Architecture Portfolio



Bibin Mathew

Bachelor of Architecture
BGS School of Architecture and Planning | 2016-2021 | Selected works

Bibin Mathew

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Architecture + Music

"Architecture is the combination of multiple notes which falls in a certain scale and the notes can be interchanged and practiced in an unconservative approach which leads to different interventions and solutions."

Education

Aug 2003- july 2016 — **Sunrise English Private School | Abu Dhabi, United Arab Emirates**
Secondary and Higher Secondary

Aug 2016- july 2021 — **Bgs School of Architecture and Planning | Bengaluru, Karnataka, India**
Bachelor in Architecture
currently pursuing architecture, anticipated completion by July 2021

October 2019 — **The Energy and Resource Institute | Bengaluru, Karnataka, India**
Energy analysis | IES Virtual Environment 2-day Workshop

Experience

Jan 2021- July 2021 — **HundredHands | karnataka , India**
Intern Architect
appointed for 6 months internship

Dec 2019- Sept 2020 — **Uravu and the Collective | kerala , India**
Designer and Visualizer (Freelance)

Jan 2020- Sept 2020 — **Redwall Studios | karnataka , India**
3D Modeller and Visualizer (Freelance)

April 2019- Sept 2020 — **Deford Architects | karnataka , India**
Designer and Visualizer (Freelance)

Features

May 2020 — **Sketchup India**
Semester 6 Design

Aug 2020 — **All of Architecture**
Semester 8 Design

Aug 2020 — **Bgs School of Architecture and Planning Website Cover**
Semester 6,7 and 8 Design

Competition

Mar 2017 — **Baiyapanahalli Railway Project**
Landscape and Form developer

Oct 2019 — **Archdais Rethinking office space**
Design and Visualisation

Oct 2020 — **DocexDoce Tianducheng** | *Finalist*
Team Lead and design

Skill

Design — Rhino : Grasshopper | 3Ds Max | Sketchup: Solar Energy : Skatter | Revit

Visualization — V-Ray | Lumion | Twin Motion | D5 render

Simulation — Ecotect | Climate Consultant | Flow Design | Inventor

Post production — Premier pro | Photoshop | Illustrator

Music — Ableton


01 The Scintillating soul | Bangalore, India
Semester 8 | Instructor : Ar. Bipin baboo
05 The promised land | Abu Dhabi, U.A.E
Semester 7 | Instructor : Ar. Indu Sathyaendran
09 Church of the future | Saadiyat, U.A.E
Semester 9 | Instructor : Ar. Indu Sathyaendran
19 Resuscitation | Docex
Team Lead
21 The Boring Cafe
Interior Design | Semester 7
23 The Desert Incubator
Biomimicry | Semester 7
25 Miscellaneous
Models | Drawings
27 Music
Heart before Beat



Scintillating Soul

"The prodigal meets the father"

Project type :- *Public building*
Area :- *135,000sqft*
Project team :- *Semester 8 Design*

The project was a result of an urban study done at Majestic(Bangalore, India) where the study led to the realisation of two entirely different urban fabric separated by a main road (Old Mysore Road).Hence the project program evolved aiming to unify the two vast lifestyles of people by designing a building which becomes a public zone with equal balance of both the lifestyles incorporated.The building dominates with its commercial, exhibition, food oriented activities which comprises 50% and the rest being green and open to have a better community experience as well as making the building more sustainable and energy efficient.

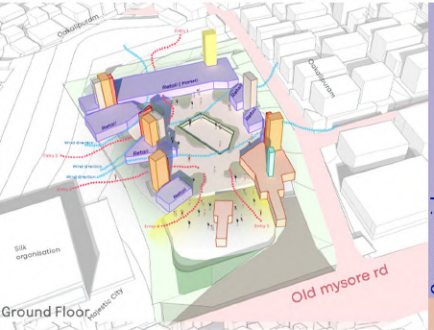
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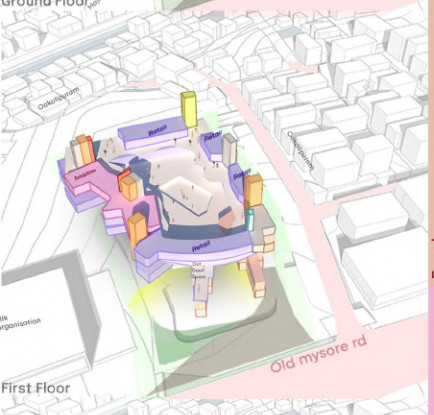
The design contains a major central Plaza which acts as an open space which doesn't have any pre defined functions, hence being used by a person's need and the activities surrounding it opening up to the central plaza.
The roof being a space frame ETFE and solar glass panels for better efficiency as well as better wind flow in the building due to the openness. Only 3.4% of the building is air conditioned hence saving 70% of the total energy.

Software Used: Sketchup | 3ds Max | V-ray | Lumion | Inventor | Flow Design | Photoshop

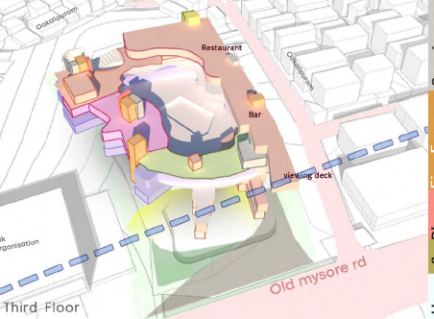
01| Volumetric

The spaces getting more secure as a person goes higher. Beginning the activities with commercial and ending with the community and food. The food and nature connecting different lifestyles.

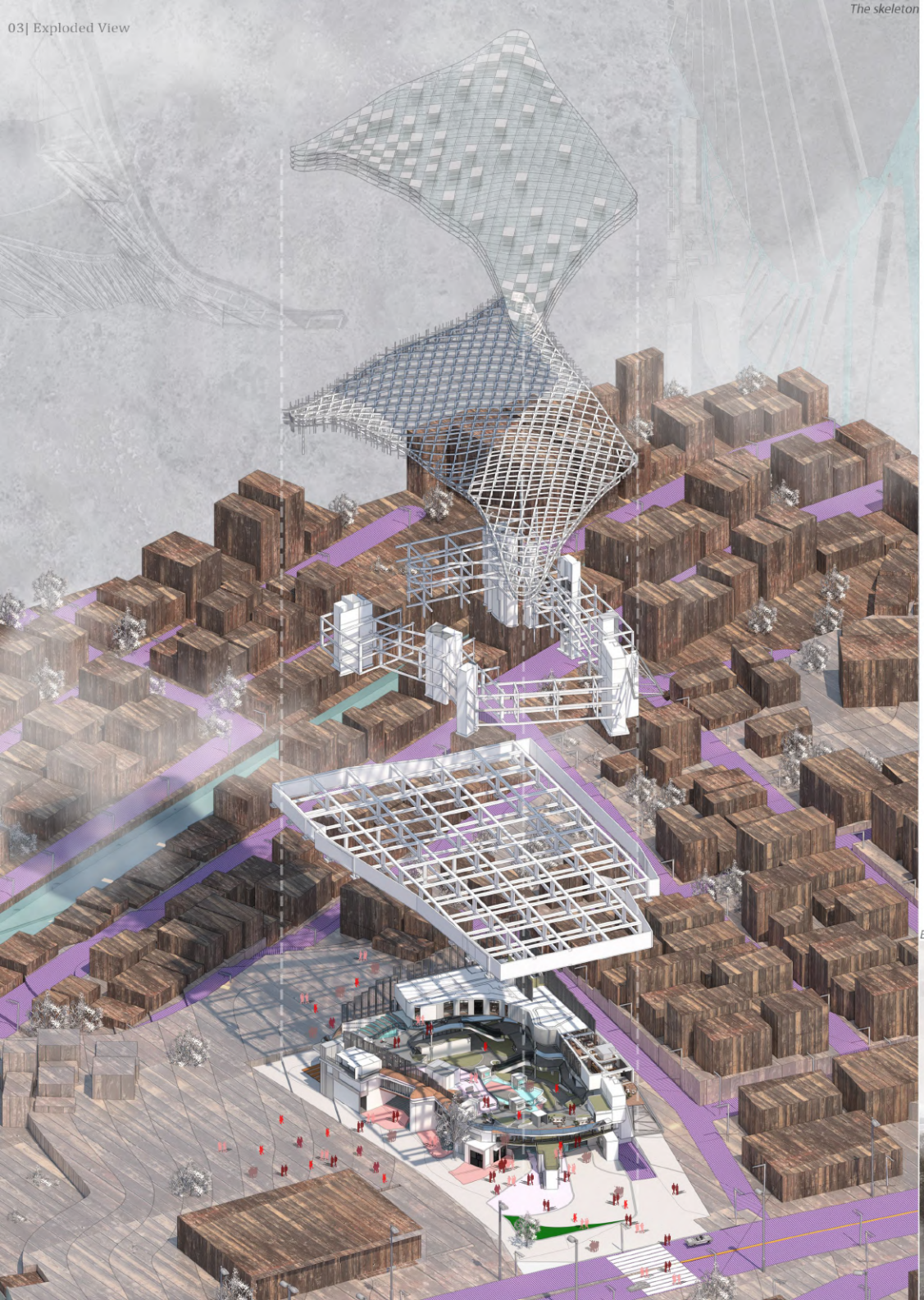








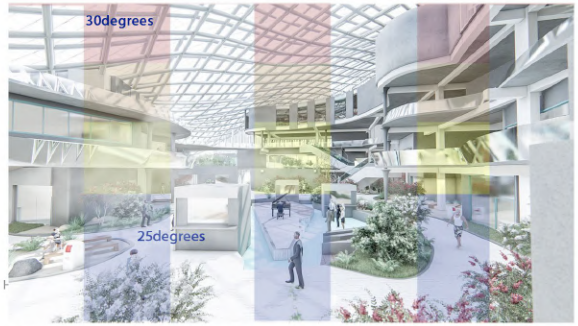
Commercial
Food
Exhibition
Green space
Services
Fire Escape
Phe
Hvac &

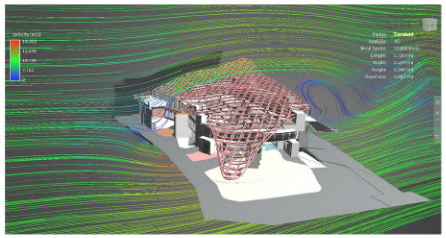


The skeleton

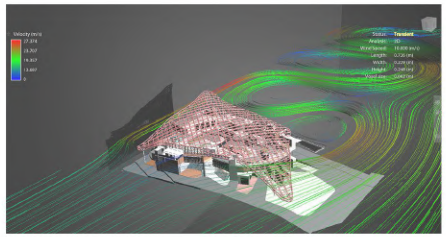
The structure emdeds itself to a rigid framework beneath where the services and parking are contained. The idea of a Stable and strong base on whcih the layouts acan be manipulated based on the free flowing form. Hence helps in the easement of the column placements. The strucutural grid contains major service zones shared by multiple blocks made of shear walls. The Space frame strucutre which holds the ETFE panels is supported by piers which connects to the main beams which carry the load to the foundation.

The Wind represent on the free flow as well as being responsible for producing wind to the other side of the building. The form and the central zone is designed based on the wind flow, the central major structure helps in chanelling the wind to two major direction inside the building helping for a proper ventilated zone inside.





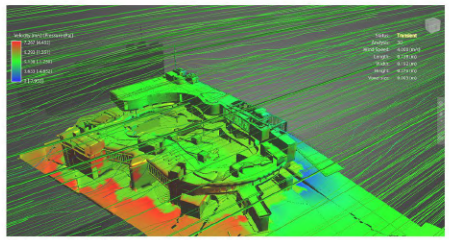
Vertical wind flow



Horizontal wind flow

The Temperature in the central plaza was the major challenge, the help of proper wind distribution as well as the space frame above with ETFE panels resulted in a major shift to in micro climate dropping the temperature to 25° The volume of the central plaza plays an important role in the movement of the hot air from the buiding as well as the cool air entering the structure.

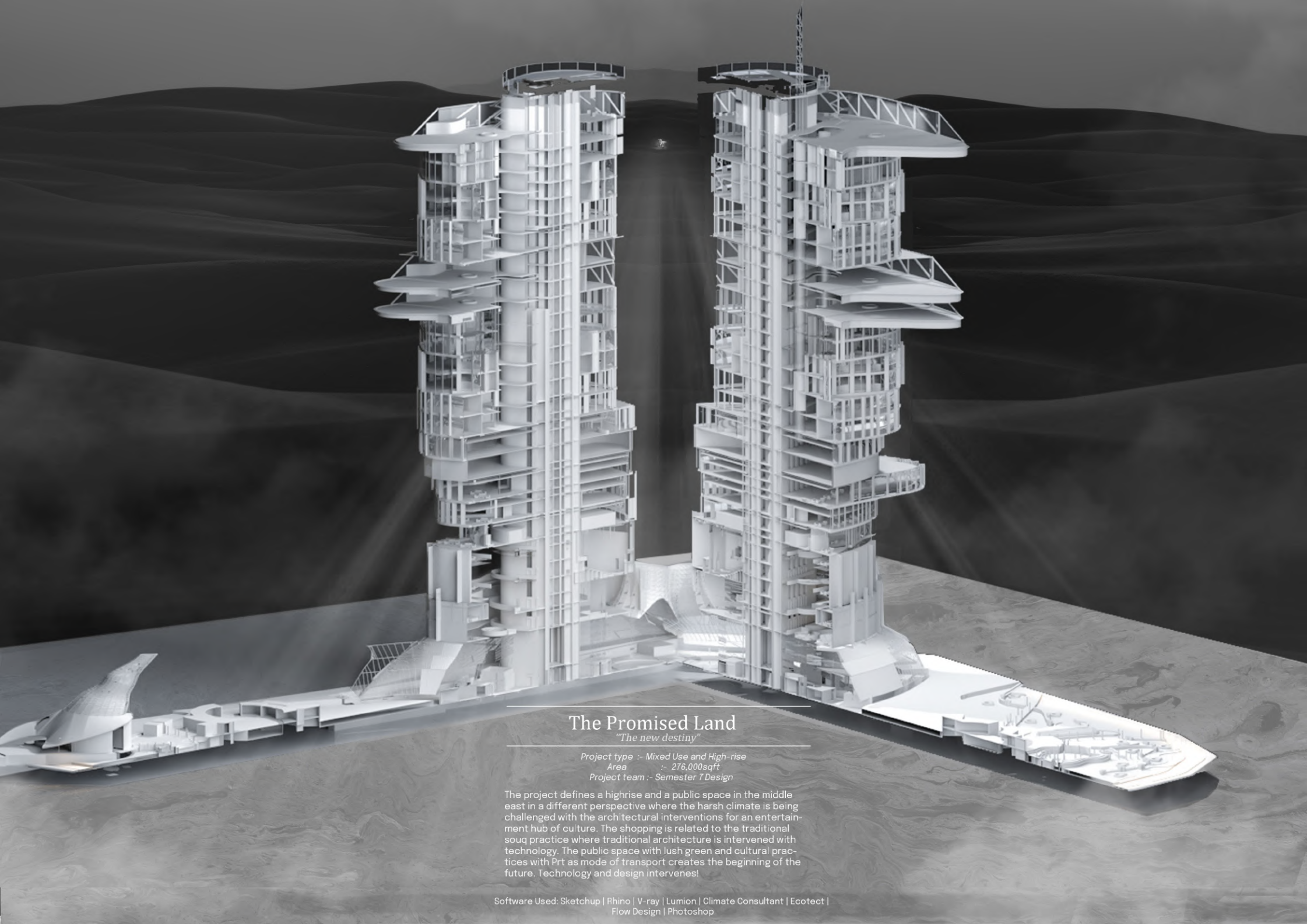
The building brings in a new function of space which a person gets attracted to with the primary focus of food and green space. Communities meet for various needs and the green space being a point for break, interaction , work, etc . Its an adaptable space which is a pattern found for better usability of spaces in an urban view point. The different urban fabrics meet, the whole interpretation of a prodigal son meeting his father. The home accepting the son with celebration. The building inviting to meet the culture and lifestyle which drifted apart and to bond and live together.



Horizontal wind flow and surface impact

Exterior view





The Promised Land

"The new destiny"

Project type :- Mixed Use and High-rise
Area :- 276,000sqft
Project team :- Semester 7 Design

The project defines a highrise and a public space in the middle east in a different perspective where the harsh climate is being challenged with the architectural interventions for an entertainment hub of culture. The shopping is related to the traditional souq practice where traditional architecture is intervened with technology. The public space with lush green and cultural practices with Prt as mode of transport creates the beginning of the future. Technology and design intervenes!

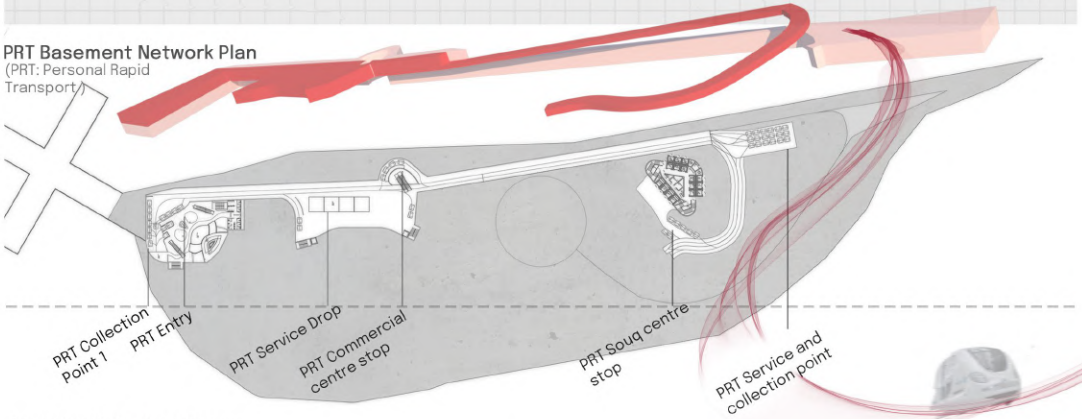
Software Used: Sketchup | Rhino | V-ray | Lumion | Climate Consultant | Ecotect | Flow Design | Photoshop

Ground FLoor Plan

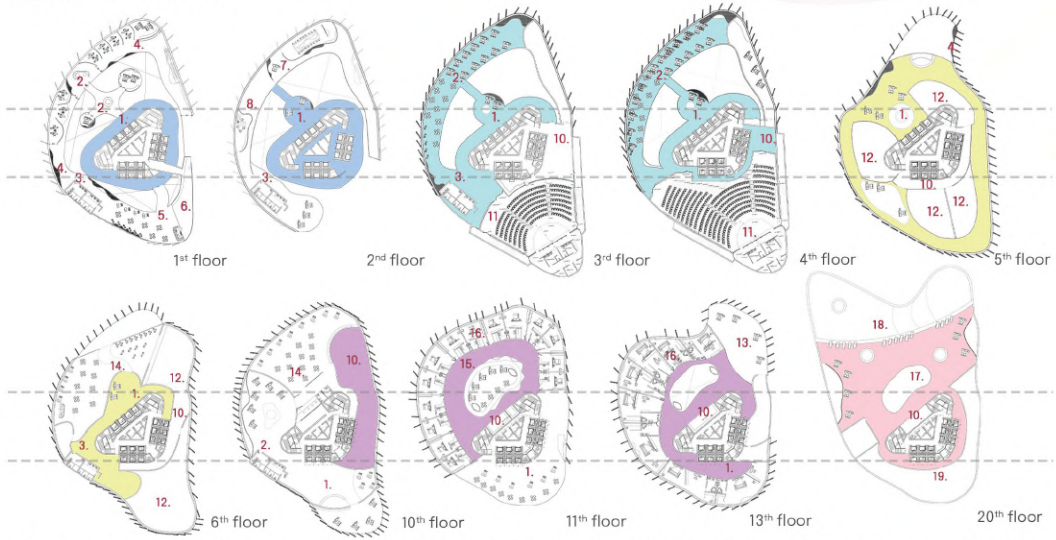


PRT Basement Network Plan

(PRT: Personal Rapid Transport)



Highrise Selected Plans



1. Entrance Zone 2. Lobby and Reception 3. Restrooms 4. Office space 5. Office Mess 6. Kitchen 7. Conference room 8. Workspace 9. Auditorium Lounge 10. Service Room 11. Auditorium 12. Retail Shop 13. Outdoor Lounge 14. Restaurant 15. Hotel Room corridoor 16. Hotel rooms 17. Bar 18. Pool 19. Gymnasium



View of the Highrise and the development around.

A

The niche provided in the center helps in the stack effect a well as providing central service ducts leading to the main service floor.

B

The Space frame Slab helps in the cantilevering of the 45m slab with the steel space frame profile running through the periphery and the above floors acting as a counterweight.

C

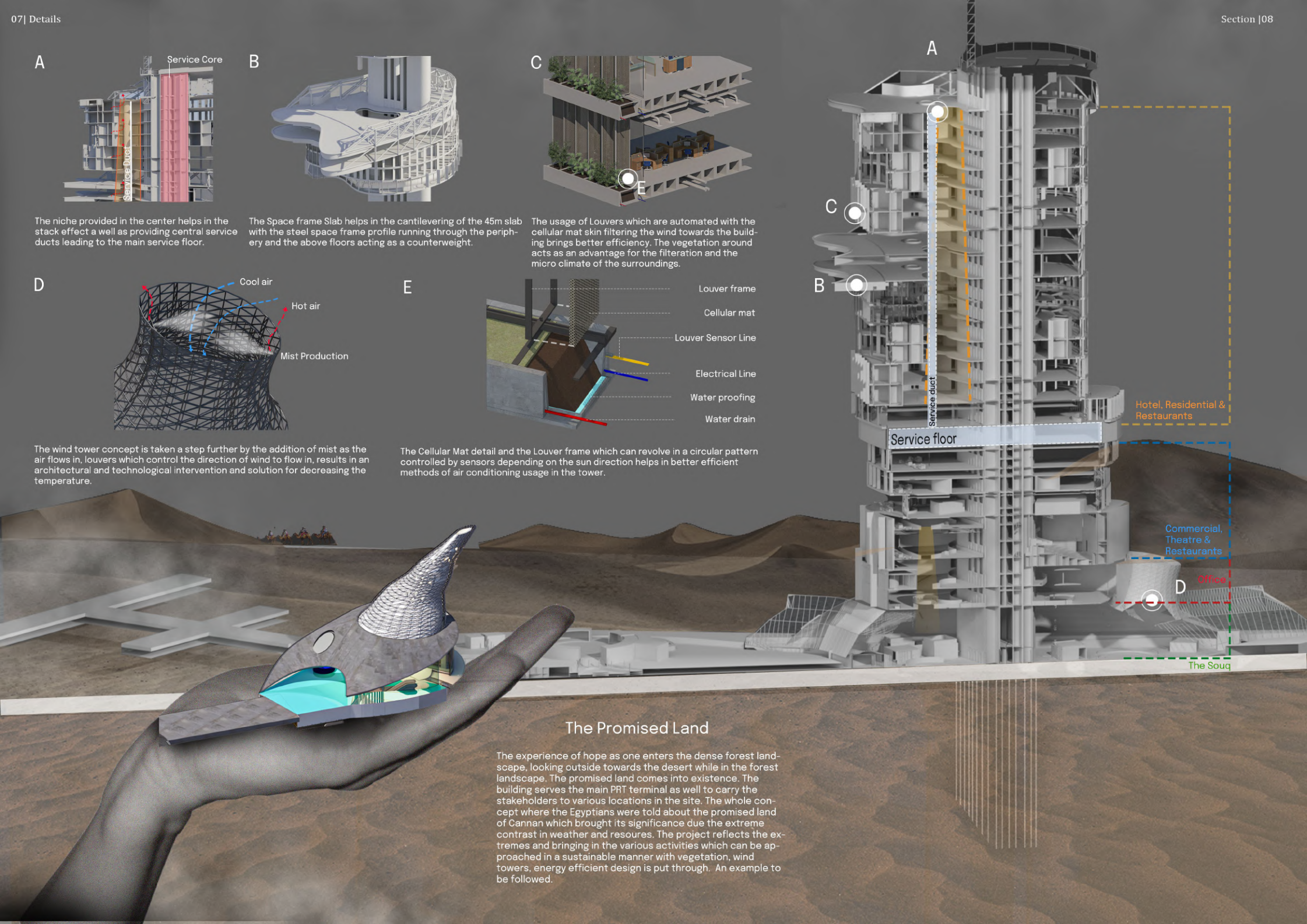
The usage of Louvers which are automated with the cellular mat skin filtering the wind towards the building brings better efficiency. The vegetation around acts as an advantage for the filteration and the micro climate of the surroundings.

D

The wind tower concept is taken a step further by the addition of mist as the air flows in, louvers which control the direction of wind to flow in, results in an architectural and technological intervention and solution for decreasing the temperature.

E

The Cellular Mat detail and the Louver frame which can revolve in a circular pattern controlled by sensors depending on the sun direction helps in better efficient methods of air conditioning usage in the tower.



The Promised Land

The experience of hope as one enters the dense forest landscape, looking outside towards the desert while in the forest landscape. The promised land comes into existence. The building serves the main PRT terminal as well to carry the stakeholders to various locations in the site. The whole concept where the Egyptians were told about the promised land of Cannan which brought its significance due the extreme contrast in weather and resoures. The project reflects the extremes and bringing in the various activities which can be approached in a sustainable manner with vegetation, wind towers, energy efficient design is put through. An example to be followed.



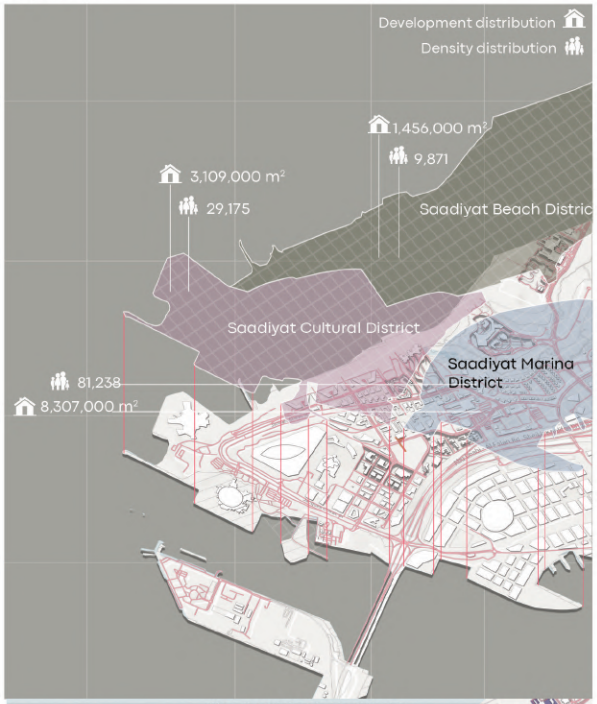
Church of the Future | *Ongoing Thesis Project*

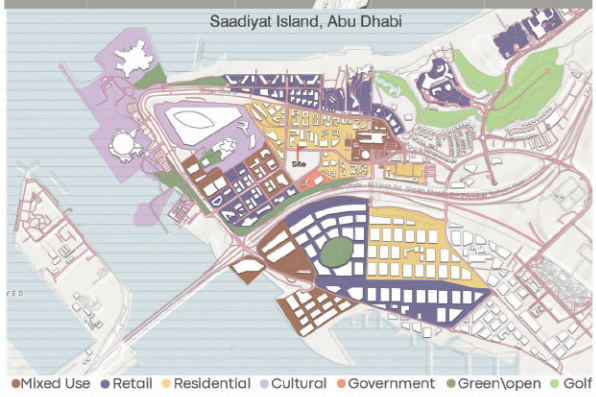
"Divisons leading to unity"

Project type :- Ecclesiastical Architecture
Area:- 960,000 sqft
Project team :- 9th Semester | Thesis Project

A theological and an architectural approach to change the present day ideology of a church. The project focuses on Christianity and its multiple denominations, creating a space which can strengthen the relationship between them. A detail study on the practices followed by various denominations and narrowing down the divisions based on spiritual rituals, resulted in 3 major zones in the site. A block connecting these zones based on cultural, educational and community oriented, breaks the ideology of the regular practice. The whole idea of divisions can result in something unique, it connects each other, the understanding of various cultures and traditions and respecting each other. Something which is already being practiced in the Gulf churches due to restrictions which turned out into something which the Bible always wanted. But it lacked public spaces, communal areas etc. The project brings the garden of Eden into reality, purity where spaces and activities are created for everyone, even a non-believer with interesting public spaces where an individual can spend some time experiencing the unique and pure. Kids enhancing the way to think, play and act and exposing themselves to various communities and adults who enjoy their worship spaces and enjoy the public spaces where various denominations meet. Traditons and rituals meet architecture.

Software Used: Rhino | Grasshopper | Sketchup | V-ray | Lumion | Photoshop | FLow Design



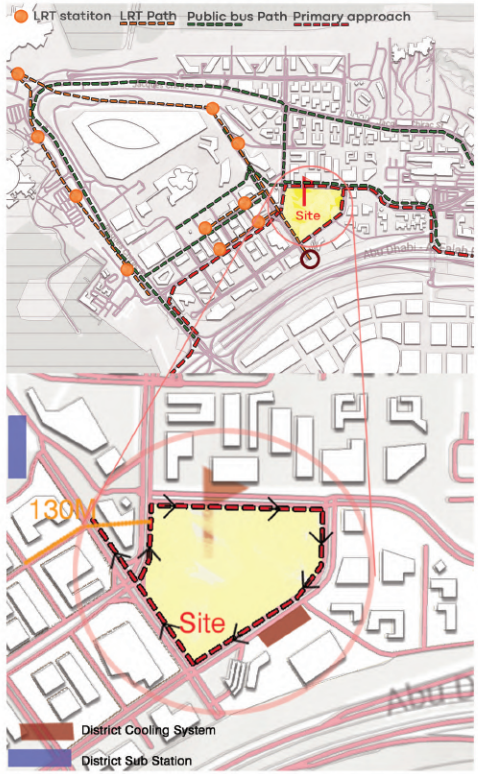


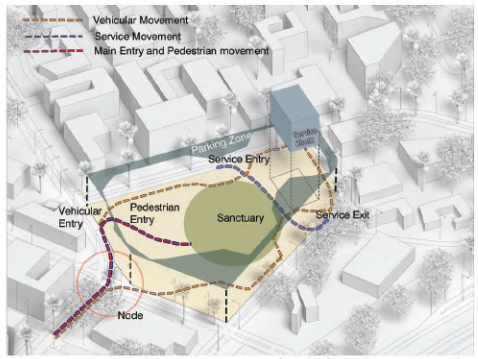
The site is situated in an island in Abu Dhabi, U.A.E . Saadiyat island, the upcoming city focus on the culture and heritage of the land. The major economical turn over was aimed based on tourism by creating the cultural district. The district is contained by 5 major structures by 5 Pritzker awardees which played the major role in the increase of tourism and impact on an urban context. The completion of the island is aimed within the next 25 years.

Abu Dhabi is known for its community church which was started 50 years ago and had an unique perspective on community oriented christianity rather than divison based on denominations. The project and ideology is taken a step further by looking into what the future church can hold based on rituals as well as the space created. There is a pattern formed in human user experience which keeps shifting based on the environment we create. The church of the future focuses on bringing people together by providing the essential space and planning.

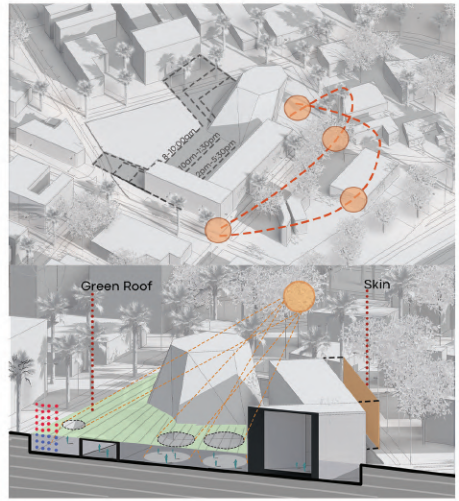
The study is based on Micro, meso and maro level which led to certain foundation to the whole course of the project.

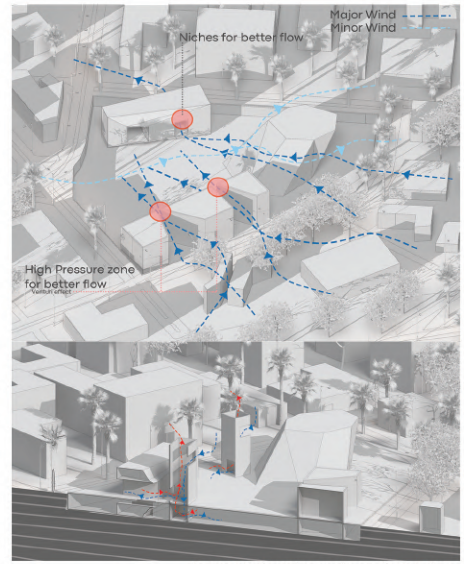






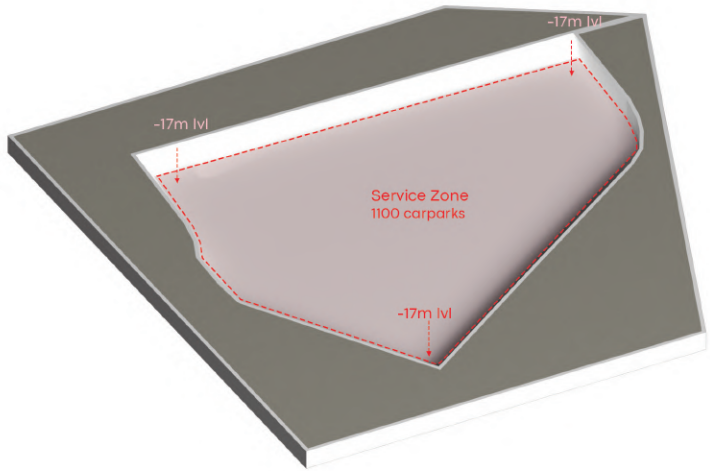
basic services around the site



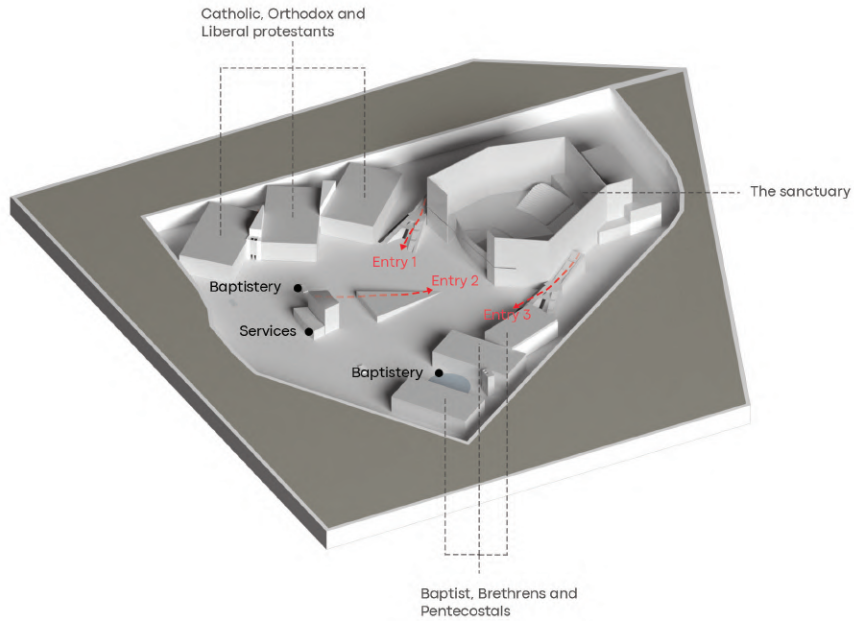


Interventions based on climatology

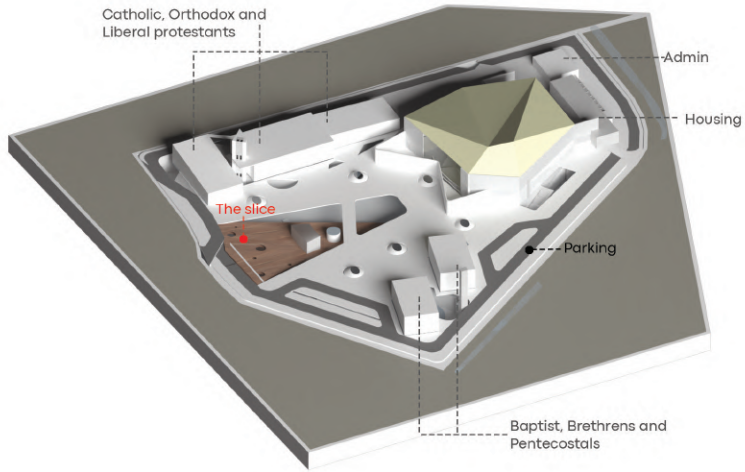
Site Analysis



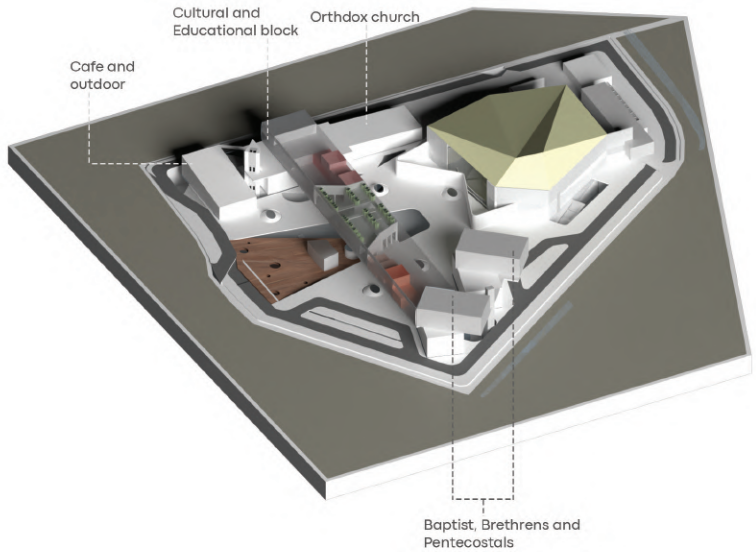
2nd Basement : Service and parking.



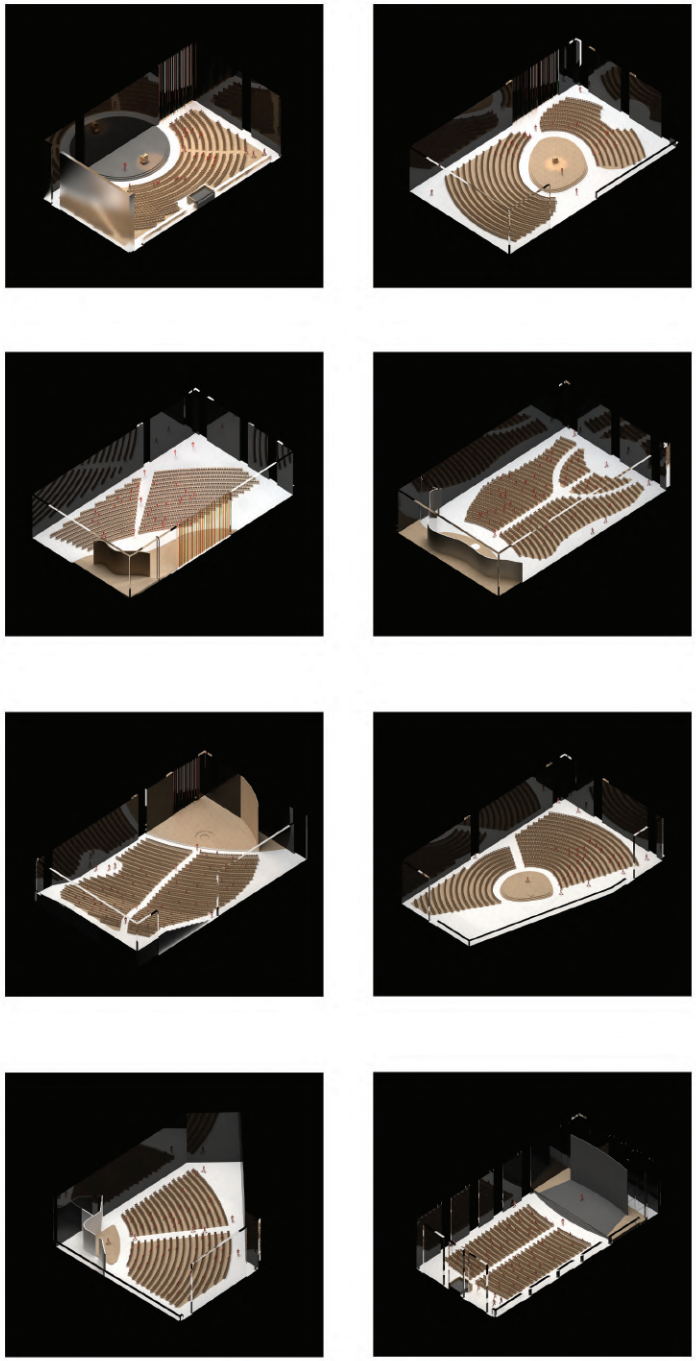
Basement: Multiple denominational churches and public space for the church.



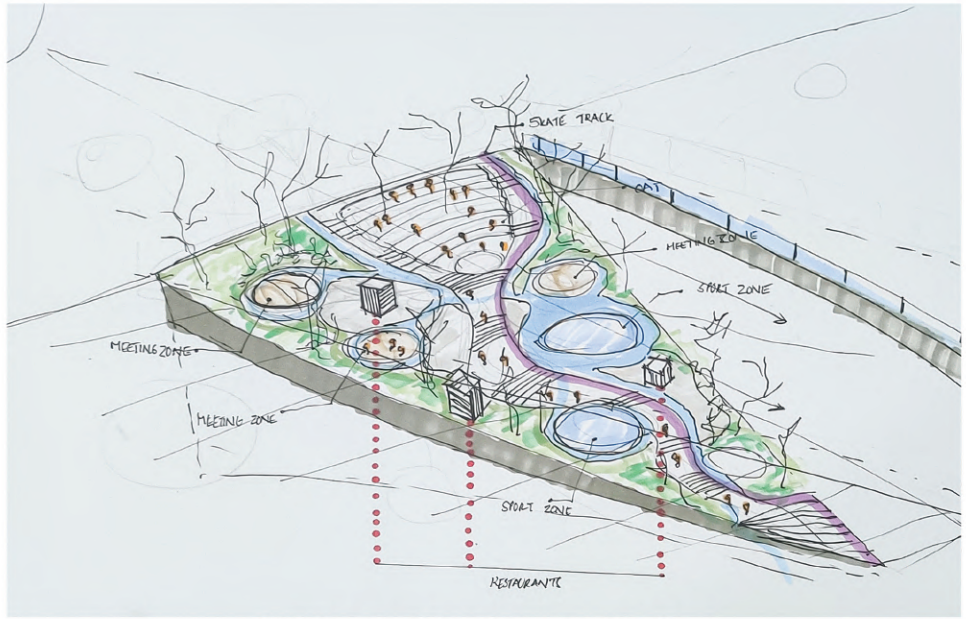
Ground Floor : Public meets the church.



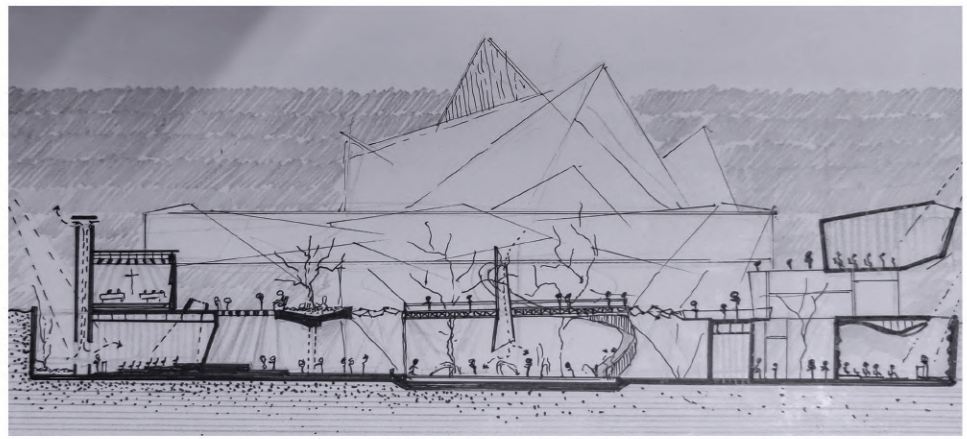
First, Second and Third Floor : The future meets. (Cultural and Educational block)



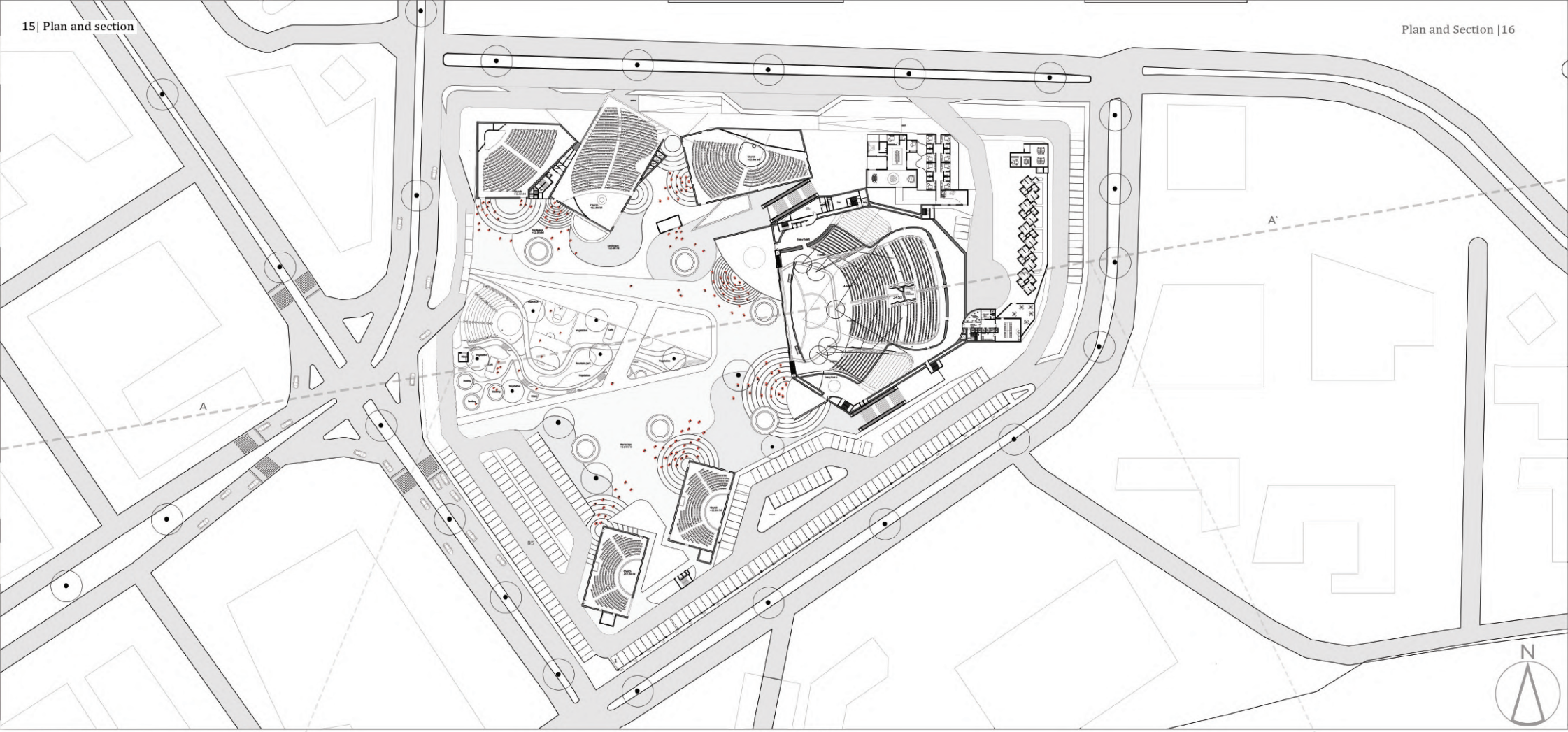
Typologies : Architecture + Theology
The arrangement of design and seating shifted based on practices, light and wind.



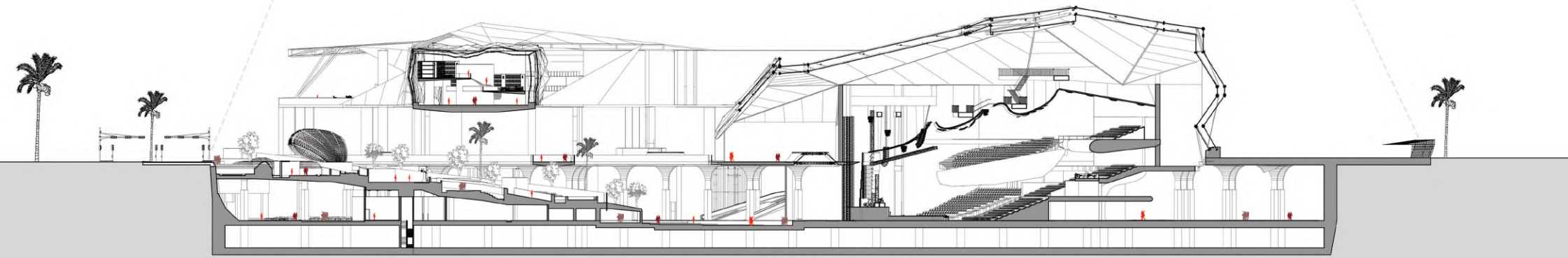
Conceptual sketch of the slice : Public meets the church
The Slice is a point of attraction for the public to spend some time and relax from the contrasting landscape of gulf from a hardscape to extreme dense tropical landscape. The breakpoint and a sense of hope.



Conceptual section : Divisions leading to unity
The different churches taking part in their rituals yet connected with a public space, building not just a space but relationships.



Ground Floor Plan



Section AA`



The Future meets: Traditional overtaken by the future.

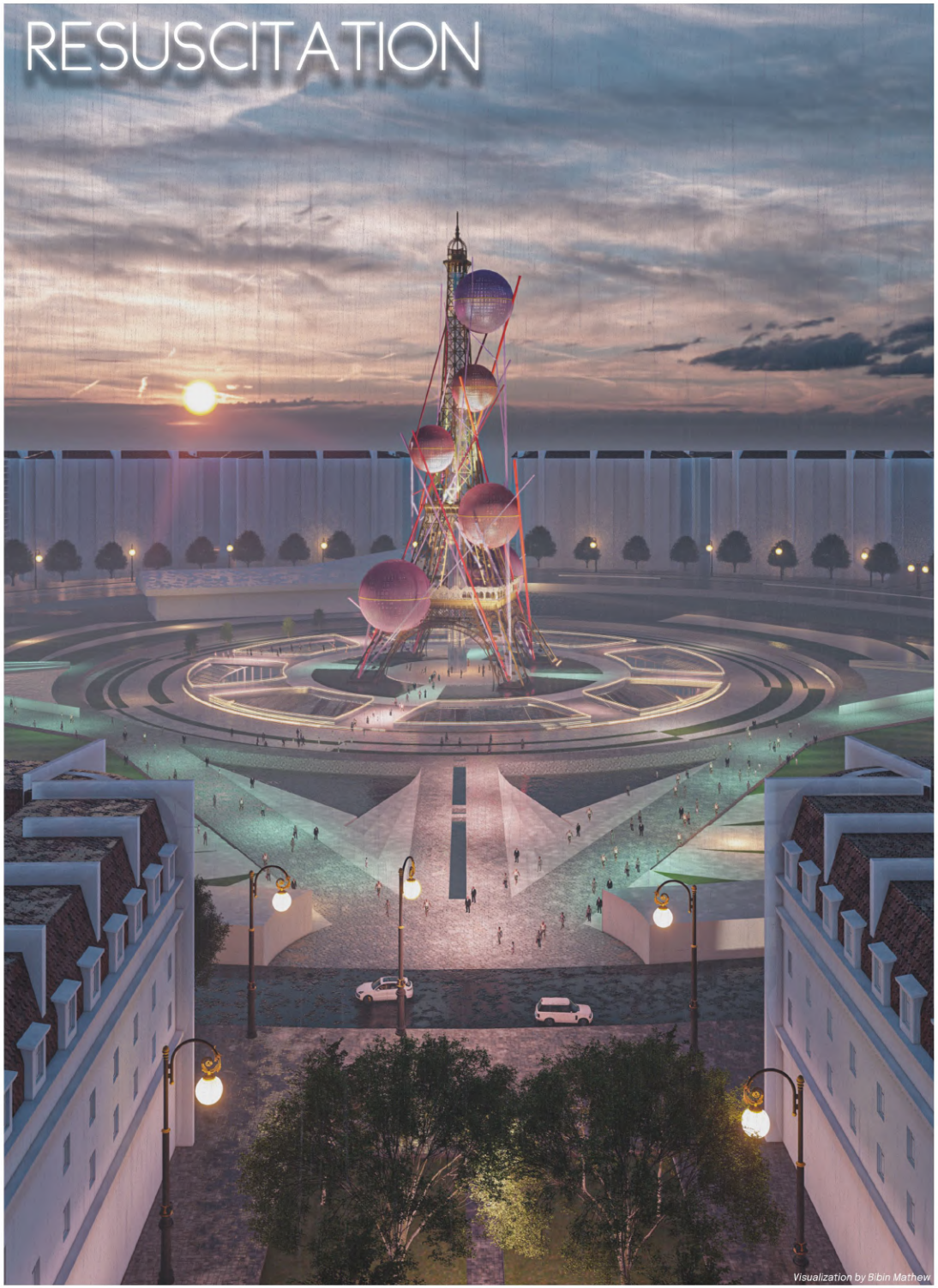
The form of the building is reflected by primarily bringing in the contrast of traditional architecture vs the future, it represents the ideology and mindset of the peope and how youth would overcome and come into existence for the future with their unique ideologies and perspective on the church.



Resuscitation

Project type :- Competition | Finalist
Project team :- Bibin Mathew, Lekhana Vali & Cibil Johnson
DOCEXDOCE Architecture competition Finalist

Software Used: Sketchup | Rhino | Grasshopper | V-ray | Lumion | Photoshop



Location : Hangzhou, capital of the Zhenjian Province.

The profanity of past in the game of imitation had created an identity crisis to the city, adding along its mutation into a ghost town.
Revamping the lost essence of the city by parasitizing and reinterpreting a new soul to the structure but without letting go the historical reasoning of imitation. A new identity of it's own, alluring to both outside public and the residents.

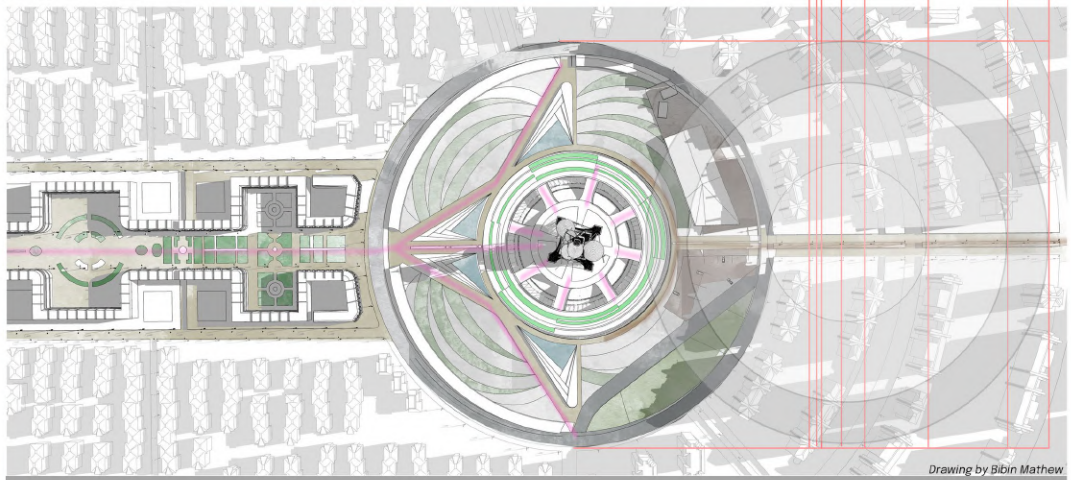
The Rebirth!

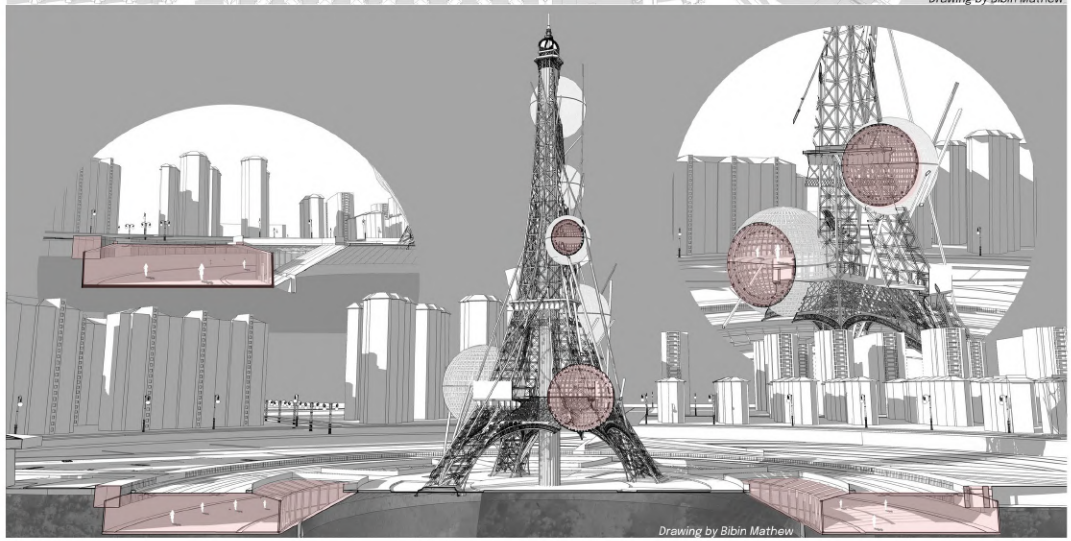
CONCEPT & INSPIRATION -











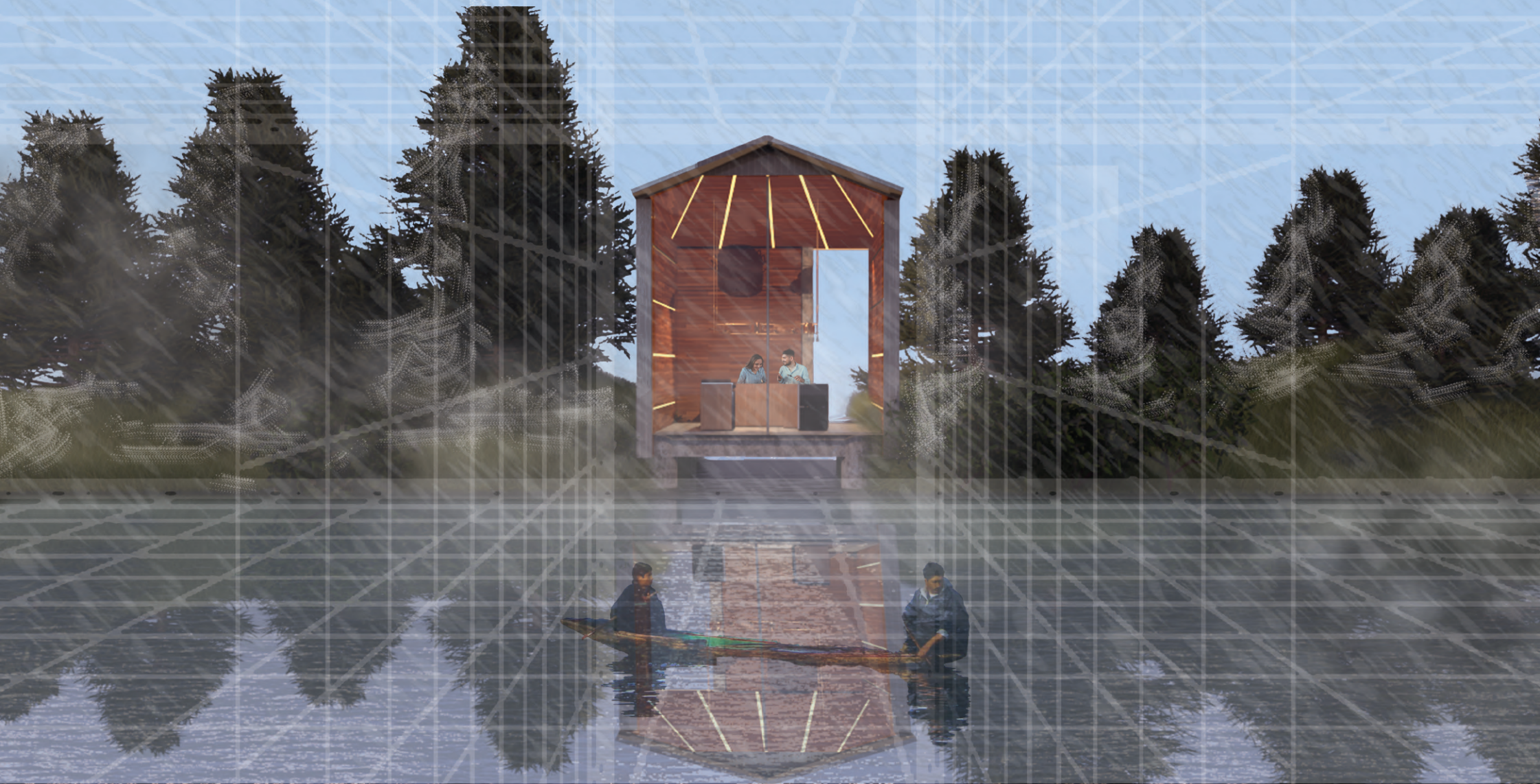
The Boring Cafe

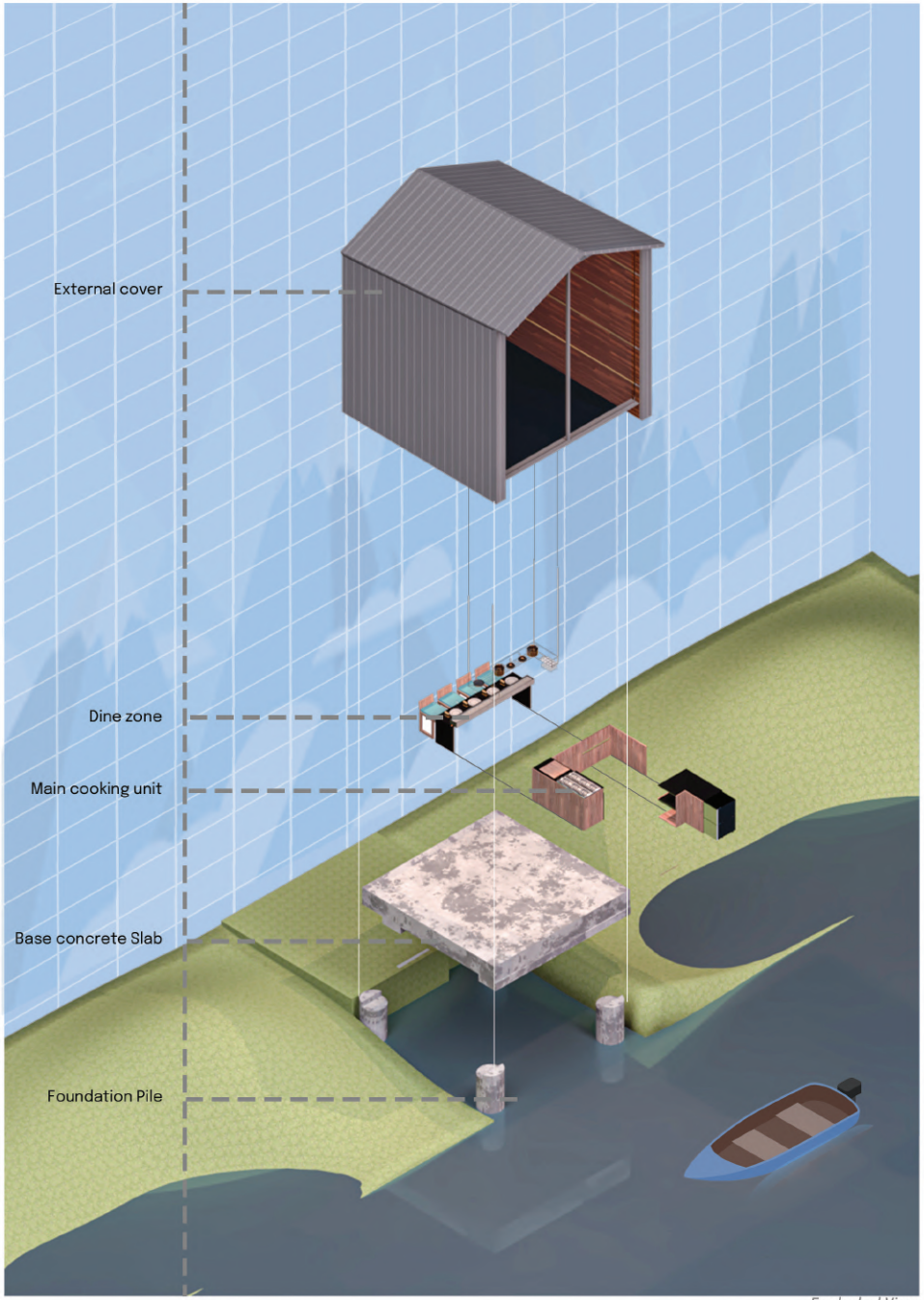
" The Focus "

Project type :- Restaurant
Area :- 250sqft
Project team :- Interior Design

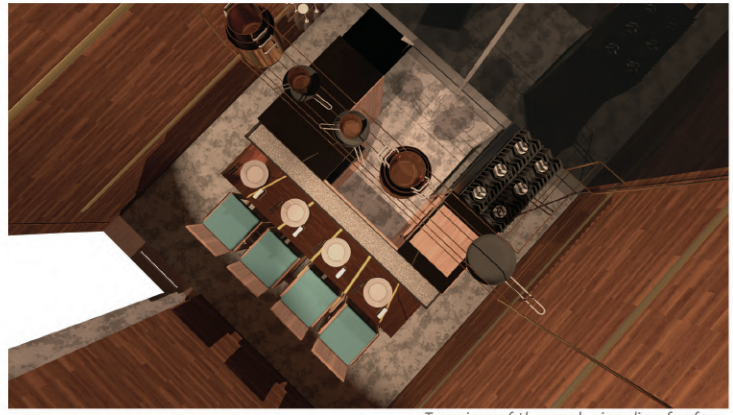
Placed in the Valley of the Srinagar mountains, the project focuses on building up the culture and food by providing an exclusive 4 seat diner. The interior designed to extreme minimalism which makes the user instantly focus on the external view rather than the interior. Viewing the culture from the inside with the authenticity of materials such as wood, bright fabrics and metal platings reflected upon the interiors of the cafe.

Software Used: Sketchup | V-ray | Photoshop





Exploded View



Top view of the exclusive dine for four.



The Visual connect to the outside.



Manipulation of material and light to direct.

Desert Incubator

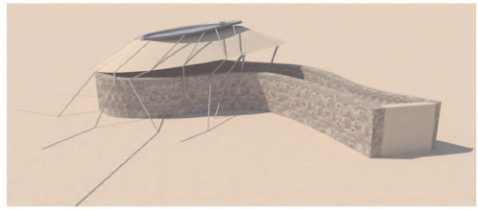
Project type :- Sustainable Architecture
Project team :- 7th Semester | Biomimicry

Different animals have different modifications to survive in the extreme conditions. What if humans could dwell in these most extreme conditions with an inbuilt modification too?

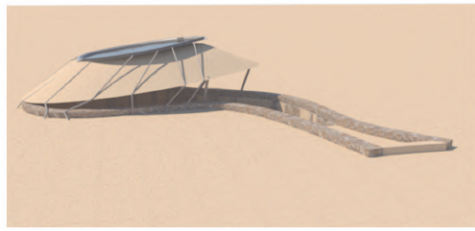
The design was inspired by the way birds adapt to extreme conditions of the desert. Evaporative method is the cornerstone of the project . The introduction to study was based on how certain birds gains water through food and liquid source whiuch eventually helps in building moist on the surface of mouth and tongue. Water is then evaporated from these surfaces and cooled.

The design is based on a residential unit where the metal structure acts as an enclosure with the help of a mesh fabric and supports spreading through the desert soil. A tank is placed on top of the structure for basic water storage. The tank is connected to a series of peforated pipes which goes underneath which helps in building a biodiverse surrounding. The water drips on the mesh fabric which helps in the evaporating process. Multiple units of these creates a precinct which is rich in biodiversity, creating an incubator in the desert.

Software Used: Sketchup | V-ray | Lumion | Photoshop



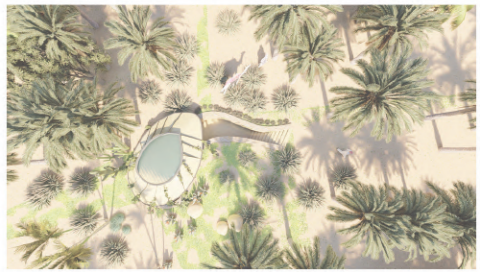
Installation of the structure and tank. The structure is dug 1m below ground level for natural cooling and insulation.



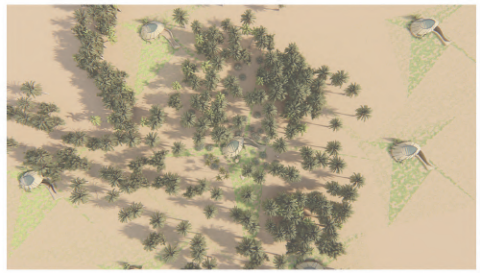
Levelling of the surroundings to ground level and the addition of water to the tank starts reflecting in the microclimate.



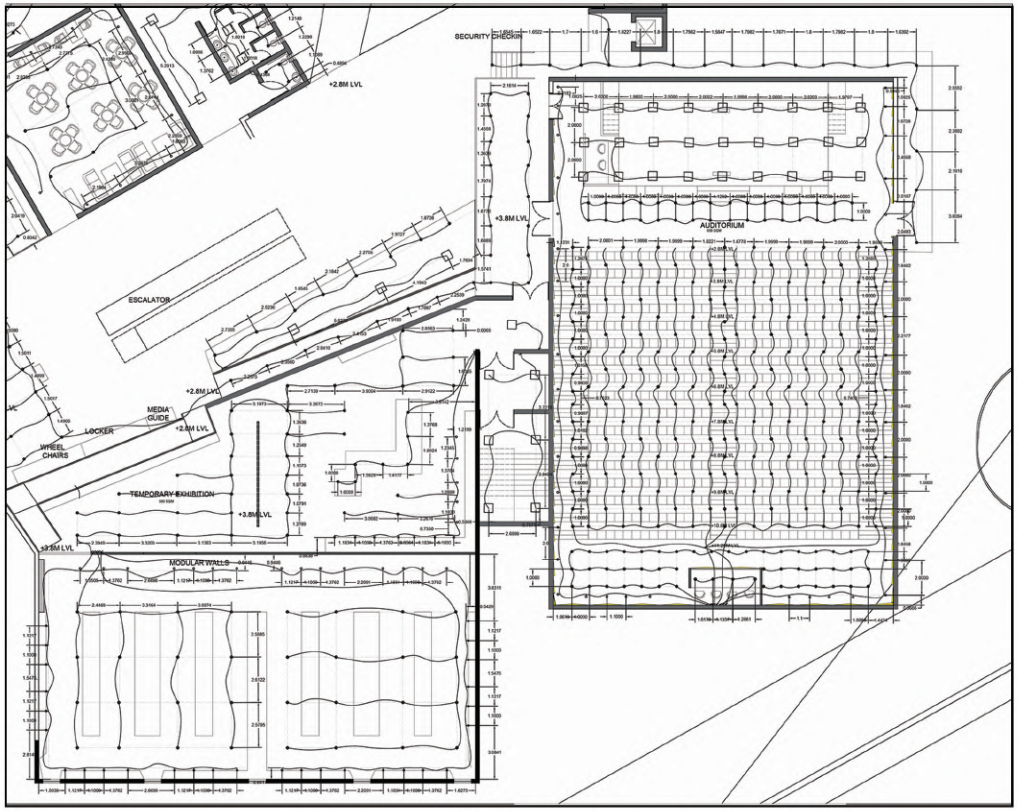
Within the next few months, visible plant growth around the unit.



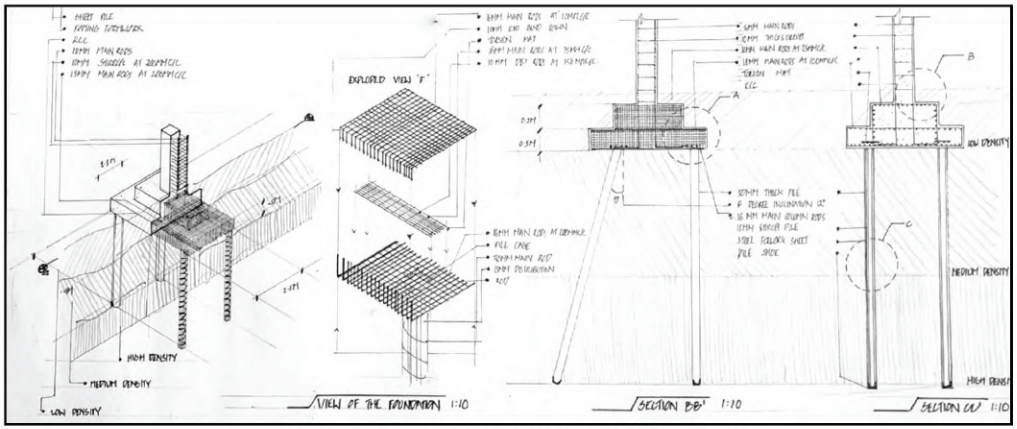
Eventually creating a biodiverse surrounding with plants and better micro climate around.



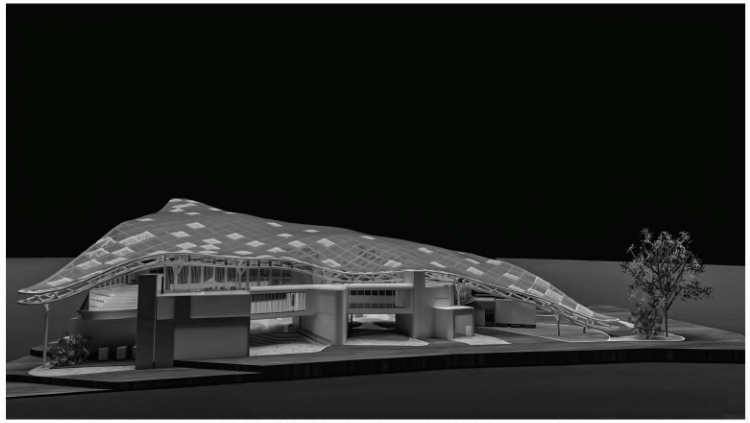
Multiple units creating a biodiverse zone with better nourishment of plants and human settlement.



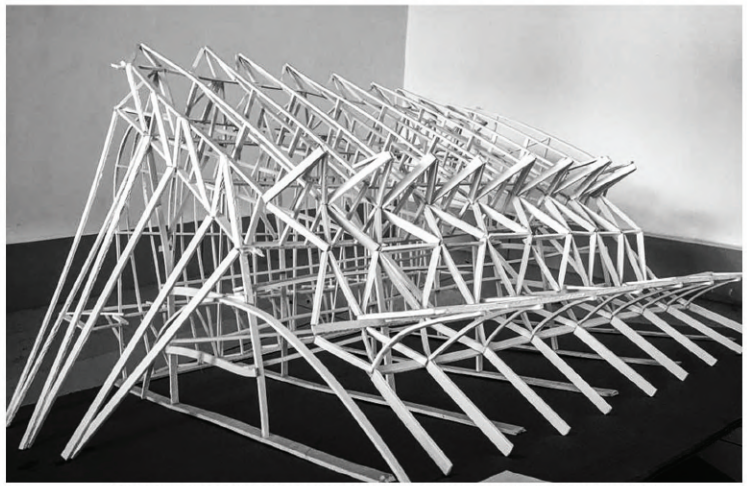
Electrical Draft - 5th Semester Architectural Design
Performing Arts Centre - Trivandrum, Kerala, India



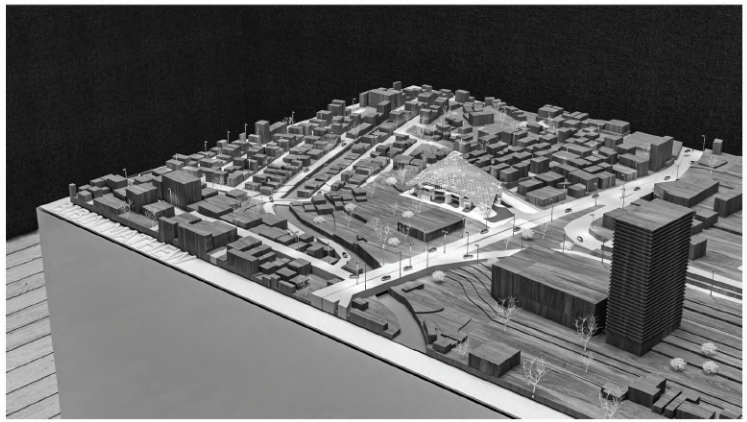
Footing Detail Hand Draft - 6th Semester Architectural Design
Research and Training Centre - Bengaluru, Karnataka, India



Scintillating Soul Model - 8th Semester Architectural Design



Strucutal Expression- Museu de les Ciències Príncipe Felipe | Santiago Calatrava



Context model- 8th semester Architectural Design



Drum Improvisation release



Sheldon Bangera | PCNAK 2018



South indian movie Chambal | Prabhu SR



Music: Drumming

BGS SAP
Bibin Mathew