

**rogers kiprono
portfolio.**

Archicad, Rhino, grasshopper, Blender and Unreal Engine works

003

selected
works

2024

KOECH ROGERS KIPRONO, GRADUATE ARCHITECT

Email

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Website

www.archvizkenya.com

Education

2017/09 - 2021/11:

Bachelor of Architectural Studies.

Kenyatta University

School of Engineering and Architecture

2022/09 - 2024/11:

Bachelor of Architecture.

Kenyatta University

School of Engineering and Architecture

Languages

English and Kiswahili

Software skills

Building Information
Modelling:

Archicad

Revit

3d Modelling:

Rhino and Grasshopper

Sketchup

Realtime
Visualisation:

Unreal Engine

Blender

Presentation:

Photoshop

Indesign

Soft skills

Sketching and Drafting
Model making
Project management
Virtual reality visualisation

Experience

Intern at MUTISO MENEZES INTERNATIONAL
May 2024-date

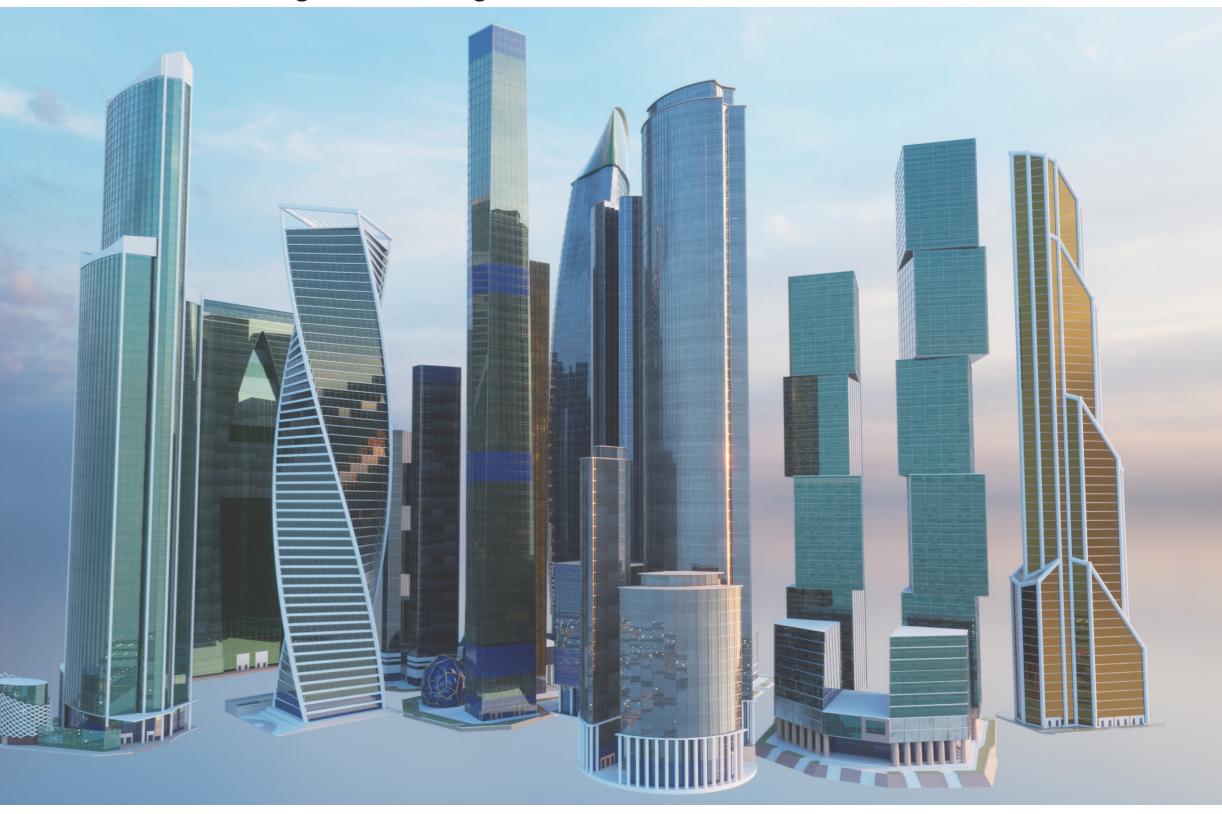
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3D Render: Created using Unreal Engine



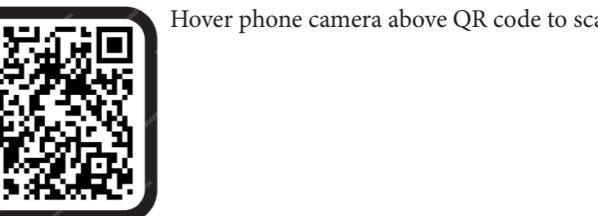
3D Render: Created using Unreal Engine



“Parametric form design”

Video animation link: <https://www.youtube.com/watch?v=JG28xg5CDQY>

QR code to Video animation:

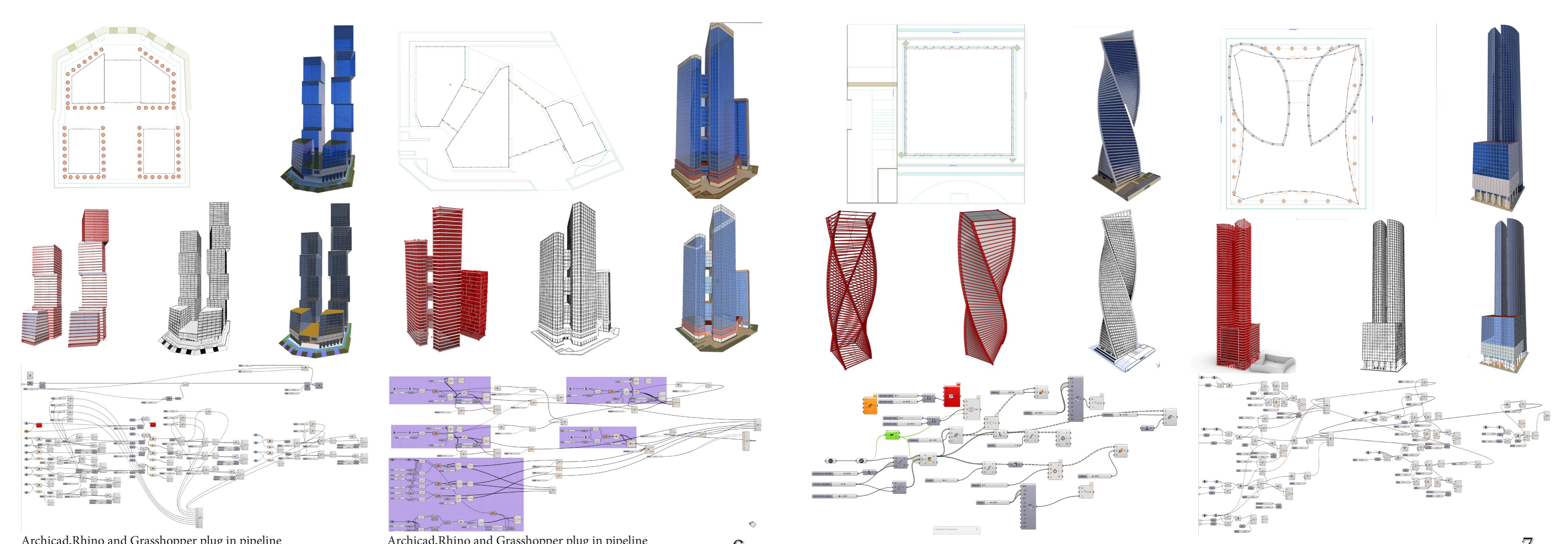


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Typology Parametric towers

Objectives the objective is to showcase proficiency in parametric form development, inspired by the Moscow International Business Center. Leveraging ArchiCAD, Rhino, and Grasshopper plugins, the aim is to explore the center's architectural motifs and generate dynamic forms. Through this, the goal is to demonstrate the capability to translate inspiration into innovative design solutions.

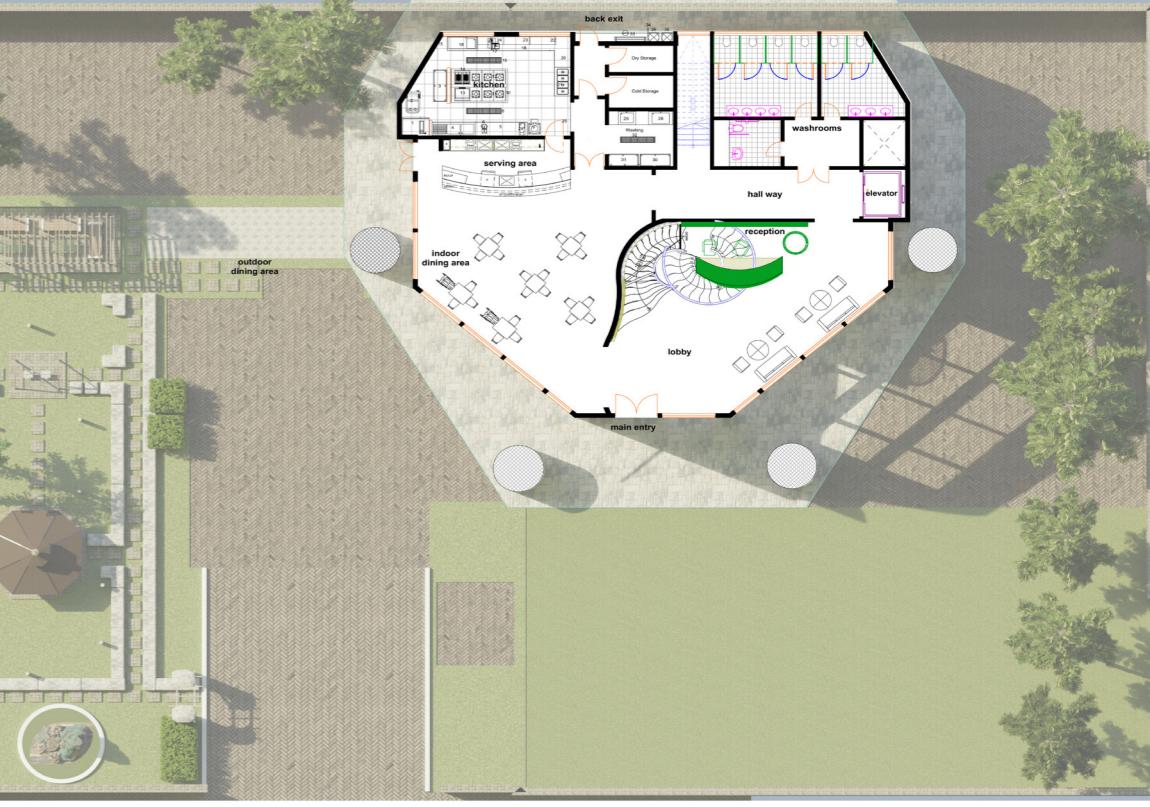
Learning Outcomes the anticipated learning outcomes include a deeper understanding of parametric design principles and enhanced skills in ArchiCAD, Rhino, and Grasshopper. To develop expertise in analyzing complex architectural structures and translating them into responsive parametric models. Ultimately, the project aims to showcase the ability to apply advanced design techniques to real-world architectural challenges.



3D Render: Created using Blender



Site Plan: Created using Archicad and Photoshop



"Jungle Lodge"

Virtual Tour link

<https://rk-sketch98.github.io/Lodge-Virtual-Tour-3/>

QR code to Video animation:



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Typology Recreational Building

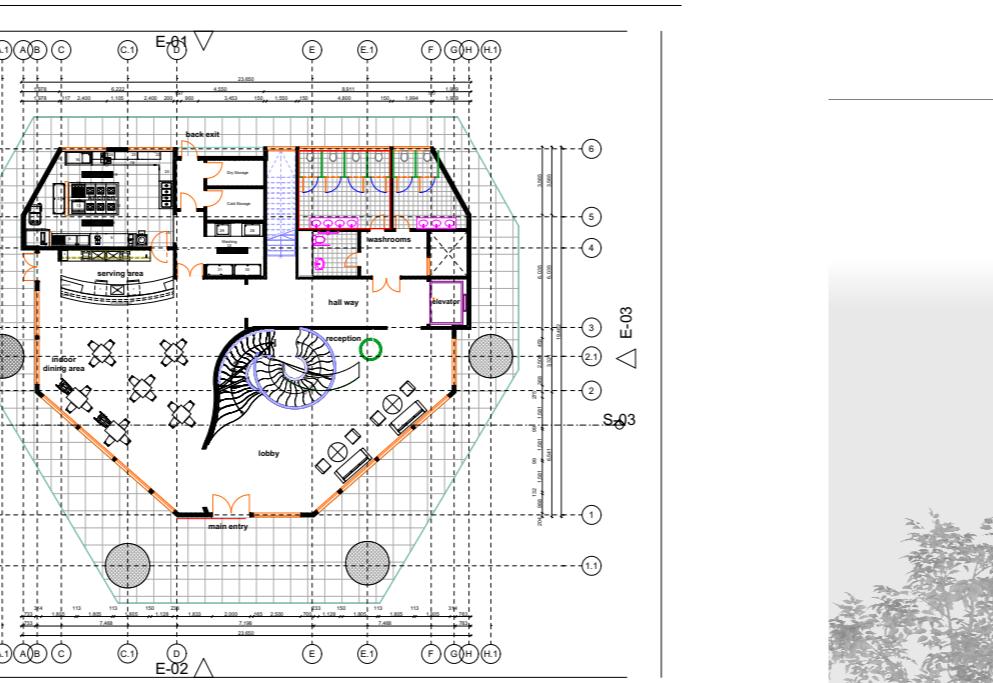
Objectives To showcase proficiency in designing organic architectural forms, inspired by natural elements and traditional construction materials like bamboo and wood. Using ArchiCAD, Rhino, and Grasshopper, the aim is to develop a unique lodge concept that harmonizes with its natural environment.

Learning Outcomes Understanding of Organic Design Principles, develop a deeper comprehension of organic design principles, focusing on fluid, natural forms that harmonize with the environment and gain insight into how these principles can be applied in real-world architectural projects, particularly in creating structures that mimic natural shapes.

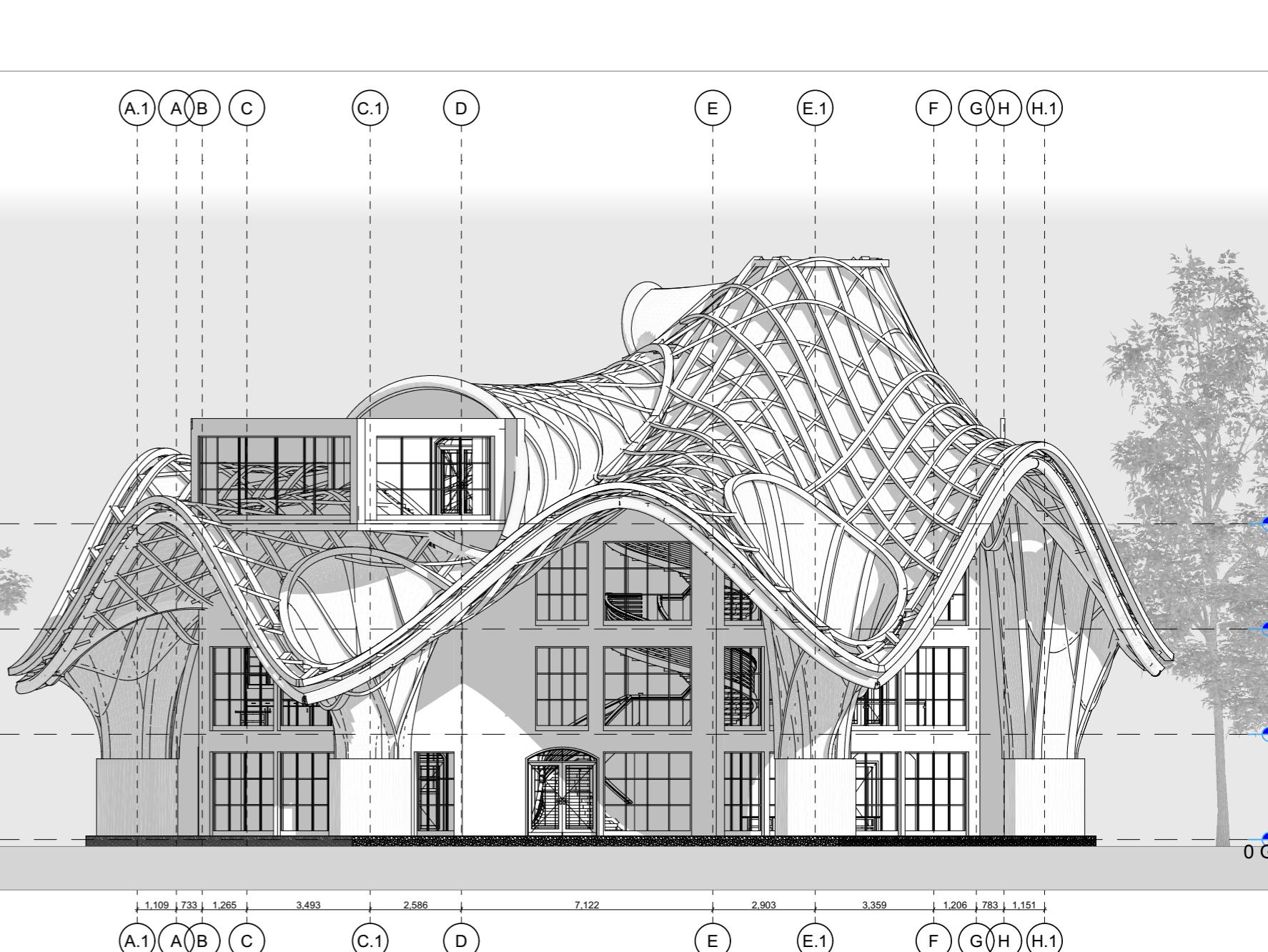
3D Render: Created using Blender



Floor plan: Created using Archicad

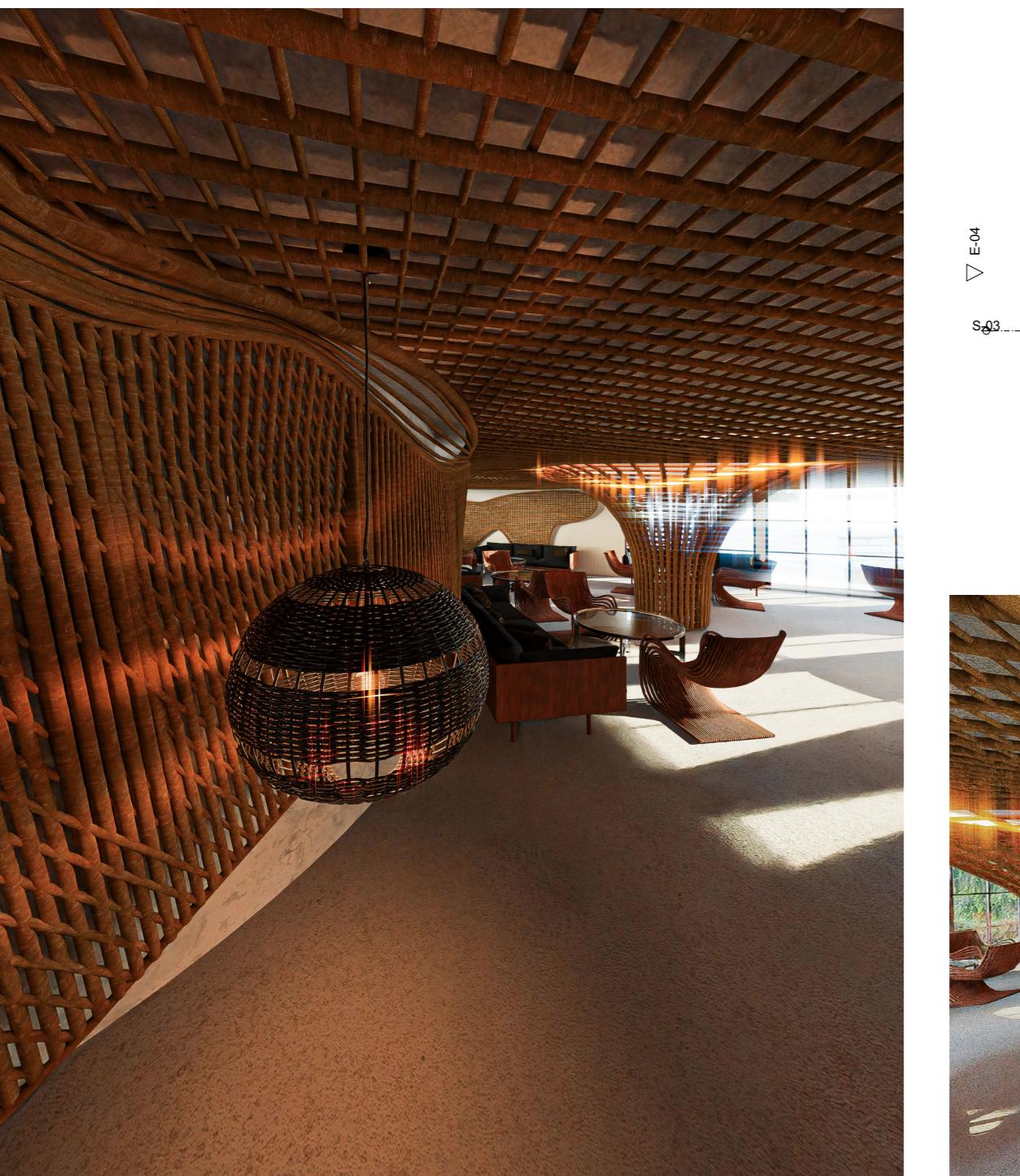


Elevation: Created using Archicad

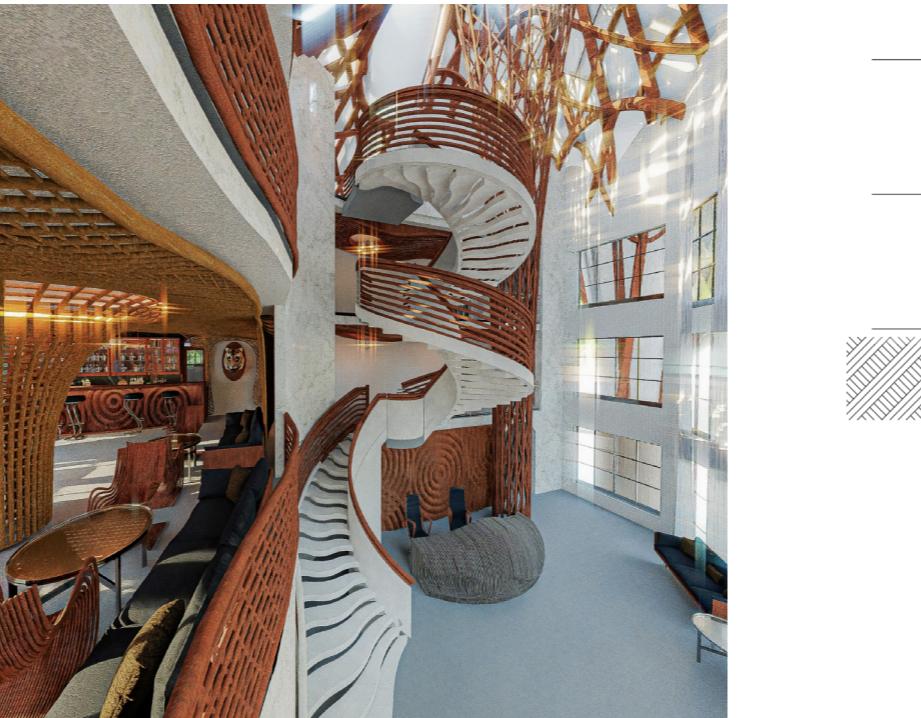
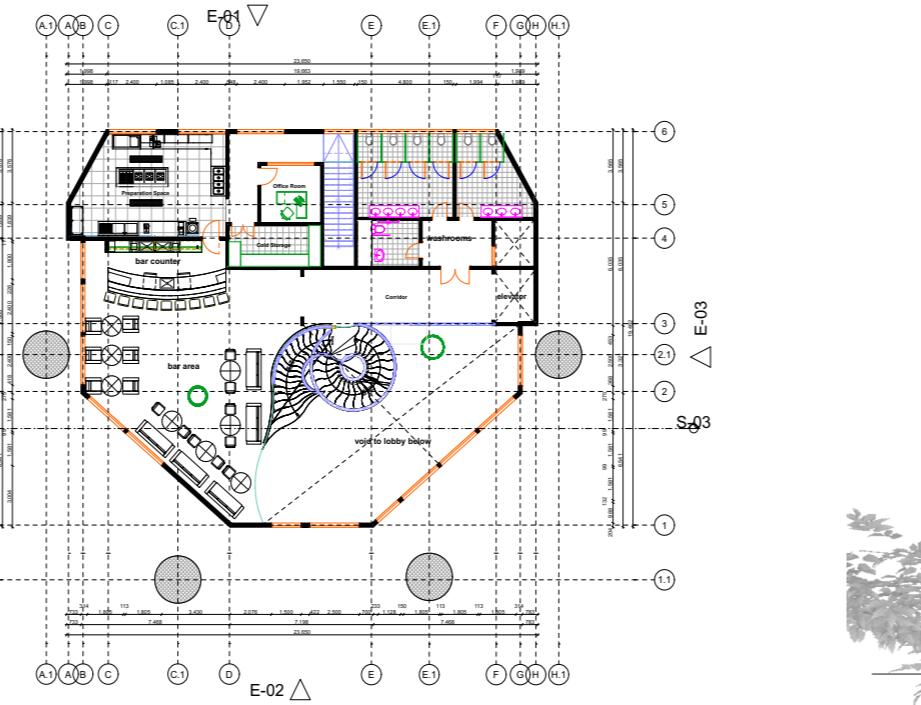


ELEVATION E-02

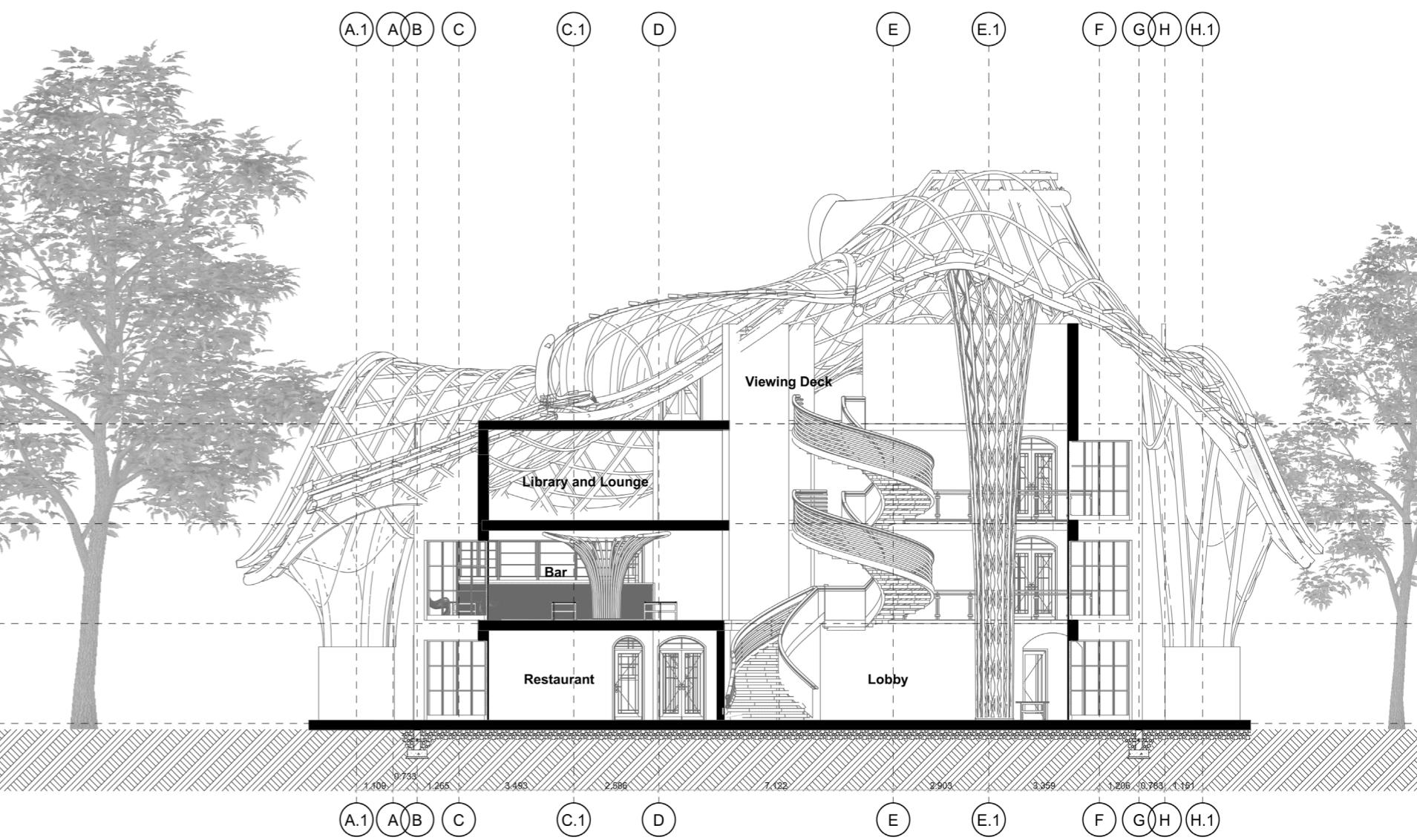
3D Render: Created using Blender

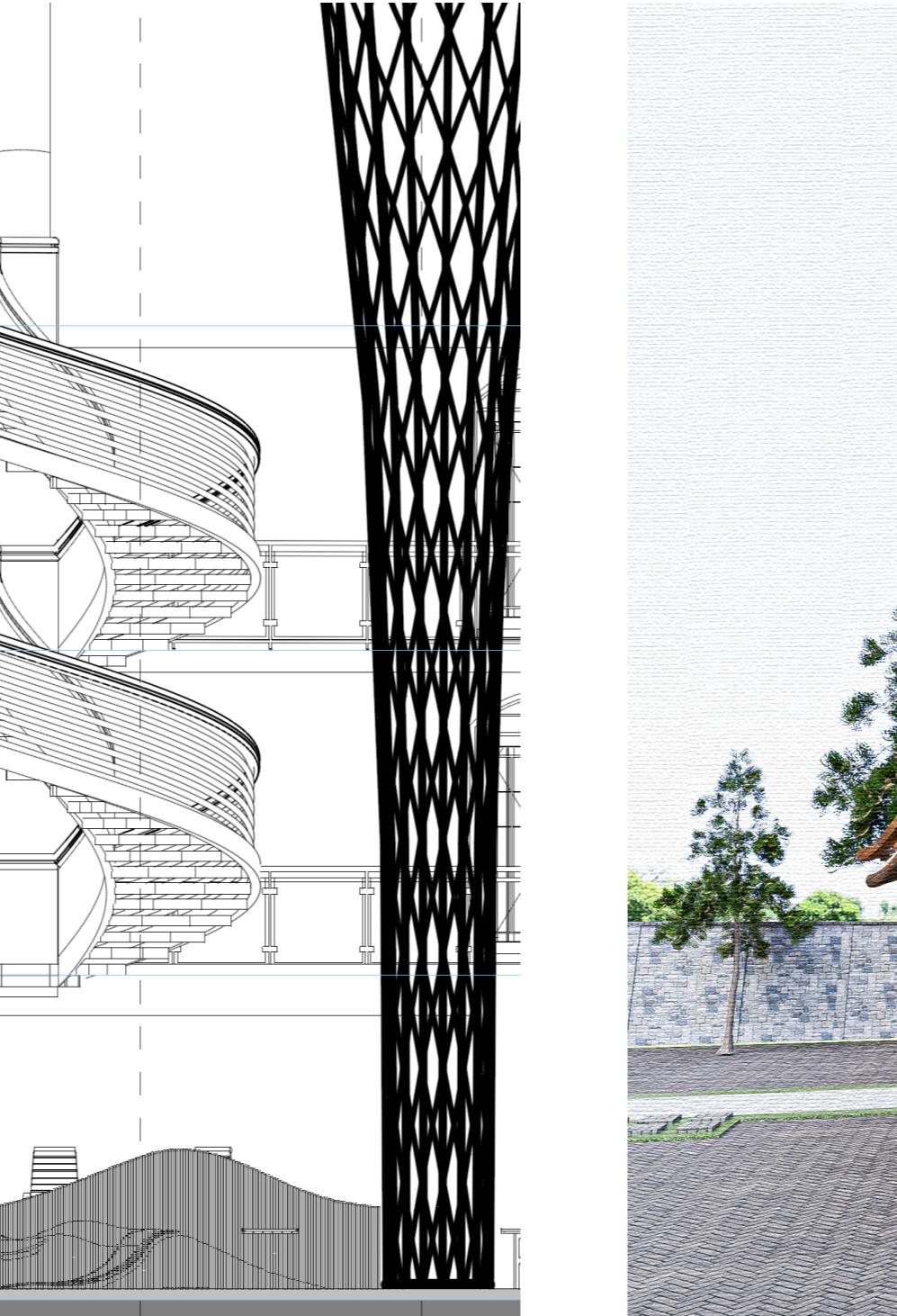
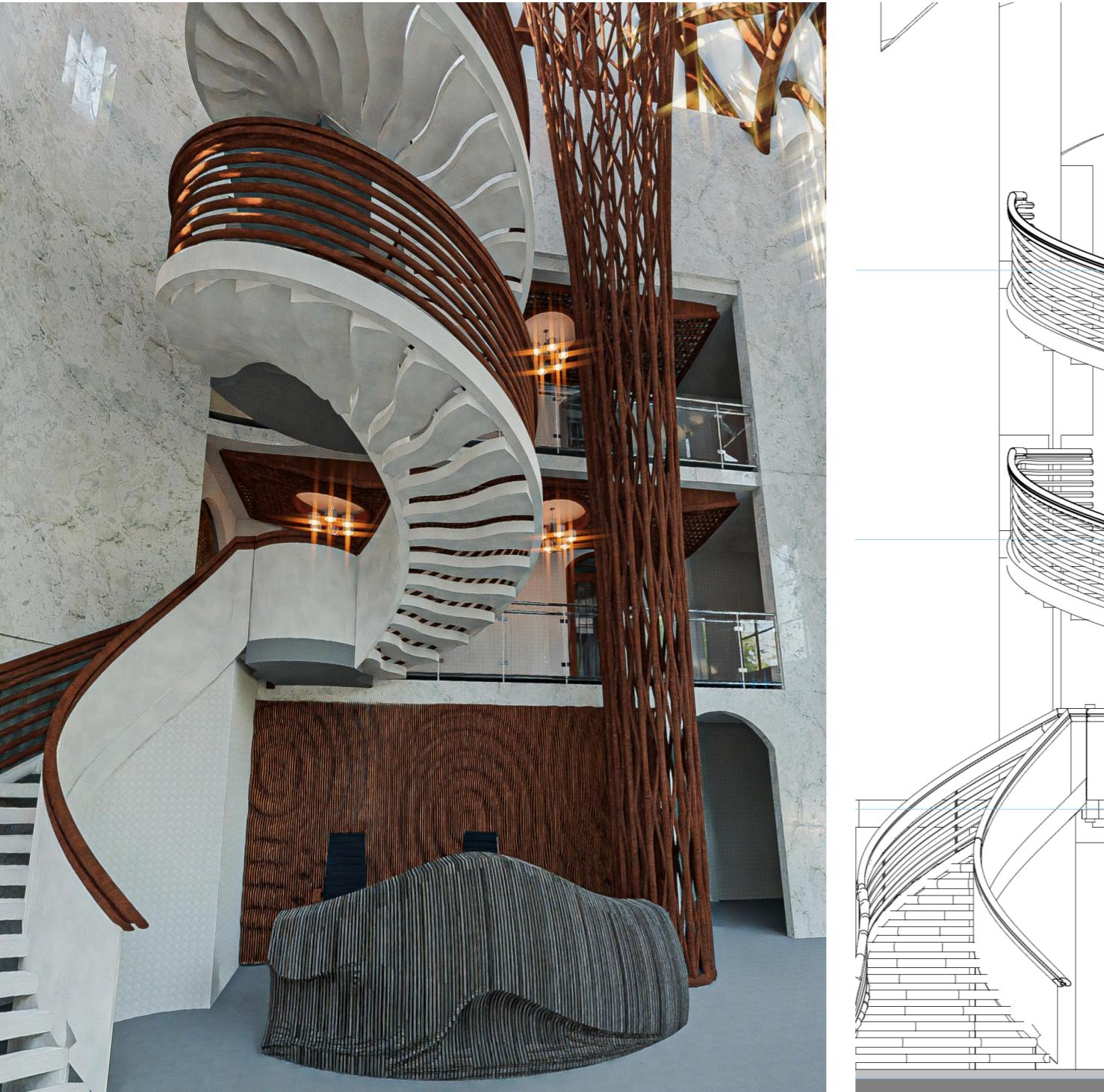


Floor plan: Created using Archicad



Section: Created using Archicad







“public market design”

Typology Commercial Buildings

Concept: Commerce Street Fusion.

public markets in kenya display conflict between space allocated for circulation and the ones for trading. To remedy this a design approach that aims to fuse the spaces for commerce and street, while both maintaining their autonomy and proper function is suitable.

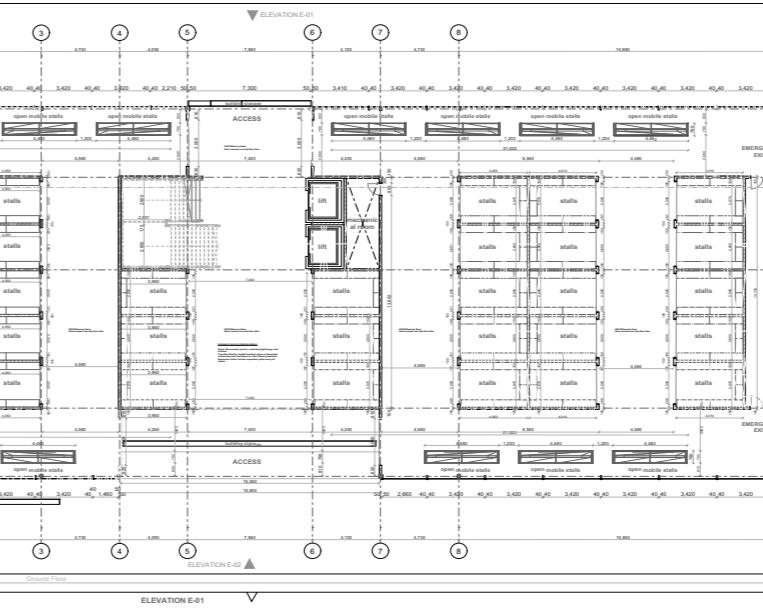
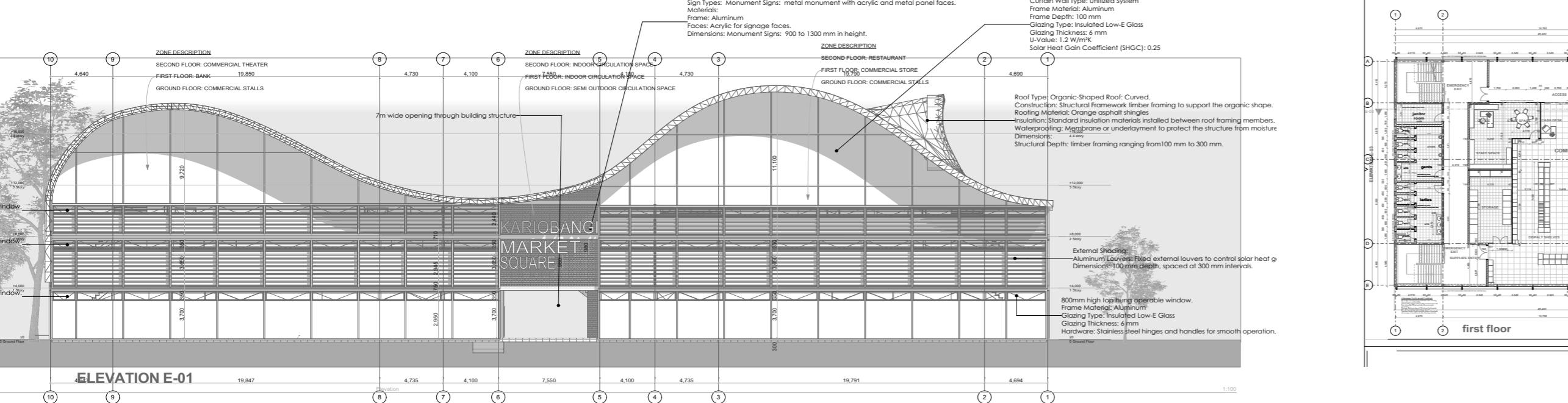
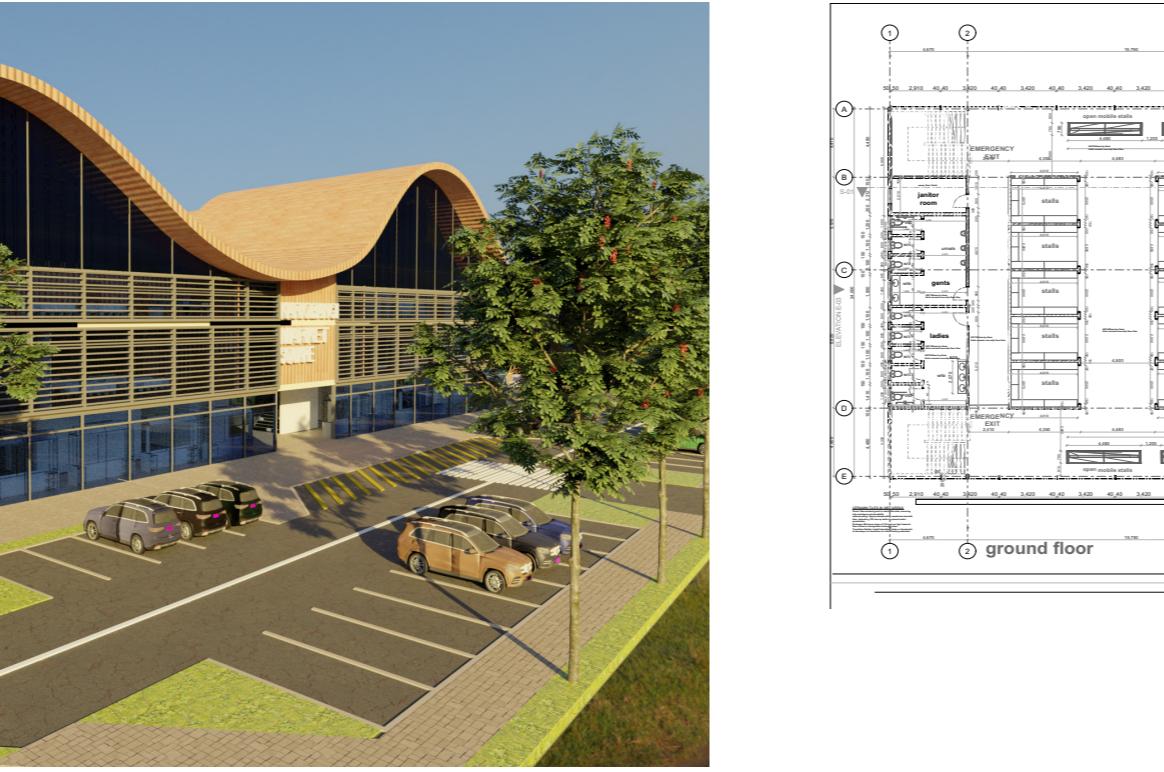
Design Elements To achieve proper fusion between the street and commercial spaces while both maintaining their integrity the elements below are applicable.

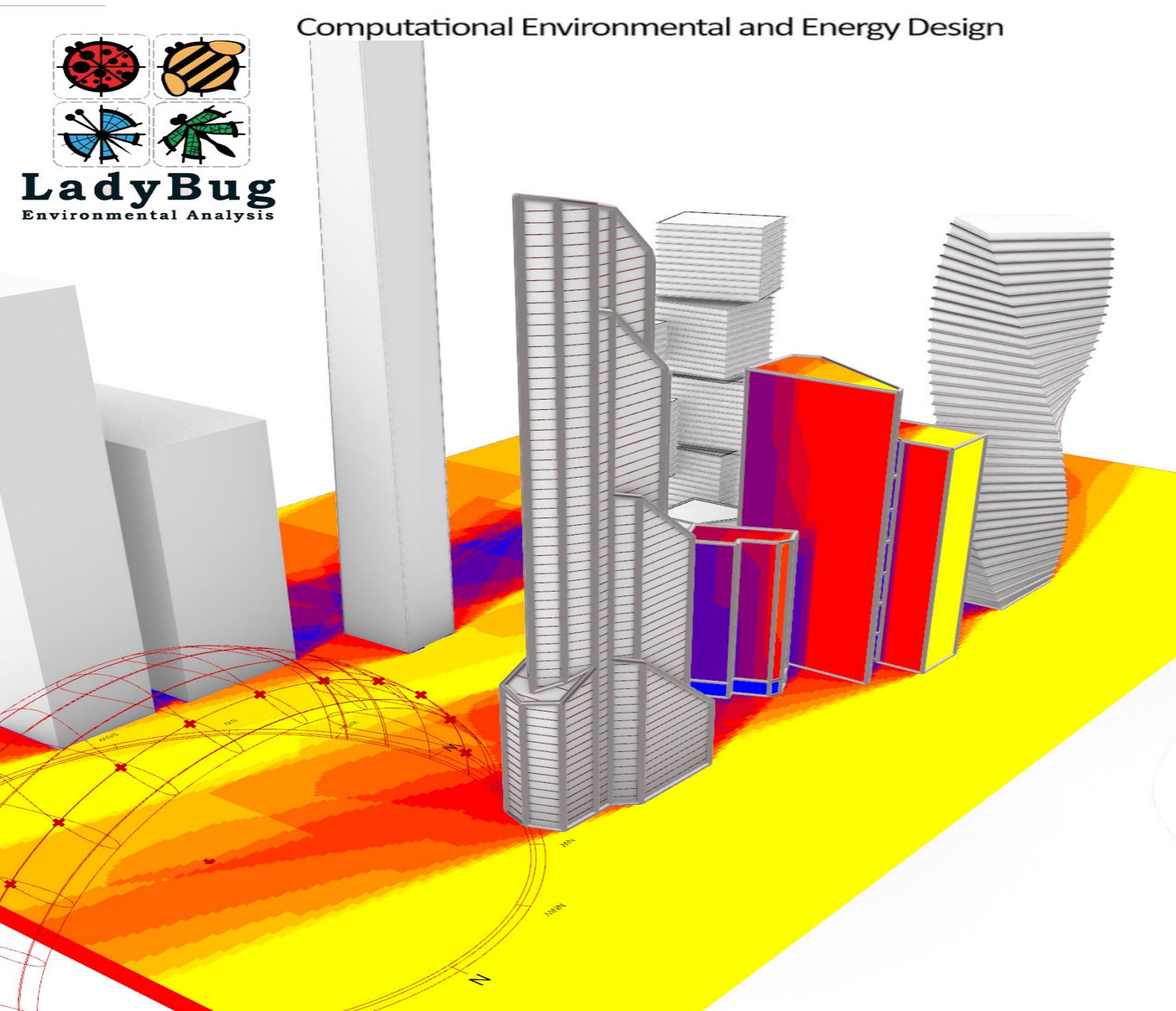
Use of grid to provide clear and organized layouts of streets for easier navigation by establishing regular intervals and intersections.

Use of low-rise structures organised in a spread out sprawl. Spread out sprawl allow for larger frontages.

Lower buildings create more open and accessible streetscape, making it easier for pedestrians to visually connect with commercial establishment from the street level.

Use of courtyard layout would form the backbone of the circulation merging all the elements together.





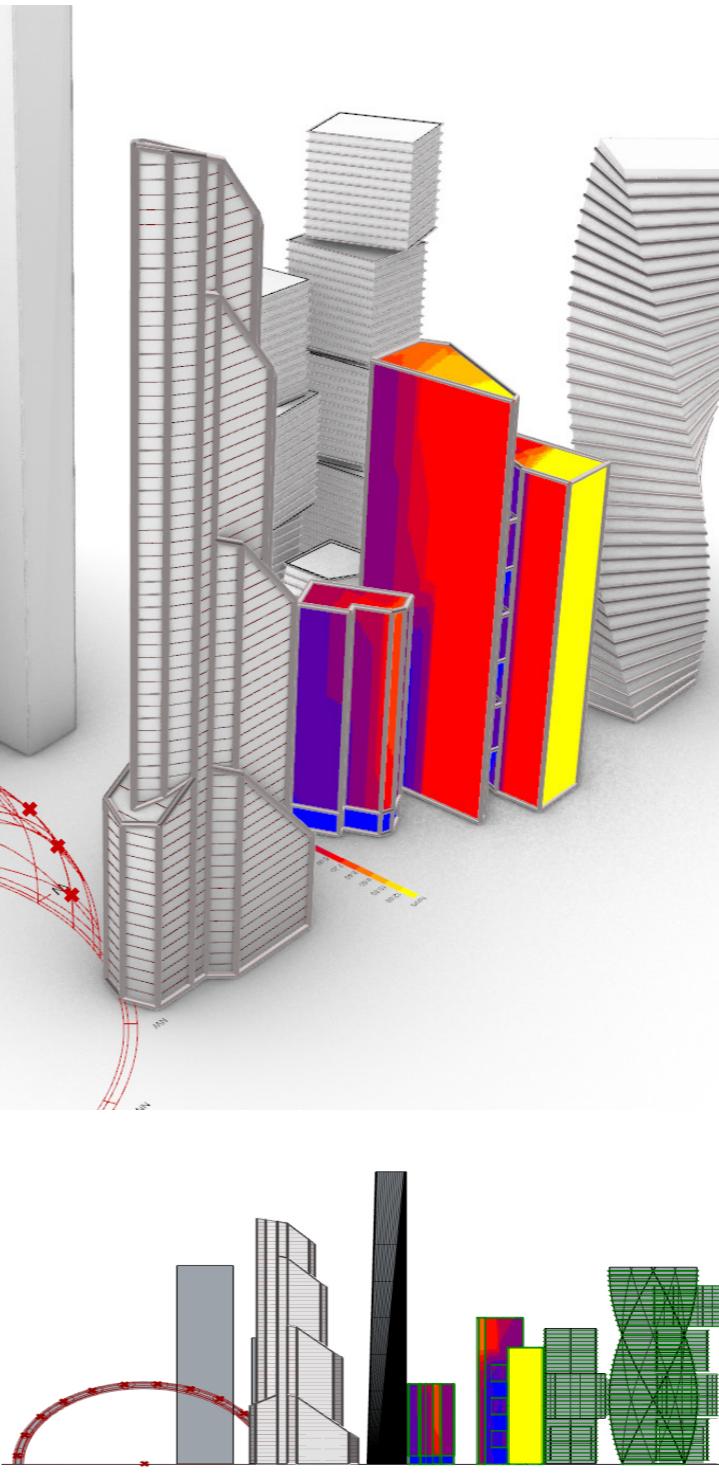
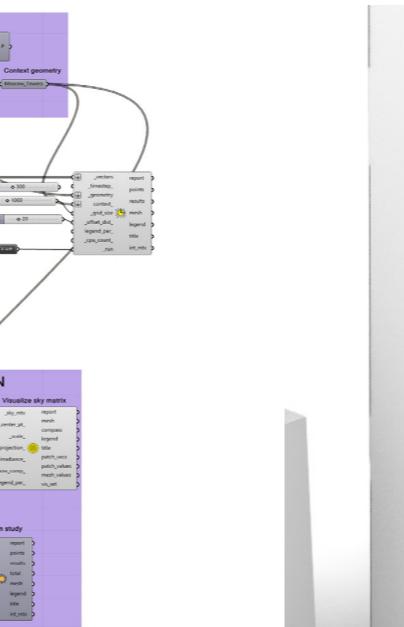
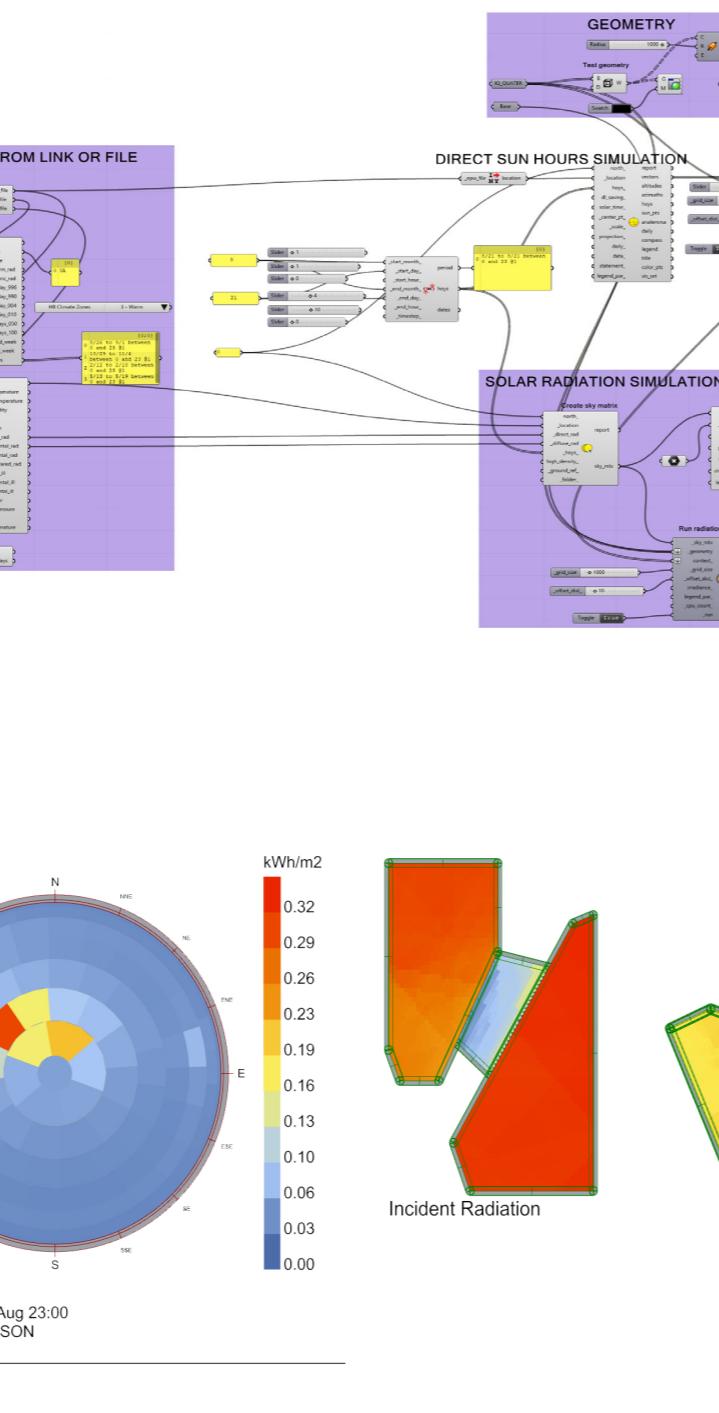
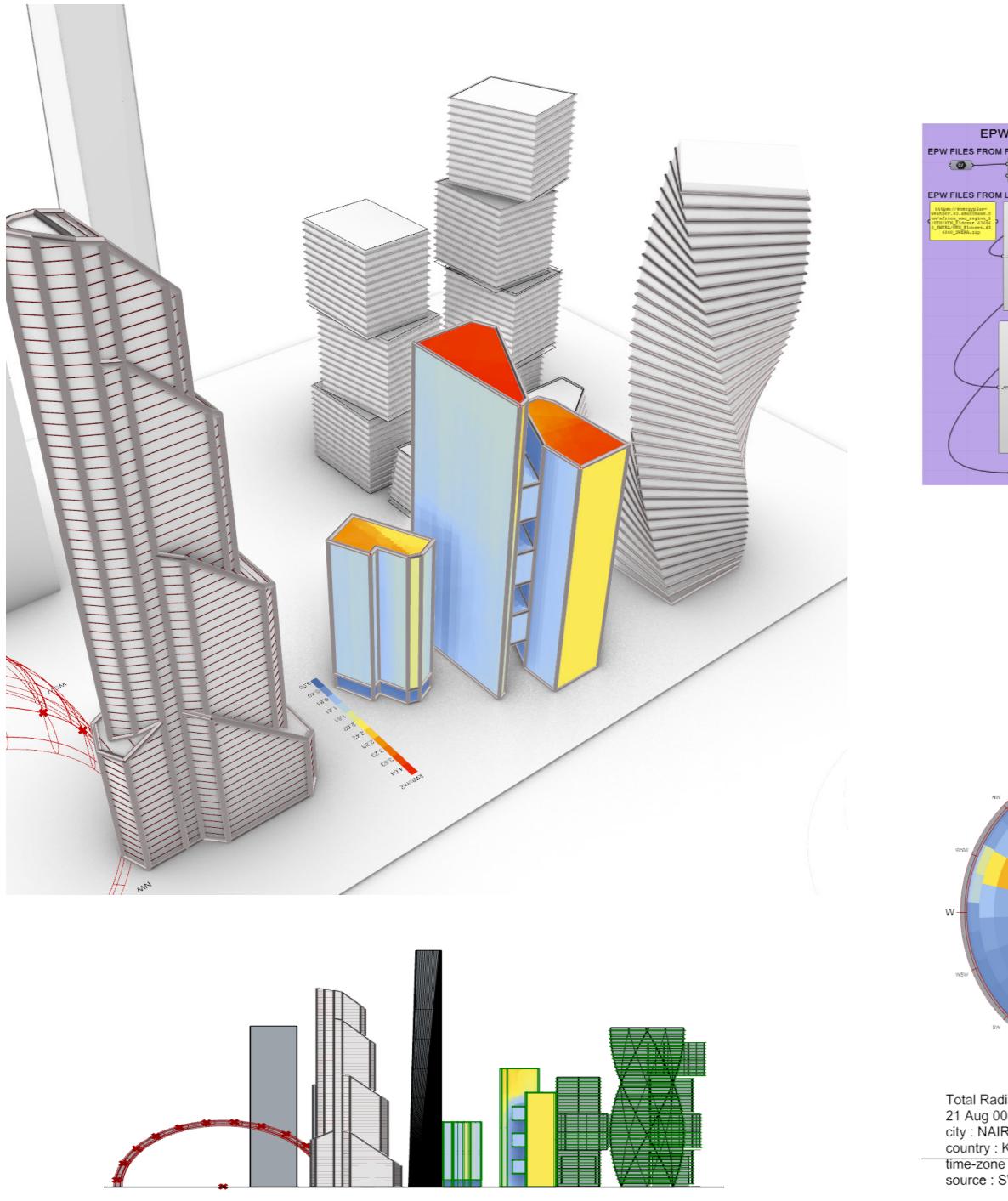
“computational Environment and Energy Design”

Typology Computational Simulations

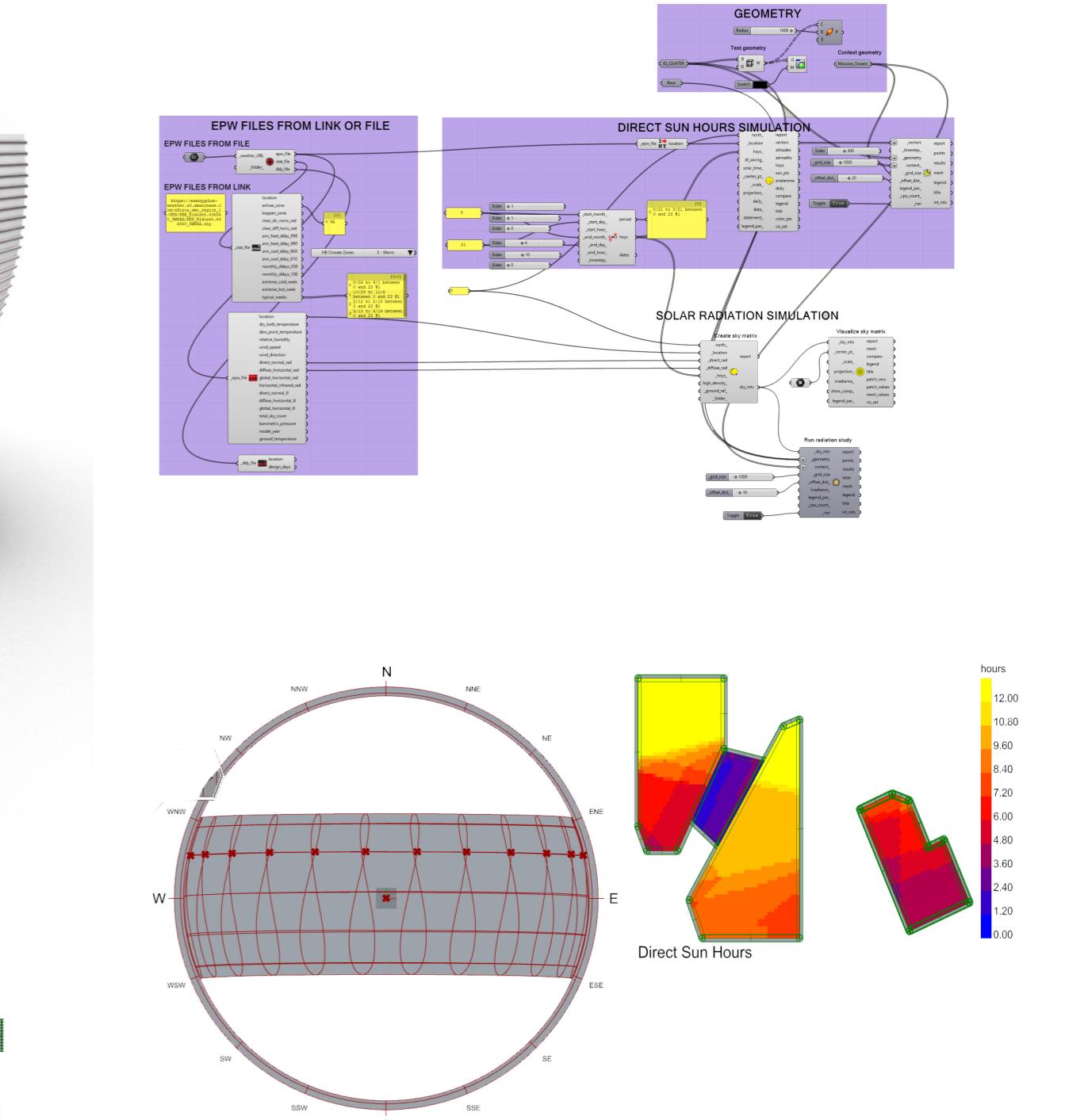
Objectives aims to delve into computational Environment and Energy Design using Rhino and Grasshopper with Ladybug plugins. The objective is to explore solar radiation, conduct direct sunlight analysis, and perform energy simulations. By utilizing these tools and techniques, the goal is to develop a comprehensive understanding of how computational methods can inform sustainable design decisions and optimize building performance.

Learning Outcomes Proficiency will be acquired in utilizing Rhino and Grasshopper with Ladybug plugins for environmental and energy analysis. Insights will be gained into conducting solar radiation studies and direct sunlight analysis to inform daylighting strategies. Furthermore, skills will be developed in performing energy simulations to assess building performance and optimize energy efficiency. Overall, this project aims to demonstrate the application of computational methods in achieving sustainable architectural design solutions.

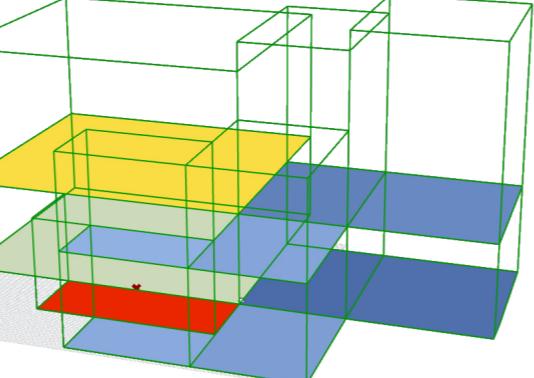
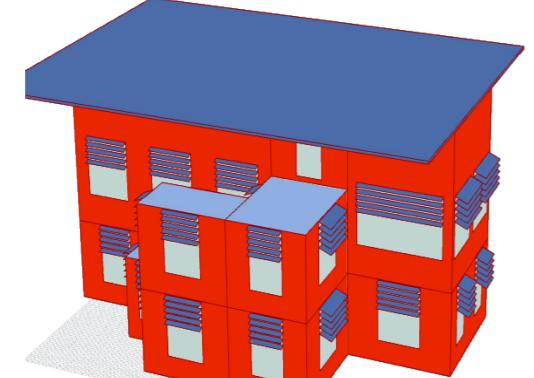
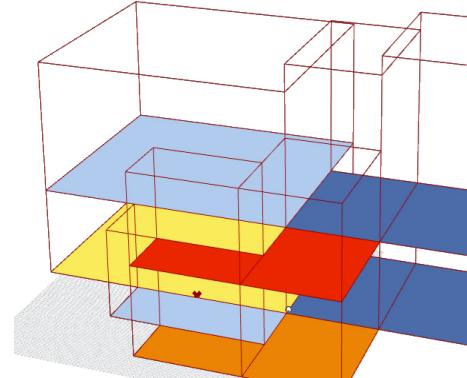
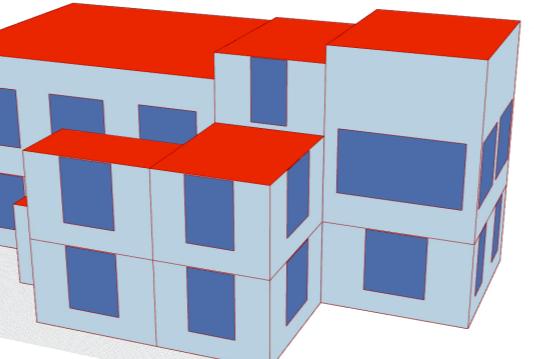
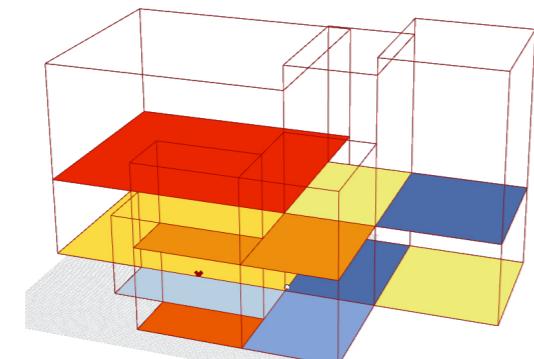
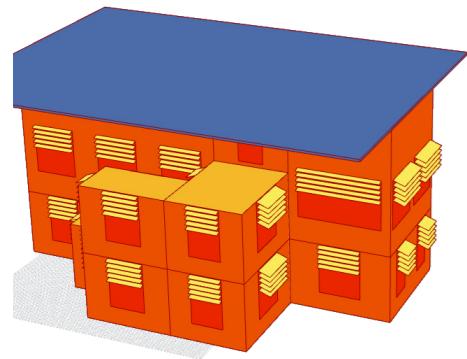
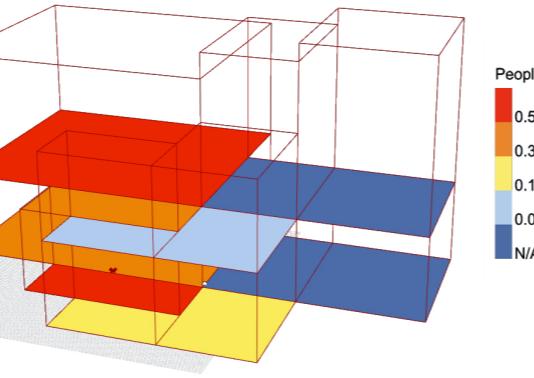
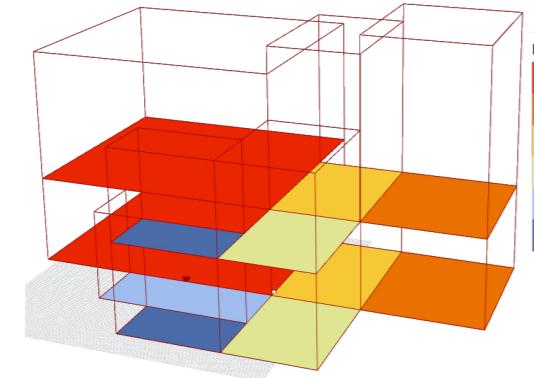
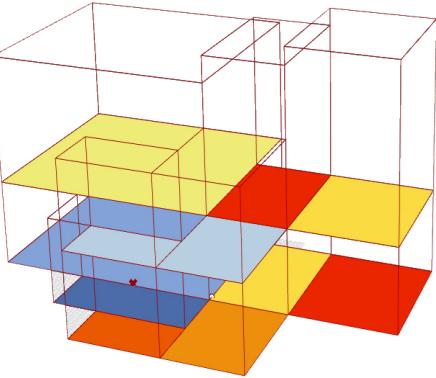
Solar Radiation Visualisation. Simulation using ladybug plugins and energy plus



light Visualisation. Simulation using ladybug plugins and en



“Energy Simulation”



Energy Simulation Results. Simulation using ladybug plugins and energy plus

