

Sustaining Rural Communities

Justin Douvier




Sustaining Rural Communities

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By

Justin D. Douvier

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 4/7/2010
Primary Thesis Advisor

 4/7/2010
Thesis Committee Chair

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Sustaining Rural Communities

For the survival of rural communities and their citizens, a strong sense of place, vital resources, focused leadership, and commitment are critical.

What are the underlying characteristics that sustain and help in a rural community's survival? Rural communities are vital because they bring about diversity and change from the demanding and often overburdening large city. Large numbers of the population make up small rural communities, and the extinction of these communities would be detrimental. Society must become more aware of the advantages and characteristics which make up rural communities, to help aid in their survival. The mixed-use building typology was investigated and researched to be found as a viable resource for sustaining a rural community. Learning about the communities for which we design is critical to the success of good design.

Abstract

A number of characteristics of the citizen influence the sustainability of a rural community. This thesis examines how citizens of rural communities directly influence the success and sustainability of the communities in which they live. The users of the project include community members, visitors, and tourists. Within the project, some major project elements become evident. These include a banquet hall, a small hotel, a restaurant, and 4 retail spaces. Calculating these major project spaces and the support spaces, the overall building square footage is 47,596 square feet. The site chosen for the thesis was located in the small west-central town of Glenwood, Minnesota. It is situated on the shore of Lake Minnewaska. The major project emphasis is to create a project which provides a small community with a mixed-use facility. A strong desire to investigate how rural communities sustain themselves also became apparent. Documentation will occur through a strict regimen to provide for proper design decisions. These decisions will also be impacted through the intensive research which is obtained through a mixed methods approach using a Concurrent Transformative Strategy.

Making others more aware of the importance of sustaining existing rural communities is critical. The meaning of the research the thesis project is to inform others about the current situation and importance of change.

key words: rural, community, mixed-use, sustainable

What are the underlying characteristics that sustain and help in a rural community's survival?

The Problem Statement:

Statement of Intent

The Project Typology:

A Mixed-Use Building

The Claim:

For the survival of rural communities and their citizens, a strong sense of place, vital resources, focused leadership, and commitment are critical.

Premises:

The citizens directly influence the success and sustainability of the community, while also being affected by any of the possible consequences.

Sustaining a rural community is a common goal among citizens of this type of community.

Survival of the community results from the adaptability of the citizens while ensuring the necessities of life, commitment, and happiness.

The Theoretical Premise/Unifying Idea:

Rural community survival is critical for the diversity of society, and it must show the character of adaptability while still being able to sustain itself.

The Project Justification:

Learning about the communities for which we design is critical to the success of good design. Rural communities are vital because they bring diversity and change from the demanding large city. Large numbers of people make up small rural communities, and the extinction of these communities would be detrimental to our culture. Society must become more aware of the advantages and characteristics of rural communities, to help aid in their survival.

The Proposal

The Narrative:

For the survival of rural communities and their citizens, a strong sense of place, vital resources, focused leadership, and commitment are critical. What are the underlying characteristics which sustain and help in a rural community's survival? Rural communities are vital because they bring about diversity and change from the demanding large city. Large numbers of the population make up small rural communities, and the extinction of these communities would be detrimental. Society must become more aware of the advantages and characteristics that make up rural communities, to help aid in their survival. The mixed-use building typology was investigated, researched, and found to be a viable resource for sustaining a rural community.

This thesis examines how citizens of rural communities directly influence the success and sustainability of the communities in which they live. How exactly do these citizens influence the community in which they live? The thesis will also study the strong characteristics of these individuals who continue to have drive and desire. This raises questions as to what characteristics contribute to success for the community members, which helps to aid the community. Can we all learn a little from the individuals who continue to make a difference? Many consequences affect them in their efforts, but for the most part they all have the common goal of sustaining their community. Along with a deep study of the individuals of the communities, the thesis will investigate how these communities sustain themselves. What exactly can be done to help a community sustain, and furthermore advance? The survival of the community results from the adaptability of the citizens while ensuring the necessities of life. For the success of the community, there must be commitment from the citizens and overall satisfaction and happiness.

These citizens have various qualities that make them admirable and intriguing. The odds are against these small towns, but many towns continue to flourish with recent improvements which have benefited the entire community. The basic needs must be met to make a complete community and keep the citizens together. All of these ideas aid in the survival of the rural community. Rural community survival is critical for the diversity of society, and it must show the character of adaptability while still being able to sustain itself. The needs must be met to make a complete community and keep the citizens together. These questions, notions, and ideas are the basis of the research into the character of the Theoretical Premise/Unifying Idea.

proposal The User/Client Description

1. All Community Members
2. Visitors/Tourists

Client Description

The community members of the town want to utilize this facility for various needs. They will be able to occupy and utilize all of its functions. There are approximately 2800 community members who could potentially use this facility at various times throughout the year. There is no real peak time for this user group, as they will utilize the facility throughout the entire year. However, the summer months may be busier because more gatherings typically take place.

The visitors and tourists will utilize this facility throughout the year. They will also be able to fully use any of the functions that are provided. The number of visitors/tourists is unknown and varies throughout the times of the year. The peak time for this user group will be during the summer months.

The site is large to provide for parking for the users. There will also be overflow parking provided in the large city park parking lot which is adjacent to the site.

The objective of this project is to study and investigate the town of Glenwood, Minnesota, to understand its needs. This town has a population of nearly 2800 people and is in need of a facility to serve multiple needs. The entire community is the focus for the design, since they will be the people utilizing the facility. The community members, visitors, and tourists form the user description. The users desire to have a building which will impact the community, serve as an icon, and strongly influence their economic stability.

The Major Project Elements

Proposed spaces / uses for the mixed-use facility include the following:

Banquet Hall

-This space will be multi-use to serve large gatherings and meetings, weddings, conferences, etc. Visitors, tourists, and communities members will be able to utilize this space.

Small Hotel with 17 rooms

-This component of the facility will incorporate hotel rooms, which will be rented out to visitors and tourists.

Restaurant

-This space will serve as a restaurant for the community and will provide services to the entire facility.

4 Retail Spaces

-These spaces will be rentable retail spaces for businesses which choose to utilize the prime building location.

Site Information

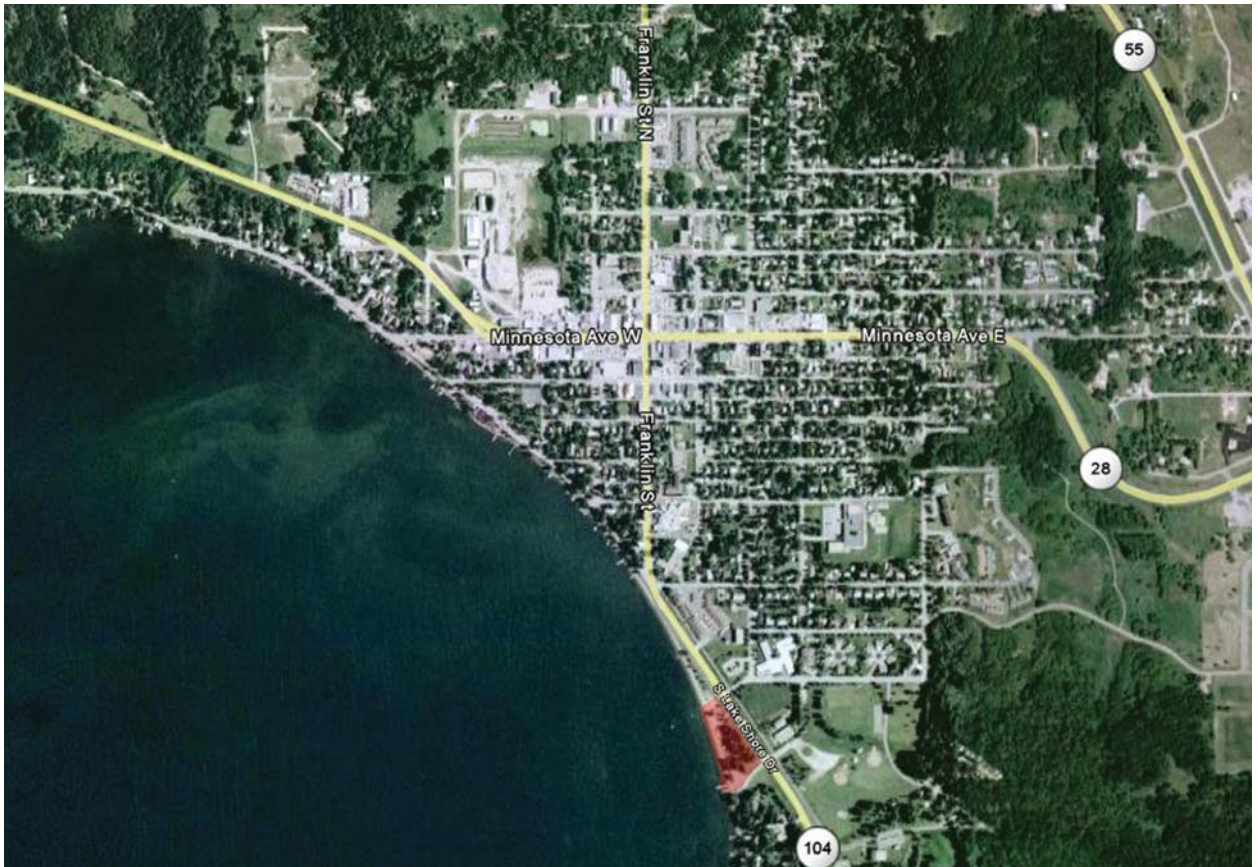
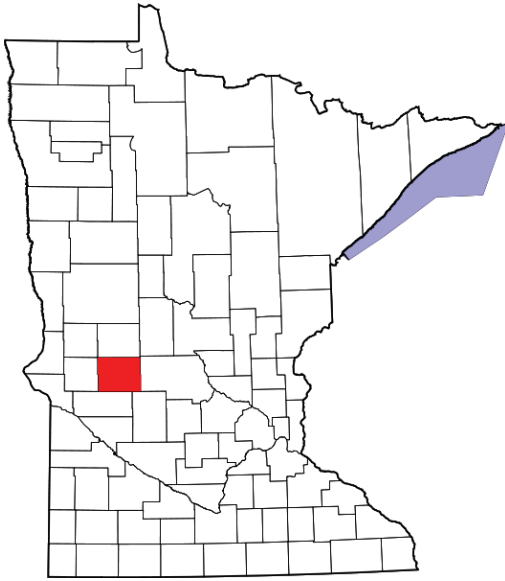
Macro Location

This thesis investigates the small community of Glenwood, which is located in west-central Minnesota. Glenwood is situated in the middle of Pope County, and it is the largest city in the entire county. Glenwood runs along Lake Minnewaska, which spans over 9 miles in length. Lake Minnewaska covers 7,110 acres and is the largest lake in the county. The local area is a popular destination for many fishermen, recreational boaters, and tourists in west-central Minnesota. The location of Glenwood is often isolated due to its relative size and the lack of services and commodities that it provides. The closest city with a population over 10,000 is Alexandria, Minnesota, which is 15 miles north of the community. This thesis fully studies the city, the lake, and more importantly, the specific site.



Micro Location

This thesis will focus on a site located along Lake Minnewaska, within the city limits of Glenwood. This site is important for the community because of its dominant and very sought-after location along Lake Minnewaska. The site offers wonderful views of the lake and provides an appropriate and significant site for the proposed building. There are other vacant sites within the city that could support this building type, but this use best fits the chosen site. The red shaded area indicates the site which will be utilized for the thesis project. The site is located on the south side of the city, with the largest edge directly along the shore of Lake Minnewaska.



Site Information

Streets

The adjacent streets serve as boundaries to the site. Minnesota State Highway 104 runs along the east edge of the site, and a city road, South Lakeshore Drive, runs along the south side of the site.

Transportation Links

Transportation opportunities for this site include: a local public bus service, vehicular options, 2 bicycle/walking paths, and boating options.

Site Area

The site occupies 2.7 acres, which is nearly 117,000 sf.

Major Landmarks

The only notable landmark within close proximity to the site is the County Museum, located directly across the highway.

Views

Views from the site are exceptional and inspiring for a thesis design. The panoramic views of Lake Minnewaska are evident from any part of the site. Views to the north provide an interesting perspective of the downtown. A view to the east allows for views of a large city park, covered with an abundance of trees and green space.

Project Emphasis

With the continual struggle, and often loss, of small rural communities, critical decisions must be made to ensure that a rural community survives. Small towns allow for diversity of society. These small communities must be able to adapt, while still being able to sustain themselves.

The strong desire of the project is to provide a small community with a mixed-use facility. Sustaining a rural community is a common goal among citizens of a community. This will be the major emphasis and the major area of interest for the thesis, as it pertains to sustainability through a new facility. The mixed-use typology is another crucial emphasis and a major area of interest which will be intensively investigated. This typology is critical for the survival of the chosen community, and one must gain a complete understanding of this building type. This building typology will be thoroughly studied through numerous case studies of other mixed-use facilities. The case studies will vary in breadth to ensure an open view on what elements actually tie in and inherently relate to this typology. The building will be designed to be a focus and an identifiable piece of architecture. This project will produce newness for the local citizens, visitors, and tourists. The main goals of this project include: providing a building which relates to the site and context, providing adequate and appropriate uses, and creating a focal point which will help to bring life to the community and help encourage the city's longevity. The other areas of interest will provide information to make the thesis project complete.

Examinations of similar typologies will aid in creating a building which will serve the community and aid in the survival of a small town. Due to the lack of critical and sustaining entities within the small community, a mixed-use facility will provide the city with new, functional, and prosperous activities and endeavors.

A Plan for Proceeding

Definition of a Research Direction

Data collected will help aid in making adequate decisions and will be directly related to the chosen project site and the theoretical premise. Data will be collected in the following areas: the theoretical premise/ unifying idea, the project typology, the historical context, site analysis, and programmatic requirements. These are the direct lines of inquiry which will drive and strongly influence the design.

Design Methodology

A mixed methods approach will be utilized while performing research for the design. The mixed method approach is successful in obtaining quantitative and qualitative data. Along with the mixed method approach, the strategy which will be followed is a Concurrent Transformative Strategy. The strategy will be guided by the four premises that the Theoretical Premise/Unifying Idea was developed from. These were discussed in the Narrative. To implement this strategy, both quantitative and qualitative data will be gathered concurrently throughout the process.

The priority of the investigation is learning about how a community can sustain itself, with the emphasis on the creation of a mixed-use facility. This concept derived through the project emphasis.

Gathering Data

Quantitative data includes both statistical data and scientific data. The statistical data may be gathered and analyzed locally and will most likely be obtained through an archival search. Scientific data includes measurements obtained through instrumentation and/or an experiment. Information will most likely be obtained through an archival search, looking at previous information that has been obtained. For quantitative data gathering, case studies and published journal articles will be utilized frequently to gather more information pertinent to the thesis project.

The qualitative data will be obtained through frequent site visits and community interaction. Additional data will be obtained through an archival search. Direct observation will be conducted through frequent site visits. These site visits will be conducted to gain knowledge of important information such as views, climate, and on-site characteristics and resources.

The extensive research process will help in obtaining critical information to lead and direct proper design decisions. The typology will be studied through various means of media and important and frequent site visits will occur to further the process and allow an understanding of the environment and function of the design. Gathered information and knowledge will be interpreted and analyzed for importance and influence on the design. The sources that will be fully utilized will be professional in nature and reliable.

Design Documentation

For the design process documentation, information will be compiled and organized into a large thesis binder. This binder will be constantly added to and will have to be strongly attended to for its longevity. The binder will tell the story of the thesis process and will always be helpful in making adequate design decisions. Along with written and typed information, the binder will also include graphical images and other items that will be inspirational and important for the design. Hand sketches, photographs, scanned images, and many other forms of digital means will be organized into the binder for ease of access. The thesis binder will be clearly organized so that the gathered and processed information can be readily available and obtained at any time. Maintaining the clarity of the binder will have a direct influence on the success of the entire thesis project.

The information that needs to be shared and is important to the final thesis project will find its way into a bound book. The book will preserve the gathered information for other scholars to utilize. At the conclusion of the thesis process, the critical and pertinent information from the book will find its way into the oral presentation and also onto the presentation boards for the final thesis presentation.

Data and all other information will be frequently obtained throughout the entire semester. A two week review of the design process and proper documentation will occur.

Previous Studio Experience

2nd Year Fall Semester (2006)

Architecture 271, Darryl Booker

-Tea House

-Boat House

-A Dwelling for an Ecologist

2nd Year Spring Semester (2007)

Architecture 272, Aly Ahmed Bakr

-Waldorf School

-Prairie Dance Academy

3rd Year Fall Semester (2007)

Architecture 371, Steve Martens

-Inuit School

-Pediatric Center

3rd Year Spring Semester (2008)

Architecture 372, David Crutchfield

-Steel Structure Investigation

-Mixed Greens Mixed-Use Facility

4th Year Fall Semester (2008)

Architecture 471, Don Faulkner

-San Francisco High Rise

-KKE Competition "Life in a Cigar Box"

4th Year Spring Semester (2009)

Architecture 472, Darryl Booker

-Santo Domingo Masterplan

-Marvin Windows Competition "African School"

-Santo Domingo Community Center

5th Year Fall Semester (2009)

Architecture 771, Mark Barnhouse

-Water Research Facility

The Program

theoretical premise research Theoretical Premise Research

How exactly do small, rural communities survive? Is there a method or common approach for them to sustain themselves and prosper? To gather a full understanding of the thesis project, one must fully understand the theoretical premise and unifying idea. Through the research process, pertinent information was collected and eventually utilized to its fullest.

For many small towns, a common and recent struggle has been survival and the ability to remain an effective community. It became evident that there are common characteristics associated with sustaining these small communities and what actions the citizens must take. Jossi (1997) took a nice approach towards explaining these strategies. One strategy emerged as a dominant and critical requirement for these struggling communities. According to Jossi (1997), for small town survival strategies, "The mantra is 'adapt or die'" (p. 1). Although seemingly a harsh statement, through personal experience and gained knowledge, it seems to be a true and important notion.

In a research article, the small community of Cambridge, Nebraska, was investigated. The city of Cambridge has strong business and civic leadership which helps to create an environment that encourages business expansion (Jossi, 1997). This great leadership may help to bring new businesses and firms into the community in the future. Similar to this small town, Glenwood, Minnesota must continue to flourish and encourage development.

Many small communities are in need of improvements and must encourage growth. Through a mind set and similar attitude of the city of Cambridge, many rural communities could once again thrive.

According to the text, "While many small towns look remarkably healthy, many others are wondering how long into the 21st century they will survive. Those are the towns with an unappealing location, poor access to interstates, crumbling infrastructure, or unwilling to foster change" (Jossi, 1997, p. 2). In general, this is a sad notion but also very true. Growing up in a small town, witnessing the town starting to crumble and businesses constantly leaving, is discouraging.

The small towns which are losing the battle are often also losing their youth. This situation arises from a lack of jobs and also a common desire to move to a larger city. When young families leave, these small rural communities are left with an aging population. Often, this elderly population is unable and sometimes unwilling to foster change (Jossi, 1997). Drawing from personal experience, the idea of people unwilling to change has become very evident. Often in the past, the city of Glenwood has struggled with creating change and allowing new opportunities to come into the city. Many citizens want and desire things to remain the same and do not like to encourage unknowns or foster projects that they feel may increase their taxes. There is a strong belief in the idea that with the city being part of this new mixed-use facility, the negative views of the community may be relieved or changed, and growth may occur. With previous disappointments, loss of development, and loss of growth, I strongly feel that now is the time to bring about change to the community of Glenwood.

With the knowledge of this and also the known factors of deterioration common to rural communities, I have always dreamt of creating a new and exciting facility for the city of Glenwood. With ideal encouragement and support from the city, I strongly feel that an appropriate mixed-use facility would add great depth to the city. Looking into the future with the goal of sustaining the community and also keeping the youth around, I feel that the architecture must be encouraging, modern, and exciting for the users. This architecture must be something that the town is very proud of and that encourages participation by the citizens. If youth from the community are encouraged and agree with the direction that the city is heading, they are more likely to remain or come back to live in the town.

To create a sustainable and thriving community, it is often helpful to have public attractions. According to a research article, "Towns near natural attractions are most likely to attract newcomers. The new residents are often older couples who sell more expensive houses in metropolitan areas; others are young parents who 'want to get their kids out of urban schools'" (Jossi, 2007, p. 2). Often, these younger couples choose to move to a small community that is within commuting distance of a larger city, but there must be some attraction that draws them to the specific rural community. Natural attractions are a huge driving force in the outlook of a city, always a reminder of possibilities and opportunities.

The city of Glenwood falls right into this category. Located on the shores of Lake Minnewaska, the city is a forgotten gem. When people first visit the community, they are often overtaken by the beautiful landscape and city located within a deep valley along this large Minnesota lake.

The city is also located within 15 miles and 55 miles respectively, to two large, productive, and growing cities. Along with city location and attractions, the city should also build on its strengths (Jossi, 2007). The city of Glenwood should utilize its natural beauty and continue to encourage its tourism amenities. Tourism has long been a strength of the community. The idea for the thesis is derived from this notion and will flourish off of the projected growth in tourism. The building is meant to be an icon that will bring new people and tourism to the community, while economically supporting the city at large.

The crucial factor in the success and sustainability of these rural communities is the ability to think ahead. Jossi (2007) said, "You need to have some good team players who can represent the community and who are willing to jump through some hoops" (Jossi, 2007, p. 5). The city officials and other crucial members must be looking toward the future and have the common goals of growth, opportunities, and success. Although it is often easy to fall into one way of thinking and allow oneself to be easily discouraged, the city must be willing to sacrifice for the encouragement and growth of the town. The leaders who make the decisions for the community must be fair and dedicated toward the future. Many of the town's residents must be convinced that change is not a bad thing and fully understand that it is imminent. I feel that with the shape the community of Glenwood is in, many skeptics are now starting to believe that growth is desperately needed.

In attempts to save the rural community, many communities have tried various methods to lure new residents. Many small rural communities have tried to utilize publicity stunts to encourage growth and to allow for survival (Jossi, 2007). The approach often fails and can create negative effects; however, with a thoughtful and delicate approach to the concept, some success may arise. As an example, the large public event that occurs along the shores of Lake Minnewaska came to mind. The city of Glenwood has a long-running and well respected yearly festival called Waterama. This festival draws thousands of tourists to the community, to utilize the lake and the activities that take place throughout the town. The mixed-use building is partially intended to promote and strengthen this festival, allowing for families and tourists to take advantage of the facility during the festival. This festival is commonly and successfully advertised publicly throughout the media, and I feel that the new and exciting building would strengthen these advertisements. The new facility could be effectively publicized in an effort to draw and attract even more tourists to the community. With the building being located directly on the lakeshore, the facility would definitely be a centerpiece to the festival and the thousands of people who participate each day in the festival.

At the conclusion of the article written by Jossi (1997), encouragement and insight was provided. "In the long run, the towns that make it are those that manage to encourage entrepreneurship and to retain local businesses. They start with good planning that shows them how to pay for infrastructure improvements and special projects like downtown revitalization. Most important, these towns are blessed with strong leaders: bankers who are willing to take risks, government officials who understand how to write grant applications, and businesses that are eager both to expand and to help attract other companies to the area" (Jossi, 2007, p. 6). One strongly feels that the city of Glenwood could change and once again be a very busy and flourishing community. The city already has many of these essential aspects mentioned above, it simply needs to put it all together and unify the residents of the community, creating a common direction. Often citizens of these small towns eventually realize that they determine their own fate, and many start looking into how to benefit the community as a whole. In a situation common to the city of Glenwood, local businesses will become excited and encouraged by the thought of new development in the town, since an increase in population and tourism positively affects existing business.

For overall community success, it is common to look to these ideas for encouragement and a direction. Through the creation of opportunities and bringing an entire community to a common direction for the community's future and success, the chance of rural community survival becomes more prevalent. Though discouragements often arise, the aid of natural attractions and positive and influential leaders can lead to overall success.

Along with strategies to sustain a rural community, it is critical to look into the attitude and reasoning behind why the residents of these small communities act in the ways that they do. From information gathered through research, one realizes that the well-being of the residents directly impacts their feelings towards the community and often determines whether or not they will stay. According to Auh & Cook (2009), "Individual well-being is affected by satisfaction with specific life domains such as housing, family relationships, and community features. Dissatisfaction with housing or community is related to increased levels of stress and may motivate subsequent decisions to relocate among households" (Auh & Cook, 2009, p. 377). Where people live and how they feel about where they live is important to individual and family mentality.

Auh & Cook (2009) talk about how at the community level, planners and policy makers often have the goal of determining what makes the community attractive and what exactly the current residents prefer and desire. These people are also very interested in determining what draws and brings newcomers to the community (Auh & Cook, 2009). Often, city planners show interest into understanding how to bring new people into the community, while still respecting what the locals work for everyday and what they desire from their town. Along with understanding the citizens' desires, a portion of the article talks about an investigation that was done to determine the quality of community life, which is a huge predictor in the success of bringing newness and more attractive buildings to a city. One must fully understand the implications that go along with these concepts and predictors.

“Neighborhood features impact individuals’ psychological response (attachment) to their community and therefore impacts housing satisfaction: both of which (community attachment and housing satisfaction), affect community satisfaction” (Auh & Cook, 2009, p. 378). The relationship among these concepts helps one fully understand how being attached to the community directly affects and impacts the housing satisfaction. Creating new and exciting architecture may in fact bring about more pride and upkeep of the existing homes. Residents appreciate the newness of the community, increasing encouragement and pride of their properties.

Through these ideas, rural community revitalization and economic development strategies often discuss the idea of tackling neglected and abandoned housing problems. The idea of cleaning up these areas of the community would help to make the entire city a more sought after commodity. Having a well-kept city also encourages the residents to take pride in the community and often gives property owners confidence. There is a strong that a clean and well-kept community will encourage others to move to the city, taking part in the action and adding to the overall benefit, beauty, and unification of the community.

Creating pride within the community also encourages residents to remain. The length of residence is related to community satisfaction and community attachment. If residents live in the community for more than ten years, they are likely to be emotionally attached to the community. Having residents become emotionally attached to the community helps ensure overall success. Respect must be paid to the long-term residents, for they have shaped and developed the community.

Due to this, long-term citizens are often more satisfied with the community than members who have only lived in the community for a few years (Auh & Cook, 2009). The notion of social ties within a community seem to be even more of a predictor of community satisfaction and attachment. Auh & Cook (2009) state, "As people feel safe within a community and acknowledge their neighbors as friendly, trustworthy, and supportive, they express greater community satisfaction" (Auh & Cook, 2009, p. 379). All of these factors are critical to the success and survival of the community. Creating good relationships in which residents get along encourages new members to want to become part of the network. The community of Glenwood does in fact have many of these close relationships and morale is often high within the town.

Community economic conditions and local government services also play a role in the satisfaction that residents have with the community. Employment satisfaction, job security, and job opportunities are also determinants of community satisfaction. With so many factors playing into community and individual satisfaction, one must be sensitive to the implications. Designs must relate to discovered key and critical concepts, respecting the information gained through the research. The designed thesis project intends to bring new jobs and job security to the community. It will be an investment for the city, which will encourage growth and pride in the existing as well as new structures. I feel that the mixed-use facility, while providing many opportunities, will encourage new businesses to enter the city and also promote growth in existing businesses. The facility will bring more people to the city, which in turn adds to the success of the downtown retail and commercial business district.

Community attachment, community satisfaction, and housing satisfaction have been proven to be key concepts in helping to explain family environment and community well-being (Auh & Cook, 2009). Results from the studies that were discussed in this article indicate a “spillover” effect from one domain to another in relation to perceived satisfaction. “The spillover of an individual’s subjective satisfaction with his or her dwelling characteristics and assessment of the resources in the public community context accounted for effects on housing satisfaction, which in turn affected community satisfaction” (Auh & Cook, 2009, p. 387).

Overall, there are many relationships and ties that determine community satisfaction. One key idea is that the longer residents live within a community, the more social ties they create. This in turn makes the residents feel more attached to their community and more likely to remain there. Also, in rural communities such as Glenwood, it has been found that housing conditions strongly affect community attachment, and these conditions are also strongly impacted by local government’s public services and social capital. Trier & Maiboroda (2009), stated, “It seems likely that small town infrastructure can be restored and the well-being of families strengthened in rural America through the efforts of community leaders to create social capital, provide quality services, promote housing satisfaction, and engender community attachment” (p. 388).

To tie the research together and create a holistic approach to understanding the theoretical premise and unifying idea, it was pertinent to study the ideas formulated from sustainable design and developments. "Sustainable development initiatives have been particularly robust at the community level. Sustainable development can be regarded as a process of reconciliation of three imperatives: (i) the ecological imperative to live within global biophysical carrying capacity and maintain biodiversity; (ii) the social imperative to ensure the development of democratic systems of governance to effectively propagate and sustain the values that people wish to live by; and (iii) the economic imperative to ensure that basic needs are met worldwide" (Dale & Newman, 2009, p. 670).

One idea that arose from the article was the concept of liveability elements. These elements are crucial for good design and allow for the interaction of people and the building. The liveability elements mentioned include street furniture, green space, and the availability of cafes and other services (Dale & Newman, 2009). I agree with this concept and plan to utilize these elements in the thesis project. Allowing occupants and the public to fully utilize the building is crucial. Also, allowing for the creation of little spaces throughout the facility to gather, hold discussions, and take breaks are essential. Pedestrian-friendly and walkable spaces will be important in the thesis project, creating an enjoyable experience.

With the concept of liveability elements, comes the idea of revitalizing a downtown. Often, this includes providing sustainable, liveable spaces for the residents of the community. For the revitalization to be a success, these elements of the redevelopment must be prominent (Dale & Newman, 2009).

Similarly, I plan to utilize these ideas in the redevelopment of a piece of land and the design of a mixed-use facility. It is my goal to create a sustainable and extremely liveable place, fully designing spaces which people actually want to utilize. Creating a place that is fun to visit will be crucial to the success of this building type and in its ability to bring additional tourism to the community.

“Caution is needed when we assume that sustainable development projects will be inherently respectful of equity issues and naturally lead to meeting social imperatives that integrate both equity and livability concerns through affordability” (Dale & Newman, 2009, p. 672).

Interestingly, the idea of “greening” up a neighborhood is often deemed very positive; it may, however, have a negative effect. With a new green and sustainable development, desirability for these spaces often increases, driving up their prices and making them less affordable. For the design of the mixed-use facility, I will need to keep this idea in mind and be aware of all consequences, both positive and negative, that may arise from such an act as “greening” the facility. The building must accommodate various income levels and respect the groups of people that will actually utilize the facility.

“There is a growing belief that mixed-use-neighborhoods and human-scale buildings create street life, lower-crime rates, and encourage civility” (Dale & Newman, 2009, p. 679).

“Sustainable development, if it is actually to be sustainable, should not be for some, but for all” (Dale & Newman, 2009, p. 679).

In general, creating a sustainable project is desired. Through consultations with the community to gather their desires, the success of a green building can prevail. Creation of walkable and enjoyable spaces, liveable spaces, and spaces of human-scale must be prominent, encouraging full utilization of all designed spaces. One must look into the future, providing for an appropriate and sustainable design, being sensitive to the natural environment.

research summary Research Summary

Through intensive research, a further understanding of how rural communities sustain themselves has been gained. The findings from the various research sources have given me great insight into ideas and concepts which can be taken into the thesis project design. More than just learning from the articles, the research has opened my eyes to understanding more fully the importance of the rural community and why exactly residents are motivated to sustain and remain within these communities.

Early in the process of the thesis project, I was intrigued when asked to think about why residents remain within the rural communities in which they grew up and also why many leave. This seemed like an enjoyable task and something that would prepare me for the start of my research. I thought it would be a simple task, but the process made me think deeply about why residents actually remain and leave. I became fully engaged in learning more about the true reason behind the actions of the residents.

With the threat of many small rural communities dying, I wanted to learn how other similar towns are flourishing and what critical steps are taken to sustain these communities. Many small towns that are losing the battle are often also losing their youth. This may be connected to a lack of jobs in the area and also a common desire to move to a larger city. When young families leave, these small rural communities are left with an aging population. Often this elderly population is unable and sometimes unwilling to foster change. A greater understanding was developed into how all communities must realize that change is imminent. I became very enthused to create a facility that would bring positive change and opportunity to the city of Glenwood.

In relation to community satisfaction, many factors exist. It became evident that the longer residents live within a community, the more social ties they create. This in turn makes the residents feel more attached to their community and more likely to remain living there.

The idea of sustainability was also researched. This idea is becoming more and more popular, and I wanted to fully understand what the consequences and implications of creating a “green” and sustainable design would be. We are all familiar with what a “green” building is and how to design for one, but the real question was how should this idea be utilized within a design such as the thesis project? One must take great caution to fully understand what will occur when choosing to make a facility sustainable. After much research and a fuller understanding, I will dive into my thesis project more aware of why a designer may want to design sustainability and how the decision will impact the building and the community.

Overall, the most beneficial aspect of researching the theoretical premise/unifying idea was that it gave me a greater understanding of the issues that will actually pertain to my specific project. Although I may not be an expert on the survival of rural communities and the aspects of these communities, I feel confident in my understanding of them. I know that my design decisions will be strongly influenced and impacted by the knowledge gained through various research. A deeper meaning to the overall project has been gained, and I go into the design process and approach the thesis project even more confident and sure of my understanding of the full picture.

case study one

mixed-use facility

Located in Culver City, California, this 46,000 square foot building and garage is a mixed-use facility. Designed by the architecture firm Studio Pali Fekete, the building is comprised of residences, live/work lofts for creative neighbors, design offices, art galleries, and a neighborhood restaurant. The project was a roughly \$4 million dollar development project.

“MODAA represents a fundamental revision of the famous Los Angeles dream of a single-family residence” (Fortmeyer, 2007, p. 98).

Each of the lofts includes a full kitchen, bathroom, flexible living space, an enclosed room for a bedroom or office, a mezzanine, and connection to the outside through an exterior corridor.

The interior material palette includes the use of sealed and unpolished concrete floors, exposed wood truss ceilings, and white gypsum board walls. For the exterior of the building, the designers used a variegated facade of cement-board boxes and curtain walls as the main envelope materials.

This building nicely connects the public and the private. The user boundaries within the building were deeply considered and show a distinction between the public and the private. Polished and rough finishes distinguish the contrast, while the sealed, unpolished concrete slab unites each floor. The second level is comprised of the private spaces and the first level is a double height space that houses the offices and galleries.

The mixed-use facility utilizes a rainscreen consisting of cement-board panels attached to metal stud framed boxes, which in turn connect to galvanized metal channels that run in vertical strips along the waterproof membrane covered with plywood sheathing (Fortmeyer, 2007). Between the membrane and the boxes, a one inch gap nicely allows for the shedding of water and also encourages natural ventilation. The rainscreen system is mounted to a traditional steel structural system.



Circulation to Space

A strong articulation of the building spaces has evolved from the plan, strongly showing the primary functions of the facility. Use of space is the primary focus of the layout of the facility, while the circulation is created through a long corridor. The building utilizes a linear circulation method. The corridor simply acts as a space to move people from one point to the next, in a straightforward method. Movement within lacks the articulation of an artistic movement due to the length of the long corridor.

Geometry

A straightforward and simple geometry was clearly utilized within the MODAA. The building geometry is determined to be comprised of the basic geometric configuration, the use of the square. Perpendicular walls create and define spaces, allowing the geometry to reinforce the clean, open, simple, and flexible spaces related to the building as a whole.

Plan to Section

While investigating plan to section, the plan is the device which organizes the spaces and is the generator of form. From the plan, the sections enforce the spatial relationships and show appropriate balance and scale. The plan to section relationship reveals a proportional one, where connections are evident among the two. One can visually see the simple square playing into and tying the two conventions into one unified building.

Massing

The building acts as one large mass located within the setting. However, the relative size and height of the building allows it to fit well into its context. Related to massing, the exterior is articulated with additive components with portions of the exterior protruding, creating a concept of shade and shadow.



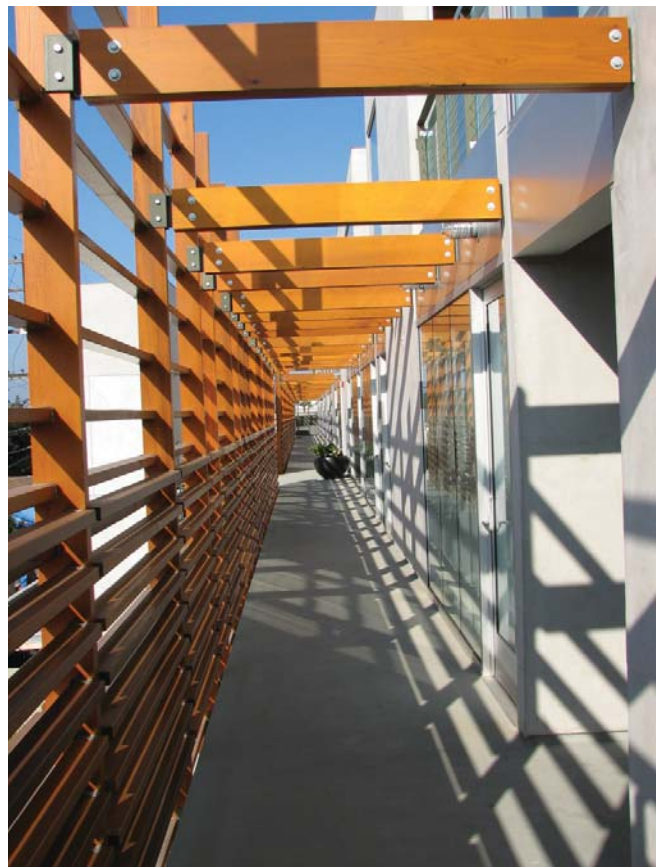
SECTION A-A

0 10 FT.
3 M.



UPPER FLOOR





Natural Light

The spaces within the building are filled with beautiful and ample natural daylight. The designers have succeeded in creating spaces which remain bright and open, without harsh glare. The effectiveness of the lighting is realized in the gallery spaces, which effectively display artwork.

Hierarchy

Through an examination of hierarchy, the simple geometry visible through plan and section emerges. From the geometry, a pattern and repetition of similar-sized spaces is apparent. Through the help of a grid system, repetition of the basic geometry is evident, allowing for a functional flow and layout.

Structure

The typical steel structural system is more about efficiency and creating open spaces. Structural components are often hidden from view, allowing the clean and open spaces to be evident. The planner system relates to concepts of creating a flexible and open building, allowing the unique spaces to be successful. Columns, walls, and beams creating the structural system define a simplistic and regular layout.

To make this facility unique, the architecture firm studied the material palette for this building. Creating a new and creative facade, the architecture team utilized the concepts of push and pull, solid and void to design an interesting and eye-catching exterior. Varying from other case studies, this building utilized a focus of the entrance and exterior perspectives, luring in the users and visitors.

Similar to other case studies, the mixed-use facility utilizes uses which strongly relate and make the building succinct. Like many similar building types, it separates the uses, defining a difference between public and private spaces.

Through the design of the exterior and also the creativity of space layout, the designers created a facility which in itself is a piece of art. Showcasing artwork within, the building displays and portrays the lifestyle and life experiences of the users. Socially and culturally, the MODAA allows for interaction among the users, a collaboration of artists working and living together within one facility. Through the unity of the facility, a strong belief in the building as a piece of artwork has been realized. Along with a full understanding of the interaction between all components, one understands the conceptual ideas that triggered the expressive and functional design.

Through an investigation of building features, characteristics, functions, and a complete analysis, the case study has proven to be useful. The MODAA strengthened knowledge which will be utilized for the design of the thesis project. With a sensitive scale, the building relates to and enforces the idea that this building typology can be effective in a rural community. Using simple geometry through plan, section, and elevation, the idea of simplicity and its effectiveness can be realized.

The MODAA combines unique functions into a unified building, while still allowing each function to be clearly defined. With a design team interested in creating a piece of artwork, inspiration has been drawn to create an “identifiable” piece of architecture for the community of Glenwood.

Green Courts Mixed-Use

case study two

mixed-use facility

Located in an area abundant with offices and flats traditional to European urban style, this mixed-use development, located in Vienna, Austria emerges. According to Architectural Record, the building is “An adaption of traditional continental European type [that] suggests new forms of urbanity” (Green Courts, 2003, p. 78).

Designed by architect Delugan Meissl, the facility is comprised of offices (two and a half stories in height and located at the back of the building), residential complexes (occupying the street side of the facility and standing seven stories high), computer-based spaces (located below the grass roofs), and pedestrian spaces (carved into the office spaces and located in the back of the building where traditional courts of a city block would be located) (Green Courts, 2003).

The mixed-use facility fits nicely into the site, stretching parallel to the adjacent street. The beautiful roofs are covered with grass, creating a landscaped and green component located within the urban context. Parking is hidden underground, and allows for utilization of the entire site for pedestrians and building users.

Many local artists strongly influenced the design of the Green Courts facility. One strong contributor to the project was glass worker Herwig Klempinger. He helped design the streetside facade which is composed of beautiful glass work, symbolizing winter gardens in a rigorous grid (Green Courts, 2003).

The flats are flexible and allow for variation both vertically and horizontally. There are moveable walls which allow for changes in the plan. Double-height rooms are also possible, creating very lively and open spaces.



Circulation to Space

Similar to the previous case study, an articulation of the building spaces has evolved from the plan. The use spaces are the primary focus for the layout of the facility. For the design, a linear circulation method was created, allowing easy and efficient circulation. The corridors providing for public circulation are created through a traditional method, where definition of the space is long spans of continuous wall. Through the use of natural light, the articulation of these spaces emerge and provide strength to the design.

Geometry

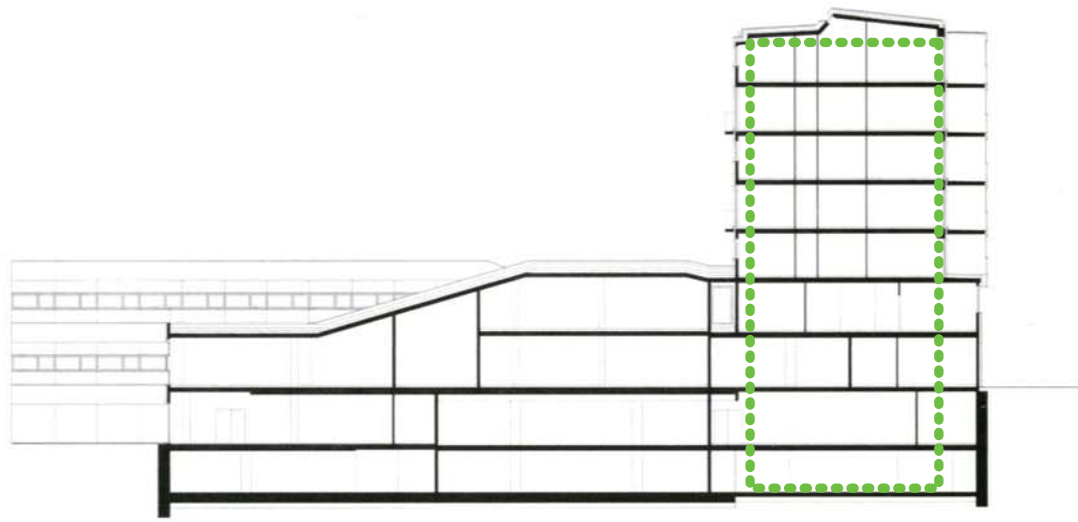
A simple and clean geometry is utilized through plan and section of the street mass. The design of the building geometry is comprised of the basic geometric configuration. The simple use of the square is realized within the plan and section of this facility. Relating to the planted roofs and interior of Green Courts, a more random and juxtaposed method is used. Overall, the geometry of the building provides an understanding of the uses within.

Plan to Section

The plan to section investigation revealed that the plan was the device which organized the space and was the generator of form. From the plan, the sections enforce the spacial relationships, especially within the mass related to the streetside.

Natural Light

Along with the previous case study, the spaces within Green Courts are flushed with beautiful natural light. Many openings throughout the facility allow natural light to penetrate deep into the spaces. Corridors are naturally lit, allowing for a pleasant transition from one space to the next.

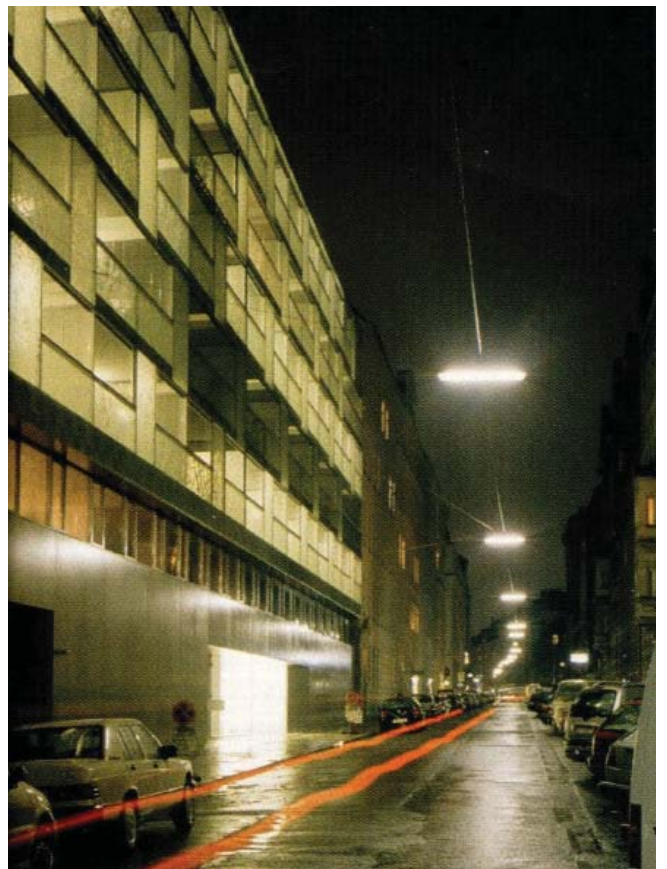


cross section



typical floor





Structure

The structure of the facility is a combination of planner and columnar, creating an openness of spaces with a grid of columns. The walls within the design provide for typical spaces, with the numerous structural columns allowing for the possibility of modulations and definition of smaller spaces within. The columns are laid out in pattern, and the pattern expresses efficiency and support of the load of the green roofs.

Massing

The massing of the building relates to the ideas of uses and functions. With respect to the street and adjacent existing structures, the mass of the facade is similar. Stretching to similar heights, it pays homage to a traditional mass running parallel to the street. However, the interior of the building's mass contrasts significantly. Acting in an artistic movement and relating to pedestrian functions, the interior building mass has a more human scale and creates a very lively atmosphere.

Hierarchy

A simple and effective geometry lends itself to the prevalent factor of the design. However, the bold and inspiring planted roofs emerge as a planned and determined design concept, serving as one of the important aspects of the design.

Overall, the simplicity of the facility allows for a clear understanding of uses and building functions. The interaction of nature and the built environment became an inspirational design element that will most likely lend itself in the design of this thesis. Through this integration, various aspects of function and also sensitivity to users was realized.

In relation to the other case studies, Green Courts creates a unified building of various uses. In addition, the facility looks to the future. Common to this building type, creating open and flexible spaces is paramount, allowing for future use and frequent changes in users.

What sets this case study apart is its use of planted roofs, creating a visually pleasing facility. While similar to many sustainable mixed-use buildings, Green Courts steps it up and makes the building's skin a live material. The roofs help users understand the importance of green design and the intentions of the architect.

This case study has provided some important information for designers. The designers utilized simple geometric forms, linear circulation, and proportions in the construction of plan and section. Simplicity was utilized throughout the facility, creating a clean and well-organized building. Green Courts uses a unique approach to allow for future growth and change. Flexible spaces and walls helps one understand the idea of creating new and exciting opportunities for the users.

Through the design of the roofs, the building relates to and respects the environment. Culturally, Green Courts looks to the future and creates a socially accepted movement, the movement of going green. The design also expresses an artistic culture through the layout of spaces. Green Courts is an inspiration in the way it looks to the future and utilizes sustainable strategies. Many of these concepts will be utilized and further investigated for the thesis project.

case studies Working Artists Ventura (WAV)

case study three

mixed-use facility



The Working Artists Ventura (WAV) project is a state-of-the-art mixed-use community which has been designed to house artists and creative businesses. Located in the city of San Francisco, California, the 130,000 square foot complex is currently under construction and is estimated to be a \$59 million project (Working Artists Ventura, 2009). The design intention was that the facility should serve as a live/work community for local and non local artists.

Total Property Size: 1.7 acres

Number of Floors: 4

The WAV will be the nation's first mixed-income and mixed-use community to offer and provide supportive housing to homeless families.

Along with housing, other spaces will include an amphitheater and spaces for art-friendly small businesses such as coffeehouses, galleries, cafes, wine bars and jazz clubs (Working Artists Ventura, 2009). Other designed spaces include a theater/gallery, 6,177 square feet of commercial space, and three on-site parks. Along with these spaces, the project is designed to include 13 market-rate condos, which will be LEED Certified. The condominiums will have ocean views, and they will help subsidize the affordable housing (Working Artists Ventura, 2009).

Fifteen units will be designed to provide permanent supportive housing for recently homeless families and individuals from the area (Working Artists Ventura, 2009).

The building will utilize green building technology with the goal of becoming LEED certified. To accomplish this goal, the design includes recycled building materials, car sharing, water and energy conservation, and renewable power from the sun (Working Artists Ventura, 2009).

The WAV project will provide sixty-nine units of affordable housing, which will all serve low income families and individuals from across the region. Because artists need high ceilings, plentiful light, and open space, they and their families find it particularly difficult to live and work in traditional housing. The WAV will provide 54 affordable units especially designed for the needs of artists with families (Working Artists Ventura, 2009).



Structure

For the majority of the complex, a planar approach to the structural system was used. In some cases, columns are utilized. An expressive structural system was not utilized in the design, with more attention given to create a structural system hidden within the walls.

Natural Light

Relating to natural light, the design paid particular attention to allowing sunlight to penetrate deep into the public spaces. The ability to bring sunlight into these spaces allows vegetation to grow. Many openings, including rooftop openings, show the intention and sensitivity in relation to naturally lit spaces.

Plan to Section

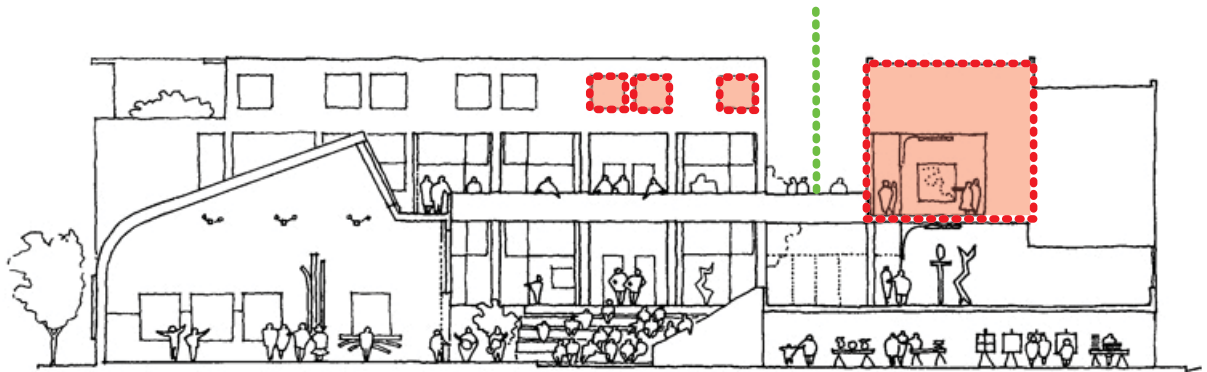
While investigating plan to section, it became apparent that the plan was a first step in the design process. Plan was the device which clearly organized the spaces and inspired the generation of the building form. From the plan, the sections enforce the spatial relationships. A human scale is appreciated and is evident from section, creating an appropriate balance of the spaces.

Geometry

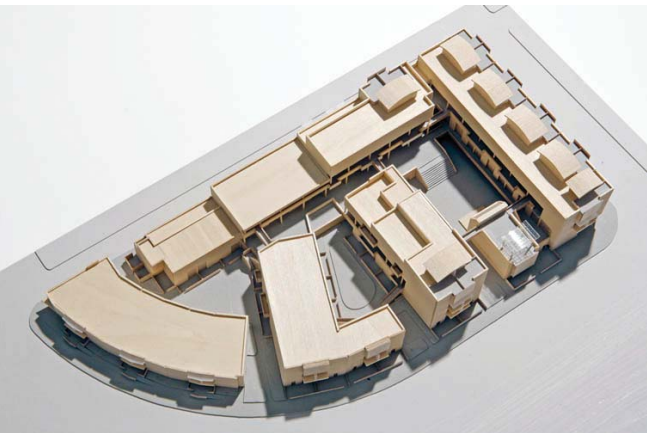
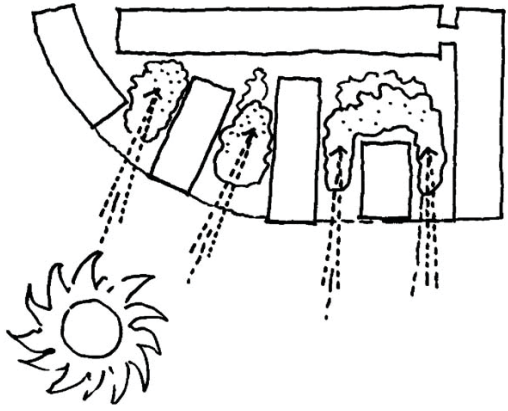
Though varying in geometrical shapes, the overall theme is simplicity. With most walls parallel or perpendicular to each other, the approach was simple and straightforward, creating an elegant and personable building form. Similarly, the use of the geometric square was often utilized, along with the use of the rectangle.

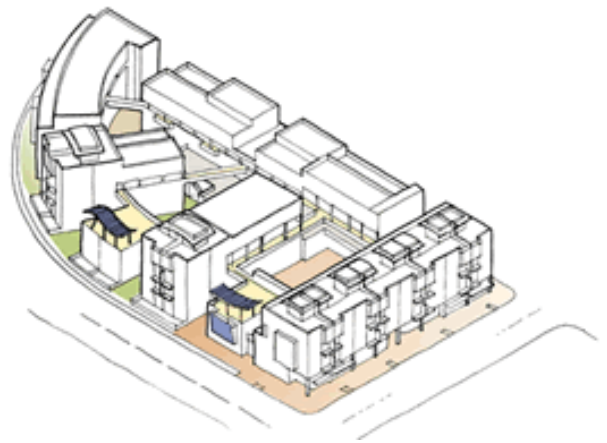
Hierarchy

A sense of hierarchy emerges from the use and attention paid to the design of the building plan. Creating a functional and economical design was important. Through efficient and simple plans, a building form emerged, creating lively public spaces between.



scale: 20'





Massing

Heights vary among the structures located within the complex, so the massing has an appropriate humanly scale. The massing also emphasizes repetition, which is utilized throughout the design.

Circulation to Space

The WAV utilizes a strong articulation of the building spaces, which encourages and supports the primary functions of the facility. A more static approach was used throughout the functional spaces within the buildings. Use-space was the primary focus of the layout of the facility, with the articulation of the circulation being dealt with on the exterior of the buildings. Much attention was paid to the movement of people through the green outdoor spaces.

In relation to the other case studies, WAV creates a unified building of various uses. In addition, the facility looks to the future. Common to this building type, creating open and flexible spaces is paramount, allowing for future use and frequent changes in users.

WAV is different from the other case studies in that it is a larger mixed-use development. It utilizes many mixed-use facilities within one large complex. Also, this development pays particular attention to the locals and the improvement of the city as a whole. Bringing natural light into the facility and exterior public spaces was of great importance.

Many simple geometric shapes comprised the plans and sections. It was also evident that the plan derived the building form. With dedication to the importance of outdoor spaces, the designers work well in plan to create dynamic and sun-filled outdoor spaces.

With the goal to become LEED certified, the design respects the environment. The designer has paid particular attention to creating enjoyable and green outdoor spaces. Being socially responsible, this development plans to reach out to homeless and less fortunate citizens of the community. While doing this, WAV continues to respect the culture that it is built within, creating homes and studios for local artists, fostering a creative and lively community. From the sensitive response to the community, many lessons were learned that will apply to this thesis project. Creating a sustainable project and also allowing for great outdoor spaces will be paramount to the mixed-use project design for Glenwood.

After studying the Working Artists Ventura project, it became evident that the designers cared greatly about the culture that the building will serve and also the importance of respecting the environment. Much can be learned from this new development, including ideas of looking ahead and benefiting the city as a whole. The designers respected many elements that are similar to sensitive issues related to the city of Glenwood. Again, simplicity is often key, creating spaces that are appropriate and serve the users to their full potential. The WAV is a facility that looks ahead, while also trying to solve problems of the present. With a dual approach, the building seems to be successful. The success of the thesis project will be supported by ideas derived from this case study.

Case Studies Summary

The case studies of three different mixed-use facilities generated similarities, differences, and essential and important characteristics of this building typology. MODAA, Green Courts, and WAV were models that provided great lessons and much respected methods towards the creation of great and new architecture.

Despite the differences found within the previous case studies, there is a significant and unifying idea that emerges. The idea of creating a facility which fosters opportunity is the essential aspect. No matter which uses the building supports, it must accommodate and provide for the best opportunity for the use to prevail. Whether the approach to this building typology is through an approach that utilizes a wide range of uses (MODAA), a green and flexible facility (Green Courts), or a humanistic approach through the creation of spaces which can be utilized by all citizens of a community (WAV), the underlying nature of these projects is the prevailing idea of creating opportunities for the users and their interaction.

The major focus and essence of these three projects is that they all focus on creating community and unity within one facility. Through sustainable practices and green ideas, the development of mixed-use facilities must be sensitive to the natural environment, while still respecting the ideas of the built environment.

Through rigorous analysis of the case studies, common characteristics and formative ideas for design emerged. Plan to section relationships revealed proportional relationships, where strong connections became evident. The simple square lead the designs, tying the two conventions of plan and section into one unified building. Through analysis, it also became evident that the buildings utilized a linear circulation method. Geometry was found to be simple within the plans and sections of the investigated buildings, with the use of the square serving as the major geometric shape. A pattern and repetition of similar-sized spaces became apparent within a couple of the studies, generating ideas for the thesis project. Through the help of a grid system, repetition of the basic geometry allows for a functional flow and layout. Along with these concepts, the use of natural light showed to be of great importance in the studies. Serving as a psychological and also a functional aspect, the flow of natural light into a facility is a must.

Through the case studies, it became evident that this building typology can house virtually any desired spaces. It was evident that often similar uses are paired together within the same facility because they have been proven to make the facility effective. A common mixture for this type of facility includes a restaurant, retail spaces, and housing. Within these common spaces, a great variation can and often does occur.

Common characteristics that emerged include the idea of creating sustainable facilities, which will allow for change over time. This idea is critical for the adaption of a rural community, as often the needs and uses will change as will the current condition of the city and the desires of the residents.

The idea of rural community survival still emerges as a prominent and critical event for the diversity of society. Through new growth and development, these small communities will show the character of adaptability, while fully sustaining themselves.

Through the various contexts and users that occupied and lived near the local mixed-use facilities, an obvious and sensitive approach was utilized towards developing the functions and spaces. In an area with low income and many homeless citizens, spaces were utilized to help this disadvantaged population. Similarly, in an artistic region of the county, live/work spaces were fully utilized in the mixed-use facility.

Functional and spatial relationships held a common bond among the case studies. The private spaces were typically located on the upper level, with the more public spaces located at or close to ground level. The simplicity of this method allows for an ease in understanding the building layout. It is an appropriate approach to allow for the greatest opportunities of the provided spaces.

A great interest in these studies is how one can design for the future, looking at how buildings must be constructed to serve functionally in the years to come. Being able to create a flexible space, but still define meaning for the user is a difficult task. The building must function as a whole while providing individual spaces. Through intensive investigations of the case studies, confidence was gained to pursue the appropriate design for a rural mixed-use facility.

historical context Historical Context of the Thesis

In thought, the thesis project has emerged from the study of many similar projects throughout history. With the fairly new idea of mixed-use, the building designed for Glenwood will take into account the lessons learned from previous projects. The creation of opportunities is a great characteristic of this building typology, and will be emphasized through the thesis project. The thesis will utilize similar spaces that have been proven to create a succinct, unified, and prosperous building. Retail, hotel spaces, and a restaurant are just a few of the spaces which will be fully utilized.

With time comes change and trends that occur in society. Studying the history of the typology has provided evidence of the evolution of this building form. The thesis project strongly relates to these trends, and will see changes in uses throughout its future. The building type will lend itself nicely to creating smooth and efficient transitions among foreseen and also unforeseen uses.

The thesis project is set in a very remote and rural community, the city of Glenwood, MN. With the large attraction of Lake Minnewaska, the town becomes a very socially active and dynamic community during the summer months. The specific site, located directly on the shoreline of the lake, has proven to be a sought-after piece of land. This valuable piece of land, owned by the city, allows for a great contribution to the city through aiding and boosting the community both economically and psychologically. The project is set in a context that is heavily influenced by pedestrians, creating a great opportunity to allow for a functional and useful facility. With a beautiful site, the context will effectively support the mixed-use facility, a facility providing optimism and growth.

The City of Glenwood

The city of Glenwood was named for the great glen or valley occupied by the lake and for the woods around its shores. The wooded and hilly city greatly contrasts with the prairies that form the greater part of Pope County. Glenwood is the county seat and is situated on the northeast end of Lake Minnewaska. It was first platted in part on September 26, 1866, was incorporated as a village on February 23, 1881, and finally became a city in 1912. (Roots, 2009).

Glenwood is a city that has had a fluctuating population. With the current population a little under 3,000 residents.

For many years, the site chosen for the thesis project has been known and utilized as the "city beach." As a popular destination for tourists and adolescents during the summer months, the site is a popular attraction.

City Information:

Land area: 5.57 square miles with a population density of 454 people per square mile.

Nearest city with pop. 10,000+:

Alexandria, MN (15 miles, pop. 10,603)

Nearest city with pop. 50,000+:

St. Cloud, MN (58.9 miles, pop. 59,107)

Nearest city with pop. 200,000+:

Minneapolis, MN (113 miles, pop. 382,618)

Origins and Evolution of the Mixed-Use Building Type

The idea of the mixed-use facility is fairly recent in the history of building typologies. From the ideas of mixed-use development, or MXD, emerged the building type that is utilized in this thesis project.

After World War II, a transformation in traditional land development practices and an unprecedented urban growth emerged. A building boom was occurring along with a rapid growth in population. Because of this, many large scale communities, with a mixture of commercial and residential use, became commonplace (Witherspoon, Abbett, & Gladstone, 1976). From these changes, other forms of real estate development began to emerge. The industrial park, the business park, and a wide range of diverse recreational development, such as resorts and theme parks, started to appear. Shopping center development also went through a radical change. In the 1950's the "open center" mall began to vanish as climate controlled, enclosed malls became common (Witherspoon, 1976). The shopping center concept continued to evolve, while some developers envisioned a change to create something different, something more than scattered structures with an abundance of parking common to the traditional shopping center.

From these trends, the mixed-use development became reality. Newport Center, a mixed-use development located in Orange County, California, is considered one of the first mixed-use developments that broke away from the traditional mall (Witherspoon, 1976). This evolution revealed the mixed-use type, which is still commonly-used today.

“The term ‘mixed-use development’ was given definition in 1976 when ULI published *Mixed-Use Development; New Ways of Land Use*. The report examined a then rapidly growing number of developments that were so different that they could be defined in a way that set them apart from other development concepts” (Snedcof, 1985, p. 5).

Eventually, a definition was created: “Mixed-use development means a relatively large-scale real estate project characterized by: three or more significant revenue producing uses such as retail, office, residential, hotel/motel, and recreation - which in well planned projects are mutually supporting” (Snedcof, 1985, p. 5). From this comes a physical and functional integration of project components, creating a highly intensive use of land. Mixed-use has been proven through time to increase municipal revenues, save public-sector costs, treat blight and decay, integrate public uses, and organize growth.

Ideas of intensive use of land, pedestrian connections, and a conformance with a coherent plan have all continued to be prominent indicators of this building type since the its beginning. Through these initial ideas and concepts, the idea of mixed-use continues to evolve.

Stated as a previous goal for the project and a strong reason behind this building type, the opportunities promoted through a mixed-use facility are tremendous. A mixed-use facility often becomes more feasible due to the combination of uses within, which means higher densities within one piece of land. This is often a means to faster development, creates a sharing of infrastructure, provides superior performance, and most importantly, it creates a rewarding and sensitive impact on the community (Witherspoon, 1985).

Recently, mixed-use facilities have continued to be a growing trend, with a rise in green and sustainable practices. Over the past 40 years, mixed-use has often been a controversial building typology and has faced many issues with identity crises (The Reinvention, 2009). With standalone uses like traditional malls and apartment complexes, there has been a trend toward less desirability of this typology.

The idea of live-work-play facilities underscores the longing for a return to small-town convenience and sociability (The Reinvention, 2009). The live-work-play concept creates an energy, and the users of these facilities feed off of this energy (The Reinvention, 2009). Creating a dynamic and energetic community will be crucial for the sustainability of a small town. Also, having multiple uses within one facility is strongly desired for communities of all sizes. The idea of this plays well into the creation of a facility for a small rural community, providing much-needed resources.

There are a few major issues that one must consider when thinking about mixed-use design. Much thought must be put into the design, making it flexible, creating adequate separation among the uses, utilizing the human/pedestrian realm (promoting a walkable, healthy environment, incorporating pedestrian paths through the project and paying attention to landscaping and the details outside that can attract and benefit passersby), deeply considering the entry sequence, putting security as a top priority, being aware of concerns with parking and the uses that they are serving, and being thoughtful of services that will affect the design (The Reinvention, 2009).

The mixed-use facility seems to have remained almost unchanged since its beginning. However, recently it has emerged with almost any combination of uses. That is a strong benefit of this building typology, its allowance for change and flexible spaces. Although some spaces may work well together and create a unified building, there is no method for what the specific uses must be. This idea lends itself to a great facility for a community that must adapt to change in the near future to survive.

Overall, mixed-use facilities must gain public support. Strong relationships must remain between this new development and the existing facilities, functions, and businesses. The design must plan for anticipated uses through flexibility. These spaces will be much more effective when they are well prepared for change and smooth transitions. The idea of mixed-use allows for the creation of a more satisfying and relevant building design. The benefits and vast opportunities promoted through a mixed-use facility are tremendous. They lend themselves to creating and sustaining a small rural community. One great opportunity is to bring change and growth to a community, while having a rewarding and sensitive impact on the community.

Research has show that for the understanding of the history of this thesis project, there is a strong convergence and many similar points of agreement. By providing growth and opportunity, the mixed-use facility has been proven to be a successful typology throughout time. The small community of Glenwood has a history of great pride, and this will continue to be prevalent through the new architecture that will emerge. The specific site is the perfect landscape and showcase to house the mixed-use facility, a site which is respected by all residents.

thesis goals **Goals for the Thesis Project**

The Academic

As a capstone of my architectural education, the thesis project will challenge my ways of thinking and making adequate and appropriate design decisions. The building's complexity and meaning will encourage me to think deeply into the future about the appropriateness of this building typology. I hope to learn and discover more things about the person and designer that I have become. Through intensive education, I feel confident to pursue the thesis project. Rooted in my experiences of growing up in a small rural community, the project exists for me as a symbol of my past and the way I see things in the future. The thesis project goes beyond serving as an interesting and inspiring project for myself, it is a research piece which is intended to inform other academic students and faculty members. The thesis book will be added to the library, expanding the knowledge of the relationship between design and the built environment. My intensive research, insight, and project is intended to bring about discourse on this topic. With the recent talk of small rural communities and their survival, this topic is soon to be one of paramount importance. I take strong pride in informing others about this issue and providing knowledge of the topic.

The Professional

Through extensive research, investigation, and a holistic design approach, the process and completion of a complex design problem such as this will provide encouragement to enter the profession. The thesis project demonstrates my ability to organize and present my research efforts. The acquired skills and knowledge of the past five years will culminate into one final project, the capstone of my architectural career. Through experience with my advisor and other peers, the process will further develop communication skills which will be used throughout my professional career.

The Personal

Through much personal interest and excitement, this project exists to fulfill my personal and academic career at NDSU. I am very enthused and motivated to learn more about experiences and a lifestyle that has shaped me as a person. Through my experience of growing up in a rural community, much of my insight and life decisions have been guided by this experience. The thesis project is a reflection of my past and also a dedication to a place that has served me well. Through the process, I hope and am confident in discovering many things about myself as a person and as an architect. The thesis project is an opportunity to express my understanding of the design process. I have developed a positive and appropriate approach to research and design, and hope to further this methodology through the most complex project of my career thus far. This is more than just a project, it is a closure to a successful education career, but more importantly it is a bold and enthusiastic start to my professional career. I am comforted pursuing this project as the ending point of my education, since it has so many ties and connections to the person that I am, and the person that I desire to be. Furthermore, it is a tribute to the life that I have thus far lived, the shaping of my personality and the experiences of growing up in a small rural town.

This building is intended to be built for citizens of the community and for visitors and tourists which often visit. It is meant to create a new and exciting piece of architecture for the city of Glenwood, something which will proudly serve the citizens and bring newness to the region. A mixed-use building will provide needed services and opportunities to the community, while adequately providing and looking to the future needs and sustainability of the city.





Site Analysis

Site Narrative

The site chosen for the thesis project consists of terrific views and an abundance of opportunities. Large public spaces and a public beach are the main components within. The site is not overly large, relating well to the human scale and providing for a comforting place. Through an analysis of the site and its offerings, one fully realizes the true beauty of the site. With a dynamic atmosphere, the context provides much for the city of Glenwood.

As one approaches the site, visitors, locals, and tourists are abundant. The small town character is evident, friendly people all taking in the attributes of this great place. With the bustle of children on the beach and the sounds of recreation and boats on the water, this dynamic place creates a refreshing experience and sense of youth.

With breathtaking views from virtually any direction within the site, the peaceful and tranquil environment is prominent. Views to the large neighboring park or looking over the vast and expansive body of water helps one realize the true spirit of the site.

Sitting under a large tree in the middle of the site, the sounds of the waves hitting the shore and the pelicans flying above dominate. With the breezy day, a cool chill sets in as the wind captures the waters cool temperature. Although filled with noise and a chill, the site creates a place to rest, a place where thoughts and ideas are generated.

The bright colors of the leaves on the trees, the unique color of the water in the lake, the reflections of the sun bouncing off this body of water, the bright green and well manicured grasses all emerge as one sits to think about the true elegance of this place.

This site has been a part of my life for years. Creating many enjoyable and memorable experiences, it is a place that will always be dear to me. The large lake is the feature and component of the town that makes the community whole. As more than just a place to take advantage of the water, this is a place that brings families and friends together; a place where gathering is of importance and is evident every day. Even with the current success of the site, it seems as though it could be more, a place where even greater pride occurs.

To show respect and love for the site, the design decisions must be appropriate and sensitive to the natural environment. Being able to demonstrate a full understanding of the relationship between the natural environment and the built environment is of great importance, a full realization that this place is special.

Through its various and predominant characteristics, the site lends itself to be one of the most popular destinations within the city. Visually seeing constant human interaction and use of the site, one quickly realizes the lively character of the city and its residents. Great sensitivity must be taken to design for this beautiful site, care that goes beyond normal design. As an added component to the site, the mixed-use facility will fully respect and pay tribute to the context. Through the thesis project, it will be crucial to create newness and opportunity in a place of such importance.

Qualitative Analysis

Built Features

There is one small building that serves as a bathhouse and storage space for the city-operated public beach. The building is many years old and in need of replacement or renovation. This facility is located on the northern part of the site, north of a large parking lot that runs north to south.

Light Quality

The light quality throughout the site is nearly all natural, with protection and shade provided by the numerous trees. Near the lake, the sunlight becomes more intense as reflections from the water bounce the light around.

Vegetation

The site is comprised of grasses and large, mature trees. This allows for many small outdoor gathering spaces, created with numerous picnic tables scattered throughout.

Water

Water is a prominent and much respected feature of the site. Lake Minnewaska is a large lake in terrific view from the site with very few obstructions hindering the view. The motion of the water varies depending on the wind speed and direction. Due to the relative size of the lake, it is most common to have movement within the lake and the creation of visible waves. The water temperature heats up in the summer months, which allows for comfortable swimming activities, and it freezes in the winter months, which provides for snowmobiling and ice fishing. The water purity within the lake is considered typical for a Minnesota Lake. The normal pollution exists within, but is not a hindrance. The permanence of this site feature allows for great opportunities and possibilities.

Wind

The water that is present on site often affects the flow of wind. Due to the large body of water, winds from the west can build up over the lake and create a breezy site. The cooler temperature from the lake can act as a cooling source for the site. Winds typically come from the northwest direction during the winter months and the south to southeast direction during the summer months.

Human Characteristics

Human use is common and evident throughout the site. Foot paths and bike paths can be seen where humans move off the paved walkways and roads. Also, the sandy beach is full of footprints, creating a dynamic and always changing view. The human interaction with the site comes from the aspects and qualities that the site offers. The site serves as a public space for people to use the beach, the large parking lot and boat docks, or the large green spaces serving as a park for picnics and gatherings. People are present on the site each day of the year, with the summer months being the most populated. However, the site is often used by people who walk and jog as well as people who come to the site to take breaks throughout the day.

Distress

The only distress that is evident within the site is the beach-house facility and the sandy beach. The public facility is starting to show its age, but still functions properly and is utilized throughout the summer months. Its upkeep is minimal, and it still provides what the users desire. Although a common characteristic with a lake nearby, the sandy shore often shows distress due to large waves that crash on the shore. This form of distress is common and is not to a level which hurts or impacts the site negatively.

Quantitative Analysis

Soils

Within this region of Pope County, the site soil is considered deep, hilly to steep, well-drained to excessively drained, loamy soils. Categorized under the Langhei-Barnes-Waukon-Sioux association, this soil type is found on site and throughout adjacent areas to the site (Soil Survey, 2009).

According to soil maps indicating the soil types located within Pope County, the Barnes Series is comprised of deep, well-drained soils. These nearly level to rolling soils are commonly found in the western two-thirds of Pope County.

Barnes soils are commonly cultivated and grow crops well if rainfall is adequate and proper management is practiced. Controlling erosion and fertility management are the major concerns in these soils.

Boring results have indicated the fill near the site is variable in nature. The surficial fill layer consists mostly of brown sand and silt and black and brown clay-like sand. The underlying surficial fill deposits are black, organic clay deposits.



Topographic Survey

Slope analysis for the site determines that the site is under four percent. The large grass area and parking lot lay flat and can be used for all sorts of activities. From the elevated platform of this grassy area and the parking lot, the site slopes down to the water's edge. This region of the site is where the sandy beach is located, with a slope ranging from ten percent and above.

Site Character

Signs of distress are evident in the sandy beach and old beach-house facility. The sandy shore lends itself to showing change easily, and is often disturbed by the waves that crash into it. Also, after the lake freezes during the winter months, the large ice sheets push and distress the shoreline. Large sand mounds are formed along the edge of the once frozen lake, which are smoothed out eventually through human interaction.

Shading

The shading located on site comes from the numerous mature trees that are scattered over most of the site. These trees provide a nice canopy, creating many desired gathering spaces throughout. With the busy time during the hot summer months, it is not uncommon to have these gathering spaces occupied by tourists and locals taking a break from the intense summer sun and heat.

Noise

Throughout the site, there is little distraction from negative noises. Although there is a highway that runs along the site, the speed limit is set low because the road is within city limits. The crashing waves along the shoreline and sounds of pelicans often create a dynamic and interesting experience.

Slope and Climate

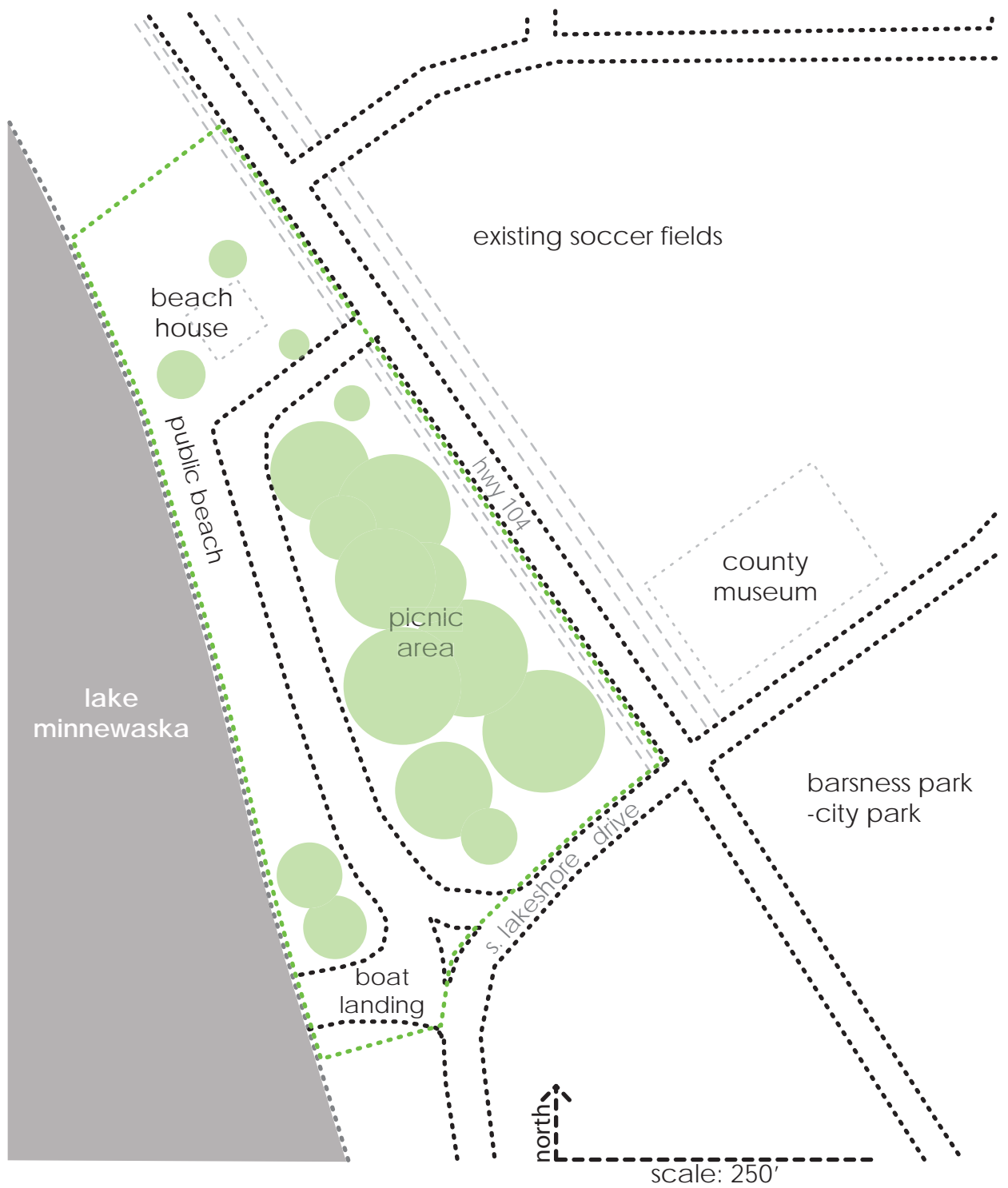
Within the site, there is a large public beach. With the roughly ten percent slope of the sandy beach and the southwest direction it faces, this area of the site receives an abundance of direct solar radiation. This draws humans to the beach for relaxation. The majority of the site is composed of minimal slope and is not affected by the relationship between slope and direct radiation.

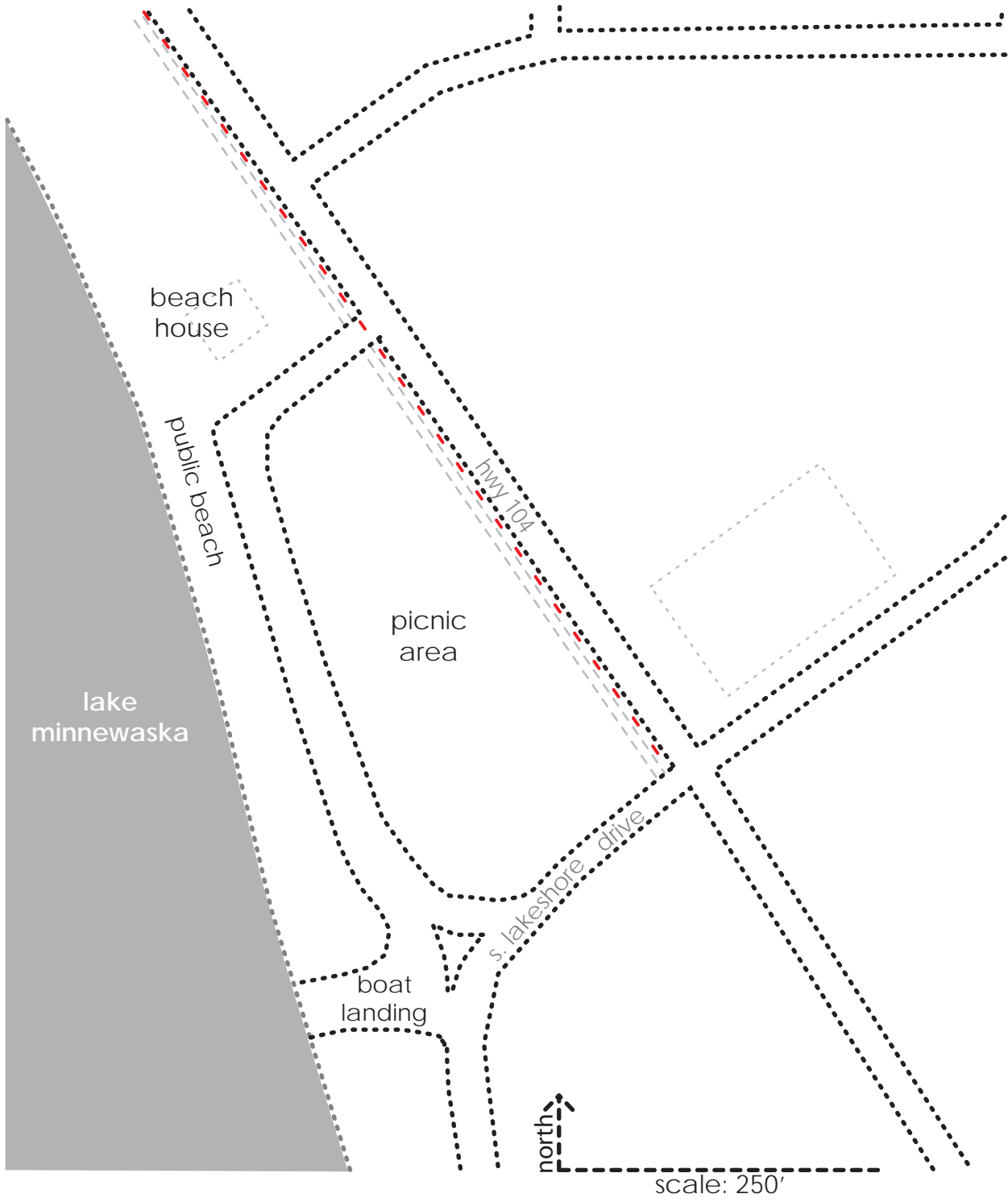
Maps

Due to the small size of the city and the ownership of this region by the City of Glenwood, the specific site has not been platted. There are no legal lines within this area, and the land surrounding it is granted to and maintained by the City of Glenwood. The city obtained the land through a grant, with the intention that the land would be kept in city ownership and lend itself to use by the public.

The green line represents the proposed site boundaries.

Trees overlay the central portion of the site, allowing for terrific gathering spaces.



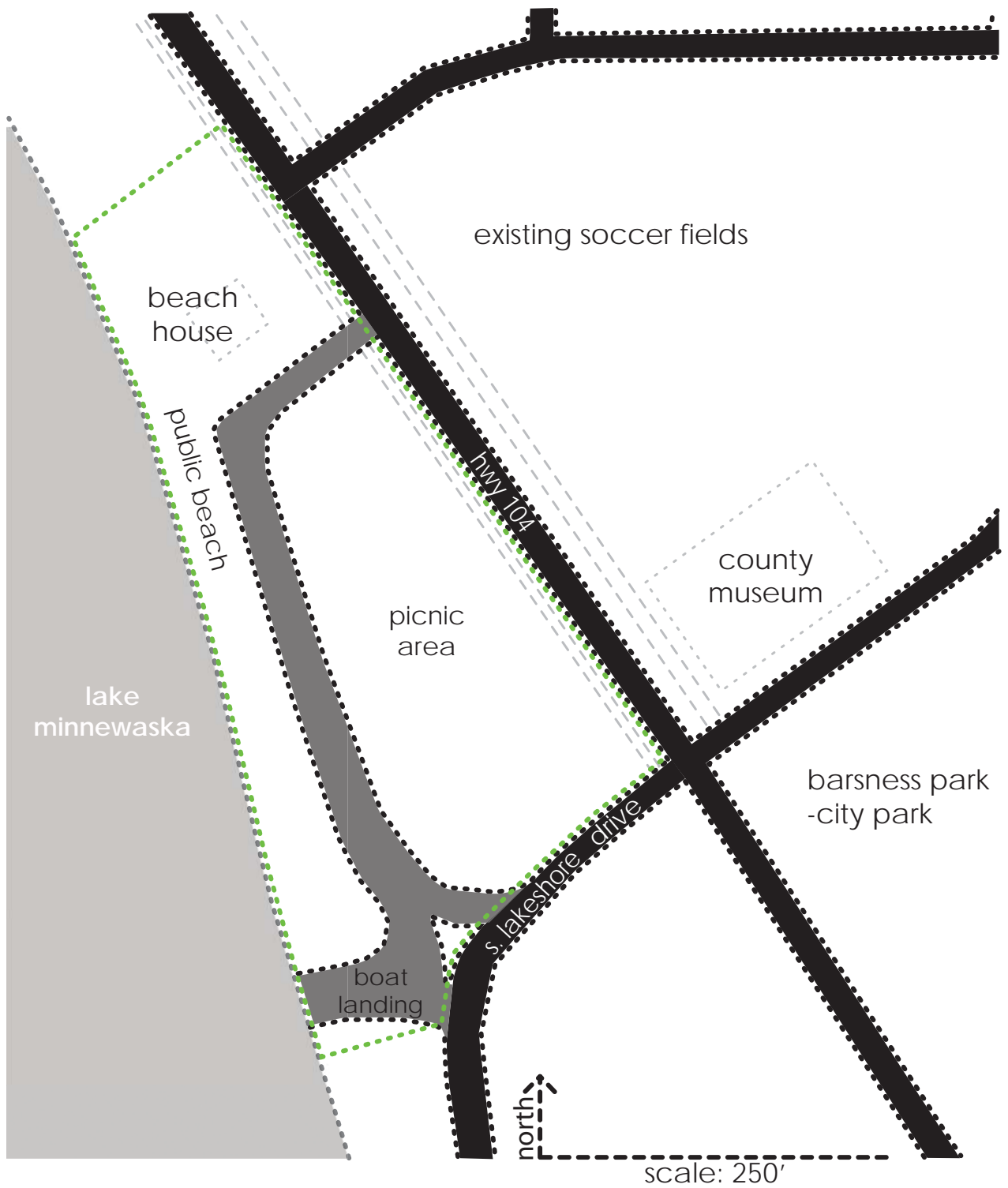


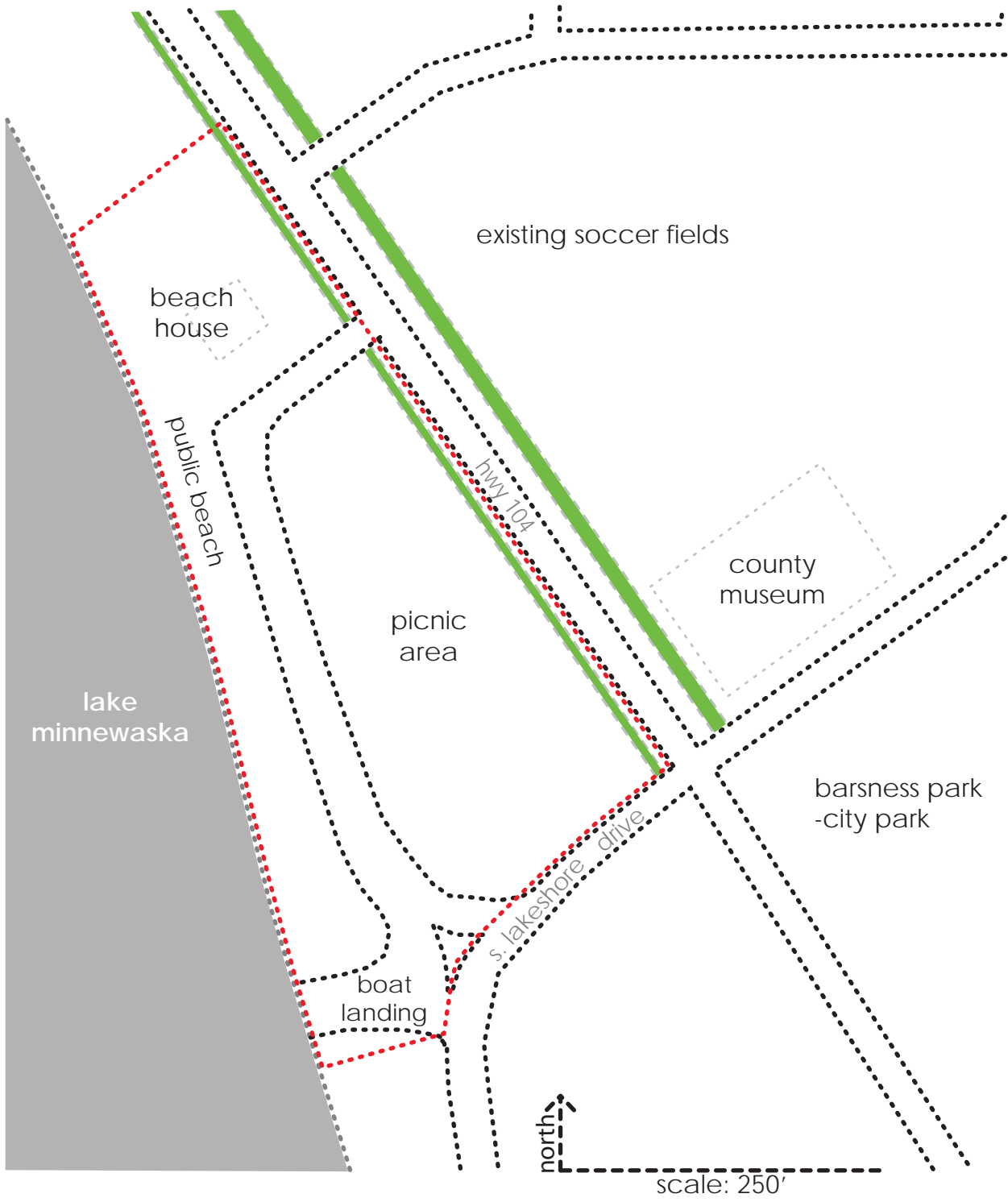
Utilities

Utilities within the site run above ground and below ground. Power lines run parallel to the highway, not hindering the quality of the site.

Vehicular Traffic

Most of the vehicular traffic near the site is located on the adjacent highway to the east of the site and the city street to the south of the site. Vehicles are allowed to enter the site from northeast and south entrance points. The traffic on site is typically very slow and is comprised of people who are parking in the lot.





Pedestrian Traffic

Pedestrian traffic is abundant on the site. A walking path runs parallel to the highway on the edge of the site. Also, across the highway is a larger bike and pedestrian path that runs parallel to the highway. With the large number of people exercising and taking daily walks, these paths are fully utilized throughout the day and evening.

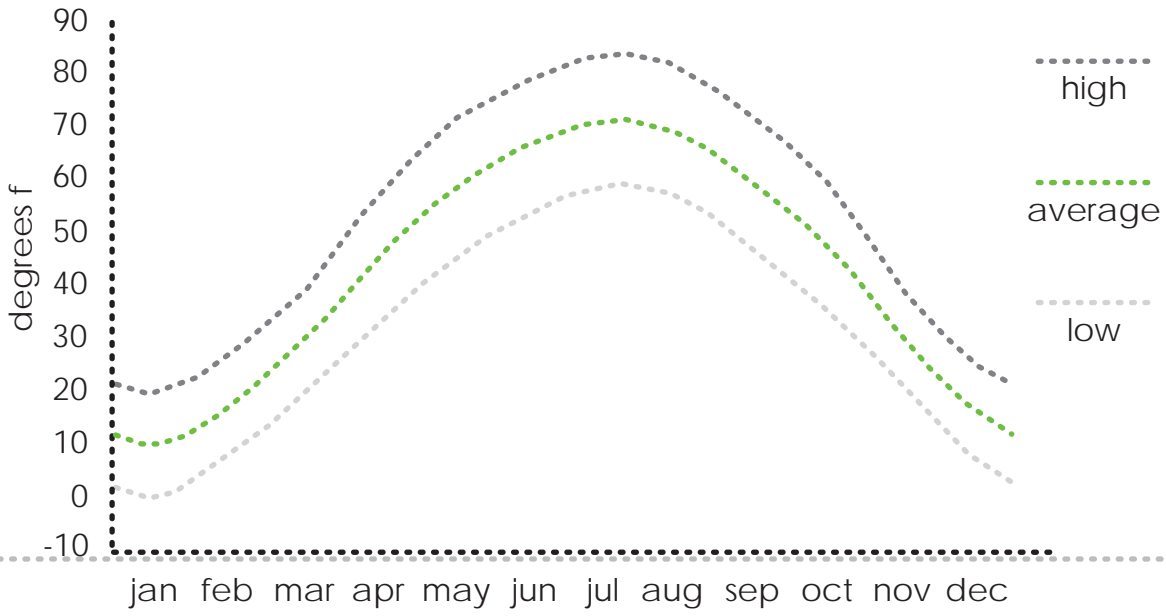
Site Reconnaissance



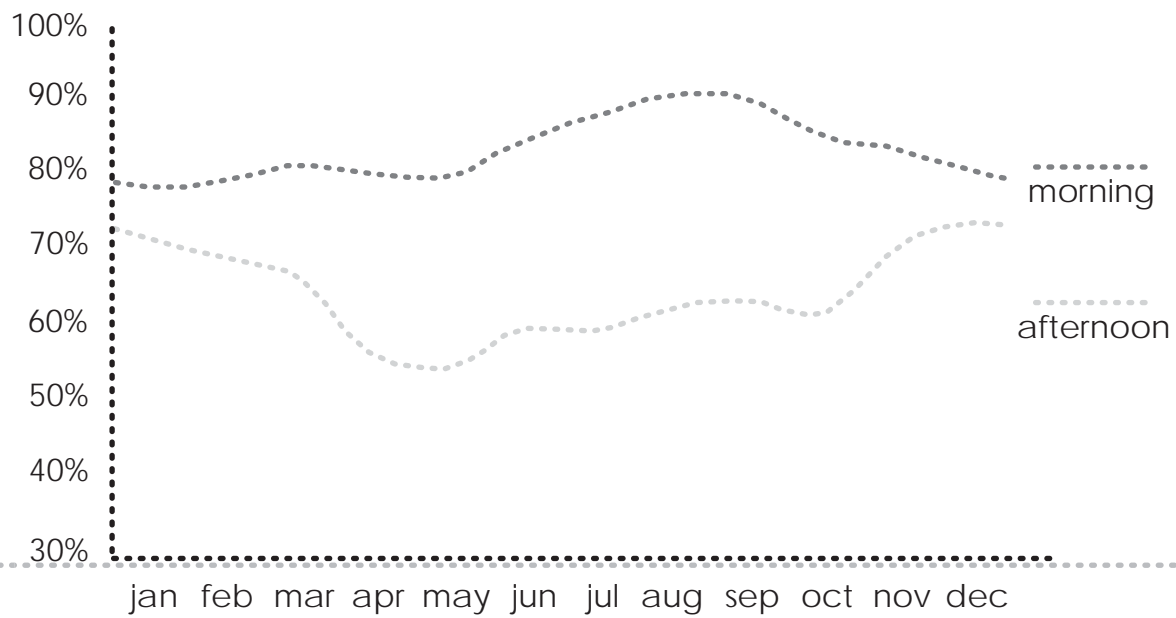


Climate Data

Temperature



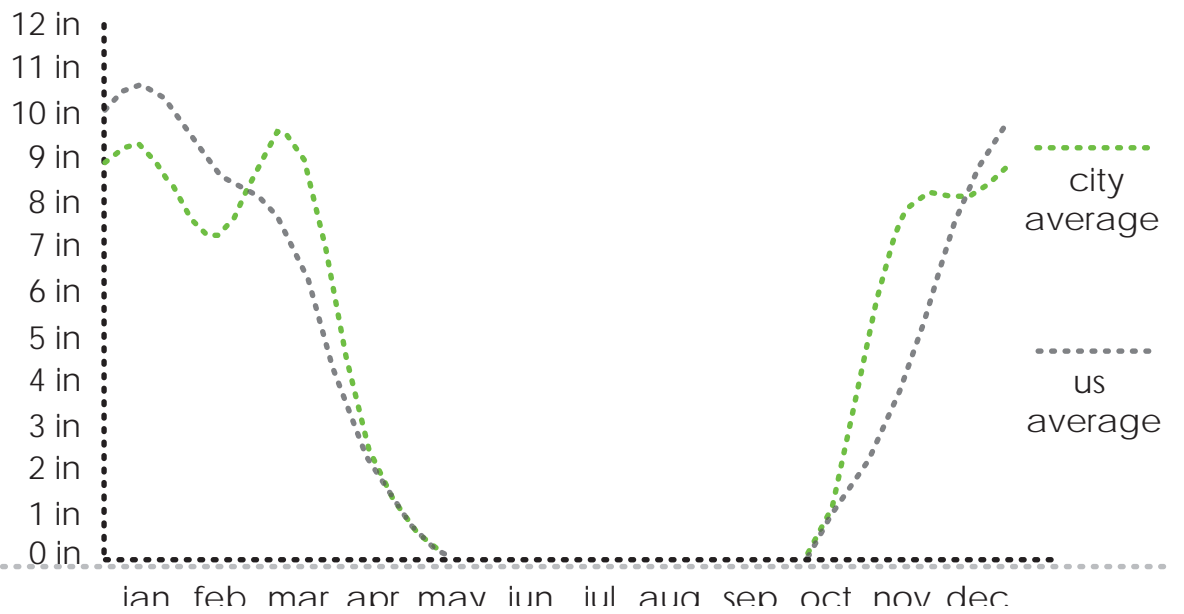
Humidity



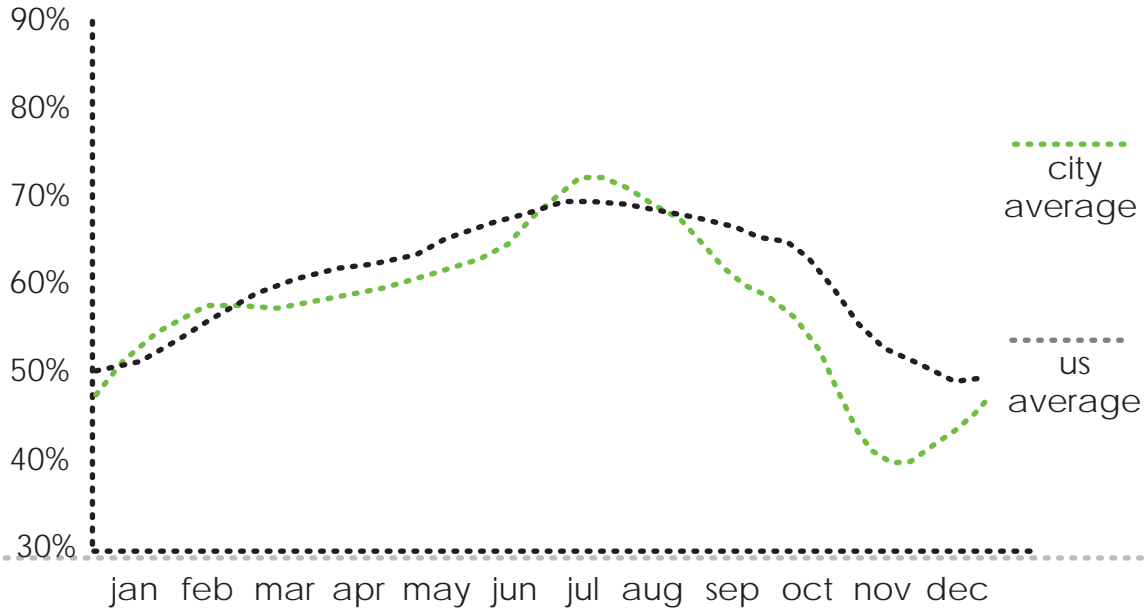
Precipitation



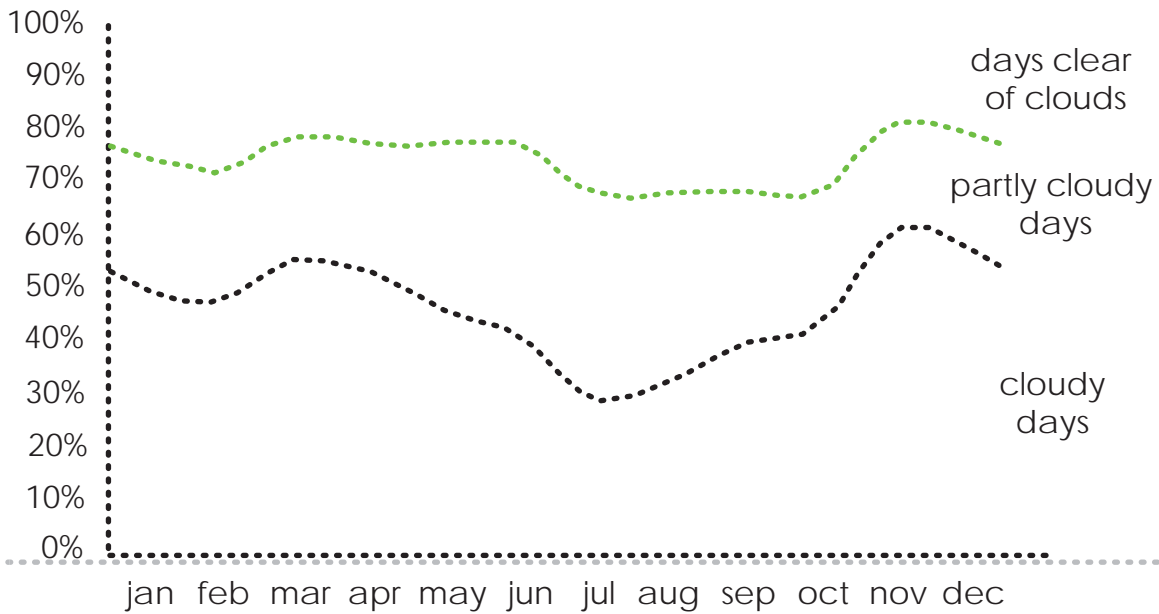
Snowfall



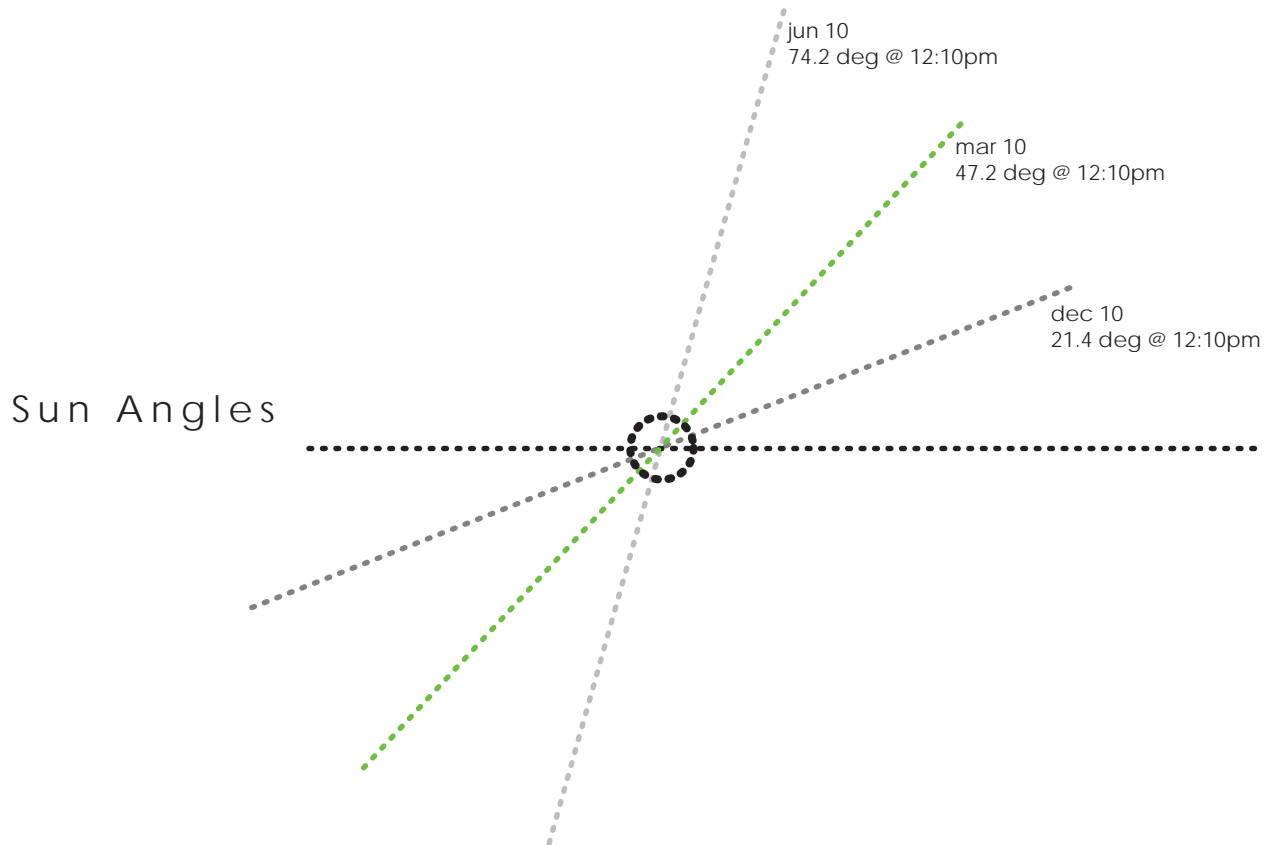
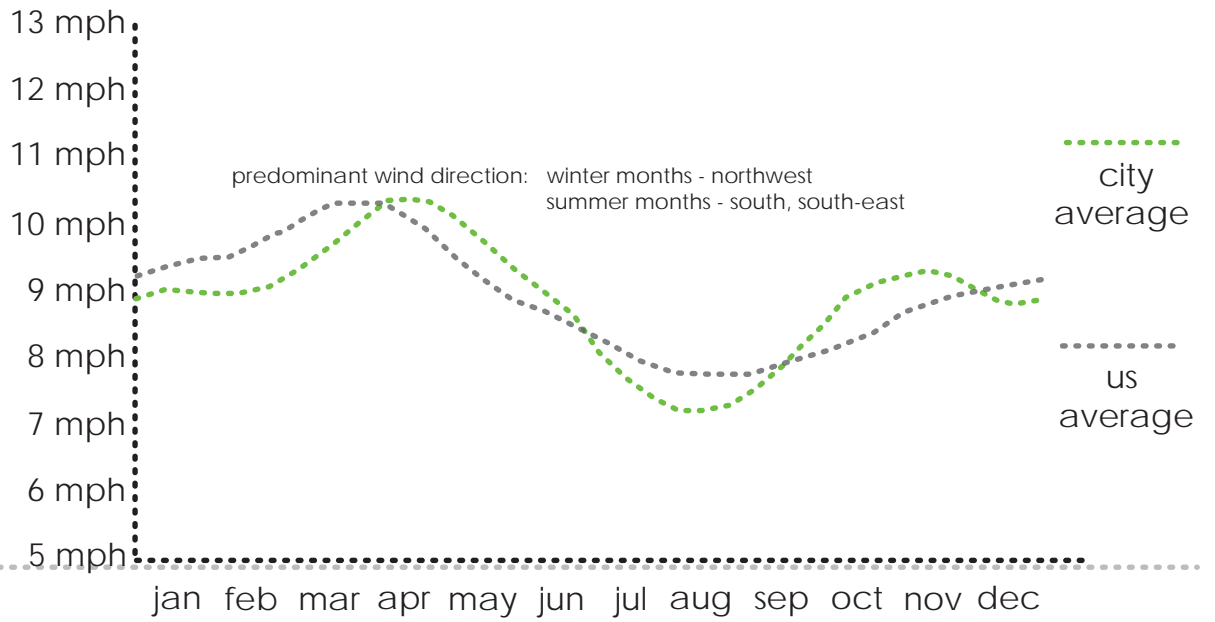
Sunshine



Cloudiness



Wind Speed & Direction





Space Allocation

.....4 Retail Spaces

each 1200 - 1600 square feet

.....Banquet Hall (Flexible Space)

6100 square feet

.....17 Hotel Rooms (overnight & suites)

each 320 - 750 square feet

.....Mixed-Use Lobby

3600 square feet

.....Restaurant

2800 square feet

.....2 Public Beach Spaces (Showers/Changing)

each 500 - 700 square feet

.....Public Beach Storage

150 square feet

Total Facility Area

47,596 square feet



apparel

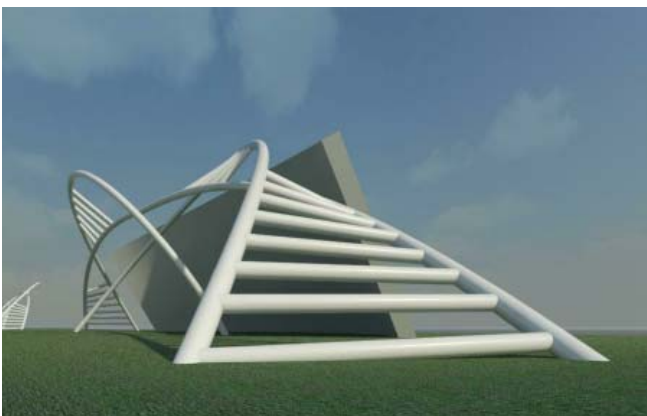
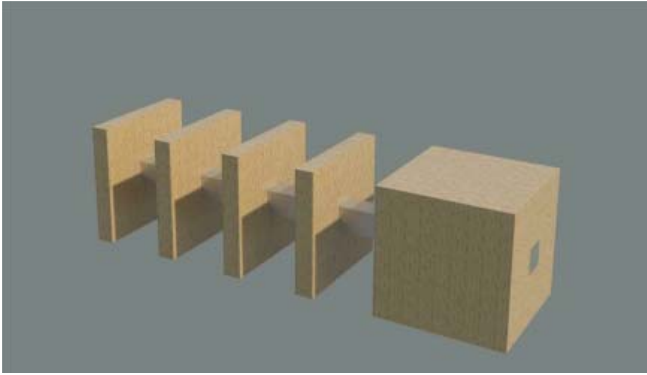
beach

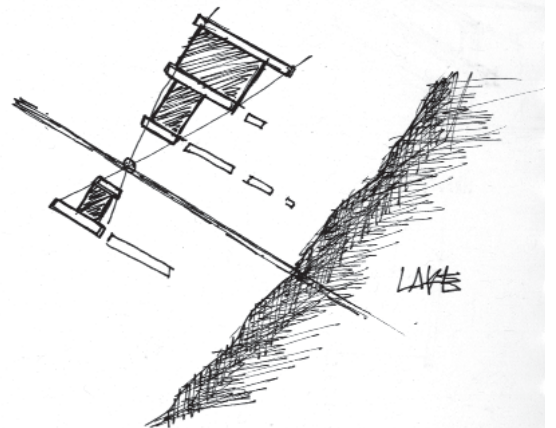
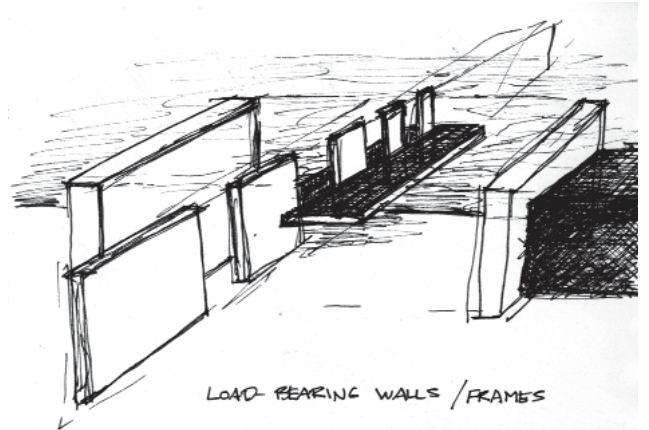
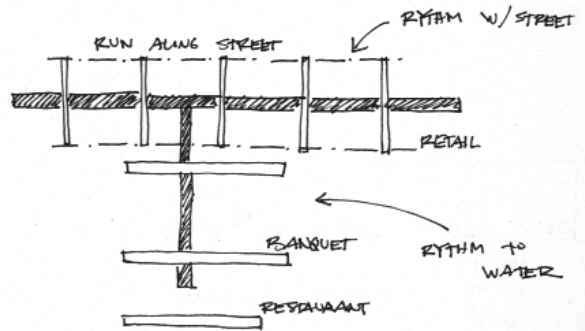
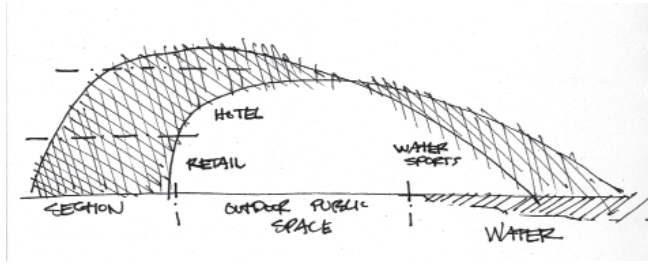
bait

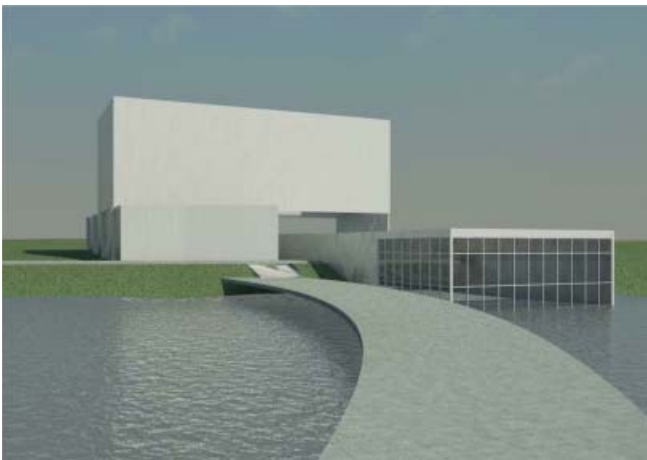
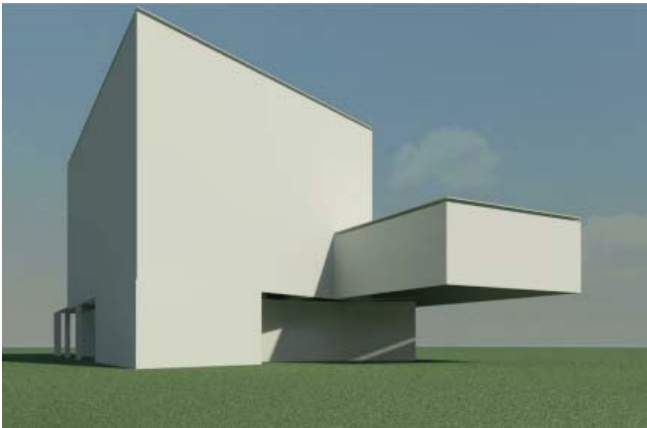
college

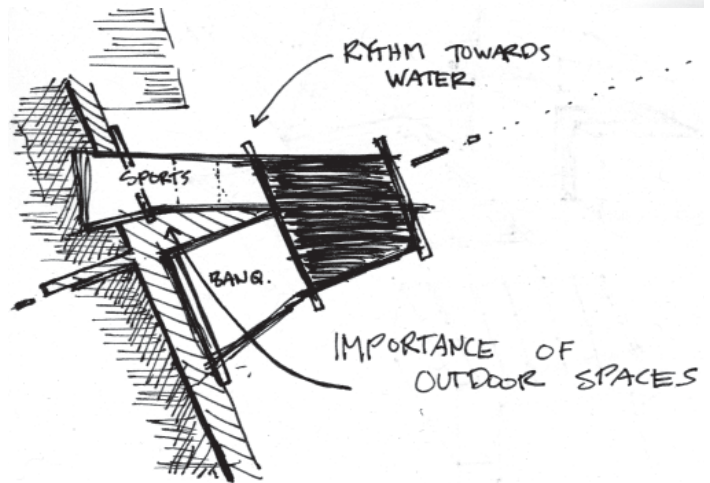
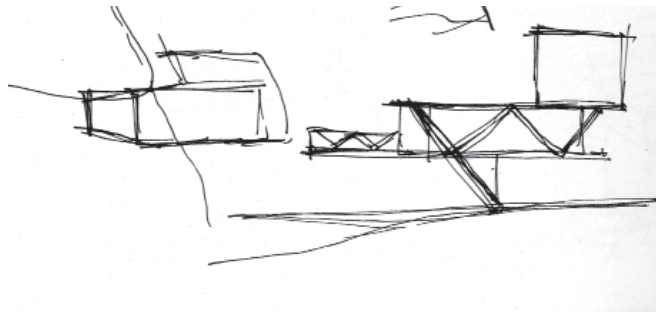
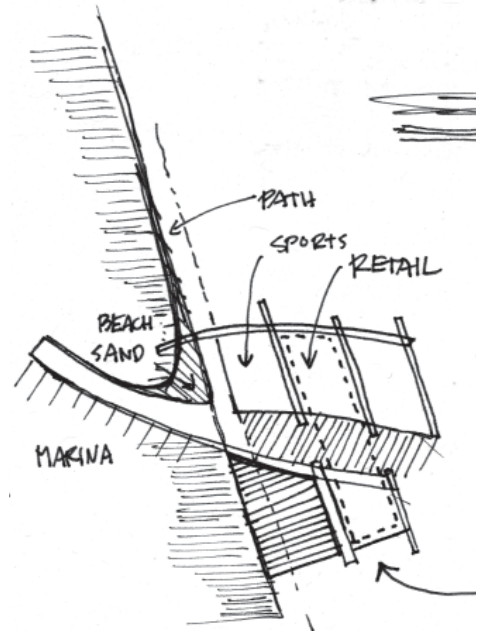
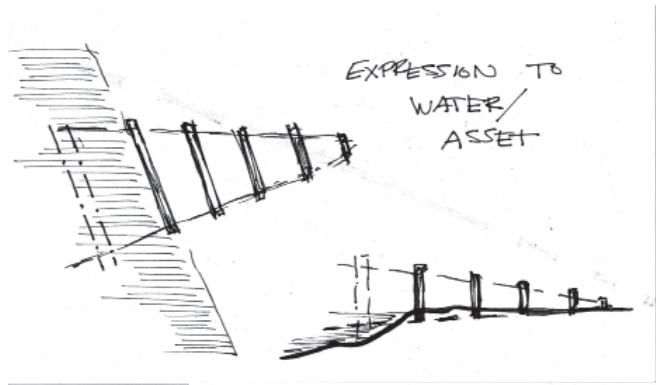


Design Documentation

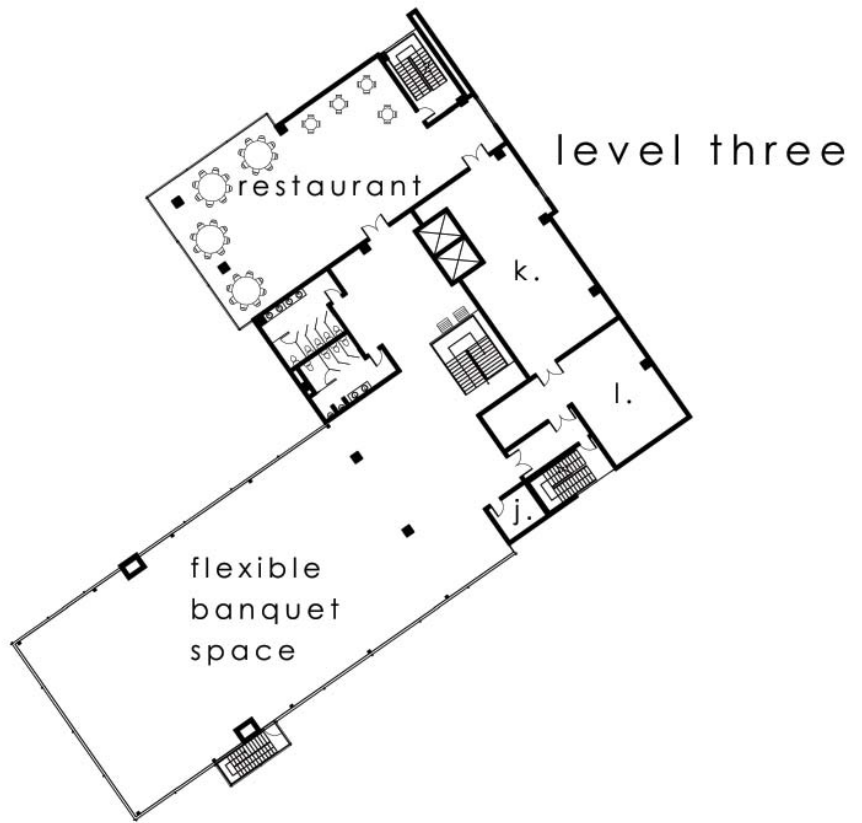


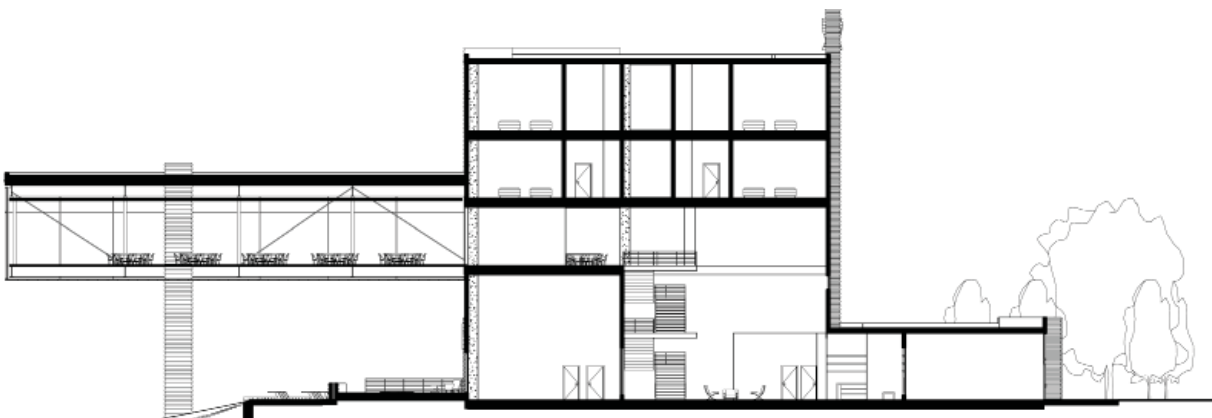
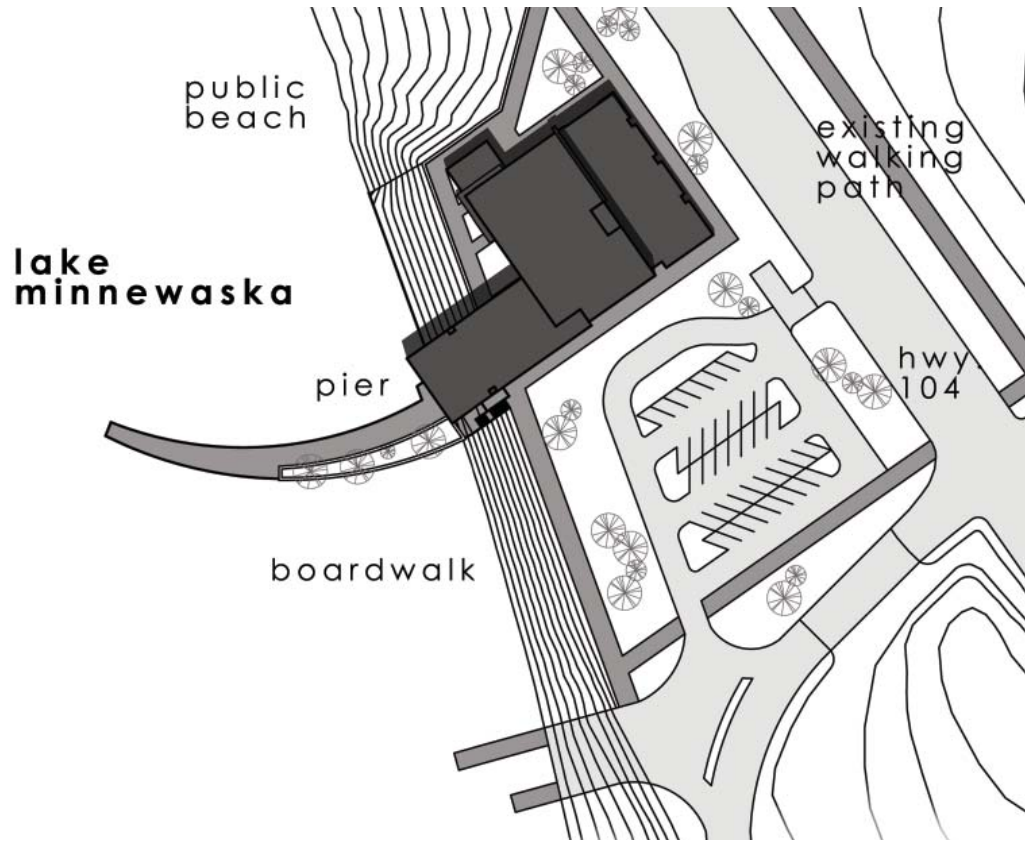






















beach perspective



building entry



hotel suite



mixed-use lobby



boardwalk



retail



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Personal Identification

Permanent Address:

1170 10th Street NW, Glenwood Minnesota,
56334

Email: jdouvier@hotmail.com

Tel: 320-808-5672

Hometown: Glenwood, Minnesota

"NDSU is a place where ideas are
generated and newness is created."