Ryan Grabow Portfolio 2008

MASTER OF ARCHITECTURE CURRICULUM FORM

University of South Florida
School of Architecture and Community Design

Name: Ryan Grabow
SSN: U73 14 0072

Curriculum	Credits	Credits Done	Term	Grade	Points	Total	Basis for Waiver=BFW Comments
Calculus							
Physics							
CAD (Autocad)							
ARC 5361 Core Design I	9			W	FALSE	0.00	Design Studios @ LTU
ARC 5362 Core Design II	9			W	FALSE	0.00	Design Studios @ LTU
ARC 5363 Core Design III	6		F 07	A			
ARC 6364 Advanced Design A	6		S08				
ARC 6365 Advanced Design B	6						
ARC 6366 Advanced Design C	6						
ARC 5256 Design Theory	3		F 07	B+			
ARC 5467 Material and Methods of Construction	4			W	FALSE	0.00	LTU
ARC 5470 Introduction to Technology	3			W	FALSE	0.00	ARC 2313 & 2323 @ LTU
ARC 5587 Structures I	3			W	FALSE	0.00	ECE 4753 @ LTU
ARC 5588 Structures II	3			W	FALSE	0.00	ECE 4743 @ LTU
ARC 5689 Environmental Technology	4			W	FALSE	0.00	ARC 3413 & 4423 @ LTU
ARC 5731 Architectural History I	3			W	FALSE	0.00	ARC 3613 @ LTU
ARC 5732 Architectural History II	3			W	FALSE	0.00	ARC 3623 @ LTU
ARC 6311 Intro Community Design	3						
ARC 6287 Professional Practice I	3		F 07	A			
ARC 6288 Professional Practice II	3		S08				
ARC 6481 Design Development	3						
ARC 6936 Research methods	2						
ARC 6971 Master's Thesis	5						
ARC 6971 Master's Thesis	5						
Electives:							
Technical Elective	3		S08				Green Building Seminar
Design/Graphics Elective	3						
Site/Urban Design Elective	3						
Elective	3			W	FALSE	0.00	ECE 4263 @ LTU
Total Credit Hours	**104**	**0**					
Total Quality Points		**0.00**				**0.00**	

Table of Contents

It's a very clear path, it's a rich variation of spaces along that path.

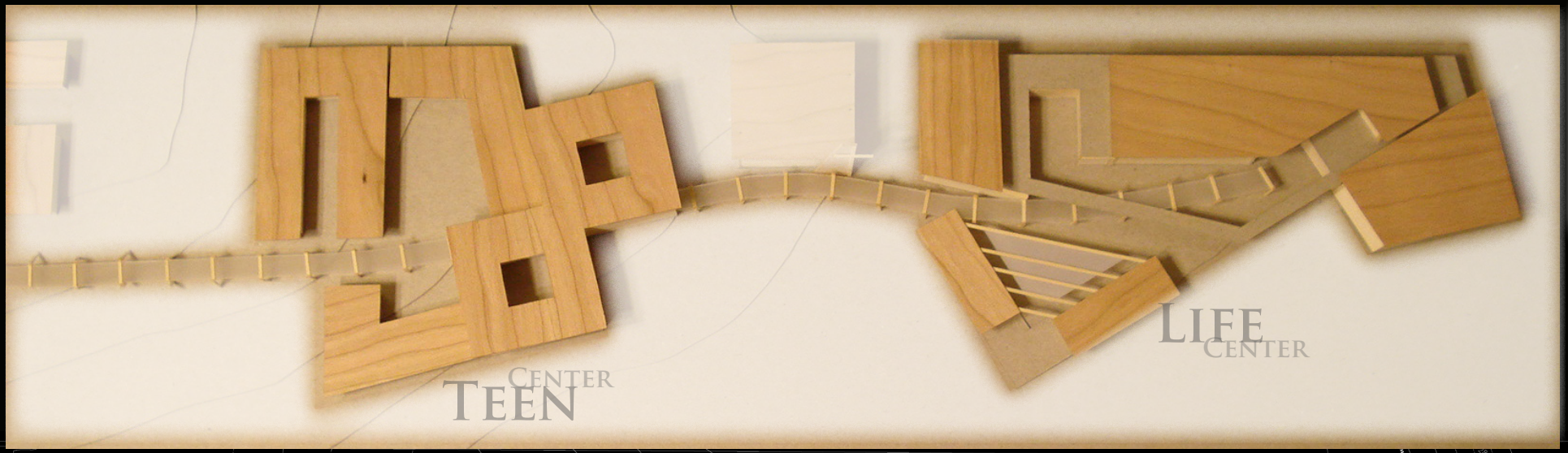
- Eric Rice, Wilder Architecture -

New Life Tabernacle is seeking to build a teen and life center at their new location east of Tampa. This team project, completed with Karina Cigagna, consisted of both a home for troubled teens and a life center (Gymnasium, pool, classrooms, etc.).

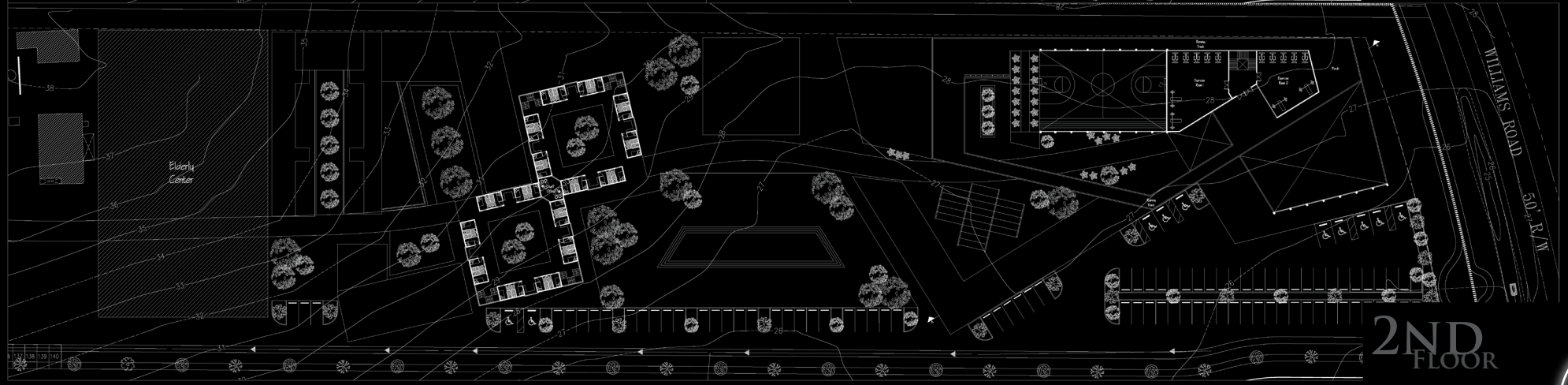
An iterative process was used where the buildings were worked on largely independantly, then exchanged. This facilitated a successful distance collaboration between Tampa and Orlando.

Site Model

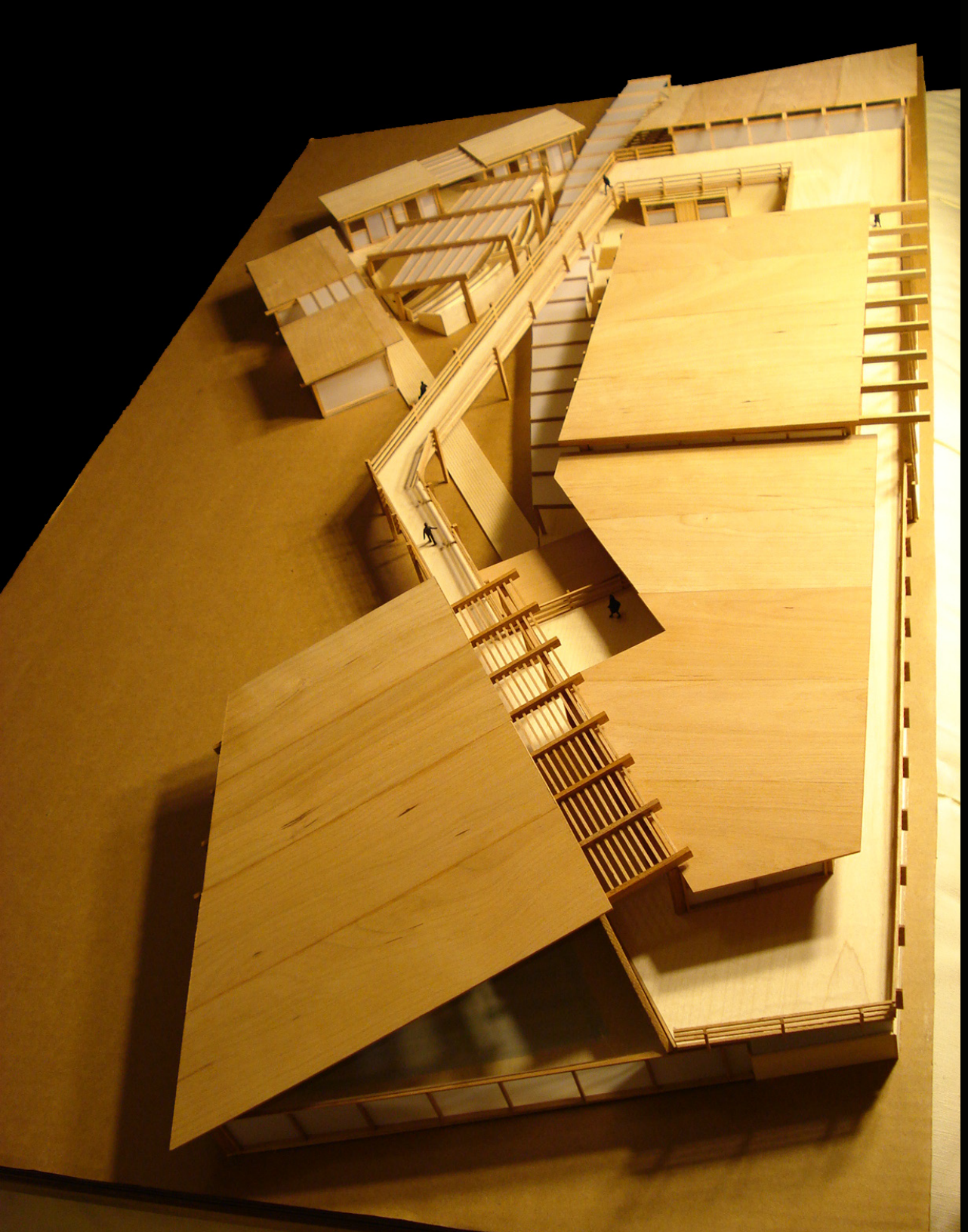
New Life Tabernacle


TEEN CENTER
LIFE CENTER


Existing House
Elderly Center
Chapel
Central Courtyard
Water Feature
Pool
WILLIAMS ROAD
50' R/W
1ST FLOOR


Elderly Center
WILLIAMS ROAD
50' R/W
2ND FLOOR

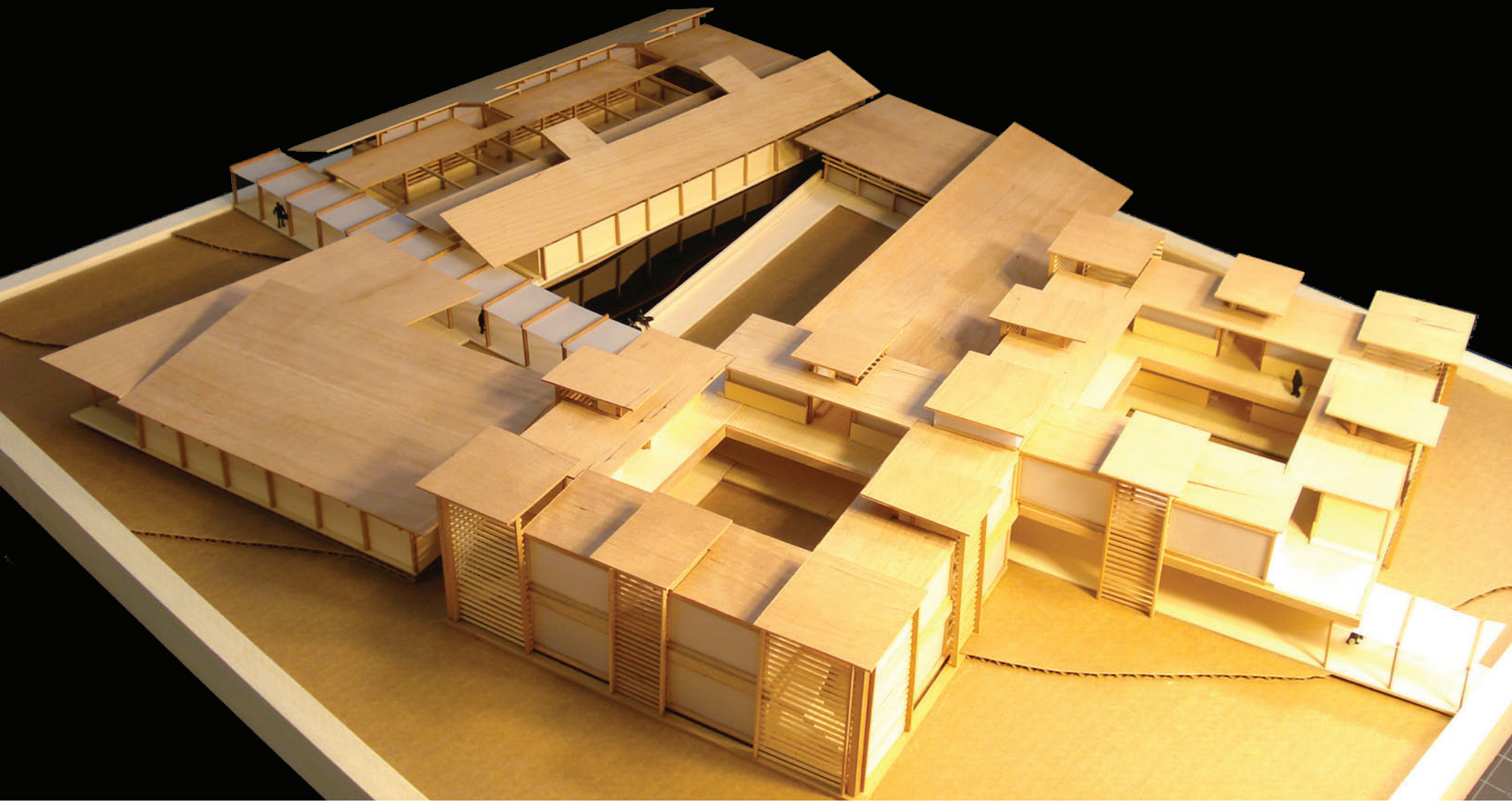

SUCCESSFUL
NEAT
"That move with the walking track very dynamic. Its a very successful move, its very engaging, its neat."
- Eric Rice, Wilder Architecture -
VERY DYNAMIC
ENGAGING



"I really appreciate your development or your treatment of … cloisters, but also the scales you are working in and out of.

The scale of the courtyard… it relates to the larger path and the larger complex."

- Shannon Bassett, USF College of Architecture -




Dining
Administration
Gymnasium
exercise


Class
rooms
Auditorium
Running / Walking
Track

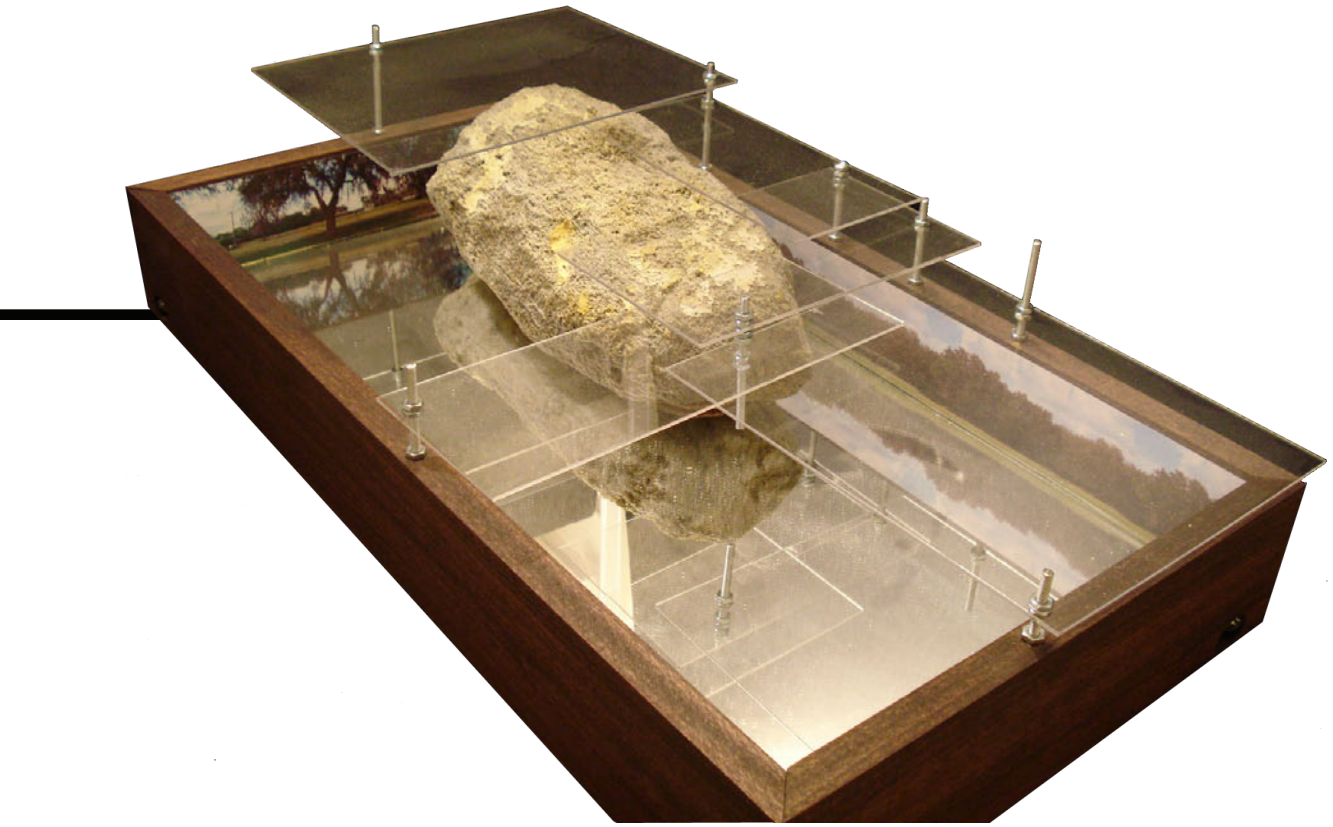
Collect

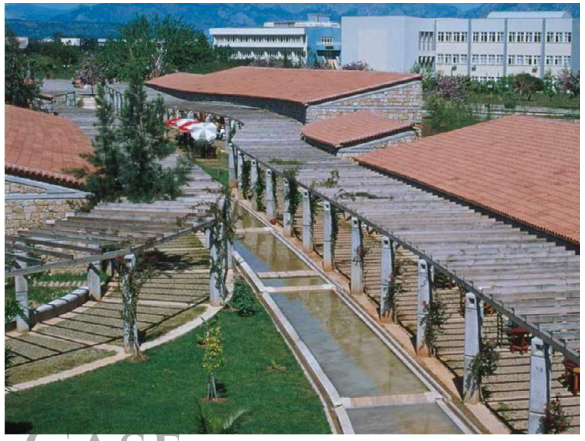
Reactions to the site were collected and clairified by assembling a construct representing these thoughts

Clairify

Construct

Site



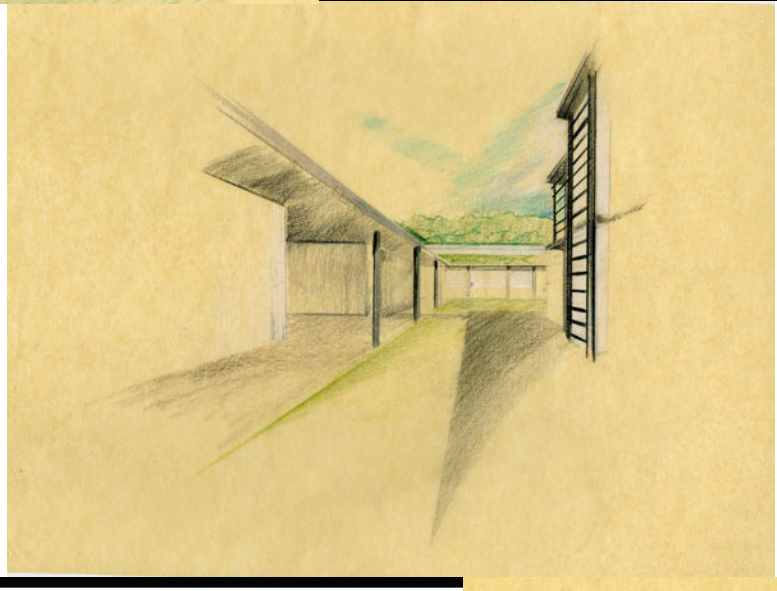


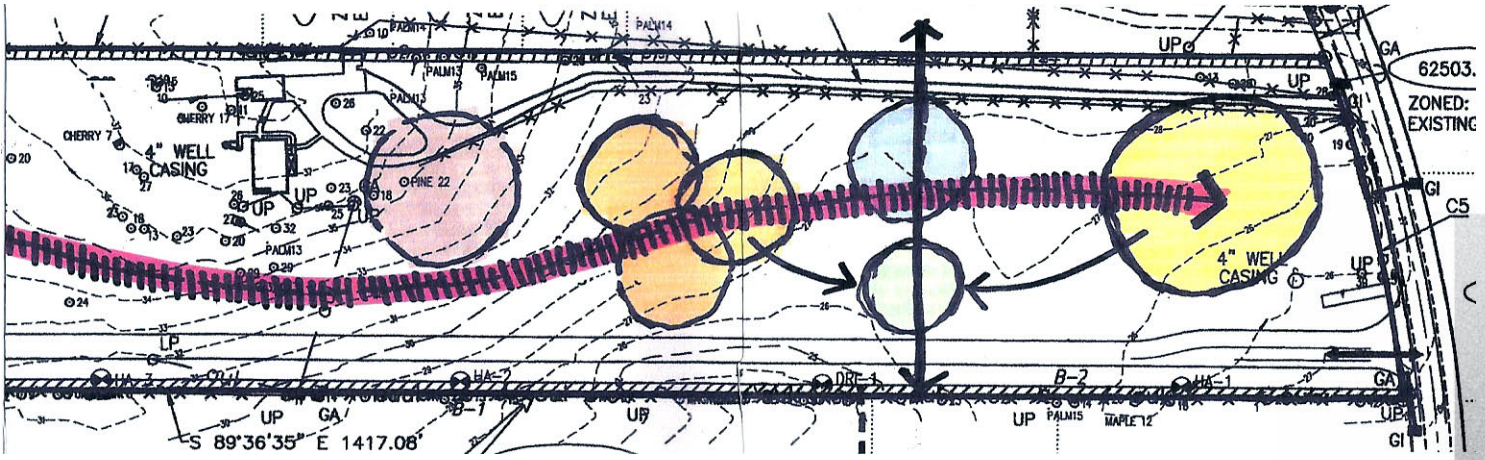
Case Study

Natural

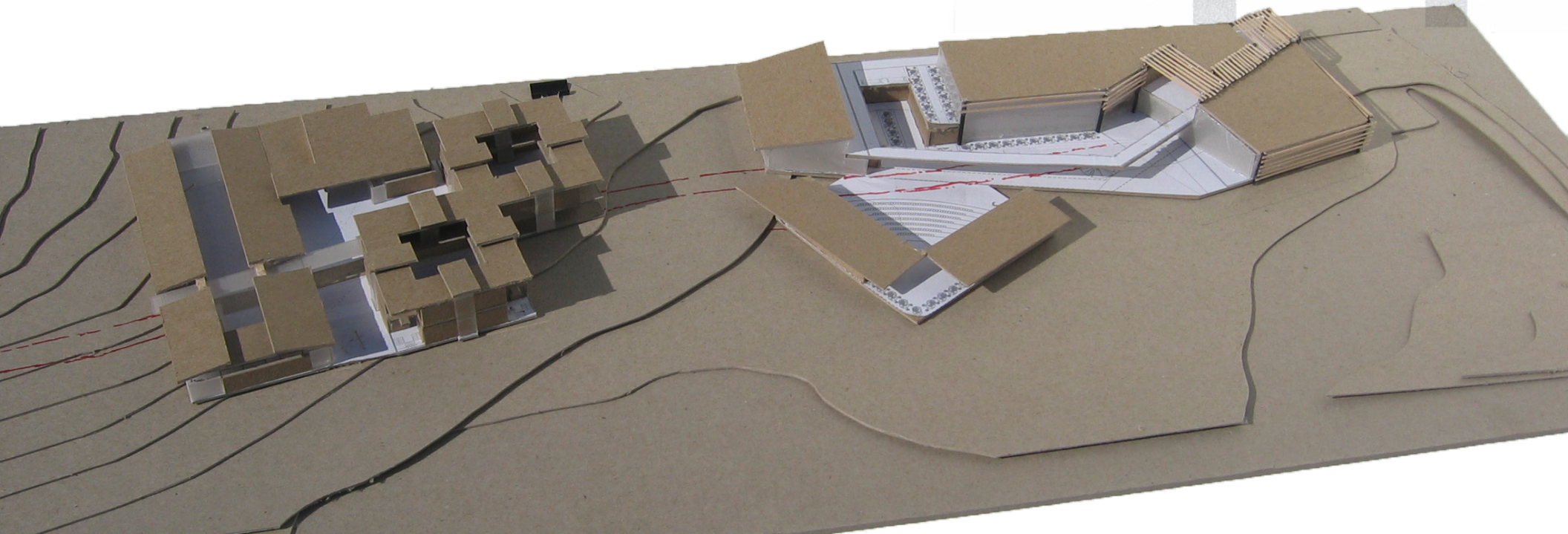
Expanse

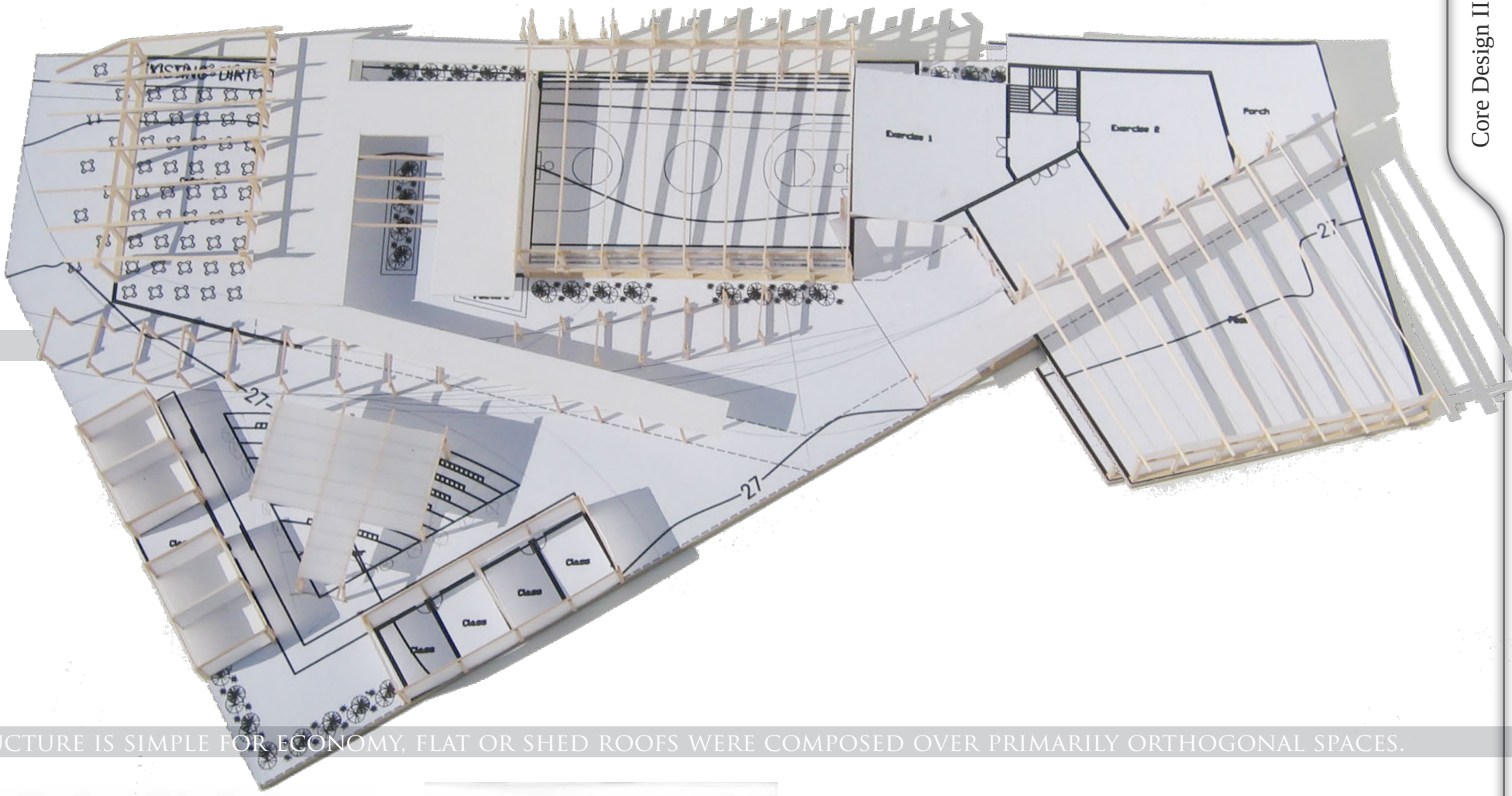
Bounded



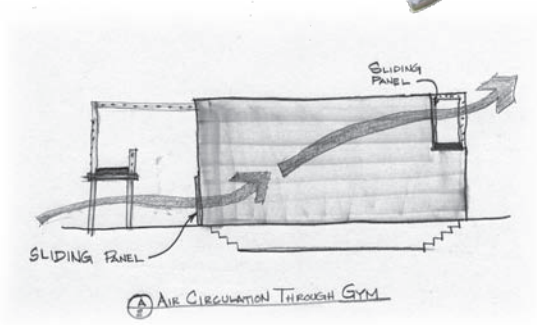


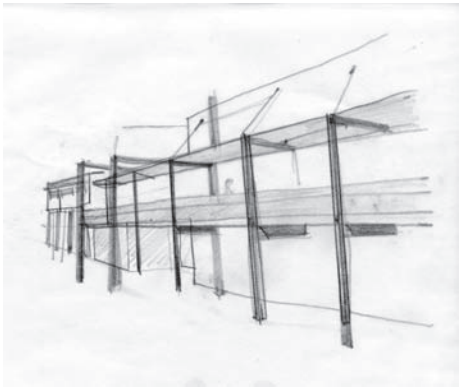
The relationship of the spaces, courtyards, and path were a primary consideration throughout the Process

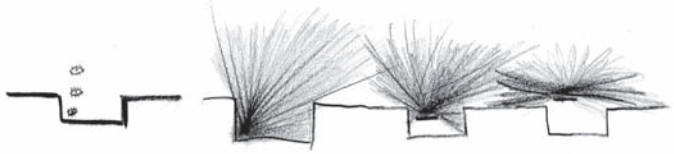




The structure is simple for economy, flat or shed roofs were composed over primarily orthogonal spaces.



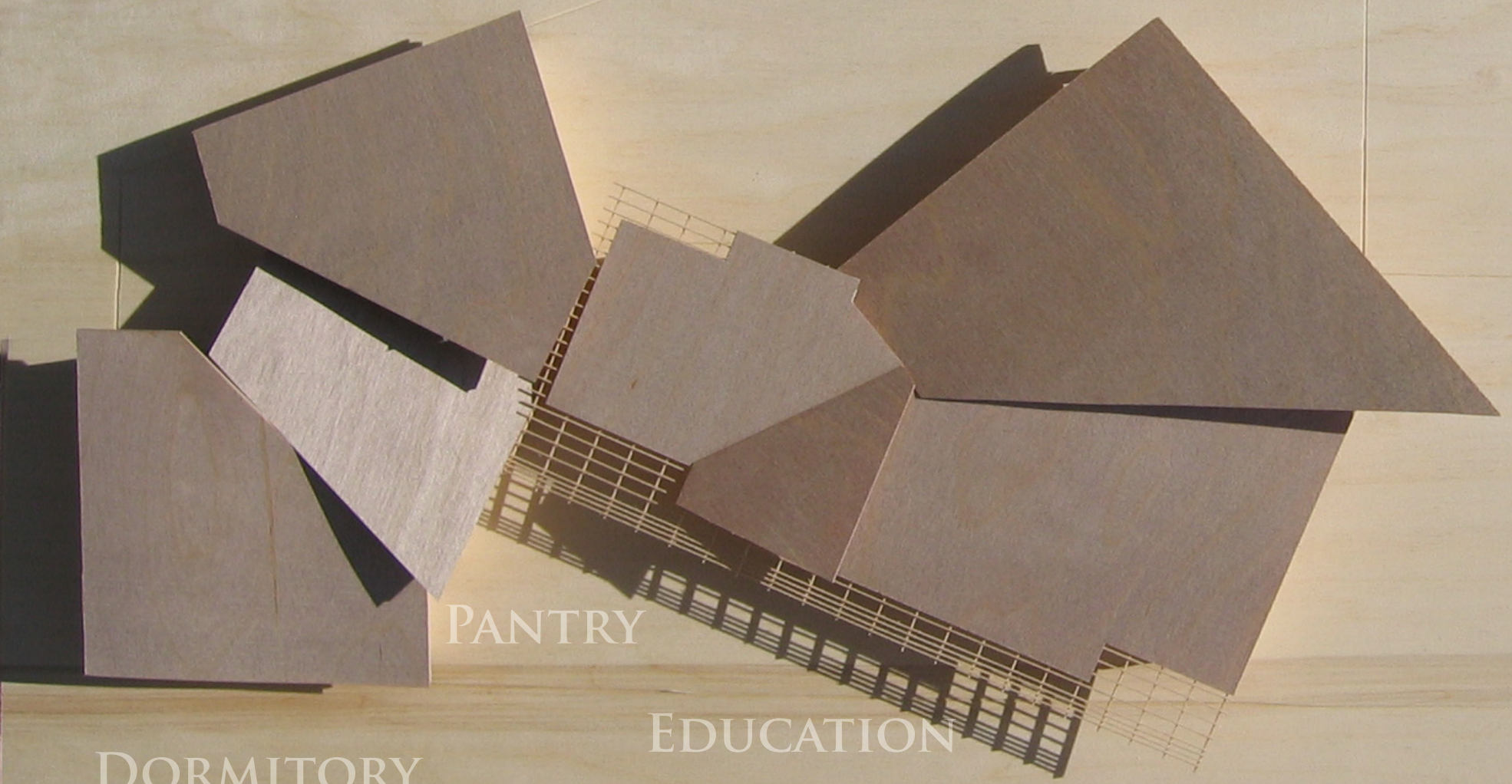





NOAH NOTHING CARING

AND TEACHING CENTER

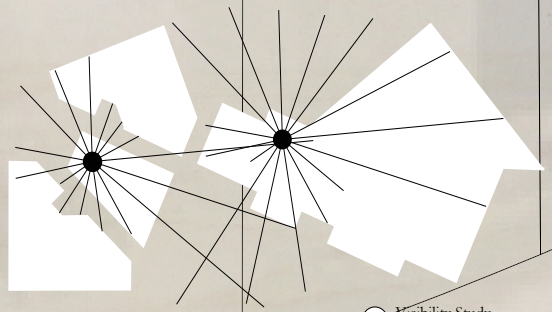
The Church of the Kingdom of God ni Tampa currently offers community services from a residential house. The vision of th Noah Nothing Center is much larger than the building can accomodate. The house is to be replaced by a larger facility incorporating a food pantry, transient housing, educational areas, and a dining area.



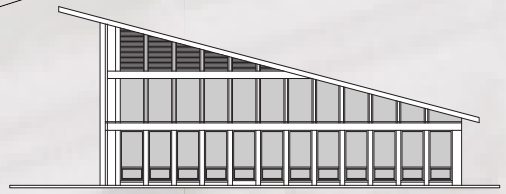
Noah Nothing

Caring and Teaching Center

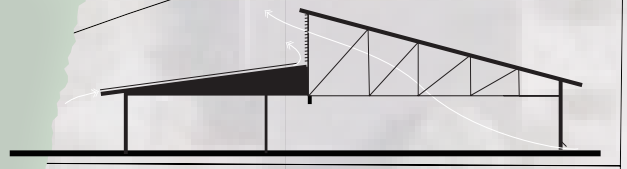
Ryan Grabow - Core Design III - University of South Florida



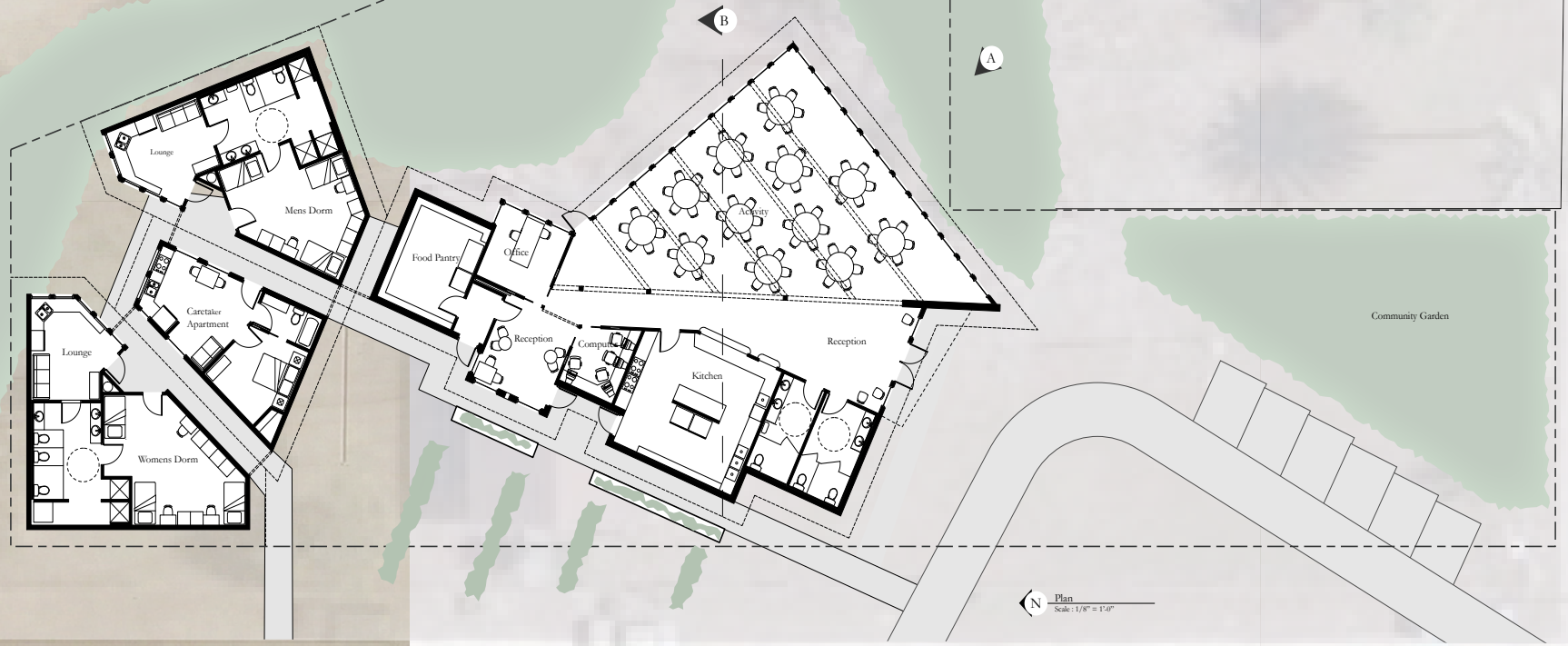
Visibility Study
Scale : 1/16" = 1'-0"
The layout of the spaces was arranged to maximize visibility from the office and the caretaker apartment



A Southeast Elevation
Scale : 1/8" = 1'-0"



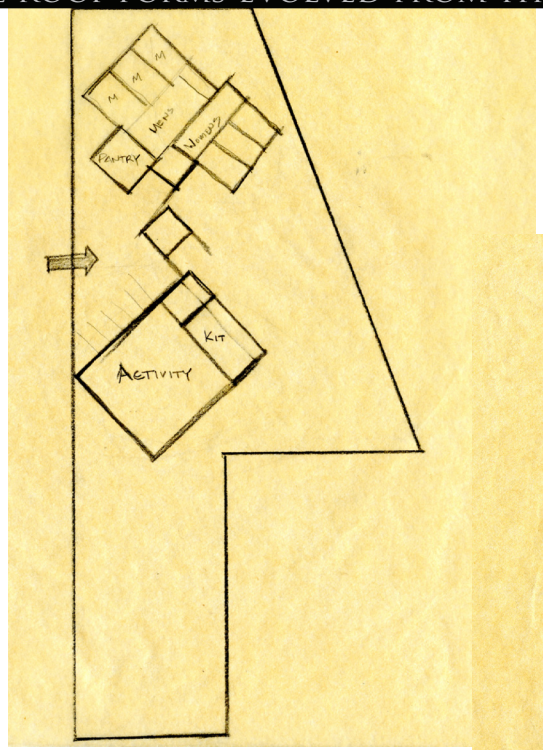
B Southeast Elevation
Scale : 1/8" = 1'-0"

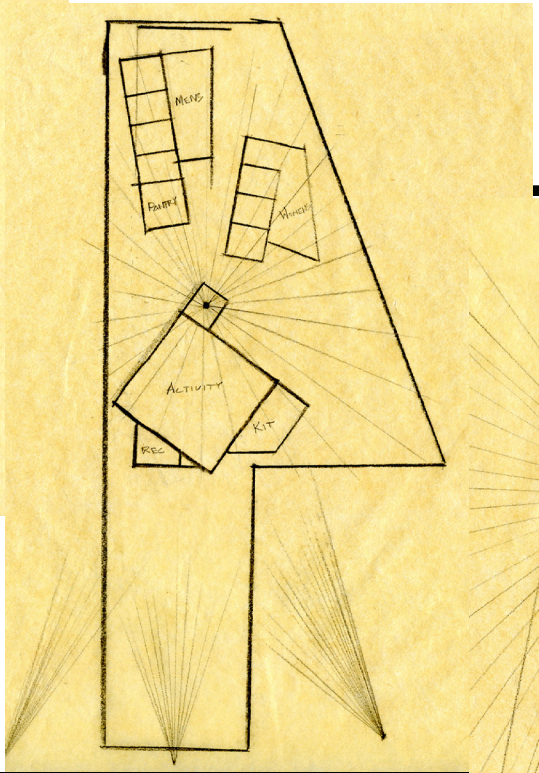


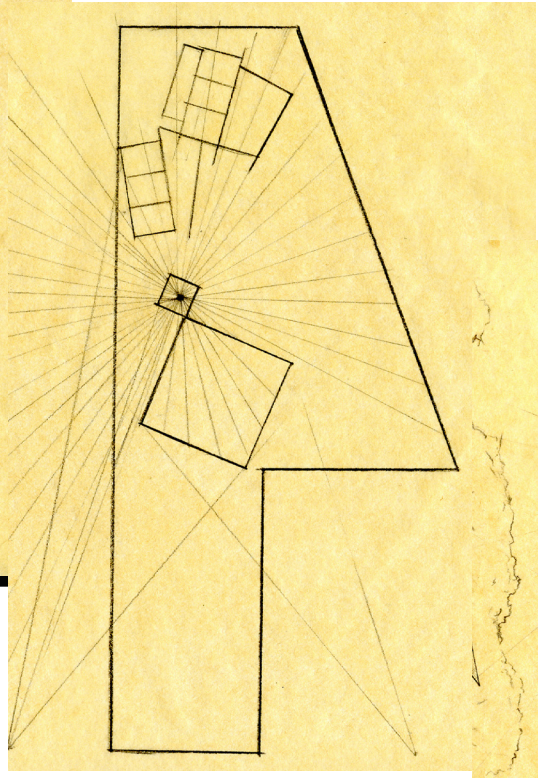
N Plan
Scale : 1/8" = 1'-0"

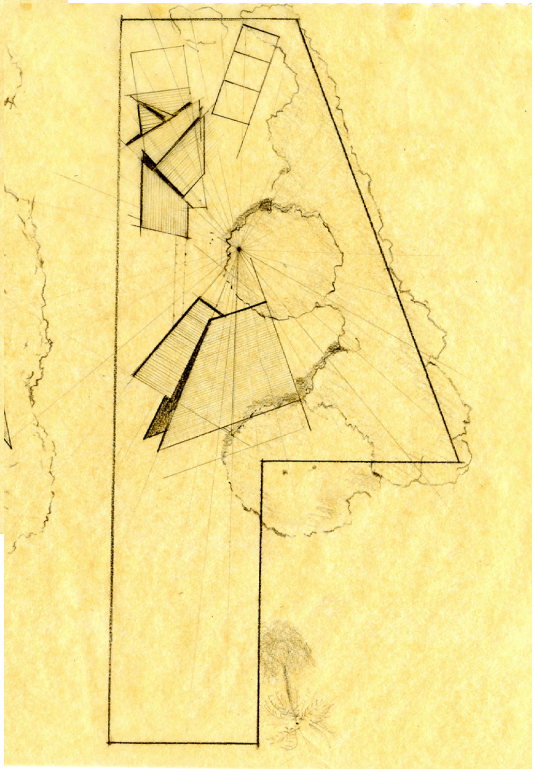
N Short 30th Street

The roof forms evolved from the clients desire for visual control. Providing deep views arranged the

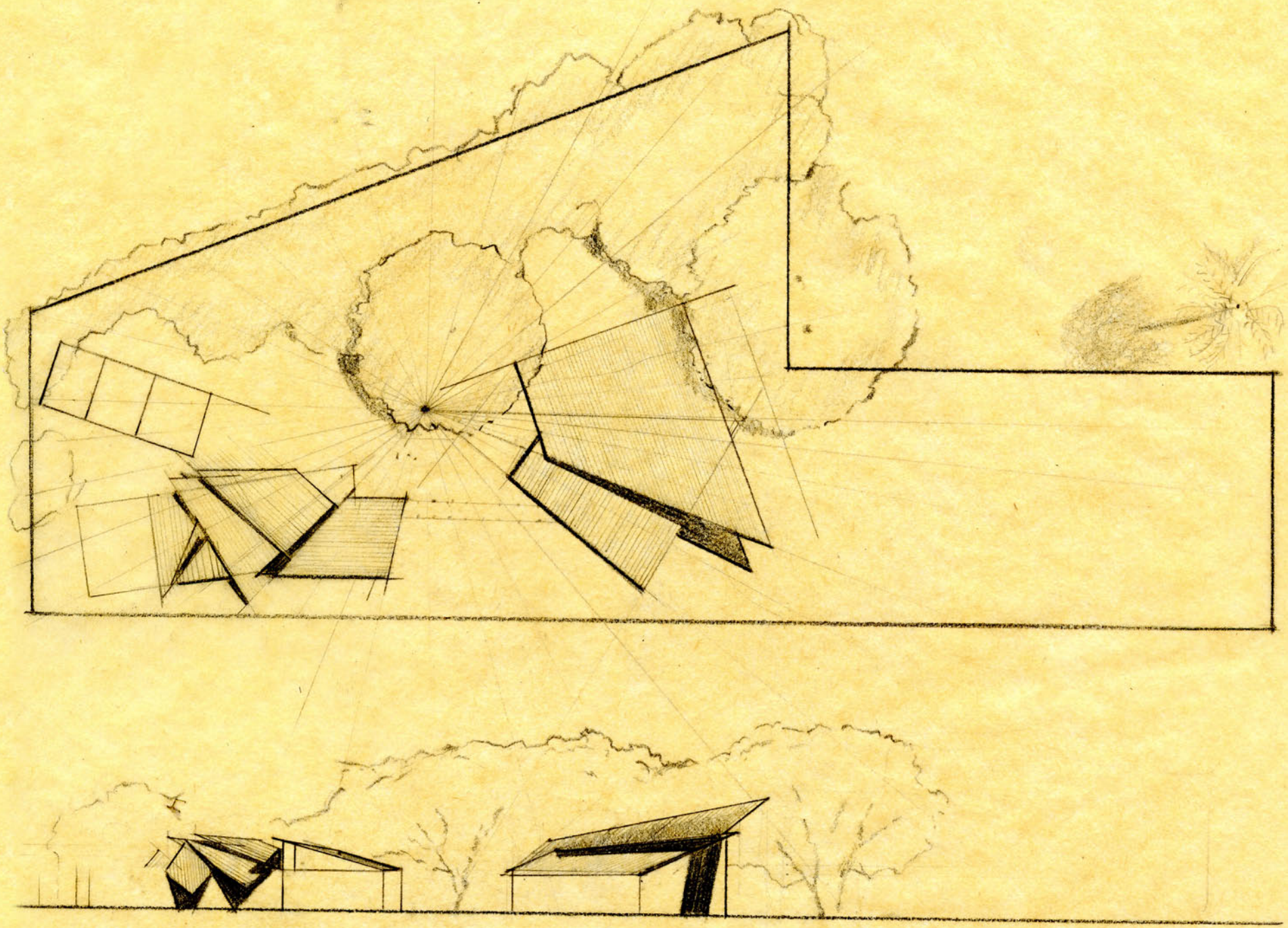


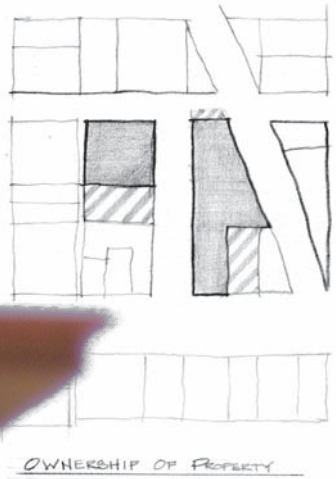


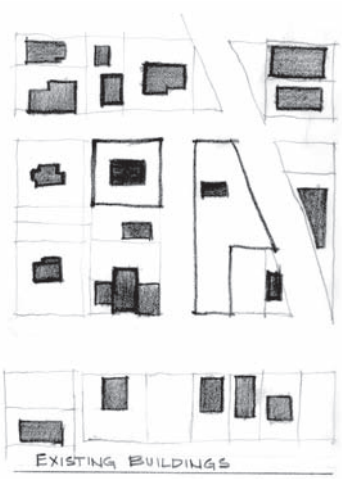


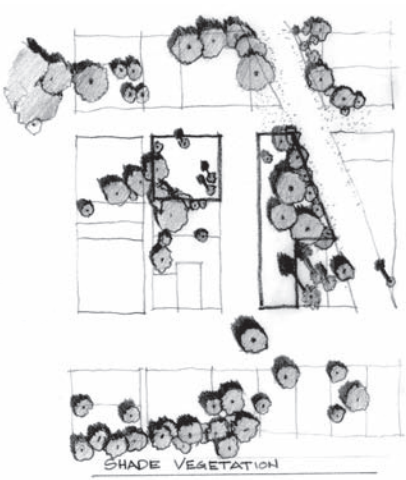


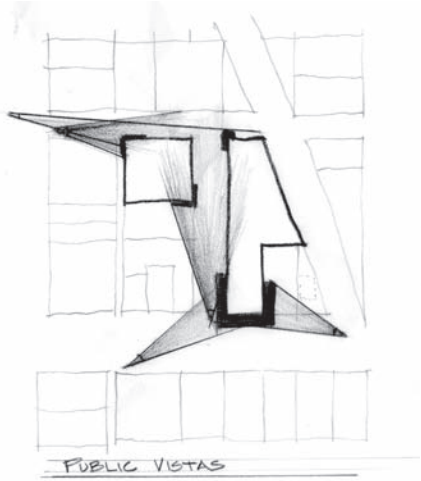
SPACES AND THE ROOFS EXTEND OR RECEED TO ACCOMODATE THE NON-ORTHOGONAL SPACES

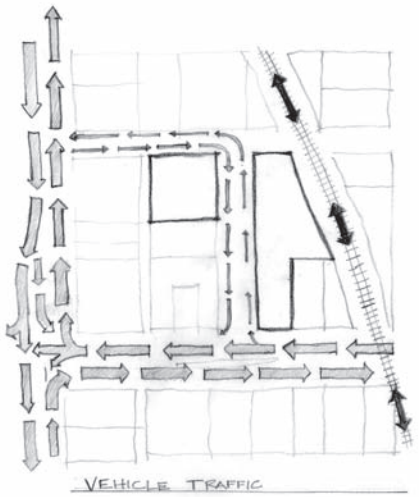



OWNERSHIP OF PROPERTY

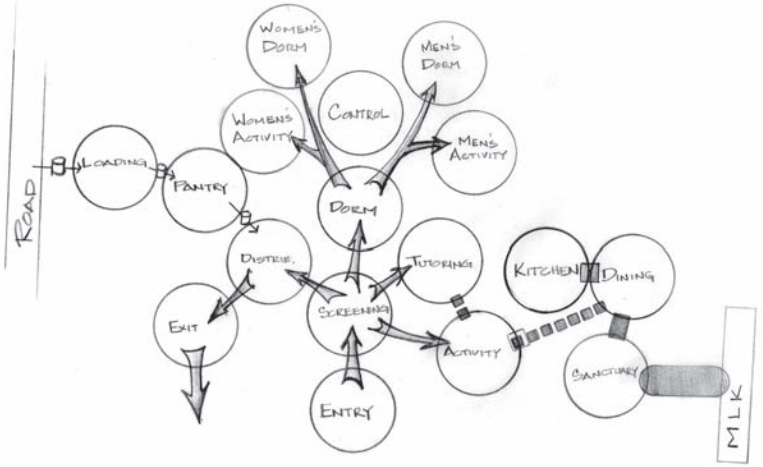

EXISTING BUILDINGS

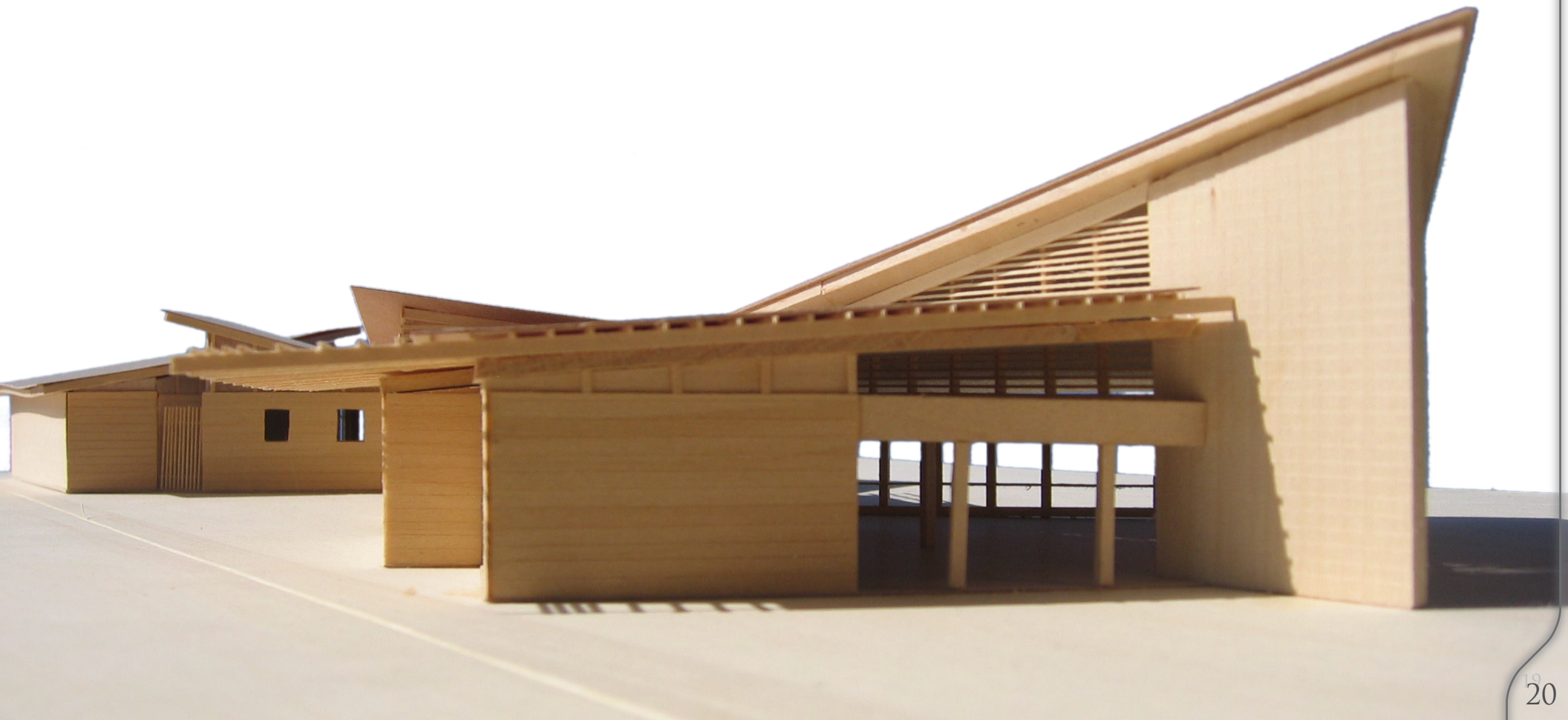

SHADE VEGETATION


PUBLIC VISTAS

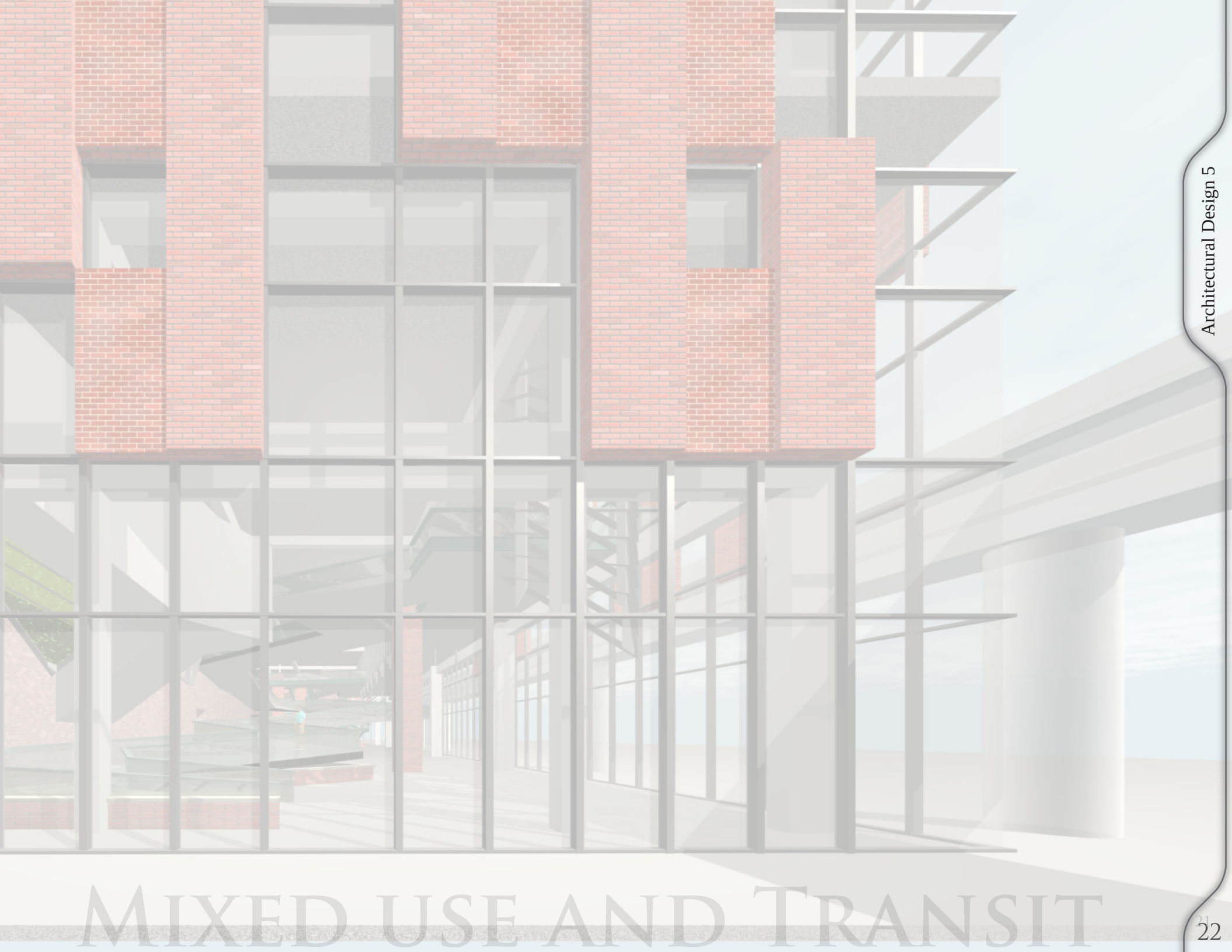

VEHICLE TRAFFIC


PEDESTRIAN PATHWAYS

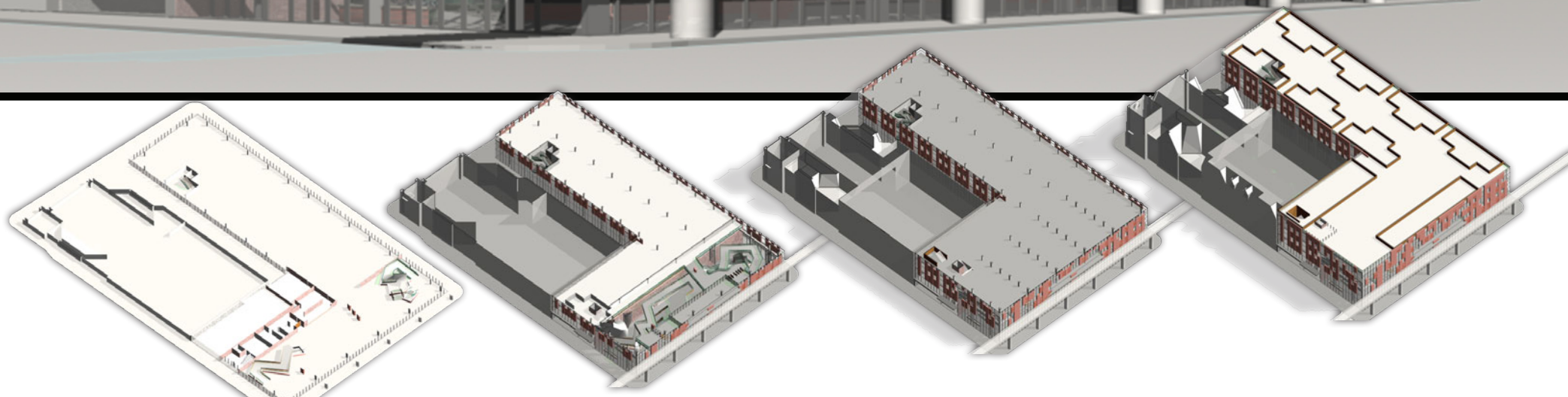

WOMENS DORM
MEN'S DORM
CONTROL
WOMENS ACTIVITY
MEN'S ACTIVITY
ROAD
LOADING
PANTRY
DORM
DISTRIB.
TUTORING
KITCHEN
DINING
EXIT
SCREENING
ACTIVITY
SANCTUARY
ENTRY
MLK



DETROIT

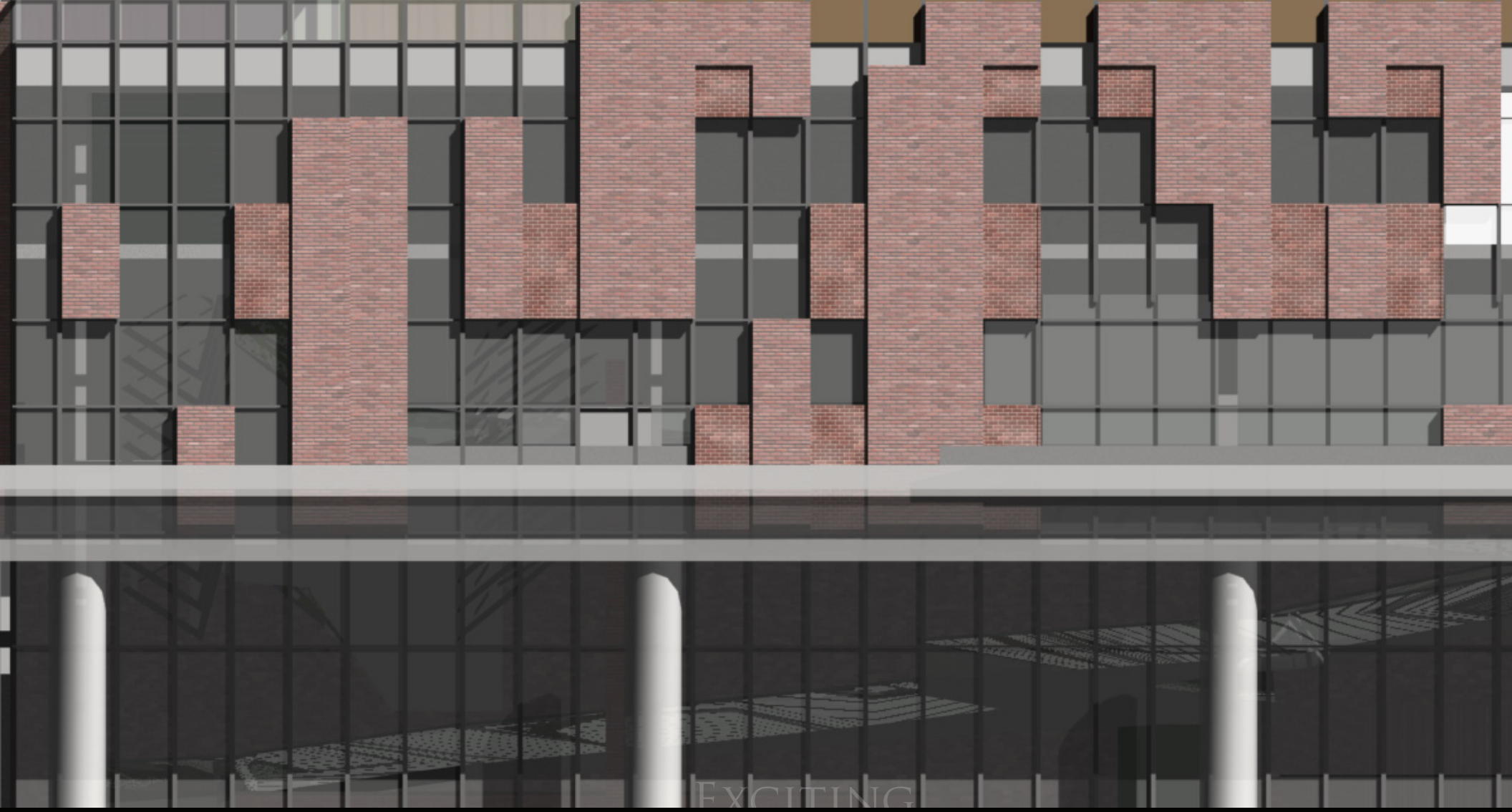


Mixed use and Transit



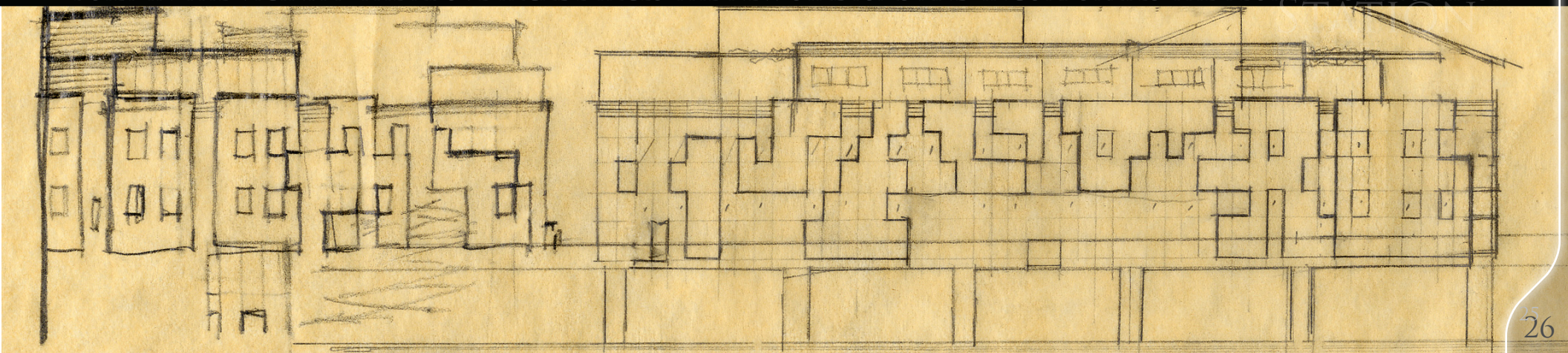
The building quietly wraps around a historic church and boldly engages the stadium and People Mover.

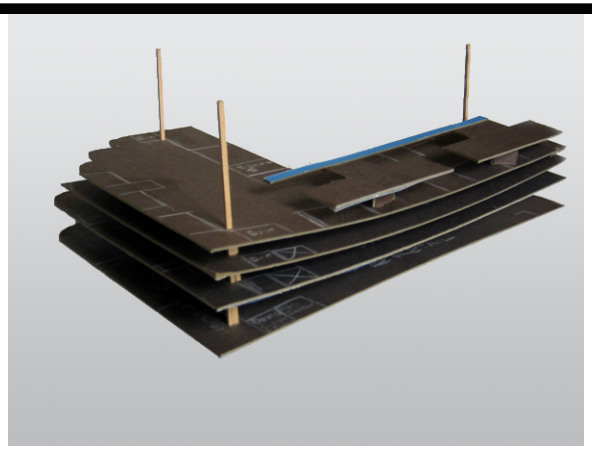
Located in downtown Detroit, the building has retail on the first floor, offices on the second and third, and residential on the fourth. The People Mover lobby on the first floor includes foodservice and options of ramps, stairs, or elevator to take you to the loading platform. The roof provides patio area looking directly into the new baseball stadium.

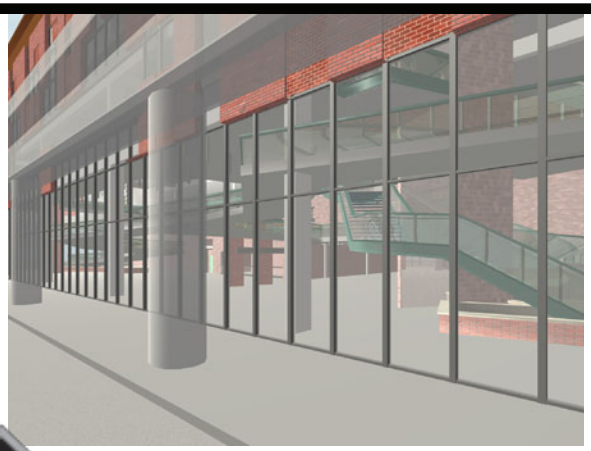


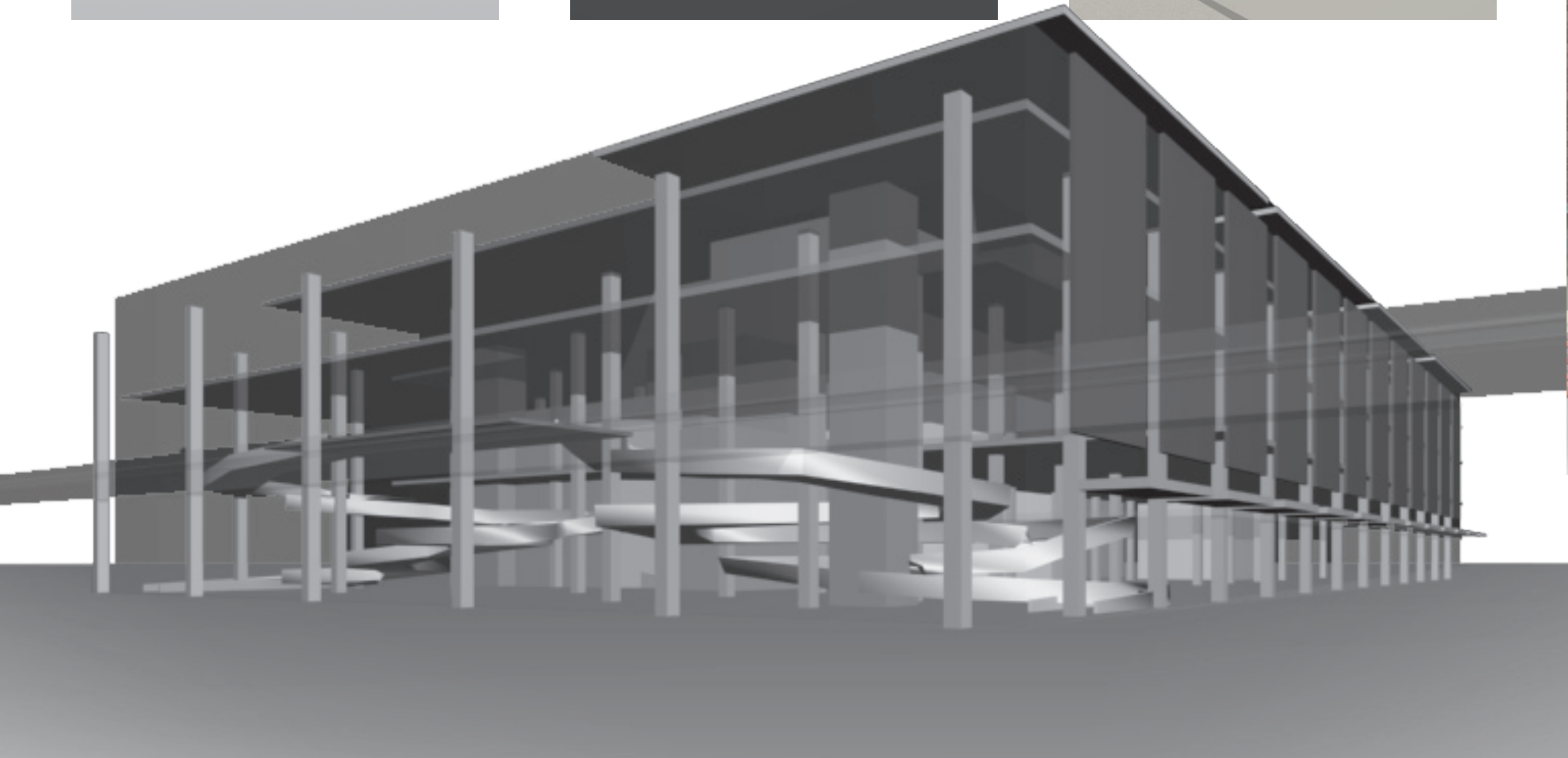
FACADES TRANSITION FROM OVERTLY REPETITIOUS TO AN EXCITING CELEBRATION OF THE NEW DOWNTOWN STADIUMS

built in the vicinity. The above facade faces the new stadiums and incorporates the people mover station.



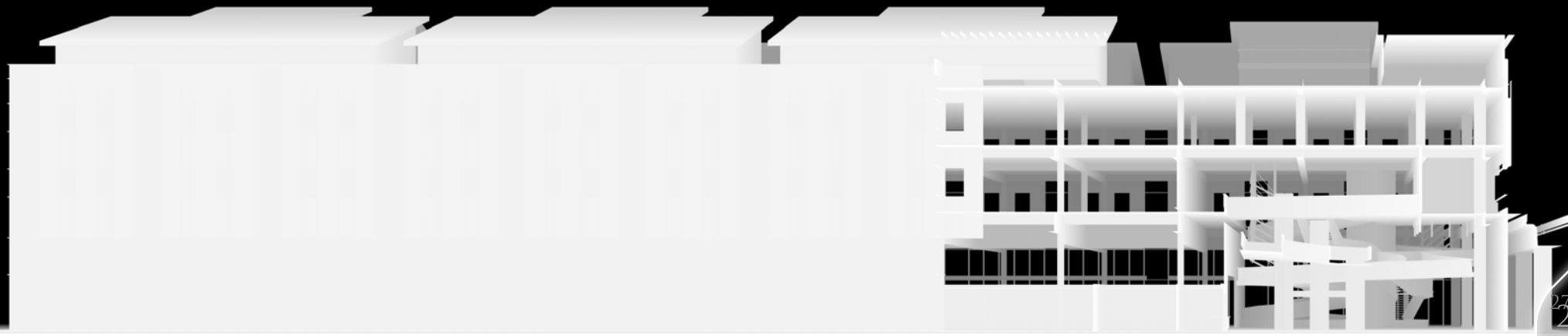


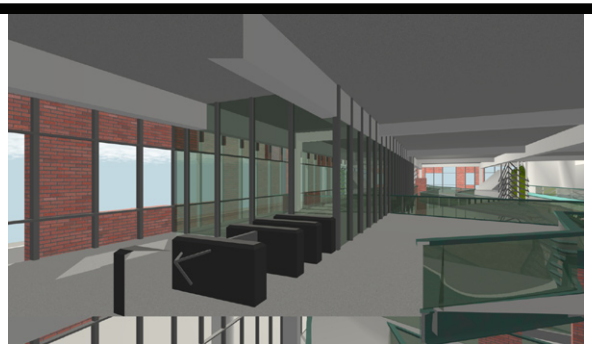


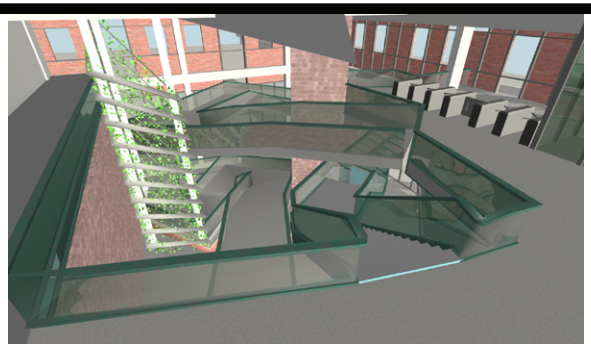


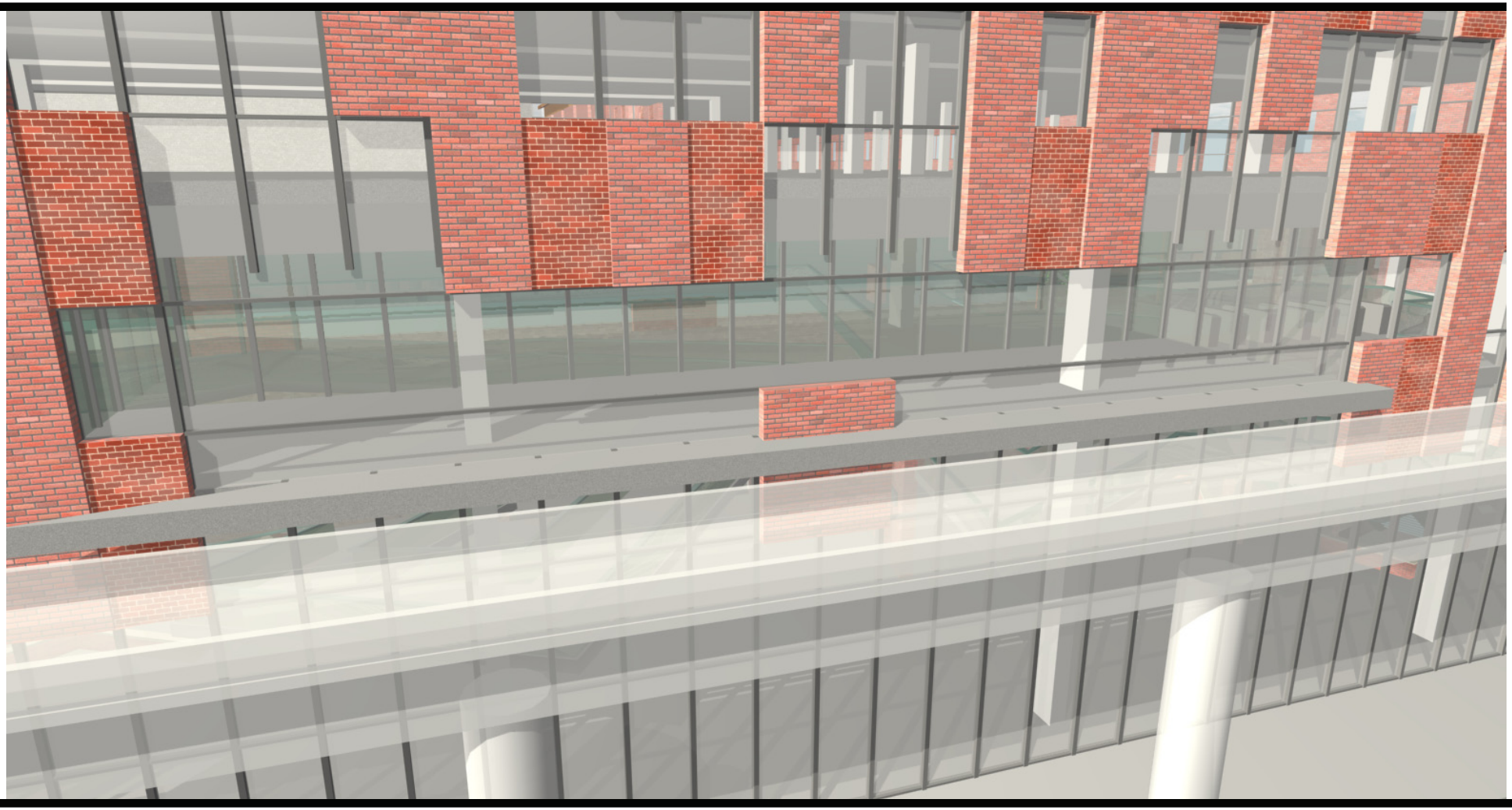
The ramp structures were studied largely through relational modeling. A basic U-shape section extruded

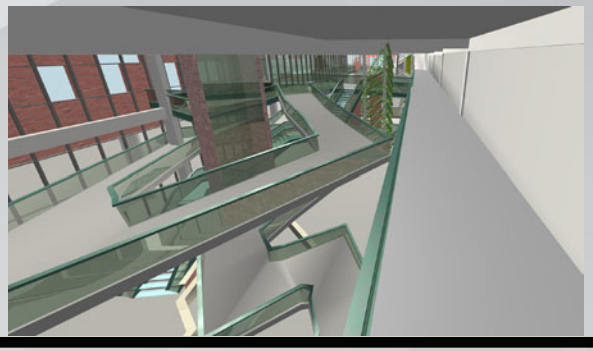
along a path allowed interactive changes and evaluation of hundreds of adjustments

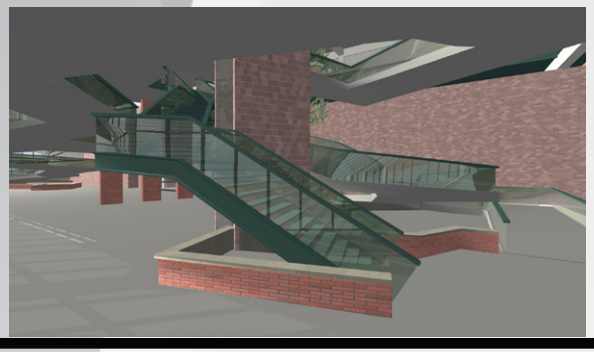




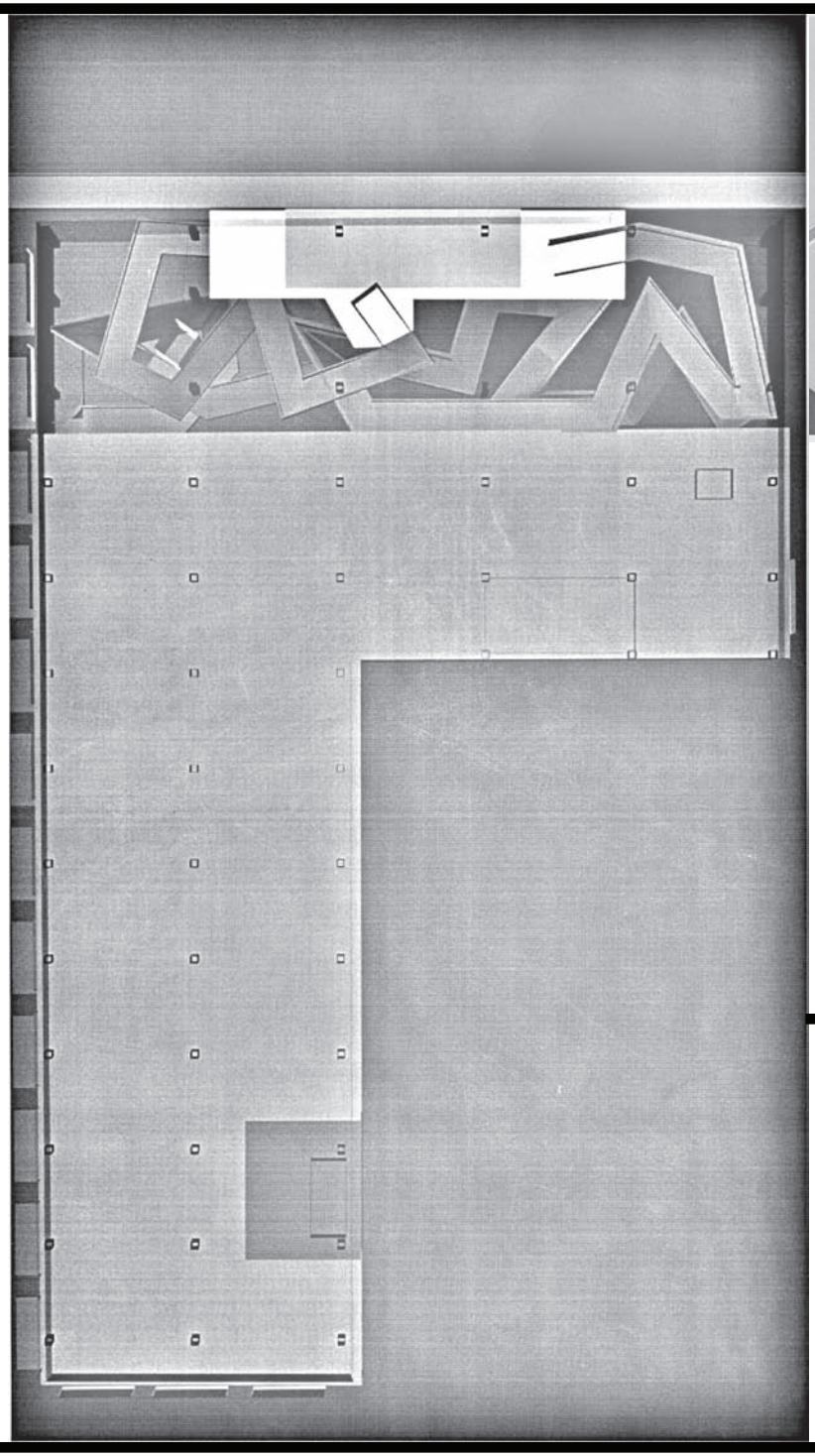


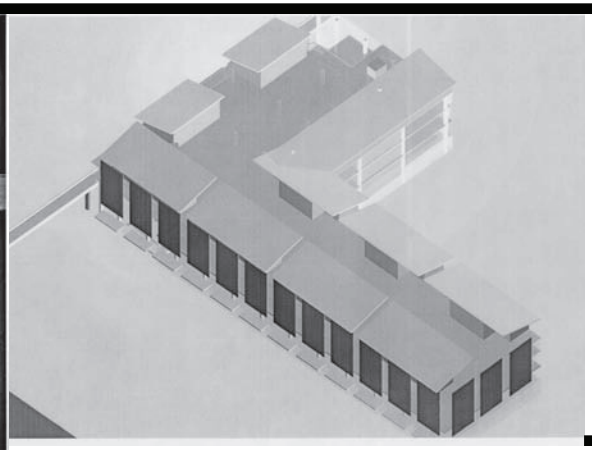




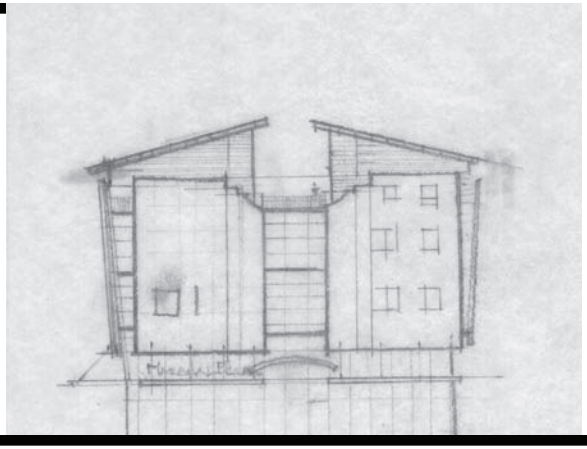


Rooftop
Residences



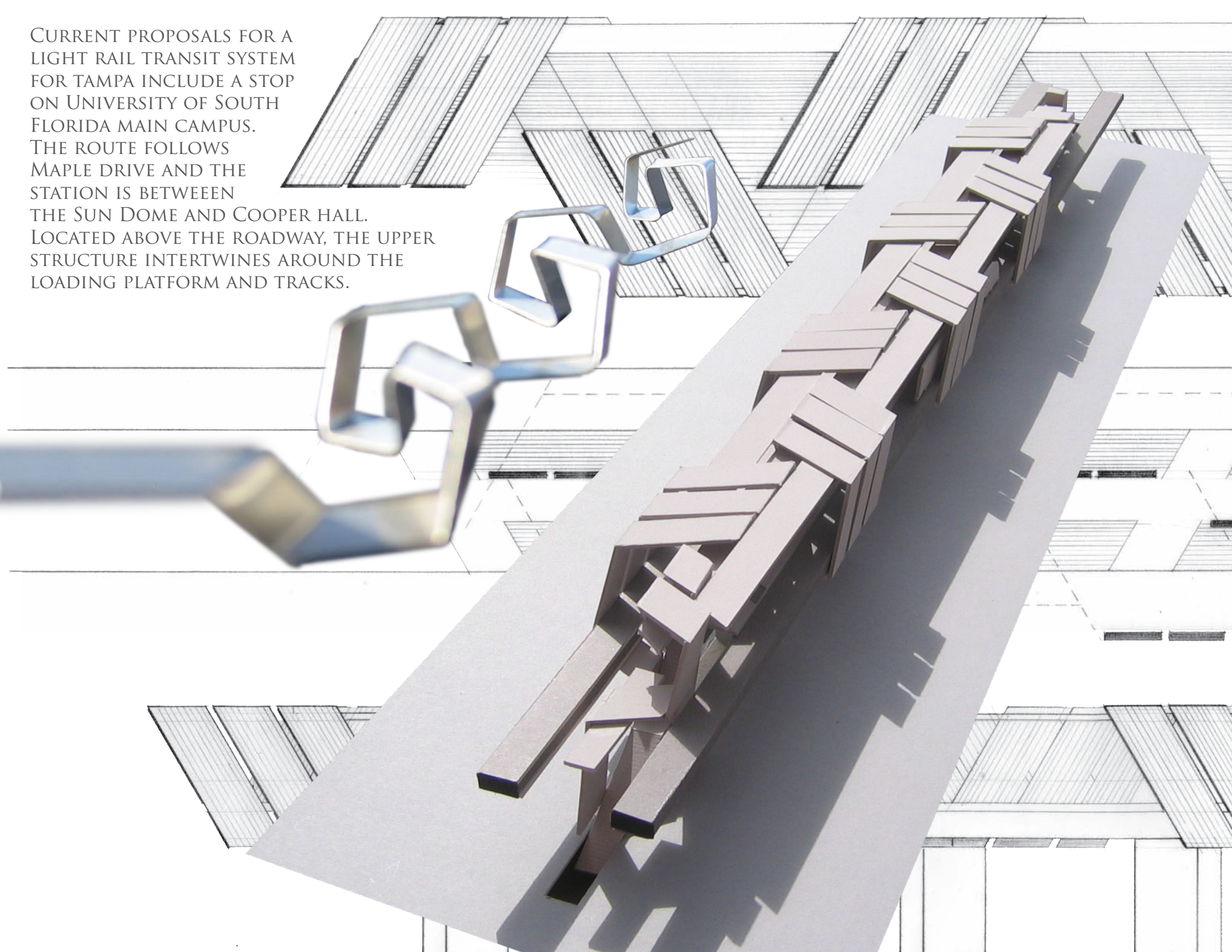


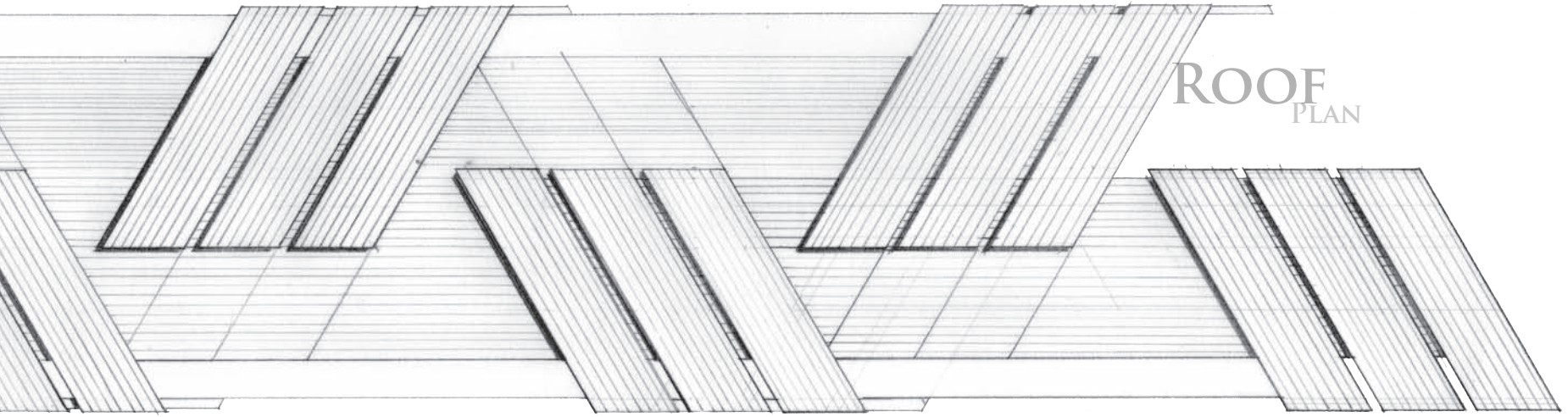
PROGRESS
SKETCHES



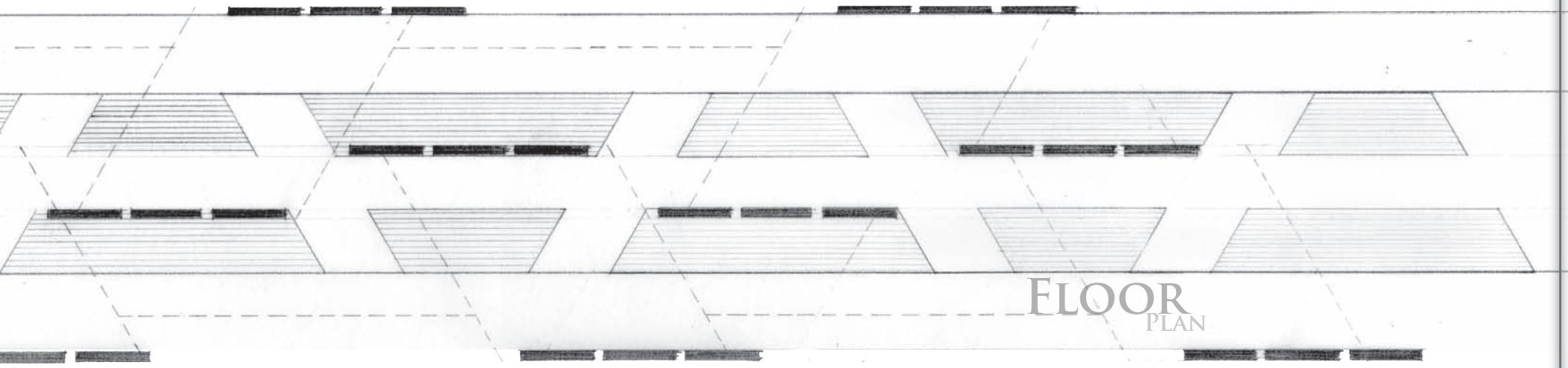

USF Light Rail Station

Current proposals for a light rail transit system for tampa include a stop on University of South Florida main campus. The route follows Maple drive and the station is betweeen the Sun Dome and Cooper hall. Located above the roadway, the upper structure intertwines around the loading platform and tracks.

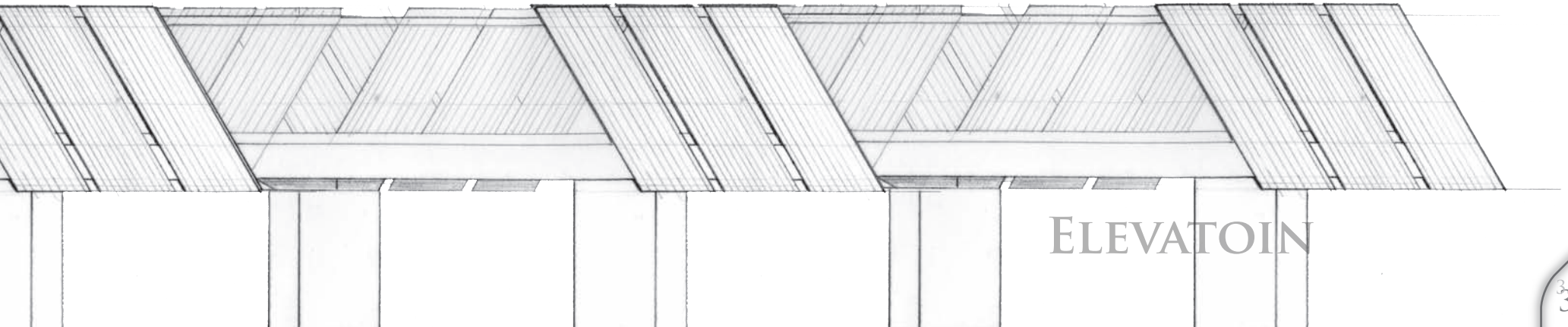




Roof Plan

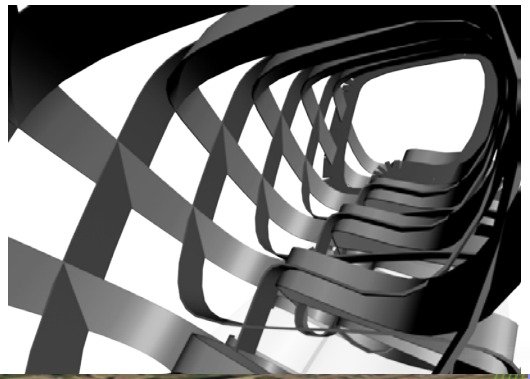


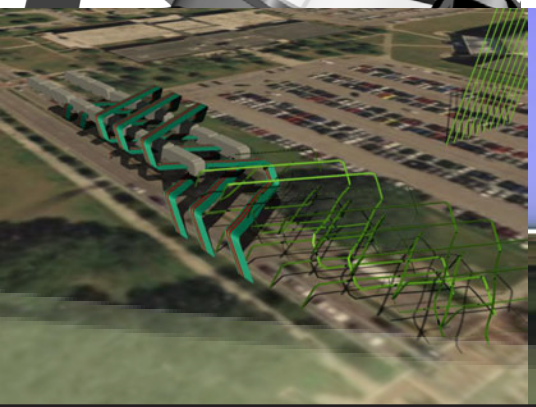
Floor Plan

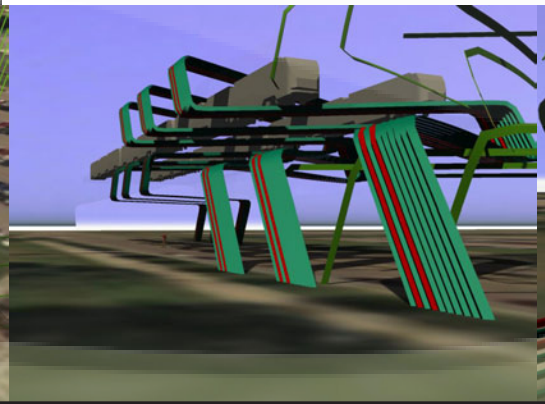


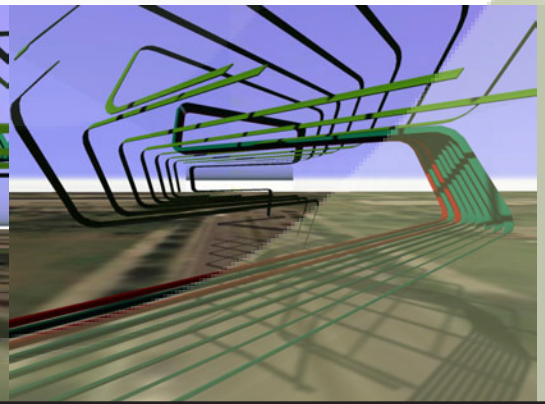
Elevatoin

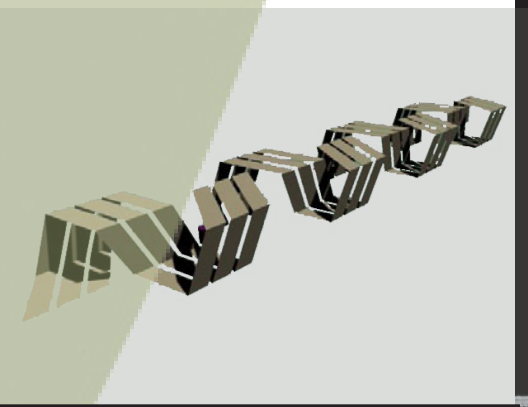
Preliminary Sketches



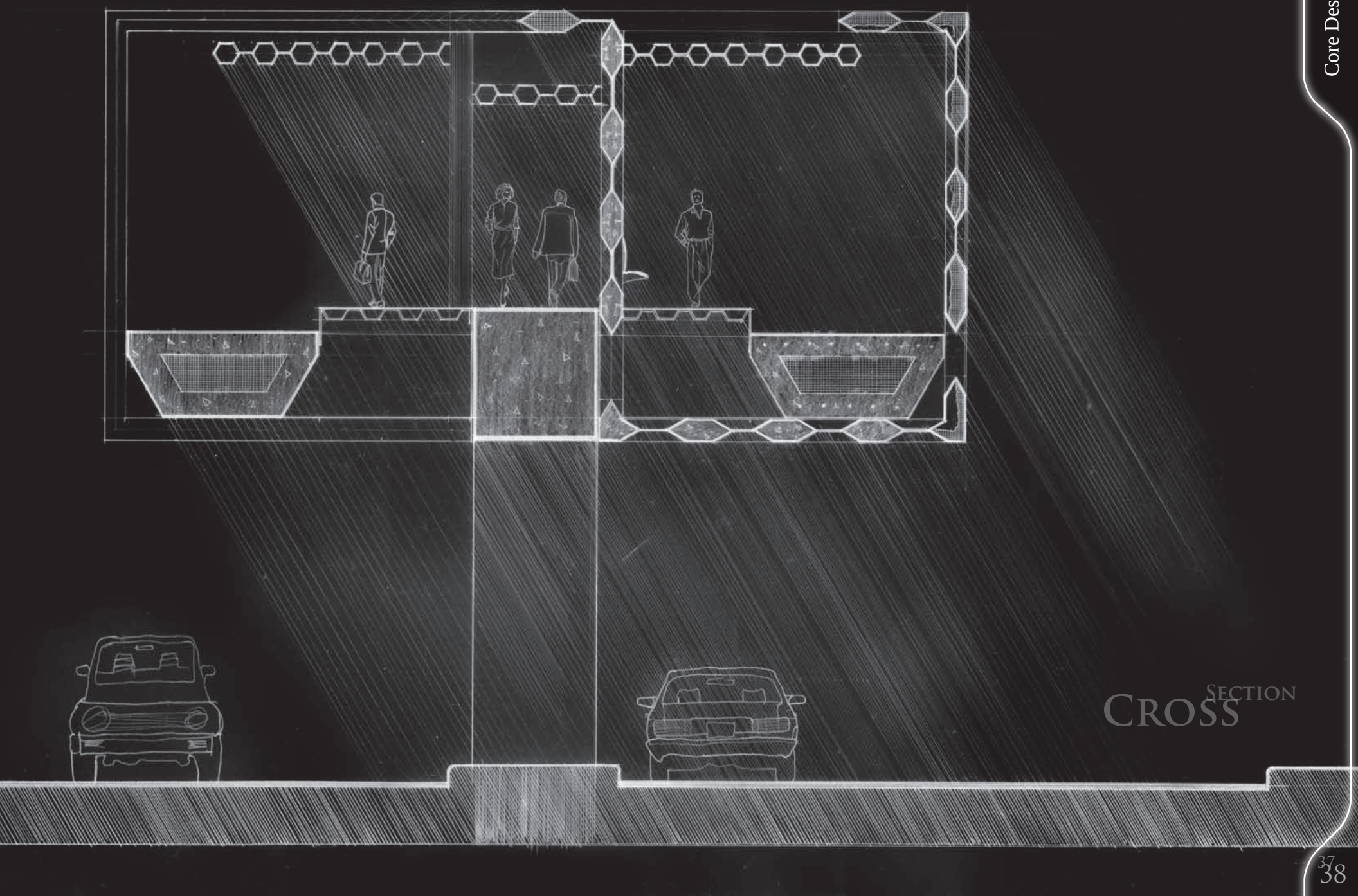




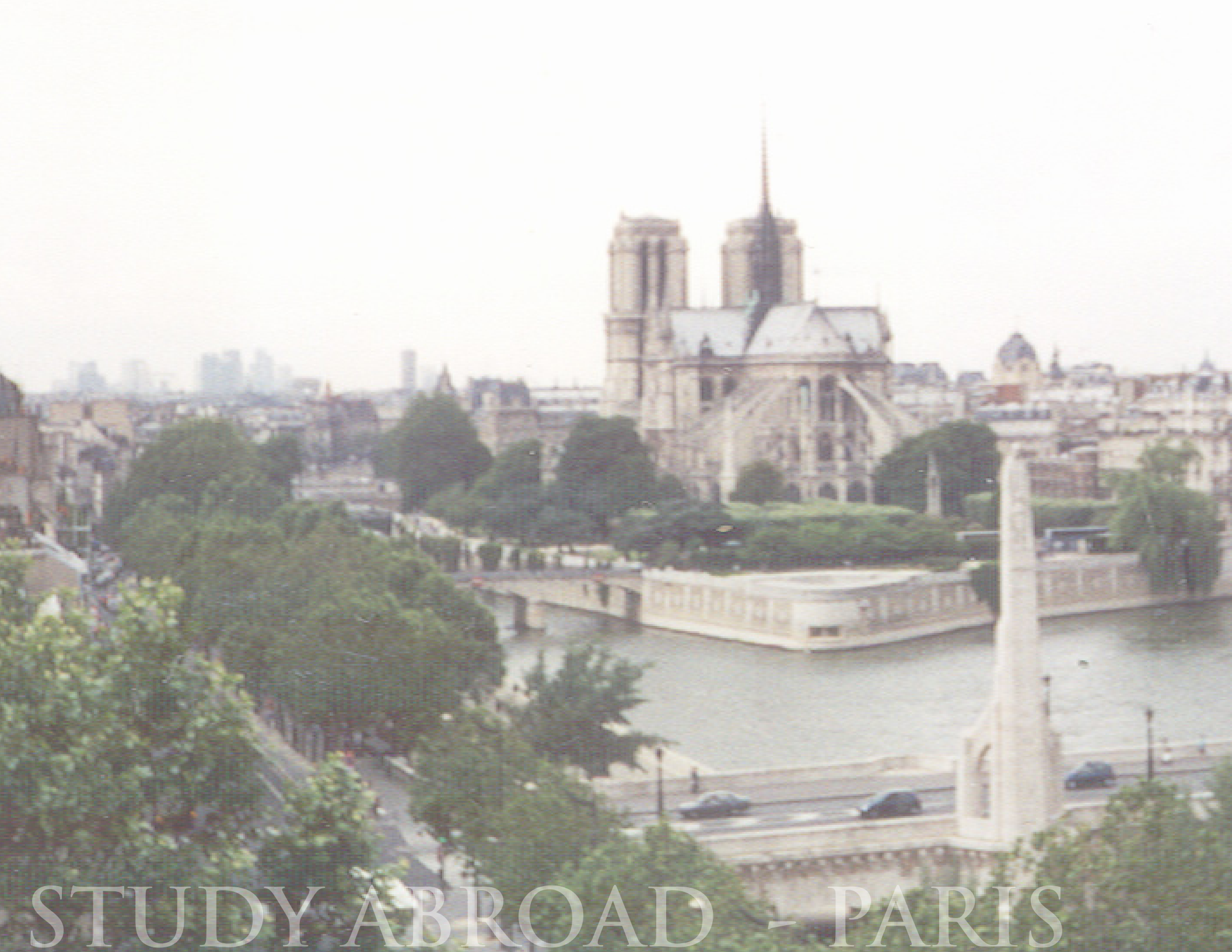


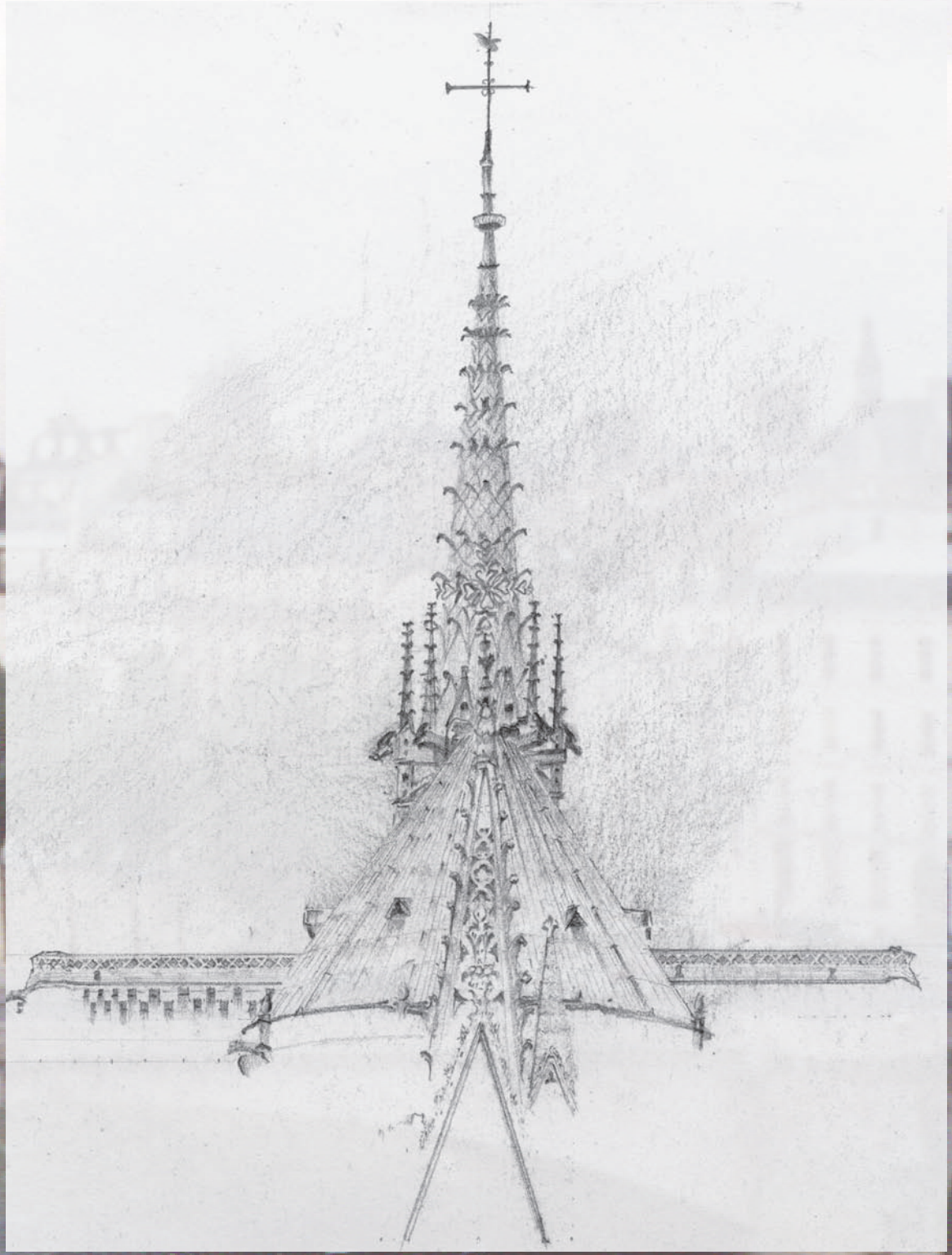


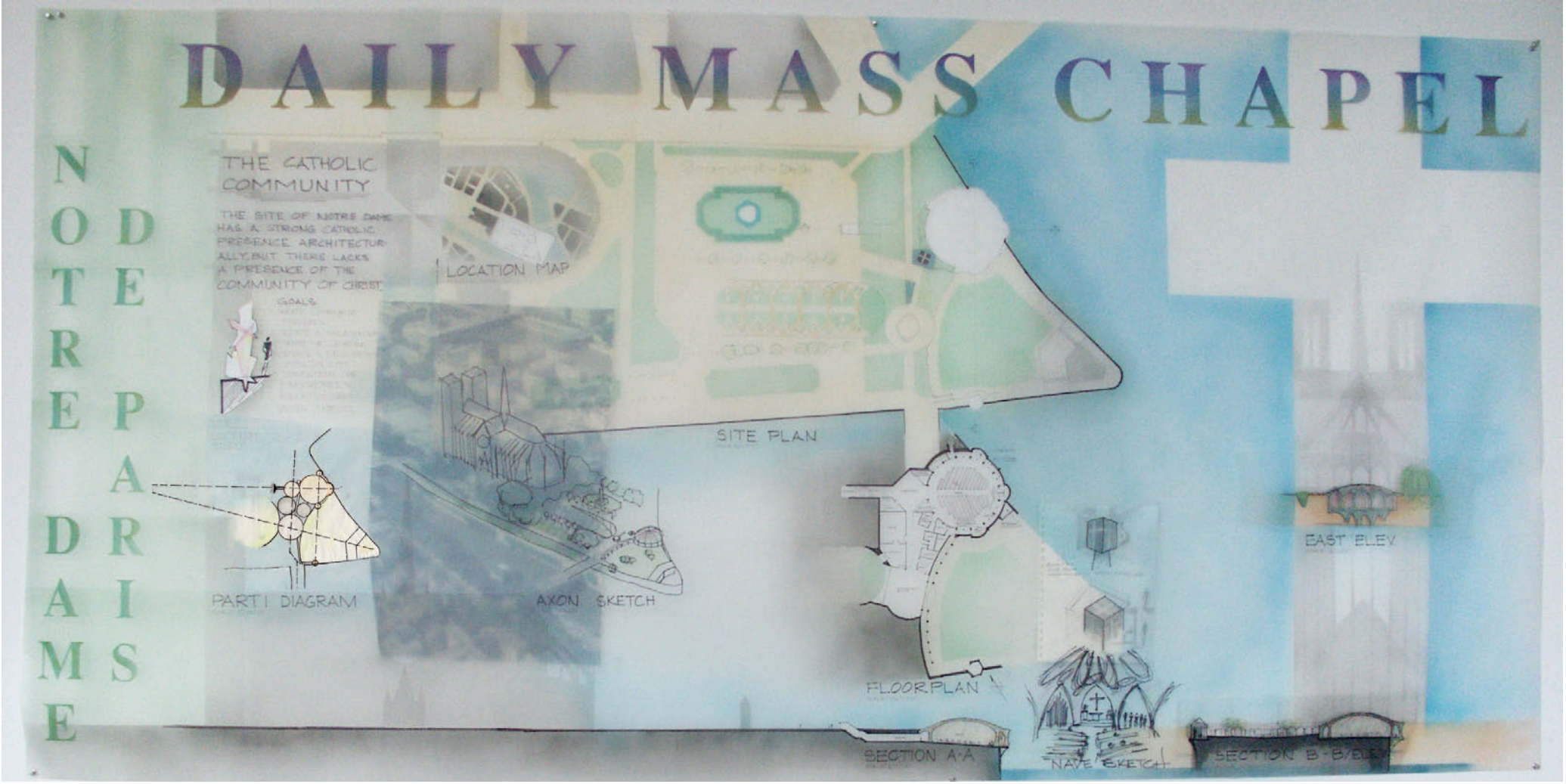
AN INTERWEAVING GAUSSIAN PLANE DEFORMS LINEAR ELEMENTS IN EXPLORATION OF POTENTIAL STRUCTURE FOR THE STATION



Cross Section


STUDY ABROAD - PARIS

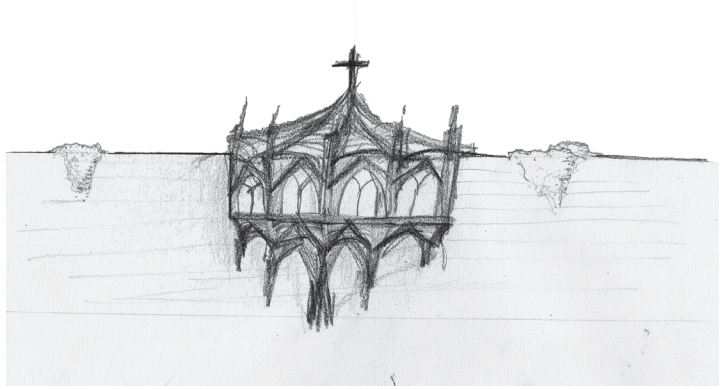


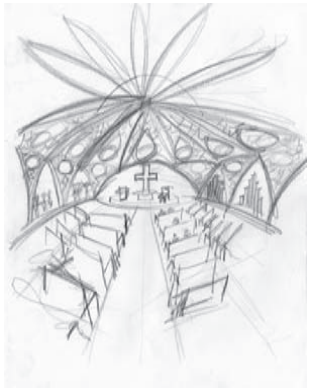


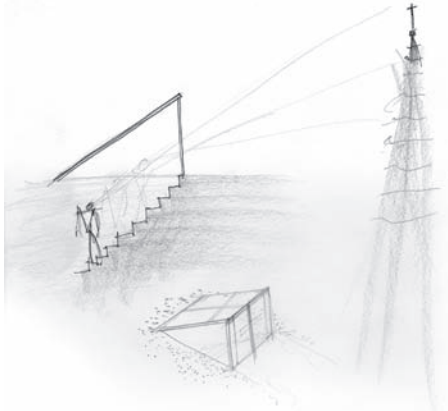
The study abroad program spent a month living and studying in Paris. The project was a chapel for the congregation of notre Dame de Paris. The project required minimal impact on the historic sculpture and fountain and the holocaust memorial, so the majority of the spaces are below ground. The sanctuary penetrates the retaining wall to overlook the seine. Presentation was airbrush, marker, and colored pencil on mylar (approximately 4'-6" x 9'-0").

A chapel is needed for the religious functions for the congregation Notre Dame Cathedral in Paris.

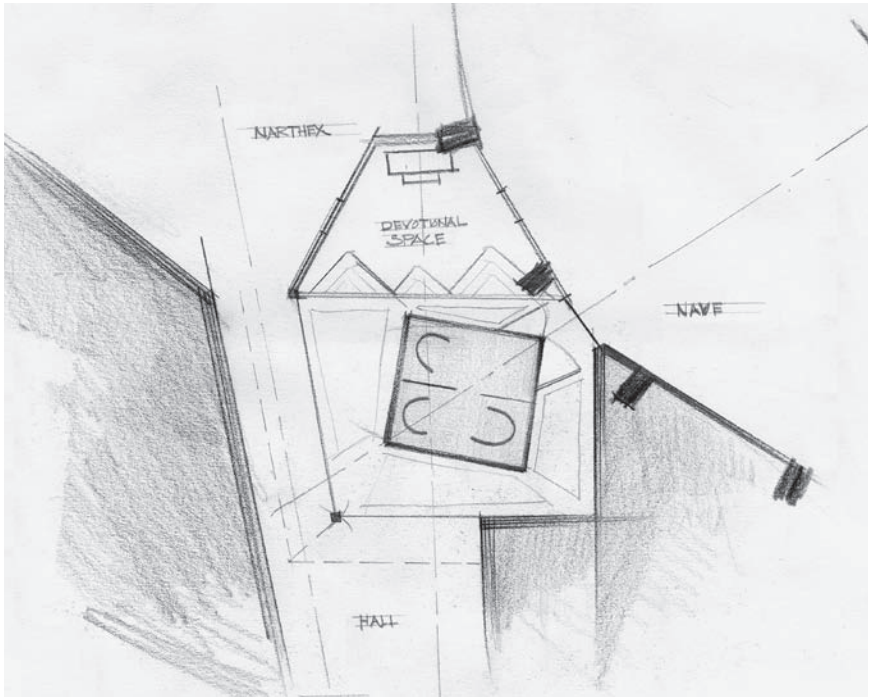
PARTI
DIAGRAM

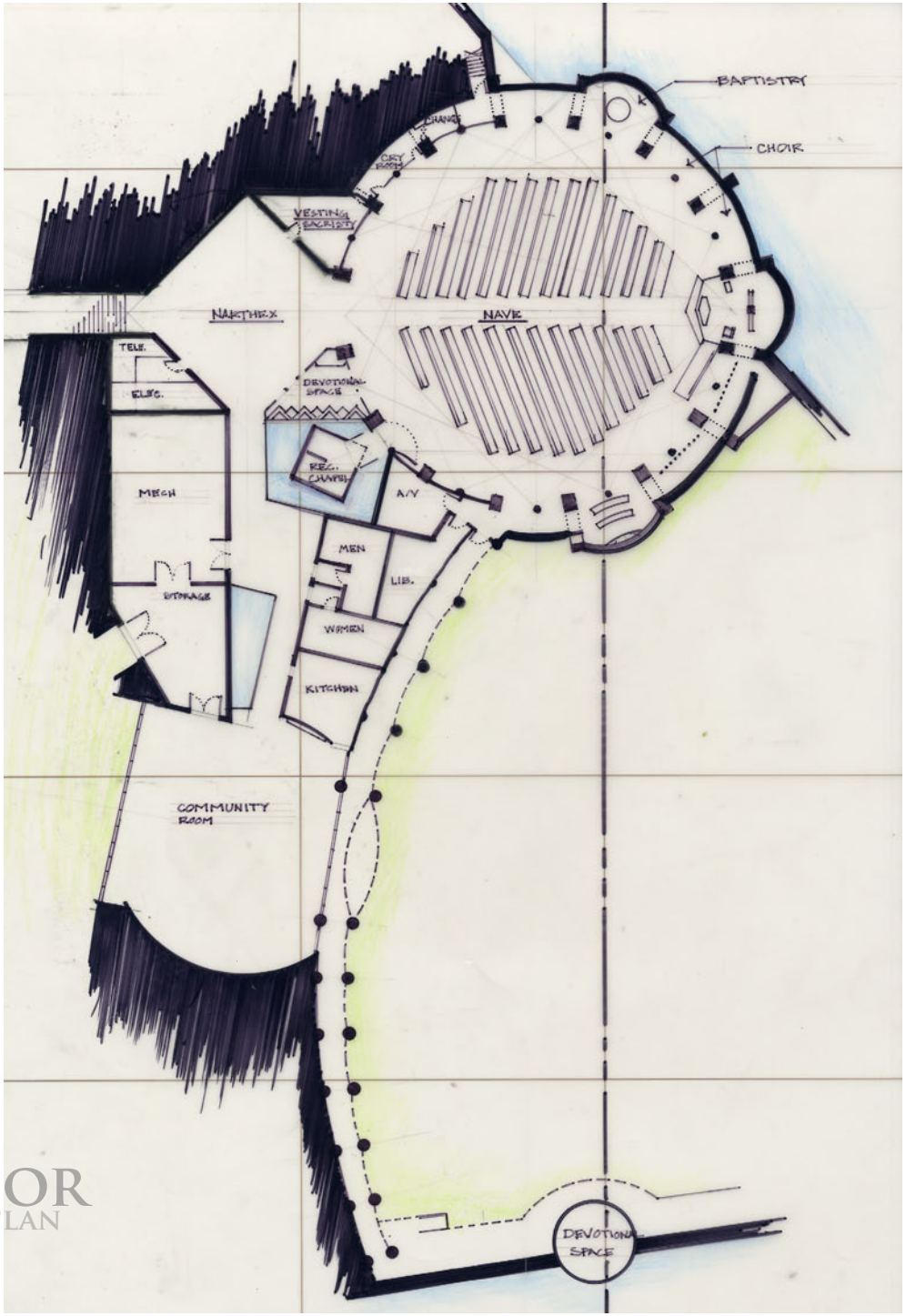






NESTLED BETWEEN A HISTORIC FOUNTAIN AND HOLOCAUST MEMORIAL, THE BUILDING IS PRIMARILY BELOW GROUND

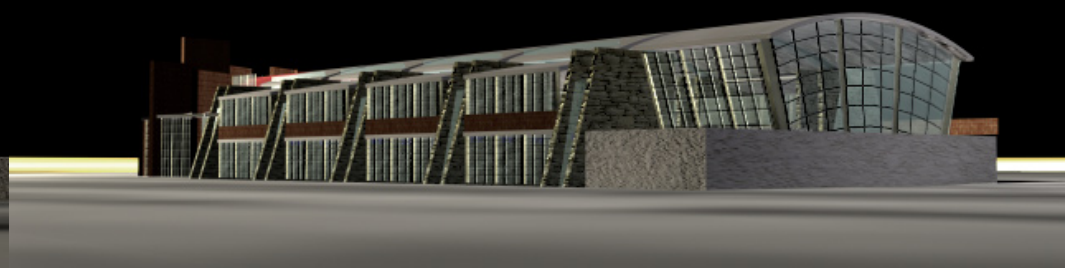

NARTHEX
DEVOTIONAL SPACE
NAVE
HALL

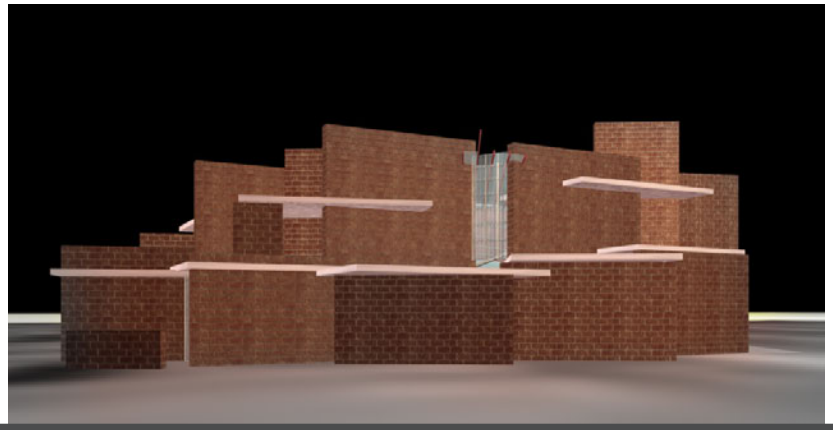

BAPTISTRY
CHOIR
VESTING
NARTHEX
NAVE
TELE.
ELEC.
DEVOTIONAL SPACE
REC. CHAPEL
A/V
MECH
MEN
LIB.
STORAGE
WOMEN
KITCHEN
COMMUNITY ROOM
DEVOTIONAL SPACE

FLOOR PLAN

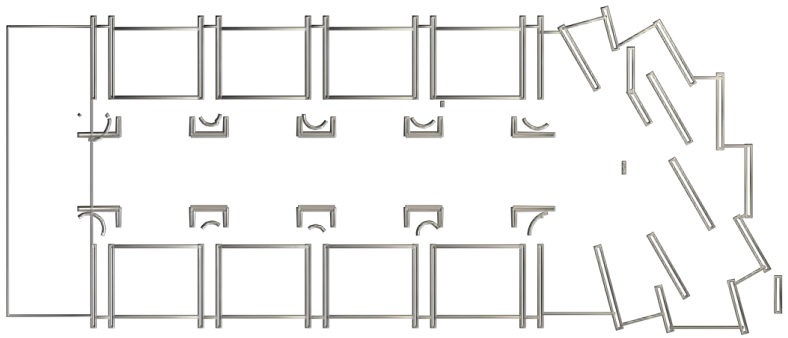
PULL-APART
MODEL

Near the early Ford automobile factories, the building evokes the industrial heritage of the area





THE COMMON AREAS ENGAGE THE INTENSITY OF DETROIT TECHNO

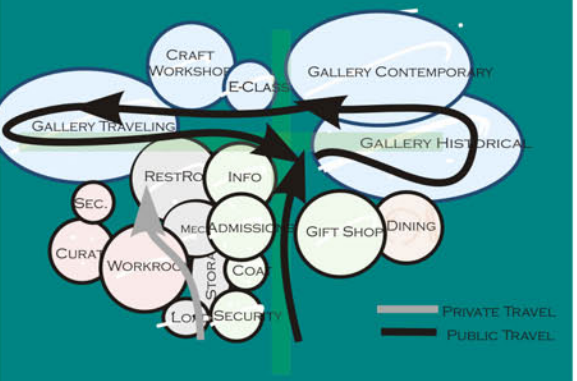


DETROIT YOUTH HOSTEL

FLOORPLAN

SCALE : 1" = 10'-0"

SCHEMATIC DESIGN



IDS-2 : SANDWICH AREA CRAFT MUSEUM SD-1

ROOF PLAN

ARTS & CRAFTS MUSEUM

Interior

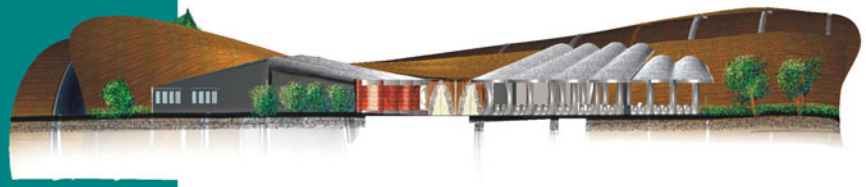
Dining Room

The Chairs in the dining area were selected for their ambiguity. They are wood, but in a contemporary design creating an ambiguous transitional area between the contemporary food service and the rustic brick walls. The layout of this room mimics the layout of the historic and contemporary galleries and should be visible to someone exiting the dining area.

East

Elevation

Scale : 1" = 8'-0"



Cross Section

Scale : 1" = 8'-0"

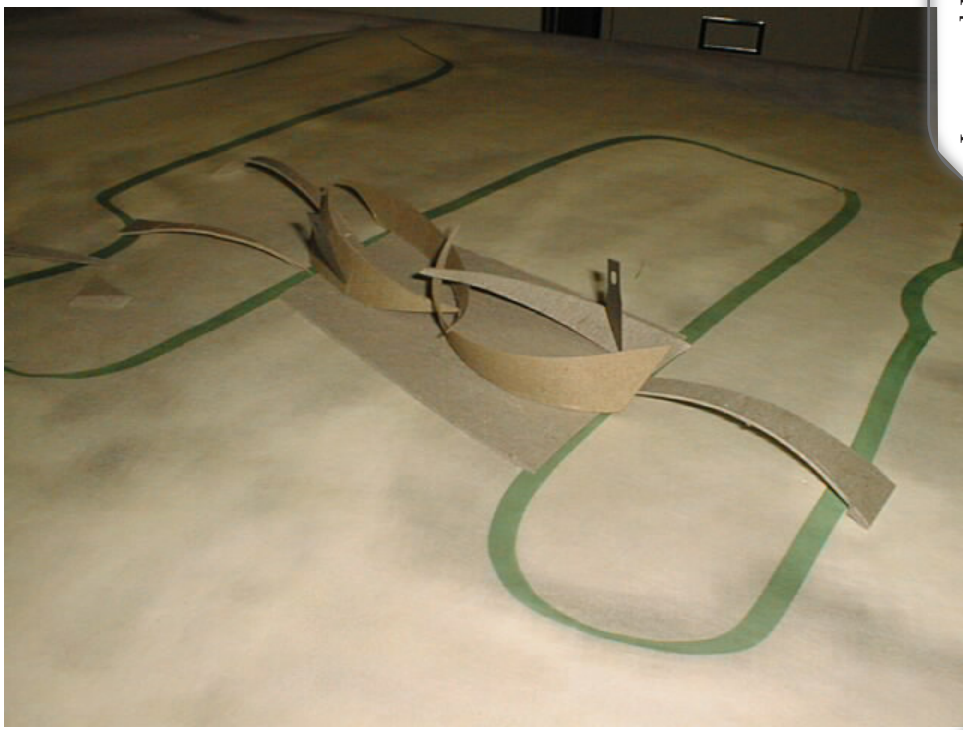
Site Plan

Scale : 1" = 40'-0"

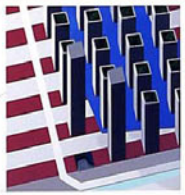
Site number 1 was chosen for the proximity to the Sandwich district. The development of site 1 would help draw development deeper into the Sandwich area than the other sites. Being only one block away from Sandwich street promotes pedestrian access to the district. The location of parking promotes pedestrian use of the area.

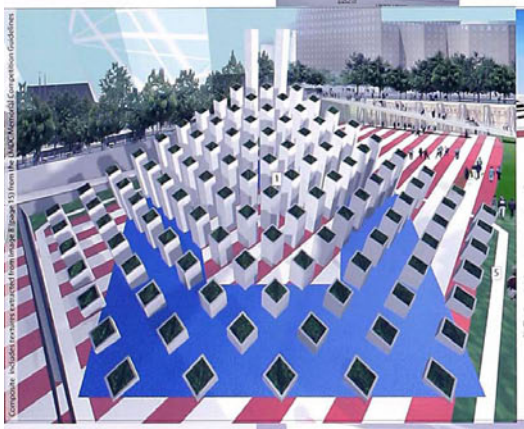
Location Map

No Scale

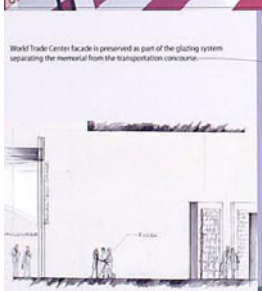


Composite: includes Image 3 (page 16) from the LMDC Memorial Competition Guidelines

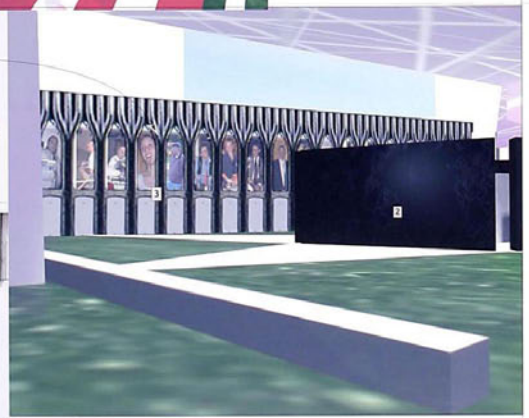




Composite: Included two sketches extracted from Image 8 (page 15) from the LMDC Memorial Competition Guidelines



World Trade Center facade is preserved as part of the glazing system separating the memorial from the transportation concourse.



The Great American Experiment hatched from the hearts and minds of this nation's forefathers has grown and prospered for over two centuries probably outstripping their expectations. With pen they laid out a system of government designed to protect unalienable rights of all citizens; with muskets they laid down their lives in hope of their descendants having country they dreamed. This is our legacy.

September 11th revealed our vulnerability as a nation as immoral men violated those unalienable rights. "How could we have let this happen? How could we let our guard down so much?" was asked by peace loving Americans. Personally, I began coming to terms with the tragedy when I realized that this could happen because we were succeeding. America's free markets and civil rights operate on a fabric of trust. The Great American Experiment is proving successful.

The Memorial marks tremendous sorrow, but also marks occasion for tremendous pride and celebration of the social accomplishment that is our way of life.

The footprint of the South Tower contains 110 miniature towers. Two of these would rise a hundred feet above the memorial plane and be detailed models of the World Trade Center towers for those who never saw the towers, and for those who remember them all too well. The remaining towers are truncated, forming a miniature city with the highest height relative to the next tallest building near the World Trade Center, capturing the dominance of the Towers for generations to come. The names of the victims are inscribed vertically on the field of towers, at legible height, each reaching upwards to heaven as the long vertical windows once did. Small gardens top each of these truncated tower, annually inviting landscapers to renew our celebration of life with fresh arrangement and designs; also alluding to the gardens atop the Libeskind buildings.

The World Trade Center functioned at the core of our economy, which is founded on the laws and regulations of our society. As a constant reminder of this relationship between our economy and justice system, a blue pentagon is inlaid at the base of the field of towers. This pentagon lies in a field of red and white stripes, similar to the American Flag. All Americans know the references of these colors. The white stripes are constructed with pure and simple concrete, whereas the red is created with tiles set slightly inches below the concrete and selectively covered with laminated glass. A void between the tiles and glass allow for water to flow from the waterfall towards the harbor, reminding us of the sacred loss experienced on this site.

White - purity and innocence

Red - hardiness & valor

Blue - vigilance, perseverance & justice

An open field separates the vicinities of the North and South Towers. Pathways for traffic on the perimeter help preserve the open expanse of grass as a reminder of the heroes in Pennsylvania who made the ultimate sacrifice to save potentially thousands of other lives.

The North Tower footprint is inscribed with a single concrete star. Control joints divide the five points in to ten regions, making 50 in all. The irregular shape of the regions depicts the confusion faced by the States over what to do, but in this confusion there was overwhelming national unity. The center of the star houses the most sacred section of the Memorial. Inside a pentagonal structure of white marble walls is the final resting place of the unidentified remains from the tragedy. A courtyard is formed around this building with two layers; the inner layer is a structure of vines supported by wires, the outer layer is a thick pentagonal wall of black marble. The vines provide a place for families to place remembrances honoring their loved ones. The outer marble has five faces where artists can be selected to make their expression the the solemn occasion. This courtyard is largely shielded from the elements by Daniel Libeskind's cultural building bridging over the site.

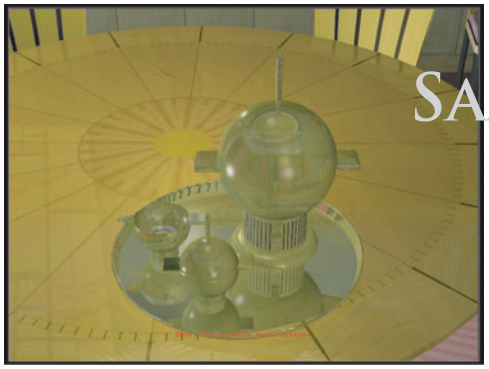
In the bedrock region, opposite of the slurry wall, is dedicated to the brave men and women who helped with the recovery effort. With emphasis to those who risked their lives to save others, and special distinction to those rushed to the call of duty for the last time that day.

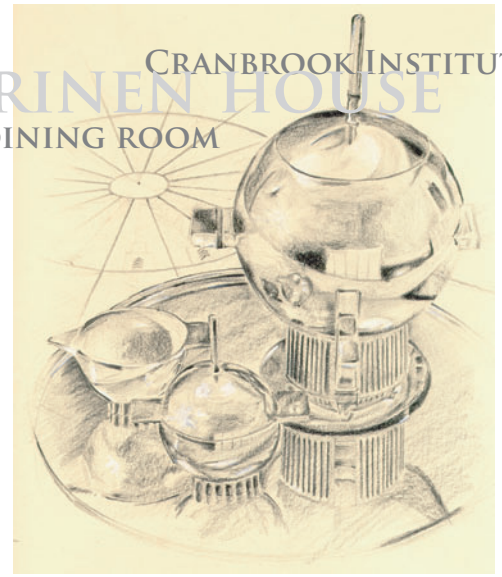
The Liberty Street wall shall represent the international impact of these events. Each of the 92 countries that suffered loss of life will be represented by a plaque of their flag.

The glazed wall on the northern edge of the North Tower shall become a constant and living celebration of life. Restoring one facade of the entry to the towers along this wall, although reversed to face inward to the tower, would produce numerous glazed openings. Utilizing the interior of the transit station to mount projection equipment, each opening becomes a screen where families can bring digitized photos for projection. Viewed from within the North Tower footprint, computer kiosks would allow individuals to identify their loved ones, whose images would then be queued for in a slide show format in one of the openings. This solemn celebration of life would be composed over the people in the terminal going about their daily business, reminding us of the fragility of life and value of every single day.

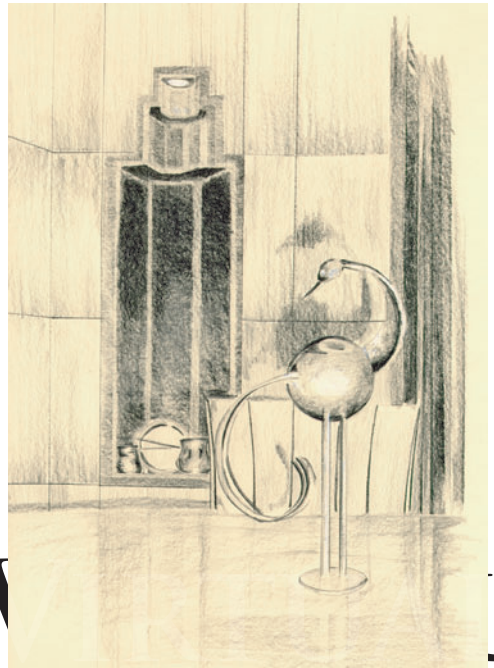
1. Recognize each individual who was a victim of the attacks.
2. An area for quiet visitation and quiet contemplation.
3. An area for families and loved ones of victims.
4. Separate accessible space to serve as a final resting place for the unidentified remains from the World Trade Center site.
5. Make visible the footprints of the original World Trade Center towers.

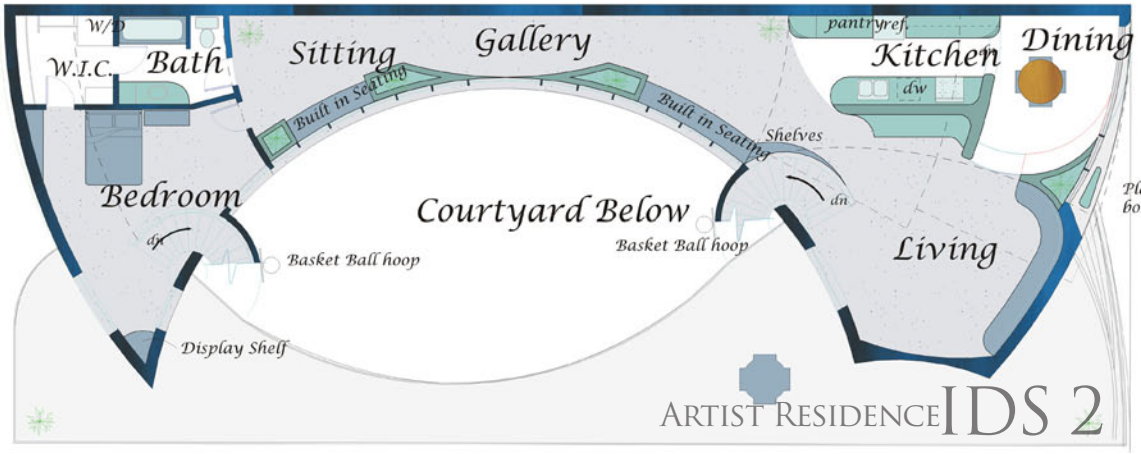
Saarinen House
dining room

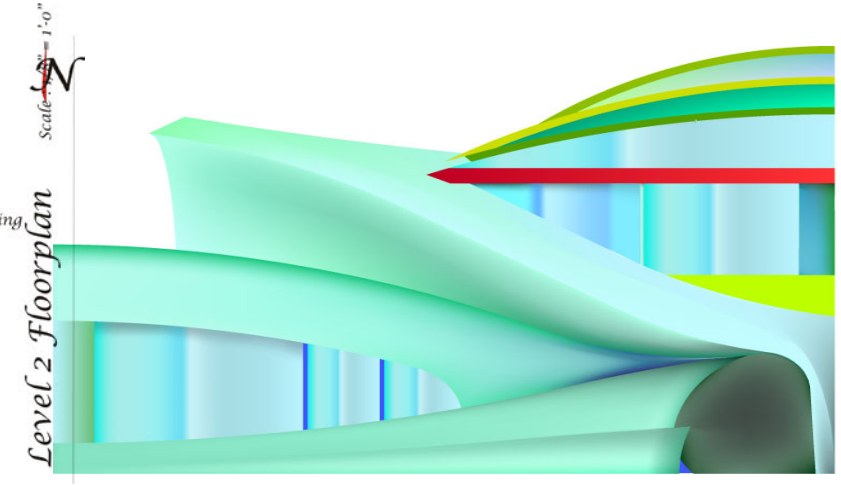


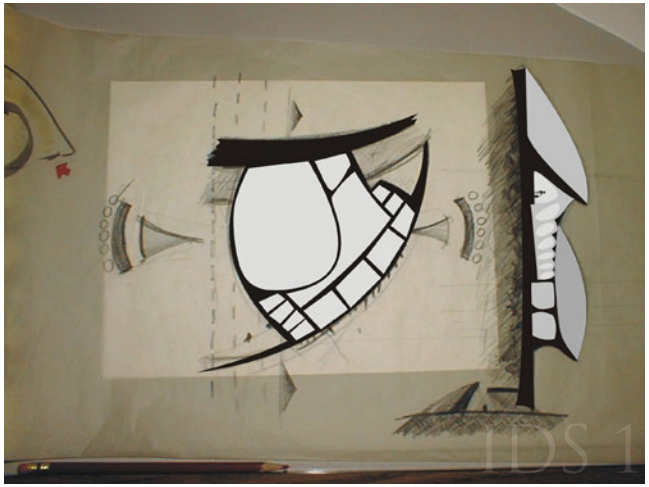


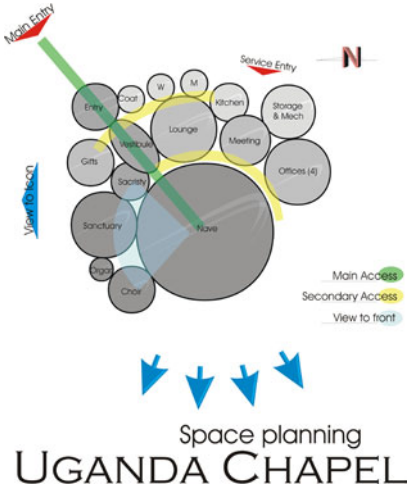
The Virtual Cranbrook project progressively documented the buildings at the Cranbrook Institute. The dining room of the Saarinen house was rendered, sketched, and documented for HABS.











Michigan Architectural Foundation
A.I.A. Detroit-a chapter of the American Institute of Architects
Lawrence Technological University-College of Architecture & Design
Detroit Edison Company
And the
Illuminating Engineering Society-Michigan section
Confer this Certificate of Achievement Upon

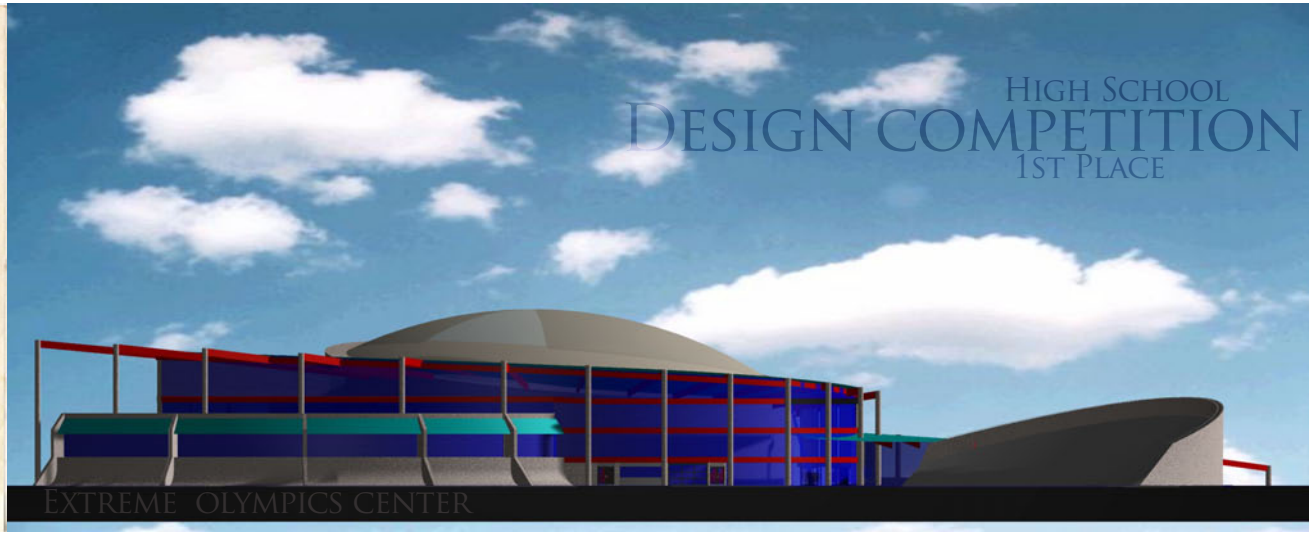
Ryan Grabow

First Place
Michigan Architectural Foundation

30th Annual Architectural Design Competition For High School Students

1996-1997

President, Michigan Architectural Foundation
Dean, College of Architecture & design, LTU.
President, Detroit Edison



TECH LAWRENCE TECHNOLOGICAL UNIVERSITY NEWS

Vol. 71 No. 8 SERVING THE LAWRENCE TECH CAMPUS FOR 71 YEARS 4.21.04

Steel Bridge Team Headed for Nationals

A couple nights prior to the Regional Steel Bridge competition, team members could be found in the Structural Testing Center filing down welds and racing the clock to better their construction time. Mike Livernois II files a weld. Below, Ryan Grabow solders a cable.

Steel bridge team members (clockwise from lower left) Amy Stevenson, Mark Novis, Ryan Grabow, Lora Naccarato, and Mike Livernois II.

By Karen Sanborn

Lawrence Tech's 2004 Steel Bridge Team walked away from the Regional Steel Bridge Competition held in Akron, Ohio, with three plaques and a berth in the national competition to be held in Golden, Colorado, May 28-29.

The five-member team consists of Lora Naccarato (captain), Ryan Grabow, Michael Livernois II, Mark Novis, and Amy Stevenson. They finished first in the economy and construction speed categories and second overall.

The University of Michigan placed first overall. They have an advantage with a 20-member team designing and fabricating their bridge.

While the objective of the competition is to build the lightest, strongest, best-looking bridge in the fastest time, each year the competition rules are revised. While the bridge design scheme remained a dual-span bridge, there were some significant changes.

This year's bridge is a foot longer and the target bridge weight was reduced from 100 pounds to 80 pounds. The bridge must support a 1,500-pound load on the short span and a 1,000-pound load on the long span, with a maximum of one quarter of an inch aggregate deflection. The bridges are built one at a time in front of a team of ASCE-certified judges, one of whom holds the stopwatch.

The competition involves assembling, weighing, and loading the bridge. Prior to building and assembling the bridge, the pieces or "members" are laid out in the staging area taped off at opposite ends of the gym floor. In the center is an imaginary river of blue tape with an island in it for the short span. One team member, known as the barge, can be in the river; the other teammates must bring the bridge members to him or her for assembly. Penalties are assessed for tools, bridge members, or bolts dropped into the water or for team members who step off land. After the bridge is built, it is moved to the weighing station and then the loading area, where it is stacked with 2,500 pounds of angle iron steel to check the deflection.

Built of lightweight, yet strong, chromoly bars and square tubes, Lawrence Tech's bridge was the second lightest at 118 pounds. The Blue Devil bridge builders blew the other teams out of the water (pun intended) with a construction speed of 3 minutes 29 seconds. All the other teams took more than five and a half minutes. Economy is calculated by multiplying the construction time by the number of teammates. With only five builders and the fastest time, Lawrence Tech ran away with the economy plaque.

The team's thorough understanding of the rules allowed them to design a bridge that met all of the specifications. The many hours spent designing, fundraising, fabricating, and practicing paid off. The team's presentation board was a work of art, with project designs etched on sheets of steel.

"They were awesome, and I am very proud of them," said student advisor Jeff Girard, who watched anxiously from the bleachers. Mounir Karam, the faculty advisor, also is excited that the team will go to the national competition.

Between now and nationals — only six weeks — the team is designing an upper structure to reduce deflection and is trying to shave some weight off the bridge. "Because our construction time was so fast, we have plenty of room to add an upper structure, which will make us even more competitive at nationals," said Naccarato, who was a builder for last year's team. "We intend to be in the top 10 at nationals. With the addition of an upper structure it may even put us in the top three."

LAWRENCE TECHNOLOGICAL UNIVERSITY — LAWRENCE TECH NEWS

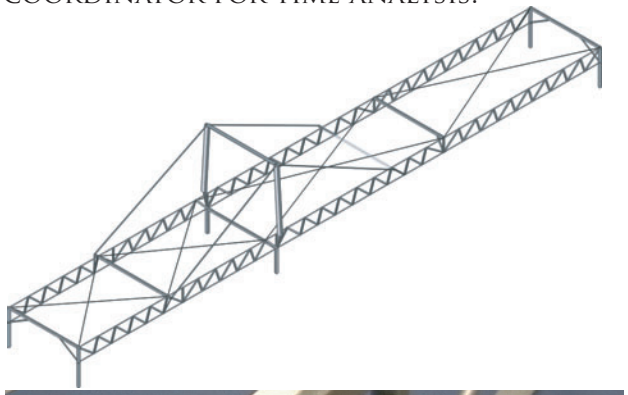
Release Date: July 8, 2004
Steel Bridge Team Competes at Nationals

Lawrence Tech's 2004 Steel Bridge Team walked away from the Regional Steel Bridge Competition held in Akron, Ohio with three plaques and a berth in the national competition in Golden, Colorado. May 28-29.

The five-member team of Lora Naccarato (Team Captain), Ryan Grabow, Mark Novis, Amy Stevenson and Michael Livernois II finished first in the economy and construction speed categories, and second overall in regionals. At Nationals the team placed in the top 10 in several categories. "But we were hit with some weight penalties that made our 133-pound bridge more like 333 pounds," said a disappointed Naccarato, BSAr'04, BSCvE'04. "The penalties knocked us from 4th lightest to 27th lightest, and from a top 10 finish to 20th overall."

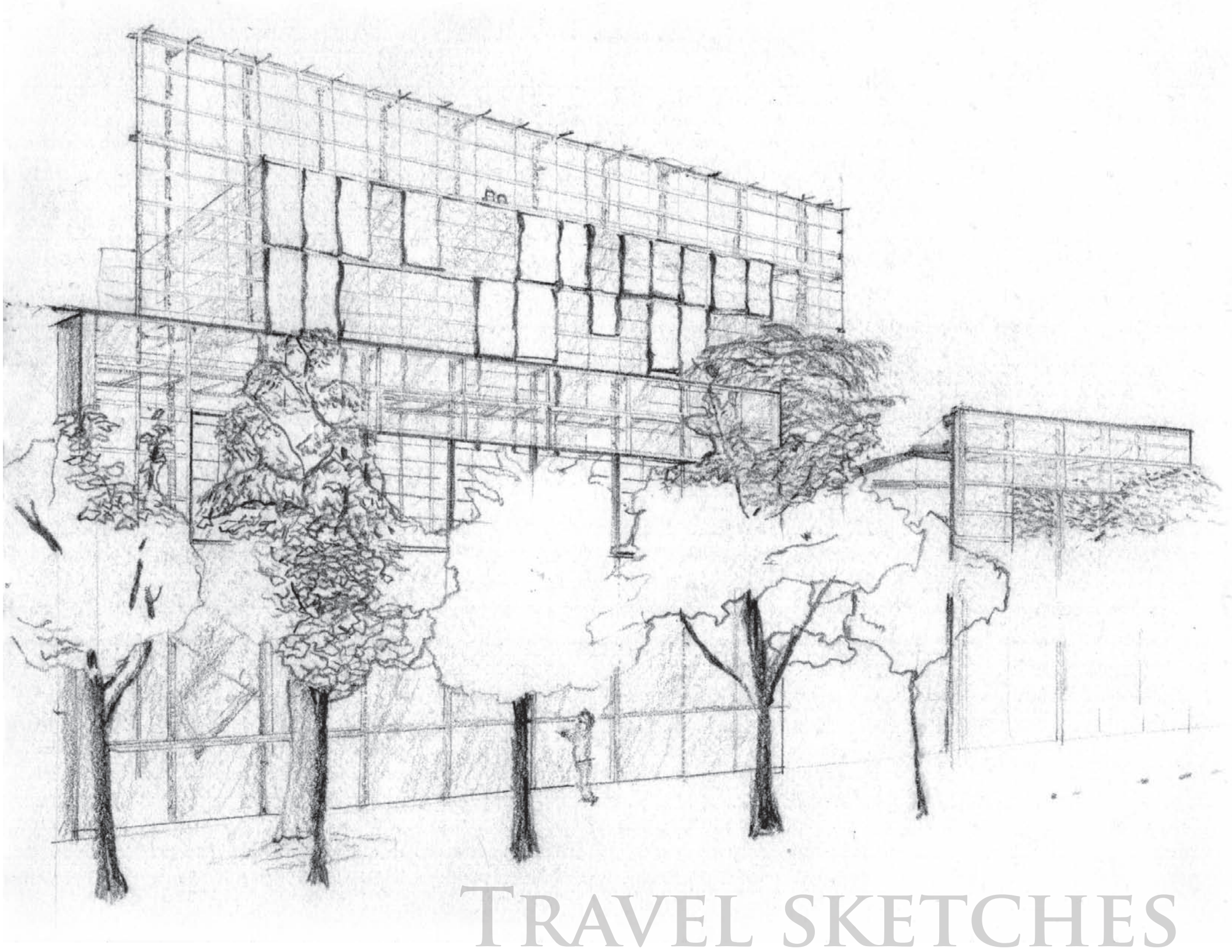
3D Structural Analysis

Structural analysis with RISA-3D was part of my responsibility on the team. RISA was used throughout the project. Hundreds of variations were reviewed structurally and the best were submitted to the construction coordinator for time analysis.

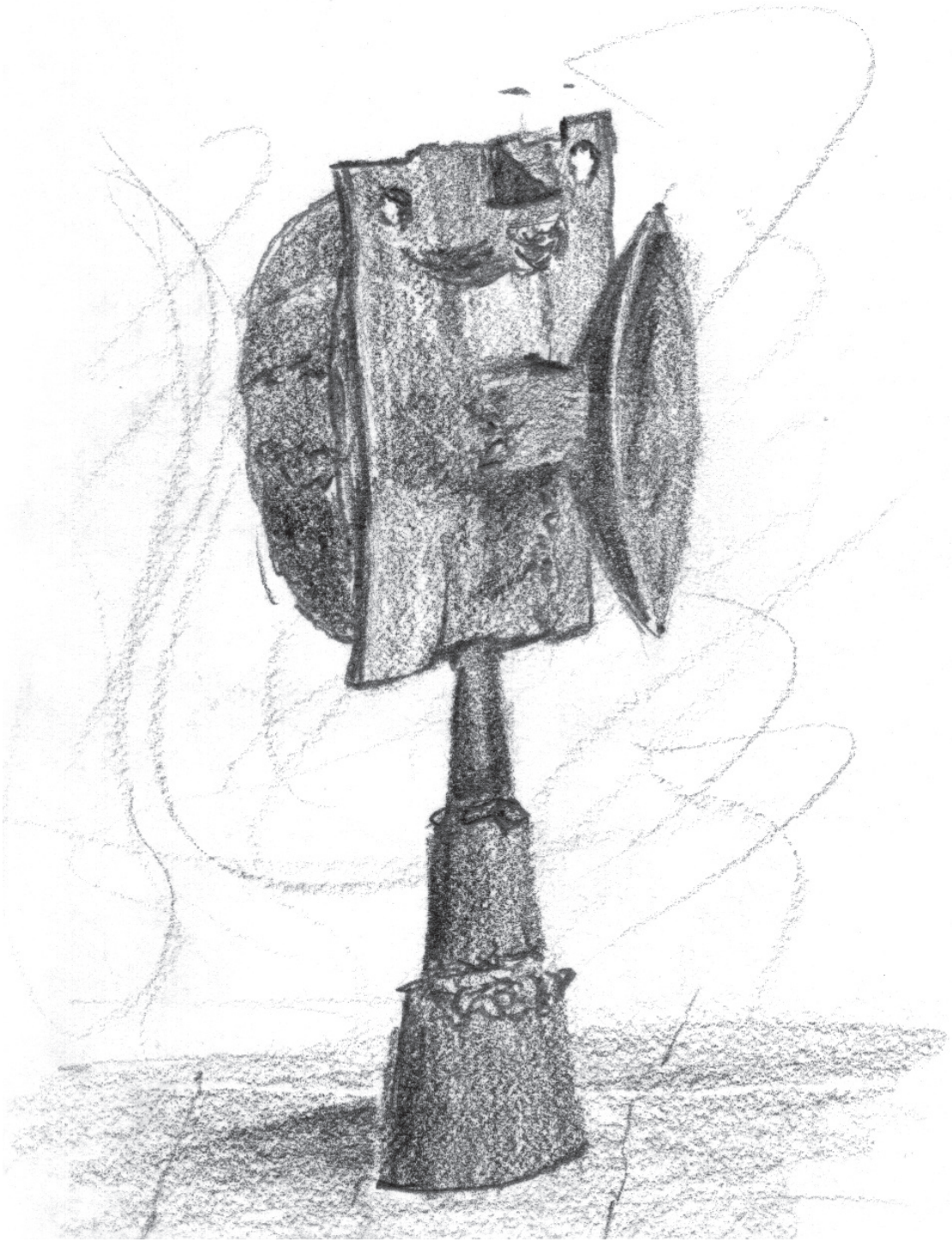


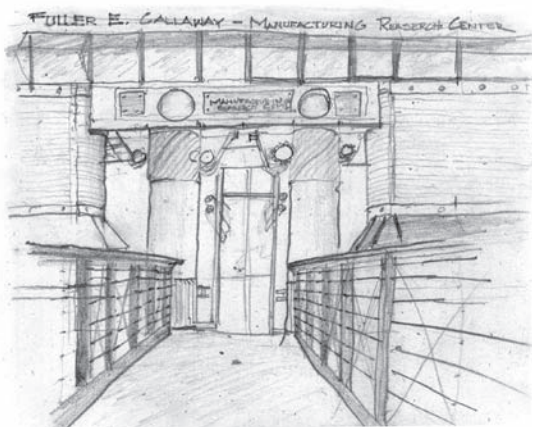
The ergonomic wing shape allowed greater force to be applied by hand than many competitors acheived using ratchets.

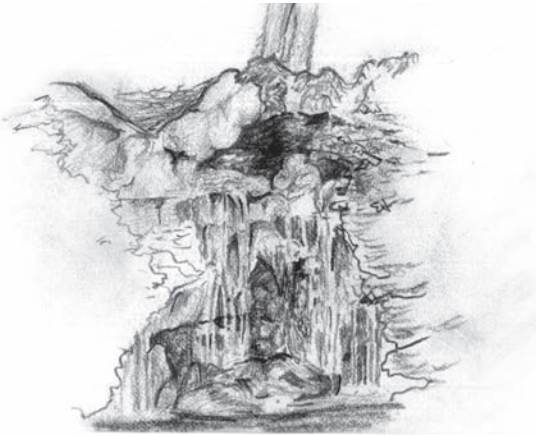
Timed construction at the regional competition.

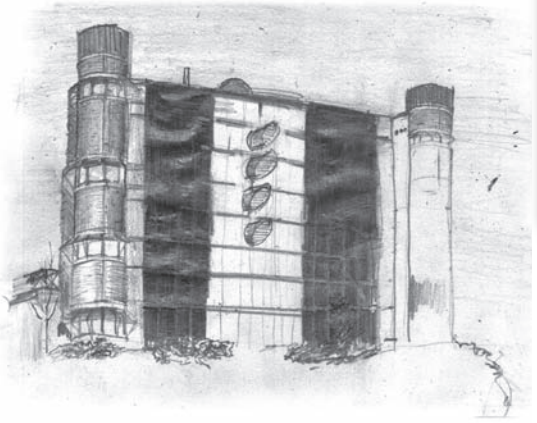


Travel sketches




FULLER E. CALLAWAY - MANUFACTURING RESEARCH CENTER





Professional Work

J K Janiga Architects, Inc.

Baker Office Building

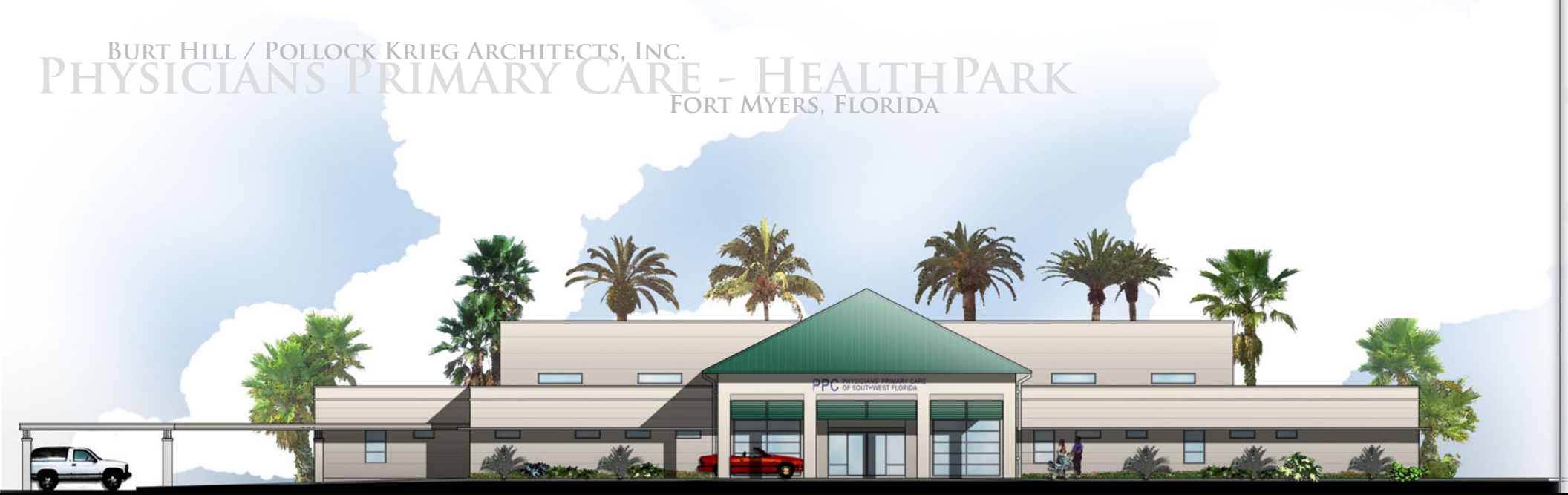
Hamburg, Michigan

Personally drafted over 90% of the architectural construction drawings, assisted with coordination

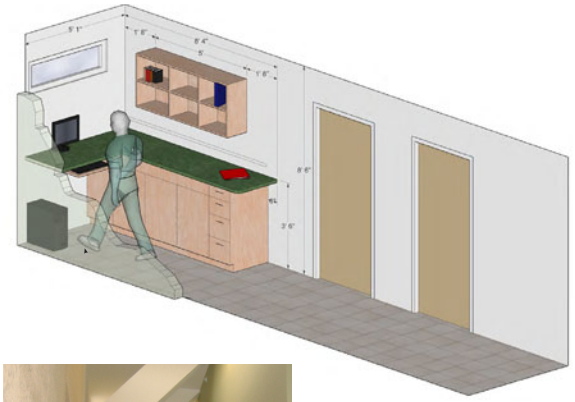
Burt Hill / Pollock Krieg Architects, Inc.

Physicians Primary Care - HealthPark

Fort Myers, Florida

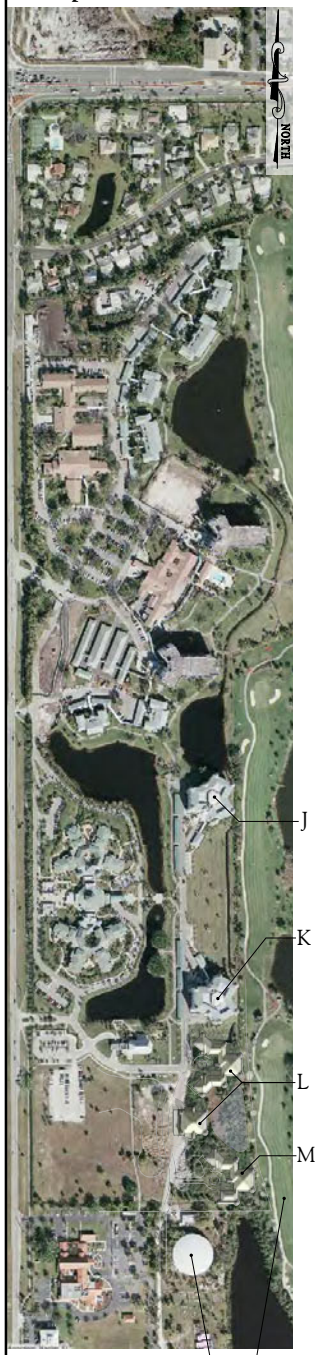


Managed project from design development phase through construction administration

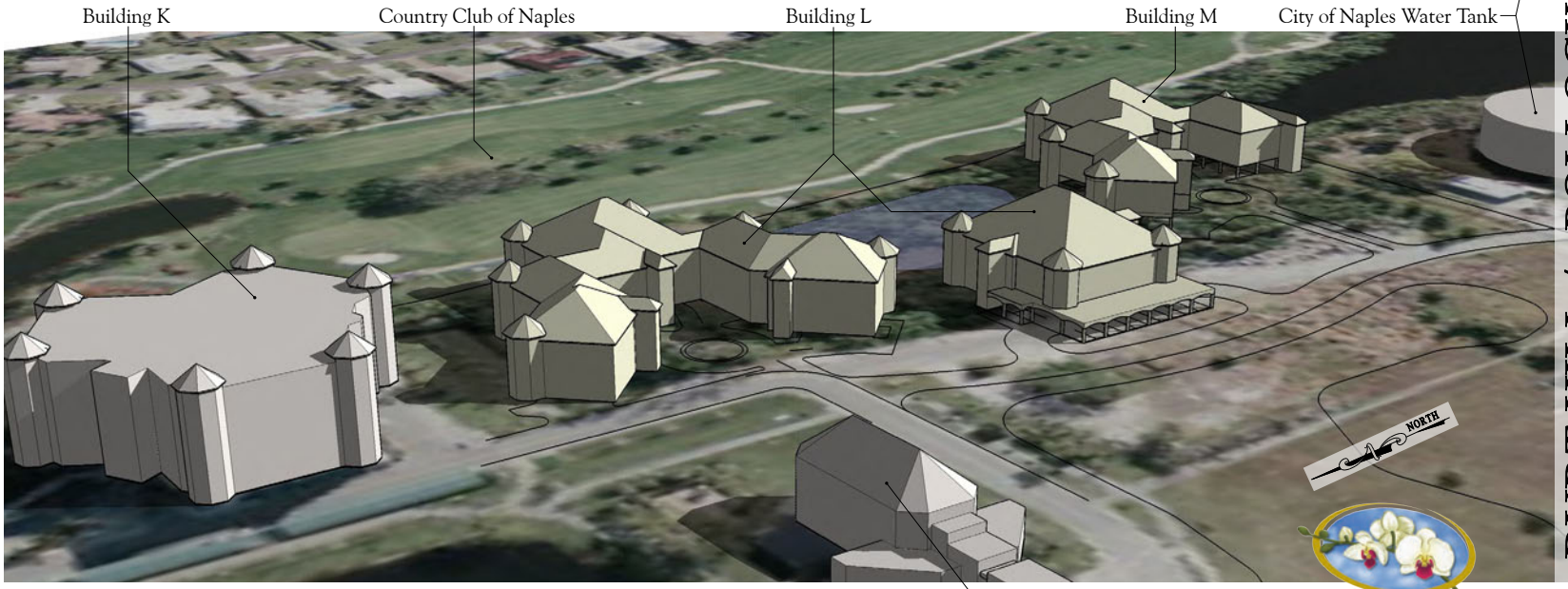


Physician's Primary Care - HealthPark
07-27-06 Nurse Work Sketches (SK-5)
BURT HILL / POLLOCK KRIEG ARCHITECTS, INC.

Campus Aerial



3D Mass Model - Southwest Perspective



3D Mass Model - Northwest Perspective

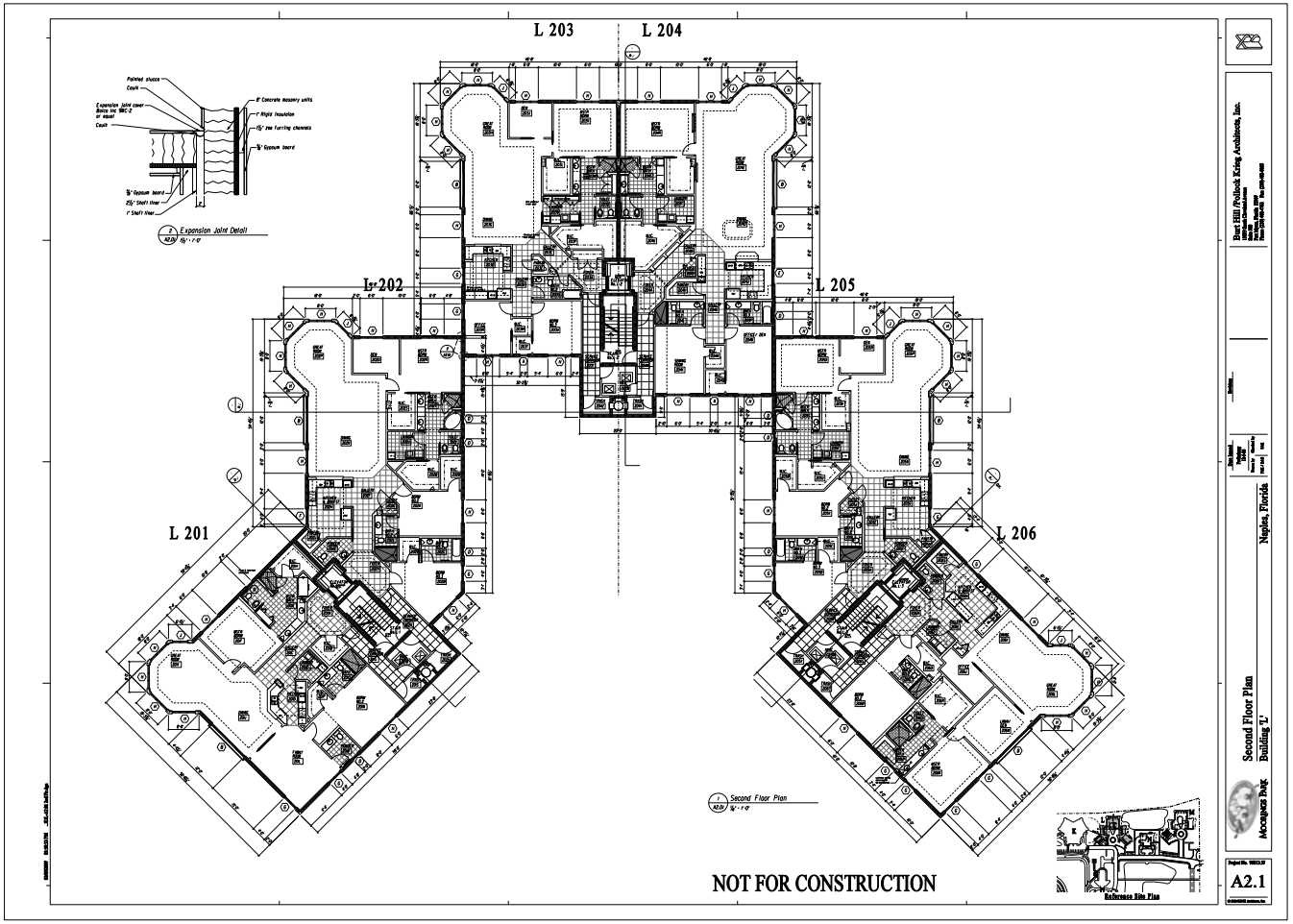
MOORINGS PARK

These plans are Schematic Design concepts and are subject to change. Final plans may vary.

July 24, 2006
Project No. 96013.57

BURT HILL / POLLOCK KRIEG ARCHITECTS, INC.
13099 South Cleveland Avenue Suite 500 Fort Myers, Florida 33907 239 / 482-4761

Buildings L-M-N



This three building expansion at an exclusive continuing care retirement facility. Responsibility included project management during the design development and construction Documentation phases. The units were individually customized to the residents requests. The buildings are currently under construction.