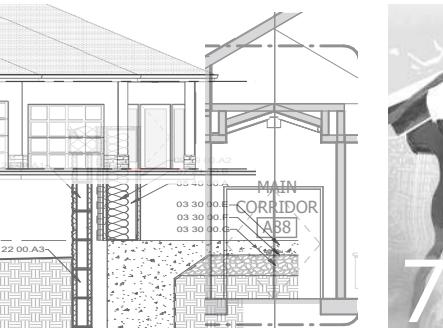


Portfolio

Shiva Keyvanfar

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Professional Experience



New Chicago Neighborhood



An Architecture of Unity



High School



Ballet Studio



Residential Complex



Apartment



Renovation



Workshops

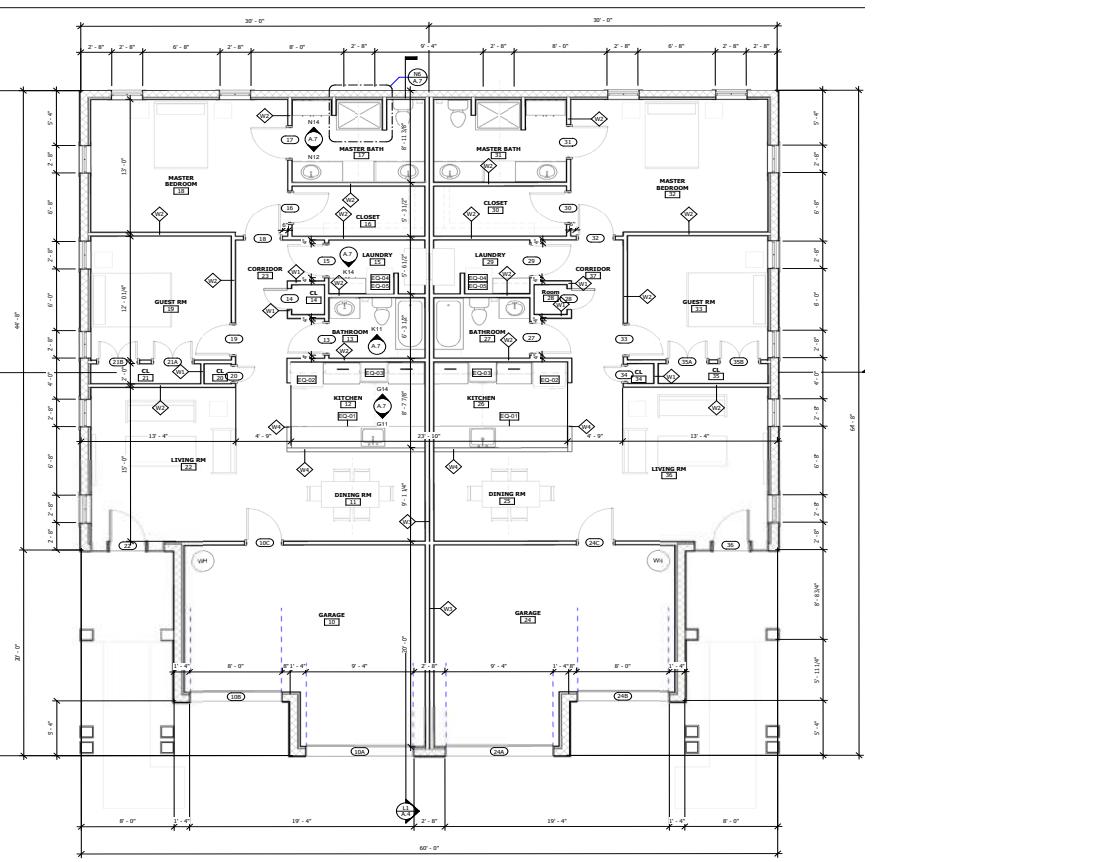


Independent Living
Residential Project

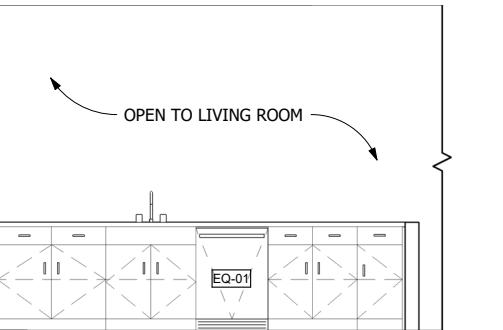
Schematic Design & Design Development
Summer 2018

SITE Apollo Beach, Florida

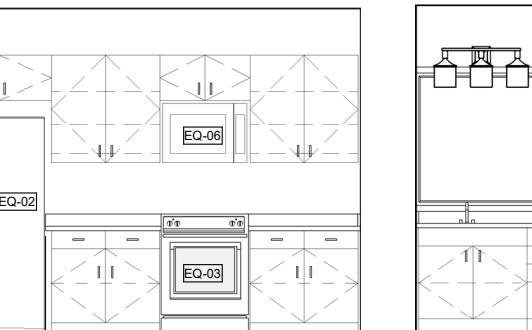
OBJECTIVE The main goal of the project was to create cottages for elderly people. The structure of cottages is CMU concrete masonry units for exterior walls and wood for interior walls. The only load bearing wall was designed in the middle of each unit. Each unit has a master bedroom, bathroom, closet, guest room, common bath, laundry, living room, dining room, kitchen, and two garage spaces for a car and a golf cart.



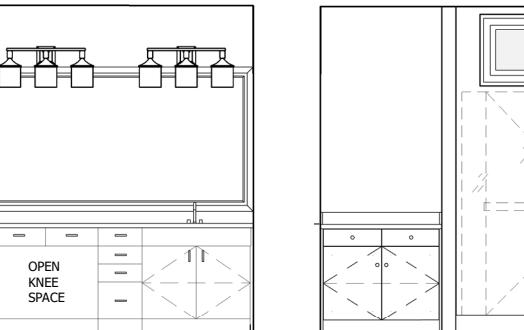
Floor Plan of Cottage



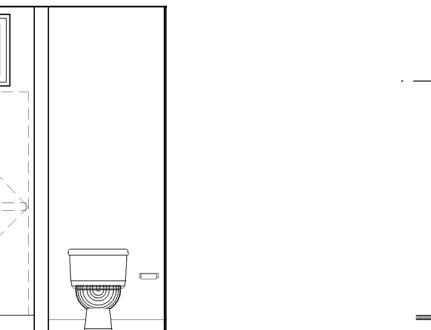
Interior Elevation of Kitchen



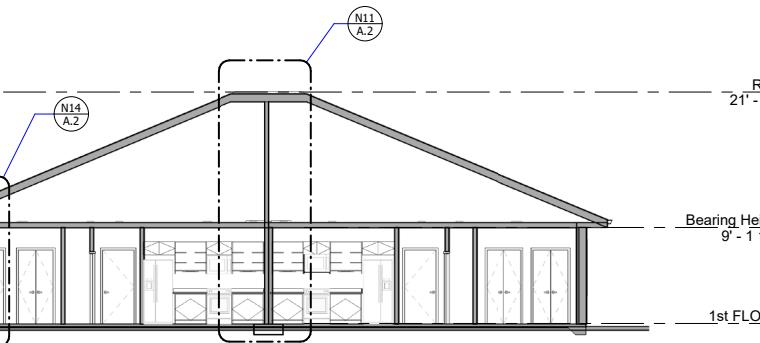
Interior Elevation of Kitchen



Interior Elevation of Master Bathroom

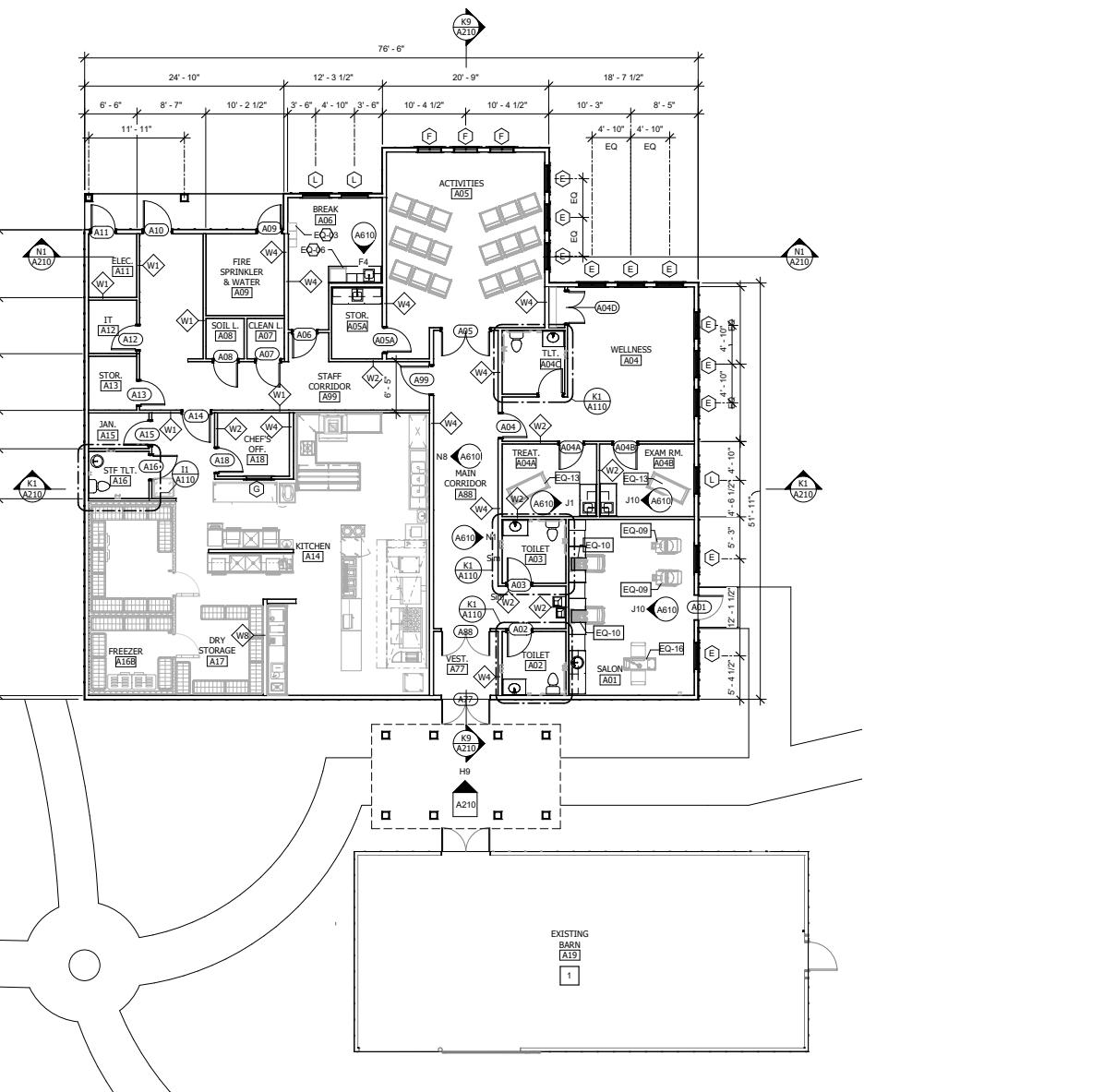


Interior Elevation of Master Bathroom

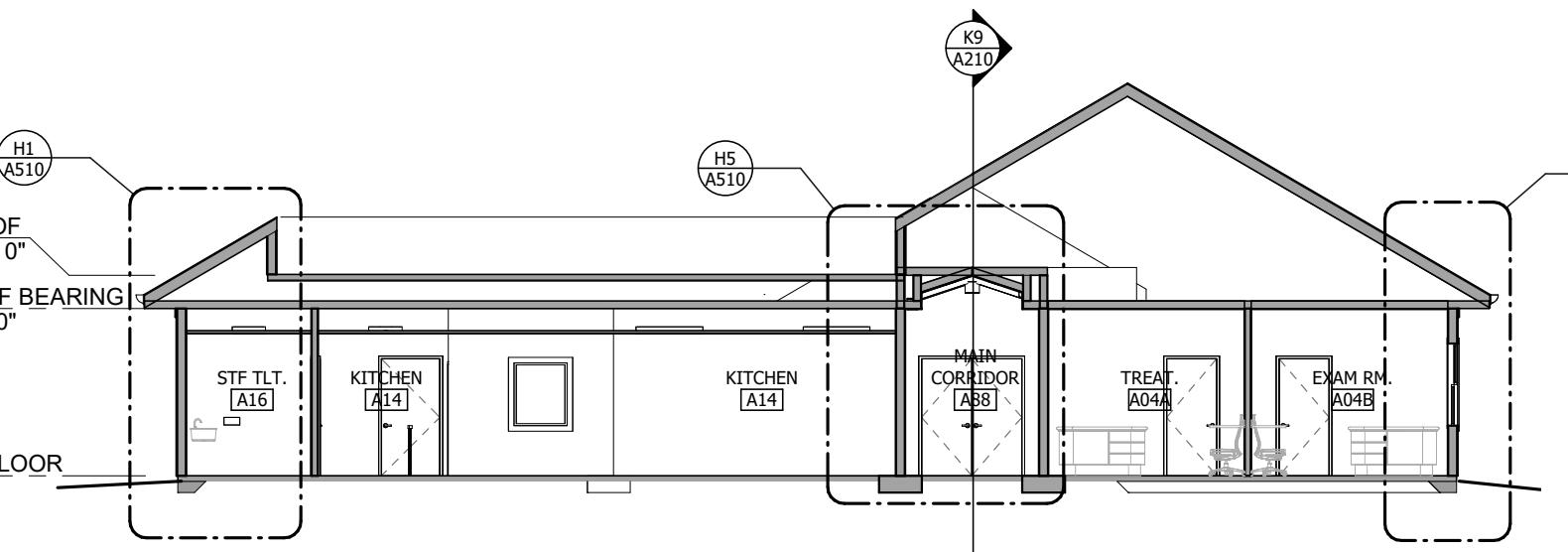


Section of Cottage

Commercial
Commercial Building for Assistant Living and Memory Care Units
Schematic Design & Design Development
Summer 2018



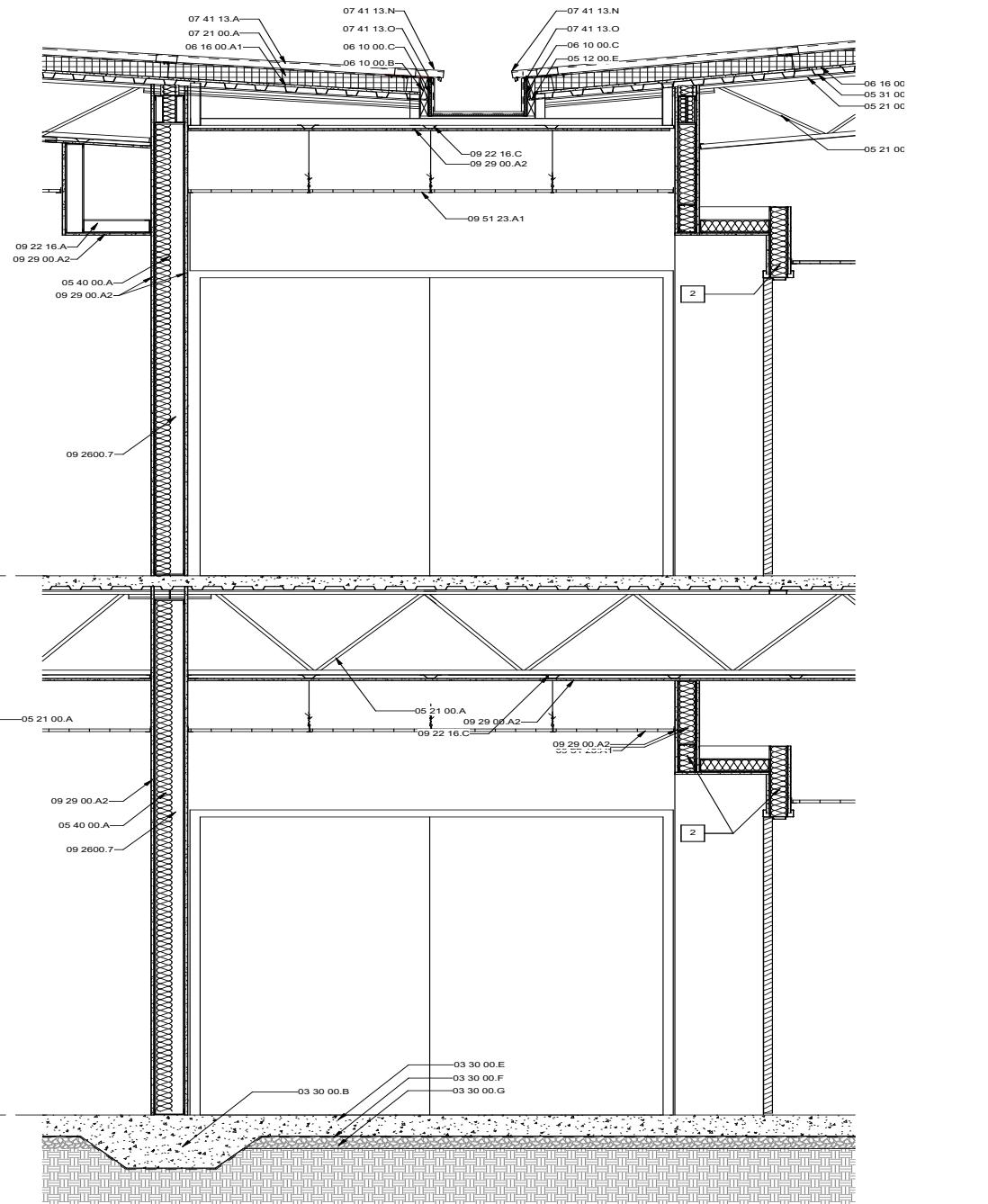
Floor Plan of Activity Building and Existing Barn



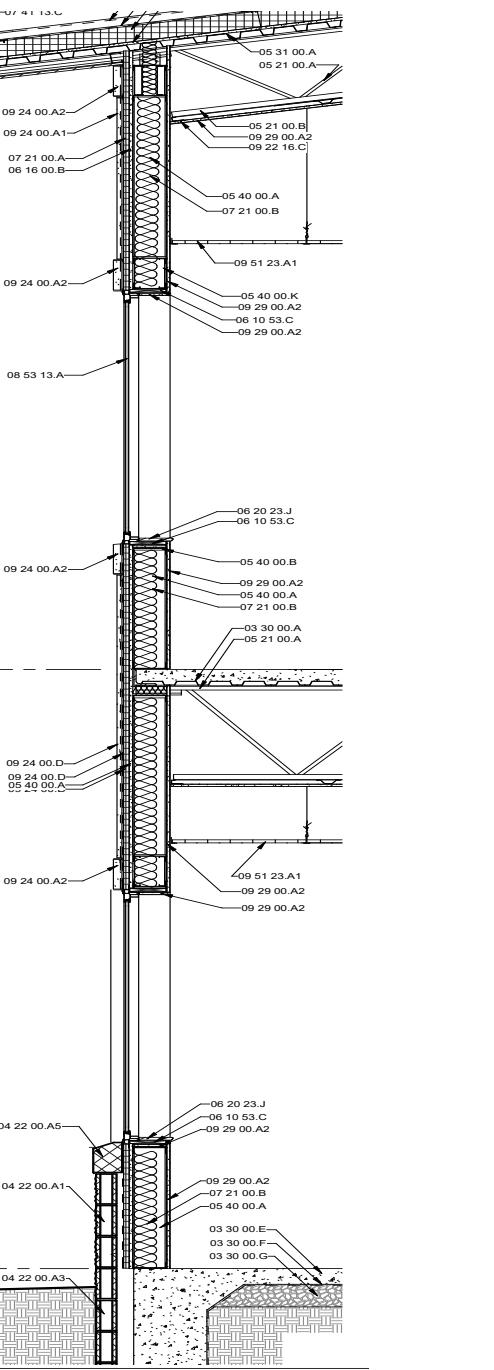
Section through the Kitchen, Corridor, and Treatment Area

SITE Cartersville, Georgia

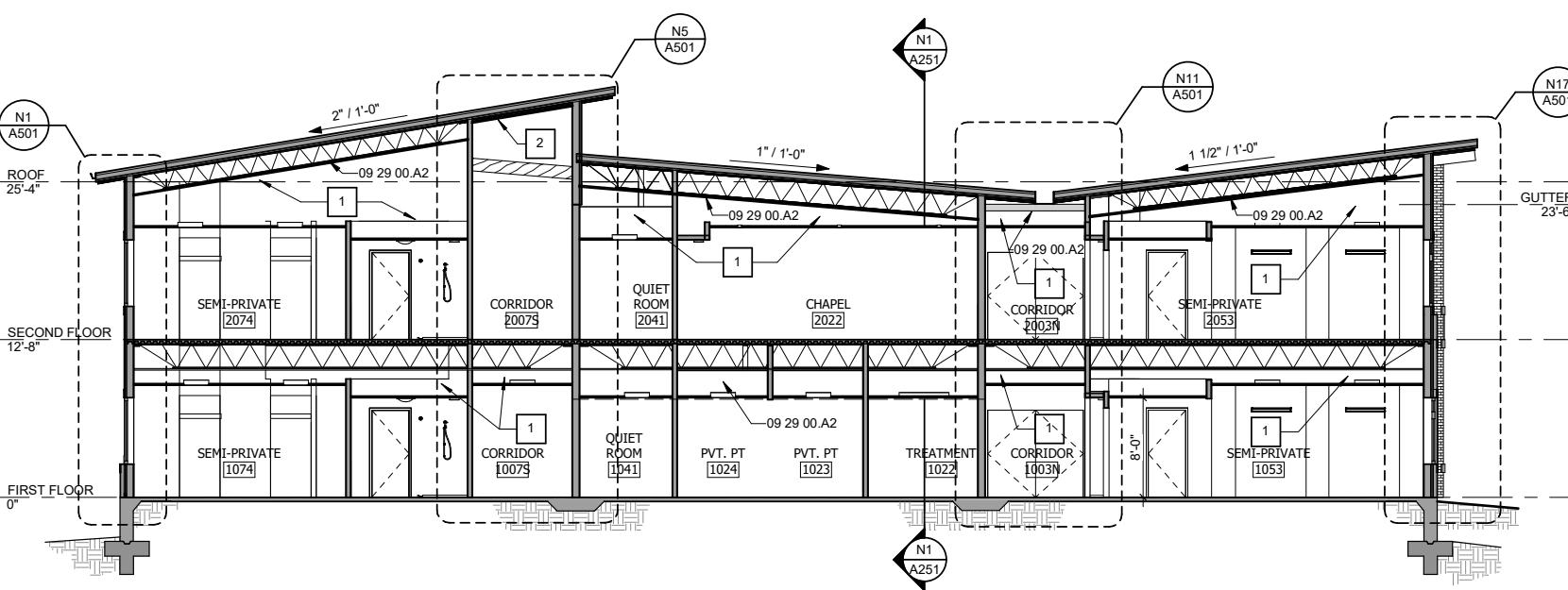
OBJECTIVE The main goal for this project was to create an activity building for residents in the community. This building should have a relationship with the existing barn and should connect the barn with the new building. Harbor designed between the barn and main building to connect past architecture with the new building. Preparing food, treatment office, chapel, and the salon was designed to provide basic amenities for residents.



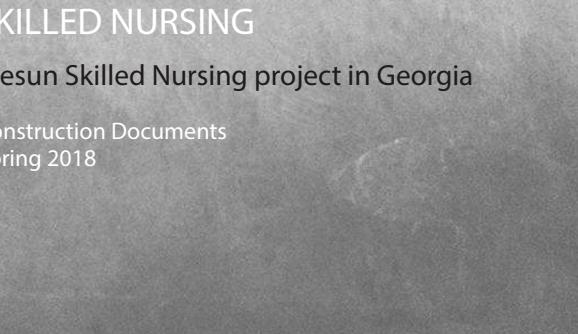
Wall Section



Wall Section



Section



SITE Lawrenceville, Georgia

OBJECTIVE The main goal for completing the construction documents was creating building sections and wall sections to indicate the details of the design. Coordination with engineers and reviewing the structural, electrical, and plumbing details was very important to create accurate wall sections, details, and room elevations.

COMMUNITY ASSETS

Interstate 40

The interstate separate the Reed United Methodist Church New Chicago from Hollywood Neighborhood, although there are some residential areas which belong to the New Chicago. In the 1970's Memphis built Interstate-240 through the main residential area just west of Bellevue, cutting Chicago Ave down the middle.



Reed United Methodist Church



Firestone Plant



Gospel Temple Baptist Church



Firestone Rubber and Tire Company

opened a large plant in 1936. The Firestone Plant and the remaining boiler house and smokestack is the most significant building in the neighborhood. The giant smokestack, visible for miles, serves as a reminder to the height that the plant brought the neighborhood to while it employed over 3,000 people.



Gospel Temple is assigned as a historical public place in Memphis Heritage.

This church has been in the neighborhood for over 100 years and renovated several times.



Lumber Companies

were also built in the late 19th as the hardwood industry boomed in and around Memphis around the railroads that provided easy access to the Mississippi River, in the eastern part of the neighborhood.



Danny Thomas Street

Danny Thomas street is the main corridor in the neighborhood. It serves as a north-south route for much of the freight transportation coming and going. It also serves as a commercial corridor.

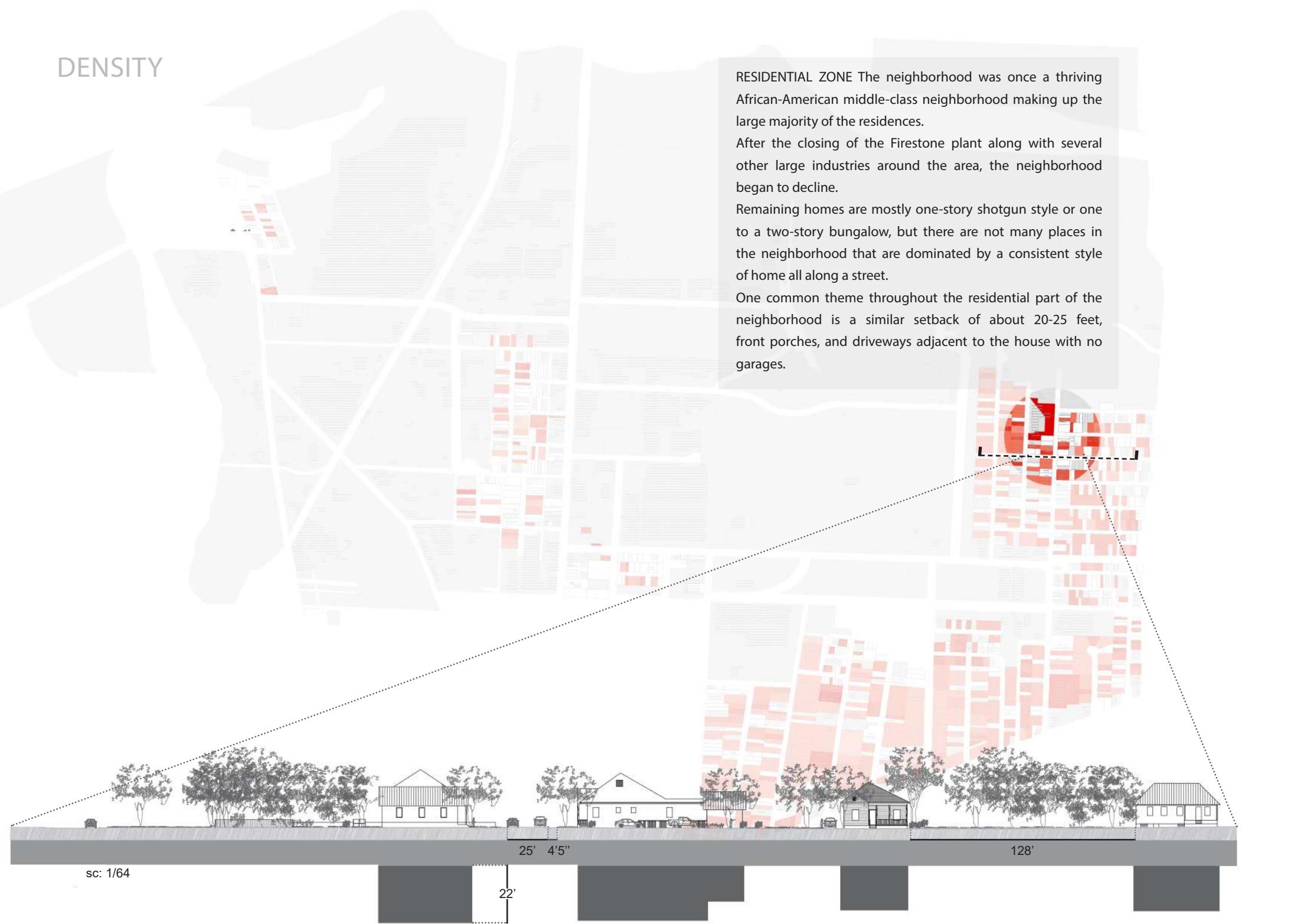


Rail Road

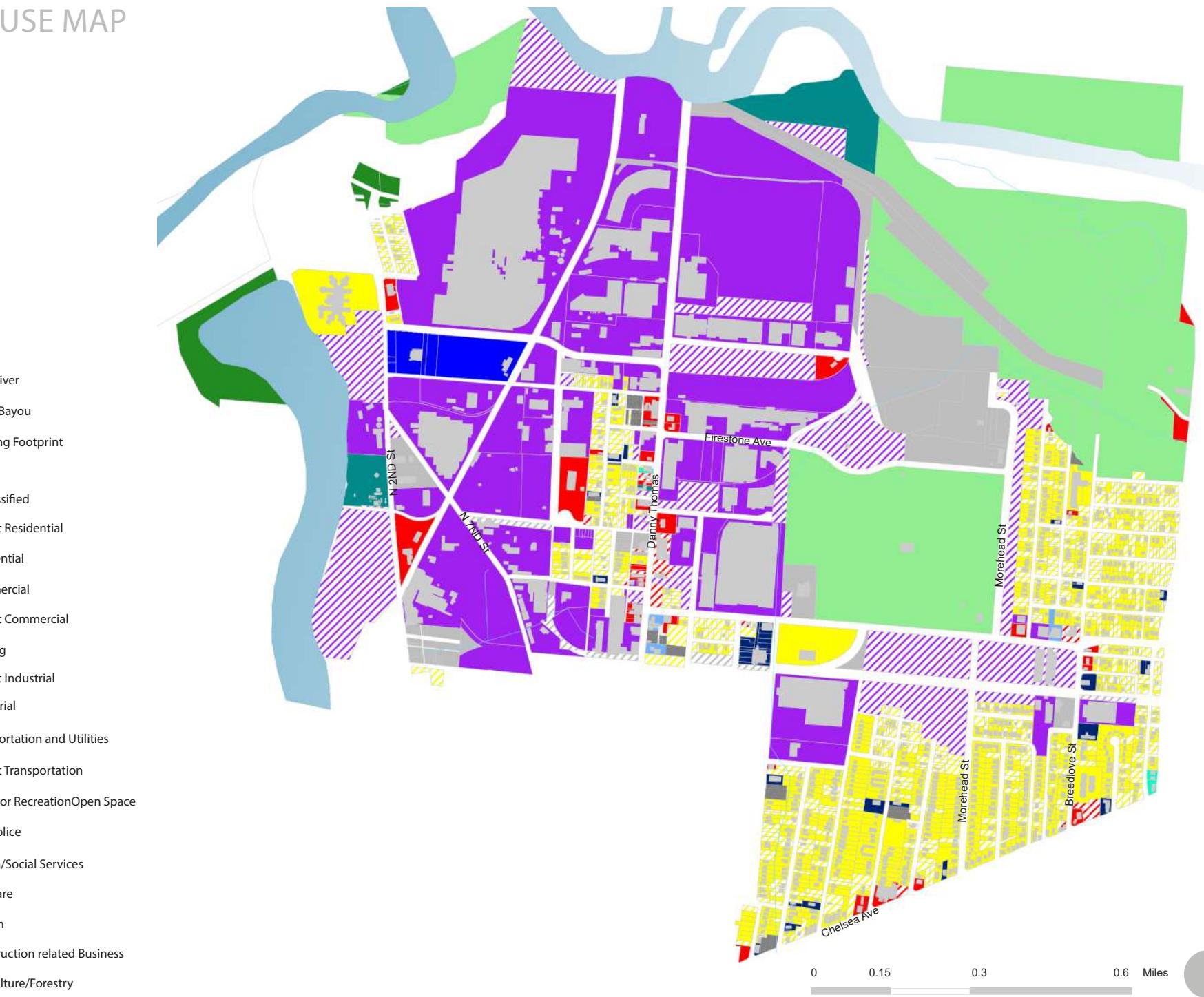
This rail road runs through north and south Memphis, connecting what was once a thriving lumber industry to Woodstock.

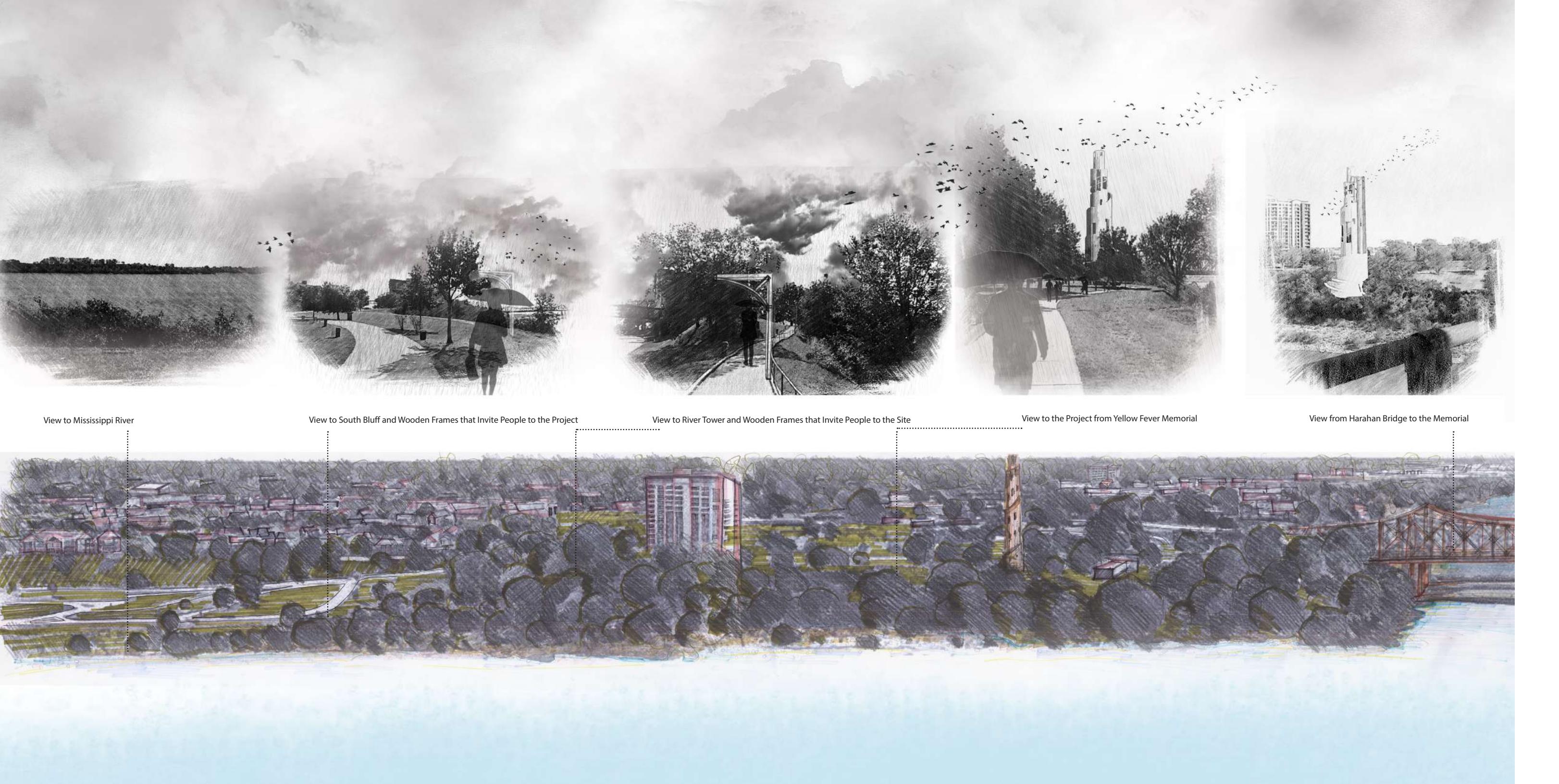


DENSITY



LAND USE MAP





An Architecture of Unity

A Memorial to Dr. Martin Luther King, Jr.

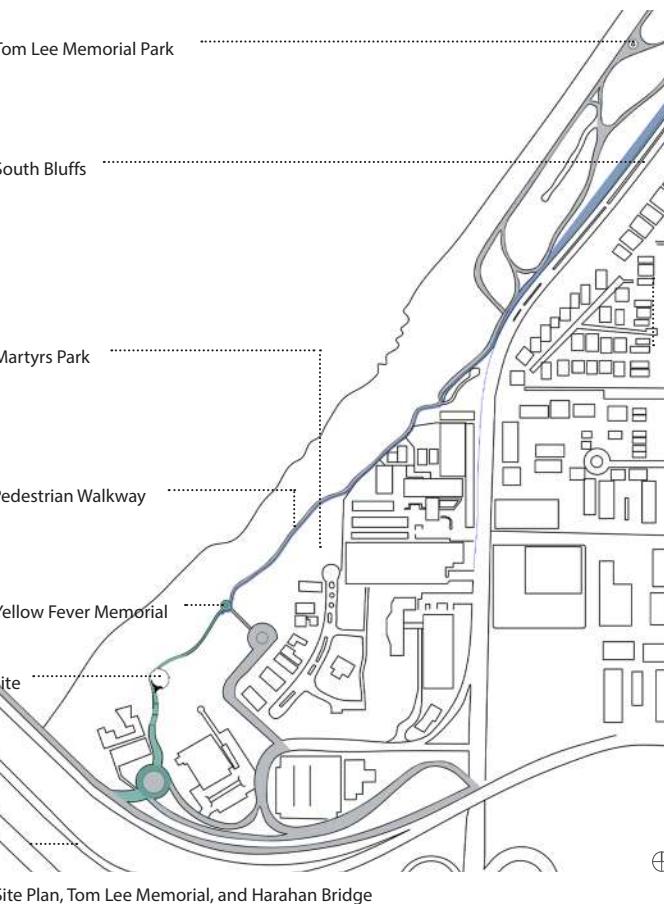
Architecture Thesis Studio / M.Arch
Spring 2017
University of Memphis

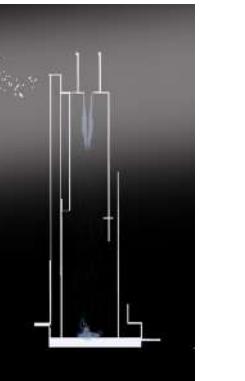
SITE The site selected for this project is on top of the South Bluff overlooking the Mississippi River, south of downtown, and near the Harahan Bridge. The site was chosen because of its proximity to the river. Historically, rivers have been a major way of connecting people between cities. This is true of Memphis, where the Mississippi's importance continues to this day. Memphis is oriented to the river and major public venues such as memorials and parks are located along the river.

There is also a relationship between the siting of the memorial, the National Civil Rights Museum, and the Mason Temple. Based on the Memphis Heritage Trail, the tour visit will start from the Harahan Bridge. The start position can provide an opportunity for visitors to visit the memorial as the first part of the route, and then continue the tour to the Mason Temple, where Dr. King gave his last speech, and then the Civil Rights Museum, where Dr. King was assassinated.



The potential for the site to attract the public from the Unitarian Church, Harahan Bridge, Martyrs Park, and Riverwalk, as well as inhabitants of the residential blocks. This is an opportunity to attract a diverse group of people to the project.

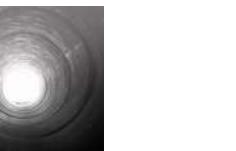




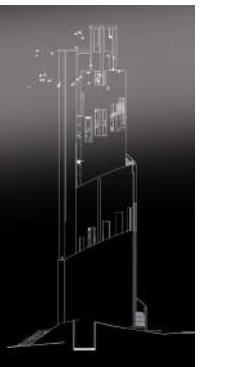
Water as Cleansing



Water as Cleansing
Water Running from Top Room



Rising Up from Low Places
Vertical Tunnel



Birds as A Community



Wide Openings at High Levels



Small Opening at Low Levels



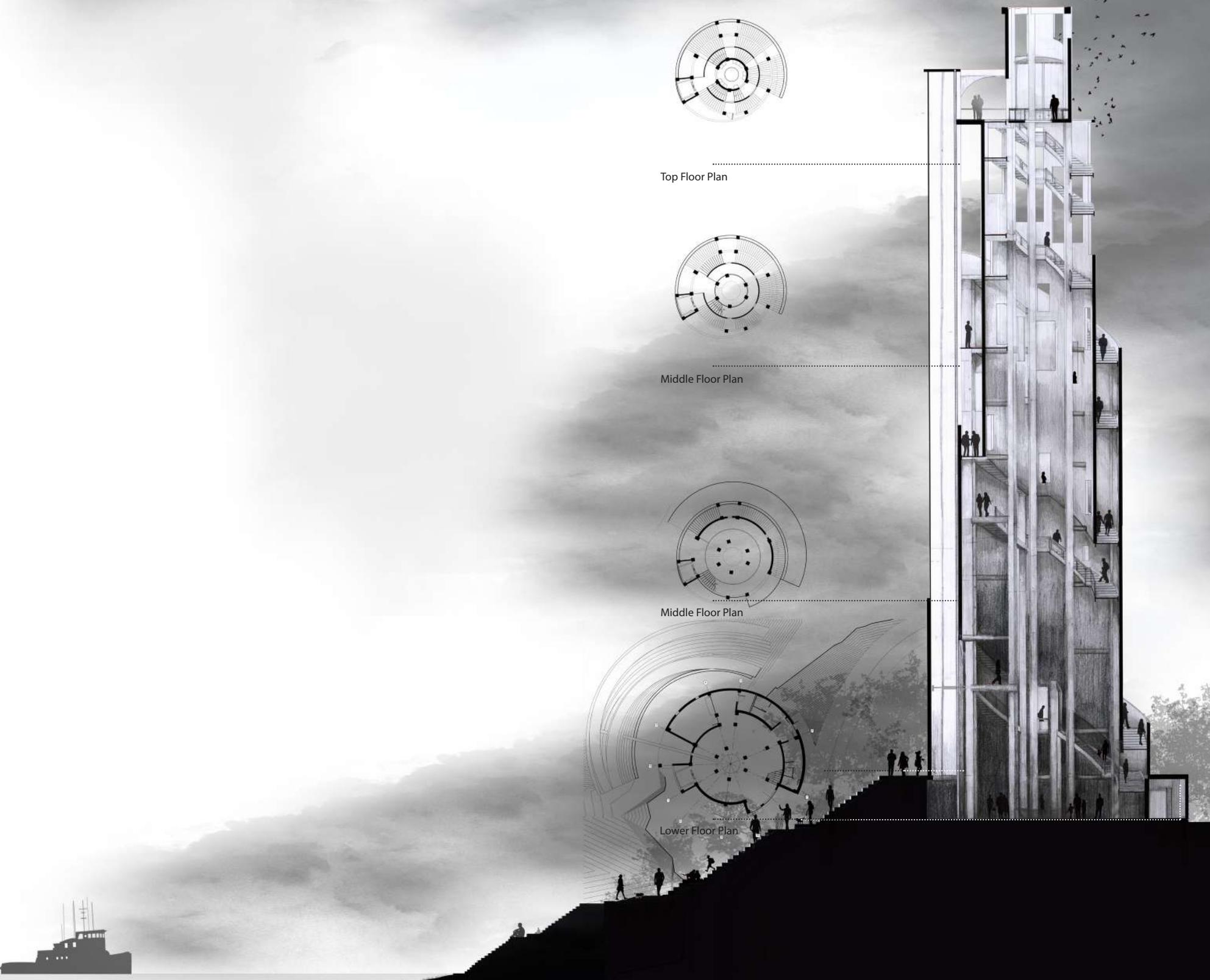
Dark versus Light



The Progressive Path
Circumambulation Concept



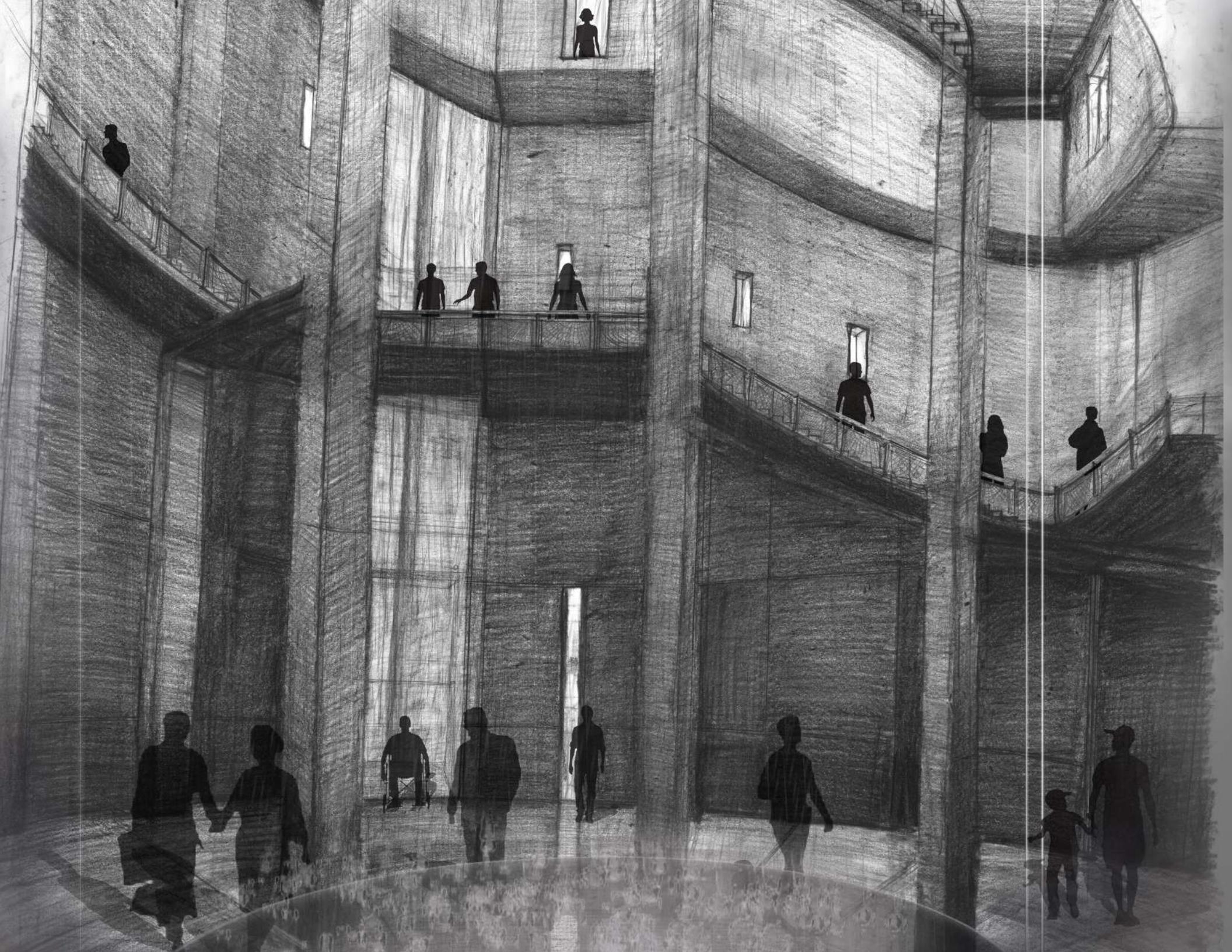
Horizontal Tunnel



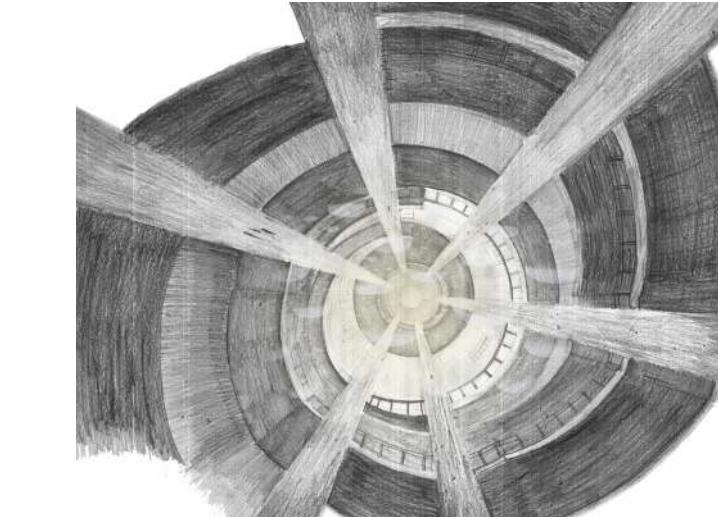
OBJECTIVE The Memorial to Dr. Martin Luther King, Jr. overlooking the Mississippi River, creates a place that shares common experiences of people through using metaphor. There are different metaphors that are applied in the design: dark versus light, rising up from low places, water as cleansing, the progressive path (circumambulation concept), and birds as a symbol of community. The entry path is intended to provide an experience of being in the ground and experiencing the feel of earth, dirt, and darkness. This is achieved by the path descending into the landscape. Inviting people from all around the site to the building is a horizontal journey. This journey becomes a vertical journey in the building. In the tower, the vertical journey begins in a darkened space and it ends in light, at the top of the tower. The lower levels have small openings, and as people rise within the tower, the openings become larger. The diameter of the tower at the lower level is larger than above. As the tower reaches to the top, the diameter of the tower narrows and the stairways become closer to each other. People become closer and closer to each other as they ascend, and become closer to the source of the light and water. After reaching the top room of the tower, the experience for descending the tower is different.



View to the Entrance of the Tower on a Rainy Day



View to Top of Tower



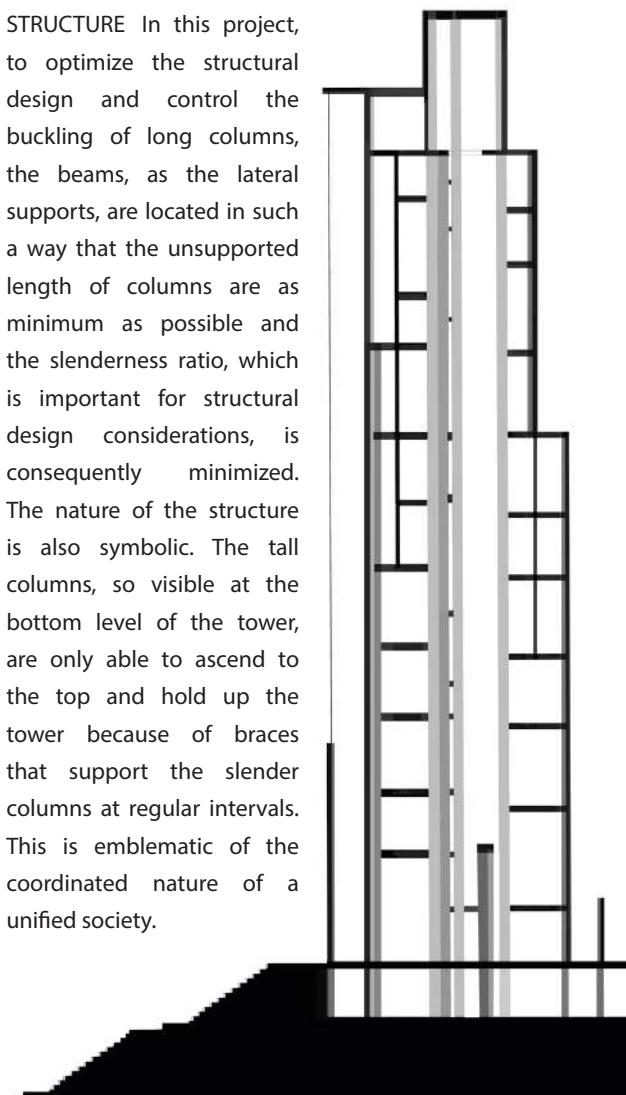
The round lobby features a large bronze bowl that gathers water falling from the top of the tower and channels it to an opening in the wall. The water then goes outside and descends through a stair plaza to the Mississippi River. The lobby provides service areas, such as rest rooms and a concession tea stand. There are a limited number of programs happening at this lower level to motivate people to climb the stairs rather than spending time below.

As people look up from the lobby they see the convergence of the stairs, providing another invitation to journey vertically. As people move up the stairs they will experience the mist (present under certain weather circumstances), and on rainy days, water that falls from the top part of the tower down to the bowl below. The mist creates a cool place at the bottom of the tower and obscures the view.



Moving down the tower is a releasing experience, which is achieved by an open-air stair with expansive views all around the site. The stairs continue to the ground level and connect to another larger stairway that reaches down to the Mississippi River.

STRUCTURE In this project, to optimize the structural design and control the buckling of long columns, the beams, as the lateral supports, are located in such a way that the unsupported length of columns are as minimum as possible and the slenderness ratio, which is important for structural design considerations, is consequently minimized. The nature of the structure is also symbolic. The tall columns, so visible at the bottom level of the tower, are only able to ascend to the top and hold up the tower because of braces that support the slender columns at regular intervals. This is emblematic of the coordinated nature of a unified society.



Structural Diagram



Prioritizing Requirements



We gathered with Whitehaven High School students, parents, teachers, coaches and administrators to discuss the possibilities for improvement of the school.

Renovation of Whitehaven High School

Advanced Design Studio 2 / M.Arch
Spring 2016
University of Memphis

SITE Whitehaven High School, Memphis, TN

PROGRAM The Whitehaven High School began as a 22'x44' academy when it was first built in 1911. This was the first school in the Whitehaven area for many years, and since its initial opening, it has largely expanded throughout time.

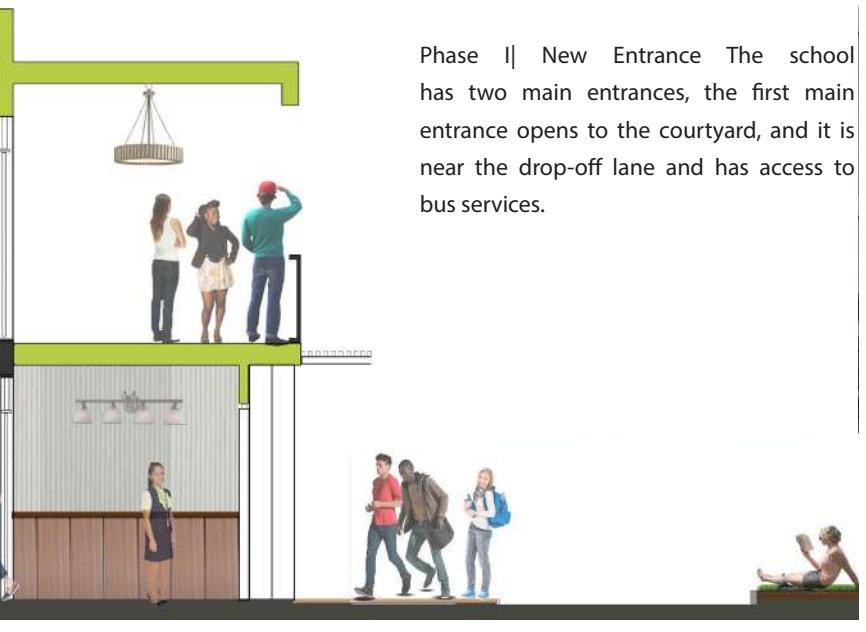
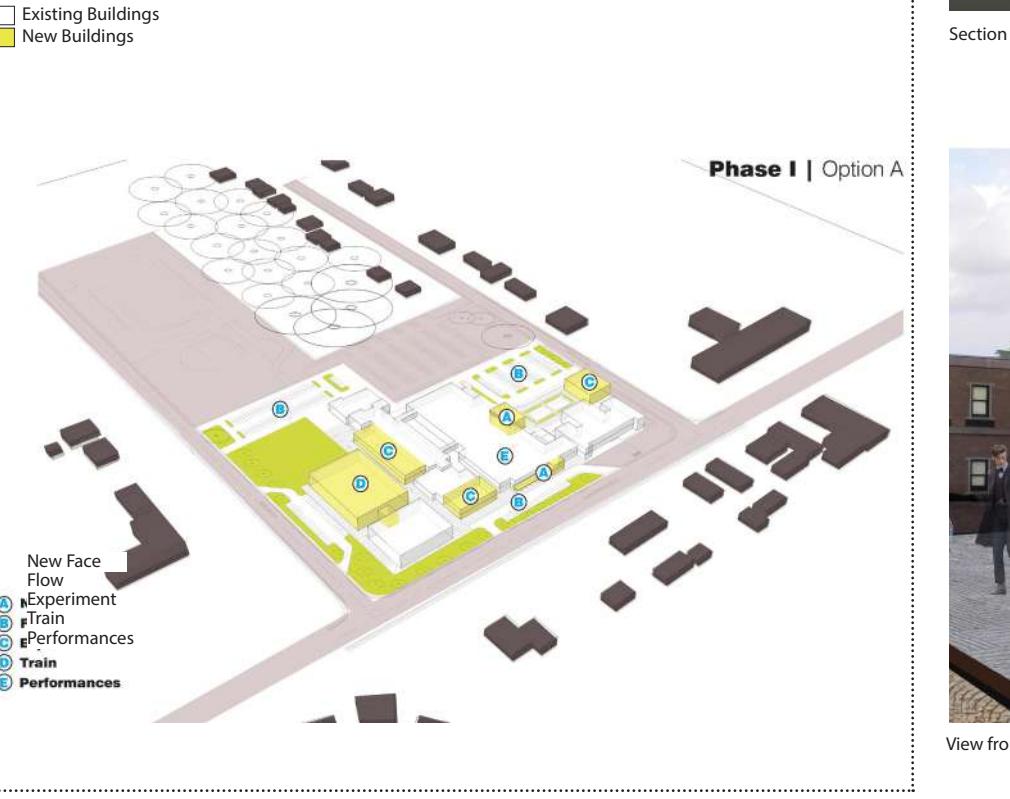
Me and my classmates were a group composed of three members. We had to facilitate the designing process and understanding of the strategies. These strategies are further divided into three categories: Site Improvements, Building Renovations and New Constructions.

OBJECTIVE The first strategy was to incorporate a new face while conserving the traditional facade. The new facade and entries are designed to highlight the main access points on campus. The second strategy is the improvement pertaining to the flow and movement of people and vehicles within the campus. This strategy not only reinforces effective and quick movement but also segregates pedestrian and vehicular movement to assure the safety of the students.

Apart from the renovation of existing buildings, three new buildings have been proposed: the first is the STEM building, the second is additional vocational training laboratories, and the third is a new gym that I was assigned to design. Along with the new proposed gym, the old gym would be upgraded to suit the current needs of the school.

We proposed two options for the additional buildings.

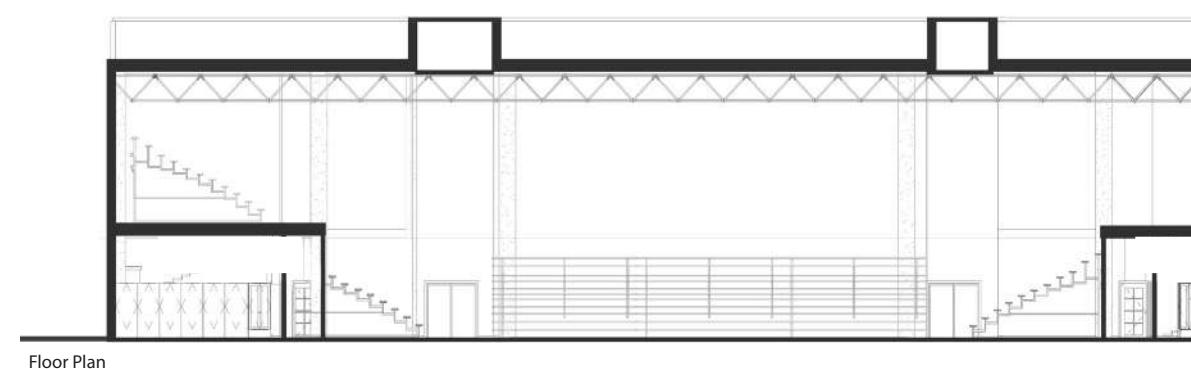
Phase I | Option A



Phase II New Entrance The school has two main entrances, the first main entrance opens to the courtyard, and it is near the drop-off lane and has access to bus services.



View from Courtyard to the Entrance

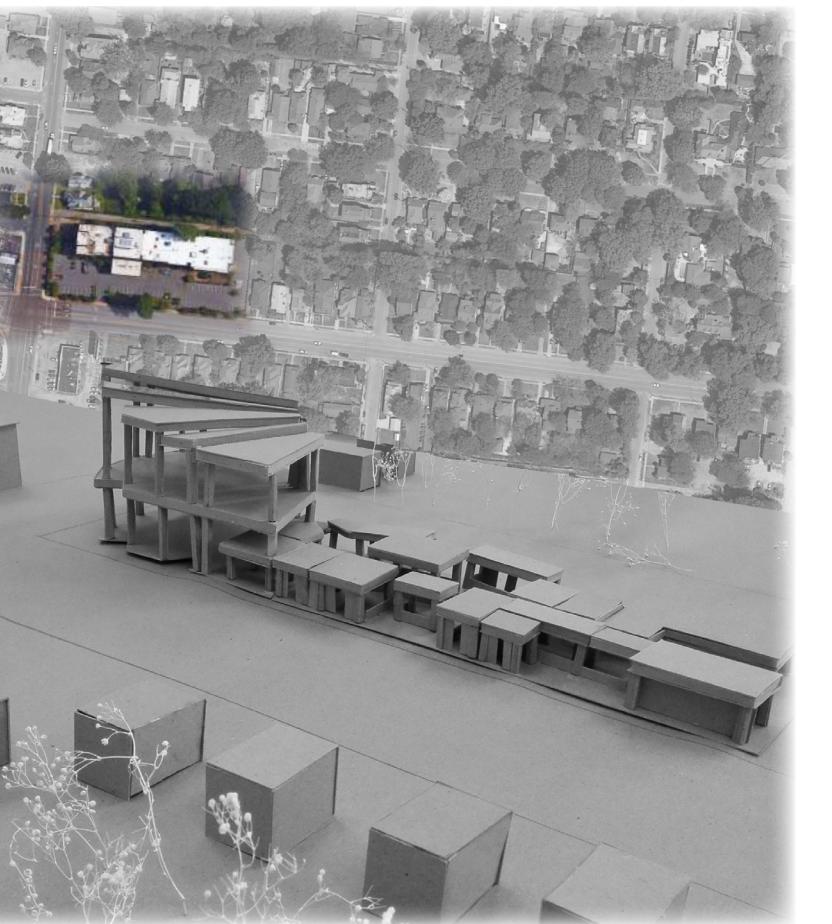
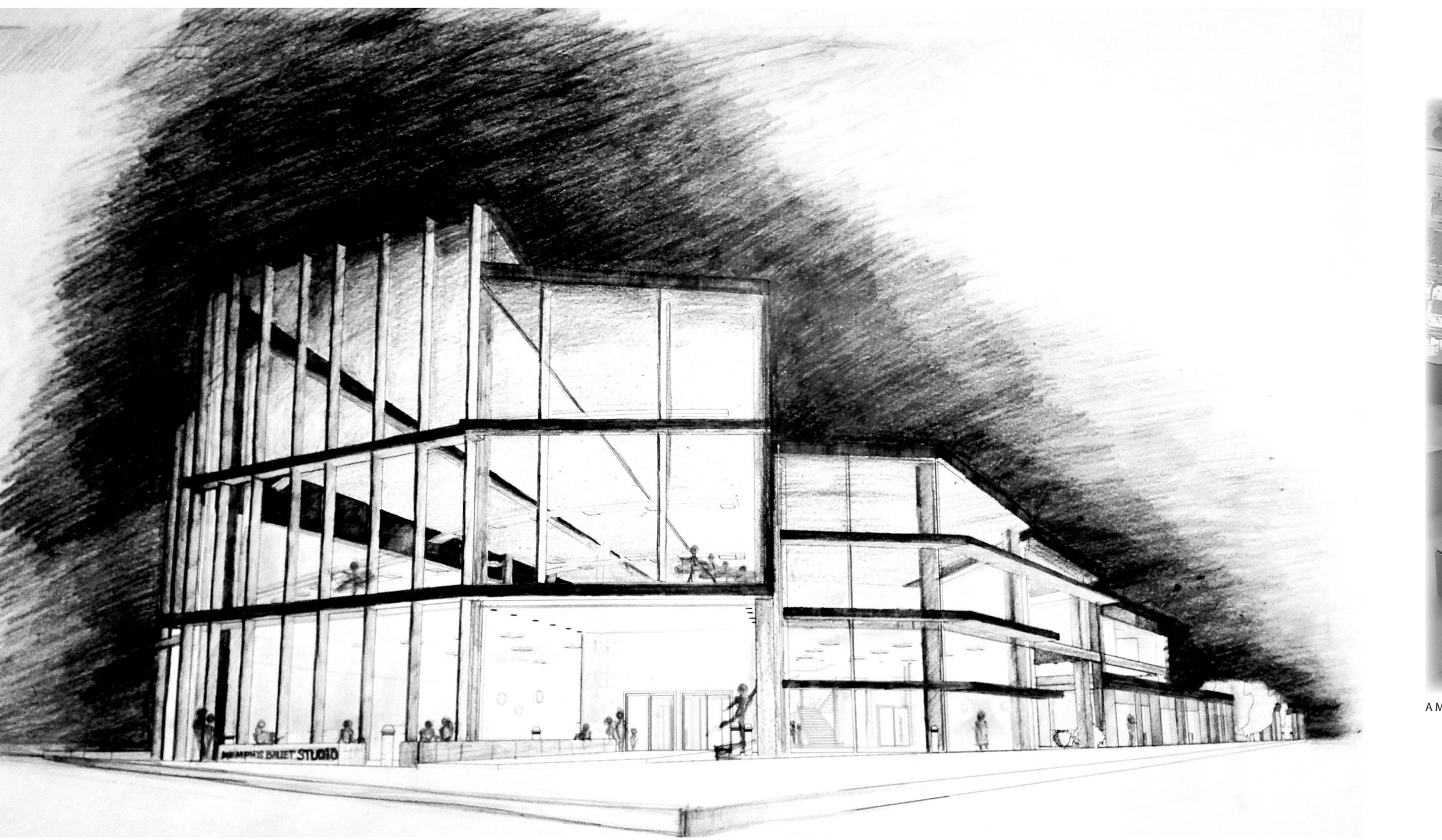


Floor Plan



I was assigned to design a Gymnasium to accommodate 1400 people, locker rooms, restrooms, offices, ticket booth, cafe, and main court.

Natural daylight and exterior view to the green area are some of the important factors for designing the gymnasium. I tried to create better accessibility between the existing gymnasium and the new one. The gymnasium has four entrances: two doors to connect the existing and the new gymnasium, and two other doors to make parking accessible from the new gymnasium and provide a wide view to the green area.



A Model Representing the Structure of the Building and the Daylight



Memphis Ballet Studio

Advanced Design Studio 1 / M.Arch

Fall 2015

University of Memphis

SITE Overton Square, intersection of Cooper Street and Madison Avenue in Midtown Memphis, TN

PROGRAM The Ballet Studio should accommodate 4 various studio rooms, Pilates room, cafe area, catering kitchen, locker room, lobby, box office, offices, storage, and costume room.

OBJECTIVE One of the main purposes is to attract people to the Ballet Studio, and also to create a place that can motivate dancers. The corner part of the building is one of the most important parts, because it can have a view to both main streets. The scheme of the project accelerates chance events by creating a place that has an identity in Overton Square, and it could invite more people to the Ballet Studio.

Moreover, different patterns of the site and the extensive concept of ballet is considered in form design.

The concept of the design is inspired by ballerinas' movements in their performances. The posture of ballerinas show an inclination forward, where there is an attempt for flight.

Based on this inspiration, I have tried to create studio rooms to motivate the ballerinas to dance.

Moreover, the design was not limited to what the program requested. Spaces such as a Rest Hall for dancers, and a Community Courtyard were not in the program, but dancers need them to relax and communicate with each other.



The offices have a different design due to the different programs, and also different experiences that people can have. One of the main considerations for designing offices is views to the central courtyards. These courtyards are designed to provide a place for people to take a break during their work time, and also to interact with each other.

The courtyards have a vegetation area, water pool, and the seating area that can provide an intimate place for people to relax and communicate with one another. The selection of the material for these courtyards is important to create an intimate place.



Section through Studio, Lobby, and Offices



Site Plan and Main Entrance of the Complex



Design Concept
Arrangement of the layers

Combine with Masses

Creating a Mass



Shemir Residential Villas

Final Design Studio / B.A

Fall 2013

University of Semnan

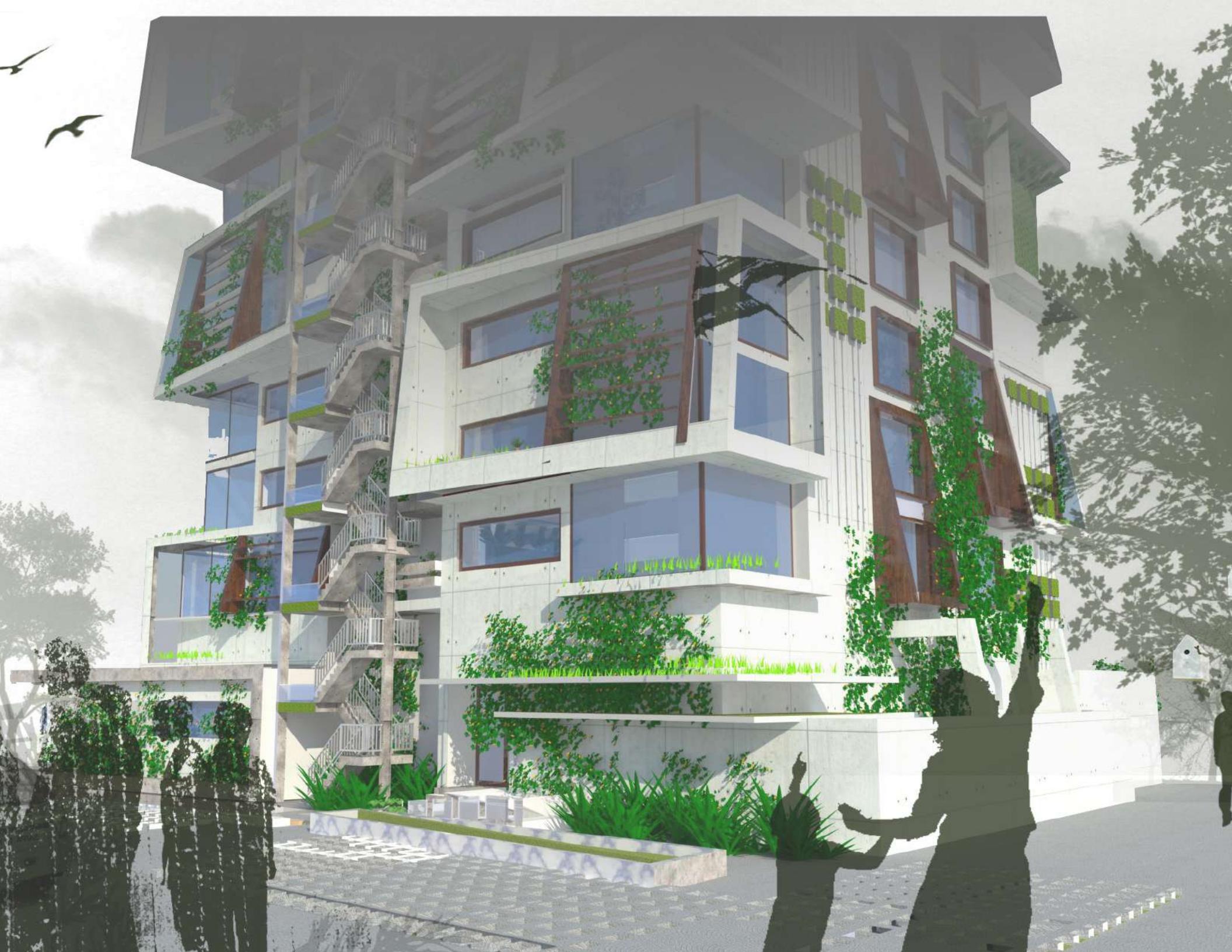
SITE Shahmirzad, Semnan, Iran

PROGRAM Eight complex villas should have 3 or 4 bedrooms and spaces such as kitchen, living room, and service area, as well as a parking garage for eight villas. The complex should accommodate public green space for users of the villas.

OBJECTIVE Design villas based on the topography of the site. The topography is considered a key factor in both the initial form and implementation.

The concept is shaped by the arrangement of the layers of the topography on top of one another.

Ecological designs are considered by using water conservation systems, PV panels, considering the sun orientation, and prevailing winds. Also by utilizing water conservation systems to minimize the water consumption in villas in an efficacious way. I decided to emphasize the minimum use of water for each villa and public area.

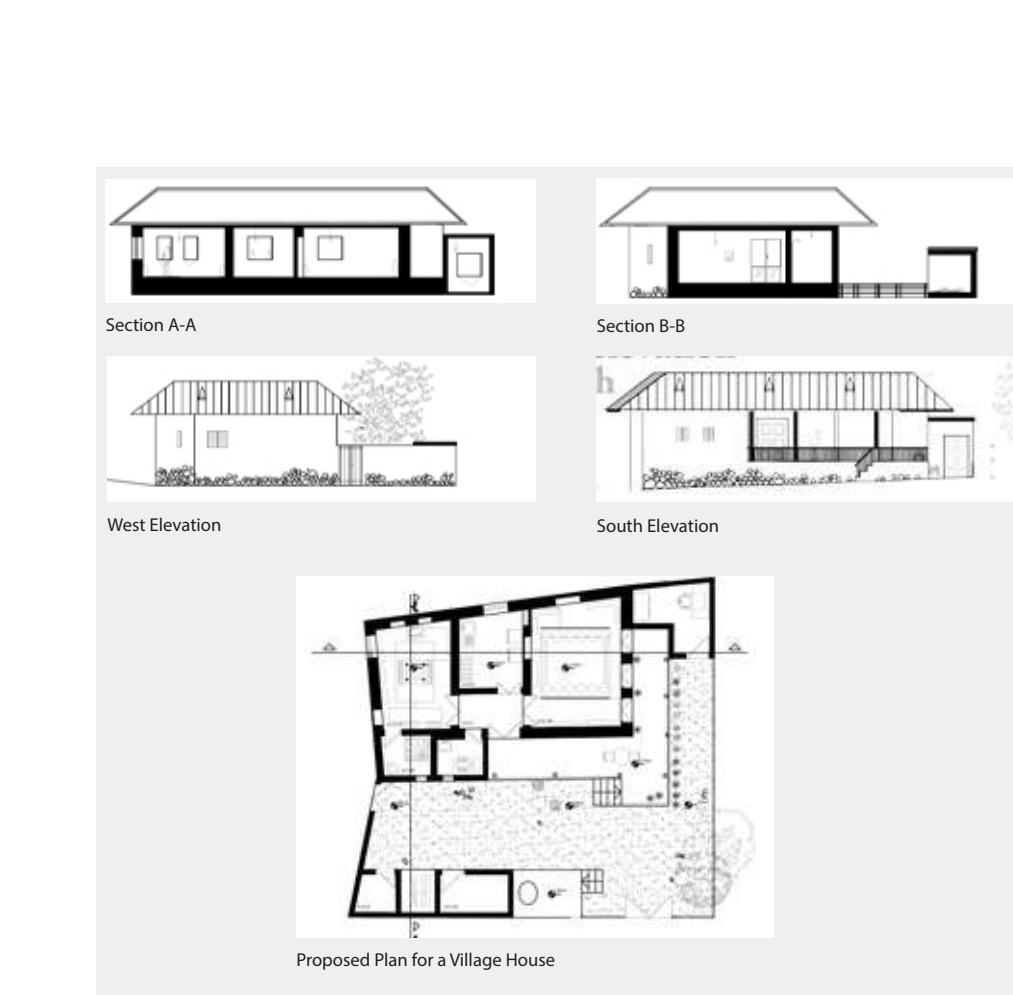


SITE Shahmirzad, Semnan, Iran

PROGRAM Designing a twelve story green apartment building with a ground level for a guard, gym, hall, and lobby. The green apartments should have a typical plan for the first floor to 10th-floor plan and the 11th floor should occupy 60% of the ground level plan. The last floor should occupy 50% of the ground level plan.

OBJECTIVE The view and light for each apartment are important. The project was designed to obtain a sustainable apartment in Shahmirzad. Due to the considerable precipitation in this region, the plan for obtaining a sustainable apartment will come about by implementing water storage tanks in the basement, and green roofs on the building.

This project is located in an apartment zone, and the project is in keeping with the surrounding neighborhood.



Moladeh Village

Rural Design / B.A
Spring 2012
University of Semnan

SITE Mollah Deh, Mazandaran, Iran

PROGRAM We were asked to analyze the village to obtain a deep understanding of its formation. We also analyzed different spaces in the village in order to understand the density of the buildings. Moreover, we investigated the quality of the buildings and pathways meticulously to detect the foundational problems.

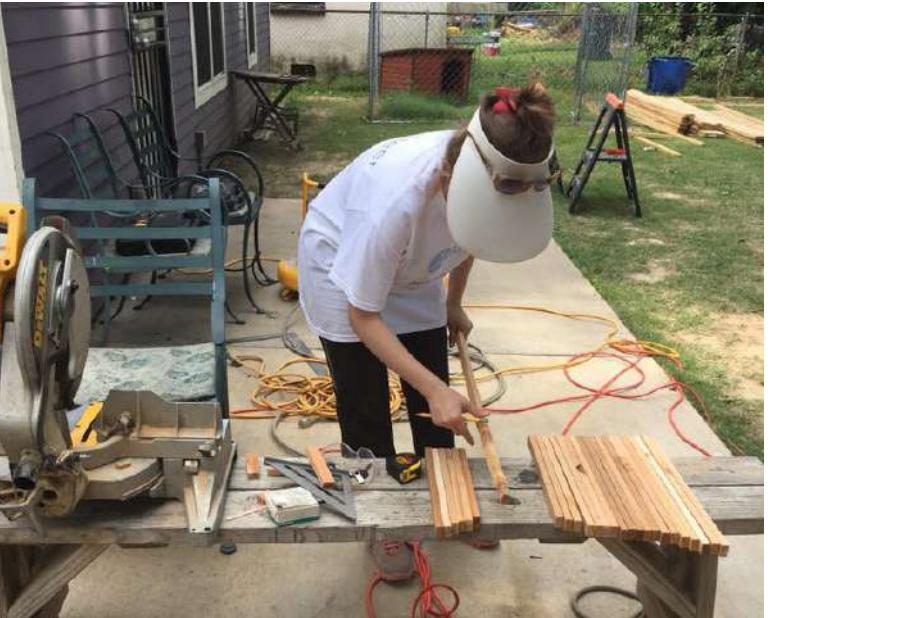
Then, we were to analyze some village houses and propose a plan for a perfect village house. The house was designed based on the fundamental requirements of the people.

OBJECTIVE

- To survey the current conditions of the village.
- To offer suggestions for improvement of the living conditions in the small society.
- To present suggestions for development of a village house based on the ecological considerations and cultural parameters.



This is the cart project that we learned cutting, sanding, welding, grinding and polishing the metal parts.



I was measuring and cutting wood pieces for the side panels of the stage.



Design + Build Studios

Voluntary courses in Memphis
Summer 2016-2017
University of Memphis

SITE Binghampton, Memphis, TN

PROGRAM AIAS members took a Design+Build course during the summer. The team of 14 students worked in partnership with carpenter Art Garden.

OBJECTIVE We worked at the Purple House in order to add an overhead plane, side panels, and additional steps. We designed them during the first week of summer, and then we built the proposed design. I also participated in designing a cart for carrying vegetables.



Design Ceiling and Lighting for the Living Room and the Entrance of the Kitchen (house1)



Design Ceiling and Lighting for the Kitchen and Living Room (house2)



Residential Projects

Interior Design Projects in Semnan
Winter 2014

Designing KNAUF ceiling and decoration

I designed ceiling and wall decoration for kitchen, living rooms, bedrooms, and master rooms. The ceiling designs was accompanied with designing the lighting and arrangement of the furniture in the house. Different designs for different clients was accomplished regarding their needs, their arrangement of the furniture, and their priority.



Design Ceiling and Lighting for the Private Hall (house3)



Design Ceiling and Lighting for the Entrance of the Kitchen (house3)



ART PIECE As part of my M.Arch thesis, I worked on a symbolic painting on canvas (9'*6') representing the idea of unification as described by Martin Luther King. Jr. In this painting, the goal is to encourage people to form a unified society, a United States of America.

The main idea of this painting has been inspired by "The Conference of the Birds", a long celebrated Sufi poem written in Persian by Attar of Nishapur, in which a group of birds, as a symbol of people in a community, start their journey toward a dreamland that is the land of the "Simorgh". This Simorgh is a mythical Persian bird equivalent to the western phoenix and serves as a symbol of unification. At the end of this story, thirty birds finally reach the dreamland, where they find that the legendary Simorgh is actually the reflection of their own faces in a lake, and they realize their unification has been the key to their success in their community all along.

DURATION 4 weeks