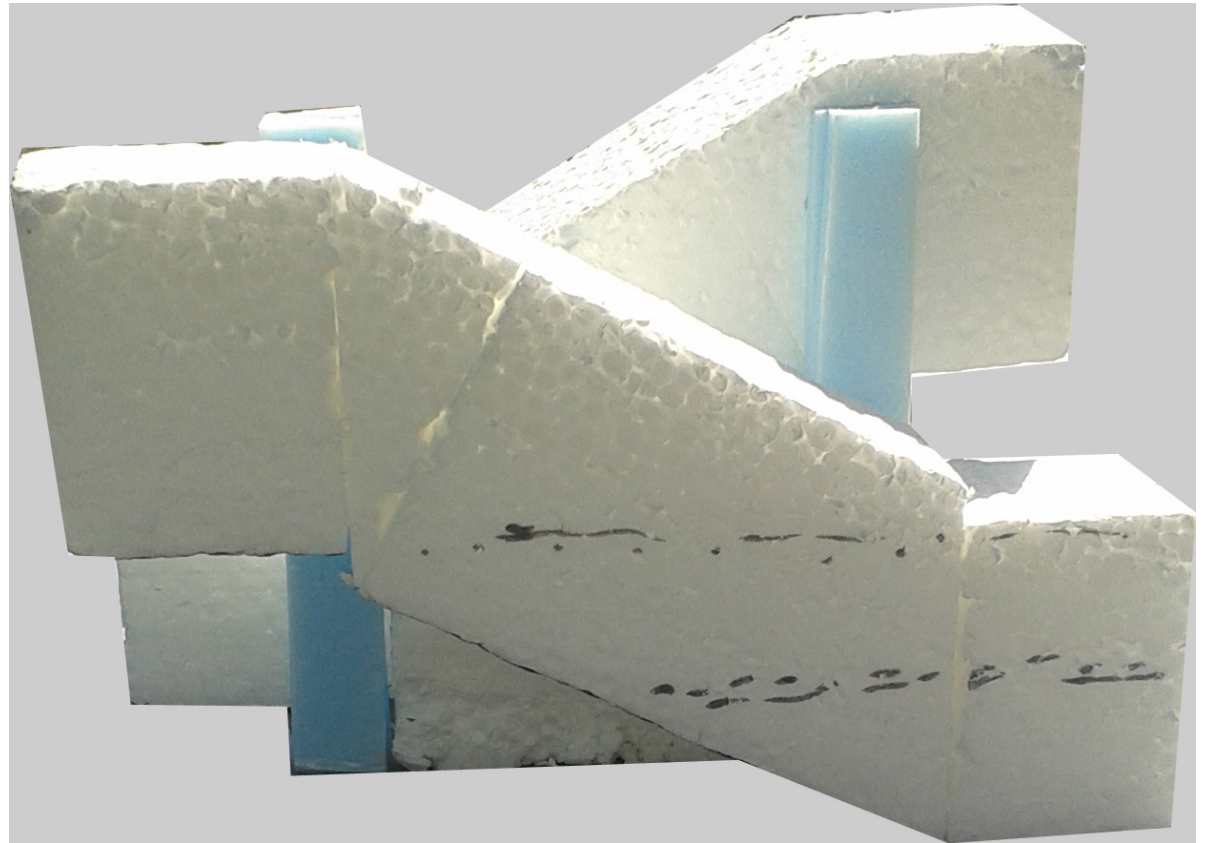
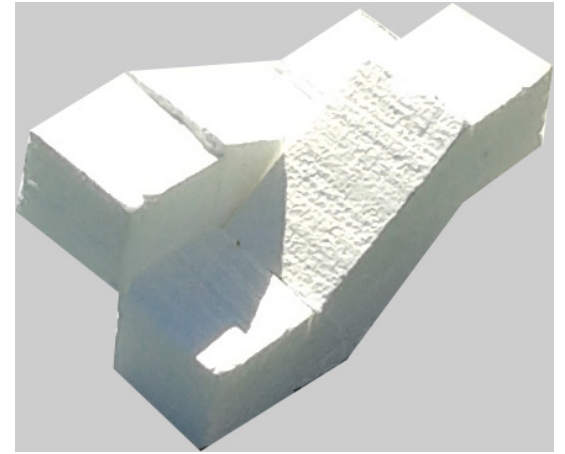
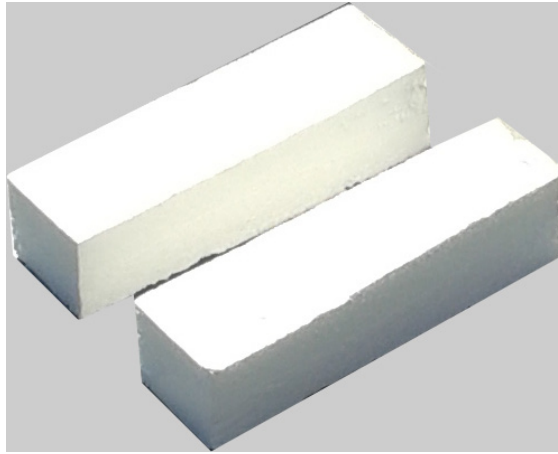
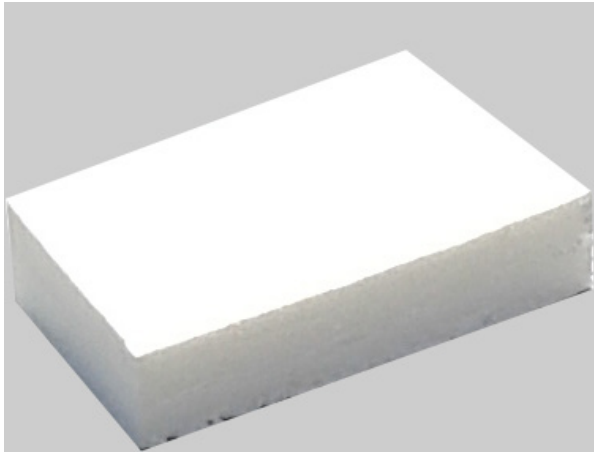


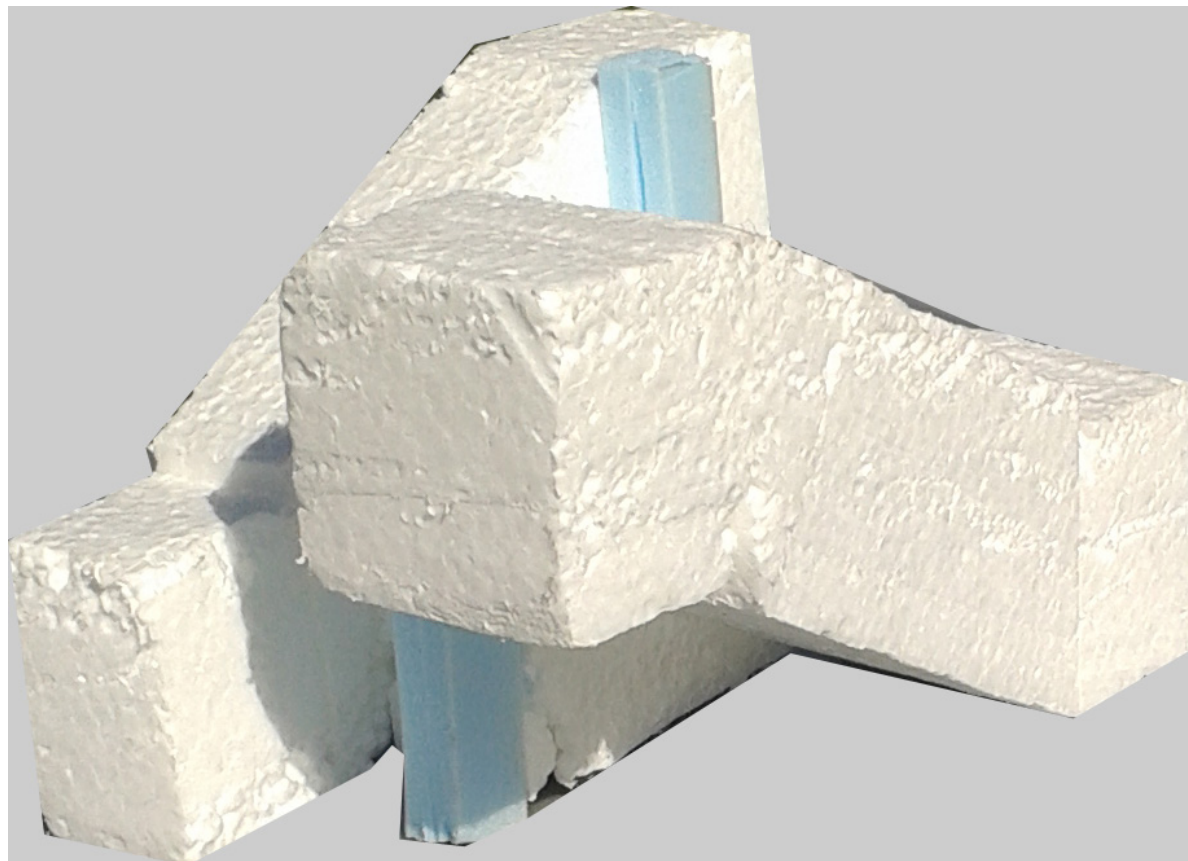
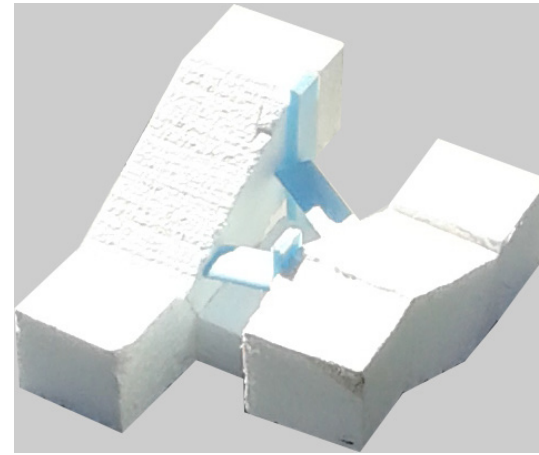
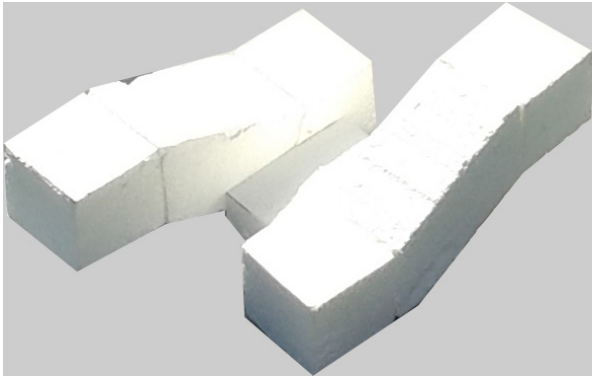
Parti Studies



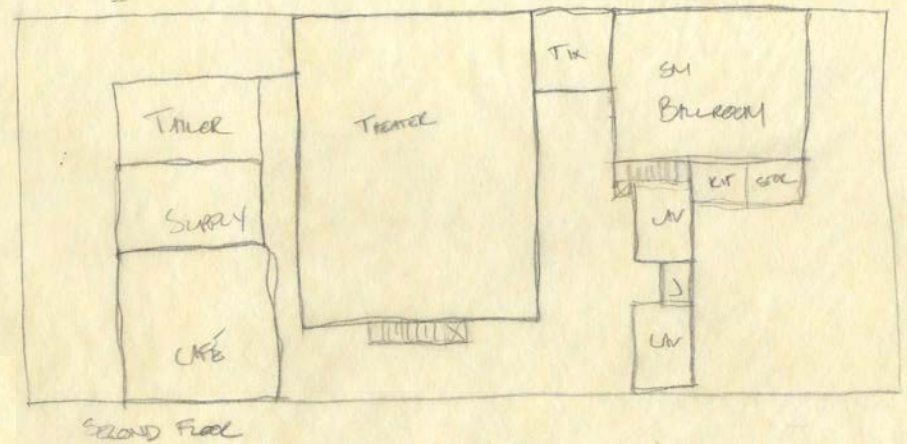
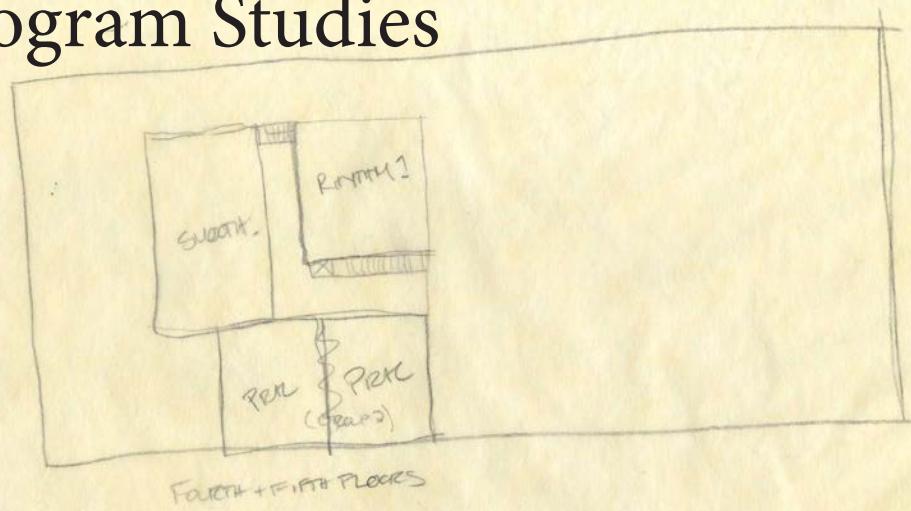


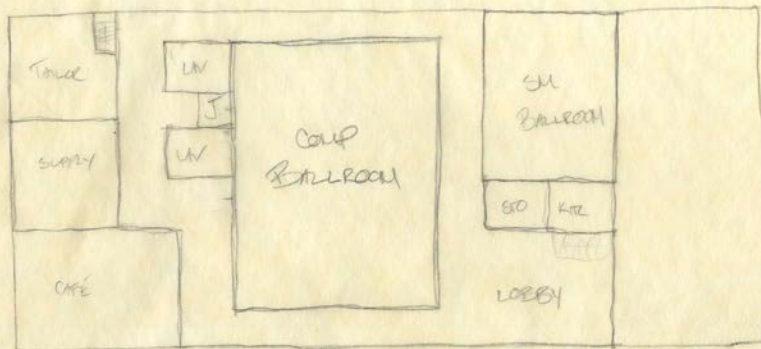
Massing Studies





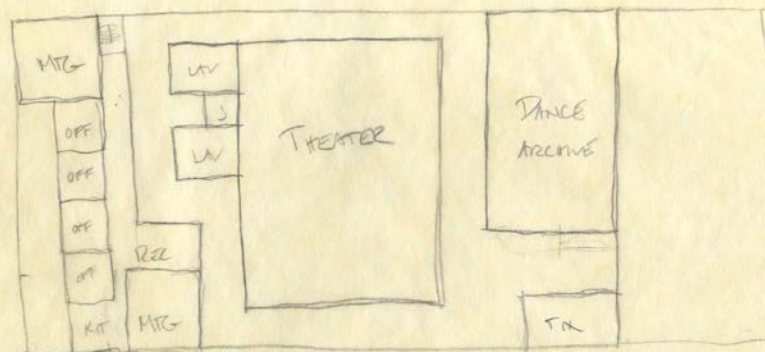
Program Studies





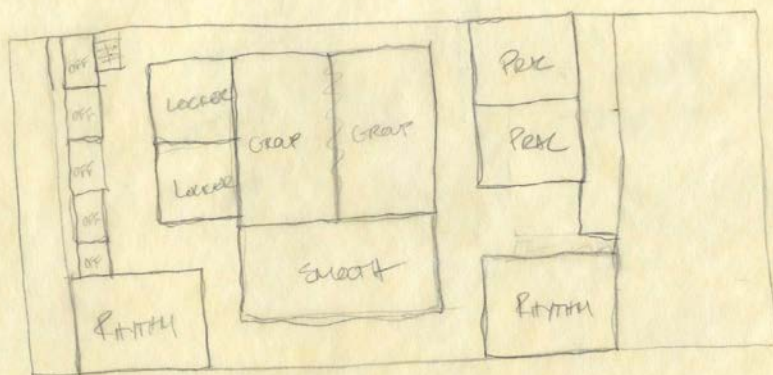
GROUND FLOOR

SCHEME 2



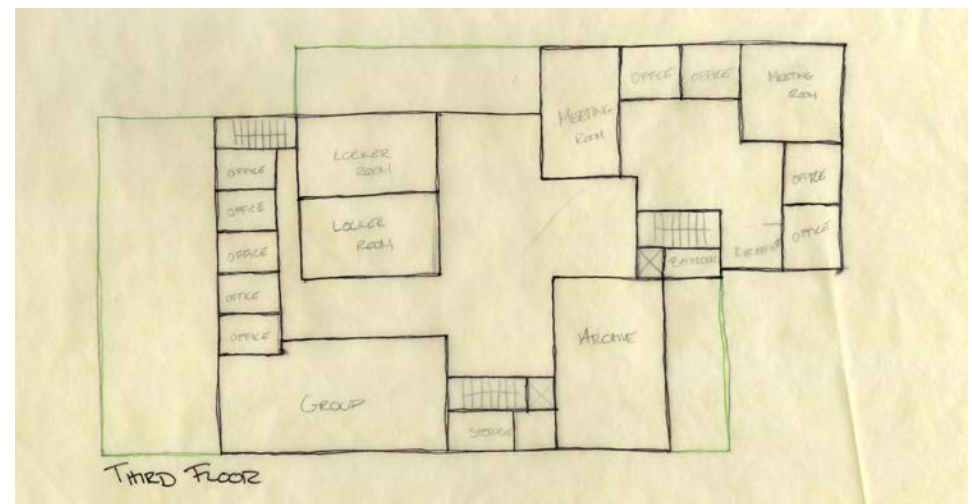
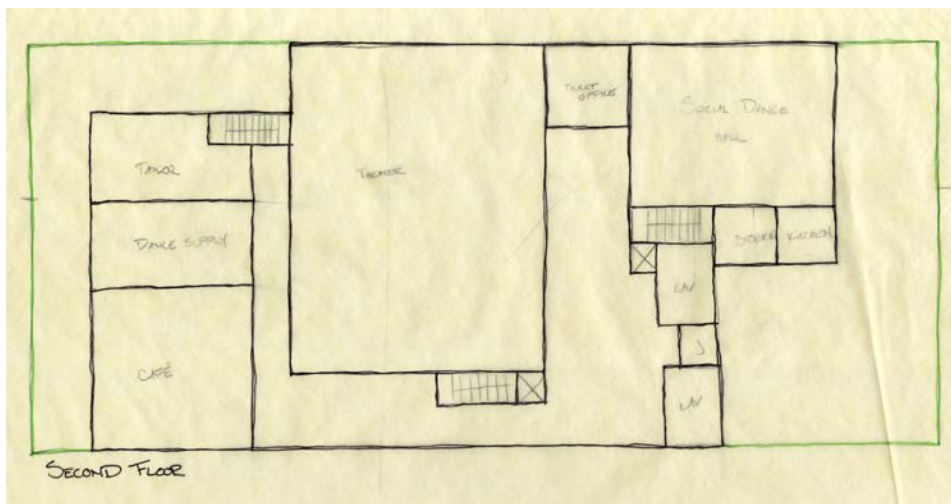
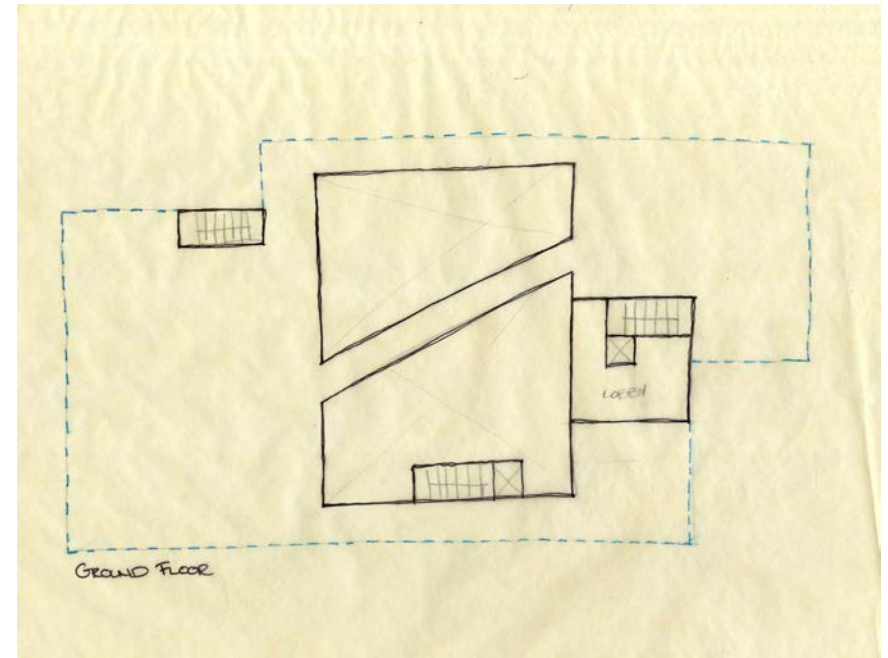
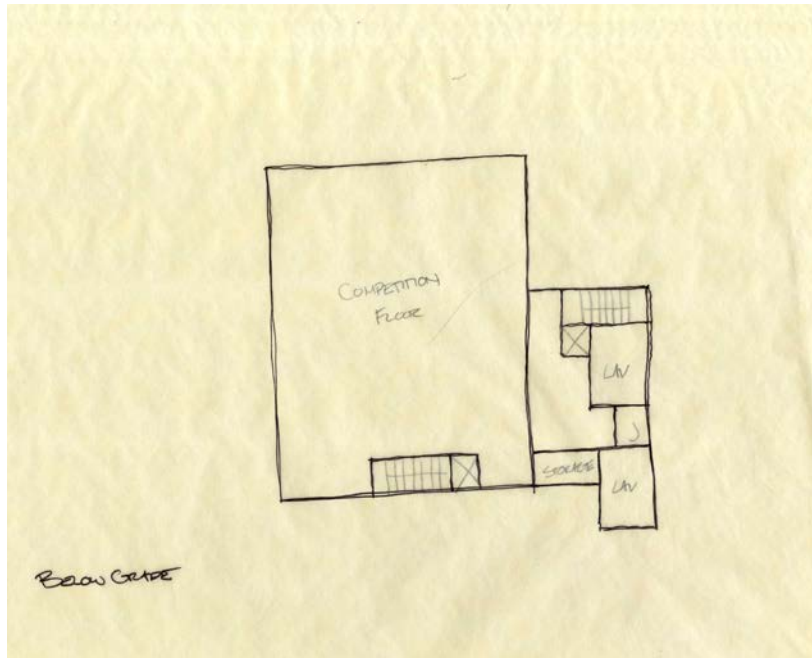
SECOND FLOOR

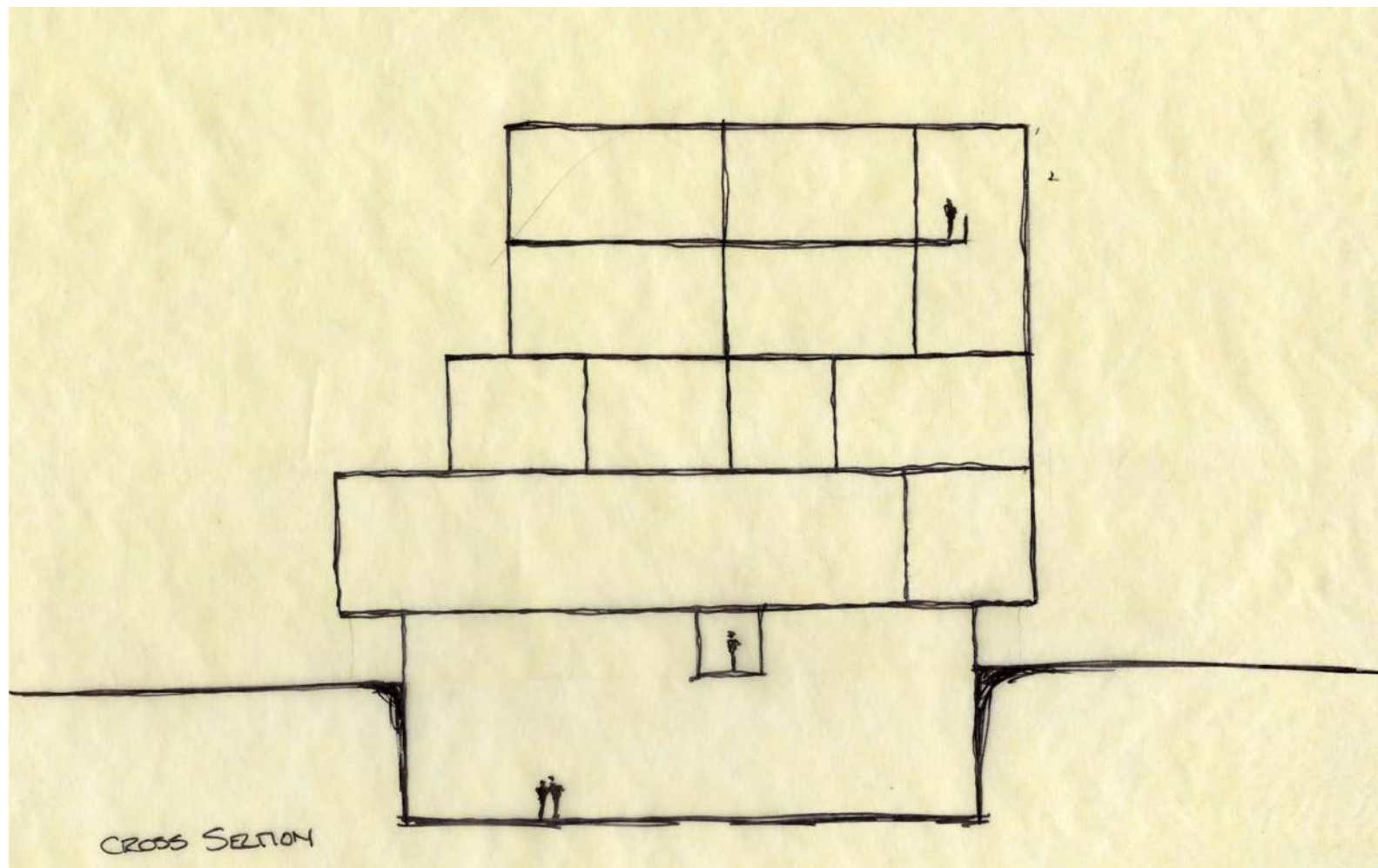
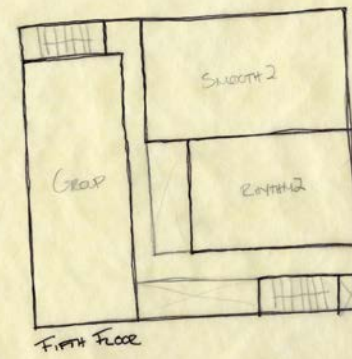
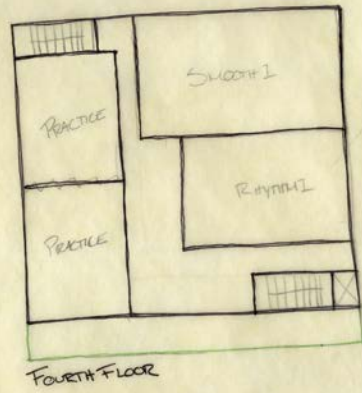
SCHEME 2

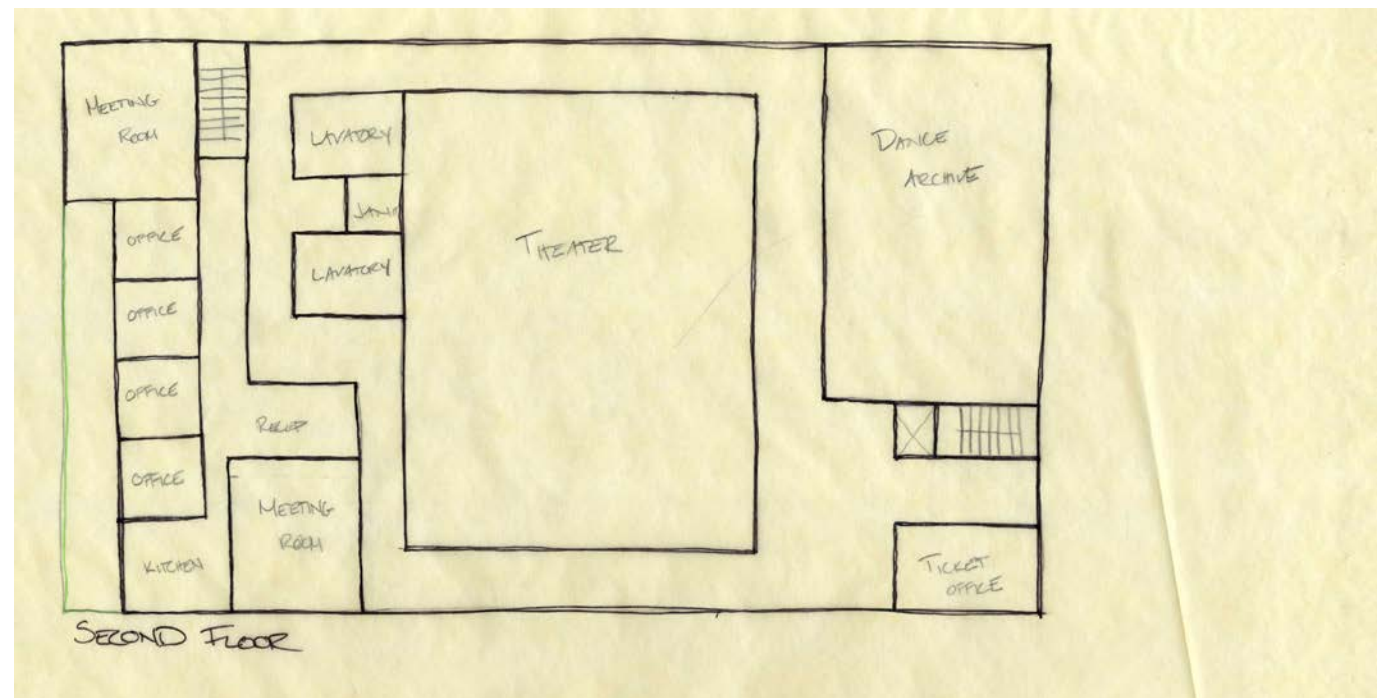
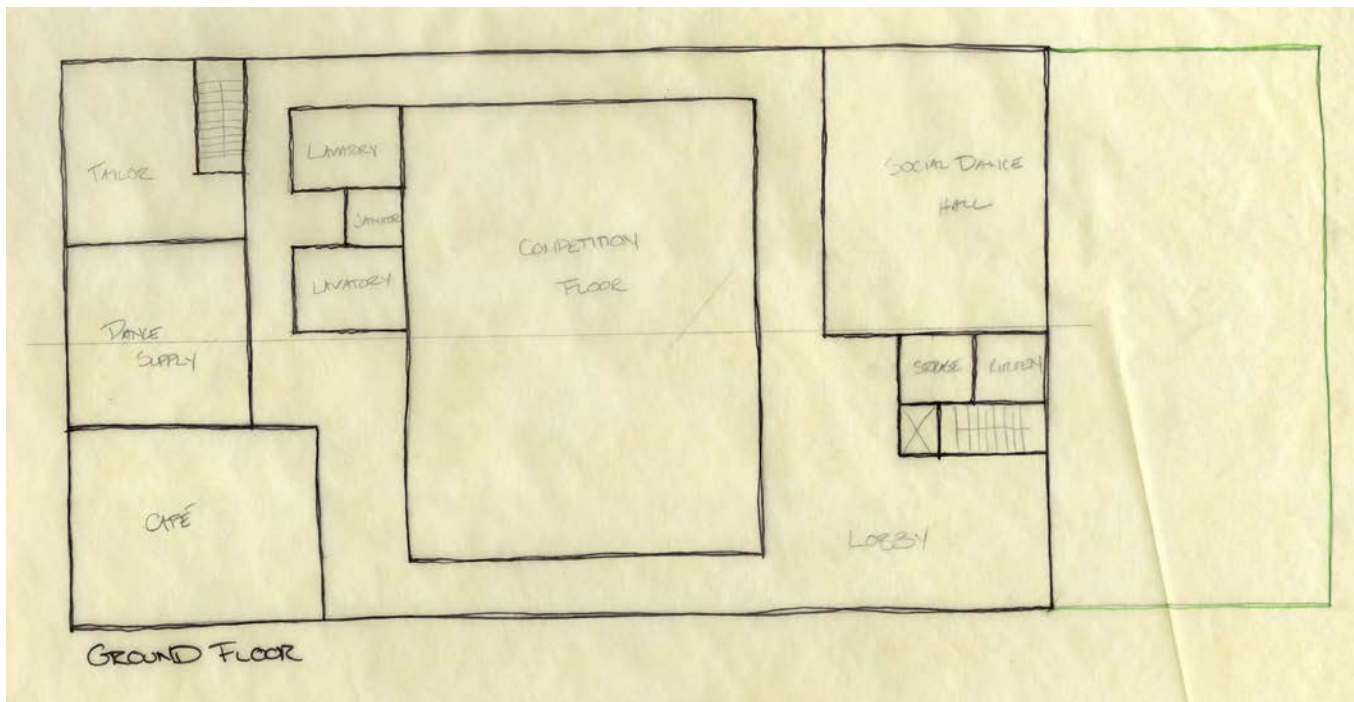


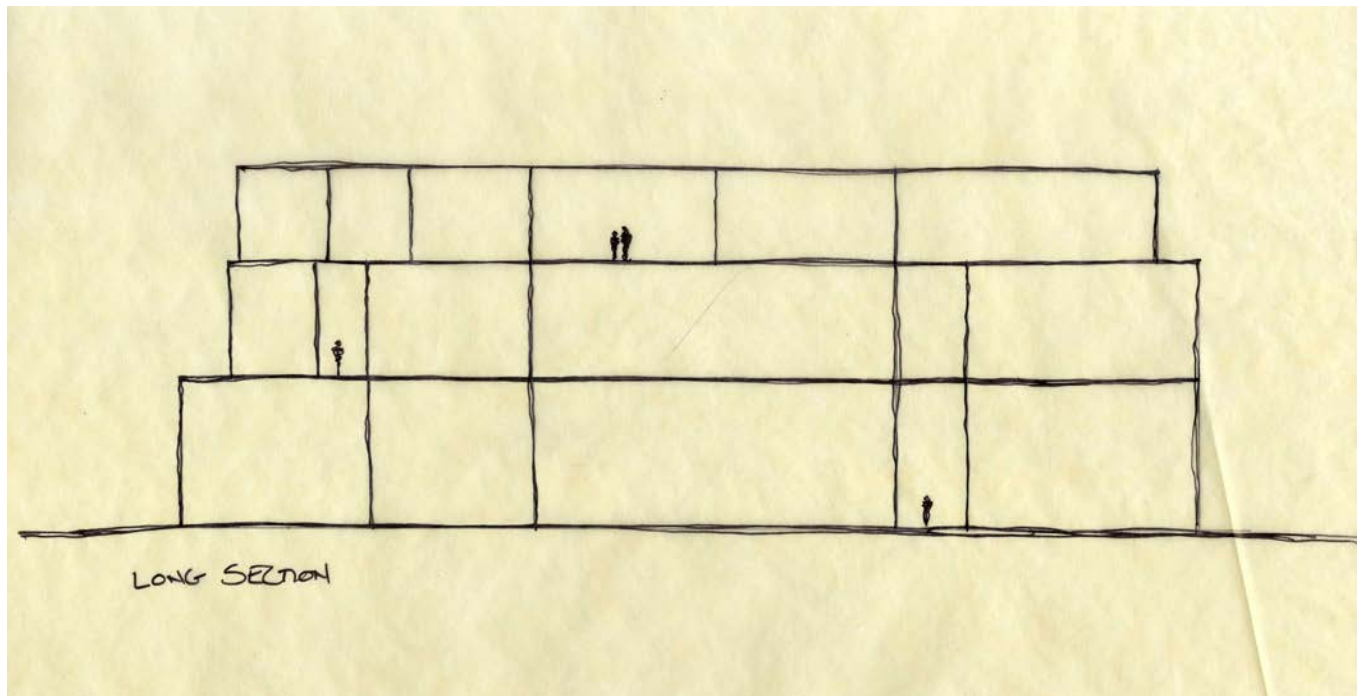
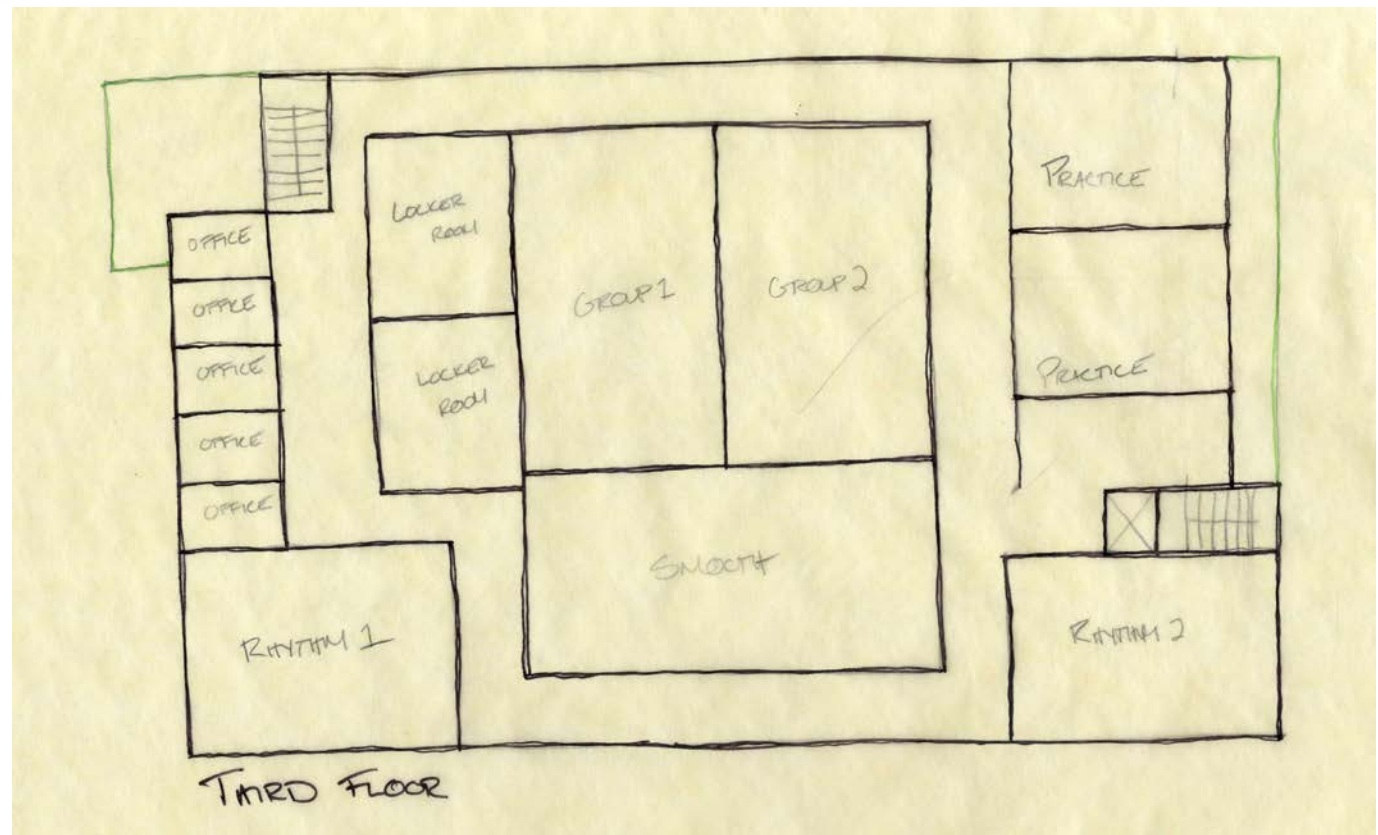
THIRD FLOOR

Design Options

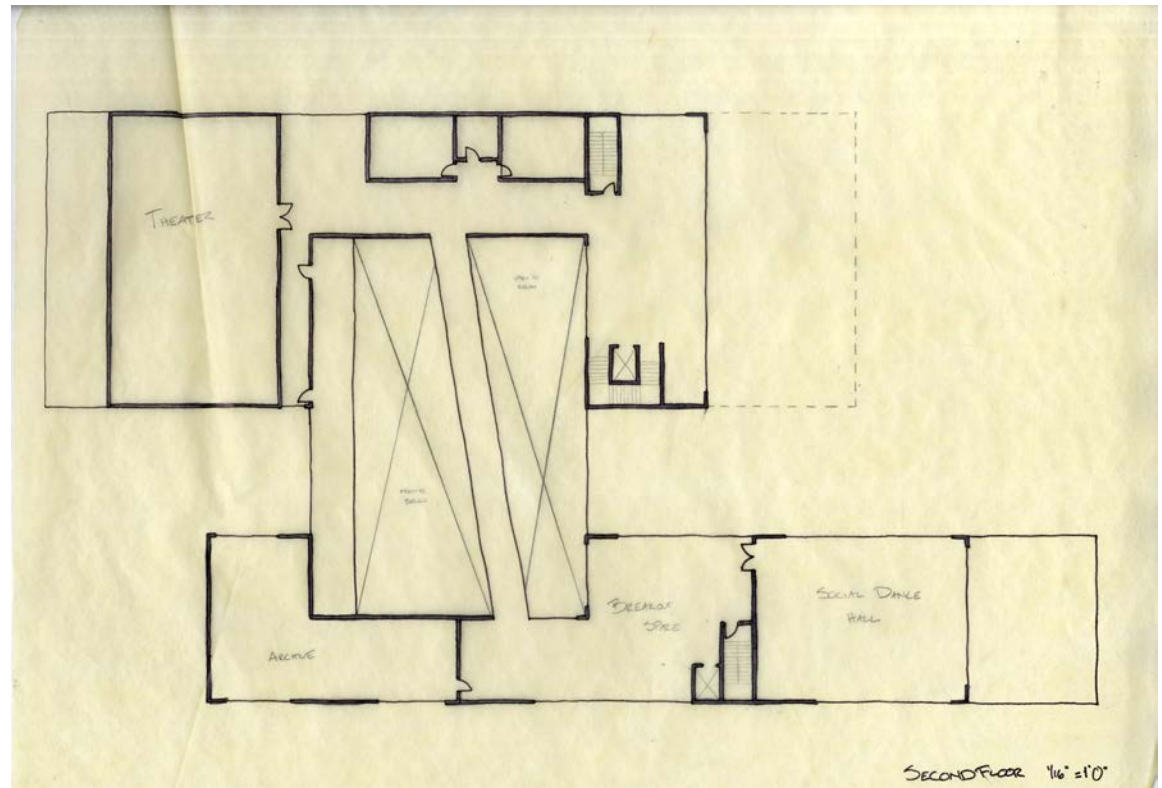
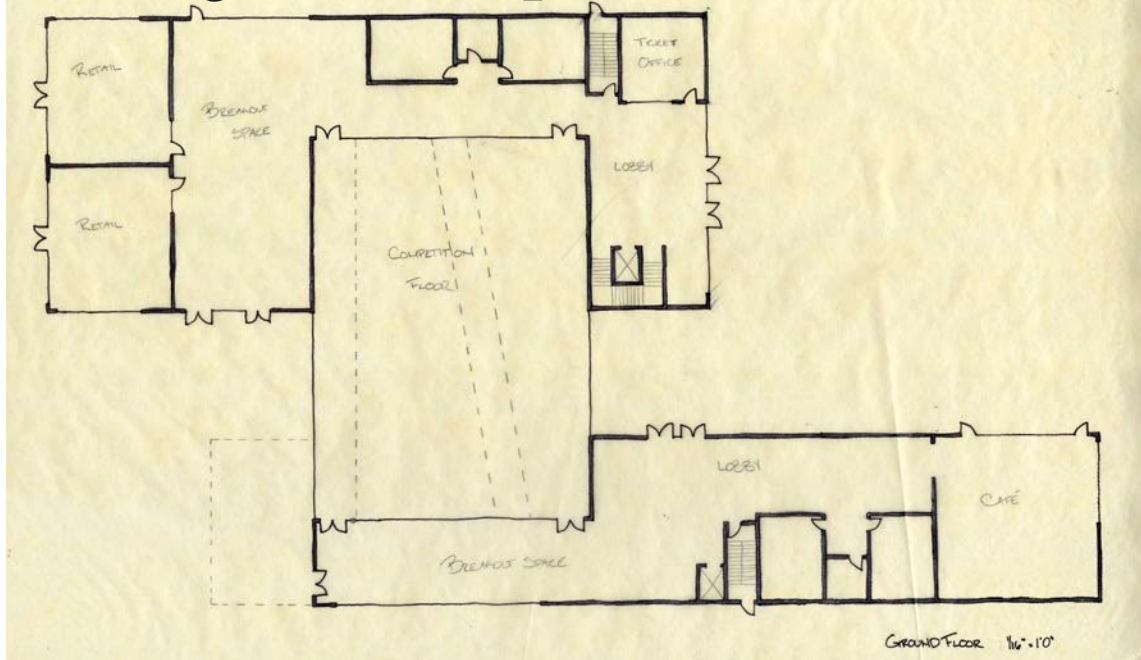


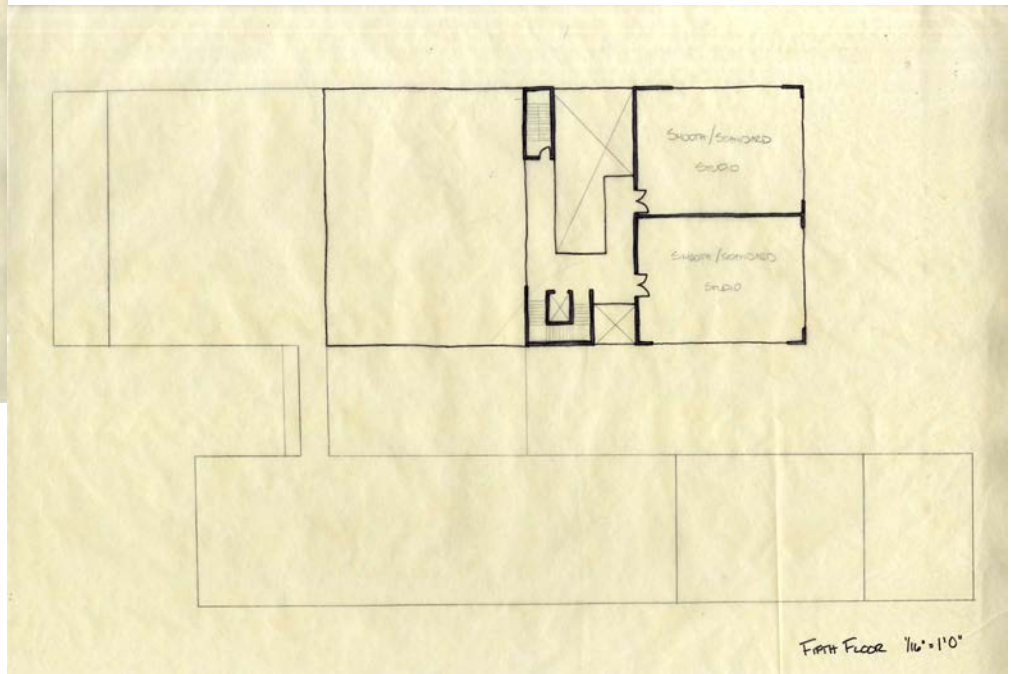
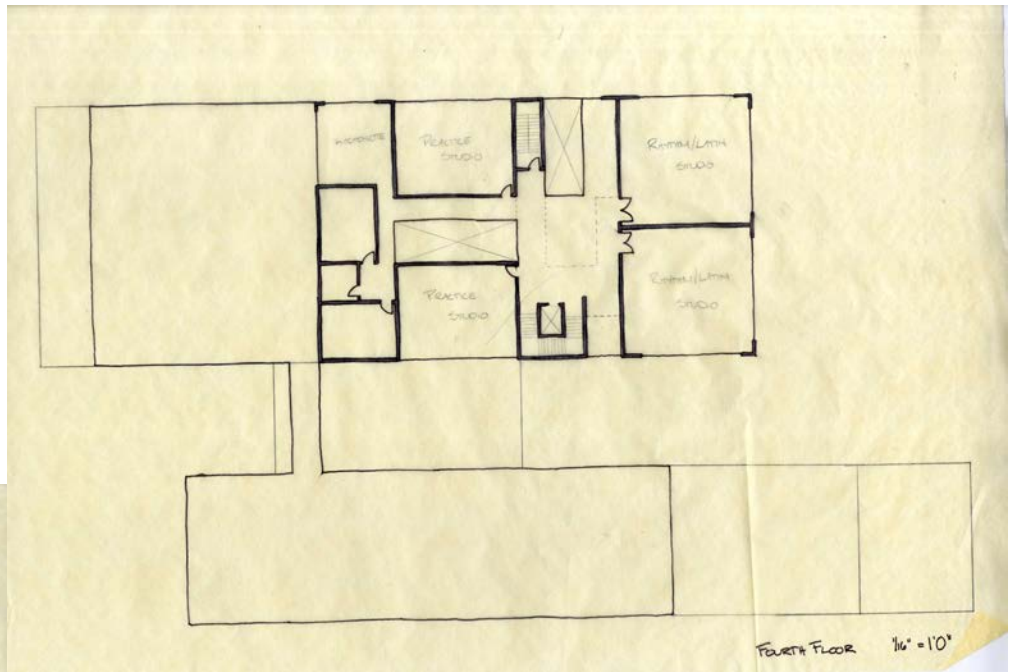
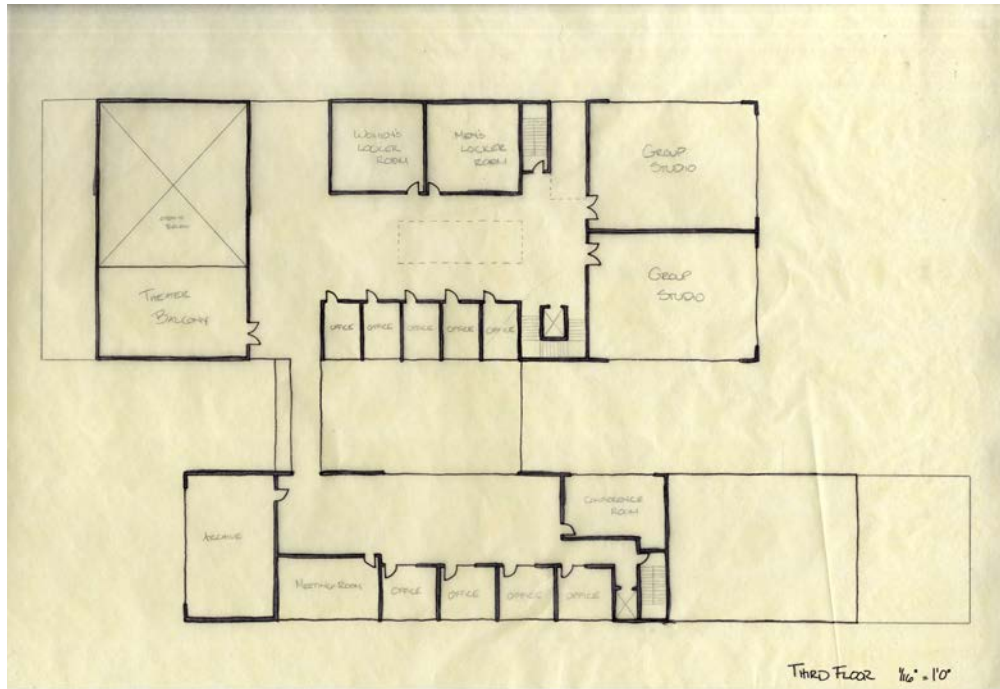


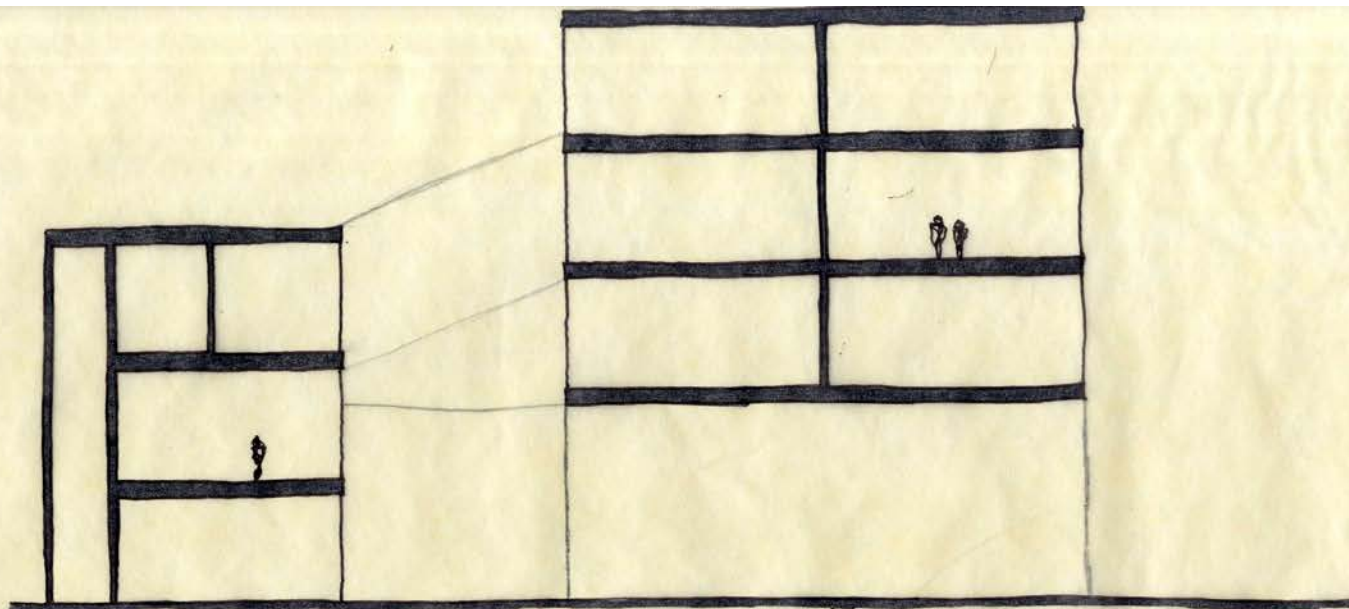




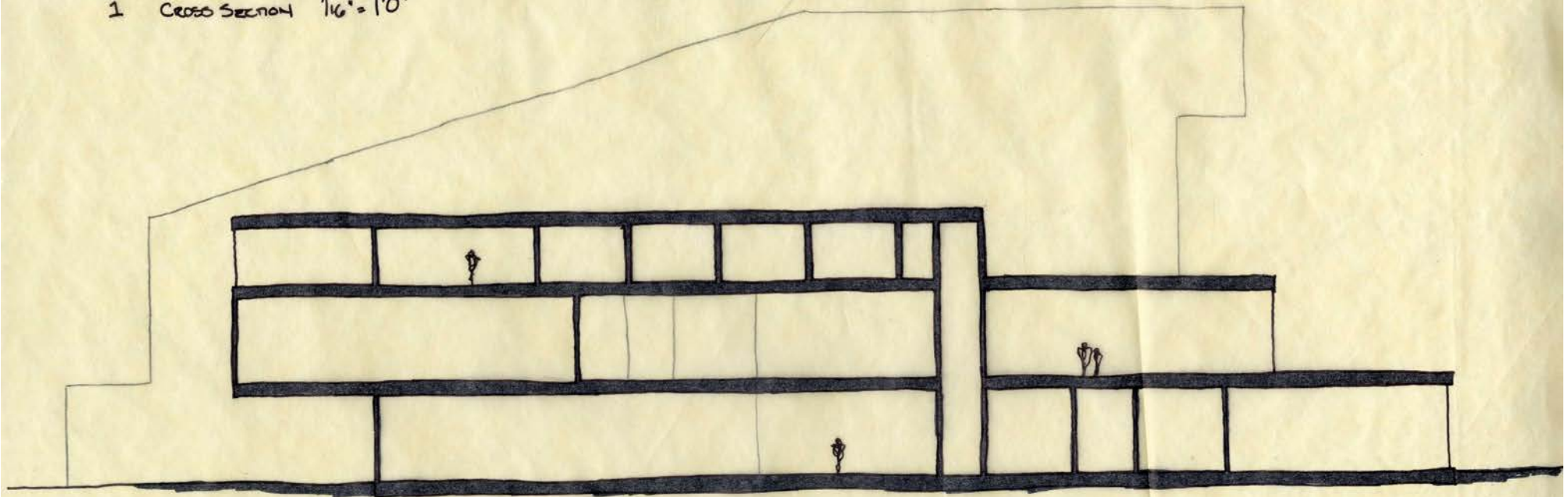
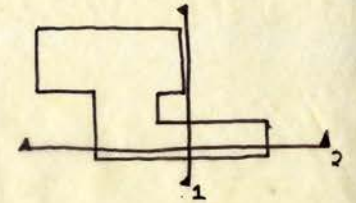
Design Development



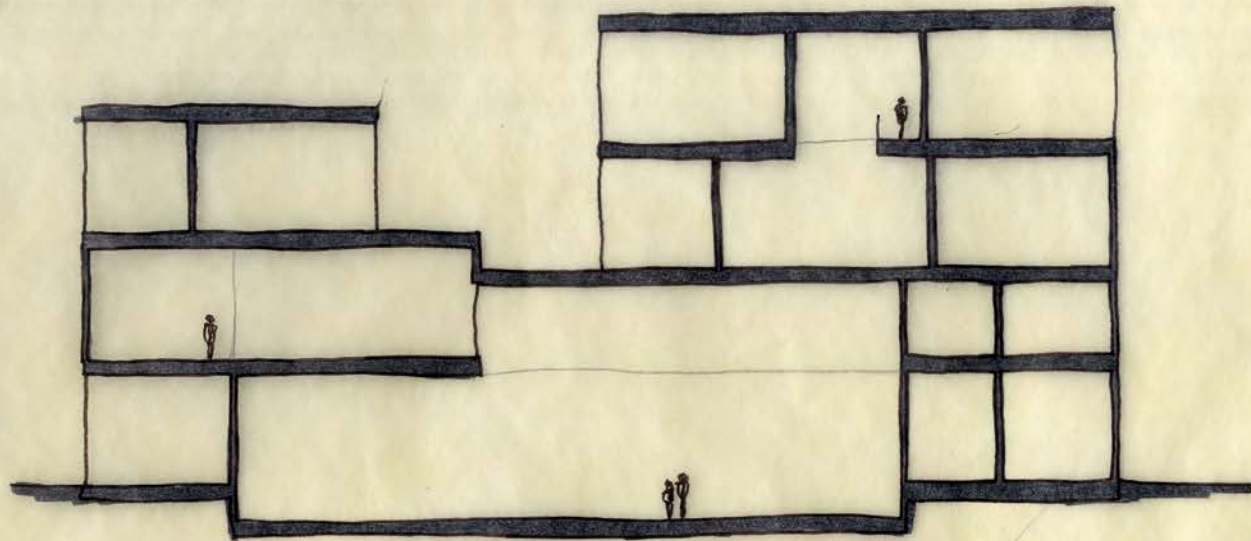




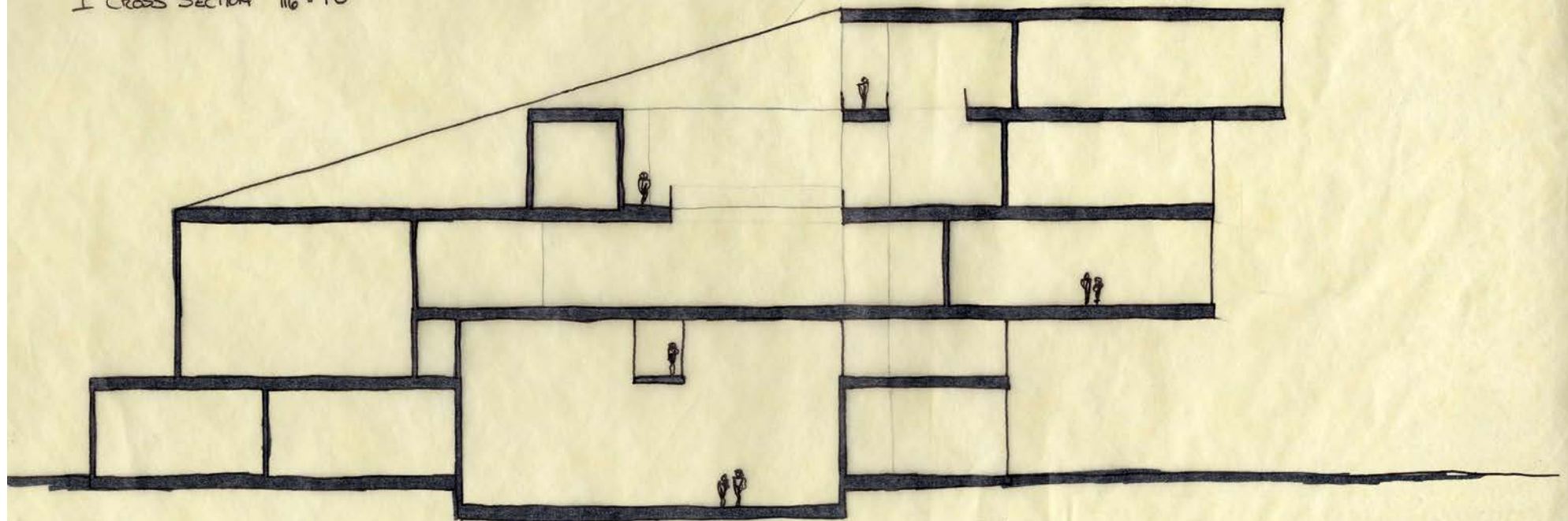
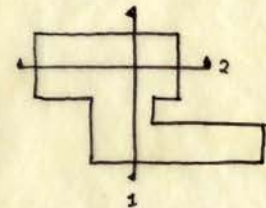
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2 LONG SECTION $\frac{1}{16}'' = 1'0''$

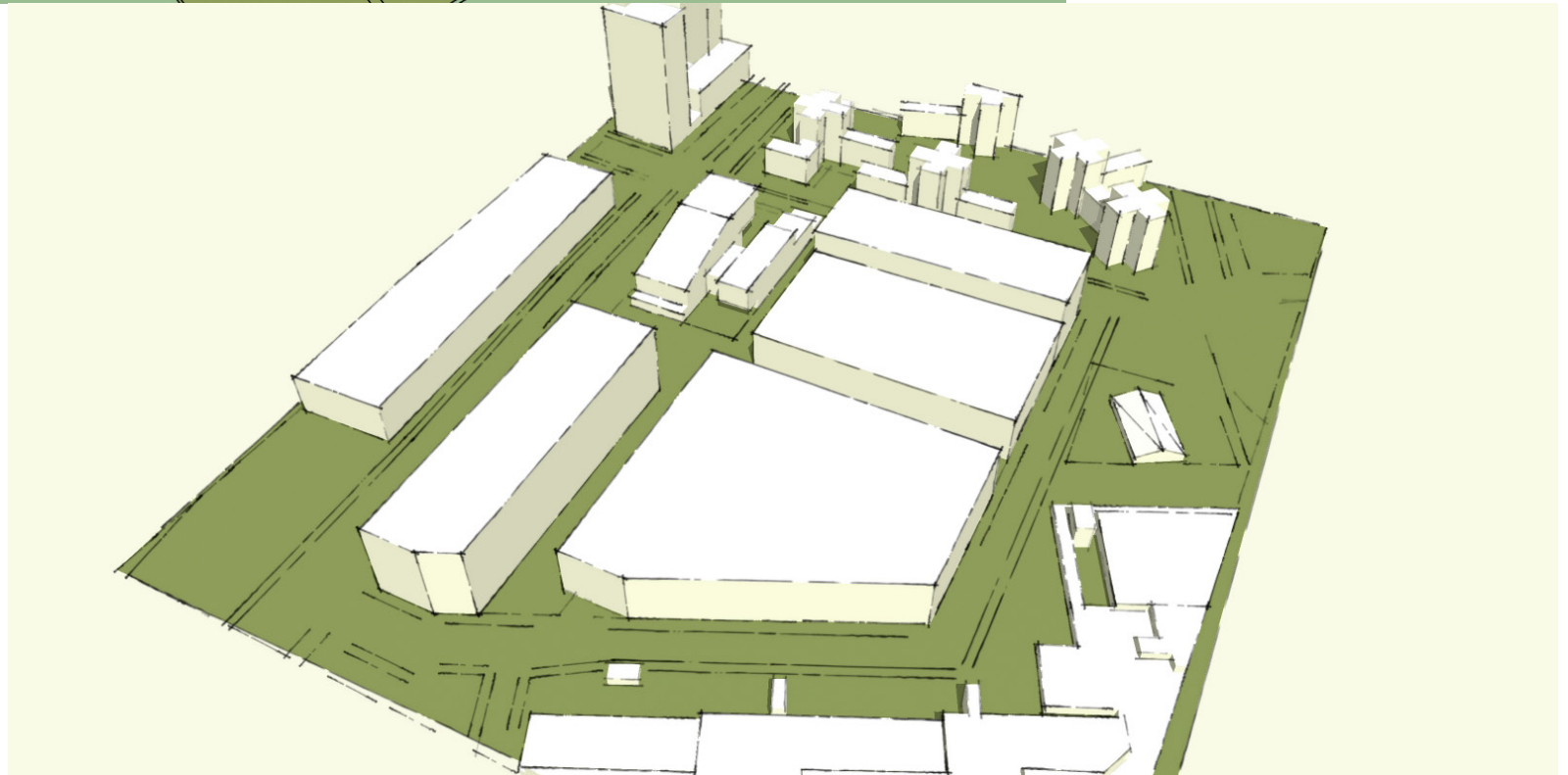
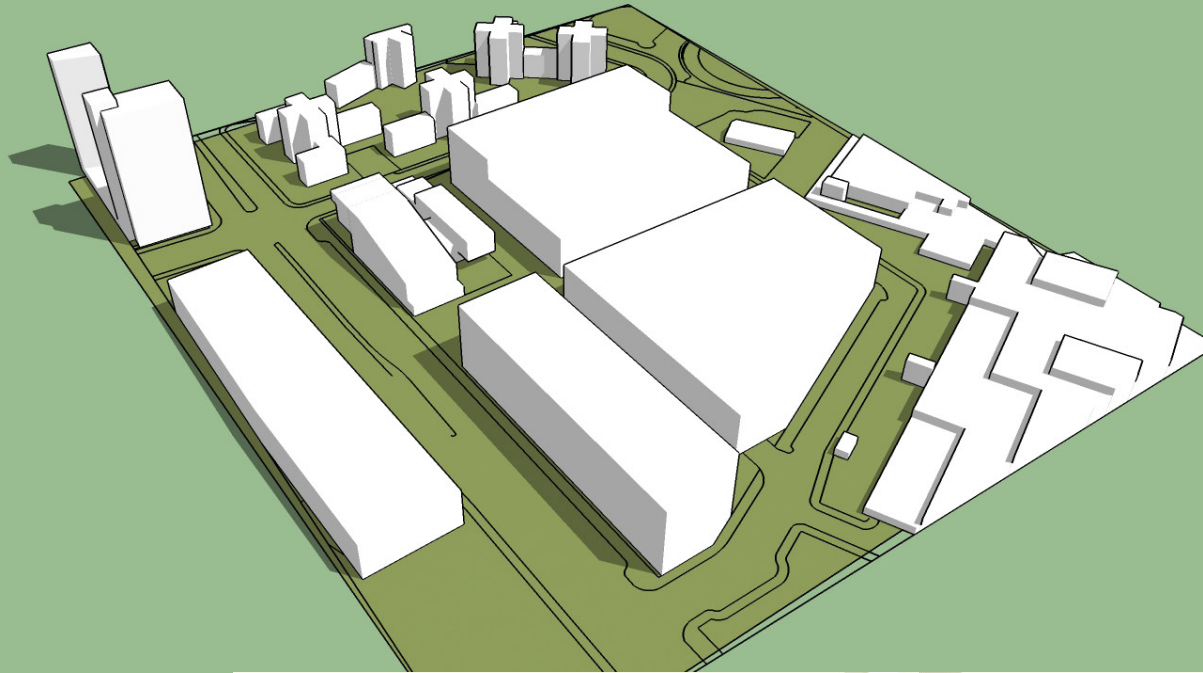


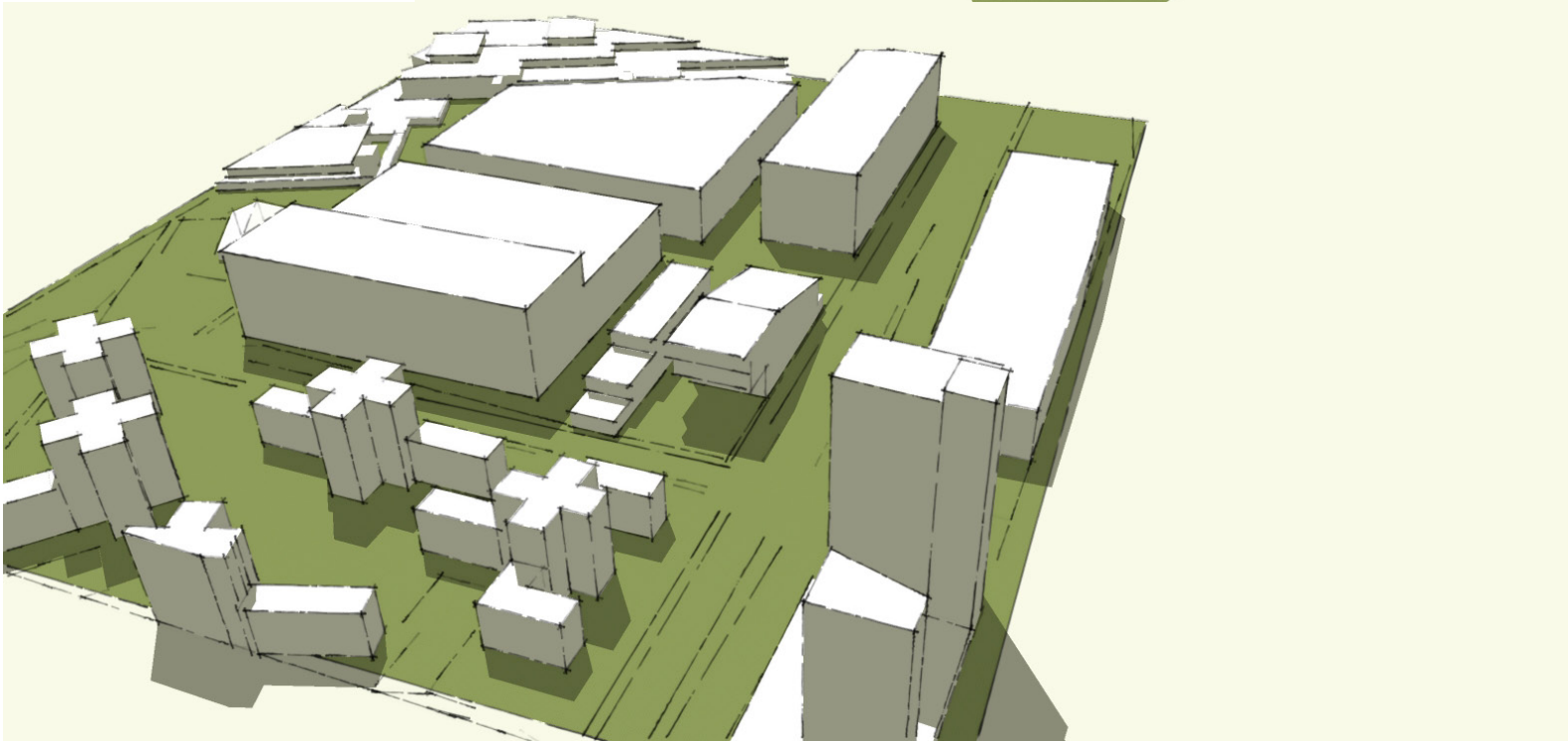
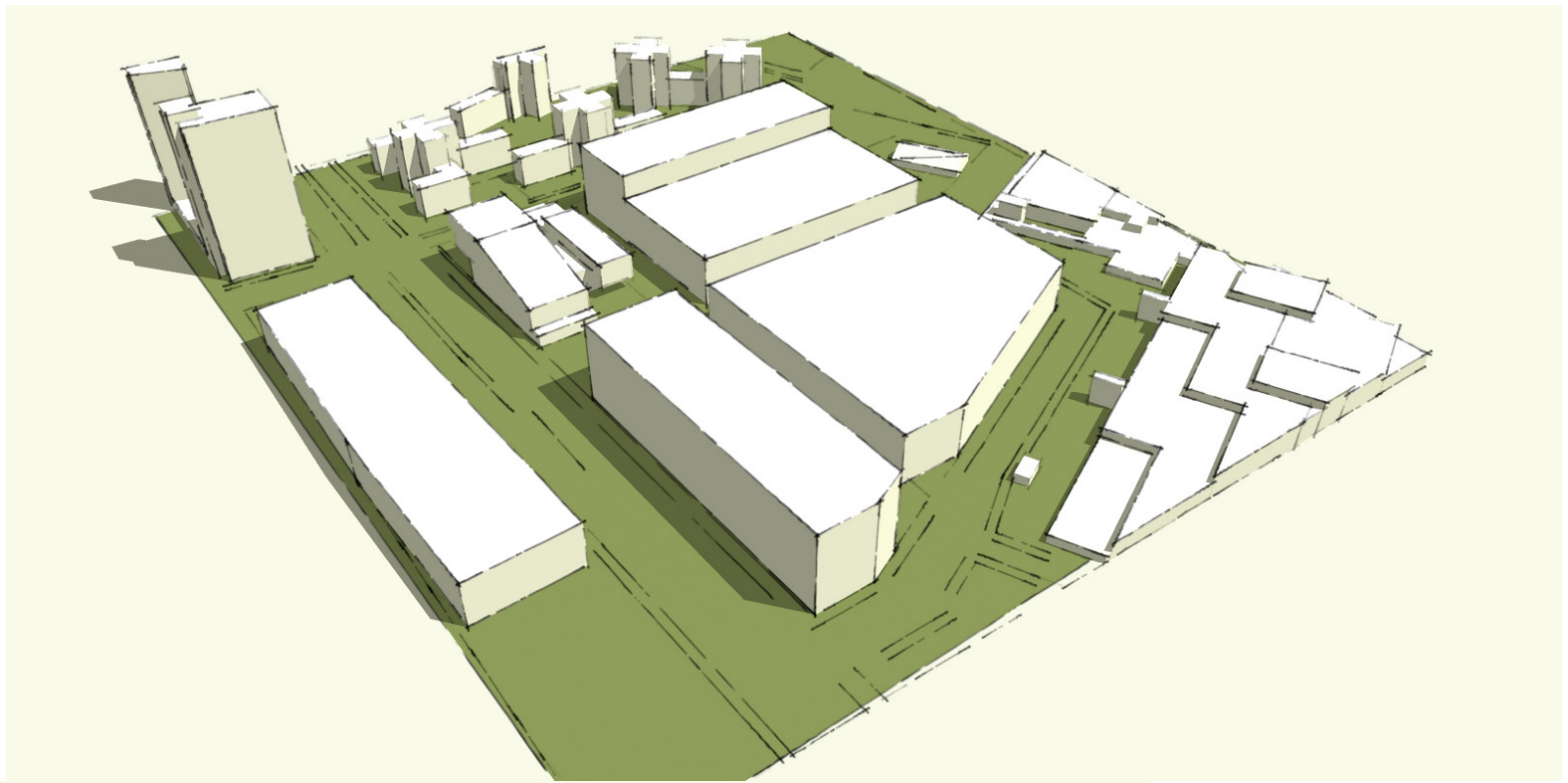
1 CROSS SECTION $\frac{1}{16}'' = 1'0''$

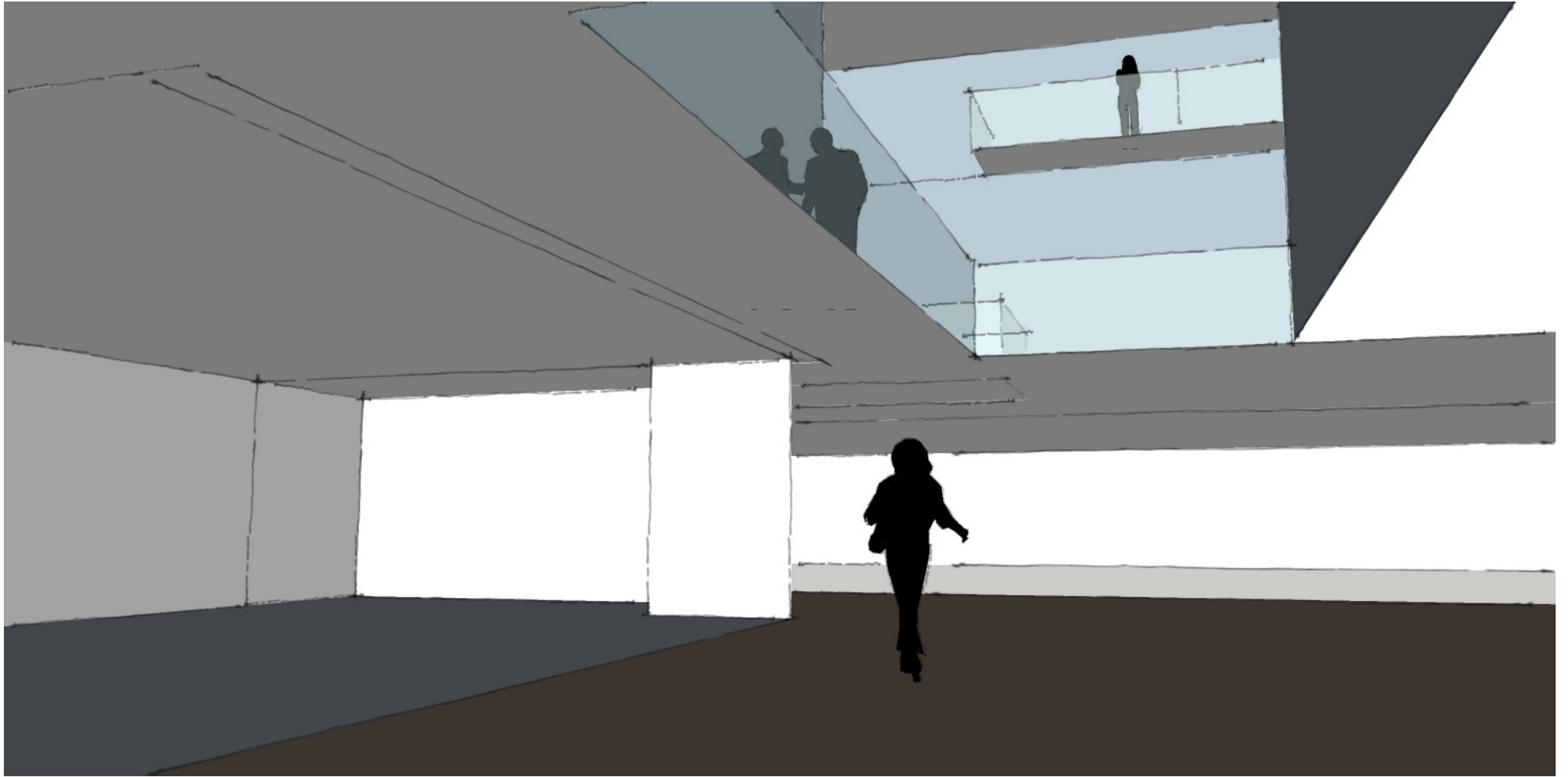


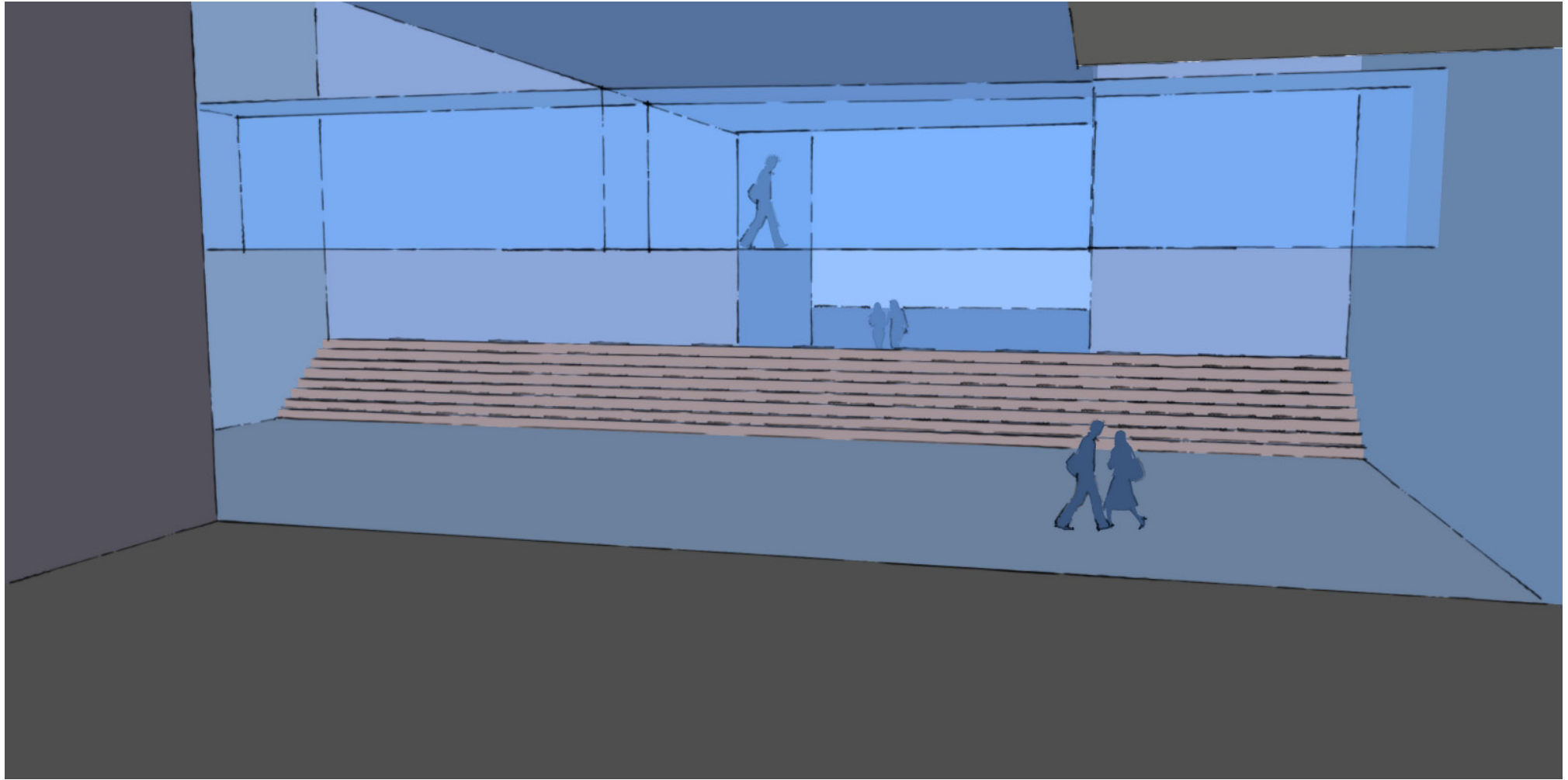
2 LONG SECTION $\frac{1}{16}'' = 1'0''$

Mid-Review









PROJECT STATEMENT:

Thanks to this rising demand for ballroom dance, more and more dance studios are opening, and older studios are expanding to accommodate higher numbers. Weekend social dances are more populated and need larger spaces to host dances. Even the competitive side of the sport has increased, with many of the growing collegiate dance competitions needing to not only find larger venues, but to split the competitions across two days in order to accommodate the vast number of dancers.

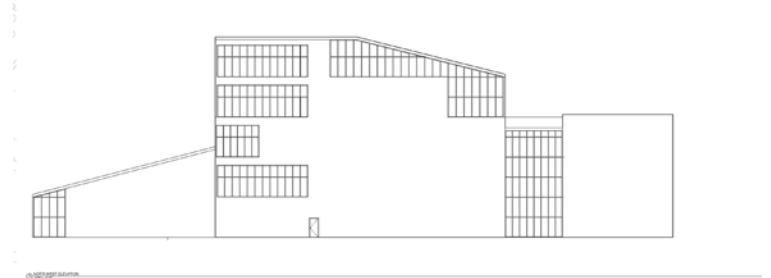
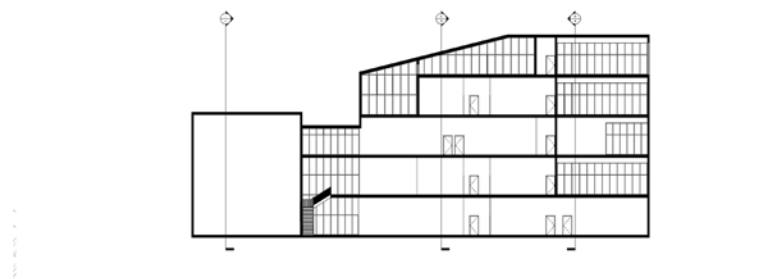
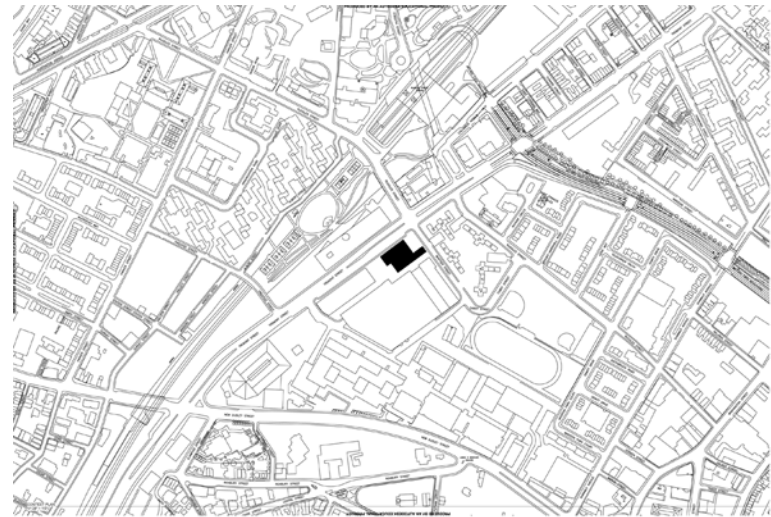
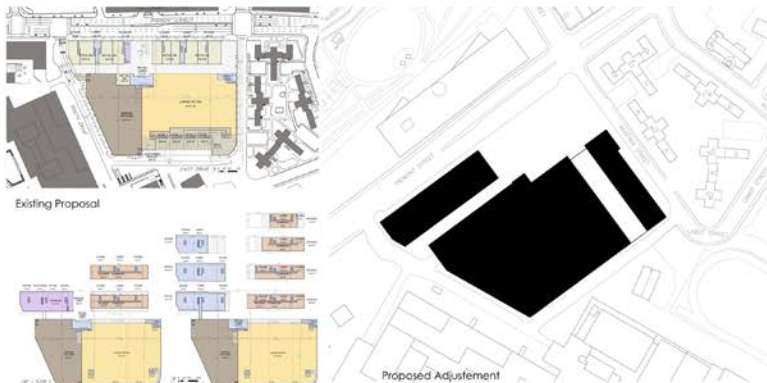
As it exists today, dance studios which teach ballroom dance are disjointed and wide spread. There are multiple different styles and most studios only function as individuals. There is an opportunity for a greater community to be developed for ballroom dance which will join all styles together and create a richer experience for dancers.

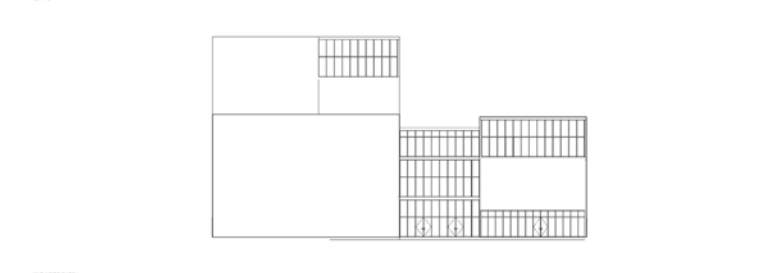
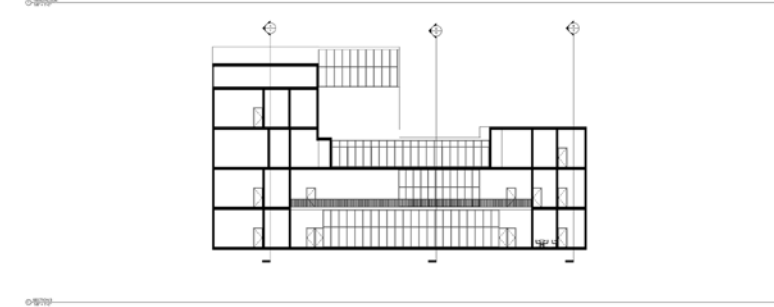
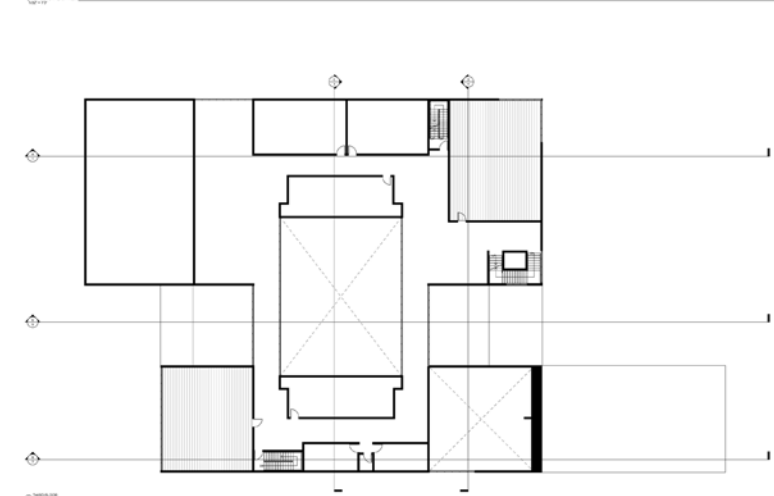
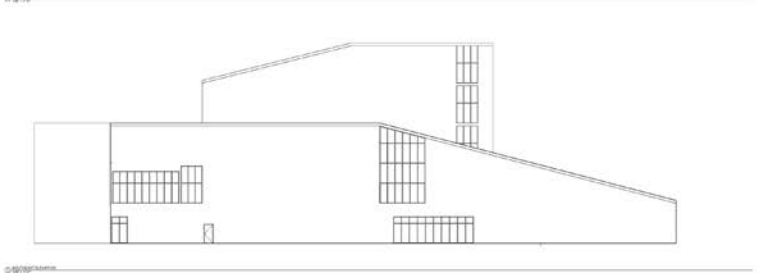
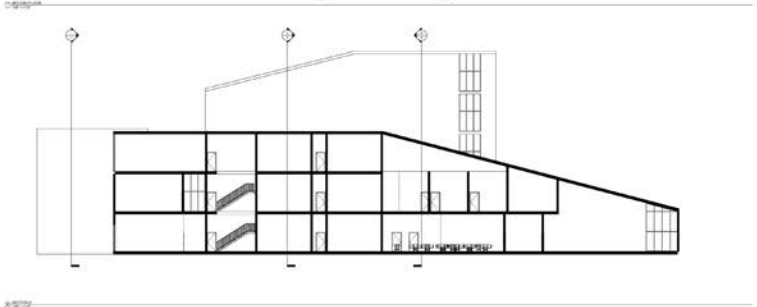
By providing a headquarters for the national ballroom dance organization in the United States, this project will provide a practice, performance, and interaction space for all levels of dancers. Furthermore, this building can also provide a social space both inside and out not only for the dancers who use the building, but for the local residents.

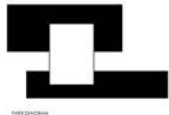
NARRATIVE:

The overarching concept for this building is to give it a sense of movement. To achieve this, the building was divided into two bars which are then joined by a central public space. In form, the bars stretch up and away from one another while the central space acts as a void in the center, connecting the spaces while providing visual separation. This division of the building form allows for different functions to inhabit the two bars. The ground floor houses access to all the fully public spaces within the building. The Northwestern bar, which is wider and shorter, houses the dance studio spaces for lessons; the Southeastern bar houses the administrative spaces.

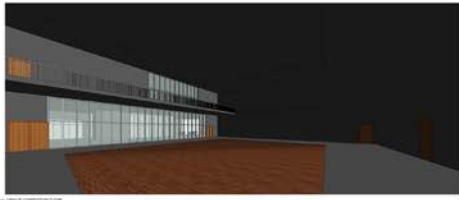
As a primarily public building, there are many sequences through the building. Since there are many users of this building as well as many different events to account for, the sequences are not strictly forced, but rather vary with the individual user. In order to enforce the parti, it is important that my scheme be recognizable as the two linear bars with a central space. My building is surrounded by outdoor public spaces. To the South there is a large public space which belongs to the shopping complex; to the North there is a public space specifically for the entrance of my building. These outdoor public areas help to define my building and its reaction to the surrounding environment.



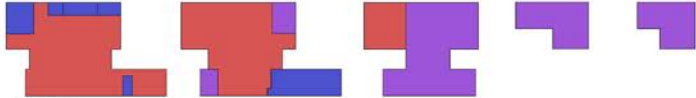




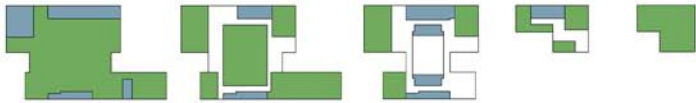
PLAN CONCEPT



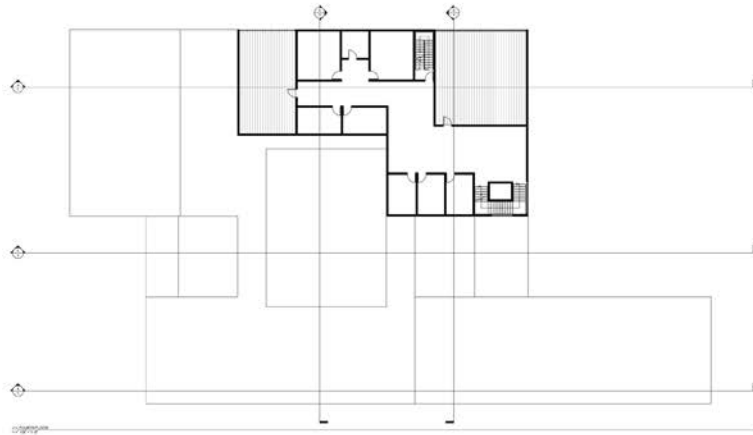
© JESSICA LARSEN ARCHITECTS



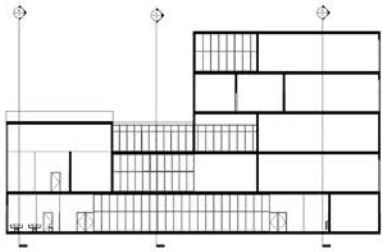
PUBLIC ZONE / PUBLIC PORCH



INTERNAL ZONE



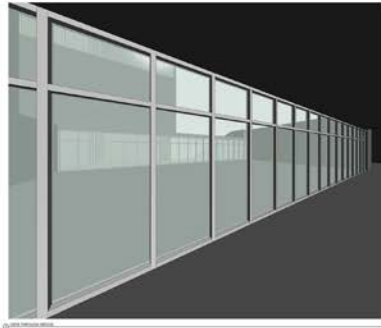
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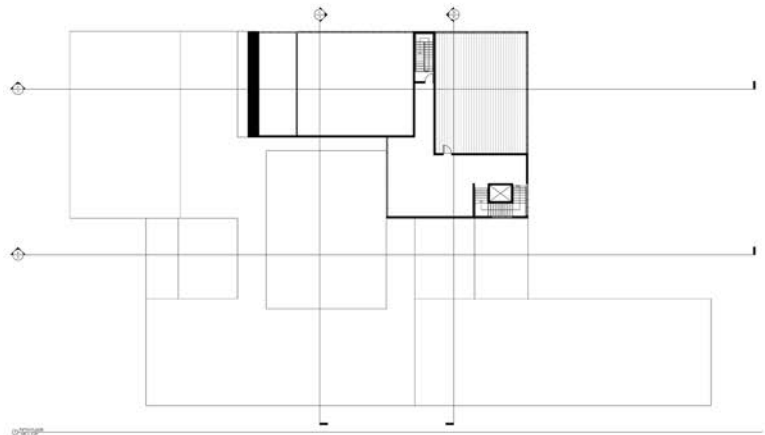
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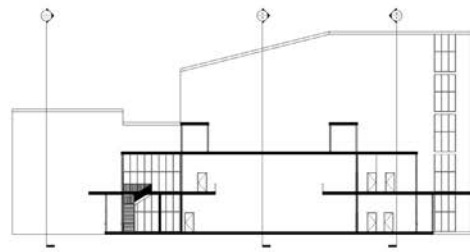
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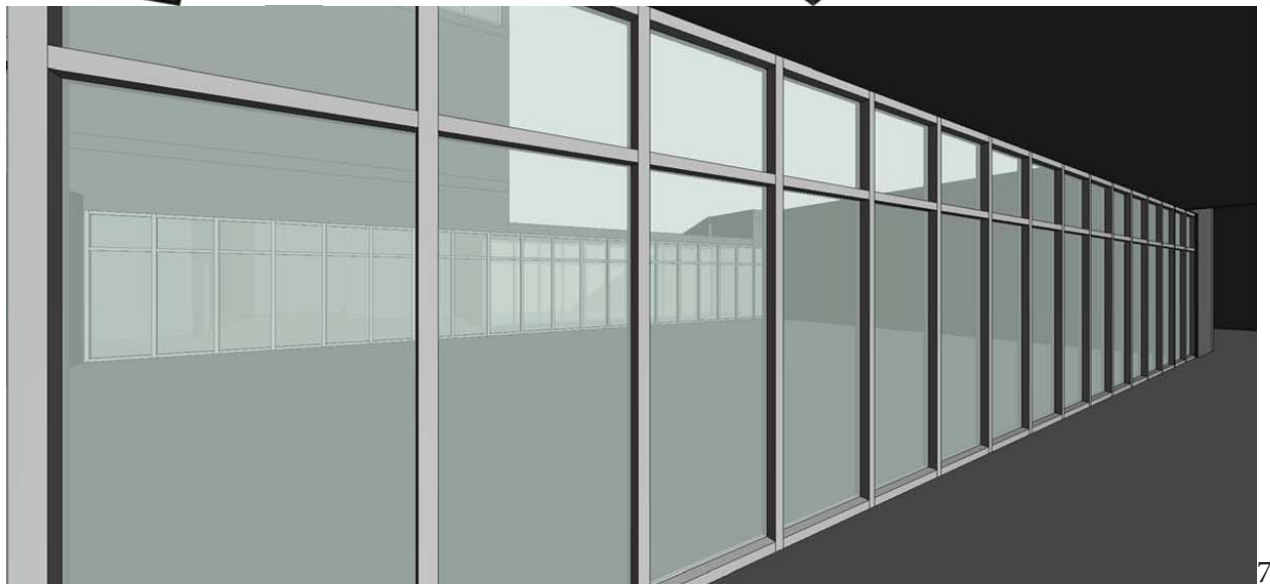
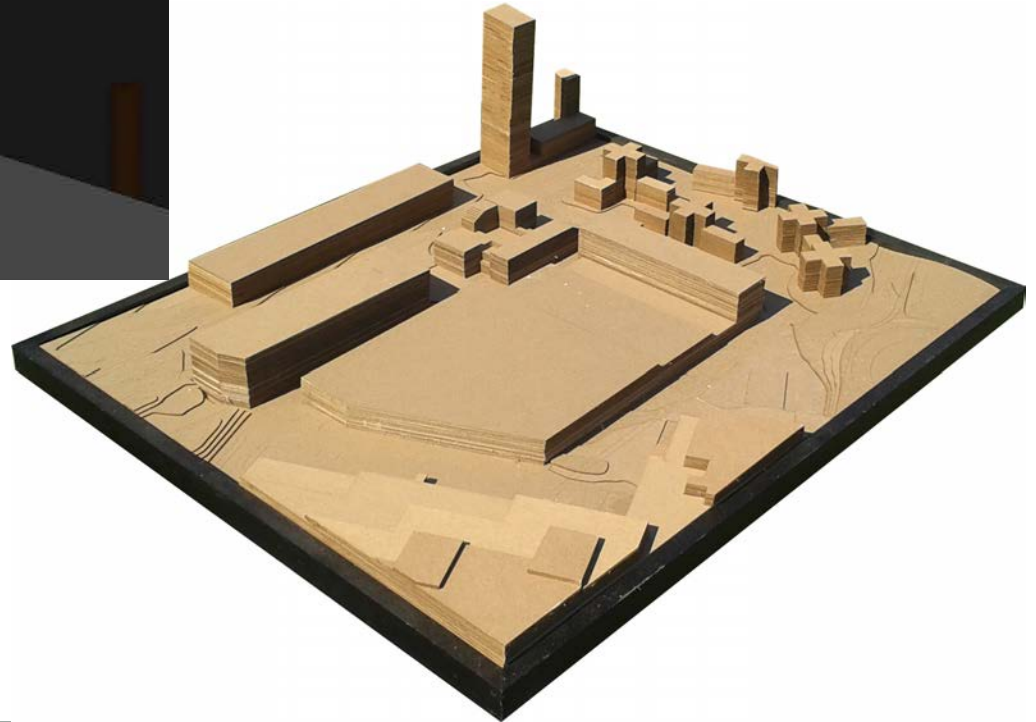
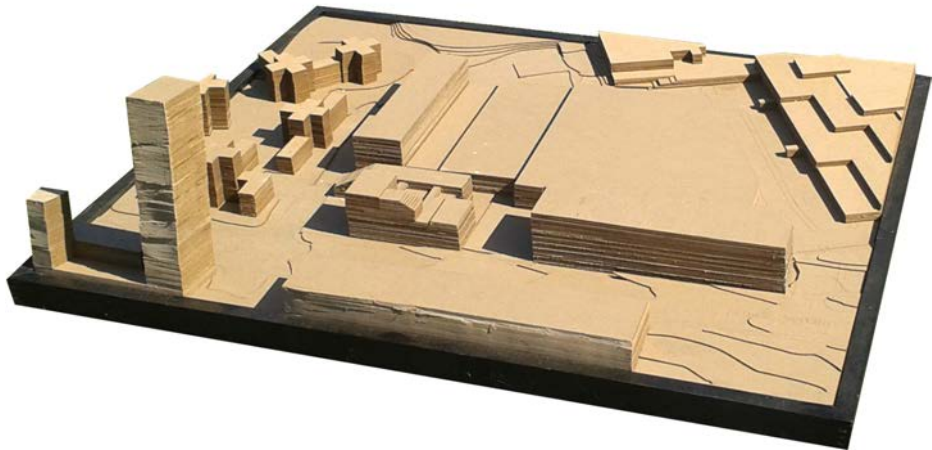
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Final Review

An Architecture of Movement

Project Statement: Thanks to the rising demand for ballroom dance, more and more dance studios are opening and older studios are expanding to accommodate higher numbers. Weekend social dancers are more plentiful and need larger spaces to host dances. Even the competitive side of the sport has increased, with many of the growing collegiate dance competitions needing to not only find larger venues, but to split the competitions across two days in order to accommodate the vast number of dancers. At 4 local ballroom dance studios which teach ballroom dance are identified and under demand. There are multiple different styles and most studios only function as individual. There is an opportunity for a greater community to be developed for ballroom dance which will join all styles together and create a richer experience. By providing a headquarters for Ballroom Dance, the national ballroom dance organization in the United States, this project will provide a practice, performance, and interaction space for all levels of dancers. Furthermore, this building can also provide a social space both inside and out not only for the dancers, but for the local residents.



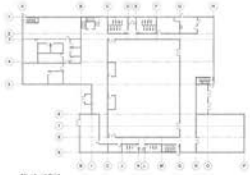
Competition Hall from Balcony



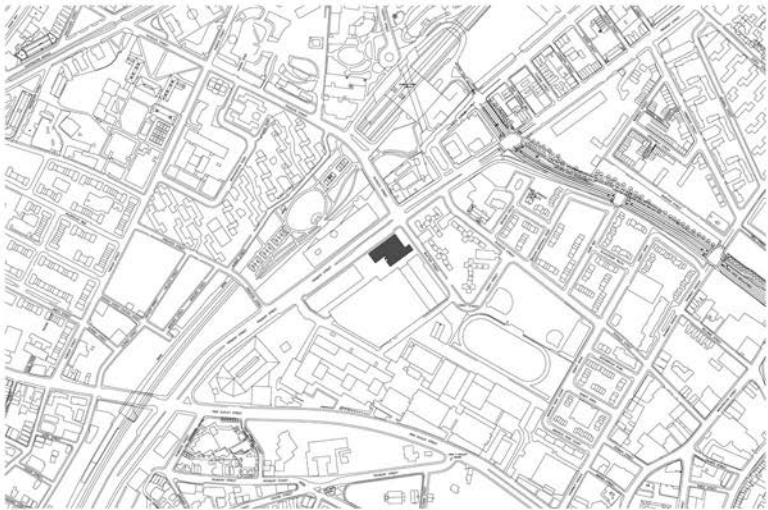
View up in Dance Hall



Plot Diagram



Structural Grid

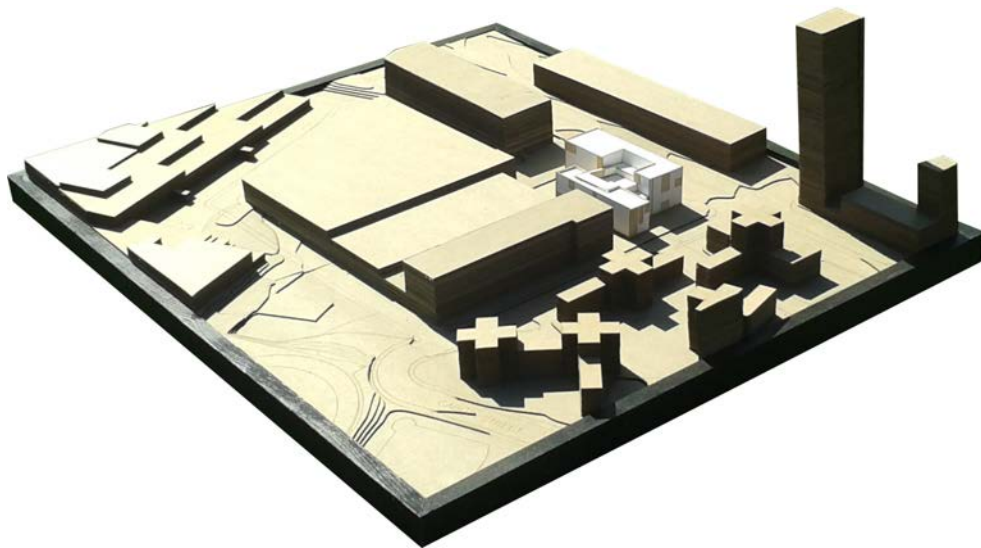
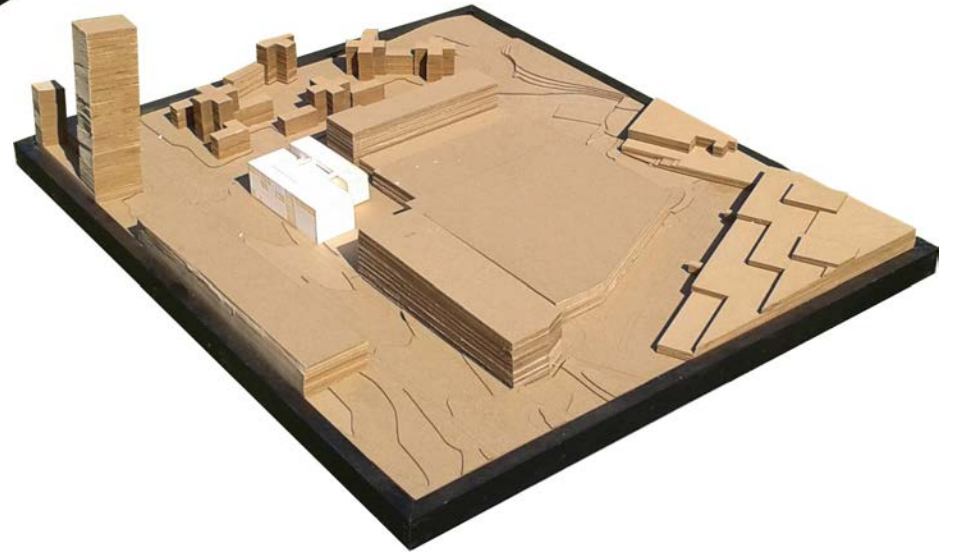
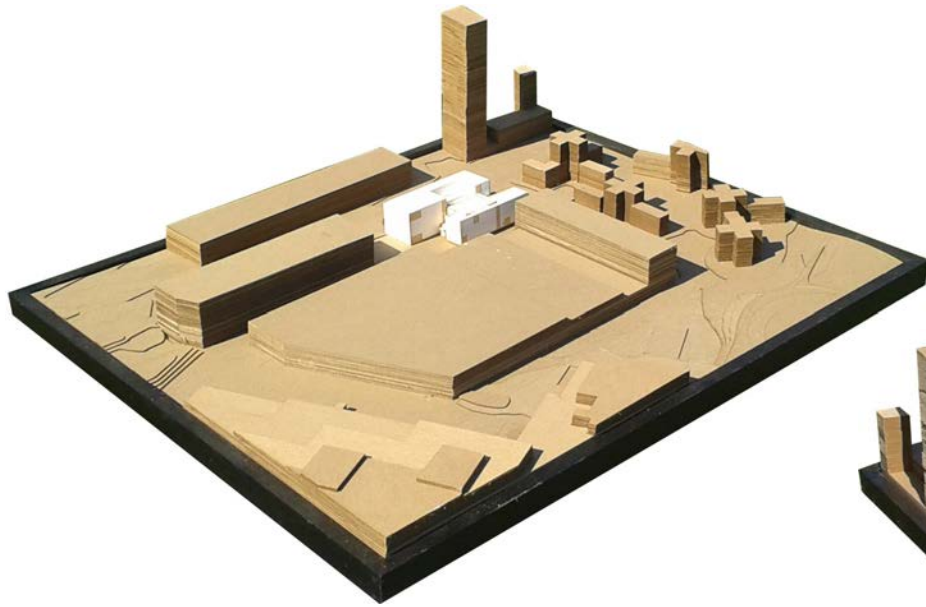


1:1000' = 1" = 30'

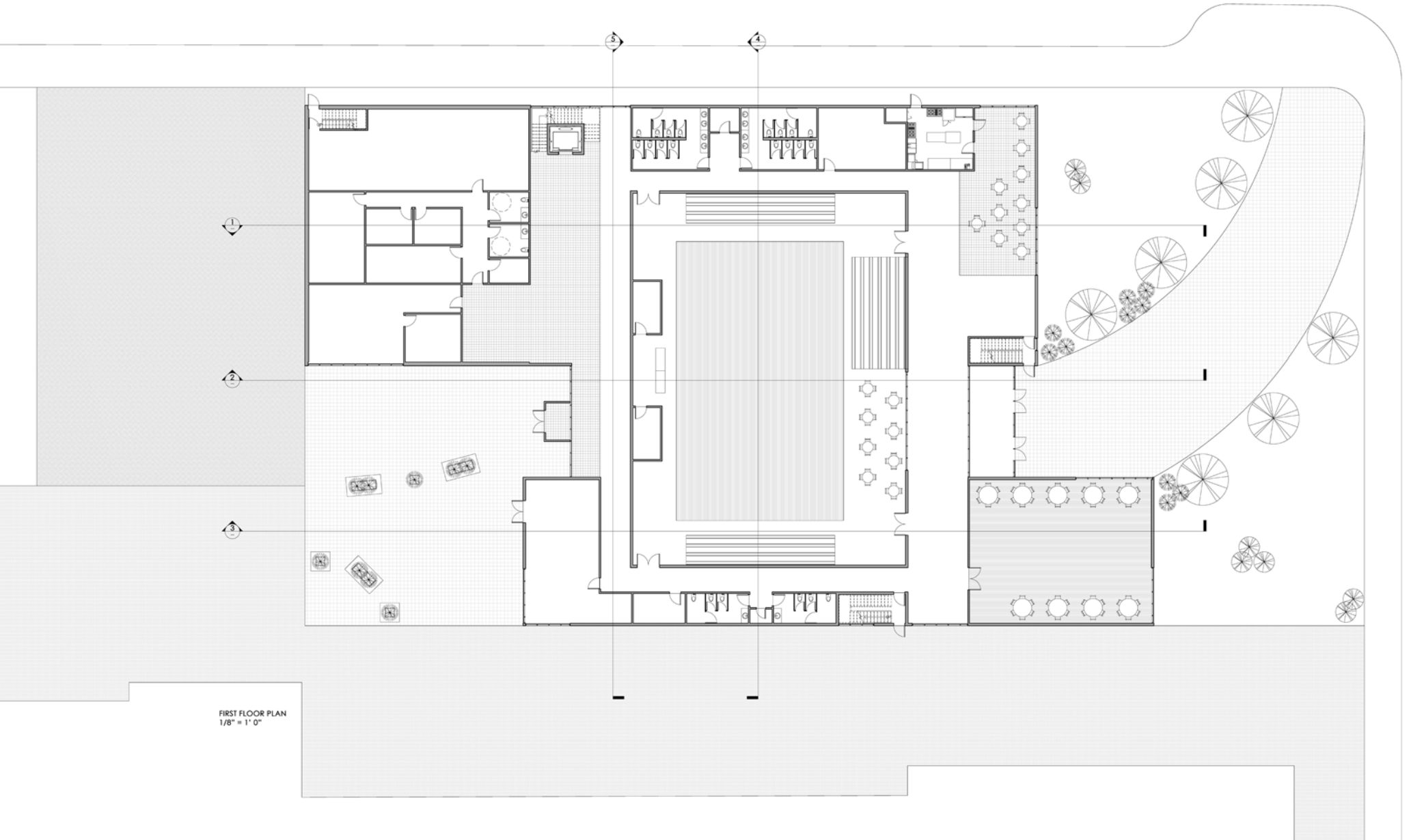


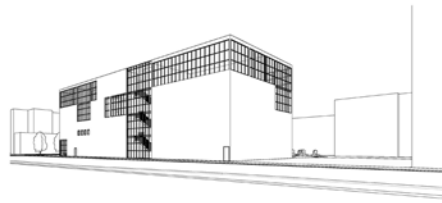
1:100' = 1" = 30'





FIRST FLOOR PLAN
1/8" = 1' 0"





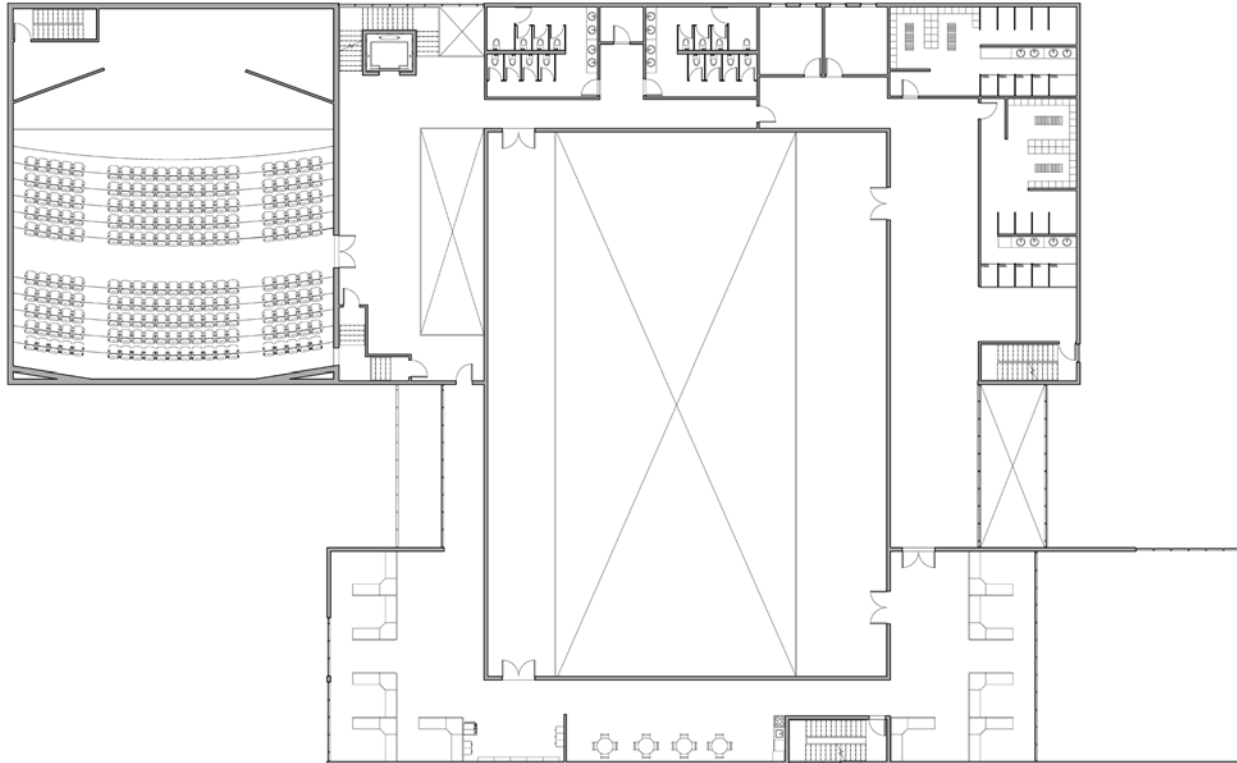
View from Tremont Street



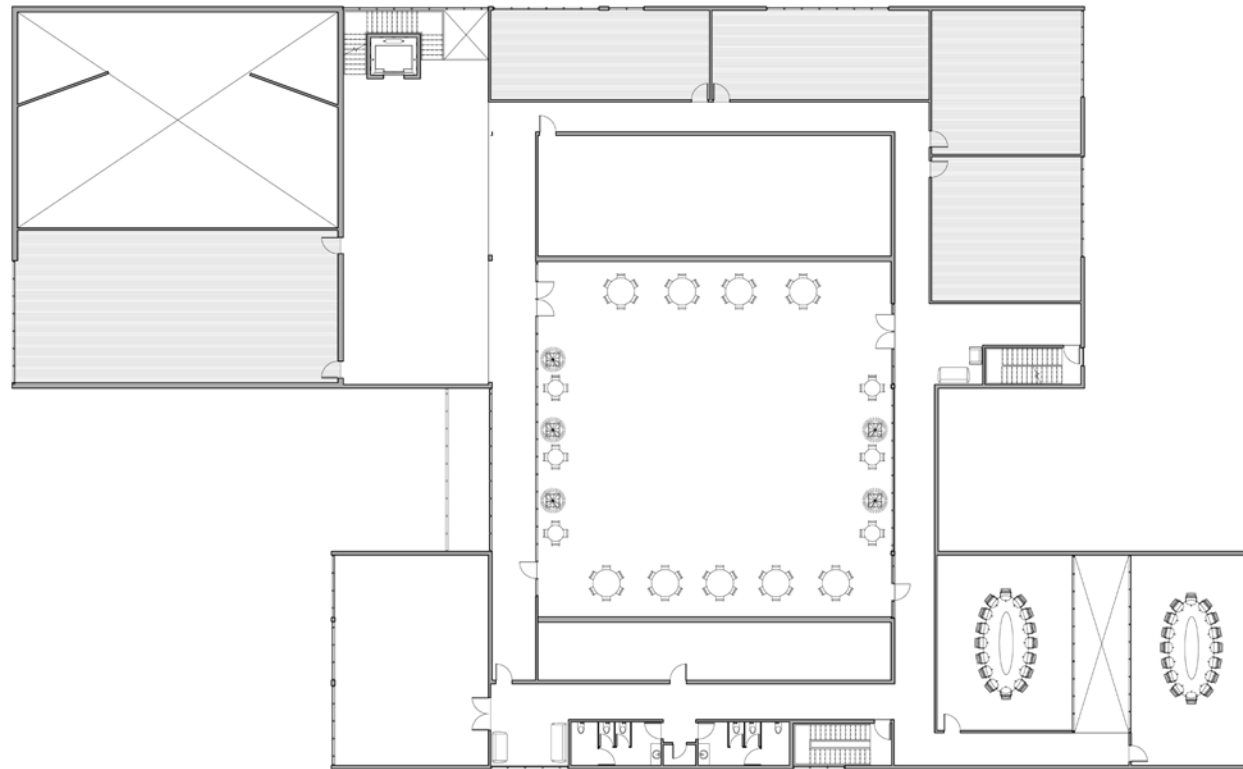
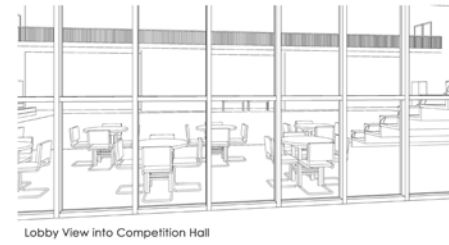
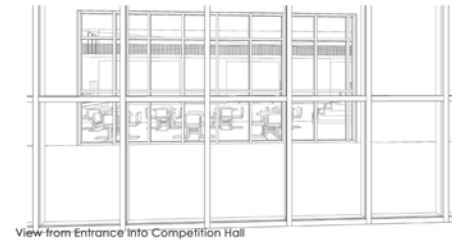
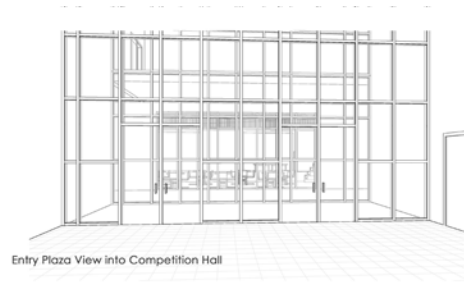
View from Ruggles Street

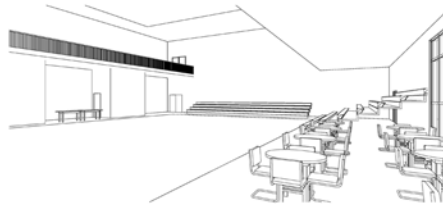


View from Whittier Street



SECOND FLOOR PLAN
1/8" = 1' 0"





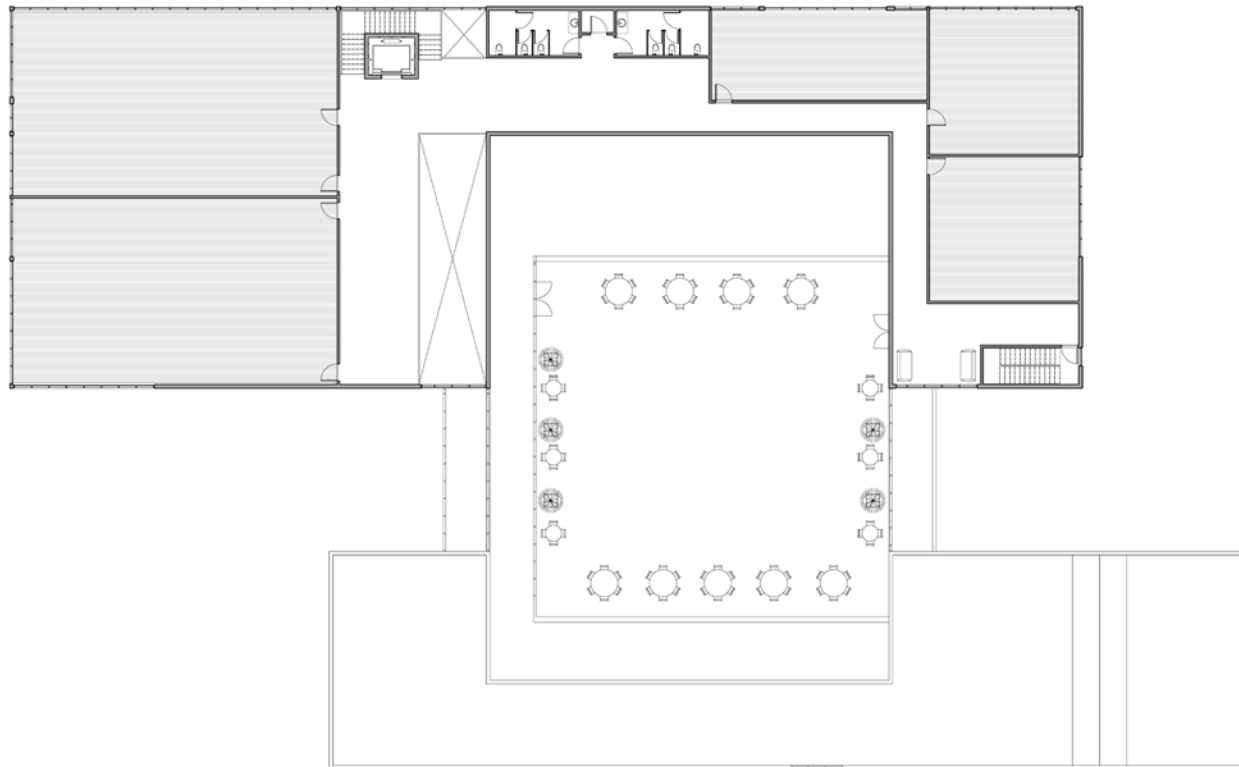
Competition Hall



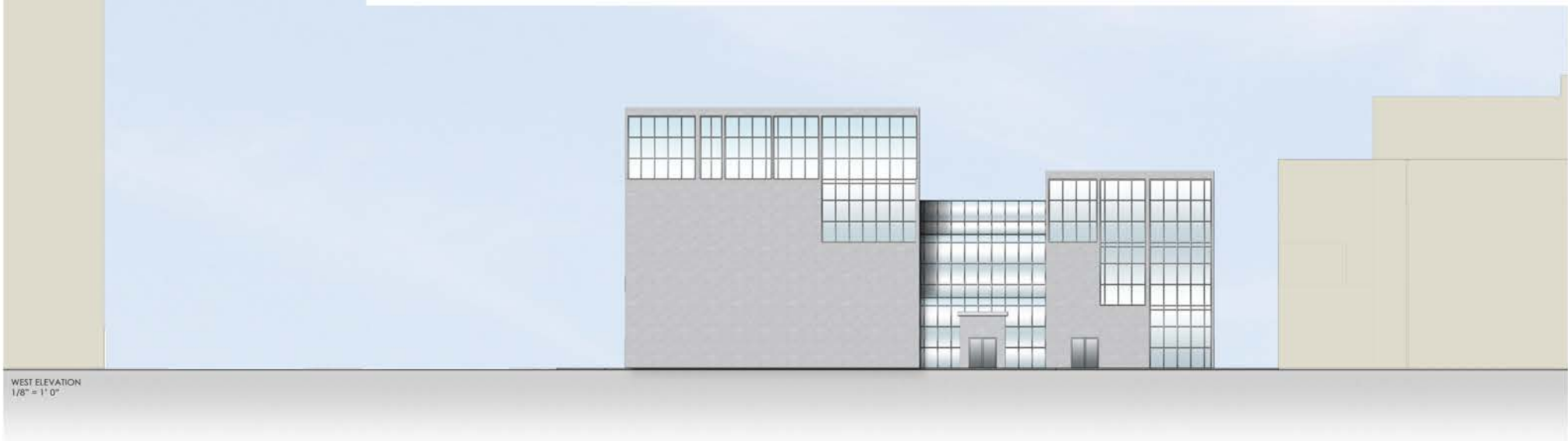
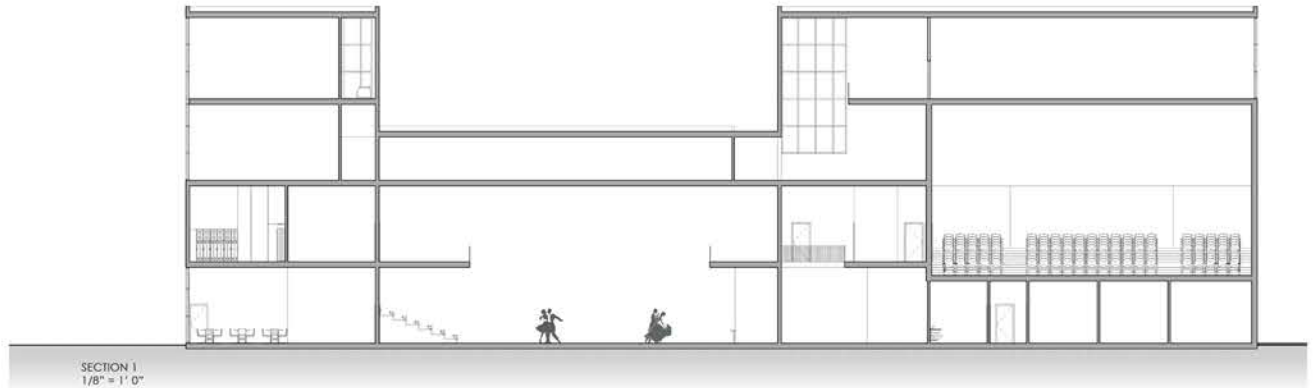
Social Dance Hall

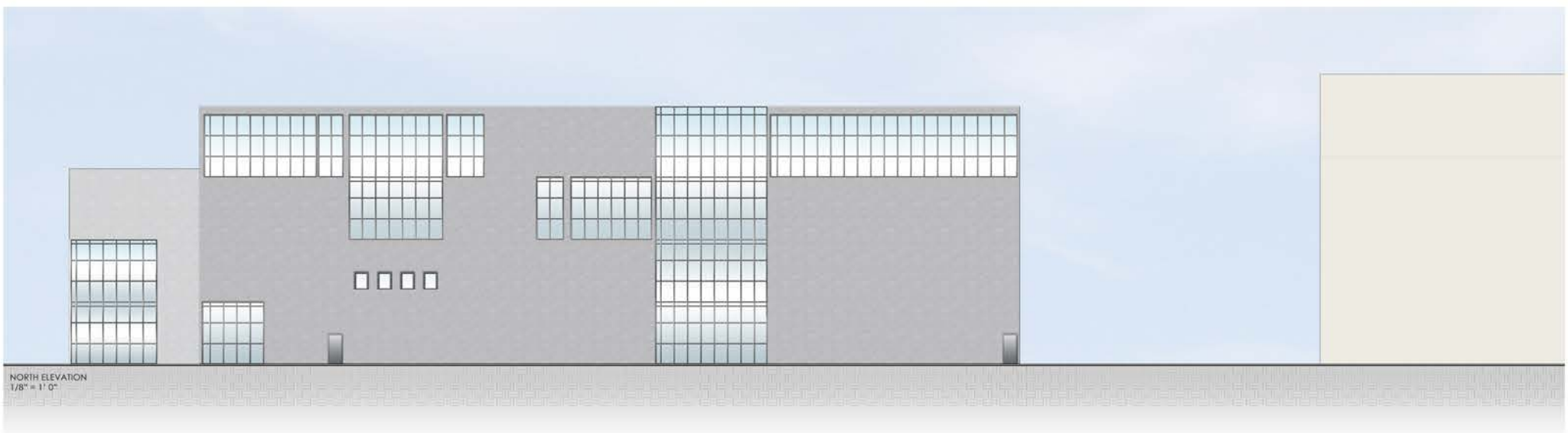
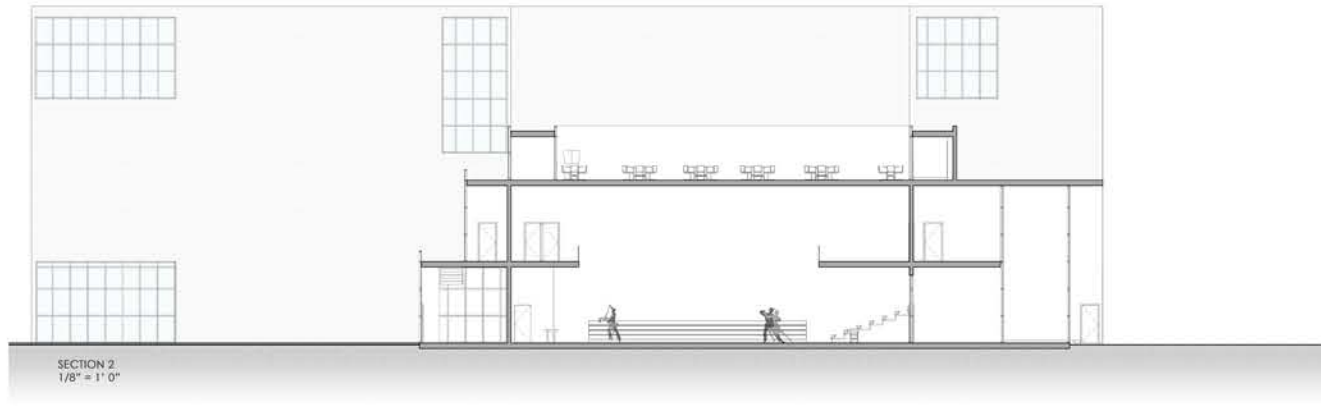


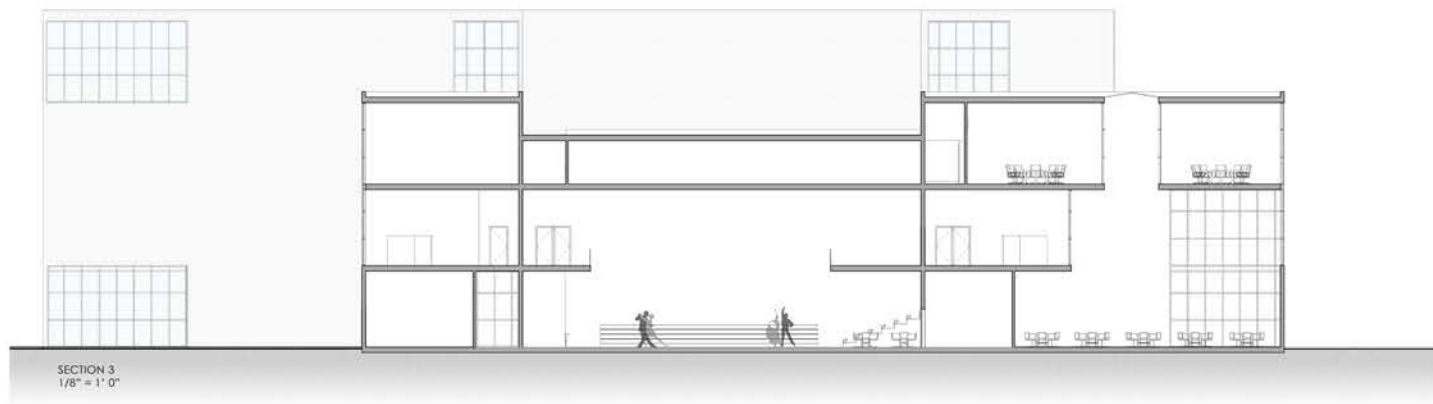
View to Terrace

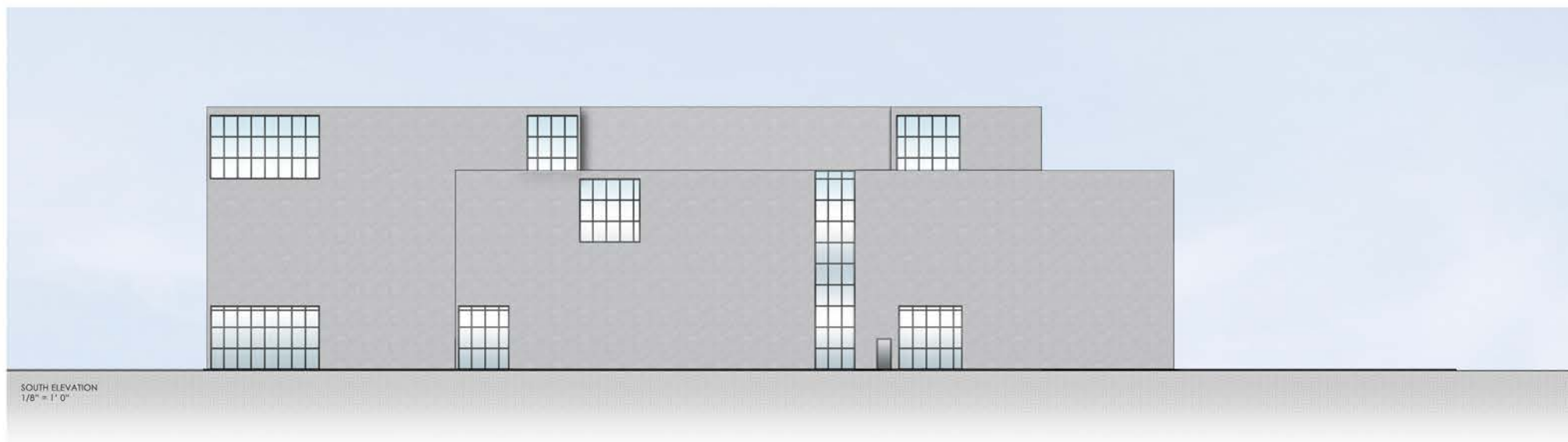
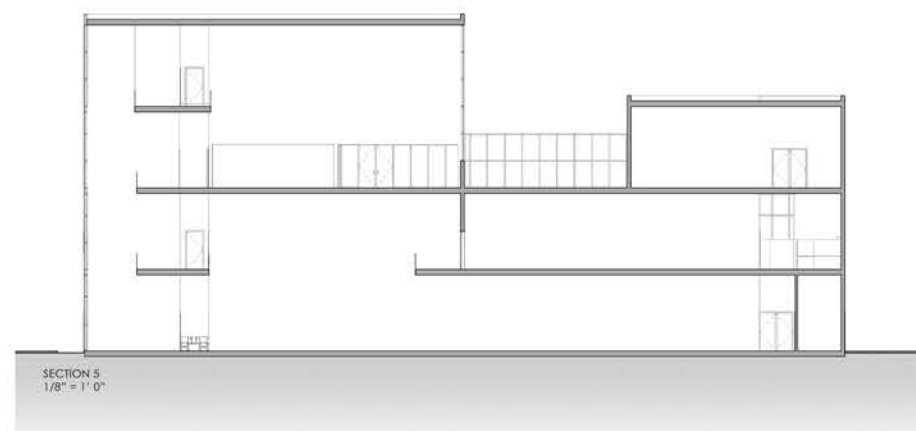
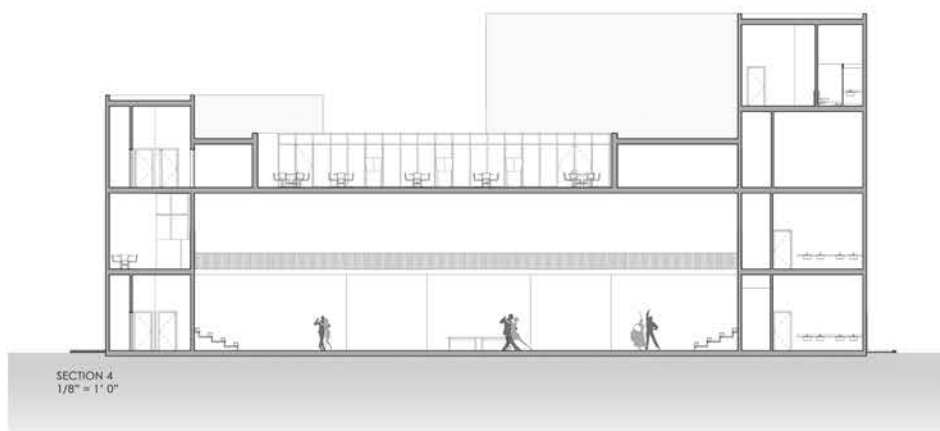


FOURTH FLOOR PLAN
1/8" = 1' 0"





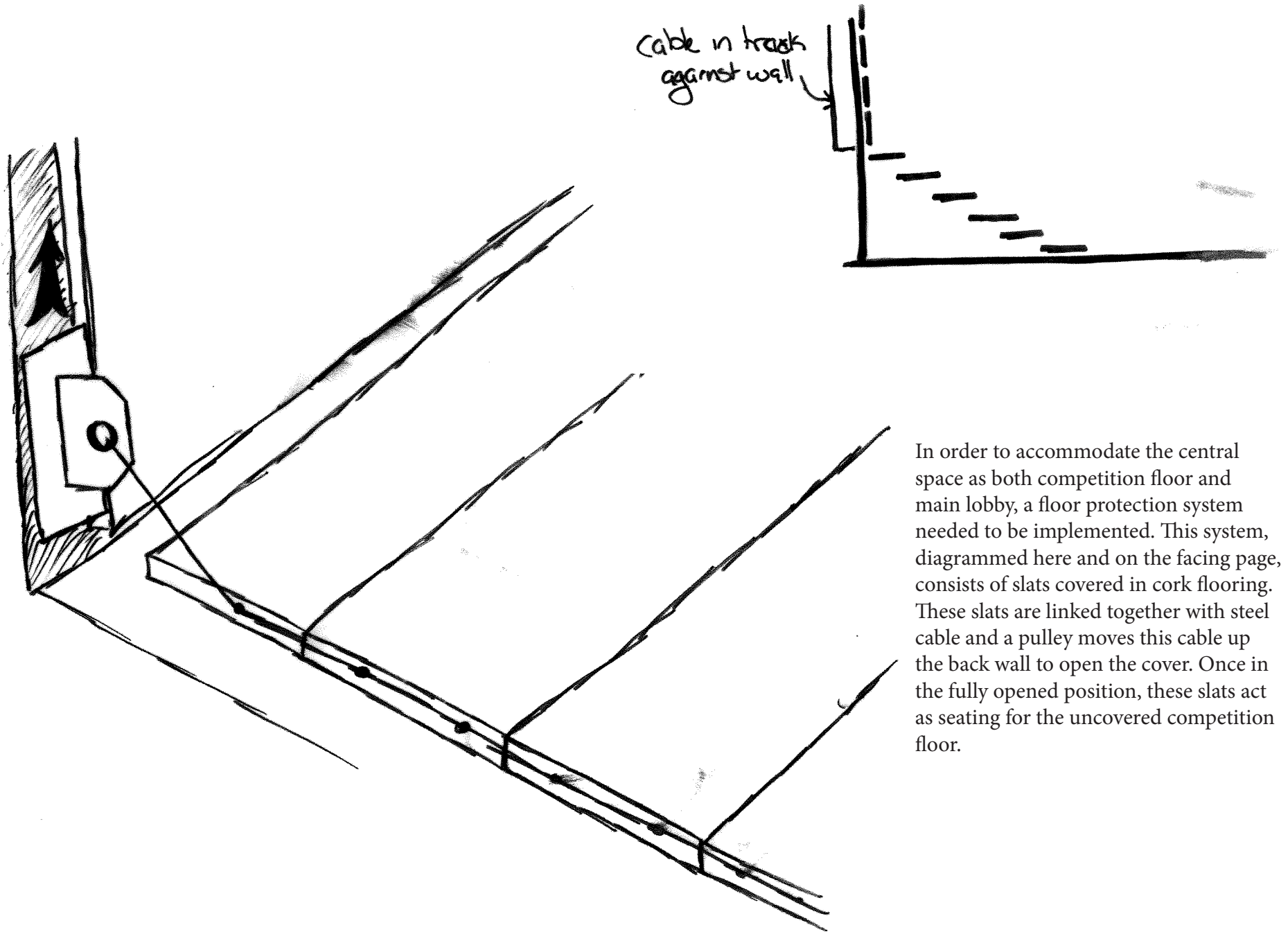




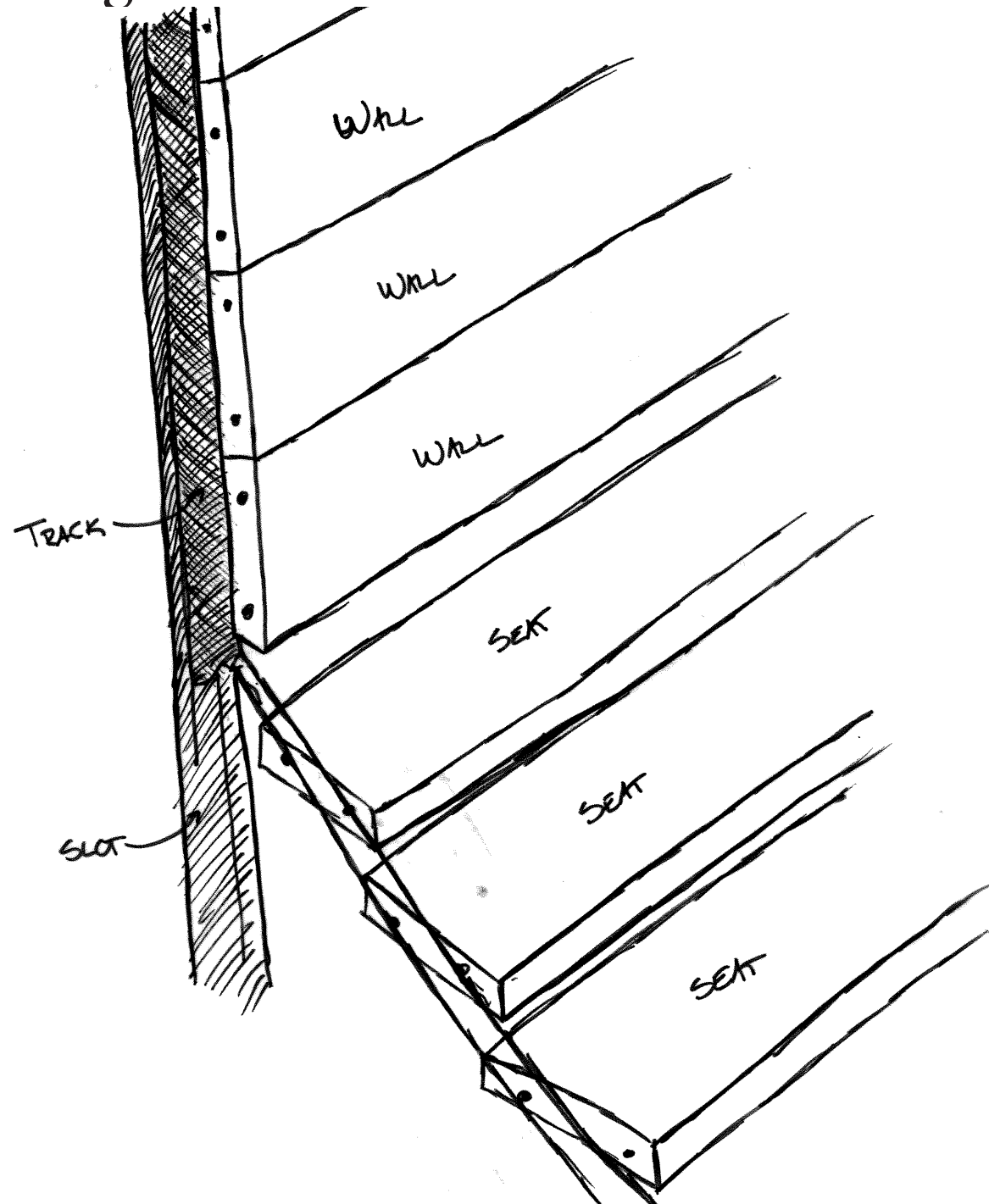
Final Design

Diagrams	88
Structural Floor Plans	92
Technical Sections	96
Wall Details	100
Colored Floor Plans	102
Colored Sections	107
Elevations	111
Rendered Views	116

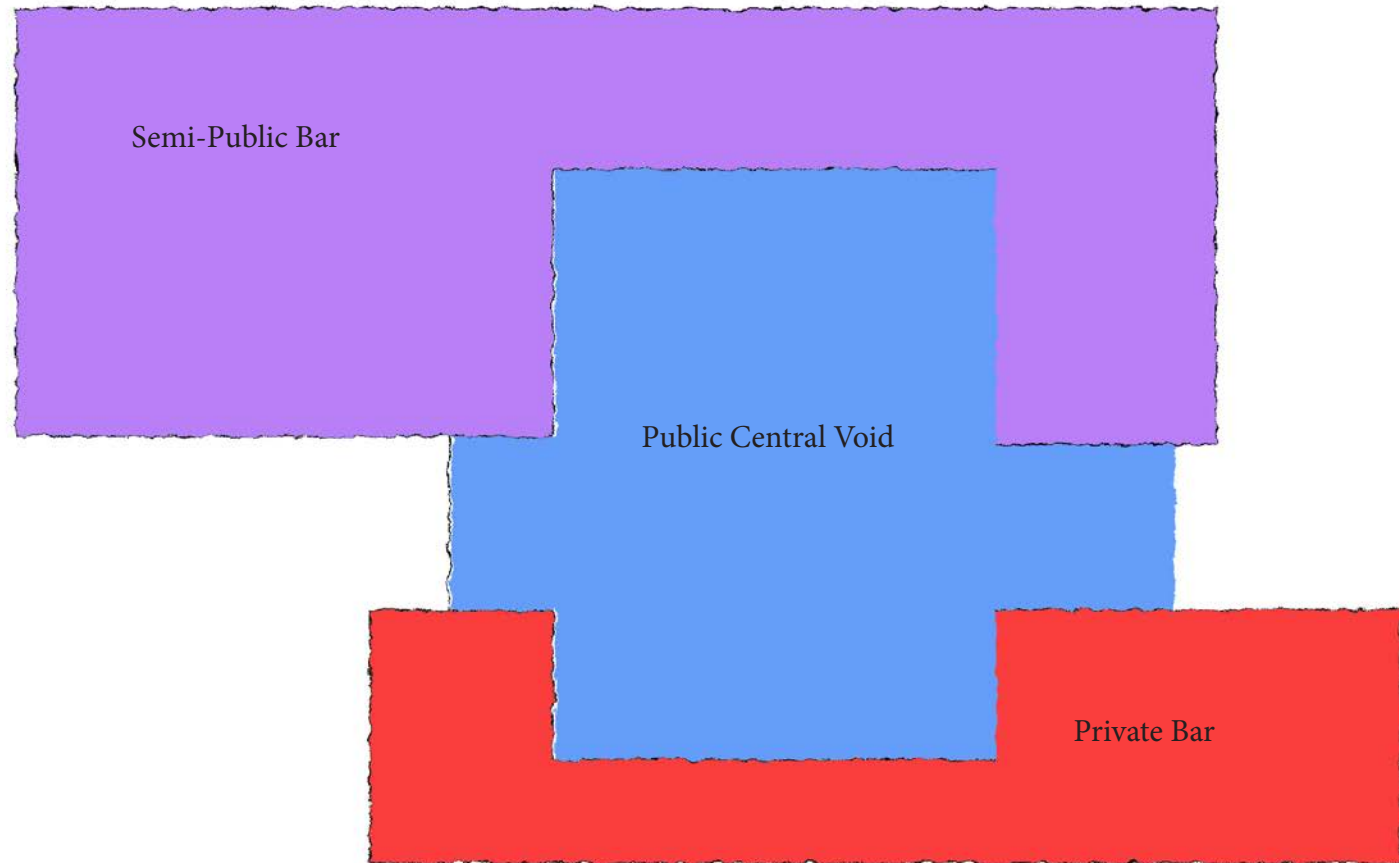
Floor Cover Diagrams



Floor Cover Diagrams

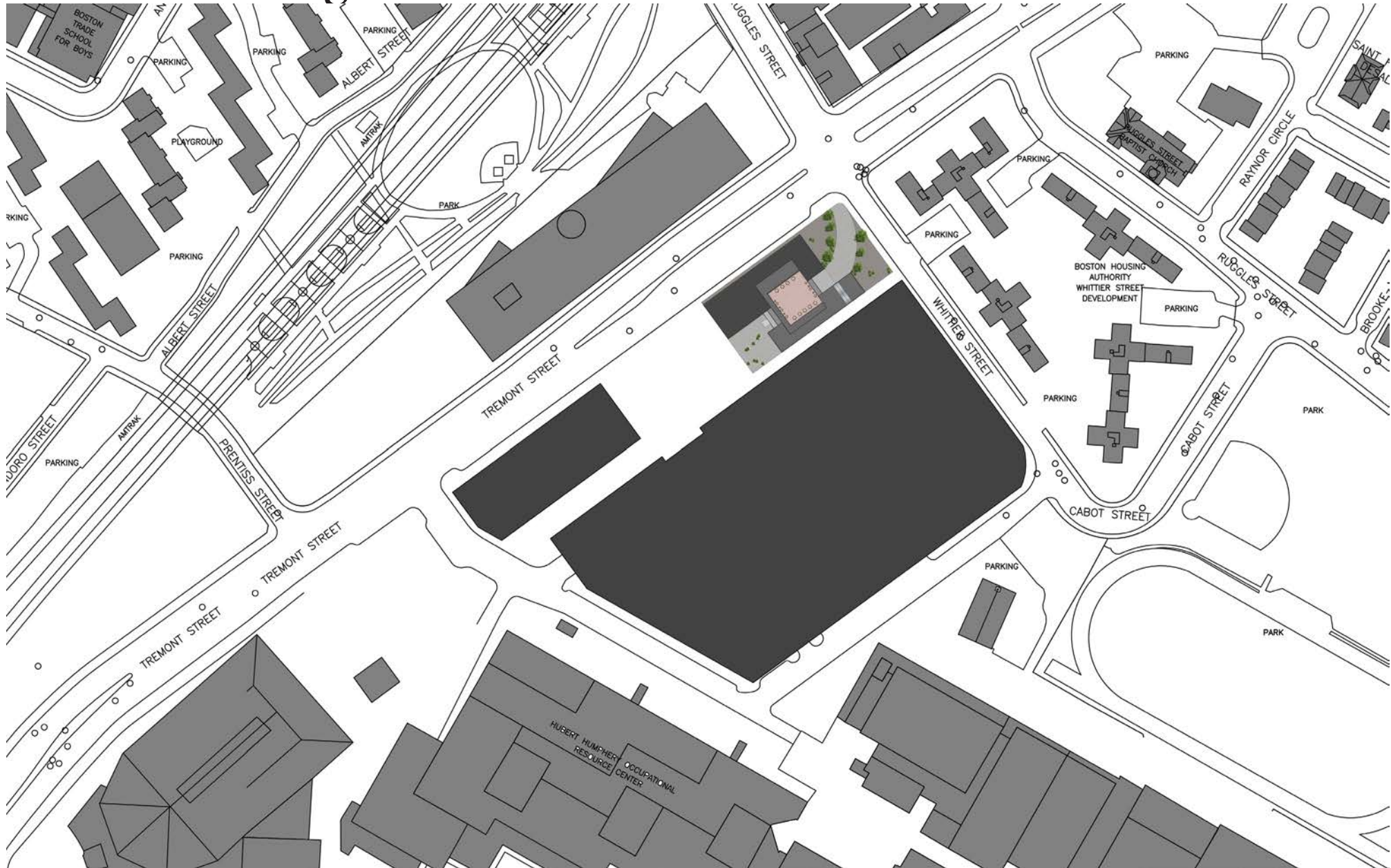


Public/Private Diagram



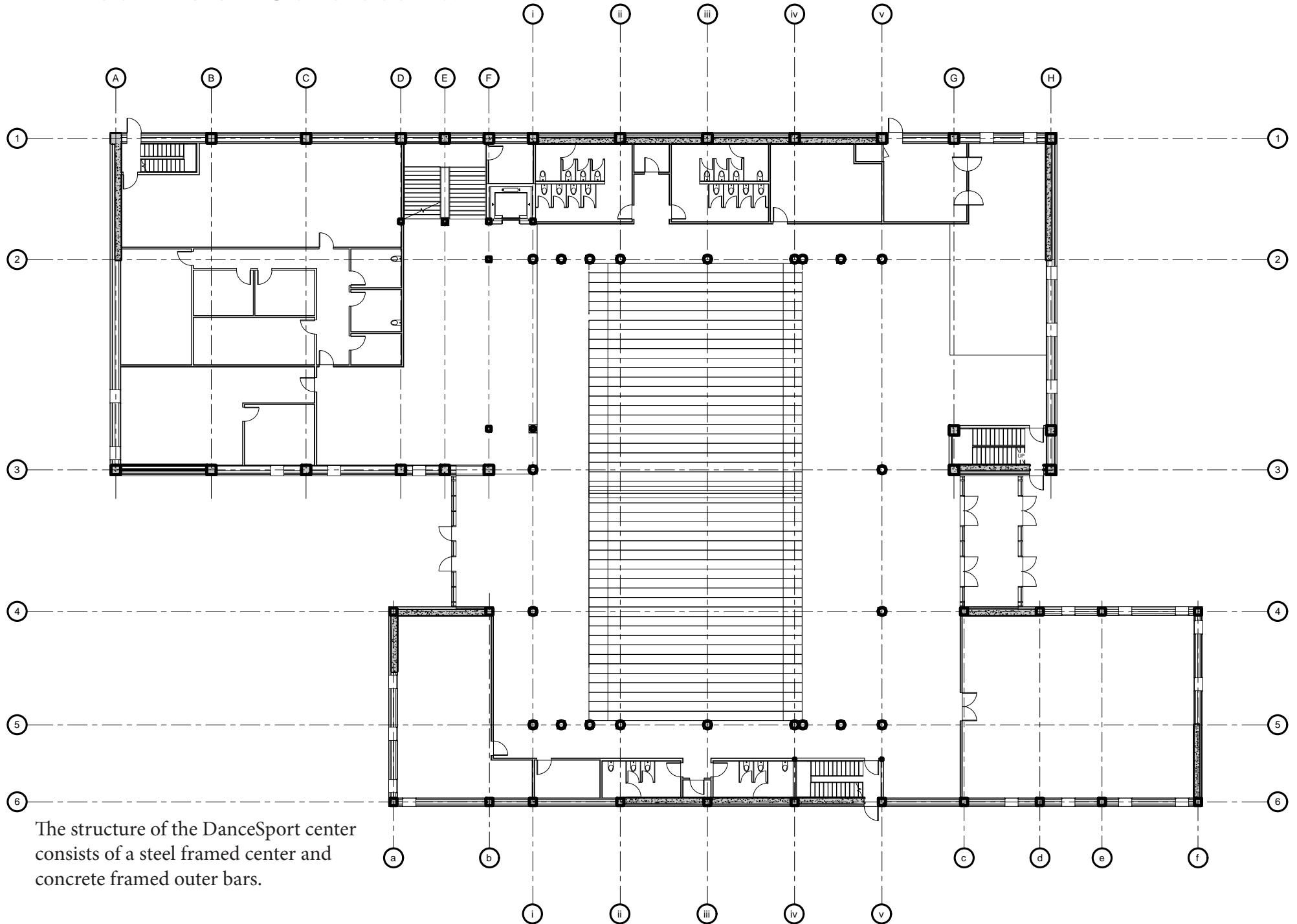
The main idea for this building is to have a single central space bracketed on either side with the semi-public and private program. This central space encompasses the competition floor, the scene of the pinnacle of dance sport. To the North is the Semi-Public bracket of program, including the practice spaces. To the South is the Private bracket which houses work spaces and archives of the DanceSport headquarters.

Site Plan Diagram

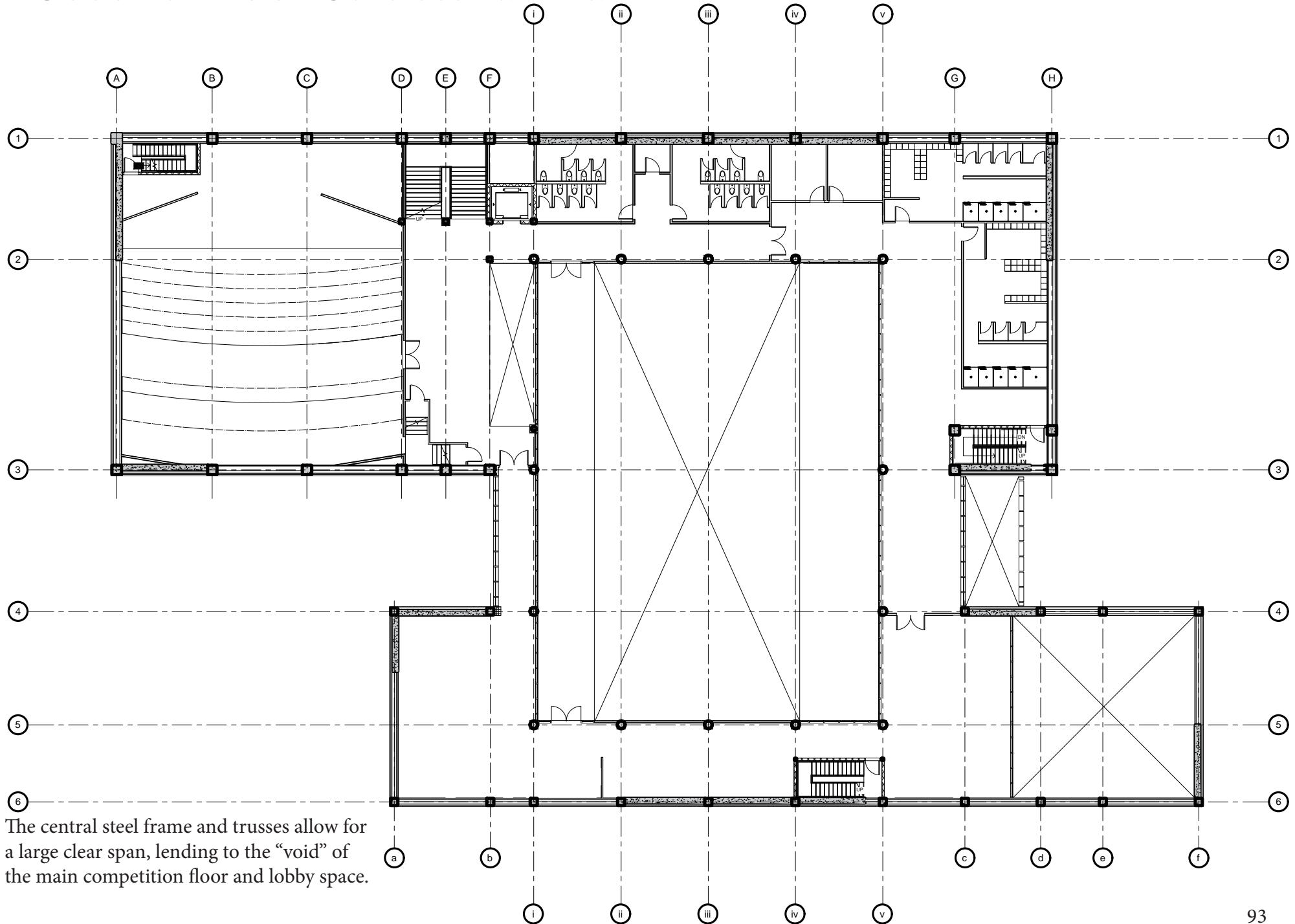


As shown in the Design Process portion of this book, the site plan for this project was created by revising an existing proposal for a shopping center. This revision opened up the North corner of the site for the DanceSport center. This site provides visibility along a main road, Tremont street, as well as close access to both local and university housing to the East, the MBTA system to the North., and a local high school to the South.

First Floor Structural Plan

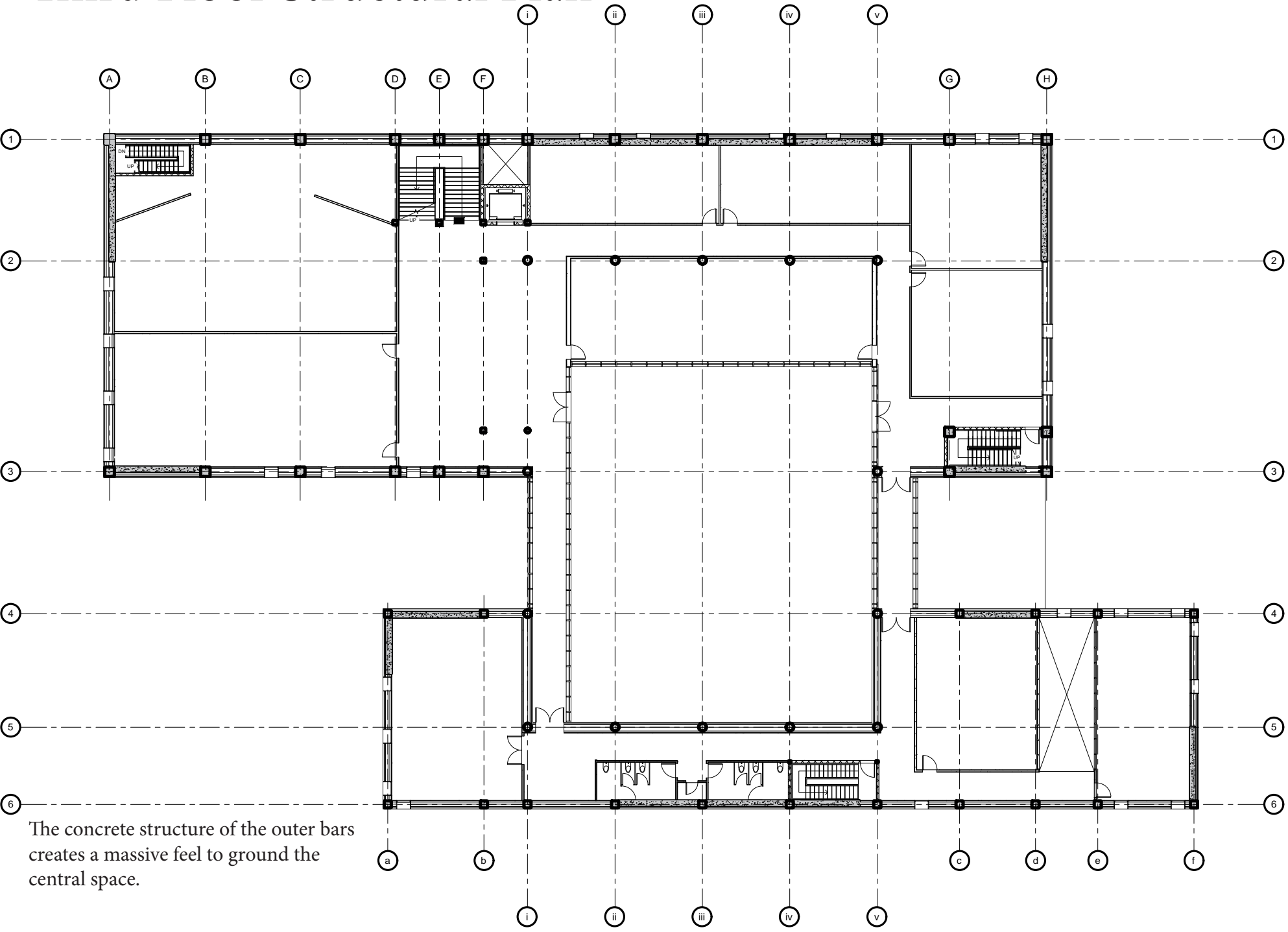


Second Floor Structural Plan



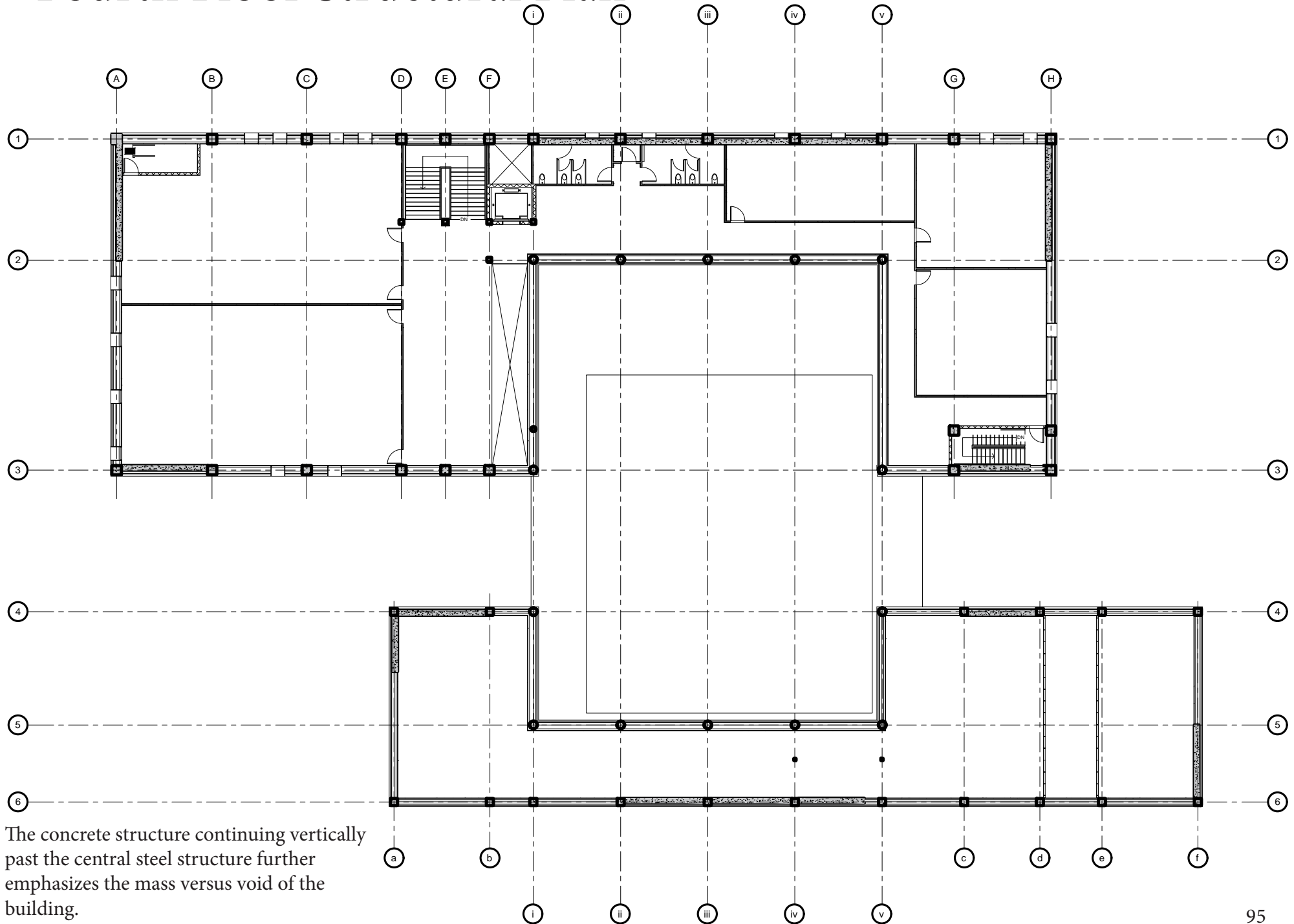
The central steel frame and trusses allow for a large clear span, lending to the “void” of the main competition floor and lobby space.

Third Floor Structural Plan



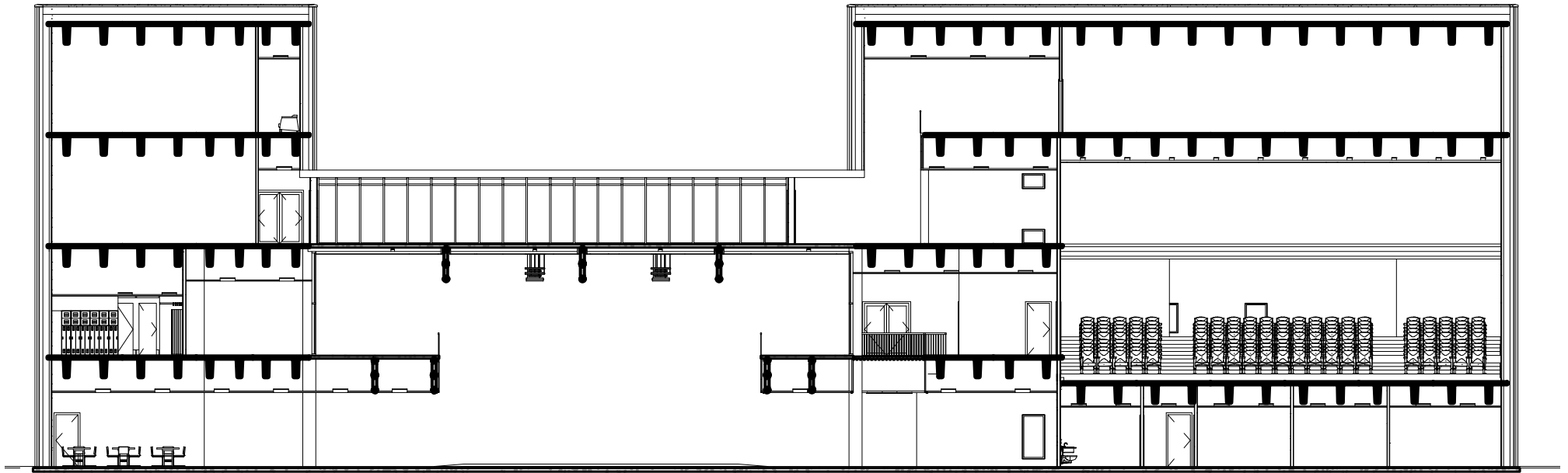
The concrete structure of the outer bars creates a massive feel to ground the central space.

Fourth Floor Structural Plan



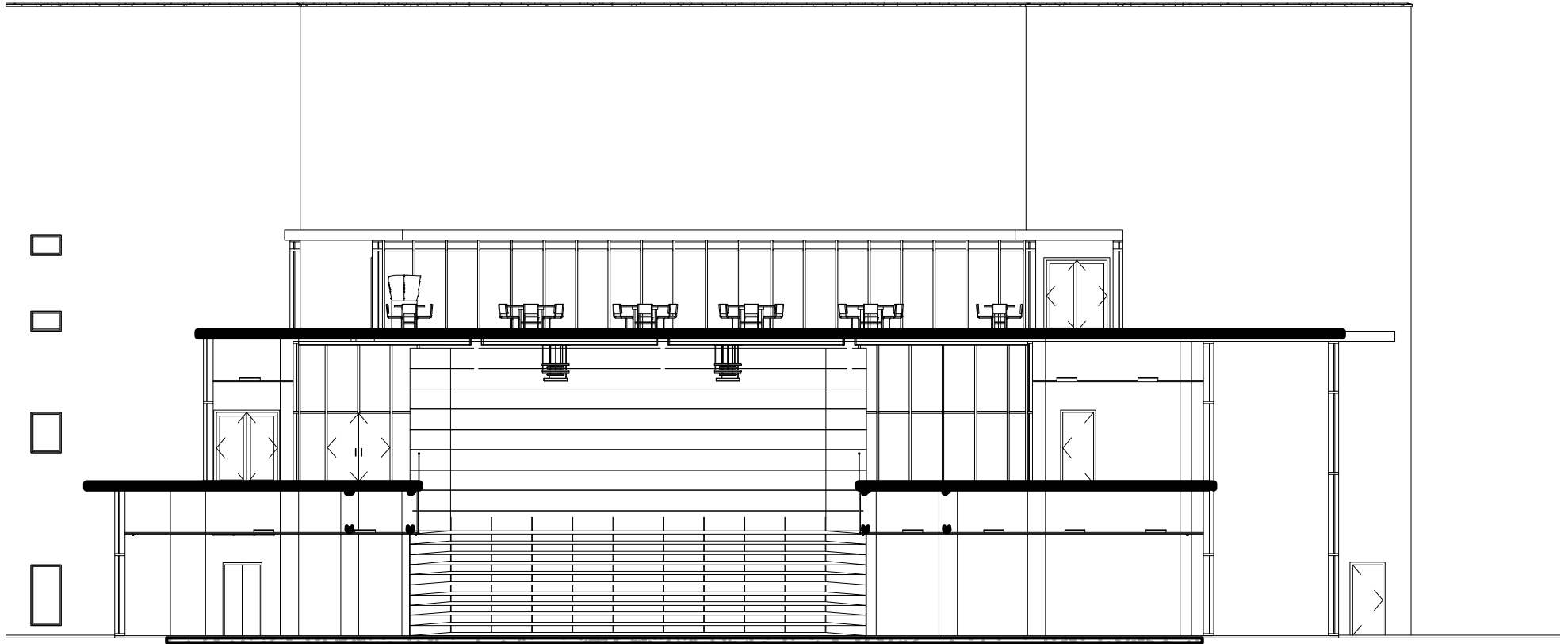
The concrete structure continuing vertically past the central steel structure further emphasizes the mass versus void of the building.

Technical Section through Public Bar



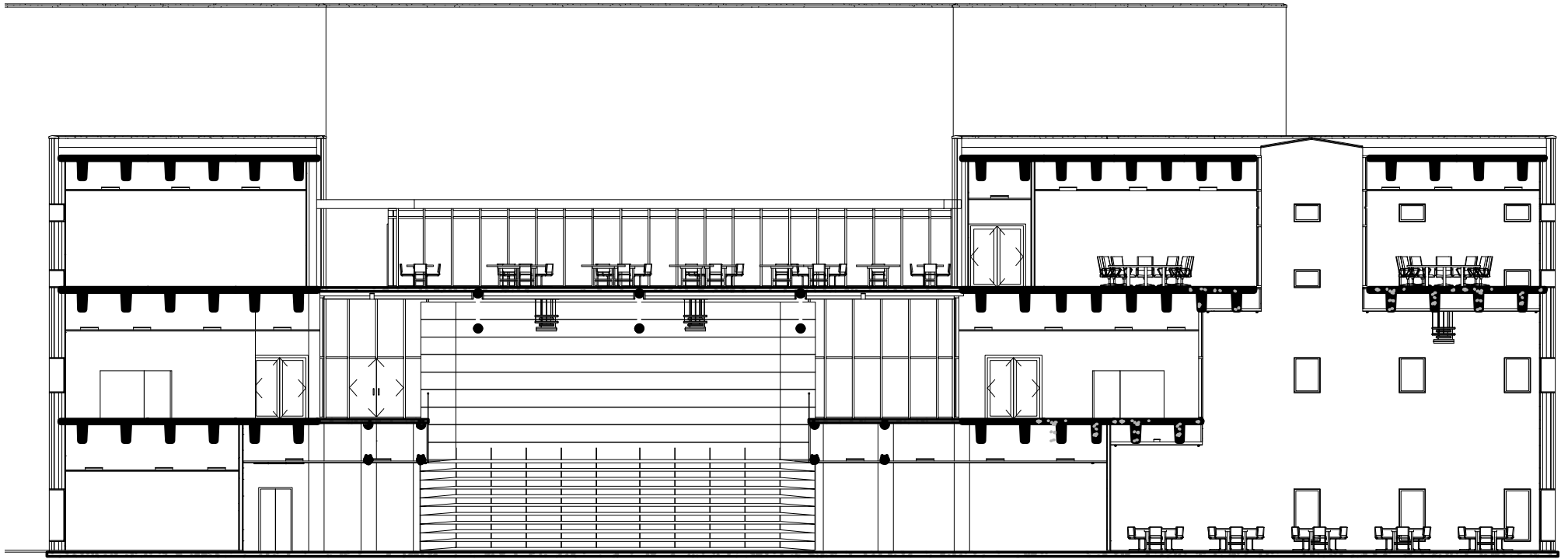
This section is taken through the Northern bar of program and includes the central void space and shows the compaction of spaces in the mass portion of the building as well as the opening of space toward the central void.

Technical Section through Central Void



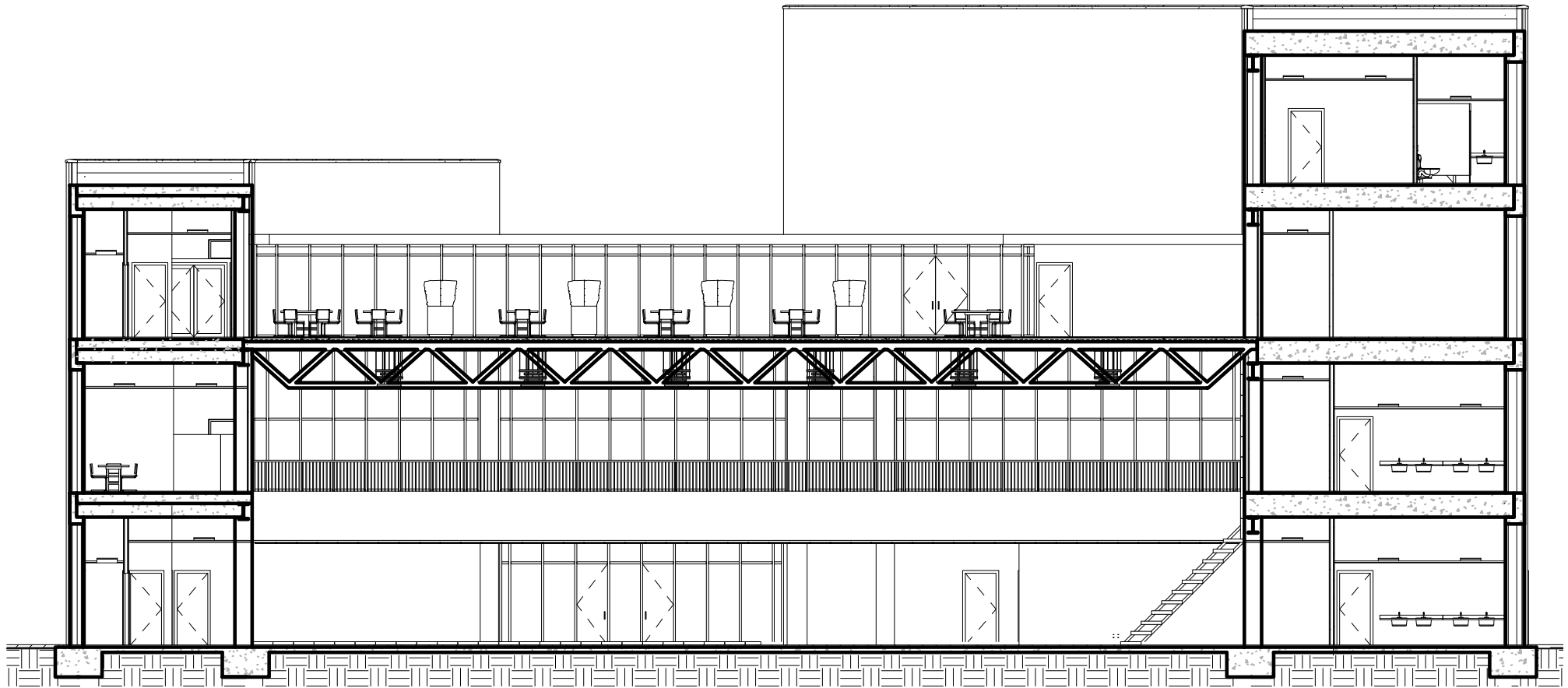
This section is cut through the central void space and looks North towards the mass bar of program. This illustrates the difference in scale of the smaller central void space to the larger, massive bar.

Technical Section through Private Bar



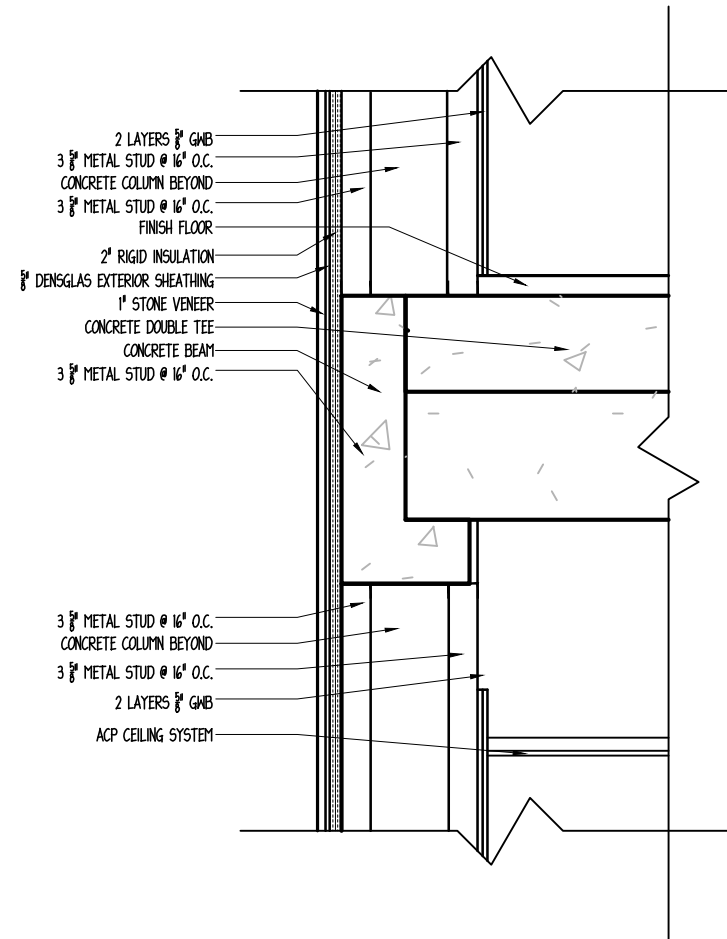
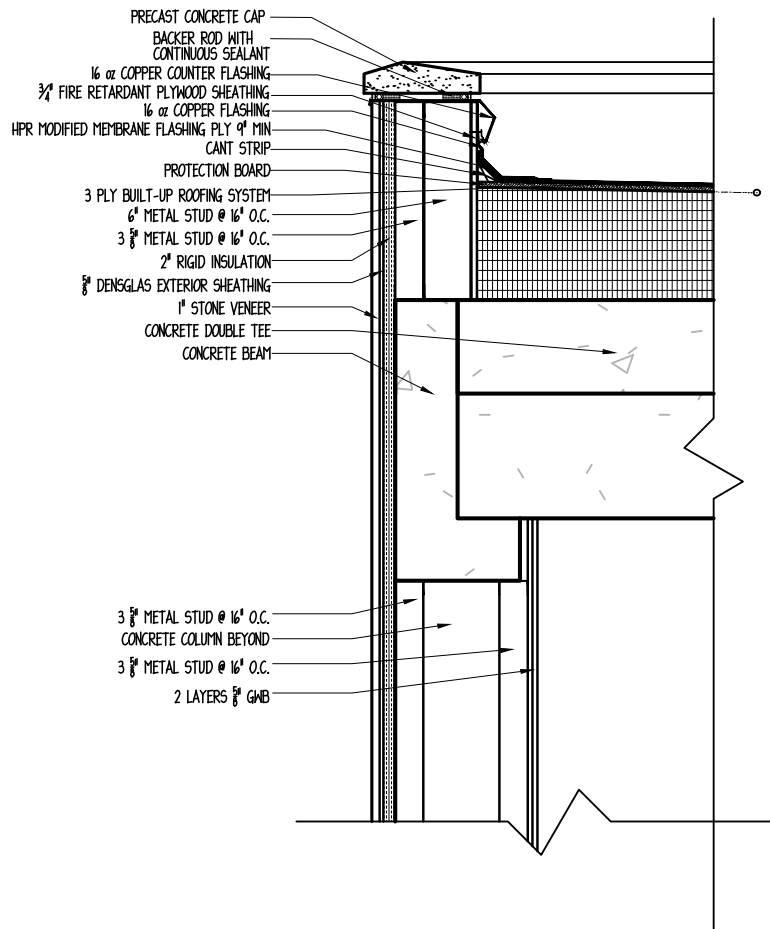
This section is taken through the Southern bar of program. Here again there is compaction of space through the mass bar of program and an opening of space in the central void portion.

Technical Cross Section



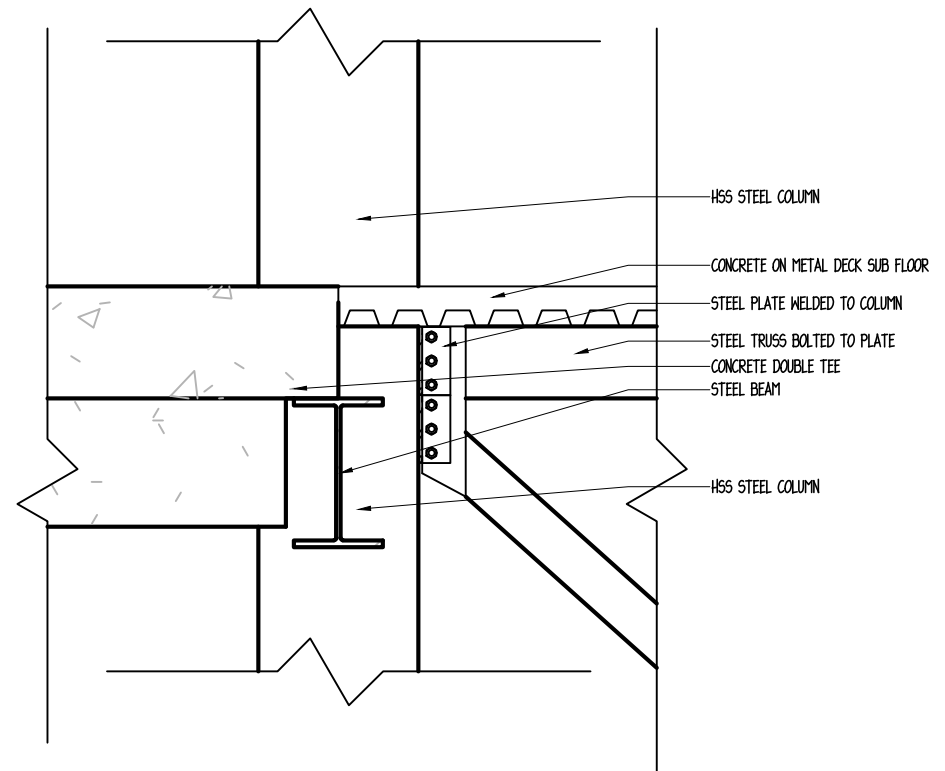
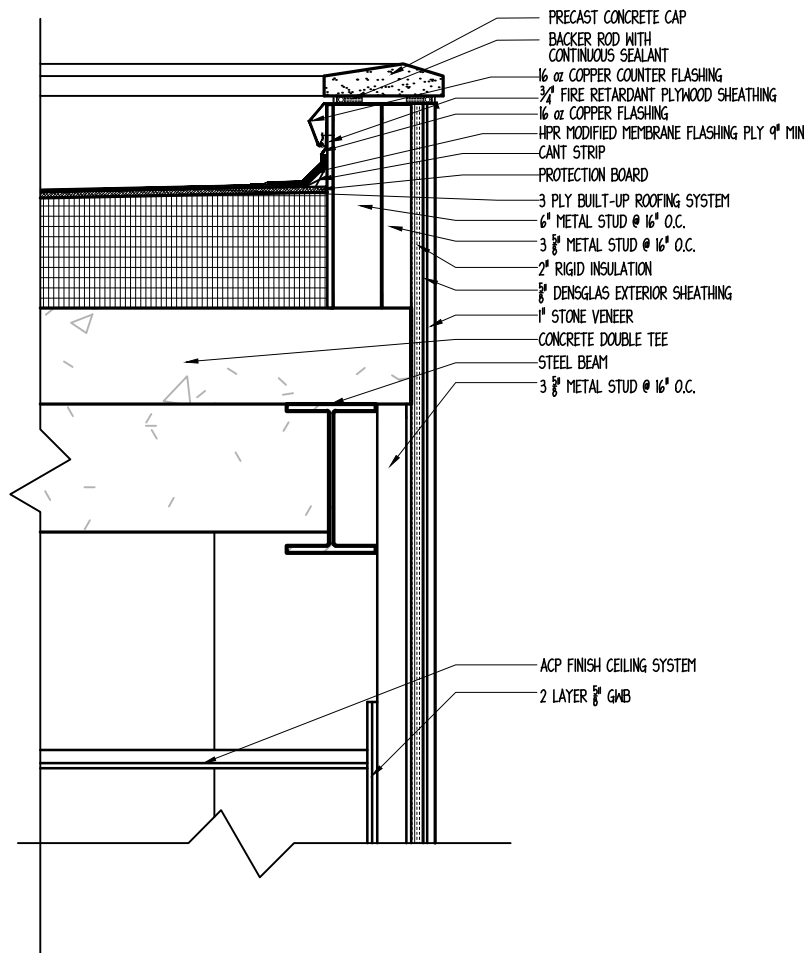
This section, cut South to North through the central space of the building, shows the transition from the massive concrete bar to the steel trusses of the central void space.

Wall Details - Concrete Structure



These details show the exterior conditions of the concrete structure. The detail to the left is the typical parapet detail. The detail to the right shows the typical connection of concrete column, concrete beam, and concrete double tee.

Wall Details - Steel Structure



These details illustrate the connections between the steel structure and the concrete structure. The left detail shows the parapet over the steel column portion on the interior of the mass bar. The detail to the right shows the connection of the street truss spanning the central space to steel columns and the concrete double tee of the massive bar.

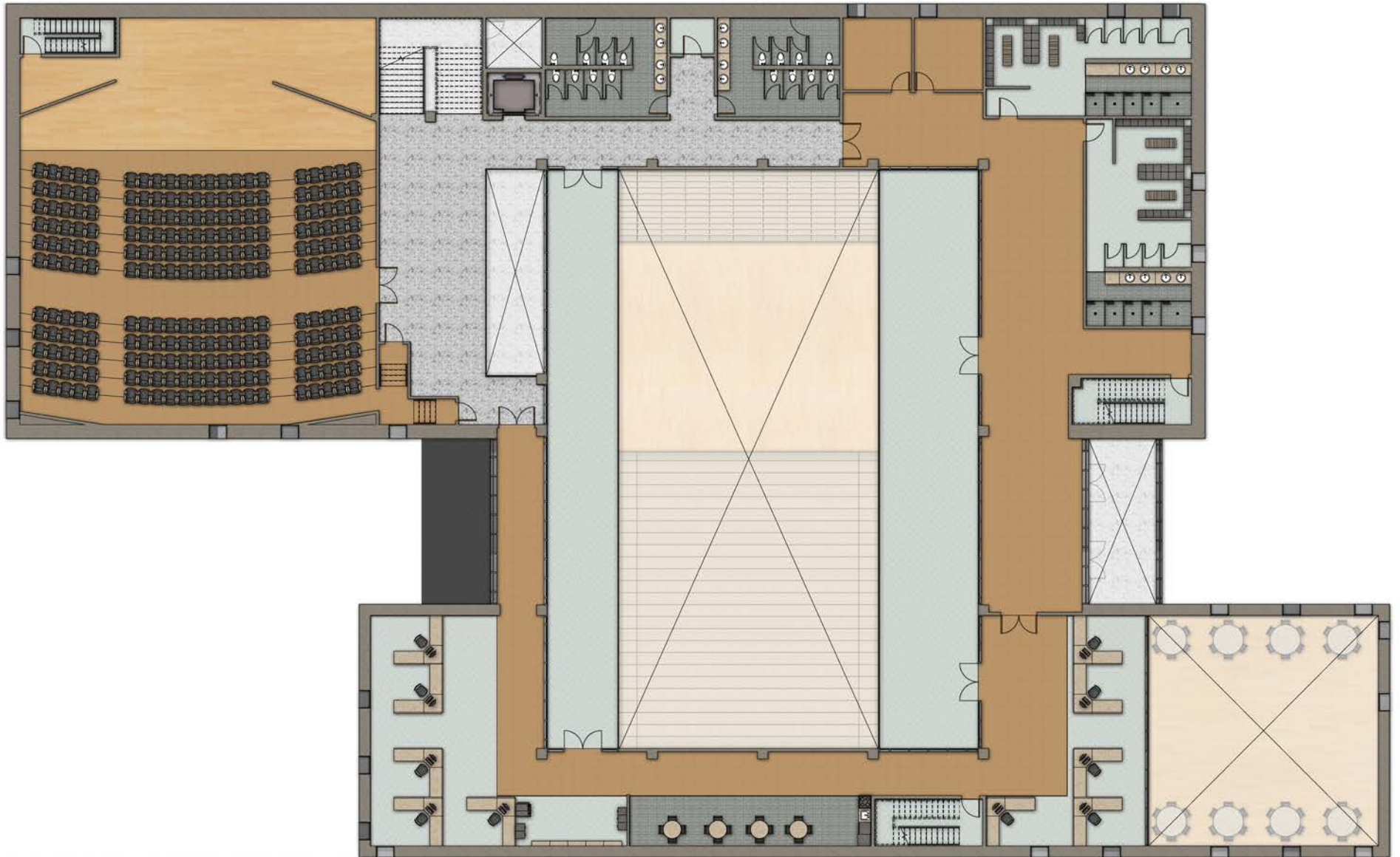
Site Plan



First Floor Plan



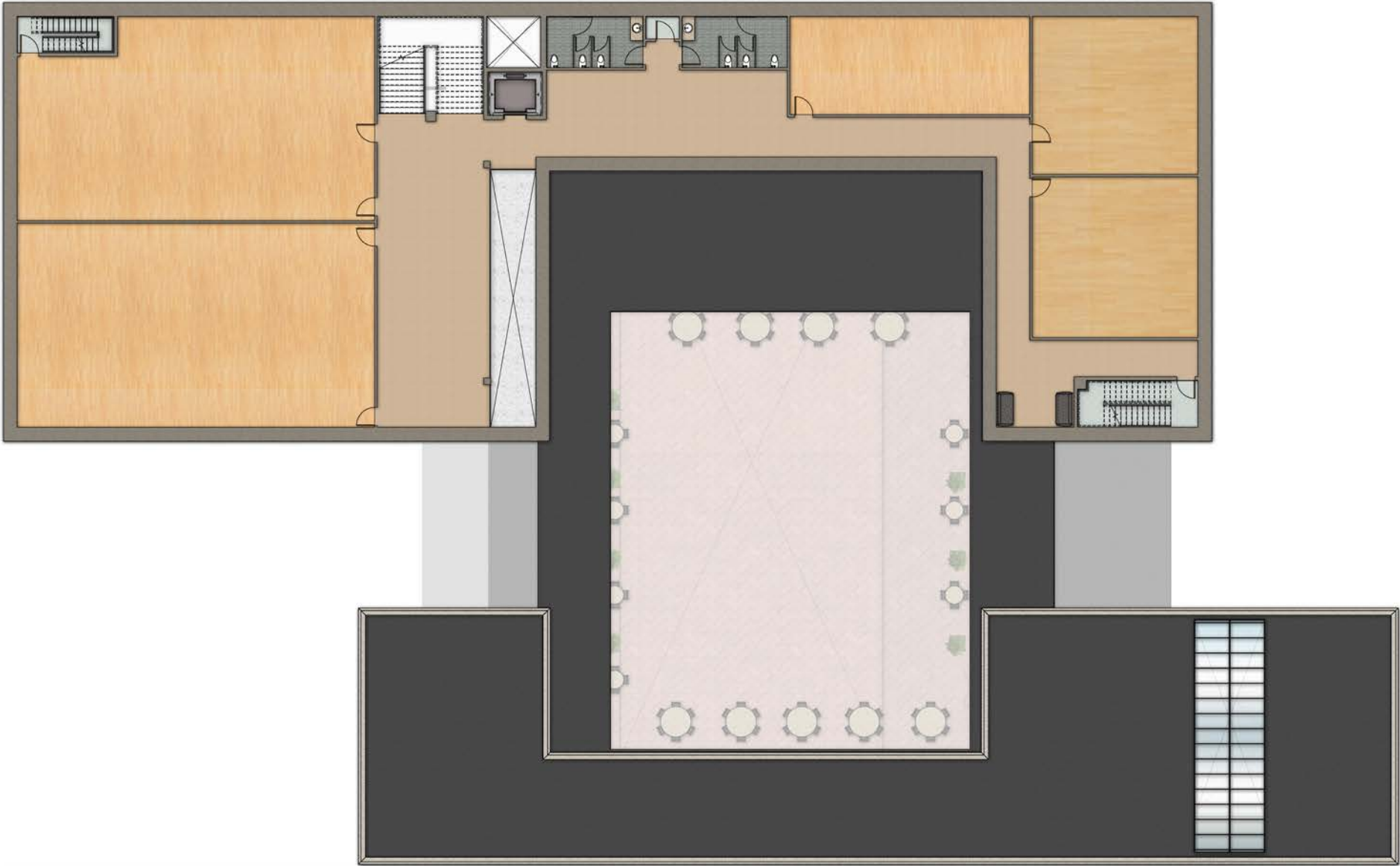
Second Floor Plan



Third Floor Plan



Fourth Floor Plan



Building Section through Public Bar



Building Section through Central Void



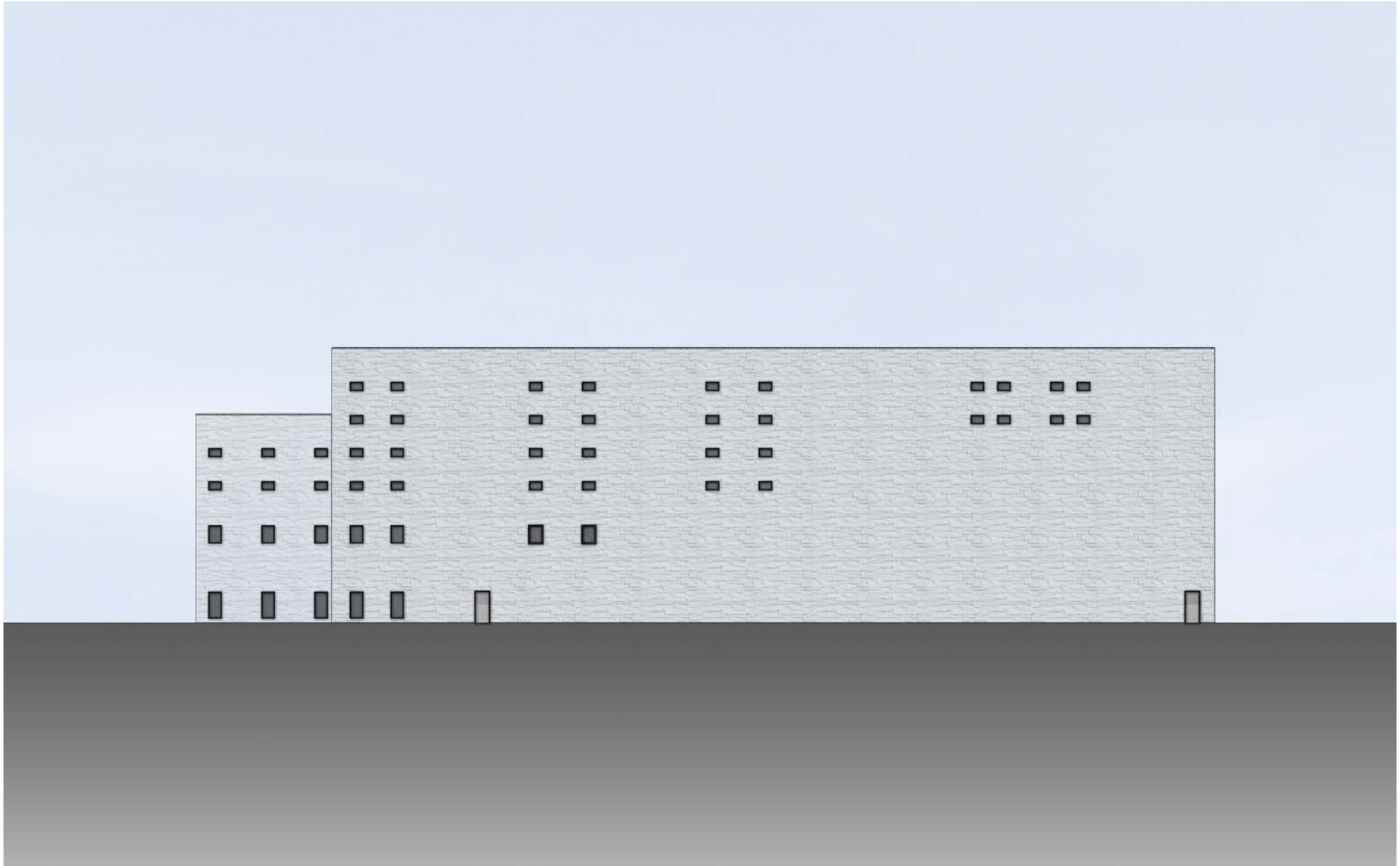
Building Section through Private Bar



Building Cross Section



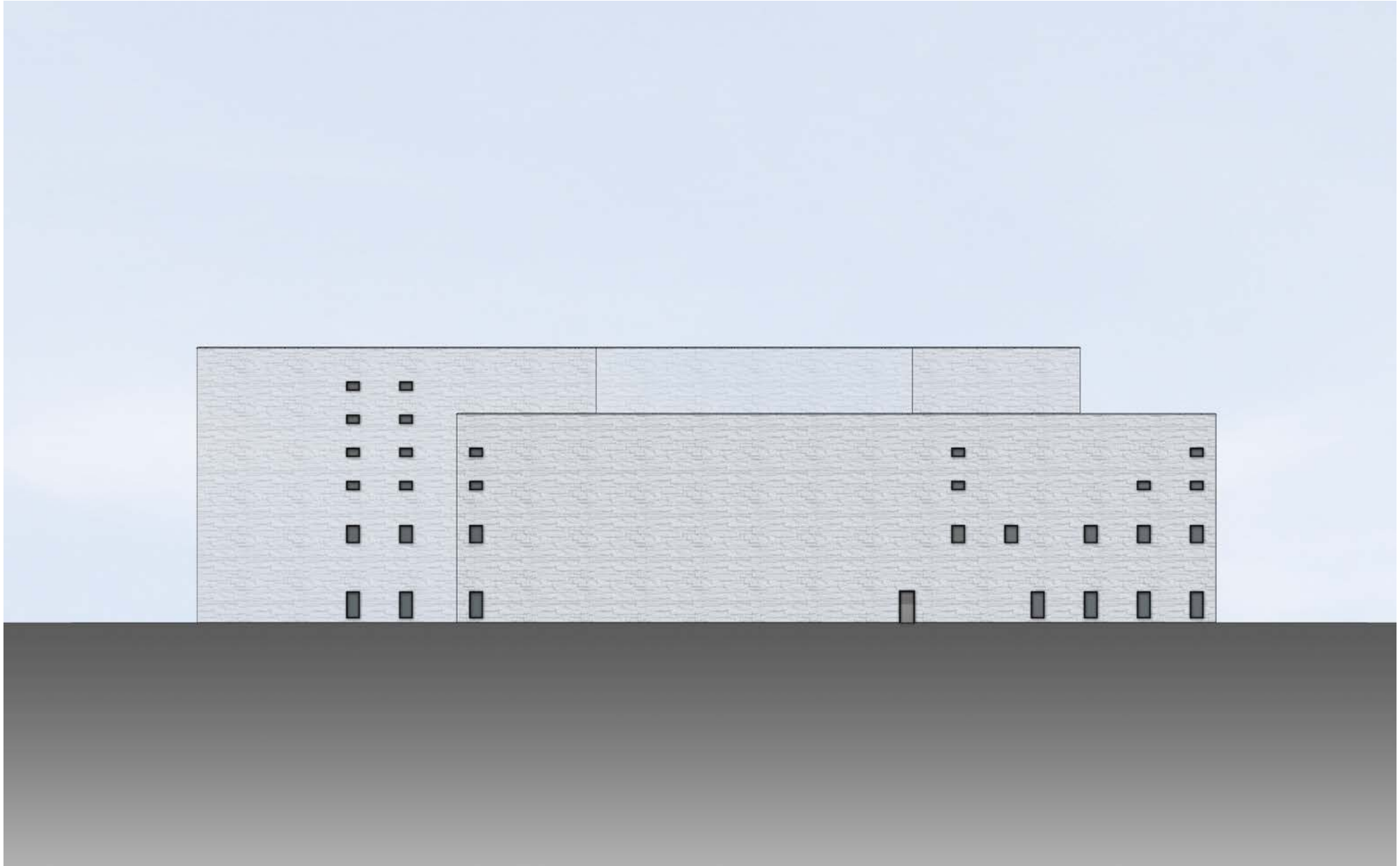
North Elevation



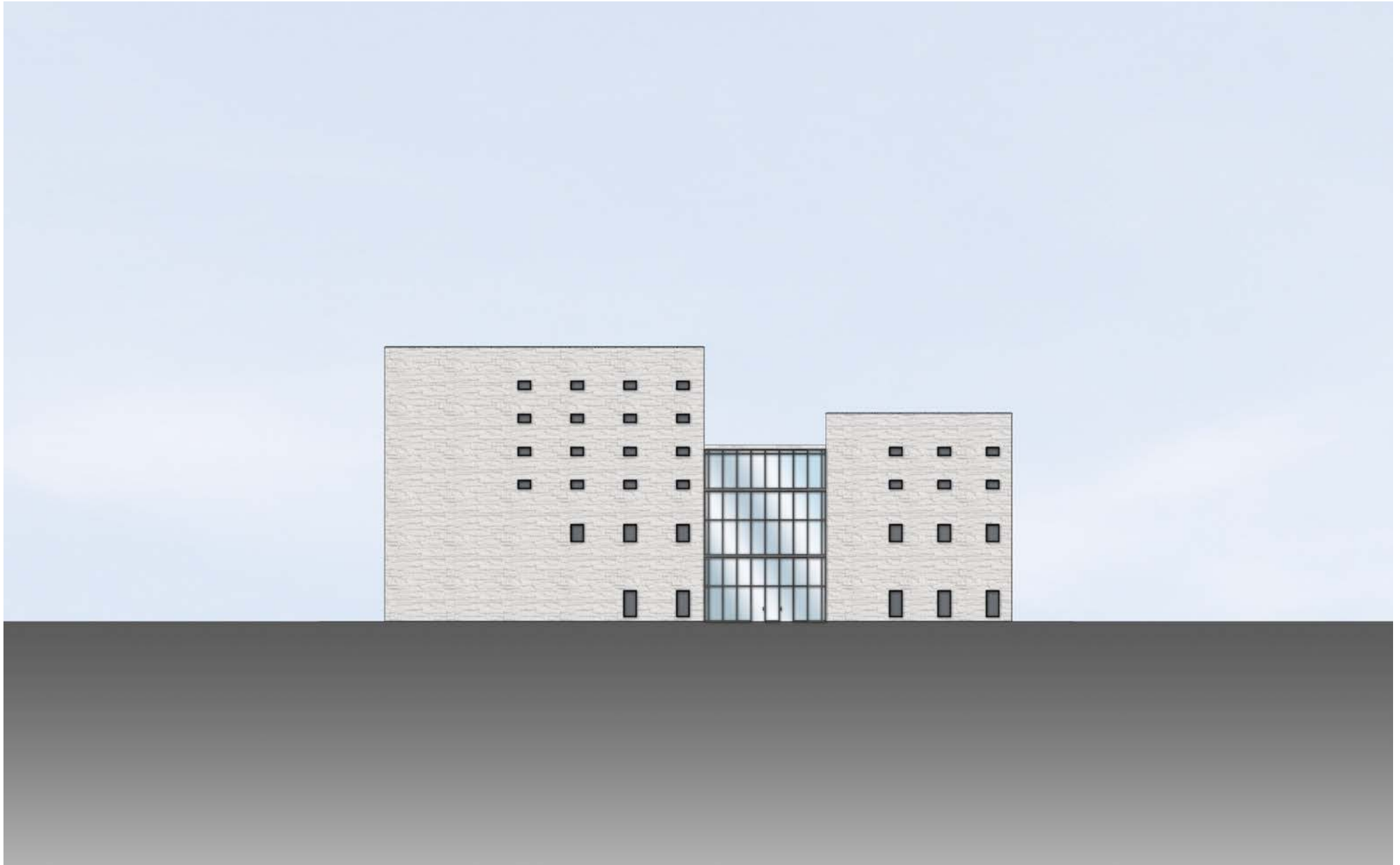
East Elevation



South Elevation



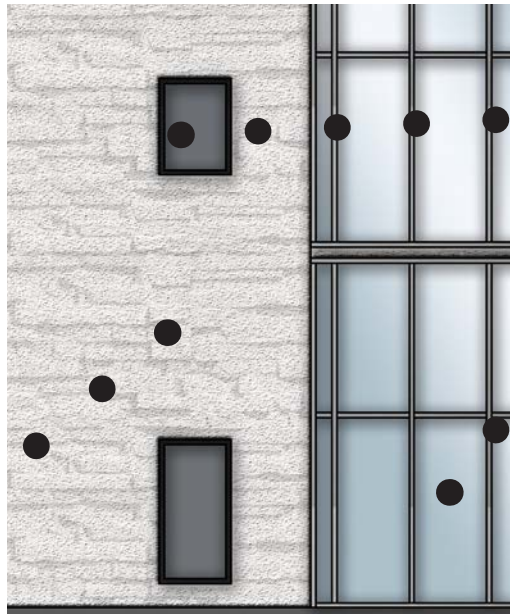
West Elevation



Enlarged Detail Elevation

The exterior cladding and windows are designed to further emphasis the concept of mass versus void. The massive bars are clad in white split faced stone, allowing for a uniform appearance which contrasts with the void. The windows in these bars are individual, small and deeply inset into the wall in order to appear as punchouts within the larger mass.

White split face stone block



● Clear and spandrel glazing

The central void consists of storefront glazing. This allows for clear views through the center. In addition, during the day, the dark appearance of the glass contrasts with the white stone of the massive bars. At night, the light from the center void will shine out in contrast with the solid bars.

Rendering - Main Hall as Lobby





Rendering - Main Hall as Competition Floor





Rendering - View to Main Hall from Private Bar



Rendering - View to Main Hall from Public Bar



Rendering - View Down from Balcony



Rendering - View Up in Social Hall



Precedents

Laban Dance Center	Herzog & de Meuron	126
Hamburg Philharmonic	Herzog & de Meuron	132
Boston Ballet School, Newton	N/A	136
Springstep	Andrew Cohen Architects	140



Laban Dance Center

Architect: Herzog & de Meuron, Basel

Client: Laban Centre, London

Completion: 2003

Gross Floor Area: 88,296 SF

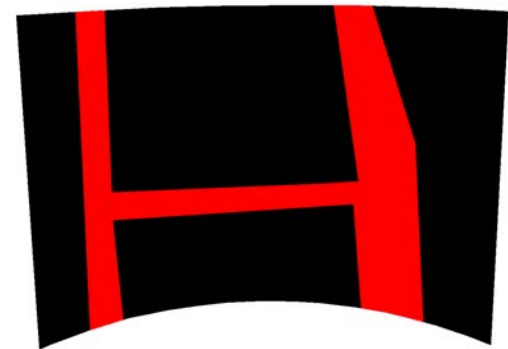
Seating Capacity: 400

Studio Area:

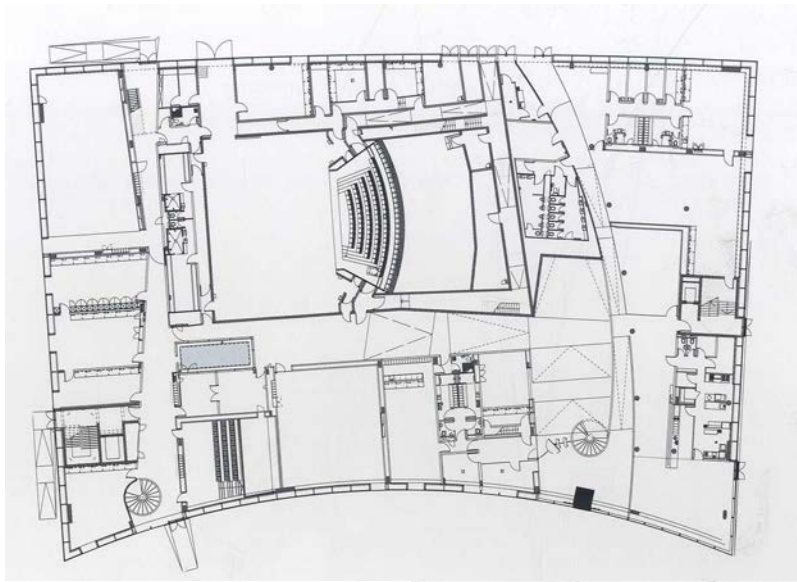
Largest: 2285 SF

Smallest: 385 SF

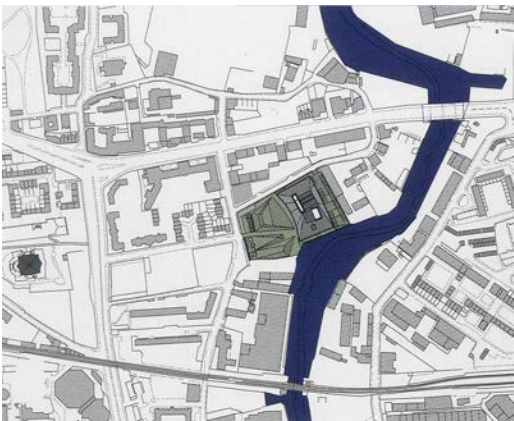
Average: 1290 SF



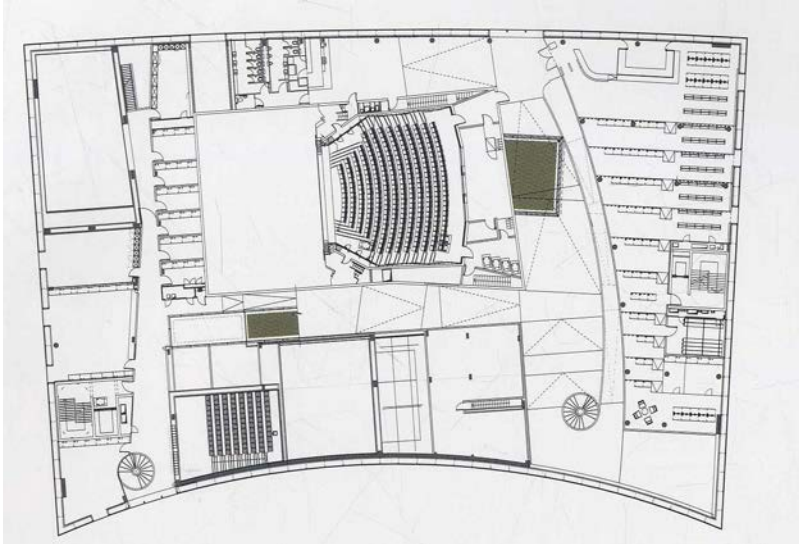
Parti



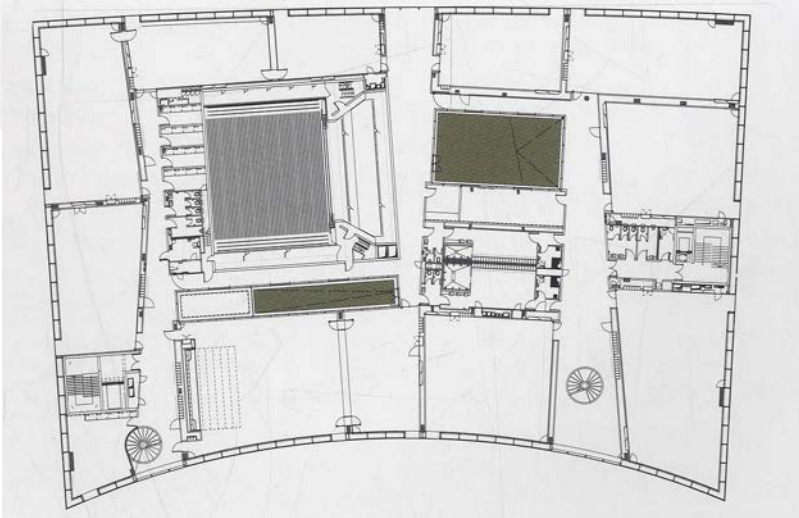
First Floor



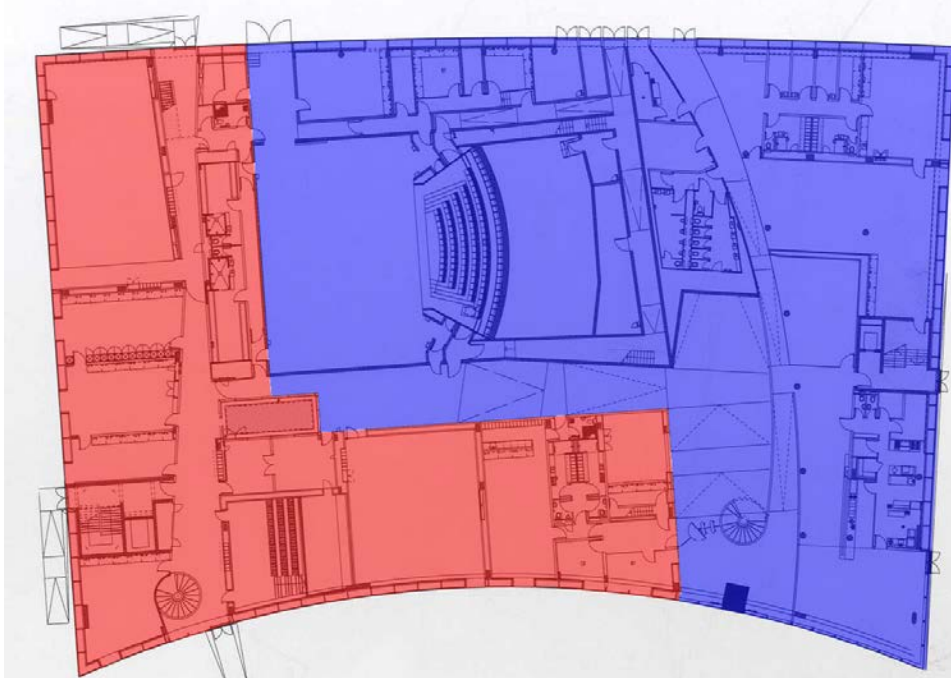
Site Plan



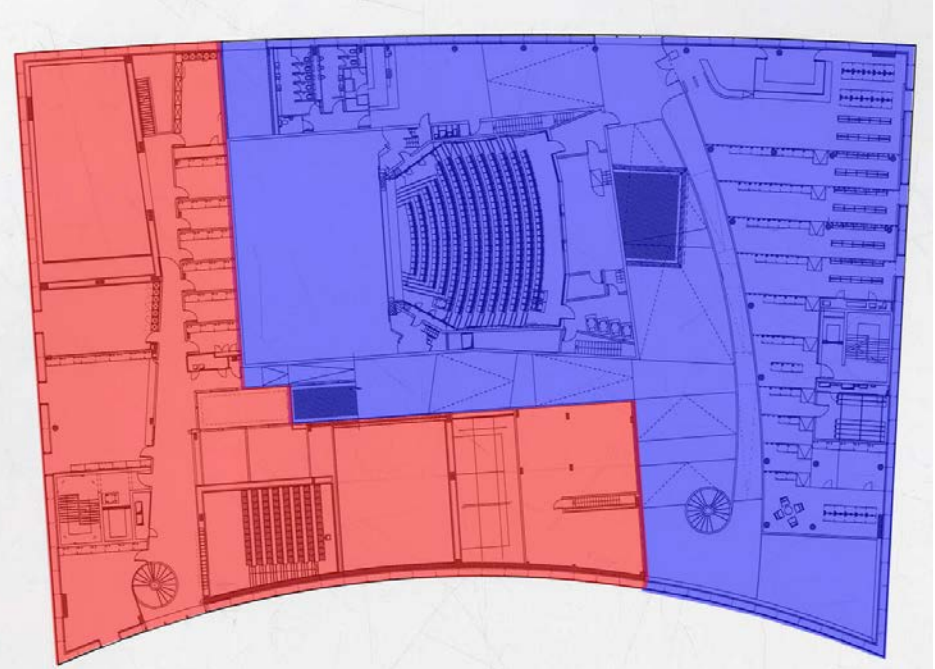
Mezzanine Floor



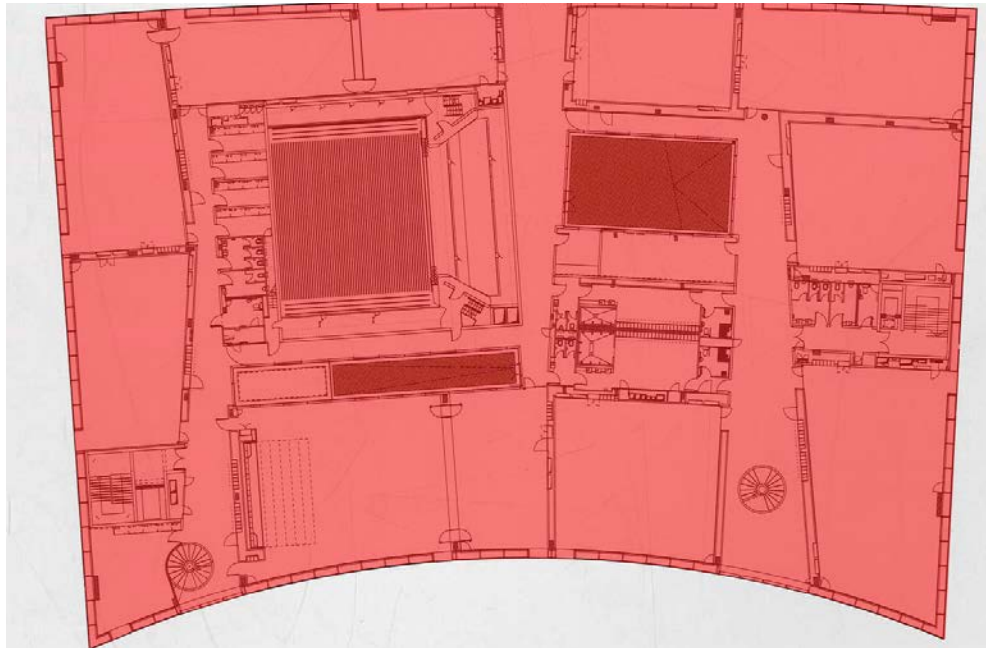
Second Floor



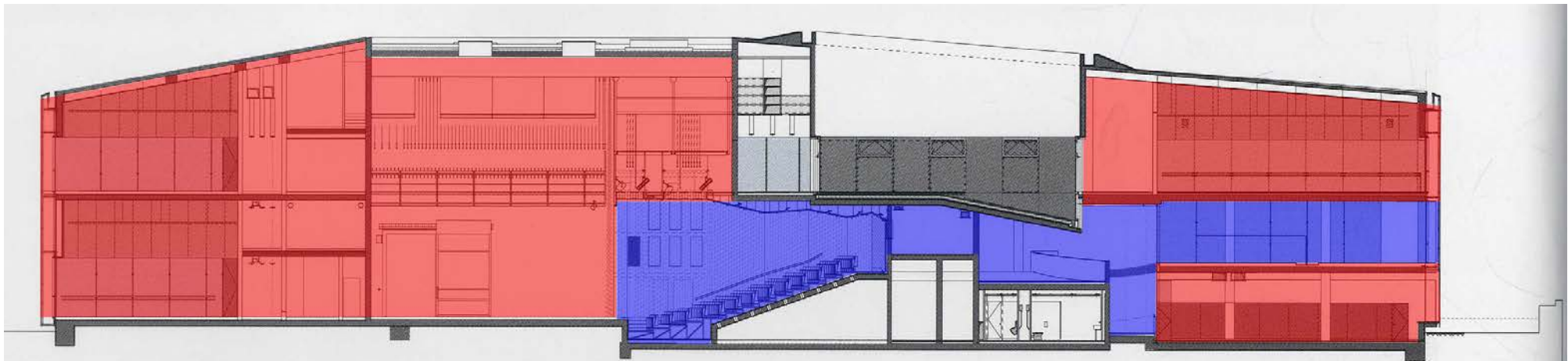
First Floor

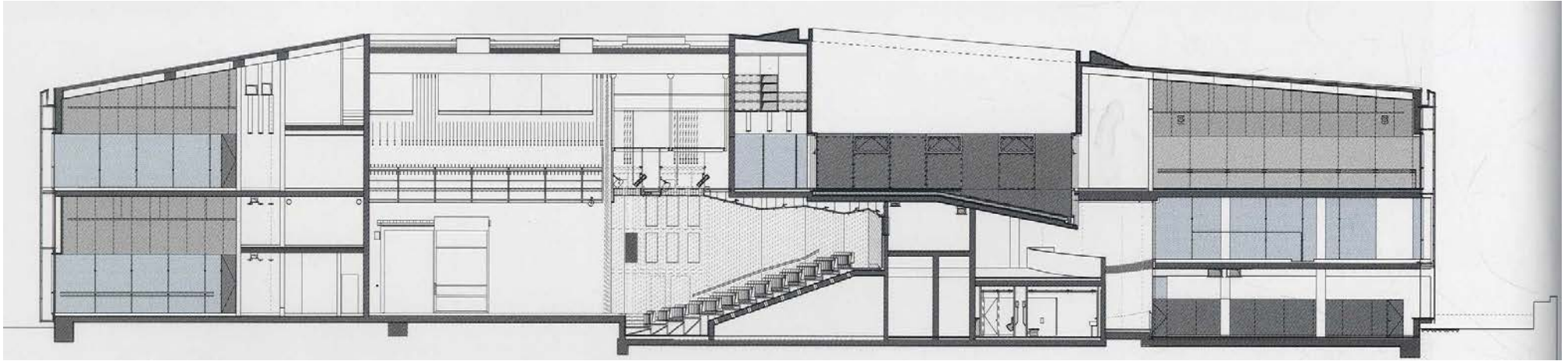


Mezzanine Floor

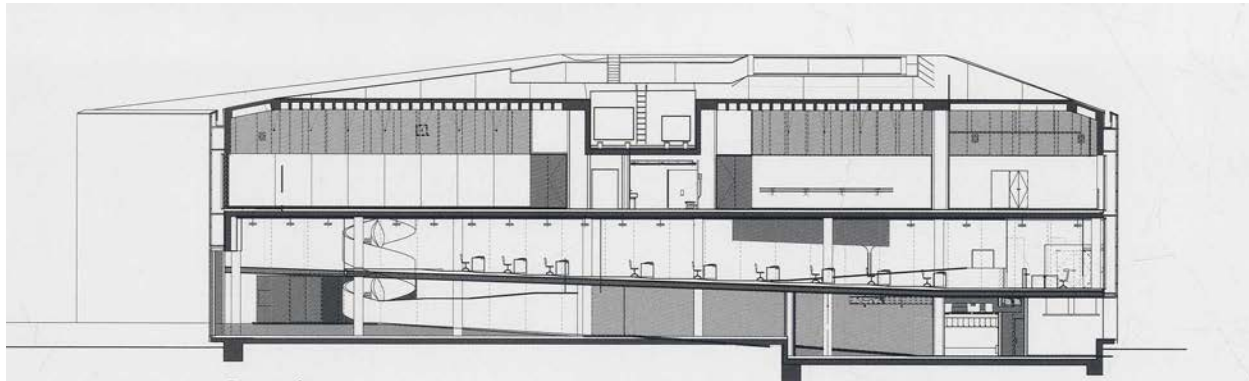


Second Floor





Longitudinal Section



Cross Section



Entry Space



Monumental Stair



Philharmonic Hall

Architect: Herzog & de Meuron

Client: City of Hamburg

Completion: Estimated for 2013

Gross Floor Area: 1,295,792 SF

Seating Capacity:

Main Concert Hall: 2,150

Small Concert Hall: 550

Studio Area: N/A

Program includes:

Symphony Hall

Luxury Hotel

Residential Apartments

Conference Center

Wellness Area

Music Museum for Children

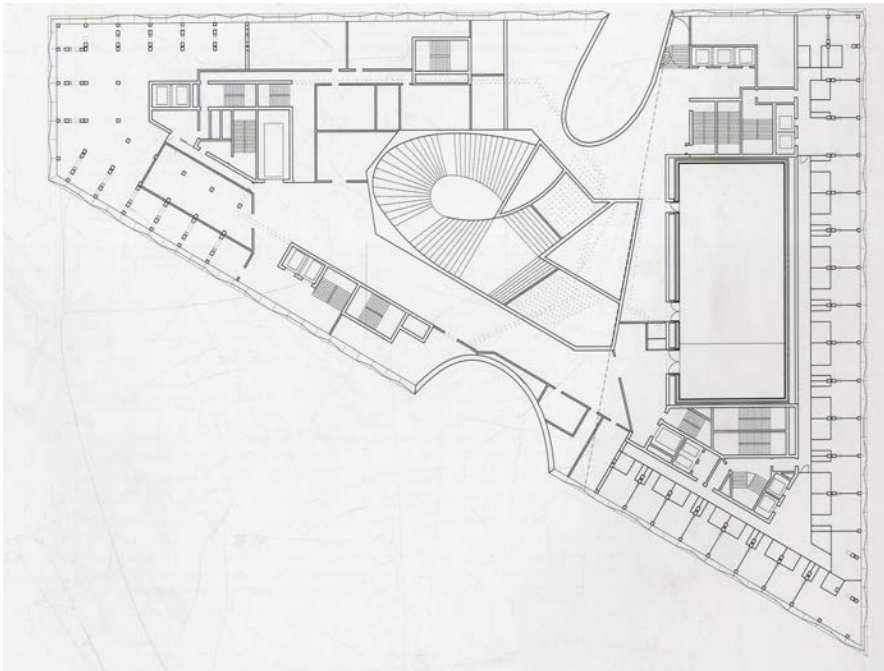
Restaurants

Nightclubs

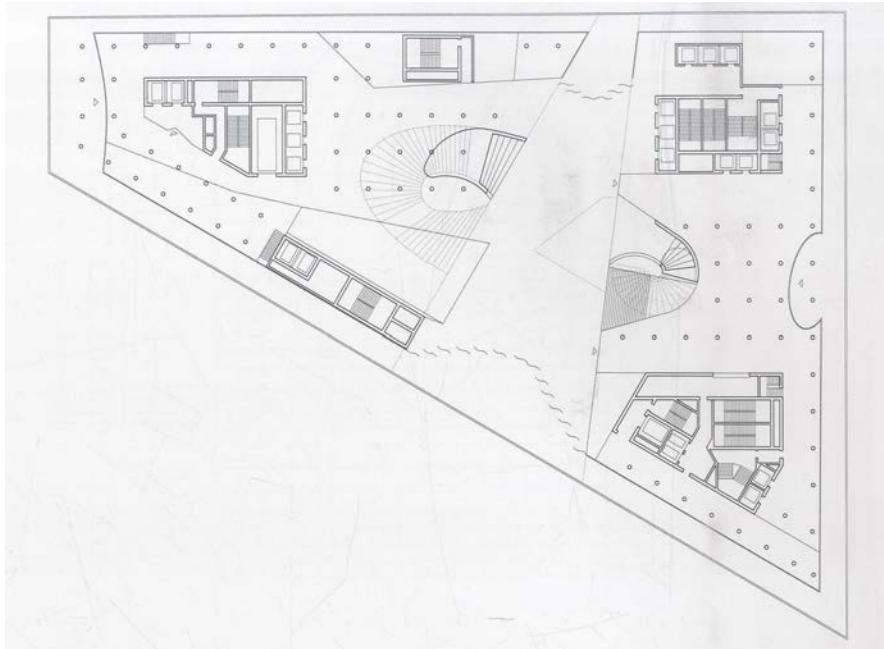
Parking



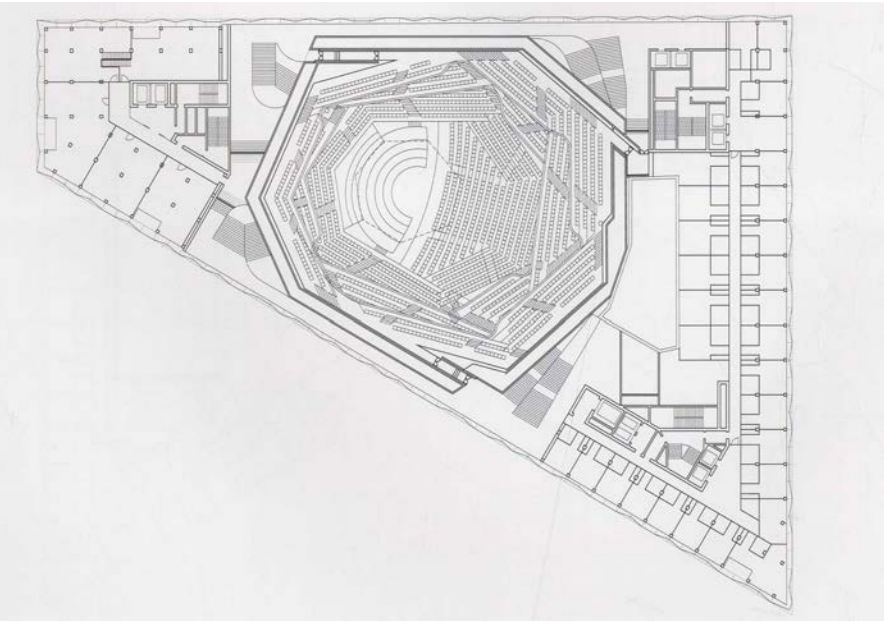
Fourth Floor



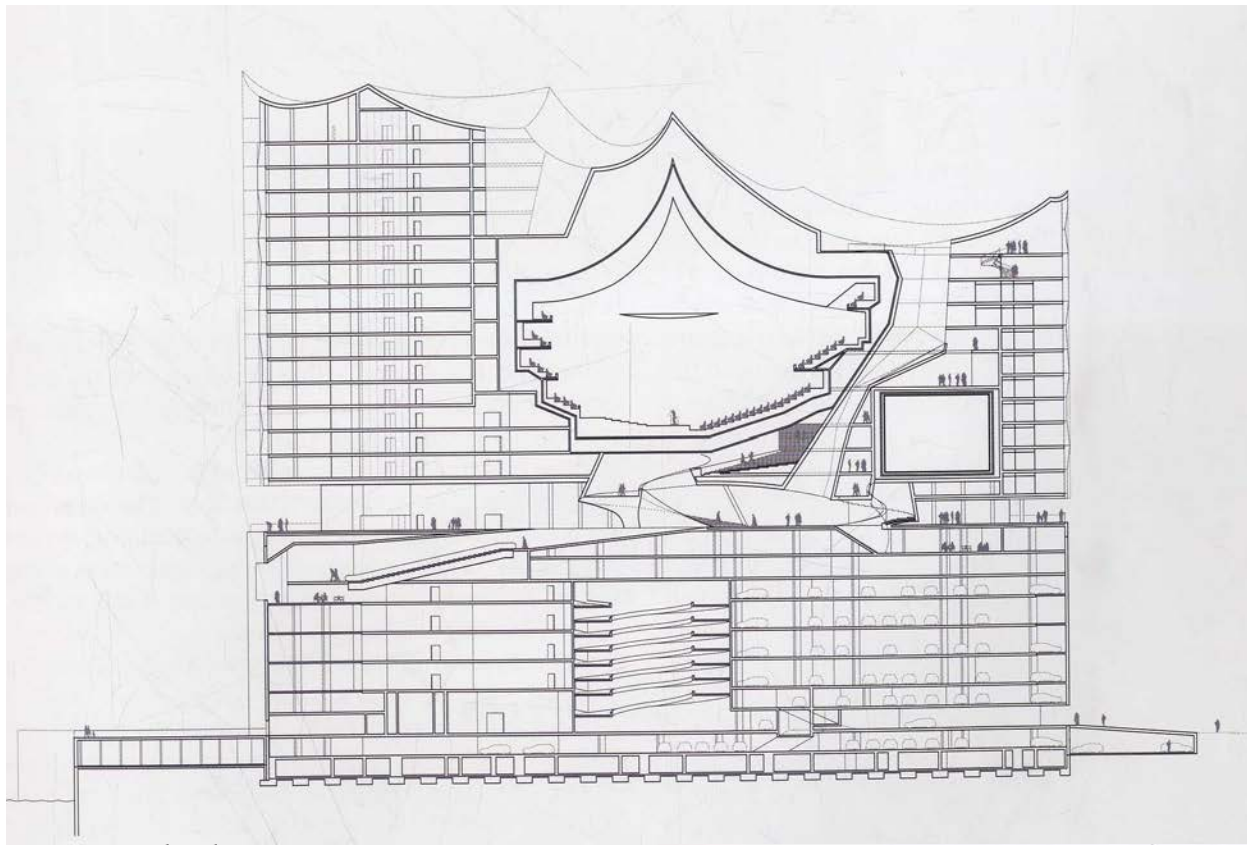
Tenth Floor



Eighth Floor

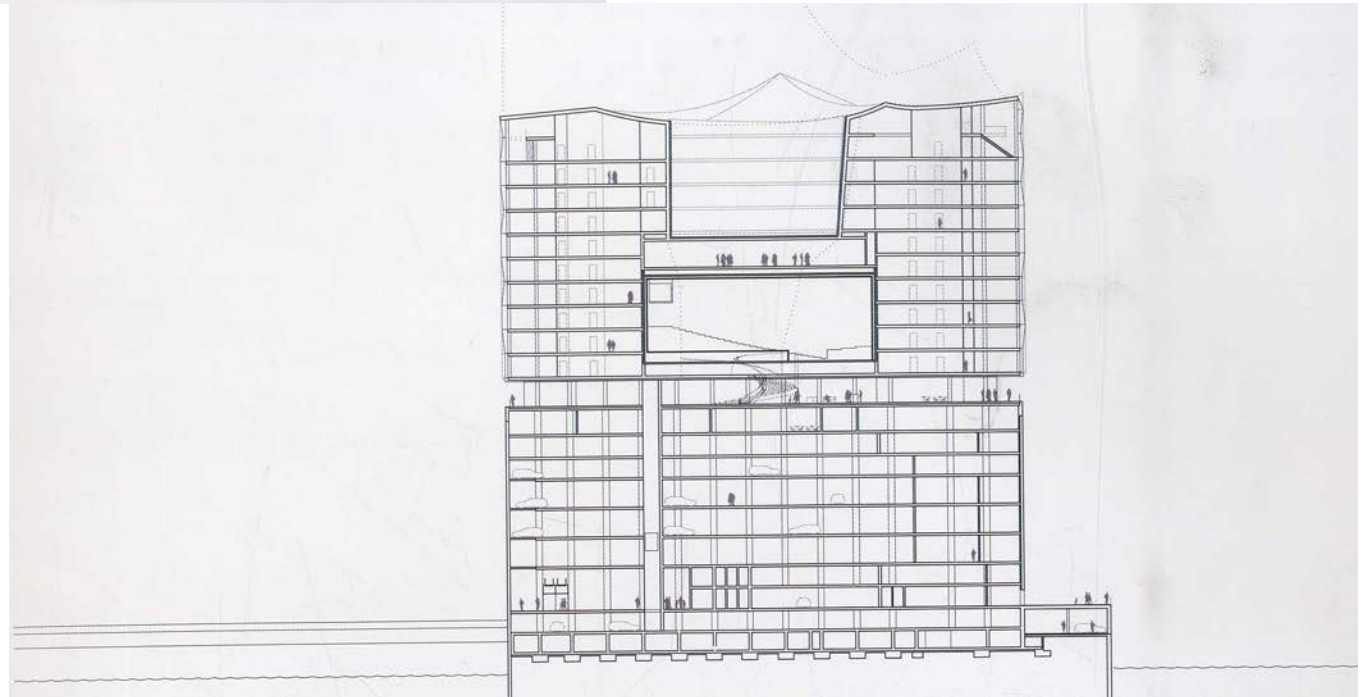


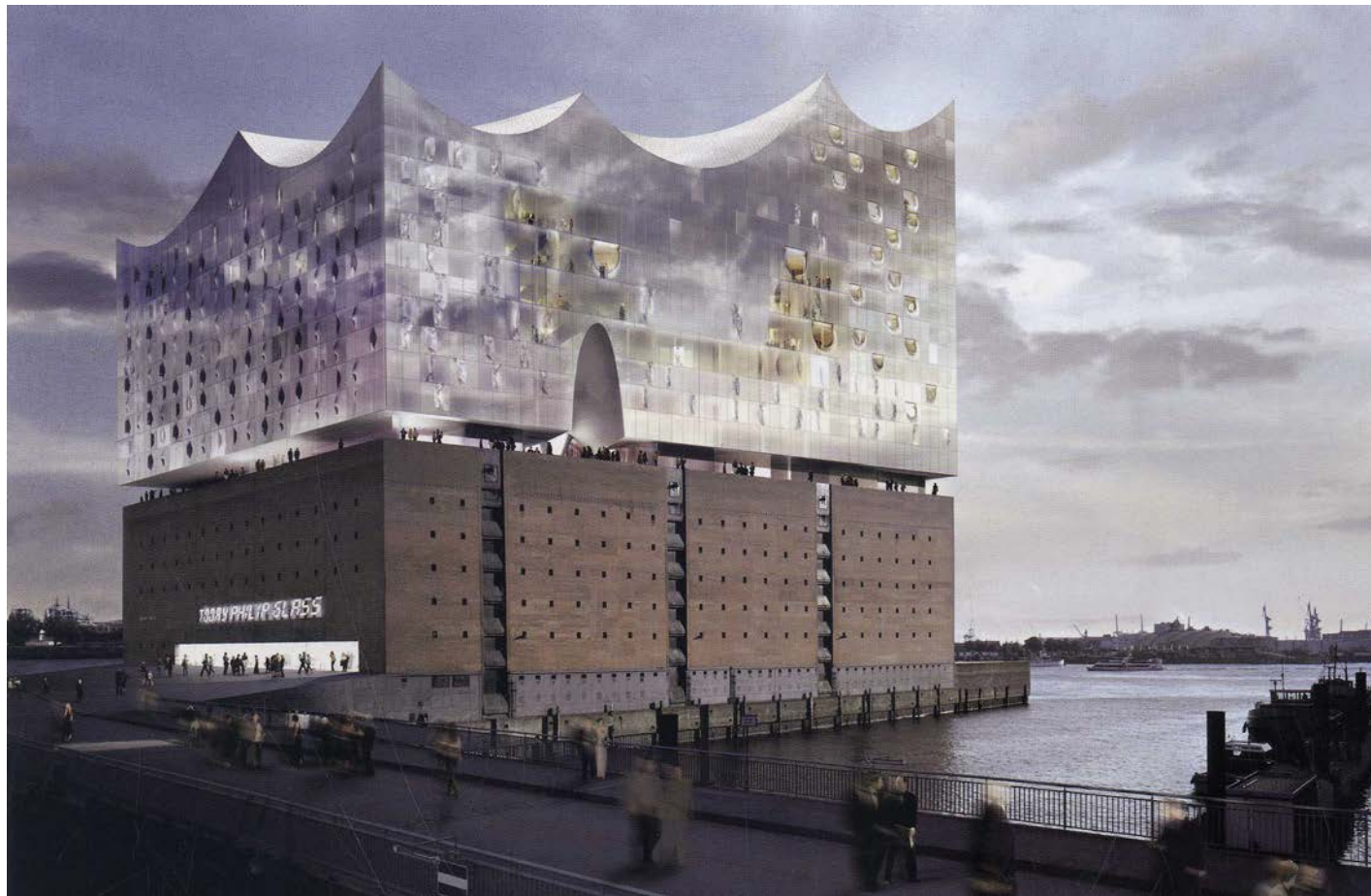
Sixteenth Floor



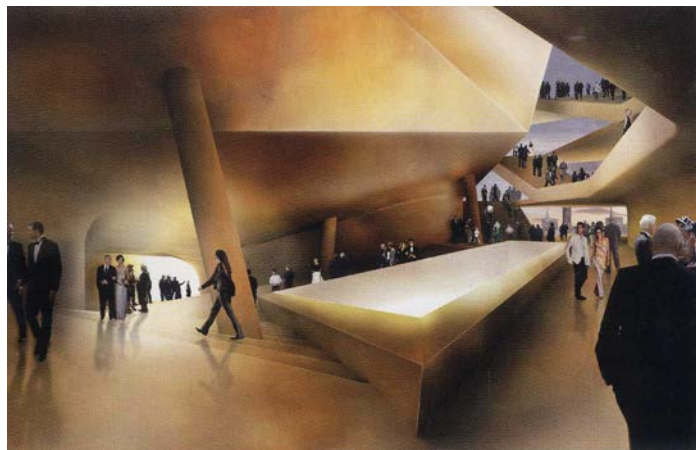
Longitudinal Section

Cross Section





Exterior Rendering



Foyer



Main Concert Hall



Boston Ballet School

Architect: Unknown

Client: Boston Ballet School

Completion:

Gross Floor Area: SF



Parti



Small Dance Studio

Maximum
Capacity: 49





Large Dance Studio

Maximum
Capacity: 160

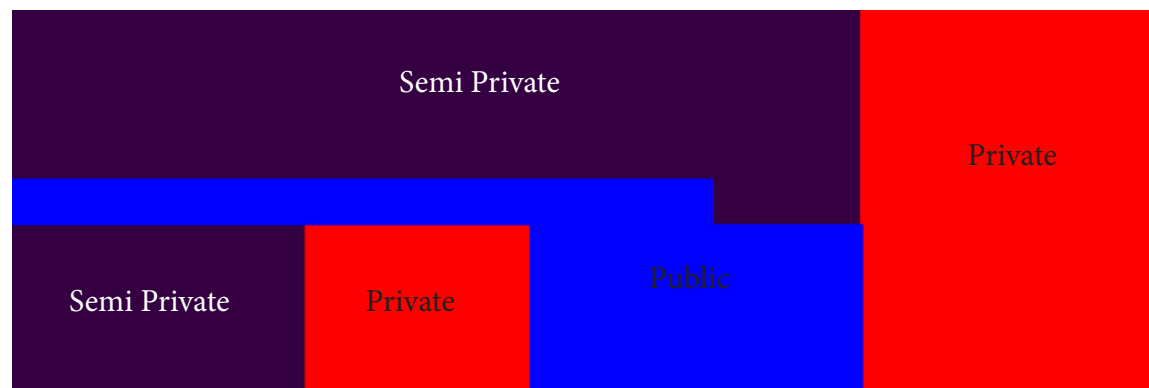




Entry to Dance Studios



Exterior of Studio





Springstep Dance Center

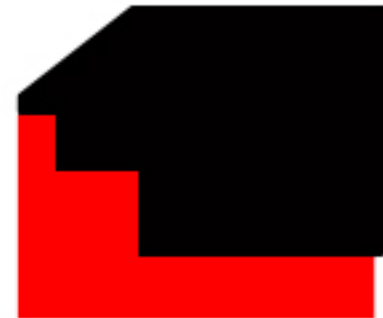
Architect: Andrew Cohen Architects

Client: Springstep Center for Traditional Dance and Music, Inc.

Completion: 2003

Gross Floor Area: 20,000 SF

Studio Area: 1428 SF



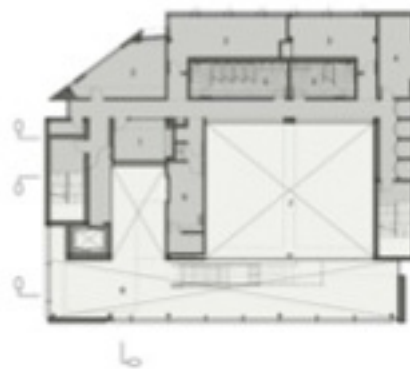
Parti



Ground Floor



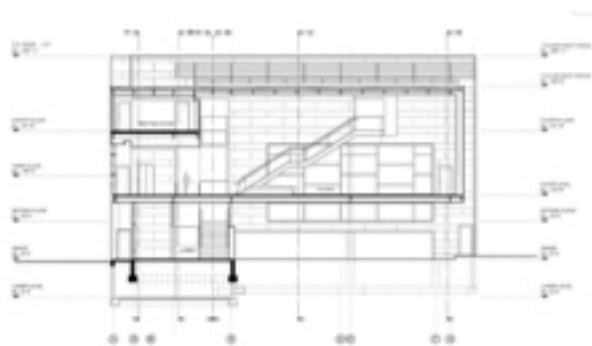
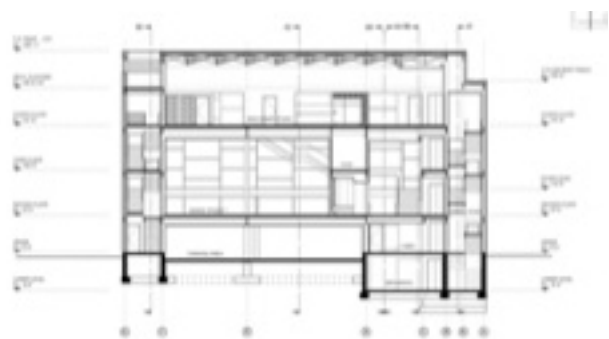
Second Floor

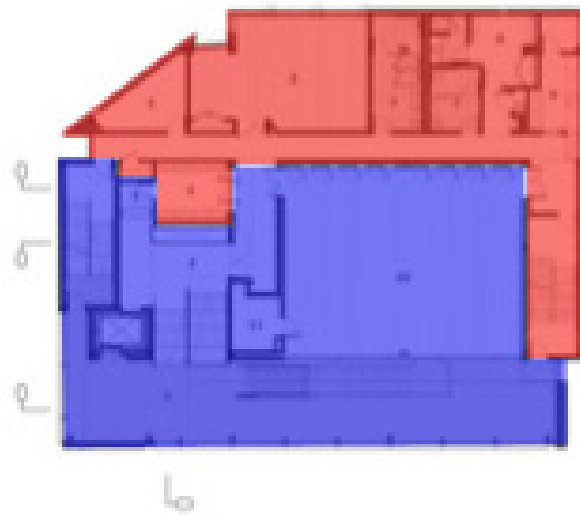


Third Floor

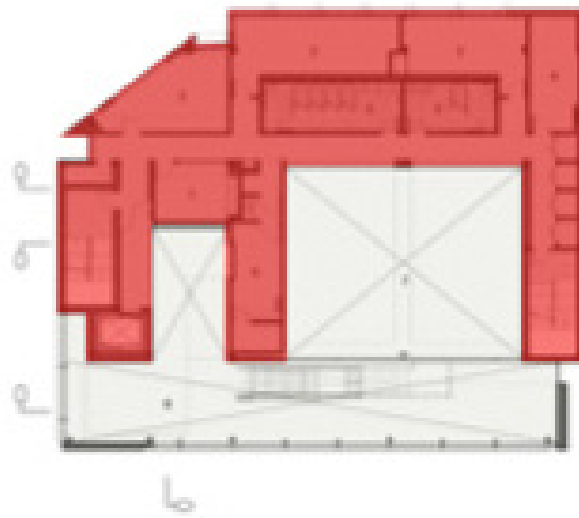


Fourth Floor





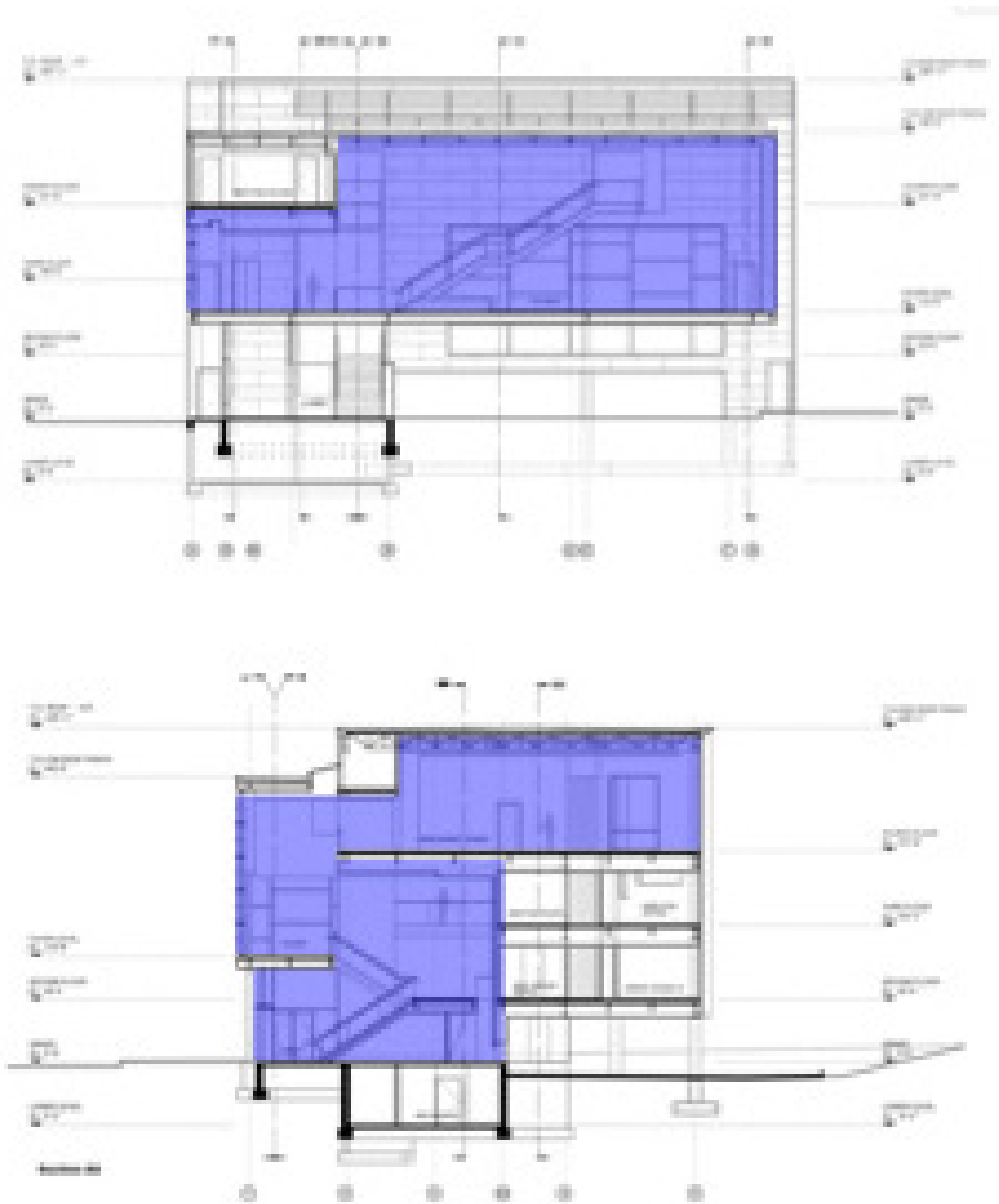
Second Floor



Third Floor



Fourth Floor



Springstep makes of point of keeping the public spaces connected not only in plan, but in sections as well. This creates smooth connections, easy wayfinding, and coherent spaces throughout the building. Furthermore, the main public space is two stories and resides behind a glass and metal facade which creates a visual connection to the exterior, expanding on the public space from within while inviting people in from without.



Northwest Facade

Main Dance Studio



springstep 6



springstep 20



South Facade

South Facade at Night

