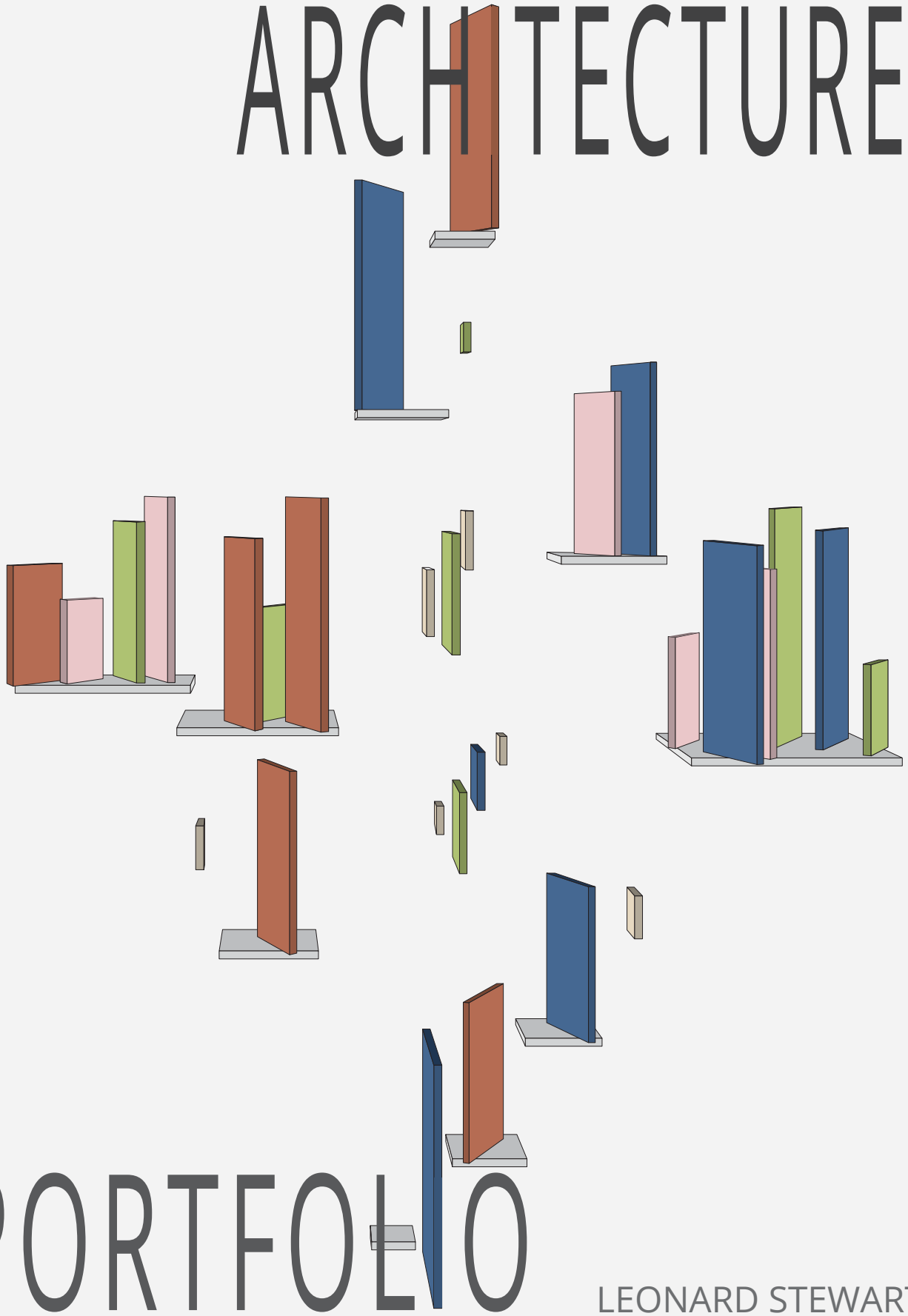
ARCHITECTURE



PORTFOLIO

LEONARD STEWART

LEONARD STEWART JR

MASTER OF ARCHITECTURE

Tea, SD 57064

(605)-310-7894

leonardwaynejr@icloud.com

EDUCATION & TRAINING

SOUTH DAKOTA STATE UNIVERSITY
Bachelor of Arts in Architecture
GPA: 3.63
Graduated: May 24'

Master of Architecture
GPA: 3.71
Graduated: Aug 25'

Deans List (8): Fall 20'; 22'; 23'; 24' - Spring 21'; 23'; 24'; 25'

HOBBIES

BASKETBALL	3D PRINTING
FOOTBALL	RUNNING/HIKING
GOLF	ARTS/DIY PROJECTS
TINKERING	REPAIR/RESTORATION

REFERENCES

FEDERICO GARCIA LAMMERS
Associate Professor, Architecture
University of Minnesota, College of Design
Email: garc0157@umn.edu

SEAN O ERVIN
AIA, MCM, LEED AP / Professor of Practice
South Dakota State University,
Architecture Program, School of Design,
Email: sean.ervin@sdstate.edu
Phone: (605) 759-5199

SKILLS

REVIT	RHINO	CODING (JAVASCRIPT)
PHOTOSHOP	ILLUSTRATOR	RENDERING (ENSCAPE & MORE)
PREMIERE PRO	INDESIGN	3D MODELING (NURBS & POLY)
WOODWORKING	LASER CUTTING	BASIC ELECTRONICS (SOLDERING & ARDUINO)
FUSION 360	3D PRINTING	CARPENTRY (FRAMING TO FINISHING)

WORK EXPERIENCE

DISPATCHER / MANAGER
AMAZON - KRKN | Sioux Falls, SD | July 2024 - December 2024
- Create work schedules for 70+ workers, report injuries, repair daily issues, and manage all timecards for the company.
- Manage drivers during their route, I.E. answering questions, driving, etc.
- Started as driver in May, moved to management late July.

CONSTRUCTION & MAINTENANCE
Working Hands Carpentry | Brookings, SD | June 2023 - July 2024
- Framing, siding, basetrim, mudding, and more construction tasks.
- Apartment Turnovers: Painting, spackling, caulking, repairing, and cleaning.

SUMMER STUDENT SHOP WORKER
South Dakota State University | Brookings, SD | May 2023 - August 2023
- Misc. cleaning, repairing, and other tasks around the architecture studio.

DELIVERY DRIVER
DoorDash + Spark | Sioux Falls + Brookings, SD | January 2020 - Current
- Pick-up food/groceries from restaurants/stores and deilver to customers homes.
- Navigated routes with map programs while obeying traffic laws and transportation procedures
- Handled merchandise in accordance with DoorDash/Spark handling standards.

PLAYSET INSTALLER
Rainbow Play Systems | Sioux Falls, SD | May 2022 - August 2022
- Built and installed entire playsets at residential and commerical sites.
- Provided customer service to customers.
- Organized tools, supplies, and materials to complete work on the job site.
- Unloaded truck and trailer at every job site.

PACKAGE HANDLER
UPS | Sioux Falls, SD | April 2021 - August 2021
- Sort packages in trailers, remove packages from trailers, other miscellaneous tasks.
- Scanned and sorted packages according to destinations and service type using handheld scanner.
- Sorted packages to appropriate slide, line or belt for final distribution.
- Resolved conveyor system issues by clearing jams and blockages.

INDEX

01
CENTRO DE CIENCIAS VEGETALES DE MONTERREY

MONTERREY PLANT SCIENCE CENTER

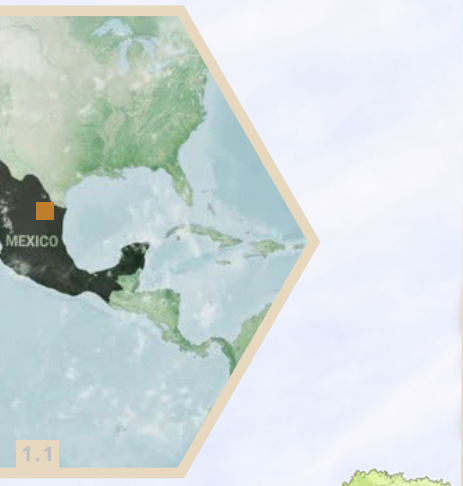
PROJECT BRIEF: The site is located in Santiago, Nuevo León, Mexico, just outside Monterrey. The project's goal was to address Monterrey's water crisis through a sustainable plant science research center. The design includes labs, greenhouses, and educational spaces focused on combating deforestation and land degradation, issues caused by the area's water shortage. My approach emphasizes local sustainability by using renewable materials and water collection systems to help restore nearby natural aquifers. Additionally, I integrated a trail system to showcase the researchers' work in action. The trails are named after Monterrey's primary native plant species: Crassulaceae, Cactaceae, and Agavaceae.

This promotion of environmental education and community engagement brings more people to the site and building. With the community in mind, the building includes an herbal café showcasing some of the plants grown on-site. However, the most critical design element was blending the structure into the environment. Nuevo León is filled with mountain ranges, and I wanted my building to reflect that landscape. To me, a simple sawtooth design was not enough—I needed something different. I developed a design using EPS foam, sculpted to create a mountain-like form. As an added benefit, this approach provided a thermal barrier for the entire building, reinforcing my sustainability goals and passive design considerations. This was my first individual project and by far my biggest risk in a project, however the end was worth it.

INDIVIDUAL PROJECT

1.1

dge Render
by Render
rance Render
enhouse Render
r Plan
evation Render of Entrance
wing solar gains in Greenhouse
Bridge and Mass Sketch
ssing Vignette
e Hemp & Biolime Wall Detail



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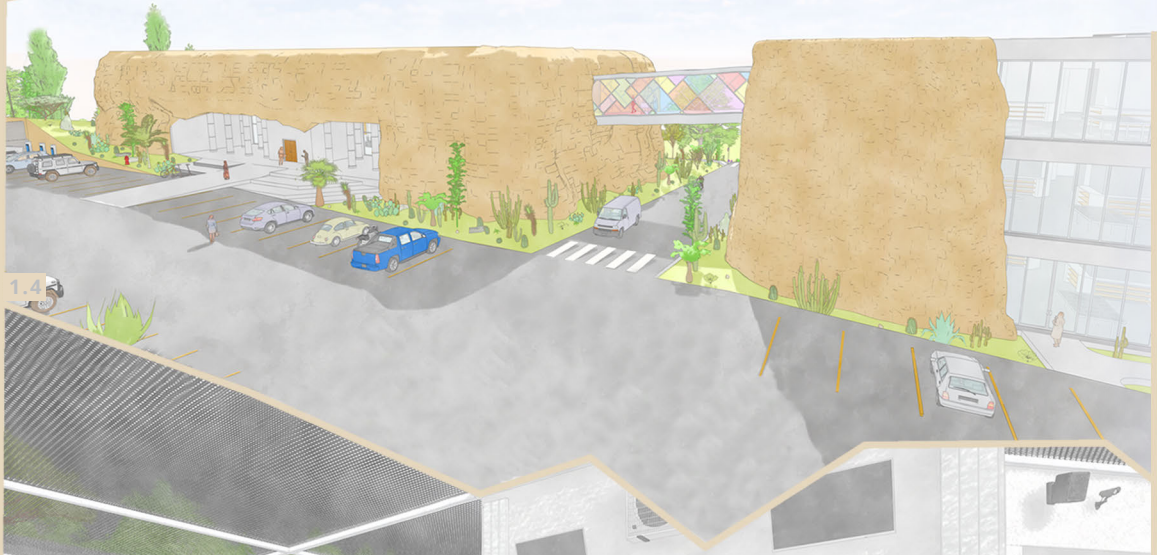
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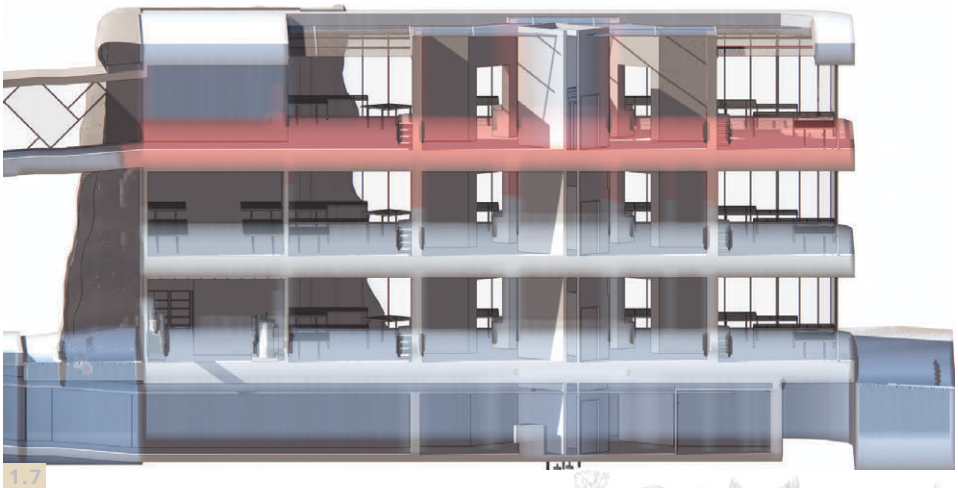

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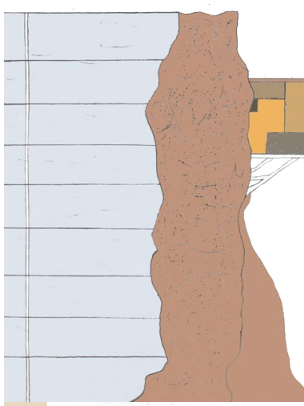

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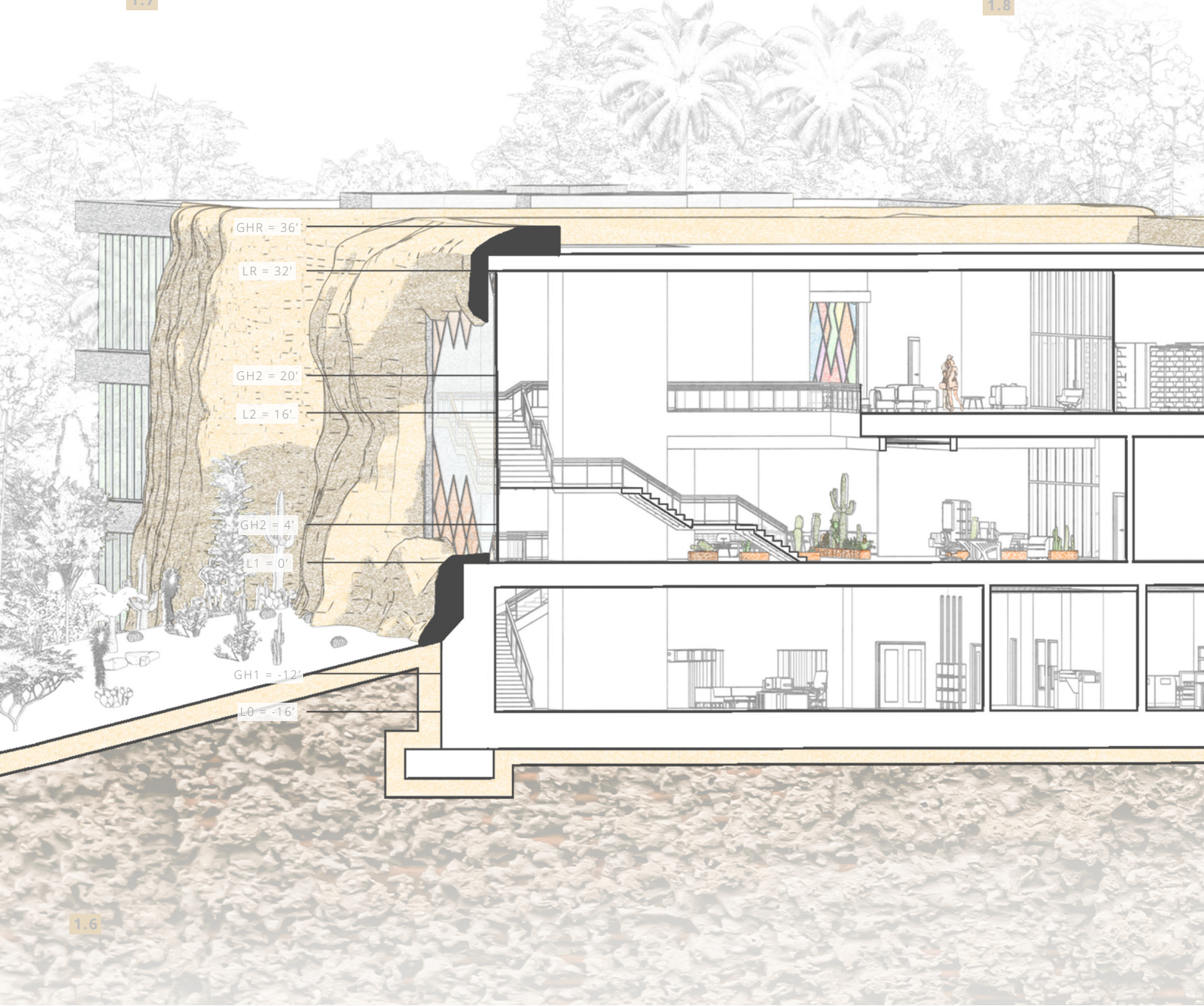

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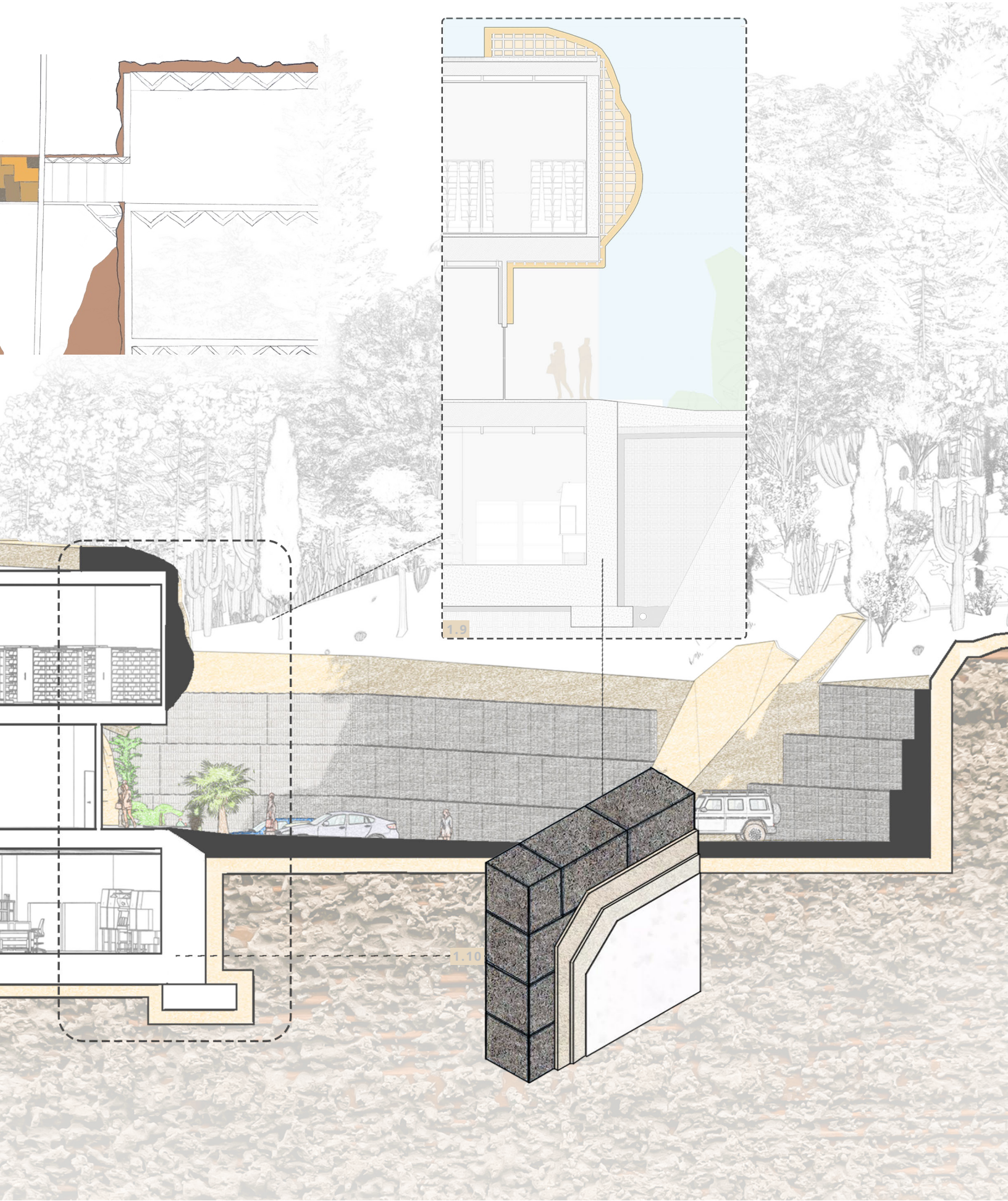

1.9
1.10

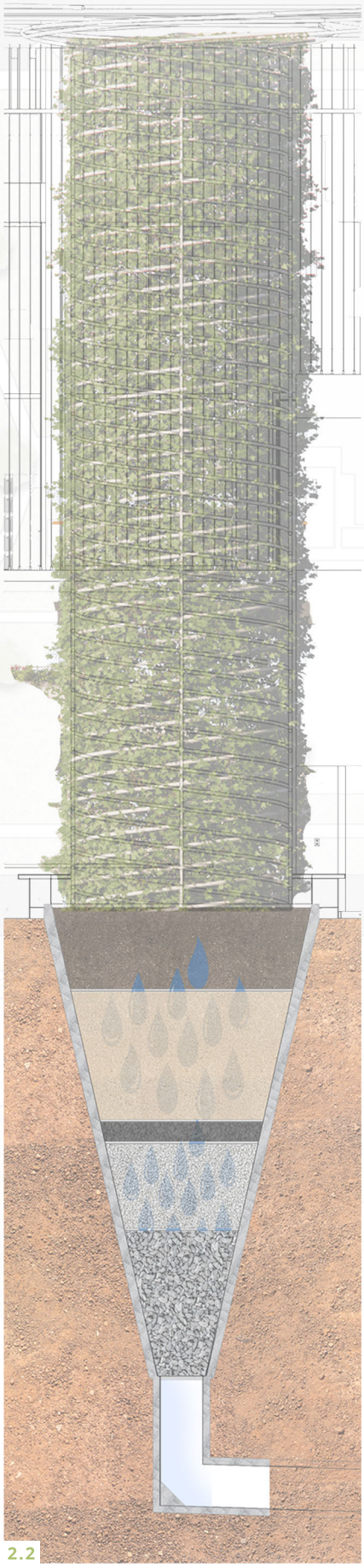
02
BROOKINGS PUBLIC LIBRARY

CITY OF BROOKINGS, SOUTH DAKOTA

PROJECT BRIEF: This studio focused on designing a new public library for Brookings, SD, one of the most engaging projects I've worked on. For the first time in our studio history, we had a real client, collaborating with the city and the head librarian of the BPL (Brookings Public Library), which brought a refreshing change to our studio process. Another unique aspect was the team size, groups of eight, unlike the standard four, were led by two upperclassmen known as the "firm leaders." My firm, Composite Collective and Design, was co-led by Tylan Bear and myself, acting as the firm principals. This experience taught me valuable lessons in team management and collaboration. My key contributions were the biophilic elements, specifically the central atrium and shelving models, while also managing the Revit file and leading digital modeling for our team.

TEAM MEMBERS: (year)
Tylan Bear (4), Uri Goedert (3), Jackson Rogers (3), Emma Greenfield (2), Katilyn Goettl-Rutt (3) Connor Anderson (2), Leo Scholten (2)

2.1



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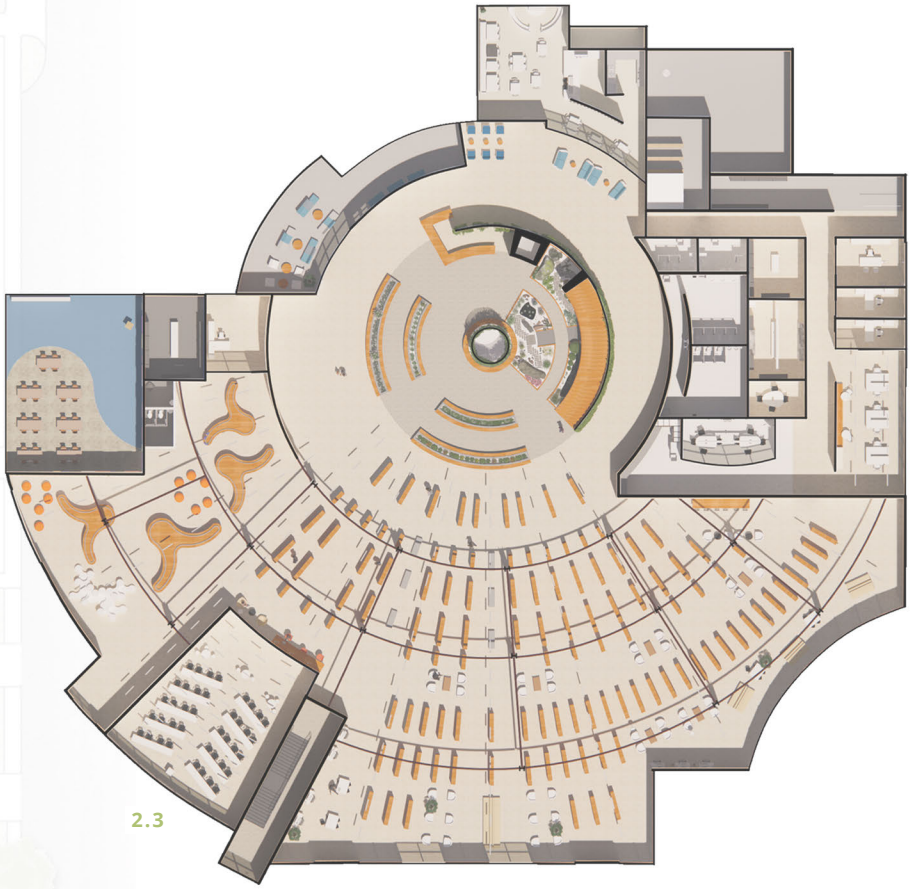

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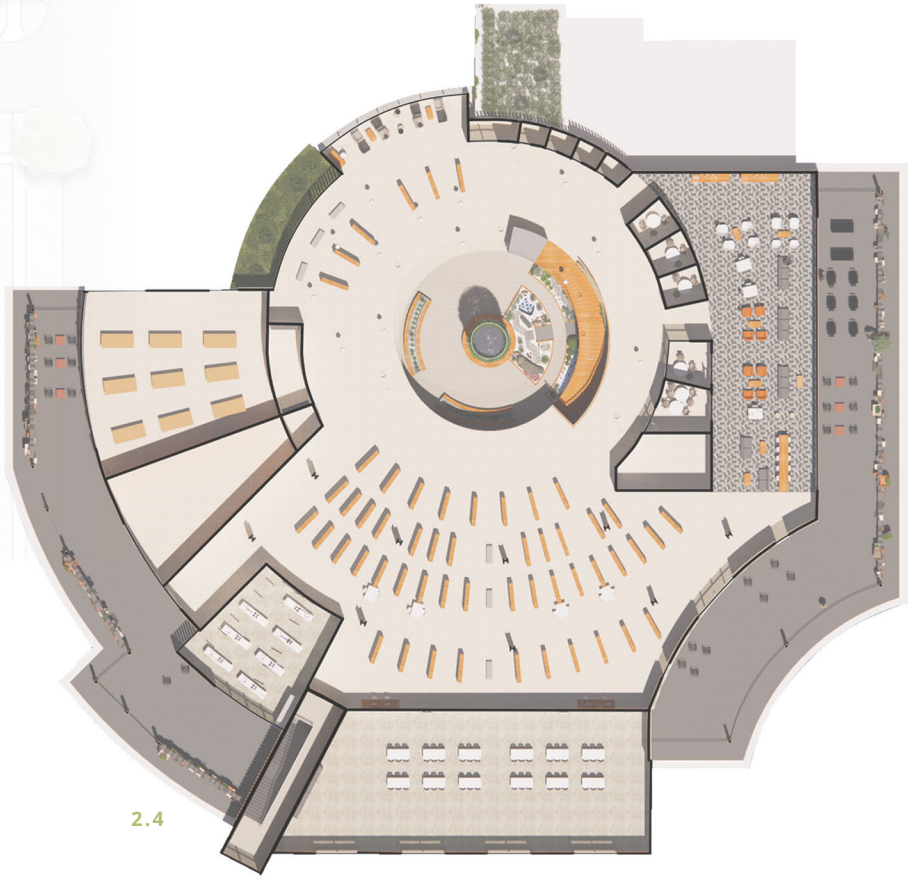

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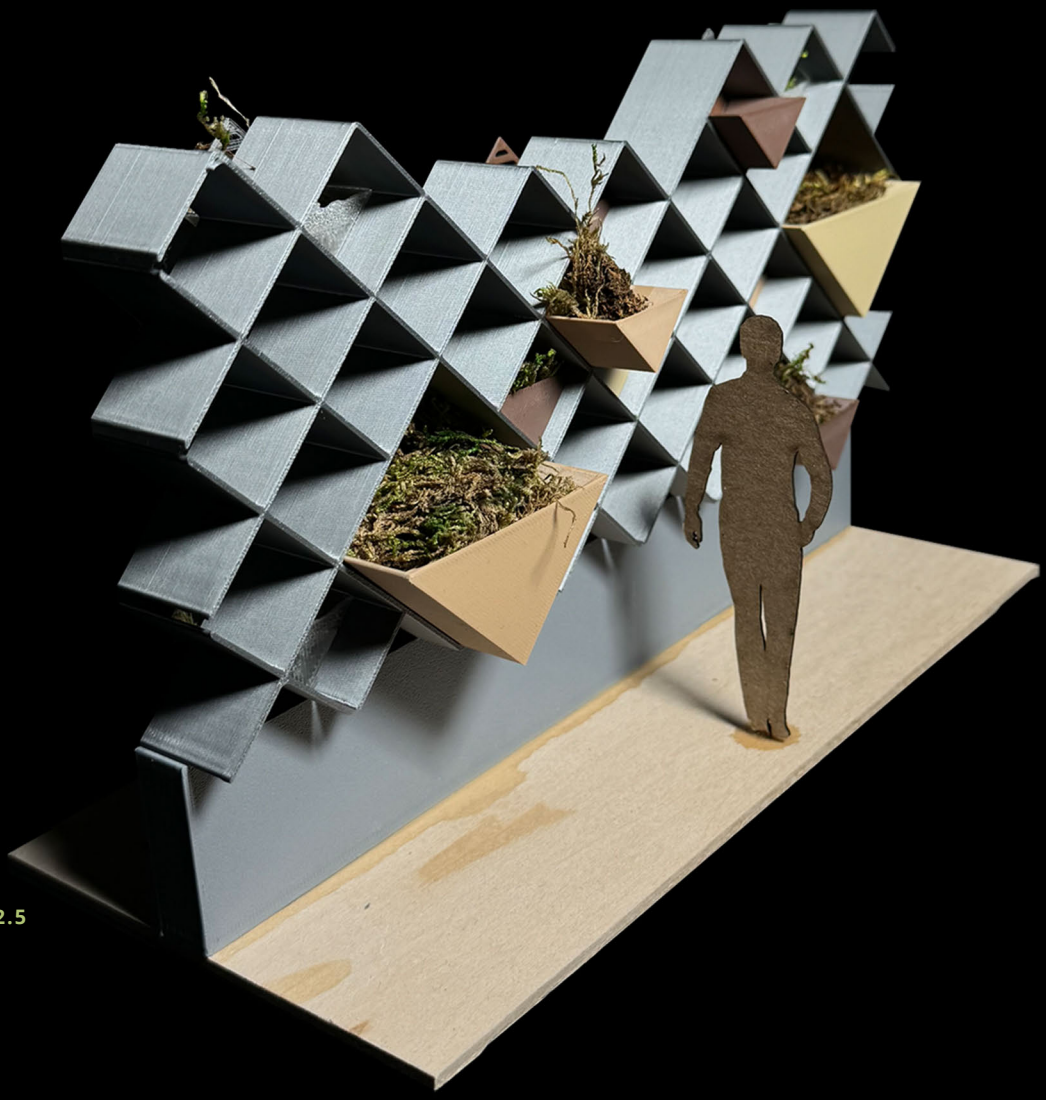


2.5

2.7

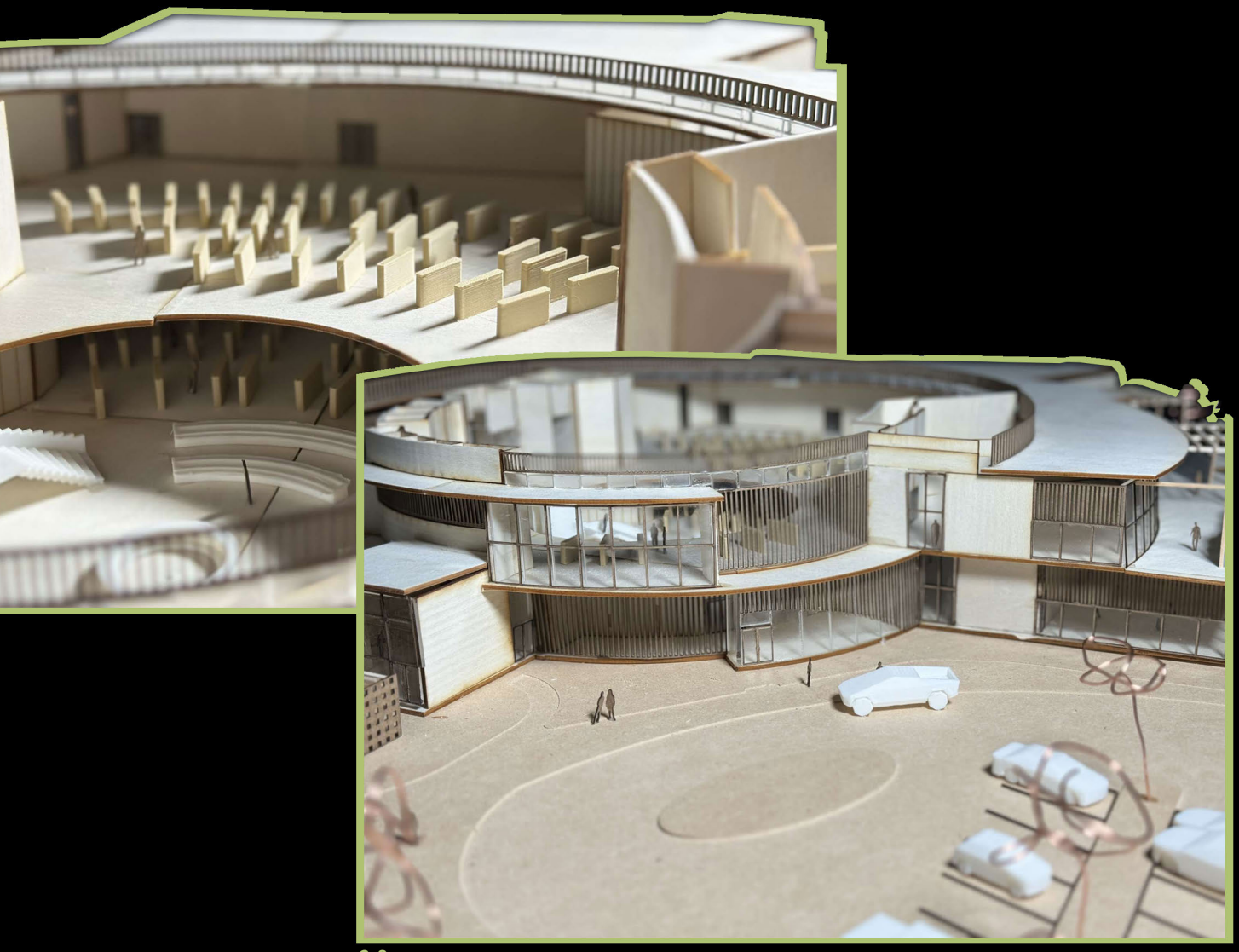
2.6

SPRING 2024

ARCH 455

NESRINE MANSOUR
SEAN O ERVIN

TAYEBEH NAZARIAN
ALI KHORASGANI



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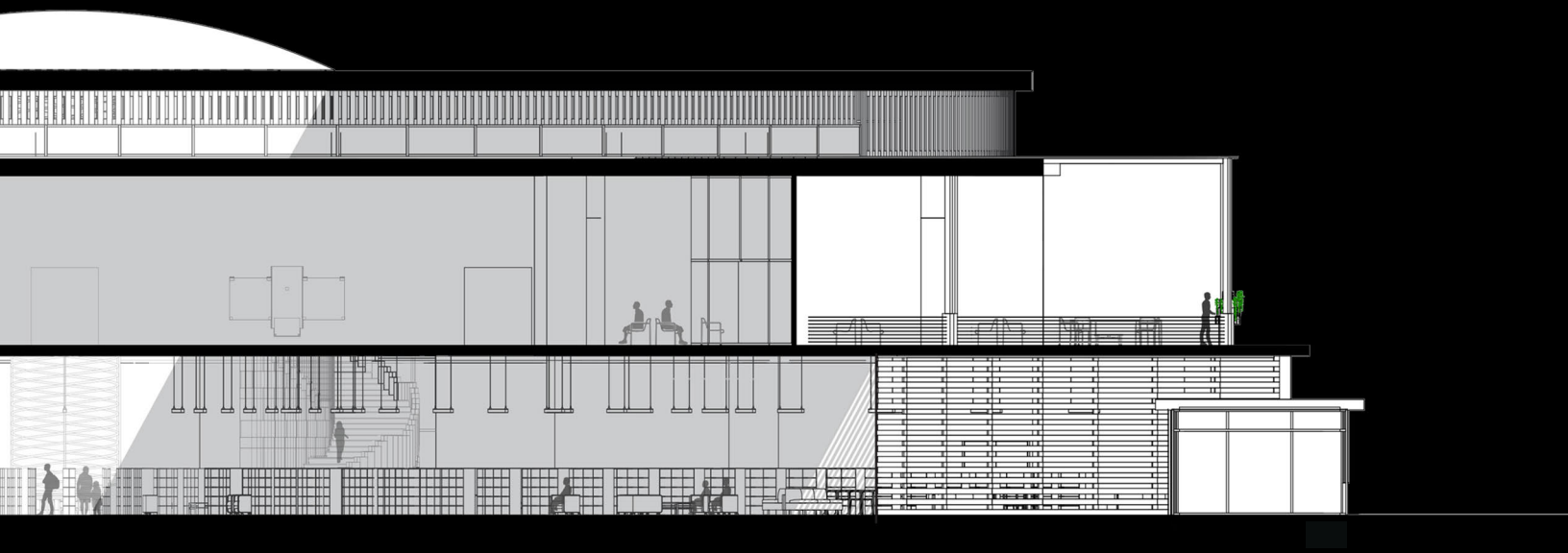
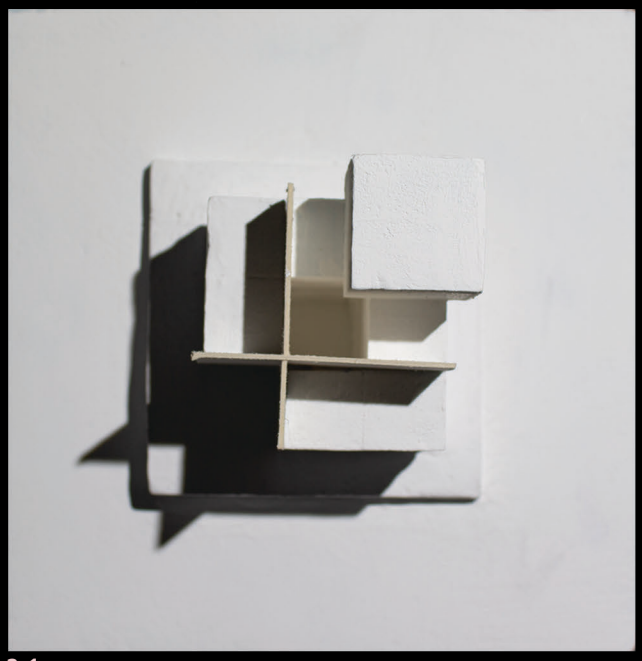


03
AXONOMETRIC CUBE DESIGN

BASED ON WORKS FROM SHINKEL & HEJDUK

3.1: Top view of final model
3.2: Final Cube axonometric drawing
3.3: Cube axonometric drawing with sectio
3.4: Perspective view of final model

PROJECT BRIEF: The first half of the semester focused on the analysis and technical representation of architectural works by Karl Schinkel and John Hejduk. Through planimetric, axonometric, and orthographic drawings, we explored their design principles and spatial compositions, gaining insight into historical and contemporary architectural methods. This process developed my technical drawing skills and understanding of spatial relationships. Building on this foundation, the second half of the semester transitioned into hands-on form-making using foam, paper, wood, and other materials. This iterative design process encouraged experimentation with physical modeling, allowing us to explore complex forms and spatial configurations. The semester culminated in a final physical model that was then transformed into an inhabitable space through a large-scale axonometric drawing. This comprehensive approach bridged the gap between technical analysis and creative design development.



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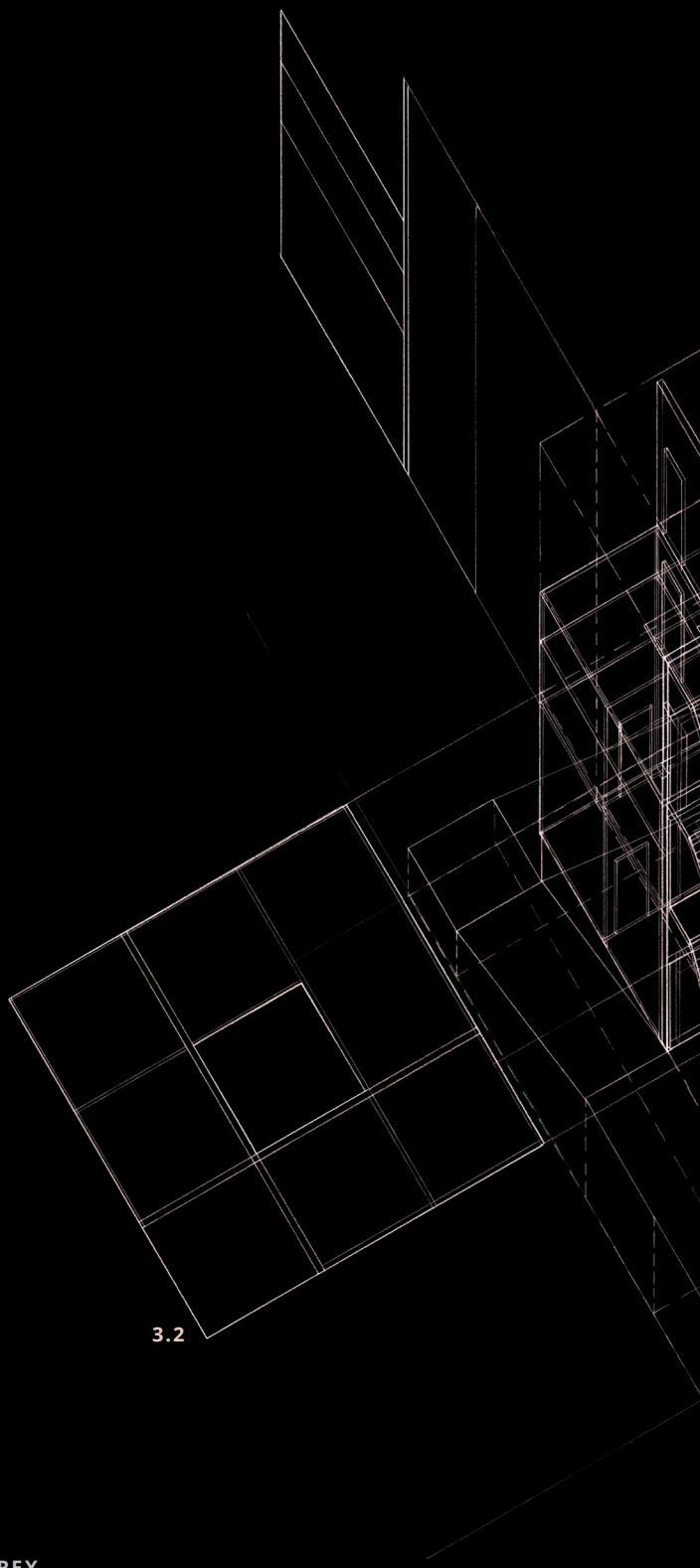

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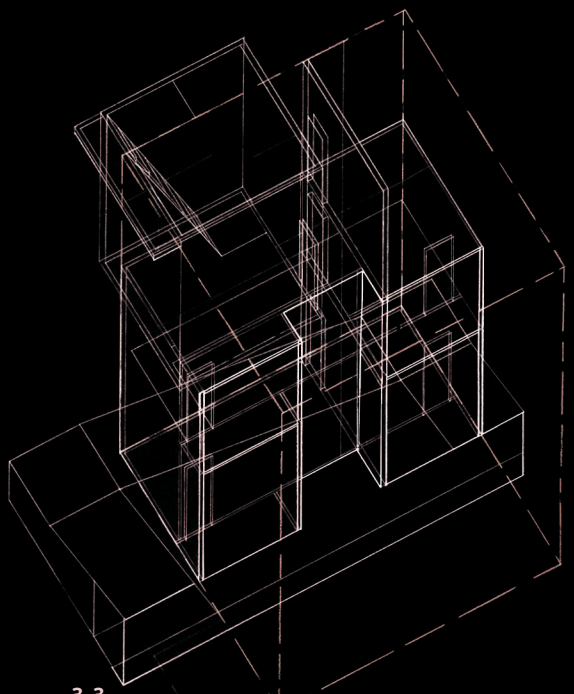
n cut



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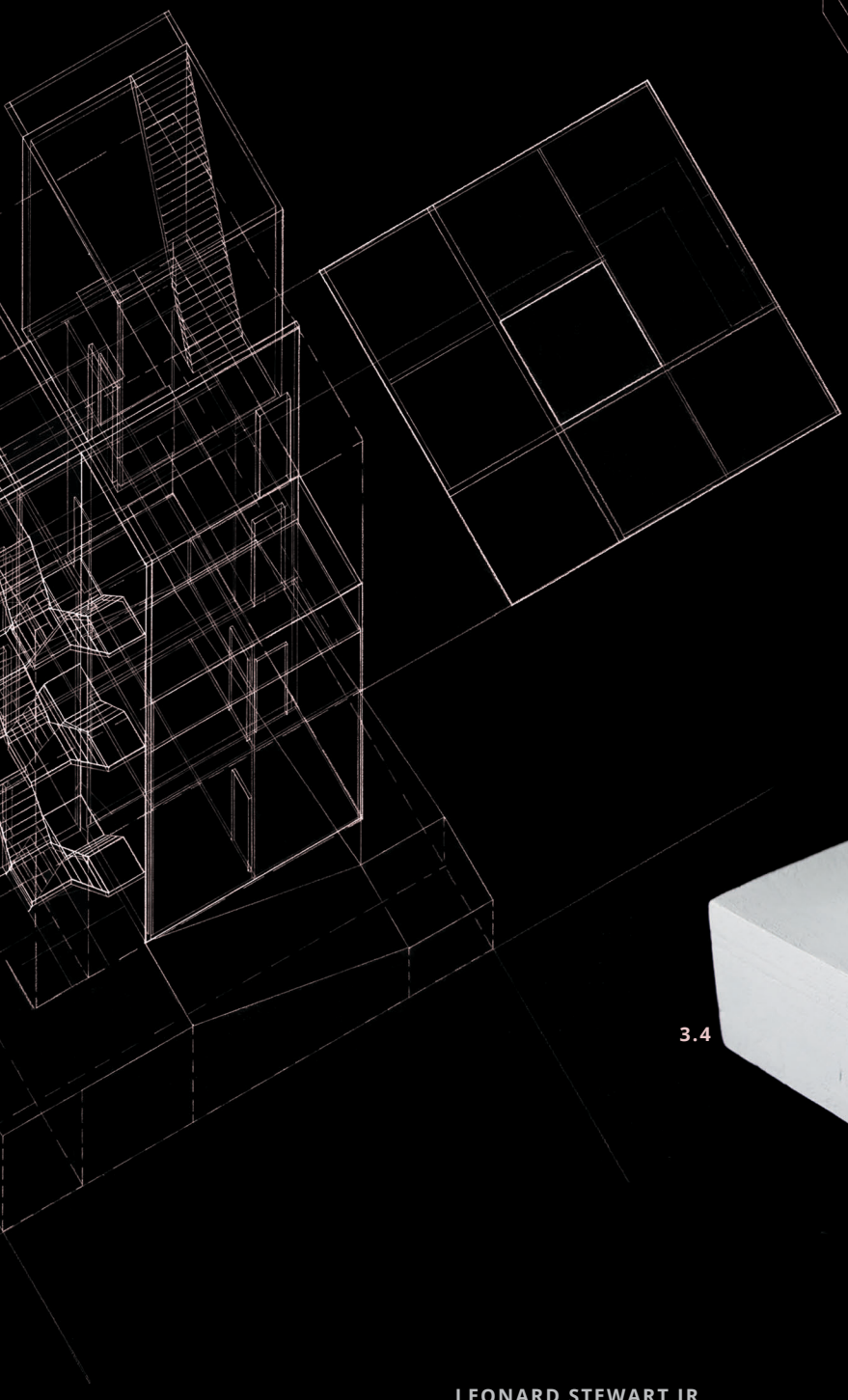
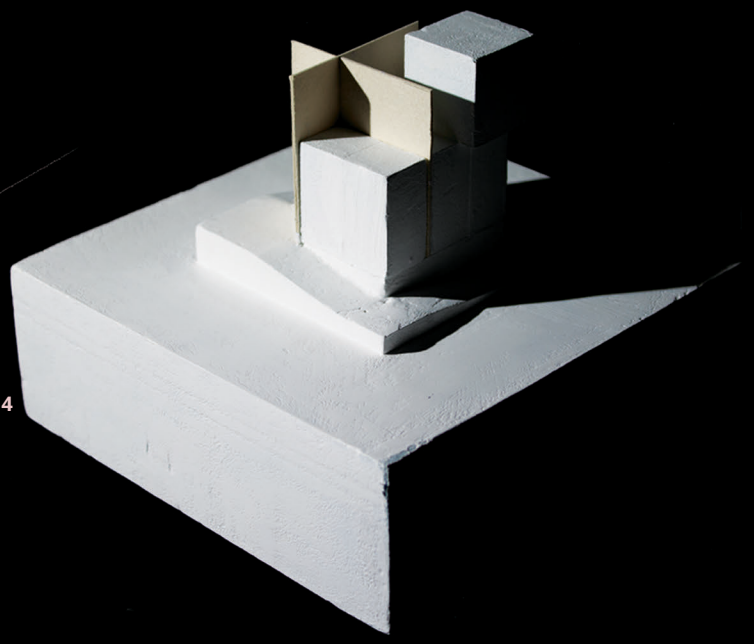




3.4

04
DESIGN PRACTICE - “STICKPLAY”

SOUTH DAKOTA ART MUSEUM
BROOKINGS, SD

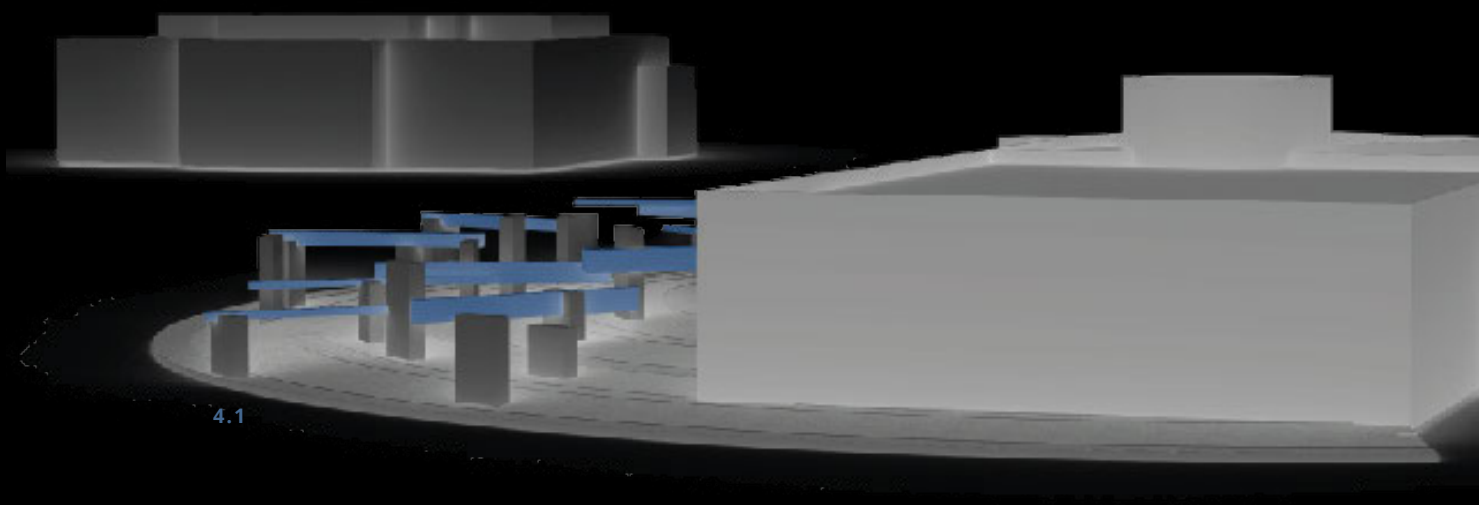

4.2

PROJECT BRIEF: The Stick Play project was divided into two phases: Part A and Part B. In Part A, we worked in pairs to explore form-making using only 15 sticks. We all drew our forms, 3D modeled them, and then analyzed the entire class’s results.

Part B transitioned from physical to digital modeling using Rhino. We created a 3D model of our site and stick structure, forming the foundation for redesigning the east entry of the South Dakota Art Museum. Our design emphasized accessibility and an outdoor art display, referencing the museum’s circular roof and aligning structural elements with surrounding buildings. The ramp system was designed to meet ADA standards, ensuring inclusive access for all users.

GROUP MEMBER: Cheyenne Miller
Drawings Completed Individually

4.1: Perspective render w/ Campanile in background
4.2: Series of pre-site images
4.3: Axonometric drawing of Stick Play assembly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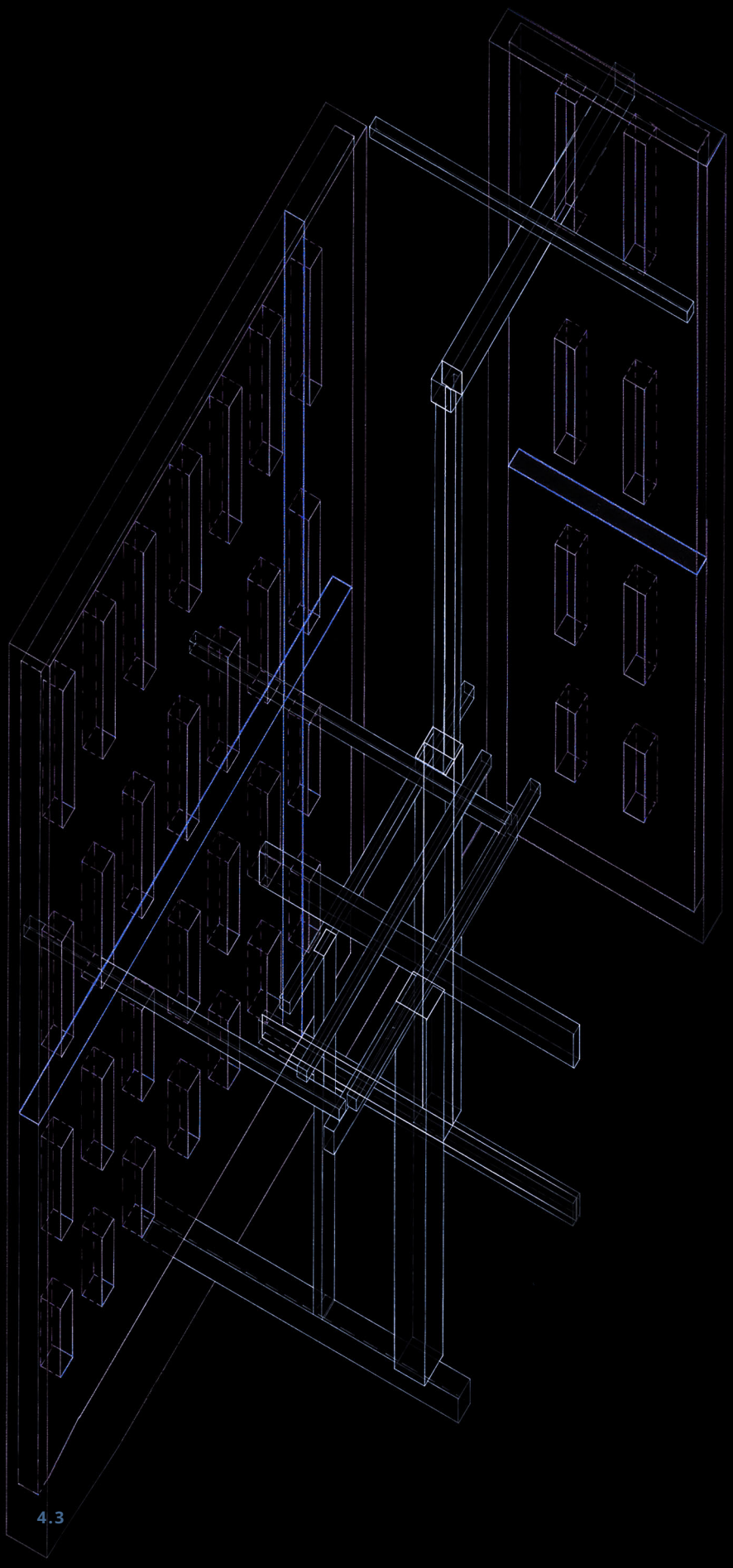
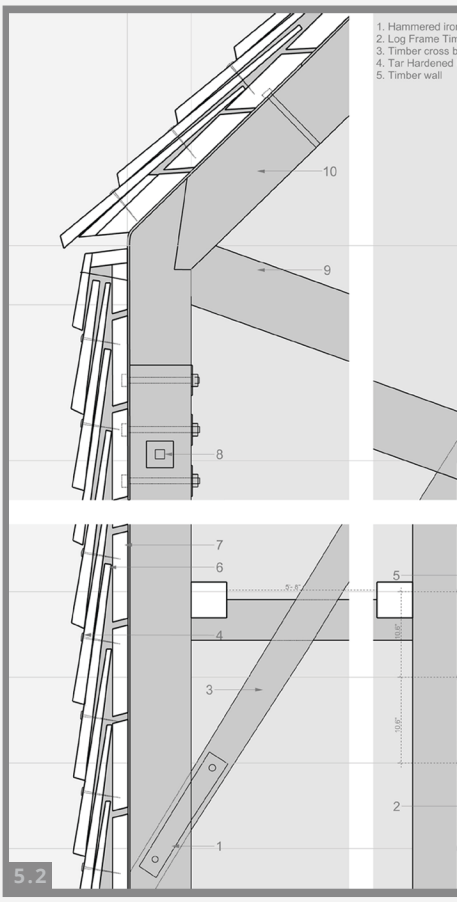


4.3

05.1
TECHNICAL VIGNETTES
(PART A)

KÄRSÄMÄKI SHINGLE CHURCH, FINLAND

PROJECT BRIEF: The first part of this studio focused on technical vignettes, showcasing our analysis and detailed representation of building conditions. Specifically, the Ground, Wall, Span, and Roof. At the start of the semester, each student was assigned a building from a curated selection. I was assigned the Kärsämäki Church in Finland, known for its unique spatial composition and materiality. I began my process using imagery, floor plans, and sectional drawings, and through studying these, I was able to understand the entirety of the church's architectural elements. This detailed examination also allowed me to explore the relationship between spatial organization, material usage, and structural design. The project was also very iterative as each vignette was refined weekly, based on feedback from instructors and peers. This iterative design process enhanced my technical skills and my ability to understand how the different conditions connect to each other.



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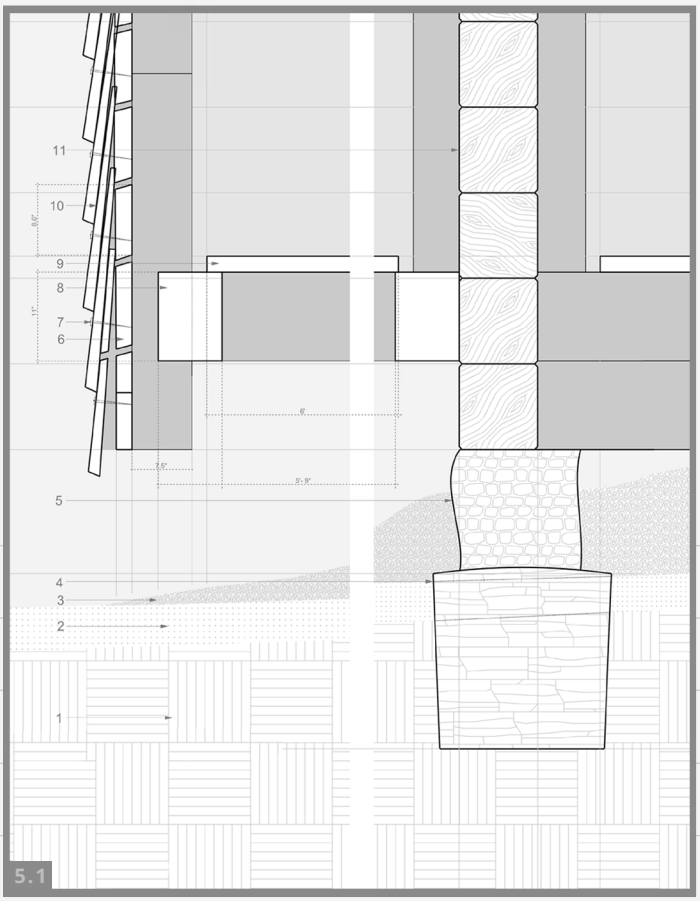

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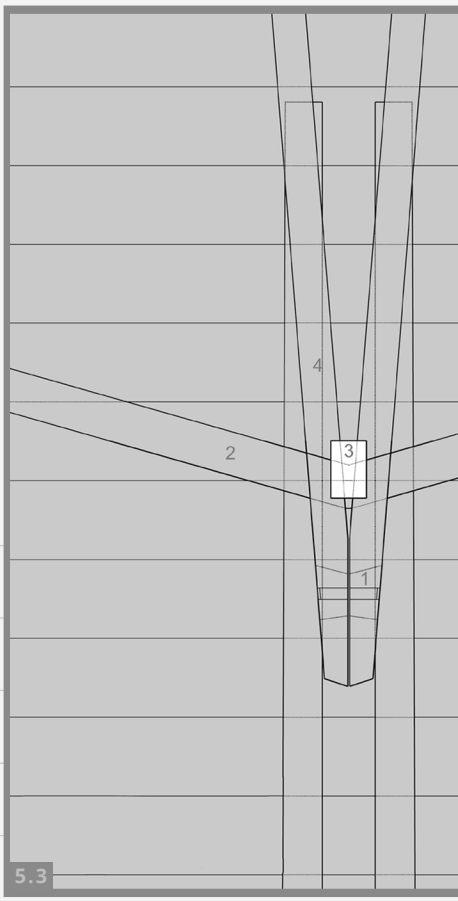

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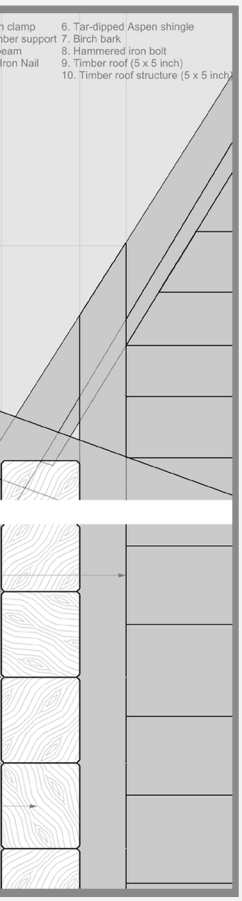
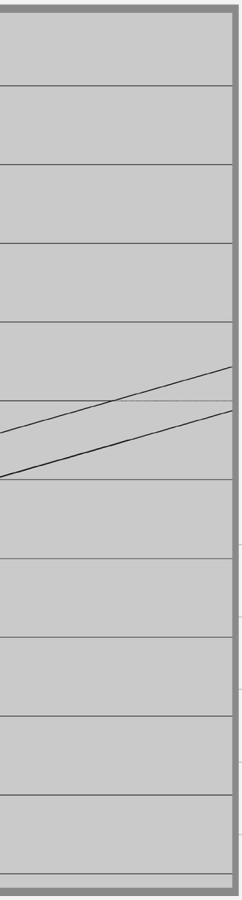
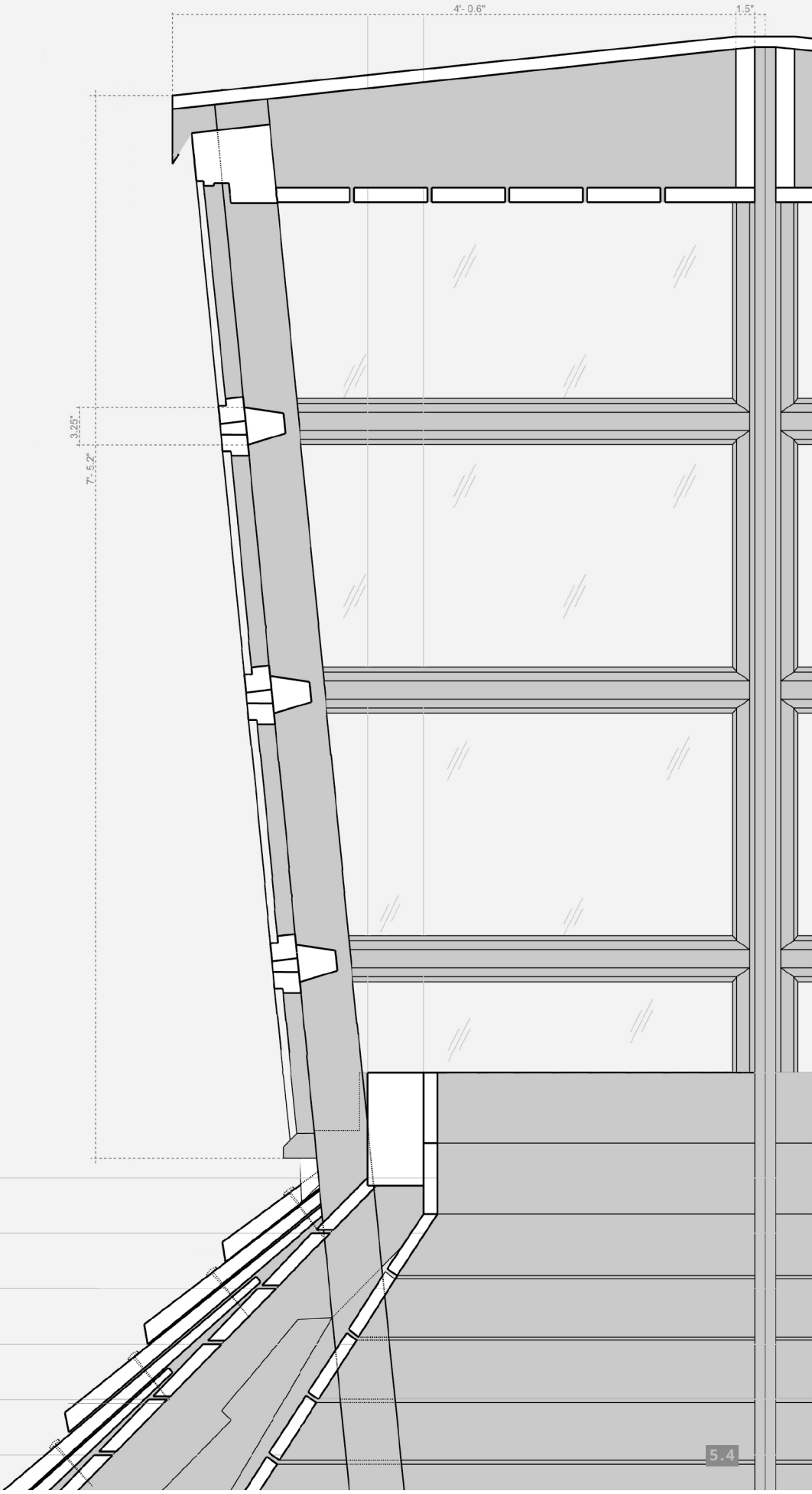

n clamp
nber support
eam
Iron Nail
6. Tar-dipped Aspen shingle
7. Birch bark
8. Hammered iron bolt
9. Timber roof (5 x 5 inch)
10. Timber roof structure (5 x 5 inch)




4'- 0.6"
1.5"
3.25"
7'- 5.2"

5.4

05.2
SDSU AGRICULTURAL HERITAGE MUSEUM - EXTENSION (PART B)

BROOKINGS, SD

PROJECT BRIEF: Following the vignettes, we formed teams to design an extension for the Agriculture Heritage Museum at SDSU. Our team developed architectural documentation, including floor plans, sections, vignettes, renderings, and a physical model using Rhino, Revit, Photoshop, and Illustrator. The final deliverables were collaborative design sheets and a physical model showcasing our unified design vision.

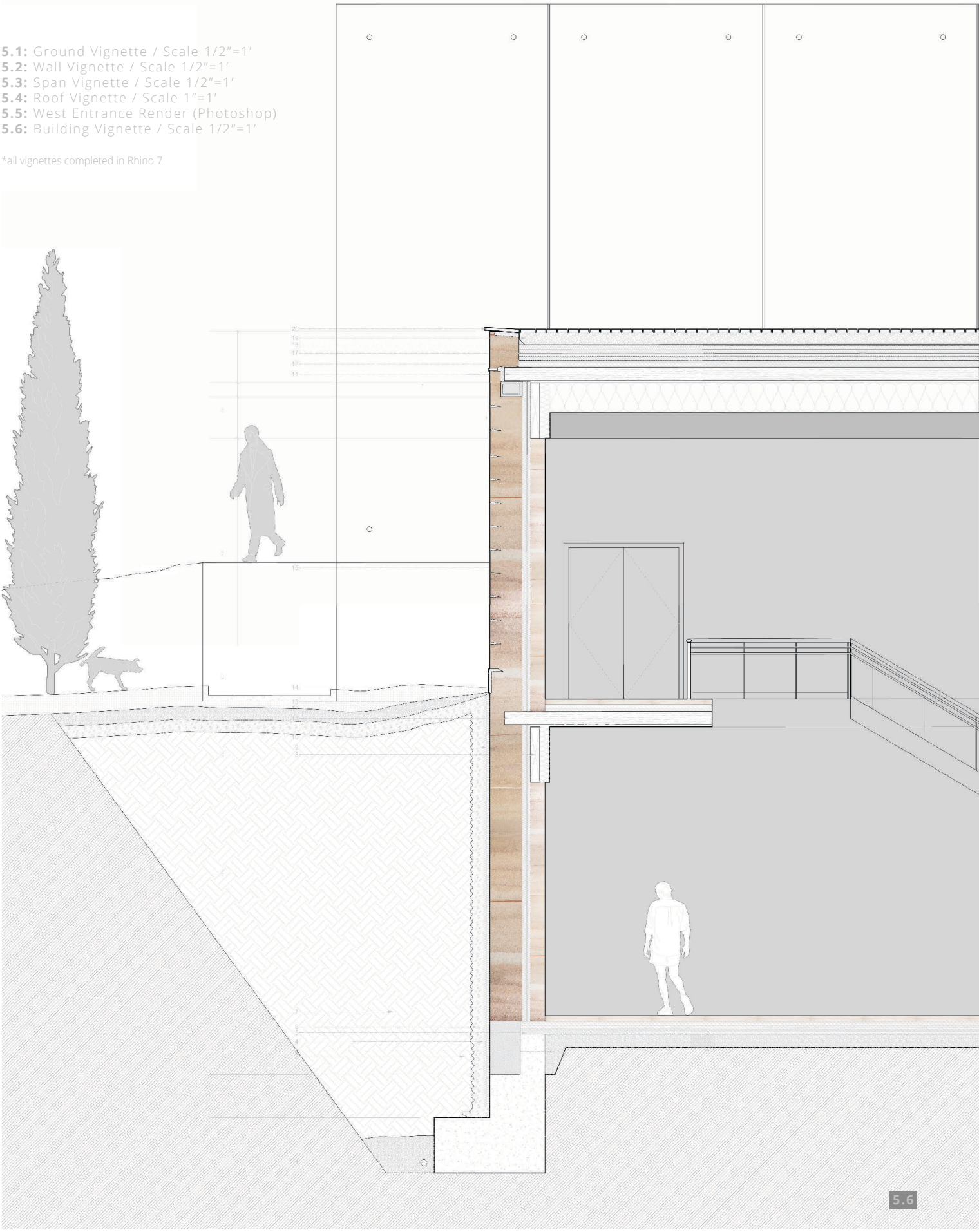
GROUP MEMBERS:
Katie Ishol
Manahil Elsheikh
Cheyenne Miller

5.5

SPRING 2022 ARCH 255 FEDERICO GARCIA LAMMERS JESSICA GARCIA FRITZ NESRINE MANSOUR SEAN ERVIN

5.1: Ground Vignette / Scale 1/2″=1′
5.2: Wall Vignette / Scale 1/2″=1′
5.3: Span Vignette / Scale 1/2″=1′
5.4: Roof Vignette / Scale 1″=1′
5.5: West Entrance Render (Photoshop)
5.6: Building Vignette / Scale 1/2″=1′

*all vignettes completed in Rhino 7



5.6

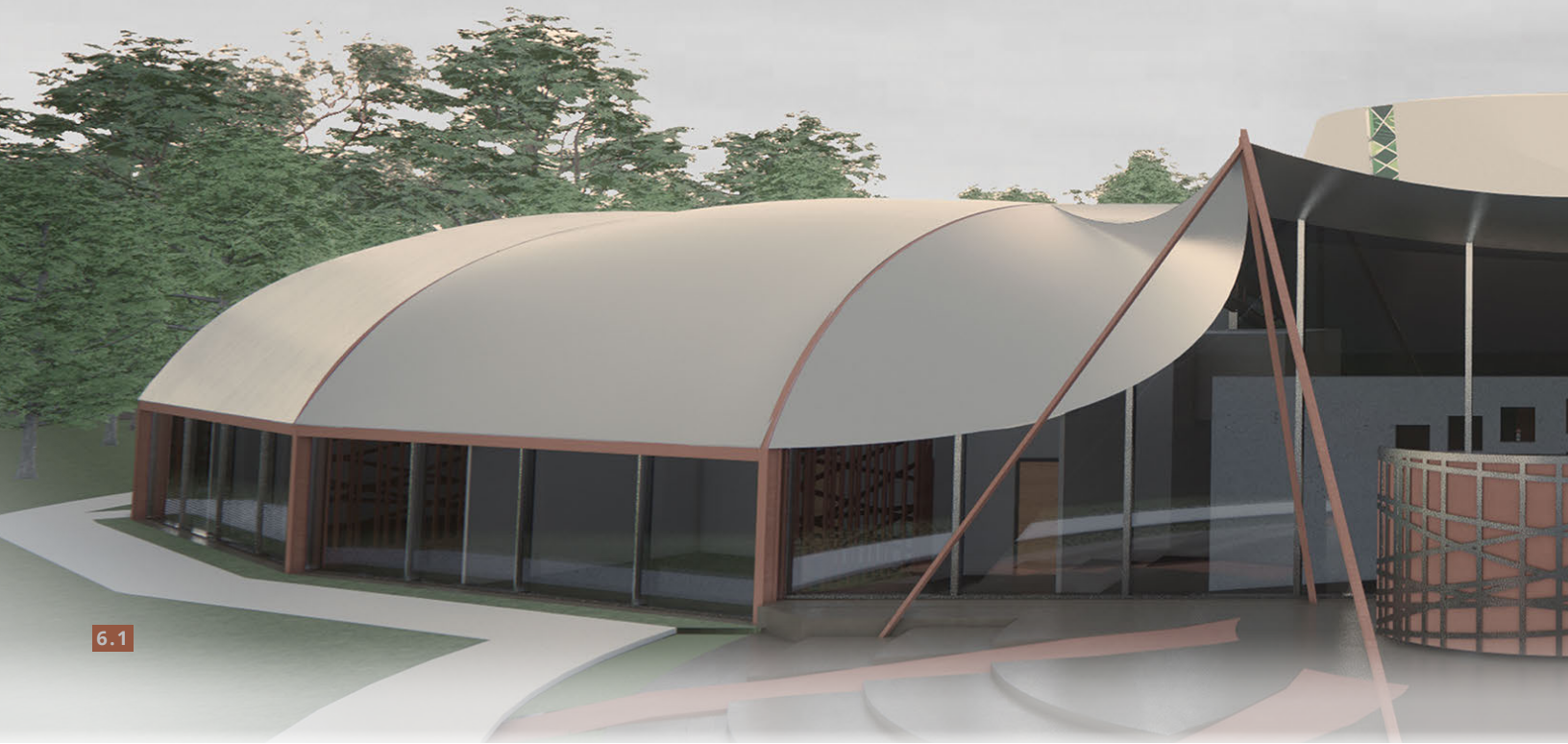
06
SDSU INTERFAITH CENTER

“RELIGIOUS WORSHIP CENTER FOR ALL FAITHS”

PROJECT BRIEF: At the start of the semester, we focused on technical vignettes like the previous building studio. However, this time, each student was allowed to pick a building from a list before studying it in depth. Each student then created a series of vignettes spanning from the ground to the roof. Upon finishing the vignettes, the class split into groups of four, shifting focus to designing a new building on the SDSU campus. This building's purpose was religious, but unlike traditional religious sanctuaries, it was designed to be inclusive of all faiths, influencing our design choices. As a group, we created floor plans, sections, vignettes, renders, and both physical and digital models using Rhino, Revit, Photoshop, Illustrator, and hands-on fabrication. We then submitted our design to the ACSA 2023 Steel Competition!

GROUP MEMBERS:
Alec Whitted
Noah Gass
Stetson Hulstein

6.2



6.1

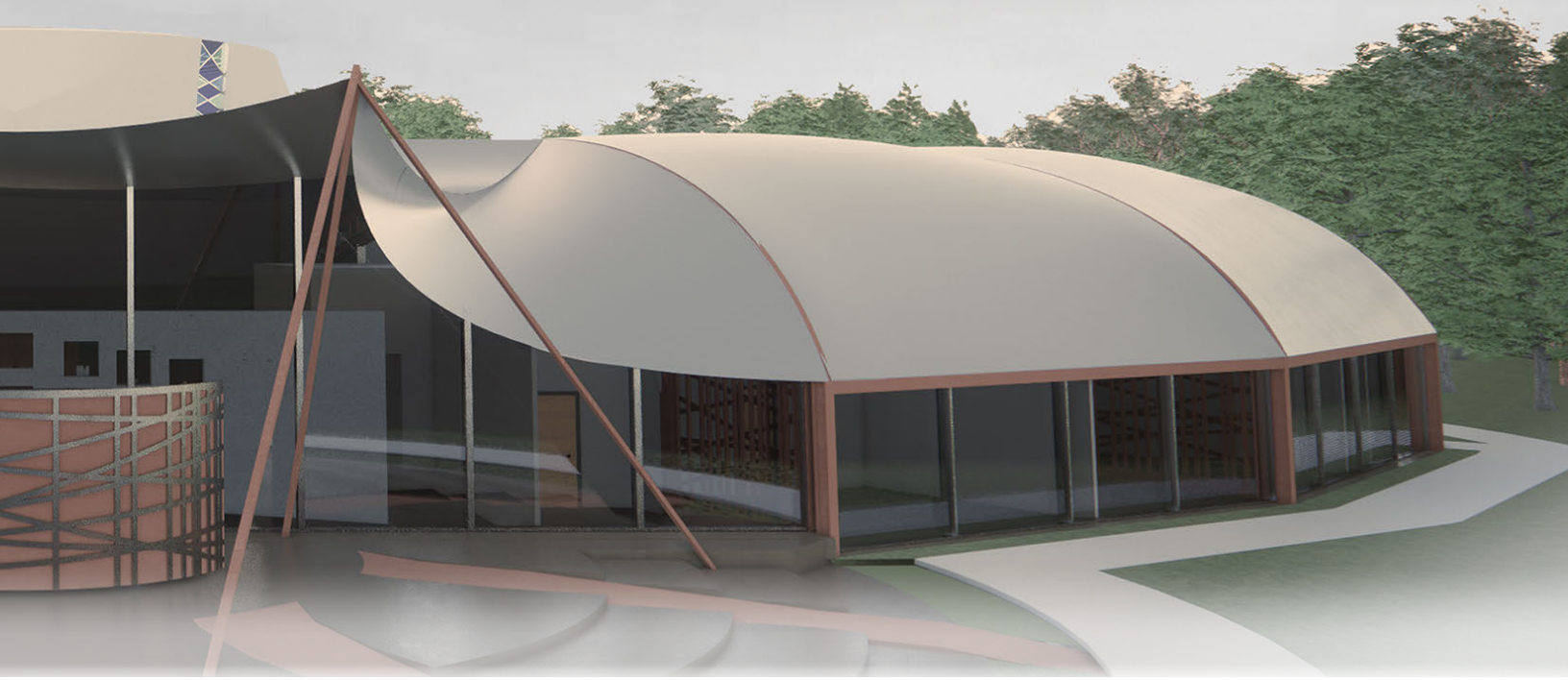
SPRING 2023 ARCH 355 NESRINE MANSOUR SEAN O ERVIN MOHAMMEDMEHDI DANESH SOMAYE SEDDIGHIKHAVIDAK

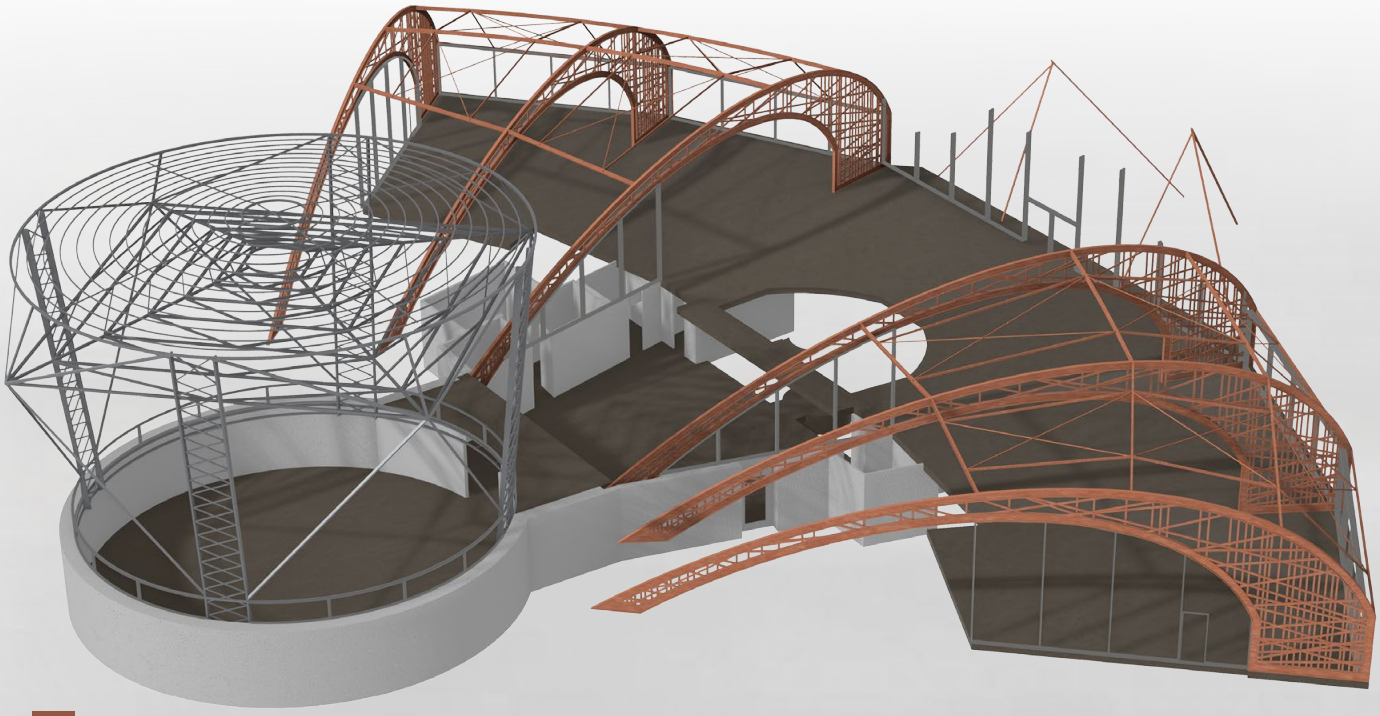
6.1: Enscape / Building Entrance Render
6.2-3: Enscape / Various Building Renders
6.4: Site Map
6.5: Entire Building Structure
6.6: Section / E/W through Entire Building
6.7-9: Building Steel Detail's
6.10: Custom Truss Design Graphic

LOCATION:	Brookings Awos, SD, USA
LATITUDE/LONGITUDE:	44.3 degrees North, 96.82 degrees West, Time Zone from Greenwich -6
DATA SOURCE:	TMY3 726515 WMO Station Number, Elevation 1646 ft


6.3

6.4

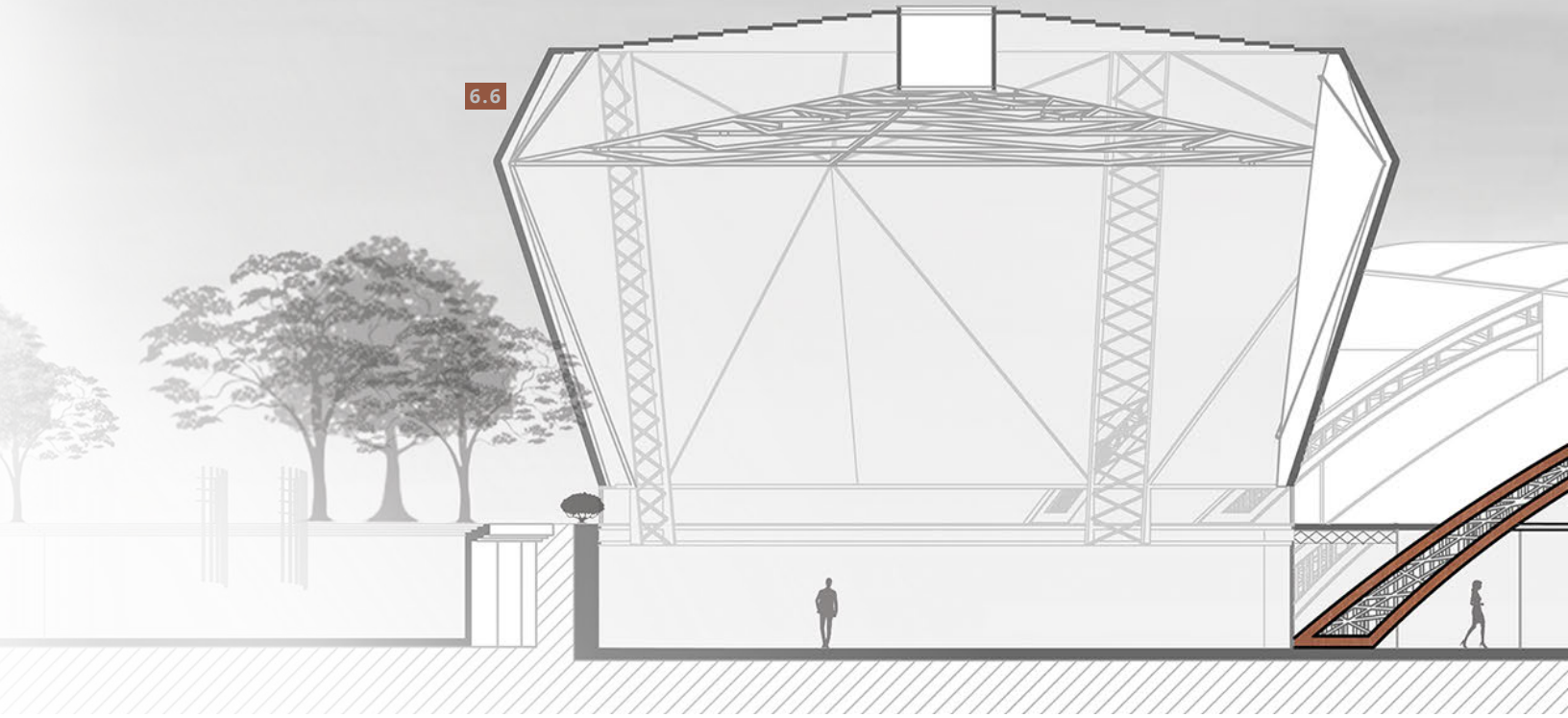




6.5

Why Cor-Ten® Structural Weathering Steel?

- Structural Weathering Steel is meant to rust, so as the building ages, the color and textures become more vibrant.
- Weathering Steel is more pleasant for visitors because it blends pleasingly with the environment.
- Structural Weathering Steel needs very little maintenance and cleaning.
- Structural Weathering Steel can withstand temperatures above 400 degrees Celsius.
- Structural Weathering Steel does not need to be painted erasing some cost and all environmental problems associated with the volatile organic compounds (VOC) in paint.



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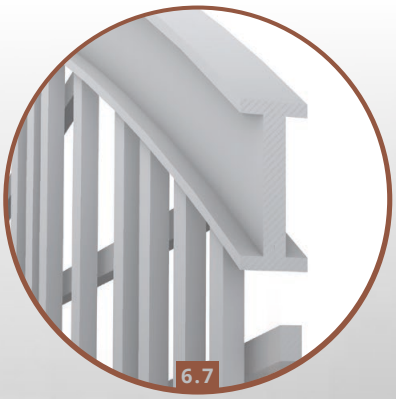

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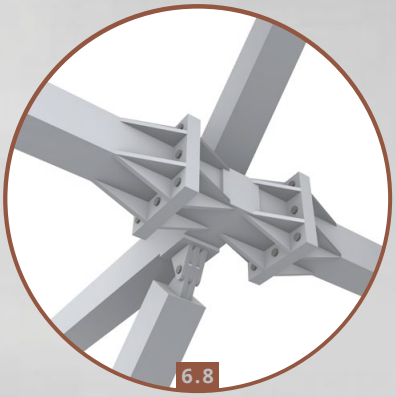

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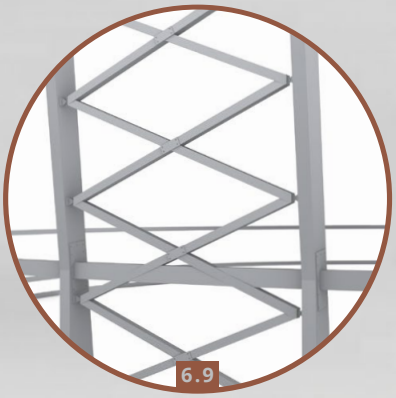

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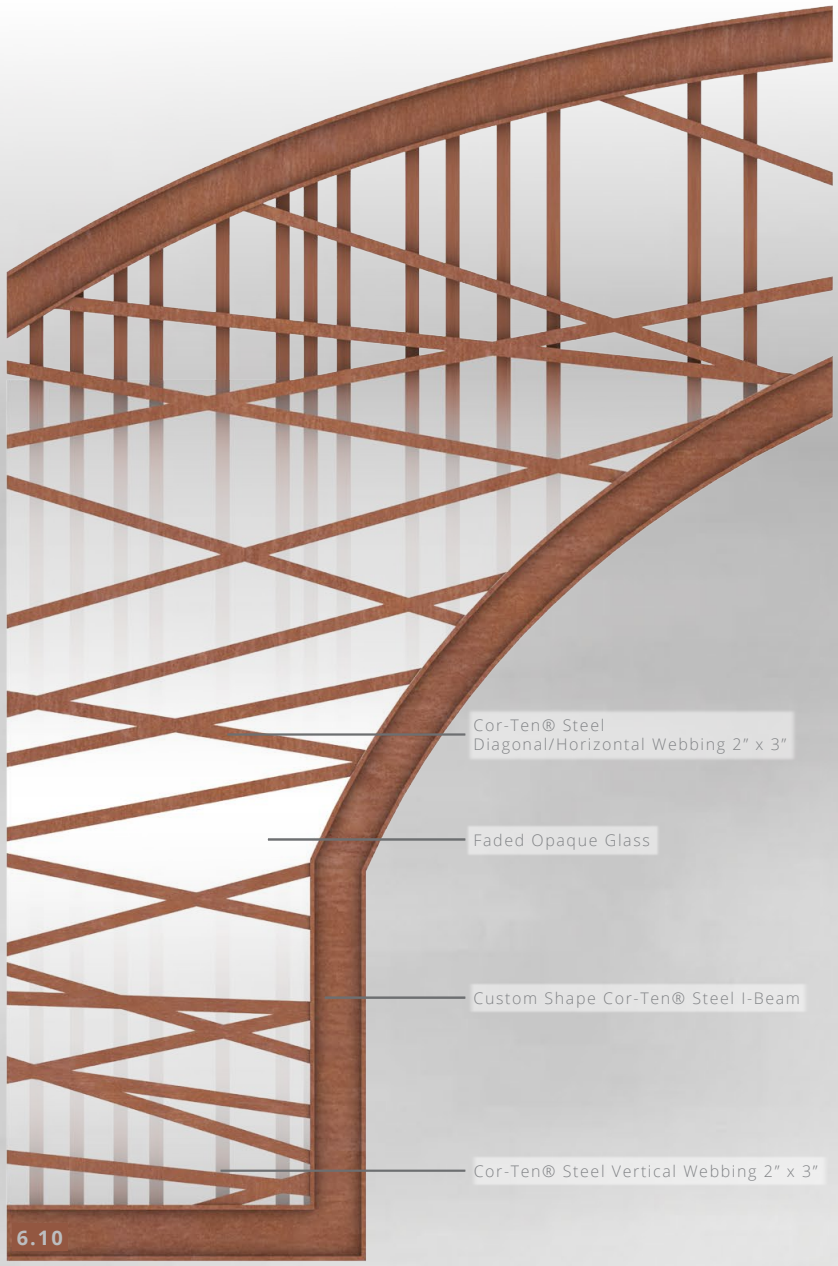
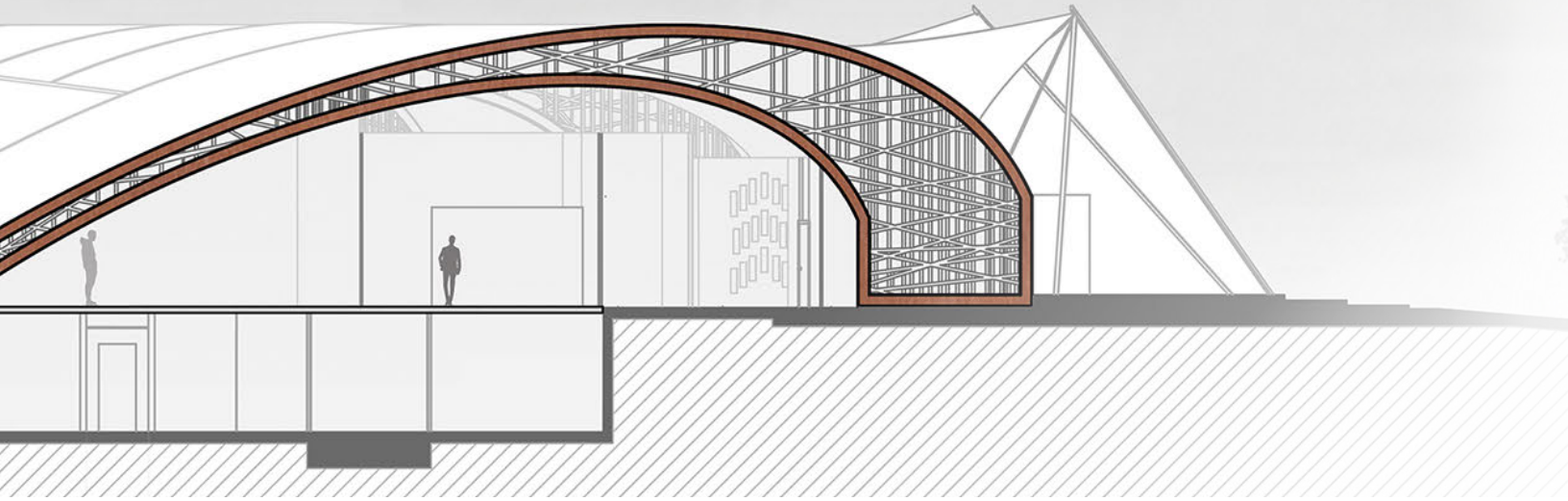

Cor-Ten® Steel
Diagonal/Horizontal Webbing 2" x 3"
Faded Opaque Glass
Custom Shape Cor-Ten® Steel I-Beam
Cor-Ten® Steel Vertical Webbing 2" x 3"

6.10



ARCH 292(L) Construction Materials / Spring 2022
Throughout the semester, in pairs, we created a timber framed residential home model.
Team Member: Cheyenne Miller