



Kyle Skar

+ Content

+2007

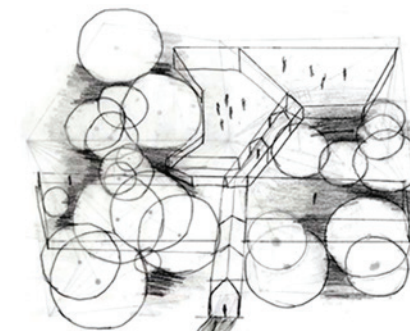
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+2008

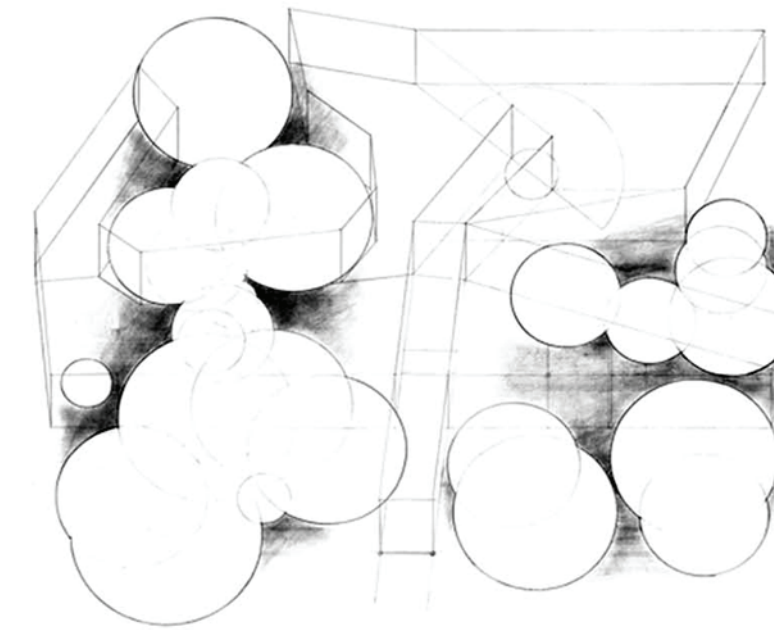
+2009

+2010

+ Kyle Skar



Process site diagrams

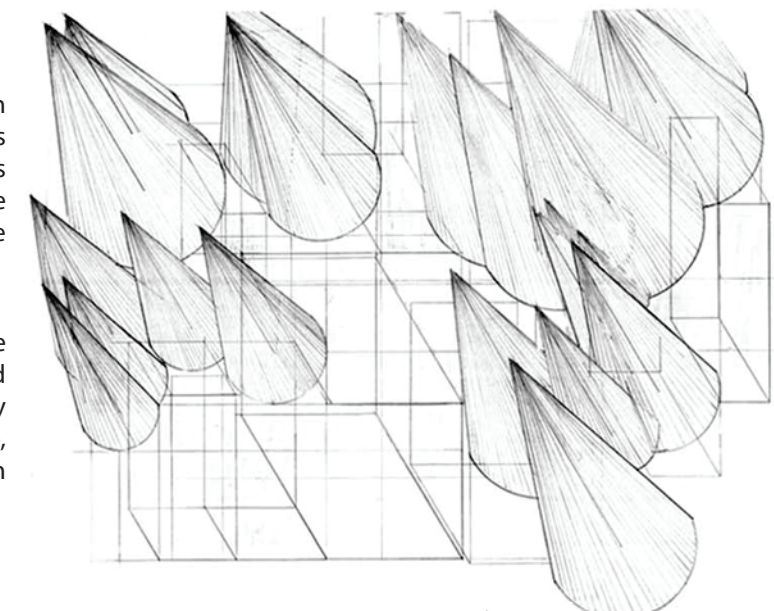


Final spatial relationship diagram

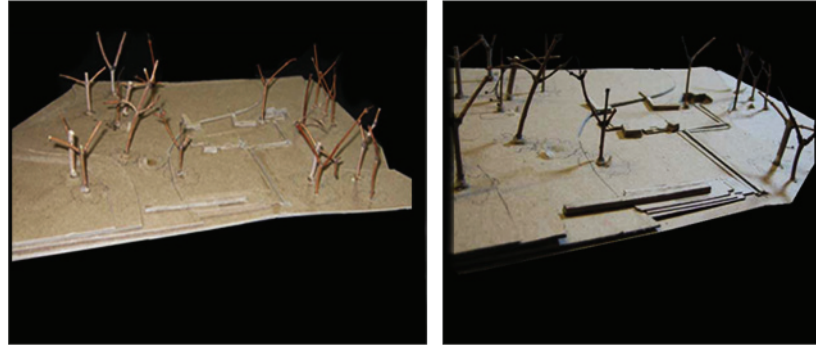
Manipulating the Ground Plane: Studio_1 Fall_2006 Professor_Benjamin Ibarra Sevilla

The primary focus of this project was to refine and develop spatial concepts through manipulating the ground plane. Our site was located in a wooded area adjacent to the St. Johns University Campus in St. Cloud Minnesota. This location is a gathering place for students that is defined by a grove of Norway Pines. These trees were planted by the Abbey Monks to divide the field into a series of outdoor rooms. Early iterative diagrams of the site helped me discover the geometries of the site. The trees quickly became the dominate spatial drivers.

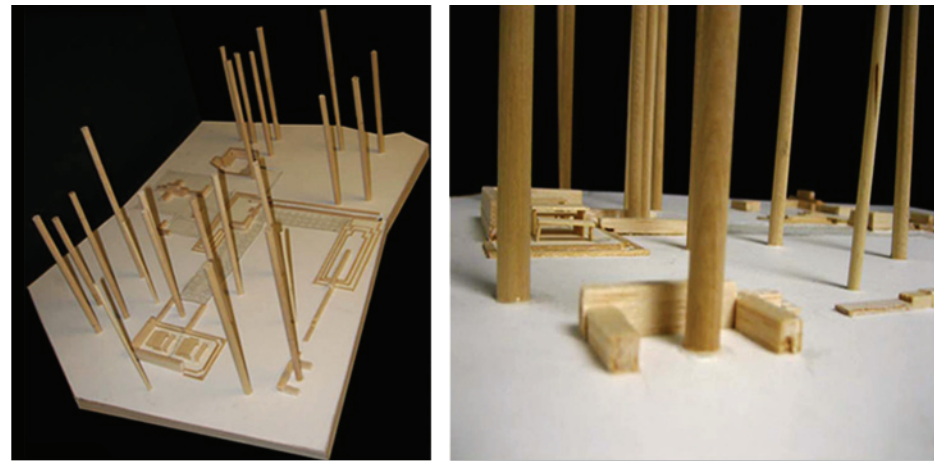
After the spatial sequence of the site was fully understood. A series of study models were made to analyze manipulations to the ground plane. I decided that the ground plane should contrast the pronounced vertical elements of the trees. Each step up of earth and pavers subtly defines its edge in the field. Platforms of gathering and reflection stride across the landscape, interacting with the trees. Each platform grows out of the earth and is covered in grass and an indiscriminate border of granite pavers.



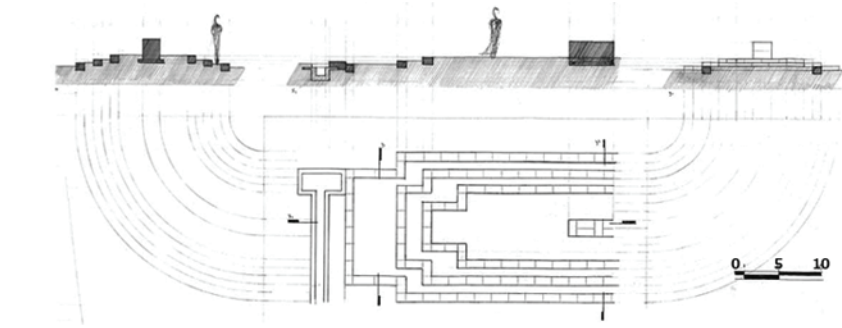
Final soft and hard boundaries diagram



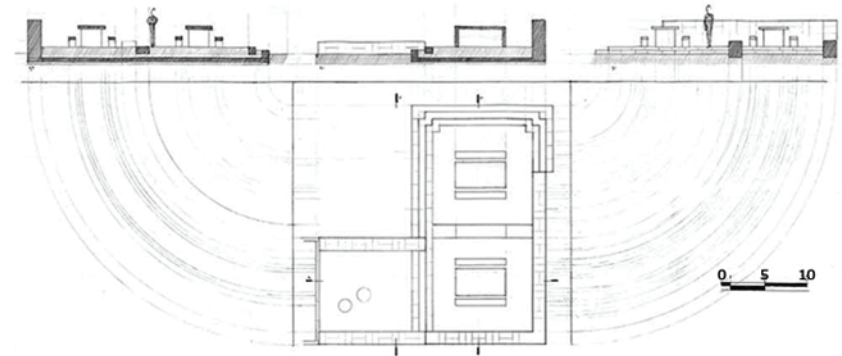
Process Site Models



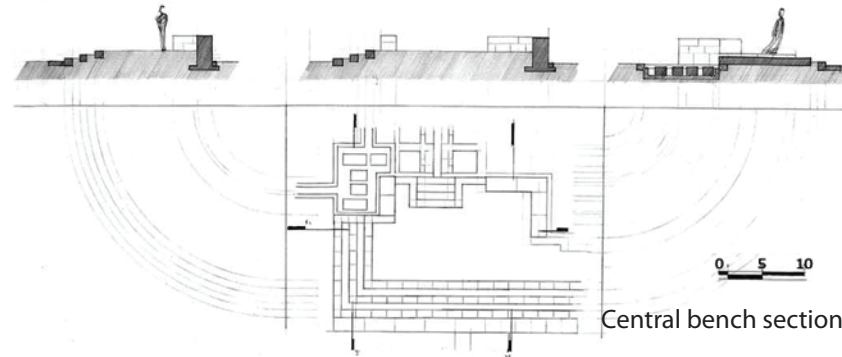
Final site model



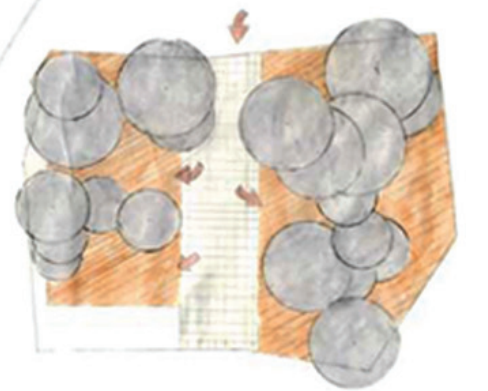
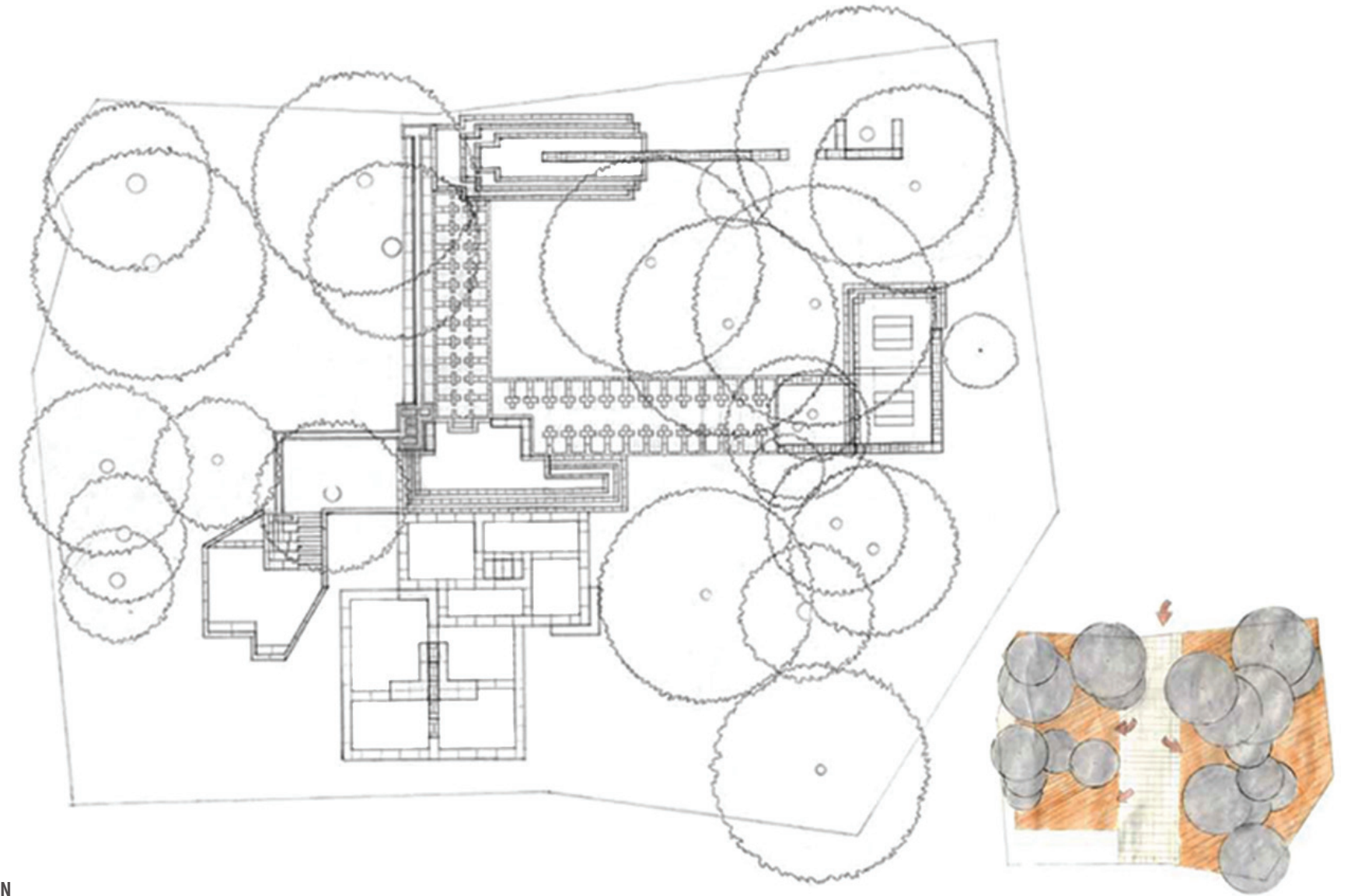
Entrance section



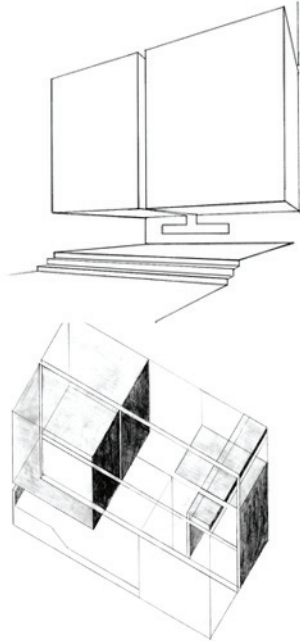
Picnic pavilion section



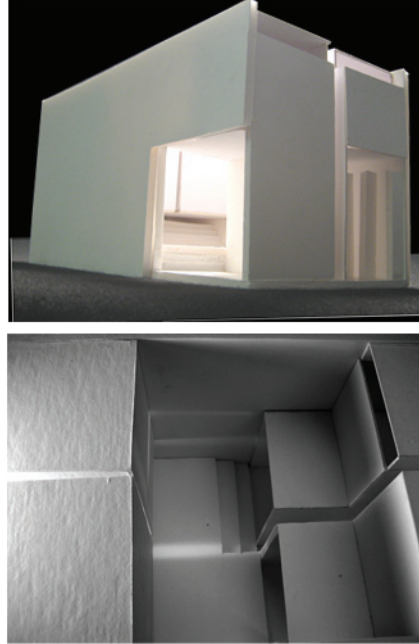
Central bench section



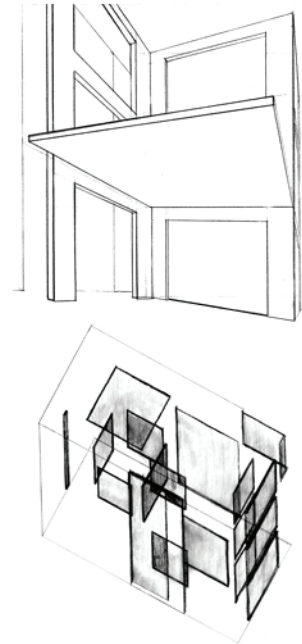
Final site plan



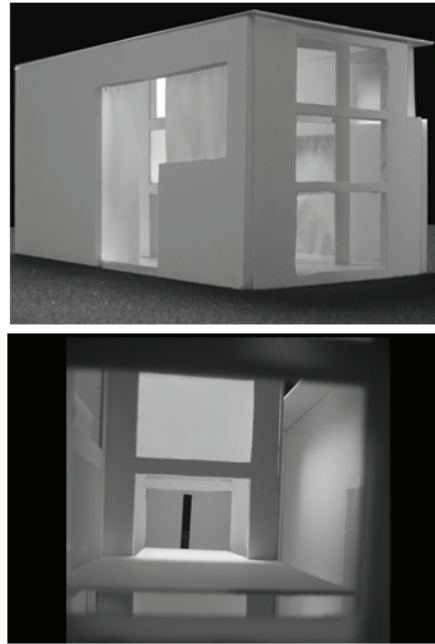
Perceived solid and void



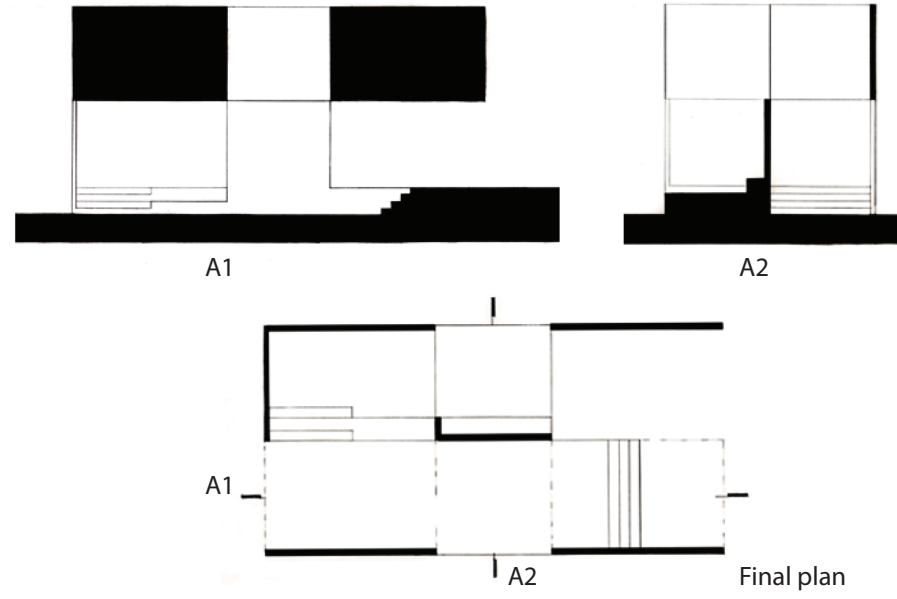
Final opacity study



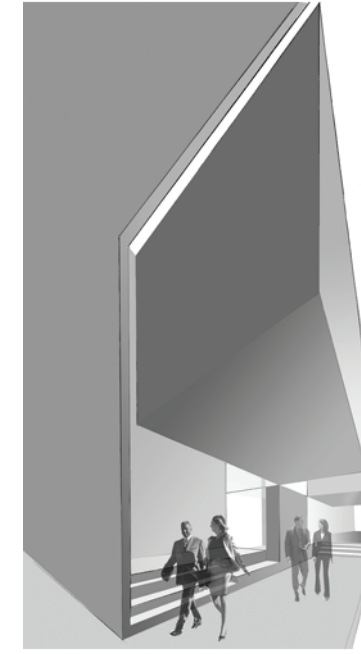
Division of layers



Final transparency study



Final plan



Interior Perspectives

Movement and Waiting Space: Studio_2 Spring_2007 Professor_Martha McQuade

This project involved studying the inherent properties found in transparency and opacity. The final objective of this studio project was to create a movement and waiting space. Transparency can be used to define volumes while revealing their structure. This quality can create a dynamic composition in relationship to opaque materials. Opacity can be used to create solid and void spaces within a greater whole. An opaque wall adjacent to a transparent opening creates a situation of edge, transition and order—an order of light, solid and void.

The design process involved a series of model and drawing studies that investigated the inherent properties of transparency and opacity. These iterative studies in formed the physical properties of my final movement and waiting space. The program of this project was simple. It was known that the space was a given dimension that connected to distinct volumes. With this in mind I wanted to enhance the experience of moving through a volume of space while creating a seamless transition into the waiting space. In the end this created a space defined by solid, void, and symmetry.

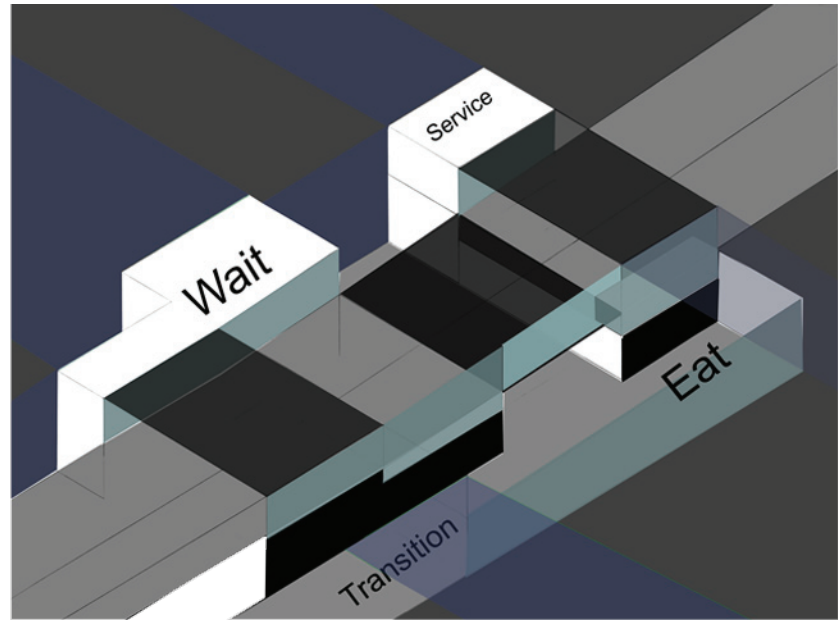


Final Model

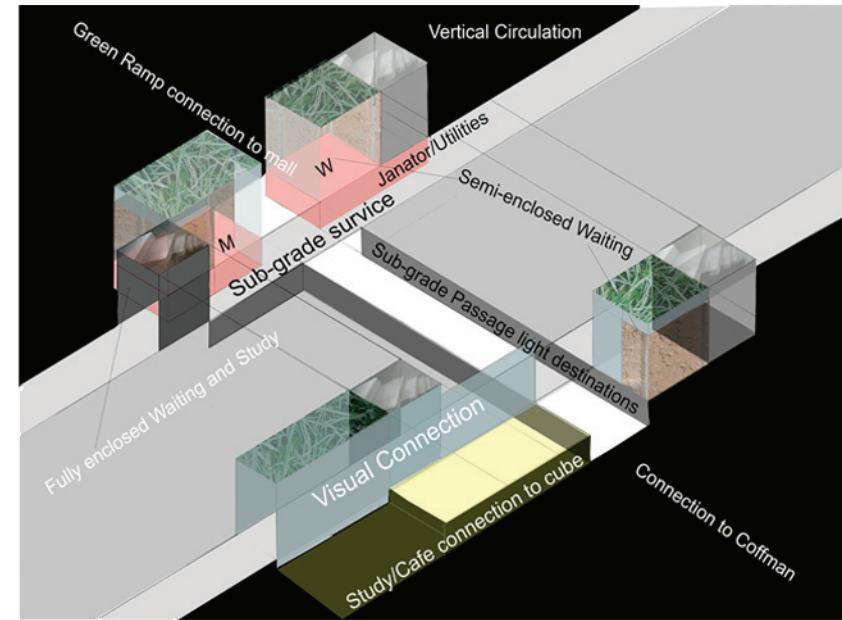


Final Model

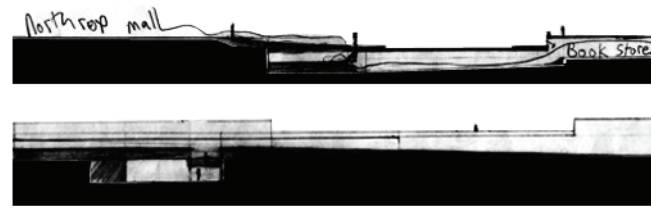




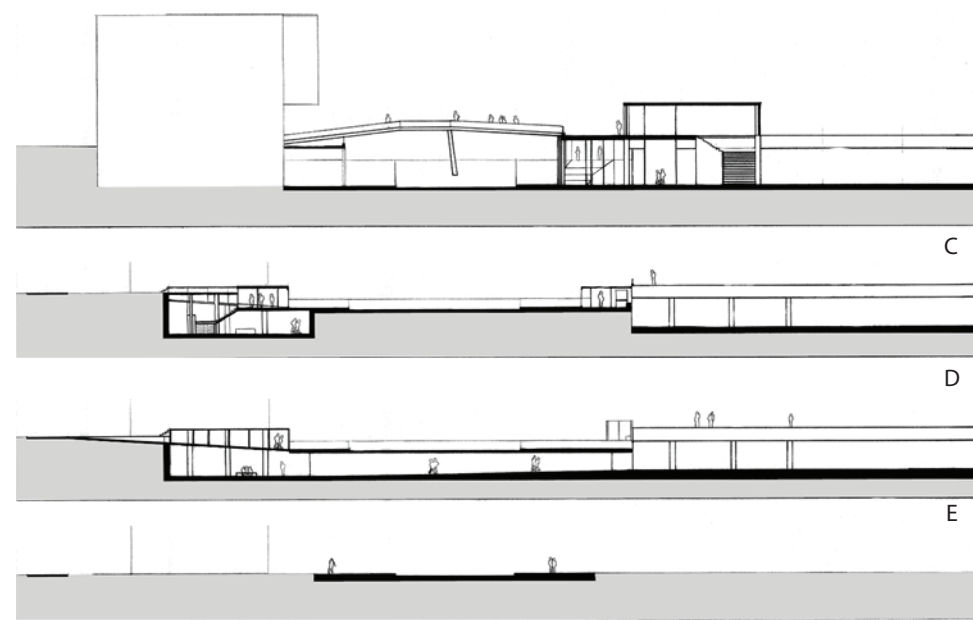
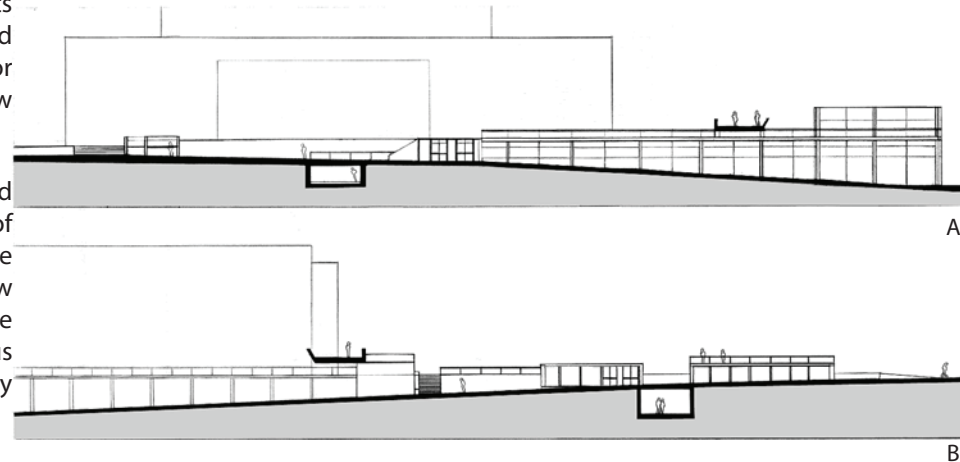
Process Volumetric program diagram



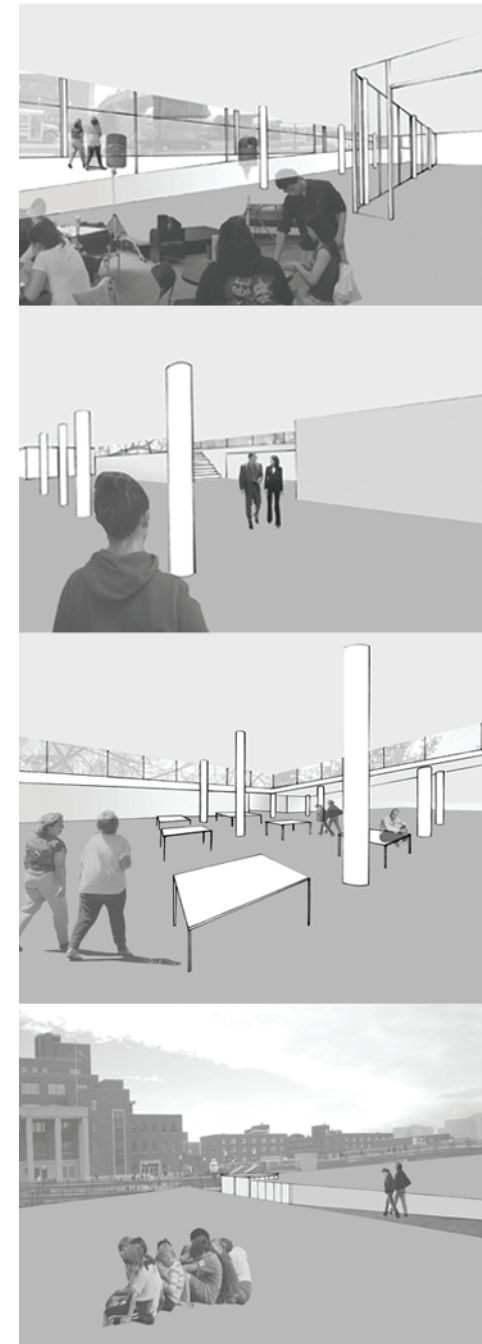
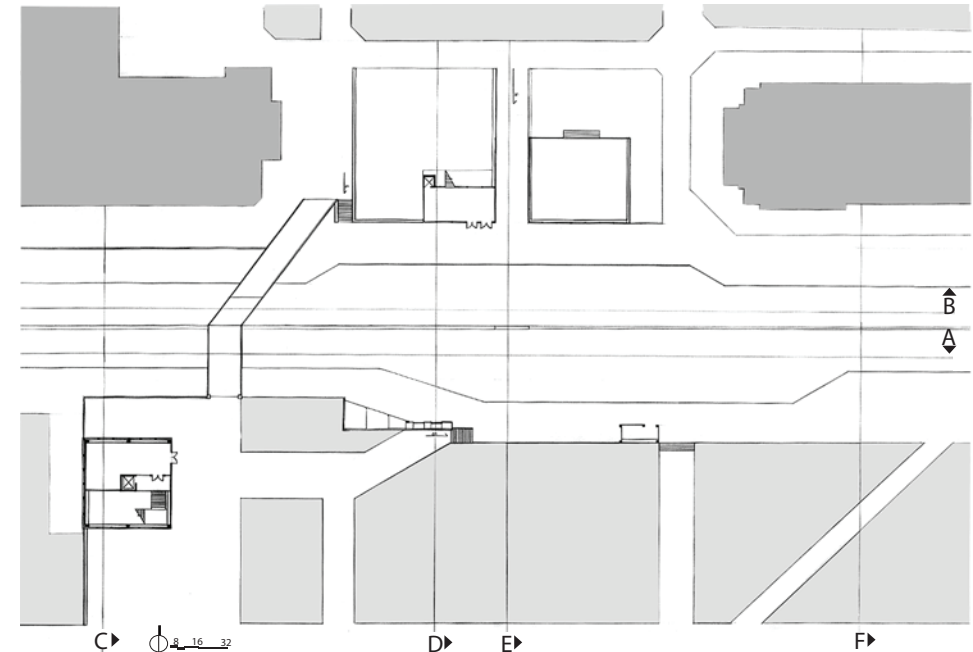
Final Volumetric program diagram



Process site sketches



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View from cube in Coffman Union

View from Coffman Book Store

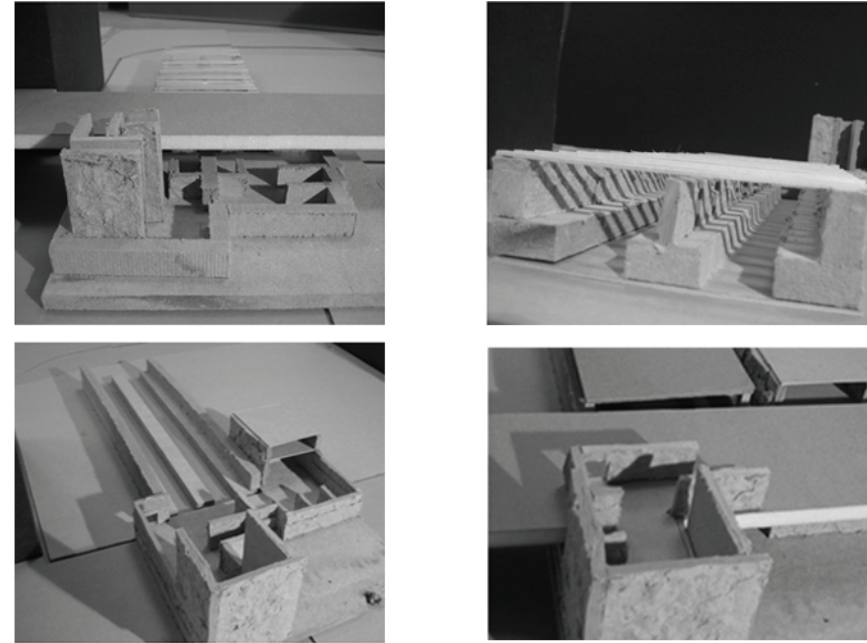
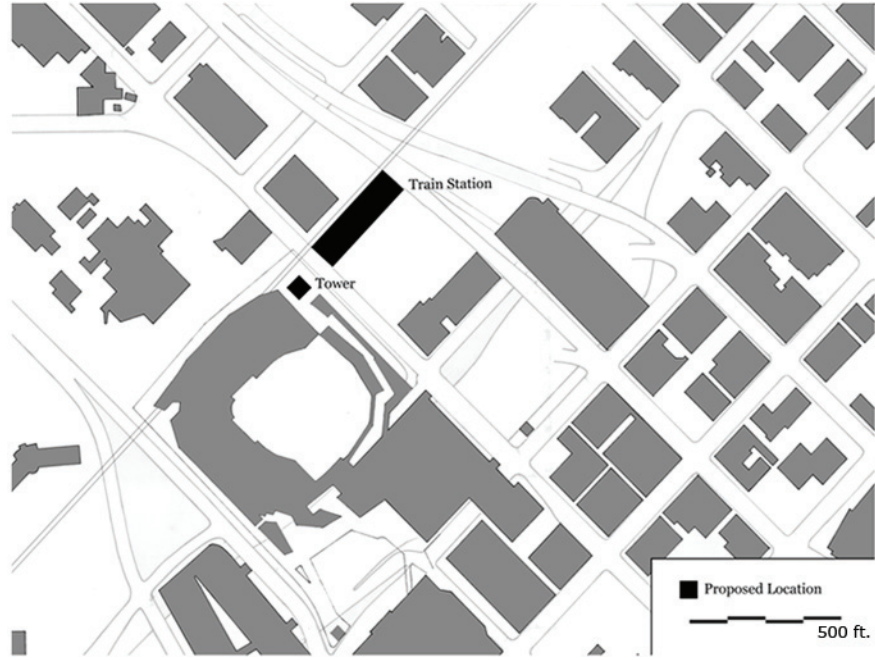
View from sub-grade waiting space

View from Northrup Mall

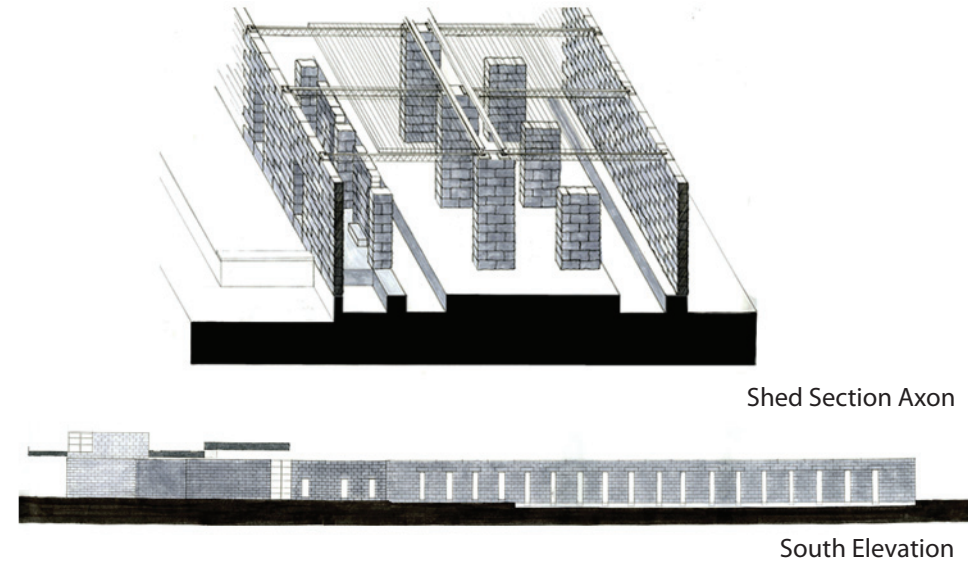
Reformatting the Coffman Union Bus Stop: Studio_2 Spring_2007
Professor_Martha McQuade

The site of this project is located on the University of Minnesota Twin Cities Campus in Minneapolis Minnesota. The bus stop in front of Coffman Memorial Union is a temporal space. It represents a transition between work and school--home and friends. In its existing condition the sites program is fragmented and defensive. Obstructed views and hard boundaries create an environment that is unwelcoming and disorienting. In order for this site to function properly a welcoming space a clear continuity of circulation and view must be established.

From the understanding of transparency and opacity in the previous project. I developed a stable program for the Coffman Memorial Union bus stop. Through a process of volumetric programming diagrams I started to define new the new boundaries of the site. These diagrams helped inform me of areas where continuity of circulation and view were lacking. In reference to my program diagrams and early sketches a new sub-grade connection became important. This would soften the boundaries of the site and save bus patrons valuable time in their commutes. Overall my final design embraced the diversity of the site while creating an overall sense of continuity of space.

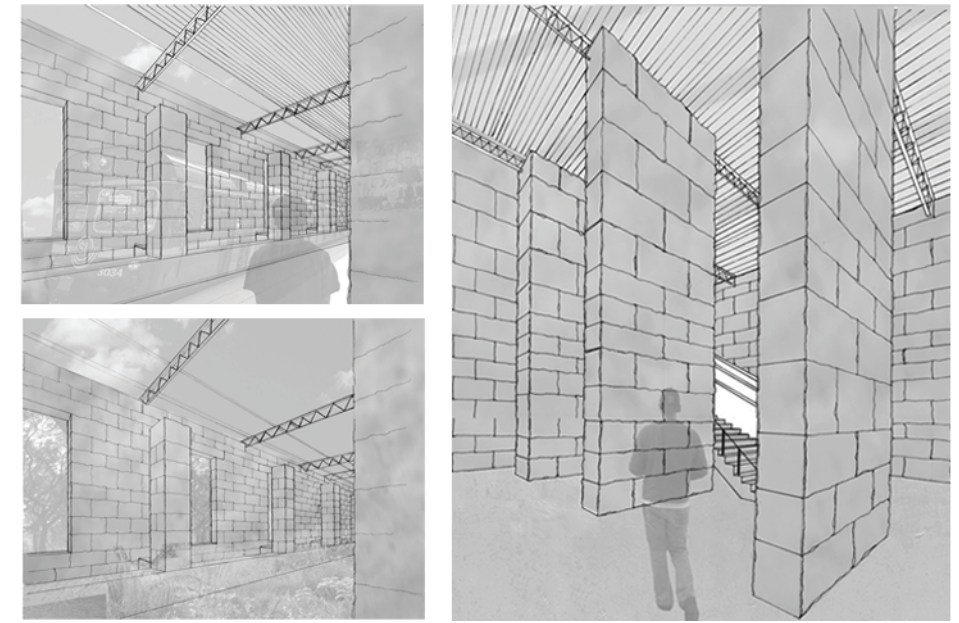


Program massing study models



Shed Section Axon

South Elevation



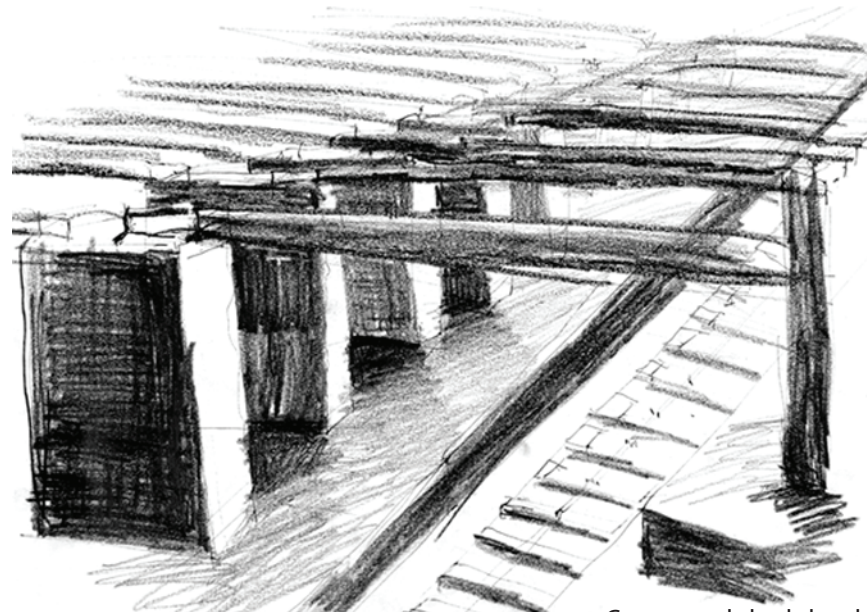
Shed perspective now and after 100 years

Perspective at circulation core

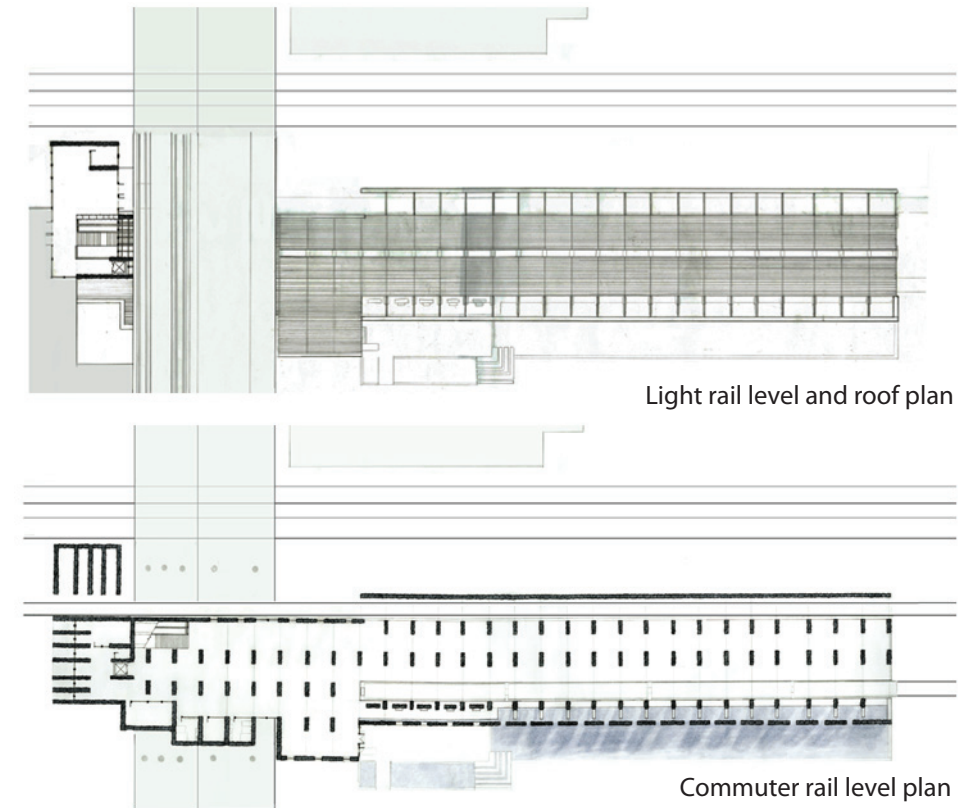
North Star Commuter Rail (Bearing Wall Project): Studio_3 Fall_2007
 Professor_Bob Ganser

In this studio we developed projects inspired from material properties and construction techniques. Our site was located at the terminus of the North Star Commuter Rail, Minneapolis Light Rail, and adjacent to the new Minnesota Twins baseball stadium. The layered nature of the sites program required negotiating two different elevations, that of the overpass level where the light rail connects with the baseball stadium and that of the commuter rail at ground level. The derelict site existed in a carved out void where primary circulation corridors overpassed the ground level. It was our primary project goal to compose a building to connect all the layers of the site based on our material choice.

Due to the caved out nature of this site, my preliminary material choice was a local Minnesota dolomite limestone. Traditional bearing wall construction has reflected the stereotomic nature of the earth for centuries. A load bearing wall tells a story of how it was constructed, while relating to its origins and massing as a layer of strata. To begin my design process I developed a series of program massing models and sketches. These drawings and models helped me refine the relationships of the site and provided fertile ground for the design which followed. I wanted the material properties of the stone to reflect the existing site characteristics and create an environment that could change over time.

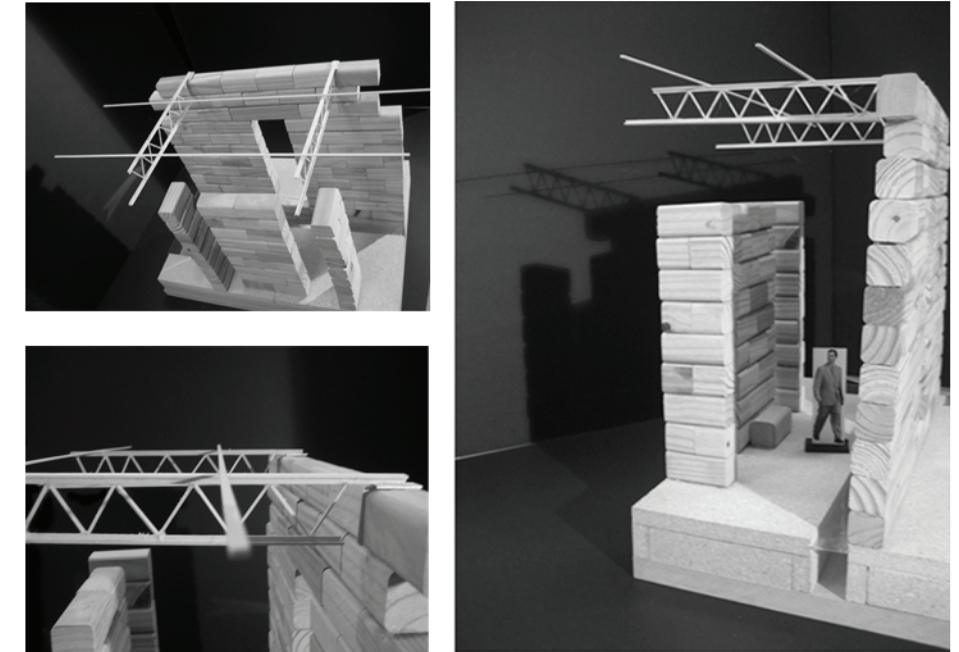


Conceptual shed sketch

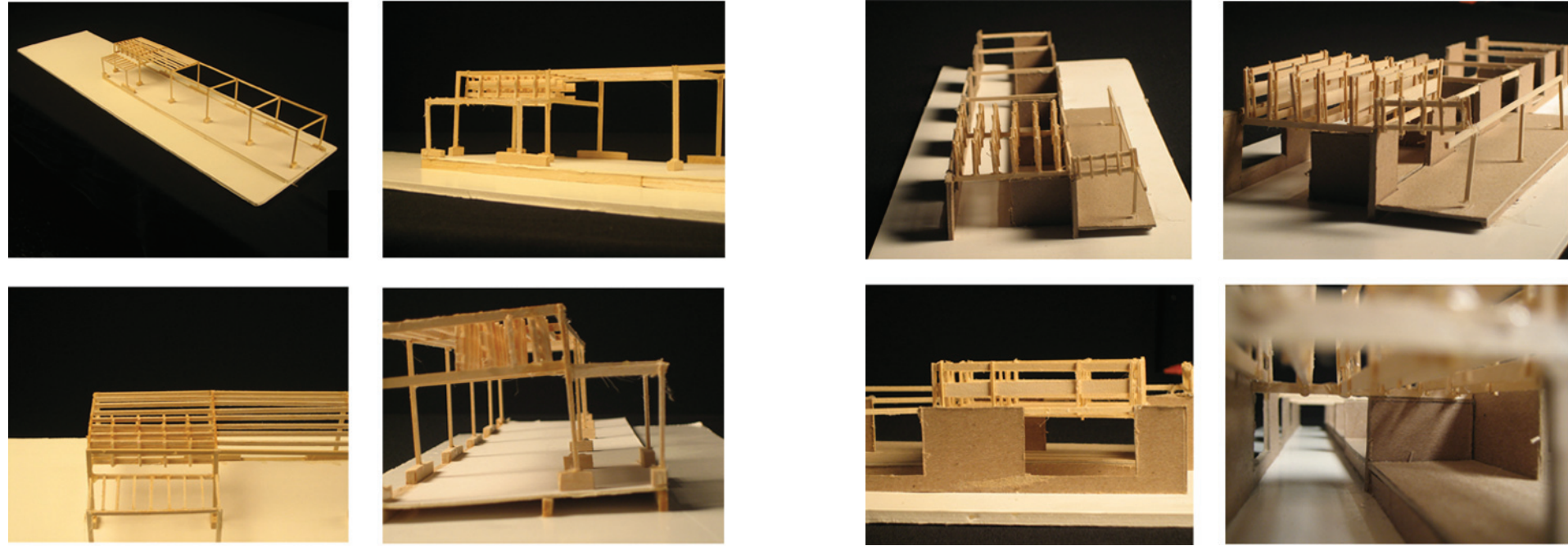


Light rail level and roof plan

Commuter rail level plan



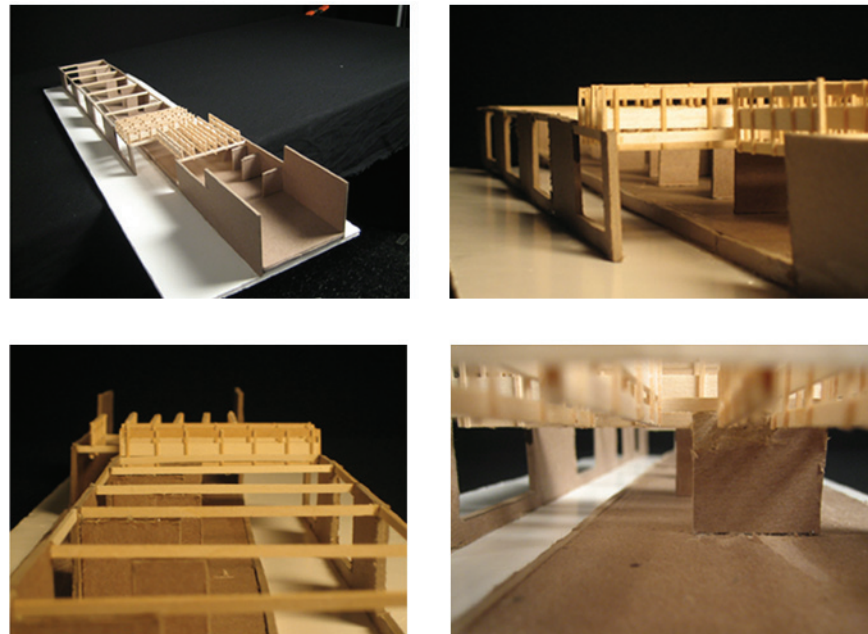
Final detail model



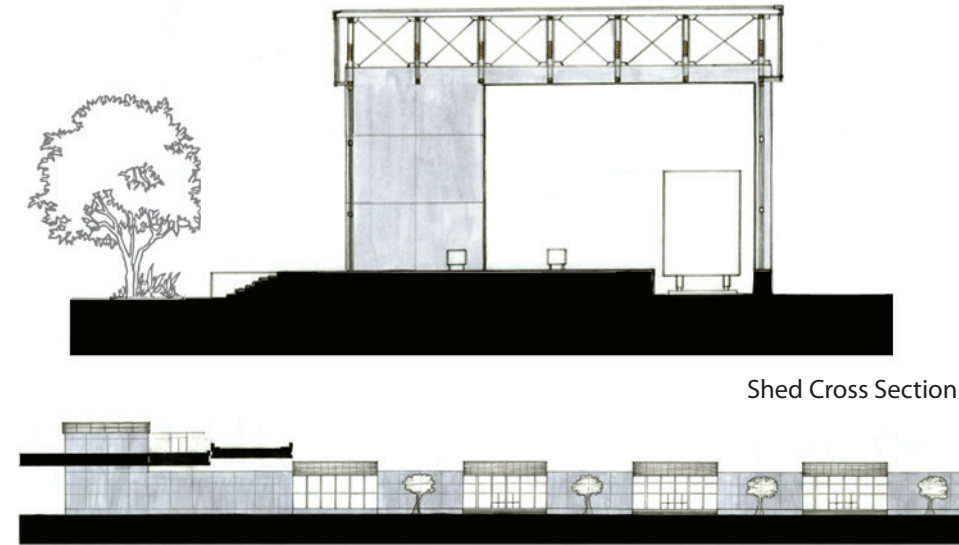
North Star Commuter Rail (Tectonic Frame Project): Studio_3 Fall_2007
Professor_Bob Ganser

The second project of this studio utilized the same site as the bearing wall project. However, a different material and building system was used. A tectonic building system is one that is comprised of smaller members, which work together to create a larger structural system. Through what I learned about the site in my first project I wanted to create a tectonic system that spanned great distances, while creating a volume of space. This volume of space and depth of structure can integrate the interior of the building with the layers of the site on the exterior. To achieve my project goals I studied a gluelam steel truss system that was paired with site cast and precast concrete members.

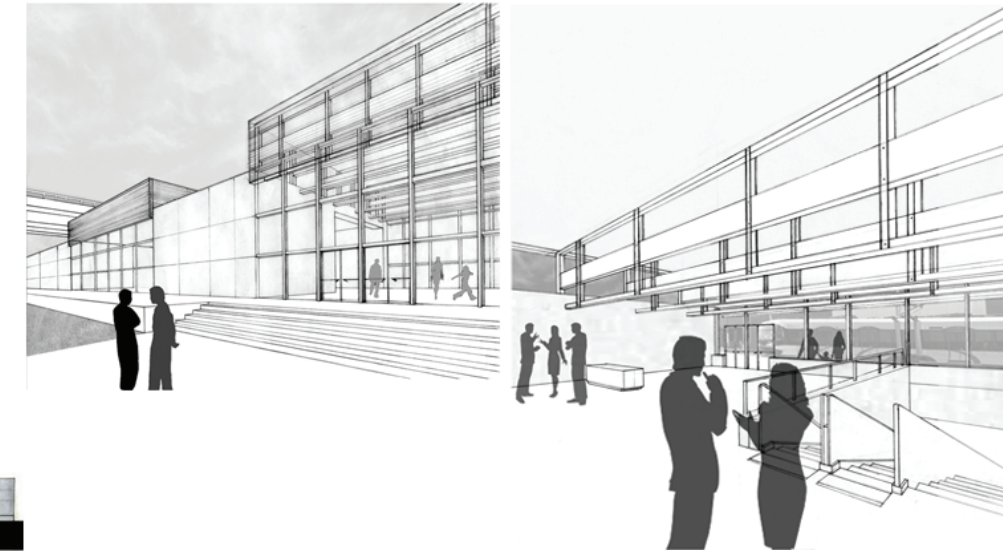
The solid areas servant spaces of the building became areas where the concrete system was deployed. This created transition areas where the truss system was used. A metal fabric cladding system was used to cover the truss system while allowing light to filter into the building. This cladding application would illuminate the interior during the day and delineate the exterior facade at night. The relationship of the solid concrete mass and tectonic volume was reinforced in the exterior landscape with the planting of several groves of maple trees. These exterior vertical volumes would divide the site while drawing commuter rail patrons in and out of the building.



Frame iterative studies 1-3

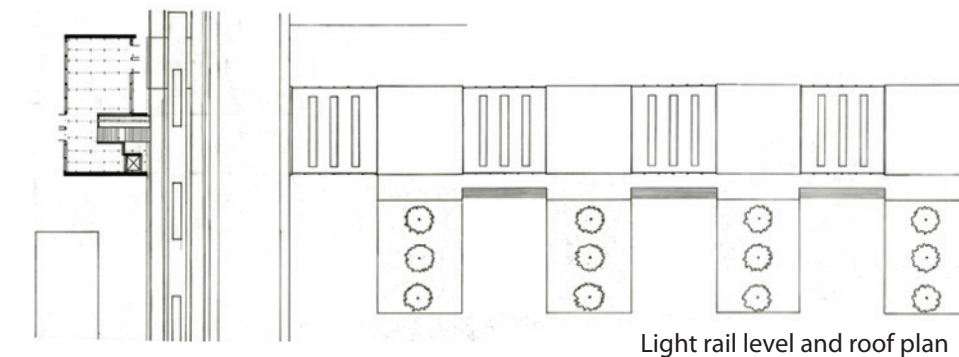


Shed Cross Section

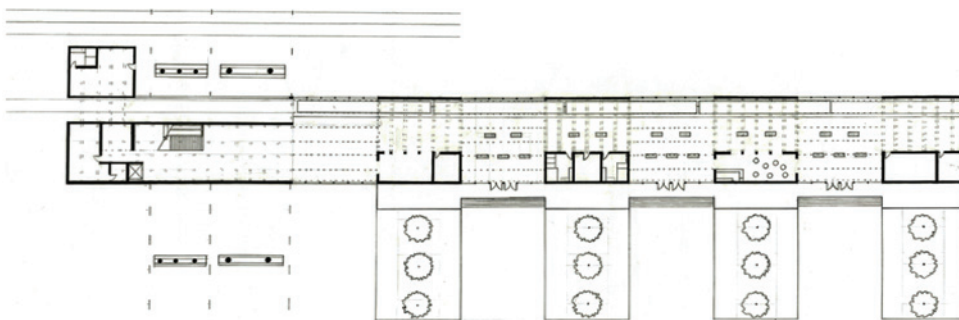


Exterior perspective

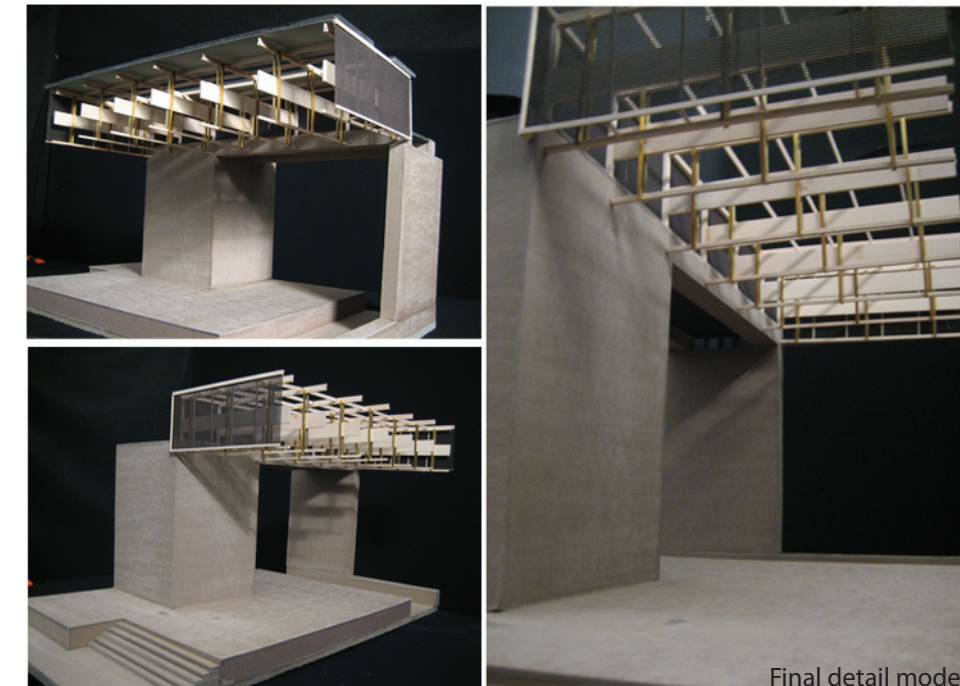
Light rail platform interior



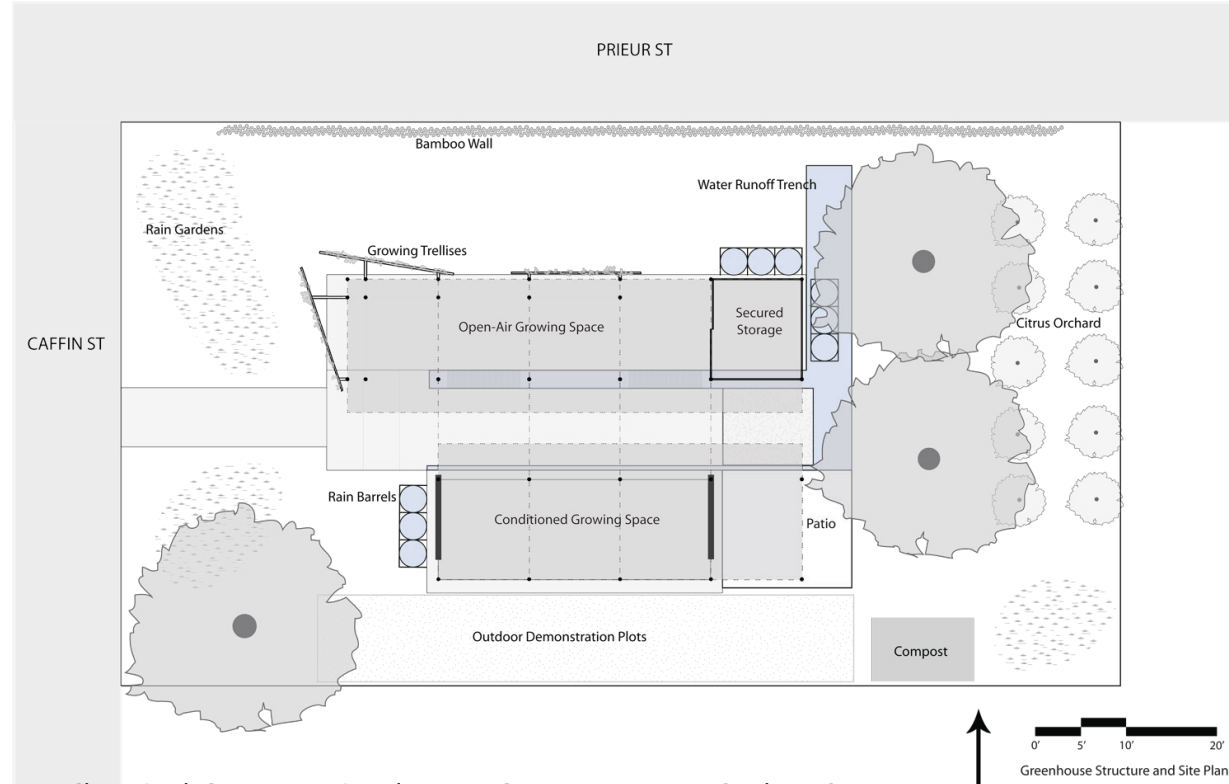
Light rail level and roof plan



Commuter rail level plan



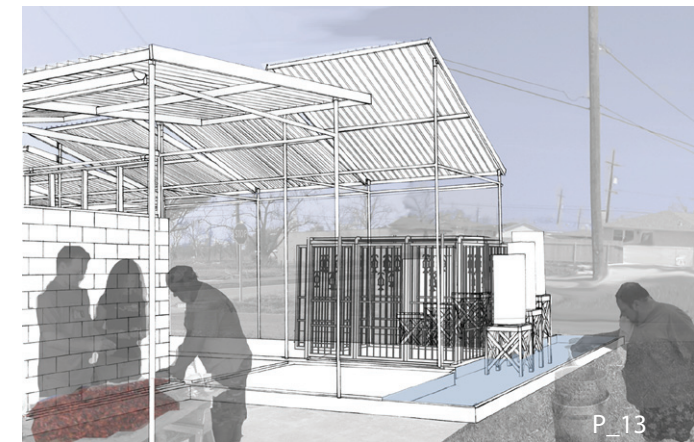
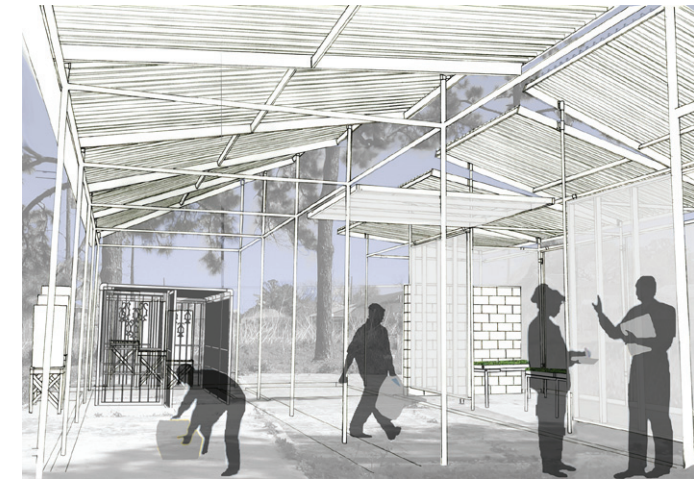
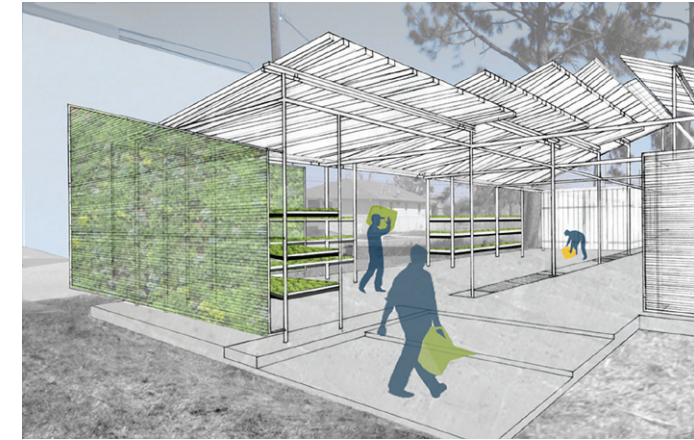
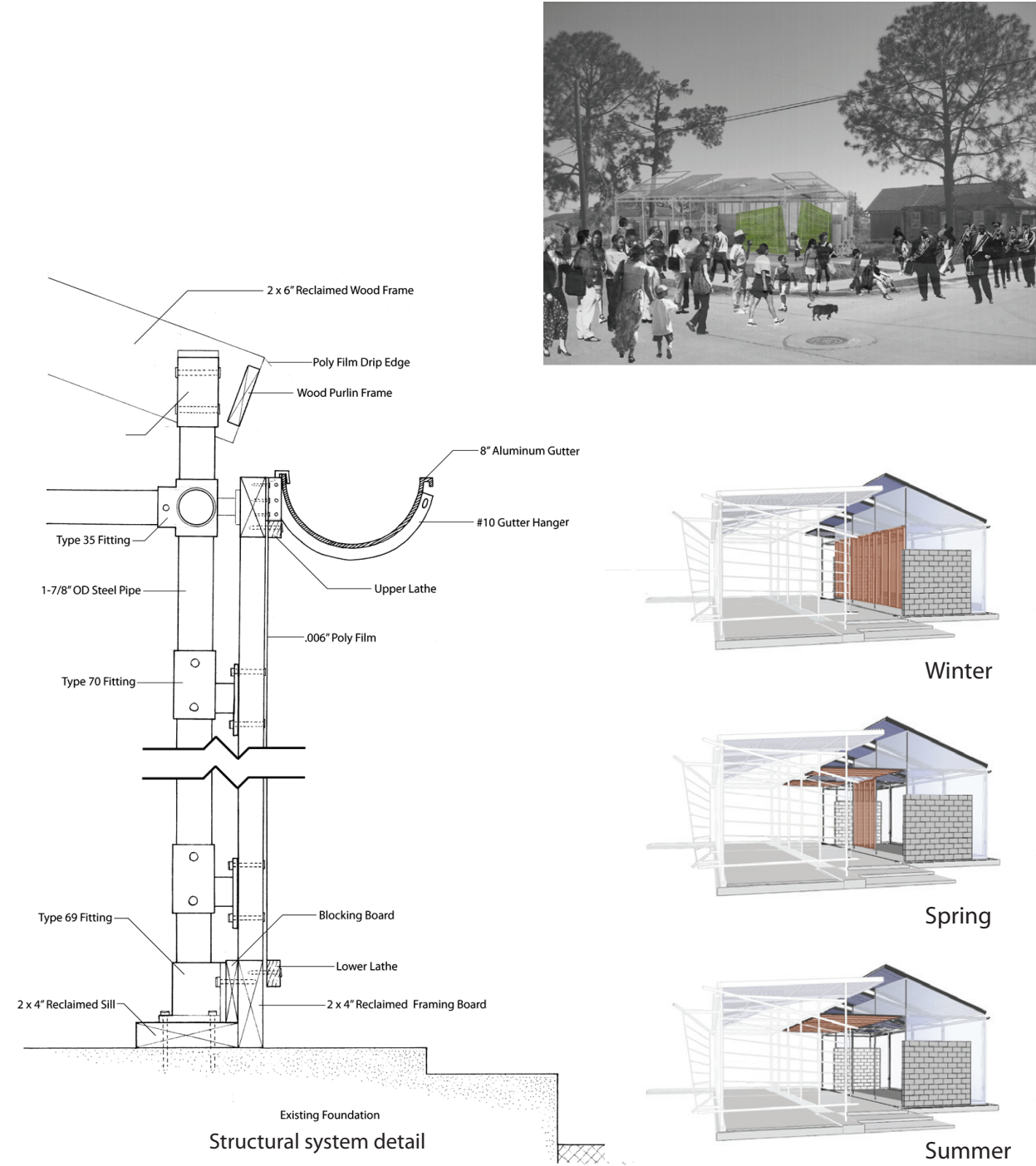
Final detail model



2008 Chase Bank Community Development Competition Entry: Studio_4 Spring 2008
 Professor_Thomas Westbrook
 Project team: Kyle Skar, Christine Warnert, Jake Lewis, Michael Sobol, and Jodi Wilson

The Case Bank Community Development Competition is was developed to benefit the lower ninth ward in New Orleans, LA. Our design studio collaborated with a local New Orleans 501 (3) (c) organization named the Renaissance Project, who is focused on redeveloping the community garden and farmers market infrastructure in New Orleans. We lived and worked on site in New Orleans for two weeks to gain a more concrete understanding of the true needs of the community. This immersion into the site and project constraints provided our studio with a stable foundation of knowledge to work from.

The portion of the competition entry seen here is a community green house. This element of the project will be used as a seed plant producer. Once plants started in this greenhouse have reached a suitable stage of growth they are transferred to local community gardens. Citizens are able to buy stock in these plants, therefore providing a family with locally produced vegetables and fruits. The footprint of the greenhouse site is defined by the foundation of a house that was devastated in Hurricane Katrina. In order to create the most adaptable and affordable structure we chose a system that consists of aluminum fence post members and connections, dimensional lumber, and a polyurethane membrane. This green house is light on the site while providing a formative visual presence in the community.





Shrinking Cities Literally: Grad Studio_2 Spring_2009
Professors_Mark Linder and Julia Czerniak

What is a "shrinking city"? This term can be defined as a city in which vacant lots are on the rise, while population and municipal tax bases are decreasing. Syracuse, New York has been declared a shrinking city and was the site of this work. The primary objective of the studio was to devise a strategic model of operation and catalyze new territories of urbanity in Syracuse. The scale and complexity of each project varied. My goal was to define critical intersections of existing infrastructures and reformat them to better suit the cities needs.

Sited on the edge of Syracuse University's campus and highway 81 is a public exhibition space. This structure is meant to be the primary source of capital to fund other smaller scale catalysts. The galleries imbed themselves into the site, thus creating a stage that faces the city. The urban theater performed at this site establishes a new level of visibility for the infrastructure of the city. The possibilities are endless.



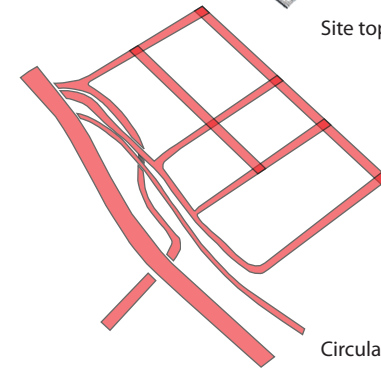
Existing site conditions



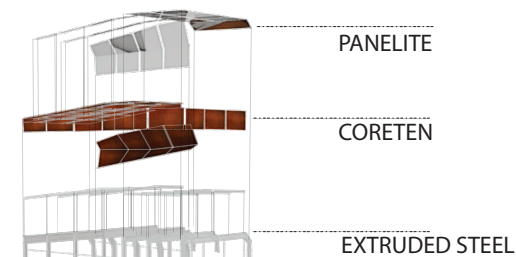
Site section A-A



Site topography



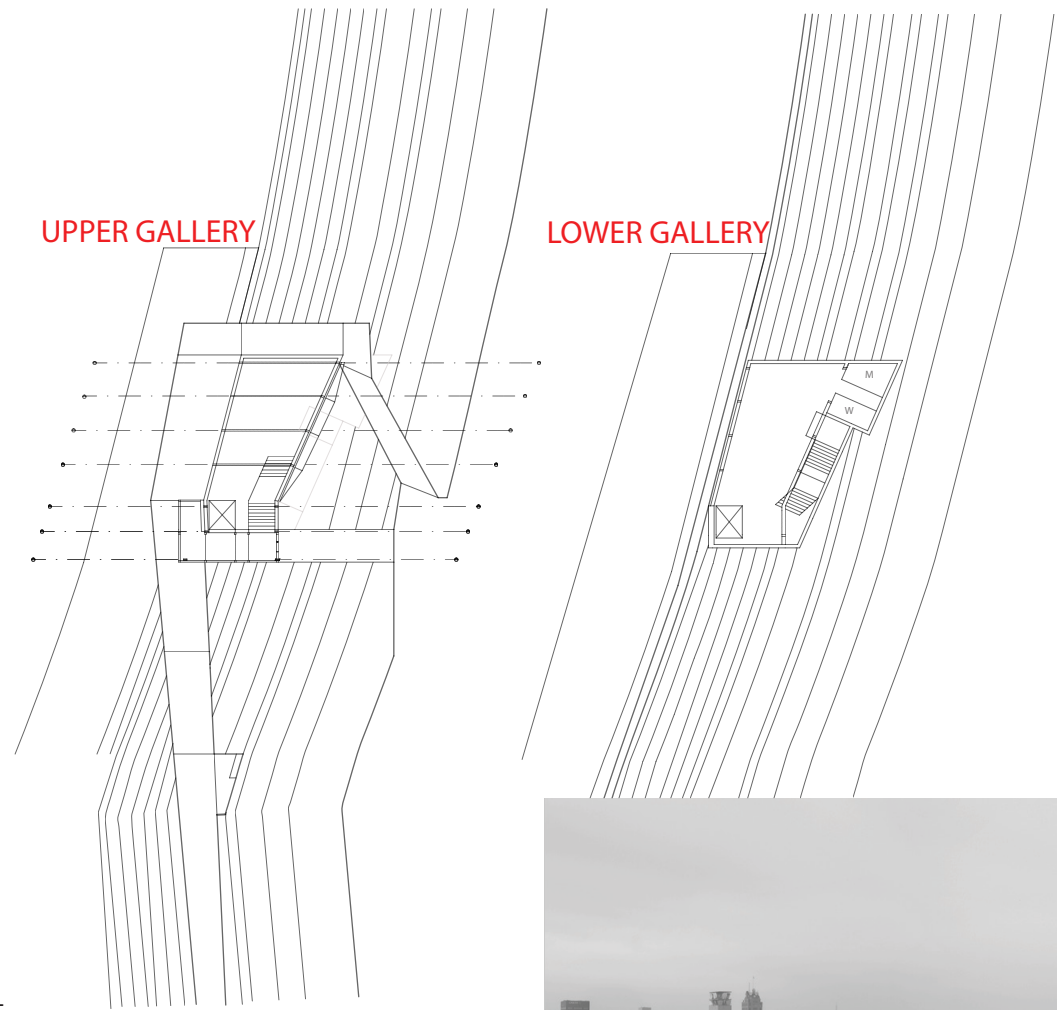
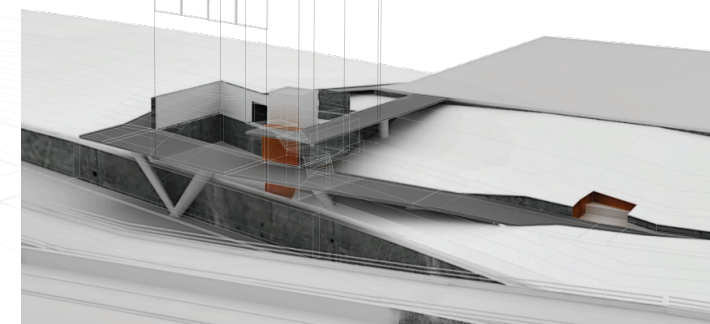
Circulation infrastructure

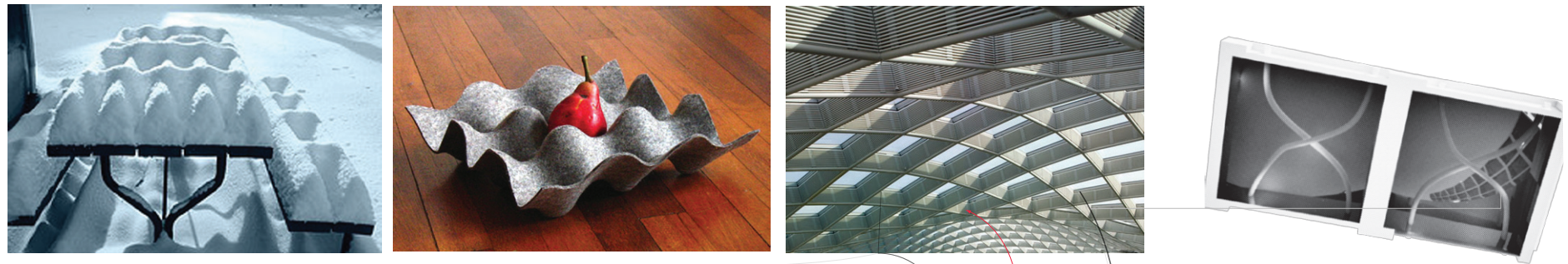
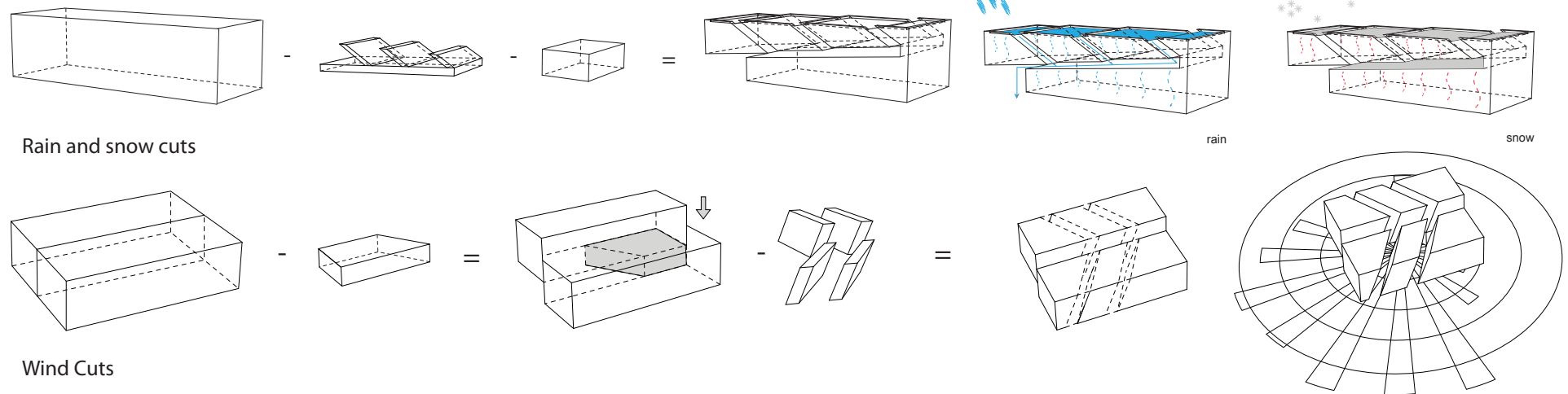


PANELITE

CORETEN

EXTRUDED STEEL



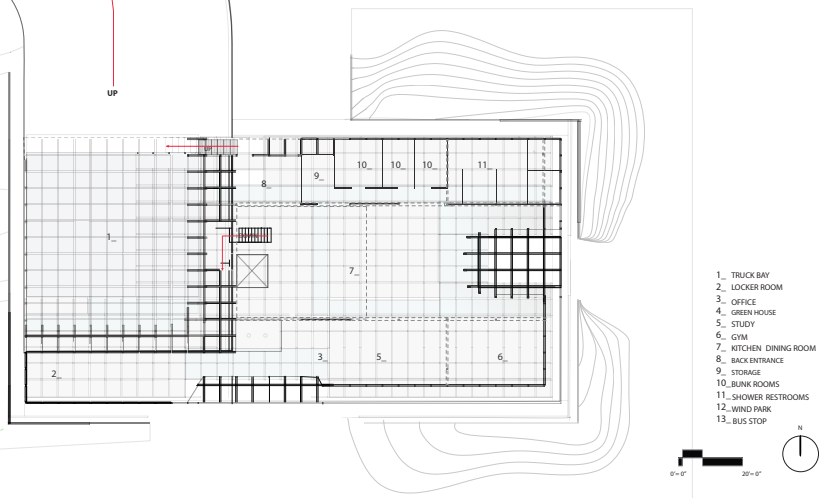


Building Anatomy: Grad Elective Spring_2009 Professors_Craig Borum and Neal Robinson

Project team: Kyle Skar, Andrew Norskog, Tom Lee, and Chris Nakamura

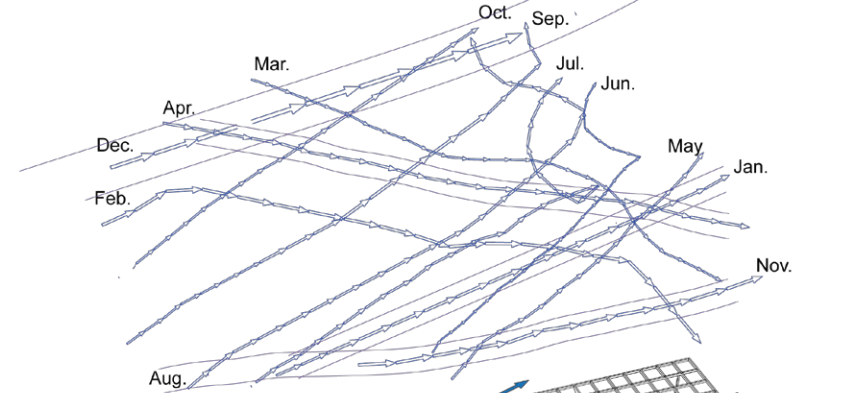
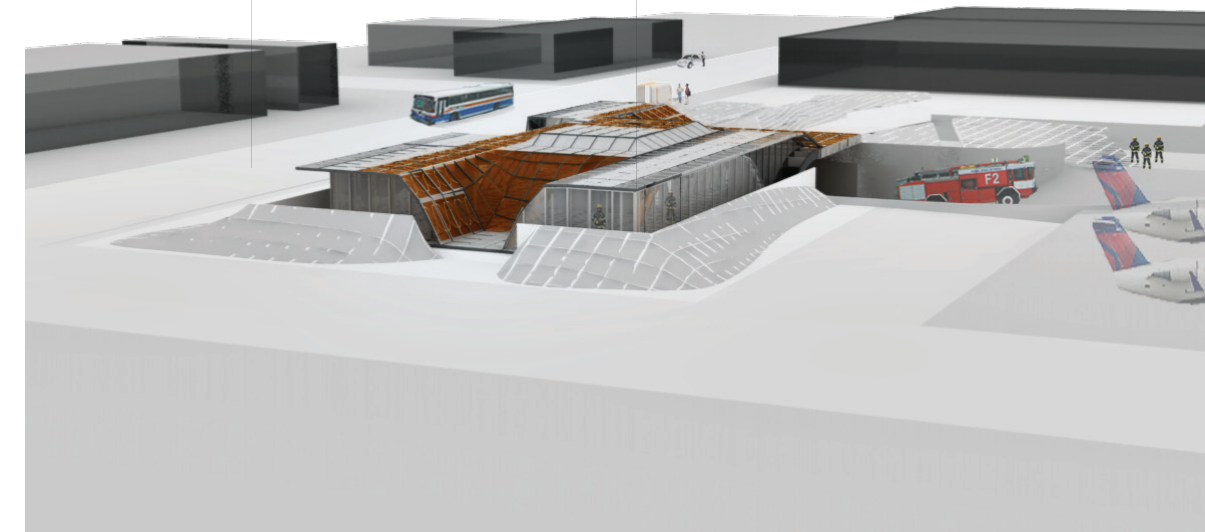
The contemporary discourse of architecture has undermined one of architecture's fundamental goals, to mediate weather, for too long. Building systems and environmental technologies rarely evolve further than the stage of diagrams. Thus, creating a standardized modus operandi for conditioning the environments that we inhabit. The projects for Building Anatomy no longer asked "why?" but "how?" Each team was given an airport in a different climate region and was asked to design a fire station for this location. Our location was MDW in Chicago.

Through a series of climate building massing studies. Our team developed a building system that would collect wind and precipitation accumulation on site. The entire structure of the fire house is covered in a panel system that acts as active skin. This skin collects, conditions, and sheds necessary amounts of site precipitation. The interactive skin is like an unraveled radiator.

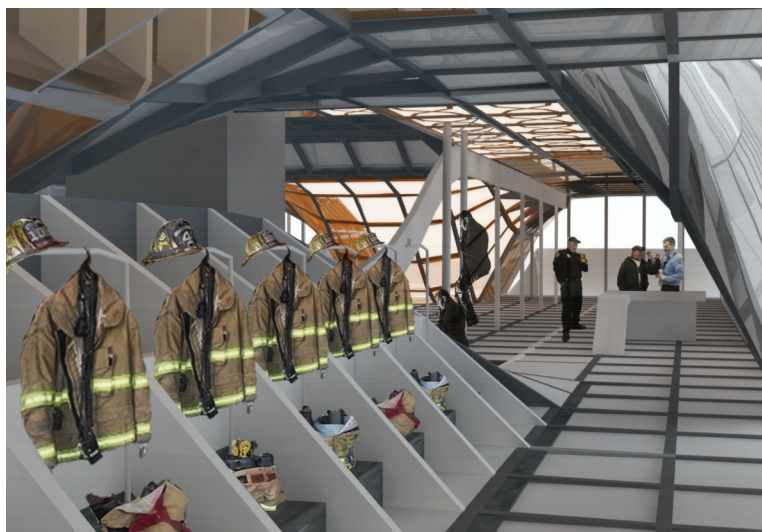


Panel system

Truck bay and vertical Structural members

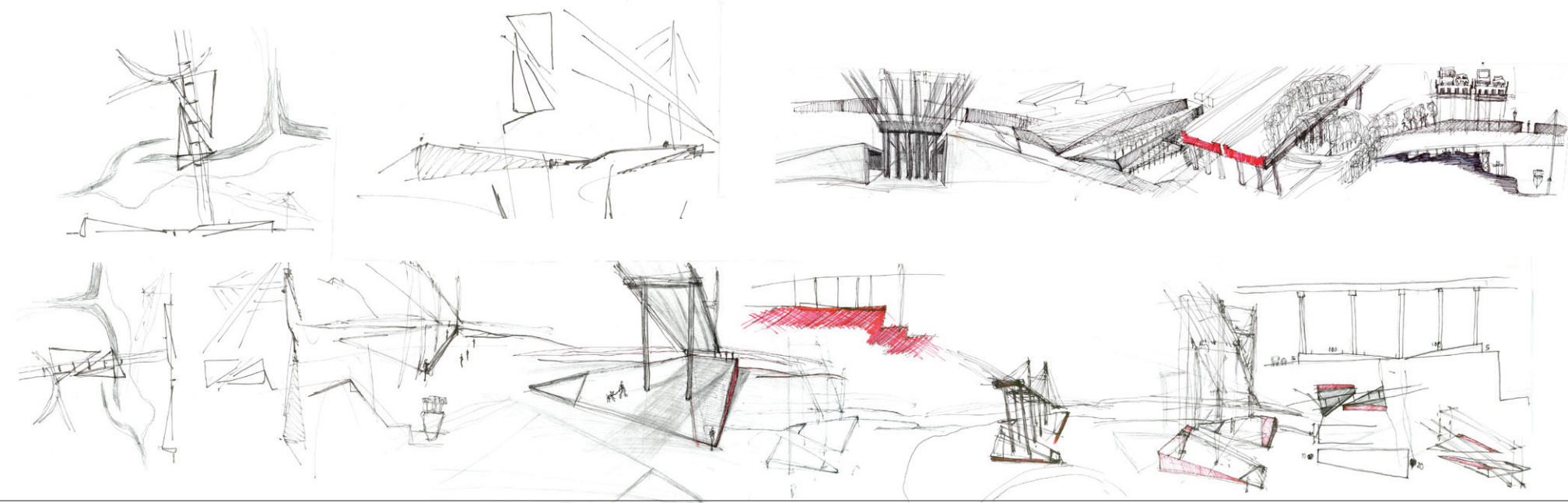
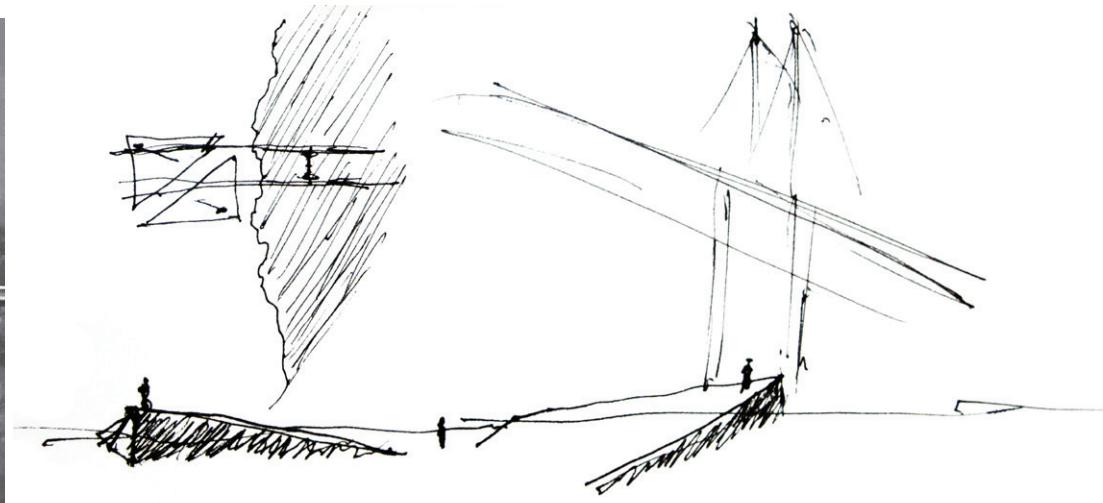


Wind vector and structure analysis





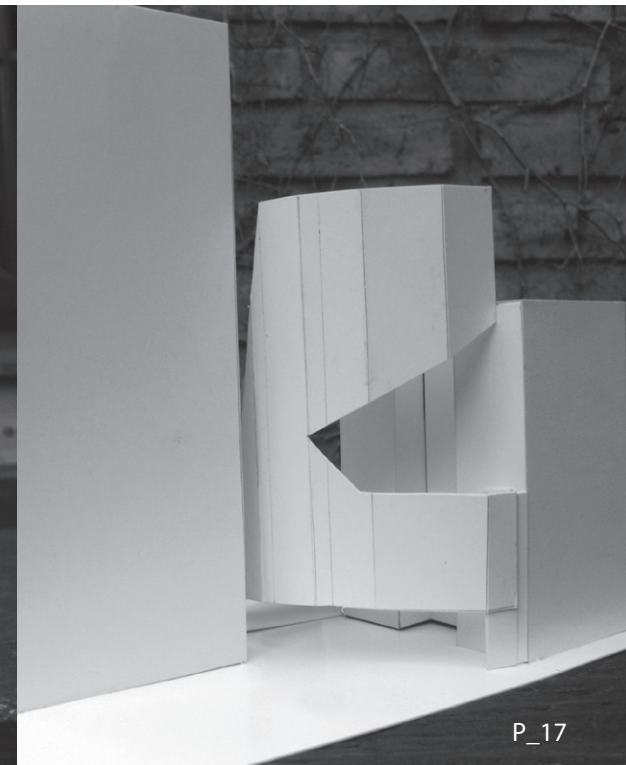
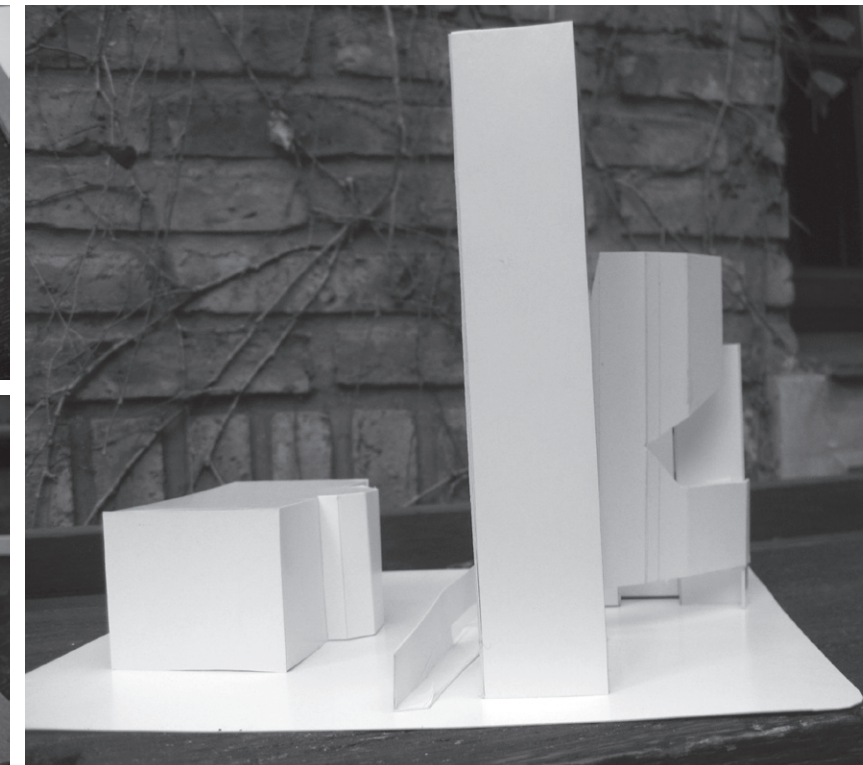
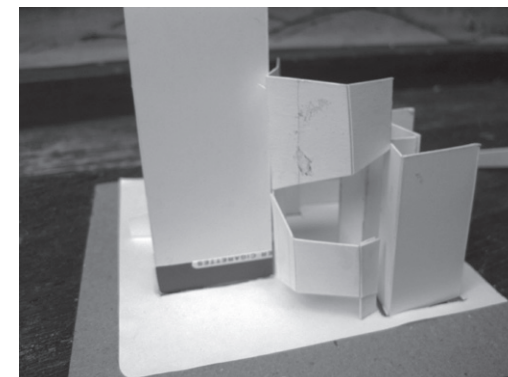
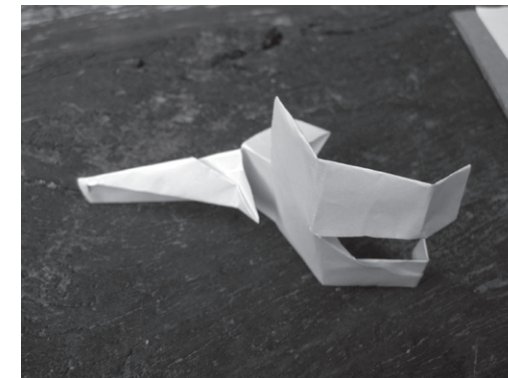
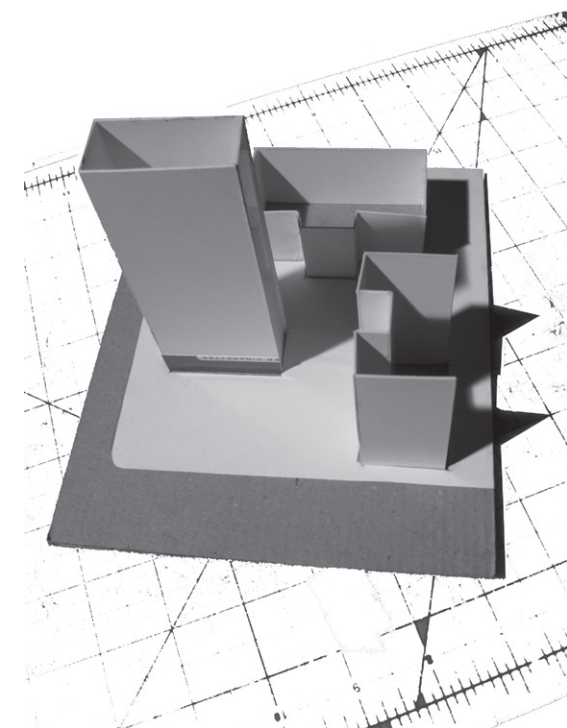
Rosario, Argentina: Measuring the Horizon
Rosario, Argentina: Urban Friction

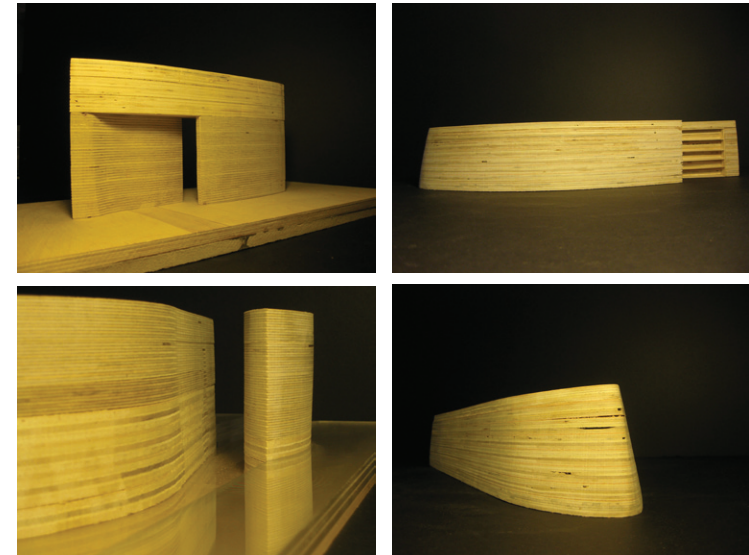
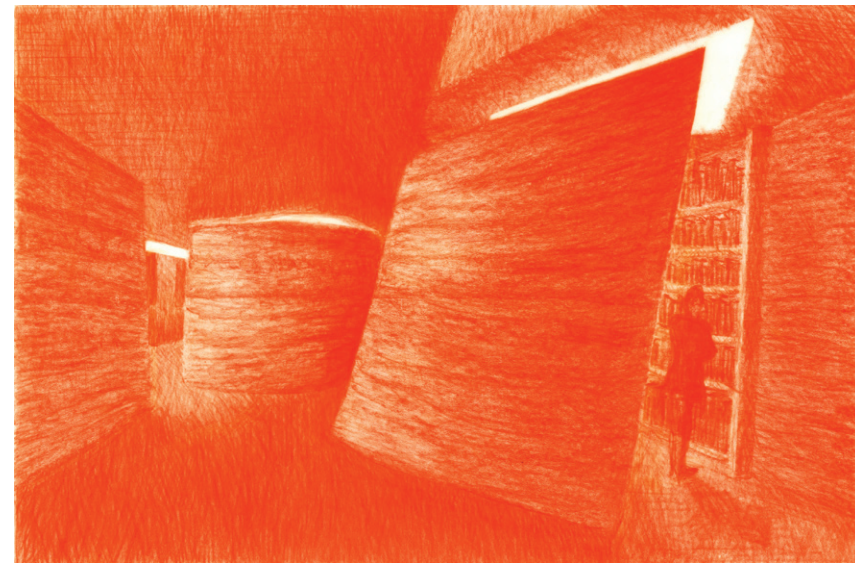


Learning Abroad Program: Rosario, Argentina Summer_2009
Professors: Gerardo Caballero and Juan Rois

The learning abroad program in Argentina was based in Rosario, AR. Here we studied with Gerardo Caballero who is a well accomplished local architect. The two projects that we worked on where both meant to hone and develop hand drawing and modeling techniques. The first project was a hand drawing exercise. The objective was to design a landscape element that would measure the horizon line. The site of this landscape element was at the Rosario-Victoria Bridge Metropolitan Park on the periphery of Rosario. My intervention was comprised of two subtle triangular masses of earth that rise up and create landscape viewing platforms. One of these platforms faces the pampas and the other faces the river delta.

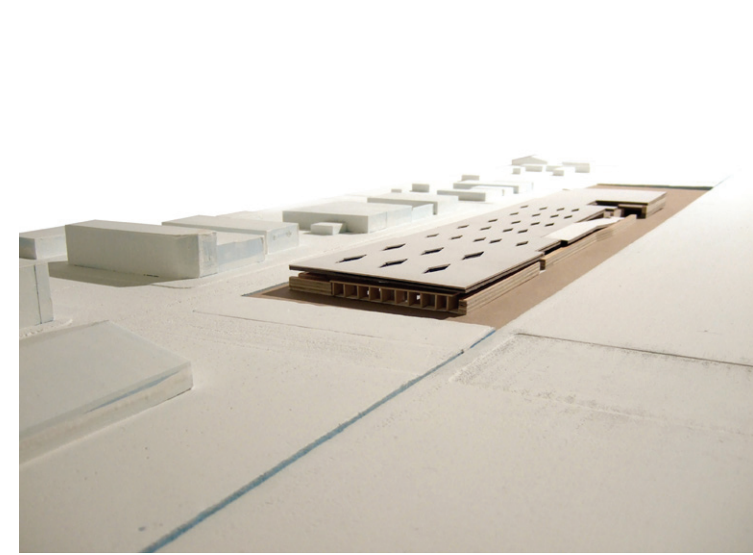
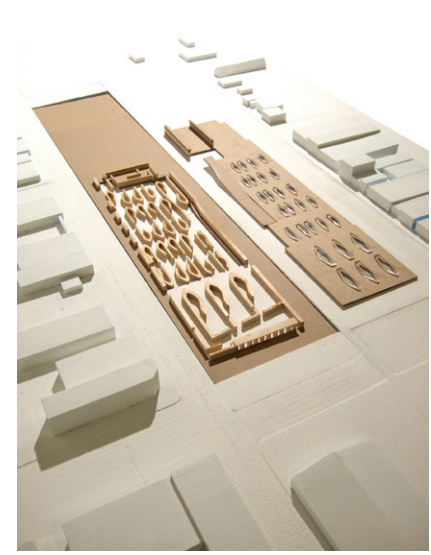
The second project was a hand modeling exercise. The objective of this assignment was to address the dynamic variability of Rosaió's urban core. Our site is located in-between three buildings with different programs, heights, and compositions. Through a series of iterative models I negotiated the three different languages that were present on the site. My design composition wraps around the tallest building on our site to provide unrestricted circulation through the site. After wrapping around this tower the building reveals itself while rising to fill the void in the site.





Wall door study models

Final hybrid element



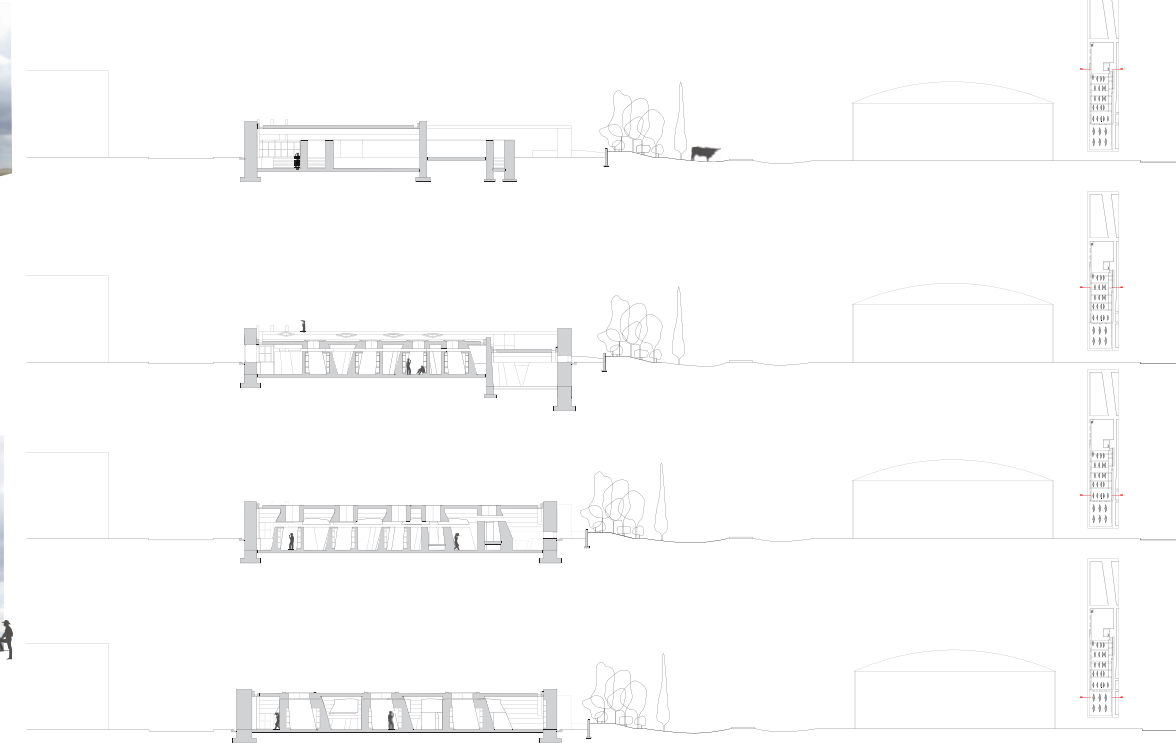
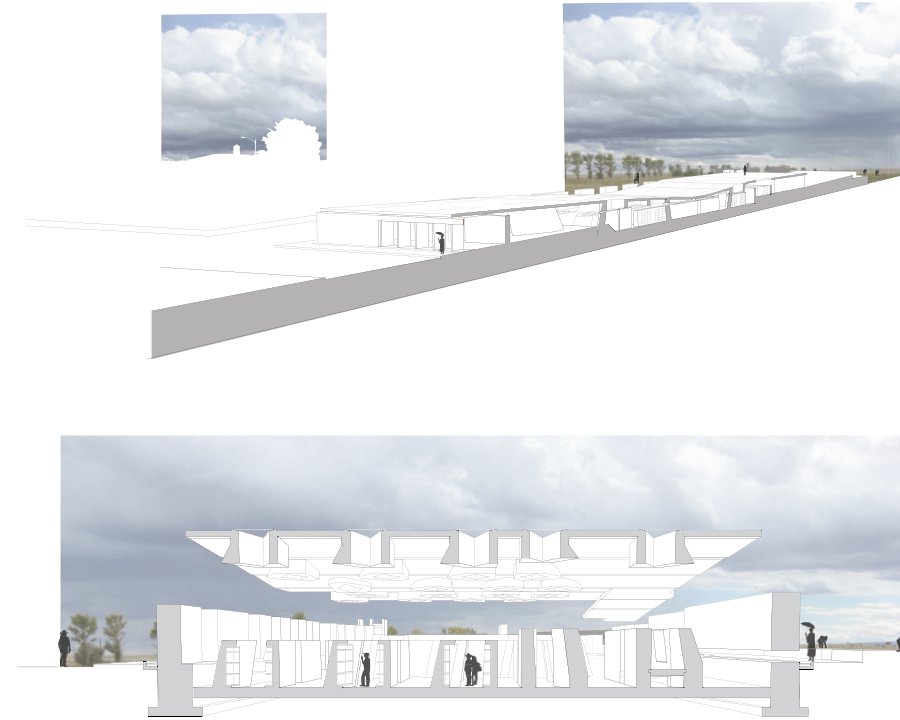
Final Site Model



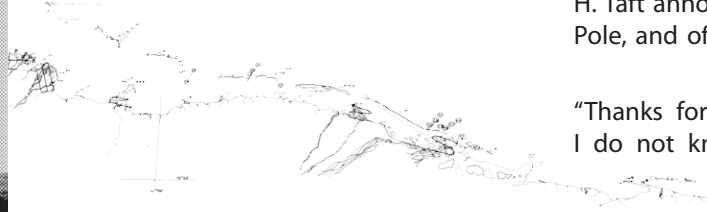
The Shadowlands Library: Marfa, Texas Fall_2009 Professors_Marlon Blackwell and Tony Patterson

The primary objective of this studio was to analyze and design a prototypical element. Each student began their investigation with two fundamental architectural elements. I was given a wall and a door. To further my understanding of each element I created an iterative set of models and diagrams. This series of investigations lead me to discover the positive and negative combinations of a wall and a door. The final prototype element was a hybrid of a door and a wall. As a wall, the element created a spatial divider that directed movement around and through its volume. As a door, the element created a threshold and layer of separation to the volume within the wall.

The program of this studio was a private library for the volume of books in the western canon that was sited in Marfa Texas. This small town is at the edge of Big Bend National Park in a ecological climate defined by a dessert with endless vistas and canyons. Marfa Texas is the location where the famous minimalist artist Donald Judd took refuge from the banality of the New York gallery culture. In Texas, Judd left behind the plain white boxes of New York and invested in property of the everyday. In the contexts of Judd's work and the ecology of South West Texas our hybrid elements were integrated into the site. The thick site cast concrete walls create an intimate interior landscape; while the roof canopy peels off of the ground to create and interactive public park.



Kyle Skar

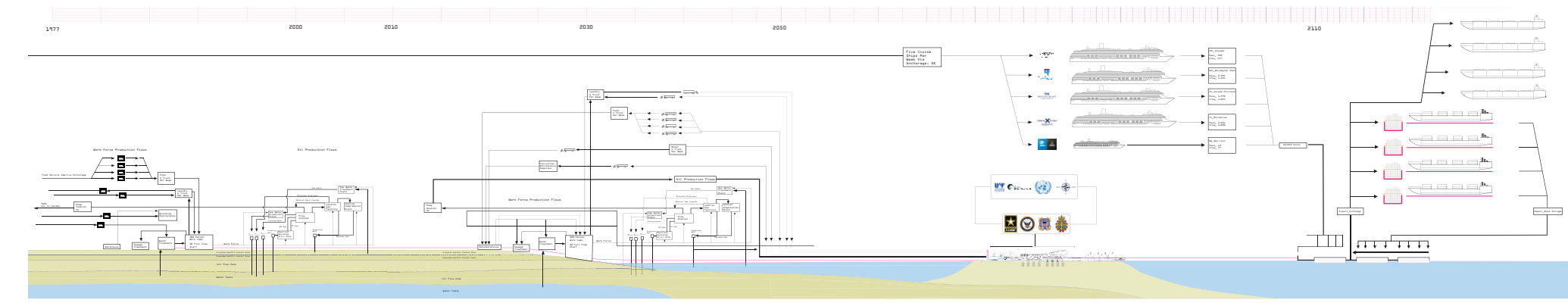
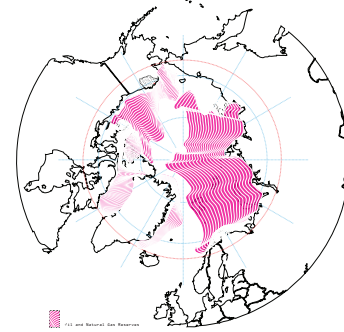
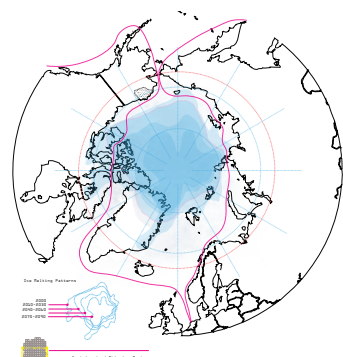
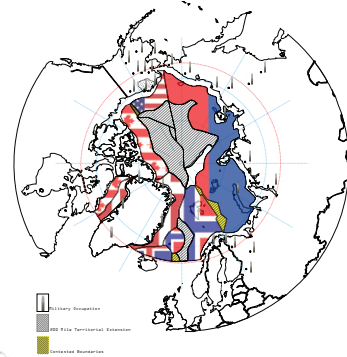
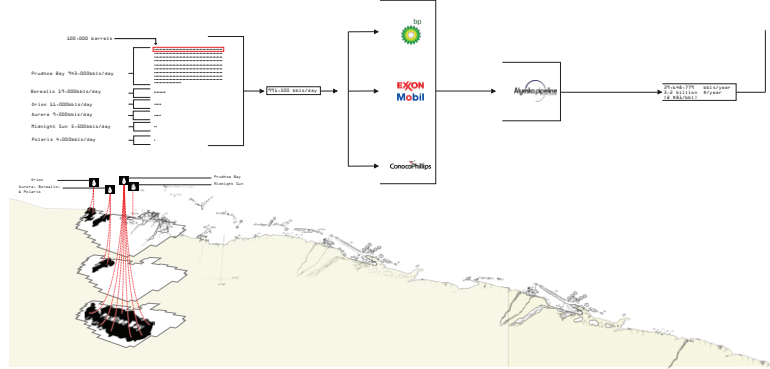


In 1909 explorer, Robert Edwin Peary sent a telegraph to U.S. president William H. Taft announcing that the stars and stripes had been nailed to the North Pole, and offering to put the place at his disposal. Taft bewildered replied,

"Thanks for your interesting and generous offer. I do not know what exactly I could do with it."

(Emmerson, Charles,)

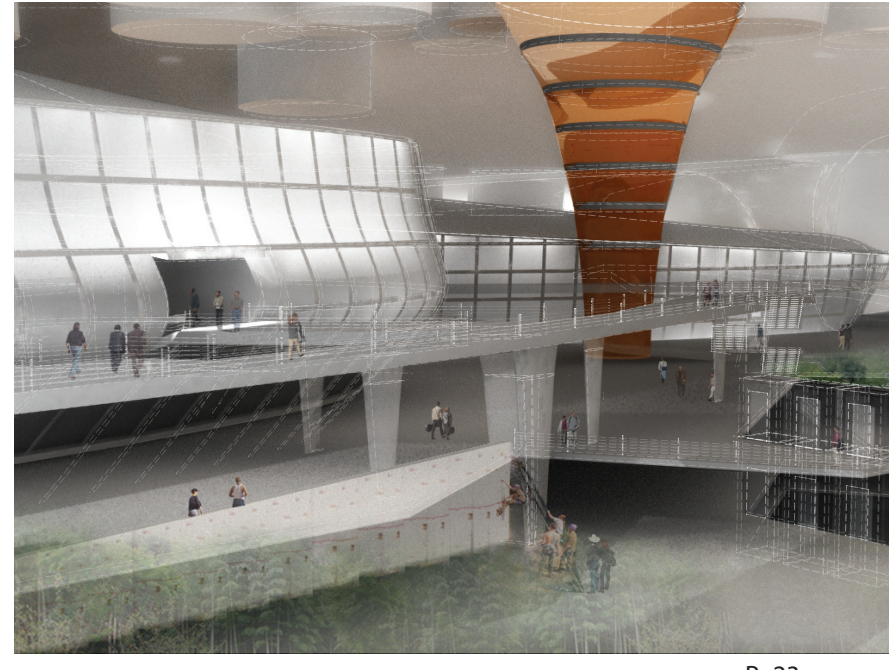
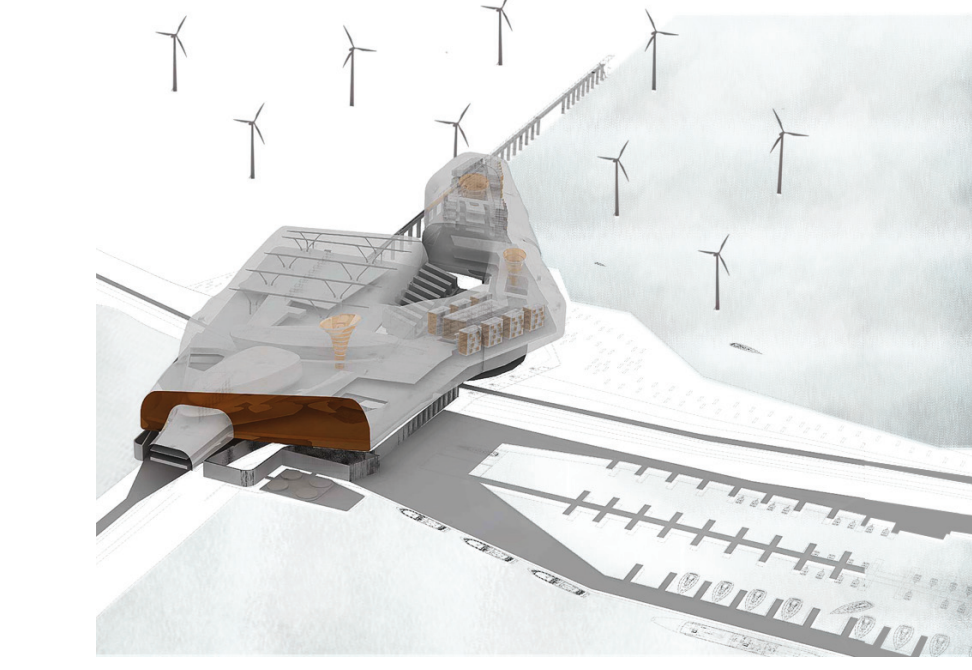
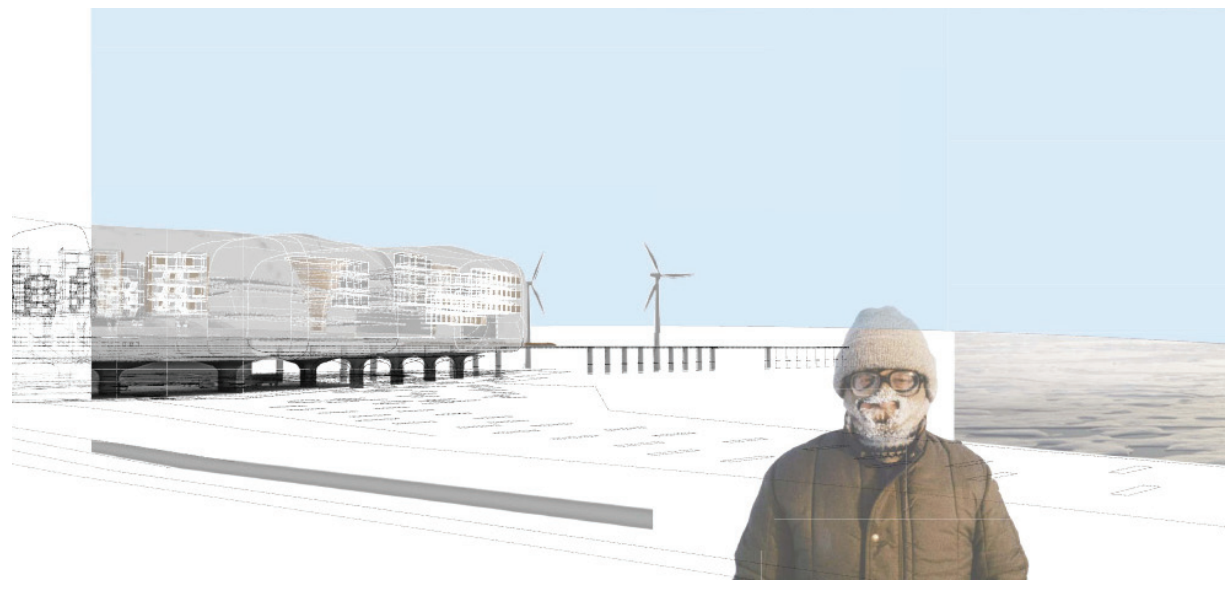
In 1977 the Trans Alaska Pipeline was dedicated forming a 800 mile long seam of infrastructure in Alaska's pristine wilderness. This is a preemptive history of the pipeline and the greater region which inherently it will effect.



Master of Architecture Thesis
 Pipeline_Ecologies:
 The Geopolitical Expansion of the North West Territory
 Primary Thesis Advisor: Geoffrey Thün

An increase of activity in the Arctic region has begun to redefine physical and geopolitical boundaries. Located within a historically remote area defined by critical nodes and the infrastructural systems that support them, the Arctic is poised for requisitioning. Towns, hamlets, industry outposts, military outposts, and nomadic tribes all make up the constituents of the arctic region's urbanity. The due to their interconnected existence at the periphery of civilization.

As the current melting patterns redefine the Arctic ice pack, new maps are drawn to analyze the region's emergence. Key nodes of industry and civility start to evolve, subsequently filling the void of the Arctic's latency and connecting the region into a globalized network. Deadhorse Alaska is a critical node of existing infrastructure. This location will serve as a surrogate host for the further development of sub-ecologies of habitation and civility—the hinterland expands, is ordered, and stages new occupations.



Kyle Skar

17 Pearl St. Apt. 1
New Haven, CT 06511
<http://rsimmersion.com/KyleSkar/>
kyleskar@gmail.com
612.964.6603

