

1-1-2009

Social Rejuvenation: A New Community Center, Lancaster, PA

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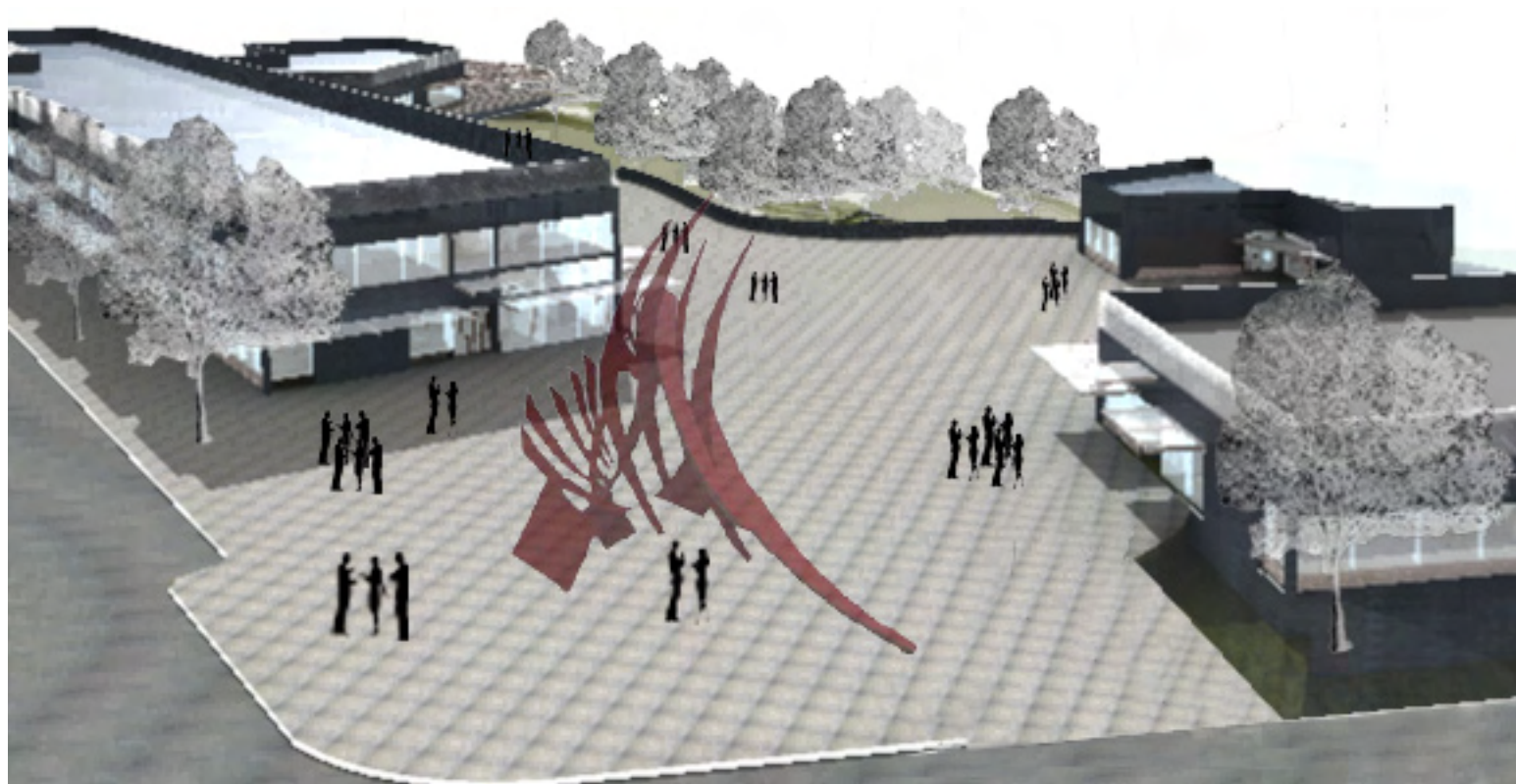
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Social Rejuvenation

“A New Community Center”

Lancaster, PA



Independent Project submitted to Roger Williams University, School of Architecture, Art and Historic Preservation
May 2009

By John Snavely
class of 2009

Advisor: William McQueen

Signature Page

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Independent Project submitted to Roger Williams University, School of Architecture, Art and Historic Preservation

In fulfillment of the requirements of the B. Arch Degree in Architecture

In May 2009

By

John Snavelly
Class of 2009

William McQueen
Advisor

Stephen White
Dean
School of Architecture, Art and Historic Preservation

Abstract

The goal of a new community center, set in the Southeast Ward, Lancaster, Pa, is to create an iconic place that will unite people in a downtrodden neighborhood by providing a setting that will bring the community together, once again. The principle element that these downtrodden communities lack is a cultural or social bond. By providing a place where members of the community can gather together, celebrate and share their different cultures will ultimately create a new cultural and social bond within the neighborhood and the greater community. Also by providing a place for everyday activities to take place within the community, rather than remote from its core, will allow for more social interaction. Ultimately the new community center will take one of the worst neighborhoods in Lancaster, Pa, and make it one the most dynamic and prosperous areas of the city.

The design intentions of this thesis are to create a building with a unique relationship to Lancaster Central Park that becomes the identity or identifiable object of an advancing neighborhood. The community center houses diverse programmatic elements that include: retail and office space, an open public market, public green spaces, as well as community studios and exhibition space. This will be a place, in essence where members of the community can gather and feel like they belong here and in the greater community.

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Manifesto

Architecture is more than just a building composed of a bunch of “sticks and stones”: it is something that has an impact on every person to from it’s daily user to someone who just happens to stroll by it one day. Whether this impact is positive or negative is open to the interpretation of the person interacting with it. It is the architect’s job to do everything he or she can possibly do to ensure that the design has a positive impact on the community that will be interacting with it.

One goes about creating an architecture that has a positive affect on its users (community) by doing the following:

1. The designer must have a thorough knowledge/understanding of the culture in which he will be designing in.
2. The local architecture should be studied and an interaction with it should take place, whether it is embracing it or rejecting it.
3. Programmatic relationships should be completely understood.
4. The primary concern of the designer should be to ensure that the functionality of the building meets and exceeds user expectations.

Some would argue that the primary goal of architecture is to create something that has an iconographic form, but I would argue to this that if you understand the culture in which you are designing in, the architecture of the area in which you’re designing, and the program you’re designing, then a gracious form will follow. Designs that only focus on form may create stunning imagery, but their interaction with the user will be of the poorest level, thus drawing major criticism from the people the building was designed for.

Architecture, when successful, is something that can reshape and revitalize a community. It should be something that a community can take pride in as something that defines and identifies them. It should not contribute to the blasé and mundane but something that enriches and enlivens its surroundings.

Problem Statement

Many communities throughout the country are deteriorating at an alarming rate, leaving places that were once socially and economically thriving in shambles. This can be seen as something that has arisen over time as communities have become a huge mix of different cultural groups as opposed to earlier communities that had common ties in the fact that they shared similar cultural backgrounds. The lack of this common cultural bond has led to a rift in social connections throughout many communities, causing many of them to become run down due to the fact that there is no longer that bond that leads to neighbors caring about one another.

These culturally impoverished communities are most severe in certain districts or segments of major cities, although it is an issue that is also beginning to creep its way into suburban life as well. A fitting quote from the Smithsonian's *Ordinariness and Light* is: "We feel the need for the district, the pub at the corner. Without these links with our fellows we are dead." (Smithson 34) I find this quote to be fitting because it gets to exactly what modern day communities are lacking; they are missing that place that identifies the community and brings it together like the pub does in English communities. If people don't have some symbol that they can relate to and which they feel identifies their community, then they are less likely to care about the upkeep of it and are willing to let it decay into decrepitness. This then brings up the question as to what is something that can stand as a symbol for a community and reunite it?

Project Statement

Architectural Intention:

- Private spaces should have a communal, public link that incorporates nature in some manner in either a completely outdoor space or a completely enclosed space or a mix of the two.
- Multiple types of program should be mixed together to create new pseudo programs that lead to or promote spaces that are scene as places that define the community.
- Architectural styles of the past in the community should be considered and should have an influence on the new architecture helping shape it into a style that is representational of the community. In other words the space/ building should be designed in a manner that it belongs to the community and if it we transplanted into another community it would be out of place.
- Public or communal spaces should be bright naturally lit spaces that are exciting to be in, which should be accomplished through the appropriate use of scale.
- Private spaces should be intimate and designed at a relatively personal scale than that of the public spaces.
- Green spaces should be incorporate into the interior of the building and help interior and exterior spaces flow together.

Project Statement

Design Intention:

The design intentions of this thesis are to create a building with a unique relationship to Lancaster Central Park that becomes the identity or identifiable object of an advancing neighborhood. The community center houses diverse programmatic elements that include: retail and office space, an open public market, public green spaces, as well as community studios and exhibition space. This will be a place, in essence, where members of the community can gather and feel like they belong here and in the greater community.

Program Outline

| Program | Per Unit(s.f.) | Proposed Program Space Total(s.f.) |
|--------------------------|------------------|---------------------------------------|
| Retail (12 Units) | | |
| Storefront | | 2,000 |
| Storage | | 680 |
| Total per Unit | | 2,680 |
| Total | 12@ 2,680 | 32,160 |
| Offices (9 units) | | |
| Rentable Office | 9@ 1800 | 16,200 |
| Restrooms | 2@ 240 | 480 |
| Total | | 16,680 |
| Restaurant | | |
| Seating area | | 7,000 |
| Bar | | 2,000 |
| Restrooms | 2@ 240 | 480 |
| Kitchen | | 2,000 |
| Storage | | 8,000 |
| Total | | 19,480 |
| Outdoor Market | | |
| Sales Area | | 20,000 |
| Total | | 20,000 |
| Community Space | | |
| Lobby | | 3,000 |
| Restrooms | 2@250 | 500 |
| Performance Space | | 7,000 |
| Lobby | | 2,000 |
| Seating | 250@10 | 2,500 |
| Backstage | | 1,500 |
| Storage | | 500 |
| Restrooms | 2@250 | 500 |
| Total | | 7,000 |

Program Outline

| Program | Per Unit(s.f.) | Proposed Program Space | |
|--|-------------------------|------------------------|----------------|
| | | | Total(s.f.) |
| Gallery | | | 12,500 |
| | Gallery | 10,000 | |
| | Gallery Support | 2,500 | |
| | Total | 12,500 | |
| Café | | | 3,440 |
| | Seating | 2,000 | |
| | Kitchen | 1,200 | |
| | Restrooms | 2@120 | 240 |
| | Total | 3,440 | |
| Music/ Dance Practice Spaces | | | 5,700 |
| | Dance Spaces | 4@ 600 | 2,400 |
| | Music Spaces | 4@ 200 | 800 |
| | Restrooms | 2@250 | 500 |
| | Storage | | 2,000 |
| | Total | | 5,700 |
| Art Production Spaces | | | 4,900 |
| | Art Studios | 4@ 600 | 2,400 |
| | Restrooms | 2@ 250 | 500 |
| | Storage | | 2,000 |
| | Total | | 4,900 |
| Total | | | 37,040 |
| Sub-total | | | 125,360 |
| Circulation and Mechanical (sub-total x 20%) | | | 25,072 |
| Total | | | 150,432 |
| Parking | 140 spaces @ 180 | | 25,200 |

Program Outline

Area Descriptions

Retail:

The creation of new retail spaces will have a positive effect on the community by giving the chance for local businesses to grow, thus creating more jobs in the neighborhood. It also creates a stronger interaction among residents of the community, because it allows them to stay in the community to buy goods they need thus interacting with their fellow neighbors and creating a sense of unity with them. By creating more interaction between members of the community it will create bonds that will in turn create an identity for the community. These retail spaces would be located at street level along the site giving an identity to the street edge of the neighborhood, thus making the making the community more dynamic.

Offices:

The creation of new rentable office spaces will have a positive effect on the community by giving the chance for local businesses to grow, thus creating more jobs in the neighborhood. It will allow the opportunity for locally owned office based companies to be located within the community and provide services to local residents.

Marketplace:

The marketplace would be place where people from the local community could buy and sell produce and other essential groceries. It would be a buzzing atmosphere made up of an infusion of many different stands selling many different things. This would be a place where local farmers could come and sell some of their crops as well as place where other small local grocers and producers could come together under one roof and create a cultural infusion in the community by offering the chance to buy so many different things.



Touraine and Richmond Architects
Livable Places Competition



<http://www.freefoto.com/preview/09-08-8?ffid=09-08-8>

Program Outline

Area Descriptions

Community Space:

The one thing that many derelict communities lack is some place that brings them together where they can share their cultures and experiences with each other and create an identity for the community. Although this entire project aims to do this as a whole the part of the program that will play the largest role in creating this identity will be the community spaces. These spaces will be able to be both semi open-air to completely enclosed depending on the weather and time of year as well as the time of day. By having the option of being open allows for a larger interaction with the programmatic spaces creating more interactions within the community. Since the neighborhood is largely Hispanic and an important part of their culture is music and dance it is important to provide places to put on performances as well as have places to rehearse.

The gallery space will allow members of the community access to the types of artwork being produced by their neighbors and even provoke conversations about the works themselves. The art production spaces will provide areas for local artists to produce art in facilities that they probably don't currently have access to.



<http://picasaweb.google.com/vikasshayana/LATrip#5181494340848606834>

Program Outline

A Narrative imaging life in the project

Local Artist

As I reach the studio I new sense of energy fills me up as I pass by some fellow artists creating work as well as works on display by them. As sit down in one of the studios contemplating the current piece that I am work on I look outside across the plaza and am immediately inspired by the sight of sitting on the green spaces holding conversations, kids playing games, people window shopping outside the local stores, and energetic pace of activity of the marketplace. As the hours pass by the faces outside change as well as the activities but the level of excitement in the air never falls. I decide to take a break and go grab something to eat at the café and pass by local musicians rehearsing and other members of the community preparing for an upcoming performance. I grab a sandwich from the café and decided to sit outside to eat and enjoy the beautiful weather. Over lunch I hold a conversation with another local artist about the impact of our art on the community and the impact of the community on our art. After lunch I get back to work.

Resident living in one of the housing units

I wake up to the sun shining through my window reflecting of the Conestoga river below. I look out the window and see local birds and wildlife enjoying all the amenities the river has to offer them. Aromas and sounds begin to seep in from the already bustling marketplace nearby, as I slowly wake up and became aware of my surroundings. On my way to work I stop by the marketplace to grab a quick pastry and coffee from one of the local stands. While wondering through the marketplace I see many of regulars for this time of the day holding little conversations with them while eat my breakfast and prepare for the day of work ahead. While leaving the plaza completely to head of to the bus stop to head to work I pass by seniors in the sitting chatting about some of the local art that is displayed around the area, I am also passed by several joggers out for their morning run.



http://static.flickr.com/119/303407314_a800301274_b.jpg



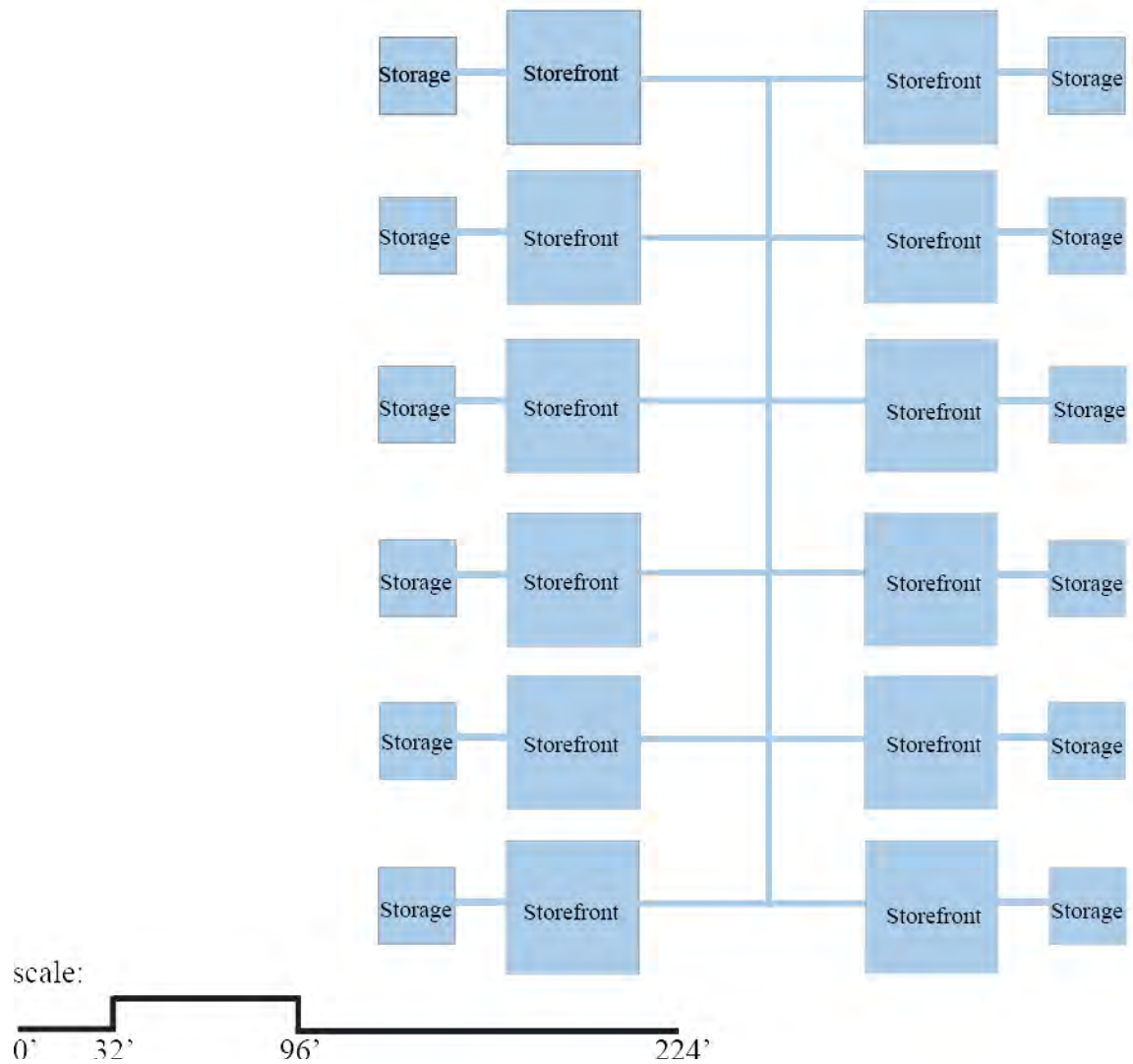
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http://www.irvinehousingblog.com/wp-content/uploads/2007/05/img_6392.JPG

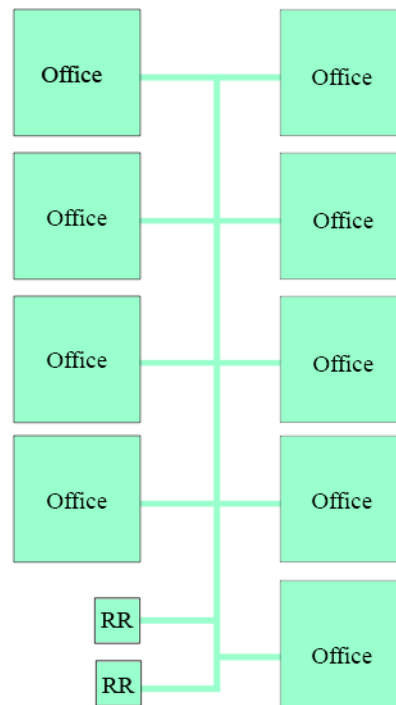
Program Outline

Retail Diagram



Program Outline

Office Diagram

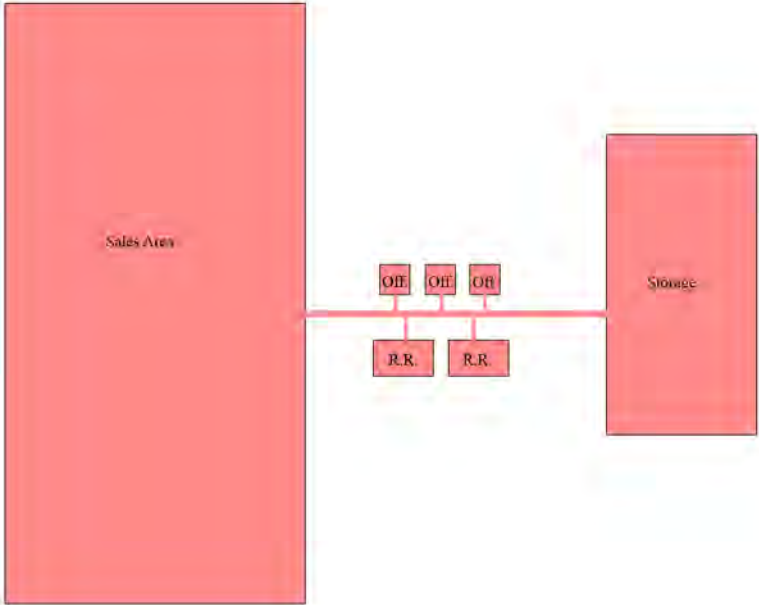


scale:



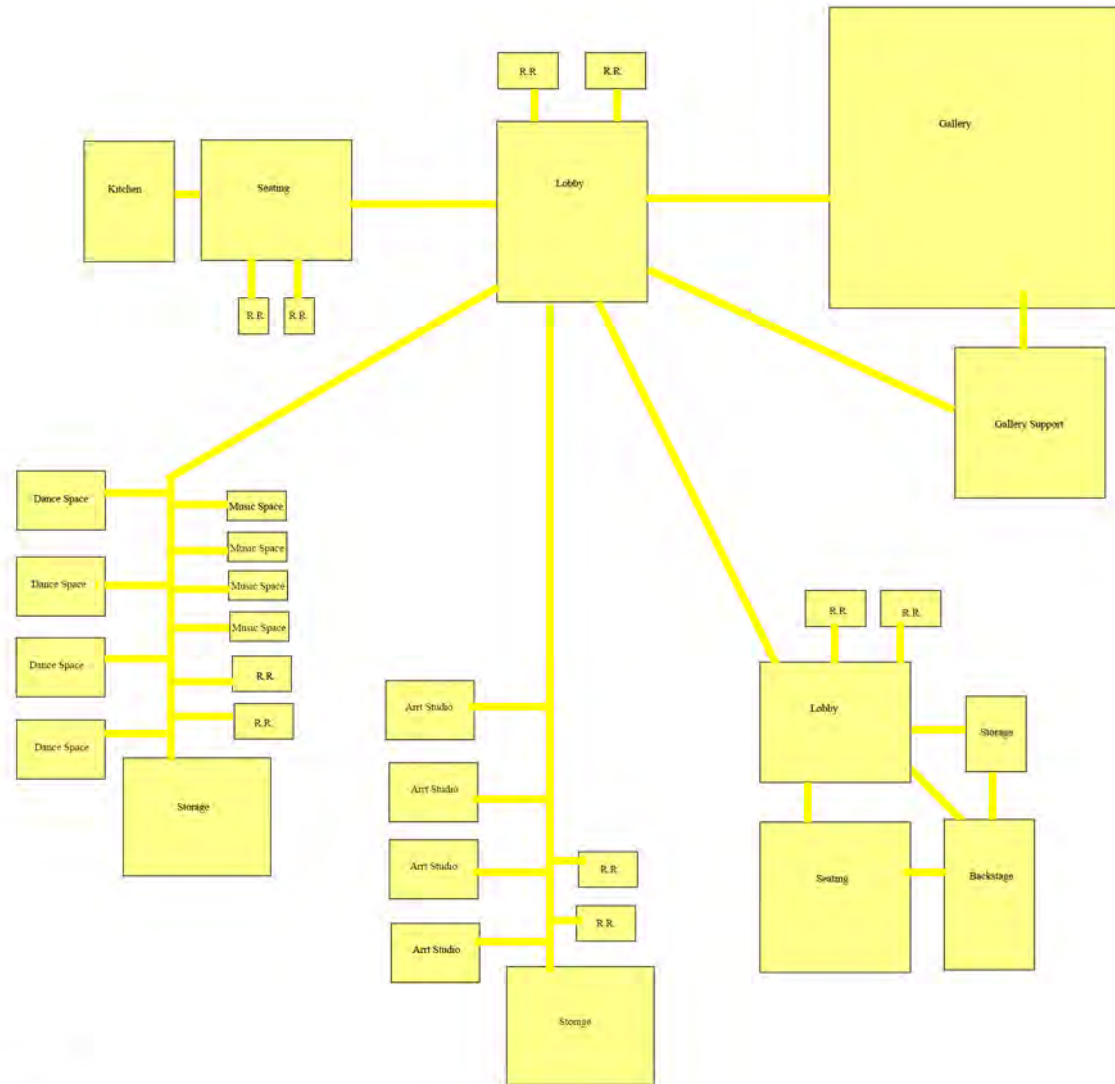
Program Outline

Market Diagram



Program Outline

Community Diagram

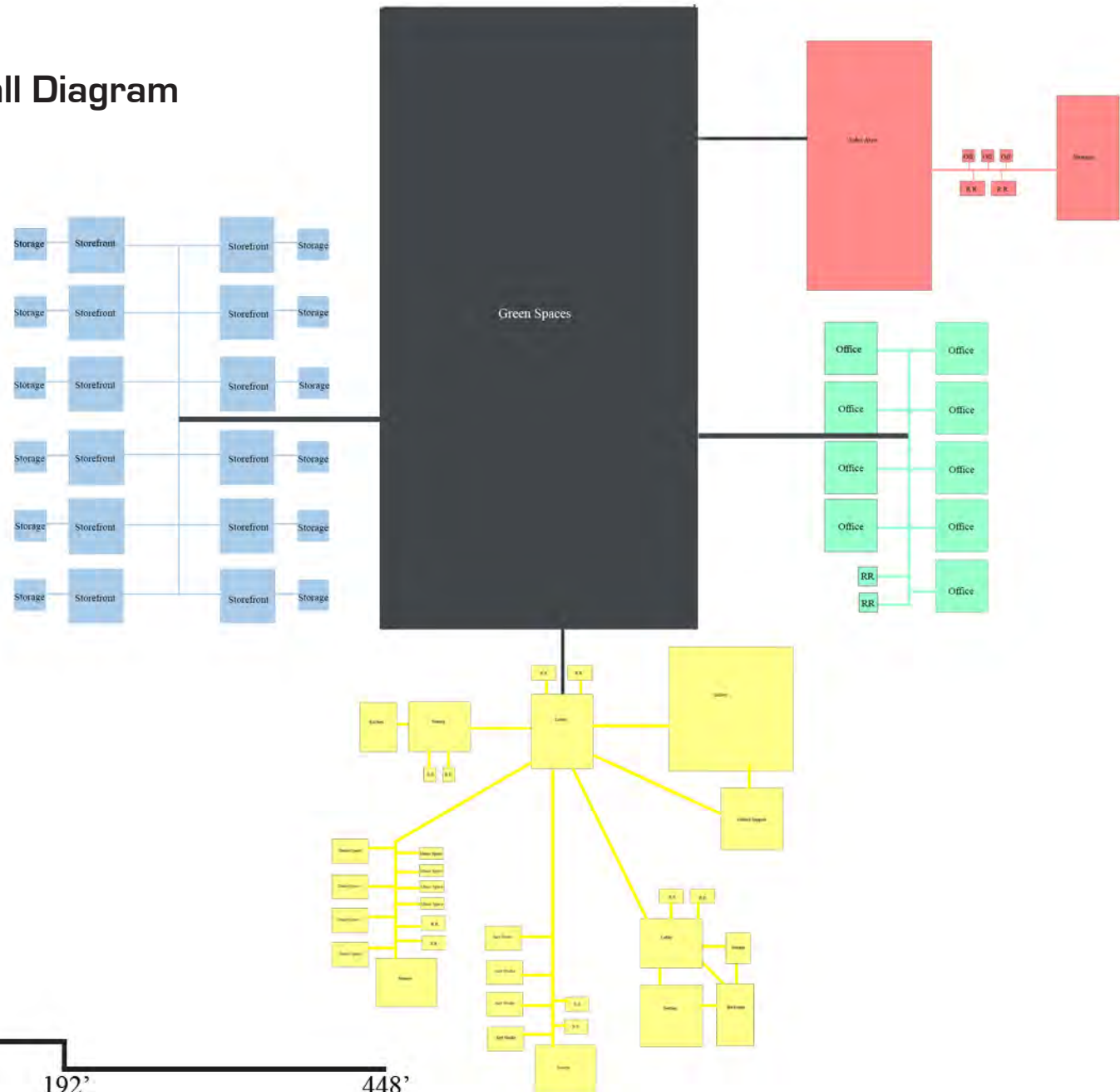


scale:



Program Outline

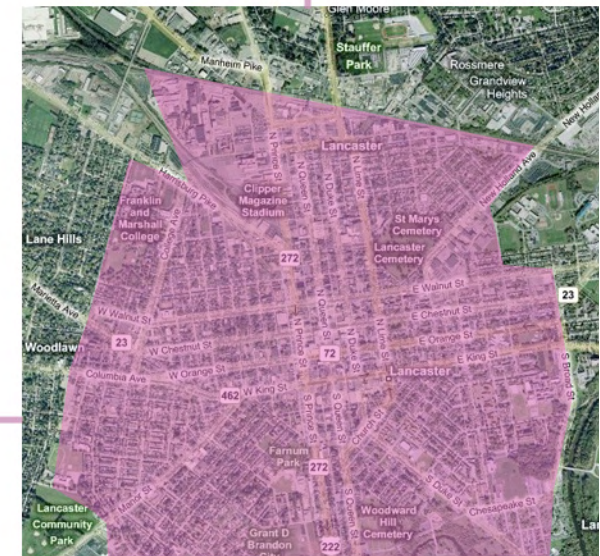
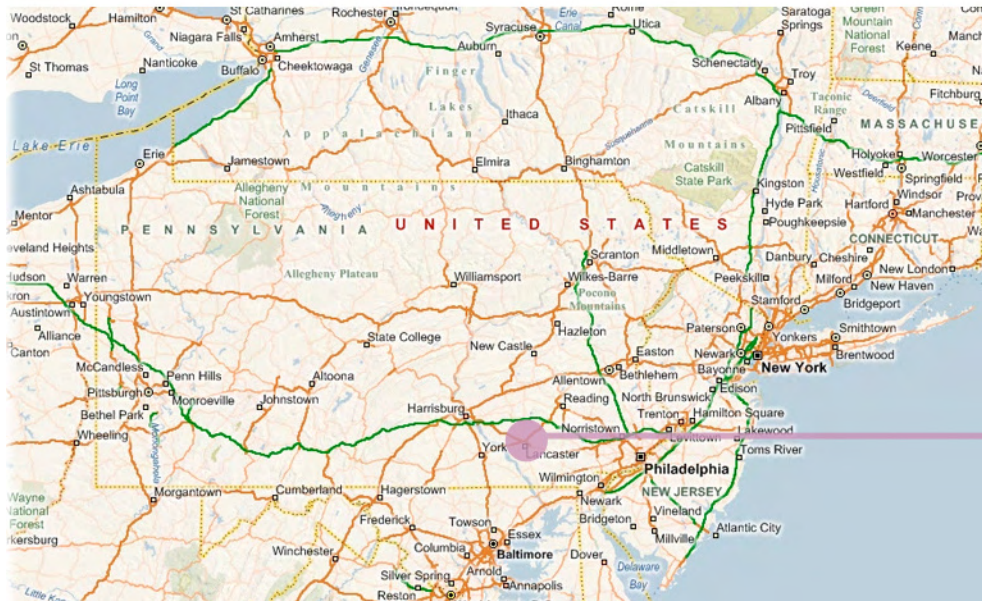
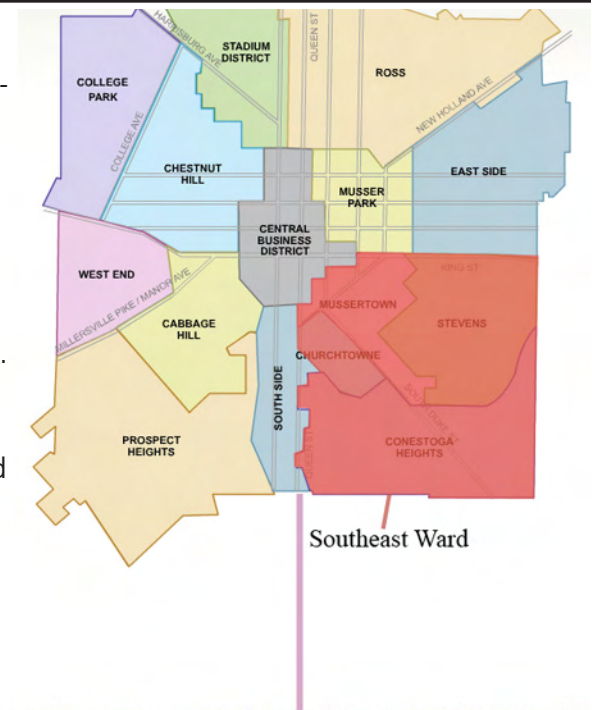
Overall Diagram



Site Identification and Analysis

The site selected is in Lancaster City, Pennsylvania at the intersection of Chesapeake and South Duke streets. The site is in what is known as the Southeast ward of the city. The area over the past decades has been known as one of the worst neighborhoods of the city, however over the past couple of years with the influx of largely Hispanic residents, the community has begun to turn itself around and make improvements. The community improvements have been led by the Spanish American Civic Association (SACA) whose mission is to “foster and facilitate the cultural, social, civic and economic development of the Latino Community of the City of Lancaster.” (sacapa.org)

Lancaster City is located in what is known as the Susquehanna Valley which was formed by the Susquehanna River that runs from Harrisburg to Chesapeake Bay. Lancaster is located 80 miles west of Philadelphia, and 40 miles southeast of Harrisburg. The area is known for its rich farm land. Lancaster City itself has seen a large influx of new residents moving from suburban Philadelphia.



Lancaster City

Site Identification and Analysis

The Hispanic community is the second largest ethnic group in Lancaster City making up nearly 31% of the city's population. (U.S. Census Bureau) Much of the Hispanic community lives in less than desirable economic conditions with a median family income of \$22,344 and with 1,199 families living below the poverty line. Under the guidance of SACA the site will be developed into three major programmatic elements that will benefit the Hispanic community greatly.

Census 2000 Demographic Profile Highlights:
Selected Population Group: Hispanic or Latino (of any race)

[Reference Map](#)

| General Characteristics | Selected Population Group | Total Population |
|-------------------------------|---------------------------|------------------|
| Total population | 17,331 | 56,348 |
| Male | 8,650 | 27,474 |
| Female | 8,681 | 28,874 |
| Median age (years) | 22 | 30 |
| Under 5 years | 2,123 | 4,445 |
| 18 years and over | 10,117 | 40,870 |
| 65 years and over | 520 | 5,933 |
| Household population | 16,938 | 52,658 |
| Group quarters population | 393 | 3,690 |
| Average household size | 3 | 3 |
| Average family size | 4 | 3 |
| Occupied housing units | 4,964 | 20,933 |
| Owner-occupied housing units | 1,423 | 9,752 |
| Renter-occupied housing units | 3,541 | 11,181 |

| Social Characteristics - show more >> | Selected Population Group | Total Population |
|---|---------------------------|------------------|
| Population 25 years and over | 7,810 | 33,183 |
| High school graduate or higher | 3,722 | 22,095 |
| Bachelor's degree or higher | 283 | 4,633 |
| Civilian veterans (civilian population 18 years and over) | 328 | 3,802 |
| Disability status (population 5 years and over) | 3,709 | 11,925 |
| Foreign born | 1,640 | 3,738 |
| Male, Now married, except separated (population 15 years and over) | 1,979 | 8,359 |
| Female, Now married, except separated (population 15 years and over) | 1,975 | 7,884 |
| Speak a language other than English at home (population 5 years and over) | 12,832 | 16,081 |

| Economic Characteristics - show more >> | Selected Population Group | Total Population |
|---|---------------------------|------------------|
| In labor force (population 16 years and over) | 6,374 | 26,744 |
| Mean travel time to work in minutes (workers 16 years and over) | 23 | 20 |
| Median household income in 1999 (dollars) | 22,453 | 29,770 |
| Median family income in 1999 (dollars) | 22,344 | 34,623 |
| Per capita income in 1999 (dollars) | 8,825 | 13,955 |
| Families below poverty level | 1,199 | 2,175 |
| Individuals below poverty level | 5,352 | 11,162 |

| Housing Characteristics - show more >> | Selected Population Group | Total Population |
|--|---------------------------|------------------|
| Single-family owner-occupied homes | 1,243 | 8,900 |
| Median value (dollars) | 64,000 | 71,300 |
| Median of selected monthly owner costs | (X) | (X) |
| With a mortgage (dollars) | 776 | 841 |
| Not mortgaged (dollars) | 232 | 290 |

(X) Not applicable.

Source: U.S. Census Bureau, Summary File 2 (SF 2) and Summary File 4 (SF 4)

Site Identification and Analysis

Southeast ward with places of interest marked.



Thaddeus Stevens College
of Technology

King Elementary
School

Spanish American
Civic Association

Edward Hand
Middle School

Crispus Attucks Com-
munity Center

The Site

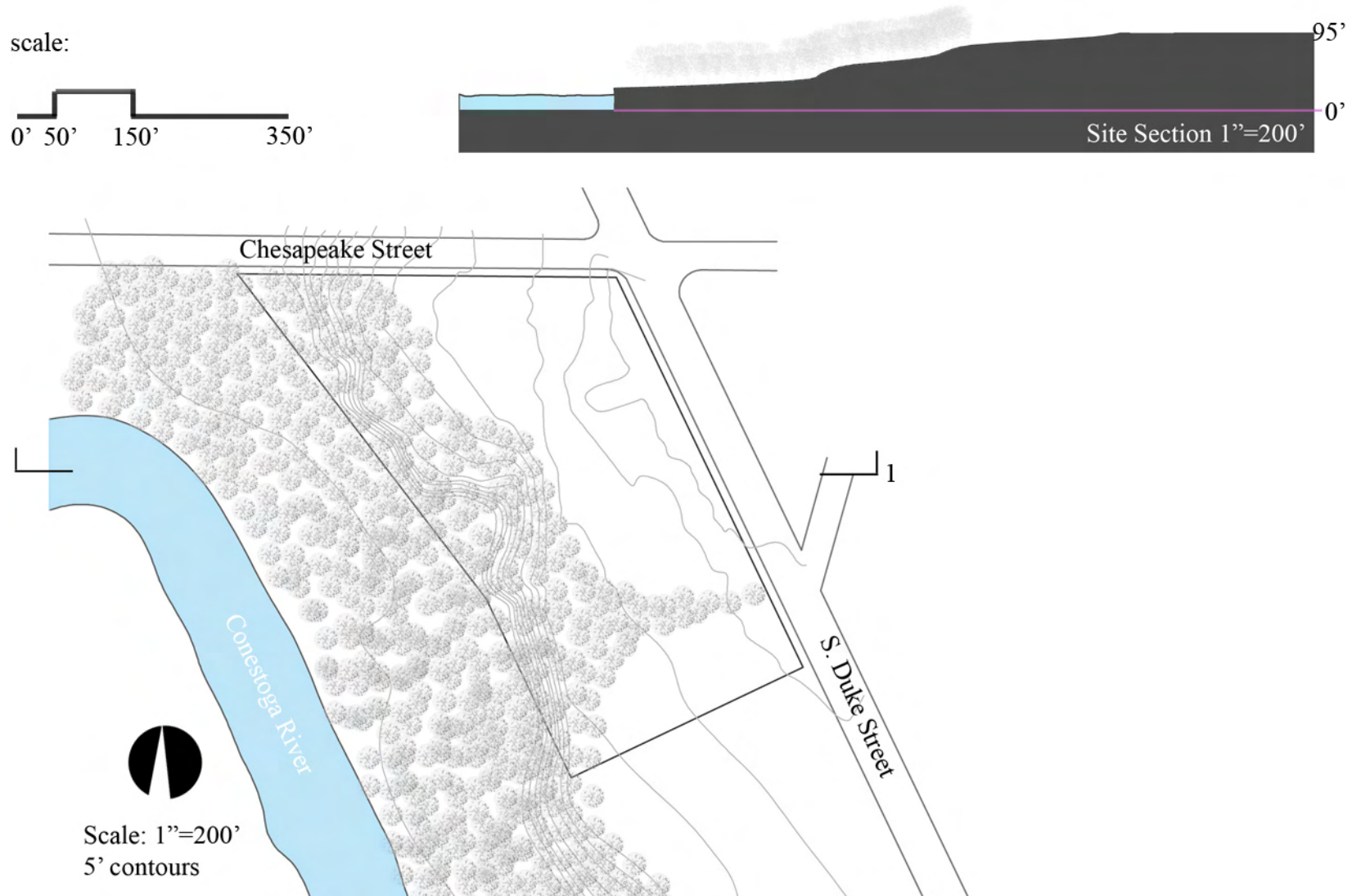
Woodward Hill
Cemetary

The Mix at Arbor Place
(after school center)

Lancaster Central Park

Site Identification and Analysis

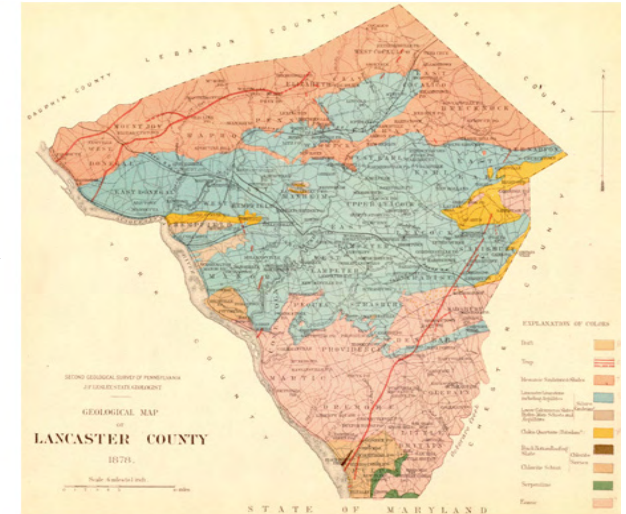
Site Plan/Section



Site Identification and Analysis

Site Analysis

Lancaster City sits on a large bed of limestone that covers much of the central part of the county, which can be seen in the geology map. The soil quality of the site has been compromised by the sites previous use as a salvage yard and junk yard which will require some environmental cleanup before it can be redeveloped. Assistance from the federal Housing and Urban Development Department's urban "brownfield" clean up grant program will allow for the necessary cleanup of the site. (sacapa.org) Vegetation on the site includes local deciduous trees like oaks, maples and beaches as well as low growing ferns and other shrubs and a few coniferous pines.



Geology



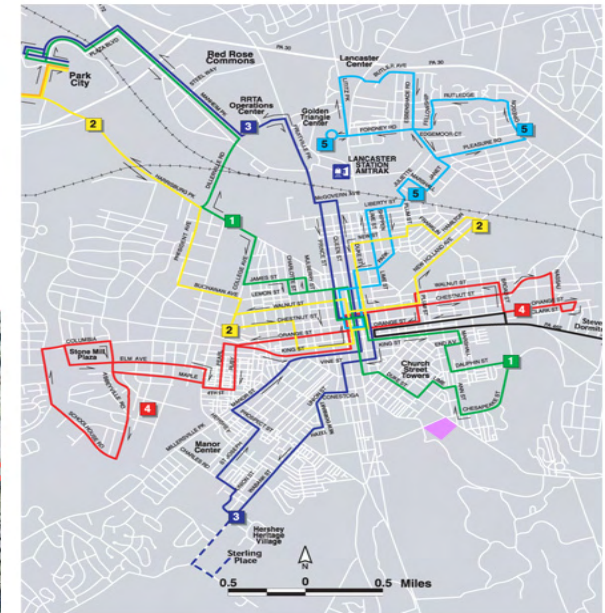
Site Drainage

Site Identification and Analysis

Site Circulation



Vehicular Circulation



| City Routes | |
|---------------------|------------------------------------|
| | Route 1 Park City A/Southeast |
| | Route 2 Park City B/6th Ward |
| | Route 3 Park City C/8th Ward |
| | Route 4 Elm Avenue/Parkside |
| | Route 5 Grandview Heights/Rossmore |
| Metro Region Routes | |
| | Route 20 Greenfield |
| | MU Park City Xpress |

Site Identification and Analysis

Site History

The site at 902 south Duke Street was previously home to a night club and restaurant which was frequently the scene of different acts of violence, which ultimately lead to operation being shut down and the site abandoned. Before the site was home to the night club it served as a junkyard and salvage yard, which brings up some environmental concerns when manipulating the site. SACA however, is seeking assistance from the federal Housing and Urban Development Department's urban "brownfield" cleanup grant program for help with the environmental remediation.

For much of the eighteenth and nineteenth centuries the Southeast Quadrant of Lancaster City was largely undeveloped with a few mills and farms occupying the area. The major landmarks at the time were the two large cemeteries the Woodward Hill and Greenwood which are still prominent features of the area today. The most prominent feature of the area today is Lancaster County's Central Park. It occupies 544 acres of land bordering the Southeast Quadrant to south and runs adjacent to the 902 south Duke Street site. The park houses everything from a county swimming pool, to a skate park, to garden rental plots, as well as an environmental center.



Southeast Quadrant 1868



Greenwood Cemetery

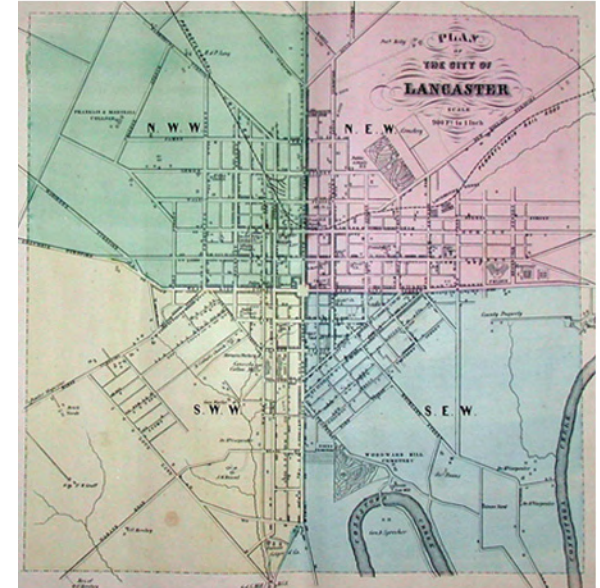
Site Identification and Analysis

Area History

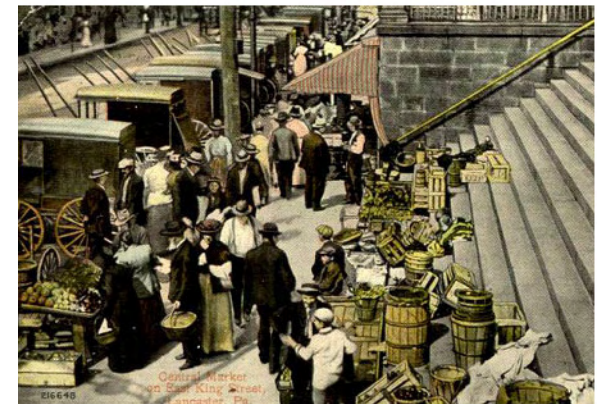
The town of Lancaster was founded in the early 1730s and developed into a regional center serving the surrounding agricultural community. Located at the intersection of major east-west and north-south roadways, Lancaster was an important eighteenth-century settlement on the primary route of westward expansion through Pennsylvania. By the second half of the eighteenth century, Lancaster was said to have been the largest inland town in America, a distinction it held until the end of the first decade of the nineteenth century.

Although the city is located at the heart of Pennsylvania's most prominent agricultural region, its late-nineteenth through early-twentieth century growth was largely a result of the city's industrial and manufacturing expansion. The historic character of Lancaster is largely defined by the building and rebuilding that took place during this period. The railroad cuts that loop across the northern half of the city and that bisects the city from north to south, defined historic industrial corridors that remain very much in evidence today. The central business district that evolved through the wealth built from these industries defines the core of the city. Surrounding these areas are neighborhoods, rich in architectural character and diversity. Row houses are the predominant form, interspersed with vestiges of the city's earlier periods – one story dwellings and high style town houses – and the mansions of the city's wealthy.

Since the early twentieth century, with the exception of the episode of urban renewal in the 1960s and 1970s, relatively little building replacement has occurred in Lancaster. This is particularly true in the residential areas outside of the central business district. Today, the city's neighborhoods are largely intact as they were originally developed and have a high degree of historic integrity.



Lancaster City 1868



Lancaster Central Market c. 1900

Site Identification and Analysis

Architecture and Planing

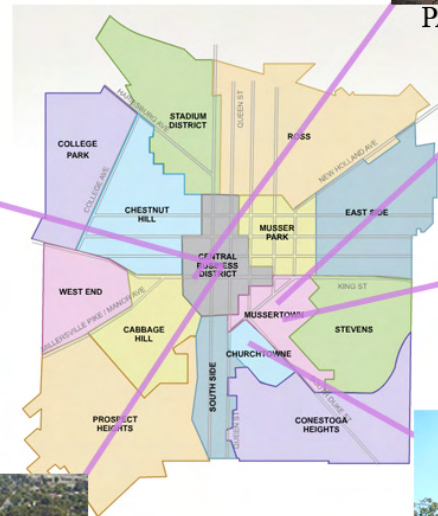
Most of the buildings in Lancaster City were built mainly in the 19th century and early 20th century. Lancaster is a predominantly brick city with many buildings built close together on regular streets arranged in a grid pattern. Lancaster's tallest building and only skyscraper is the Griest Building which was built in 1926. This however, will no longer be the case after the completion of the new Lancaster County Convention Center and Lancaster Marriot .



Griest Building



Lancaster County Convention Center



PA Academy of Music

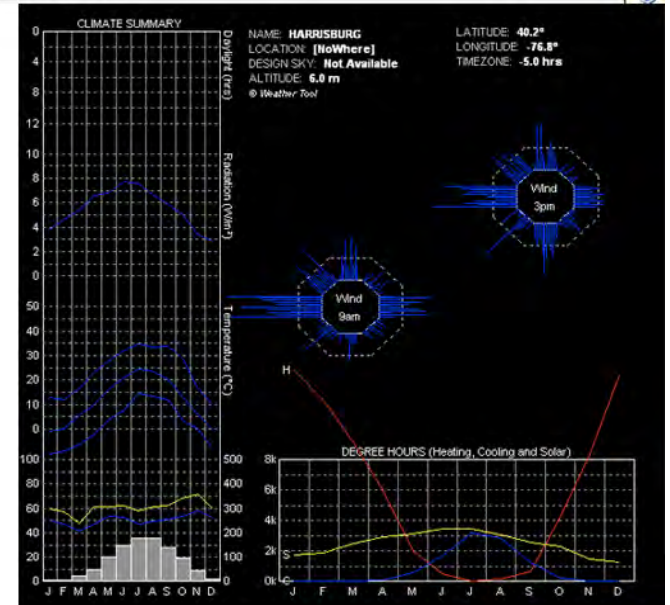
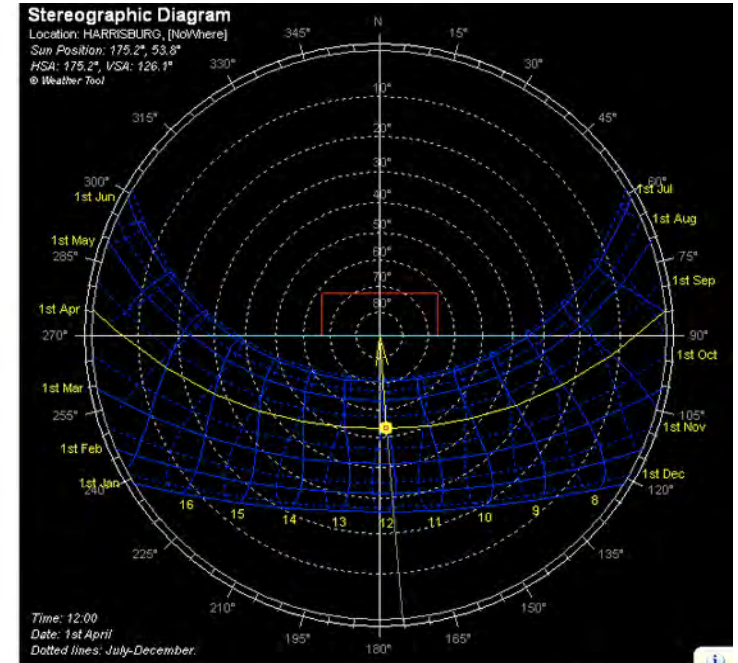
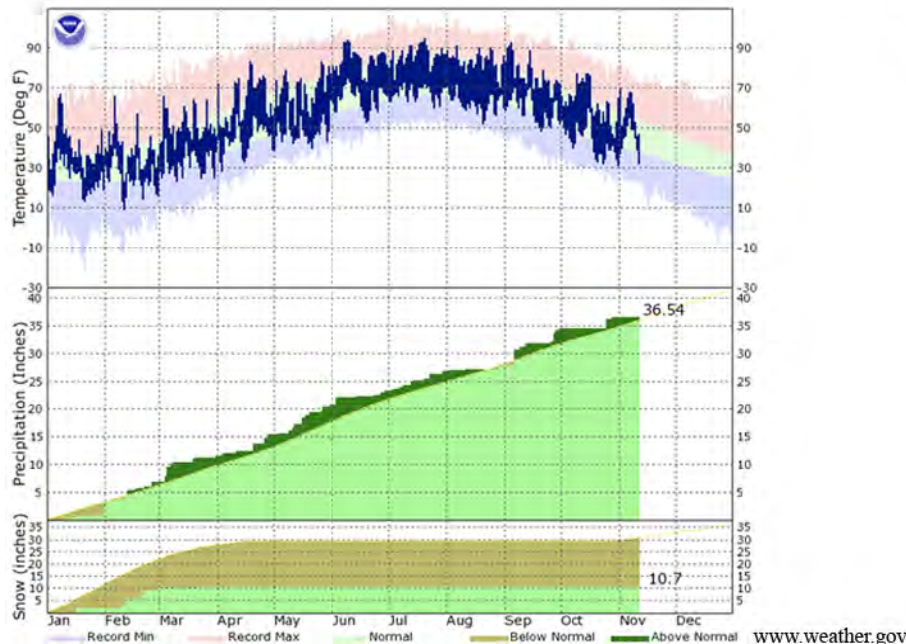


images from lancastercityliving.org

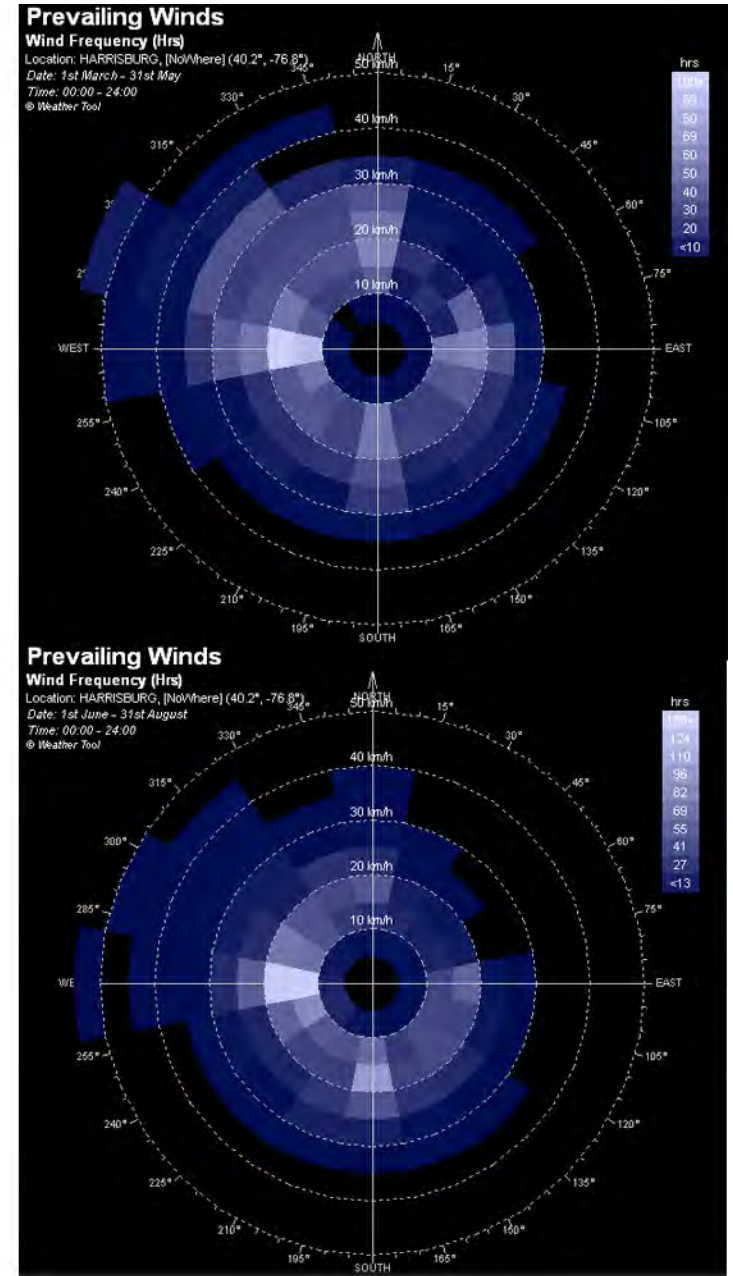
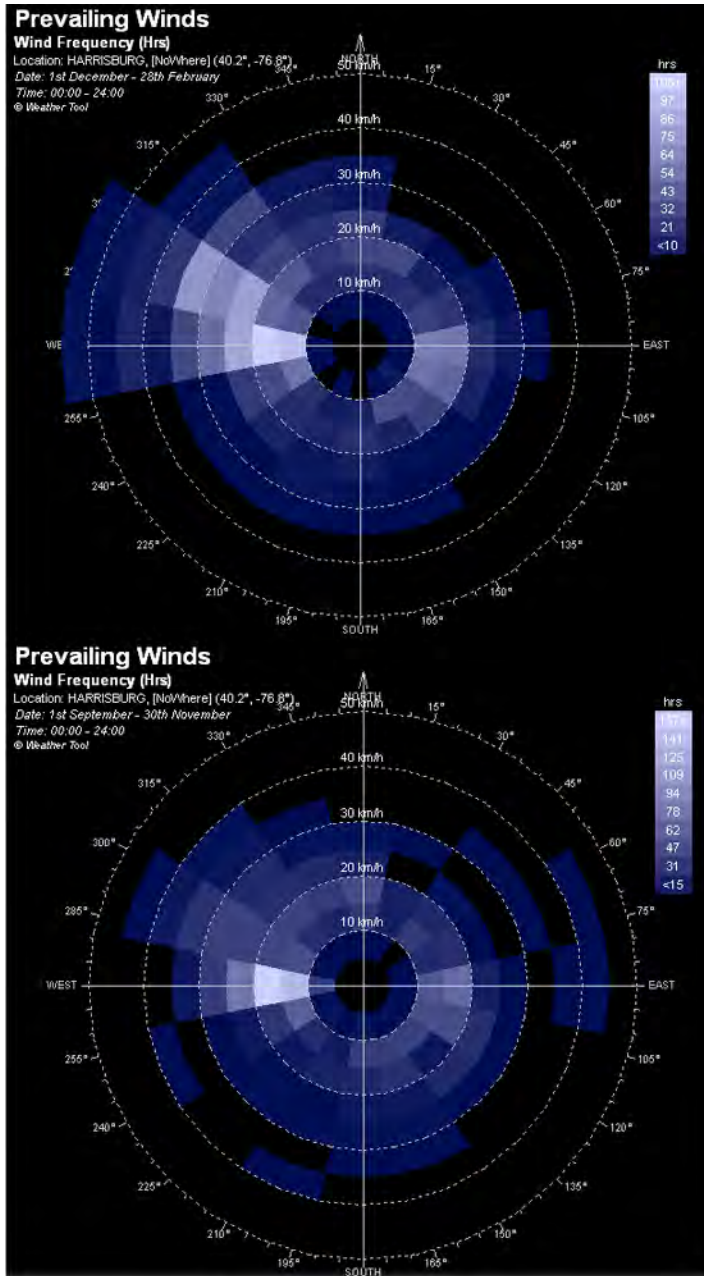
Site Identification and Analysis

Climate

Lancaster, PA has a very dynamic climate with lows in the winter reaching the teens and occasionally zero degrees Fahrenheit and in the summer highs reach the nineties and occasional one hundred degrees. The annual precipitation for there area is somewhere around 40" which means that it does get a significant amount of precipitation throughout the year. The prominent winds are generally from the West/ Northwest all year round.



Site Identification and Analysis



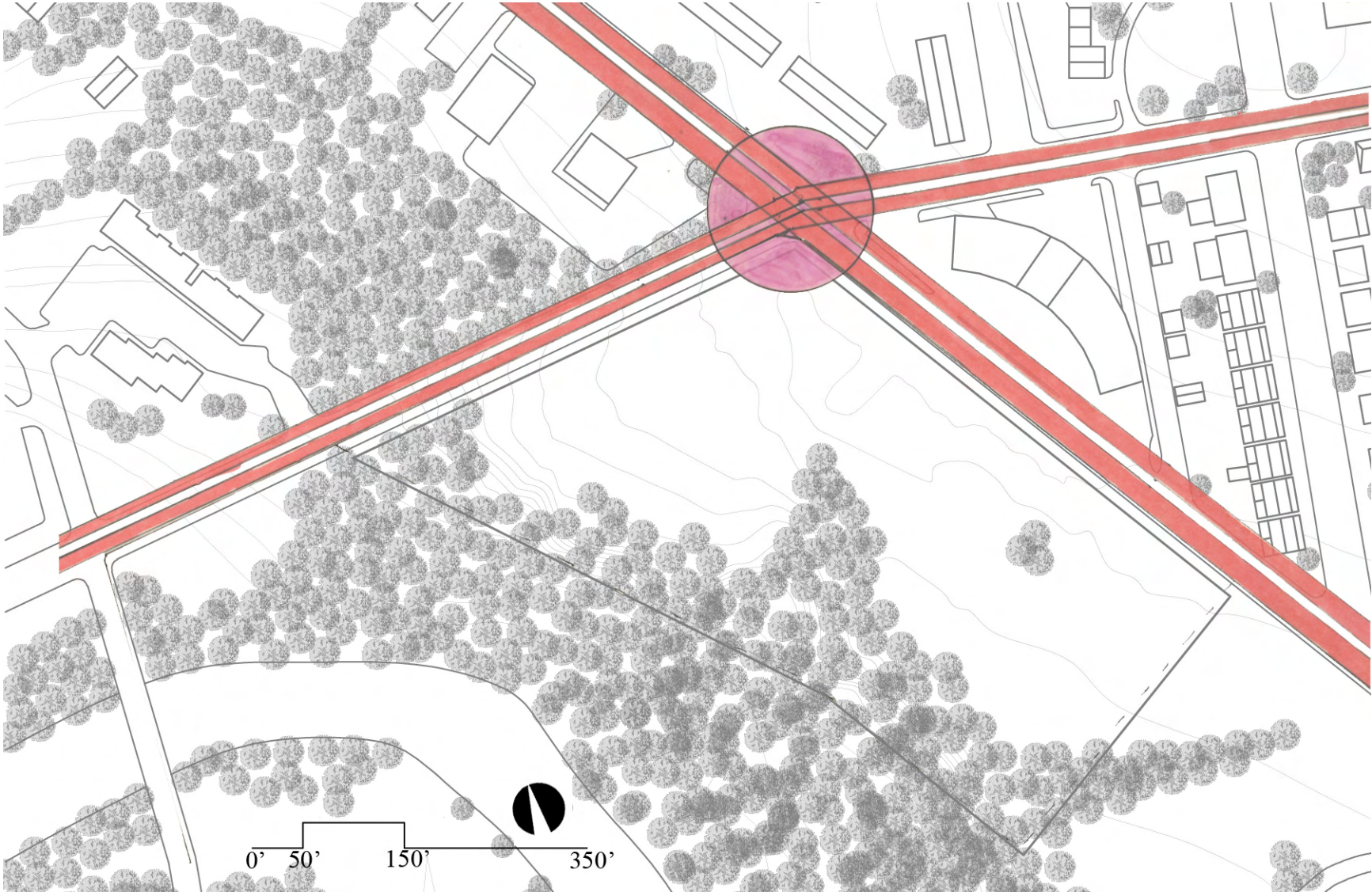
Site Identification and Analysis

Wind Diagram



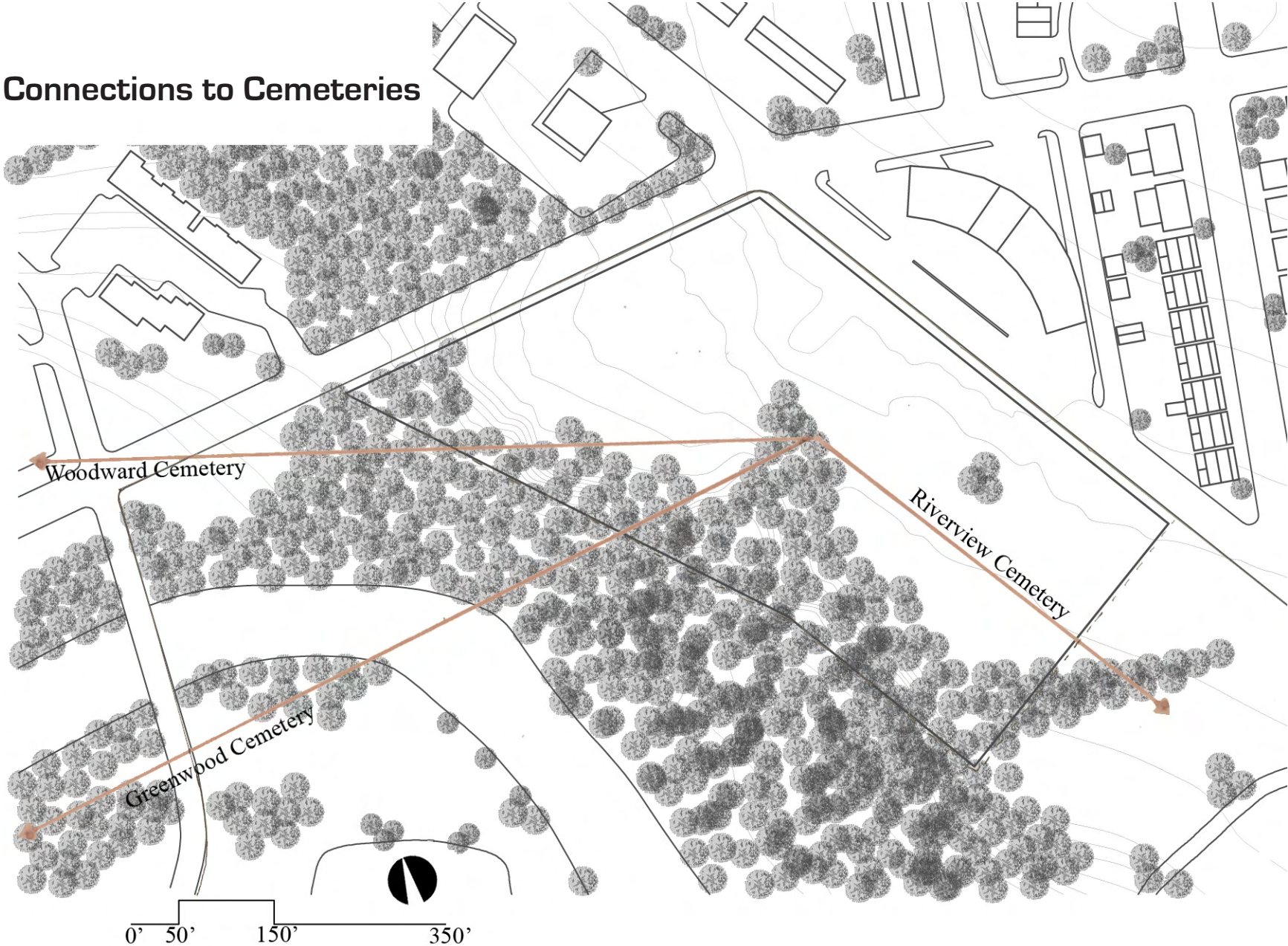
Site Identification and Analysis

Major Vehicular Circulation



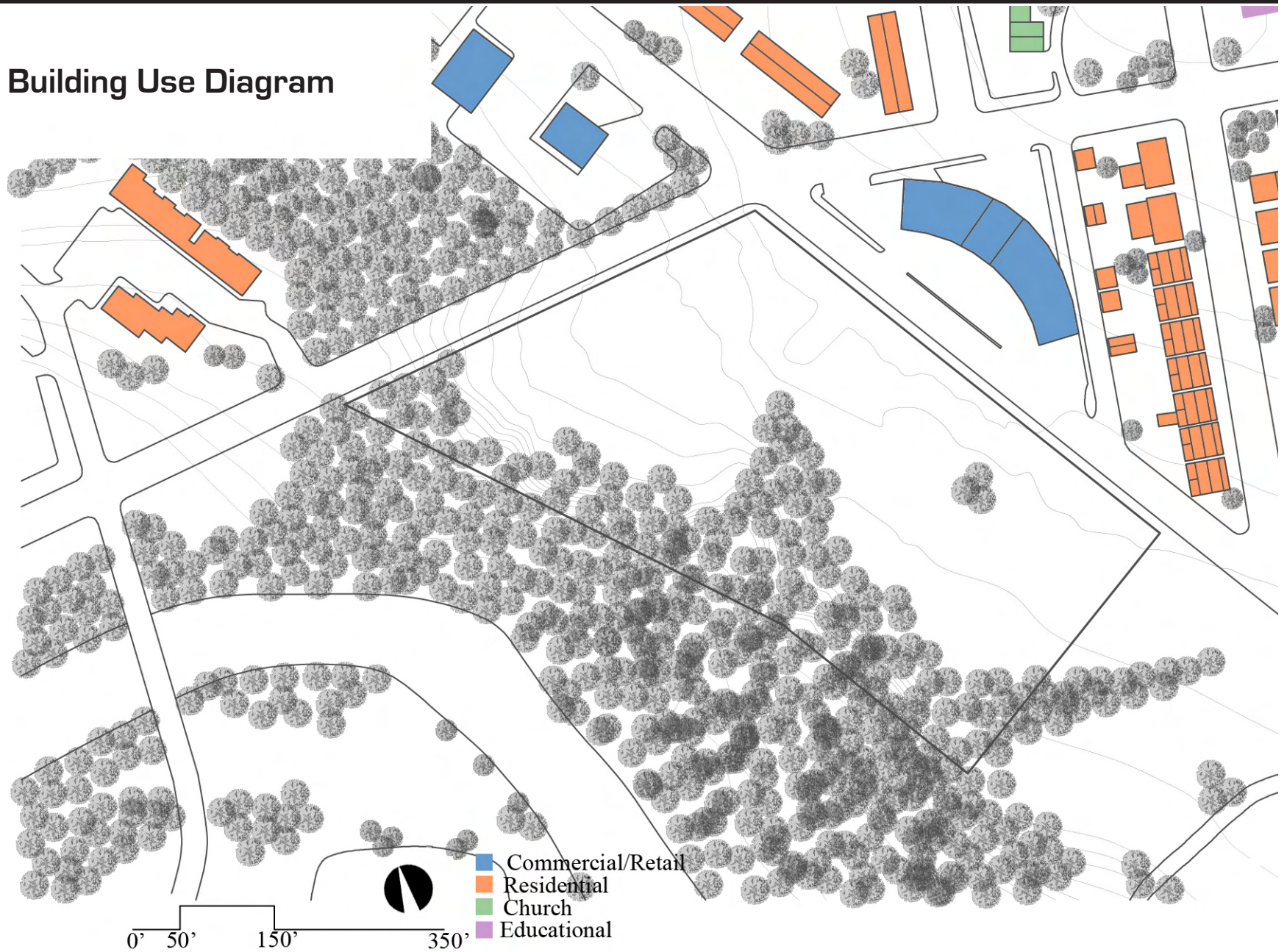
Site Identification and Analysis

Connections to Cemeteries



Site Identification and Analysis

Building Use Diagram



Site Identification and Analysis

Major fall-off Ridge



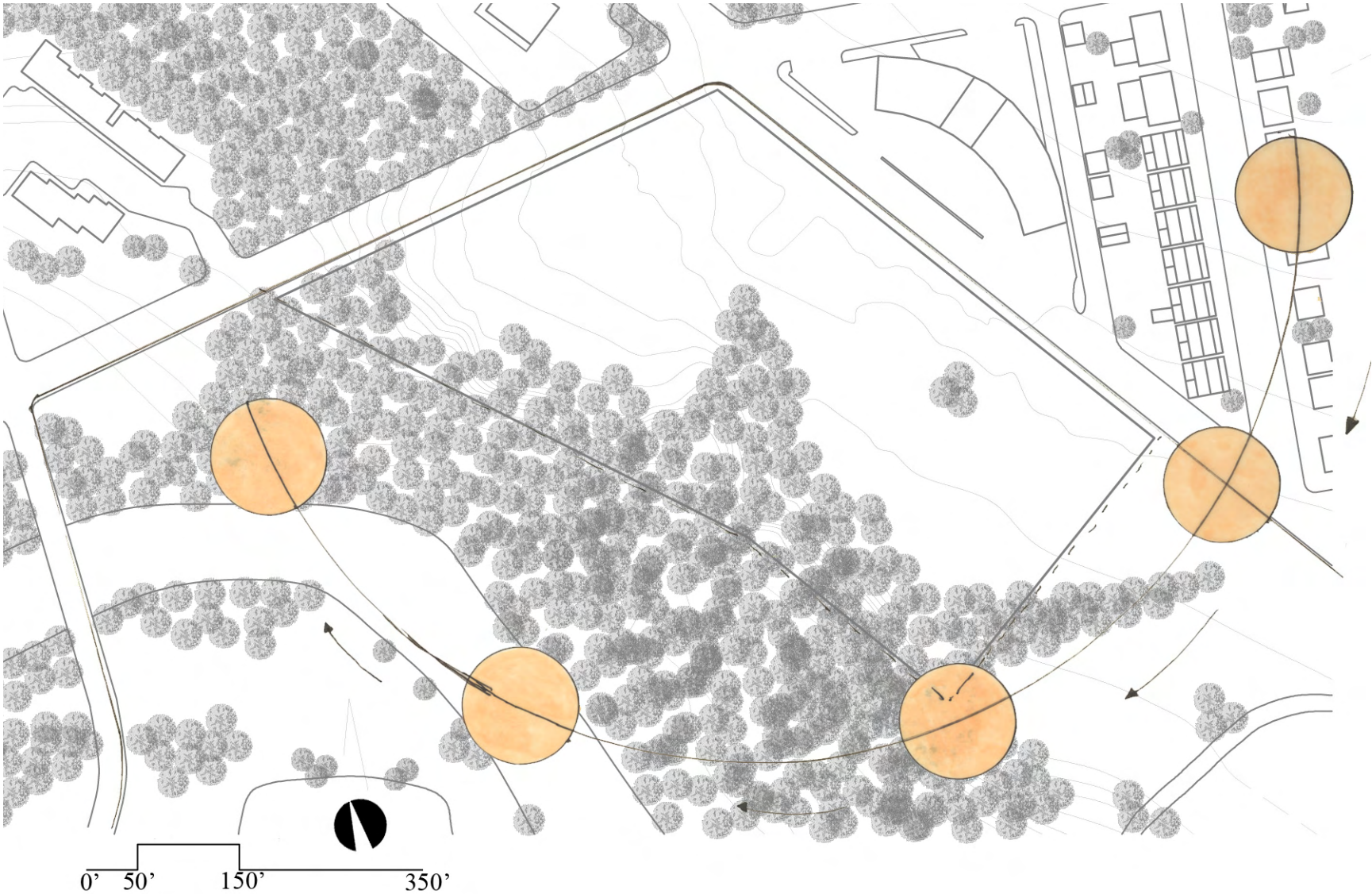
Site Identification and Analysis

Vegetation Diagram



Site Identification and Analysis

Sun Path Diagram



Precedent Analysis

Federation Square

Melbourne, Australia

Lab Architecture Studio 2003

Federation Square was designed by Lab architect studio in the heart of Melbourne, Australia. It covers an entire city block and consists of nine separate cultural and commercial buildings. The design consists of 480,000 square feet of program and open spaces. It includes new galleries for the National Gallery of Victoria's collection of Australian art, the Australian Center for Moving Image, Australia's multi-cultural broadcaster, Melbourne's Visitor Information Center, retail spaces, a car park and numerous restaurants and cafes. The program is grouped around two new civic spaces. One being a plaza capable of accommodating up to 25,000 people in an open-air amphitheater, the other a unique glazed atrium with a glass walled theater. The plaza is the key element for the design by not only relating the different programmatic elements together but by also establishing a relationship with the overall project to the rest of the city. The geometry of the plaza creates different scales of space within the larger space depending on the activities that take place there.

I picked this project as a precedent because it has similar programmatic elements like retail, cafe and cultural spaces. I also chose this project, because I feel that the way it links the program together through the use of both interior and exterior public spaces is very well done and something that I am striving for in my project.



A+U May 2005



A+U May 2005

Precedent Analysis

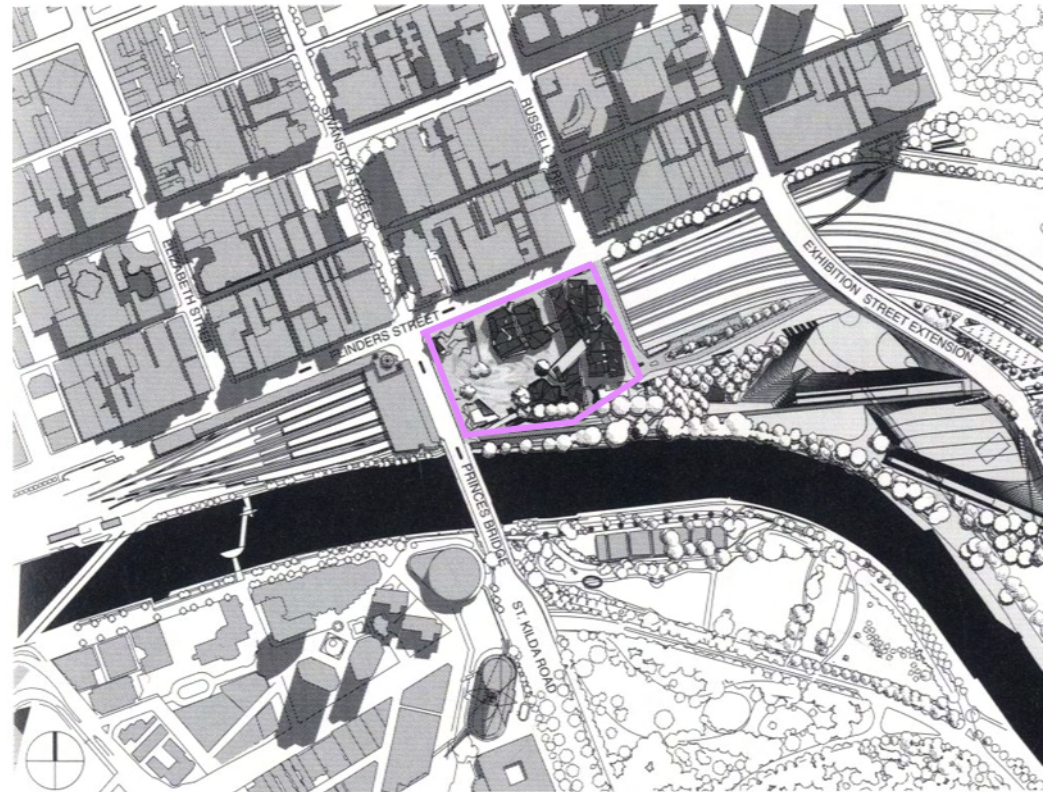
Federation Square

Melbourne, Australia

Lab Architecture Studio 2003

Federation Square comprises one city block of downtown Melbourne which covers nearly 9 acres of land. The site is bordered by the Yarra River to the south which divides the city. Federation Square makes use of a portion of the rivers edge that was previously just covered by rail yards. By building Federation Square above the rail lines it allows for them still be used while adding a new and distinct attraction to the city. The location of the rail lines also allows for easy access to the square by users outside of the city. Federation Square has become the largest tourist attraction for the Victoria Province of Australia.

Site:



Precedent Analysis

Federation Square

Melbourne, Australia

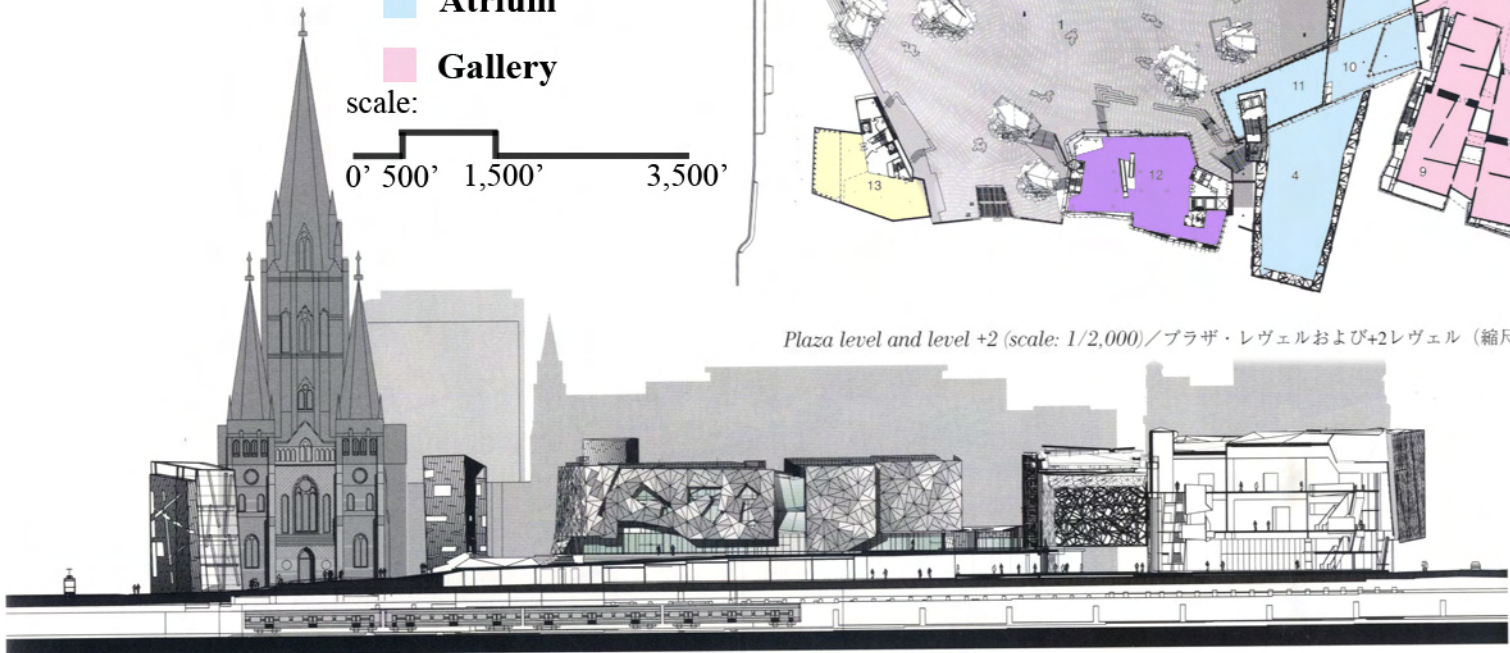
Lab Architecture Studio 2003

- Retail**
- Food**
- Center for Moving Images**
- Atrium**
- Gallery**

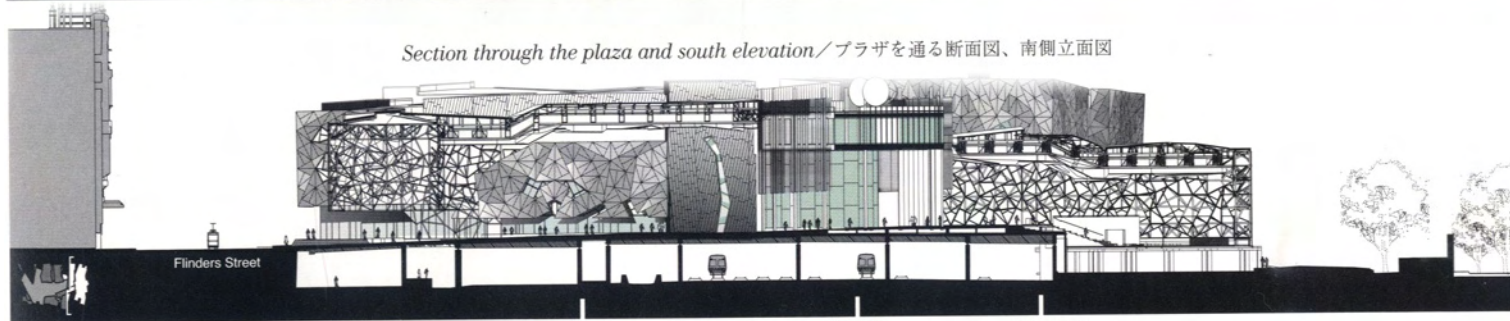
scale:



Plaza level and level +2 (scale: 1/2,000) / プラザ・レベルおよび+2レベル (縮尺: 1/2,000)



Section through the plaza and south elevation / プラザを通る断面図、南側立面図



Precedent Analysis

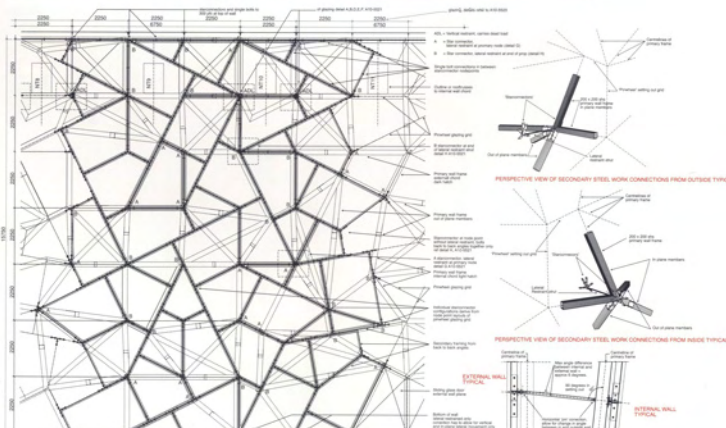
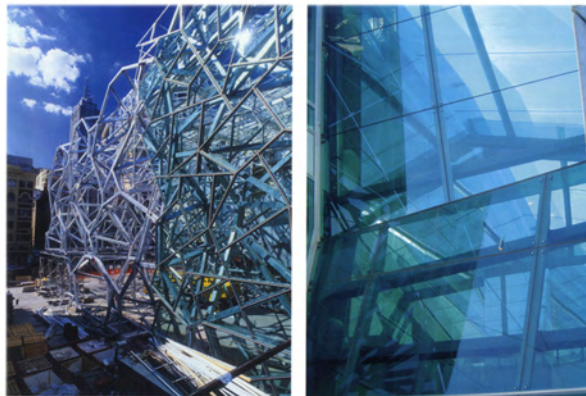
Federation Square

Melbourne, Australia

Lab Architecture Studio 2003

Atrium

Serves a similar function of that of the plaza except for the fact that it provides a covered transition for programmatic elements. The atrium is comprised of a glass and steel structure whose geometry is based on a pinwheel grid system.



A+U May 2005



A+U May 2005



A+U May 2005

Precedent Analysis

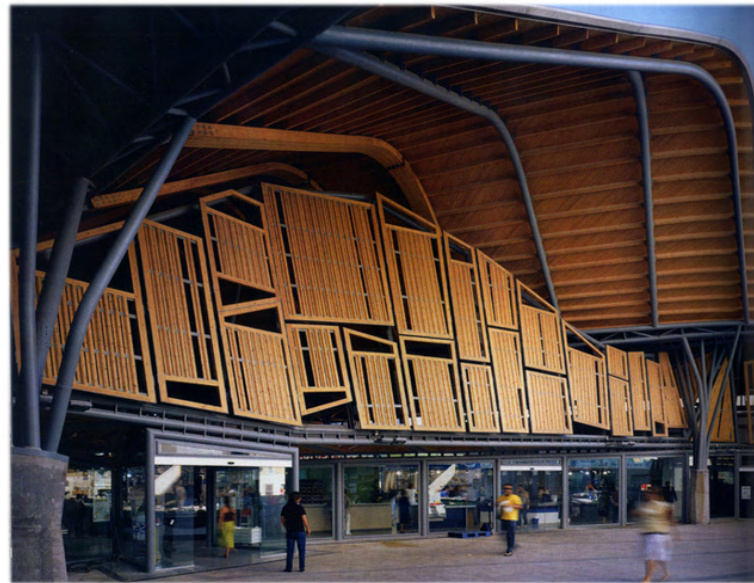
Santa Caterina Market

Barcelona, Spain

Enric Miralles and Benedetta Tagliabue 2005

Santa Caterina Market was designed by Enric Miralles and Benedetta Tagliabue. The project brings life back into what was one of the worst slums in Barcelona's Gothic Quarter. The structure houses 60 vendors' stalls, shops, cafes, a super market, restaurant, community services preserved ruins, and under ground parking.

I chose this precedent because it deals with the transformation of a historically bad neighborhood in an urban setting which is a similar issue I am facing in my project. It also has similar programmatic elements to my project those being the market, cafe, and shops.



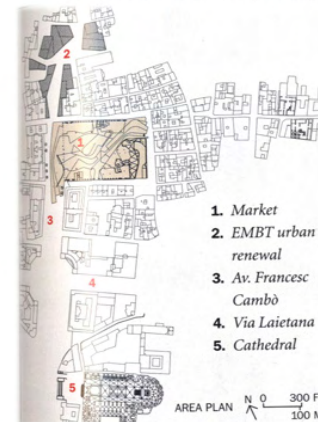
Architectural Record February 2006



Architectural Record February 2006



Architectural Record February 2006



Precedent Analysis

Santa Caterina Market

Barcelona, Spain

Enric Miralles and Benedetta Tagliabue 2005

Santa Caterina Market provides a place for local residents of the Gothic district to go and buy fresh locally grown produce in an enjoyable atmosphere. With it being located within a few blocks of Barcelona Cathedral it also provides a place for tourists visiting the cathedral to go and experience local Barcelona culture and enjoy local food.



Architectural Record February 2006



Architectural Record February 2006

Precedent Analysis

Amphitheater at Swathmore College

Philadelphia, Pa

Thomas W. Sears 1942

Tulip and White Oak Trees provide cover and an intimate setting for this wonderful outdoor theater. The Amphitheater at Swathmore College has hosted numerous theatrical and musical performances as well as housing Swathmore's Commencement each year.



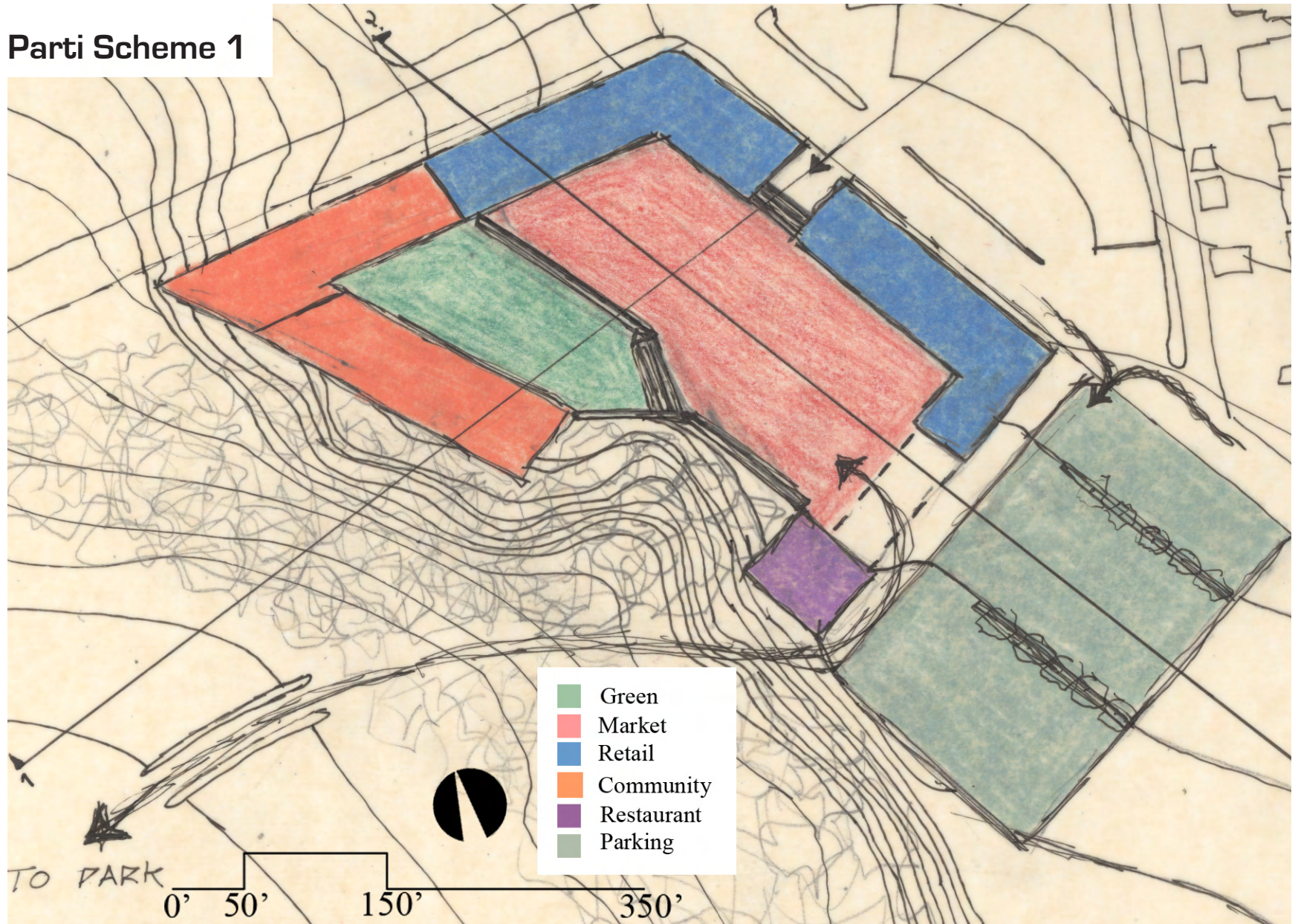
www.pct.edu



<http://www.flickr.com/photos/cpurrin1/474871139/>

Design Process

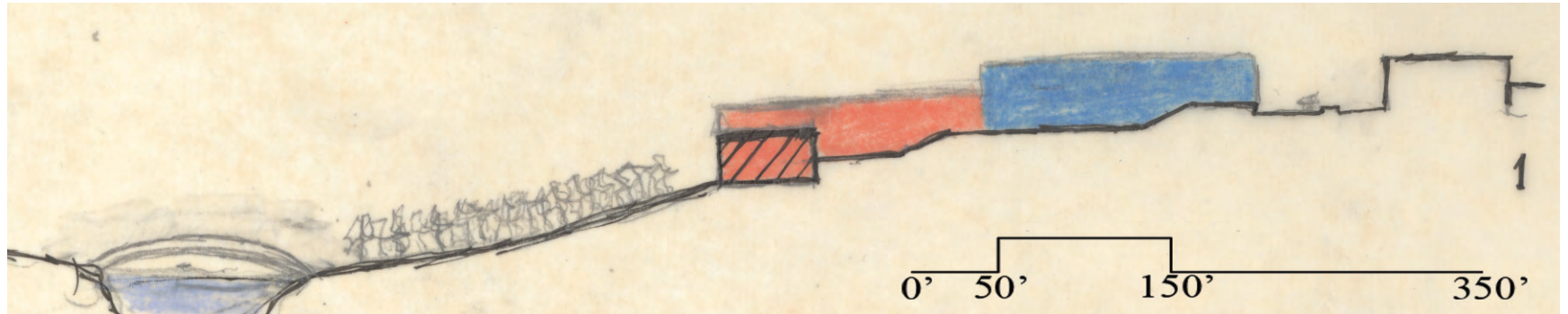
Parti Scheme 1



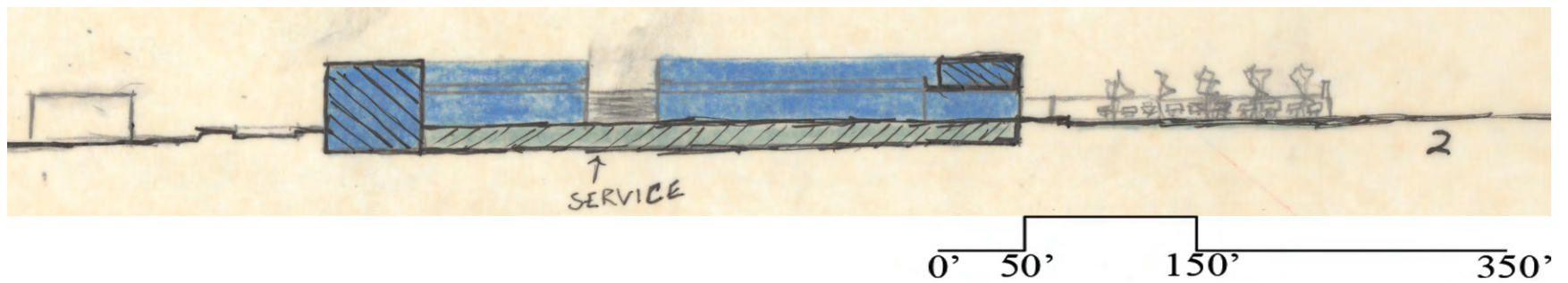
Design Process

Parti Scheme 1

Section 1

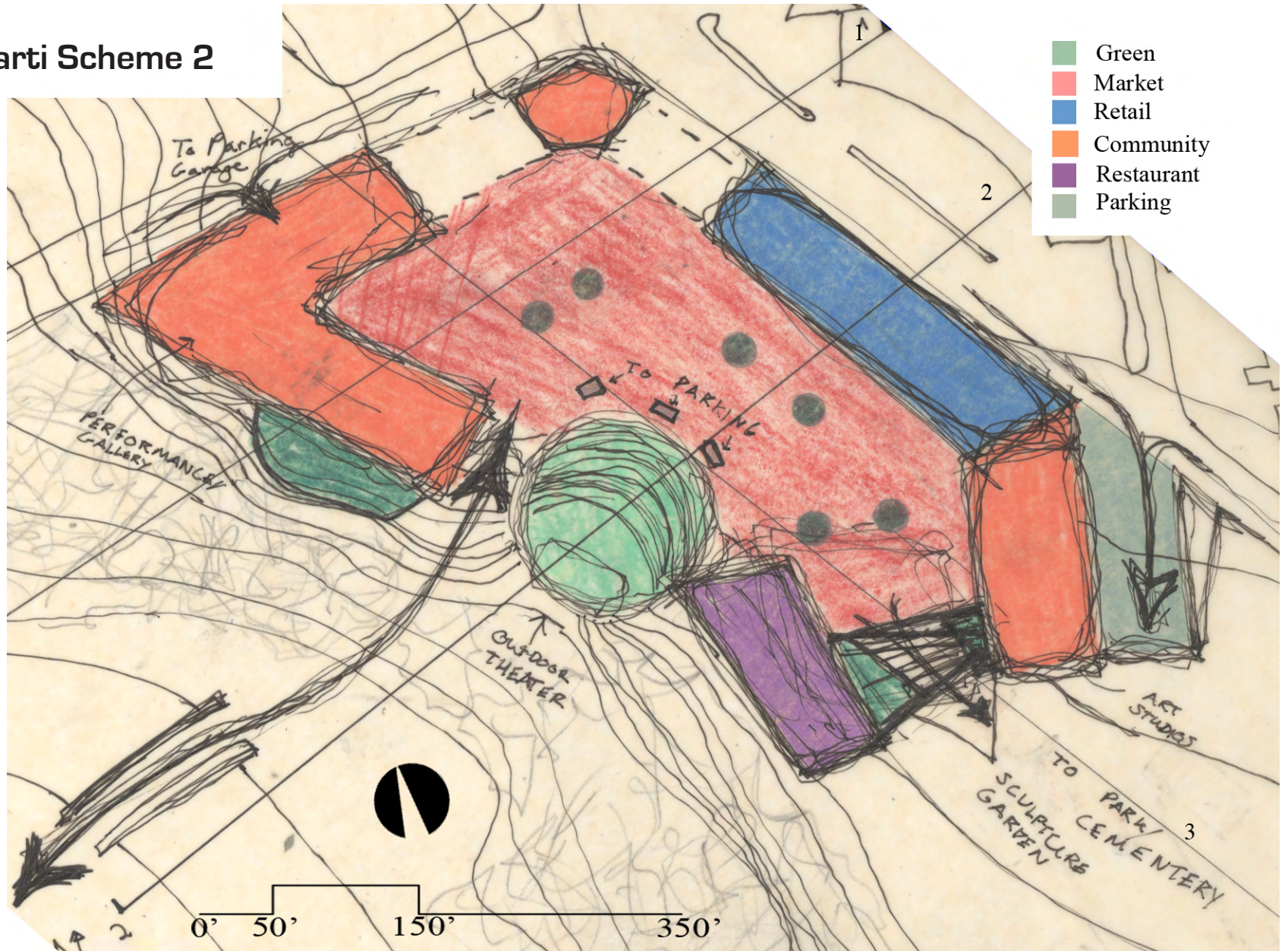


Section 2



Design Process

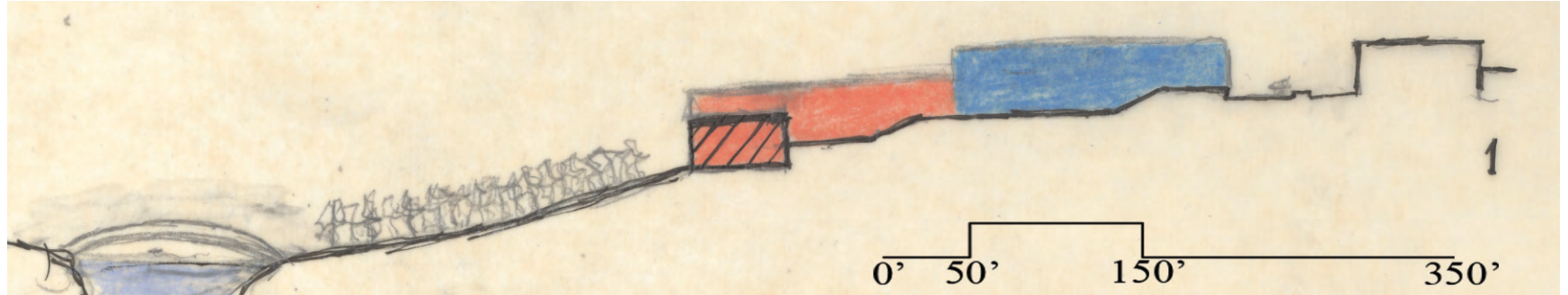
Parti Scheme 2



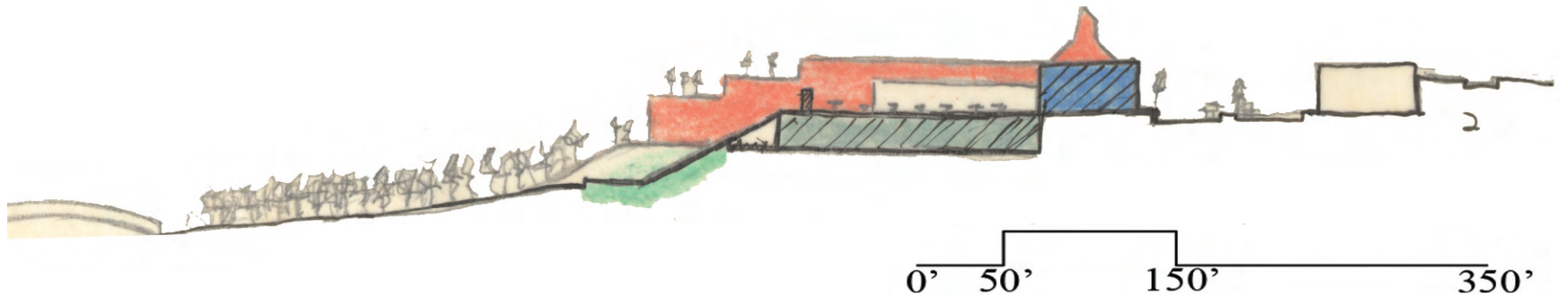
Design Process

Parti Scheme 2

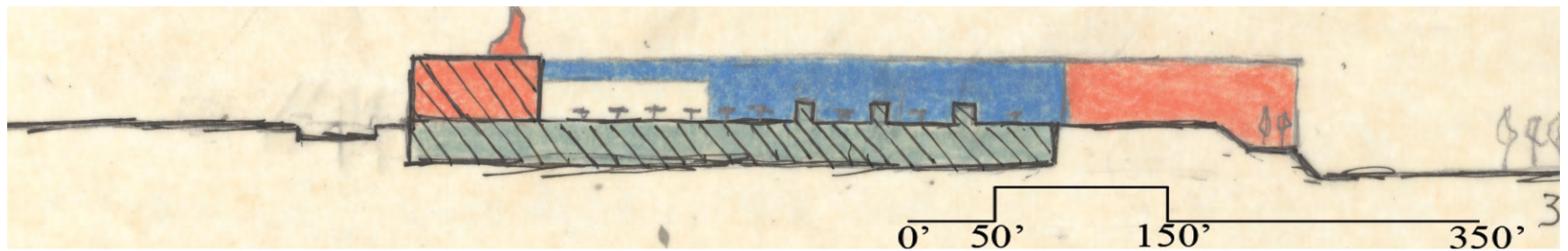
Section 1



Section 2

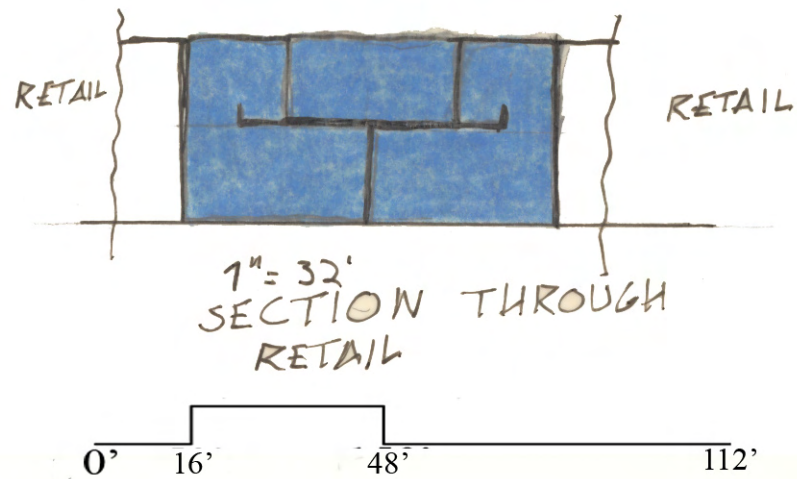
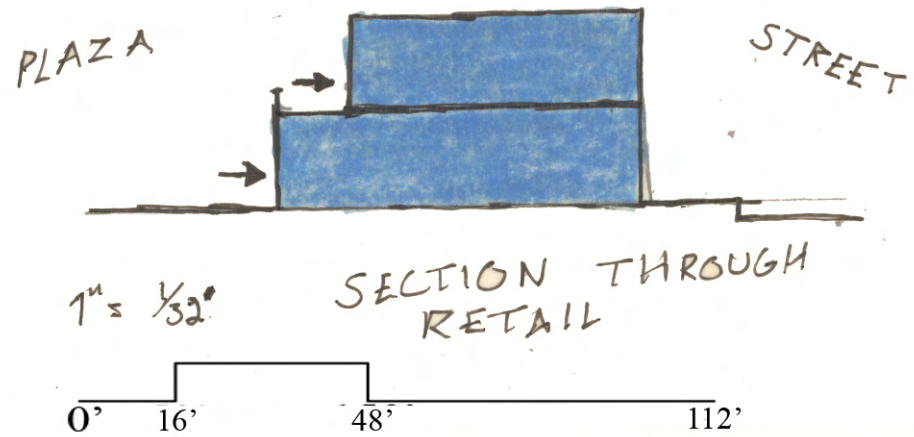


Section 3



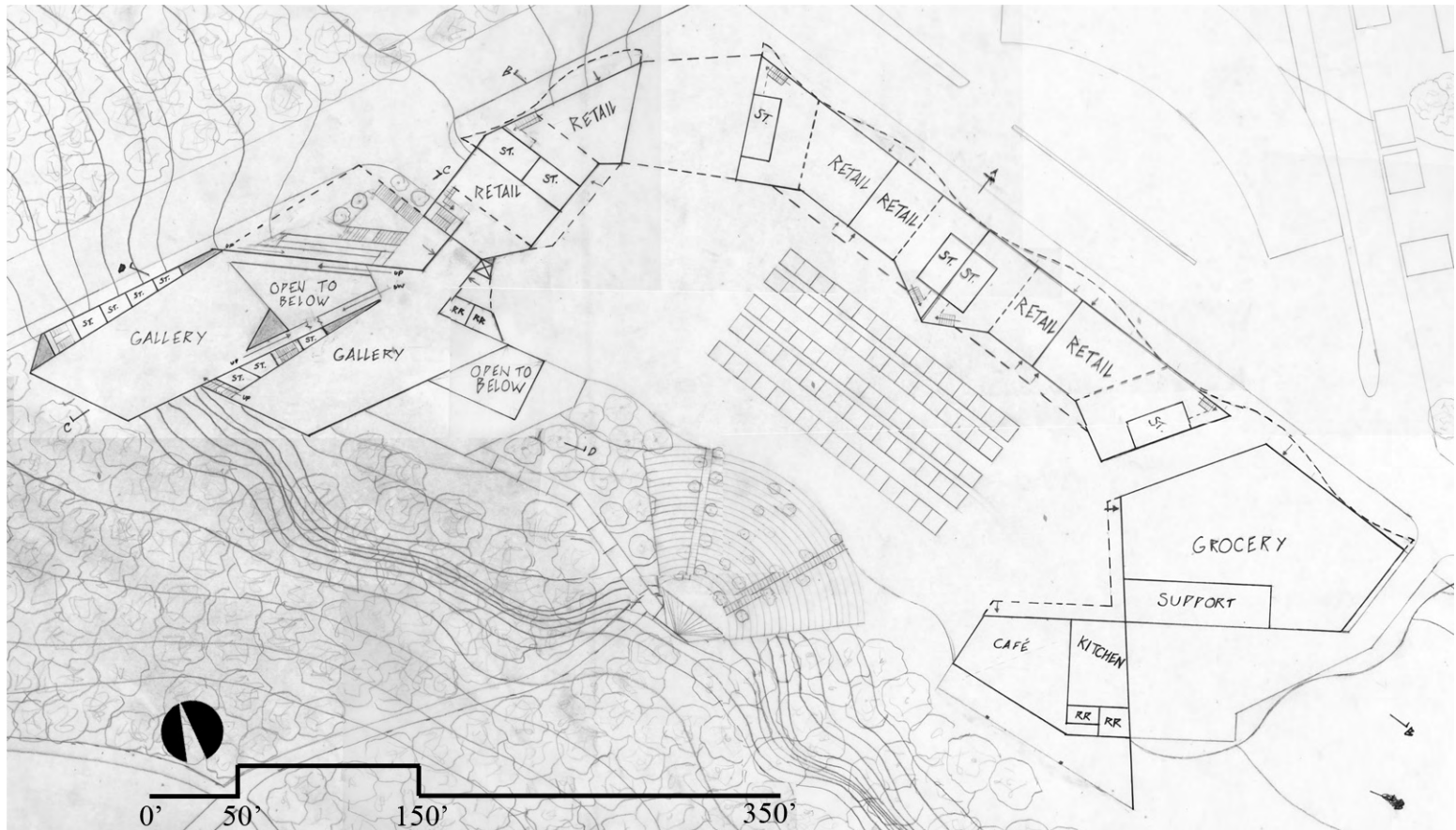
Design Process

Sectional Idea for Retail



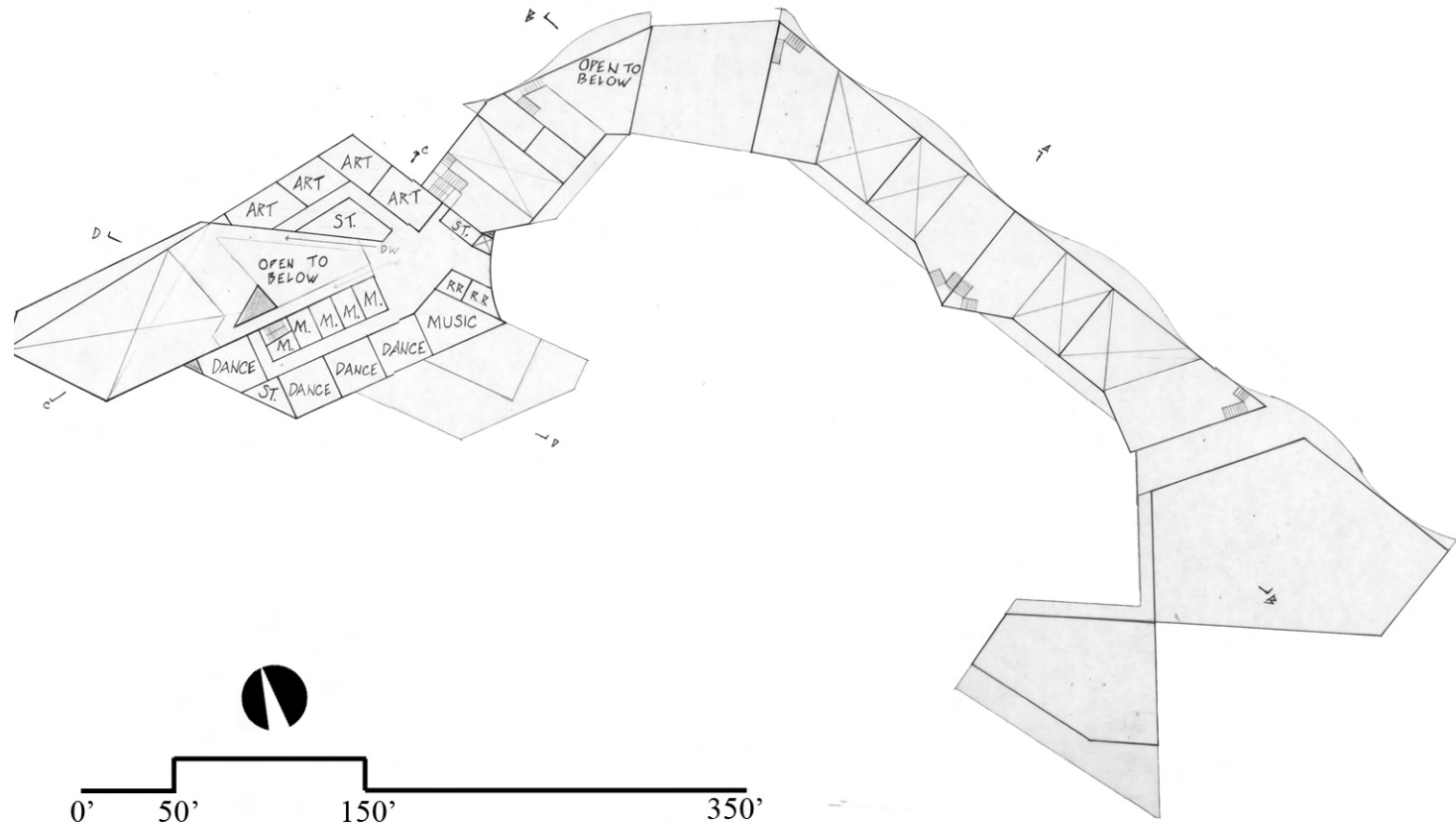
Design Process

Initial Design- Plaza Level Plan



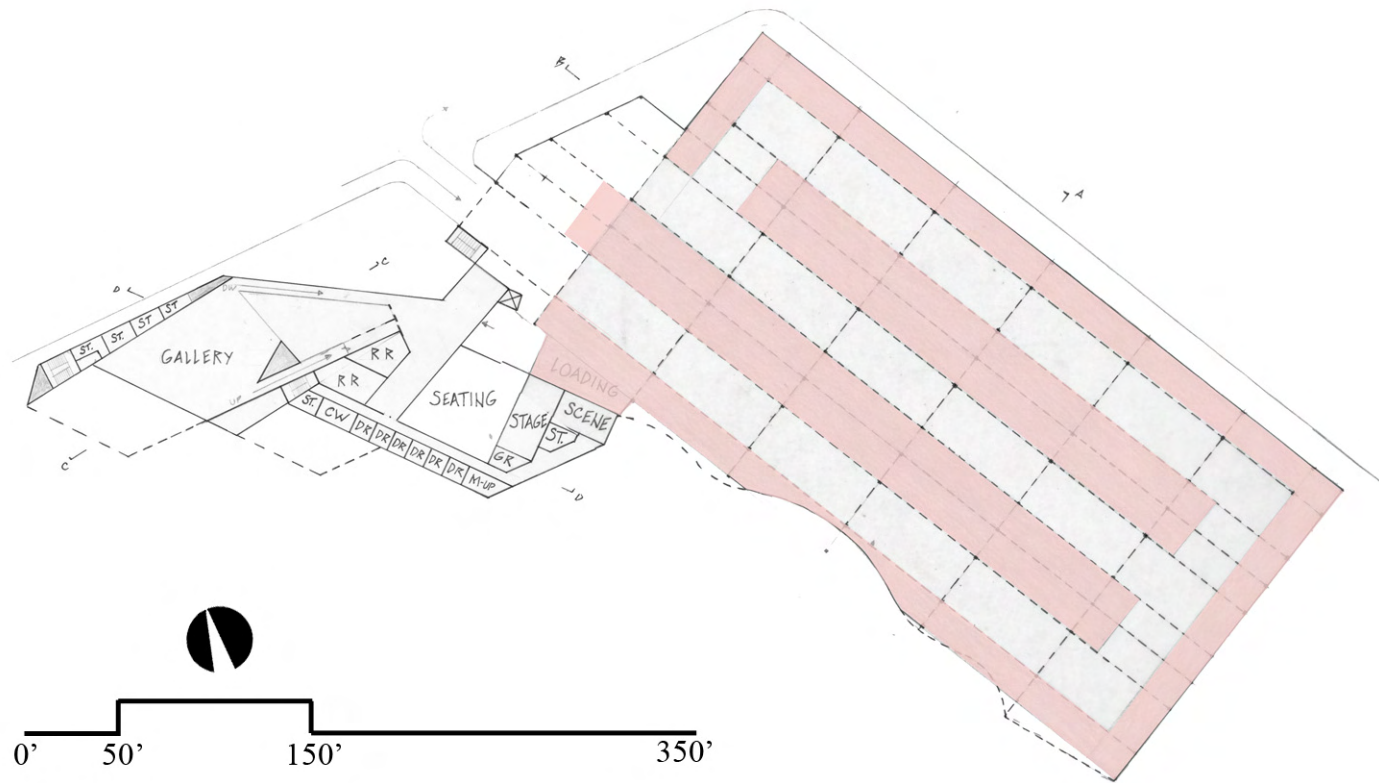
Design Process

Initial Design- Upper Level Plan +1



Design Process

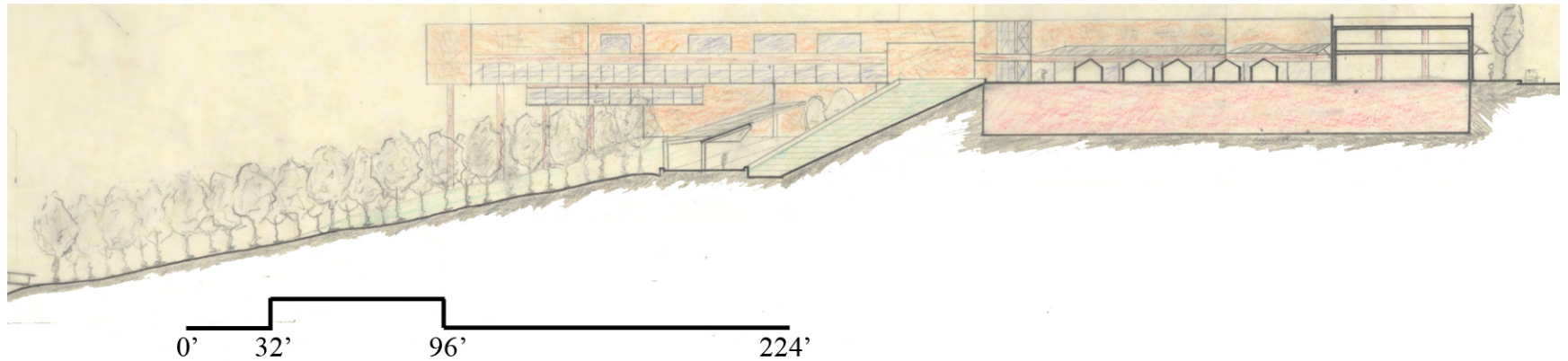
Initial Design- Parking Level Plan +1



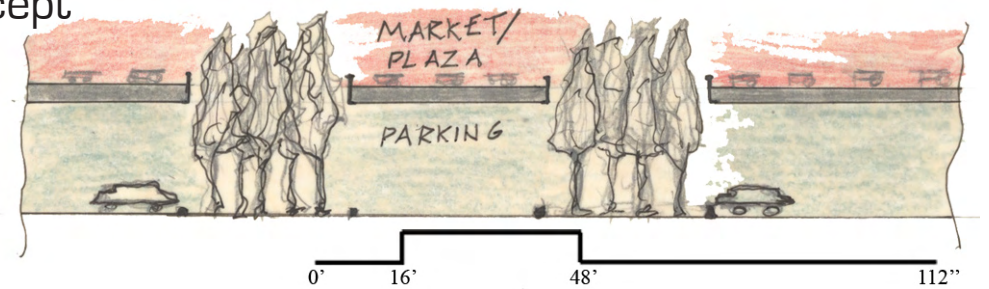
Design Process

Initial Design- Sections

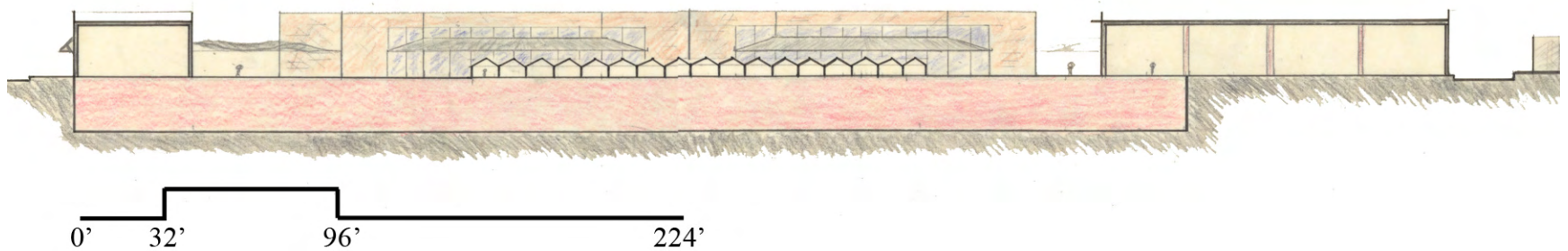
Section A



Parking Concept



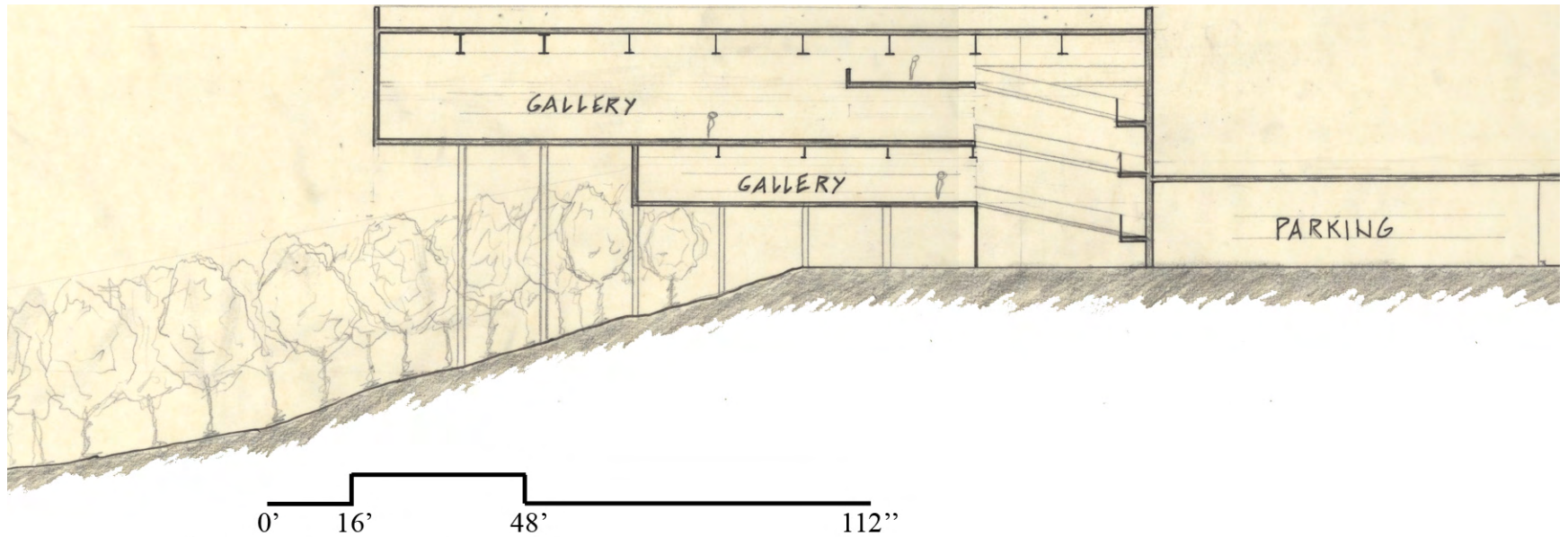
Section B



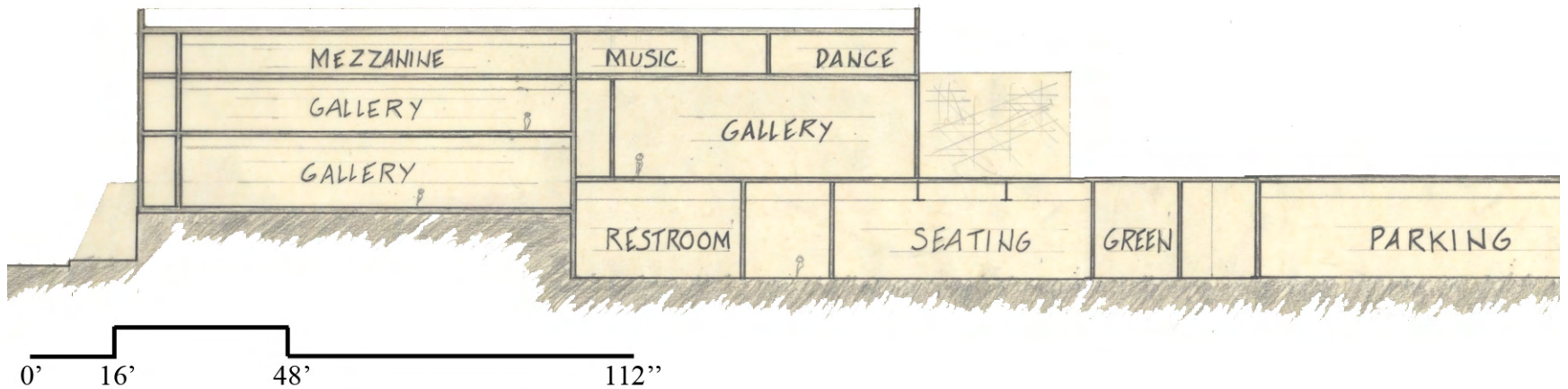
Design Process

Initial Design- Sections

Section C



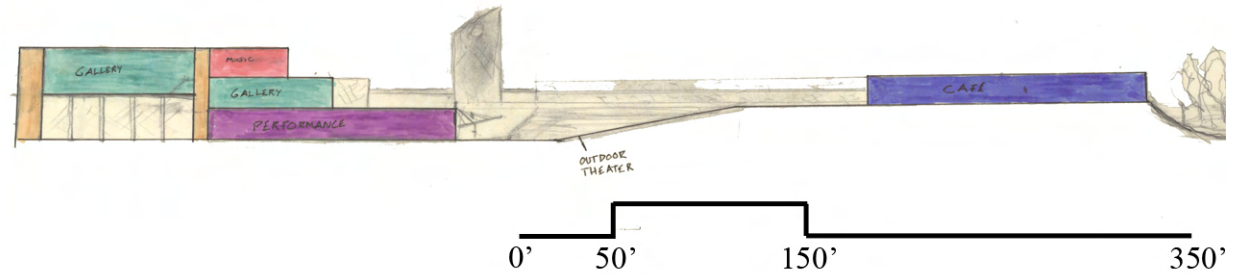
Section D



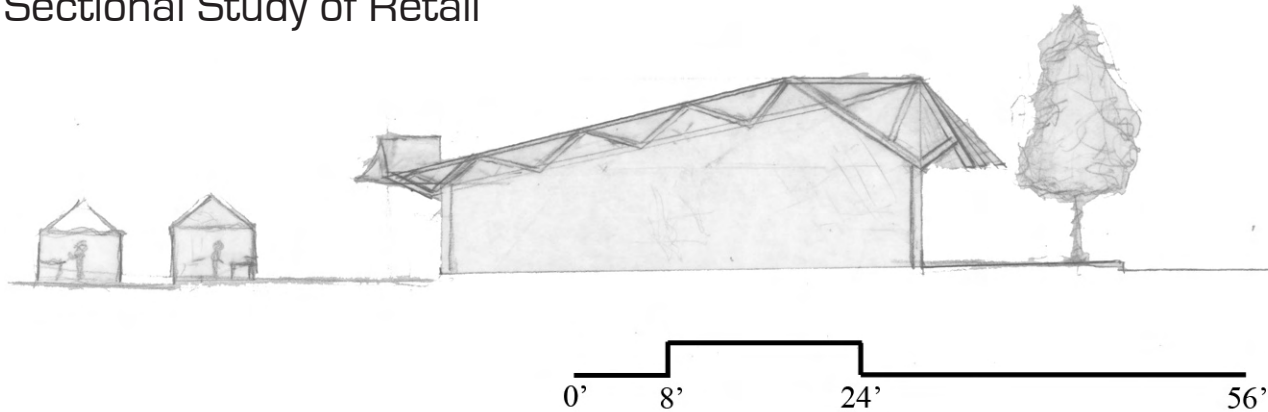
Design Process

Process Drawings

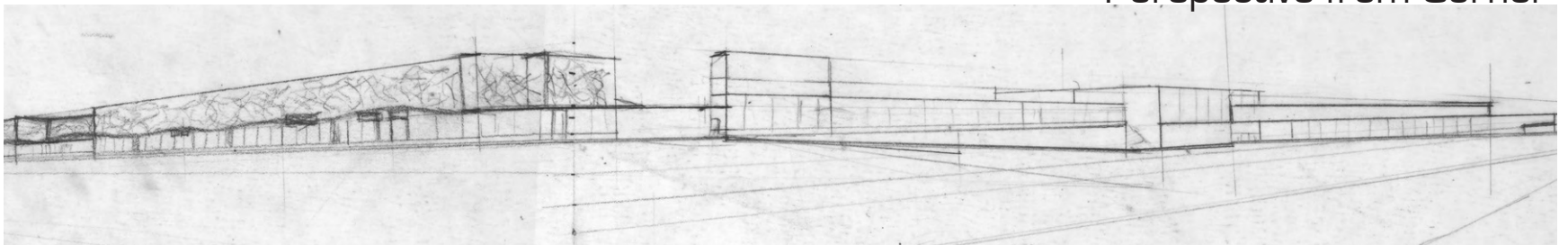
Site Sectional Study



Sectional Study of Retail

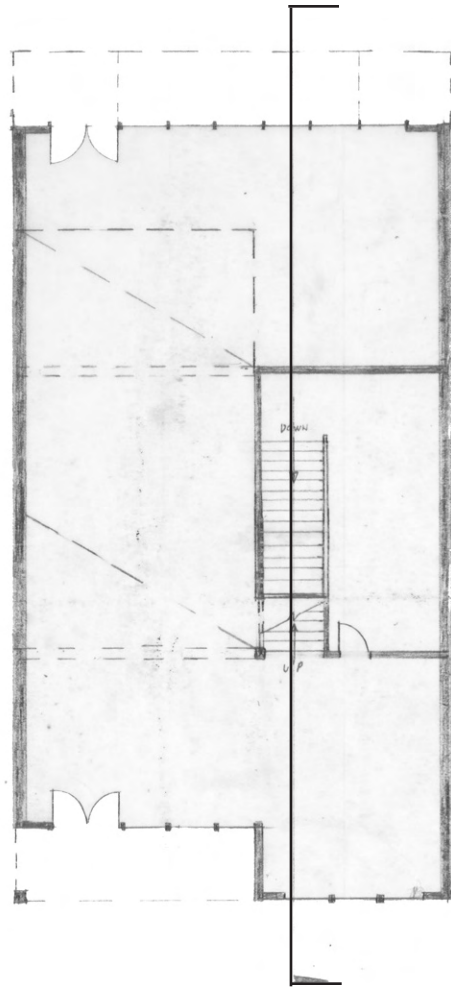


Perspective from Corner

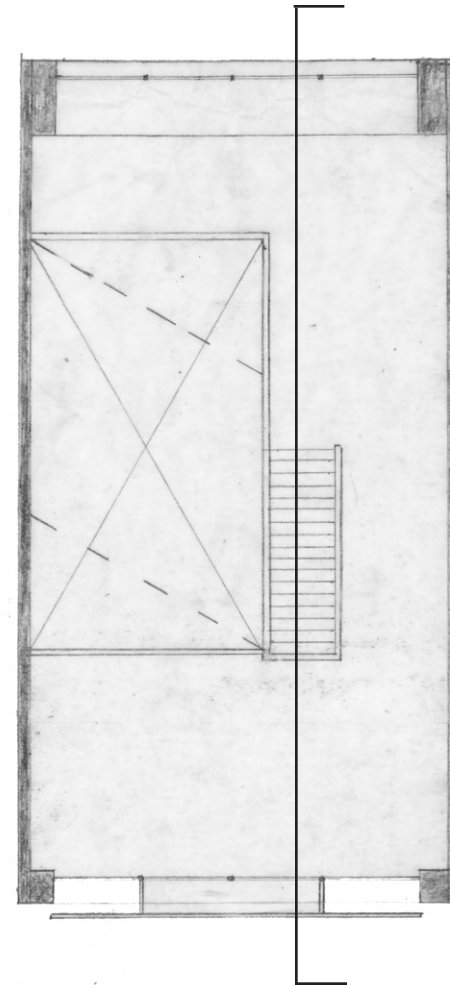
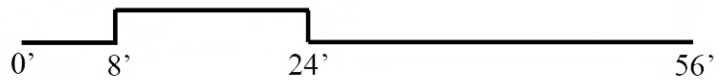


Design Process

Process Drawings- Retail Study



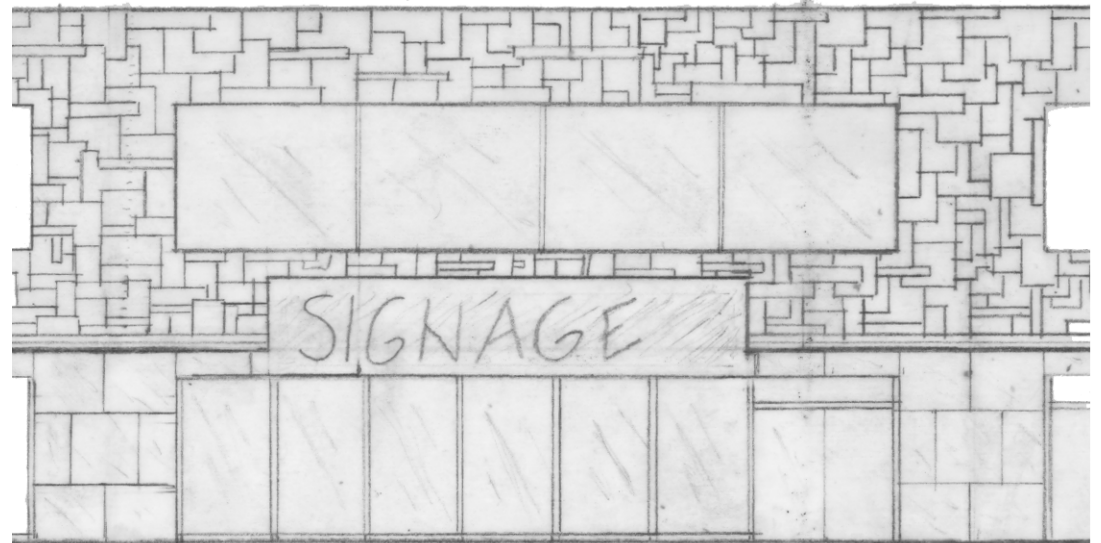
Ground Floor Plan



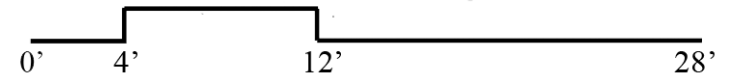
Upper Floor Plan

Design Process

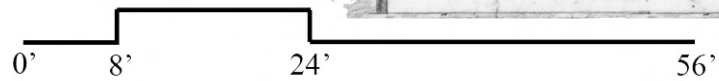
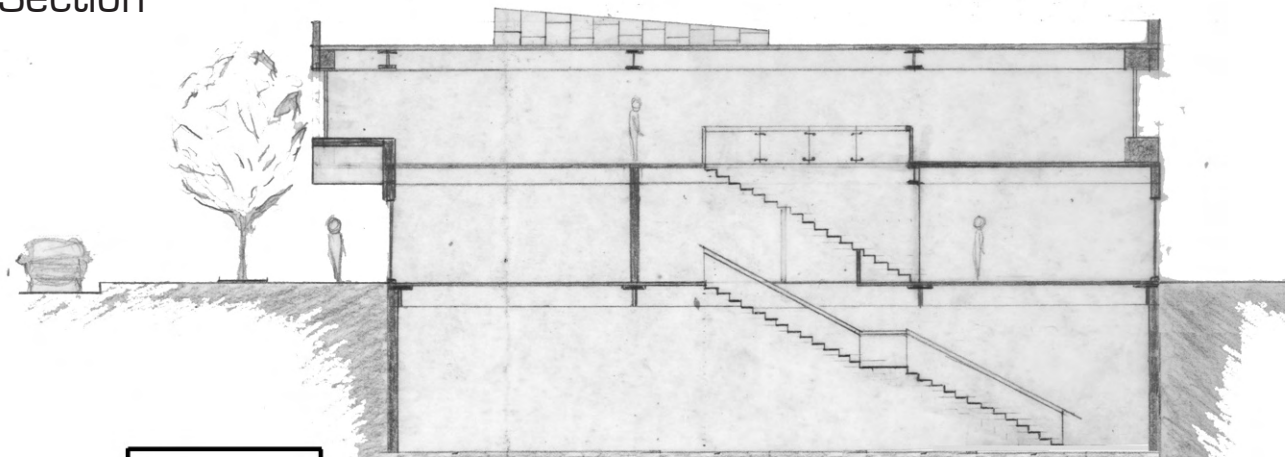
Process Drawings- Retail Study



Elevation

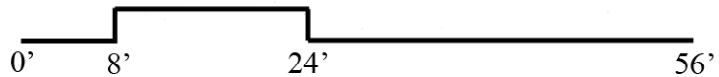
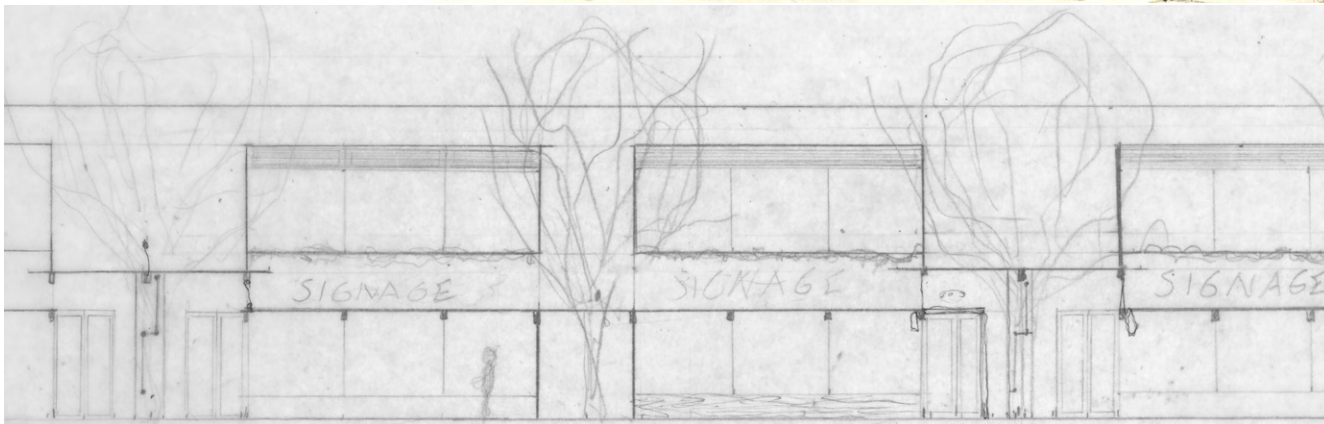
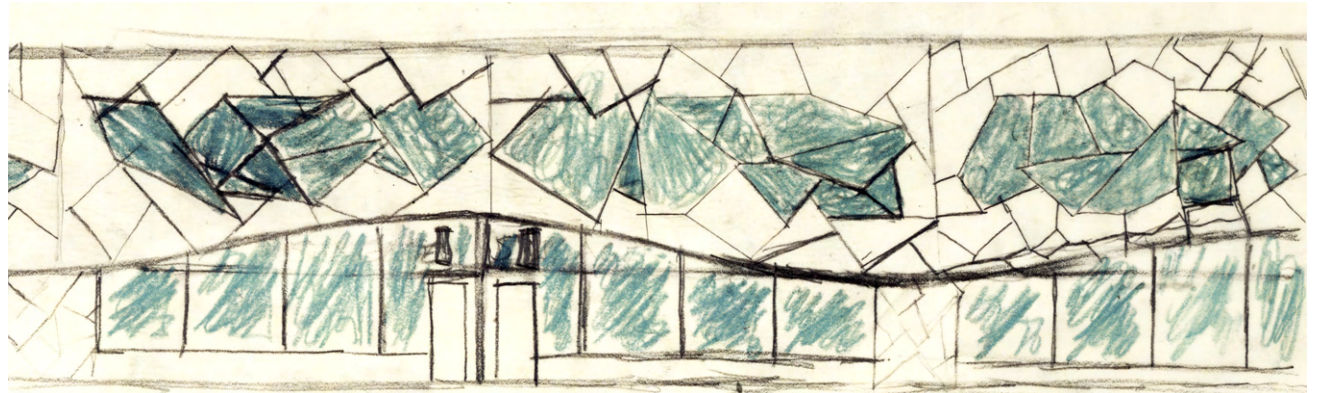
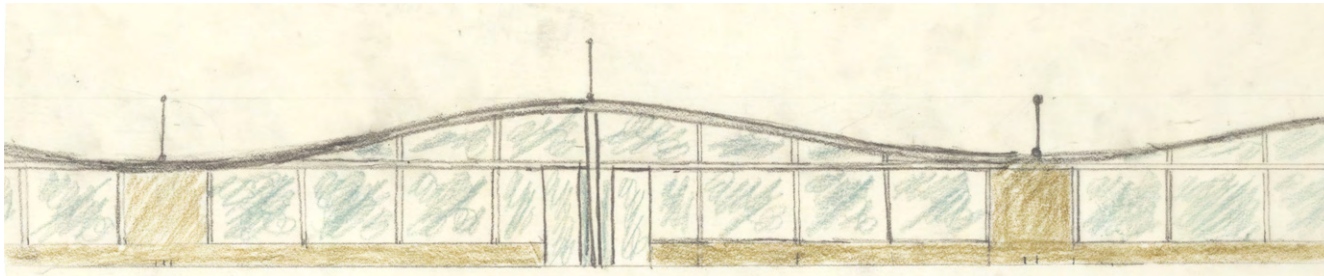


Section



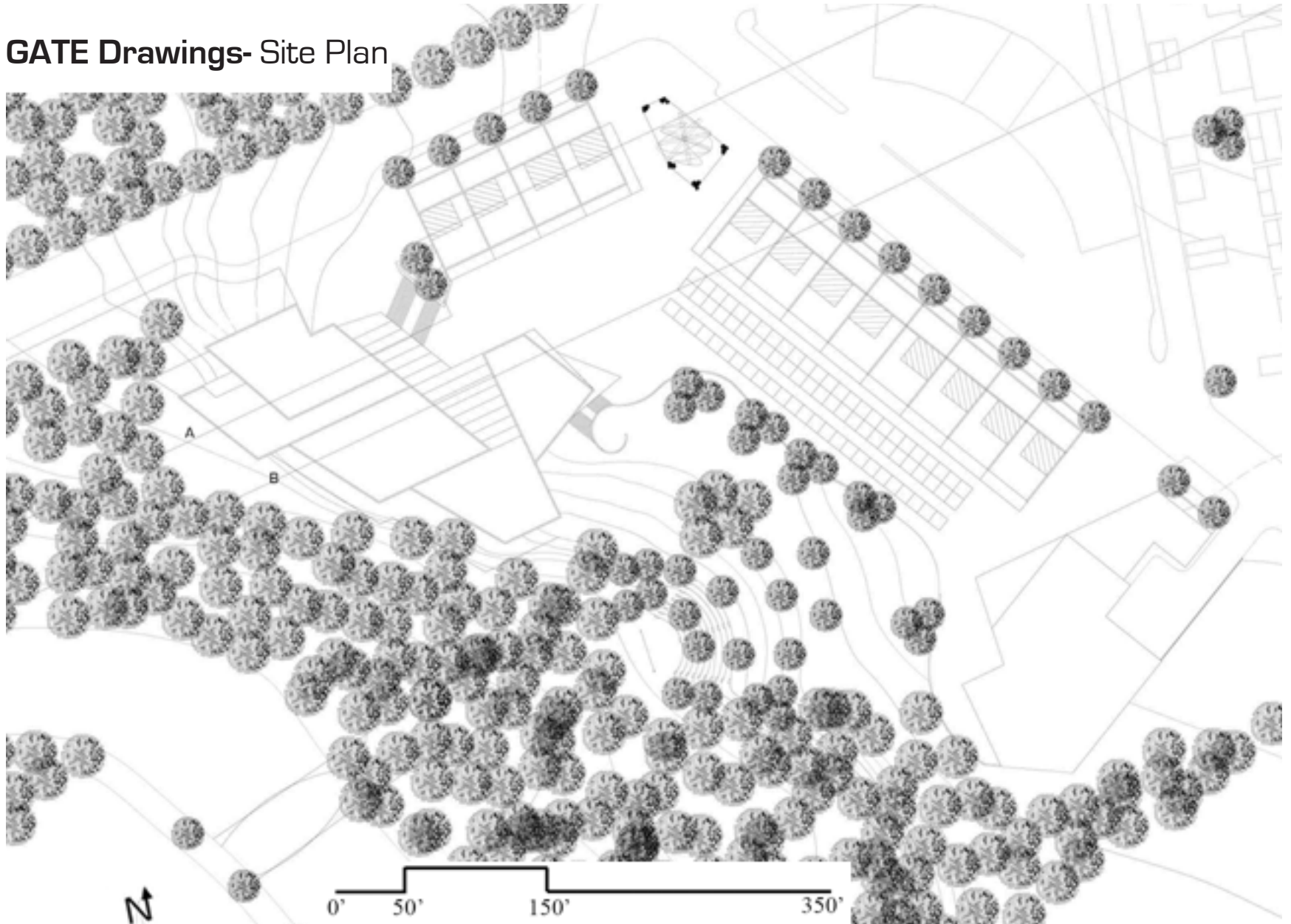
Design Process

Process Drawings- Retail Elevation Studies



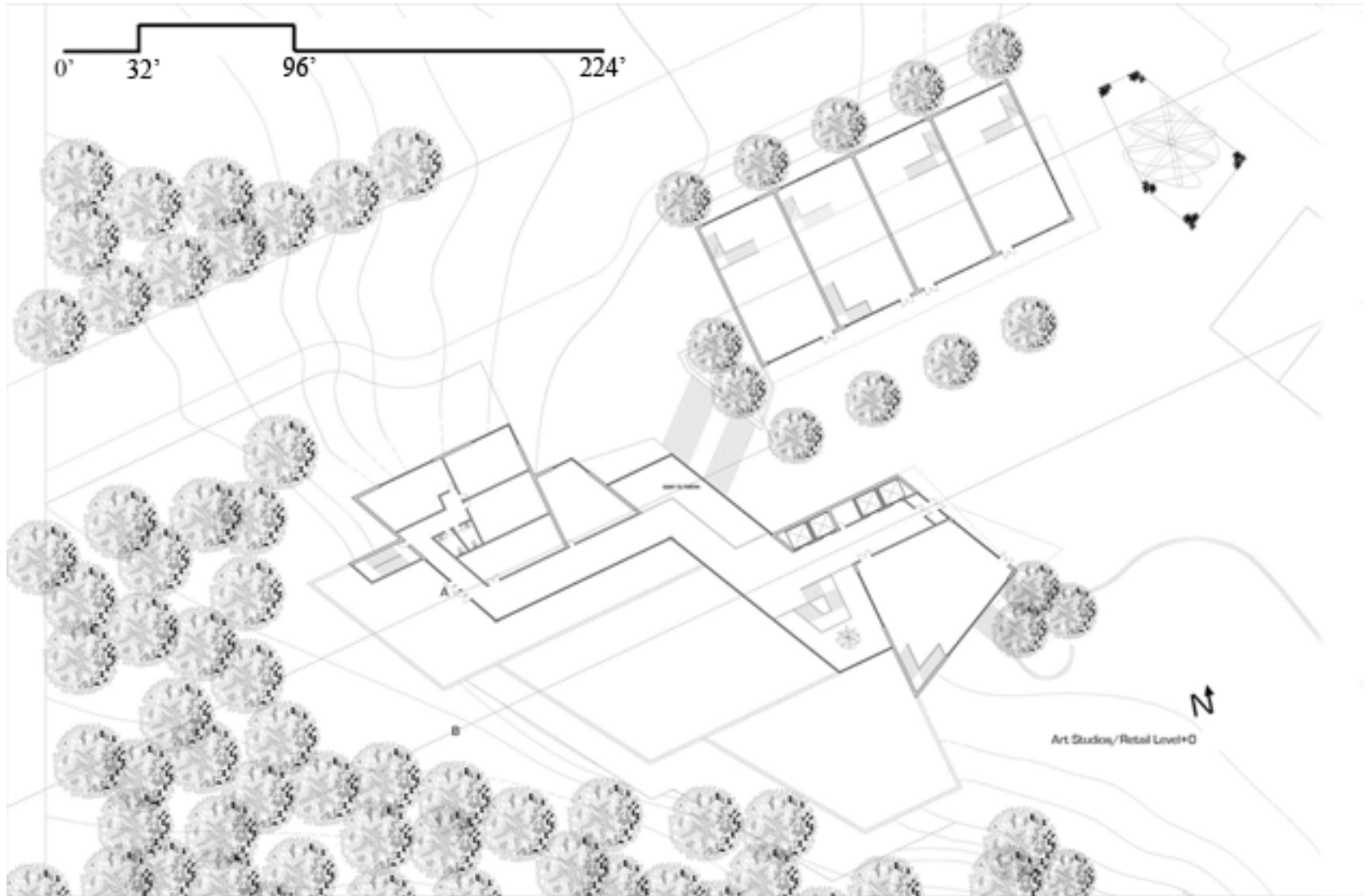
Design Process

GATE Drawings- Site Plan



Design Process

GATE Drawings- Art Studios/Retail Plan



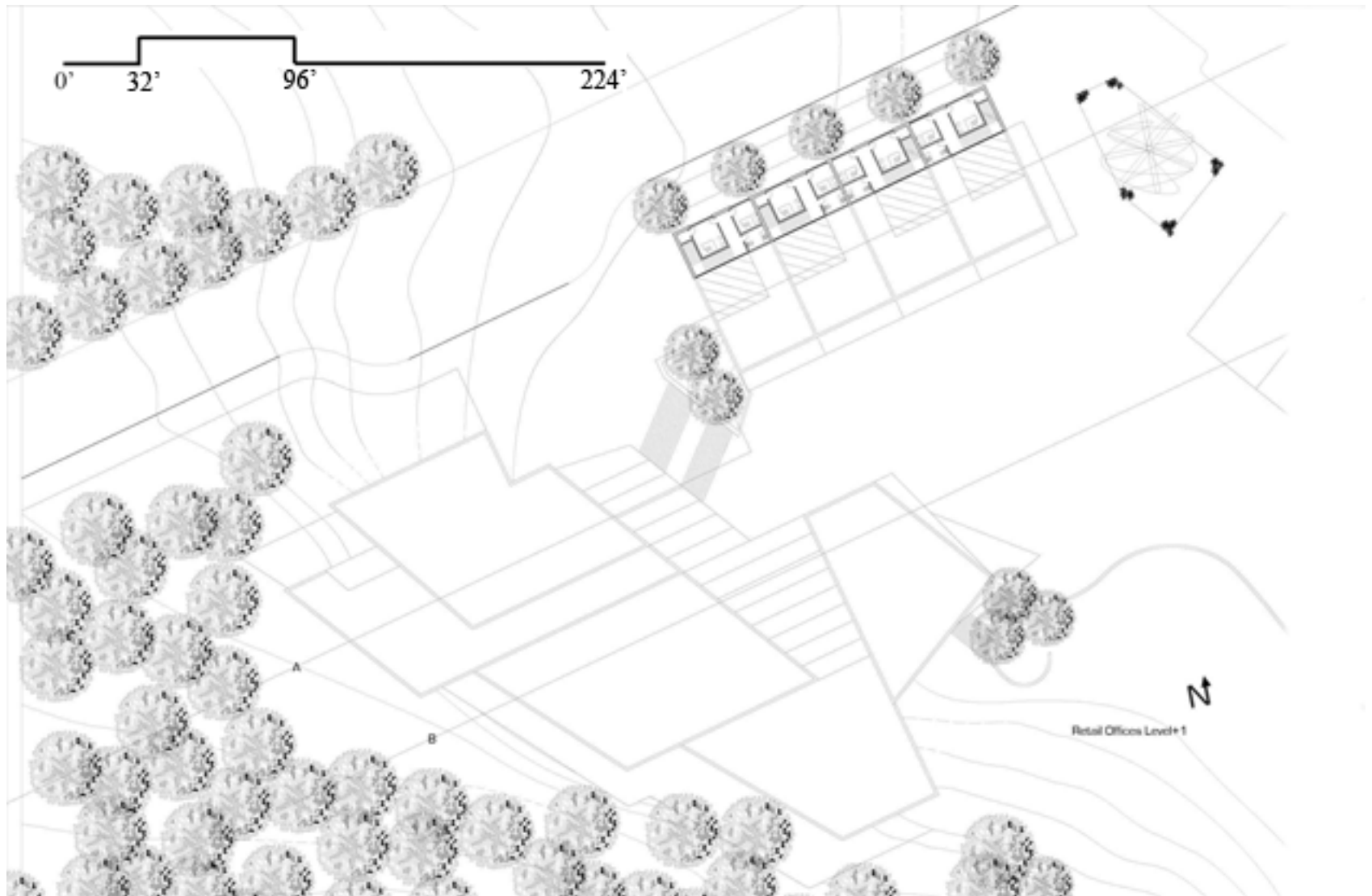
Design Process

GATE Drawings- Restaurant/Retail Plan



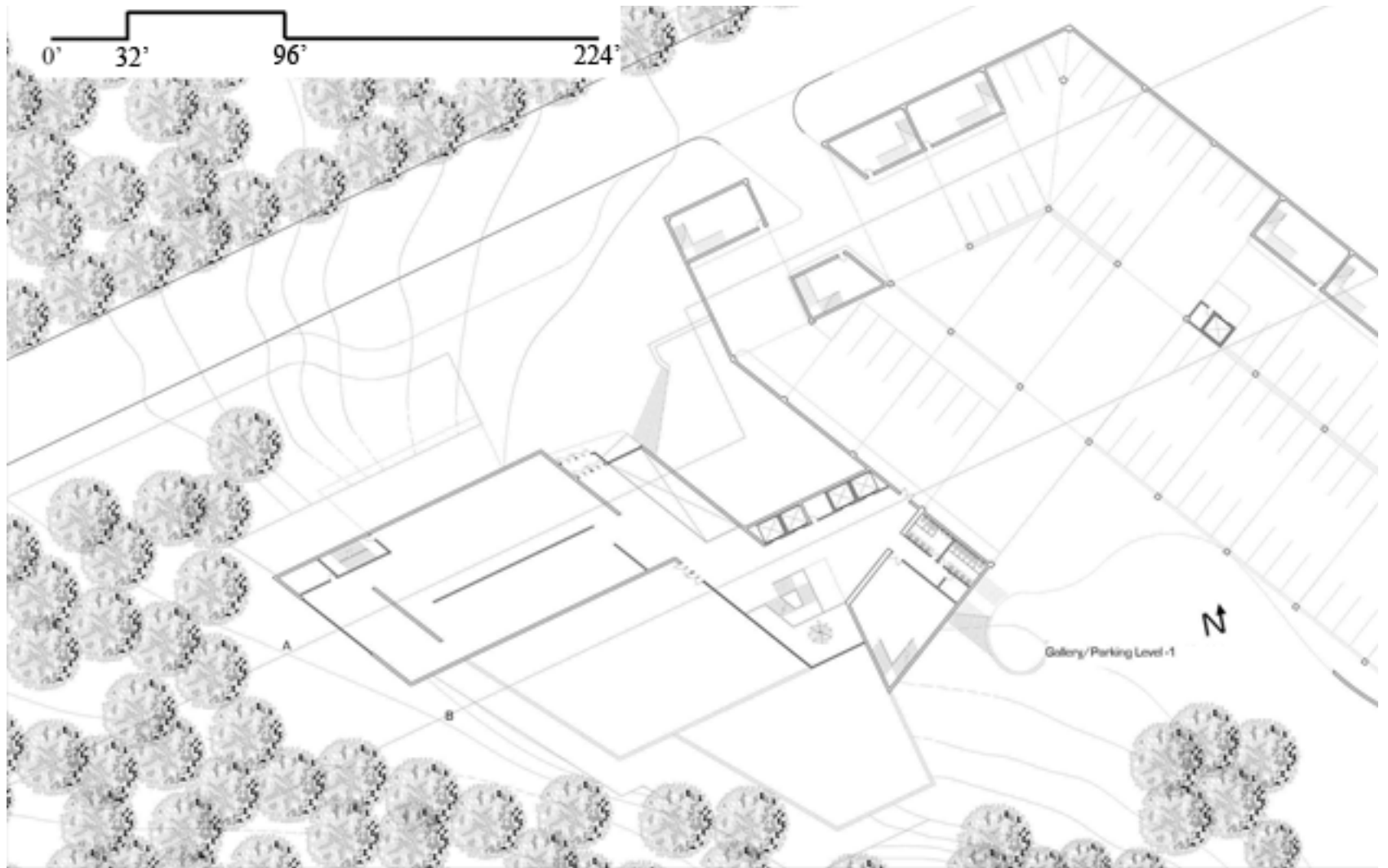
Design Process

GATE Drawings- Retail Office Plan



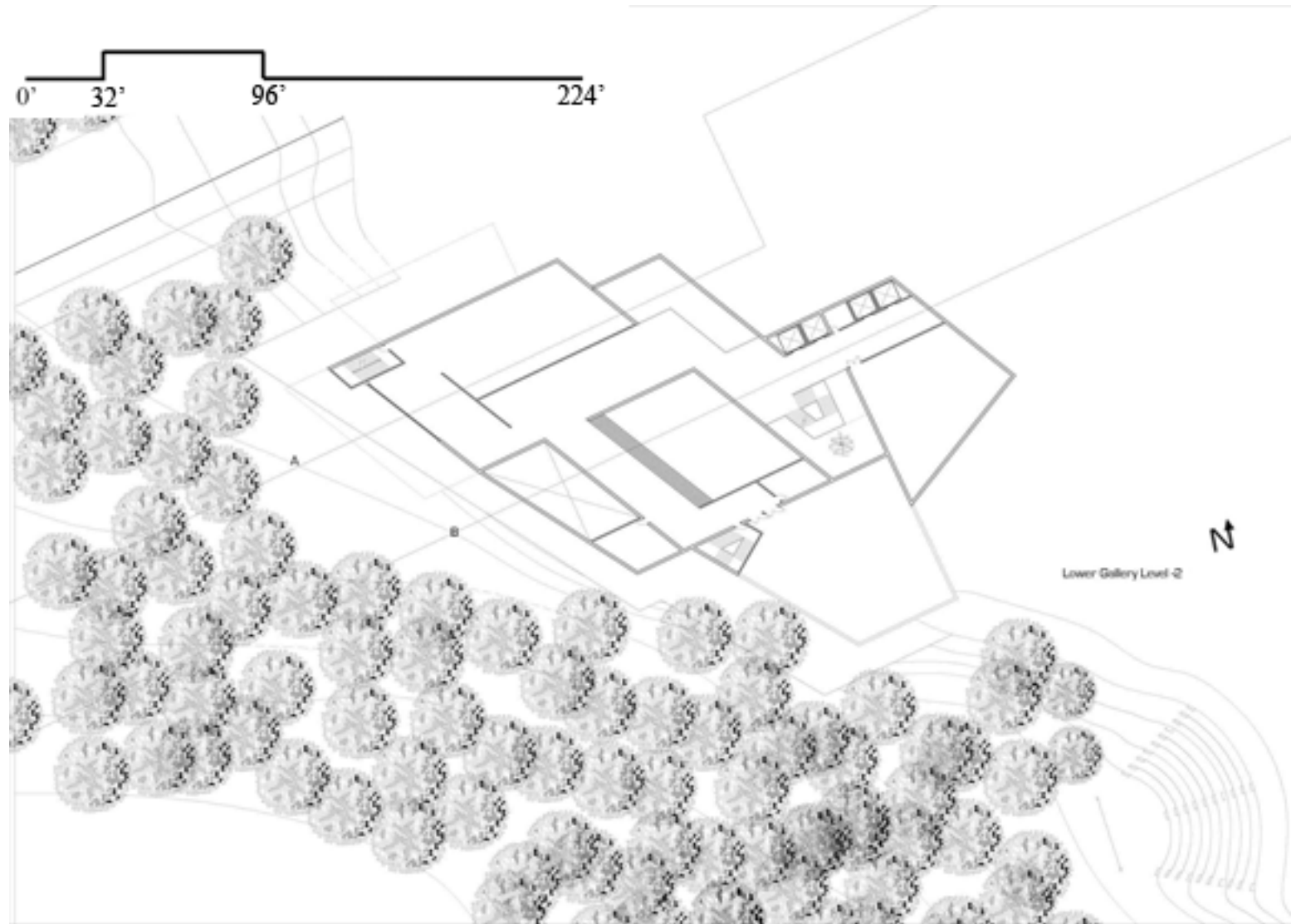
Design Process

GATE Drawings- Gallery/Parking Plan



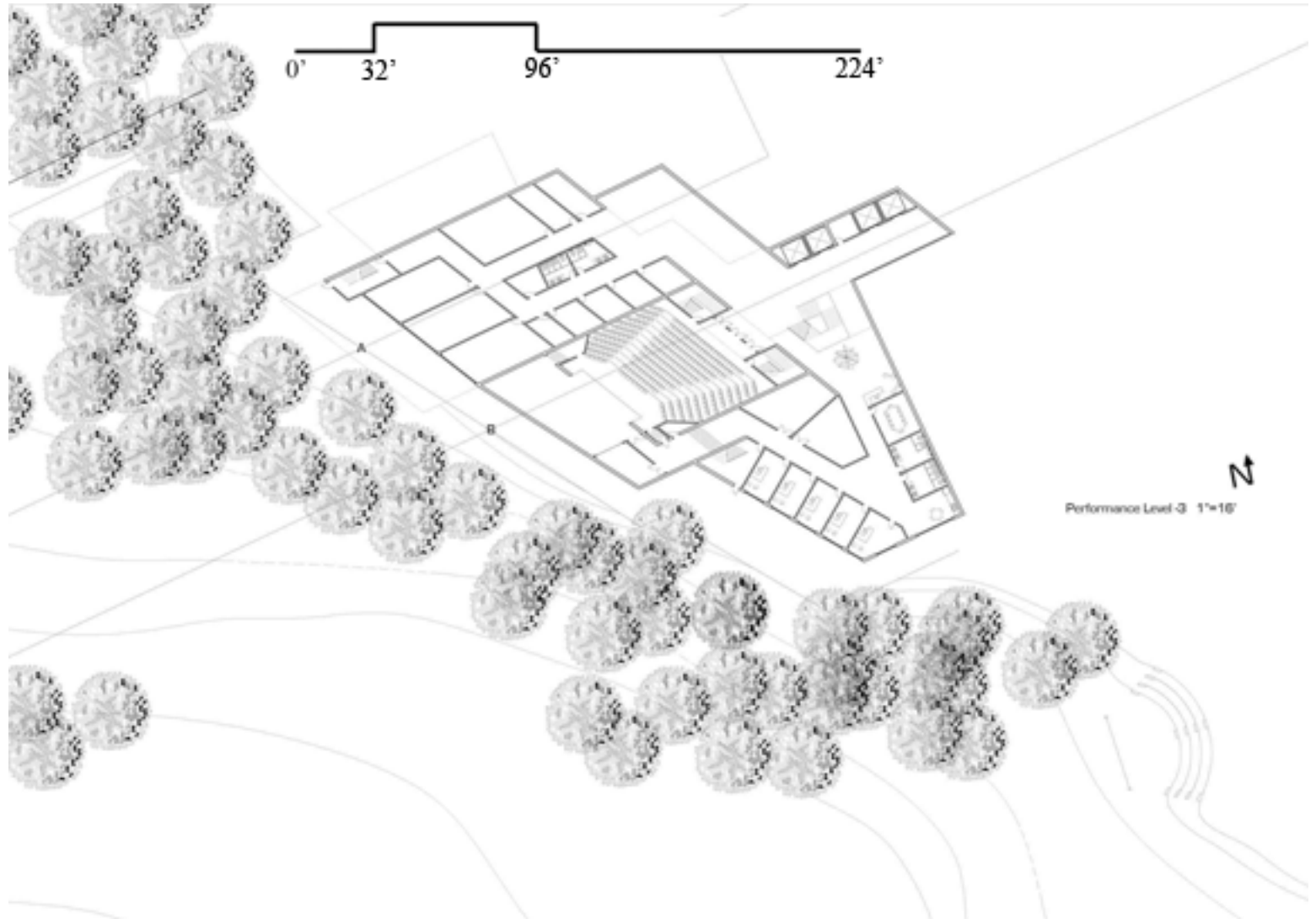
Design Process

GATE Drawings- Lower Gallery Plan



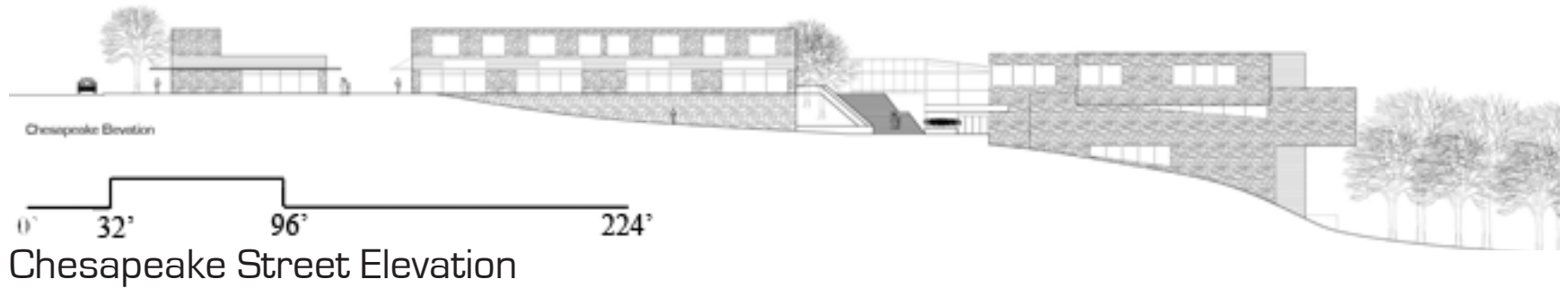
Design Process

GATE Drawings- Performance Plan



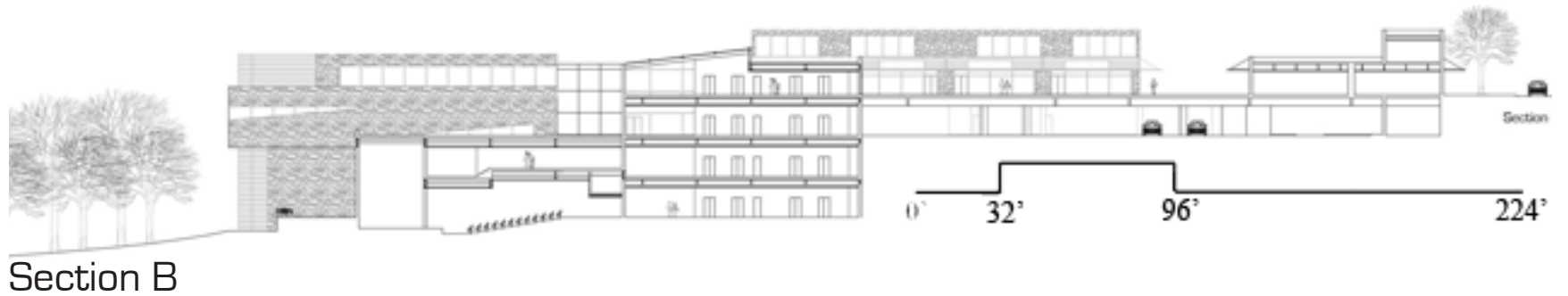
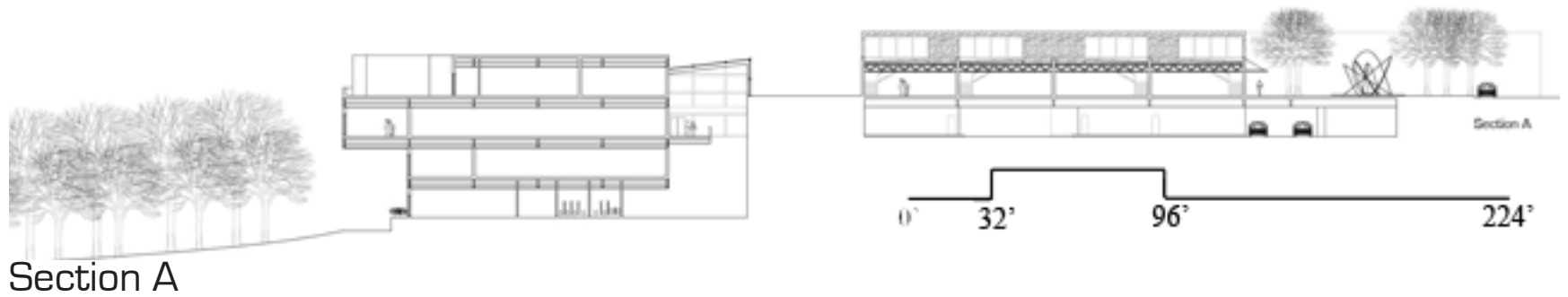
Design Process

GATE Drawings- Elevations



Design Process

GATE Drawings- Sections



Design Process

GATE Images of Model



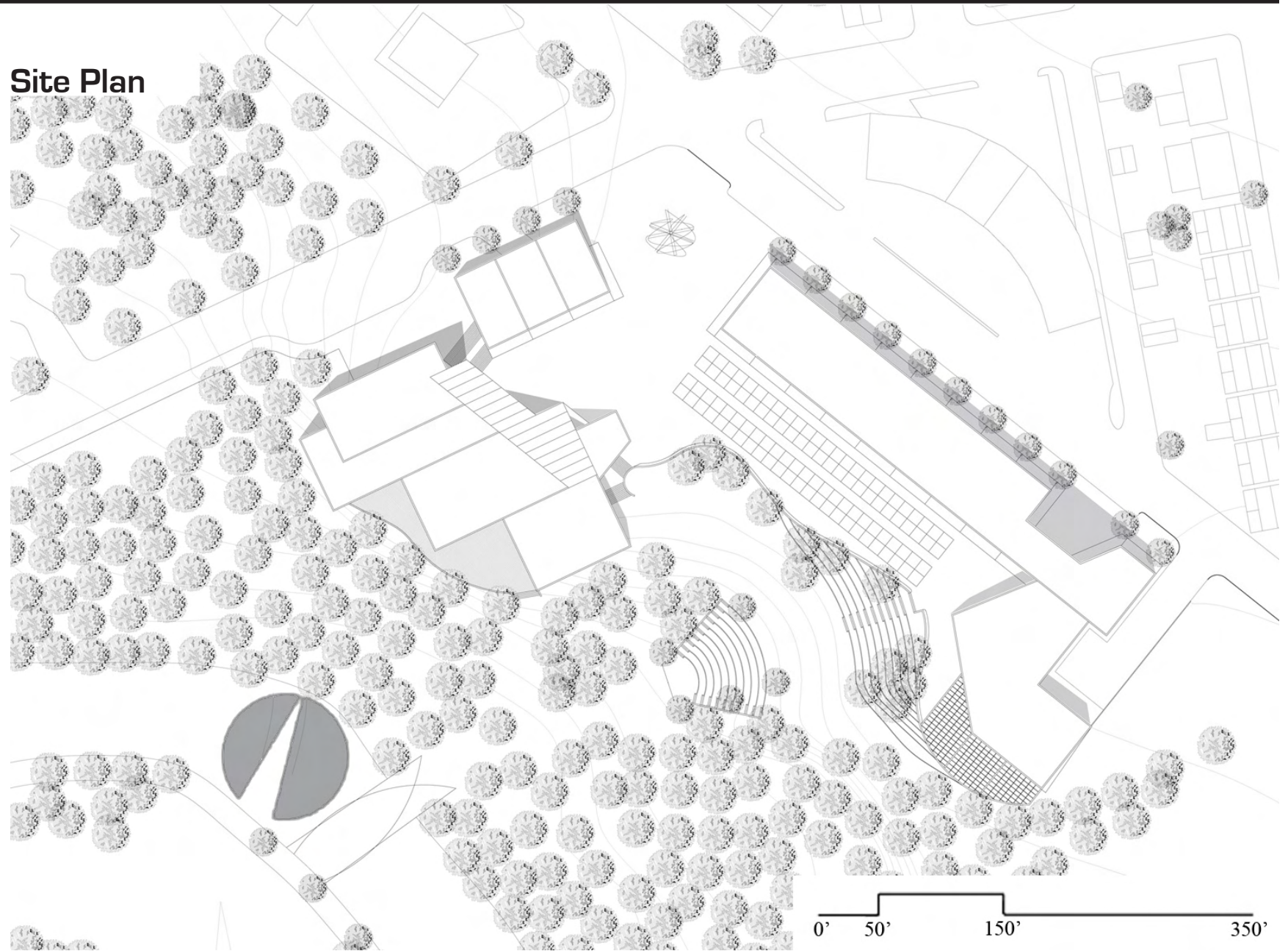
Design Process

GATE Images of Model



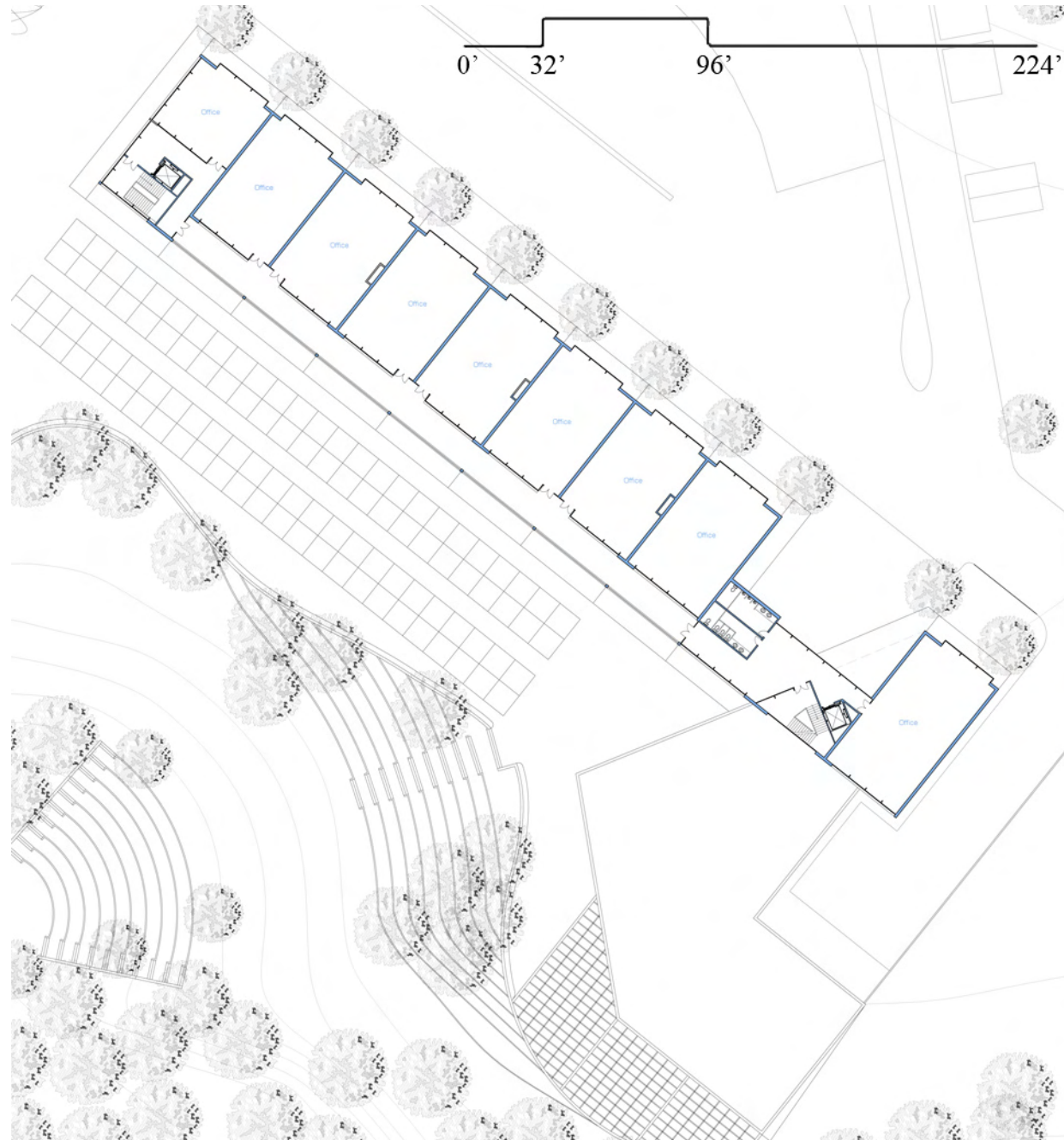
Final Drawing and Images

Site Plan



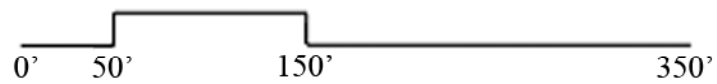
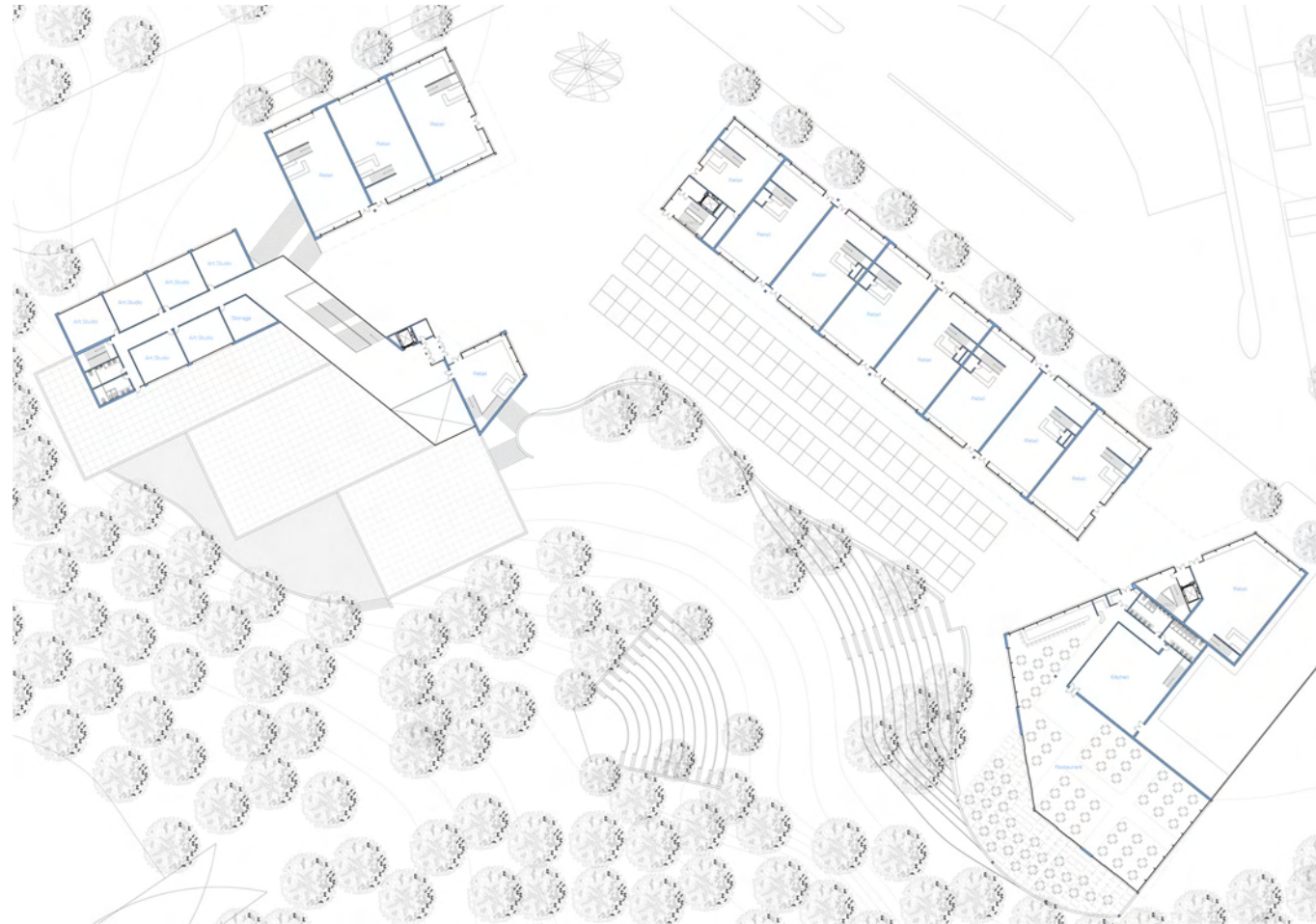
Final Drawing and Images

Office Plan Level 2



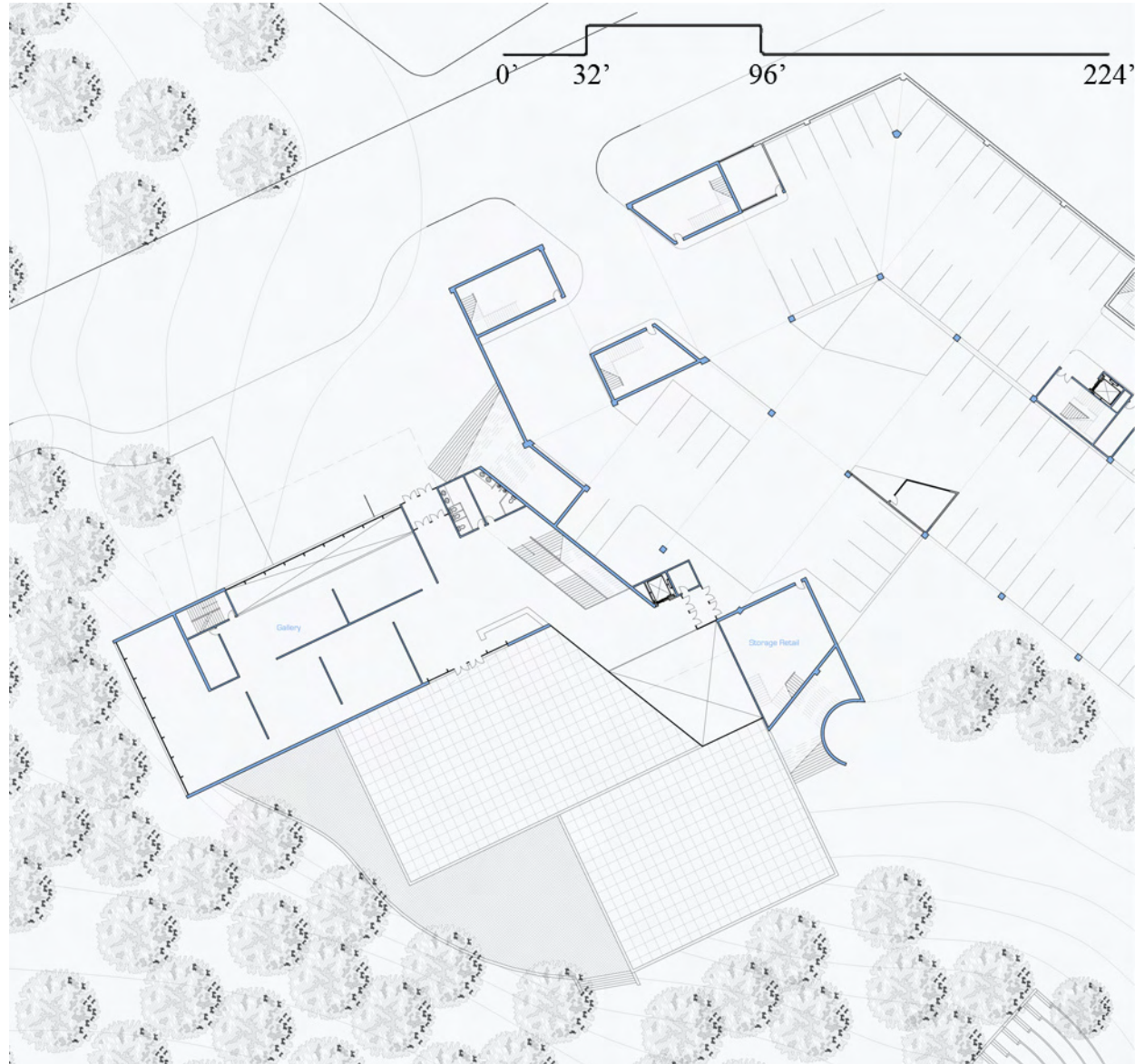
Final Drawing and Images

Retail/Plaza Plan Level 1



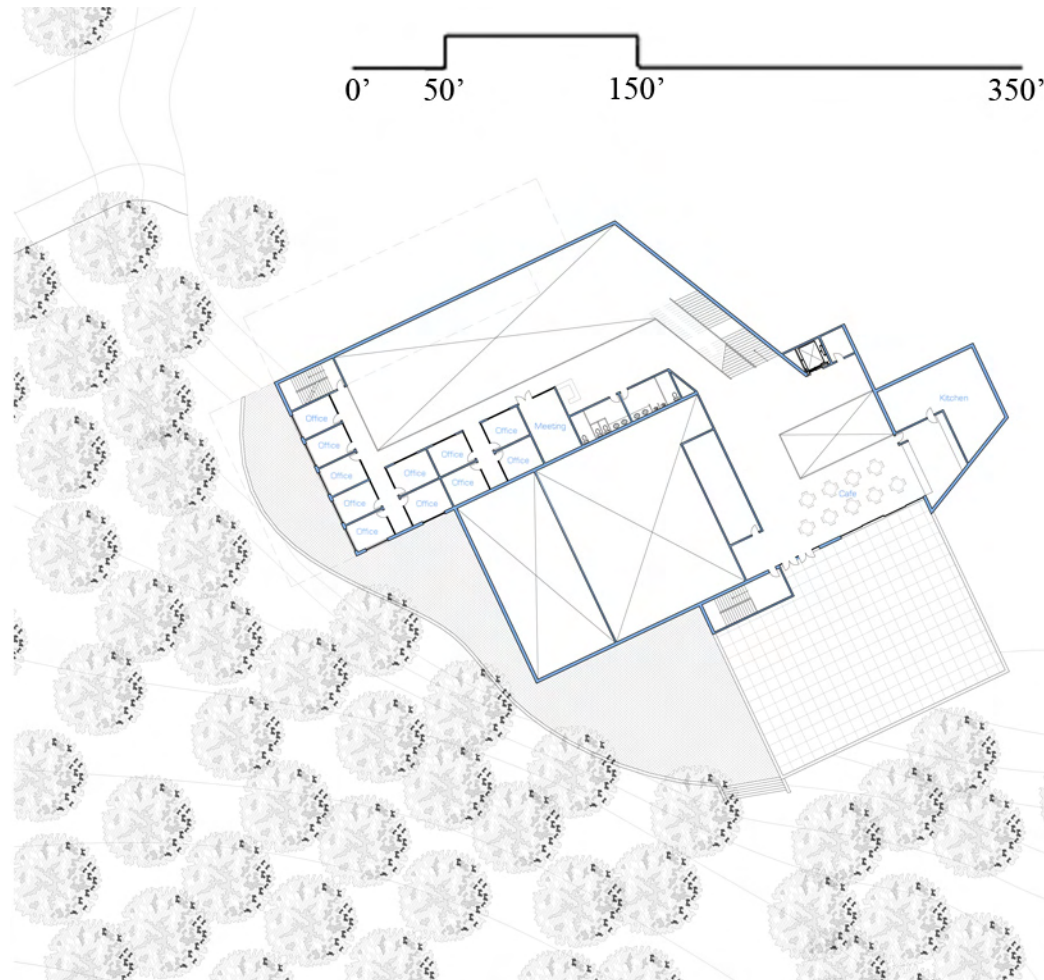
Final Drawing and Images

Main Gallery Plan Level -1



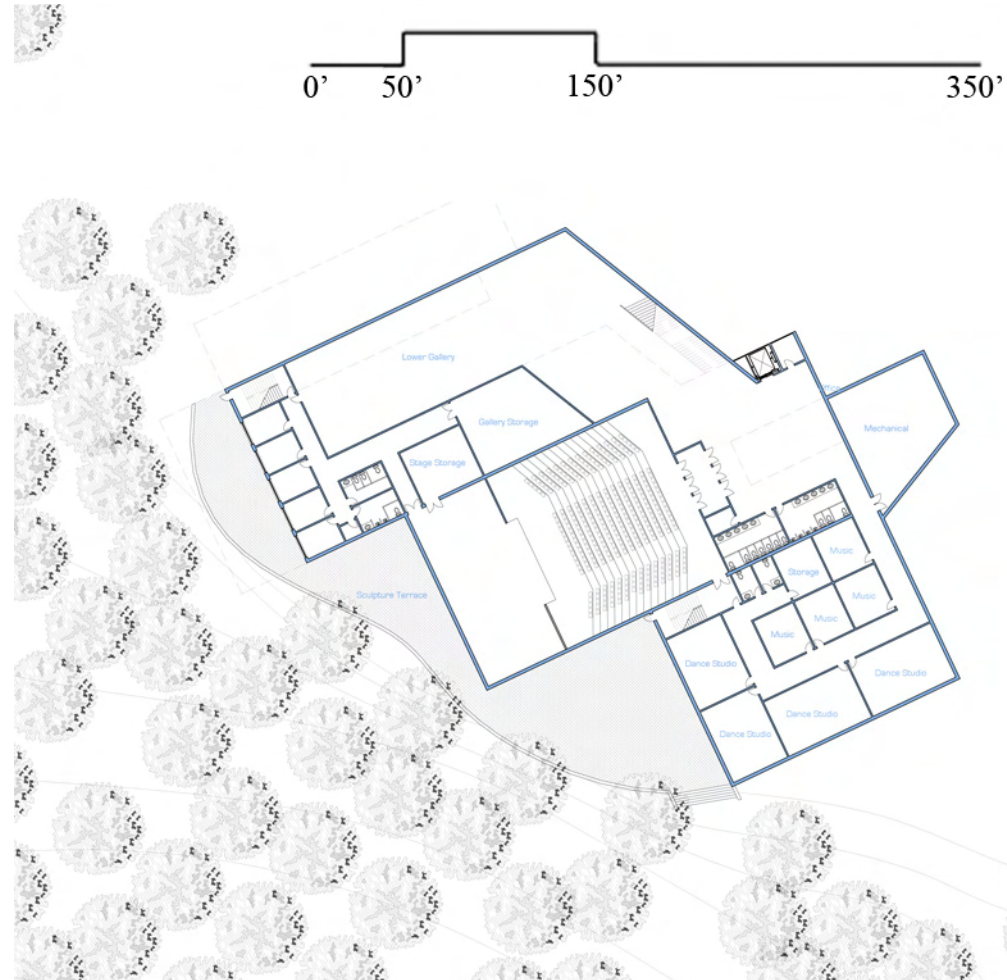
Final Drawing and Images

Administration Plan Level -2



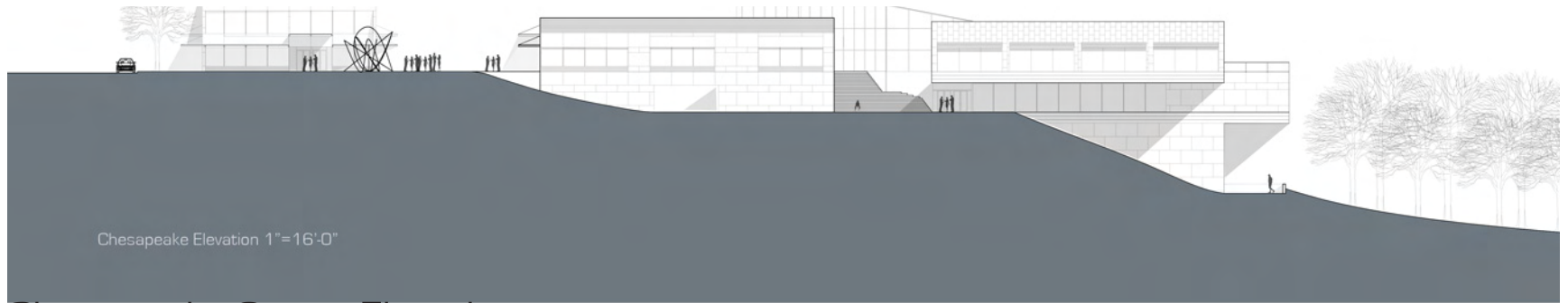
Final Drawing and Images

Theater Plan Level -3

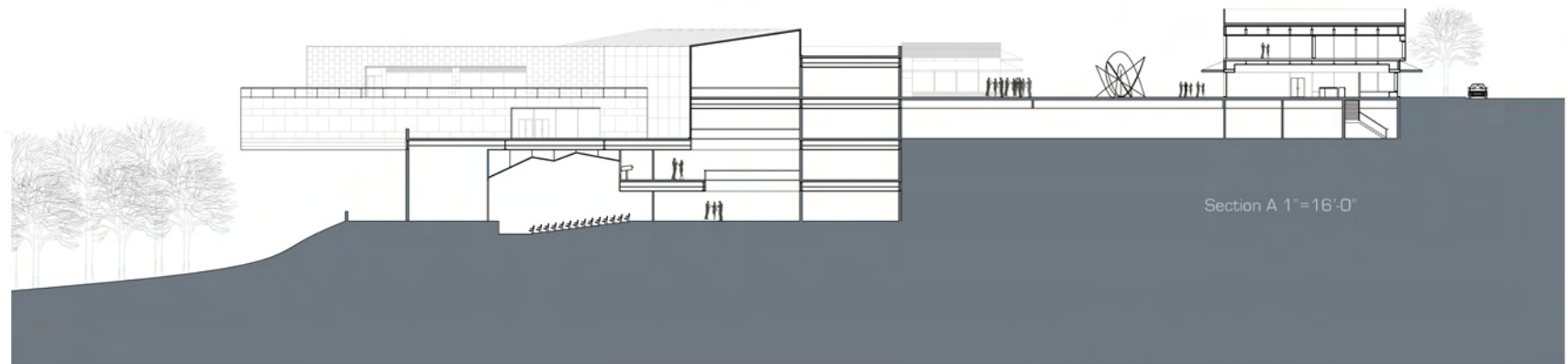


Final Drawing and Images

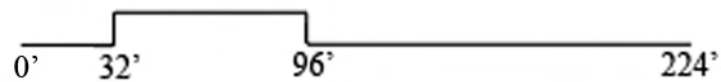
Elevation/Section



Chesapeake Street Elevation



Section A

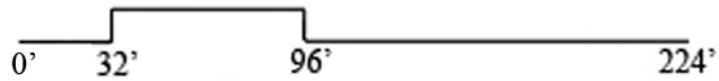


Final Drawing and Images

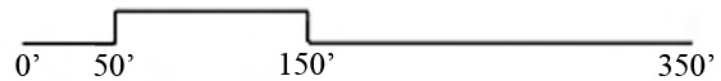
Elevation/Section



Duke Street Elevation

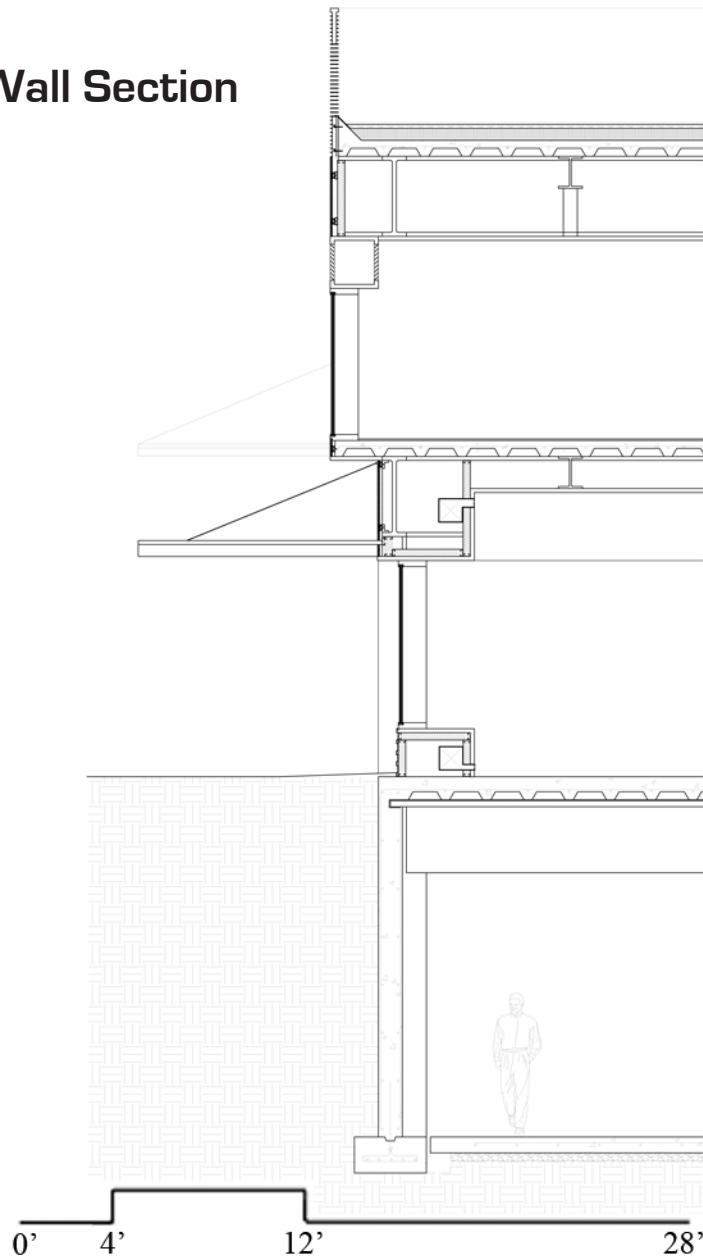


Section B



Final Drawing and Images

Wall Section



Typical Roof Condition

- Stone Ballast
- Roofing Membrane
- Rigid Insul.
- Concrete Slab w/ reinforcing
- Metal Decking
- Metal Louver system

Granite Cladding

Typical Floor Condition

- 1/8" Wood Flooring
- Concrete Floor Slab w/ reinforcing
- Metal Decking

Typical Ceiling Condition

- W40 Steel Member
- W16 Steel Member
- Batt insul.
- Gypsum Board

Custom Window
Glass Mullion

Typical Floor Condition

- Terrazo floor
- Concrete Floor Slab w/ reinforcing
- Metal Decking

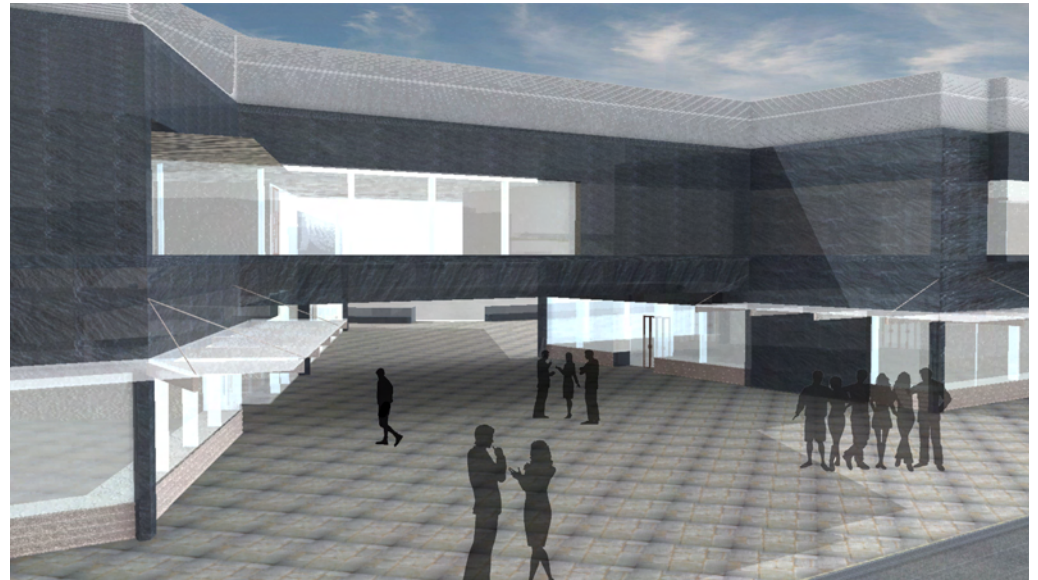
Precast concrete Beam

Typical Foundation Condition

- Concrete footing and retaining wall w/ reinforcing
- 4" Concrete Slab on Grade w/ reinforcing
- 4" Crushed Stone on well compacted Earth

Final Drawing and Images

Images



Entry near Restaurant

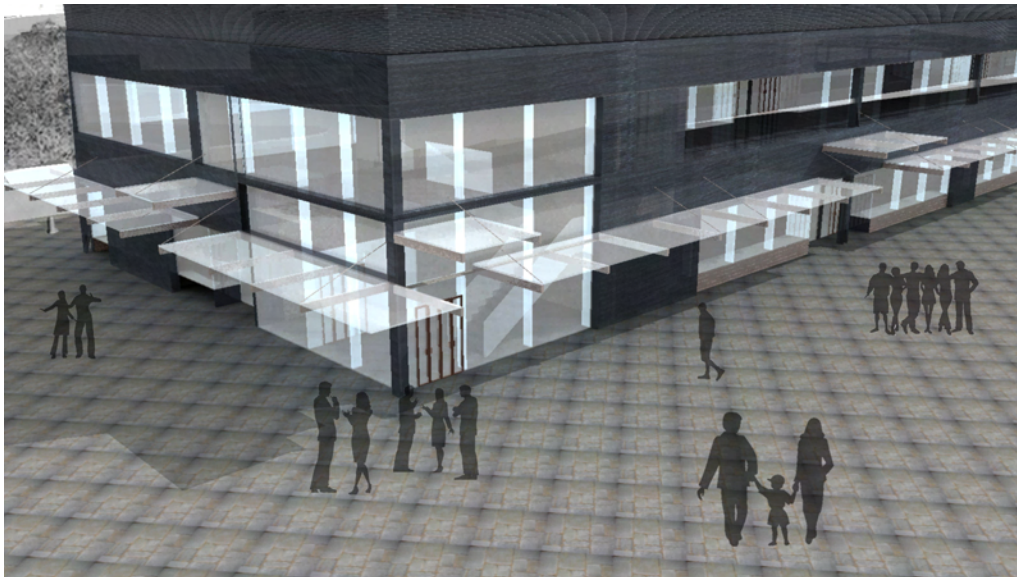


View From Upper Walkway

Upper walkway access to Offices

Final Drawing and Images

Images- Views of Plaza

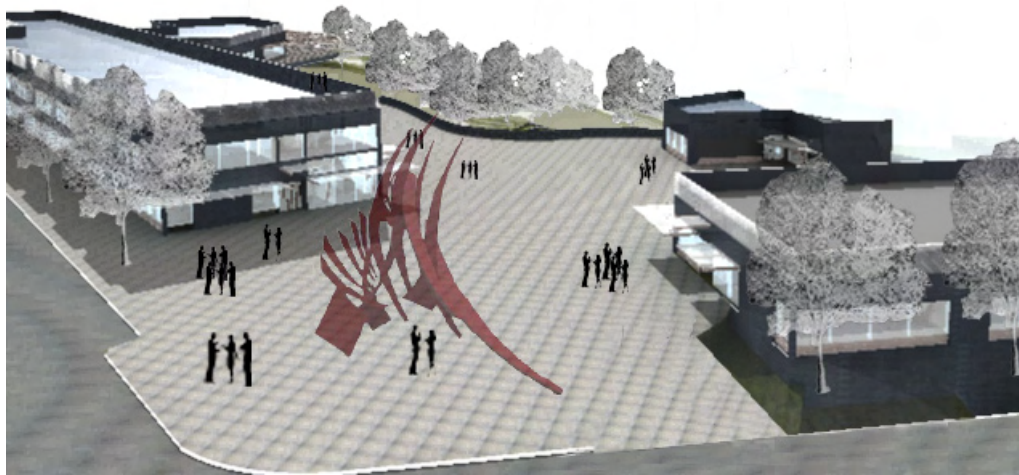


Final Drawing and Images

Images



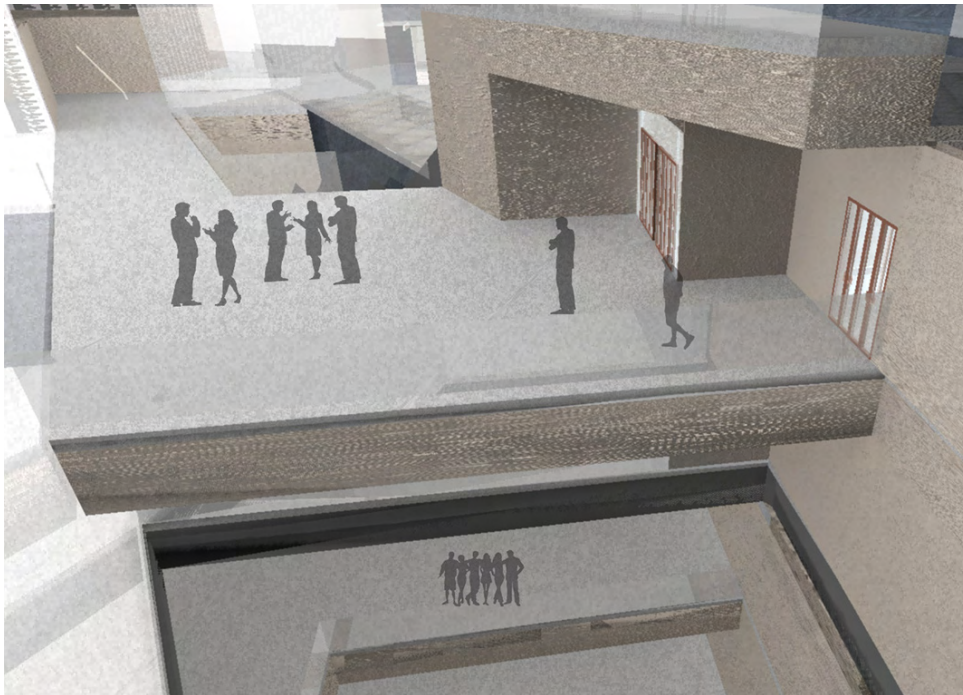
View from Chesapeake Street



View of Main Entry Point

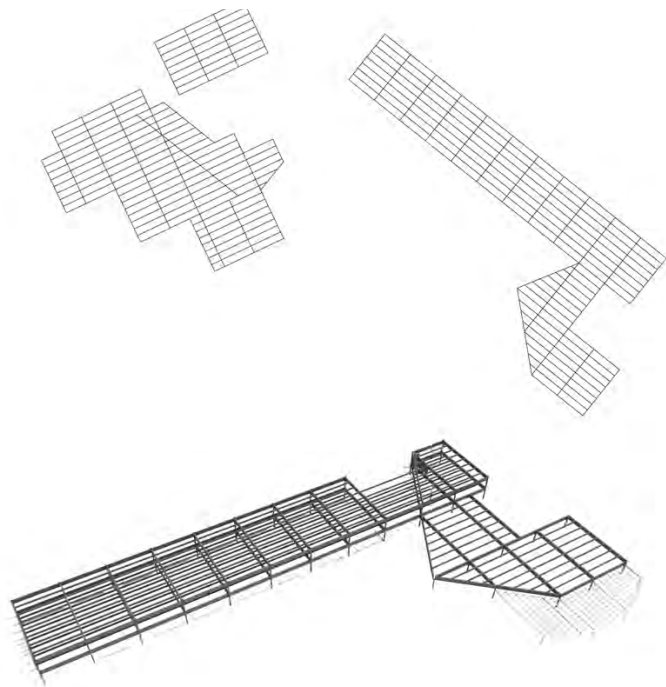
Final Drawing and Images

Images- Lobby of Community Building

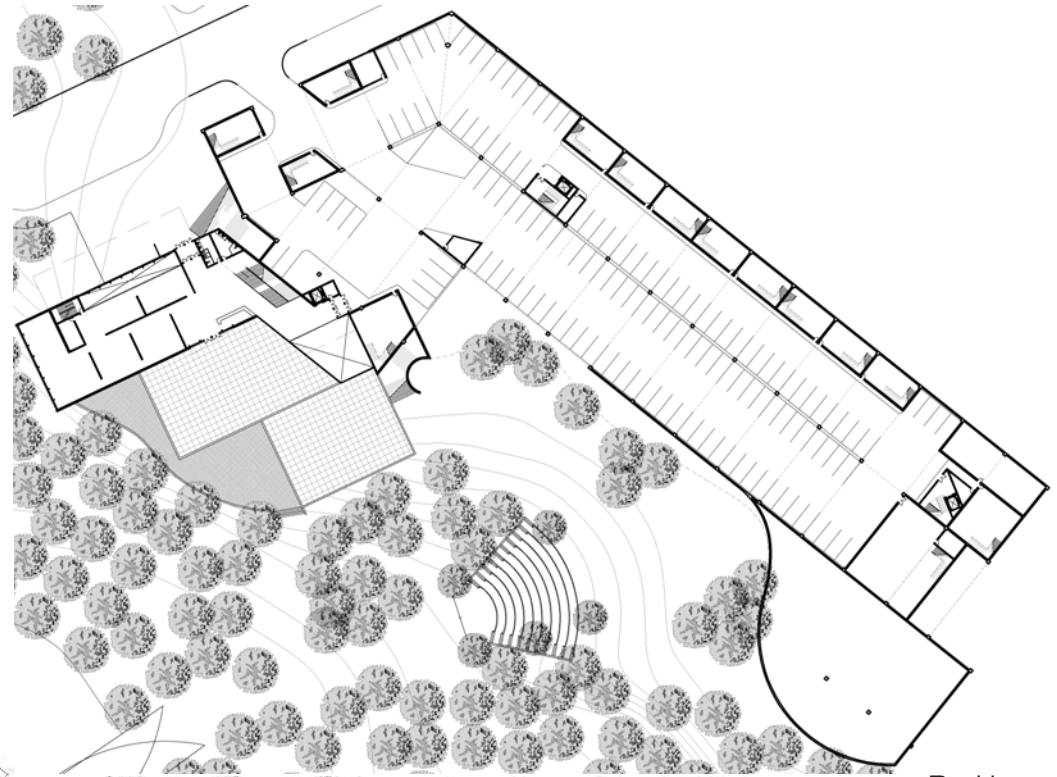


Final Drawing and Images

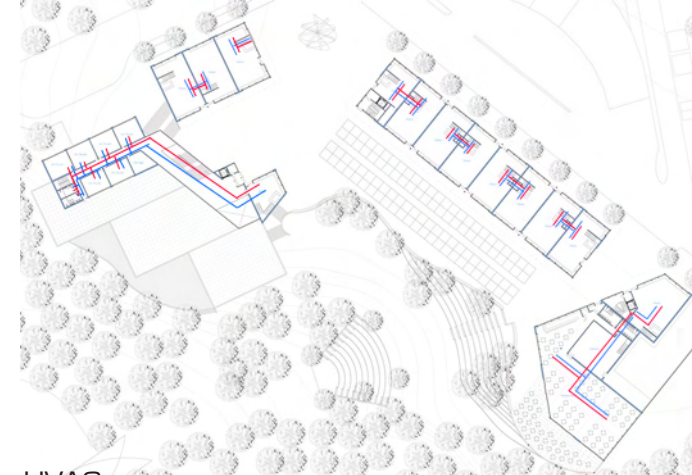
Diagrams



Structure



Parking



HVAC

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Appendix A

Regulatory Environment

The selected site at the intersection of S. Duke Street and Chesapeake Street is zoned C2 Urban Commercial. The code defines this as a retail/commercial area located adjacent to residential districts but serving a wider geographic area, with retail/service uses oriented more to vehicle traffic. A variety of higher impact retail/commercial uses, e.g., twenty-four-hour convenience stores, are permitted by right and special exception. The set back for this area are twelve feet from the property line. Following table shows the building height limits for C2 commercial which happens to be three stories.

LANCASTER CODE

City of Lancaster
Zoning
Table of Height, Area and Bulk Regulations
cont'd

| District | Use | Lot Minimum | | | Front (ft.) | Yard Minimum | | | Building Height | | Percentage of Maximum | |
|--------------------------|---|-------------------|----------------|----------------|----------------|---------------|--------------------|-------------------|----------------------|-------------------|-----------------------|------------|
| | | Area (sq. ft.) | Width (ft.) | Depth (ft.) | | Rear (ft.) | Each Side (ft.) | Combined Sides | Maximum (stories) | Maximum (feet) | Building | Impervious |
| R4, RO, C1, C2, MU | Conversion without exterior alteration of structure to other permitted use | 2,000 | -- | -- | -- | -- | -- | -- | -- | -- | -- | 85 |
| R4, RO, C1 C2 | Other principal structure or use | 2,000 | 20 | 90 | 5 ² | 25 | 5 | 12 | 3 | 35 | 70 | 85 |

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Regulatory Environment

Retail uses for C2 commercial zoning

City of Lancaster
Zoning
COMMERCIAL - RETAIL⁽¹⁾
[Amended 12-9-2003 by Ord. No. 16-2003; 1-9-2007 by Ord. No. 2-2007]

| | R1 | R2 | R3 | R4 | RO | MU | CB1 | CB | C1 | C2 | C3 | CM | SM |
|--|----|----|----|----|----|--------|--------|--------|--------|--------|-------------|----|-------------|
| Eating and drinking establishment, excluding drive-through restaurant, pizza, sub shop and take-out restaurant Up to 1,200 square feet floor area Up to 2,000 square feet floor area Without size restriction | | | S | S | S | S | X | X | S | S | X | | X |
| Gourmet/specialty food store Up to 1,200 square feet floor area Up to 2,000 square feet floor area Up to 10,000 square feet floor area Without size restriction | | | S | S | S | X | X | X | X | X | X | | |
| Grocery/general store, excluding gasoline ⁽²⁾ Up to 1,200 square feet floor area Up to 2,000 square feet floor area Up to 10,000 square feet floor area | | | S | S | S | X | | X | X S | X S | X | | |
| Meat and seafood market Up to 1,200 square feet floor area Up to 2,000 square feet floor area Up to 10,000 square feet floor area Without size restriction | | | S | S | | S | X | X | X S | X S | X | | |
| Pharmacy Up to 1,200 square feet floor area Up to 2,000 square feet floor area Up to 12,000 square feet floor area Without size restriction | | | S | S | S | X S | | X | X | X S | X | | |
| Pizza, sandwich/sub shop, take-out restaurant ⁽³⁾ Up to 2,000 square feet floor area Without size restriction | | | | S | | X | X | X | S | X S | X | | |
| Specialty retail store Up to 2,000 square feet of floor area Up to 10,000 square feet of floor area Up to 150,000 square feet of floor area Without size restriction | | | | | | X S | X C | X C | S | X S | X S C | | X S C |

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Cultural uses for C2 commercial zoning

**City of Lancaster
Zoning
CULTURE, ENTERTAINMENT AND RECREATION
[Amended 12-9-2003 by Ord. No. 16-2003]**

| | R1 | R2 | R3 | R4 | RO | MU | CB1 | CB | C1 | C2 | C3 | PO | CM | SM |
|---|----|----|----|----|----|----|-----|----|----|----|----|----|-----|----|
| Community center | | | S | S | S | | | | | | X | S | | |
| Conservation area, natural habitat, riparian greenway or similar area | | | | | | | | | | | | X | | |
| Movie and live theater Up to 250 seats Without size restriction | | | | | | S | X | X | | S | X | | | |
| Museum, art gallery, planetarium or aquarium | | S | S | S | S | X | X | X | S | X | X | S | (4) | |
| Park, tot lot, playground or game court or course | | | | | | | | | | | | | | |
| Public | X | X | X | X | X | X | X | X | X | X | X | X | | |
| Private or restricted | S | S | S | S | S | S | S | S | S | S | S | X | (4) | |
| Commercial | | | | | | S | S | S | | | S | X | (4) | |
| Performing arts studio | | | | S | S | X | X | X | S | X | X | | (4) | |

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Regulatory Environment

Parking

Commercial retail

Except as noted below

1 per 200 square feet of gross floor area. Where an establishment utilizes more than 1 floor, floors other than the one closest to ground level shall be computed at 1 parking space per 400 square feet of gross floor area.

Eating and drinking establishment, including drive-through restaurant 1 per 100 square feet of gross floor area devoted to use by the public, plus 1 per 3 employees computed on the basis of the estimated maximum number of employees on duty at any 1 time

Grocery/general store up to 1,200 square feet gross floor area 1 per 400 square feet of gross floor area

Art studio

1 per 500 square feet of gross floor area

Auditorium or exhibition hall

1 per 4 seats

Library, museum, art gallery or similar activity

1 per 300 square feet of gross floor area

Park, tot lot, playground, game court or course, pool and/or swimming area

1 per 5,000 square feet of playing

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Regulatory Environment

Parking

All off-street parking facilities shall have a minimum parking space (stall) per vehicle dimension of eight feet six inches by 18 feet, except that parking facilities containing in excess of 20 spaces may provide spaces for compact cars. Compact stall sizes shall be seven feet six inches by 15 feet, shall be clearly marked with appropriate signage and markings and shall not exceed 15% of the total number of spaces.

Perimeter landscaping shall be provided along the edge of a parking lot where the parking lot is visible from a public street or alley and/or residential property and may be located in the required yard setback. Perimeter landscaping shall be a minimum five feet in width, shall consist of shrubbery at least two feet in height and shall be maintained at a height no greater than that allowed in § 300-26. Where the length of the landscaping area exceeds 25 feet, deciduous trees shall be planted at intervals of 25 feet, except that parking lots of 40 or more spaces meeting the interior landscaping provision of Subsection F shall be required to provide deciduous trees at fifty-foot intervals in the perimeter landscaping area. Such trees shall be planted and maintained in accordance with Chapter 273, Trees, of the Code of the City of Lancaster. Any trees and landscape plants that die shall be immediately replaced by the property owner. Perimeter planting shall conform with § 300-25, Visibility at intersections. Interior landscaping shall be provided in parking lots (excluding garages) containing 40 or more spaces.

Parking lots shall be designed to facilitate pedestrian access to entrances of structures by providing delineated walkways through use of materials, pavement markings, signage or other appropriate means when pedestrians must cross travel aisles to reach entrances.

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Handicap Parking

Accessible parking spaces must be the closest spaces to the building's accessible entrance. Accessible parking spaces must be at least 96 inches wide with a clearly marked adjacent access aisle of 60 inches in width; two spaces may share a common aisle. Spaces and aisles must be level or with a slope no greater than 1 to 50. Each parking facility provided for employees or visitors is required to have accessible parking spaces as follows:

| Total Parking in Lot | Minimum Number of Accessible Spaces |
|----------------------|-------------------------------------|
| 10 to 25 | 1 |
| 26 to 50 | 2 |
| 51 to 75 | 3 |
| 76 to 100 | 4 |
| 101 to 150 | 5 |
| 151 to 200 | 6 |
| 201 to 300 | 7 |
| 301 to 400 | 8 |
| 401 to 500 | 9 |
| 501 and above | 2% of total spaces |
| 1,001 and above | 20, plus 1 for each 100 over 1,000 |

Each parking facility with accessible parking spaces shall include one accessible van parking space in every eight accessible spaces, but not fewer than one, regardless of the minimum number of accessible spaces. An accessible van parking space must have a minimum of a ninety-six-inch-wide access aisle and a minimum of 98 inches vertical clearance. Signage designating the space as "van accessible" must be provided below the symbol of accessibility.

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Regulatory Environment

Off Street Loading

Except in R1, R2, R3 and R4 Districts, one or more loading berths or other space shall be provided for standing, loading and unloading operations either inside or outside a building and on the same or adjoining premises with every building or structure hereafter erected or enlarged, in accordance with the following table. When the computation of any required loading berths or spaces results in a fractional berth or space, any fraction up to 49.9% shall be disregarded, and fractions 50% and over shall be rounded up; provided, however, that in no case shall the computation result in less than one loading berth or space. A loading berth shall have a minimum plan dimensions of 12 feet by 45 feet and 14 foot overhead clearing, plus necessary access space. A loading space need not necessarily be a full berth but shall be sufficient to allow normal loading and unloading operations of a kind and magnitude appropriate to the premises served thereby. The Zoning Officer or his authorized agent shall determine the sufficiency of loading space and in no case shall the use of such space hinder the free movement of vehicles and pedestrians over a street, sidewalk or alley.

| Use Classification | Required Loading |
|--|---|
| Retail operations with a gross floor area over 30,000 square feet | 1 berth for the first 30,000 feet of gross floor area, plus 1 berth for each additional 30,000 square feet up to 90,000 square feet, and 1 berth for each additional 100,000 square feet above 90,000 square feet |
| Retail operations with a gross floor area less than 30,000 square feet; nonresidential uses other than retail and wholesale and industrial operations less than 20,000 square feet which require the receipt or distribution of materials by vehicles; and wholesale and industrial operations | |

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Signage

Signs permitted in C1 and C2 Districts shall be regulated as follows:

A. Type: business signs, commercial advertising signs.

B. Structure: wall, projecting, freestanding, arcade, awning, marquee, roof.

C. Maximum sign area per primary building frontage: 1.5 square foot for each linear foot of frontage for single use lots; 2.0 square feet per linear foot for multiuse lots.

D. Maximum sign size: 50 square feet.

E. Corner and double frontage lots. For each additional street frontage, the property shall be allotted an additional 50 square feet of signage, provided that the additional signage is oriented toward the additional street.

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Regulatory Environment

Means of Egress/ accessibility

Commercial buildings with occupancy above 49 and below 500 require two independent exits with no dead-end corridors exceeding 20 feet in length. The maximum travel distance to an exit from a remote point can be no more than 98 feet unsprinkled and 148 sprinkled for a place of assembly and 131 feet unsprinkled and 148 sprinkled for a business/ service. The minimum clear corridor width for a C2 building is 44" as well as the minimum stair width.

Walking surfaces except for ramps may not exceed a slope of more than 1:20. Doorways must be a minimum of 32" wide. The minimum diameter of a wheelchair turning circle is 60". Ramps may not slope more than 1:12; and must have a minimum clear width of 36". Ramps can not rise more than 30" between landings and landings must be no less than 60" in length. Wherever places are required to be accessible, at least one accessible means of egress is required.