PORTFOLIO

ARCHITECTURAL

URMILA BADE

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ub_architecture

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Uku Mahal Conservation Area , Malikarjun Temple, Tharu Museum

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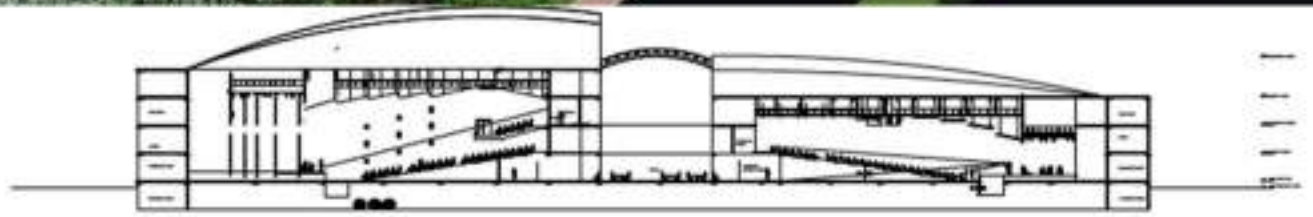
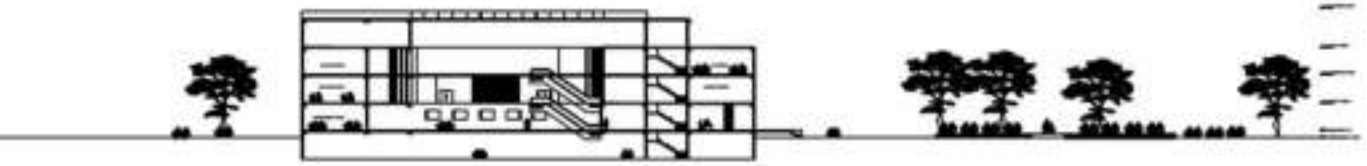
THESIS PROJECT

Final Year Project

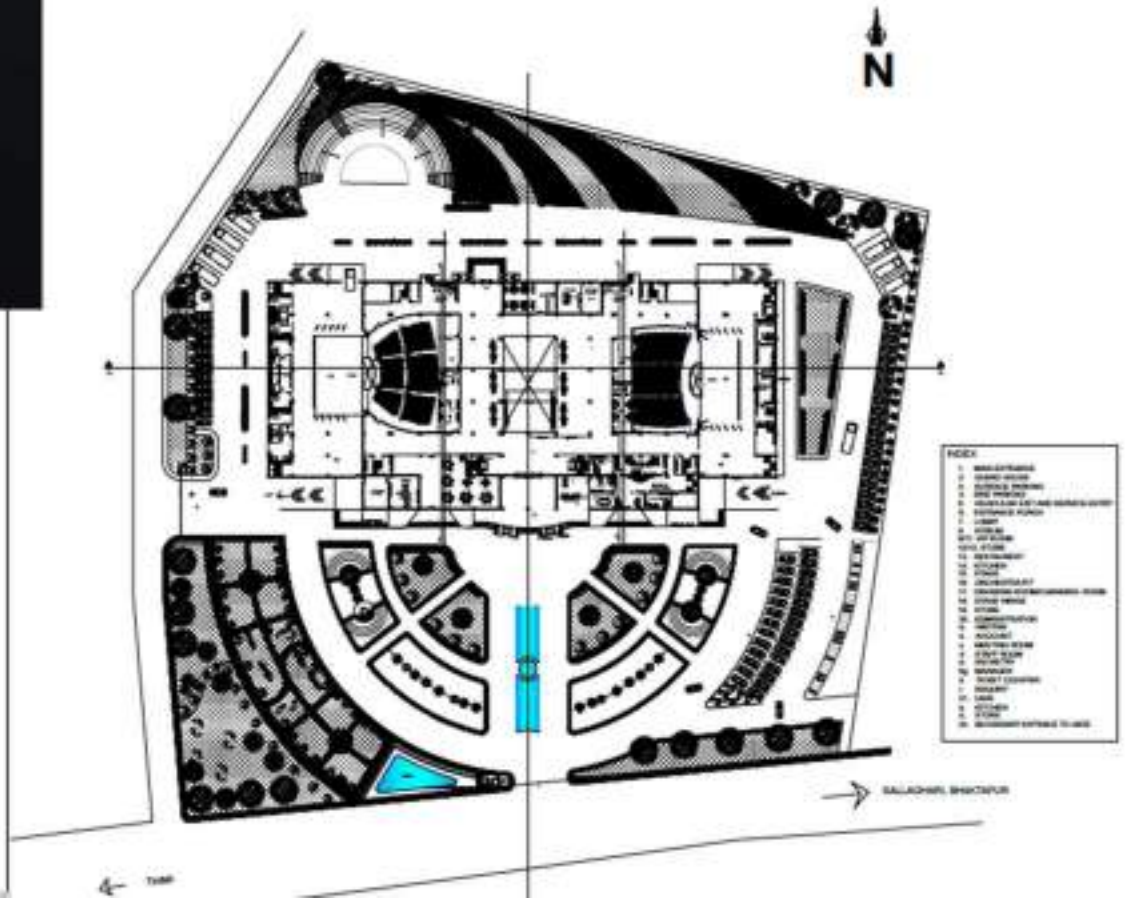
This design is an inspiration to provide a venue for cultural exchange in terms of content, curatorial and cultural management, giving the place an operational base on the international art scene.



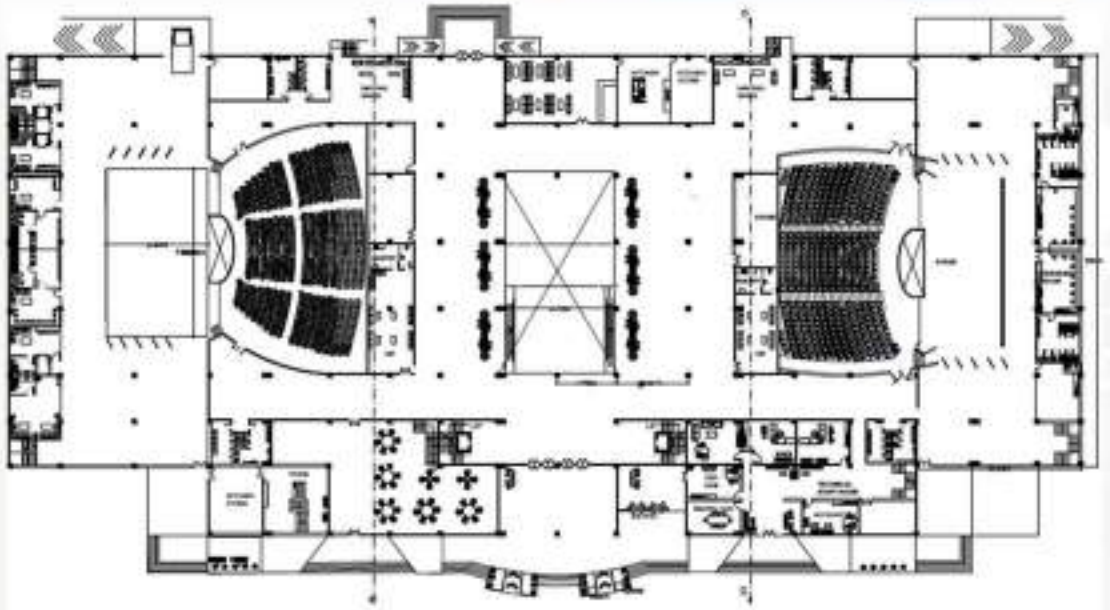
SECTION AT A-A'



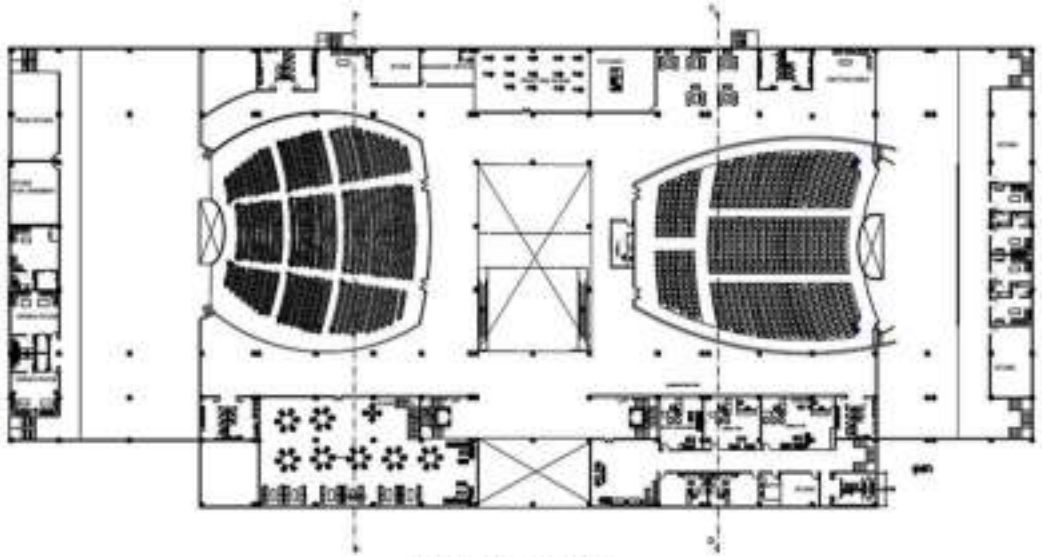
SECTION AT B-B"



THESIS PROJECT



GROUND FLOOR PLAN

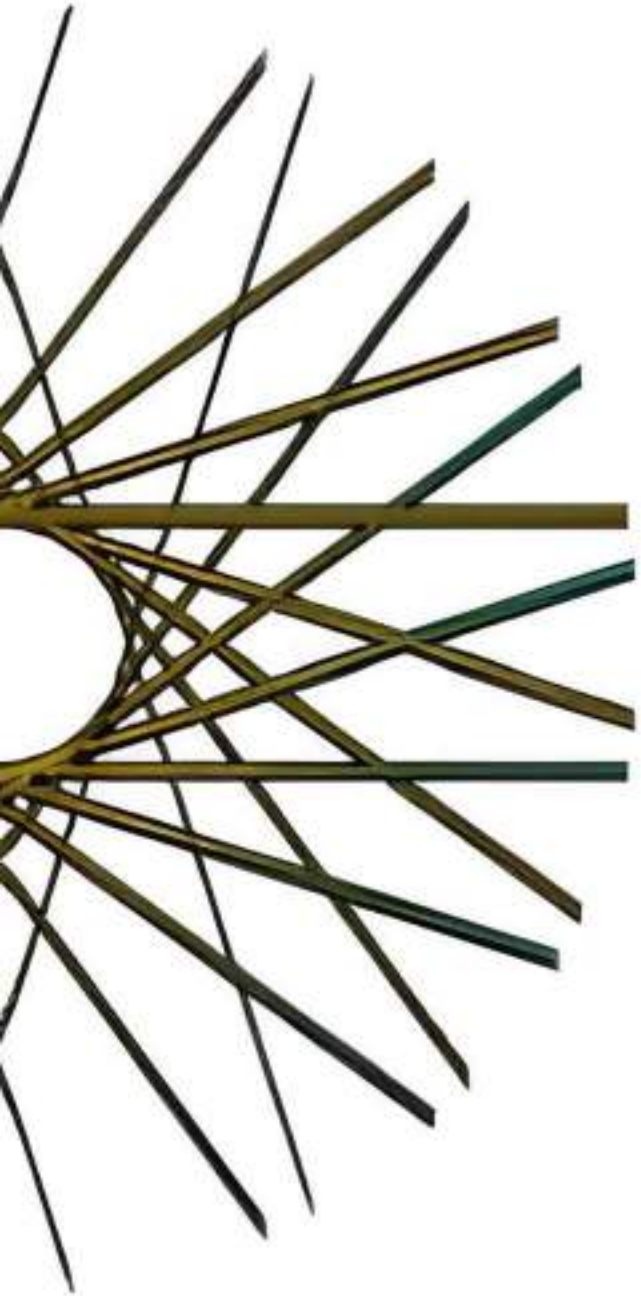


FIRST FLOOR PLAN

URBAN DESIGN

URBAN DESIGN AND CONSERVATION PROJECT

Ratnapark Transportation Management

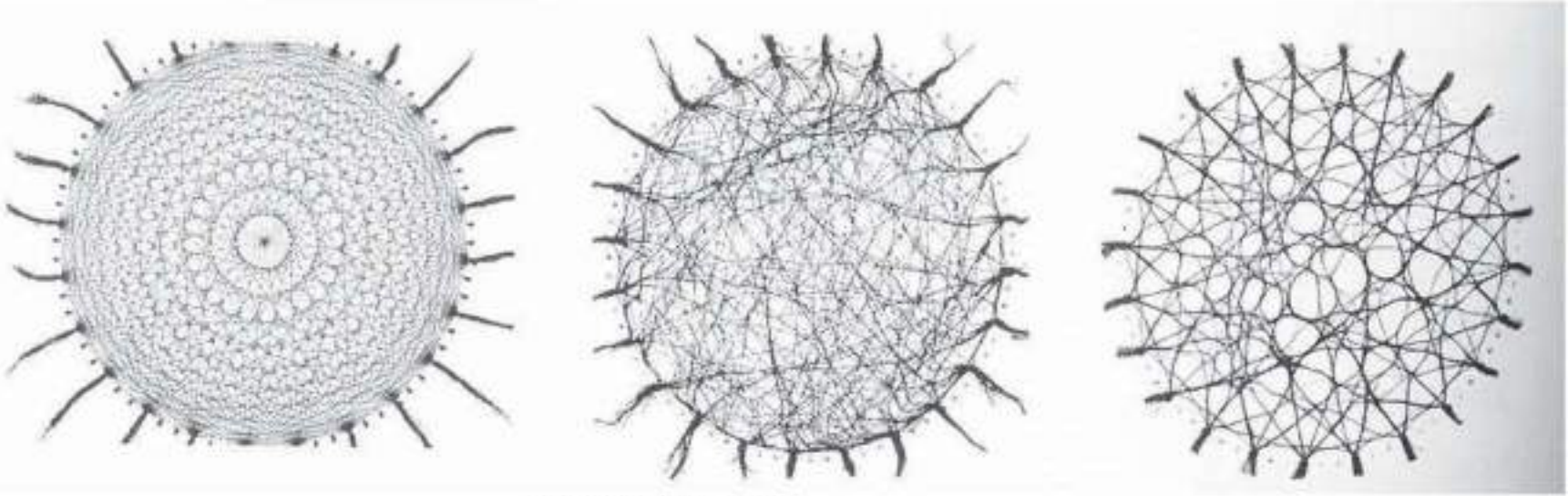


Computational Design Experiment

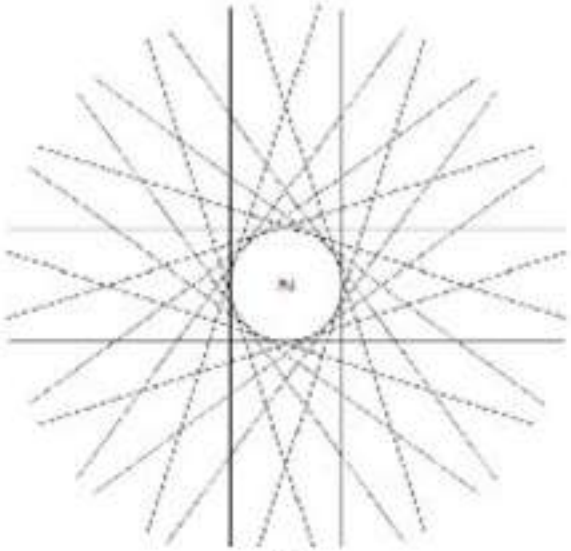
COMPUTATIONAL DESIGN

(Ref. Frei otto experiment)

Minimal Pathways for grid deformation model using computational design. This is Frei Otto's experimentation with wool



Frei Otto Experiments



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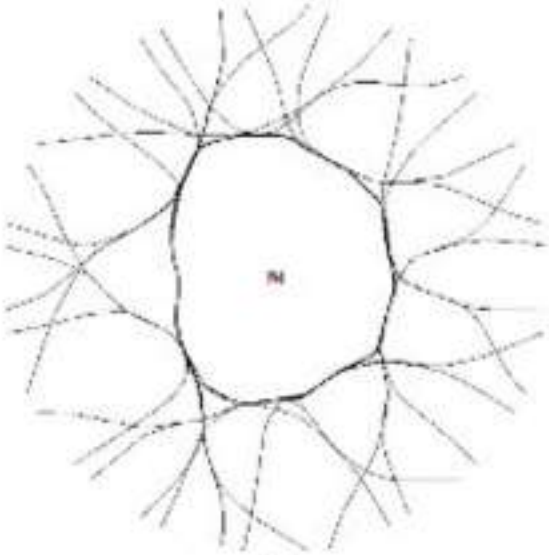

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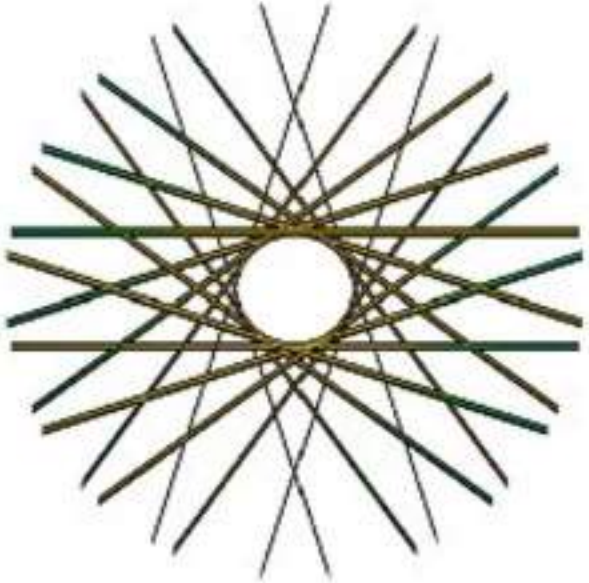

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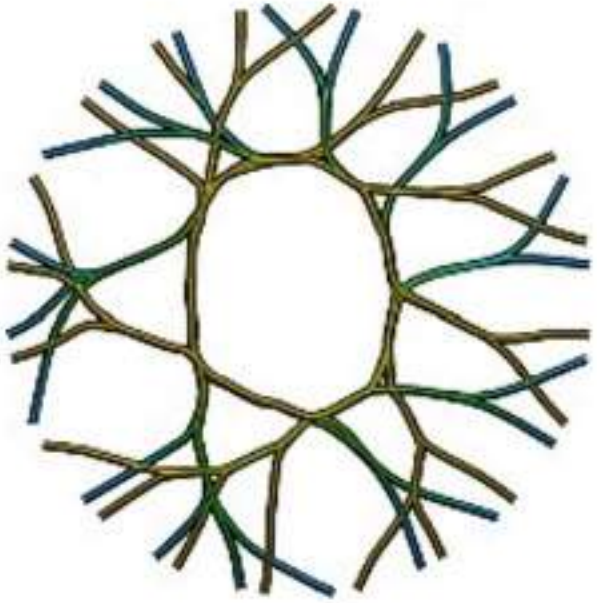

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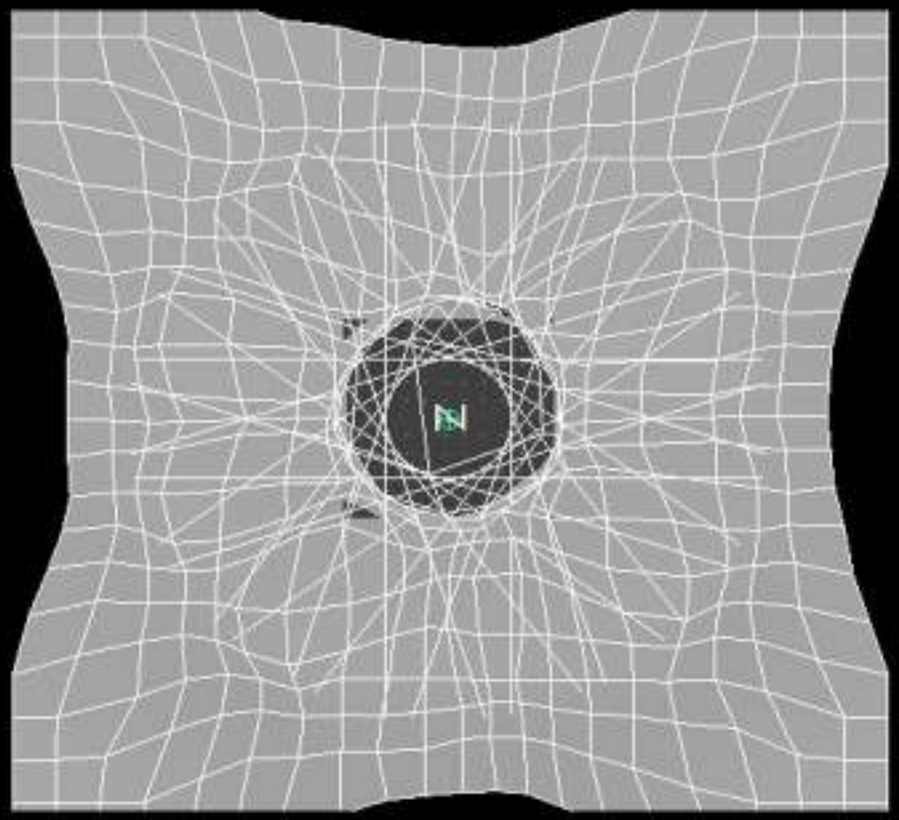
COMPUTATIONAL DESIGN (REF FREI OTTO NHAIR SYSTEM EXPERIMENT)



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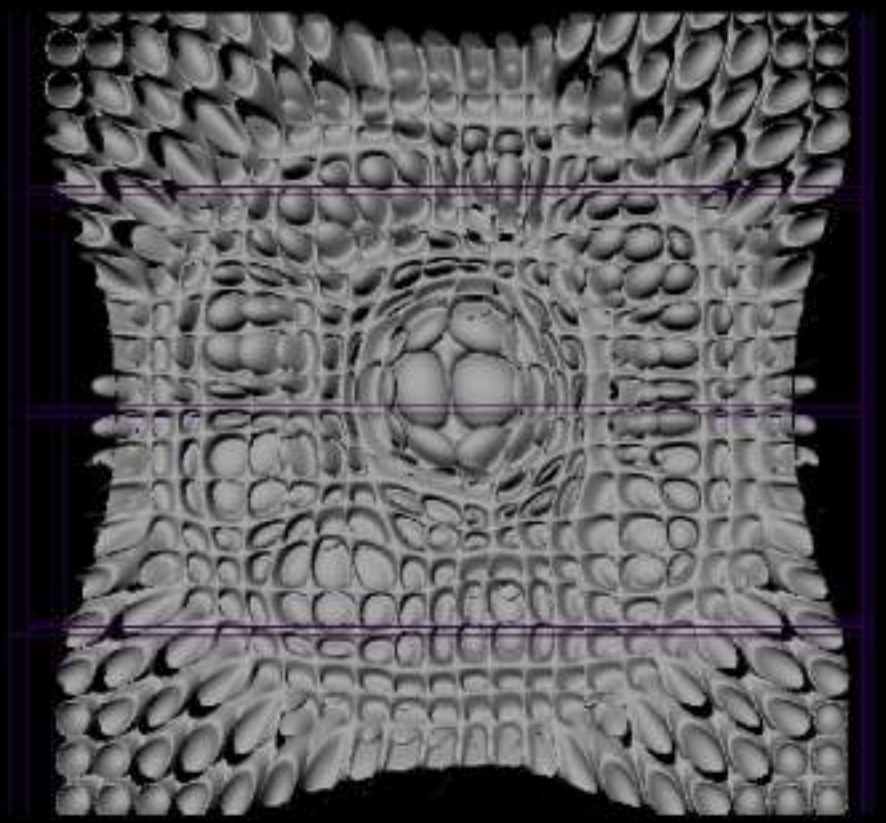
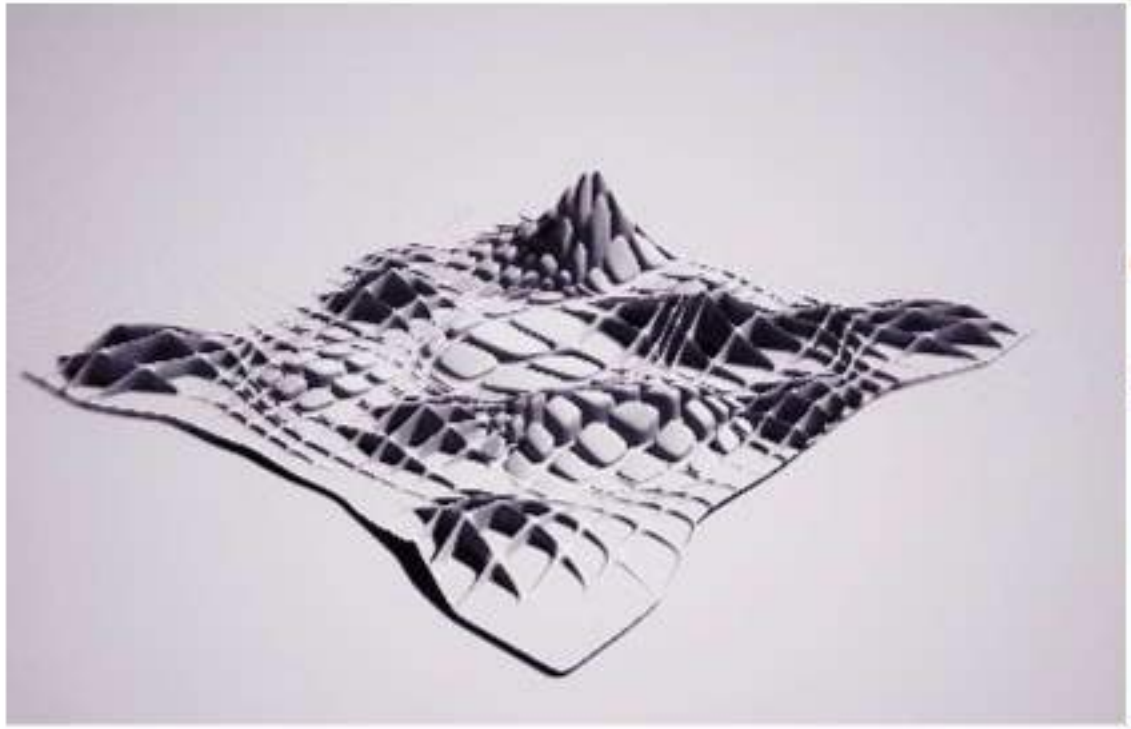
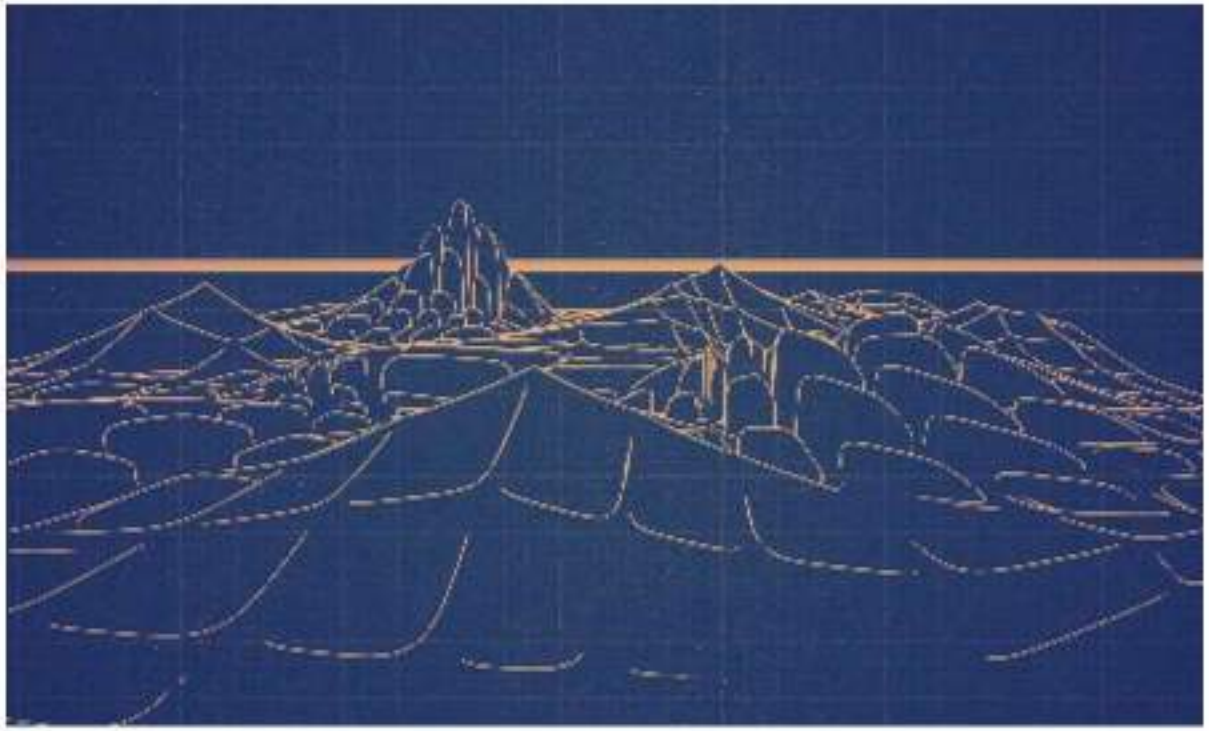


6

Further addition of lattice to n-hair system experiment to make parametric form

COMPUTATIONAL DESIGN (REF FREI OTTO NHAIR SYSTEM EXPERIMENT)



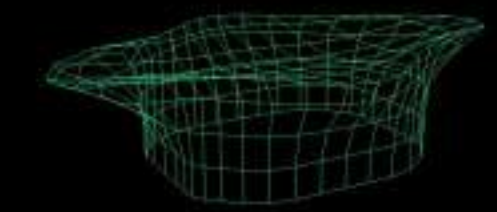


Render of parametric form

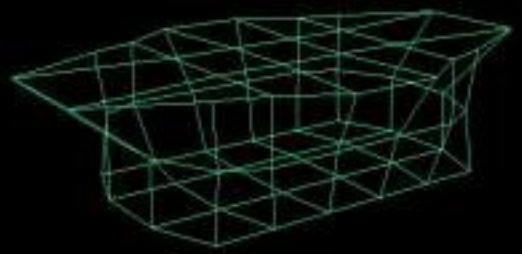
COMPUTATIONAL DESIGN EXPERIMENT (Ref; Zaha Hadid)

MAYA SUBDIVISION EXPERIMENT

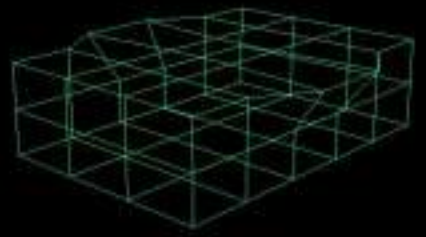
Subdivision experiment of Aquatic Centre by ZAHA in Maya.

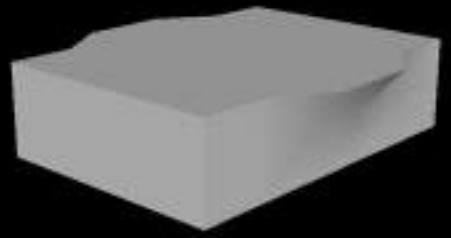


4.CHANGING GEOMETRIC SHAPE INTO PARAMETRIC WITH COMMAND 3 IN MAYA

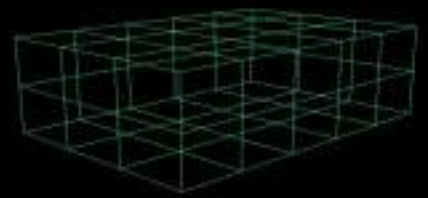


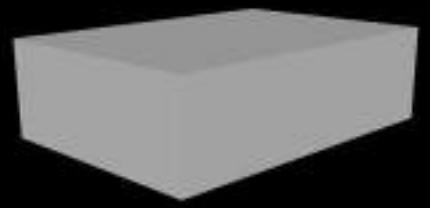
3. IN BREADTH ,SELECTING MID EDGE AND MODE TO OPPOSITE SIDE





2. SELECTING MIDDLE SECTION EDGE ON LENGTH ON TOP , BOTH SIDE AND MOVE AWAY EACHOTHER

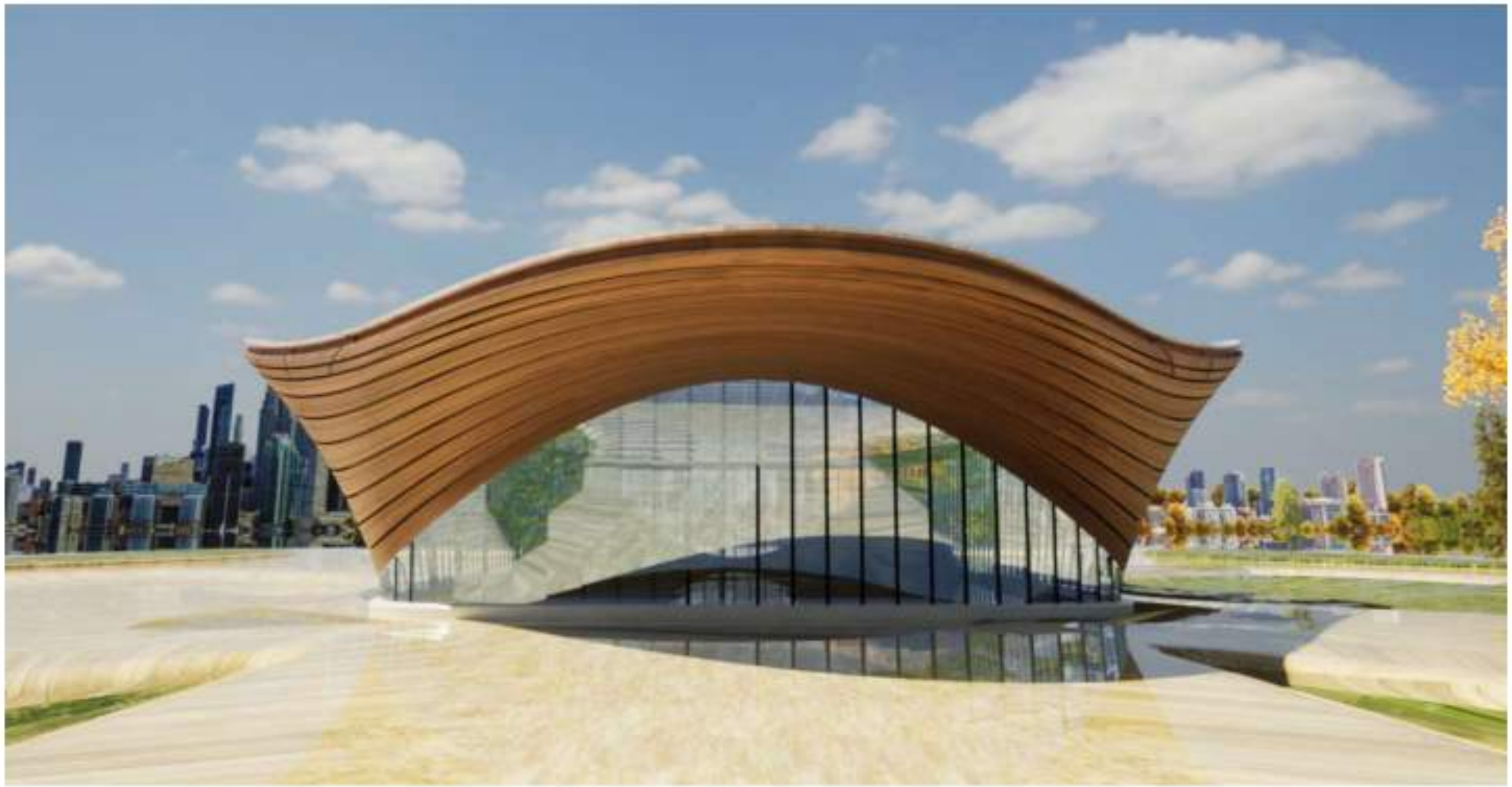


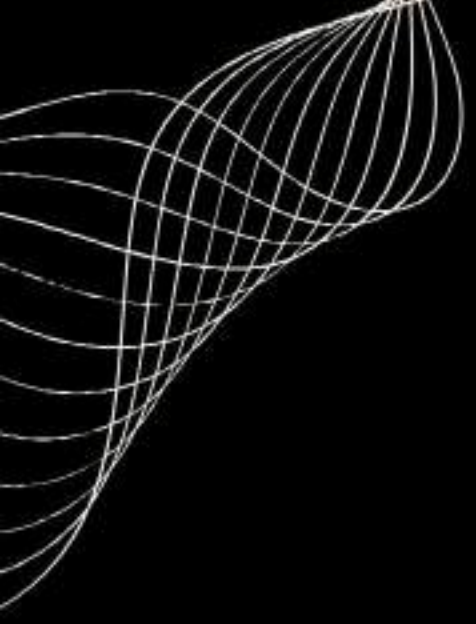


1. CREATE CUBE BOX WITH SUBDIVISION IN ALL 3 DIMENSION

COMPUTATIONAL DESIGN EXPERIMENT (Ref. Zaha Hadid Aqua Centre)

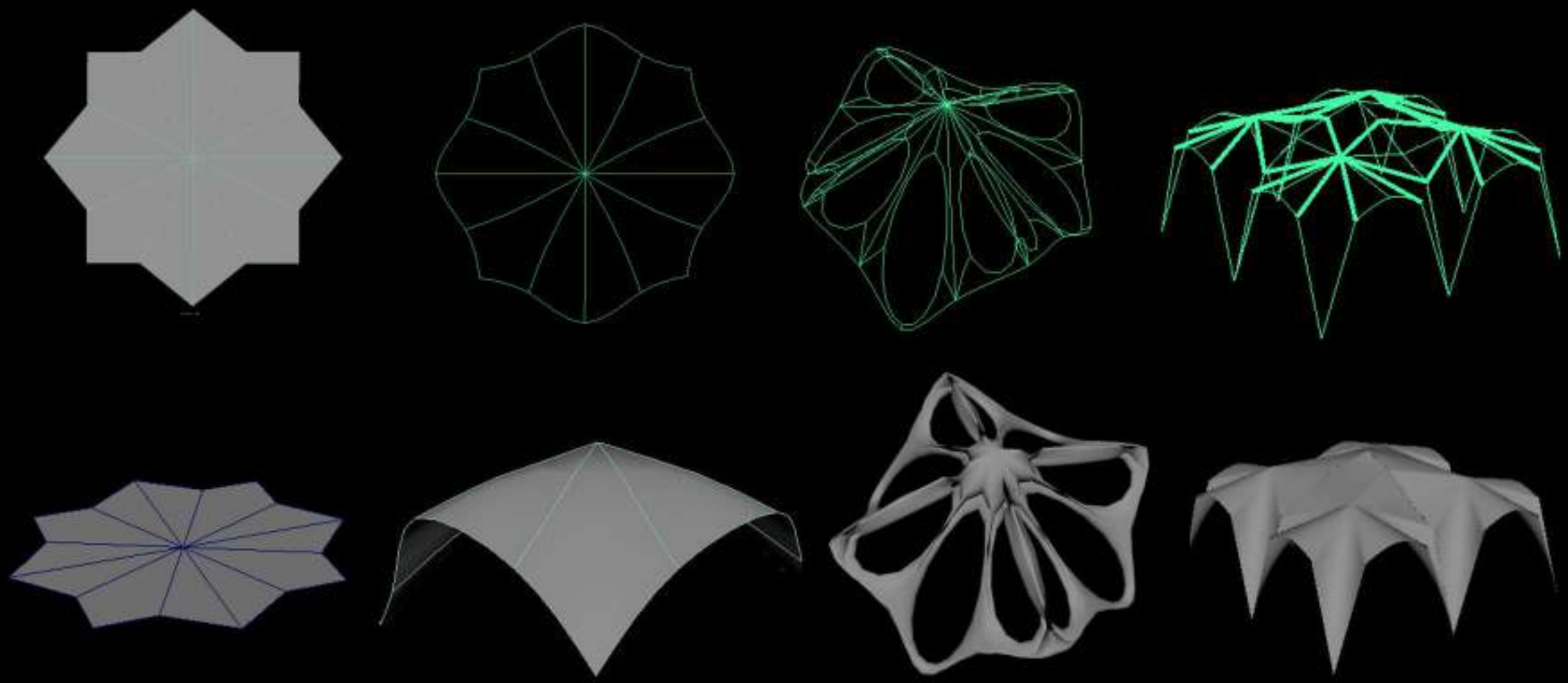
COMPUTATIONAL DESIGN EXPERIMENT (Ref. Zaha Hadid Aqua Centre)



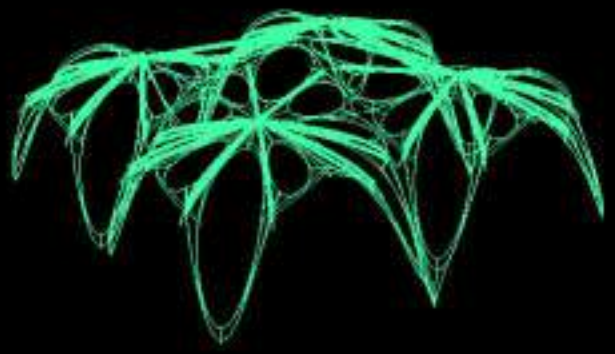


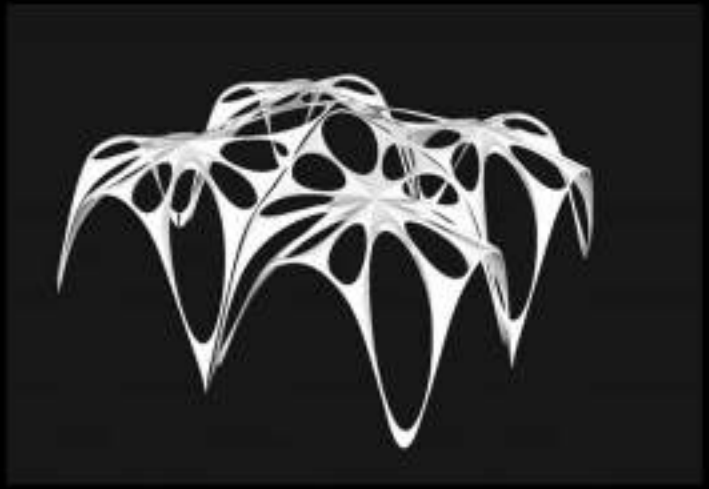
Computational Design Experiment For Minimal Surface: PAVILLION

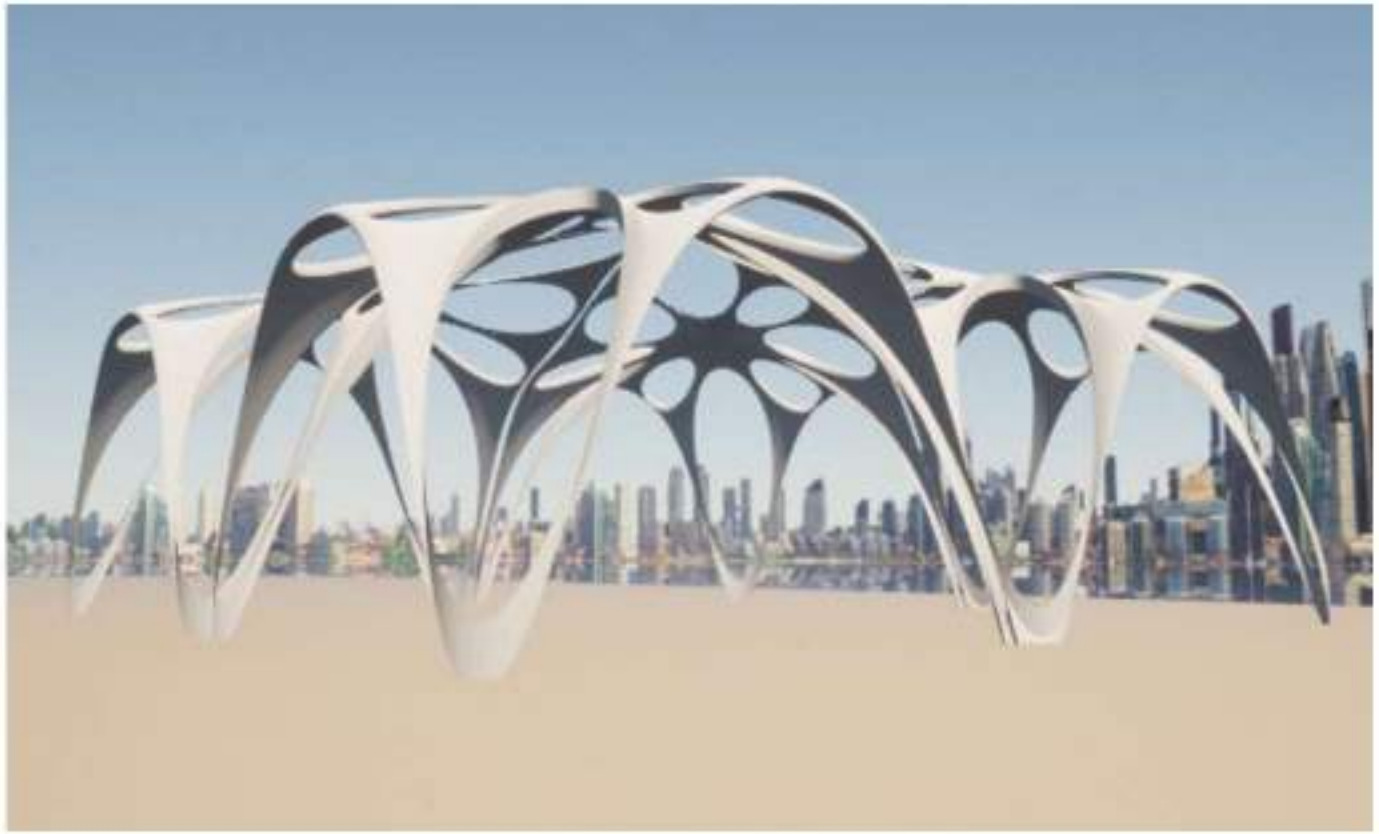
INITIAL GEOMETRY RESEARCH FOR MINIMAL SURFACE



MINIMAL SURFACE, SINGULAR PAVILION

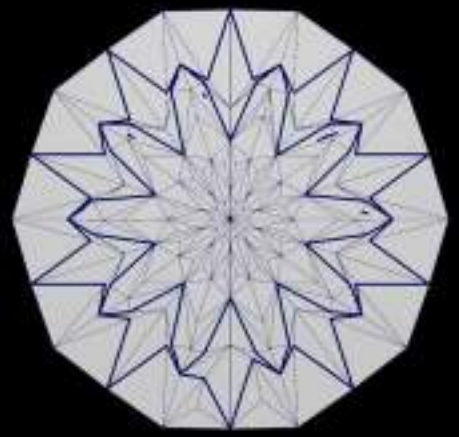


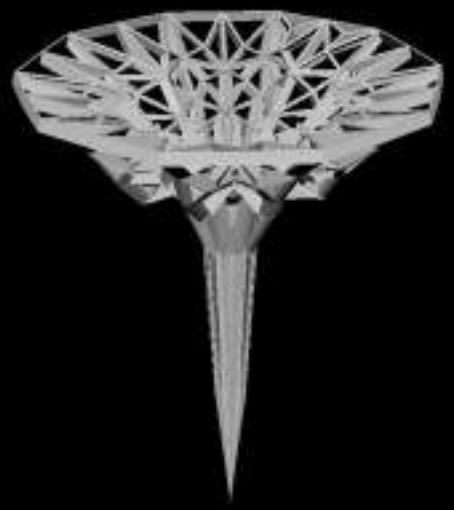




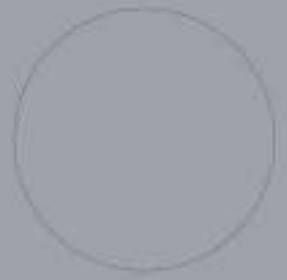
RENDER MODEL OF MINIMAL SURFACE PAVILION

NEW PATTERN BASED ONTRADITIONAL



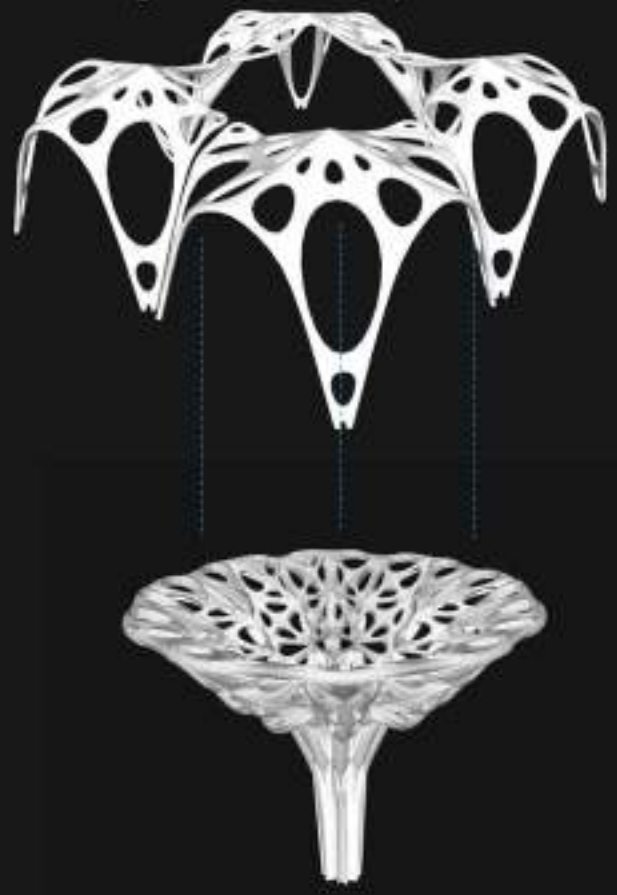


1. Start by drawing a circle
2. Divide a quarter of a circle into five equal sections to make a decagon.
3. Make shames.
4. A golden ratio rectangle is to that quarter.
5. Create the shape inside the rectangle sing guidelines.
6. Remove rectangle from the shape.
7. In small scale use the SHAMSE to the shape

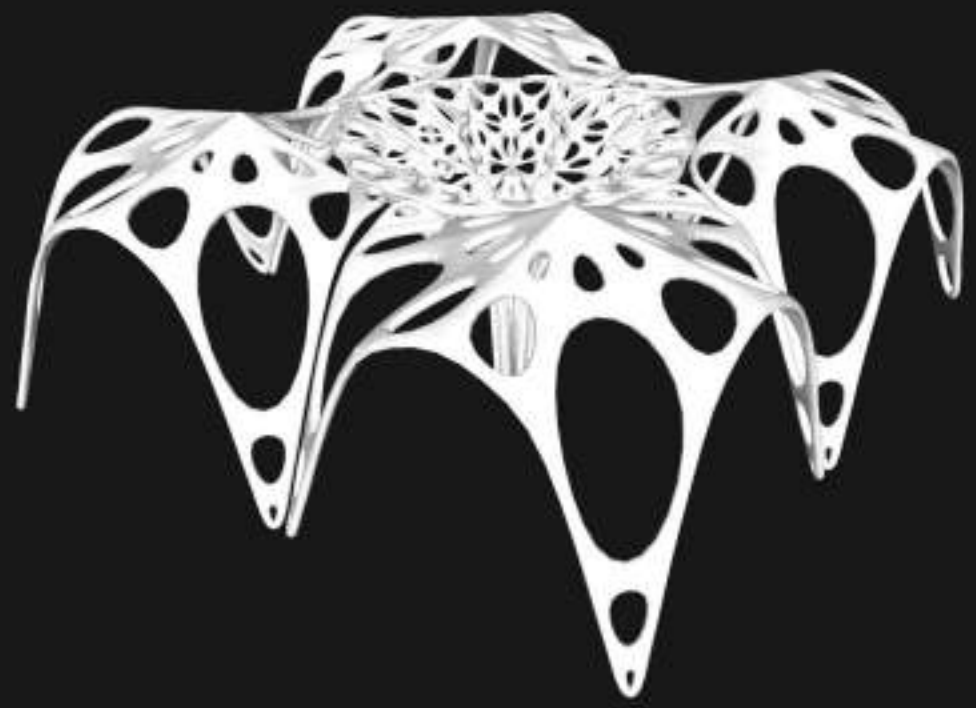


MINIMAL SURFACE: PAVILION

Singular Structure As Wall, Roof

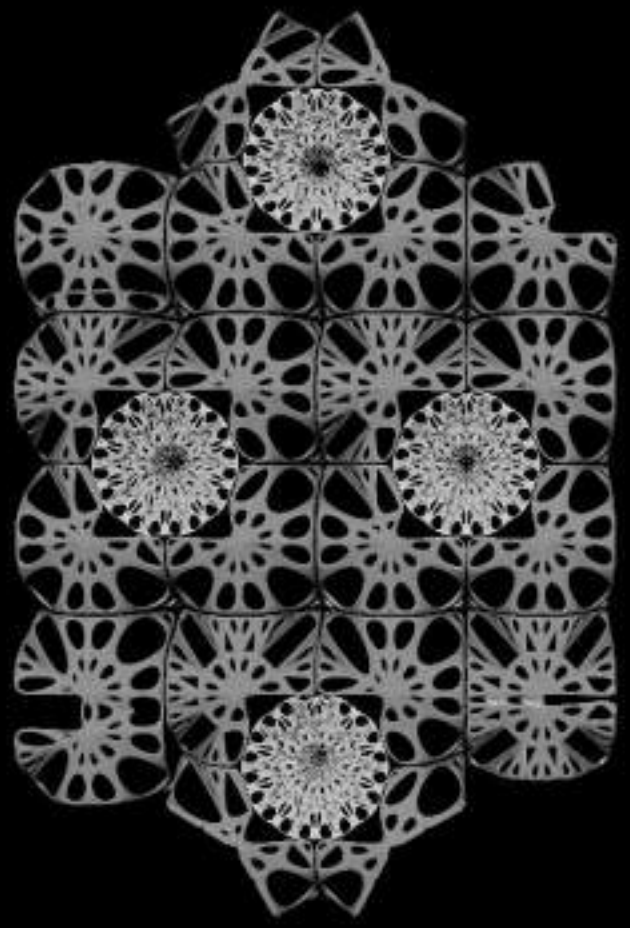


Structure As Column

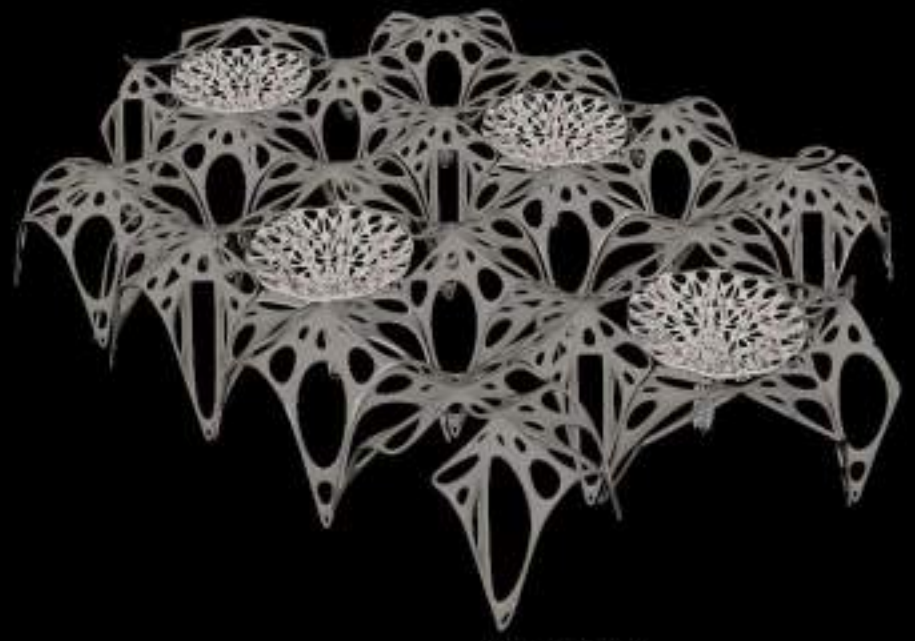


New Model by Combining Two different Model Structure

MINIMAL SURFACE: PAVILION



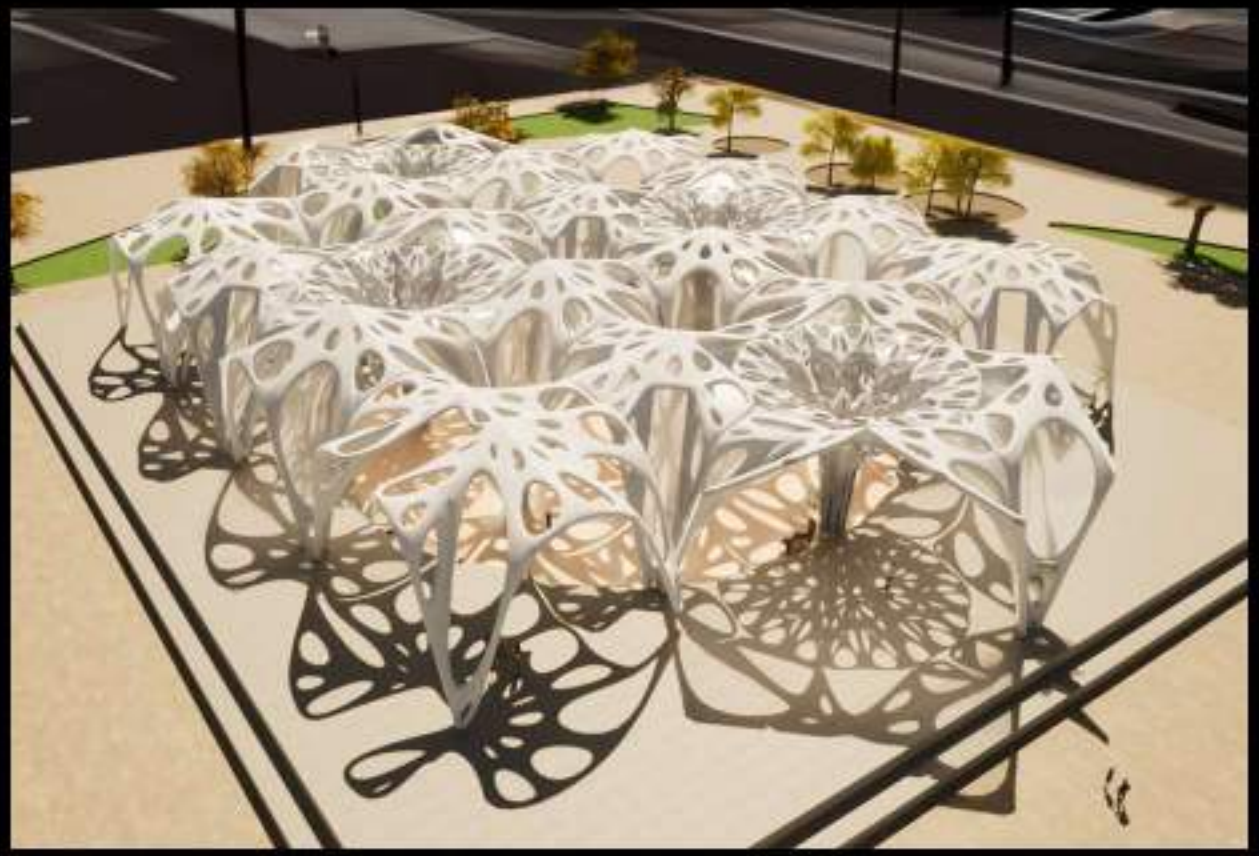
Top View



Isometric View

Design Inspiration : Wadi Rum, Jordan design by MEAN

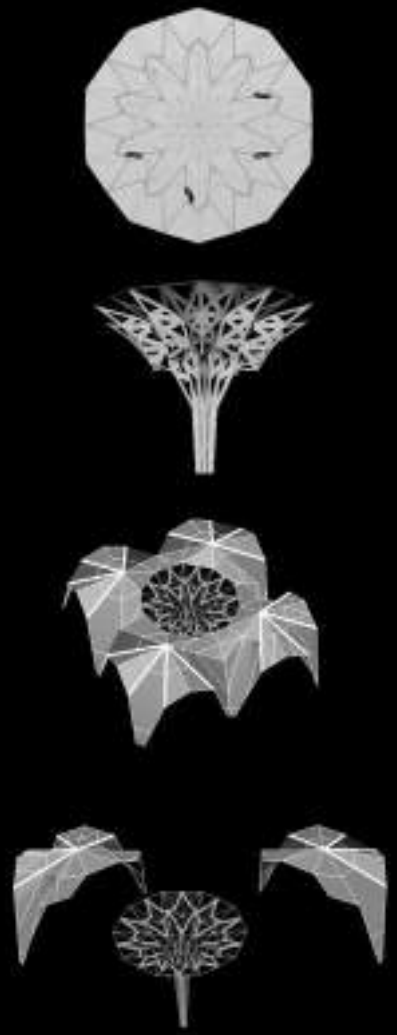
RENDER VIEW OF MINIMAL SURFACE PAVILION

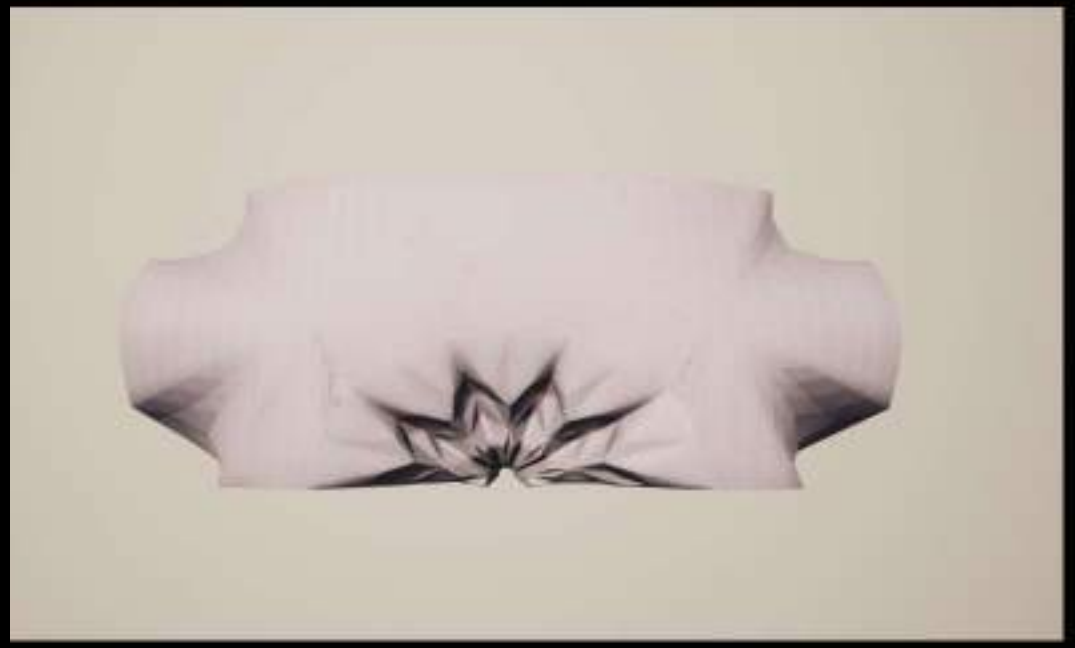


Modular Bench Design

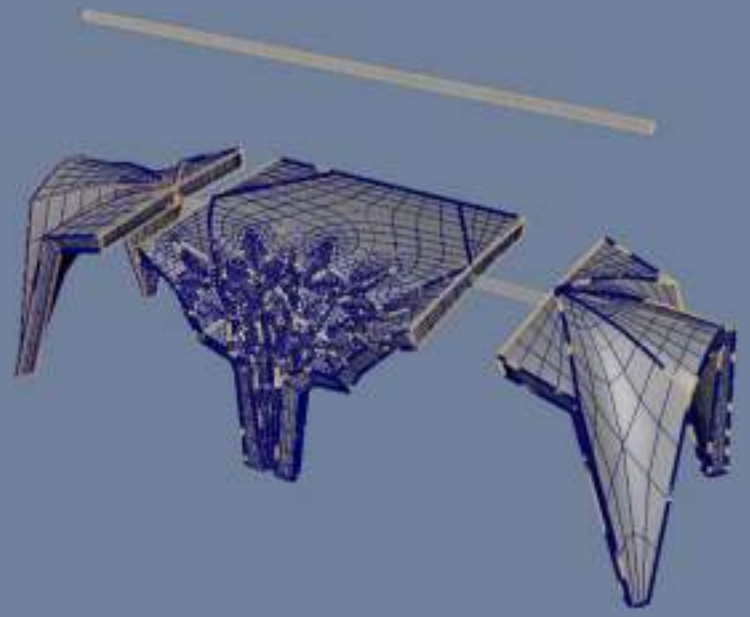
BENCH TRANSFORMATION

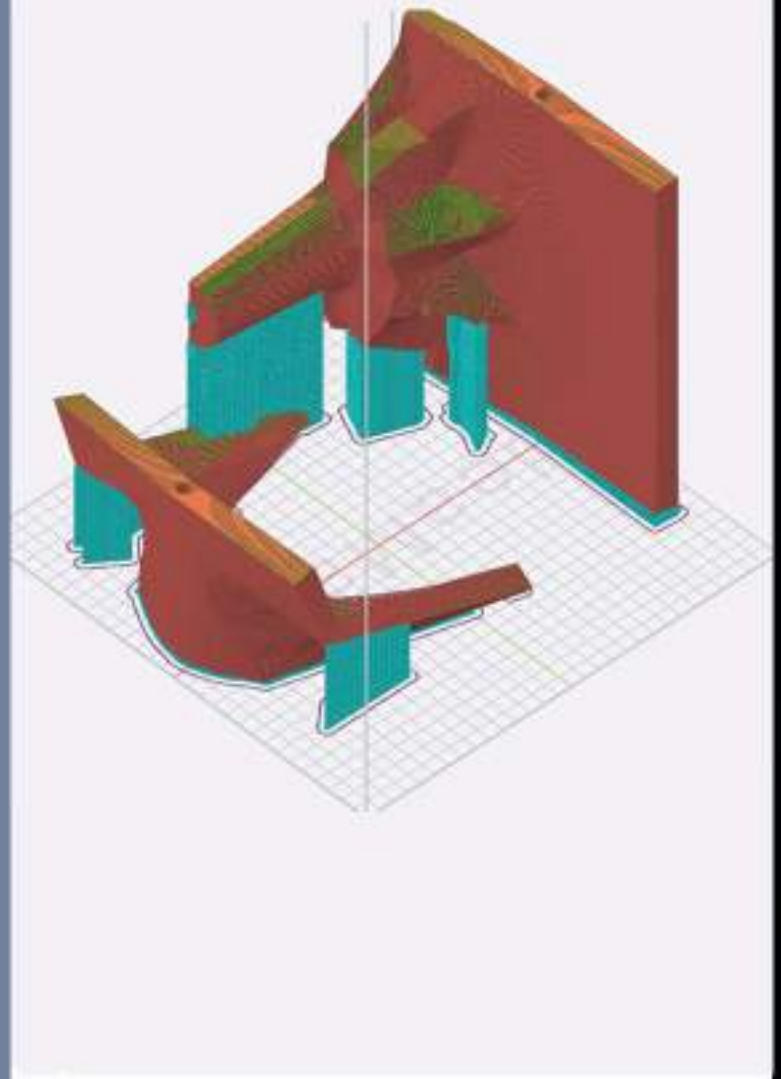
Geometric pattern inspired from historic Muqarnas.





MODULAR BENCH | DIGITAL MANUFACTURING





MODULAR BENCH : DIGITAL MANUFACTURING

- MODULAR BENCH : 3D
- VIEW

CROYDON : For Susiainability & Modularity

- Urban Analysis
- Computational Design Process Of Croydon Model
- Computational Design Process Of Landscape
- Final Croydon Design

HISTORY ABOUT CROYDON

In past, this town was known for its lively retail, commercial, and cultural scene.
However, due to changes in the retail industry, the impact of the pandemic, the rise of new residential projects in the town center, and global challenges like climate change, it is necessary to produce a strong and sustainable vision and action plan to adapt and address these shifts effectively.

URBAN ANALYSIS

Site

Access

Green Space

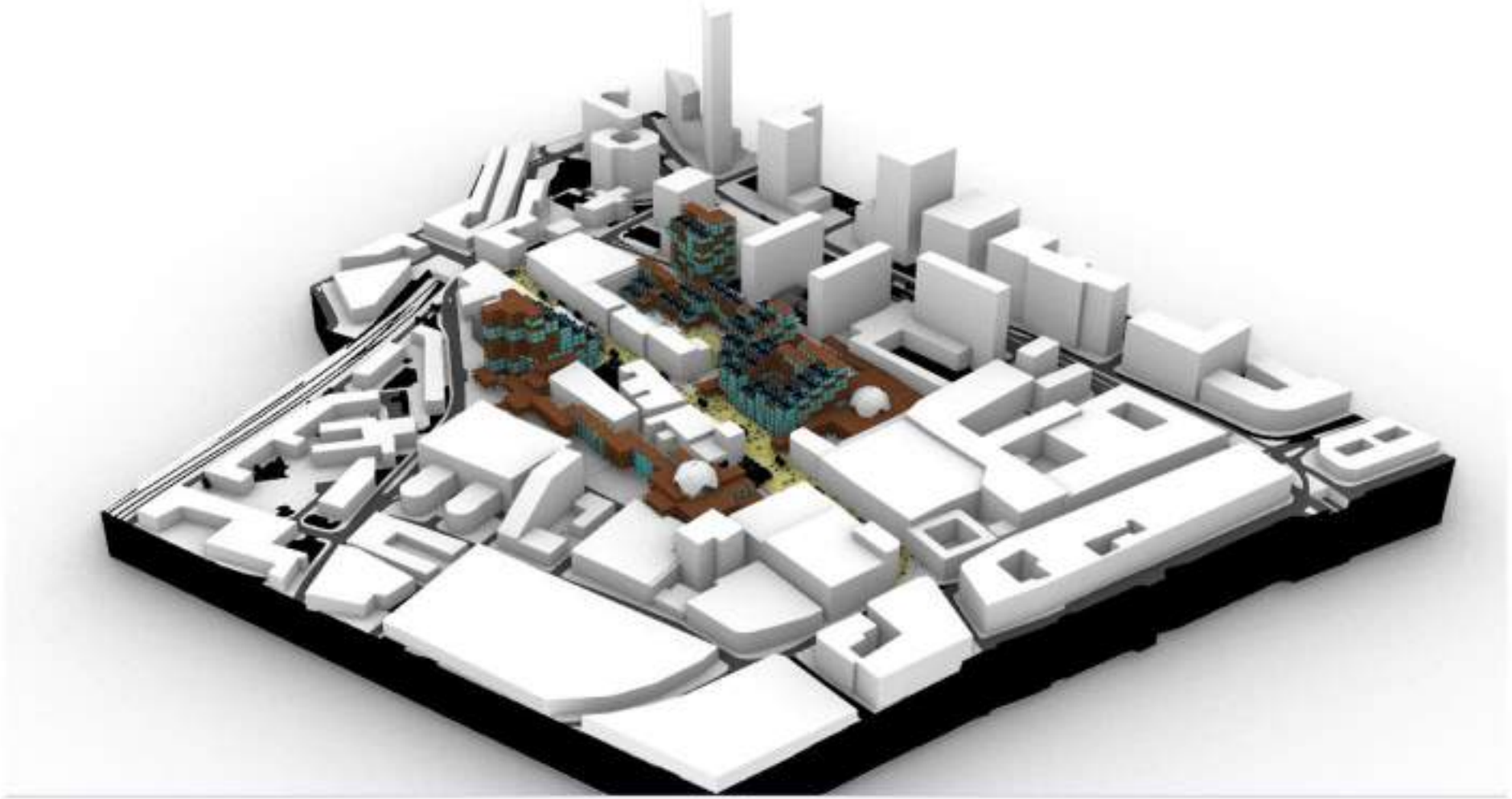
URBAN ANALYSIS

Building Typologies

Transportation System

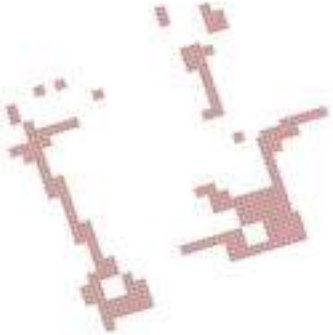
Environment

A modular housing system structural model

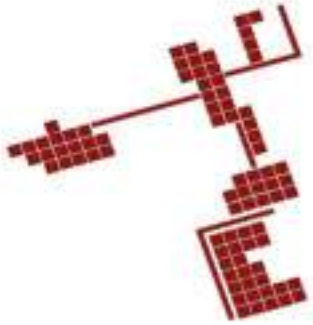


DESIGN PROPOSAL

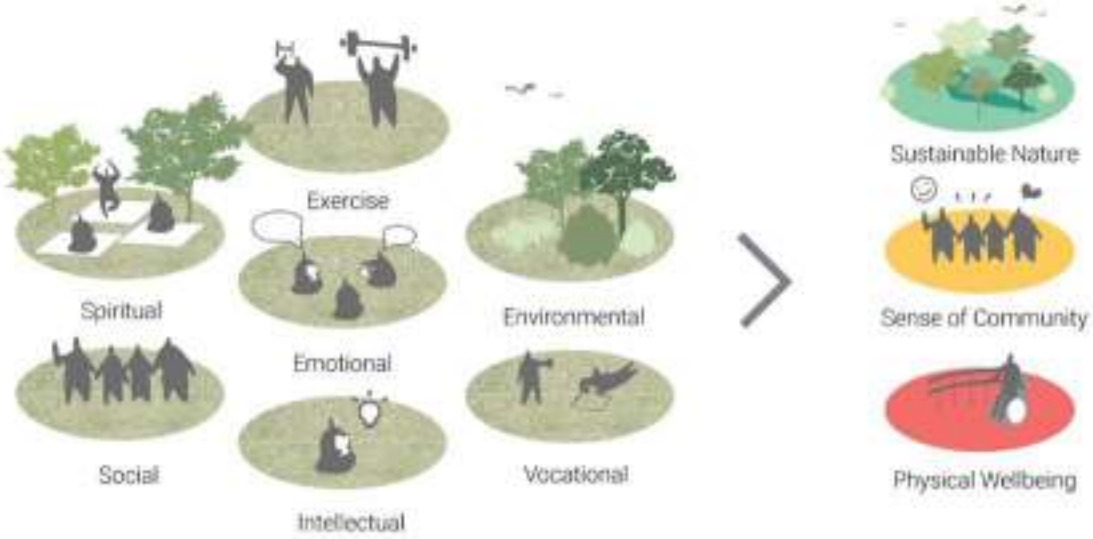
GREEN SPACE



COMMERCIAL ZONE



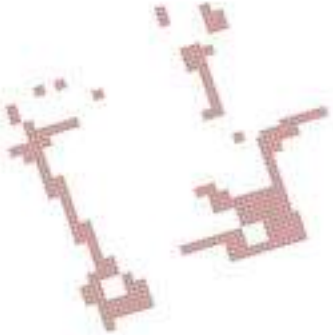
BRIDGE AND HOUSING ZONE



SPACES TO INCORPORATE DIFFERENT ACTIVITIES

DESIGN PROPOSAL

GREEN SPACE



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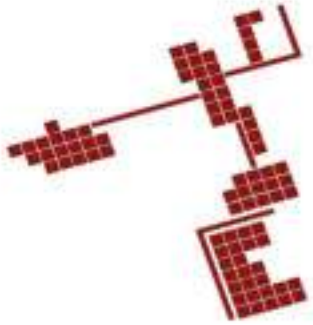
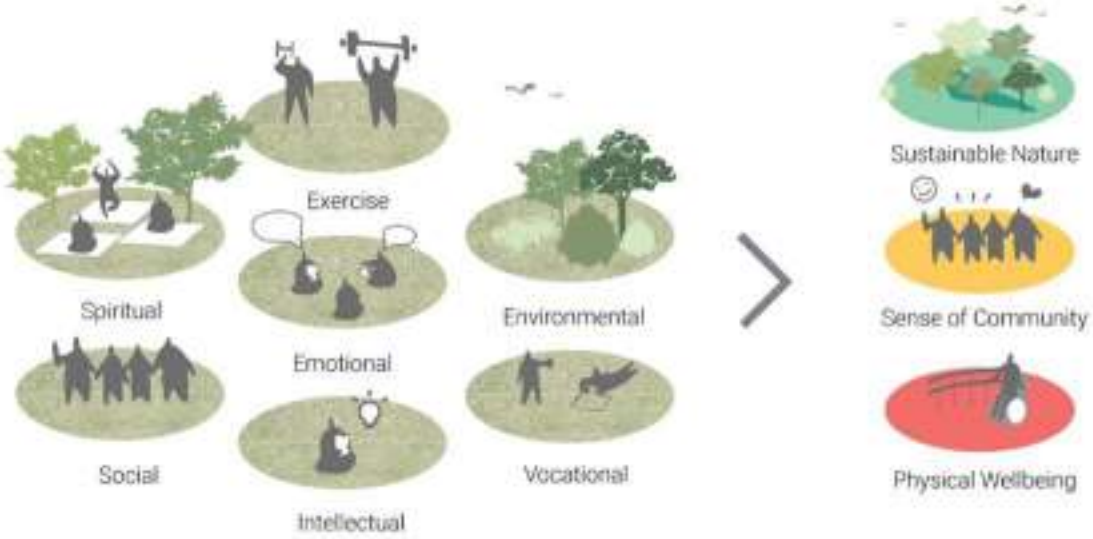
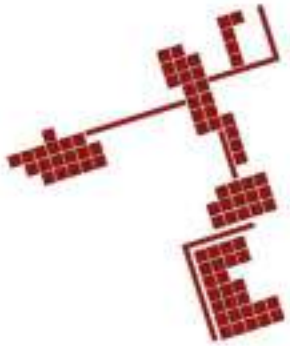


BRIDGE AND HOUSING ZONE



SPACES TO INCORPORATE DIFFERENT ACTIVITIES

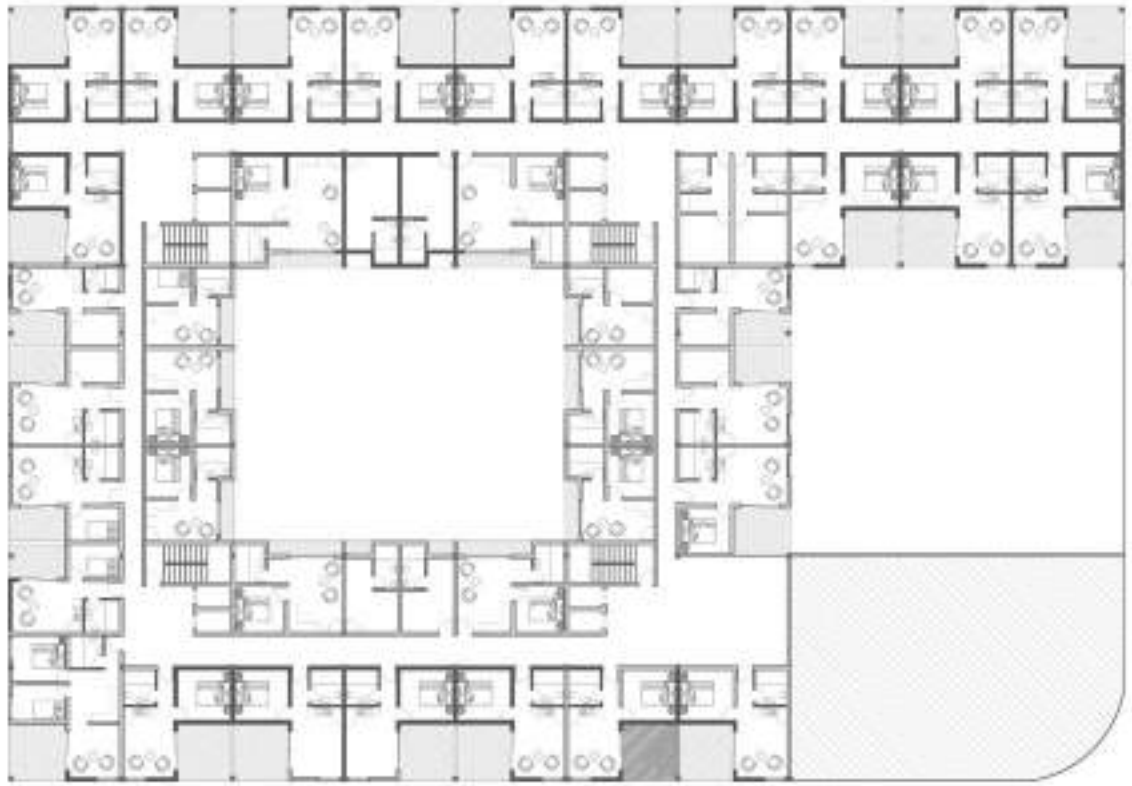
PROPOSED HOUSING TYPOLOGY PLANS

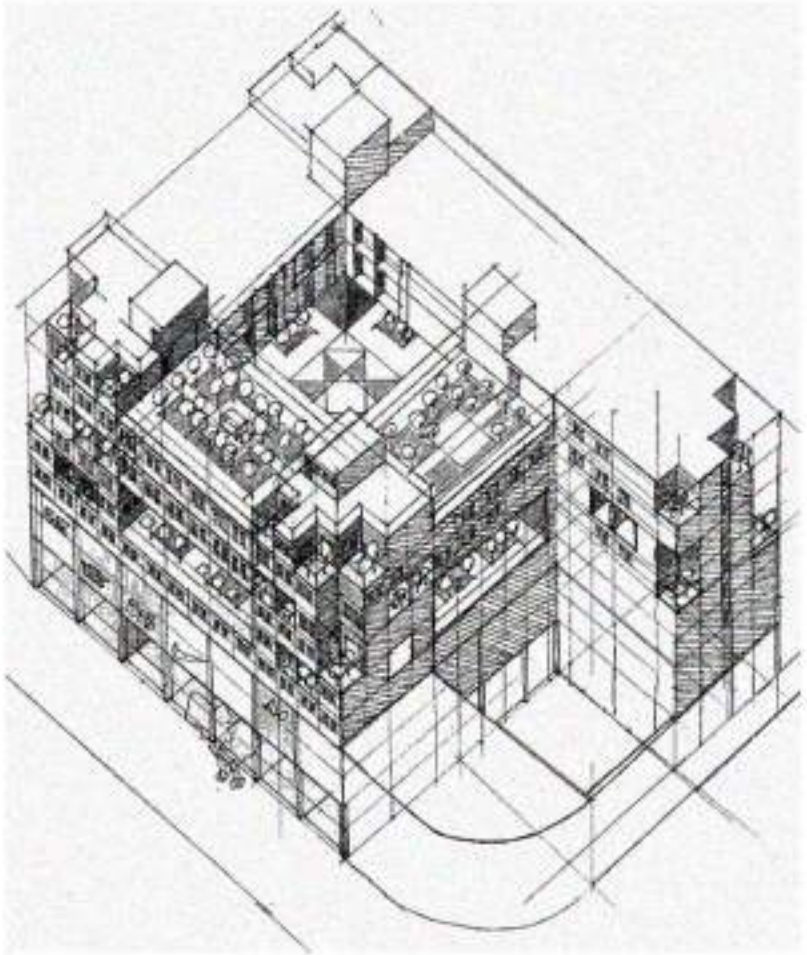


HOUSING TYPE PLAN-A

HOUSING TYPE PLAN-B

HOUSING TYPE PLAN-C



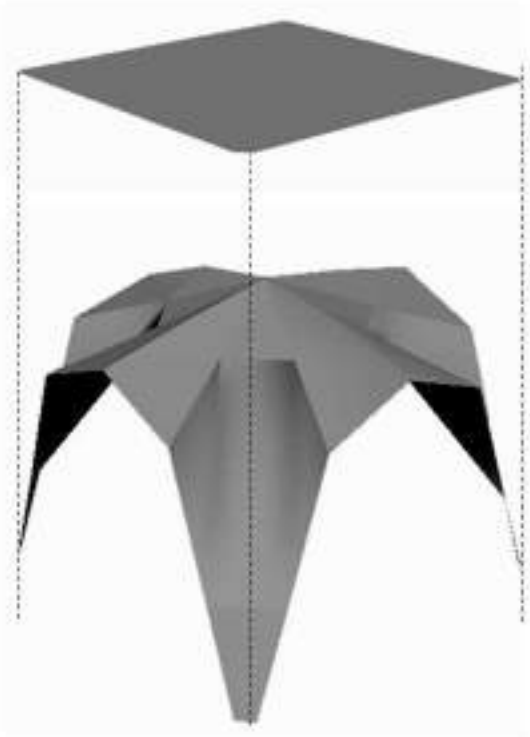


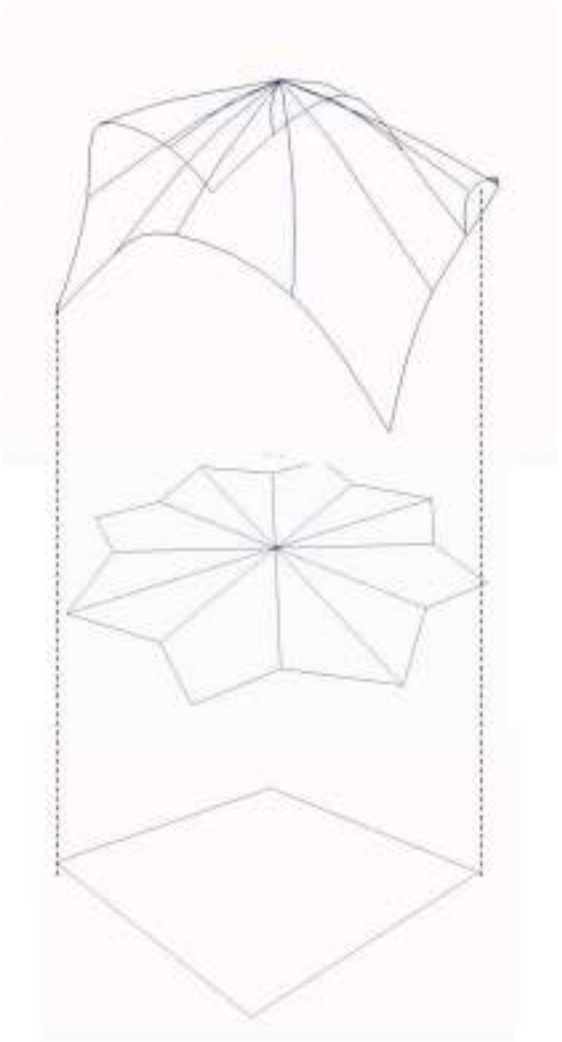
An idea in modularity and sustainability by utilizing a simple vaulted model

A vault that was created by combining geometric patterns and transforming them into a simple surface vault.

Process

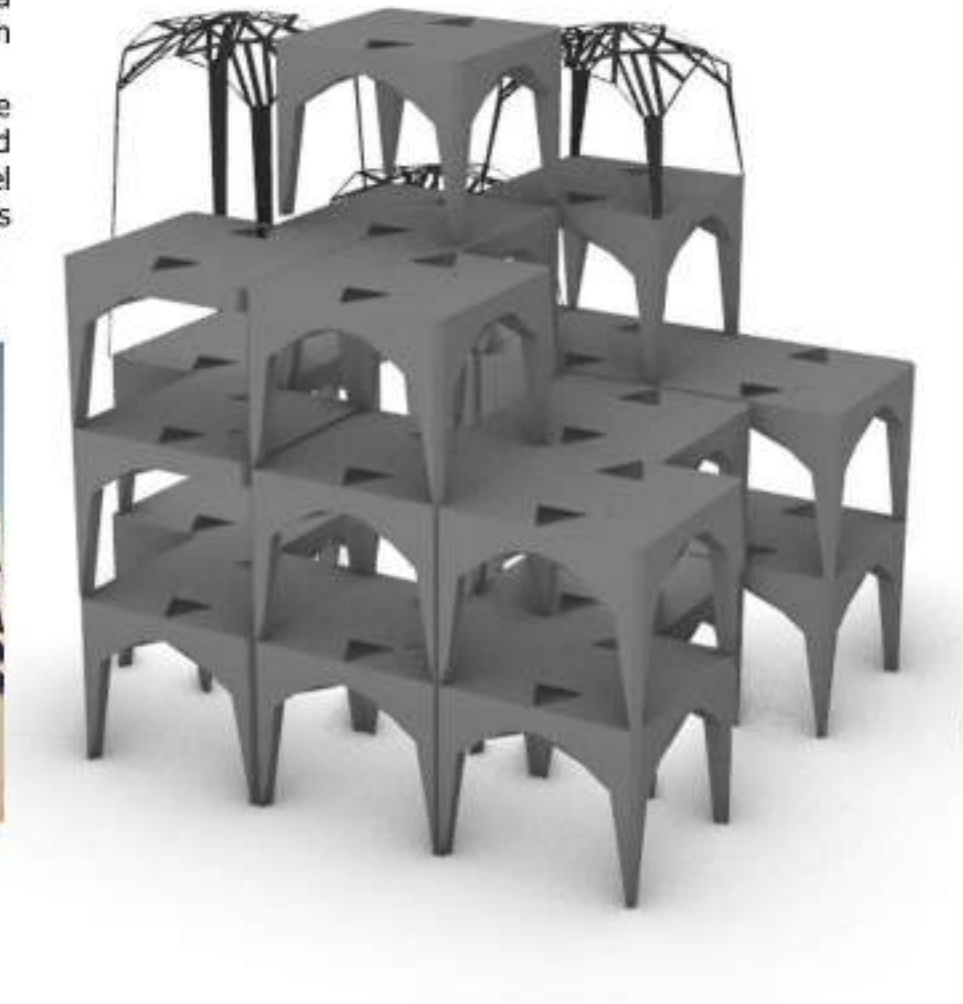
1. Start with square.
2. Pattern integration.
3. A minimal surfaced vault Using and extrude command.
4. Increase the number of quadrilateral faces and the crease.





A modular housing system structural model

A Maya structural model of a modular housing system is a digital depiction of a construction concept created with Autodesk Maya software.
The structural model in this instance would represent the modular housing system components, such as prefabricated modules, their arrangement, and connections. The model might show the outside and inside of the modular units, as well as how they fit together to make a cohesive structure.

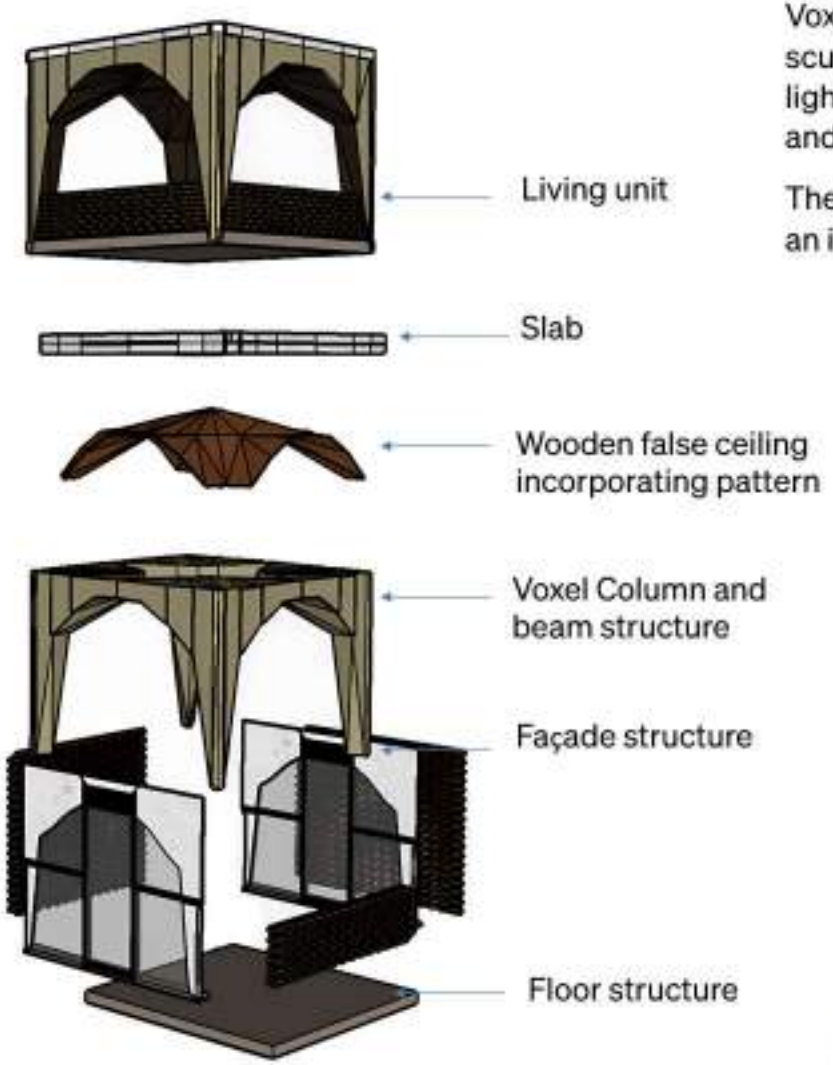


Variation of Vault we used in Model

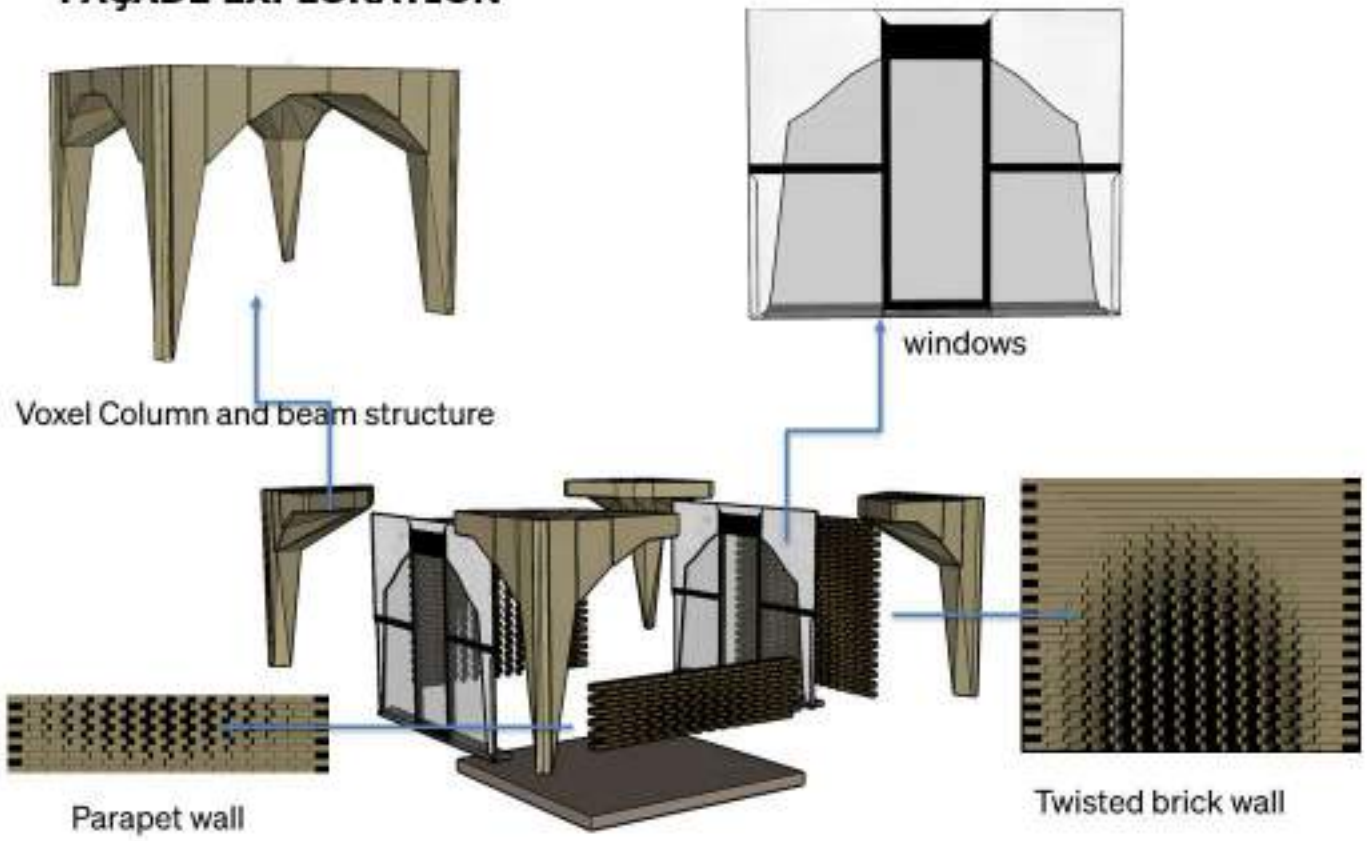
STRUCTURAL MODULE EXPLORATION

A contemporary living unit, with concrete block slab ensures stability and open floor plans. A wooden false ceiling, adorned with intricate patterns, adds warmth and diffuses light creatively. Voxel-inspired columns and beams combine aesthetics with support, creating a unique, sculptural quality. Façade structures integrate doors and windows seamlessly, optimizing natural light and ventilation. The floor structure prioritizes load distribution and insulation for comfort and energy efficiency.

These elements harmoniously blend functionality and aesthetics, transforming the living unit into an inviting, modern space that aligns with contemporary design principles.



FAÇADE EXPLORATION



Our vision

Croydon City redevelopment proposal blends sustainability, modular design, and traditional Islamic aesthetics. It integrates eco-friendly modular construction techniques, renewable materials, and intricate Islamic patterns. A green roof garden provides a lush urban oasis, enhancing biodiversity and air quality.

Contemporary elements harmonize with traditional motifs, offering a timeless character and modern comforts. The development includes mixed-use spaces, catering to diverse community needs. Our vision is to create a sustainable, culturally rich, and aesthetically pleasing urban environment, setting a model for harmonious city living in Croydon.

FINAL RENDERS OF THE CROYDON MODEL.

Green Roof Features :

Our project features a captivating green roof garden that graces our development, acting as a vibrant oasis amidst the bustling urban landscape. This lush green space not only enhances biodiversity but also contributes to improved air quality. Moreover, it serves as a tranquil retreat, offering residents and visitors a serene escape from the city hustle and bustle

FINAL RENDERS OF THE CROYDON MODEL.

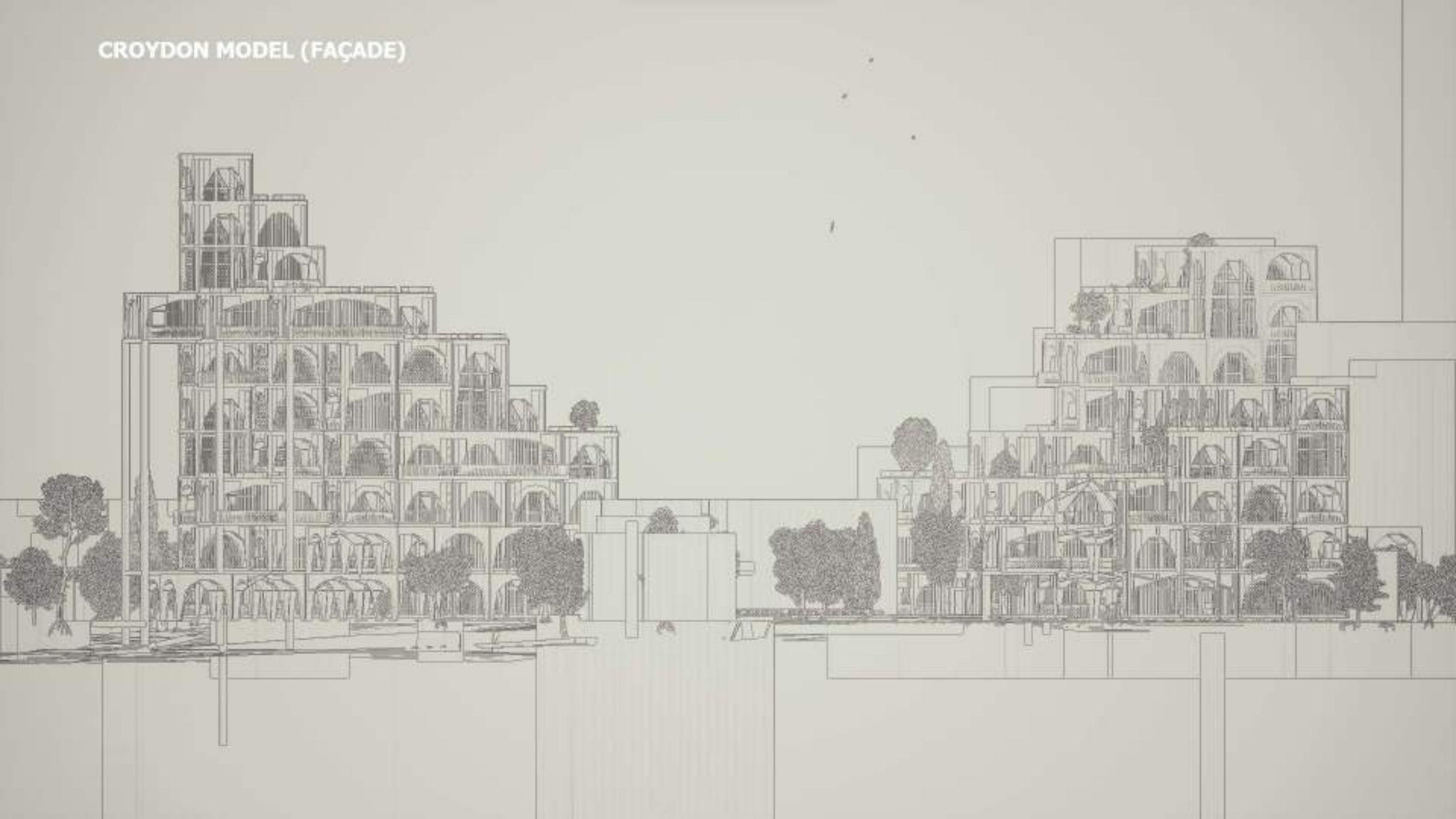
Contemporary Design Integration:

Our project excels in contemporary design integration, seamlessly merging modern architectural elements with traditional motifs, resulting in a distinctive and enduring character. With cutting-edge technology and contemporary design principles, we prioritize the comfort and convenience of all occupants. This fusion of tradition and innovation ensures that our development not only stands out but also provides a high-quality living and working environment for everyone involved

CROYDON MODEL (FAÇADE)

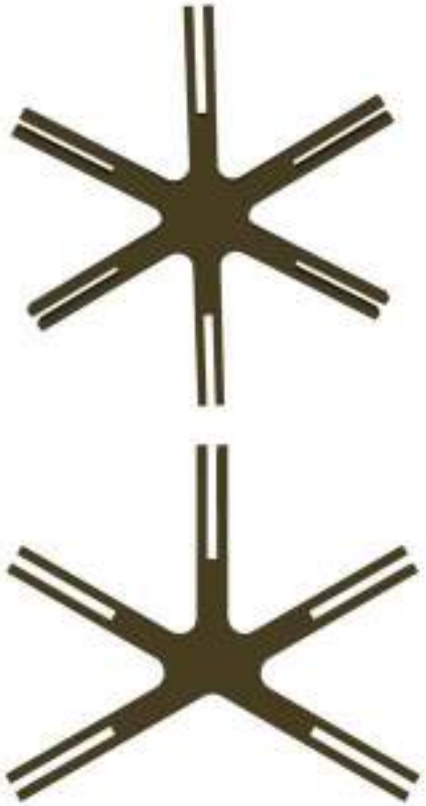
• Project draws from traditional Islamic architecture, infusing it with intricate patterns and vaults that enrich the cityscape with a unique cultural dimension. These elements are not just aesthetic, they deliver practical advantages like natural ventilation and shading. This blend of tradition and functionality not only enhances the visual appeal of our design but also underscores its commitment to sustainability and thoughtful urban planning.

CROYDON MODEL (FAÇADE)



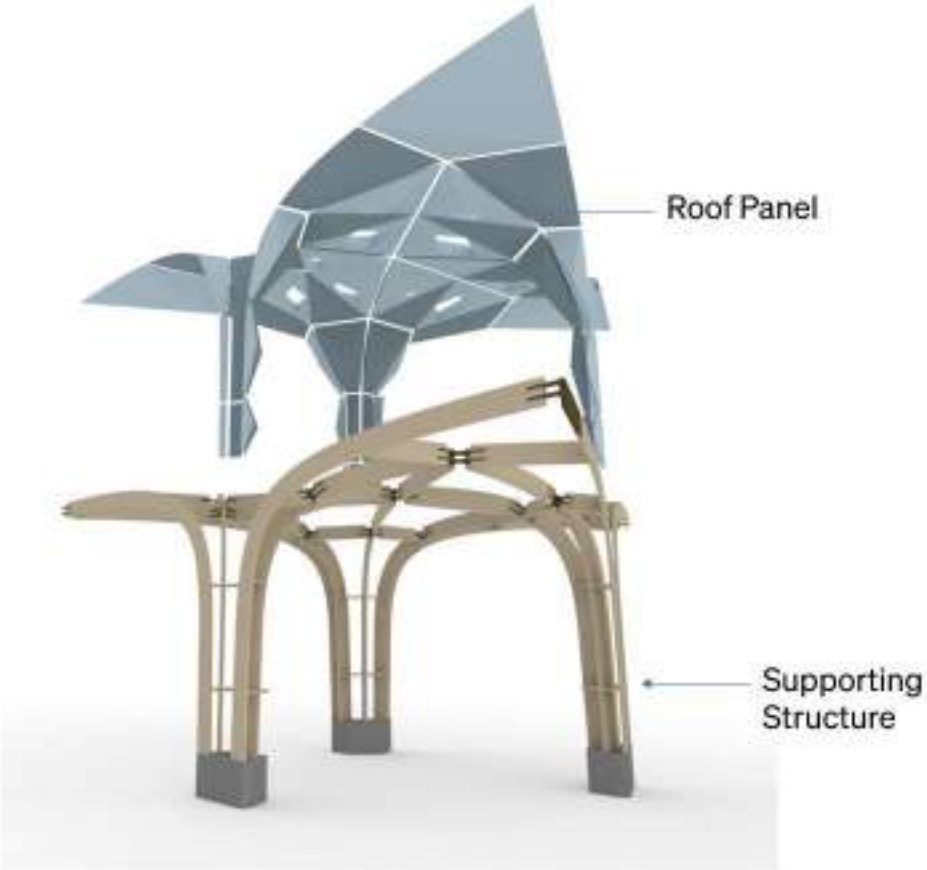
FINAL RENDERS OF CROYDON DESIGN.

TRILLIUM PAVILION



Joinery detail

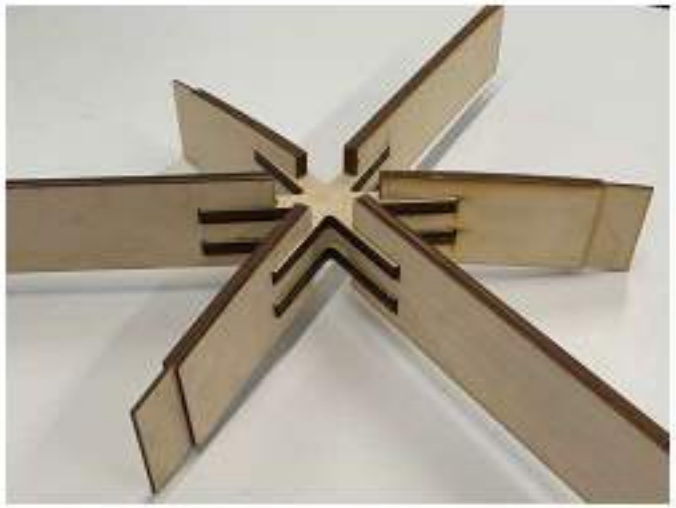
TRILLIUM PAVILION

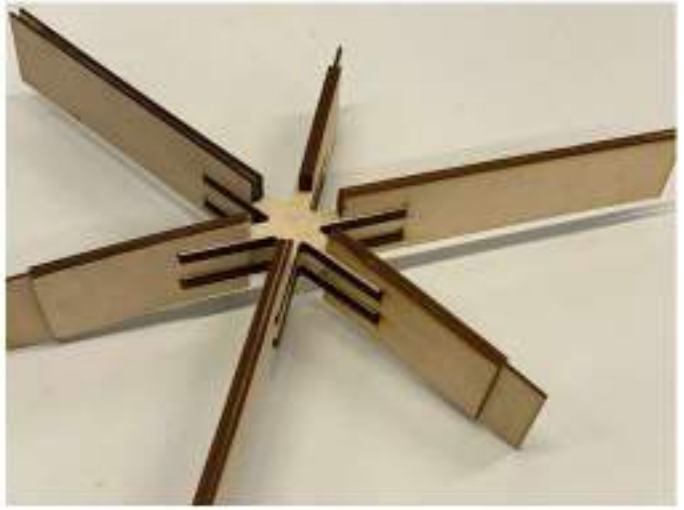


Roof Panel Top View

Final Pavilion

Digital Manufacturing

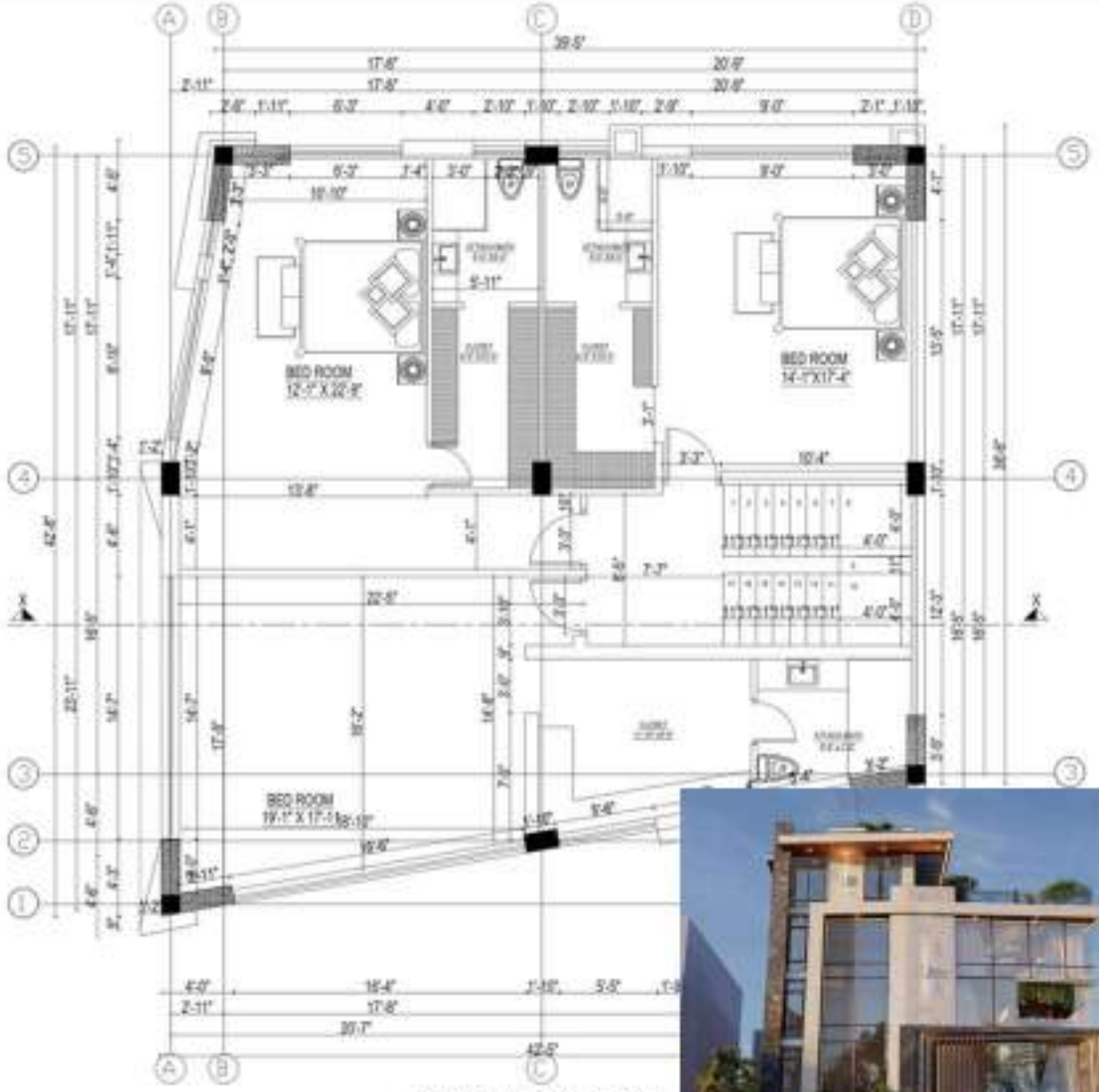




PROECTS

All the planning and 3D modelling are prepared according to the requirements of the clients.

RESIDENCE DESIGNS

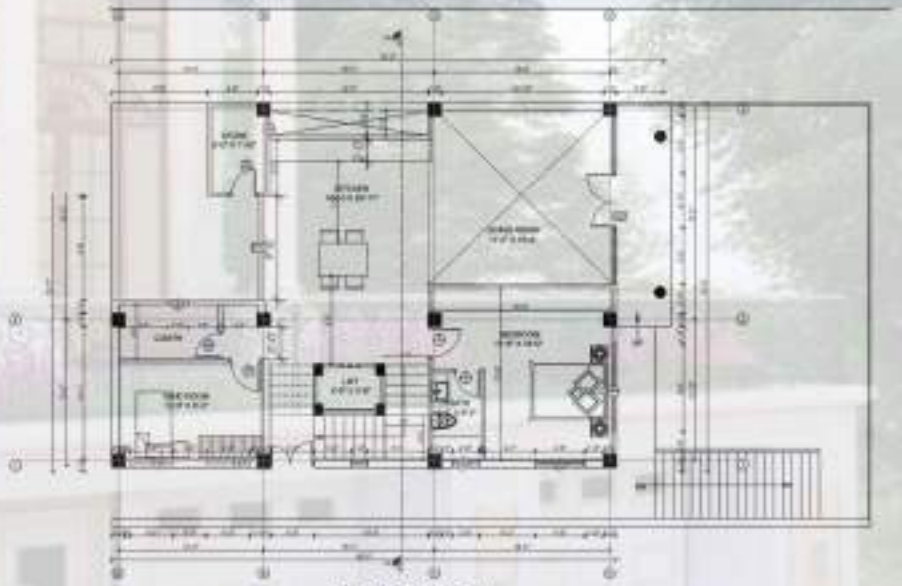


FIRST FLOOR PLAN
(AREA: 1624.8 SQ.FT)

NEOCLASSICAL DESIGN

Residence

Final Design

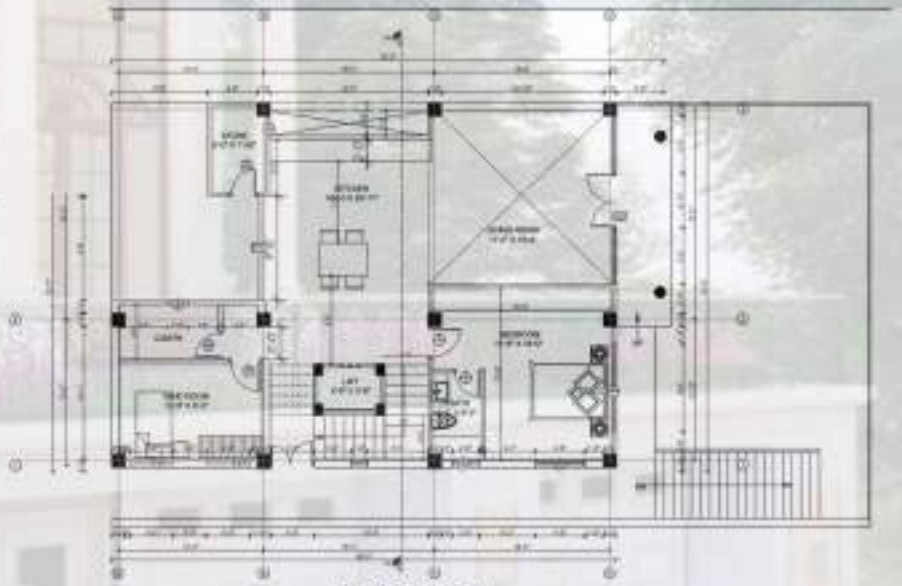


FIRST FLOOR PLAN
(AREA: 1292 SQ.FT)
SITE AREA : 2808.58 SQ.FT

NEOCLASSICAL DESIGN

Residence

Final Design



FIRST FLOOR PLAN
(AREA: 1292 SQ.FT)
SITE AREA : 2808.58 SQ.FT

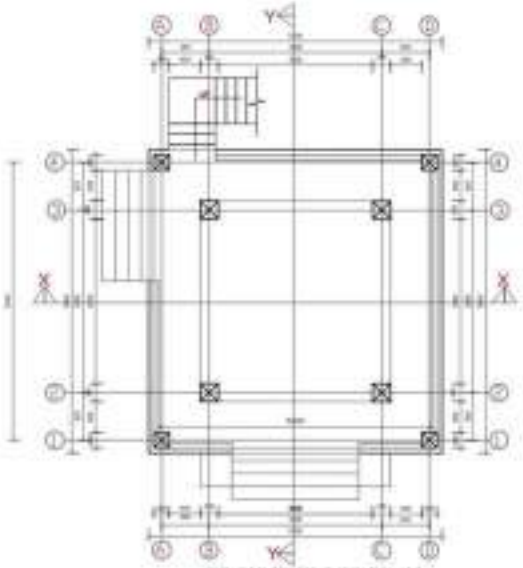
DETAILED PROJECT REPORT WITH MASTERPLAN DESIGN

MASTER PLAN OF UKU MAHAL TEMPLE AND CONSERVATION AREA

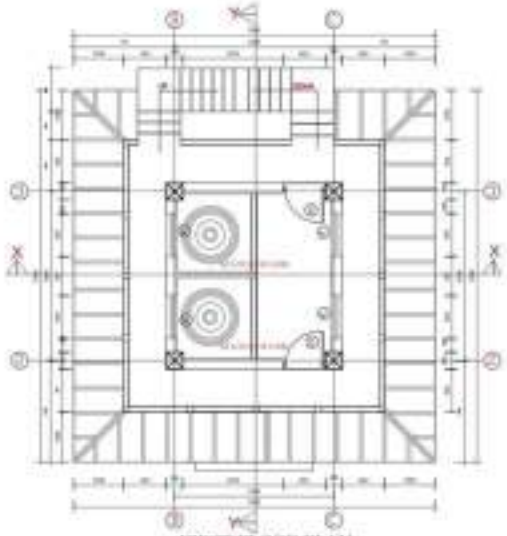
A Multipurpose activity park designed for Malikarjun Municipality, Shankarpur, Darchula Nepal

The scarcity of major parks along with the vision of local representatives on establishing the place as a religiously significant place has allowed for the swift construction of the conservation and maintenance of the UKU MAHAL area. The total area allocated for the proposed park is 559386.26 sq. ft. The planning of the park is done diligently. The administrative building is kept on the south side of the proposed main park area. The entrance is kept on the west side whereas the mandir(temple) area is proposed at the northern side of the park. Proposed internal footpaths are kept as links between different land patches and buildings. A separate stairway to Basuki(statue) is also provided. Open spaces are provided in between all buildings for fresh air cross ventilation in the building.

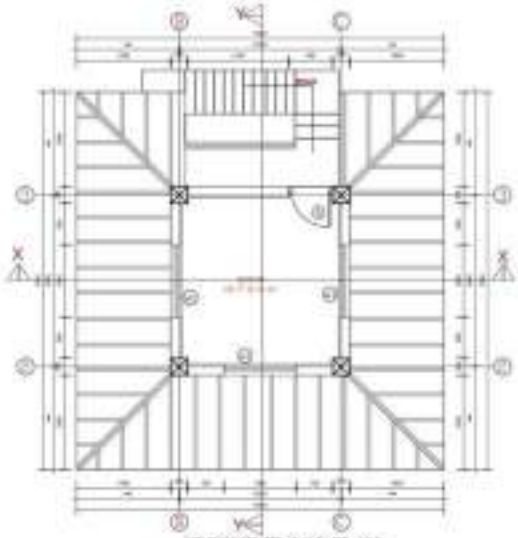
Purpose: To benefit the local people directly as well as indirectly with the addition of the international and domestic tourism



GROUND FLOOR PLAN
AREA : 31.36 sqm

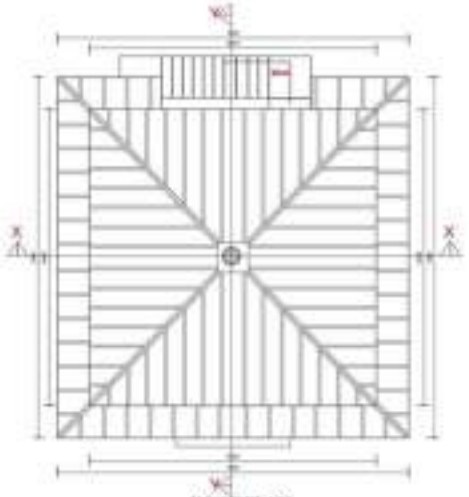


FIRST FLOOR PLAN
AREA : 31.36 Sq.m

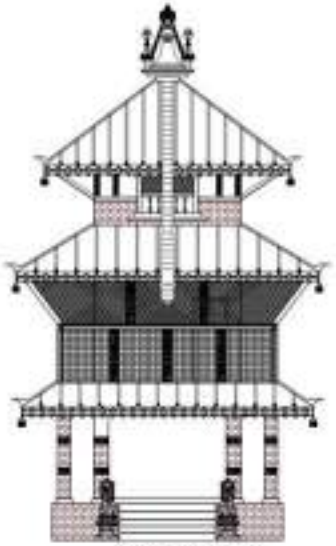


SECOND FLOOR PLAN
AREA : 14.46 Sq.m

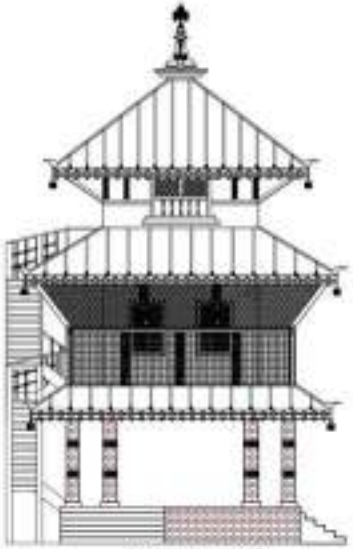
A Devi Mandir (Goddess Temple): One of the main temples in this conservation area. This temple is predicted to be visited by a huge number of visitors from all around the country and also from the neighbouring country India.



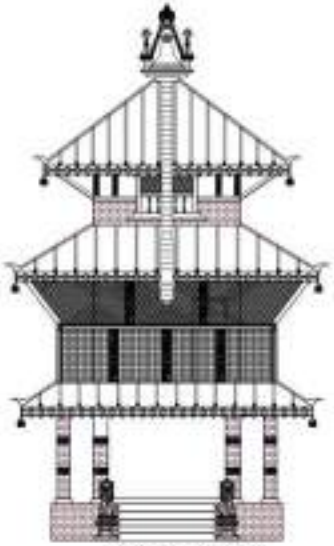
ROOF PLAN



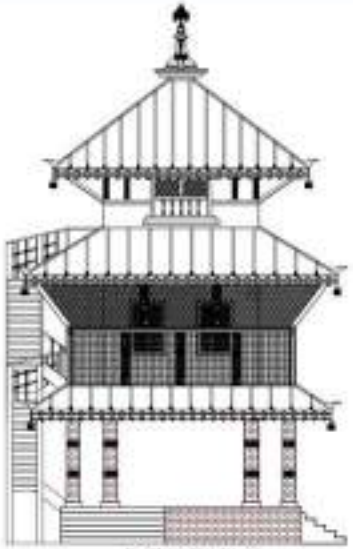
NORTH ELEVATION



EAST ELEVATION



NORTH ELEVATION



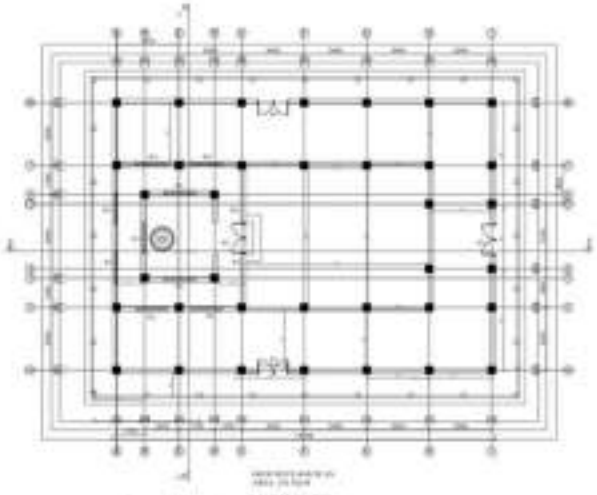
EAST ELEVATION

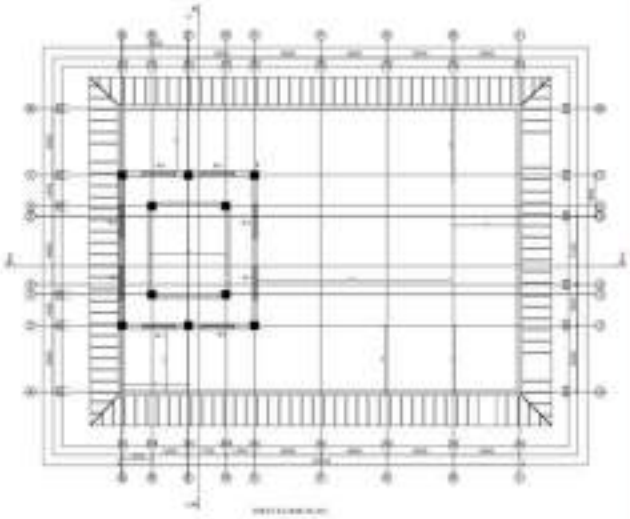
MASTERPLAN OF MALIKARJUN TEMPLE

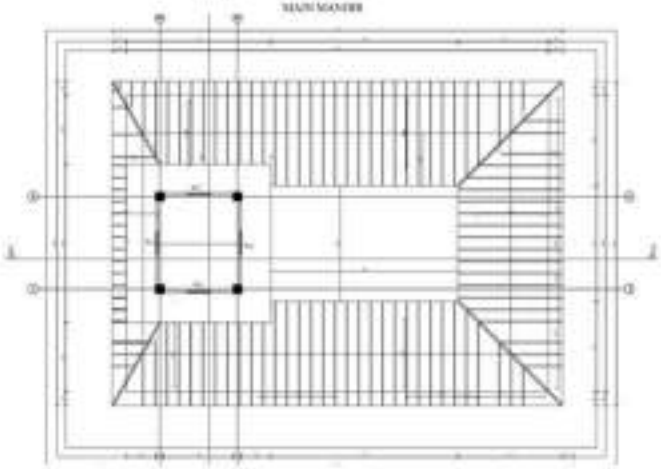
Master Plan of Malikaarjun Temple
Location : Shankharpur, Darchula, Nepal
Area : 296474.06 sq.ft

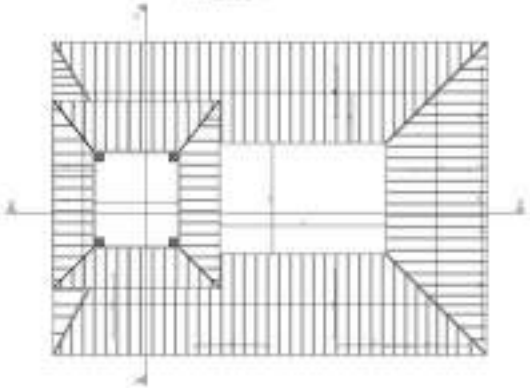
The planning of the mandir is done meticulously. The Main Temple is presiding in the heart of the proposed main temple area. The Main Entrance for the mandir is kept on the northeast side nearly a kilometre far from the temple premises whereas a similar secondary entrance is proposed at the north-eastern side of the temple. The main entrance is connected to the secondary entrance by a motorable earthen road. The Proposed premises hold a seminar hall for sacred gatherings and other religious purposes. A couple of public general halls for the meetings and gatherings hold the pilgrims and visitors. A couple of larger guest houses for distinguished guests and a comparatively smaller one for the general public has been provided. There is a pre-existing helipad in the centre of premises. A cluster of smaller temples is also strewn throughout the premises with the purpose of establishing a religious environment all around. A yajna is provided at the front of the main mandir to hold religious pujas, marriages and other cultural rituals. Proposed internal footpaths are kept as links between different land patches and buildings, a separate secondary gate at the southwestern side is also provided. Open spaces are provided in between all buildings.

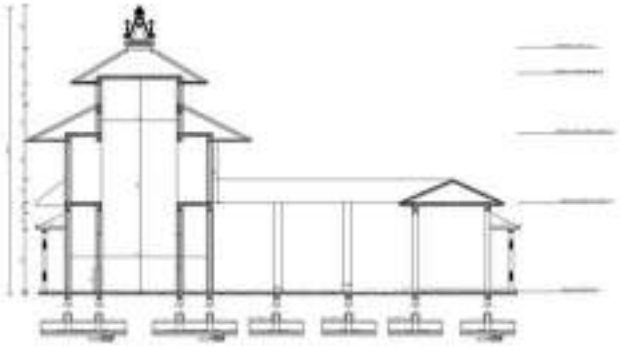
Purpose : To attract local as well as international tourists which might help in growing economical growth of the Far Western region of Nepal

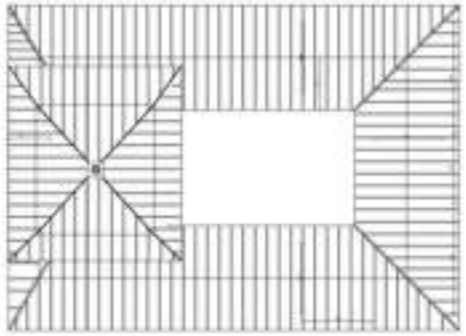








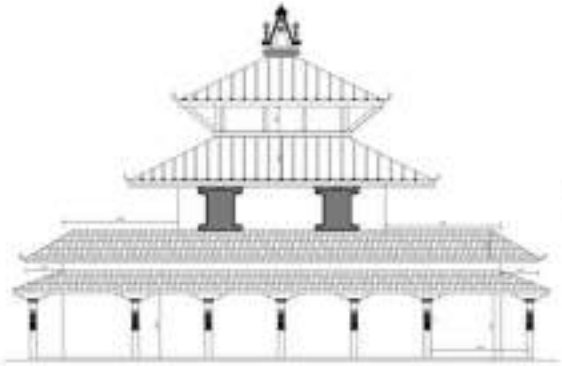


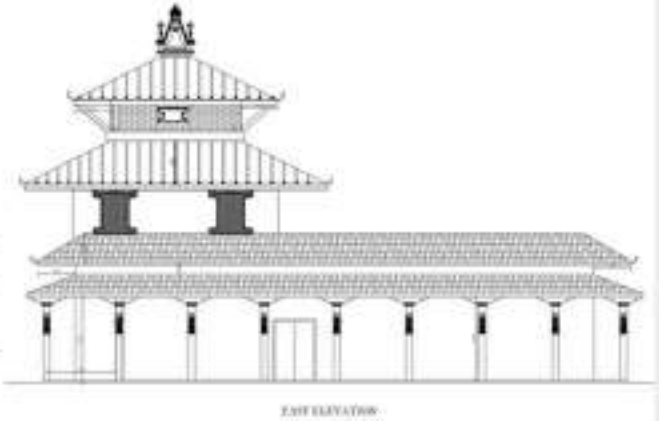


Reconstruction of existing temple of Malikarjun Temple

The main temple of the Malikarjun Dham in the heart of the area needed reconstruction. This temple serves as the soul and life of the area. The number of religious pilgrims is believed to increase with the establishment of a bigger temple in this area.

Existing Malikarjun Temple



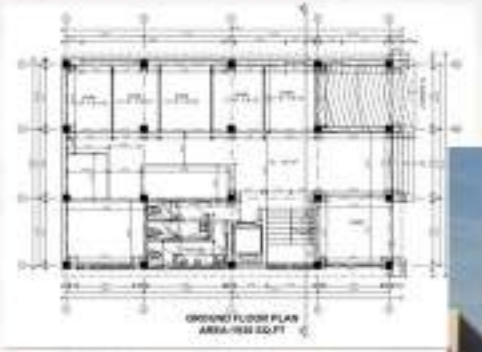


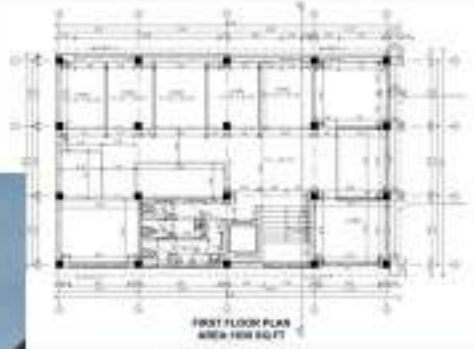
MUSEUM DESIGNS

COMMERCIAL DESIGNS

COMMERCIAL APPARTMENTS (CLASSICAL DESIGNS)

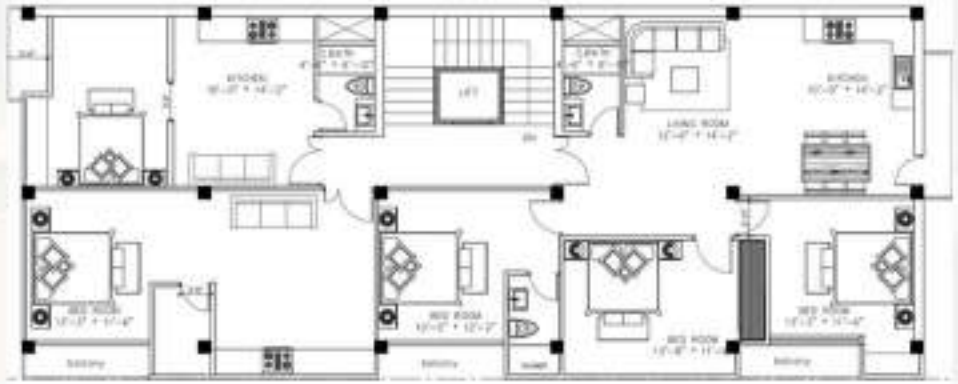
COMMERCIAL APPARTMENTS (CLASSICAL DESIGNS)





COMMERCIAL APARTMENT DESIGNS

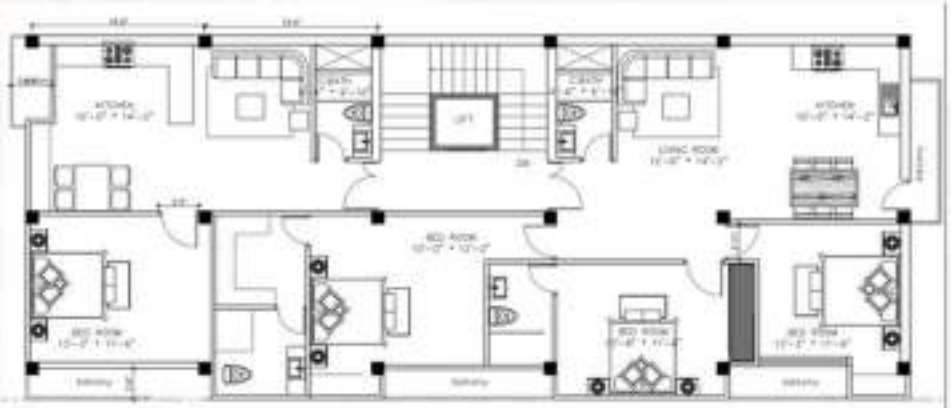
STUDIO-2



STUDIO-1

3BHK

1STFLOOR PLAN
AREA:2027 SQ.FT



STUDIO-1

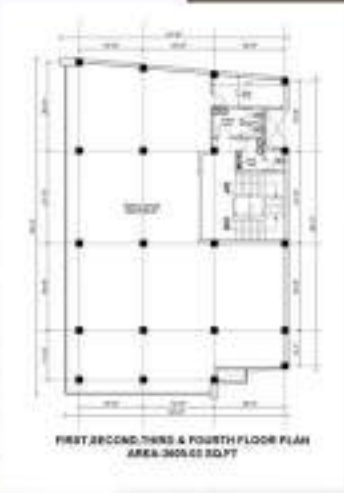
3BHK

3RD FLOOR PLAN
AREA:2027 SQ.FT

MODERN DESIGN

COMMERCIAL APARTMENT DESIGNS

MODERN DESIGN



COMMERCIAL APARTMENT DESIGNS

MODERN DESIGN

COMMERCIAL APARTMENT DESIGNS

MODERN DESIGN

COMMERCIAL APARTMENT DESIGNS

MODERN DESIGN

RESORT RECONSTRUCTION AND RENOVATION

A new space for the restaurant, banquet hall and outdoor space was added to this hotel.

Location: Lamjung, Nepal.

RESORT RECONSTRUCTION AND RENOVATION

INTERIOR DESIGN

PROJECT - HOTEL DEVOTEE RENOVATION

Redesign of bedrooms, reception, lobby, and waiting lounge.

BEDROOM DESIGNS

BEDROOM DESIGNS

BEDROOM DESIGNS

BEDROOM DESIGNS

LIVING ROOM DESIGN

LIVING ROOM DESIGNS

LIVING ROOM DESIGN

SKIN CLINIC

A cosmetic dermatologist wanted to make a small private skin clinic beside her own residency.

Area : 550 sq.ft.
The design includes a reception area, waiting area and surgery space.

FREELANCE

SKIN CLINIC

FREELANCE

THANK YOU

UB URMILA BADE

urmibade@gmail.com

www.urmilabade.com.np

ub_architecture