

ARCHITECTURAL DESIGN - IV

21ARC41

AKHILAKSHI HANU SLOTTED OF ARCHITECTURE	
NAME	: VANIESHA
USNO	: 1A033AT031
SEMESTER	: IV
COLLEGE	: ANIRVSA
ACADEMIC YEAR	: 24-25
EXTENSION EXAM	

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ACHARYA'S NRV SCHOOL OF ARCHITECTURE	
EXTERNAL EXAMINER	INTERNAL EXAMINER

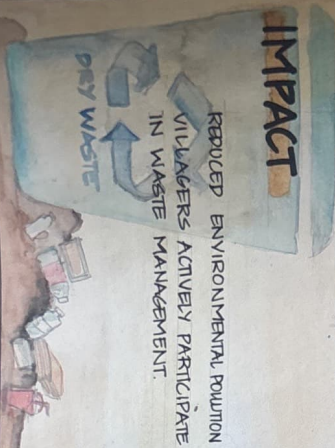
RURAL DRY WASTE COLLECTION CENTRE



SOLUTION

OUTCOME

IMPACT



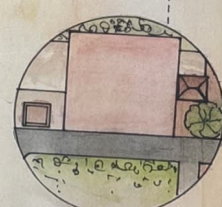
THE HERITAGE SITE KAYANT, HAS TURNED INTO A SITE WHERE PEOPLE DUMP GARBAGE



THE AIM IS TO PROMOTE EFFICIENT WASTE MANAGEMENT BY ESTABLISHING A RURAL DRY WASTE COLLECTION CENTRE THAT FOLLOWS A WASTE -TO- VALUE APPROACH.

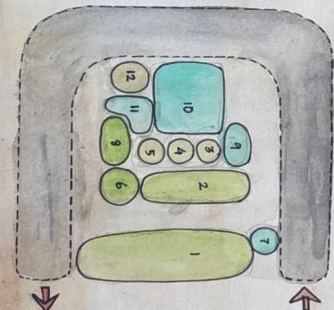


MELUKOTE, KARNATAKA



THE SITE IS LOCATED AWAY FROM THE MAIN VILLAGE CORE, PROVIDING AMPLE SPACE FOR WASTE SEGREGATION, STORAGE & VEHICLE MOVEMENT WHILE MINIMIZING DISTURBANCES.

BUBBLE DIAGRAM



- CAR PARKING
- PORTRIO (WAITING AREA)
- WASTE COLLECTION CENTRE 1
- WASTE COLLECTION CENTRE 2
- WASTE COLLECTION CENTRE 3
- COURTYARD
- SECURITY CABIN
- PUBLIC WASHROOM
- LARGE DRY WASTE STORAGE
- SEGREGATION'S STORAGE HALL
- STAFF ROOM
- OPEN SPACE

- PUBLIC SPACE
- SEMI-PUBLIC SPACE
- PRIVATE SPACE

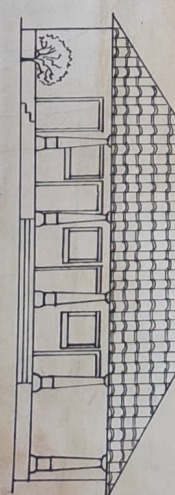
DESIGN ELEMENTS



MATERIALS



THE RURAL DRY WASTE COLLECTION CENTRE IN MELUKOTE BLENDS TRADITIONAL ARCHITECTURE WITH EFFICIENT WASTE MANAGEMENT. ITS ZONING OPTIMIZES WASTE SEGREGATION WHILE PROMOTING COMMUNITY PARTICIPATION & ENVIRONMENTAL RESPONSIBILITY.



MINOR PROJECT

SIGNATURE	NAME : VANIESHA	SHEET NO
USN NO : 1AA23ATD31	SEMESTER : FOURTH	1
SUBJECT : AD-IV	COLLEGE : ANRVSAA	

[illegible]

Architectural section drawing of a house. The drawing shows a cross-section of the building, including the roof, interior rooms, and foundation. The roof is gabled with a hatched pattern. The interior shows a living area with a fireplace, a dining area, and a kitchen. The foundation is shown at the bottom, with labels for 'CONCRETE FOUNDATION' and 'GROUND LEVEL'. The drawing is oriented vertically, with the roof at the top and the ground level at the bottom.

Level	Height
ROOF FINISH	+2950
FIRST LEVEL	+2600
CONCRETE FOUNDATION	+1000
GROUND LEVEL	+00

ROOF BRICKS LEVEL +5150

ROOF SHINGLES + 2450

INTER LEVEL +2600

CAMPING MATERIAL +1000

PLANTING 1450

GROUND 100

ALL DIMENSIONS ARE IN MM

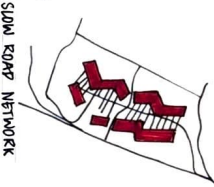
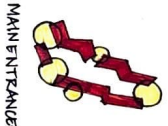
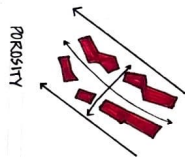
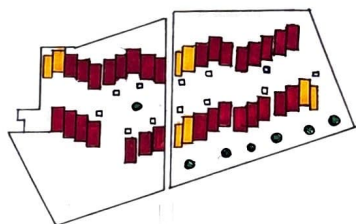
MEASURED DRAWINGS - MINOR PROJECT

TARA HOUSING GROUP IN DELHI

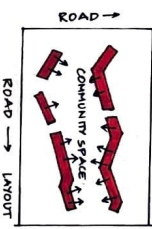
SPECIAL ORGANISATION & ORIENTATION



LOCATION
NEW DELHI, INDIA
ARCHITECT
CHARLES CORREA
BUILDING TYPE
SOCIAL HOUSING - MIDDLE CLASS
YEAR
1975 - 78
NO. OF UNITS
160
AREA
1.48 ha
DENSITY
315 PEOPLE PER HECTARE



THE PROJECT IS LOCATED ALONG GOKUL RAVINDR NAGR STREET WHICH LEADS TO TWO BIG RESIDENTIAL AREAS IN NORTH SOUTH.



SINGLE UNIT CLUSTER PLAN

● PRIVATE ZONES
● PUBLIC ZONES



STAGGERED UNITS WITH TERRACED GARDENS PROTECTED BY PERGOLAS

SUN PATH

TOTAL FIVE ENTRY POINTS TO ACCESS THE HOUSING

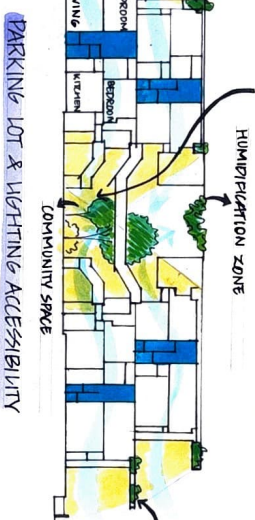
UNIT 1

LEGEND

- SERVICES
- OTHER SPACES
- CIRCULATION
- BEDROOM
- SEMI OPEN SPACES
- OPEN TO SKY

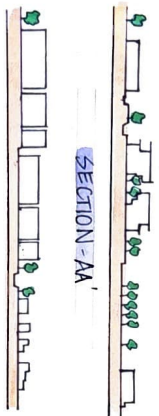
THE UPPER UNIT IS ACCESSIBLE BY THE EXTERNAL STAIRCASE

- MAJOR INSPIRATION FROM:
 - CROSS CIRCULAR SPACES
 - USE OF SEMI COVERED SPACES
 - IDEA OF A MAZE
 - PUZZLE WITH A SENSE OF PROGRESSION
 - USE OF SPACES WHERE EVENT CAN TAKE PLACE



PARKING LOT & LIGHTING ACCESSIBILITY

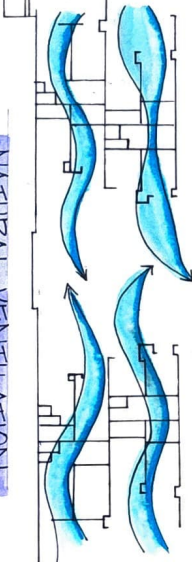
- EVALUATION: THE CONCEPT OF BUILDING ALLOWING PEOPLE TO ACCESS DIRECTLY TO THE INTERIOR GARDEN, MORE THAN THAT, EVERYONE ALSO HAS THEIR OWN OPEN TO SKY TERRACES WITH FULL PILED STAIRW. BY TAKING ADVANTAGES OF SUN, WIND DIRECTIONS & OPEN SPACES, HENCE LIGHTING ACCESS & VENTILATION TO EACH DWELLING ARE MAXIMIZED.
- WINTER INCINATION RAYS 42 DEGREE
- SUMMER INCINATION RAYS 82 DEGREE



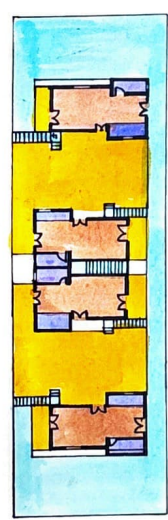
SECTION-AA

SECTION-BB

EVALUATION: THE BUILDING TURNS ITS BACK ON THE STREET TO PREVENT NOISE, JUST FROM THE HIGH FLOW VEHICLES. BEING STOCKED AS A ROOM, CENTRAL GARDEN, BIG OVERHANDS AND SHAPE BRIDGES, ALL GIVE THESE BUILDINGS A SENSE OF HIDDEN INDIAN CHARACTERISTIC UNDER HOT SUN, FULL OF LIGHT WITHOUT SUFFERING FROM HIGH TEMPERATURES.



NATURAL VENTILATION



THE 3RD, 4TH, & 5TH FLOORS ARE A REPERITION OF THE GROUND FLOORS BUT WITH AN EXTERNAL CORRIDOR ON THE 3RD FLOOR. THE MULTIPLICITY OF THE PEOPLE TO EXPAND THEIR BUILT FORM BASED ON THEIR FUNCTIONALITY.

HOUSING CASE STUDY

SIGNATURE	NAME : VANIESHA	SHEET NO
USANO : 1A023A031	SEMESTER : FOURTH	3
SUBJECT : AP-IV	COLLEGE : ANEWSA	

TARA HOUSING GROUP IN DELHI

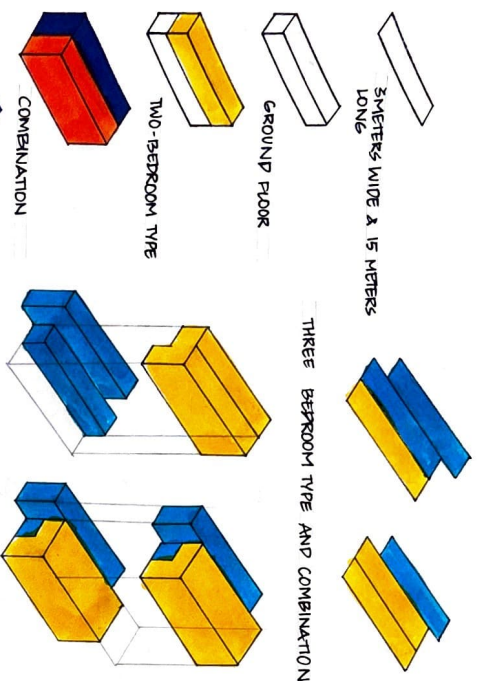
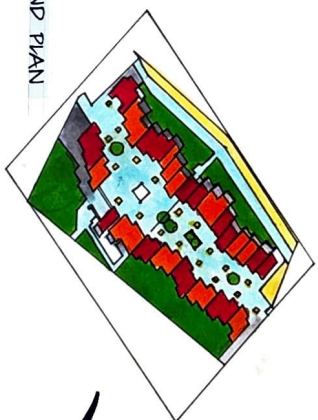


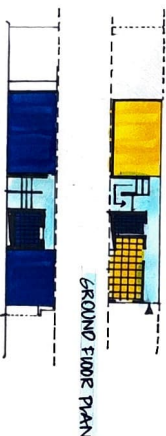
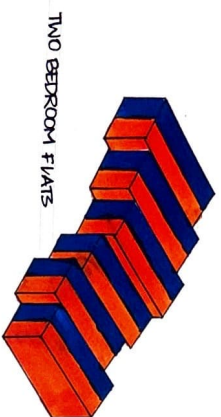
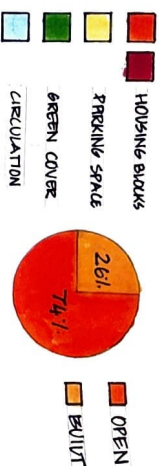
FIGURE GROUND PLAN

THE DWELLINGS ARE GROUPED INTO SOME SMALL & MEDIUM BLOCKS. SOME BLOCKS ARE ASSEMBLED ONLY BY TWO-BEDROOM FLAT, SOME ARE COMBINED BETWEEN 2-BEDROOM TYPE AND 3-BEDROOM TYPE. IT CREATES THE DIVERSITY OF FORM BUT STILL MAINTAINS THE LOGIC OF DWELLING'S FUNCTIONS.

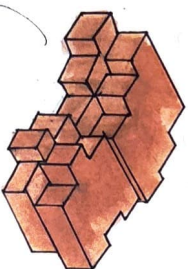


TIME PROBLEM

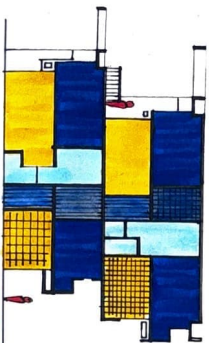
TOTAL SITE AREA	15000 sq.mt (approx 3.6 acre)
TOTAL BUILTUP AREA	15510.72 sq.mt
GROUND COVER	2924.34 sq.mt
PARKING AREA	
4 - WHEELER	9162.85 sq.mt
2 - WHEELER	160 sq.mt
GREEN COVER	3686.6 sq.mt
OPEN SPACE	11594.33 sq.mt
CIRCULATION	4692 sq.mt
F51 = 15510.72 / 15000	= 1.03



GROUND FLOOR PLAN

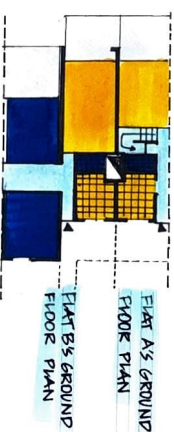


VOLUMETRIC SCHEME

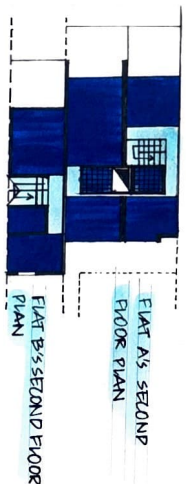


SECOND FLOOR PLAN

- THE COMPLEX IS FORMED DUE TO THE COMBINATION BETWEEN PAIRS OF ACCOMMODATION UNITS.
- THE SECOND FLOOR WHICH IS LARGER THAN THE GROUND ONE WITH A BECOMING THAT RISES FURTHER APPROXIMATELY 6 METERS GIVES THE MIXTURE BETWEEN SHADOW & LIGHT.



THREE BEDROOM TYPE



LOBBY ZONE NIGHT ZONE CIRCULATION BATHROOM

IN THE SHAPE OF "V", THIS TYPE SEEMS TO BE DIFFICULT TO ATTACH IN THE MIDDLE OF A CLUSTER AND ANY OF THEM ARE LOCATED IN THE OUTER EDGES.

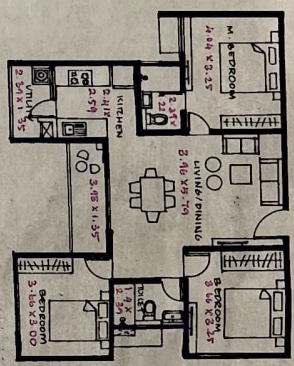
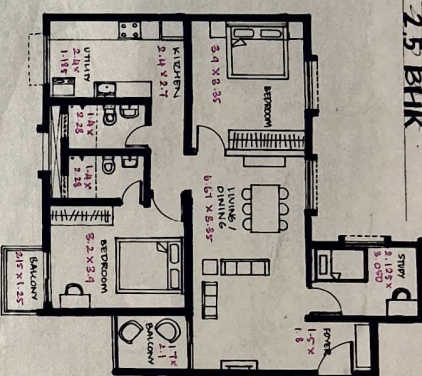
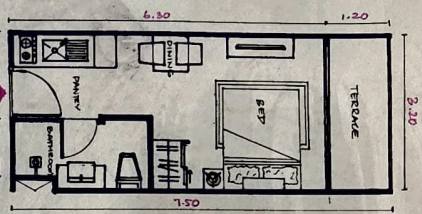
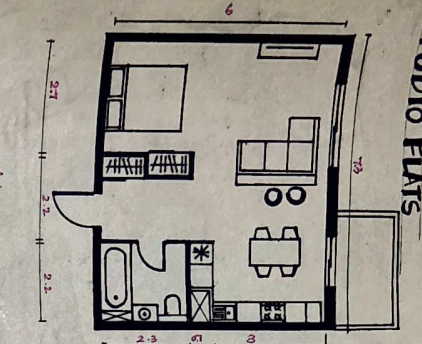
SERVICES

- WATER SUPPLY - THEY HAD UNDERGROUND WATER SUPPLY. WATER IS SUPPLIED THROUGH PUMPING SYSTEM.
- DRAINAGE - WASTE WATER IS DIRECTLY DRAINED INTO MUNICIPAL SEWER.
- ELECTRICITY - ELECTRIC METERS IS PROVIDED AT OUTSIDE EVERY BLOCK BELOW STAIRCASE LANDING.
- STAIRCASE - TOTAL 19 CORA-S BLOCKS - 4 BRIDGES THAT CONNECT 2 ROWS OF BUILDING

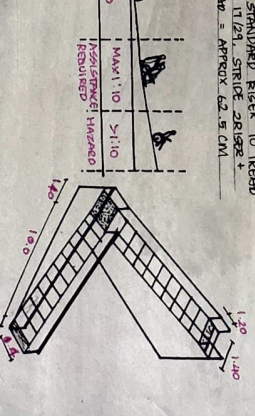
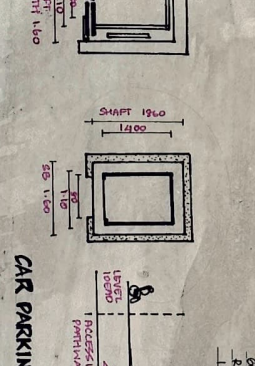
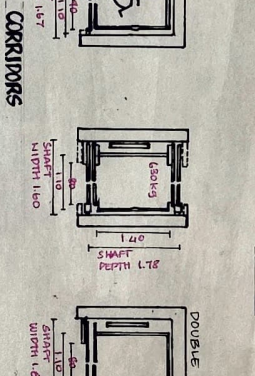
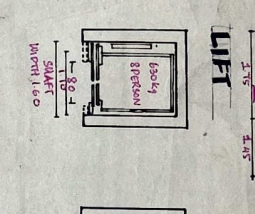
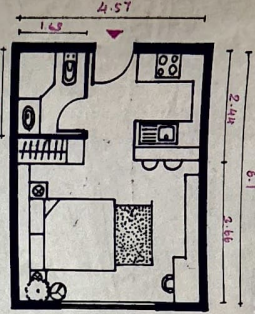
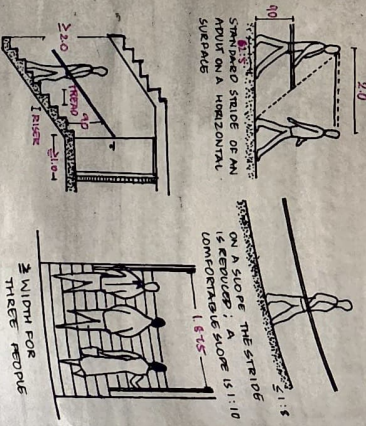


SIGNATURE	NAME	SHEET NO
USN NO	1A23KATD31	4
SEMESTER	FOURTH	
SUBJECT	AD - IV	
COLLEGE	ANURVA	

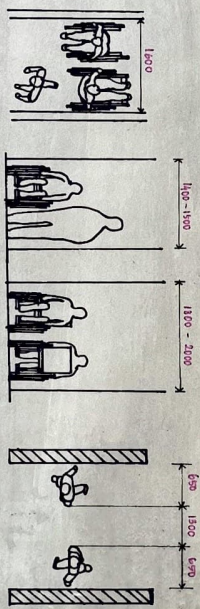
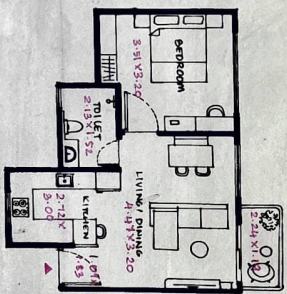
STUDIO FLATS



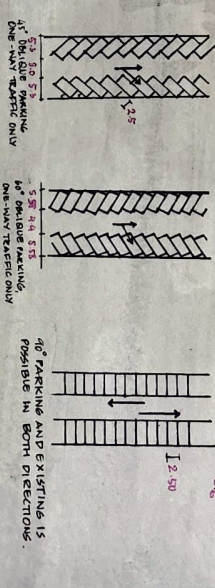
STAIRS & RAMPS



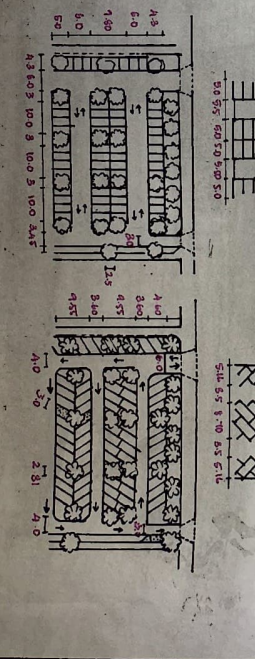
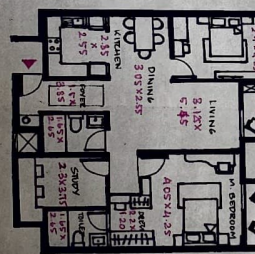
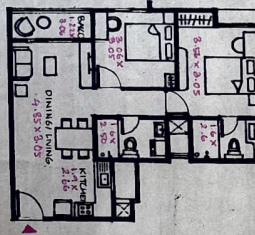
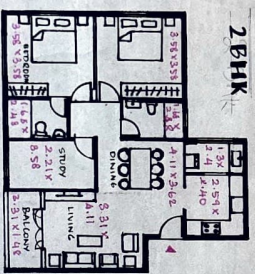
1BHK



CAR PARKING



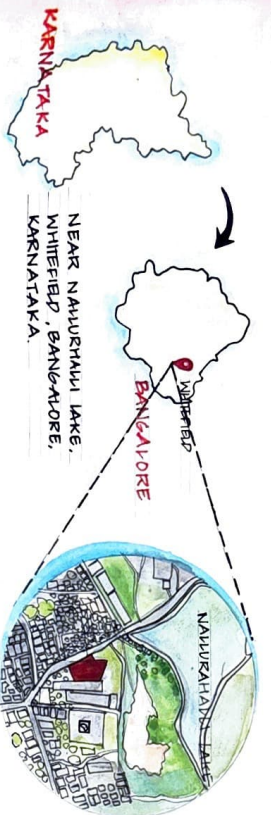
2BHK



HOUSING STANDARDS

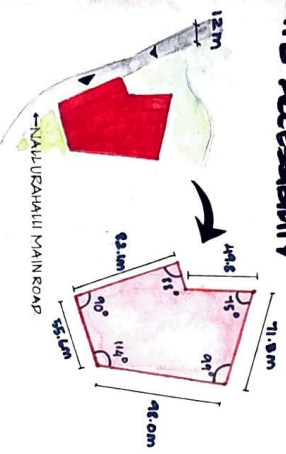
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	VAISHA	14/03/2021	5
SEMIER	FOURTH		
SUBJECT	AD-IV		
COLLEGE	ANRISA		

LOCATION :

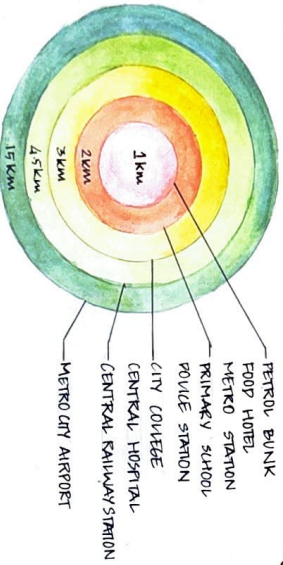


- PROPOSED SITE IS NEAR TO A REVENUE LAKE
- IT HAS GOOD METRO & URBAN CONNECTIVITY.
- POTENTIAL DESIGN FOR COMMUNITY-ORIENTED DESIGNS
- IDEAL FOR MIXED-USE DEVELOPMENT

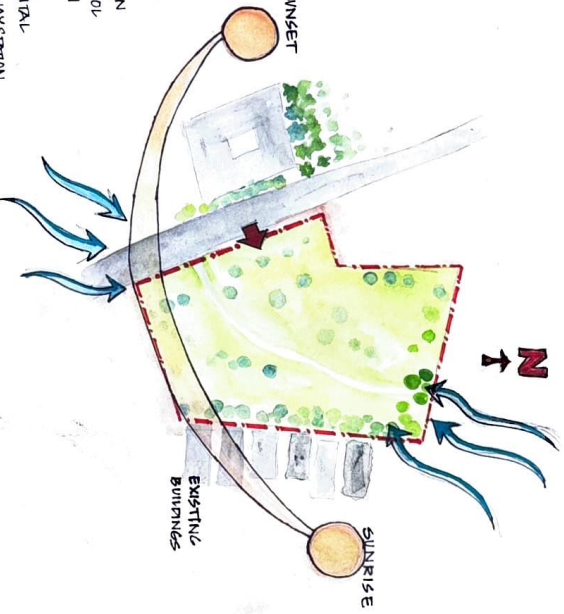
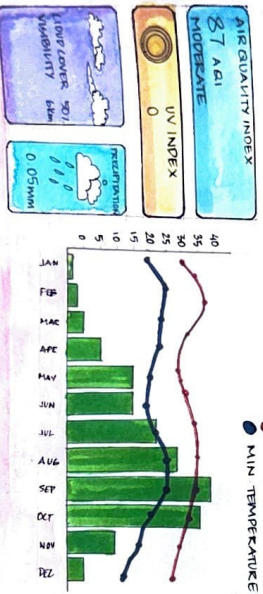
SITE ACCESSIBILITY



PROXIMITY CHART



WEATHER CONDITIONS



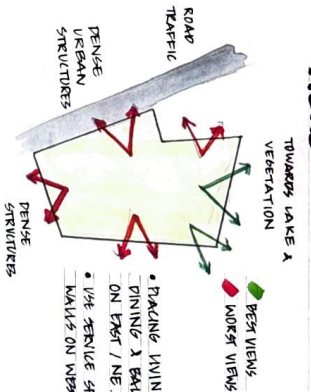
VEGETATION



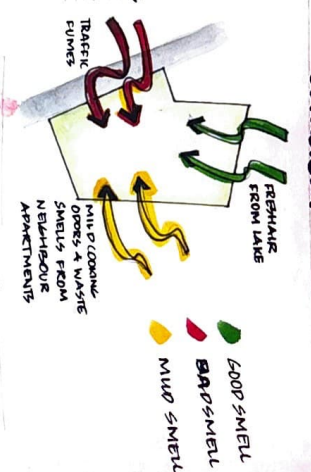
CONSTRAINTS

- FLOOD RISK : HEAVY RAINS CAN CAUSE LAKE OVERFLOW. BUILDING NEARBY SHOULD BE ELEVATED OR FLOOD RESISTANT.
- LEGAL SETBACKS : 55% ALLOWED FOR BUILD UP AREA.

VIEWS



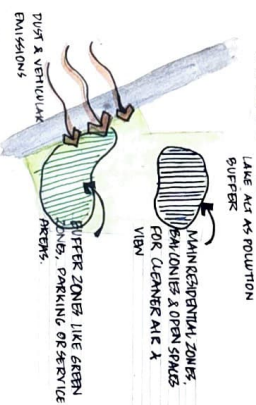
MICROCLIMATE



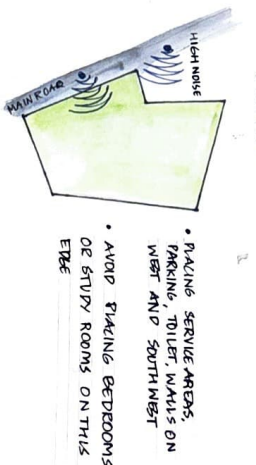
SERVICE



POLLUTION



NOISE



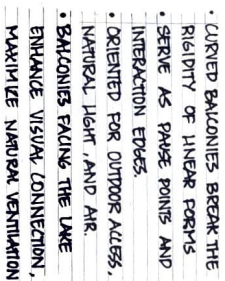
ZONE	RECOMMENDED LOCATION	WHY?
ENTRY/EXIT	WEST SIDE (ROAD ACCESS)	EASY VEHICULAR ACCESS
COMMUNITY SPACE	NORTHERN SIDE (TOWARDS LAKE)	ADVANTAGE OF PLEASANT LAKE & BREEZE
RESIDENTIAL BLOCKS	CENTRAL + NORTH EAST ZONE	AWAY FROM NOISE & POLLUTION
GREEN BUFFER ZONE	WEST, SOUTH EDGE	BUFFER TO BLOCK POLLUTION & NOISE
PARKING AREA	WEST SIDE (NEAR ROAD)	EASY VEHICLE ACCESS & PEDESTRIAN FRIENDLY
CHILDREN'S PLAY AREA	NORTH EAST SIDE	SAFE AWAY FROM ROADS, VISIBILITY FOR PARENTS
SID SYSTEM	SOUTH OR SOUTH-WEST EDGE	UTILIZES SITE SLOPE FOR GRAVITY FLOW.

SITE ANALYSIS

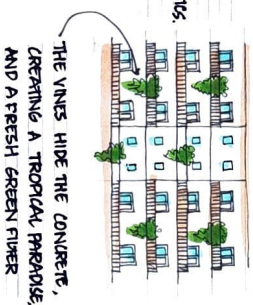
SIGNATURE	NAME : VANISHA	SHEET NO
USING : 10032031		
SEMIESTER : FOURTH		
SUBJECT : AD-IV		
COLLEGE : ANRISA		

BREAKDOWN OF CONCEPTUAL FEATURES

blocks are broken into separate massings for light, ventilation, and zoning.

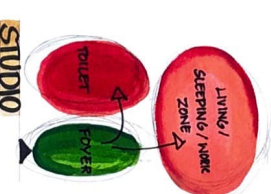
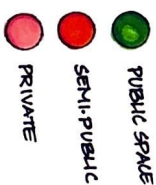
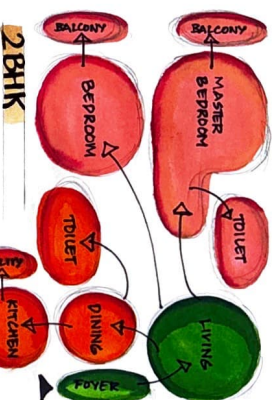


- PLANNERS IN BALCONIES & FACADE EDGES TO SOFTEN HARD EDGES.
- PROVIDE SHADING, COOLING, AND AESTHETICS.
- PROMOTES BIOPHILIC CONNECTION



INTEGRATING COAVING & APARTMENT TYPOLOGIES

A hand-drawn floor plan of a house. The layout includes a BALCONY at the top left, a MASTER BEDROOM and a BEDROOM in the upper middle, and a TOILET 1 and TOILET 2 between them. Below these are a STUDY ROOM, a LIVING room (colored green), a DINING room, a KITCHEN, a UTILITY room, and a FOYER at the bottom. Arrows indicate the flow and connections between the rooms: from the balcony to the master bedroom; from the master bedroom to the bedroom; from the bedroom to toilet 2; from toilet 2 to the study room; from the study room to the living room; from the living room to the dining room; from the dining room to the kitchen; from the kitchen to the utility room; from the utility room to the foyer; and from the foyer to the living room and dining room. There is also an arrow from toilet 1 to the dining room.



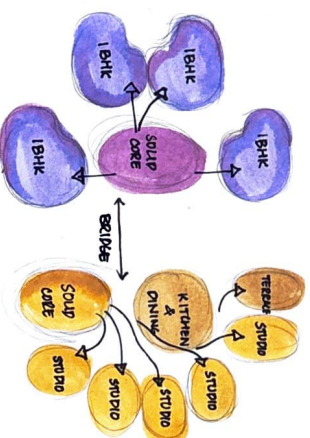
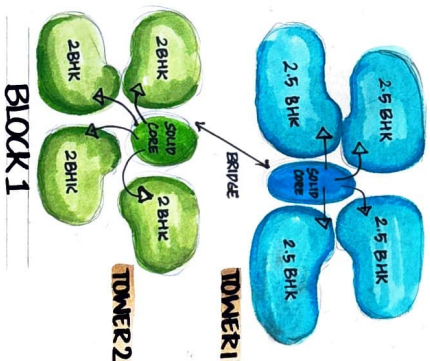
- SUNLIT BALCONIES ENSURE LIGHT & VENTILATION.
- UNITS DESIGNED FOR CROSS VENTILATION.
- PUBLIC TO PRIVATE SPACE ZONING INSIDE UNITS.
- 2.5 BHK OFFERS FLEXIBLE ROOM USE (STUDY).
- GREEN BUFFERS BETWEEN UNITS FOR COOLING.
- FRAGMENTED LAYOUT ALLOWS LIGHT & AIR.
- CIRCULATION IS CLEAR FROM CORE TO EACH UNITS.

STUDIO UNIT:

- SHARE KITCHEN & DINING ENCOURAGE INTERACTION.

TERACE ADDS EXTENSION OF LIVING SPACE

184K



TOWER 3 TOWER 4

Block 1

Block 2

CONAVITA - CONCEPT



NAME	:	VANISHA
USN NO	:	1AA23AT051
SUBJECT	:	AD-IV
ACADEMIC YEAR	:	2024 - 2025



COHABITAT

INTEGRATING COIVING & APARTMENT TYPOLOGIES

MICRO CONTEXT : NALLURAHAM IS A RAPIDLY DEVELOPING NEIGHBOURHOOD WITH A MIX OF APARTMENTS, INDEPENDENT HOUSES, COMMERCIAL SPACES AND COVING HUBS.

MACRO CONTEXT : WHITEFIELD IS MAJOR IT HUB IN BANGALORE KNOWN FOR ITS IT TECH PARKS. MIXED USED DEVELOPMENT AND HIGH DENSITY HOUSING.

BYLAWS [BMP & BDA] :

- FOR BUILDINGS UP TO 4.5M IN HEIGHT, SETBACK + FRONT - 3M → BACK - 1.5M → SIDE - 1M
- FOR BUILDINGS UP TO 11.5 - 15M IN HEIGHT, SETBACK → 5.4M ON ALL SIDES
- FOR BUILDINGS UP TO 18 - 24 M IN HEIGHT, SETBACK → 1M ON ALL SIDES
- FOR BUILDINGS UP TO 24 - 30M IN HEIGHT, SETBACK → 2M ON ALL SIDES

LAND USE CATEGORY : RESIDENTIAL, COIVING HABITAT & APARTMENT TYPOLOGIES

ZONE : MAHADEVANARA **FAR :** 1.75 **GROUND COVERAGE :** 55% (MAXIMUM)

FLOOR AREA RATIO [FAR]

FLOOR AREA RATIO FOR RESIDENTIAL BUILDINGS

ROAD WIDTH	MAXIMUM FAR	GROUND COVERAGE
LESS THAN 9M	1.50	55%
BETWEEN 9 - 12M	2.25	50%
BETWEEN 12 - 18 M	2.50	45%
BETWEEN 24 - 30M	3.0	40%
ABOVE 30M	3.25	40%

AREA PROGRAM

AREA CALCULATION :

SITE AREA - 8034 M² — ①

F.A.R. - 1.75 — ②

MAX. PERMISSIBLE BUILTUP AREA - A X B = 14060

MAX. GROUND COVERAGE - 55% → 0.55 X 8034 = 4418 M²

MIN. NO. OF FLOORS = $\frac{14060}{4418} = 3.19$

4418

SUPER BUILT UP AREA - 14060 - 1142 M²

AMENITIES = 2000 M²

TOTAL BUILT UP FOR UNITS - 12060 M²

BUILT UP AREA (80%) - 9648 M²

CIRCULATION (20%) - 2412 M²

NO. OF UNITS	UNITS	TOTAL (80%)	PER UNIT AREA
43 UNITS	● STUDIO	1423 (30%)	45m ²
26 UNITS	● 1BHK	1923 (20%)	75m ²
24 UNITS	● 2BHK	2894 (30%)	120m ²
14 UNITS	● 2.5BHK	2894 (30%)	150m ²

CLUSTER DEVELOPMENT

NAME : VANISHA
USN NO : 1AA23A1031
SUBJECT : AD-IV
ACADEMIC YEAR : 2024-2025



COHABITAT

INTEGRATING COINING & APARTMENT TYPOLOGIES

INDEX

1. ENTRANCE / EXIT	11. BLOCK2 - LOBBY
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3. UTILITY BLOCK	13. COMMUNITY HALL
4. VEHICLES PARKING	14. GYM
5. ENTRY DRIVEWAY TO BLOCK1	15. CONT'DN HALLROOM
6. ENTRY DRIVEWAY TO BLOCK2	16. SWIMMING POOL
7. PROPOSED POINT BLOCK1	17. CHANGING ROOM
8. PROPOSED POINT BLOCK2	18. KIDS PLAY AREA
9. BLOCK1 - LOBBY	19. BASKET BALL COURT
10. BLOCK1 - PARKING	20. TENNIS SEATING



SCALE - 1:250

STILT PLAN



NAME : VANIEZHA
USN NO : 1A02AND031
SUBJECT : AP-IV
ACADEMIC YEAR: 2024-2025



COHABITAT

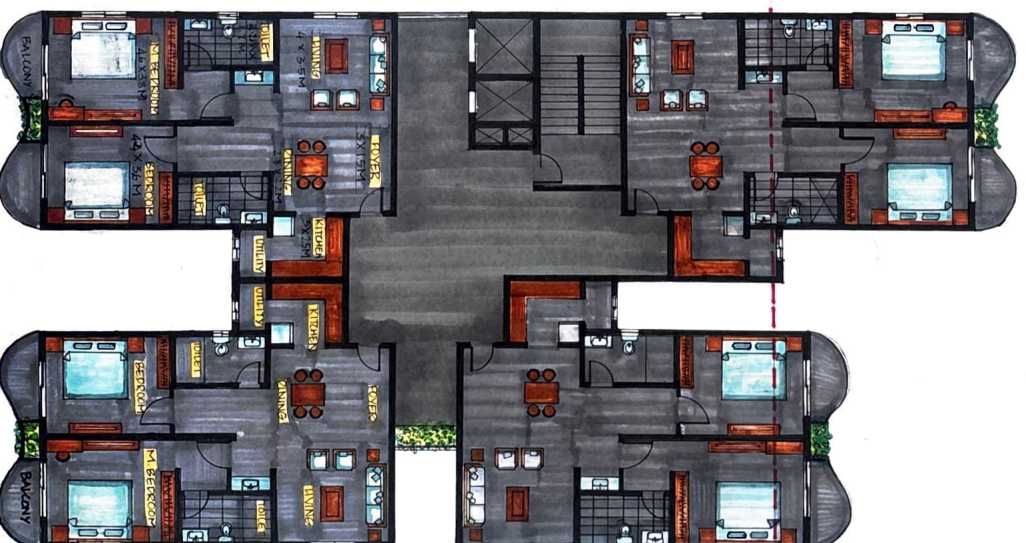
INTEGRATING COIVING & APARTMENT TYPOLOGIES



TOWER 1

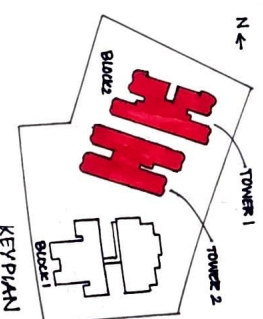
A

B



TOWER 2

B



TOWER 1 - 2.5 BHK

- NO. OF 2.5BHK IN A FLOOR - 4 UNITS
- NO. OF 2.5BHK IN A BLOCK - 20 UNITS
- AREA OF ONE 2.5BHK UNIT - 150 sq. M.

TOWER 2 - 2 BHK

- NO. OF 2BHK IN A FLOOR - 4 UNITS
- NO. OF 2BHK IN A BLOCK - 24 UNITS
- AREA OF ONE 2BHK UNIT - 100 sq. M.

SCALE : 1 : 100

BLOCK 1-FLOOR PLAN



NAME : VANIECHYA
USN NO : IAA23KAT031
SUBJECT : AD - IV
ACADEMIC YEAR : 2024 - 2025



COHABITAT

INTEGRATING COLIVING & APARTMENT TYPOLOGIES



ALL DIMENSIONS ARE IN MM

SCALE - 1 : 100

BLOCK-1 ELEVATION

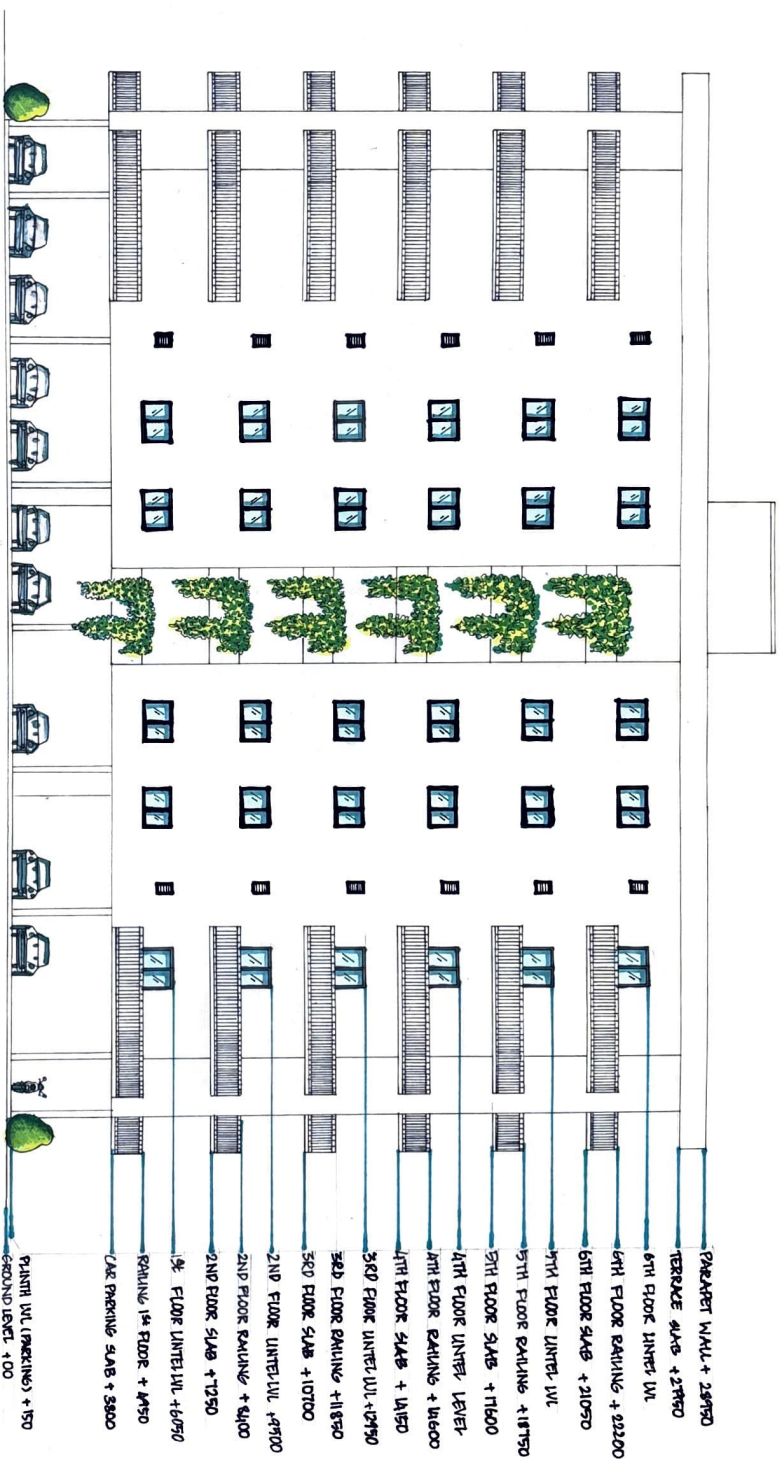


NAME : VANIEGHIA
 USN NO : 1A023ATD31
 SUBJECT : AD - IV
 ACADEMIC YEAR : 2024 - 2025



COHABITAT

INTERACTING COVING & APARTMENT TYPOLOGIES



ALL DIMENSIONS ARE IN MM
SCALE - 1 : 100

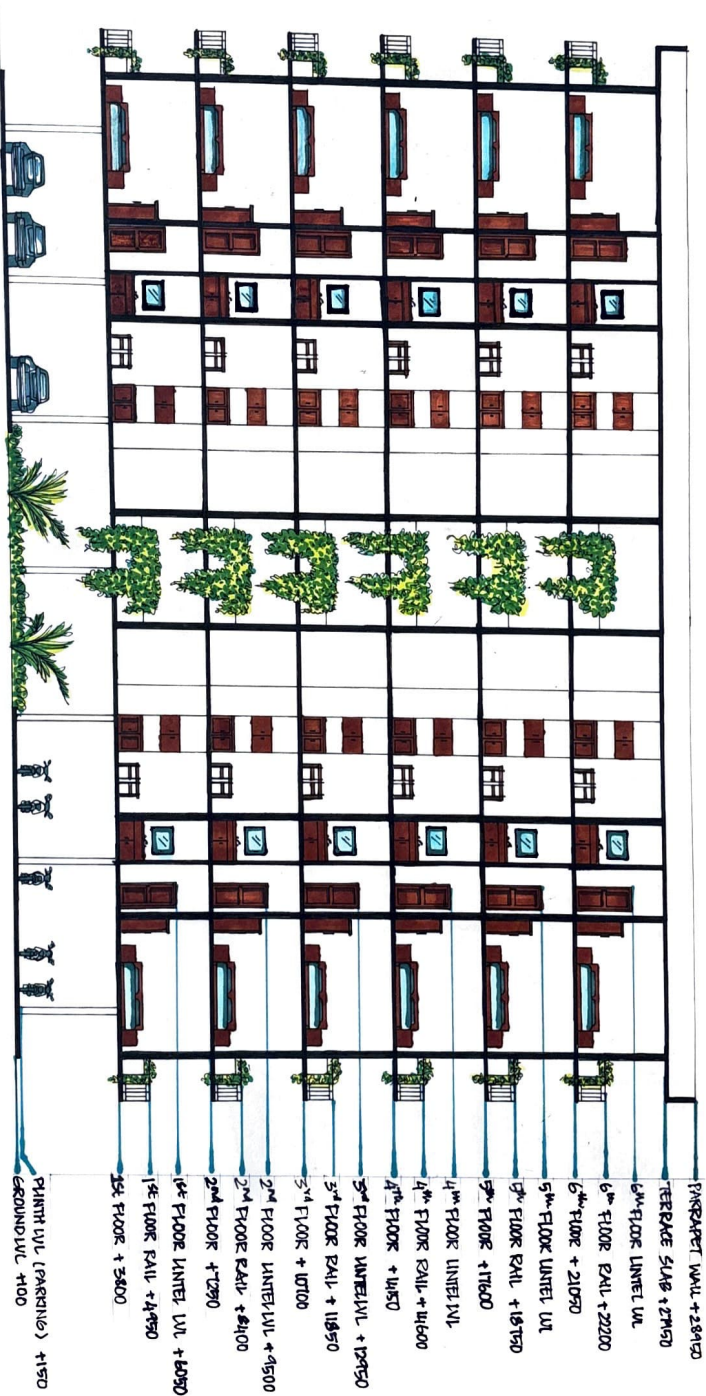
BLOCK-1 ELEVATION

NAME : VANISHA
USN NO : 1AA234031
SUBJECT : AD - IV
ACADEMIC YEAR : 2024 - 2025



COHABITAT

INTEGRATING COVING & APARTMENT TYPOLOGIES



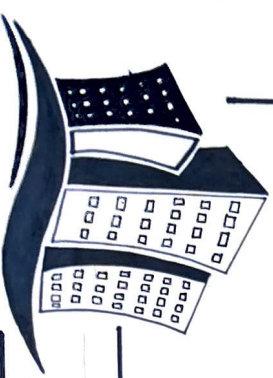
ALL DIMENSIONS IN MM

SCALE -1: 100

BLOCK-1 SECTION-AA

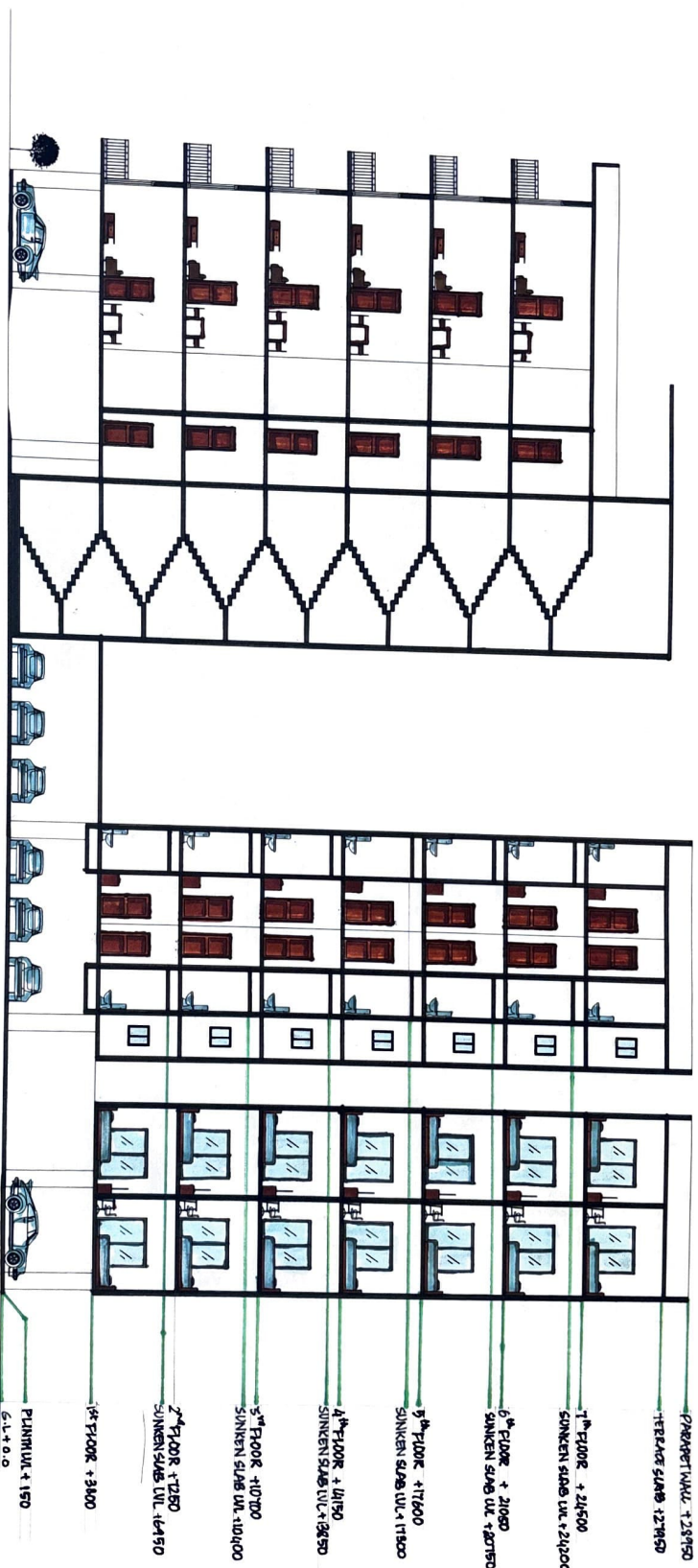


NAME : VANIKETA
USN NO : VAO24T031
SUBJECT : AD-IV
ACADEMIC YEAR : 2024-2025



COHABITAT

INTEGRATING COIVING & APARTMENT TYPOLOGIES



ALL DIMENSIONS ARE IN MM

SCALE - 1 : 100

BLOCK-1 SECTION BB'



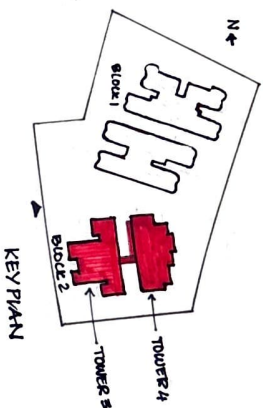
NAME : VANISHA
U/N NO : IAA25AT051
SUBJECT : AP-IV
ACADEMIC YEAR : 2024 - 2025



INTEGRATING COUIVING & APARTMENT TYPOLOGIES

- NO. OF 1BHK IN A FLOOR - 4 UNITS
- NO. OF 1BHK IN TOWER 3 - 24 UNITS
- AREA OF ONE 1BHK UNIT - 68 sqm

- NO. OF STUDIO IN A FLOOR - 5 UNITS
- NO. OF STUDIO IN TOWER 4 - 45 UNITS
- AREA OF ONE STUDIO UNIT - 35 sq.M



TOWER 4



NAME	VANIE SHA
USN NO	1AA23A TO31
SUBJECT	AD - IV
ACADEMIC YEAR	2024-2025



CONHABITAT

INTEGRATING COIVING & APARTMENT TYPOLOGIES



ALL DIMENSIONS ARE IN MM

SCALE - 1 : 100

BLOCK 2 - ELEVATION

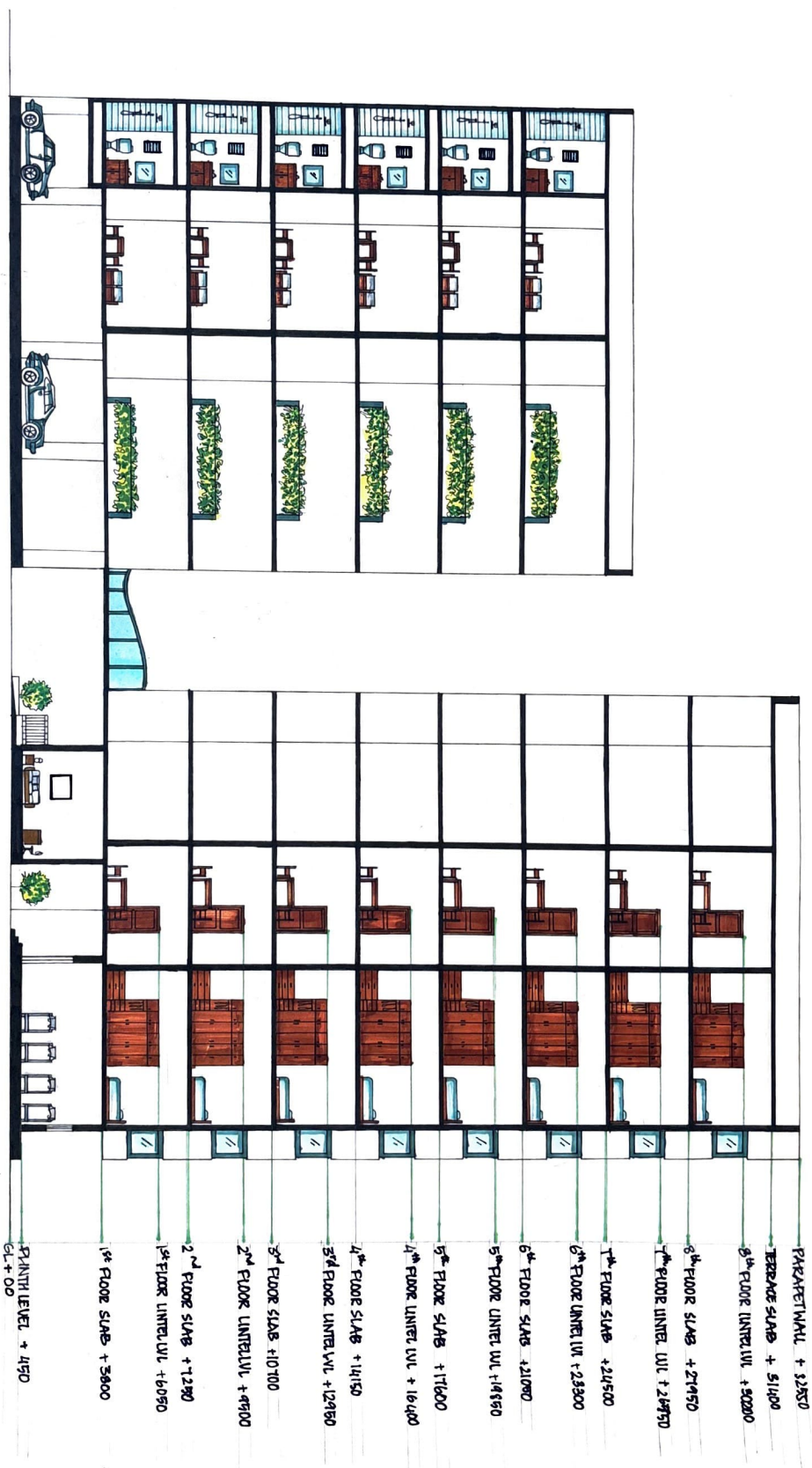
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USN NO : 1A23ANT03
SUBJECT : AD-IV

ACADEMIC YEAR : 2024-2025



COHABITAT

INTEGRATING COVING & APARTMENT TYPOLOGIES



SCALE - 1 : 100

ALL DIMENSIONS ARE IN MM

BLOCK-2 SECTION-AA



NAME : VANISHA
USN NO : 1AA23AT031
SUBJECT : AD-IV
ACADEMIC YEAR : 2024 -2025

