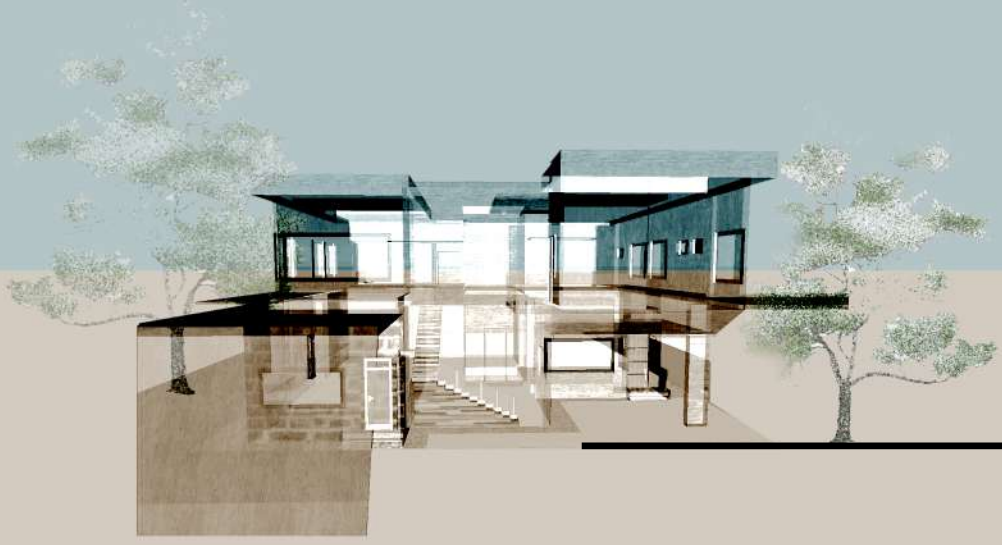


architectural portfolio

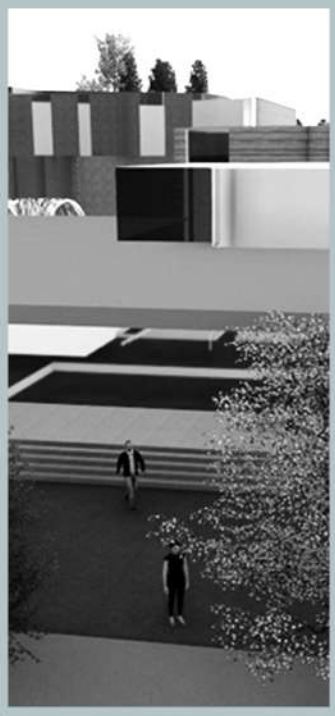
sherin abigail

undergraduate 2014-2019

CAFETERIA

APARTMENT

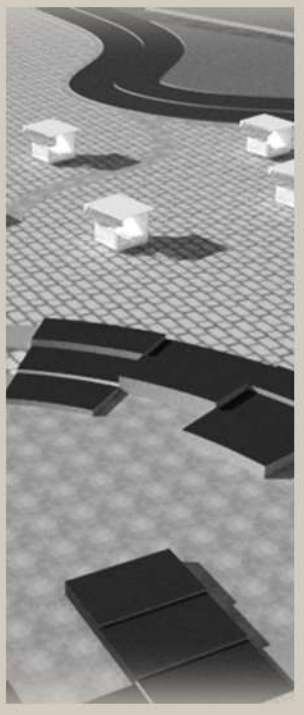
HOSPITAL



MULTIUSE
CENTRE

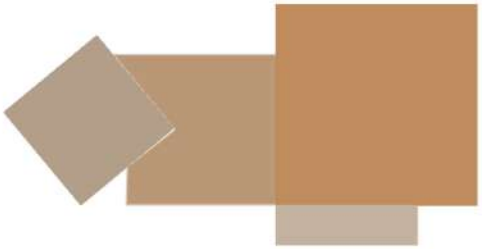
INTERNSHIP WORKS

URBAN DESIGN



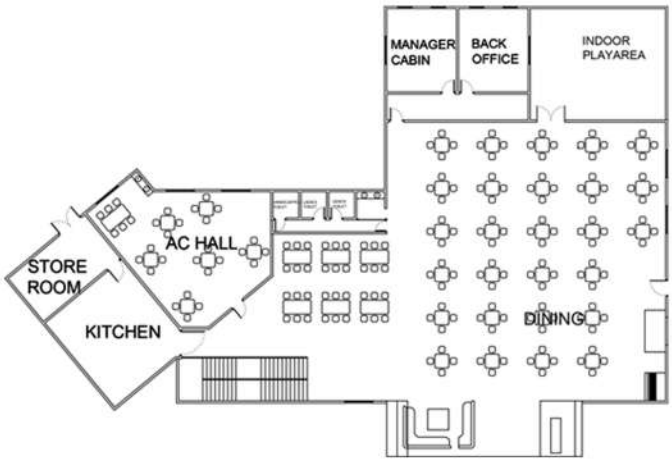
THESIS

CONTENTS

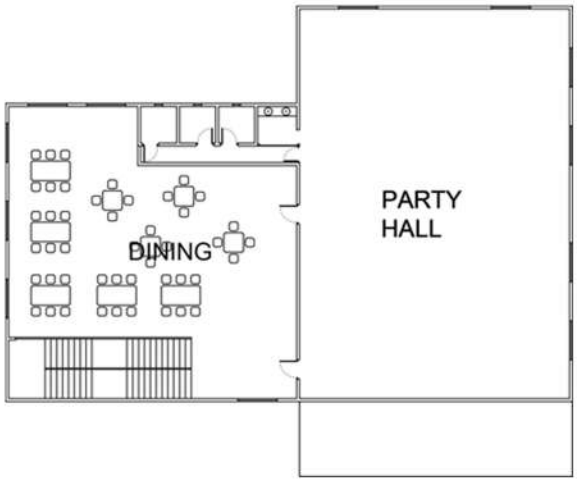


DICES ARE USED AS THE CONCEPT FORTHE STRUCTURE OF THE CAFE.

TOTALLY 4 DICES ARE USED IN WHICH TWO ARE OF LARGER HEIGHTS AS THEY CONTAIN ANOTHER FLOOR.
THE OTHER ONE IS A SINGLE FLOOR STRUCTURE.
THE OTHER GLASS DICE IS THE ENTRANCE TO THE CAFE.



GROUND FLOOR PLAN



FIRST FLOOR PLAN

THE SPOTS IN THE DICES ARE THE WINDOWS AND SOME OF THEM ARE COVERED WITH GLASS TO LET THE NATURAL LIGHT IN.

THE COLOUR AND THE TEXTURE IS MADE BROWN AS IT REFLECTS THE CAFE. THE ASTHETICAL STYLE IS ATTRACTIVE AS THE ENTRANCE ITSELF REVEALS THE CONCEPT OF THE STRUCTURE.

THE DICE IS CONSIDERED AS A FORTUNE AND SO AS THE CAFE. THIS EXPLAINS THE IDEA BEHIND THE CONCEPT.

2BHK

3BHK

THE APARTMENT HAS BEEN PLANNED TO HAVE BOTH 2BHK AND 3BHK.
IT CONSISTS OF FOUR FLOORS AND HAS TOTALLY 44 DWELLING UNITS.
EACH FLOOR HAS 11 DWELLING THAT COMPRISES OF SEVEN 2BHK FOUR 3 BHK FLATS.
UNITS ARE SEPERATED BY A CORRIDOR

HAS AN OPEN VIEW POINT ON THE LANDING OF EACH FLOOR THAT MAKES A GOOD FEATURE FOR THE USER.
THERE ARE 3 BLOCKS AND HAS TOTALLY 132 DWELLING UNITS.

HAS GOOD AIR CIRCULATION AND IS SURROUNDED BY LANDSCAPES

MORE THAN 100 VEHICLES CAN BE PARKED ON THE STILT FLOOR

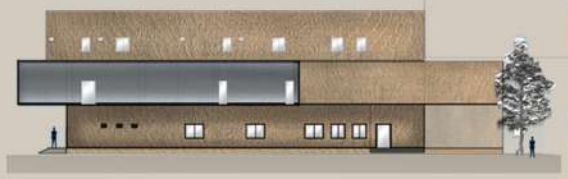
GROUND FLOOR PLAN

THIS DESIGN REQUIRES MORE FUNCTIONALISM AND KEEN THOUGHT PROCESS AS IT CONNECTS WITH THE PSYCOLOGY OF PREGNANT WOMEN. GYNAECOLOGICAL SPACE AND PAEDIATRIC SPACE ARE WELL SEPERATED AND EASY TO ACCESS. FLOORS HAVE BEEN PLANNED WITH RESPECT TO ZONES.

IT IS DESIGNED TO BE SELF-SHELTERED AS THE FIRST FLOOR IS EXTENDED THAT ACTS AS A CANTILEVER. HAS TWO LARGE COURTYARDS AND ONE IS COMBINED WITH A PLAY AREA. INTERIOR MATERIALS ARE CHOSEN TO HAVE A NEUTRAL COLOUR COMBINATION WHICH GIVES VISUALLY A PLEASING.

FIRST FLOOR PLAN

SECOND FLOOR PLAN

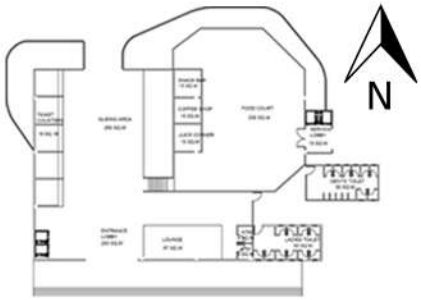


EAST FACING ELEVATION

AN OPEN TERRACE IN THE THIRD FLOOR AND TINY COURTYARDS IN THE PATIENT WARDS CAN BE THE BEST FEATURE THAT HELPS PATIENTS FROM STRESS.

ENTRANCE ZONE

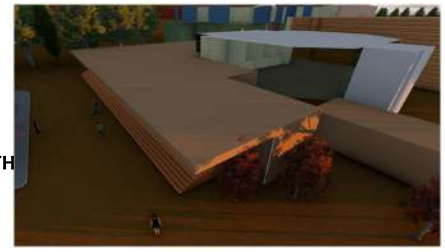
THE COMMON ZONE IS AT THE ENTRANCE THAT LEADS TO THE EXHIBITION ZONE.
THERE IS AN INDOOR GARDEN BESIDE THE QUEING AREA THAT GIVES A PLEASANT
FEEL TO THE PEOPLE WAITING THERE.



THE FOOD COURT IS AN ELEVATED FLOOR WITH GLASS COVERING.THIS GIVES A GOOD VIEW TO LOOK AT THE SURROUNDINGS.

THE ADMINISTRATION ZONE IS AT FIRST FLOOR SO THAT CREATES A PRIVATE SPACE FOR THEM.

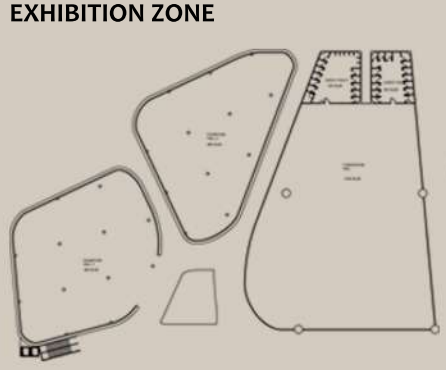
THE EXHIBITION ZONE FOLLOWED BY THE COMMON ZONE HAS TWO HALLS.
ONE EXHIBITION HALL IS A SEMICLOSED ONE COVERED WITH LOVERS AND
THE OTHER ONE IS A CLOSED HALL.

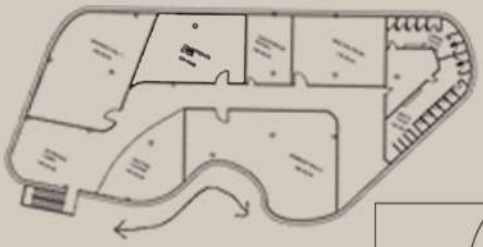


SERVICE ZONE

SERVICE APARTMENT IS AT THE REAR SIDE OF THE CENTRE.
THE FOOD COURT IS AT THE CENTRE OF THE SERVICE APARTMENT AND THE DORMITORY STAY. IT IS COVERED WITH GLASS AND HAS A GOOD VIEW OF THE EXHIBITION AREA.

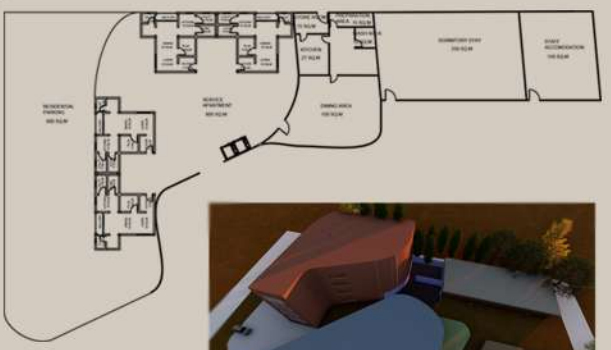
EXHIBITION ZONE

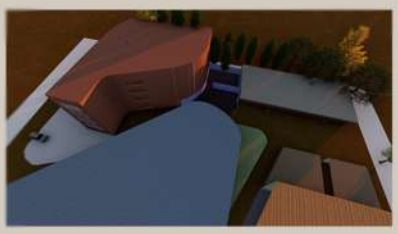


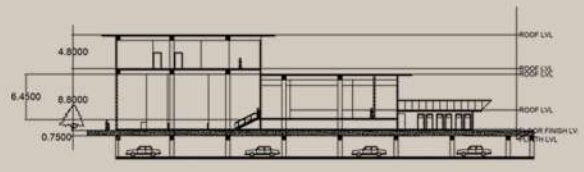


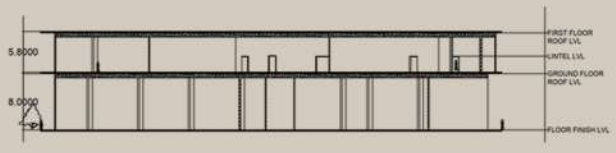
THIS AREA IS COVERED WITH GLASS SO THAT THE SHAPE LOOKS DOMINANT. IT IS ORIENTED IN THIS MANNER SO THE LIGHT OF THE SUN FALLS ON THE JUNCTION OF BOTH THE ZONES MAKES IT INTERESTING

THE CONFERENCE ZONE AT THE UPPER FLOOR GOT ITS SHAPE BY CONNECTING THE SHAPES OF BOTH THESE HALLS.





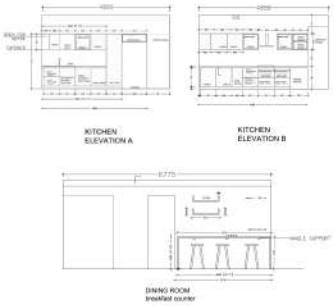




COMMON ZONE SECTION

7TH SEMESTER - DESIGN CONSORTIUM, BANGALORE

THE FIRM FOCUSES MAINLY ON INTERIOR DESIGNING OF RESIDENCES AND OFFICE SPACES WHERE I WORKED ON 2 VILLAS, A CO-WORKING OFFICE SPACE AND VARIOUS OTHER SPACES IN THE RESIDENCES. THIS HELPED ME TO LEARN MORE ABOUT COLORS, MATERIALS, LIGHTING AND INTERIOR DESIGNING IDEAS.



DESIGN PALLETE FOR LIVING, DINING ROOMS WRE GIVEN. THE DESIGN WAS GIVEN FOR WALLPAPER, FABRICS, OTTOMAN, SOFA, TV UNIT AND LIGHT FIXTURES. BRIGHT COLOR TONS WERE USED AND ONE CAN FEEL THE TEXTURES IN ALL THE SPACES

SONALI'S RESIDENCE

THE VILLA DESIGNED WITH WOOD AND WHITE HAS A BEIGE COLOUR COMBO FOR THE MASTER'S AND ELDER'S BEDROOM HAVING AN APPEALING LOOK.
THE FALSE CEILING IN THE MASTER'S BEDROOM FEELS REPRESENTS THE STARS AT THE NIGHT.

AJAY SHARMA'S RESIDENCE

THIS OFFICE IS DESIGNED AS A CO-WORKING SPACE.
THE INTERIOR IS DONE WITH VIBRANT COLOURS AND LOOK ATTRACTIVE.
I WORKED ON DESIGNING THE RECEPTION, PANTRY AND MANAGER ROOM AND THE ELECTRICAL,LIGHTING AND THE FURNITURE DETAIL DRAWINGS.

CO-WORKING SPACE

THE DHARMAPURI OFFICE IS DESIGNED WITH WHITE AND BITS OF BRIGHT COLOURS. THE FURNITURE AND THE MATERIALS WAS DESIGNED TO MAKE THE SPACE FUNCTIONAL AND BRIGHTER.

OFFICE

8TH SEMESTER - JAWAHAR ASSOCIATES, MADURAI

THE FIRM DESIGNS RESIDENCES, OFFICES, MARRIAGE HALLS, INSTITUTES AND ALSO LANDSCPAE DESIGN. I WORKED ON DETAILED DRAWINGS OF ELECTRICAL, PLUMBING, VILLA LANDSCAPE DESIGN. 3D PROPOSAL FOR AN INSTITUTE HAS BEN APPROVED BY THE CLIENT.

THE 3D FOR THIS HOUSE WAS BASED ON THE CONCEPTUAL SKETCH WITH THE IDEA OF PROJECTIONS.
POLISHED CONCRETE MATERIAL IS USED WITH THE TOUCH OF DARK STONE FINISH.
THE LOUVERS GIVES A SENSE OF PRIVACY FOR THE MAIN DOOR.
THE LARGE GARDEN CAN BE VIEWED FROM THE DINING AREA.

KANDARAJ RESIDENCE

LANDSCAPE DESIGN

THE FINAL 3D WAS EVOLVED FROM 3 STAGES OF 3D IDEAS. EACH OF THEM DIFFERS FROM PROJECTIONS, MATERIALS AND SHAPES.
THE FINAL DESIGN LOOKS SIMPLE WITH A LONG ILLUSIONED DUPLEX FLOORS.
THE SHADOWS CHANGE WITH THE NATURAL LIGHT.
THE COLOR COMBOS OF WHITE AND BROWN HAS BEEN USED TO MAKE IT SIMPLE.

RUDSET INSTITUTE

4TH YEAR

INTERNSHIP

CLIMATE LANDSCAPE TOPOGRAPHY

Figure 4.1

Figure 4.2

Figure 4.3

Figure 4.4

Figure 4.5

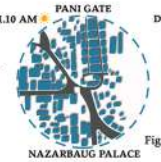


Figure 4.6

Figure 4.7

Figure 4.8

Figure 4.9

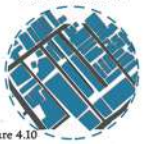
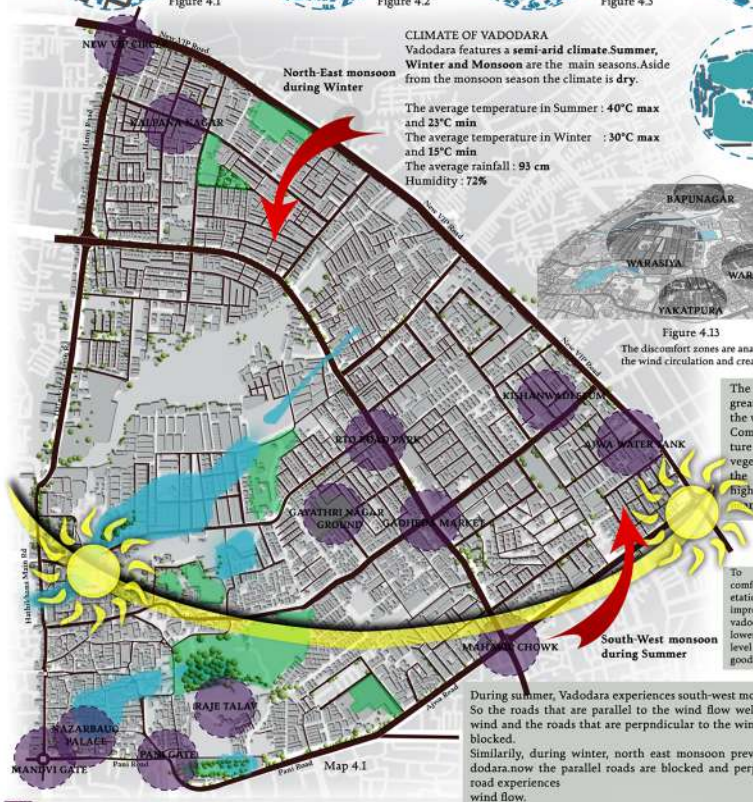


Figure 4.10



Map 4.1

CLIMATE OF VADODARA

Vadodara features a **semi-arid climate.Summer, Winter and Monsoon** are the main seasons.Aside from the monsoon season the climate is **dry.**

The average temperature in Summer : **40°C max** and **23°C min**
The average temperature in Winter : **30°C max** and **15°C min**
The average rainfall : **93 cm**
Humidity : **72%**

Figure 4.13

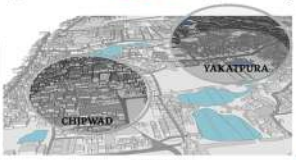


Figure 4.14

The discomfort zones are analysed based on the wind flow.Some of the street patterns that exist, blocks the wind circulation and creates poor ventilataion that causes hindrance.

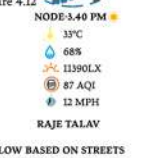
Figure 4.11

Figure 4.12

The micro climate is greatly affected around the water bodies. Comparing the temperature on the road side and vegetation, the roadside reading is higher than the reading or vegetation.

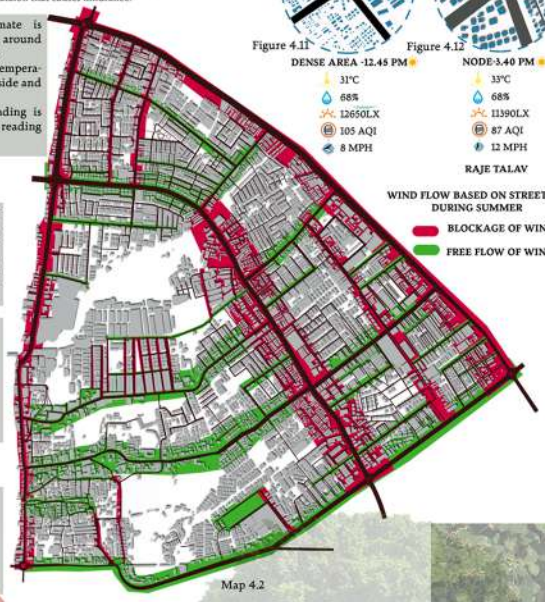
To achieve the comfort zone, vegetation should be improved all over vadodara.This can lower the pollution level and provide good air quality.

During summer, Vadodara experiences south-west monsoon. So the roads that are parallel to the wind flow welcomes the wind and the roads that are perpndicular to the wind flow are blocked.
Similarily, during winter, north east monsoon prevails in vadodara.now the parallel roads are blocked and perpendicular road experiences wind flow.



RAJE TALAV

WIND FLOW BASED ON STREETS DURING SUMMER
BLOCKAGE OF WIND
FREE FLOW OF WIND


Map 4.2

AUG 11 MAX 35°C AND MIN 25°C

VIP CIRCLE			NATHIBA SOCIE-			GARBA GROUND		
10:25 AM	1:00 PM	4:00 PM	11:00 AM	1:00 PM	4:00 PM	10:40 AM	12:40 AM	4:00 PM
28°C	30°C	28°C	28°C	30°C	29°C	29°C	32°C	30°C
76%	74%	76%	76%	74%	75%	72%	69%	71%

AUG 12 MAX 34°C AND MIN 25°C

NEW VIP			AJWA WATER TANK			MAHADEV CHOWK		
10:20 AM	2:00 PM	4:20 PM	10:35 AM	2:00 PM	3.30 AM	10:30 AM	12:30 PM	4:00 PM
28°C	31°C	28°C	25°C	30°C	27°C	26°C	29°C	28°C
82%	77%	80%	81%	76%	80%	80%	75%	79%

AUG 13 MAX 34°C AND MIN 26°C

BANK ROAD			M A N D V I			NAZARBAUG PALACE		
10:50 AM	1:00 PM	4:20 PM	11:10 AM	2:00 PM	4:00PM	11:30 AM	1:00 PM	4:30PM
31°C	31°C	29°C	31°C	31°C	28°C	29°C	31°C	28°C
70%	76%	80%	68%	76%	81%	68%	77%	81%

AUG 14 MAX 33°C AND MIN 26°C

RTO ROAD			GAYATHRI NAGAR GROUND			KISHANWADI ROAD		
10:40 AM	1:00 PM	4:00 PM	11:00 AM	2:00 PM	4:00 PM	11:50 AM	2:00 PM	4:00 PM
30°C	31°C	28°C	31°C	31°C	27°C	30°C	31°C	28°C
71%	70%	81%	71%	69%	80%	72%	70%	79%

WAGHELA NAGAR-WATER LOGGING AREA
The level of this area is 34m from the sea level which is the lowest point in this zone.So during the monsoon season,this area is flooded and water is logged.

COMFORT ZONE : T - 22°C
EXISTING : T - 30°C

The existing temperature is higher than the comforting temperature.So considering all the analytical study ,the comforting temperature can be achieved.

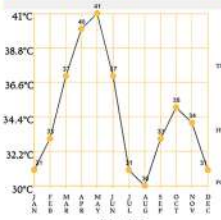


Chart 4.1

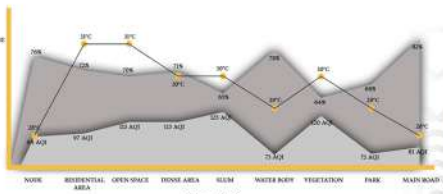
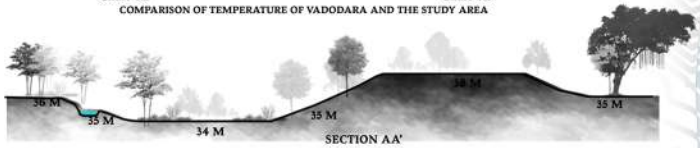


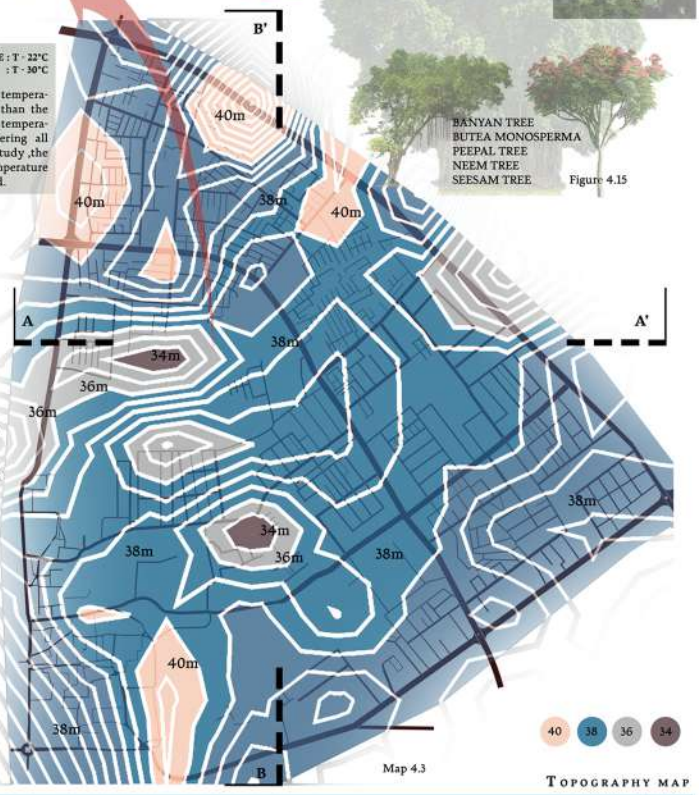
Chart 4.2

COMPARISON OF TEMPERATURE OF VADODARA AND THE STUDY AREA



SECTION AA'

SECTION BB'



Map 4.3

TOPOGRAPHY MAP


BANYAN TREE
BUTEA MONOSPERMA
PEEPAL TREE
NEEM TREE
SEESAM TREE
Figure 4.15

CHANDANVATI
URBAN DESIGN STUDIO
VADODARA
GUJARAT

"TRADITION IS THE ILLUSION OF PERMANENCE"

08

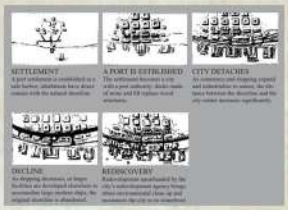
FAIROOS VK|NITHYA SRI|SANAKKIAN|SHERIN ABIGAIL|SIVA KUMAR|VEDASHREE|VINOTH KUMAR|VISHNU MAINTHAN|KARTHIKEYAN | SEMESTER - IX | RANGANATHAN ARCHITECTURE COLLEGE 2014 - 2019

INTRODUCTION

Waterfronts, the unique places where land and water meet, are a finite resource embodying the special history and character of each community. Urban waterfronts, like the cities help define, dynamic places.

"development blending residential, commercial, cultural, institutional, or entertainment uses, which are physically and functionally integrated, and that provides pedestrian connections and is attached to the water.It can take the form of a single building, a city block, entire neighbourhood"

Spread over several buildings, such as a city block or around an open space or courtyard, these individual buildings serve one or two specific uses while creating a microcism within a neighborhood.



evolution of waterfront development

why water-front mixed use?

integrates natural and built environment

improves the quality of the water prone area

features architectural expression and tends to mitigate traffic and sprawl

interface between land and water

increases the community spirit to a next level

benefits

Greater housing variety and density

Better energy efficiency and sustainability

Stronger neighborhood character

Better integration with city services, like public transportation

More flexibility to adapt to changing needs, thus increasing the building's long-term life cycle

aim

achieving a horizontal development with residential, commercial, institutional and recreational activities so as to create a live work recreate concept

to define the space with the integrity of natural and built environment

to provide it as a tourist destination

justification

As in India the birth rate and the population issues are at a high stake.

So the land area has to occupy a large amount of people for its living.

This is hard to achieve through independent houses.

So, mixed use can be the best solution.

As India has not experienced much of the waterfront living, it can be a best urban destination also

c onsideration

zoning the different typologies of building with the relation to the water

the connectivity for the private, public and semi public spaces

creating multiple destination

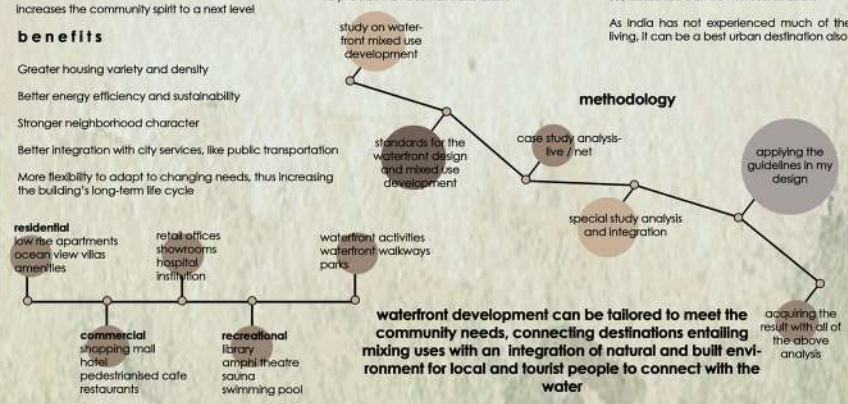
optimising public access

walkable neighbourhood

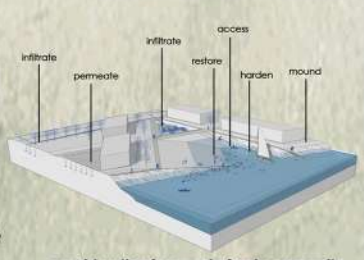
the flow of movement on various zones

to make it as a climate responsive development

methodology



waterfront development can be tailored to meet the community needs, connecting destinations entailing mixing uses with an integration of natural and built environment for local and tourist people to connect with the water



consideration for a waterfront community

special study-climate responsive architecture

what is climate?

Climate is the statistics of weather over long periods of time. It is measured by assessing the patterns of variation in

● temperature ● humidity ● atmospheric pressure ● wind ● precipitation

types

primary

● tropical ● dry ● mild mid-latitude ● cold mid-latitude ● polar

secondary

● rainforest ● monsoon ● tropical savanna ● humid subtropical ● humid continental ● oceanic

● Mediterranean climate ● desert ● steppe ● subarctic climate ● tundra ● polar ice cap

"creating a comfortable interior while reducing the building's reliance on artificial energy is said to be a climate responsive building"

how climate affects architecture?

The climate of the locality and the buildings around it mold the building, so that, even though social, cultural, and economic aspects are important, it owes much of its shape to these factors. Climate, in particular, produces certain easily observed effects on architectural forms.

factors affecting the indoor air flow

- **orientation**
- **external features External features**
- **cross ventilation**
- **position of openings**
- **size of openings**
- **controls of openings**

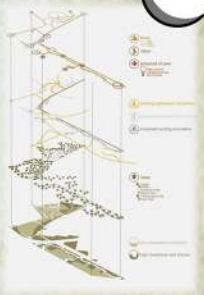
india's climate

average temperature : 23.9° C
hottest month : april , may
coldest month : january
wettest month : july
rainfall : 650mm

- **tropical wet (humid)**
- **tropical dry**
- **sub-tropical humid climate**
- **mountain climate**

consideration

site analysis 1



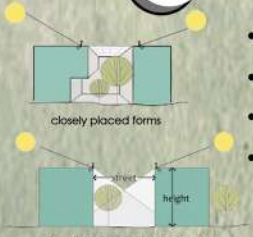
sun's orientation 2

Buildings must be responsive to solar orientation on the site. The sun is at a low angle during the winters and to the south of east-west axis. During summer, its path is at a high angle and slightly north to the east west axis. The alteration in path affects solar radiation penetration patterns during different seasons and consequently, heat gain and loss in a building.

layout of the building 3

Factors to consider here are access to infrastructure, staying at least 100 feet clear of any watershed, not building within a floodplain and in a habitat with endangered species. Asking what trees and other existing geological features should be avoided or how water flows across the site can dictate the location of the building.

shading 4



- increases mutual shading through built forms
- plantations act as a barrier for direct sunlight
- it affects the micro climate in the surrounding
- orienting the building by east-west direction

narrow streets to building height

- Landscape features such as mature trees or hedge rows;
- Exterior elements such as overhangs or vertical fins;
- Horizontal reflecting surfaces called light shelves;
- Low shading coefficient (SC) glass; and,
- Interior glare control devices such as Venetian blinds or adjustable louvers

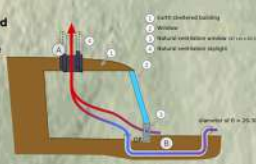
natural ventilation 5

the process of pulling fresh air into a building from the outside. In turn, this fresh air helps force the warm, dirty air inside of the building out through the opening in the roof. This becomes done, without mechanical assistance.

natural ventilation works based on the design of the building, internal thermal loads and the positioning of openings.

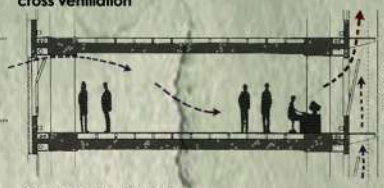
ventilation systems are designed around the following three fundamental principles:

single-sided ventilation
cross ventilation
stack ventilation



A and B earthtap additions for extremely hot areas. A is a solar chimney and B is an underground pipe for cold air intake to be used instead of the window. A is painted black, causing the air to rise faster (which increases air suction) while B cools the incoming air, as ground temperatures are always lower than air temperatures in hot environments

cross ventilation

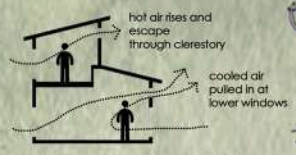


Cross ventilation is achieved using windows on both sides of the room, creating a current of air across the room. If the windows on both sides of the room are open, the overpressure on the side of the building facing into the wind and/or low pressure on the opposite sheltered side will create a current of air through the room/rooms from the exposed side to the sheltered side

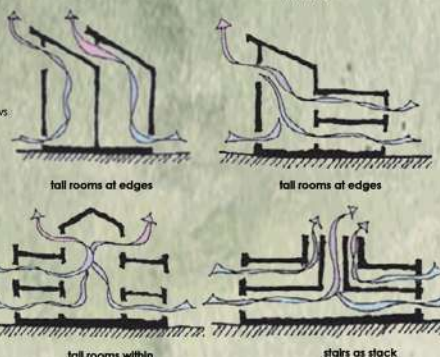
single-sided ventilation

single side-ventilation, i.e. a room with windows on only one side. The example shows the room during the winter months. The surrounding air is often cold in winter, meaning that windows cannot be opened for longer periods. To overcome this problem pulse ventilation is used. Windows are opened for short periods of time ensuring that the air in the room is replaced quickly.

stack ventilation

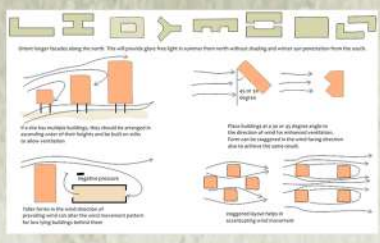


Warm air rises because it is less dense than cold air. When warm air rises to the roof of a building it creates a slight vacuum in the building's lower levels, which in turn pulls fresh air in through windows in the ground floor. This creates a natural airflow. This physical process depends on the height difference between the windows that are used to let outdoor air in and the windows used to exhaust 'used' air.
Wind direction determines which windows are used to let air in and which windows are used to exhaust air from the building



orientation to wind 6

The greatest pressure on the windward side of a building is generated when the elevation is at right angles to the wind direction, so it seems to be obvious that the greatest indoor air velocity will be achieved.
• A wind incidence of 45°would reduce the pressure by 50%.
• Thus the designer ascertain the prevailing wind direction from wind frequency charts of wind roses and must orientate his building in such a way that the largest opening are facing the wind direction.



DESIGN EVOLUTION

- the commercial spaces arranged along the road side for easy access
- the recreational space in the central space which can be used by both the public and the residents
- the villas which is the most proedominant part of the design is designed at the end of the site near the river. this gives them a good view of thewater feature
- the apartment blocks are zoned seperately so that the traffic flow can be reduced during peak hours
- the landscaping can be seen in all the zones which improves the micro climate of th area
- the amphi theater which is designed as the podium flooring is fully made green which acts as a natural wind catcher of the site
- this makes the cool air flow through the commercial and residential spaces

1 shopping mall
2 office
3 school
4 convention centre/clubhouse
5 amphi theatre
6 parking
7 boutique hotel
8 apartment
9 villas
10 kid's play area

- the roads are arranged in a 30° and 60° angle that reduces sun glare while using the roads
- the road pattern also welcomes the wind flow as it is parallel to the wind movement
- the commercial spaces arranged on the top of the site near the road for easy access
- the recreational space in the central space which can be used by both the public and the residents
- the villas which is the most proedominant part of the design is designed at the end of the site near the river. this gives them a good view of thewater feature
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1 shopping mall
2 office
3 school
4 convention centre/clubhouse
5 amphi theatre
6 parking
7 boutique hotel
8 apartment
9 villas
10 kid's play area

1 shopping mall
2 office
3 school
4 boutique hotel
5 amphi theatre
6 clubhouse and convention centre
7 apartment
8 villas
9 services
10 saradha river

THE EVOLUTION

SCALE 1:1000

MASTER PLAN

3BHK - GROUND FLOOR PLAN

3BHK - FIRST FLOOR PLAN

3BHK - SITE PLAN

3 BHK VILLA

- DESIGNED IN 2 CLUSTERS, ONE NEAR THE RIVER BODY, AND THE OTHER NEAR THE RECREATIONAL AREA

- 21 UNITS

- THIS UNIT HAS ALL THE NECESSARY AMENITY INSIDE IT MAKING IT MORE COMFORTABLE

- THE ROOFING AT THE STAIRS IS DESIGNED AS AN INCLINED CONCRETE ROOF WITH SLAB TILES THAT RESIST HEAT FROM ENTERING THE BUILDING.

- THE SKYLIGHTS IN THE ROOFING DRAWS THE LIGHT AND HELPS IN VENTILATION

- THE FRONTAGE OF THE VILLAS FACES THE ROAD FOLLOWED BY THE PEDESTRIAN RING

- THE 1ST CLUSTER IS IN A LINEAR FORM HAVING A STRIP BETWEEN ON ANOTHER WITH GREENARY SPACES

- THE 2ND CLUSTER HAS A CENTRE GREENARY AREA ENCLOSED BY THE VILLAS

- THE CONCRETE IS MOSTLY USED AS THE HEAT GAIN IS LESS

- THE VILLAS ARE PLACED IN AN ALTERNATIVE POSITION AS THE SKYLIGHT ROOFING IS SUITABLE TO DRAW LIGHT WITHOUT ANY HINDRANCE

SECTION aa'

SECTION bb'

APARTMENT - 3

THE APARTMENT IS DESIGNED TO BE AT THE END OF THE SITE FROM THE WATER BODY, SURROUNDED BY THE 2BHK VILLAS.

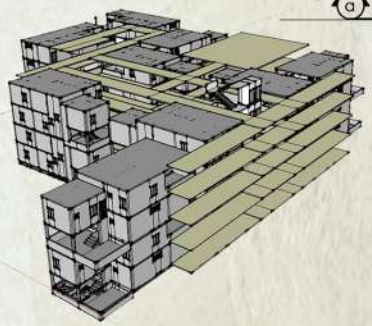
THE GREEN COMMUNAL SPACE IS DESIGNED AT THE CENTRAL SPACE FACING THE WATER BODY.

THE OPEN CORRIDORS ARE AT THE CENTRE. THERE ARE 2 SRVICE CORES BETWEEN 30 M RADIUS

THE CUT OUTS OF THE BUILDING DRAWS WIND INTO THE BUILDING CIRCULATING THE AIR.

THE APARTMENT PROVIDES SHADING TO THE NEARBY VILLAS

TH CORRIDORS AT THE EDGES AVOIDS DIRECT SUNLIGHT ACTING AS AN OVERHANG



APARTMENT 3 - BLOCK PLAN
AREA - 9000 SQ.M
9 UNITS

SCALE 1 : 150

APARTMENT 3 - SITE PLAN
PLOT AREA - 2252 SQ.M

SCALE 1 : 250

SECTIONAL VIEW

SECTION aa'
SCALE 1 : 150

3 BHK - GROUND FLOOR PLAN

3 BHK - MEZZANINE FLOOR PLAN

SCALE 1 : 100

3 BHK - FIRST FLOOR PLAN

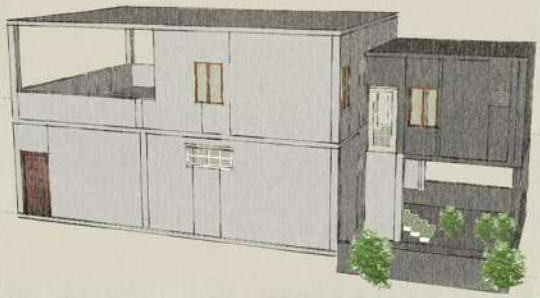
3 BHK VIEW

2 BHK - GROUND FLOOR PLAN

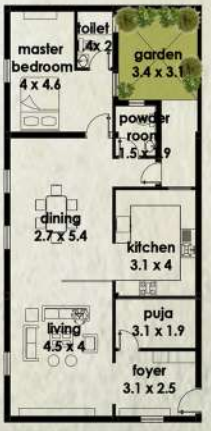
3 BHK - MEZZANINE FLOOR PLAN

SCALE 1 : 100

2 BHK - FIRST FLOOR PLAN

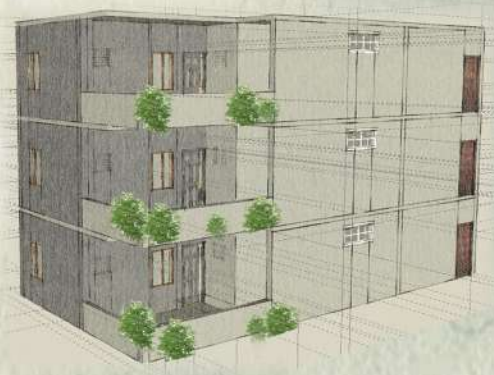


2 BHK VIEW



1 BHK - FLOOR PLAN

SCALE 1 : 100



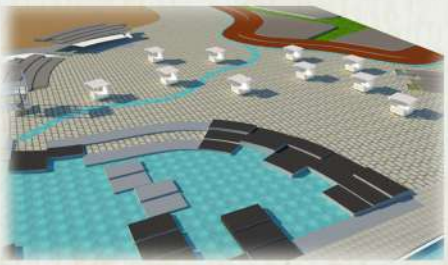
1 BHK VIEW

APARTMENT

- 3 DIFFERENT APARTMENT BUILDINGS ARE DESIGNED IN THIS PROJECT WHICH VARIES IN FORM
- EACH APARTMENT HAS 10 - 12 UNITS COMPRISING OF 1BHK , 2BHK AND 3 BHK
- THE APARTMENT IS ENCLOSED BY CLUSTER OF VILLAS
- A DUPLEX UNIT WHICH HAS A MEZZANINE LEVEL AND A PRIVATE GARDEN
- IT ALSO HAS AN OUTDOOR COMMUNAL SPACE AND GREEN TERRACES
- THE CORRIODRS ARE DESIGNED OPEN TO DRAW NATURAL LIGHT INTO THE BUILDING
- THE NARROW CUT OUTS AT DIFFERENT LEVEL MAKES THE PRESSURISED WIND INTO THE APARTMENT
- USER CAN ENJOY THE VIEW OF THE WATR BODY FROM THE APARTMENT
- THE PARKING IS GIVEN IN THE STILT FLOOR

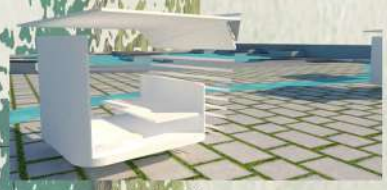
BLOCK PLAN OF THE SITE

key plan



aerial view

viewing towers

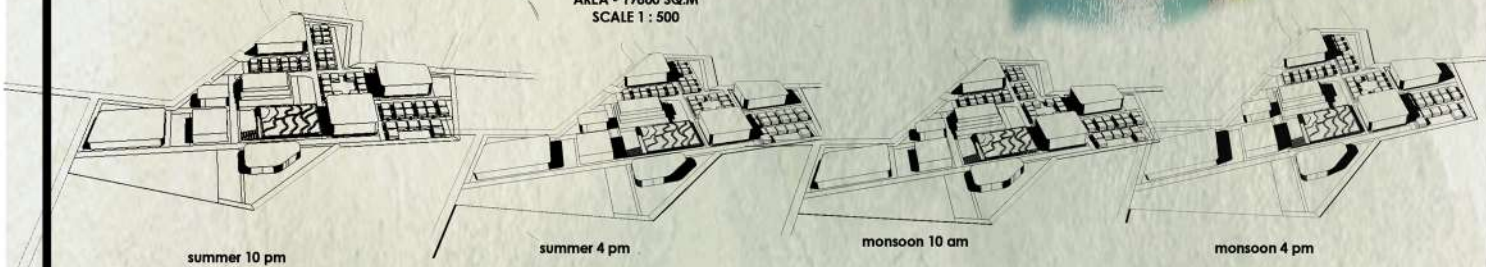


relaxing stations

THE INTEGRATION OF NATURAL AND BUILT ENVIRONMENT IS CONNECTED THROUGH VARIOUS SPOTS
THE USERS CAN ACCESS THIS ZONE DIRECTLY AND THE PEOPLE CAN ACCESS IT FROM OUTSIDE ALSO
KIDS'S AND ADULTS CAN ENJOY TH RIVER SIDE SURROUNDINGS IN THE PLAY AREA
THE OUTDOOR COMMUNAL SPACE CAN BE USED FOR PARTIS AND GATHERINGS
2 VIEW TOWERS ARE GIVEN TO GET A PERFECT VIEW OF BOTH THE RIVER AND THE DEVELOPMENT. THE CONTOURS IN THE SITE HELPS TO VIEW ALL THE ZONES
THE RELAXING STATIONS ARE DESIGNED SO THAT PEPOPLE CAN SIT, WORK, ENJOY OVERLOOKING THE RIVER AND SO AS THE RIVER STONES

THE WATERFRONT EDGE IS ALSO DESIGNED ALONG THE LENGTH

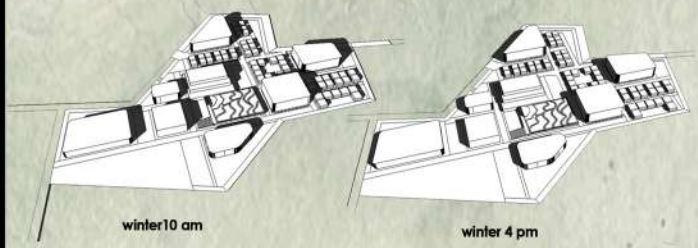
WATERFRONT ZONE
AREA - 19800 SQ.M
SCALE 1 : 500



summer 10 pm | summer 4 pm | monsoon 10 am | monsoon 4 pm

trees, shrubs, green spaces, courtyards should be provided in this area as it is normally hotter.
open corridors can help in flowing the wind across the building.
villas can be shaded through built forms and trees
apartements and other buildings shoiuld be designed to have passive cooling
the PV cells can be used for producing electricity in that building.
private gardens in every floors can help in reducing the heat

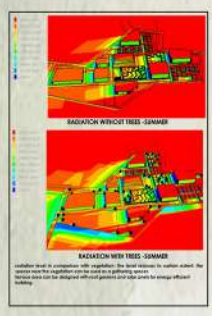
the shadow intensity in september compared to the summer season is stronger.
morning time - the shadow surrounds the building and gives shade to the building.
planting trees can help in providing shade. courtyards and green spaces coolens the area evening time - the shadows are longer giving more shade. this can be comfortable for community gathering in the evening time



winter10 am | winter 4 pm

tthe shadow analysis and radiation analysis is addressed by creating more landscapes and central spaces
apartment units has private gardens helping in circulating fresh air and that welcomes wind into the building

the mutual shading and shading through built forms are given by placing clusters of building-villas encircling the apartment



THE RESIDENTIAL , COMMERCIAL, AND RECREATIONAL ZONES ARE DESIGNED AND THE INTERGRATION OF NATURAL AND BUILT ENVIRONMENT IS DEALT IN A WAY THAT IS COMFORTABLE FOR THE USERS

THE CLIMATE ANALYSIS IS SOLVED BY DESIGNING GARDENS IN THE UNITS, OPEN SPACES AND MATERIALS.

MUTUAL SHADING AND WIND MOVEMENT IS CONSIDERED AND EVERY ZONE HAS GOOD VENTILATION

THIS DESIGN OF WATERFRONT MIXED USE DEVELOPMENT WILL BE ONE OF THE DIFFERENT PLACE TO WORK, LIVE AND ENJOY

THESIS - WATER FRONT MIXED USE DEVELOPMENT

PHYSICAL MODEL
scale 1:750

I always wanted to create things that I wish existed

sherin abigail