ARCHITECTURE PORTFOLIO

Kesireddy Harshini

CURRICULUM VITAE

PERSONAL INFORMATION

NAME: Kesireddy Harshini
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(Beside Police Station), Chandanagar, Hyderabad,500050.
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EDUCATION

Sri Venkateshwara College Of Architecture, Hyderabad
B. Arch (2010-2015)
Narayana junior college, Hyderabad
Intermediate (2008-2010)
St. Martin's High School, Hyderabad
(2002-2008)

WORK EXPERIENCE

Design Architecture Studios, Hyderabad
Architecture intern (May 2014- April 2015)
Junior Architect (April 2015- May 2016)

COMPETITIONS

Night- Shelter for homeless at Secunderabad, Hyderabad
HUDCO Trophy - 2012
Club house - as a source of interaction for present urbanising society, Ludhiana.
TRANSPARENCE - 2012
Cultural Centre in Bamiyan, Afganisthan
UNESCO - 2015

WORKSHOPS

Laurie Baker Workshop, Trivandrum
Based on Sustainable Architecture (August 2012)
CII- Green Building Conference, Hyderabad
CII - 2013

EXHIBITIONS/ ACTIVITIES

Worked as curator for Annual Exhibition
Sri Venkateshwara College of Architecture, Hyderabad

SKILLS

Autocad		Adobe Photoshop	
Autocad 3d		Adobe Illustrator	
Sketchup		MS Office	
3DS Max		Hand Drafting	
Rhino-Grasshopper		Sketching	
V-ray		Model making	

INTERESTS:

NUMISMATIC STUDIES: Interested in collecting coins with different seals.
SKETCHING

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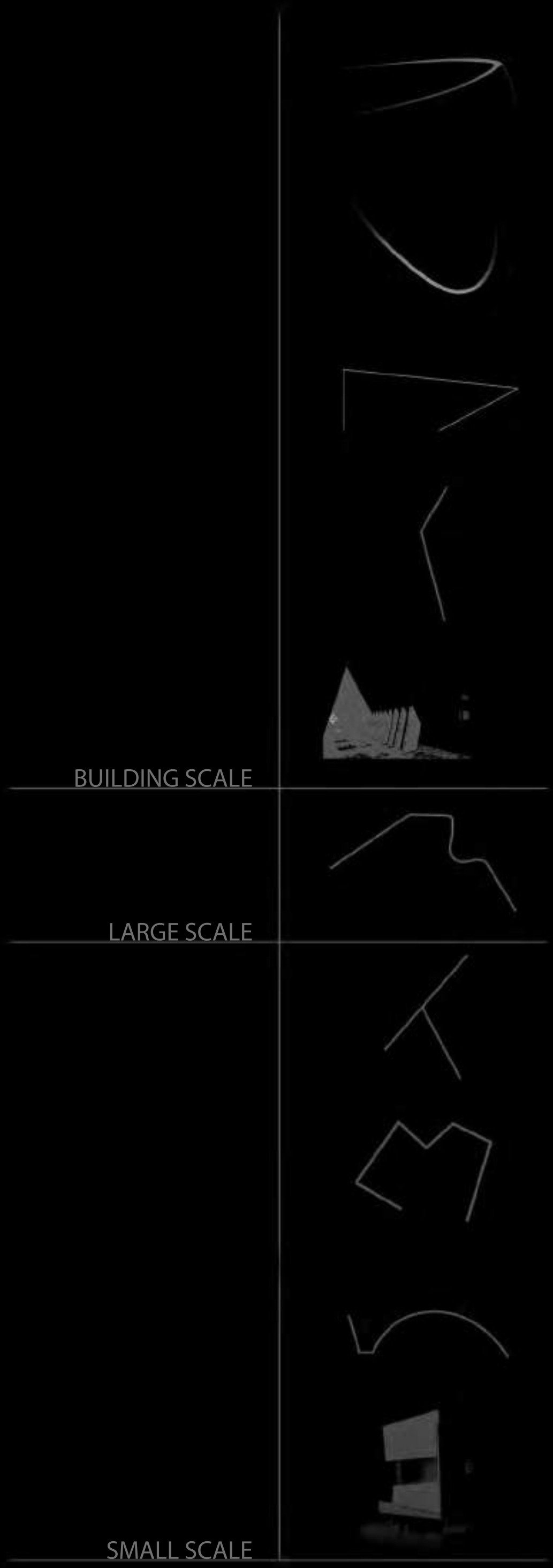

BUILDING SCALE
LARGE SCALE
SMALL SCALE

AUDITORIUM

(Academc project, 6th Semester)

AUDITORIUM

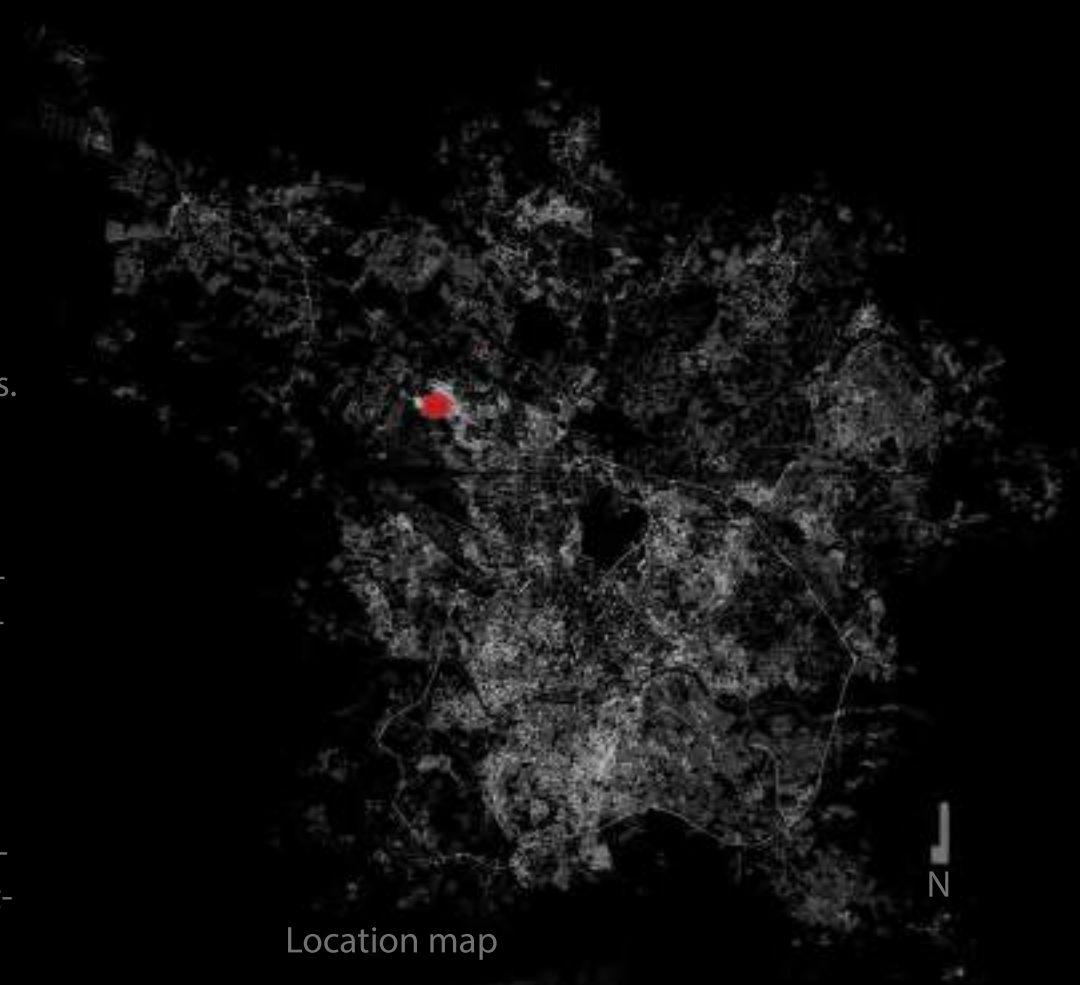
The time problem was to design an 300-seat auditorium facility for the public accomodating formal and informal communal assembles and also festive celebrations.

LOCATION: Hitex road, Kothaguda, Hyderabad.

CHARACTERISTICS: A regular contoured area bordering on the urban fabric and is surrounded by the IT Park and residential units along the Hitex Road at Kothaguda has four access roads i.e., a Main road and threeSerivce roads.

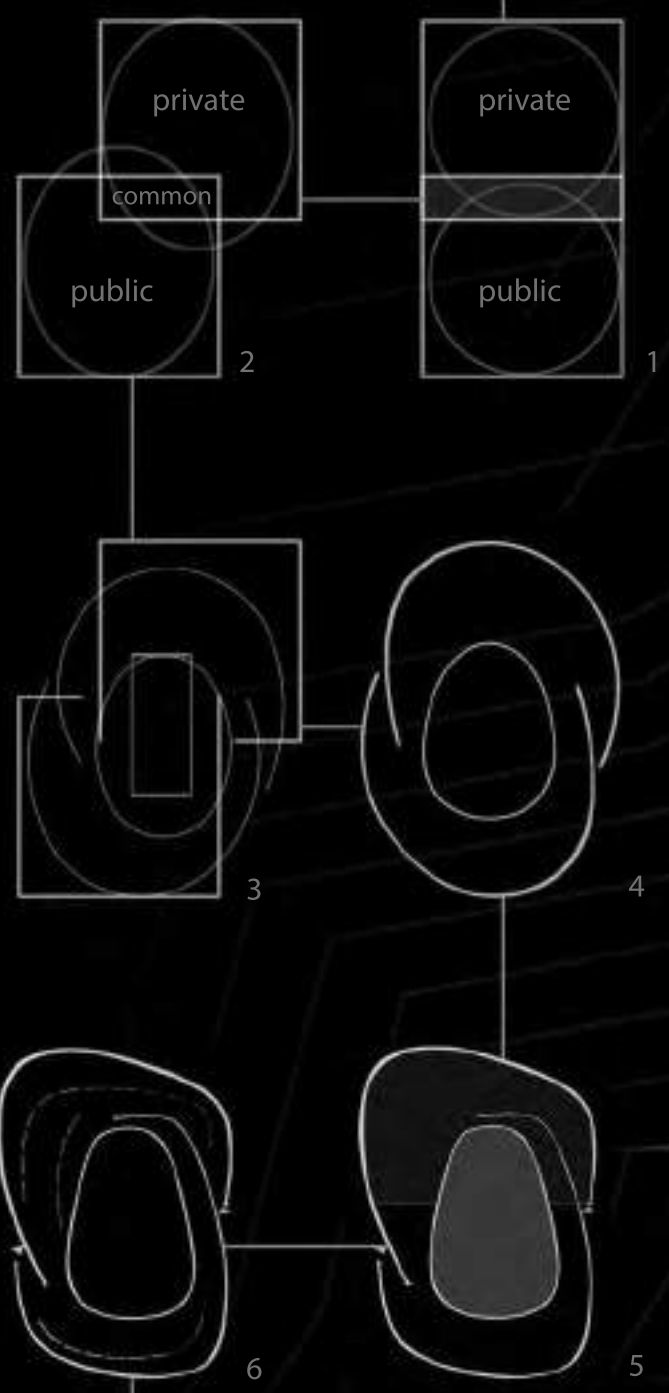
DESIGN: Main aim was to uplift the space out of its depressing environment and to evoke the worldliness in the people.

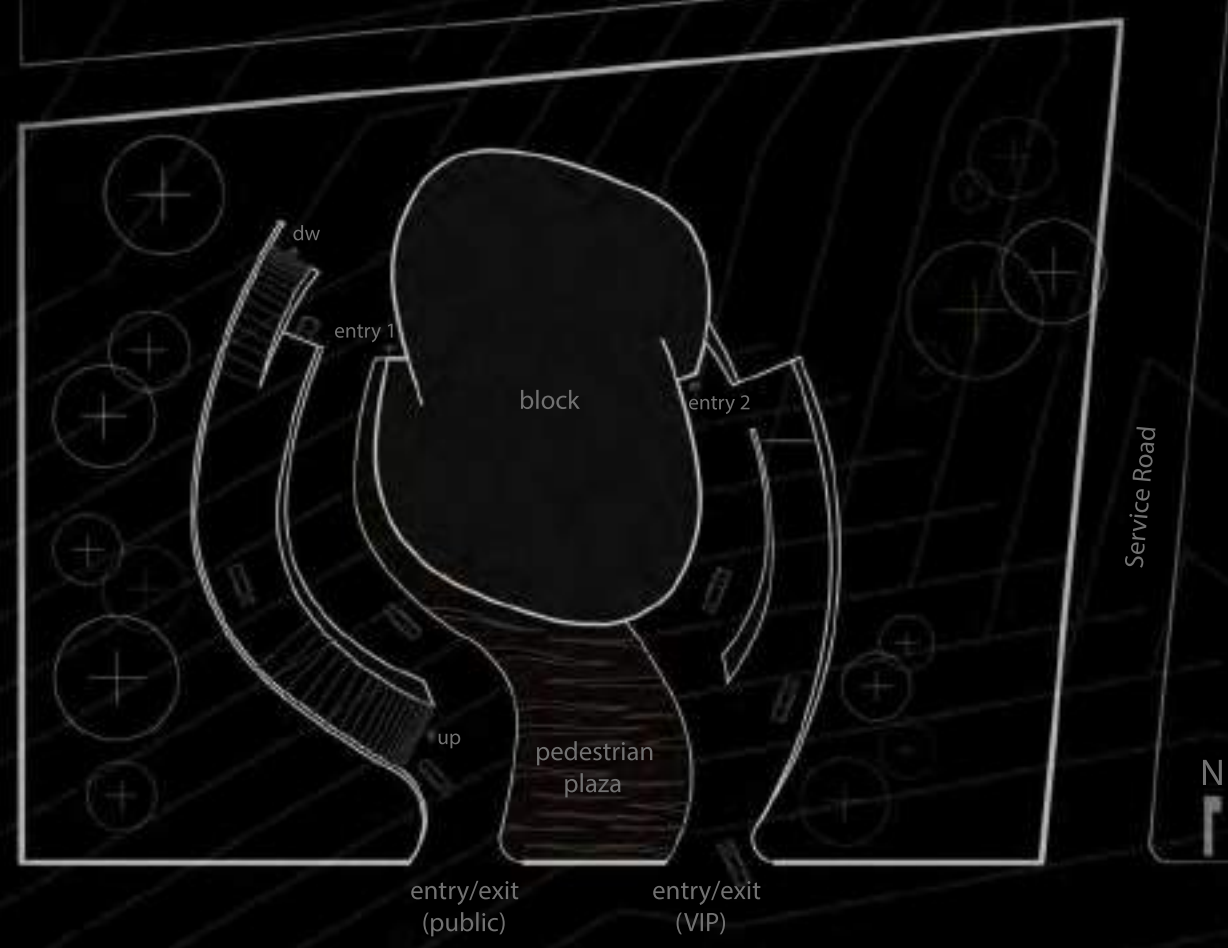
CONCEPT: The design has been evolved from the concept of juncture i.e., act of joining.
-The interplay between the performers and the viewers.
-The architecture expression between the hierarchy of serviced and servicing spaces.



Location map

Surroundings

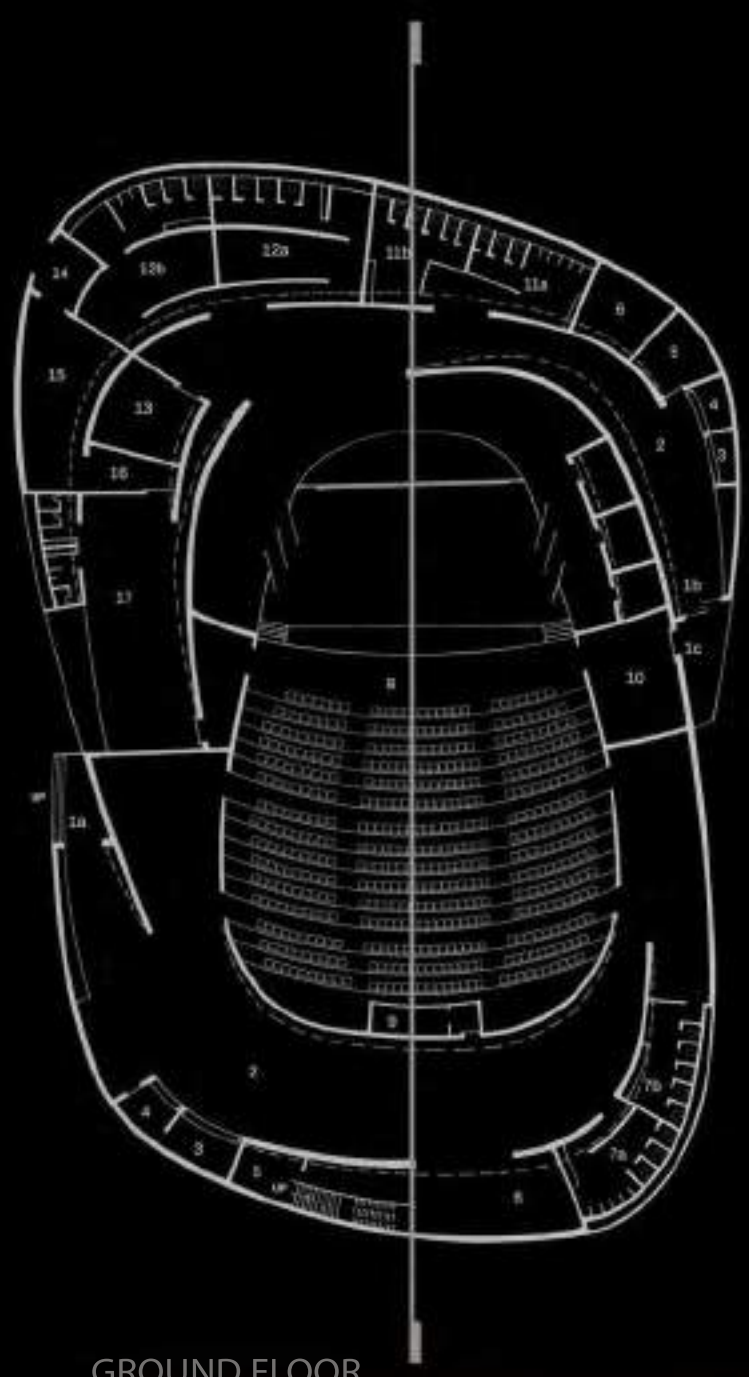




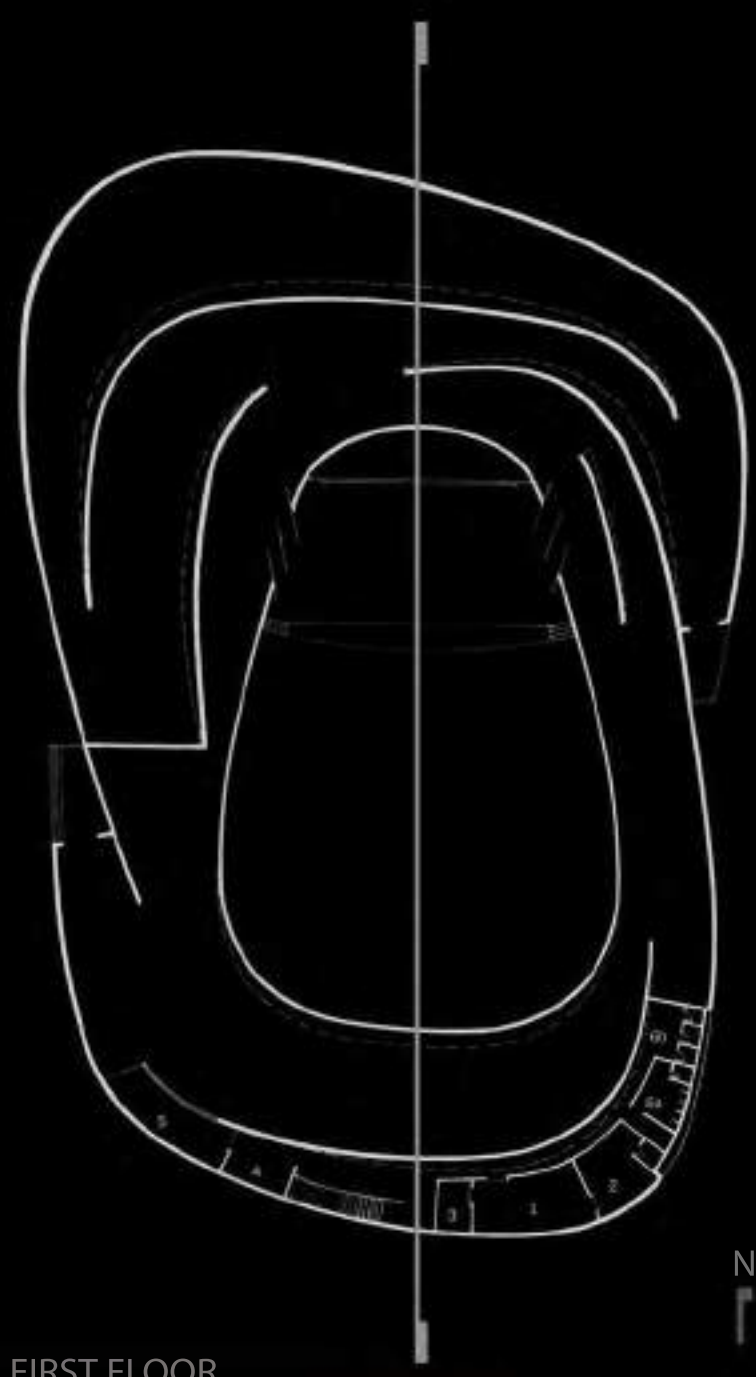
-The design establishes a fludic relationship between the surrounding plaza and the building interiors.
-The building interiors are further developed based on the hierarchy of the spaces.

FLOOR PLANS

1. Entry
   a. Public entry
   b. Private entry
   c. VIP entry
2. Entrance lobby
3. Reception
4. Ticket counter
5. Office
6. Snack bar
7. Public toilets
   a. Male
   b. Female
8. Auditorium
9. Projector room
10. Lobby
11. Staff toilets
12. Green rooms
    a. Male
    b. Female
13. Reharsal room
14. Entrance Porch
15. Kitchen
16. Pantry
17. Dining



GROUND FLOOR



FIRST FLOOR

N

1. Office room
2. Manager' s room
3. Store room
4. Lobby
5. Staff dining
6. Staff toilets
   a. Male
   b. Female

ELEVATION

1.Stage
2. Auditorium seating
3. Projector room
4. Lobby
5. Office room
6. Managers room
7. Back stage
8. Store
9. Lobby
10. Green room

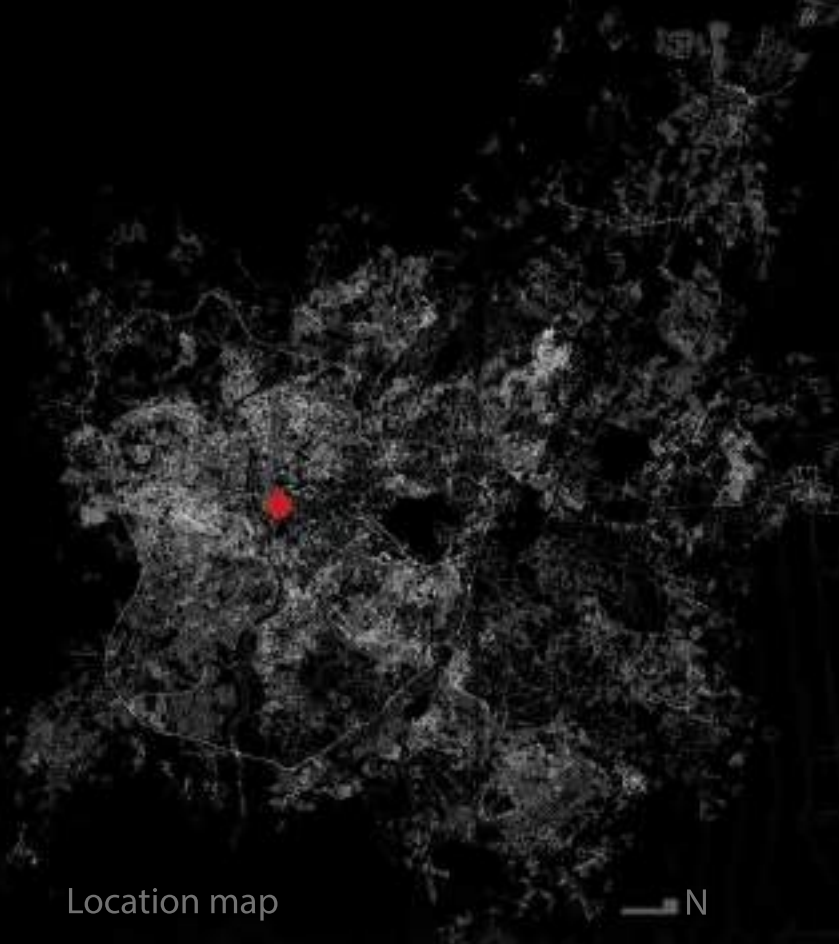
SECTION

- The auditorium, other public and semi- publice performance including reharsal spaces form the serviced and servicing spaces.
- The hierarchy between public and private forms a lined up band wrapping around the perimeter forming a concentrated interactive space in between each other i.e.,auditorium accessible to public from front while serviced from the back.
-The architecture expression of hierarchy is replicated in the form of formations which includes bifurcations, inflections of concentric spheres performs multitude functions i.e., welcoming, embracing and directing the visitors.
-Main source of diffused light is the skylight that helps in allowing natural light penetrate deep into the building giving a spectacular atmospheric effect. These skylights are prvided in between the inflected shells and the walls.

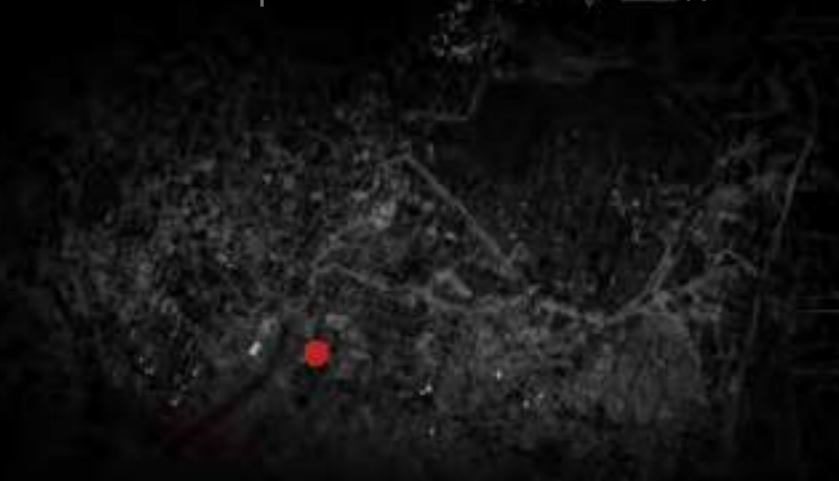
BUS TERMINAL

(Academc project, 6th Semester)

BUS TERMINAL

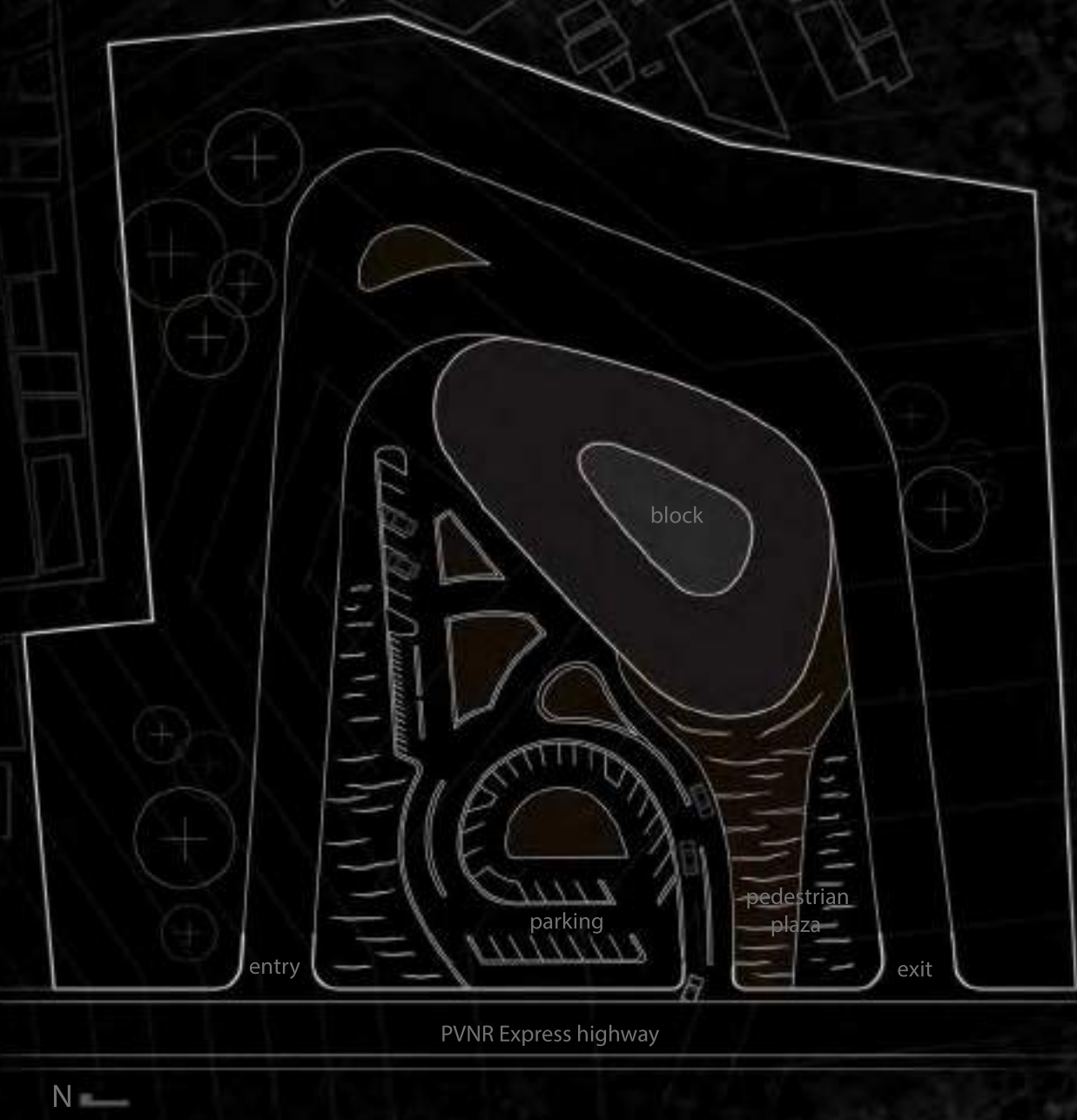


Location map



Density

SITE PLAN



The time problem was to design a bus terminal for the operators who have no organised terminal.

Location: PVNR Express highway, Hyderabad.

Characteristics: Site is located in a dense urban fabric consisting of residential colonies along the PVNR express way at athapur, has only one access road.

Design- Main aim was to design the terminal which is functionally active and is easily accessd by all the user groups.

Challenges:

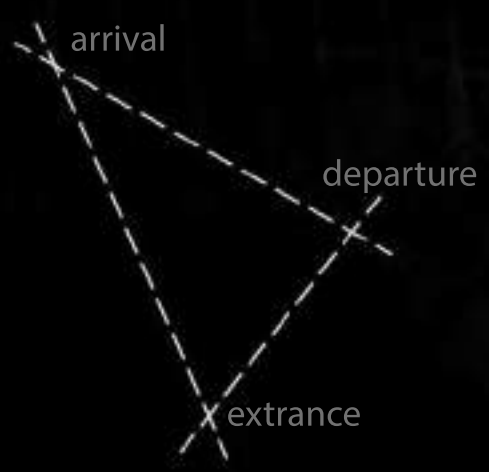
Site is a challenge by itself which includes-

-Separation of commuter and bus path.

-Ariving and Departure activity.

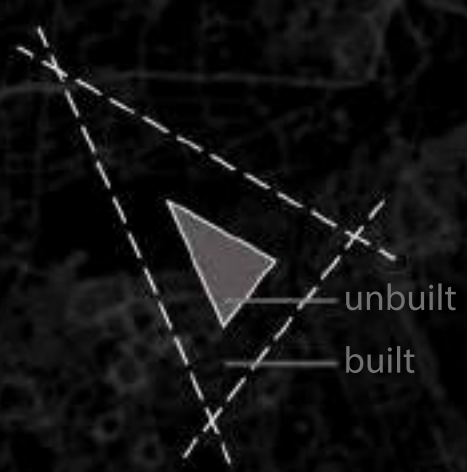
CONCEPT

VISUAL CONNECTIVITY

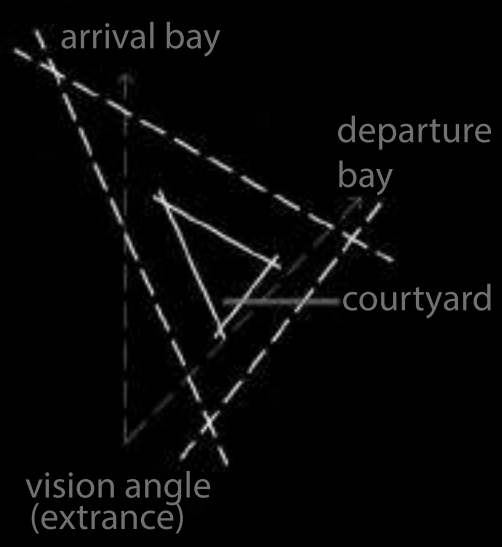


1. Connection of arrival and departure spaces.

2. Visual connection of arrival and departure bays with the entrance.



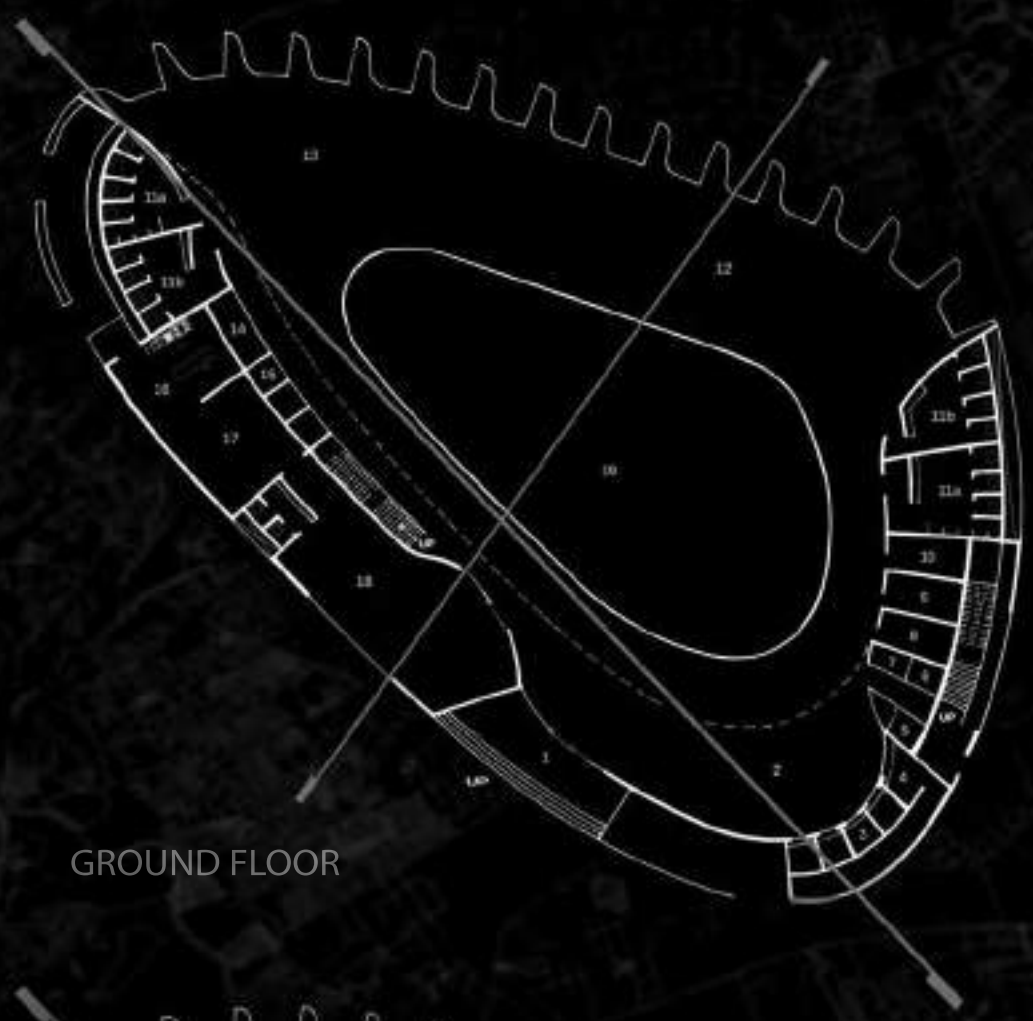
2. Built to un-built volume



To avoid the dead apaces and visual disturbances, the form has been transformed resulting dynamism - in the design.

FLOOR PLANS

- The terminal is formed by both conceptual and functional considerations resulting in fludity.
- Organic lines comose a continum and dynamism within the interiors and exteriors maintaining the relationship with the surrounding plaza.
- The architectural structure of the terminal is a series of arch shaped elements with a central courtyard.
- The courtyard has a large transparent opening to the sky forming skylight.
- The skylight floods the daylight into the terminal and distributes evenly in all directions.
- The spatial layout gives a strong perspective views throughout the inteiriors
-Arrival bay and dearture bays are visualy connected to the users from the main entrance.
- The courtyard serves as an intermediate space between the bays and the entrance.



GROUND FLOOR

1. Entry
2. Entrance lobby
3. Enquiry
4. Ticket counter
5. Flourist shop
6. Newspaper shop
7. ATM
8. Baggage room
9. Leftover luggage room
10. Cloak room
11. Public Toilets
    a. Male
    b. Female
12. Departure lounge
13. Arrival lounge
14 Snack bar
15. Kiosks
16. Kitchen
17. Pantry
18. Restaurant
19. Courtyard

FIRST FLOOR

1. Lobby
2. Office
3. Manager' s room
3. Store room
5. Staff Toilets
6. Staff Dining
7. Restrooms
8. Restaurant
9. Pantry
10. Service Lift
11. Dormatories
    a. Male
    b. Female

N

1. Restaurant
2. Lobby
3. Kiosk
3. Snack Bar
5. Arrival Bay
6. Deprture Bay
7. Dormatories

SECTION

ELEVATION

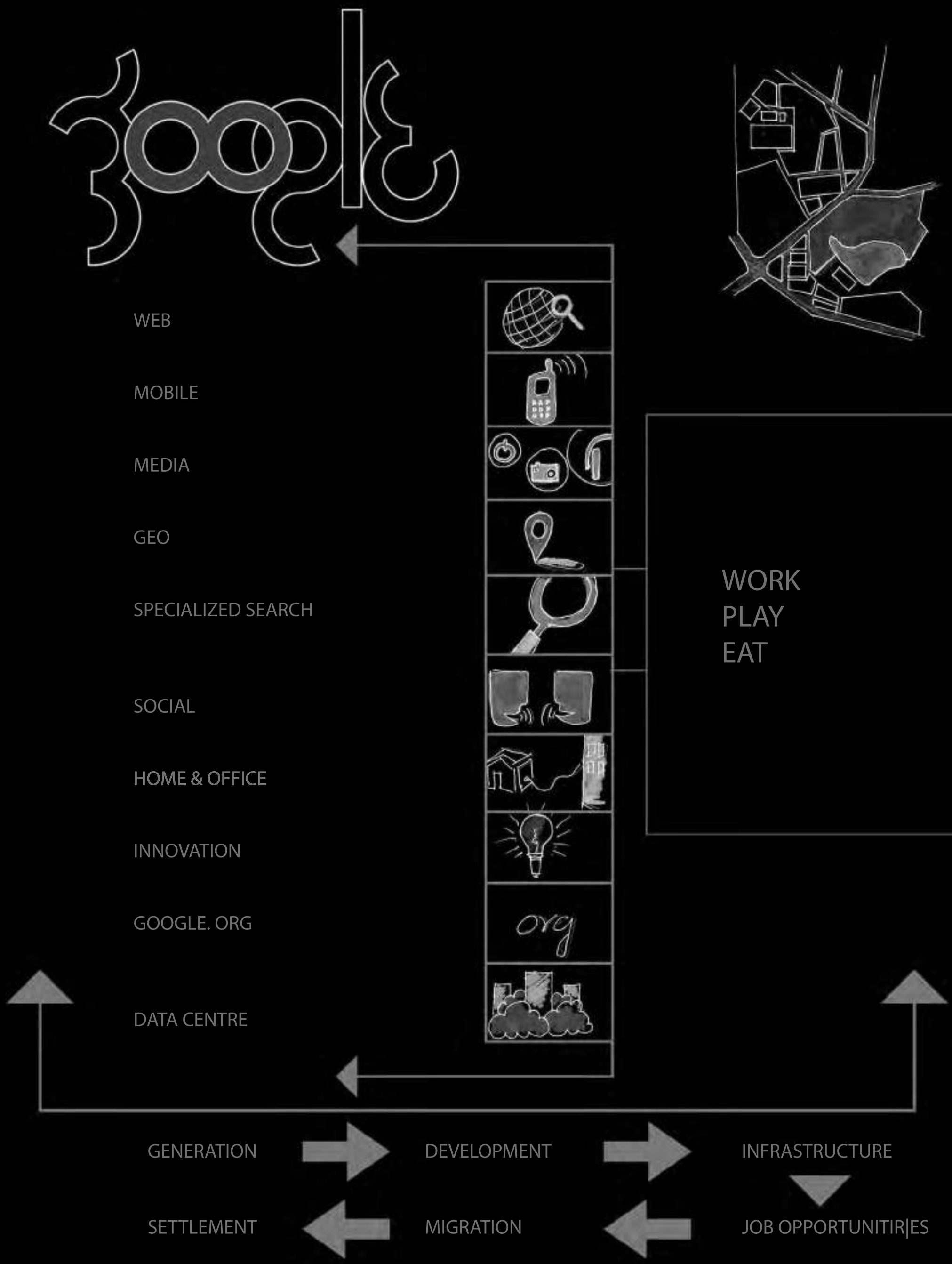
-Evenly spaced long span trusses are provided to achieve the column free space.

Materials:

1. Fibre- reinforced plastic(FRP) as it is light weight and can with stand extreme tempratures. Luminous FRP panels are held in place by steel frame.
2. Glass

GOOGLE CAMPUS

(Academc project, 6th Semester)


WEB
MOBILE
MEDIA
GEO
SPECIALIZED SEARCH
SOCIAL
HOME & OFFICE
INNOVATION
GOOGLE. ORG
DATA CENTRE
org
WORK
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EAT
GENERATION
DEVELOPMENT
INFRASTRUCTURE
SETTLEMENT
MIGRATION
JOB OPPORTUNITIR|ES

REPORT:

SITE LOCATION:
KHANMET, TIMIDKUNTA.
IT OCCUPIES A PRIME LOCATION AND IS OF HIGH ECONOMIC VALUE, MERGING INTO THE DEVELOPING SIDE OF IT SQUARE. THE SITE IS SURROUNDED BY THE EXISTING IT HUB AND IS SLOWLY BECOMING THE FOCUS OF THE CITY.

TOPOGRAPHY:
THE MAJORITY OF THE SITE IS COMPOSED OF A UNPERTURBED ROCKY LANDSCAPE WITH WILD VEGETATION.LANDSCAPE WITHIN THE SITE IS UNDULATING, PROVIDING A LOT OF VIEW POINTS.

SITE SURROUNDINGS:
MOST OF THE SITE SURROUNDINGS ARE SIMILARLY UNDISTURBED, WITH SOME CONSTRUCTION ALONG THE MAIN ROAD. THESE BUILDINGS ARE PRIMARILY COMMERCIAL WITH SHOPS AND OFFICES, ALONG WITH RESIDENTIAL CONSTRUCTION TOWARDS THE INTERIOR.TOWARDS MADHAPUR , ALOT OF TEMPORARY SHELTERS AND SMALL SLUMS ARE SEEN ALONG THE PERIFERY OF THE SIE.

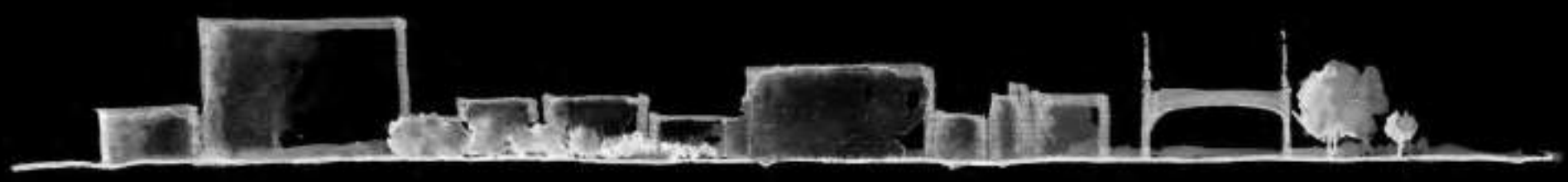
SOCIAL CONDITIONS AROUND THE SITE:
TOWARDS ONE OF THE LARGER PART OF SITE, THERE ARE ILLEGAL SETTLEMENTS AND SLUMS. BUT SHARP IN CONTRACT OTHER SURROUNDINGS FEATURE HIGH CLAGS RESIDENTIAL BUILDINGS AND CONVENTION CENTRE INCLUDING A 3- STAR HOTEL.

ACCESSIBILITY:
THE SITE IS WELL CONNECTED BY PUBLIC TRANSPORT, APART FROM HAVING A VERY GOOD ROAD CONNECTIVITY ON ALL SIDES. THE LOCAL MMTS STATION IS BARELY A FOURLONG FROM ONE SIDE OF THE SITE. THERE ARE MULTIPLE BUSSTOPS AROUND THE SITE, MAKING ANY POINT ON THE SITE EASY TO ACCESS.

CONCLUSION:
THE SITE IS IDEAL FOR A CORPORATE ESTABLISHMENT, INCLUDING RESIDENTIAL QUARTERS.

IT IS POSSIBLE TO CREATE CERTAIN ELEMENTS THAT CAN PROVE TO BE ICONIC, DUE TO THE UNDULATING CONTOURS AND VIEWS VISTAS FROM THE SITE.

THE WATER BODY WITHIN THE SITE COULD BE USED TO THE ADVANTAGE OF SITE. AS A DATA CENTRE REQUIRES HUGE AMOUNT OF WATER AND ALSO COMMON AMENITIES IN THE CAMPUS CAN BE PROPOSED AROUND THE LAKE, CREATING A SOOTHING AND RELAXING ATMOSPHERE FOR THE USER.



SITE SURROUNDINGS

CONTEMPORARY HIGH- RISE STRUCTURES:

Avoiding enclosed design.
- Indesing the hidden services.

Elevation treatment according to climate conditions
- Views and vistas.

PUBLIC- CULTURAL SPACE:

Retaining the topogaphy.
- Landscape design.

Construction materials.
- Design of he public recreational space using water body.

CII BUILDING:

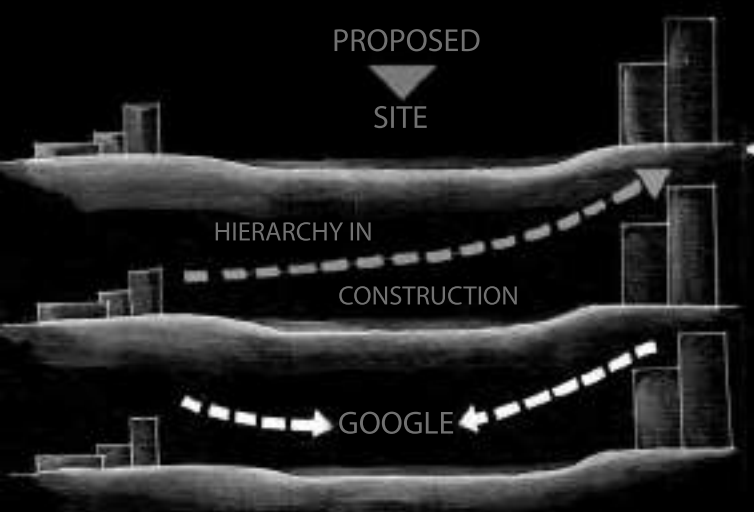
Introducing sustainable design techniques.
-Wind Towers

CONVENTION CENTRE:

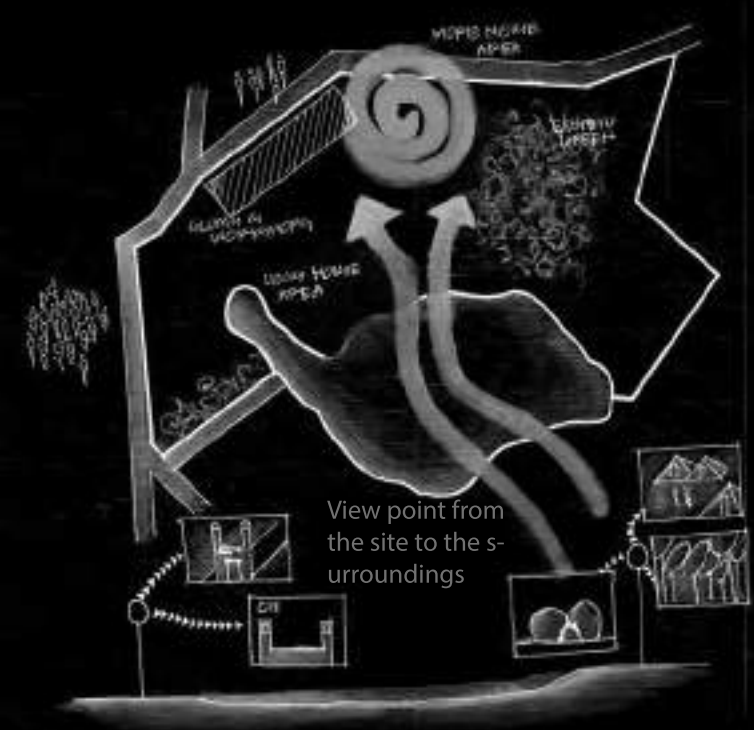
Public social gathering point.
-Absence of buffer space between the built form and the water body.

SITE LEVEL STUDY

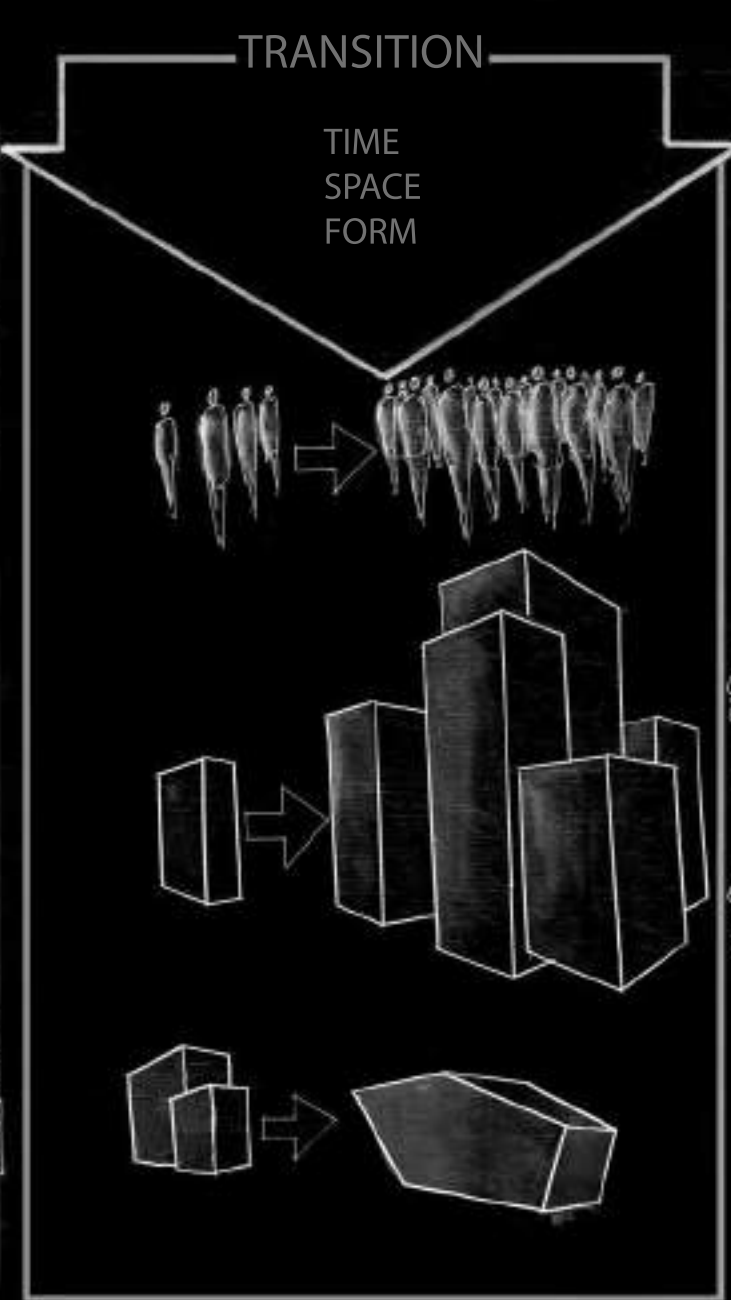
OUTDOOR- OUTDOOR



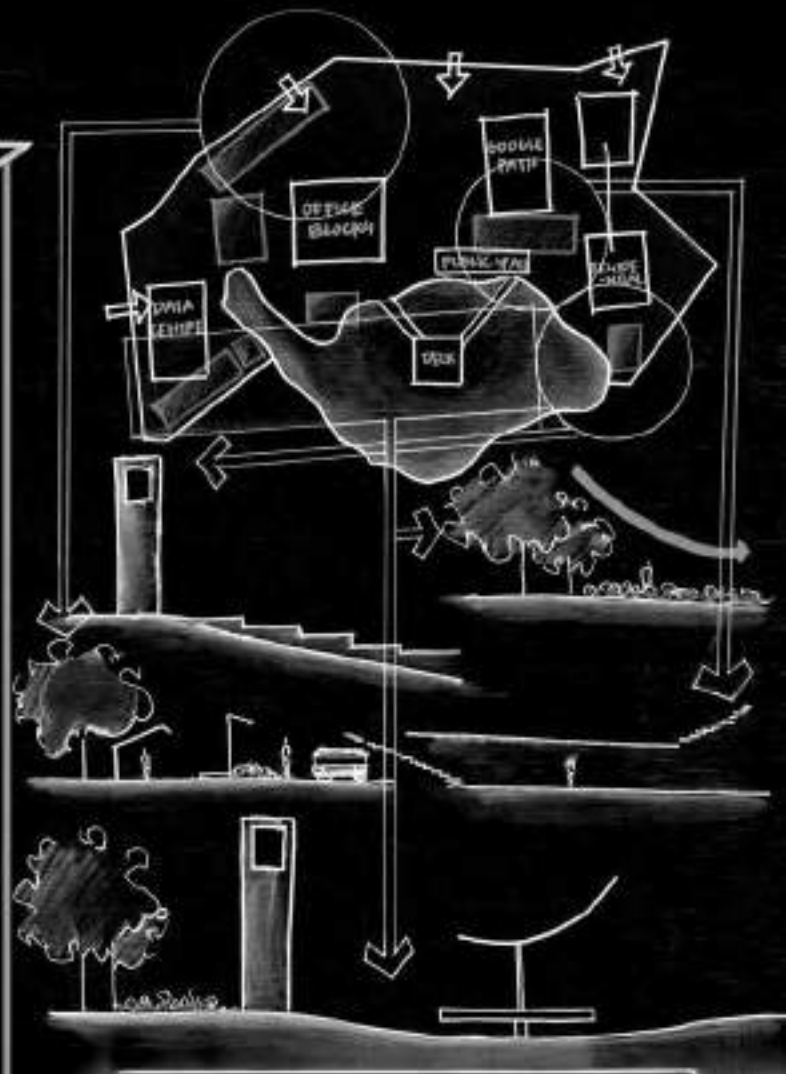
ACTIVE AND PASSIVE ZONING



TRANSITION

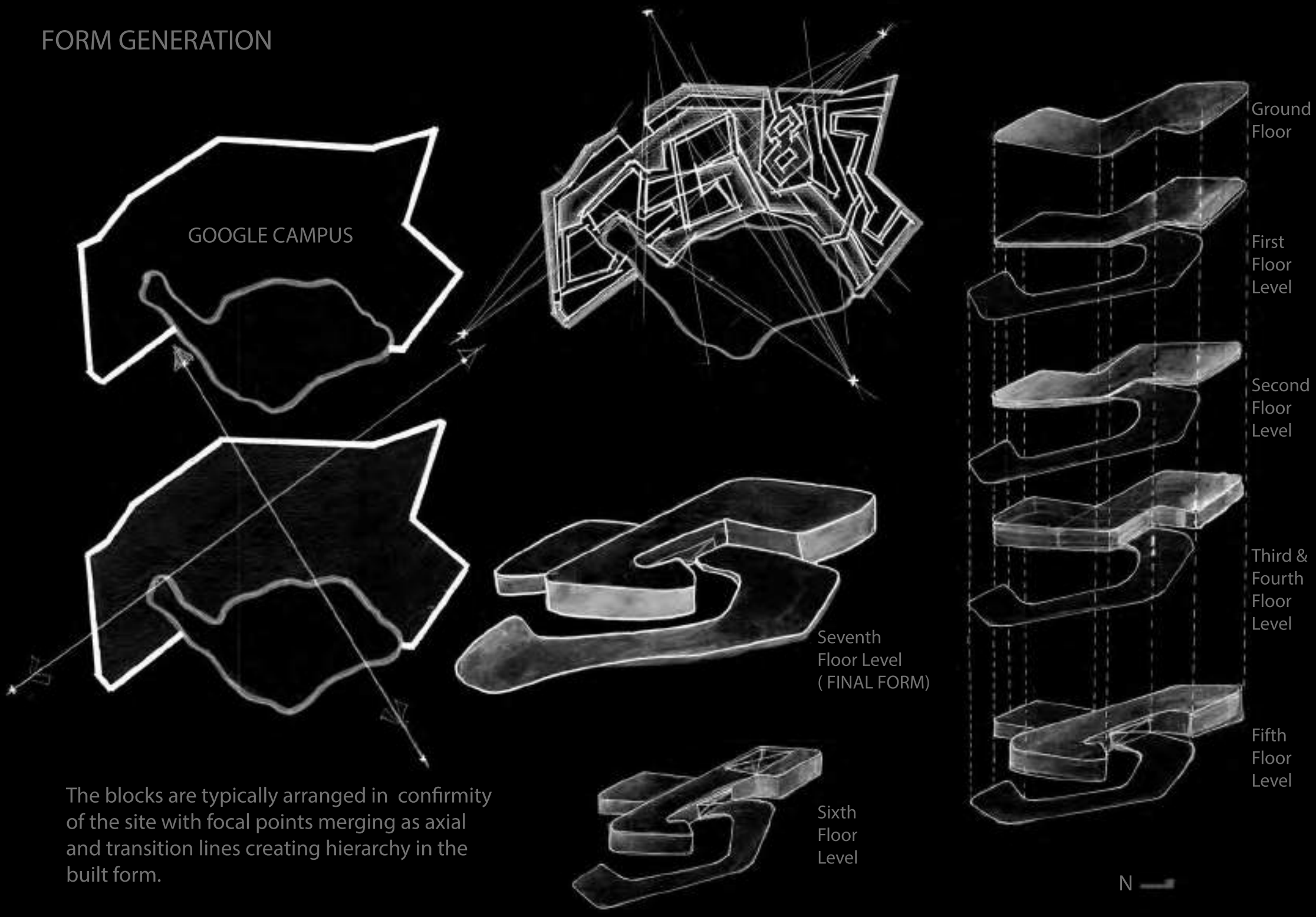


OUTDOOR- INDOOR



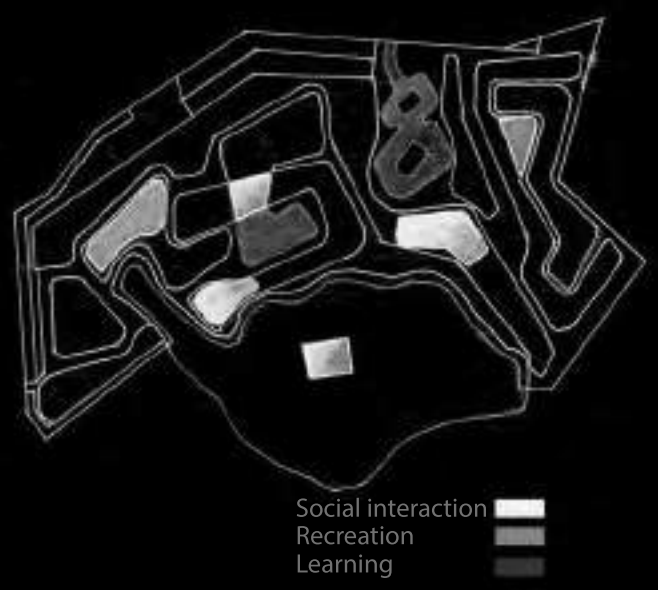
The strongest principle of growth lies in the TRANSITION

FORM GENERATION

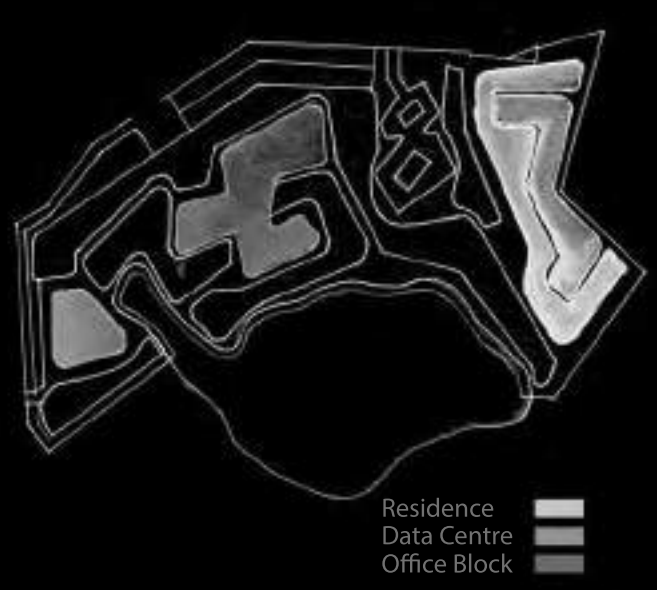


The blocks are typically arranged in confirmity of the site with focal points merging as axial and transition lines creating hierarchy in the built form.

FUNCTION

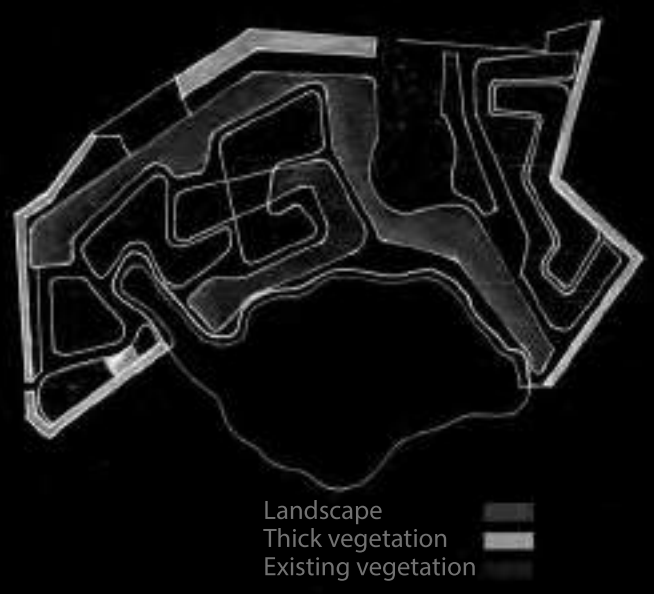


BUILT FORM

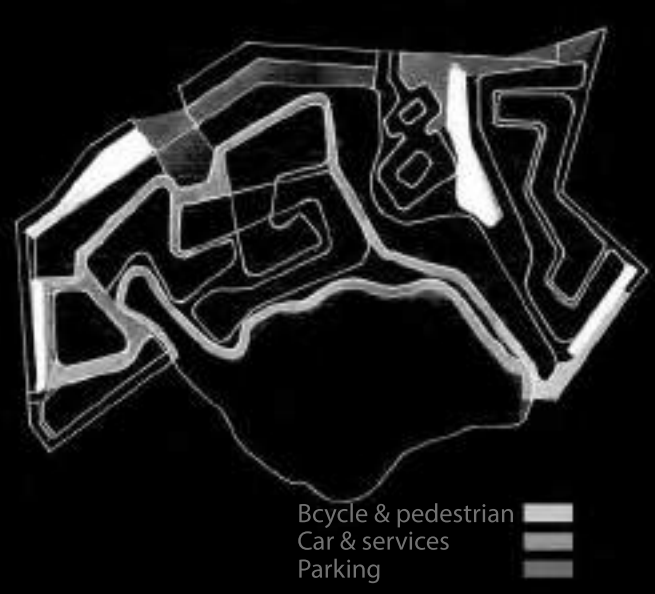


BUILDING SERVICES

VEGETATION



ACCESS



CIRCULATION

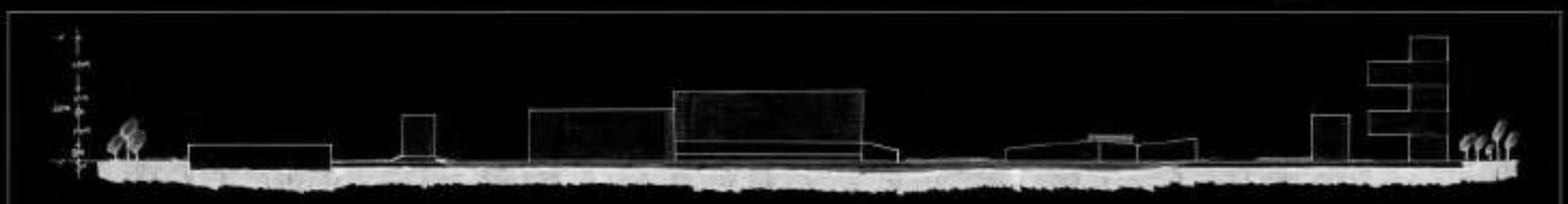
SITE PLAN

BUILT UP - 22%
LANDSCAPE- 45%
ROAD - 18%
AMENITIES - 15%

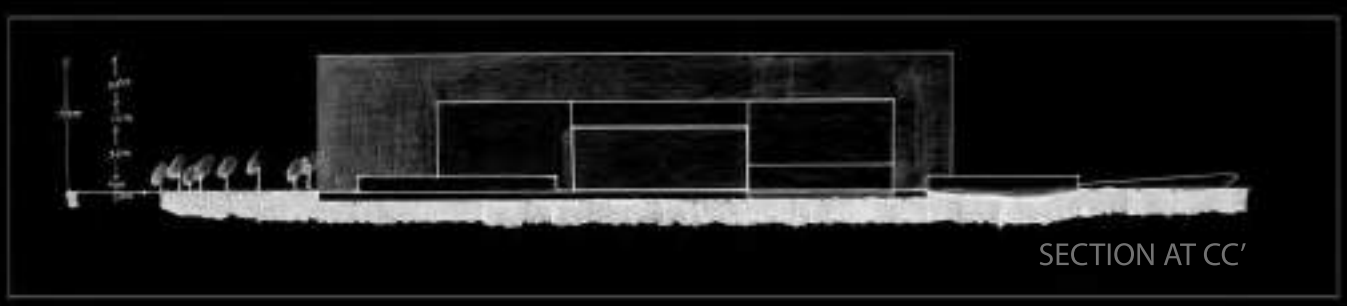
SITE SECTIONS

SECTION AT AA'

EACH SECTION OF THE CAMPUS OFFERS PANORAMIC VIEW OF THE SPACES TREATED WITH LANDSCAPE IN THE SITE.



SECTION AT BB'

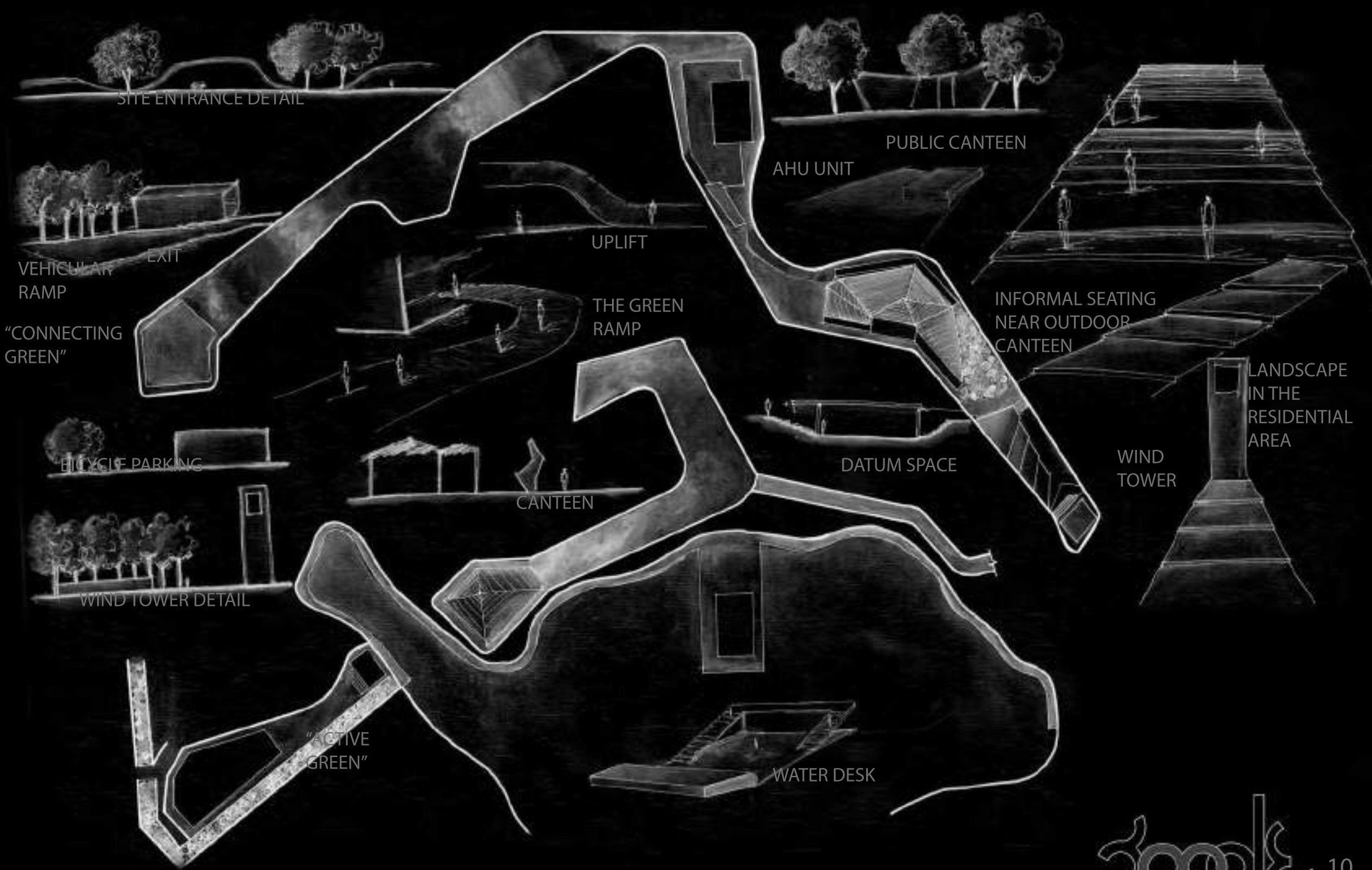


SECTION AT CC'

ZONES

LANDSCAPE DETAILS

N



STUDIOS

DESIGN ARCHITECTURE STUDIOS:

Internship and Professional practice at DESIGN ARCHITECTURE STUDIOS has given me an insight of different roles , responsibilities an architect could perform and gave an exposure in dealing with large scale project like club house to a minuscule scale like table. Also allowed me to deal with various aspects involved in evolution of project from an idea to built reality, the work and details that goes in every stage. Having given an opportunity to deal with around 20 projects, involved design development process later. Participation in client meetings and site visits gave me better understanding on architectural evolution of the projects. The ideologies, technical aspects, design and the implementation process involved in each project are independent of each other. These above factors gave a new perspective towards exploring architecture. Presenting some of the works I was closely associated with.

FURNITURE DESIGN- DISCUSSION TABLE

(Internship)

DISCUSSION TABLE

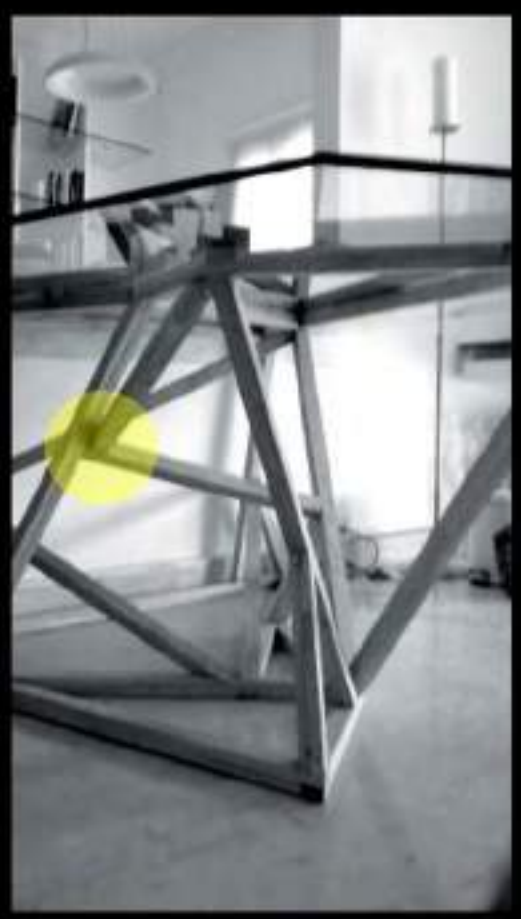
LOCATION: DESIGN ACHITECTURE STUDIOS, Jubliee Hills, Hyderabad.

TASK: Design a discussion table for the studio, used during the intractive sessions as a part to studio work.

CHARACTERISTICS: The studio has been conceptualized as an open office with main cabin of cheif architect separated from the workstation to maintain the privacy and an opening provided in between for the visual connection. The studio is 20'x20' space consistng of desk running along the wall and a display unit at the entrance.

DESIGN CRITERIA: A simple self explanatory furniture which is gives cues about the scale.
-Blends in with the interiors.
-Minimize the space consumption of the furniture and maintain the buffer space between the desks for the movement.
- Transarent and lighter in terms of design to avoid the hindrance of light.

1



2

Using a working model, in each stage the principles nad functions are analysed and thus, the design has been further developed.In this process,
a. primary and
b. secondary junctions are formed

1. Primary junction: The node, where the longitudinal members connecting the top frame and bottom frame intersect. For additional support, intermediate supports are provided to the primary braces.
2. Secondary junction, supporting the intermediate braces and thus helps in distributing the loads uniformly.

CONCEPT: BRACING
-A brace frame is a structural system designed primarily to reisit wind and sesmic forces.
- The members in braced frames are designed to work in tension and compression.
- Extensively used in construction of large scale projects to small scale.
- Bracing is categorized into two types:
  a. Concentric Braced Frames
  b. Eccentric Braced Frames

Concentric Braced Frames (CBF) are structures resisting lateral loads through a vertical system, the axes of the members align concentrically at the joints. Most of the braced frames are concentric i.e., the members intersect at a node.

OBSERVATIONS:
- Load bearing capacity and transfer of loads by providing additional supports i.e., braces.
- Proportation, Scale and Balancing of the structure.
- Material usage i.e., minimization of wastage of material by simplifying the design and use the residue.

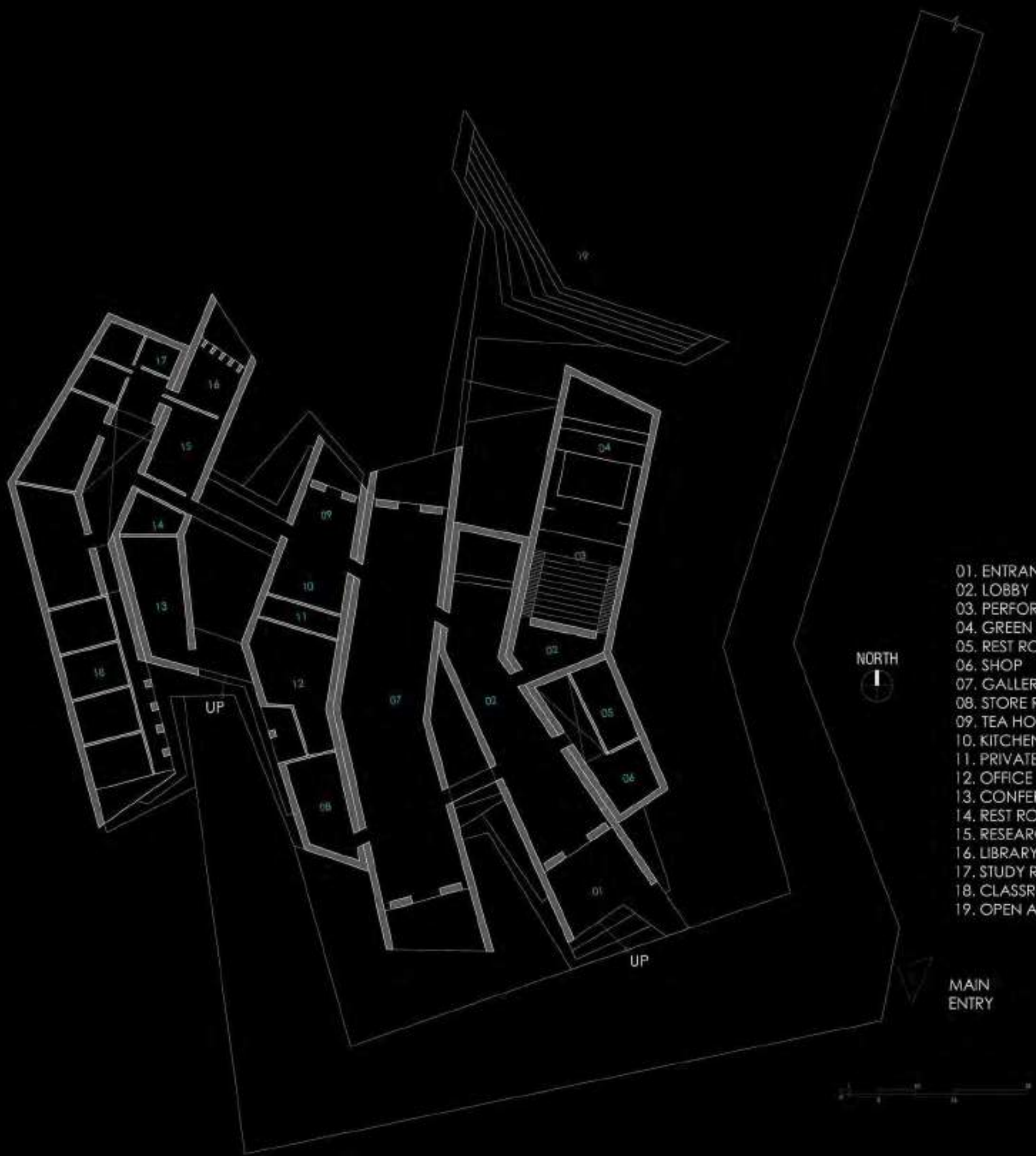
MATERIALS:
1. Brace Frame- Wood
2. Glass top

BAMIYAN CULTURAL CENTRE

(Internship)

A representation of this culmination and continuum has to be its cultural centre which simply is a cavum- aedium saluting and bowing to the arti-fact and inspiration that is Bamiyan. Rather than dictating for a stately and monumental cultural centre, it humbly bows down, respectfully is re-questing for, an elemental form like its agrarian life; a spirited venture like it vigorous sports; an intricate weave to become part of their lives like its calligraphy or poetry & yet homely exotic accomodating guests of its country, nourishing them with its culture jus like its cuisine.

Richness of its heritage,Historicity of its monuments,And a cultural pabulam,this is Bamiyan valley.
This is the culture that shaped this ' Centre for Culture' with vitality of the valley and its people's idealistic expression.



01. ENTRANCE
02. LOBBY
03. PERFORMANCE THEATRE
04. GREEN ROOMS
05. REST ROOMS
06. SHOP
07. GALLERY
08. STORE ROOM
09. TEA HOUSE
10. KITCHEN
11. PRIVATE REST ROOMS
12. OFFICE
13. CONFERENCE
14. REST ROOMS
15. RESEARCH
16. LIBRARY
17. STUDY ROOMS
18. CLASSROOMS
19. OPEN AIR THEATRE

Weaving
Developing a weave through praises, pastures and politics these rectilinear patterns have survived the strong waves of time.

Cooking
Unexpected but definitely not unexplored, cooking is all about guests and providing them with nourishing food. A cuisine which is exotic yet ever accommodation.

Calligraphy Poetry
A calligraphy which is as beautiful and yet complex as the intricate woven Timurid geometric patterns, is a humble comparison to the classical poetry of wit and prudence.

Sculpting / Painting
Being the crossroads for diversity and magnificence, an abundance of treasures in the form of paintings and sculpting from five historic cultures (Indian, Hellenistic, Islamic, Roman, Sasanian) have added to the refinement of the art forms.

Leather
A mixture of utmost smoothness, suppleness and yet strength is the skill and fashion of the unusual Karakul pelts which caught the western fashion eye for its high quality, soft fabric and deep dark colours.

Wool Spinning
An elaborate process which is resourceful and over time is eased as self sustaining occupation is the way life in this valley has spun itself.

Spices
A rare commodity that which magnetized the east to the western world and thence laid a linear route between the two.

Games
Spirited, soaring and vigorous are the sports accentuating life and vitality of the valley.

Music
Instruments Passion and appreciation to subtle sounds of the valley have rendered life here sensitive to rhythmic and harmonious nature of life and its fulfilling quality.

Architecture
Respecting the local resources; as representatives of the locale; elemental in approach; is the simplistic form of sheltering and security woven in the valley.

Farming / Agriculture
A cliff overlooking the steppes which is a colourful sight of an agrarian community. Charming, breath taking and idealistic is this valley rich.

Planform

Design of the cultural centre is a series of cavum-aedium, making the form a part of the steppes, while highlighting the characteristic terraced layout of the community. The spaces at several strategic points unexpectedly open to either a view of the Buddha Cliff; the beautiful landscape; or the citadel Shahr-i-Ghulghulah.

Orientation and Construction

Planform has been oriented to N-S for capturing / concealing maximum possible diurnal temperature variation. Construction system of Pakshe or pressed mud has been adopted to double the effect of protection from the variations in the temperature. For the longer working hours of research personnel or the lectures this solution is both highly advantageous, and sustainable.

Builtform

The builtform is a representation of progressive future which is in store for Bamiyan and in turn to Afghanistan. It has an addendum quality wherein layers of forms can be added with time and requirements without interrupting the valley.

KINETIC SCULPTURE(THEO JANSEN BEEST)

(Internship)

KINETIC SCULPTURE/ WORKING MODEL

TASK: Study and analyze the functioning and mechanism of Kinetic Sculpture/ Strand Beest created by Theo Jansen, a Dutch Artist and make a prototype of this sculpture based on the mechanism.

PURPOSE- Kiosk

INTRODUCTION:

The kinetic sculpture possessing movable mechanism known as Strand Beest (Strand- beach, Beest- beast) an example for artificial life. A skeletol object, which reacts to environmental elements such as strom and water

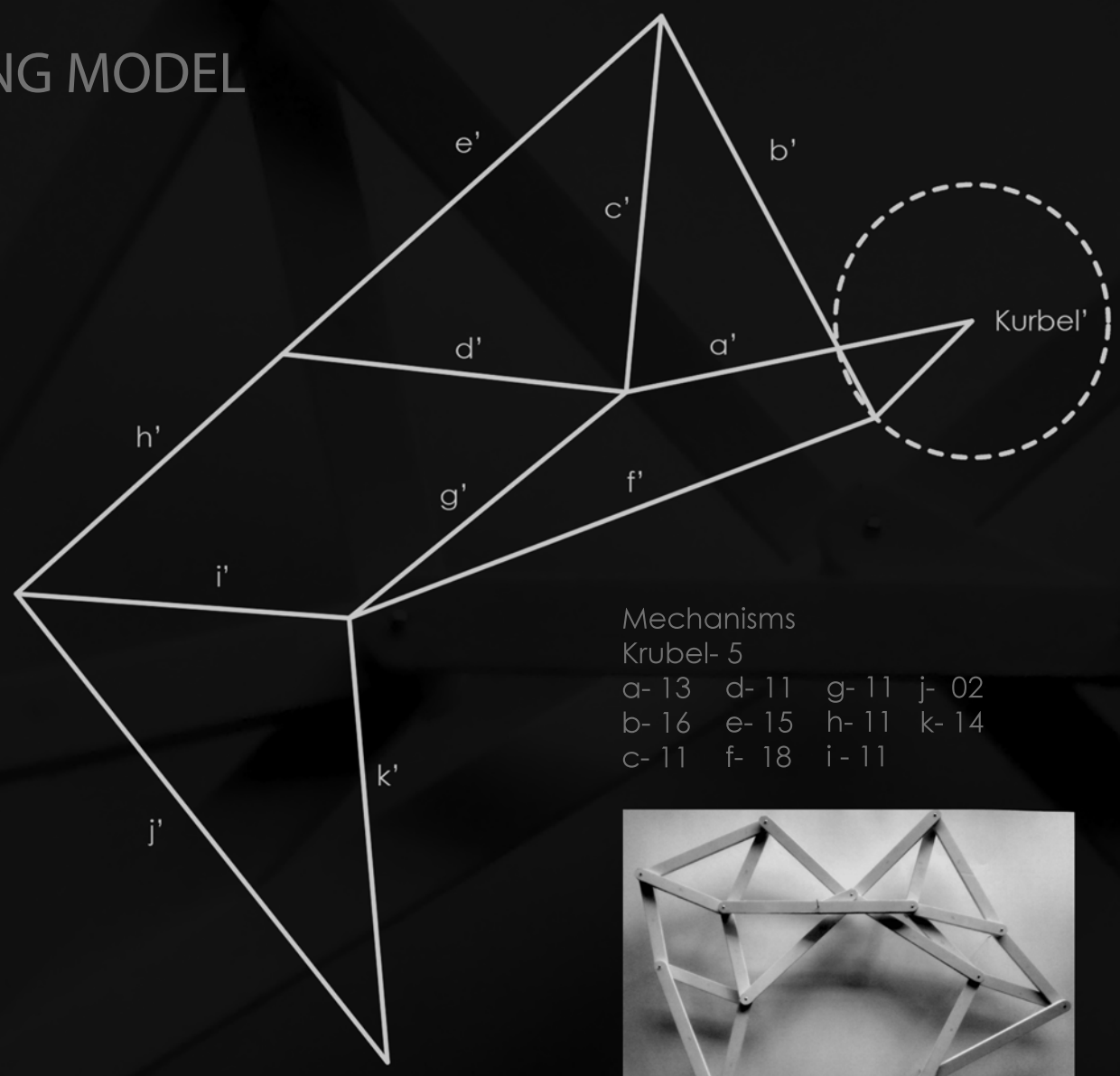
CONSTRUCTION:

This sculpture is constructed as an intricate assemblage foamcore PVC piping, wood, wing-like sails.

MECHANISM:

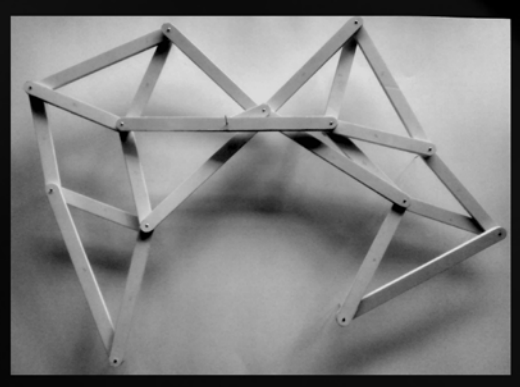
-The strand beet works on the leg mechanism i.e., assembly of links and joints(a linkage) intended to stimulate the walking motion of any living being. The mechanical legs have one or more actuators, and can perform simple planar or complex motions.

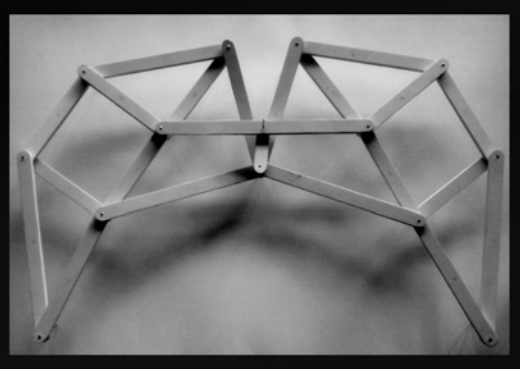
-The sculpture rotates on the pivot point and the legs don't touch completely to the ground. The sculpture move in the pressence of the wind and also has the ability to store the air pressure and use it to drive them in the absence of wind.

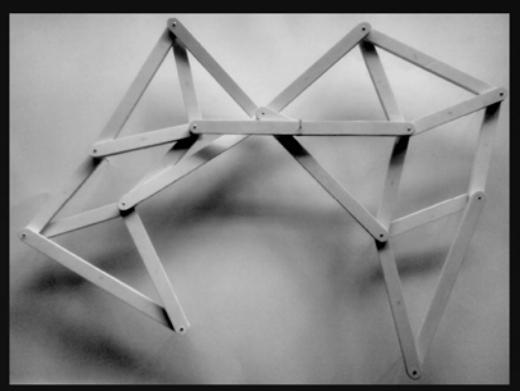


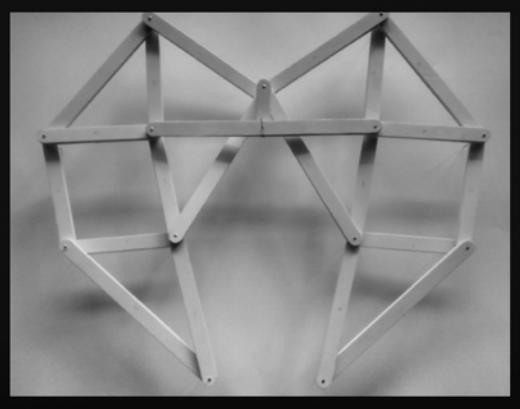
Mechanisms
Krubel- 5

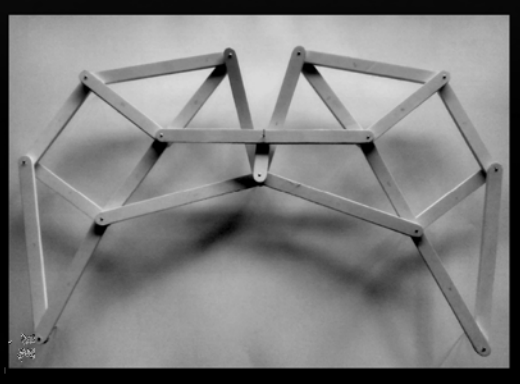
a- 13	d- 11	g- 11	j- 02
b- 16	e- 15	h- 11	k- 14
c- 11	f- 18	i - 11	

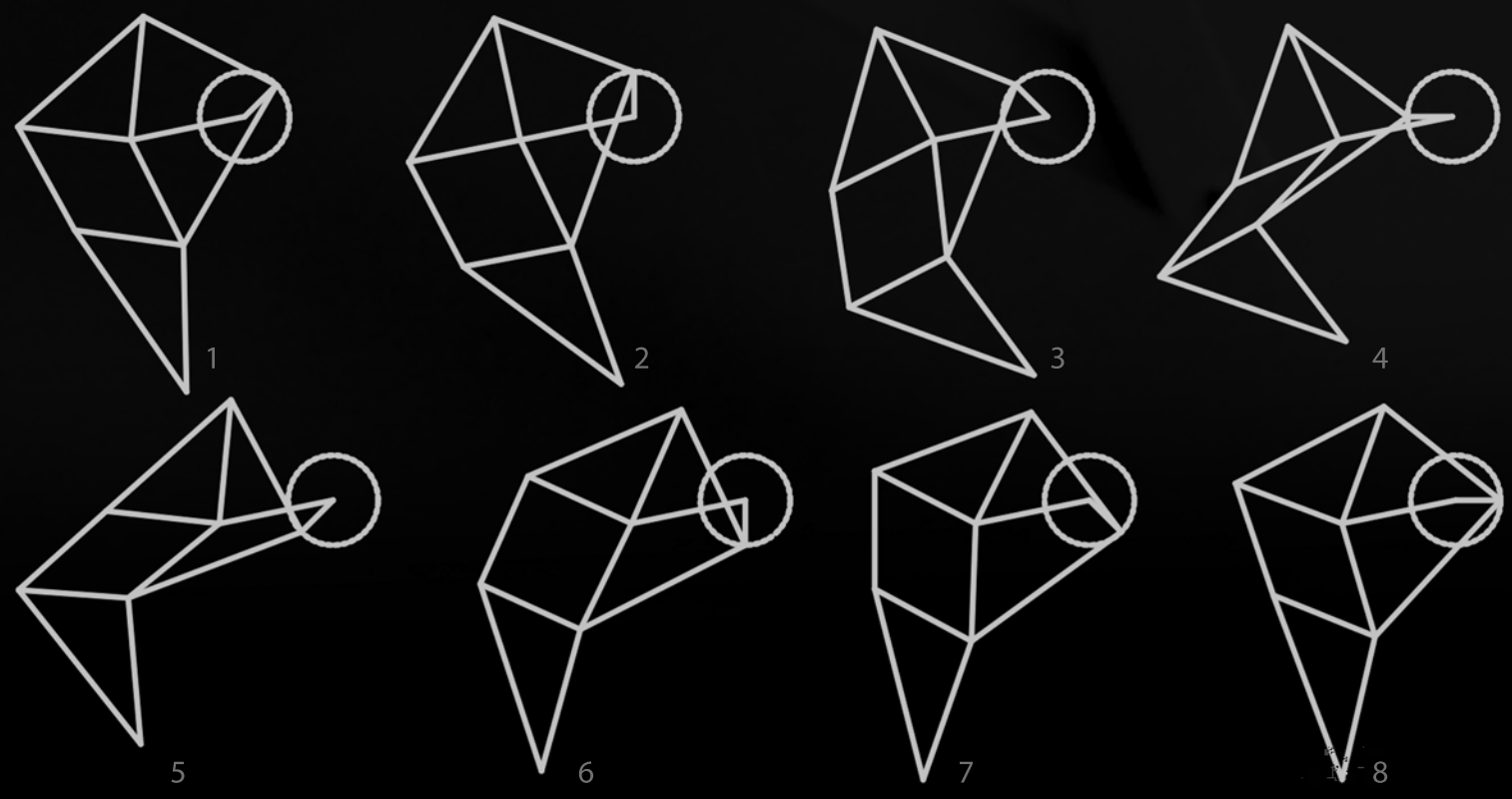












Moving mechanism of stand beast leg

WORKING MODELS(RH-5, CHINNABABU RESIDENCE)

(Professional Practice)

WORKING MODEL

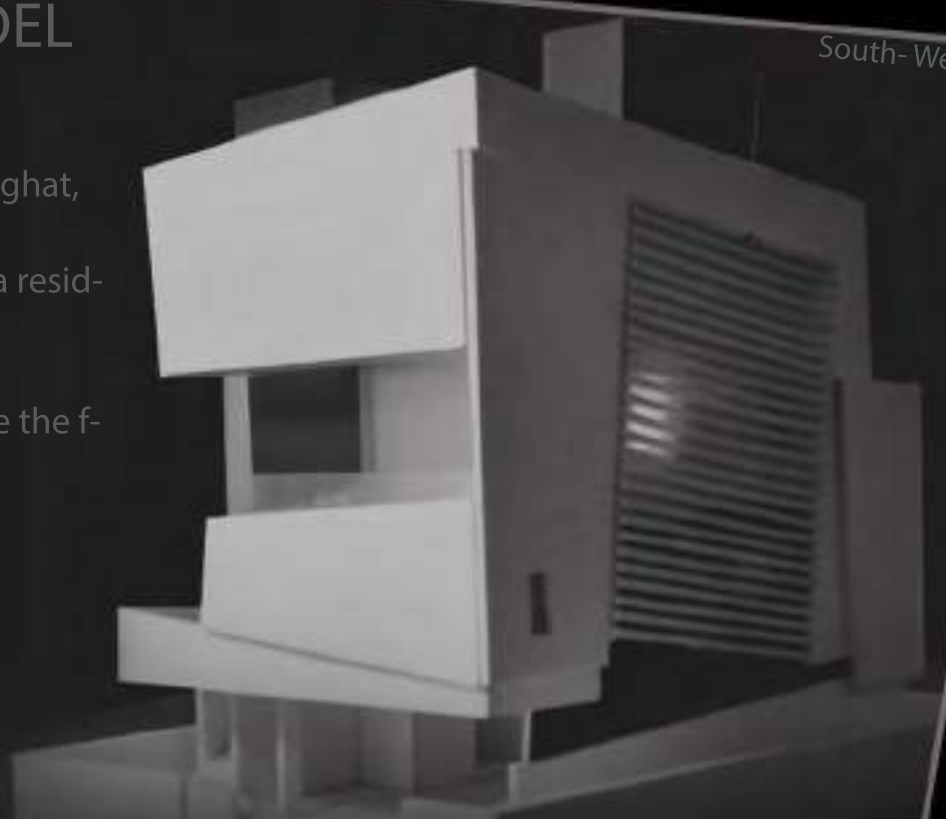
PROJECT: RH-5, Kharmanghat, Hyderabad.

TASK: Working model of a residence to a scale of 1: 100.

OBJECTIVE:

To understand and analyze the following factors:

- Design
- Scale and proportion
- Exploration of form
- Spatial layout
- Level of details
- Visual connection
- Ventilation and lighting



South- West View

01

North- West View

02

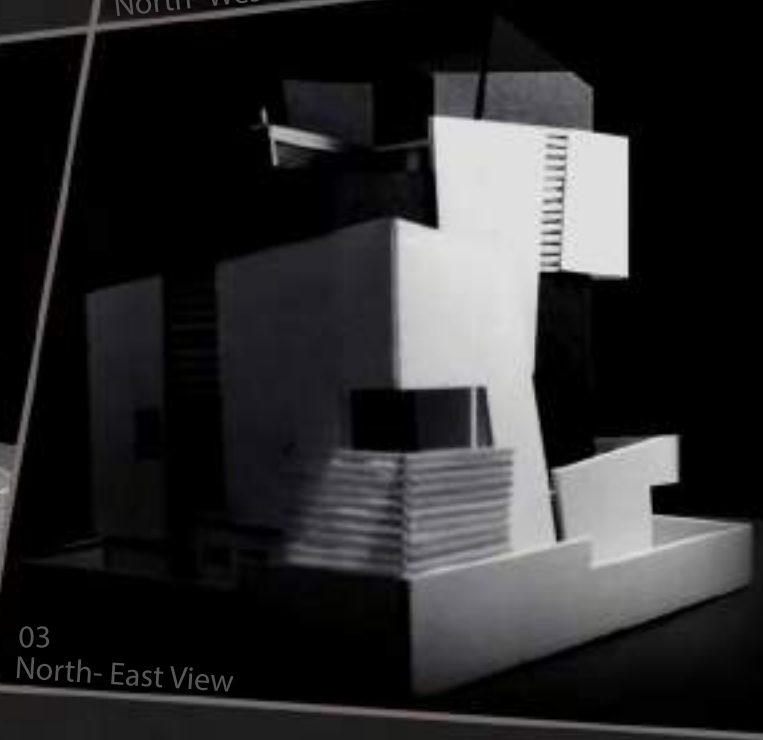
-A specific geometry is continued throughout the structure which adds character of dynamism to the building.The elevation visually hides the internal activity yet provides good amount of ventilation into the residence.

- Double skin is provided to add depth and massiveness.and avoid the heat penetration into the building.

(01, 02, 03 , 04 are images of 3D- views for the residence showing the elevation geometry)

05
North- East View

04
South- East View



03
North- East View

06
South - East View

07
South- West View

PROJECT:

Residence for Mr. Chinnababu, Guntur, Andhra Pradesh.

-A simple rectangular block.

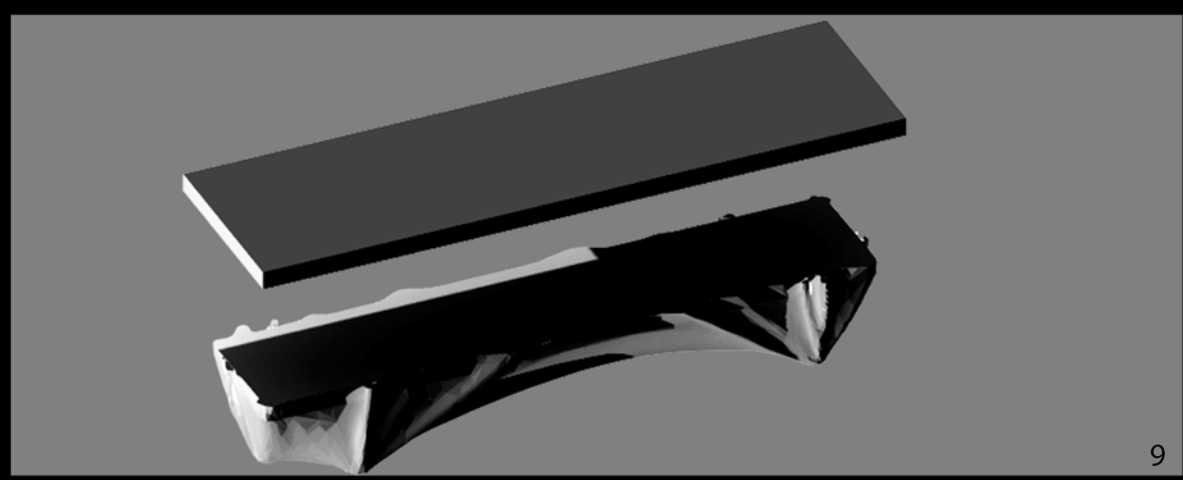
- The facade is treated with double skin with a geometric pattern is incorporated to add a character and avoid the heat penetration into the residence.
- This makes the building unique and stand out of the surrounding buildings.
- To avoid the hindrance slits and cutouts are provided along the openings yet making them less visible to the outsiders.

(05, 06, 07 are images of 3D- views for the residence showing the elevation geometry)

FABRIC FORMED STRUCTURE(BENCH)

(Professional Practice)

FABRIC FORMED STRUCTURE / BENCH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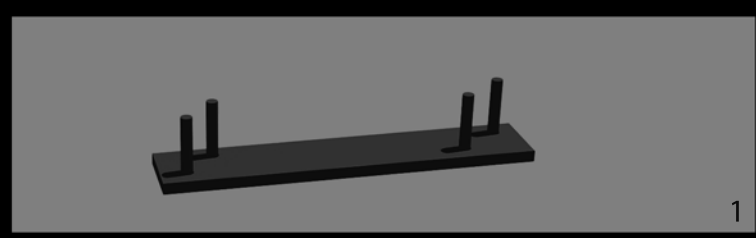
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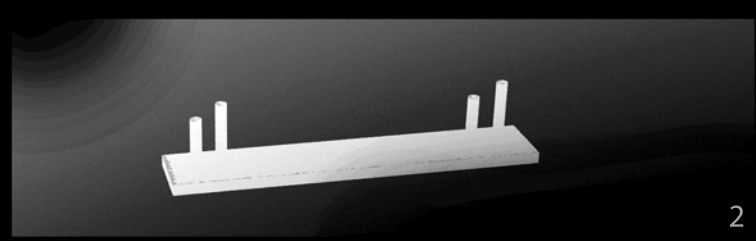
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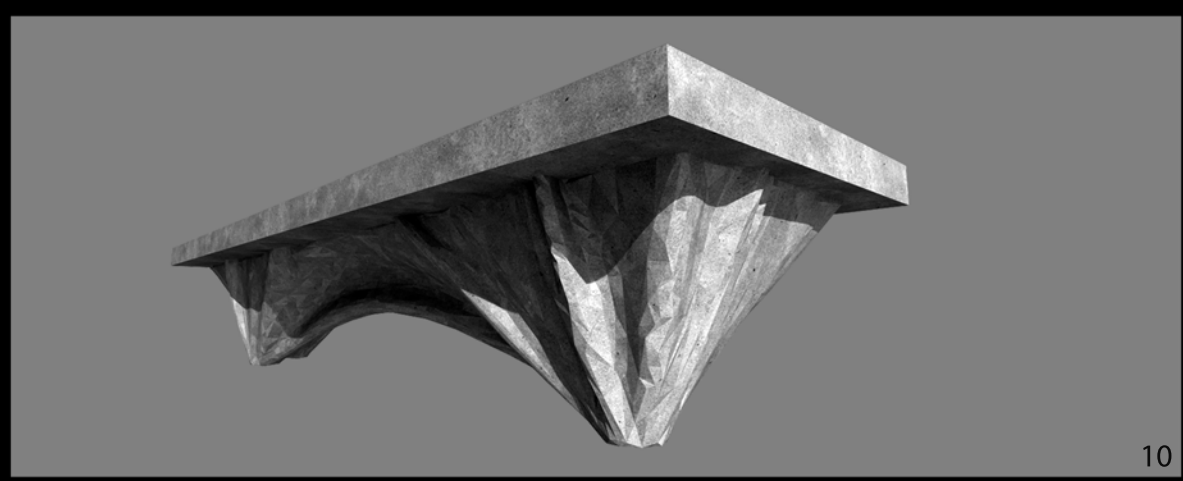
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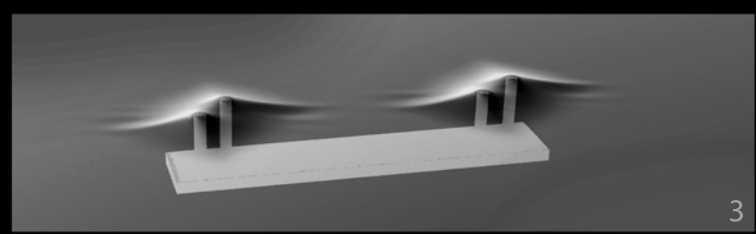
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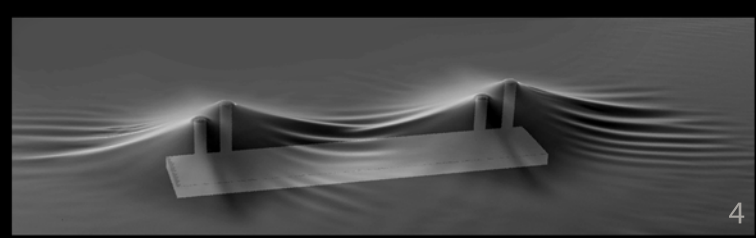

4

LOCATION: PRECA Office, Hyderabad.

TASK: Study and analyze the construction techniques of fabric formed structures and build a digital prototype of a bench proposed for the office.

DESIGN CRITERIA: A simple self explanatory furniture which is givescues about the scale.
-Blends in with the interiors.
-Minimize the space consumption of the furniture and maintain the buffer space between the desks for the movement.
- Transarent and lighter in terms of design to avoid the hindrance of light.

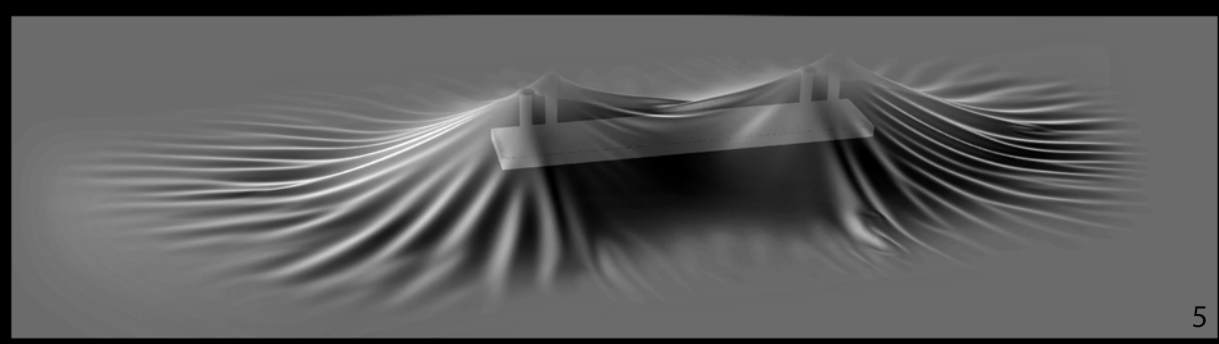
1-A rectangular base with four vertical uneven supports, used as form work for the fall of fabric.

2 to 7- Stages of fabric falling on the supports of the formwork.

8- Formation of concrete block from the fabric mould.

9- Resultant block is used as base for the seating of the bench.

10- Bench evolved from the fabric formation system.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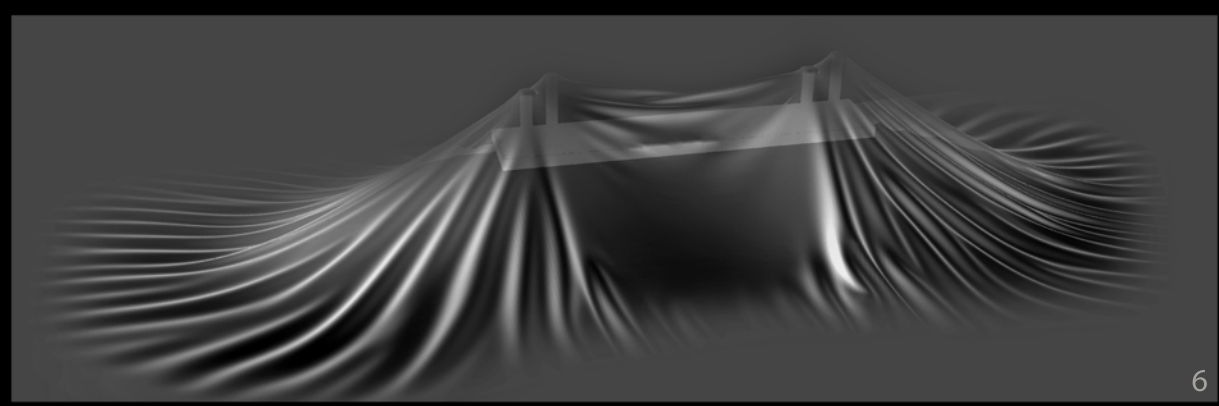
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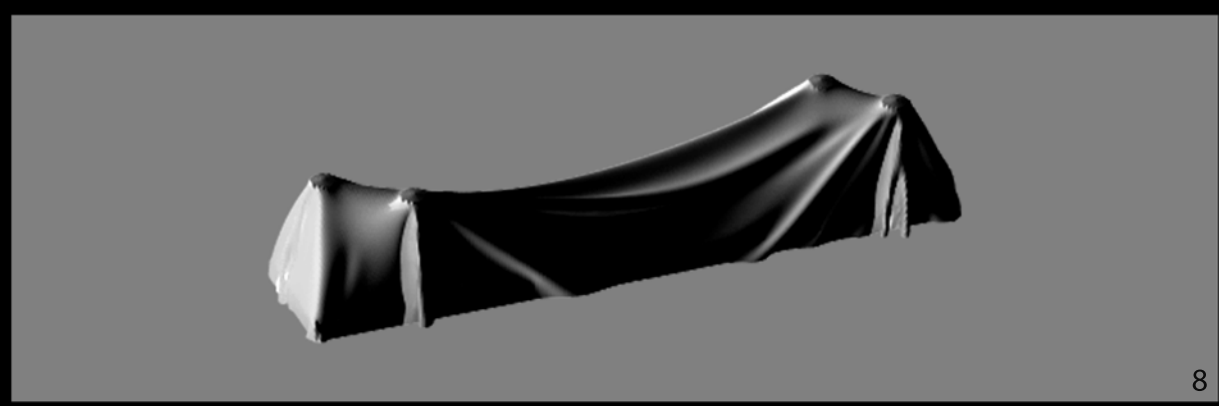

8

WORKING DRAWINGS

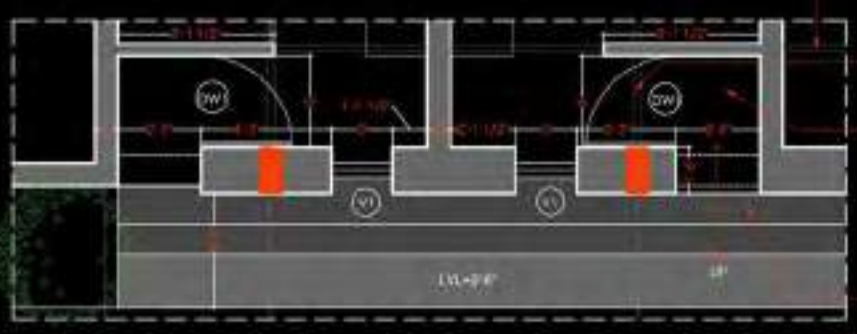
(Professional Practice)

PROPOSED DINING HALL FOR
DHANALAKSHMI,
Chilakalurupeta, Andhra Pradesh

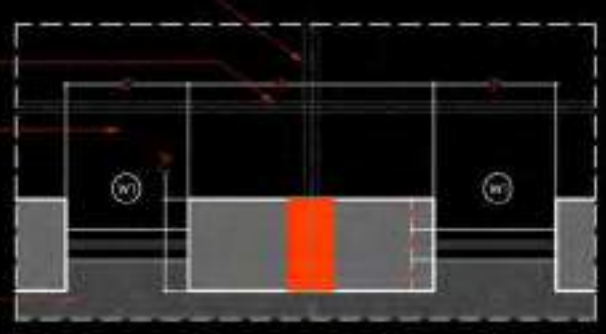
DHANALAKSHMI DINING HALL

PLAN

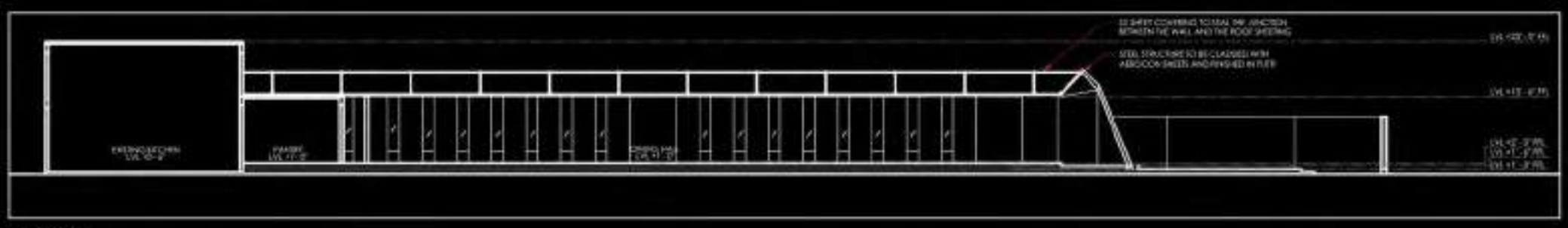
NOTE:
ALL THE SIZES GIVEN FOR THE STEEL STRUCTURE IN THE DRAWING TO BE CONFIRMED WITH THE STRUCTURAL ENGINEER



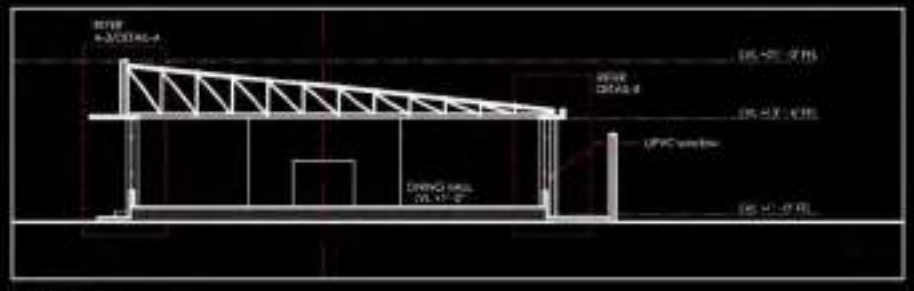
DETAIL- D
(SHOWING THE TYPICAL LAOUT OF BRICKWORK IN THE SOUTH WALLS)



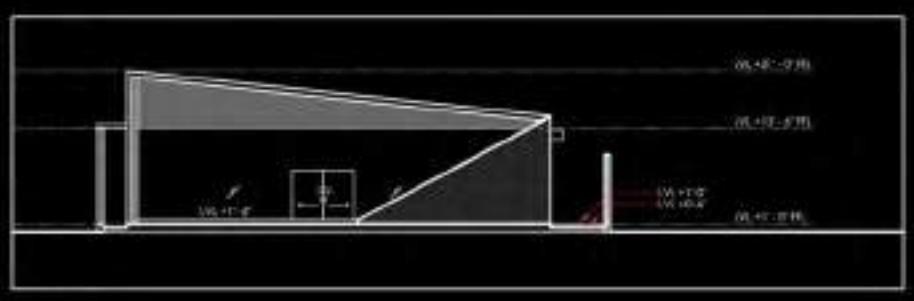
DETAIL- C
(SHOWING THE TYPICAL LAOUT OF BRICKWORK IN THE NORTH AND SOUTH WALLS)



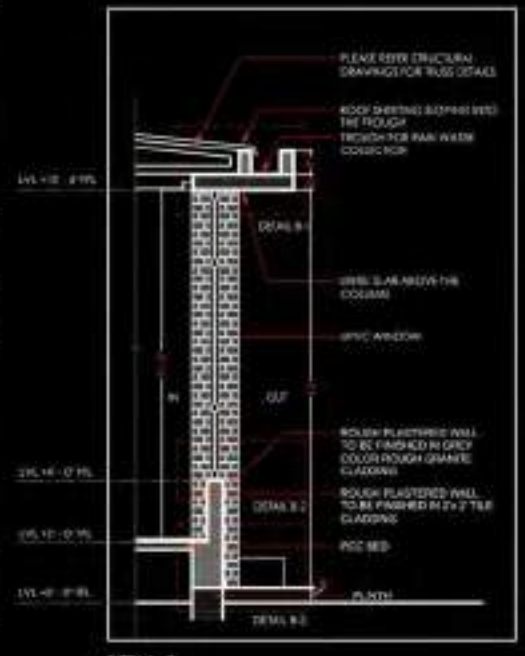
SECTION- AA'



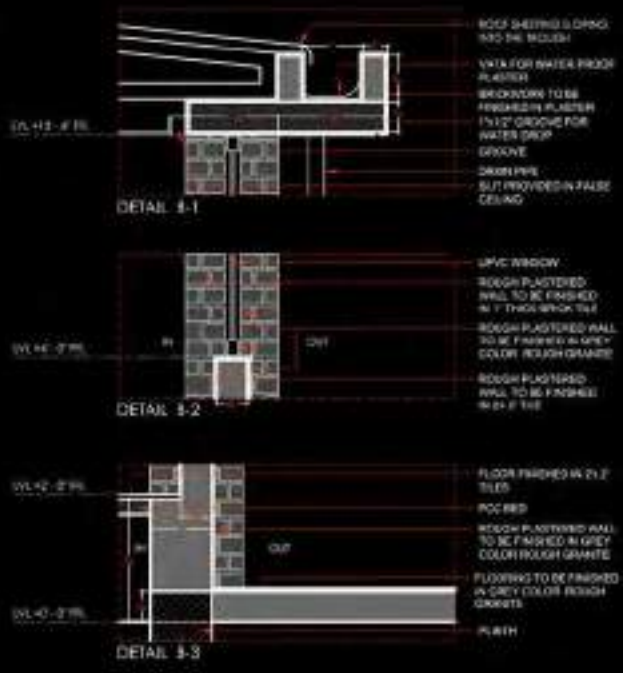
SECTION- BB'



EAST ELEVATION



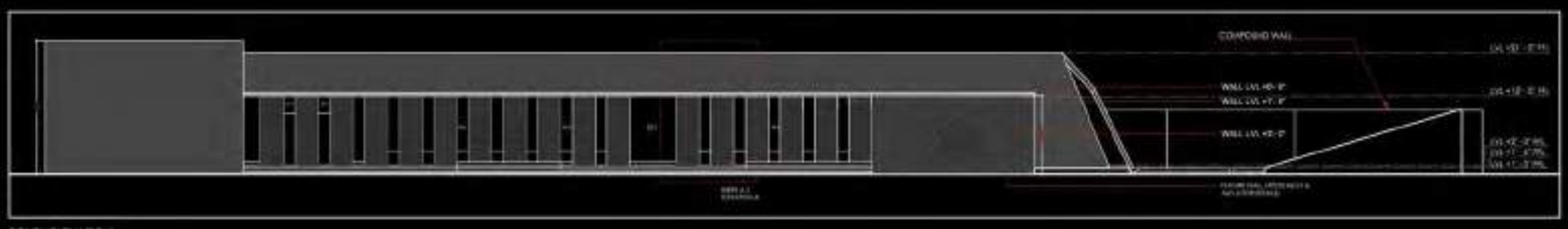
DETAIL- B



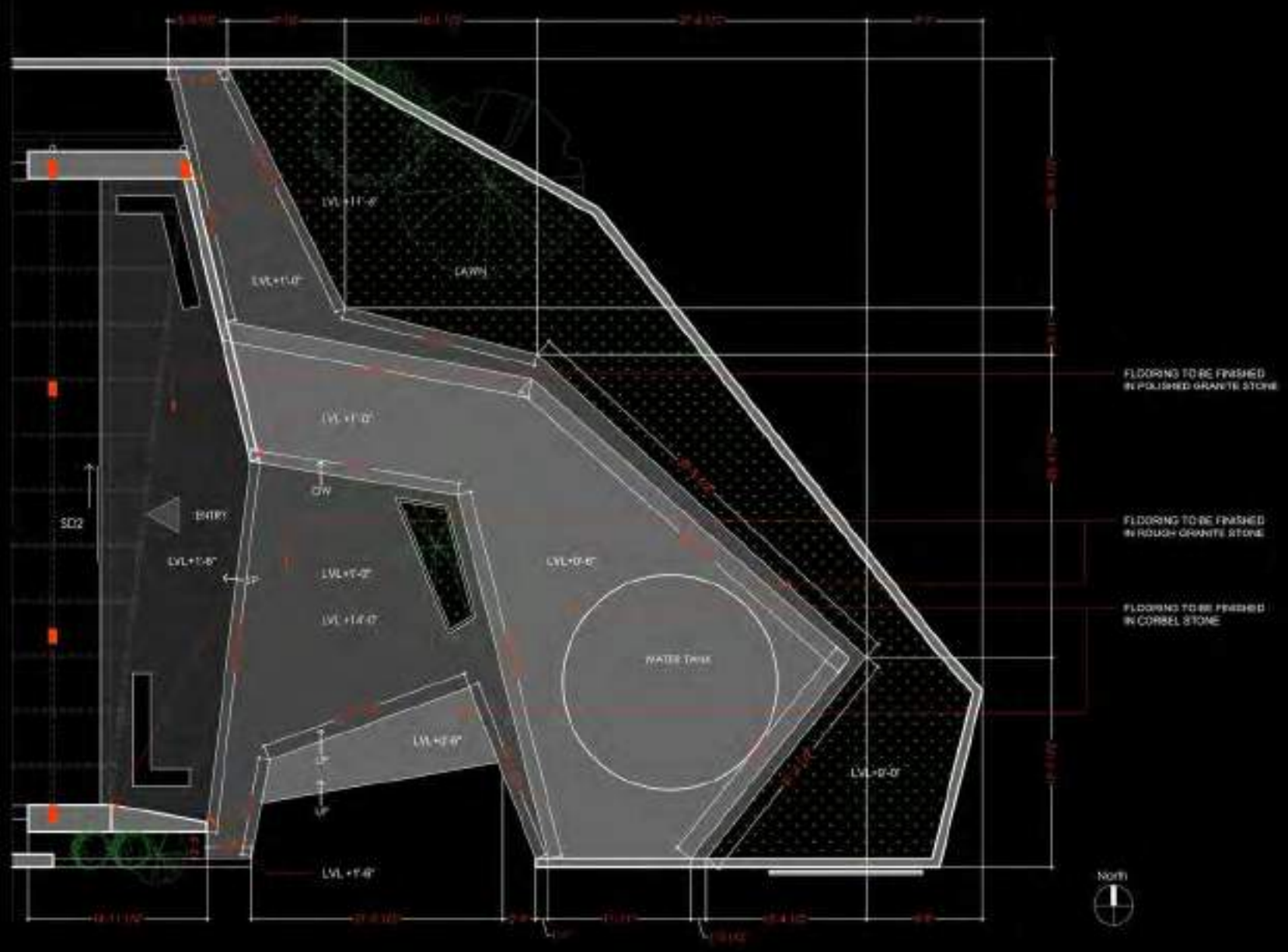
DETAIL 1-1

DETAIL 1-2

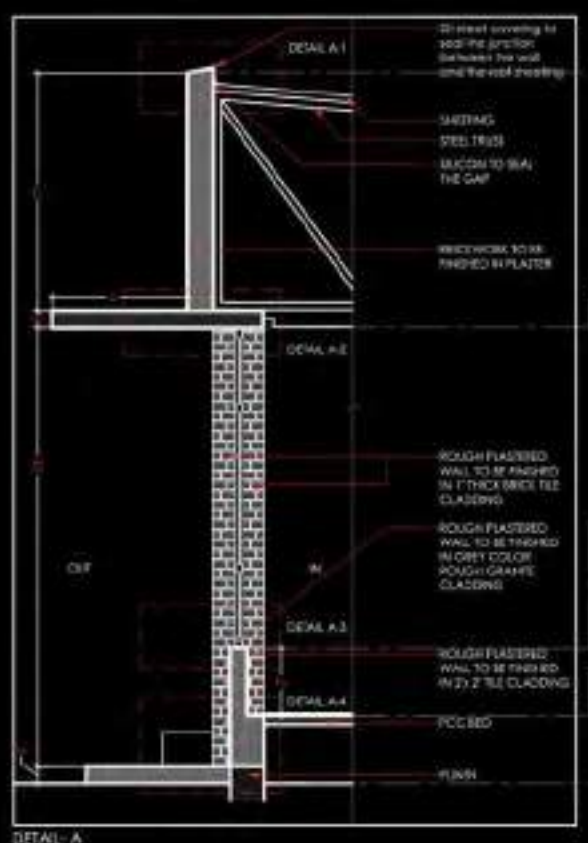
DETAIL 1-3



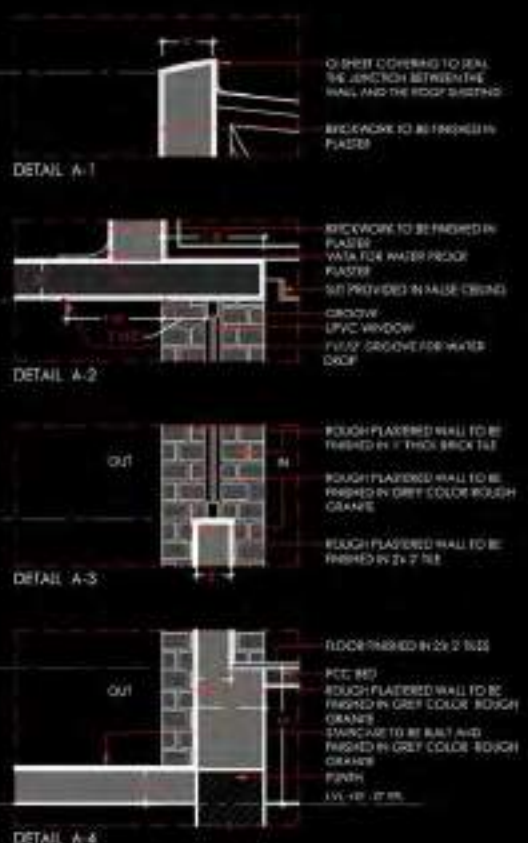
SOUTH ELEVATION

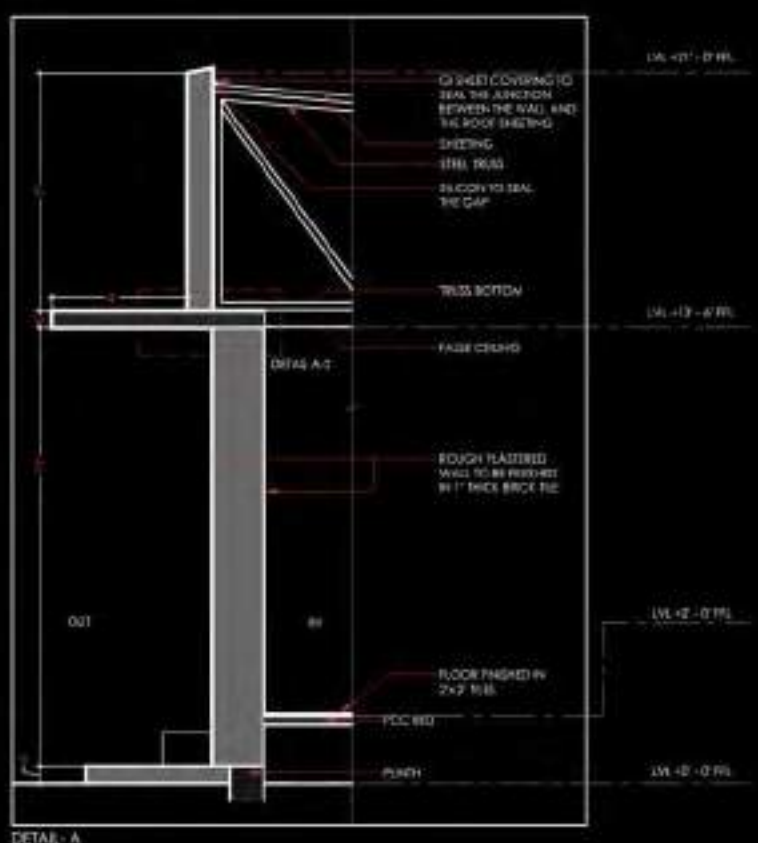


LANDSCAE PLAN



DETAIL- A





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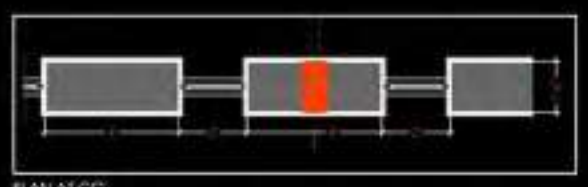
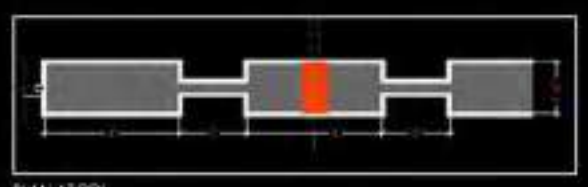
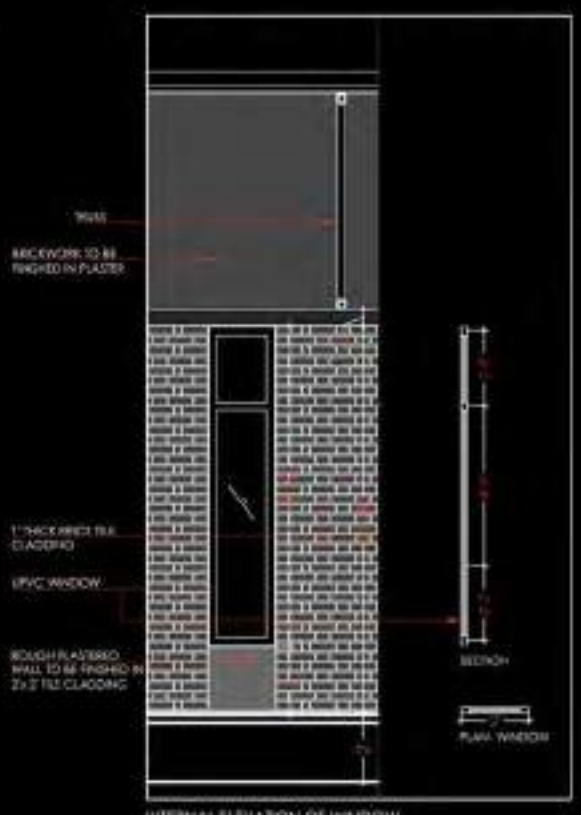


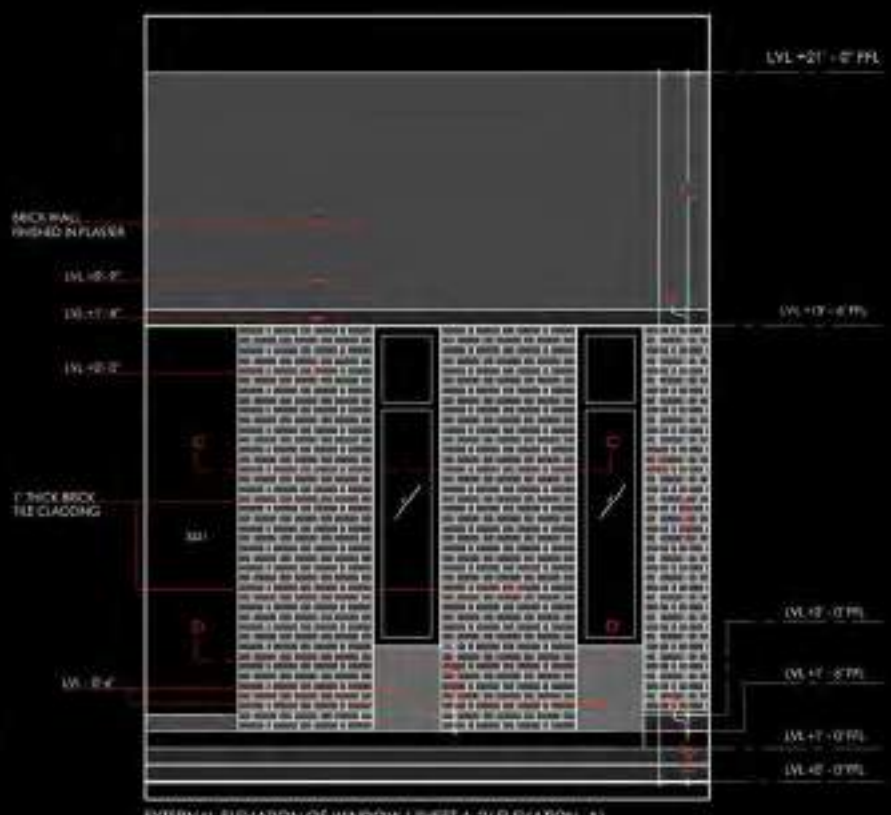
FLAN AT CC'



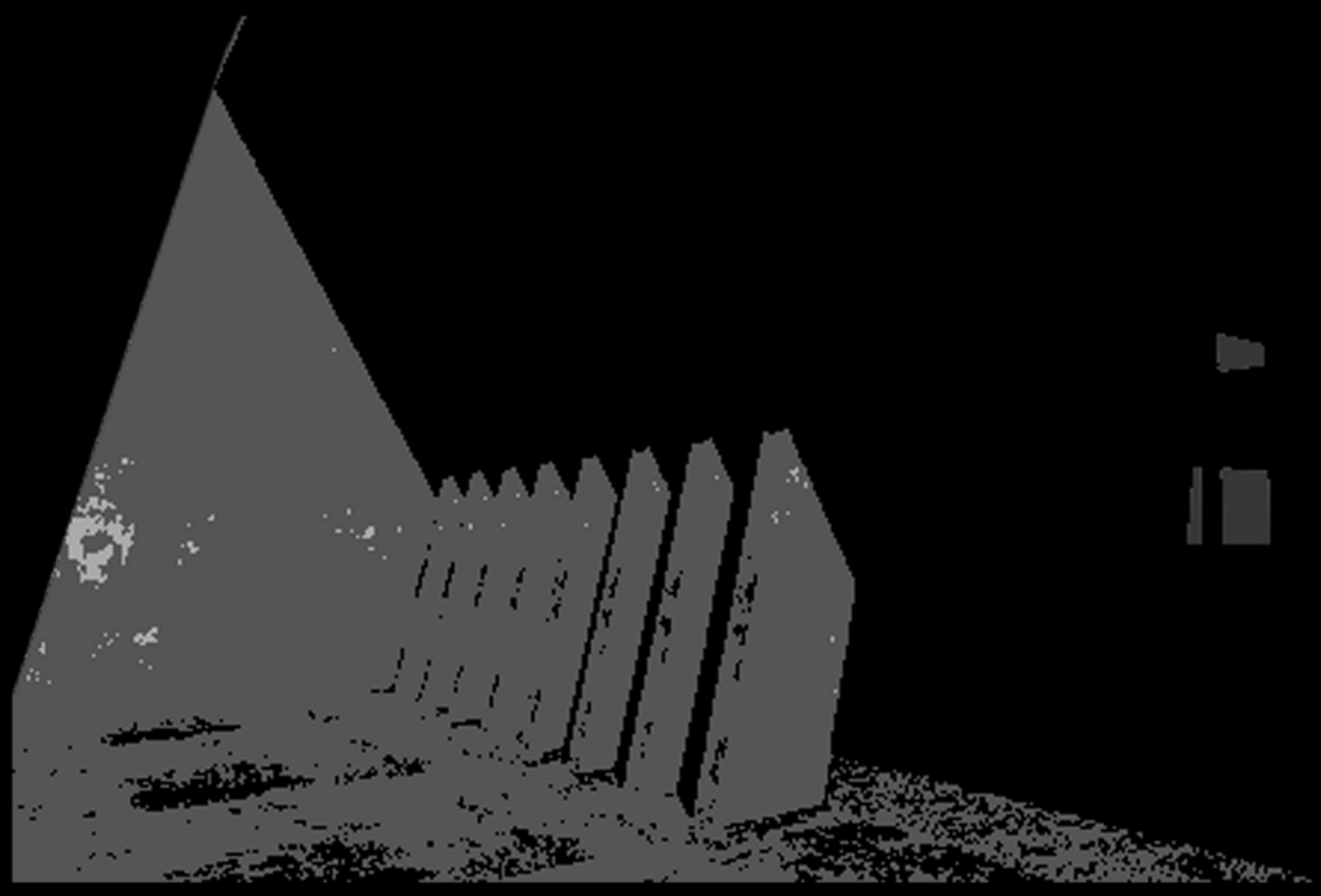
FLAN AT DD'

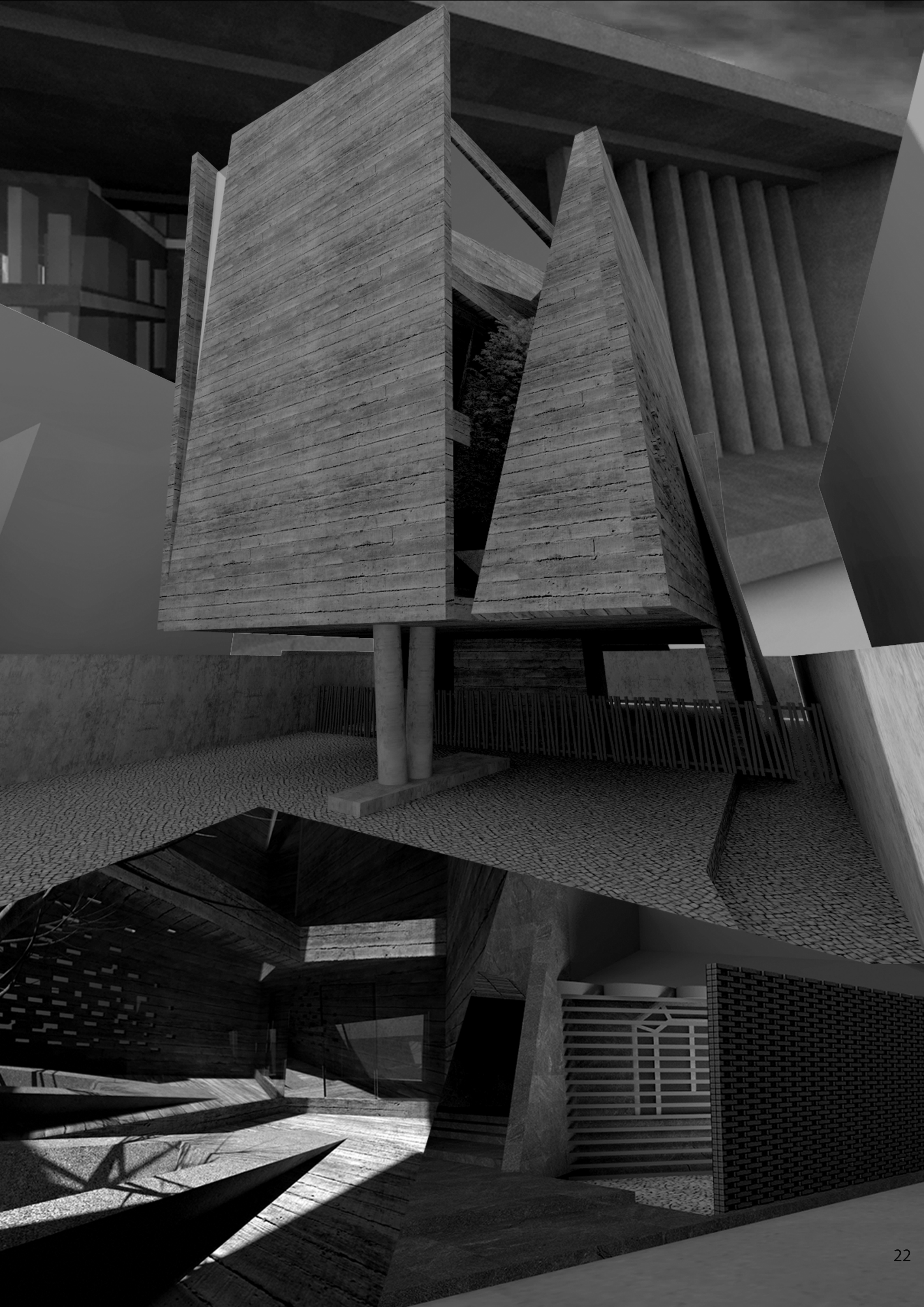


INTERNAL ELEVATION OF WINDOW



EXTERNAL ELEVATION OF WINDOW | SHEET A-2/ ELEVATION- A)



RENDERS

(Professional Practice)