

Sinhgad Institutes
SINHGAD TECHNICAL EDUCATION SOCIETY'S
Sinhgad College of Architecture, Pune

INVITES FOR

ANNUAL EXHIBITION 2021-2022

Kalavinya

CHIEFT GUEST :
AR.SONAL KARANJIKAR
AR.ANKOOR PATIL

STUDENT COORDINATORS
SIDDHANT JAISWAL
UTKARSHA CHAPEKAR
ARIHANT LODHA
KUMKUM OZA

FACULTY COORDINATORS
KALPANA HADAP
ASHISH SAKAT
VRUSHALI DHAMNE
AKSHAY PIPADA
KARUNA GHORPADE

Venue : Sinhgad college of Architetcture, pune Date: 22 April 2022

Prof.M.N.Navale
ME(Electrical), MIE, MBA,
Founder President

Dr.(Mrs)Sunanda Navale
B.A, M PM, PhD
Founder Secretary

Dr.Rohit Navale
Vice President, HR

Mrs.Rachana Navale
Ashtekar
Vice President (Admin)

Dr.Banani Banerjee
Prindpal, SCOA

Our Offline exhibition – event portraying the students’ Academic work from 1st to 5th year B.Arch. 1st year students had a physical study tour to villages which was the focus of the exhibition.

The Chief guest for the event was Ar.Sonal Karanjikar and Ar.Ankoor Patil. We initiated an interclass competition for this exhibition.



PROJECT DETAILS



Student: 1st Year B.Arch
Faculty: Ar. Kalpana Hadap, Ar. Vrushi Dhamne, Ar. Avanti Kale

**1st Year B.Arch (A) 2021-2022
ARCHITECTURAL DESIGN I**

**STUDY TOUR AT
SAMRAD,BHANDARDHARA**

Sinhgad College of Architecture, Pune

ADVENTUROUS ACTIVITIES AT BHANDARDARA-

Best time to go for Bhandardara Camping:-
Bhandardara is the best time for camping in a beautiful area. It is a small village in the Western Ghats of Maharashtra. The area is surrounded by dense forest and is a great place for camping. The weather is cool and the view is beautiful. It is a great place for a family or a group of friends to spend some time in nature.

Issues and Considerations:-
1. Lack of water supply
2. Lack of electricity
3. Lack of proper sanitation facilities
4. Lack of proper waste management system
5. Lack of proper road connectivity
6. Lack of proper communication facilities
7. Lack of proper medical facilities
8. Lack of proper security measures
9. Lack of proper fire safety measures
10. Lack of proper first aid facilities



Villages studied during the Study Tour



Academic work on display in classes from 1st- 5th year B.Arch department



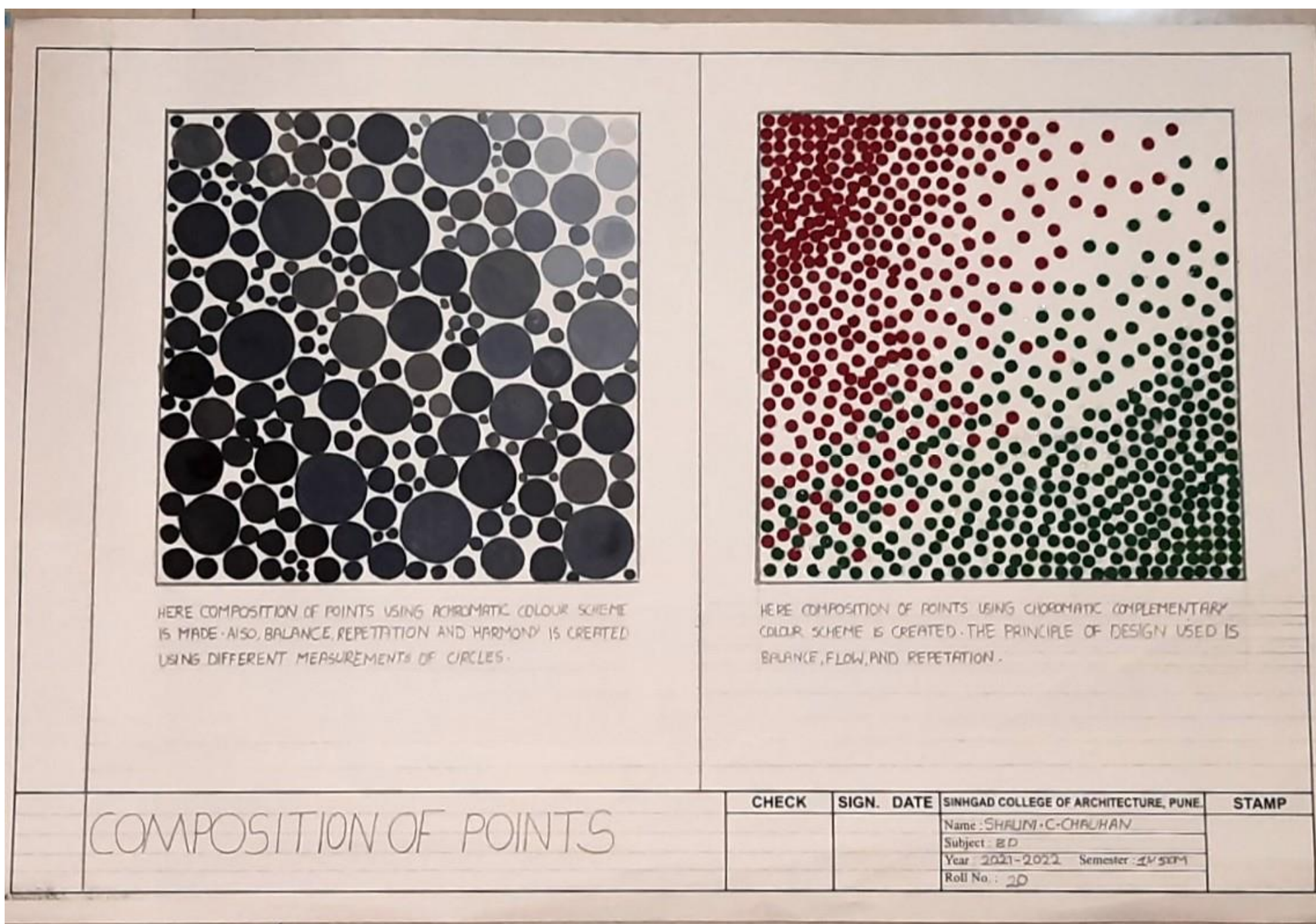
Academic work on display in classes from 1st- 5th year B.Arch department



Display of Academic work



Academic work on display in classes from 1st- 5th year B.Arch department



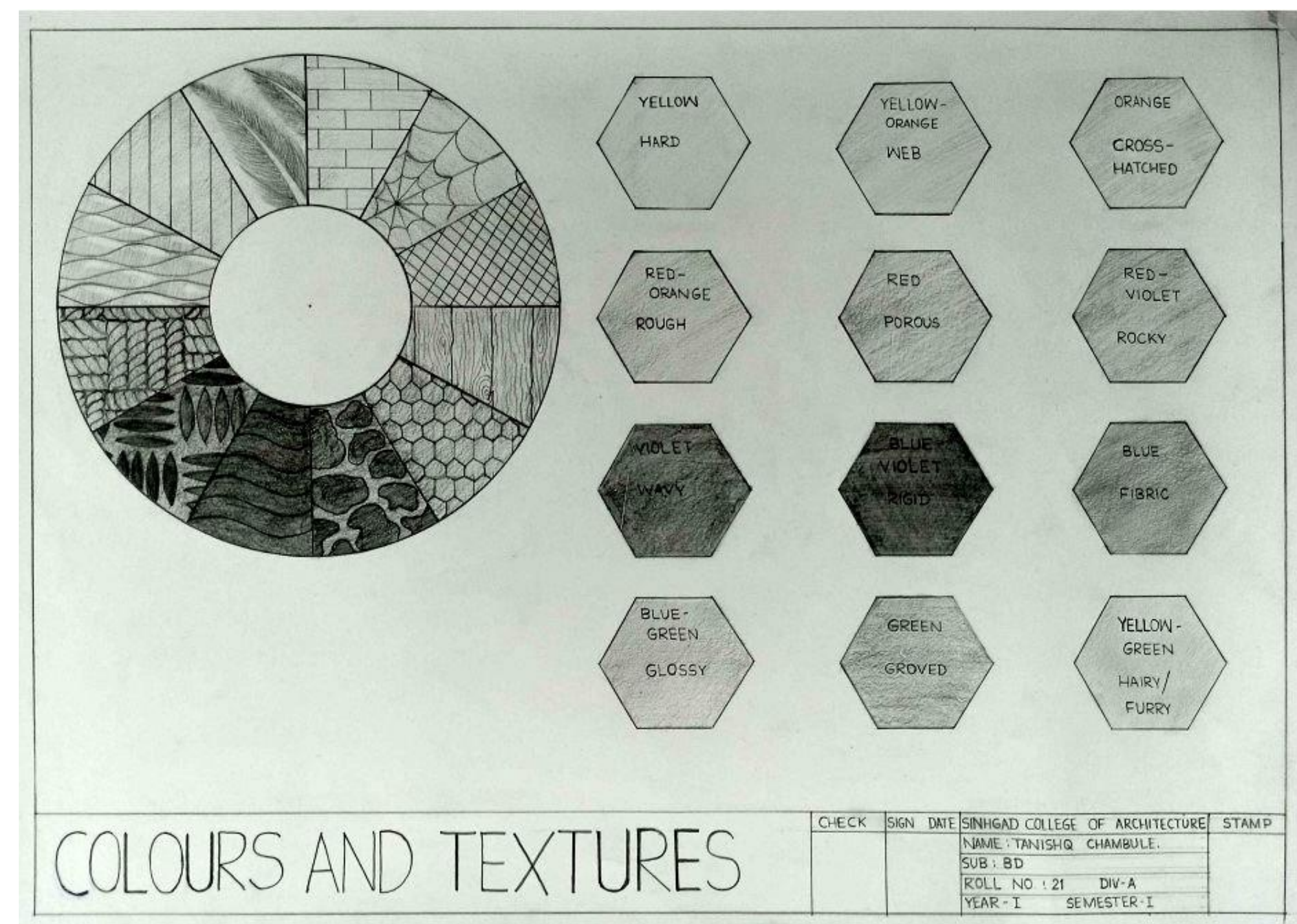
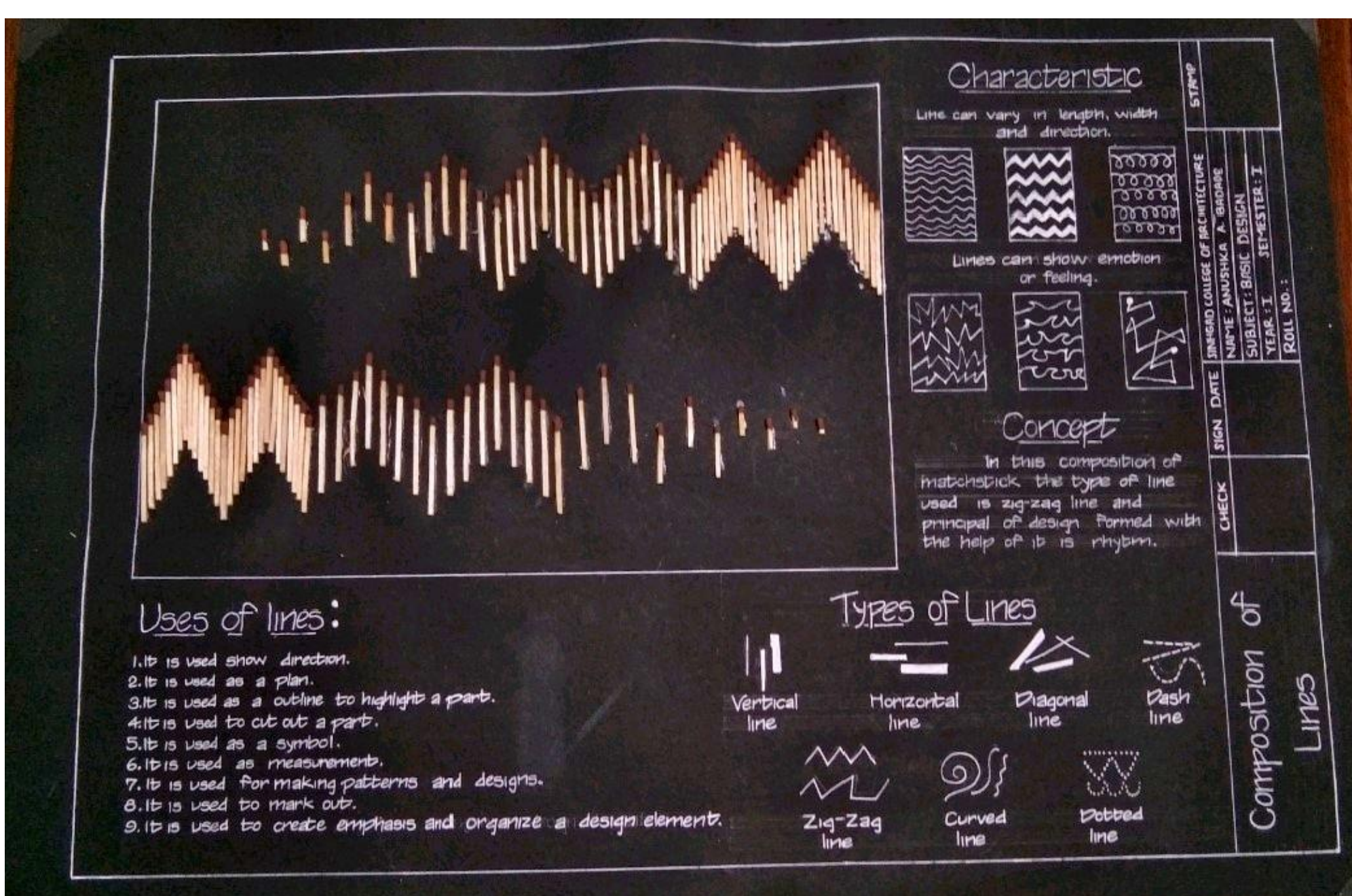
Objectives:

The purpose of the assignments was to examine the design elements and its implication expending the design principles.

The purpose of the assignments was to examine the fundamental design concepts. To create a work out of things you have around the house that demonstrates impression. To make it possible for students to learn colours using different colour schemes. To create all the assignments work out of things you have around the house that demonstrates the purpose

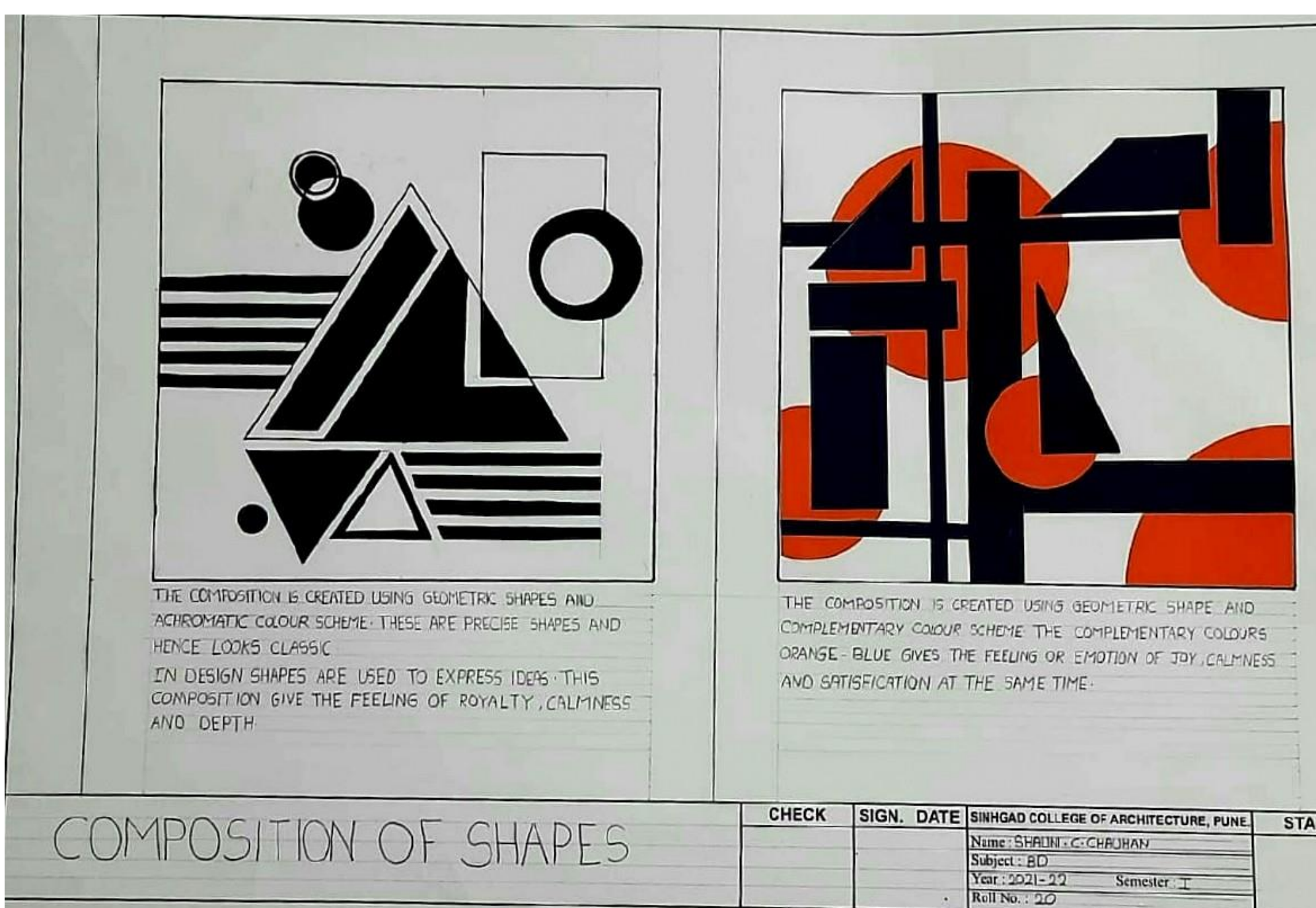
Student: Shalini Chauhan, Anushka Badade, Tanishq Chambule

Faculty: Ar. Kalpana Hadap, Ar. Vrushali Dhamne, Ar. Avanti Kale



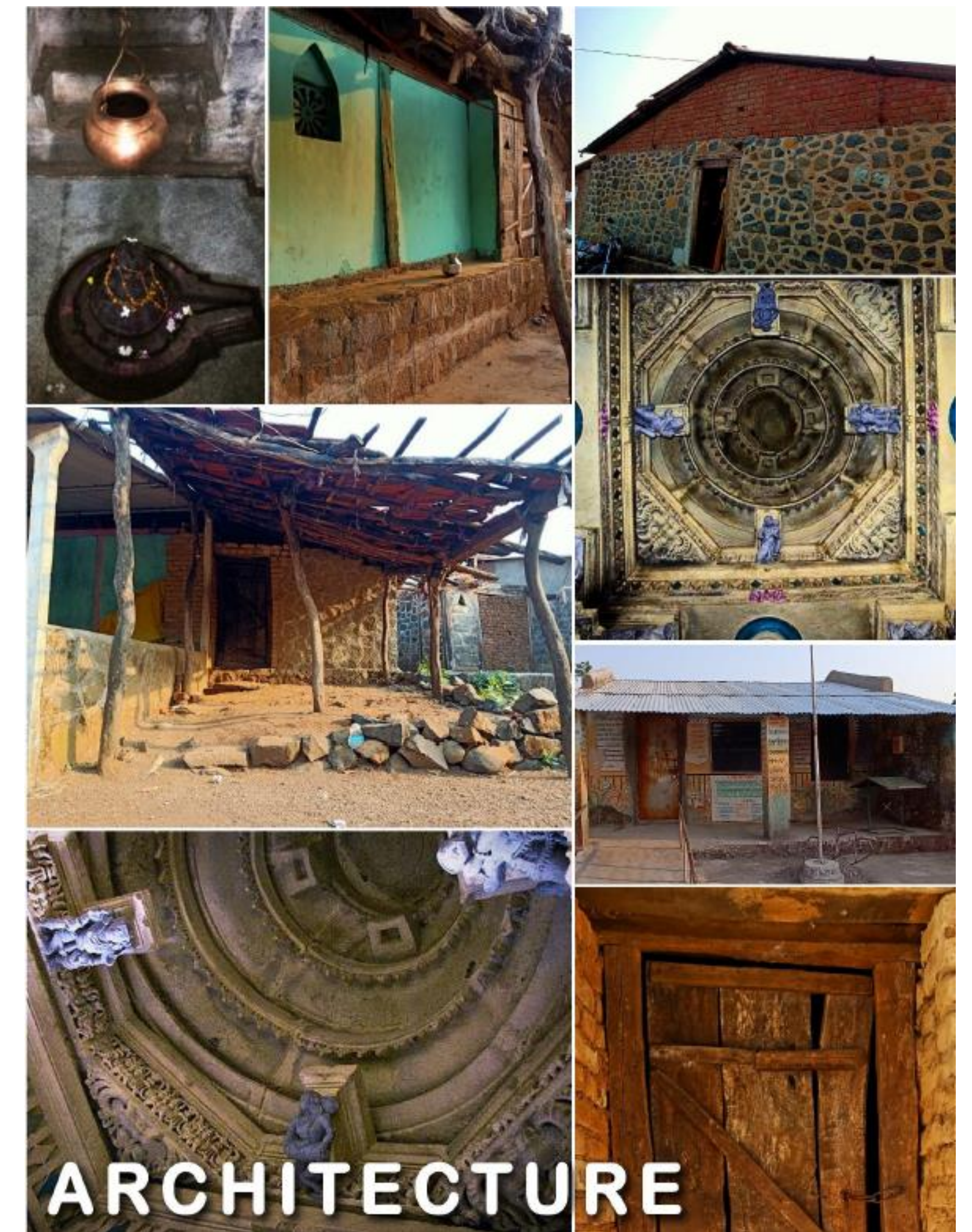
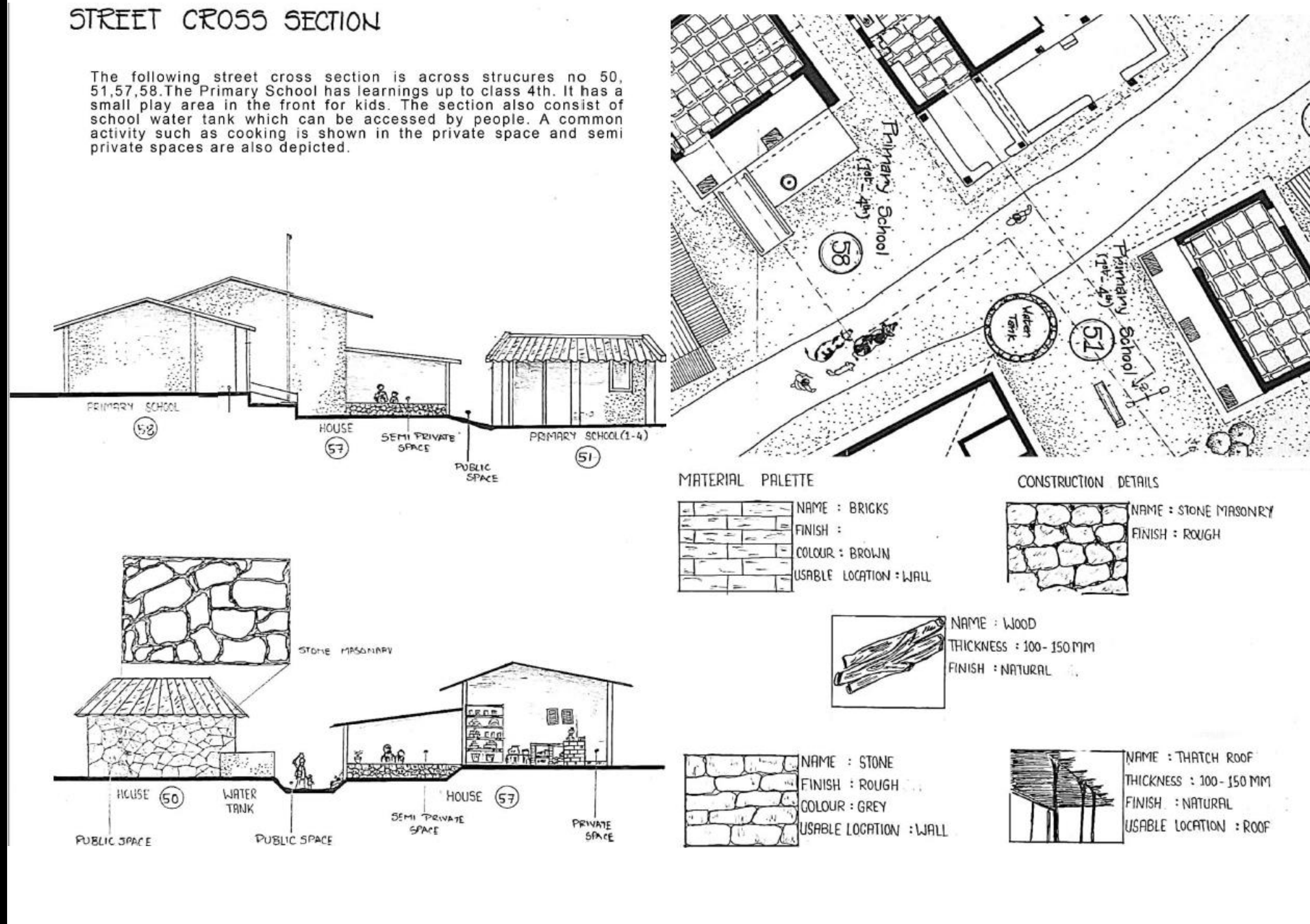
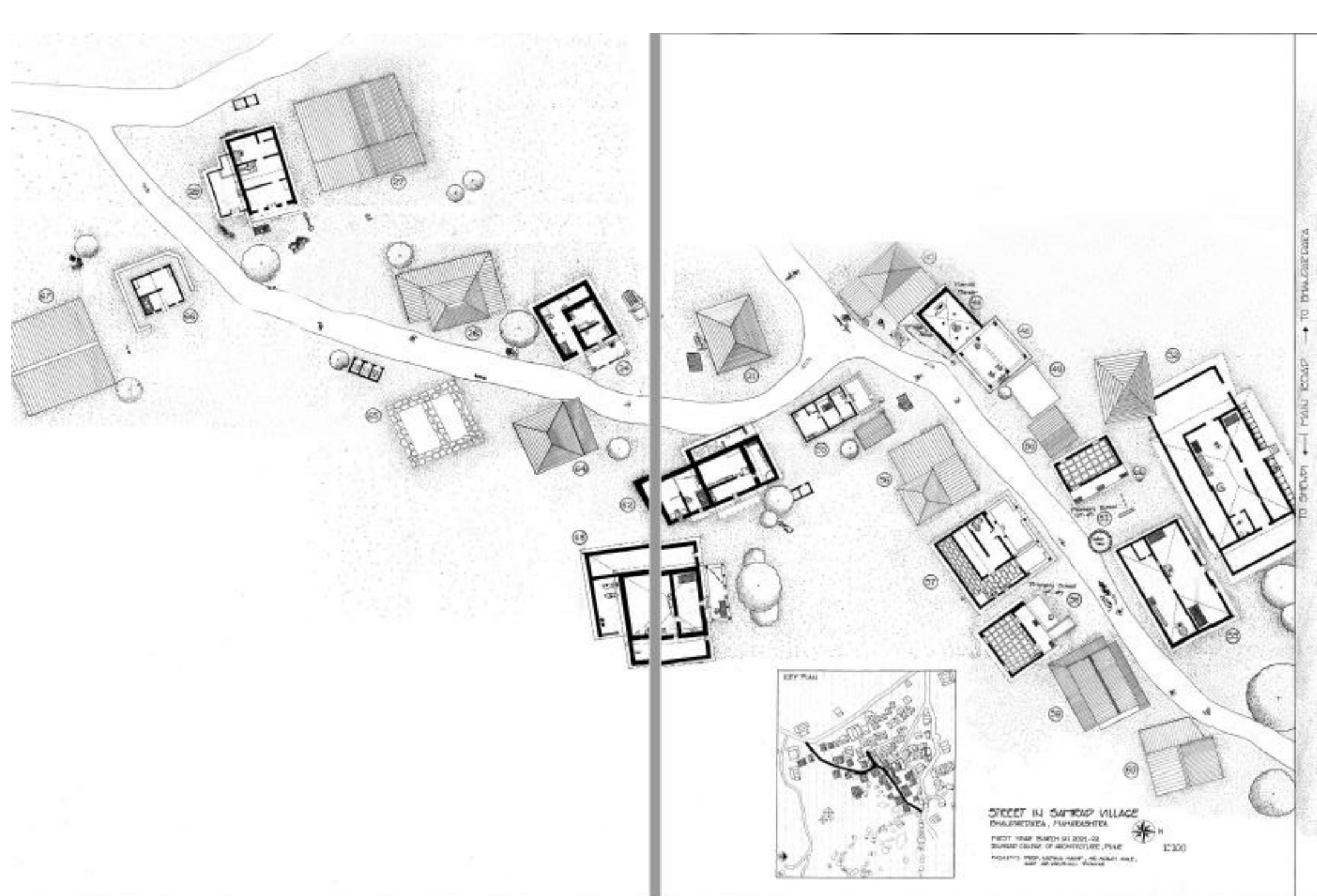
1st Year B.Arch 2021-2022 BASIC DESIGN

COMPOSITION OF POINTS
COMPOSITION OF LINES
COMPOSITION OF SHAPES
COLOUR WHEEL AND TEXTURES
COLOUR SCHEMES

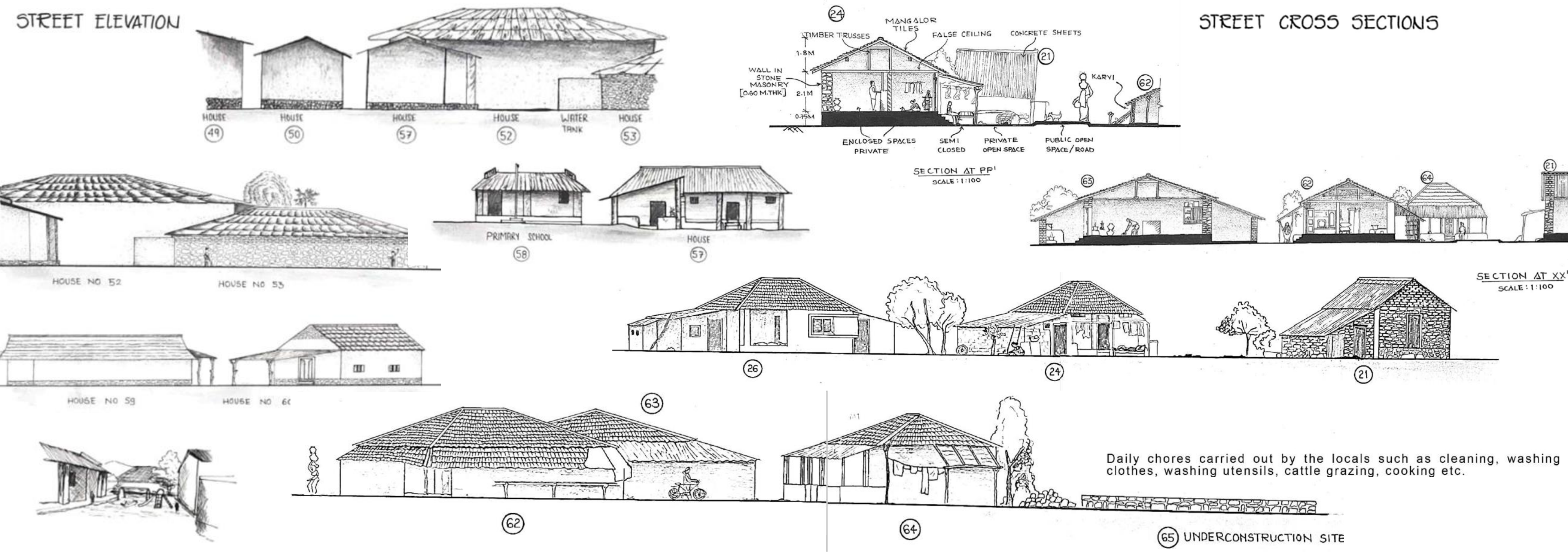
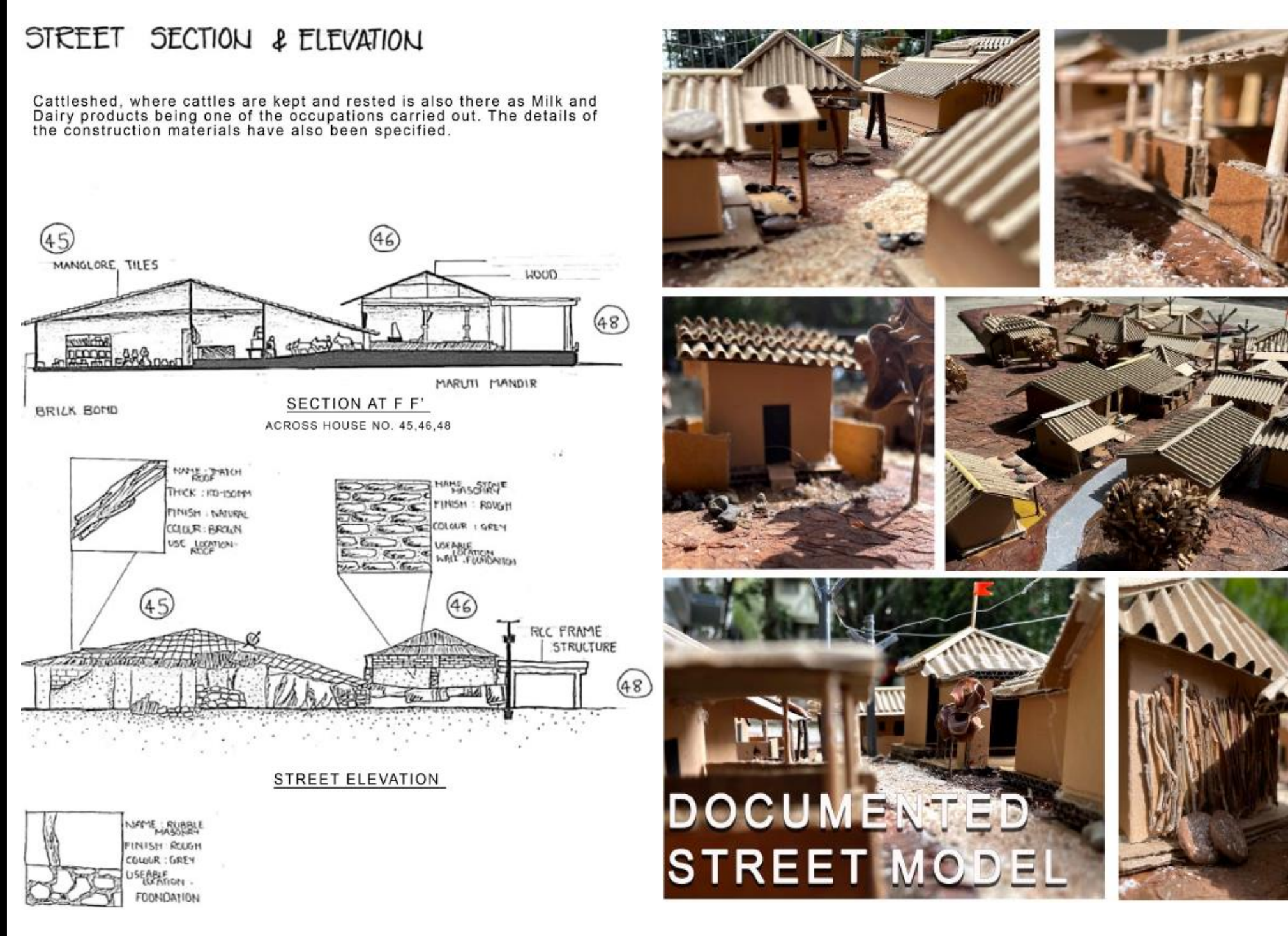
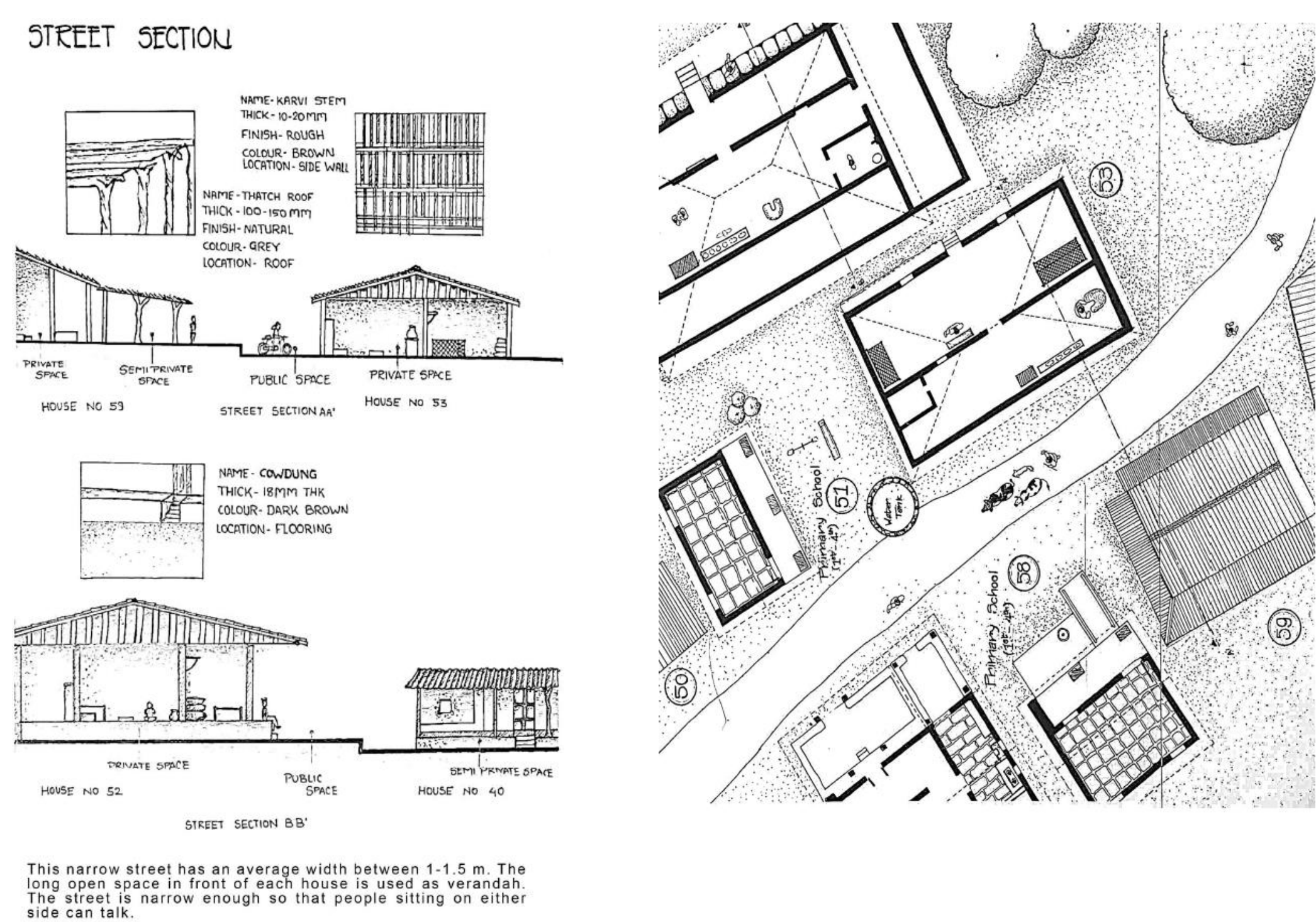


Sinhgad College of Architecture, Pune

PROJECT DETAILS



Student: 1st Year B.Arch
 Faculty: Ar. Kalpana Hadap, Ar. Vrushali Dhamne, Ar. Avanti Kale



1st Year B.Arch 2021-2022
 ARCHITECTURAL DESIGN I
 STUDY TOUR AT
 SAMRAD, BHANDARDHARA

Sinhgad College of Architecture, Pune

PROJECT DETAILS

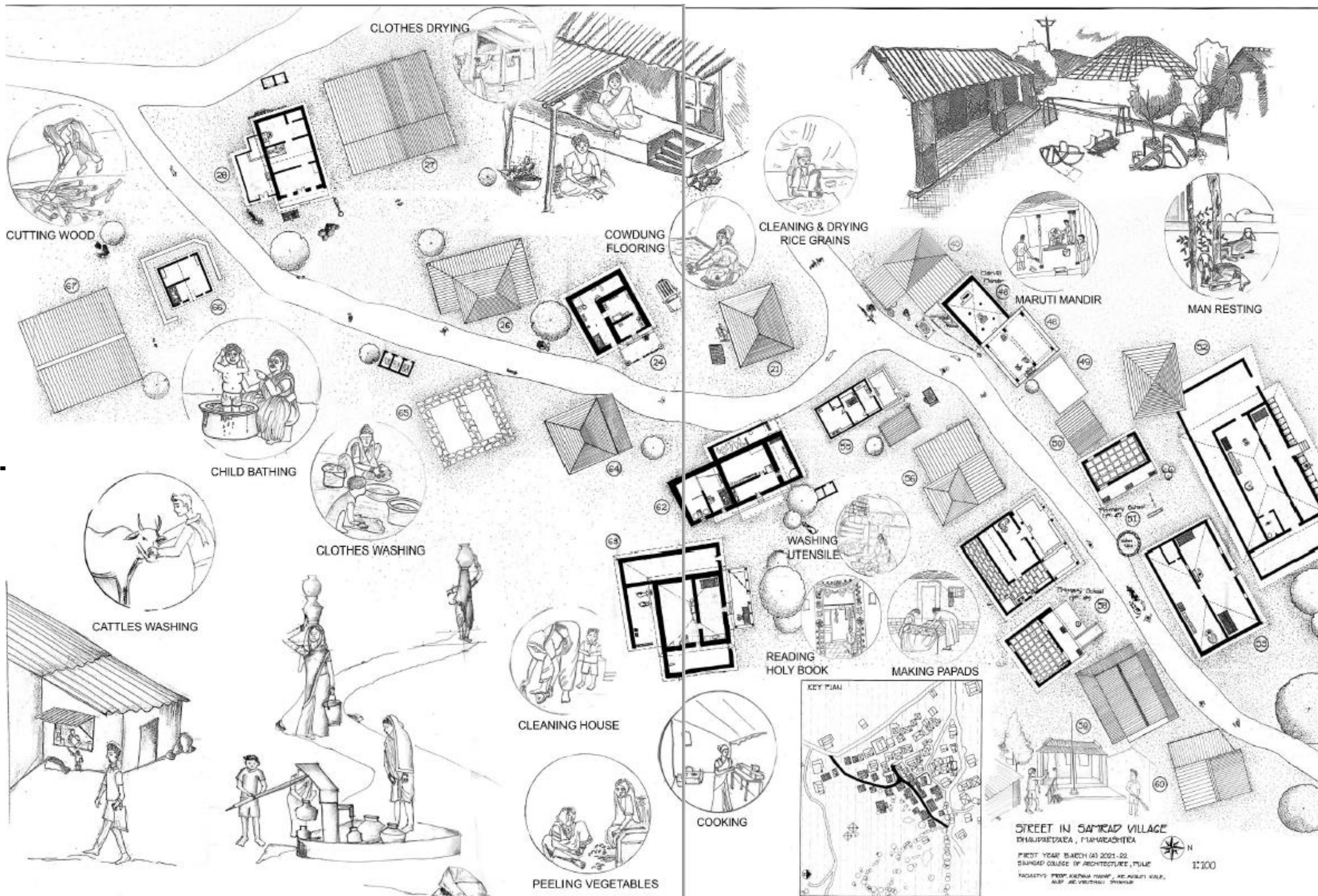
ISSUES AND CONSIDERATIONS:

STUDENTS ANALYZED AND DREW INFERENCES FROM VARIOUS STUDIES AND INTERACTIONS ABOUT FOLLOWING ISSUES:

- Unemployment
- Agricultural development
- Shortage of water supply
- Lack of technology
- Limited health care facilities
- Lack of sanitation
- Lack of electricity
- Need of secondary & higher educational facilities
- Improvement in local transportation service
- Limited basic resources
- Less amenities
- Improvement in road connectivity
- Requirement of public gathering places
- To build more green spaces

Student: 1st Year B.Arch

Faculty: Ar. Kalpana Hadap, Ar. Vrushali Dhamne, Ar. Avanti Kale



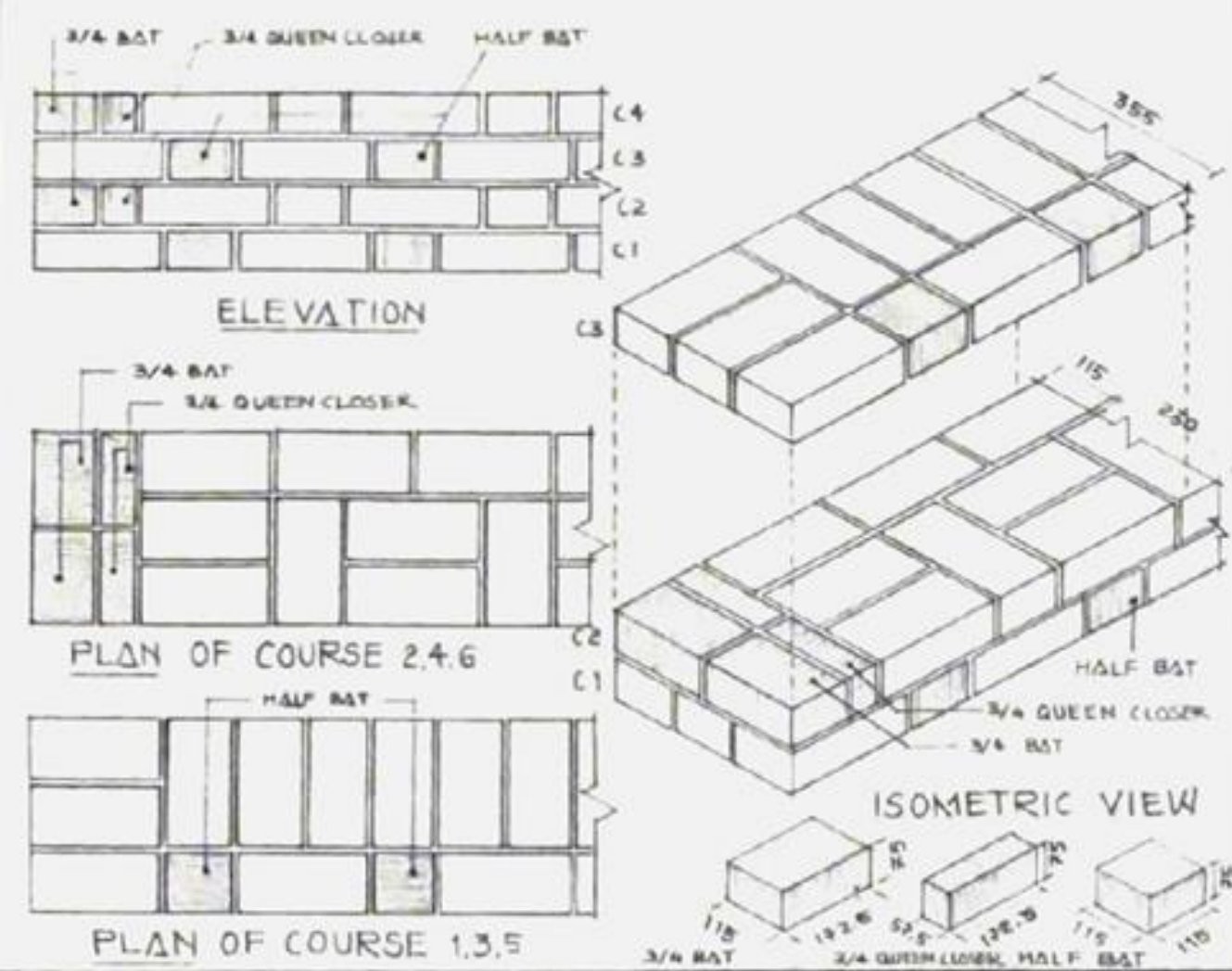
1st Year B.Arch 2021-2022
Architectural Design I

STUDY TOUR AT
SAMRAD, BHANDARDHARA

Sinhgad College of Architecture, Pune

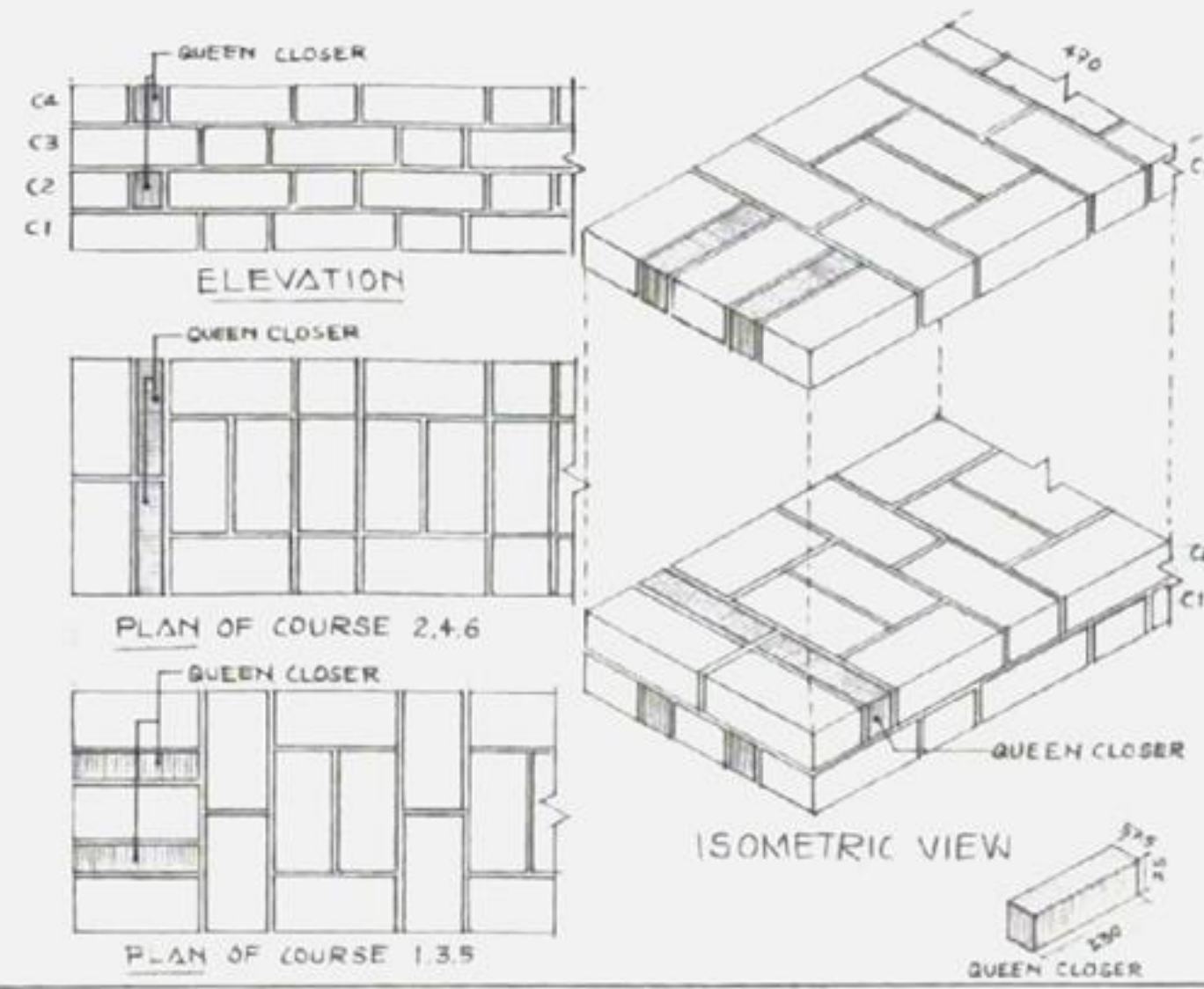
SINGLE FLEMISH BOND

1 1/2 BRICK THICK OPENED WALL



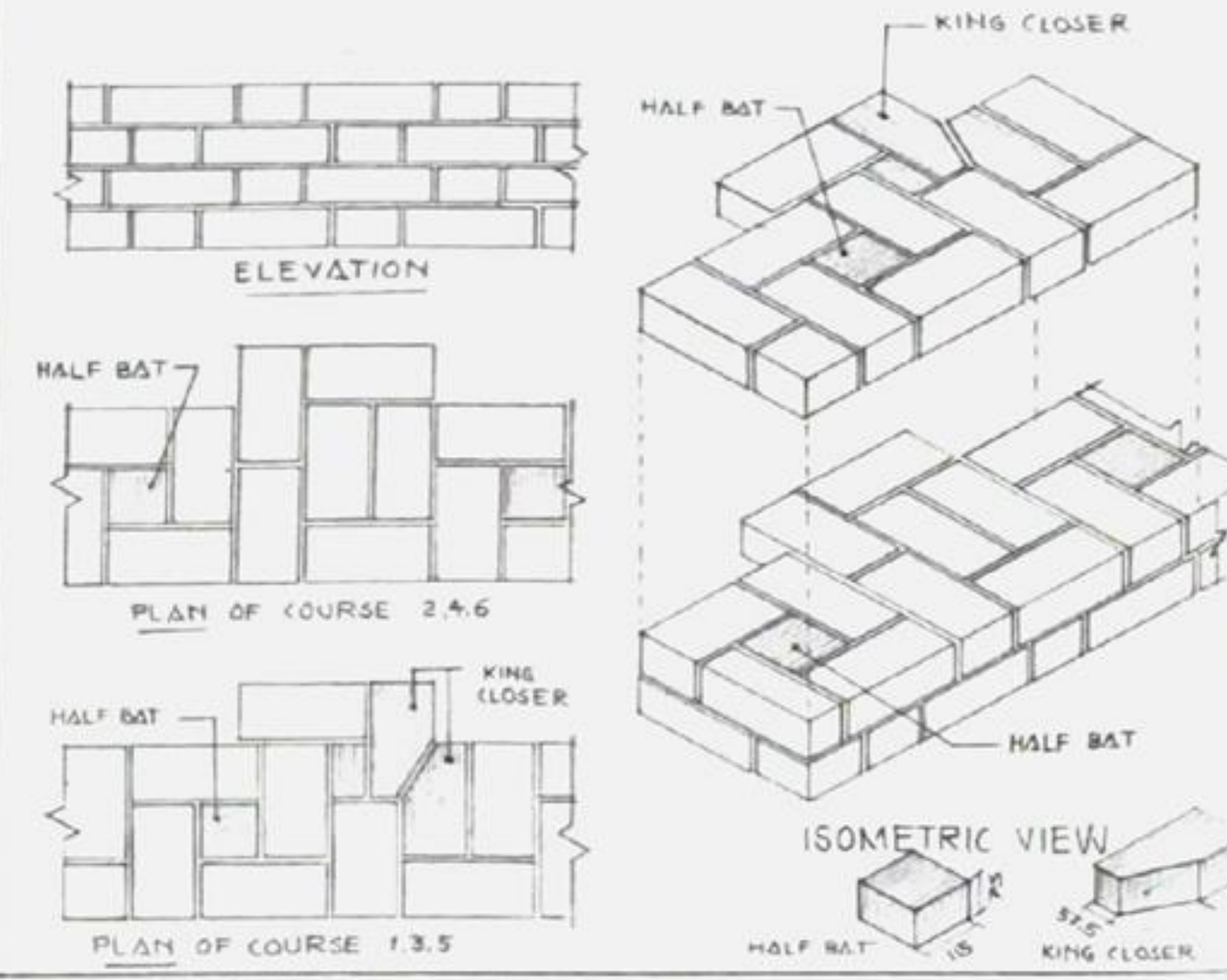
DOUBLE FLEMISH BOND

2 BRICK THICK OPENED WALL



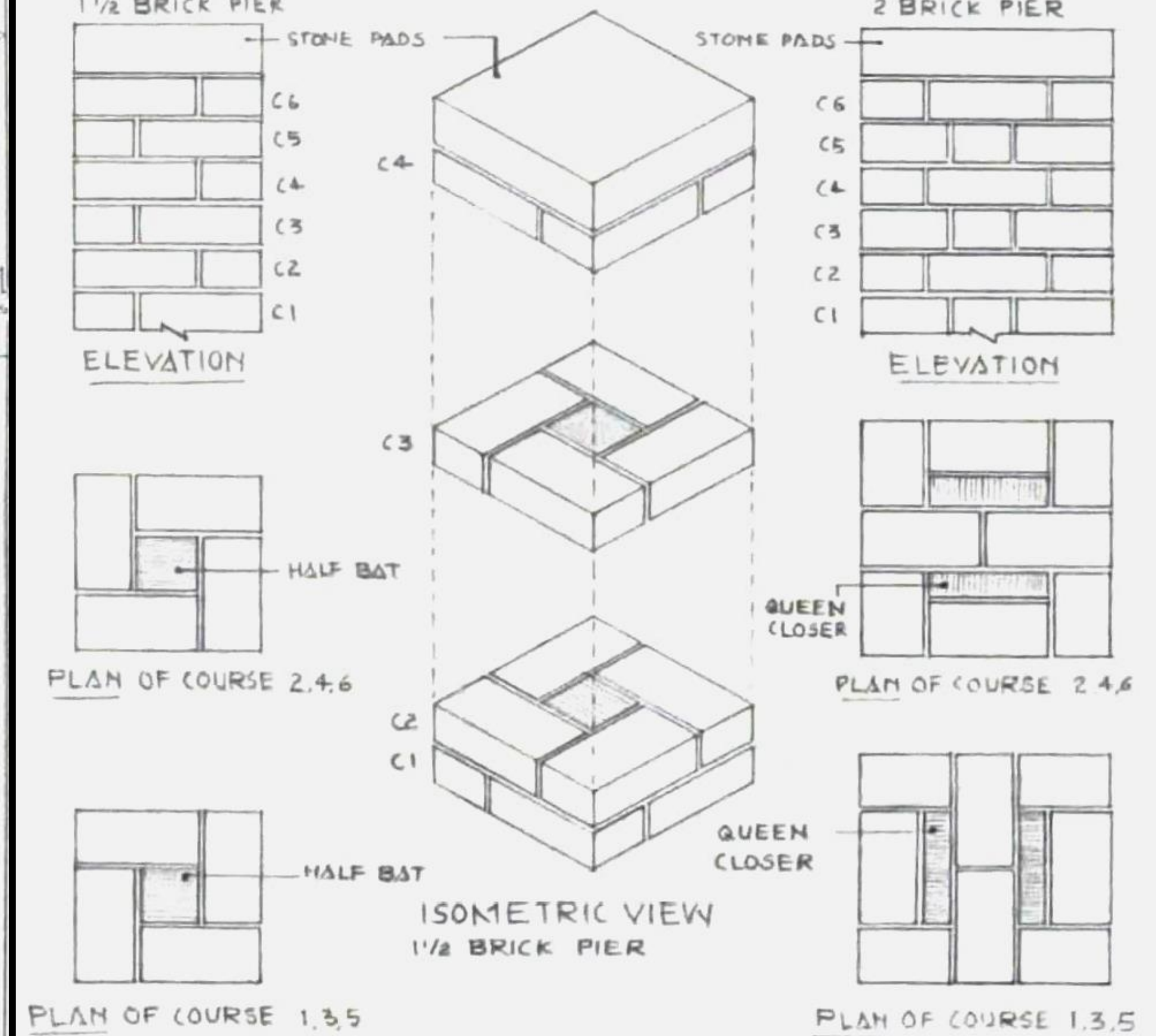
ATTACHED PIER FOR FLEMISH BOND

1 1/2 BRICK THICK 'T' JUNCTION



Load bearing masonry construction using Brick as a material and its arrangement in Flemish Bond method.

DETACHED PIER FOR FLEMISH BOND

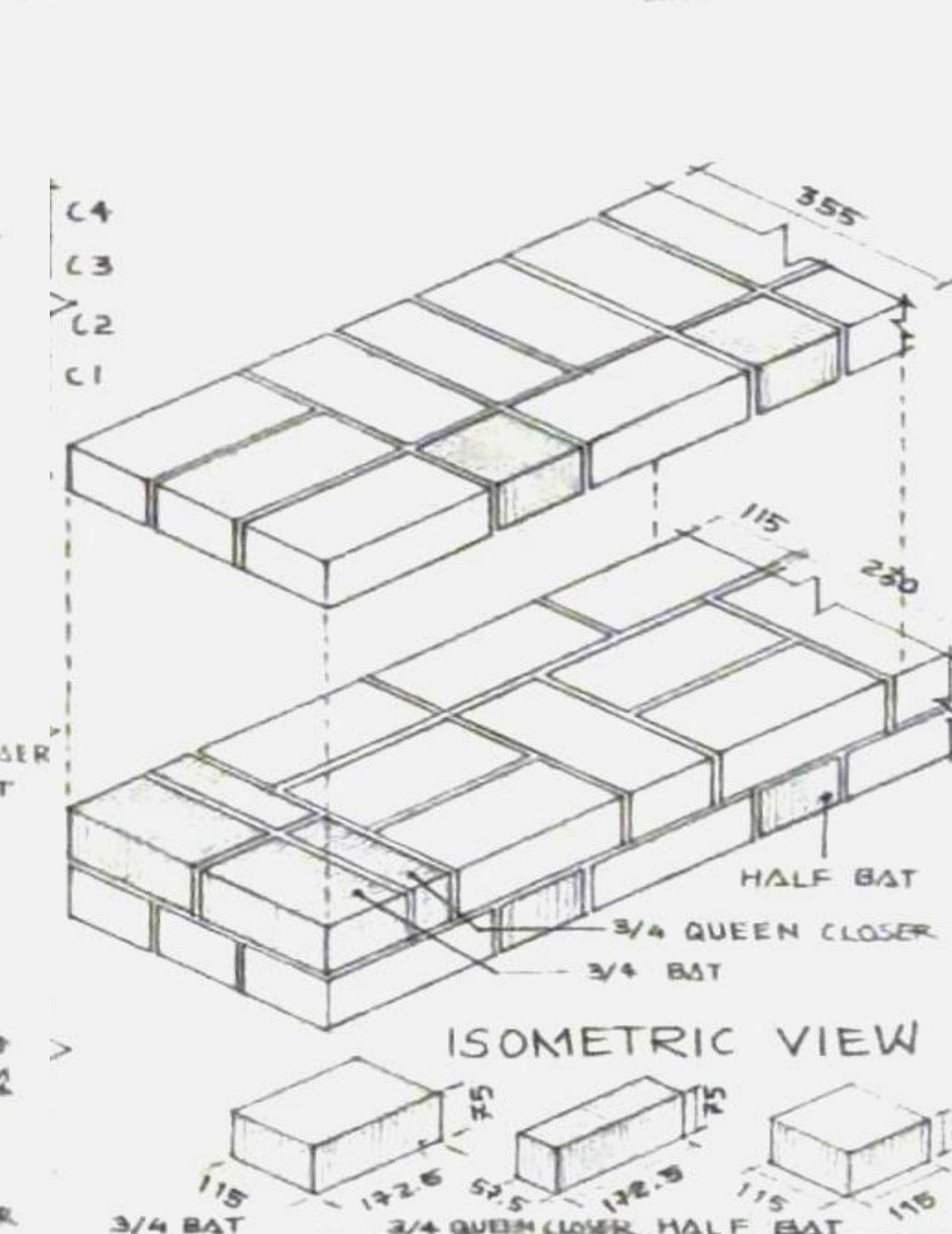
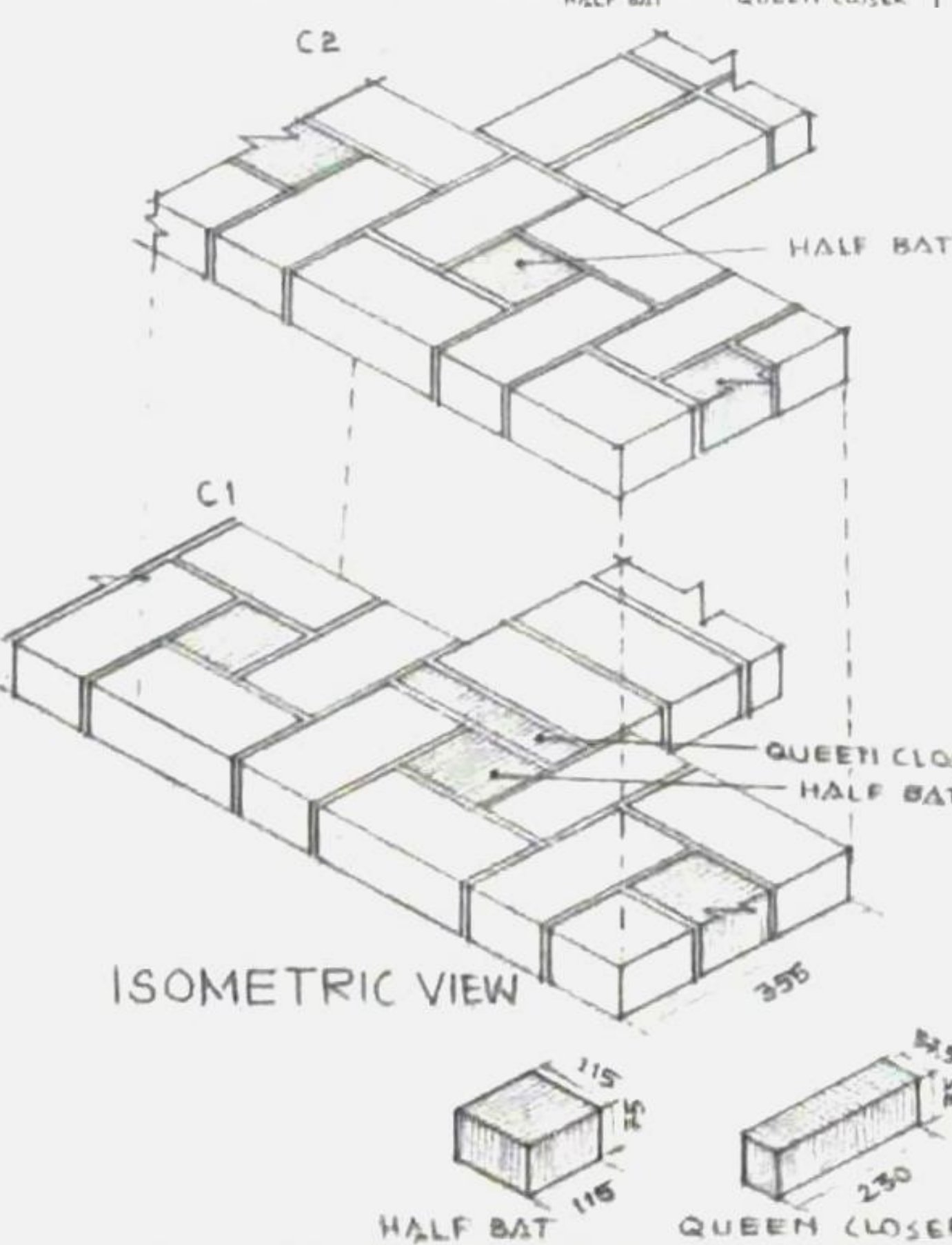
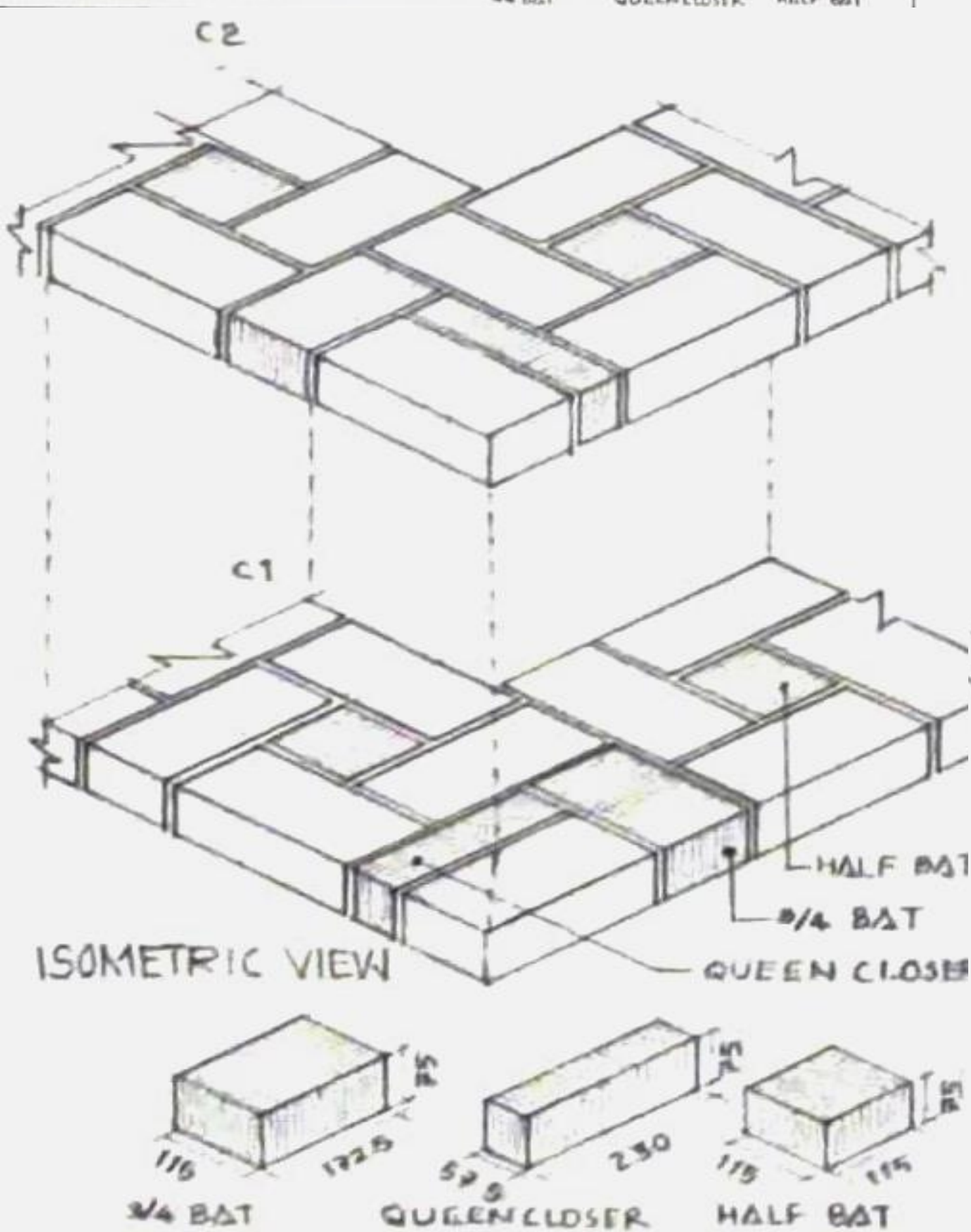


Student: Sahil Chougule

Faculty: Ar.Priyanka Purohit, Ar.Snehal Kulkarni

1st Year B.Arch 2021-2022
BCM I

FLEMISH BOND

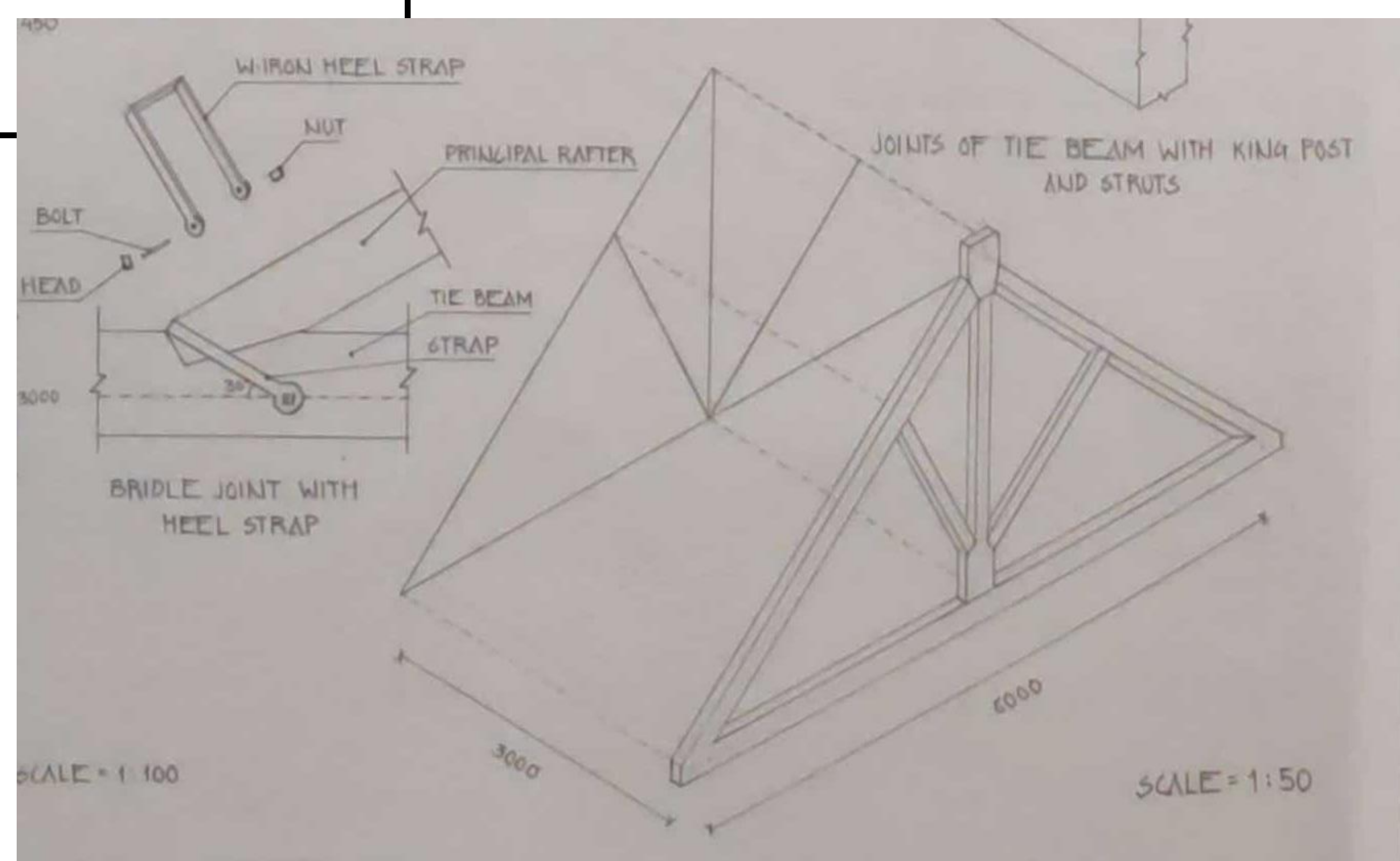
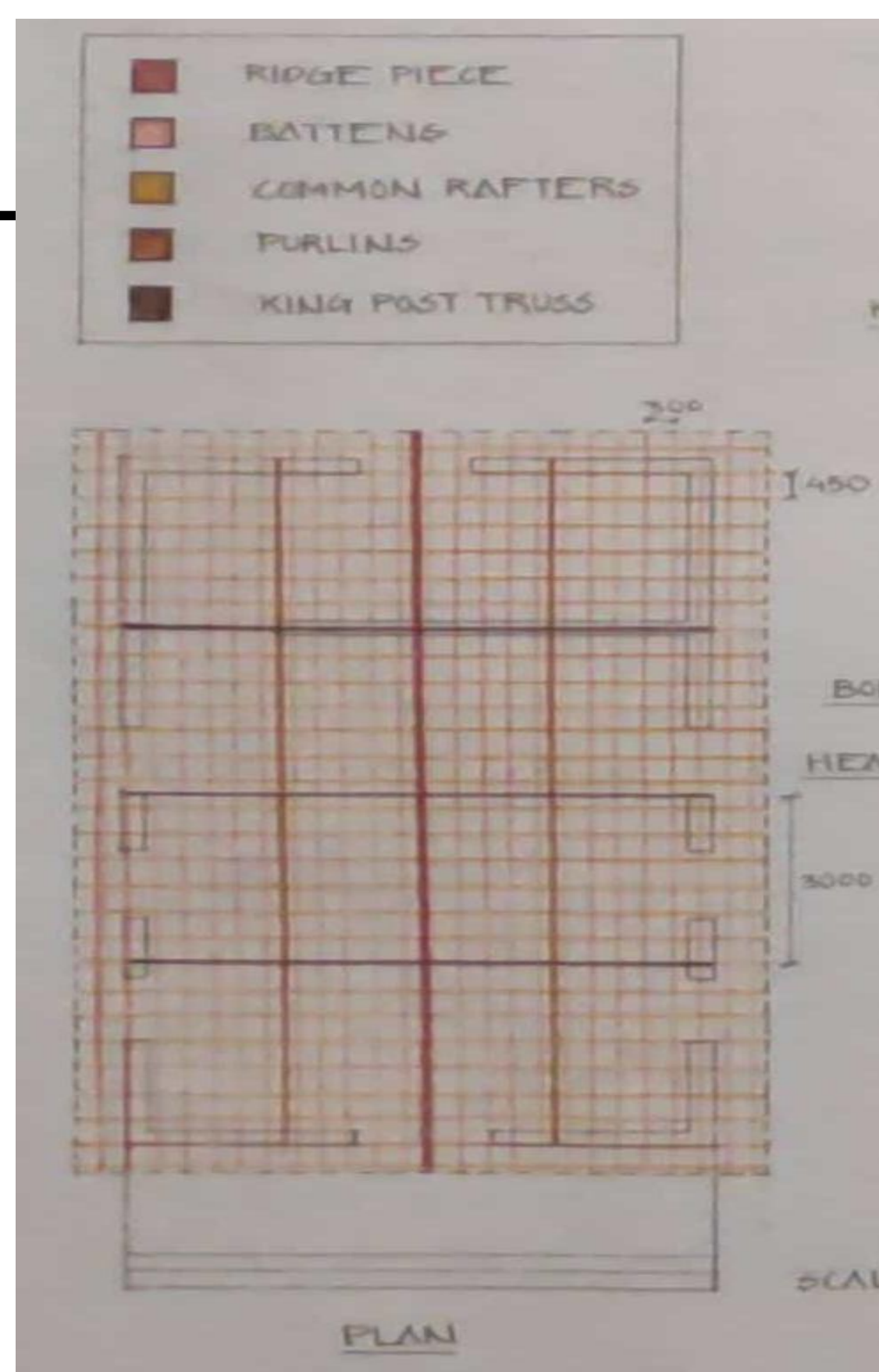
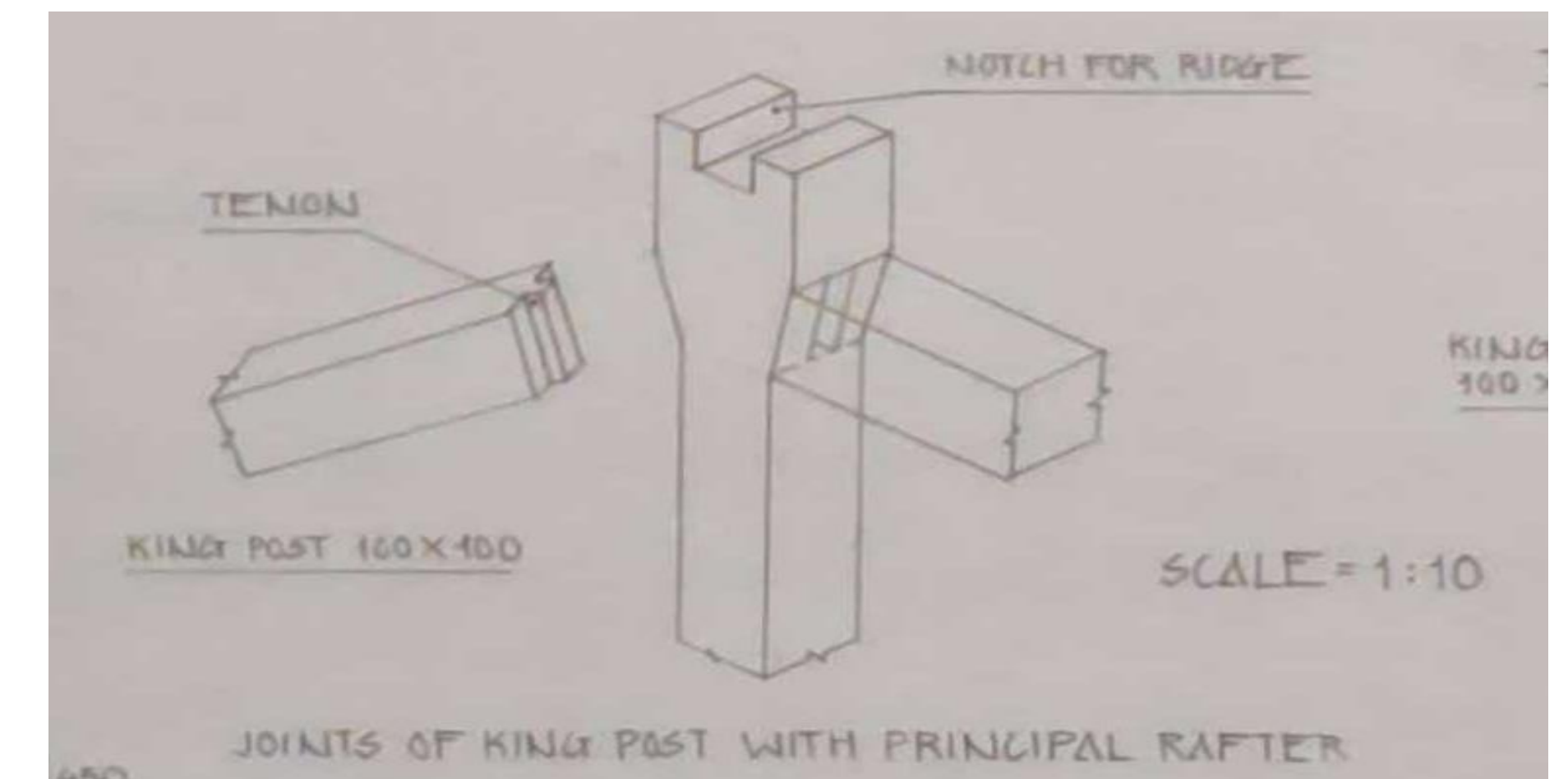
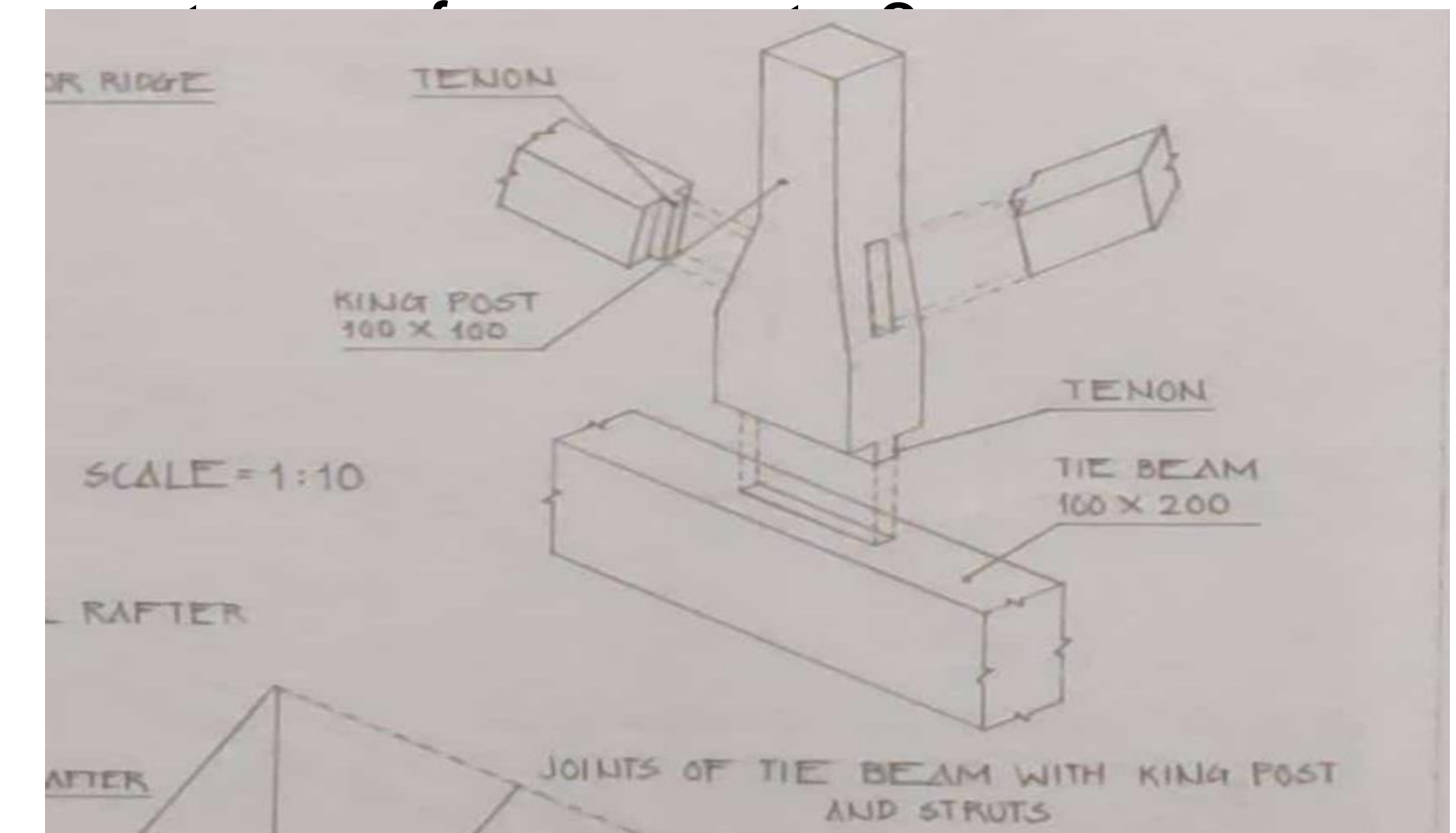
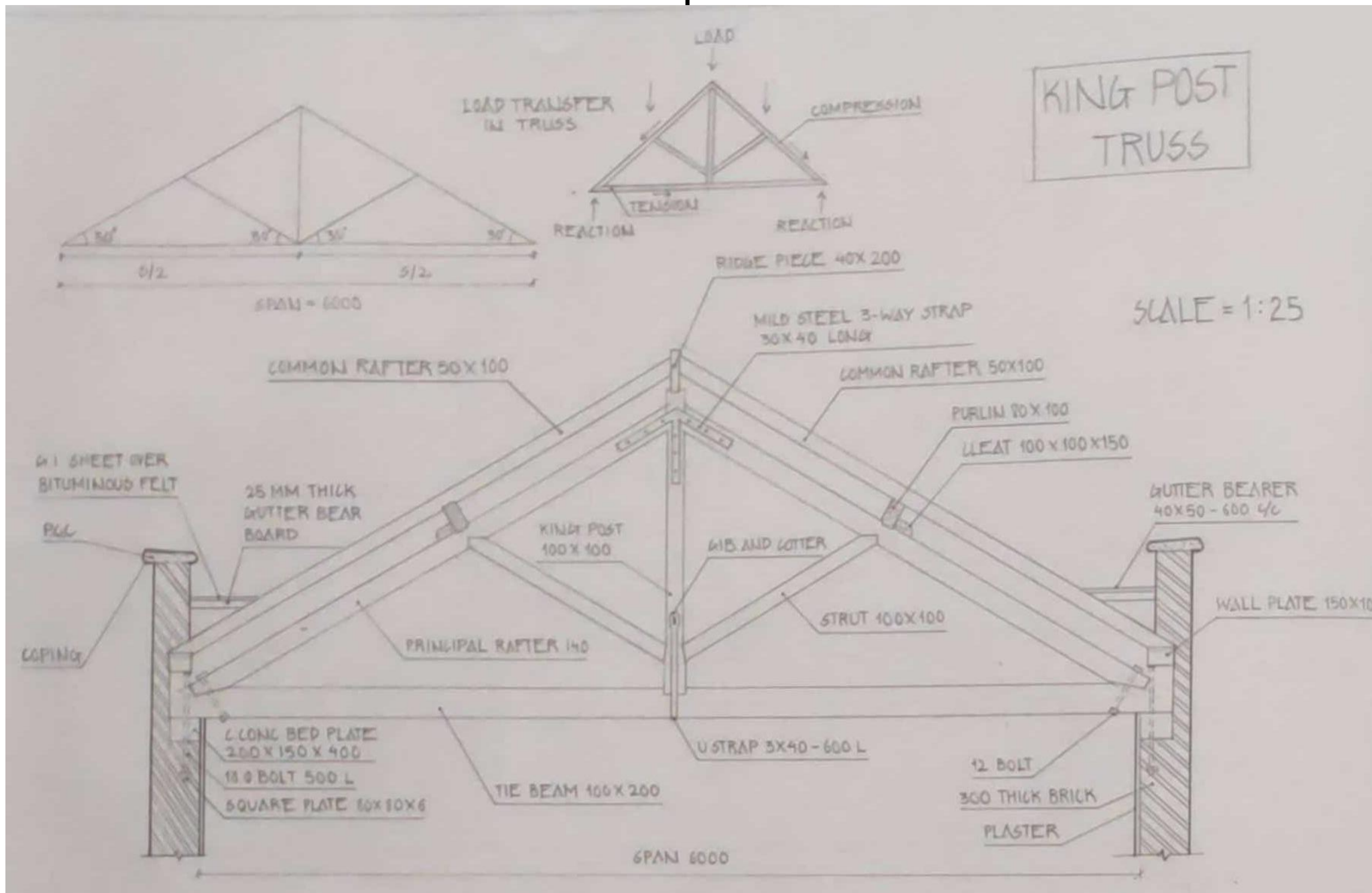


Sinhgad College of Architecture, Pune

KING POST

TRUSS

construction details of king post



Student Name – Ajinkya Gend

Faculty Name – Indrayani Dasare , Niketa Patil

1st Year B.Arch 2021-2022

BCM II

TIMBER TRUSS

SECTION

SHIVA SHRINE

VISHNU SHRINE

PRADAKSHINA PATH

SHORE TEMPLE AT MAHABALIPURAM

- THE SHORE TEMPLE IS A COMPLEX OF TEMPLE AND SHRINES THAT OVERLOOKS THE SHORE OF THE BAY OF BENGAL.
- IT IS A STRUCTURAL TEMPLE BUILT WITH BLOCKS OF GRANITE
- LOCATION: MAHABALIPURAM, TAMIL NADU
- BUILT BY: NARASIMHAVARMAN I
- ARCHITECTURAL STYLE: ROCK CUT STONE TEMPLE

GOPURAM

CHECK	SIGN	SINHGAD COLLEGE OF ARCHITECTURE, PUNE	STAMP
		NAME: CHOUGULE SAHIL SHRIMANSHAR	
		SUBJECT: HAC-1	
		YEAR: I SEMESTER: I	
		ROLL NO: 18 DIV: A	

SHORE TEMPLE OF MAHABALIPURAM

CHARIOT

MAHAMANDAPA

SHRINE

KALYANA MANDAPA

PLAN OF VITTHALA TEMPLE

- THE VITTHALA TEMPLE IS ALSO KNOWN AS SHRI VIJAYA VITTHALA TEMPLE DEDICATED TO LORD VISHNU
- THE ICONIC TEMPLE HAS AMAZING STONE STRUCTURES SUCH AS STONE CHARIOT AND FASCINATION OF MUSICAL PILLARS
- LOCATION: HAMPI, KARNATAKA
- BUILT BY: KING DEVARAYA II OF THE VIJAYANAGARA EMPIRE
- ARCHITECTURAL STYLE: DRAVIDIAN STYLE OF ARCHITECTURE

CHECK	SIGN	SINHGAD COLLEGE OF ARCHITECTURE, PUNE	STAMP
		NAME: CHOUGULE SAHIL S.	
		SUBJECT: HAC-1	
		YEAR: I SEMESTER: I	
		ROLL NO: 18 DIV: A	

VITTHALA TEMPLE, HAMPI

To introduce students to the developments in architecture through history as a result of the social, political, and geographical contexts.

2. To introduce students to the developments in architecture and its meaning, in the Indian sub-continent until 12th century AD with reference to development of typologies, forms, building techniques and features.

3. To gain an integrated understanding of settlements, landscape, and architecture as a manifestation of culture and geography.

Student: Sahil Chougule
Faculty: Ar. Avani Topkar

KATH-KUNI

CONSTRUCTION SEQUENCE OF A TYPICAL KATH-KUNI HOUSE

- SITE LEVELING AND FOUNDATION TRENCH
- PLINTH AND RETAINING WALL
- WALL CONSTRUCTION AND DOOR FRAME
- WALL CONSTRUCTION WITH BALCONY
- TOP FLOOR WITH BALCONY WITH POSTS
- ROOF STRUCTURE
- FIXING THE ROOF STRUCTURE
- STATE STONE LAIN ON THE ROOF

THE STRUCTURE CONTAINS TWO STOREY TOP LEVEL ARE THE LIVING AREAS AND KITCHEN. LOWEST AREA IS USED AS THE GAUSHALA.

Labels: SLATE ROOF, WOODEN POST, DIAGONAL BRACES, WOODEN PROJECTING BALCONIES, CANTILEVERED BEAM, WOOD AND STONE WALLS, STONE PLINTH

CHECK	SIGN	SINHGAD COLLEGE OF ARCHITECTURE, PUNE	STAMP
		NAME: CHOUGULE SAHIL S.	
		SUBJECT: HAC-1	
		YEAR: I SEMESTER: I	
		ROLL NO: 18 DIV: A	

KATH-KUNI

LONG SECTION, KAILASA TEMPLE

KAILASA TEMPLE, ELLORA

- THE TEMPLE, WHICH IS DEDICATED TO SHIVA.
- CERTAIN RESEMBLANCE TO PATTADAKAL TEMPLE, IN SIZE DOUBLE THAN THAT.
- THE COMPLEX CONSISTS OF 4 MAIN PARTS MAIN SHRINE, THE ENTRANCE GATEWAY TO THE WEST, NANDI SHRINE AND CLOISTER AROUND THE COURTYARD
- LOCATION: ELLORA, AURANGABAD, MAHARASHTRA.
- TEMPLE ARCHITECTURE SHOWS TRACES OF PALLAVA AND CHALUKYA STYLE

PLAN

CHECK	SIGN	SINHGAD COLLEGE OF ARCHITECTURE, PUNE	STAMP
		NAME: CHOUGULE SAHIL S.	
		SUBJECT: HAC-1	
		YEAR: I SEMESTER: I	
		ROLL NO: 18 DIV: A	

KAILASA TEMPLE, ELLORA

SECTION

PLAN

VIRUPAKSHA TEMPLE PATTADAKAL

- THE TWO TEMPLES ARE SIMILAR IN THEIR SIZE AND ORGANIZATIONAL TYPE, RATHER THAN THEIR APPEARANCE AND FORMAL ORDER.
- THOUGH MOST HINDU TEMPLES FACE EAST, VIRUPAKSHA TEMPLE, BEING A SHIVA SHRINE, FACES WEST.
- THE GARBHA-GRIHA IS SURROUNDED BY A WELL-DEFINED AND FULLY ENCLOSED PARIKRAMA PATH
- LOCATION: PATTADAKAL, KARNATAKA
- BUILT BY: QUEEN LOKA MAHADEVI [WIFE OF KING VIKRAMADITYA]
- ARCHITECTURAL STYLE: DRAVIDIAN STYLE

CHECK	SIGN	SINHGAD COLLEGE OF ARCHITECTURE, PUNE	STAMP
		NAME: CHOUGULE SAHIL SHRIMANSHAR	
		SUBJECT: HAC-1	
		YEAR: I SEMESTER: I	
		ROLL NO: 18 DIV: A	

PATTADAKAL

SECTION

PLAN

LADKHAN TEMPLE

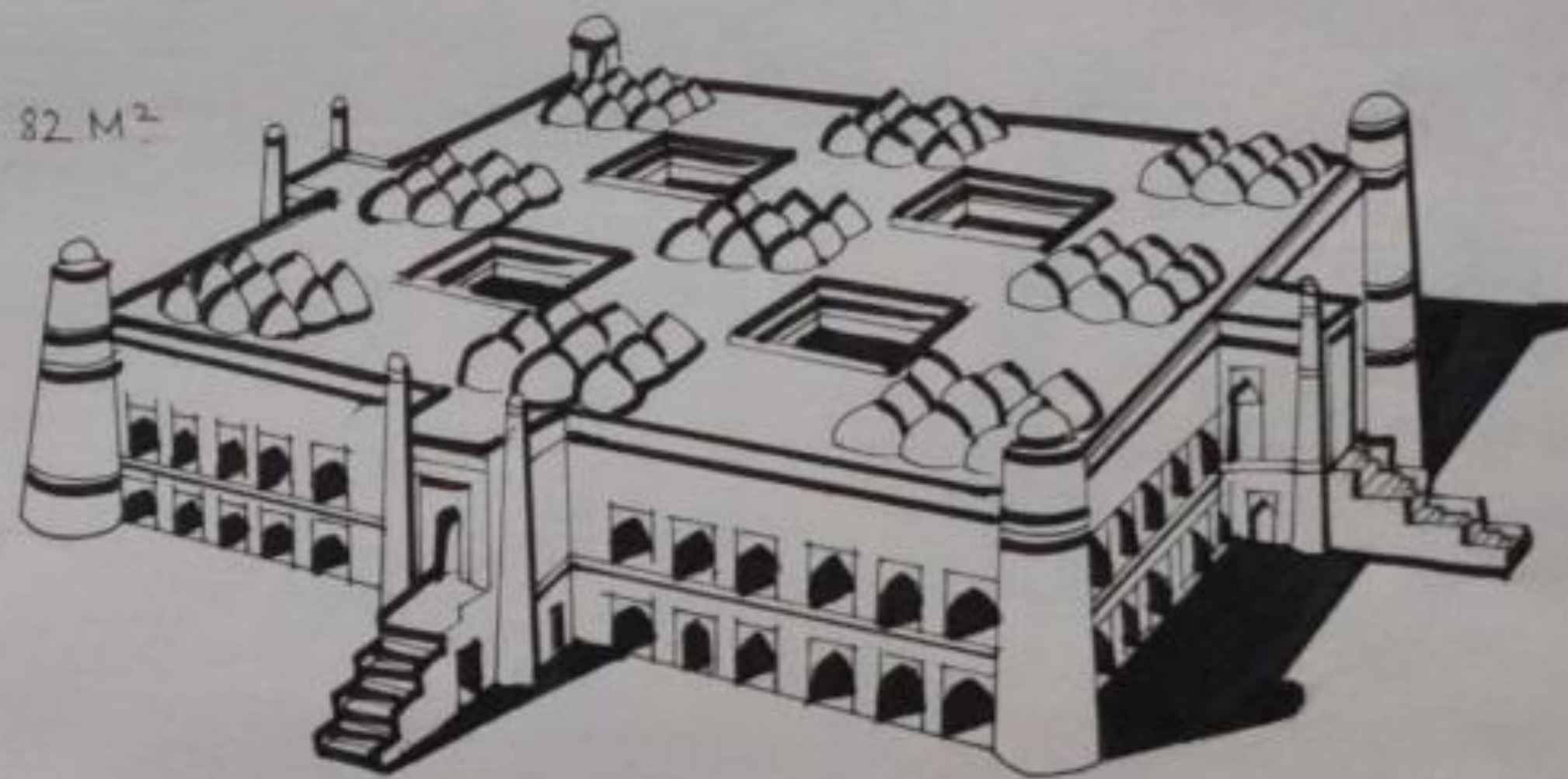
- THE LADKHAN TEMPLE IS DEVOTED TO LORD SHIVA IT IS KNOWN TO BE ONE OF THE MOST ANCIENT HINDU TEMPLE LOCATED IN KARNATAKA, INDIA.
- THE SHRINE HAS A GARBA GRIHA WHICH HOUSES A SHIV LINGA, A MUKHA MANDAPA WHICH LEADS TO SABHA MANDAPA
- LOCATION: AHOLE, KARNATAKA, INDIA.
- CREATOR: CHALUKYA DYNASTY.
- ARCHITECTURAL STYLE: PANCHAYATANA STYLE.

CHECK	SIGN	SINHGAD COLLEGE OF ARCHITECTURE, PUNE	STAMP
		NAME: CHOUGULE SAHIL S.	
		SUBJECT: HAC-1	
		YEAR: I SEMESTER: I	
		ROLL NO: 18 DIV: A	

LADKHAN TEMPLE

1st Year B.Arch 2021-2022 History of Architecture and Culture I

- LOCATION : KHIRKI VILLAGE, DELHI.
- BUILT IN : 1351.
- BUILT BY : KHAN-I-JAHAN JUMAN GHAN
- DYNASTY : TUGHLAQ DYNASTY.
- ARCHITECTURAL STYLE : TUGHLAQ AND INDO-ISLAMIC ARCHITECTURE.
- MATERIALS : STONE RUBBLE MASONRY.
- FUNCTION : MOSQUE.
- DOMES : 81.
- AREA : 52 M X 52 M SQUARE IN AN AREA OF 82 M².



KHIRKI MOSQUE, DELHI



KHIRKI MOSQUE DELHI

CHECK	SIGN DATE	SINHGAD COLLEGE OF ARCHITECTURE	STAMP
		NAME : AJINKYA A. GEND	
		SUB : HQAC II	
		YEAR : FY	SEM : II
		ROLL NO : 04	

Objective:

To introduce students to the developments in architecture of the Indian sub-continent after 12th century AD as a result of the social, political, and geographical contexts.

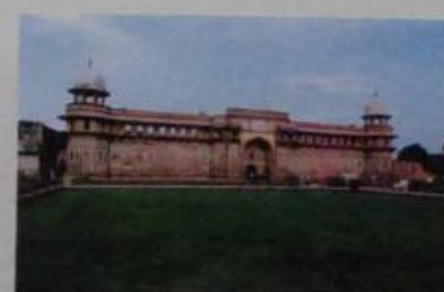
2. To study the development of architecture with specific reference to form, technology, and ornament.

3. To gain an integrated understanding of settlements, landscape, and architecture as a manifestation of culture.

Student: Ajinkya Gend
Faculty: Ar. Ila Shende



- LOCATION : AGRA, UTTAR PRADESH.
- BUILT : 1565 - 1573.
- BUILT BY : AKBAR.
- ARCHITECTURAL STYLE : MUGAL ARCHITECTURE.
- AREA : 94 ACRES.
- MATERIALS : BRICKS, RED SANDSTONE AND MARBLE.
- UNESCO : 1983.



JAHANGIR PALACE

THE JAHANGIR MAHAL IS THE ONLY PORTION OF THE FORT WALLS, APART FROM THE GATES, DISTINGUISHED BY THE ORNAMENTAL TREATMENT ACCORDED TO ITS EASTERN ENCLAVE.



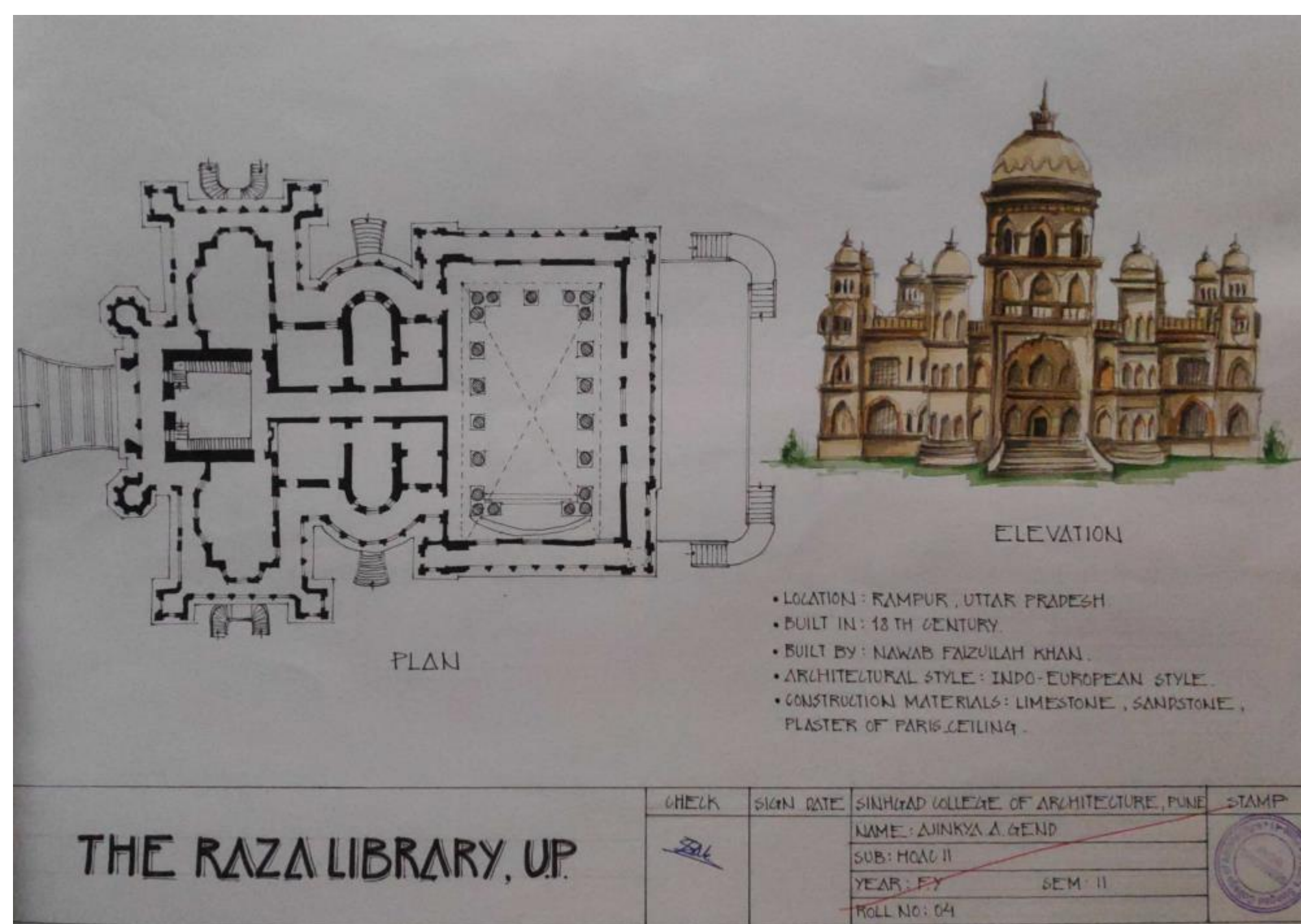
- JAHANGIR MAHAL
- AMAR SINGH GATE
- DIWAN-I-AM
- DIWAN-I-KHAS
- MUSAMMAN BURJ
- ANGURI BAGH
- SHISH MAHAL



PLAN

AGRA FORT

CHECK	SIGN DATE	SINHGAD COLLEGE OF ARCHITECTURE	STAMP
		NAME : AJINKYA A. GEND	
		SUB : HQAC II	
		YEAR : FY	SEM : II
		ROLL NO : 04	



ELEVATION

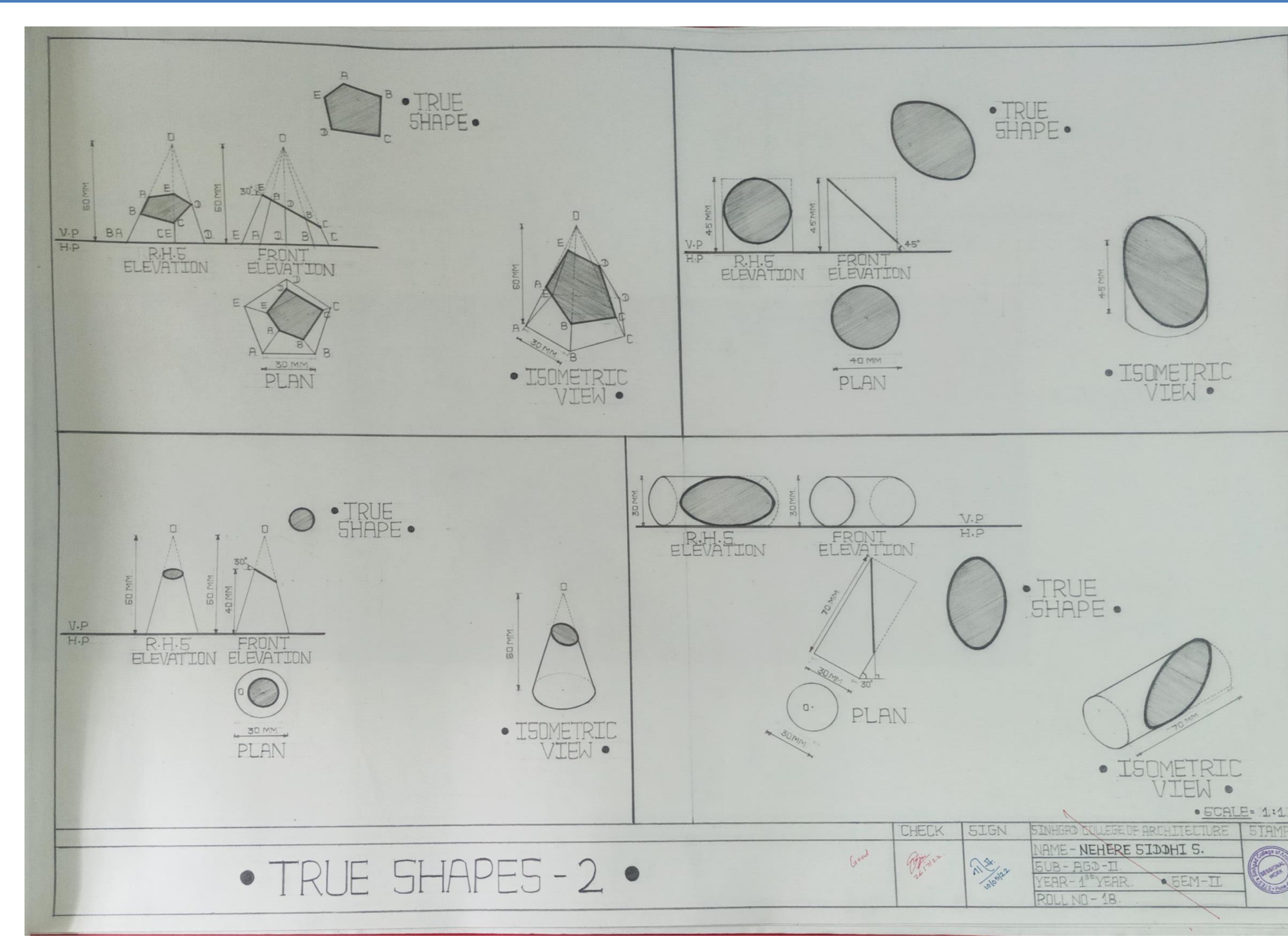
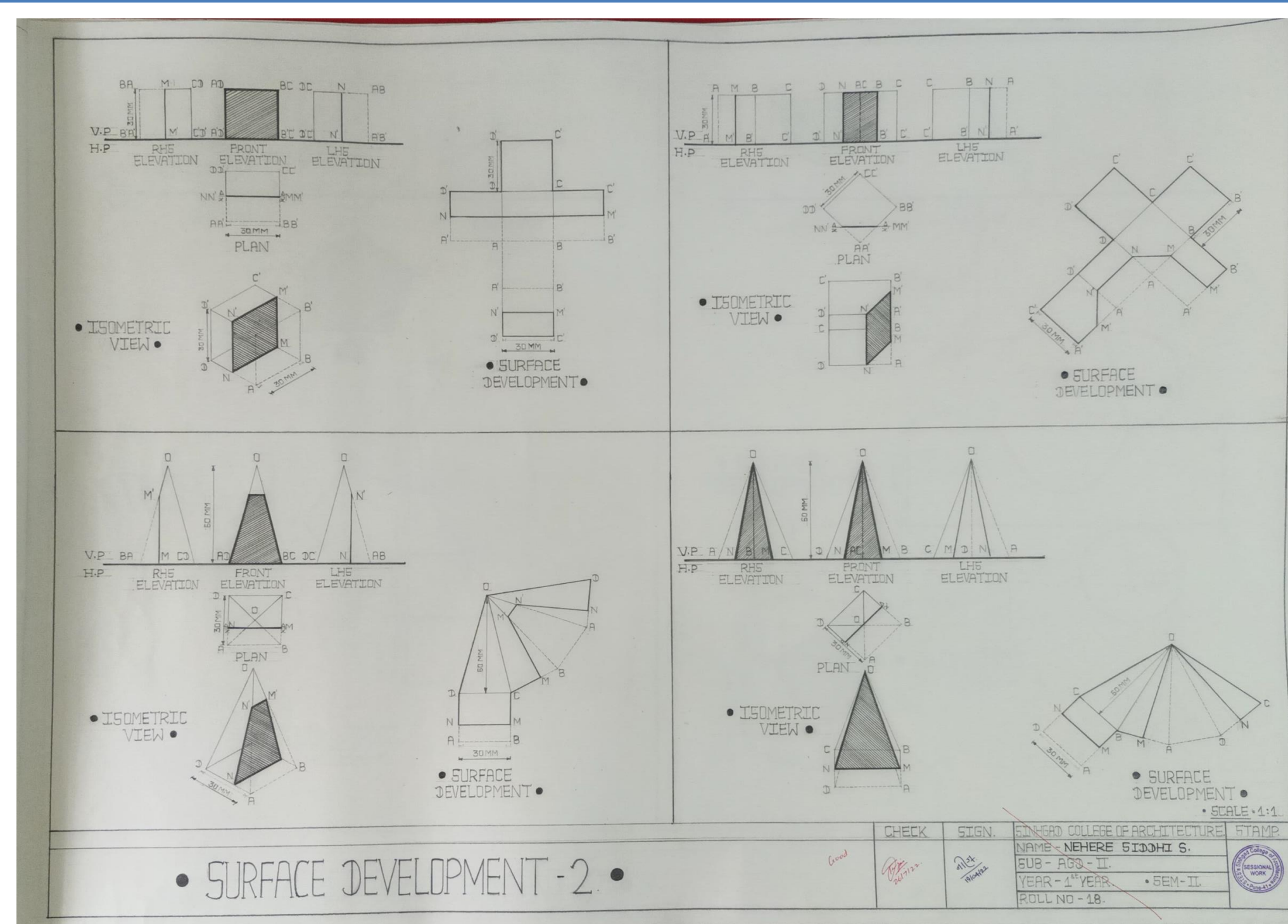
- LOCATION : RAMPUR, UTTAR PRADESH.
- BUILT IN : 18TH CENTURY.
- BUILT BY : NAWAB FAZULAH KHAN.
- ARCHITECTURAL STYLE : INDO-EUROPEAN STYLE.
- CONSTRUCTION MATERIALS : LIMESTONE, SANDSTONE, PLASTER OF PARIS, ZILLING.

THE RAZA LIBRARY, UP

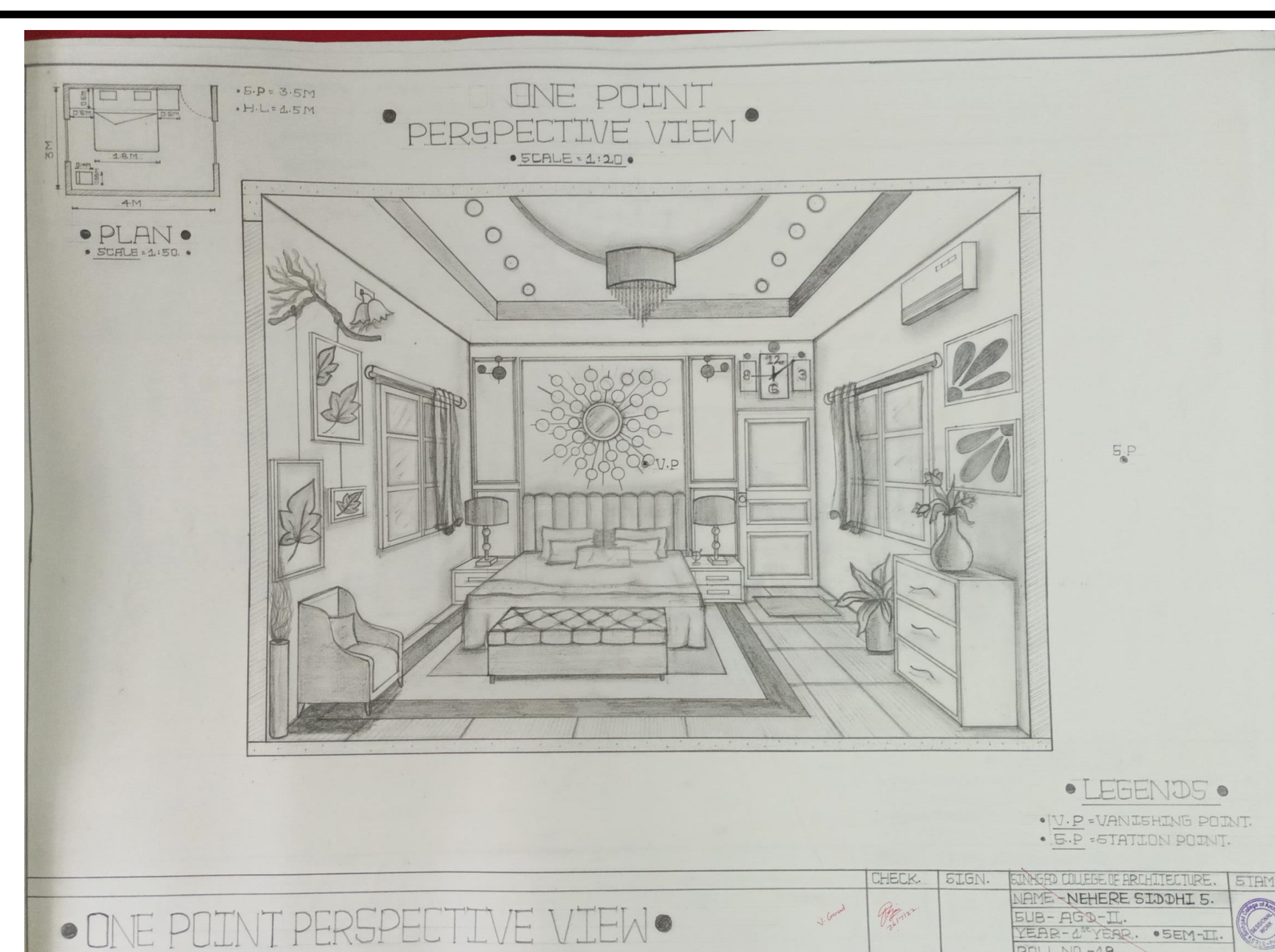
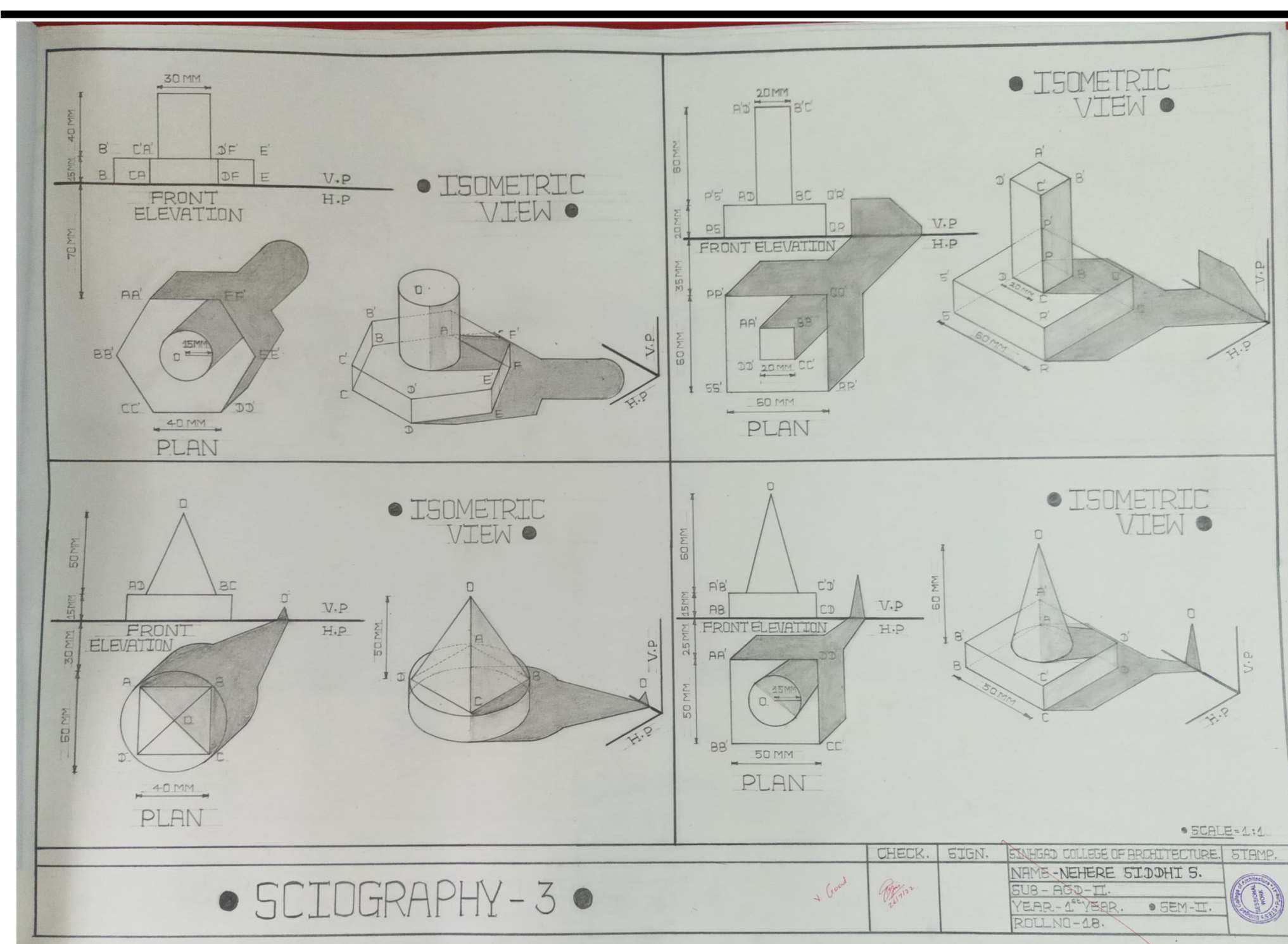
CHECK	SIGN DATE	SINHGAD COLLEGE OF ARCHITECTURE, PUNE	STAMP
		NAME : AJINKYA A. GEND	
		SUB : HQAC II	
		YEAR : FY	SEM : II
		ROLL NO : 04	

1st Year B.Arch 2021-2022 History of Architecture and Culture II

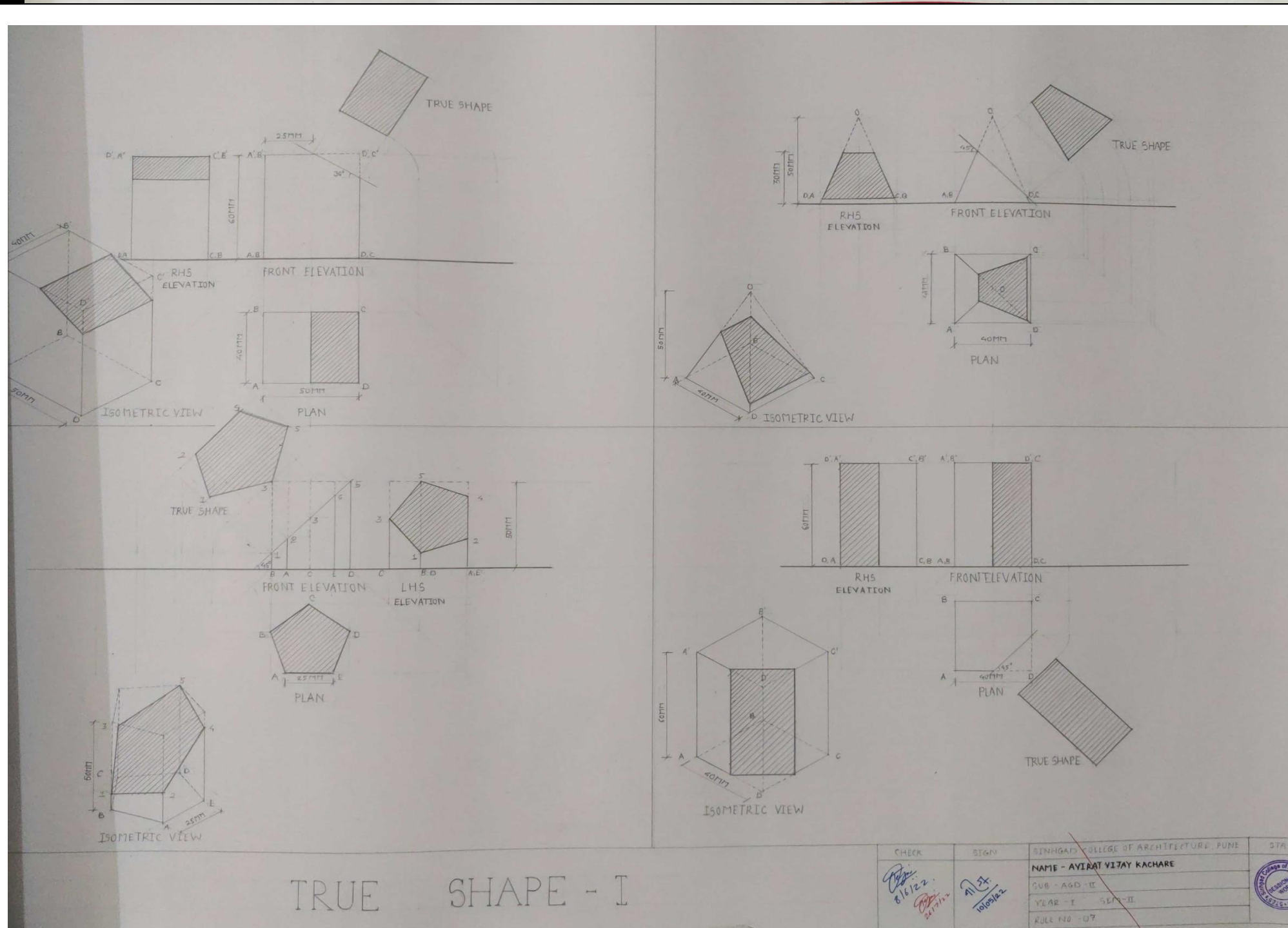
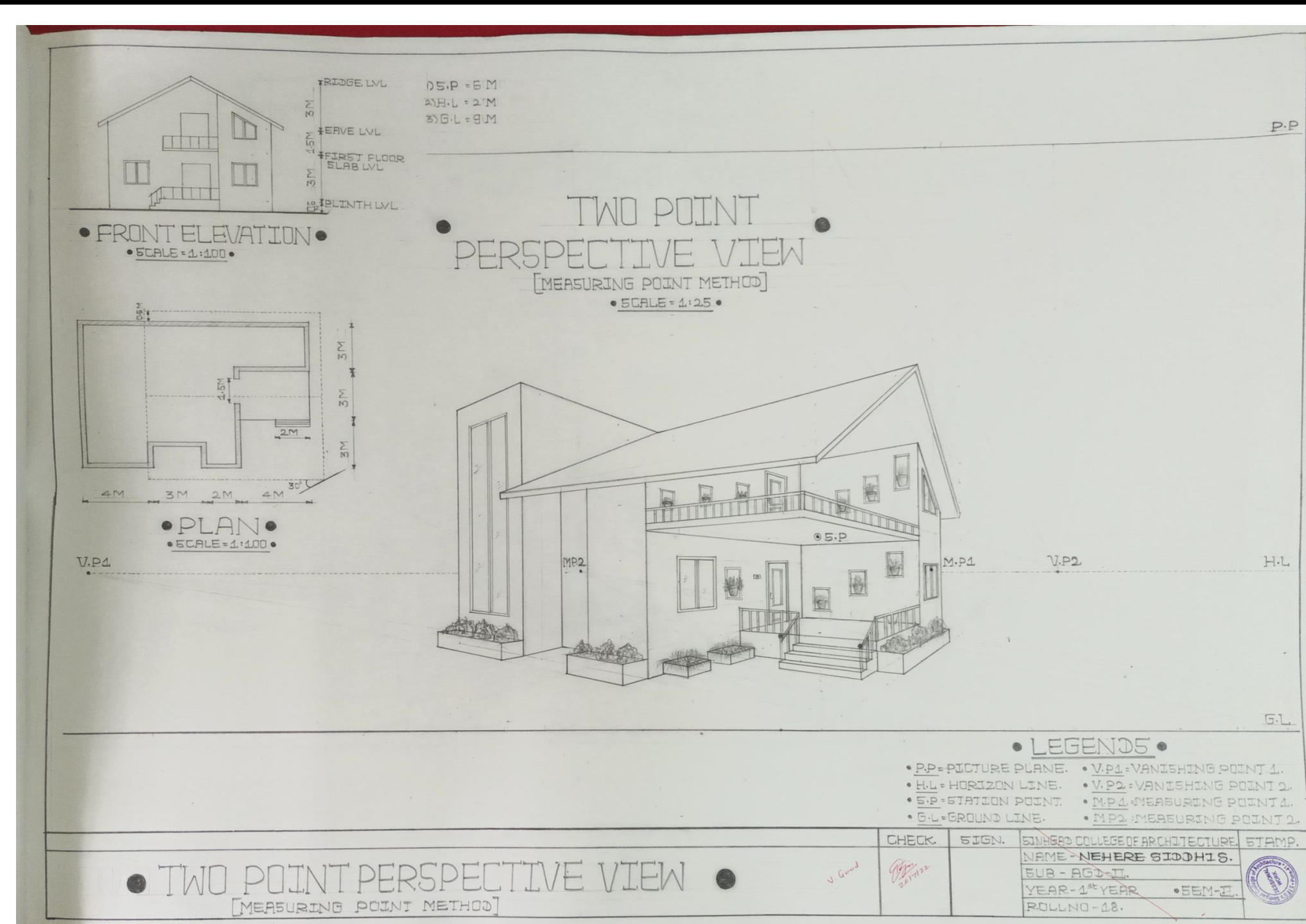
Sinhgad College of Architecture, Pune



- Surface Development of Cut Objects
- True Shapes of Circular Objects
- Sciography of Complex Objects
- Perspective View of Interior of a room
- Perspective View of Exterior of a Bungalow
- True shapes of Objects



Student: Siddhi Nehere, Avirat Kachare
Faculty: Ar. Tejas Joshi, Ar. Neeraj Nijampurkar, Ar. Karuna Ghorpade



1st Year B.Arch 2021-2022
Architectural Graphics & Drawings-II



Page No. _____ Date: _____

Topic: FOREST HOUSE / TRIANGULAR



This triangular shaped forest house is situated in the middle of "hualles" and "ulmos" forest. Project's lead Architects were Tomás Swett Amendábar, Gabriel Díaz Riad. It is located in city Cunco in Country Chile. Total area occupied by this unique house is 225m².

The Colico Lake in the background increases the beauty of the House. For a minimal environmental intervention, the house sits on a base that allows wild flora to grow through it. The orientation of the house in rectangular form towards the north east direction that separates for protecting trees. It has garden and it can be used as a source of solar radiation. House is designed by keeping two concepts in mind, first- for family vacations. As they need large meeting spaces and with total independence from each other. second- the adaptability of uses. For users, four areas are defined family, parents, children and guests.



The rooms are designed in such manner that every room is provided with proper and required sunlight. Thus, the bedrooms was left with the morning sun and the public areas with the noon and afternoon sun. The house is made up of concrete base that absorbs the slope of land, allowing the forest to pass through at the same time isolating the floor from the humidity of the soil. Fabrication used is to reduce the time of construction despite the complexity involved. This house allows the entry of natural light to the all areas of house.

For Educational Use
Priyanka Chavan
07/08

Veggie's Grand Opening

- ⦿ A healthy **outside** starts form the **inside**.
- ⦿ Feel the **sound of nature** with your friends and family.
- ⦿ **Flower's smell** makes your food tastier.
- ⦿ Make your memories in the **delightful area**.

Student: Sayali Renuse, Aditya Wadkar, Mansi Vaidya
Faculty: Ar. Priyanka Chavan

COLOR Theory

TONES
TONE IS ANY PURE HUE WITH NEUTRAL GRAY ADDED.

TINTS AND SHADES
Tints are the light values that are made by mixing a color with white. Shades are a mix of pure colors to which only black is added.

PINK, MAUVE, AND BABY BLUE ARE COMMONLY USED PASTEL COLORS, AS WELL AS MINT GREEN, PEACH, AND LAVENDER.

PASTEL COLORS
Pastel colors are basically, tints of colors which are used mostly for aesthetic purpose.

WARM COLORS
This colors appear closer to the observer.

COOL COLORS
This colors leaves a cold effect on people.

PRIMARY COLORS
Primary colors are those colors which can not be created by mixing other colors together.

MONOCHROMATIC COLORS
This Colors are all the colors of a single hue.

IN GENERAL, WARM COLORS ARE THOSE IN RED, ORANGE AND YELLOW FAMILIES.

IN GENERAL, COOL COLORS ARE THOSE IN THE GREEN, BLUE AND PURPLE FAMILIES.

CHECK SIGN DATE SINHGAD COLLEGE OF ARCHITECTURE, PUNE
NAME: MANSI V. VAIDYA
YEAR: 3rd SEMESTER 1st
SUBJECT: CS
ROLL NO: 24

FAKE IT, TILL YOU MAKE IT.

AMY CUDDY IS THE AUTHOR OF BOOK CALLED PRESENCE. IN THIS TALK SHE DISCUSS ABOUT A REAL LIFE HACKS.

AMY PRESENTS A LOT OF IDEAS IN THIS TALK THERE IS A CLEAR THEME AND EVERY BIT OF INFORMATION SUPPORTS OR GIVE EVIDENCE ON HOW BODY LANGUAGE FITY SHAPE WHO YOU ARE

IMAGES USED IN THIS TALK ARE FREE OF ANY CLUTTER AND DISTRACTIONS THEY ARE NICELY IN FOCUS AND FREE OF ANY TEXT AND CAN BE INSTANTLY RECOGNISED.

OPENING OF THIS SPEECH WAS QUITE CLEVER. SHE OFFERED A TREE AND TECH LIFE HACK. FIRST AMY WAS OUR ATTENTION AND THEN SHE WAS OUR CURIOSITY.

DESPITE THERE BEING A LOT OF INFORMATION IN THIS TALK, BY USING EFFECTIVE PAUSES, BALANCED VISUAL AIDS AND ADEQUATE STRUCTURE AMY GIVES THE VIEWER A COMPLETE PICTURE.

"DON'T FAKE IT TILL YOU MAKE IT, FAKE IT TILL YOU BECOME IT."

TED TALK

CHECK SIGN DATE SINHGAD COLLEGE OF ARCHITECTURE, PUNE
NAME: RENUSE SAYALI PRAKASH
SUBJECT: CS
YEAR: 1st Yr
SEMESTER: I
ROLL NO: 1006

**1st Year B.Arch 2021-2022
Communication Skills**

Sinhgad College of Architecture, Pune

HONEST!! ARCHITECT

MY BEST DESIGN WHICH IS STILL UNDER CONSTRUCTION AND IT JUST MISSED THE 1ST PRIZE IN A COMPETITION ... SIGH!!

OTHER DESIGNS WHICH ARE NOT WORKING PUTTING ON THE WALL BUT I NEED TO FILL MY WALLS... DUH!!

I NEED TO LOOK LIKE AN ARCHITECT-
1. LE CORBUSIER SPEC
2. THE BOARD
3. THE LAMPY PEN
4. THE KRAVAT JACKET

AWKWARD FROM COLLEGE TIMES TO FILL MY EYEGLASS (SOMEONE WILL NO IT WOULD EAT MY MOUTH)

AGAIN SOME OTHER MODELS FROM COLLEGE DAYS!!

NBODY USES THIS STATUARY BUT IT IS KEPT SO TO MAKE MY OFFICE LOOK AN ARCHITECT OFFICE.

THE WATCH OF AN ARCHITECT

THINKING ABOUT PRITZKER PRIZE!
COFFEE AND BREAKS
LUNCH TIME!
+ EXTENDED LUNCH TIME INCLUDES GOSSIPING-1
200M IN, 200M TIME!
TEMPORARY OBSERVATION: NEED POWER NAP BUT NOT POSSIBLE
CHECKING ARTICLES ON ARCHITECTURE
BOSS THREATENING ABOUT YOUR STUPID DESIGN!
BOSS CAULING! DON'T KNOW WHETHER TO PICK IT UP!!!
FINALLY FINISHED THAT GODDAMN DESIGN AND LEAVING FOR HOME!
CARRYING ABOUT LIFE AND THINKING ABOUT CHANGING OFFICE

DESIGN TIME!
SMALL CHECKING TIME AND DOING STUPID REVISIONS.
WORKING UP AFTER A HEADACHE AND GETTING READY FOR OFFICE ALSO.

REPEAT!

ARCHITECTURE KNOW THE SYMPTOMS

CHECK	SIGN	DATE	SINHGAD COLLEGE OF ARCHITECTURE	STAMP
	Priyanka	1/10/2021	NAME: ISHIKA PAWAR SUBJECT: FOA YEAR: FIRST YEAR SEM I & II ROLL NO: 01	

AR. PHILIP JOHNSON

8 JULY 1906 - 25 JAN 2005 ; CLEVELAND, OHIO, US.
AMERICAN ARCHITECT BEST KNOWN FOR HIS WORKS OF MODERN AND POSTMODERN ARCHITECTURE.
COMPLETED EDUCATION FROM HARVARD GRADUATE SCHOOL OF DESIGN
AWARDED WITH PRITZKER PRIZE [1993] AND AIA GOLD MEDAL [1999]

A ROOM IS ONLY AS GOOD AS YOU FEEL YOUR IN IT.

[1946-1960] THE GLASS HOUSE
[1960-1980] MUNSON-WILLIAMS-PROCTOR ARTS INSTITUTE
[1980-1990] THE CRYSTAL CATHEDRAL
[1991-2005] COMERICA TOWER

THE SEAGRAM BUILDING
THE DAVID KOCH THEATER
550 MADISON AVENUE
THE URBAN SUITE HOUSE

ARCHITECT'S BIOGRAPHY

CHECK	SIGN	DATE	SINHGAD COLLEGE OF ARCHITECTURE	STAMP
	Priyanka	1/10/2021	NAME: ISHIKA PAWAR SUBJECT: FOA YEAR: FIRST YEAR SEM I & II ROLL NO: 01	

Objective of the course is to introduce students to the field of architecture, its scope and fundamentals.

The assignments are designed to make students understand the distinguishing characteristics of architecture as a profession with respect to other professions. Scope and fundamentals of architecture along with factors affecting architectural design and significance of subjects in curriculum.

Student: Ishika Pawar
Faculty: Ar. Priyanka Chavan

AR. RAHUL MEHROTRA

ARCHITECTS AND URBANIST

BORN: 1959
PRACTICING IN MUMBAI AND TEACHES AT GRADUATE SCHOOL OF DESIGN AT HARVARD UNIVERSITY.
STUDIED AT SCHOOL OF ARCHITECTURE ANENEDABAD AND COMPLETED MASTERS AT GRADUATE SCHOOL OF DESIGN AT HARVARD UNIVERSITY IN URBAN DESIGN.
IN ADDITION TO HIS INVOLVEMENT WITH CONSERVATION URBAN DESIGN AND PLANNING HE'S AN ACTIVIST, AND ALSO PRACTICING WITH HIS FIRM, RMA ARCHITECTS.

FROM 1994 TO 2004, HE WORKED AS EXECUTIVE DIRECTOR OF THE URBAN DESIGN RESEARCH INSTITUTE. DURING HIS TENURE AS THE DIRECTOR OF UDR, HE INITIATED PROJECTS IN MUMBAI LIKE HISTORICAL PRESERVATION LEGISLATION, RECYCLING OF POST-INDUSTRIAL LANDSCAPES.

SHANTI - A WEEKEND HOUSE, ALIBAG 1997

FACTORY FOR STP, GOA 1999

OFFICES FOR CATHOLIC RELIEF SERVICES, A STREET IN THE ATTIL, GOMBAY 1993

ARCHITECT'S BIOGRAPHY

CHECK	SIGN	DATE	SINHGAD COLLEGE OF ARCHITECTURE	STAMP
	Priyanka	1/10/2021	NAME: ISHIKA PAWAR SUBJECT: FOA YEAR: FIRST YEAR SEM I & II ROLL NO: 01	

LOTUS TEMPLE - AR. FARIBURZ SAHBA

BIOMIMICRY
LOCATED IN DELHI, INDIA
BAHAI HOUSE OF WORSHIP, IS MOST FAMOUS FOR ITS DISTINCT FLOWER-LIKE SHAPE, DELIBERATELY BUILT TO REFLECT THE BEAUTY AND SYMMETRY OF LOTUS.

STRUCTURE ANALYSIS
CONCEPT CONVERTED INTO DEFINED GEOMETRIC FORMS.
EXTERNAL STRUCTURE IS OF 27 SAINTS MARBLE PETALS, WHICH ENVELOPE INTERIOR SPACE HAVING CAPACITY OF 2500 PEOPLE, AND ACCESS VIA 9 BRIDGES, WHICH CROSS 9 PONDS.

CONSTRUCTED FROM MARBLE, CEMENT AND SAND.
REINFORCEMENT USED IN THE STRUCTURAL FRAMEWORK OF THE WHOLE CONCRETE SHELLS.

INSPIRATION FROM NATURE AND STRUCTURE ANALYSIS

CHECK	SIGN	DATE	SINHGAD COLLEGE OF ARCHITECTURE	STAMP
	Priyanka	1/10/2021	NAME: ISHIKA PAWAR SUBJECT: FOA YEAR: FIRST YEAR SEM I & II ROLL NO: 01	

LOTUS TEMPLE NEW DELHI [1978-1984]

STRUCTURE ANALYSIS

- THE TEMPLE ARE WELL KNOWN FOR THEIR ARCHITECTURAL SPANNDOR AND THE TEMPLE CONTINUATION IN DELHI IS A CONTINUATION OF THIS TRADITION COMPLETED IN 1986.
- AR. FARIBURZ SAHBA ; STRUCTURAL DESIGNER - FLINT AND MALL PARTNERSHIP OF LONDON WERE THE CONSULTANTS ; CONSTRUCTED BY - ECC CONSTRUCTION.
- CONSTRUCTION SYSTEM - A BASED ON A RADIAL GRIDS
- STRUCTURE OF INNER LEAF ENCLOSE THE INTERIOR DOME IN A CANOPY MADE OF [RIBBONS] RIBS AND SHELS OF INTRICATE PATTERN.

STRUCTURE ANALYSIS

CHECK	SIGN	DATE	SINHGAD COLLEGE OF ARCHITECTURE	STAMP
	Priyanka	1/10/2021	NAME: ISHIKA PAWAR SUBJECT: FOA YEAR: FIRST YEAR SEM I & II ROLL NO: 01	

CIRCULATION

CIRCULATION DIAGRAM

TWO MEDICAL OFFICERS
FIVE NURSES [FEMALE]
FOUR CLEANING STAFF
GENERAL OPD - 100 PATIENT FOOTFALL

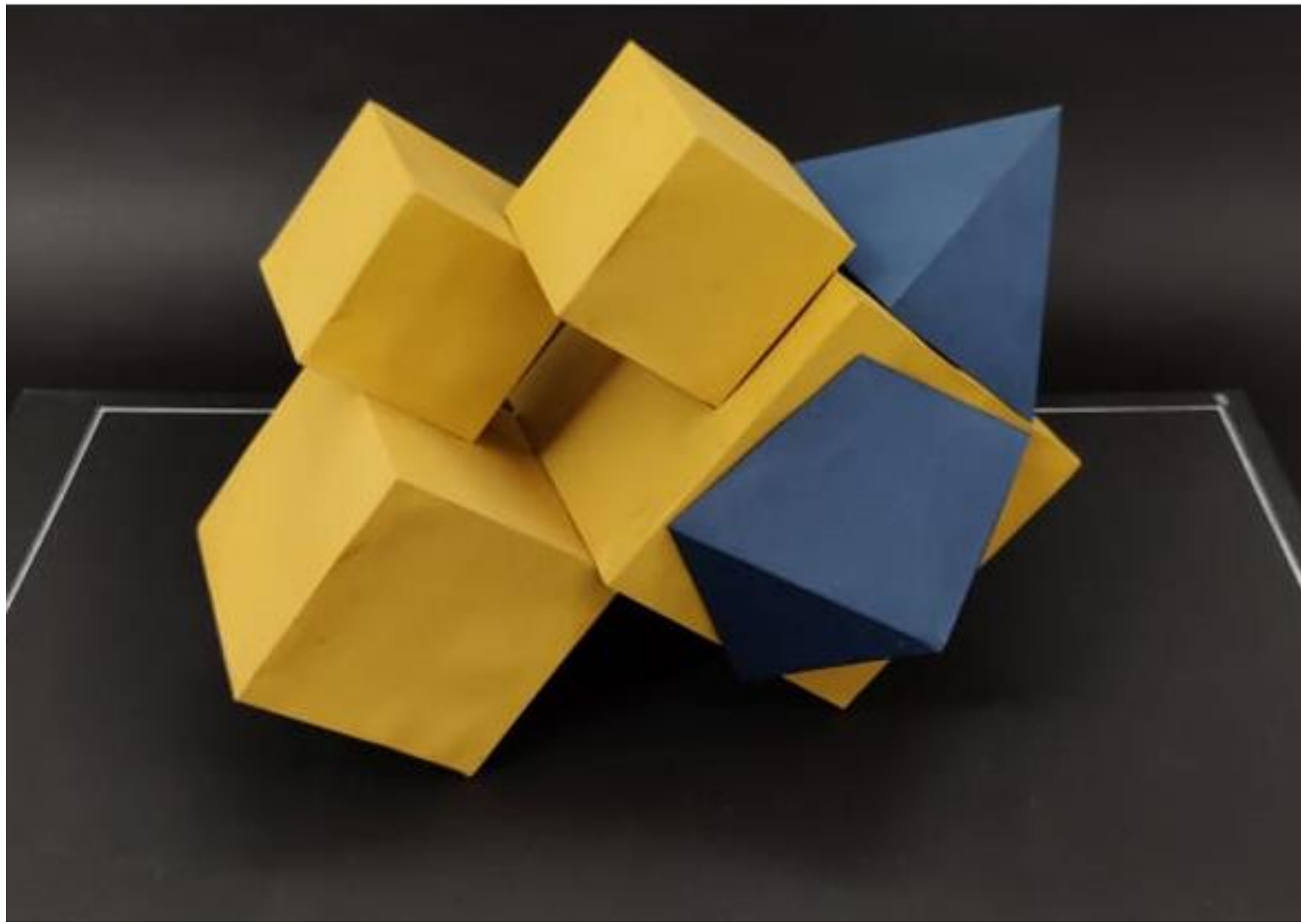
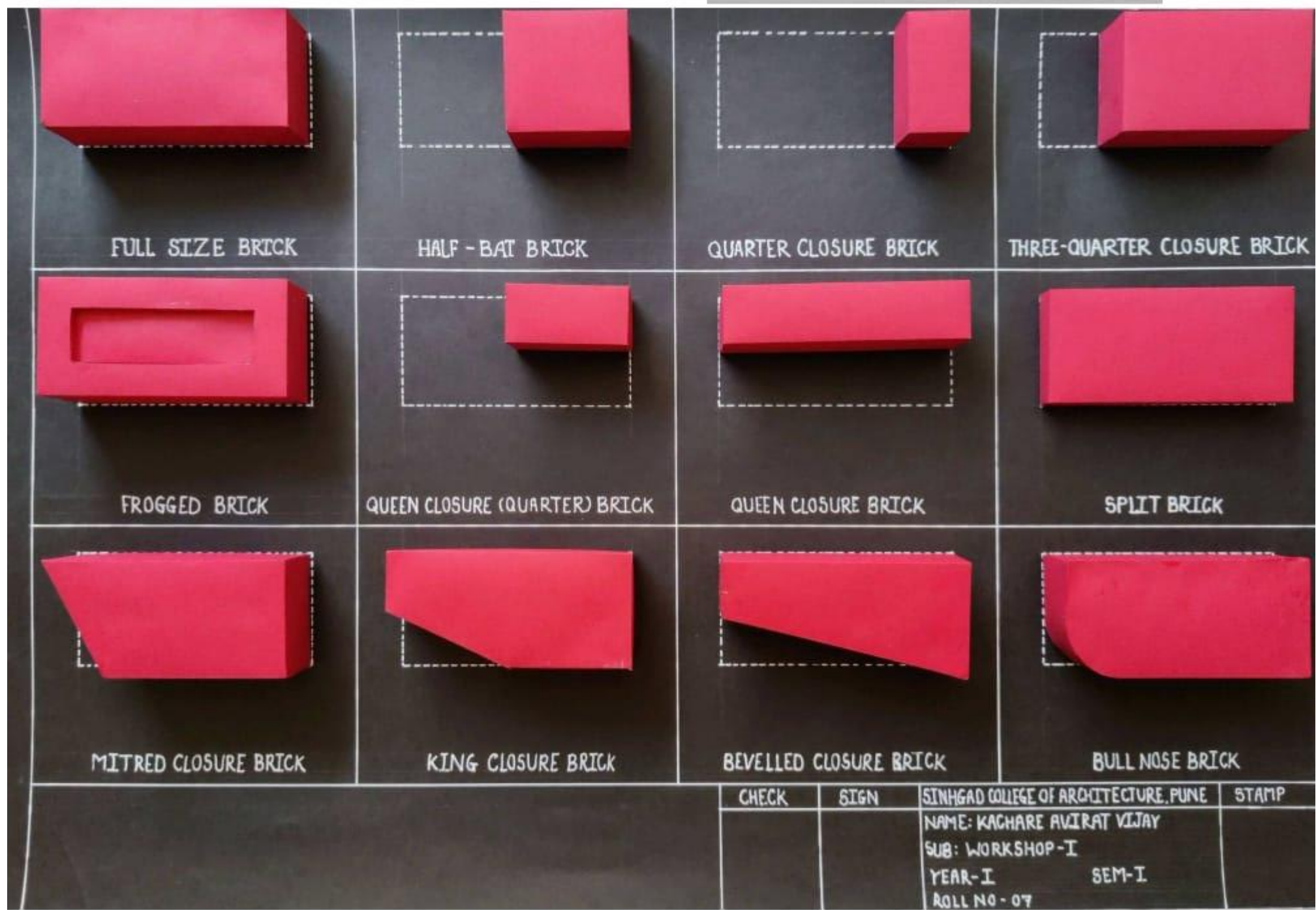
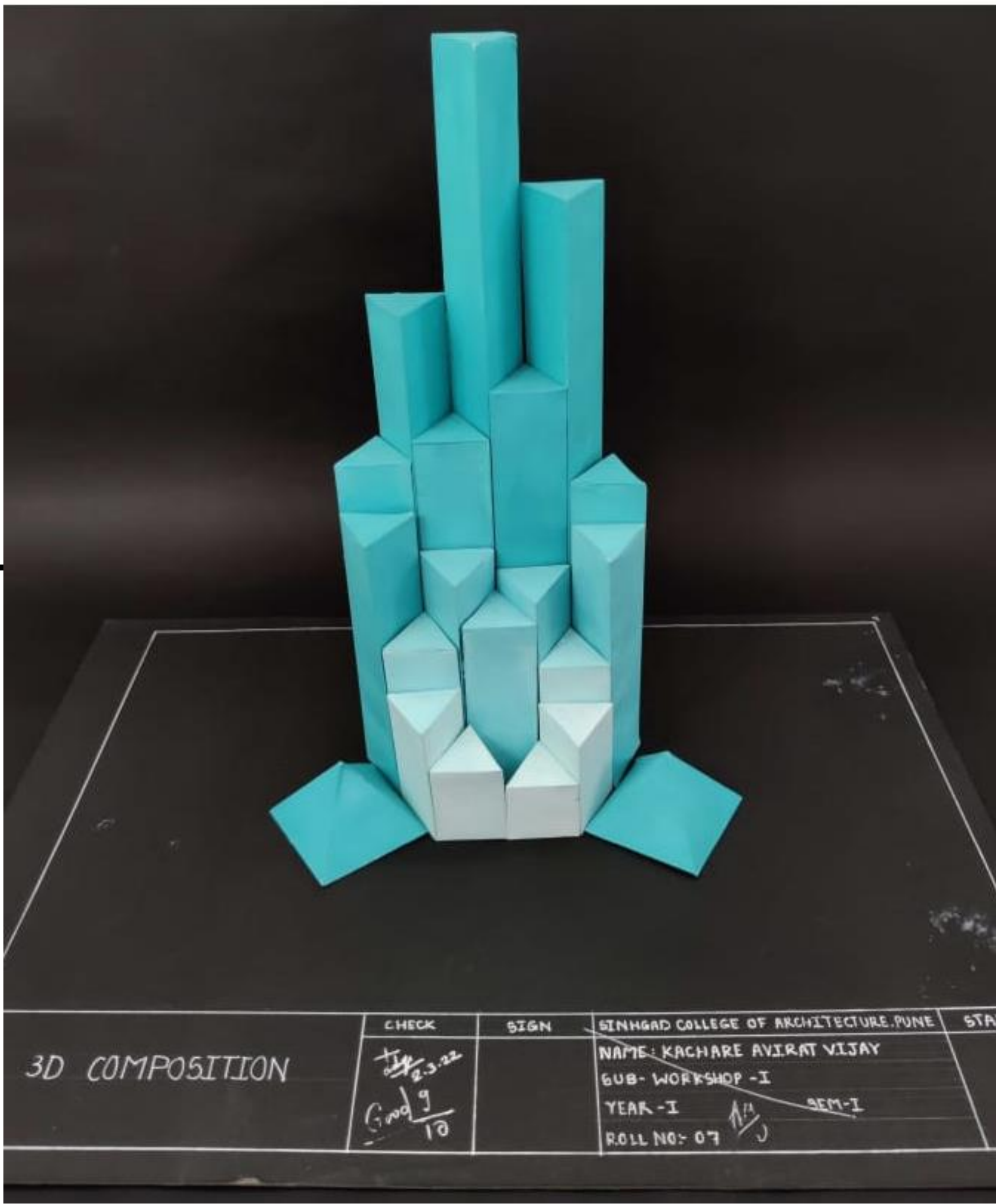
EXITS AND ENTRANCES
THERE IS ONLY ONE MAIN ENTRY AND EXIT, AND ONE EXIT WHICH WAY OUT THROUGH PARKING.

CIRCULATION

CHECK	SIGN	DATE	SINHGAD COLLEGE OF ARCH.	STAMP
	Priyanka	1/10/2021	NAME: ISHIKA PAWAR SUBJECT: FOA YEAR: FIRST YEAR SEM I & II ROLL NO: 01	

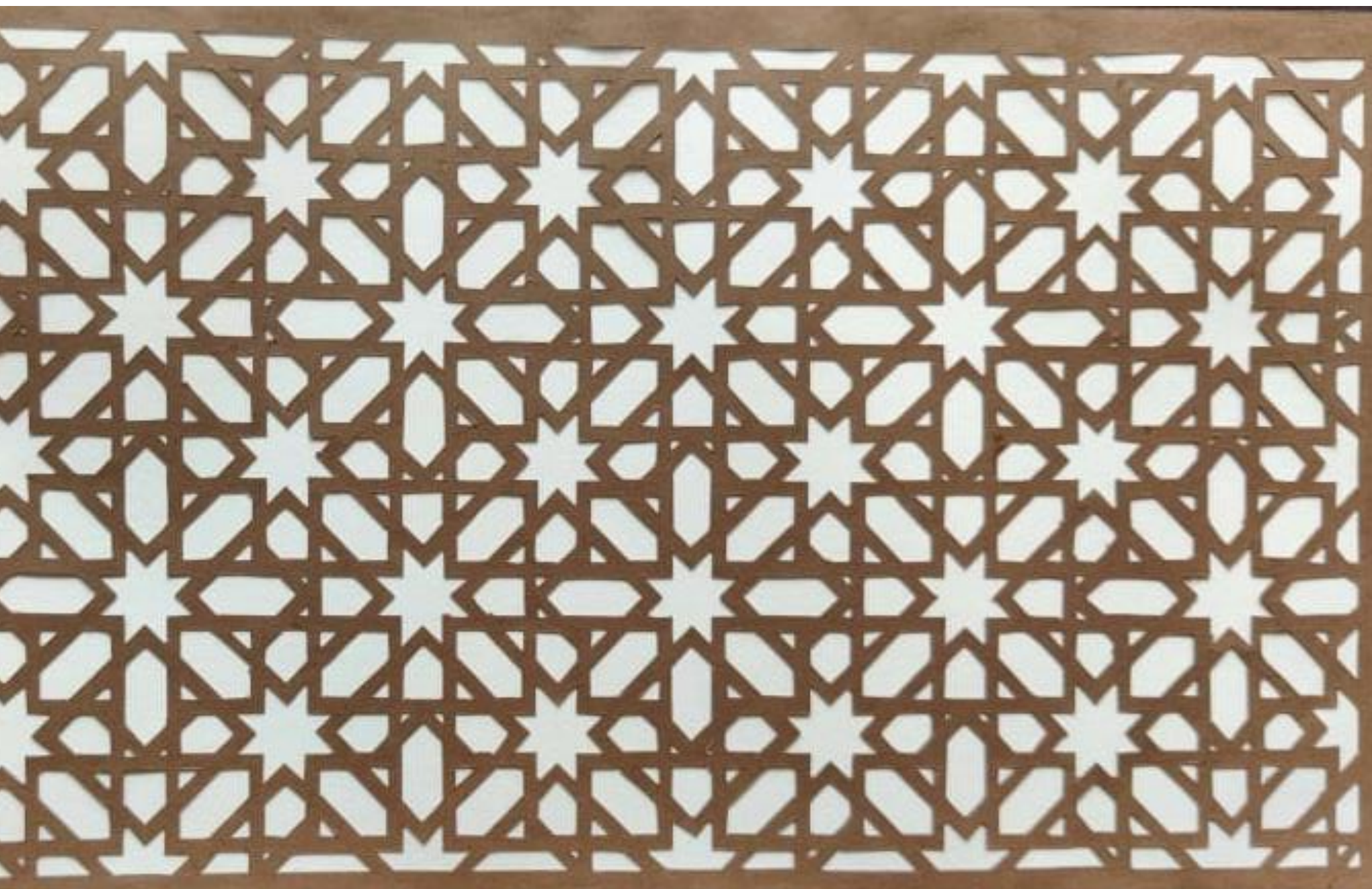
1st Year B.Arch 2021-2022
Fundamentals of
Architecture

Sinhgad College of Architecture, Pune

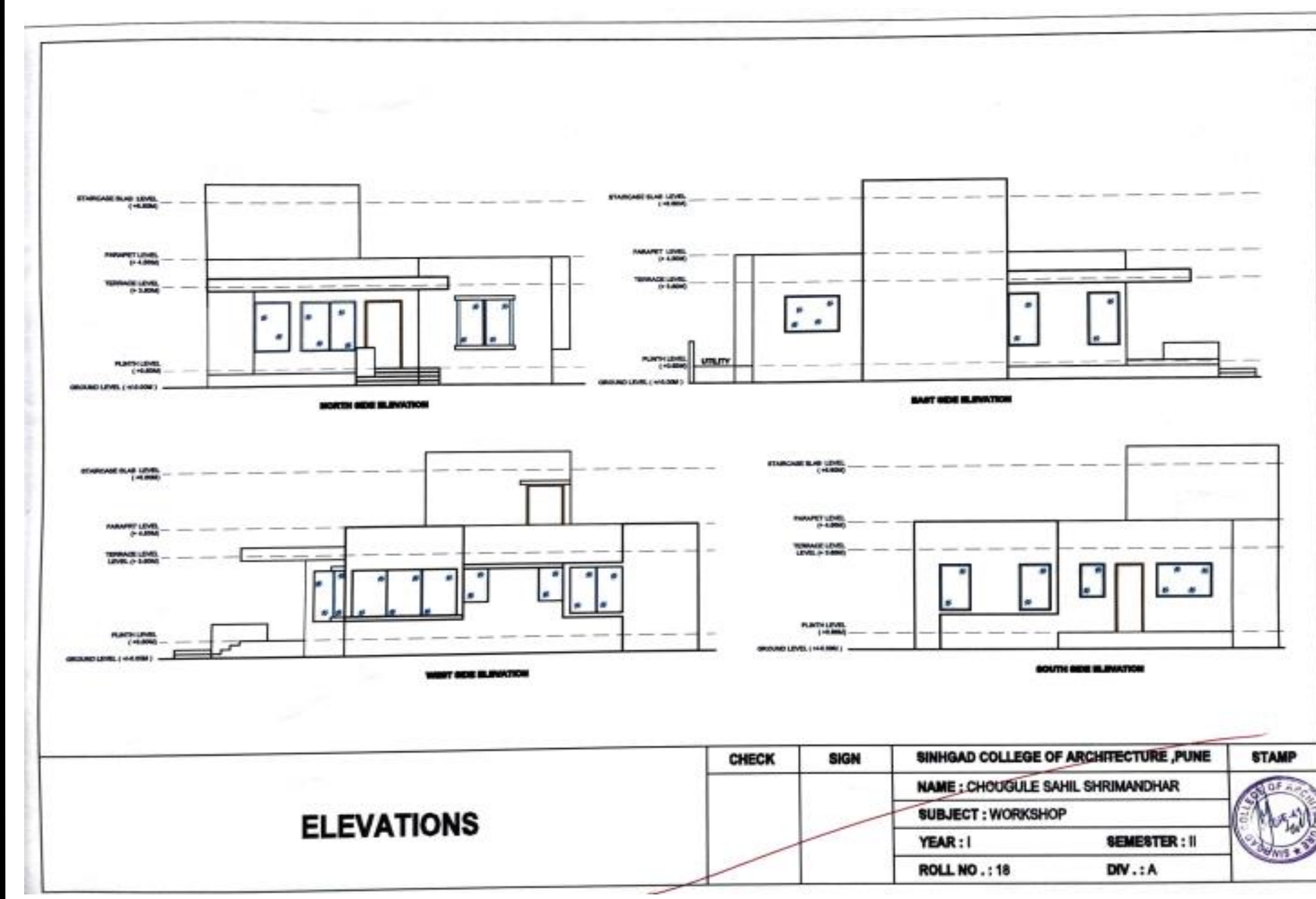
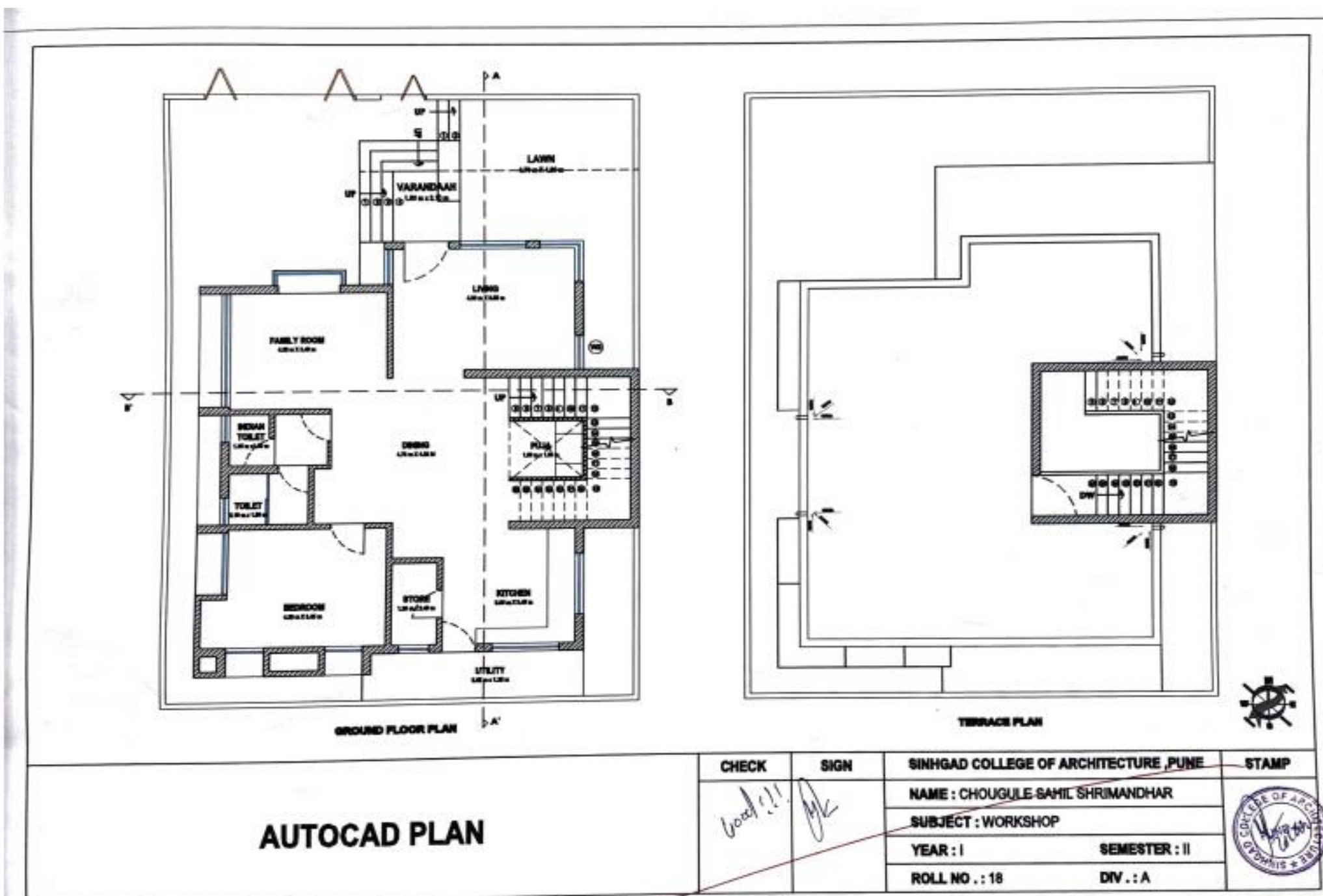


Student: Avirat Kachare
Faculty: Ar. Karuna Ghorpade, Ar. Janhnvi Dhage

1st Year B.Arch 2021-2022 Workshop I



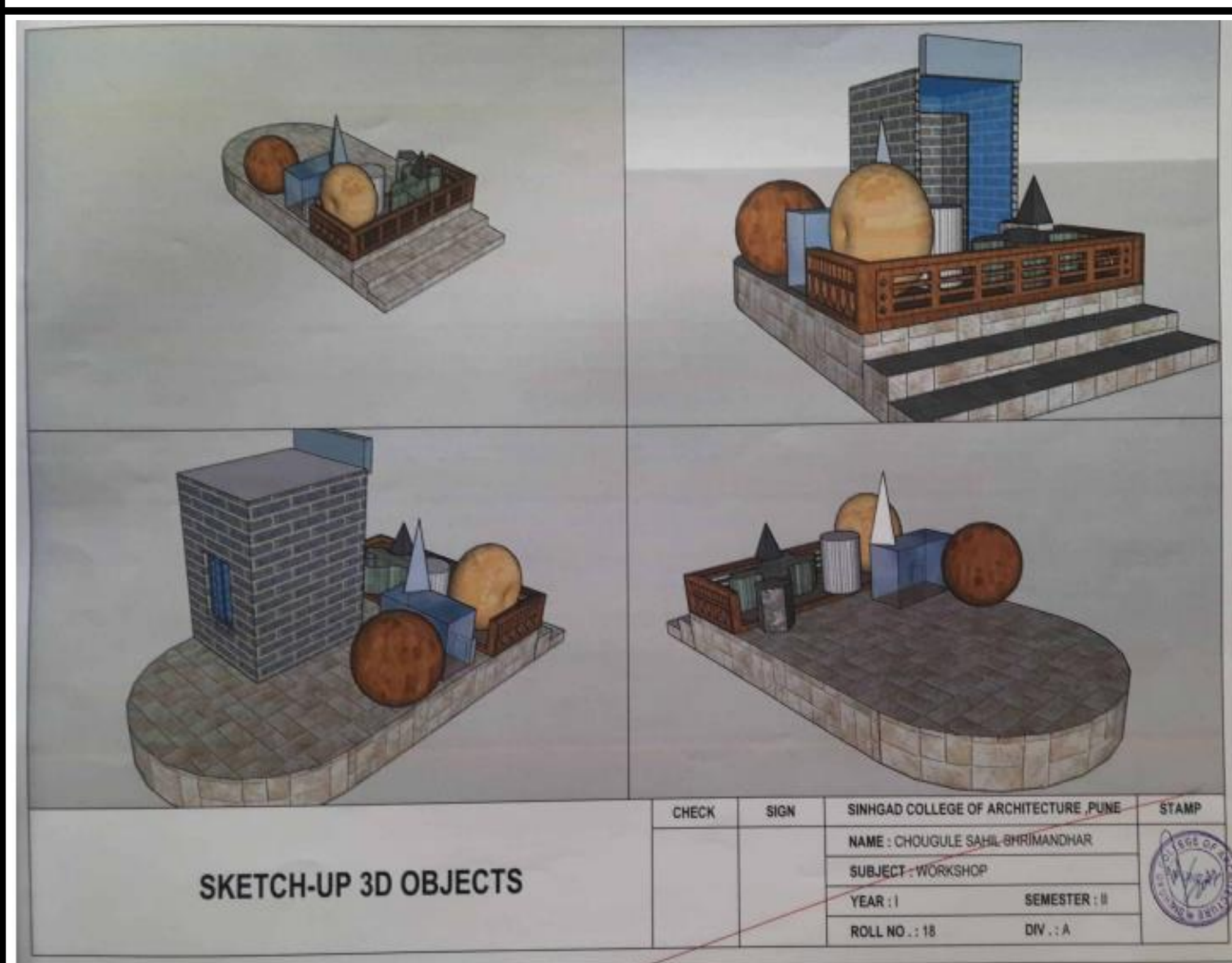
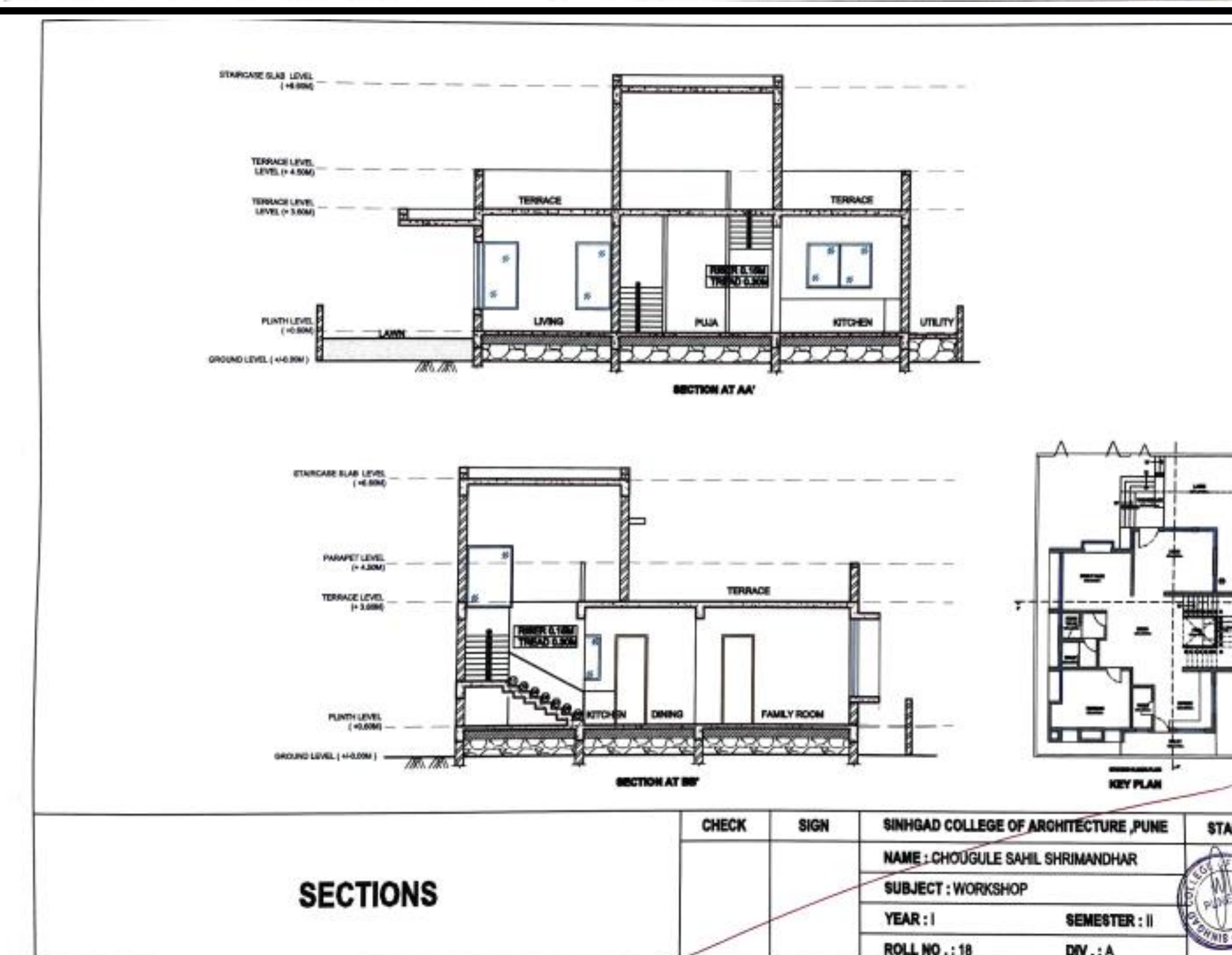
Sinhgad College of Architecture, Pune



Objectives :

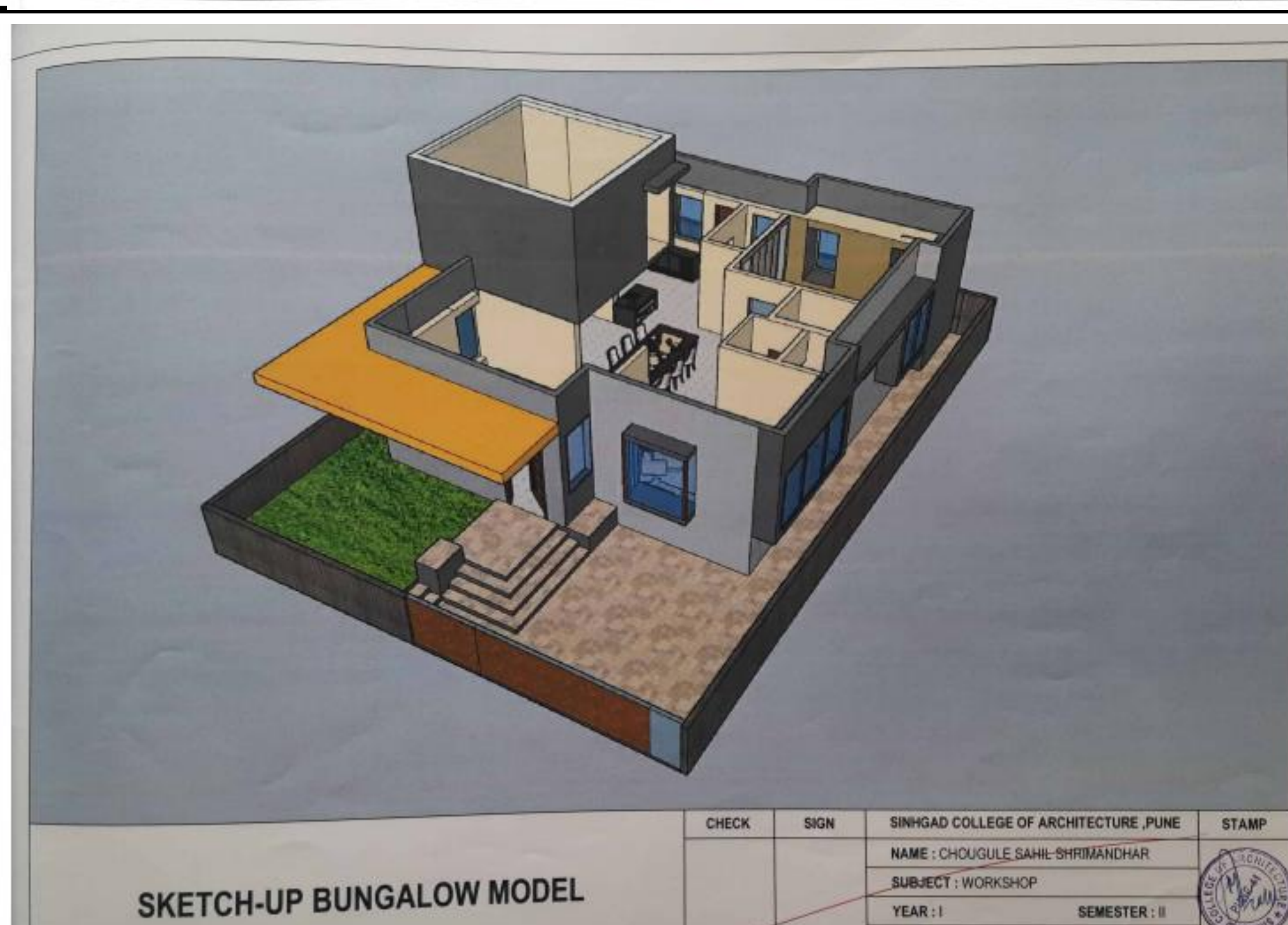
To enable students to make Architectural models with various materials during process of Design and Construction studios and as final presentation to express ideas

Introduction to Digital modeling with basic software's.



Student: Sahil Chougule

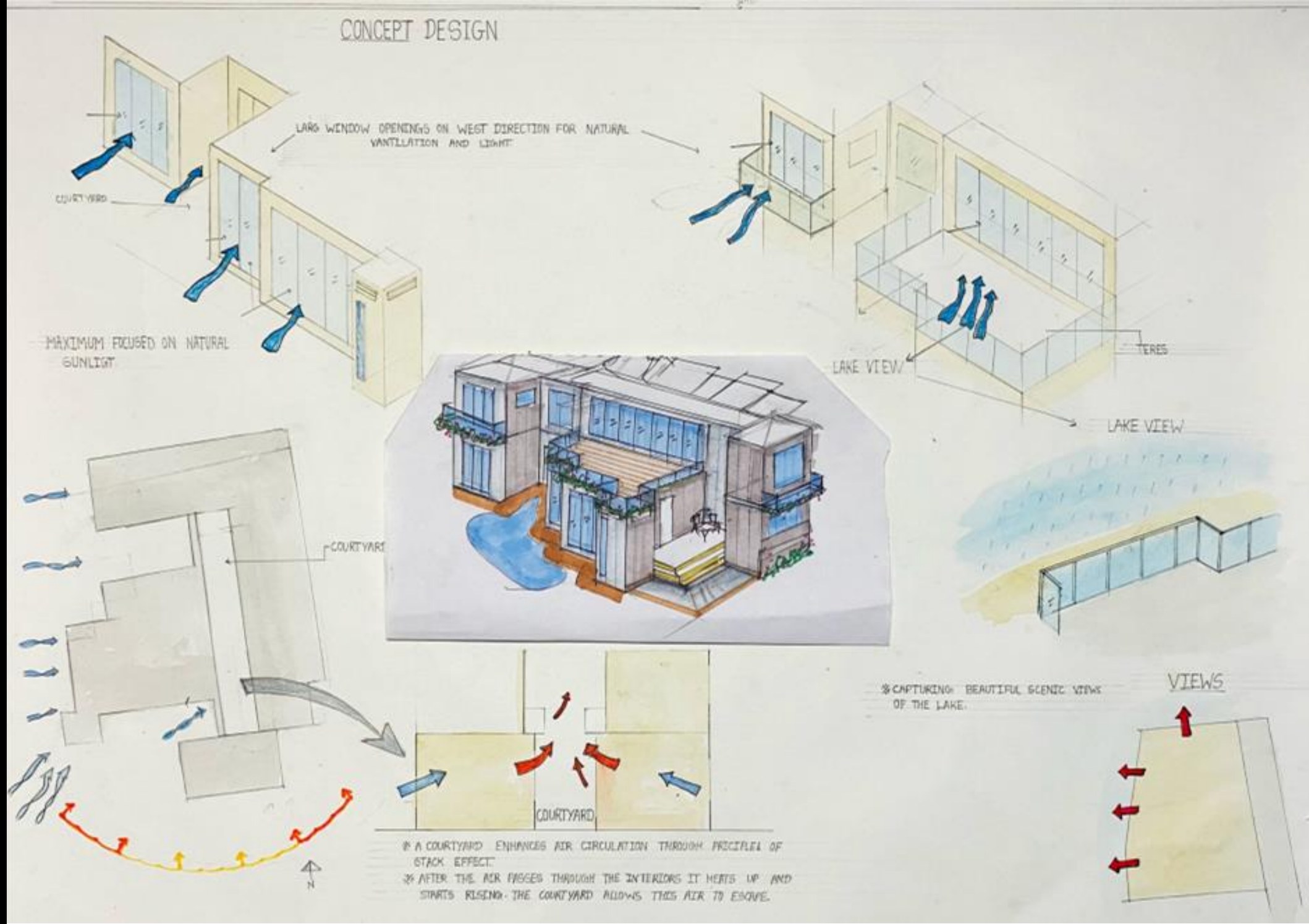
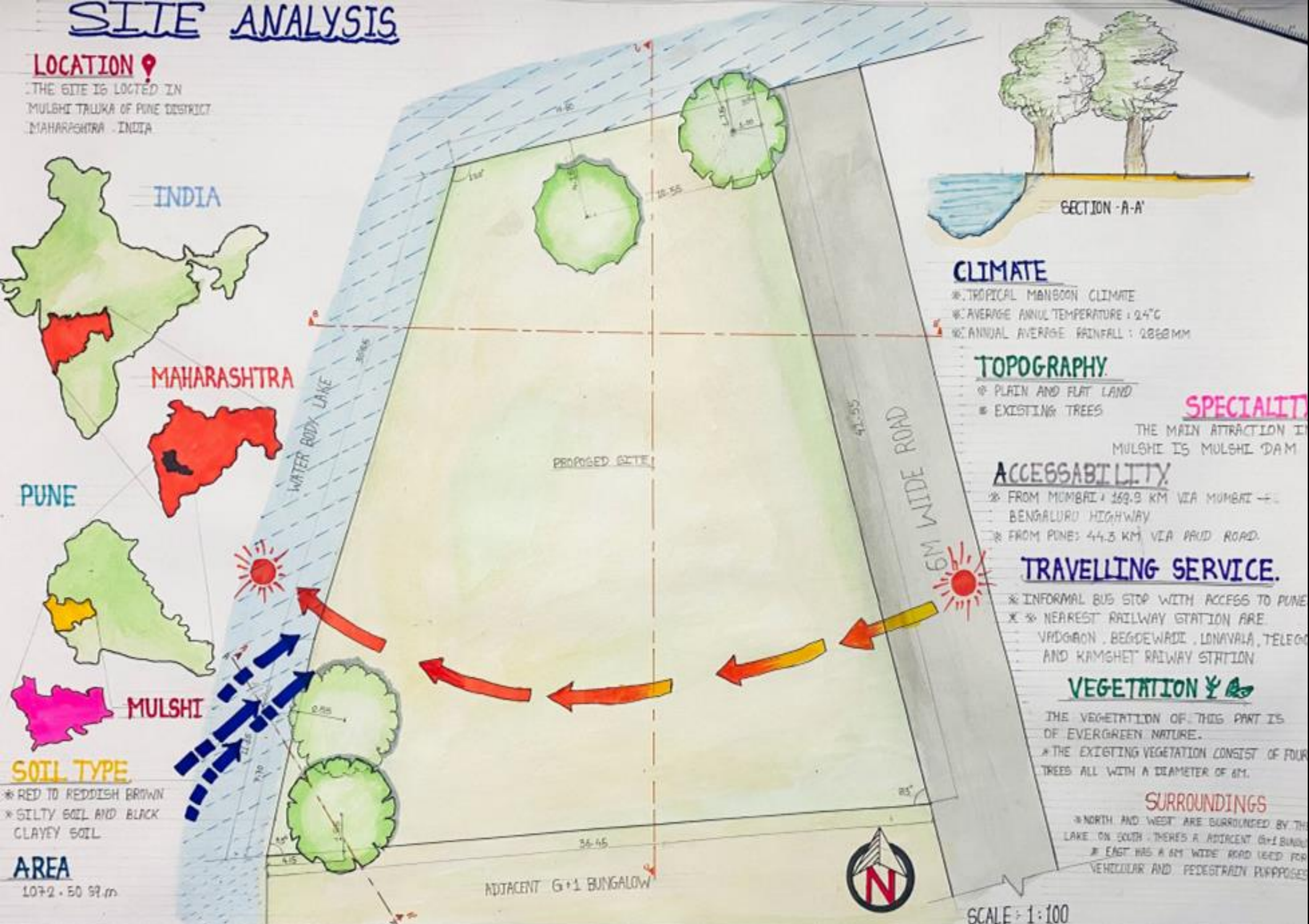
Faculty: Ar. Manasi Khope, Ar. Akshay P.



1st Year B.Arch 2021-2022
Workshop - II

AUTOCAD/SKETCHUP

Sinhgad College of Architecture, Pune



PROJECT DETAILS

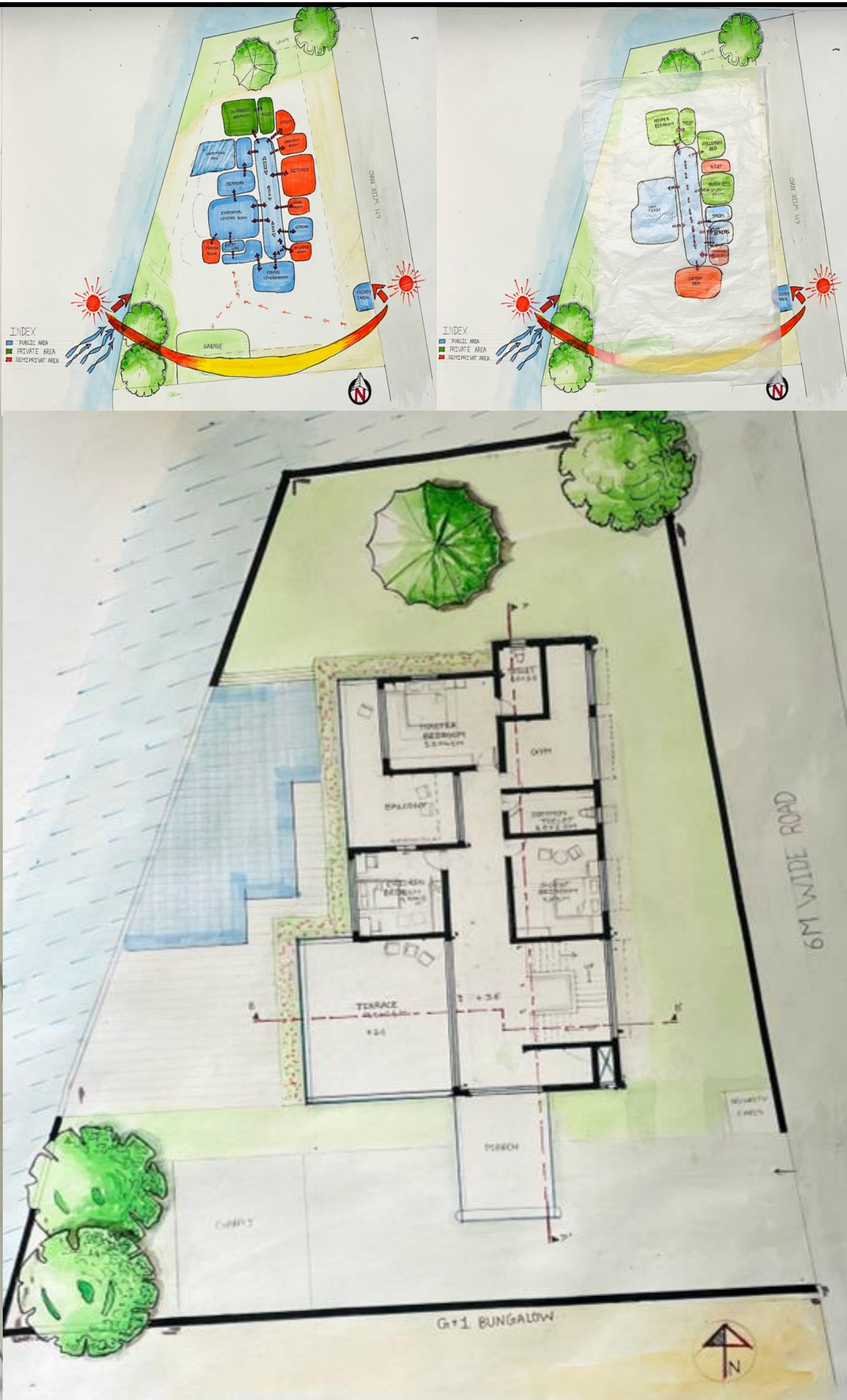
Location: Mulshi lake area
Plot area: 1072.50sq.m
The location is best suited to have a family holiday residence for people, as it has been a tourist attraction since years.

Residence Design For Own Family			
Sr.no.	Space	Units	Area (sq.m)
1	Entrance Lobby	1	7
2	Formal Living Room	1	20
3	Informal Living Room	1	30
4	Kitchen	1	20
5	Dinning	1	20
6	Utility	1	15
7	Store Room	1	10
8	Prayer Room	1	7
9	Master Bedroom	1	20
10	Master Toilet	1	10
11	Children Bedroom	1	15
12	Grand Parents' Bedroom	1	20
13	Grand Parents' Attached Toilet	1	7
14	Guest Bedroom	1	15
15	Common Toilet	1	7
16	Powder Room	1	4
17	Servants Room With Toilet	1	20
18	Individual Requirement	1	25
19	Garage (2 Two Wheelers & 2 Cars)	1	50
20	Security Cabin	1	3
Total area			325
21	Built up area	15 %	48.75
22	Circulation Space	15%	48.75
Total area			422
23	Additional Outdoor Spaces: Swimming Pool, Party Area, Barbeque Area, Watchman's Cabin, Visitors parking		

- Aim:** To design a Residence for an own family.
- Objectives:**
1. To be able to zone the activities in and out of a residence, create appropriate circulation in a residence by planning spaces accordingly to scales and levels, understand the macro and micro climate for the site and respond to it.
 2. To comprehend relationship between design, visual arts, building construction, climatology, building materials, structure etc. and evolve a design solution.

Student: Yatish Chaudhari
Faculty: Ar. Priyanka Purohit, Ar. Tanmayee Panse

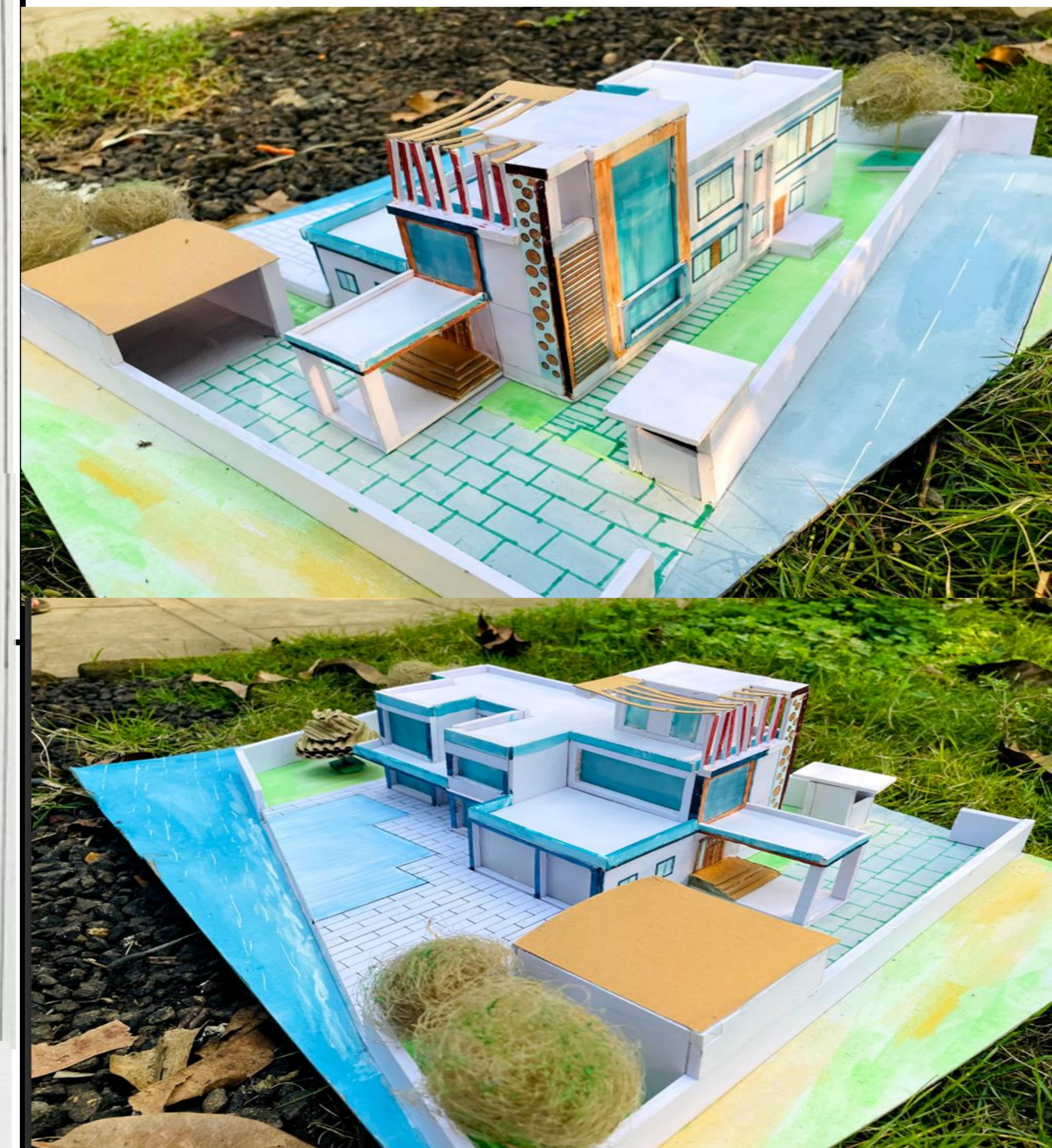
2nd Year B.Arch 2021-2022 Architectural Design-II Bungalow Residence at Mulshi (Major Project)



PROJECT DETAILS



SCALE : 1:100

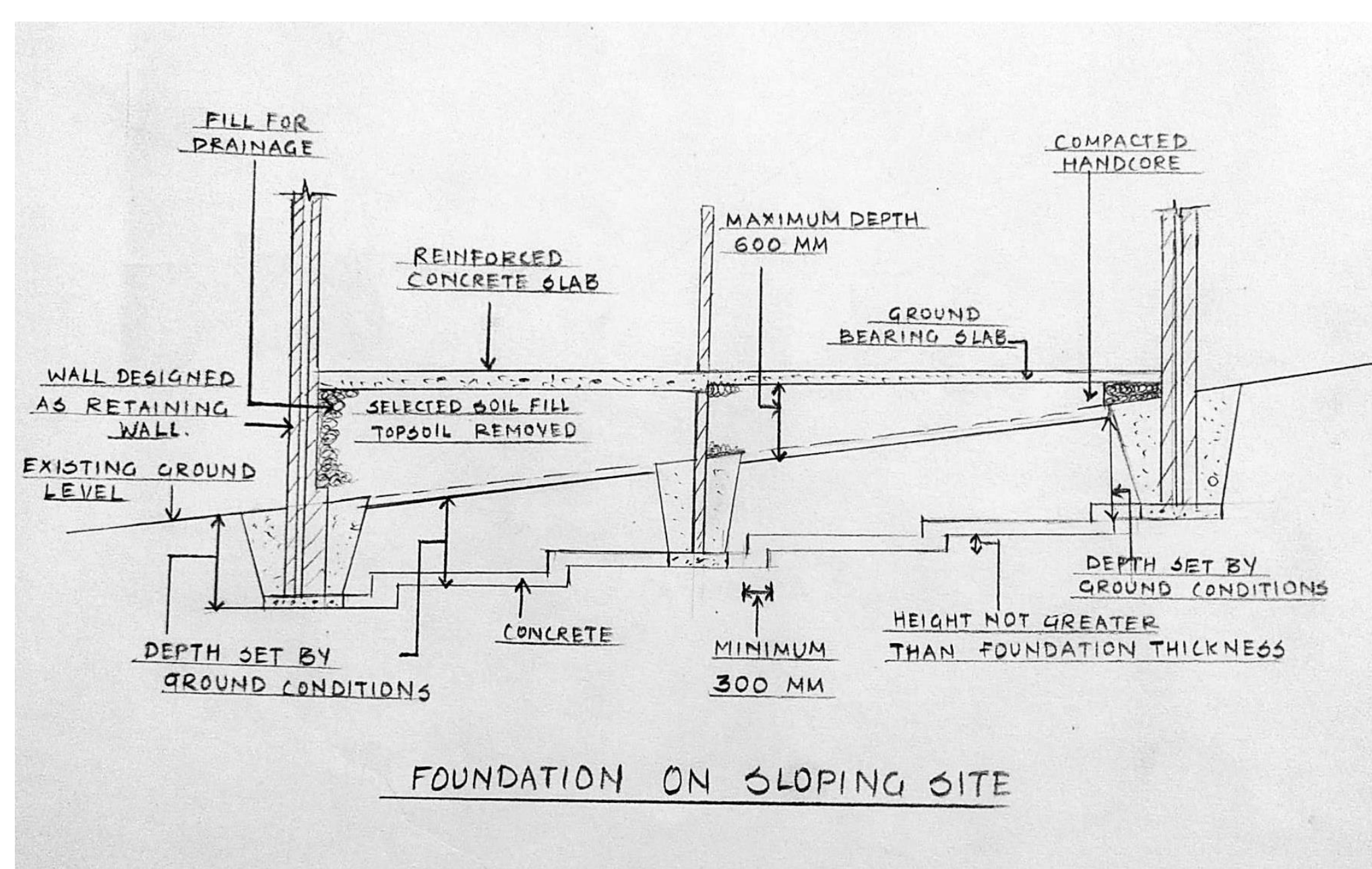
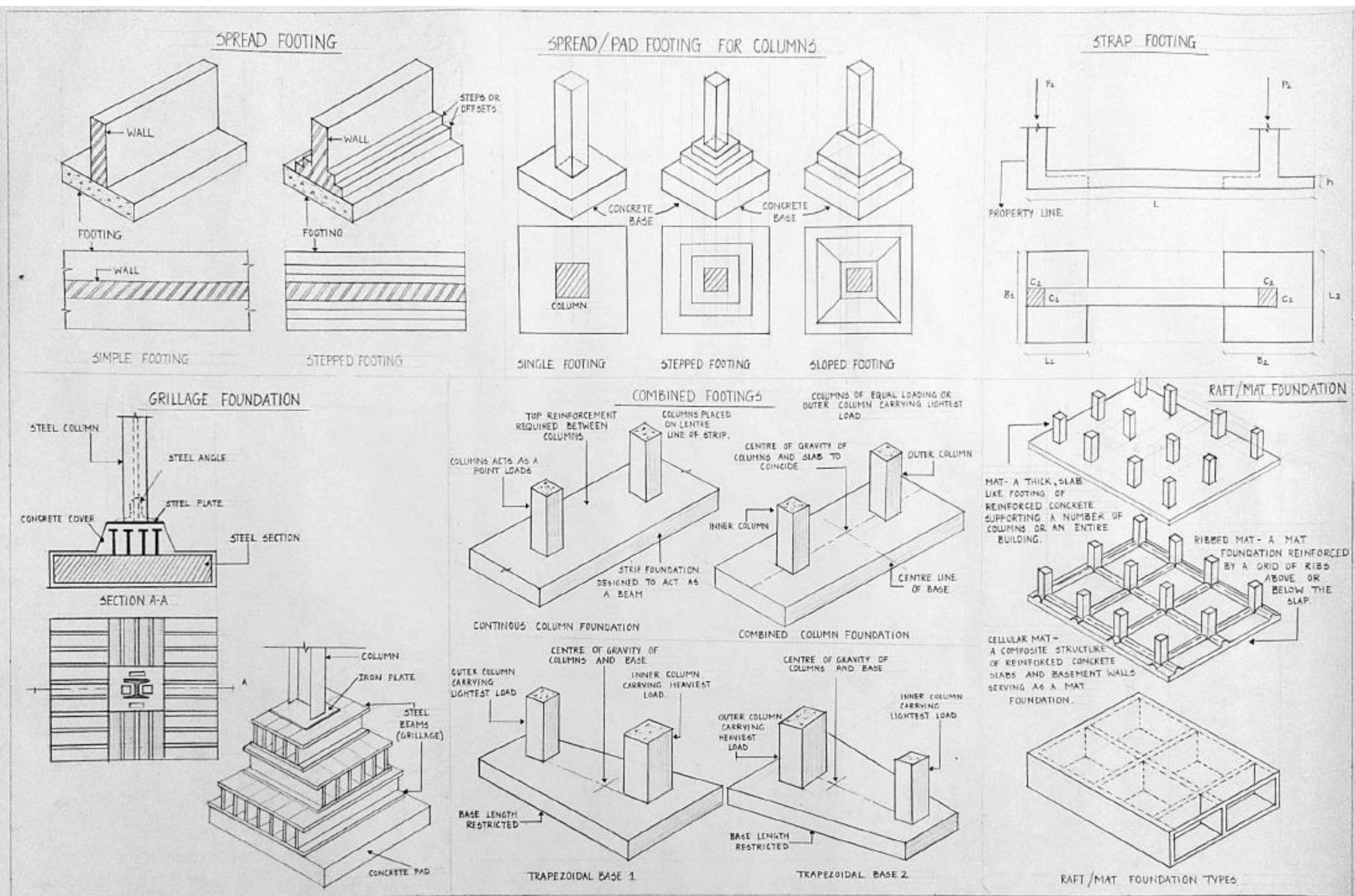


Student: Yatish Chaudhari
Faculty: Ar. Priyanka Purohit, Ar. Tanmayee Panse

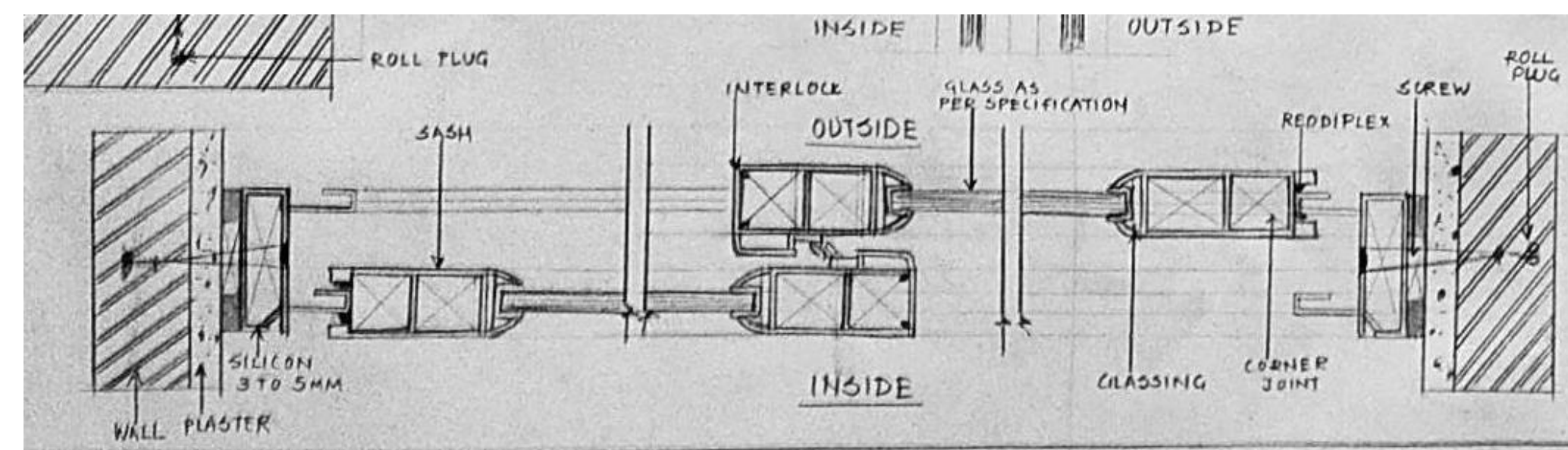
**2nd Year B.Arch 2021-2022
Architectural Design-II**

**Bungalow Residence at
Mulshi
(Major Project)**

Sinhgad College of Architecture, Pune



Foundation for sloping site

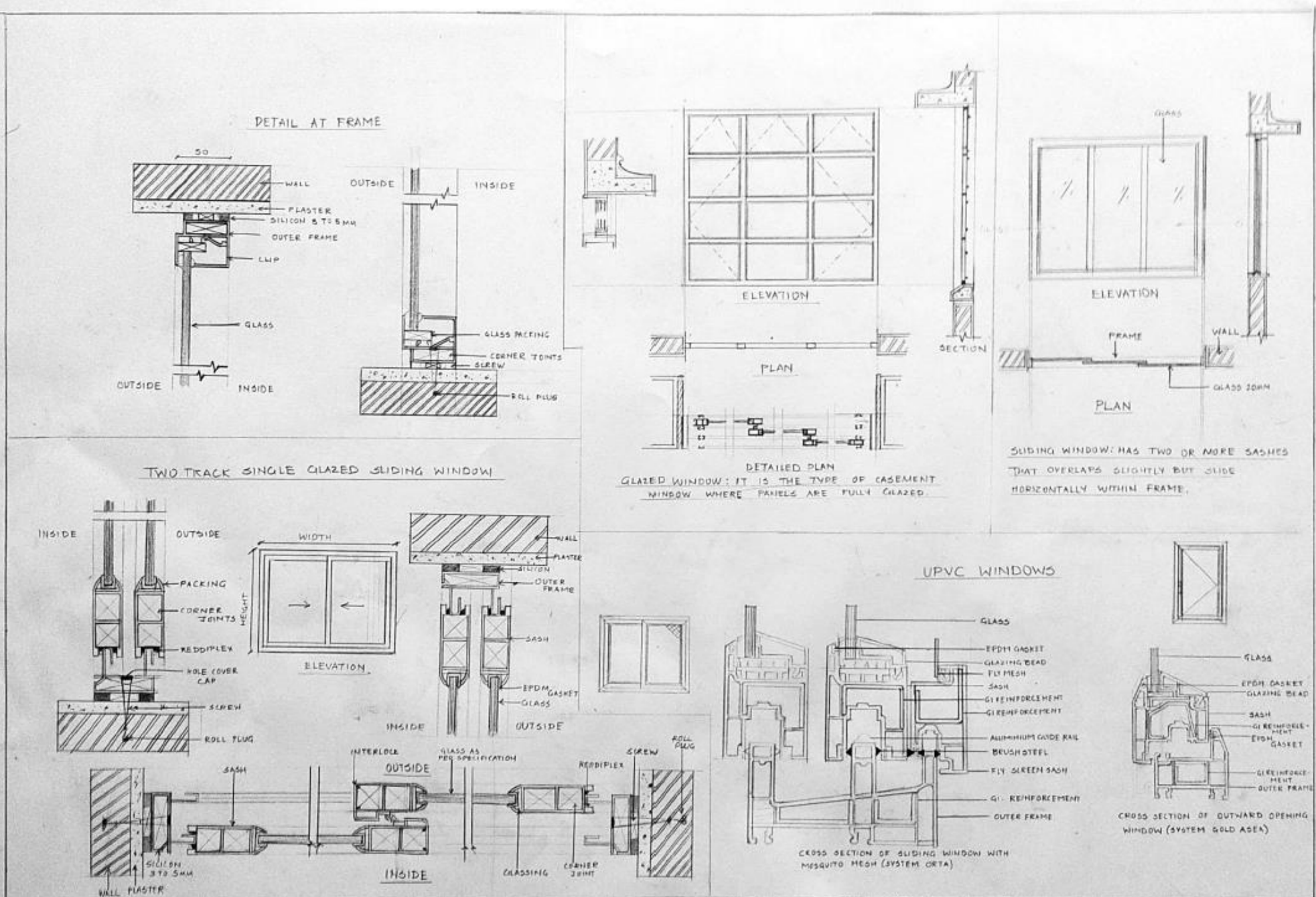


Details of frame for UPVC and Aluminium window

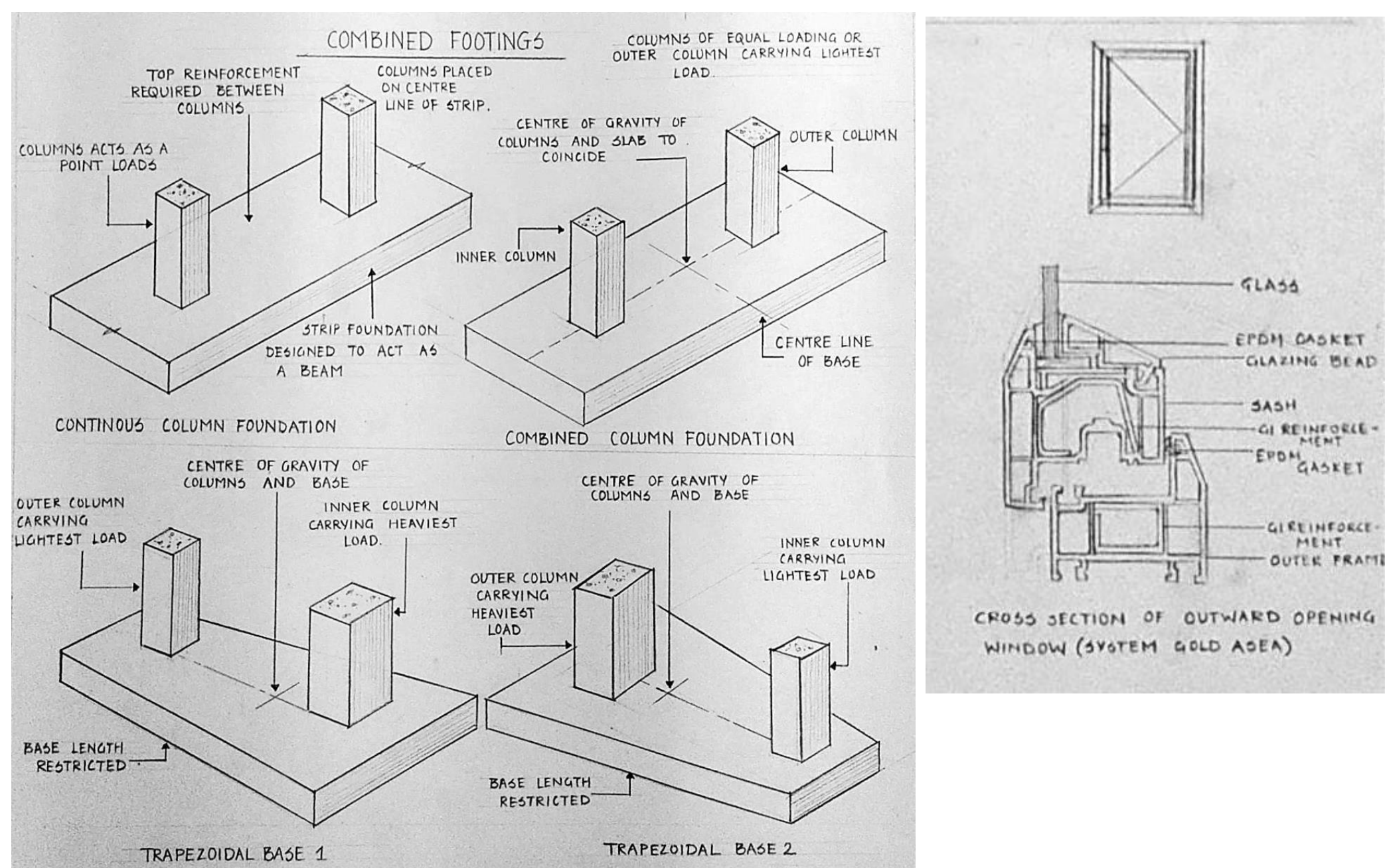
Student: Swarali Kurapatti

Faculty: Ar. Leena Jain, Ar. Ila Shende

Shallow footing – Various types and uses of each



UPVC and Aluminium window



Understanding C.G.

2nd Year B.Arch 2021-2022 BUILDING CONSTRUCTION AND MATERIALS III Shallow foundation and Non timber windows

Sinhgad College of Architecture, Pune

SECTION OF BEAM

SCHEDULE FOR RCC ELEMENT

ELEMENTS	APP	SIZES	REINFORCEMENT DETAILS	
			MAIN STEEL	SECONDARY STEEL
BEAM	B1	230x625	4#20	10# @ 250 c/c
	B2	230x400	8#16	8# @ 300 c/c
	B3	230x550	4#20	10# @ 275 c/c
	B4	230x450	3#12	8# @ 250 c/c
	B5	230x250	2#12	8# @ 275 c/c
	B6	230x300	3#16	8# @ 275 c/c
COLUMN	C1	230x600	4#20	10# @ 250 c/c
	C2	230x650	4#20	12# @ 250 c/c
	C3	230x625	8#16	10# @ 150 c/c
	C4	230x550	6#25	10# @ 275 c/c
	C5	230x450	6#20	10# @ 250 c/c
	C6	230x600	8#20	12# @ 150 c/c

SCHEDULE FOR OPENING

ELEMENT	APP	SIZES	TYPES OF FOOTING
FOOTING	F1	1.2M x 1.5M	150 STEPPED FOOTING
	F2	1.4M x 1.6M	150 STEPPED FOOTING
	F3	1.2M x 1.5M	COMBINED FOOTING
	F4	1.2M x 1.5M	150 STEPPED FOOTING

SCHEDULE FOR FOOTING

ELEMENT	APP	SIZES	TYPES OF FOOTING
FOOTING	F1	1.2M x 1.5M	150 STEPPED FOOTING
	F2	1.4M x 1.6M	150 STEPPED FOOTING
	F3	1.2M x 1.5M	COMBINED FOOTING
	F4	1.2M x 1.5M	150 STEPPED FOOTING

COVER BLOCKS

CEMENT BLOCK USED TO MAINTAIN GAP B/W SHUTTERING BOTTOM AND REINFORCEMENT BAR

STIRRUPS

IT IS REFER TO A CLOSED LOOP OF REINFORCEMENT BAR.

CHAIRS & SPACERS

STEEL CHAIRS IS USED TO MAINTAIN GAP FROM SHUTTERING TO THE SHUTTERING.
CEMENT BLOCK USED TO MAINTAIN GAP

FOUNDATION PLAN

FRAMING PLAN

KEY PLAN

ISOMETRIC SCALE-1:20

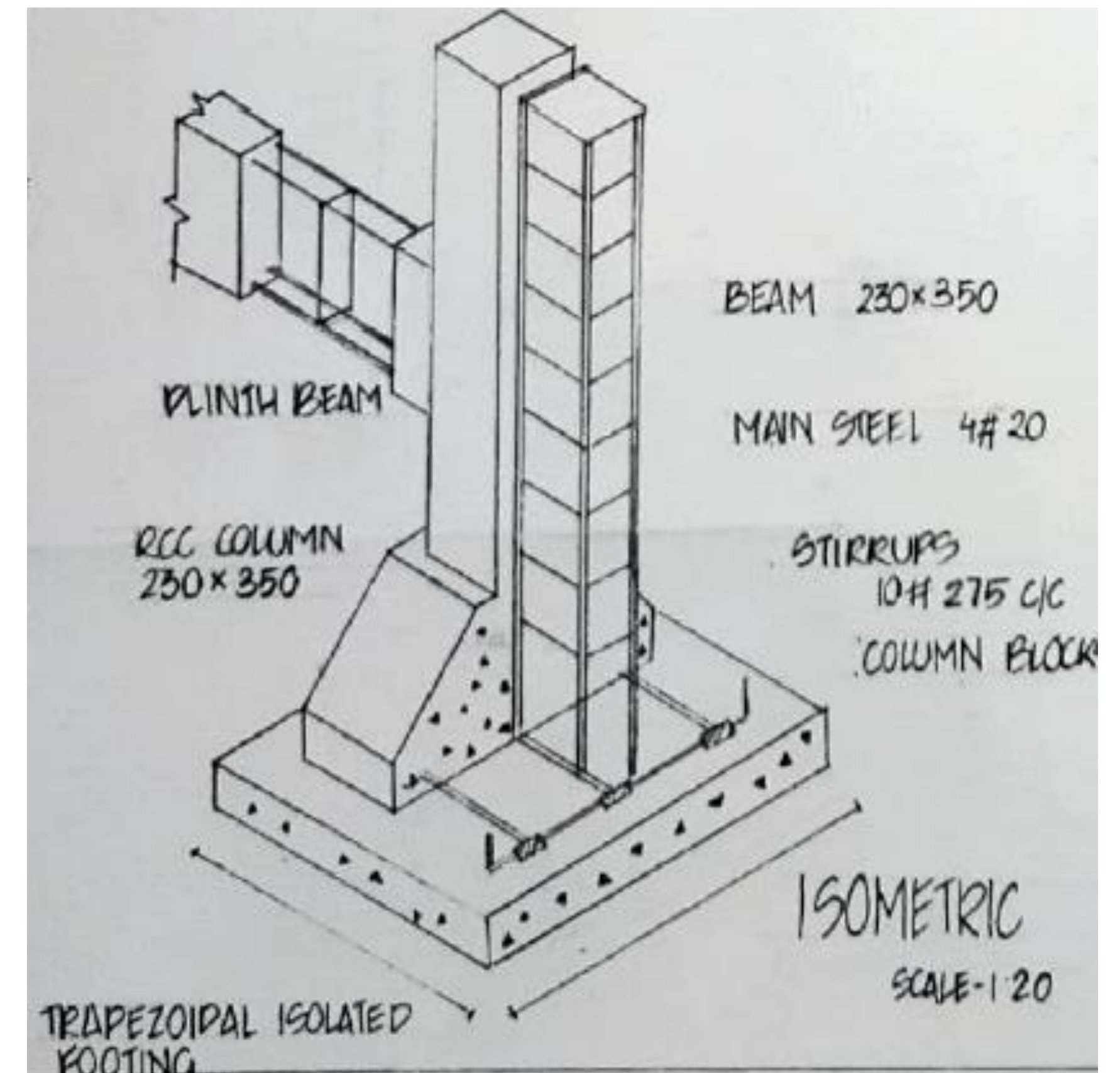
VERTICAL SECTION OF COLUMN

ISOMETRIC SCALE-1:20

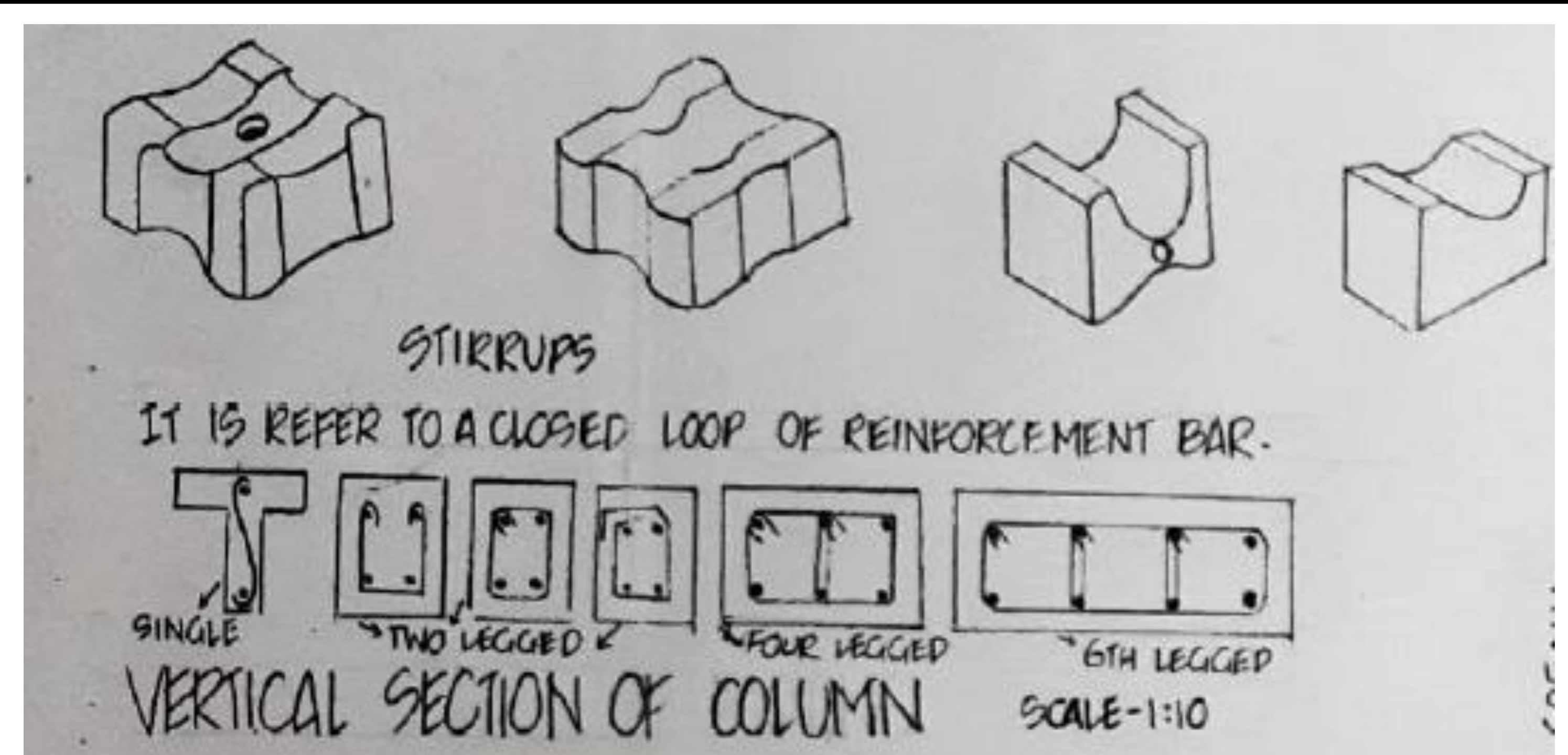
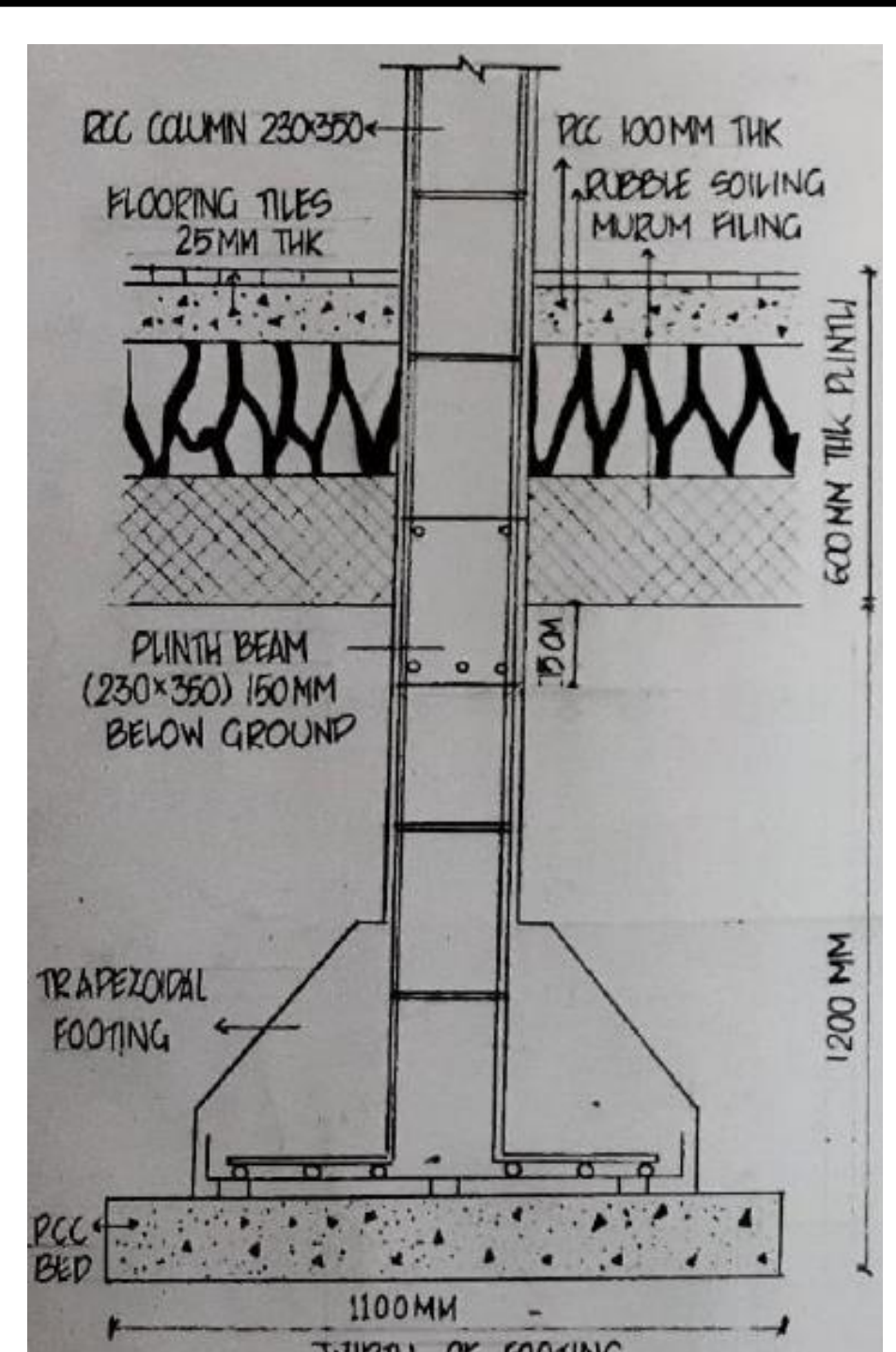
INTRODUCTION TO RCC (WORK UPTO PLINTH)

DATE	SIGN	SINHGAD COLLEGE OF ARCHITECTURE	STAMP
		MANVI MAYANK	
		SY BARCH ROLL-II DIV-C	
		BCM-III	

Reinforced Cement Concrete Construction upto plinth



Student : Manvi Mayank
Faculty : Ar.Ketaki Badge, Ar. Natasha Senpati, Ar. Vrushali Dhamane



2nd Year B.Arch 2021-2022 Building Construction and Materials III

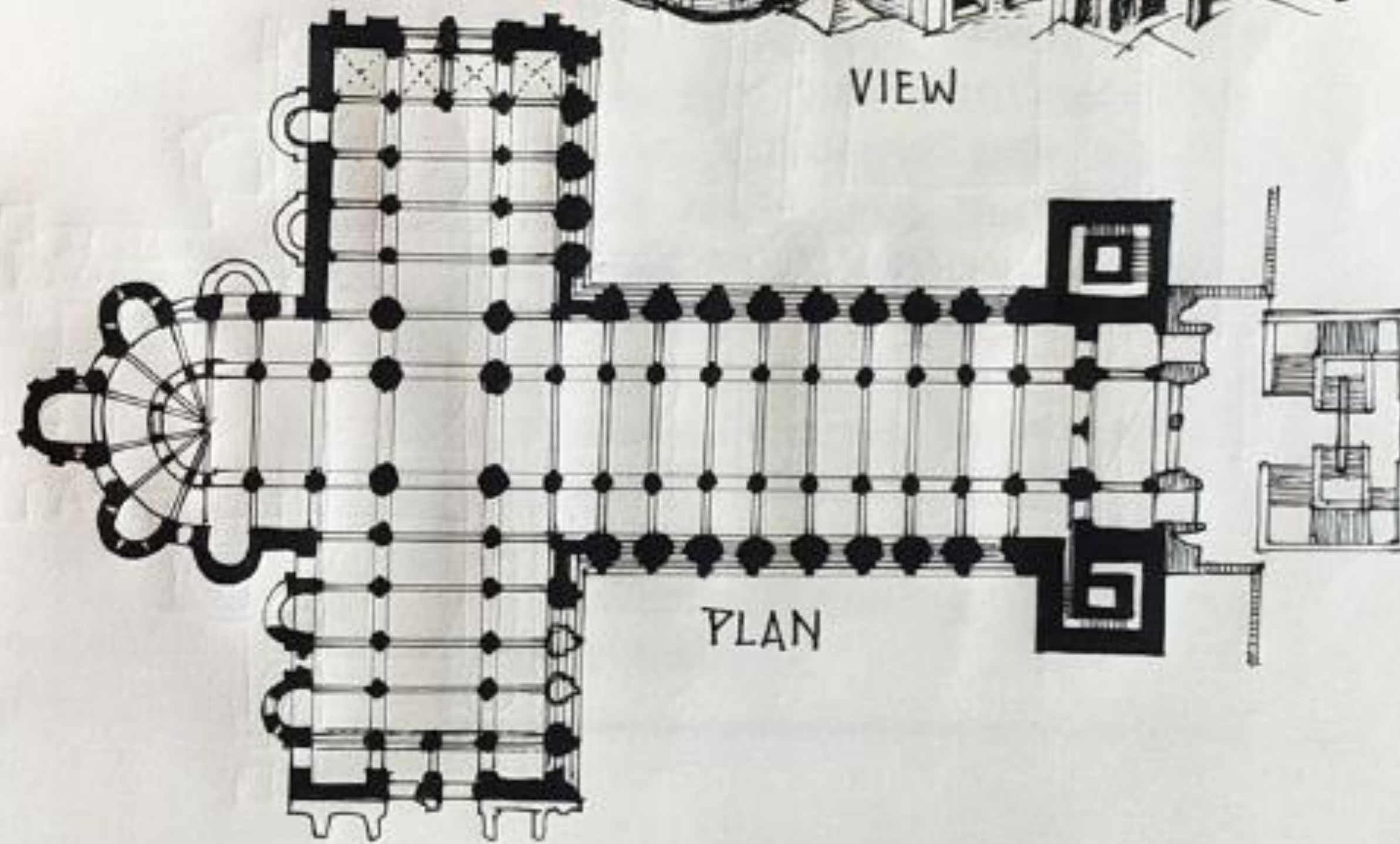
WORMS CATHEDRAL

CHARACTERISTICS :- • CHURCHES WERE PLANNED ON LARGE SCALE.

- THEY USED TO BE VERY HIGH.
- THEY HAD AN APSE OR SANCTUARY AT EACH END.
- NUMEROUS ROUND OR OCTAGONAL TOWERS THAT CONFERRED THEM A PICTURESQUE SILHOUTTE.



VIEW



PLAN



SECTION

NAME : SWARALI. B. KURAPATTI

Objectives of syllabus:

1. To understand the development of European architecture through the historical period till 17th century AD.
2. To understand the relationship of religion and society with architecture
3. To understand the drivers of change, revival, and evolution of architecture

Following courses to be covered:

1. Greek Architecture
2. Roman Architecture
3. Early Christian Architecture
4. Early Medieval and Romanesque
5. Gothic Architecture
6. Renaissance Architecture

Coursework:

Sketches of 25 representative buildings
minimum
Measured Drawing
Tutorial

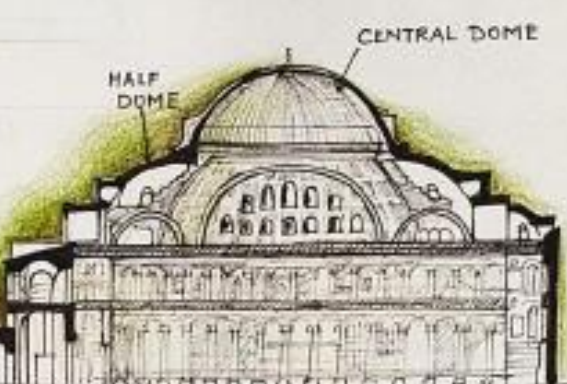
Student: Swarali Kurapatti

Faculty: Ar. Leena Jain

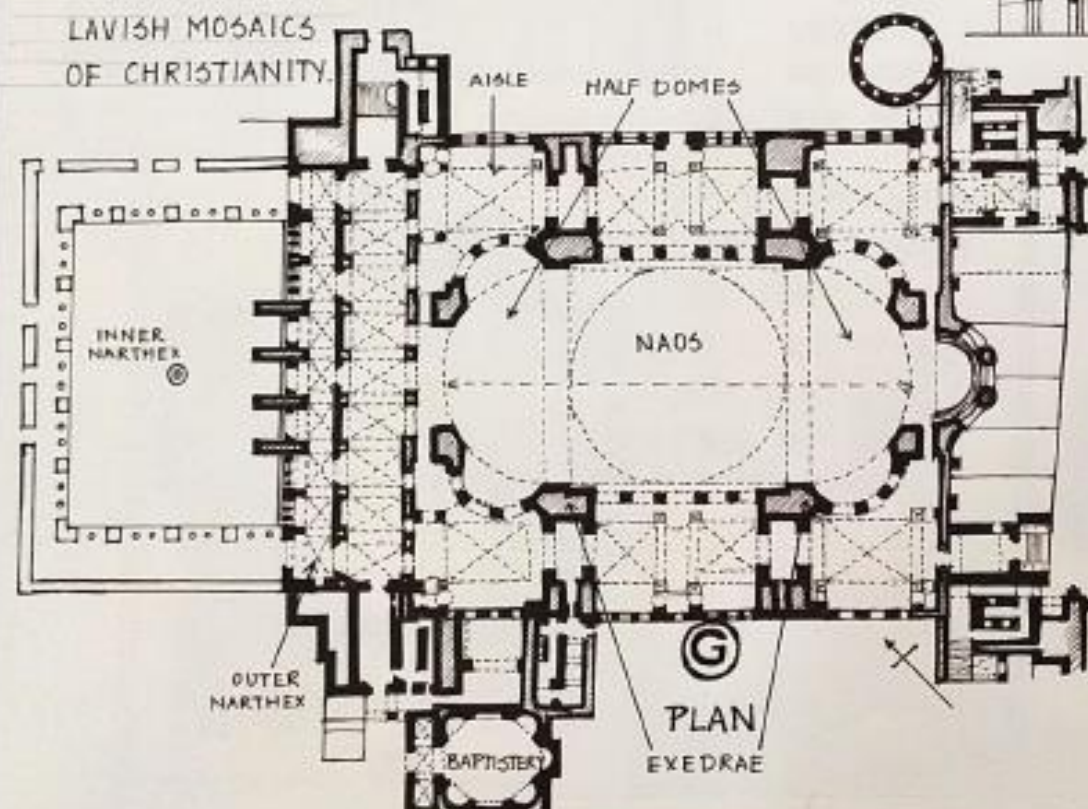
Romanesque Architecture

HAGIA SOPHIA

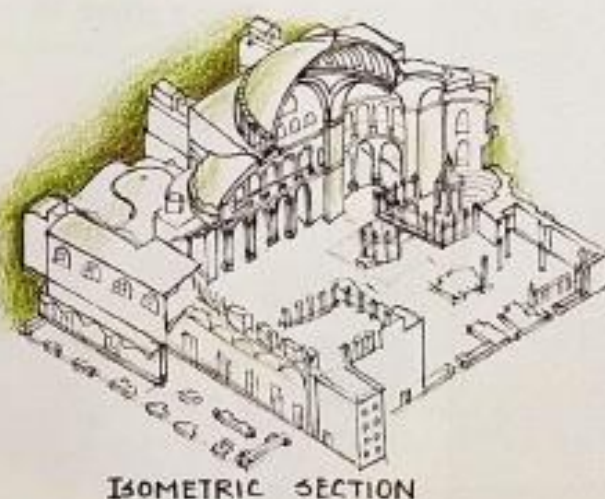
- IN SUBSEQUENT CENTURIES IT BECAME A MOSQUE, A MUSEUM AND A MOSQUE AGAIN.
- THE BUILDING REFLECTS THE RELIGIOUS CHANGES THAT HAVE PLAYED OUT IN THE REGION OVER THE CENTURIES, WITH THE MINARETS AND INSCRIPTIONS OF ISLAM AS WELL AS THE LAVISH MOSAICS OF CHRISTIANITY.



SECTION



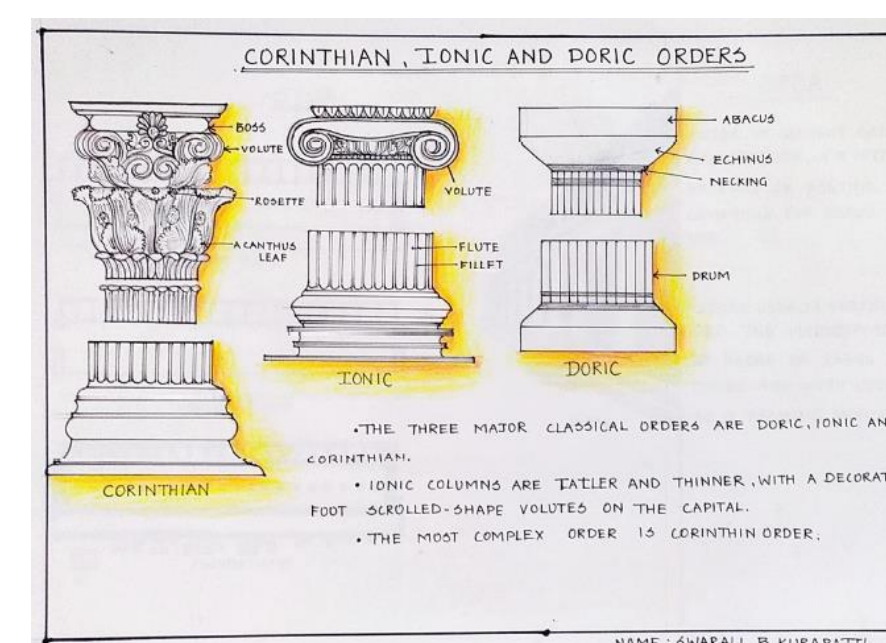
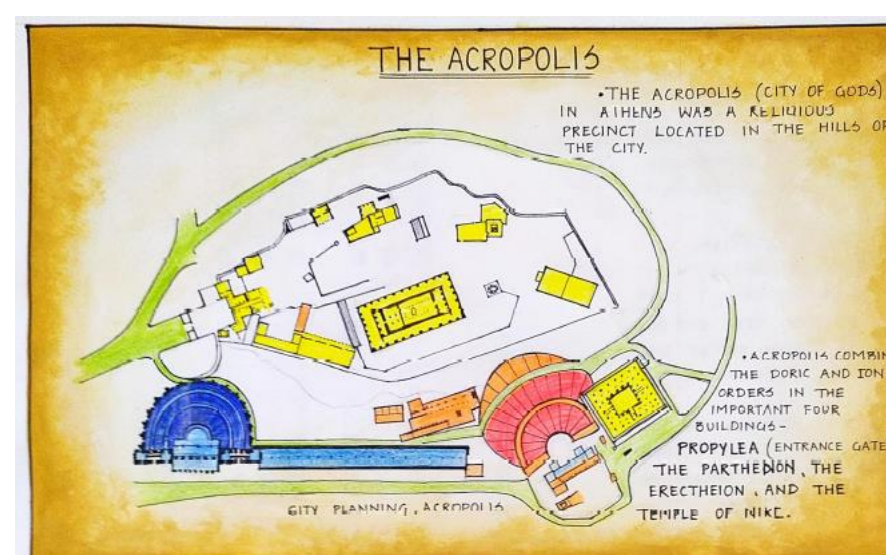
PLAN



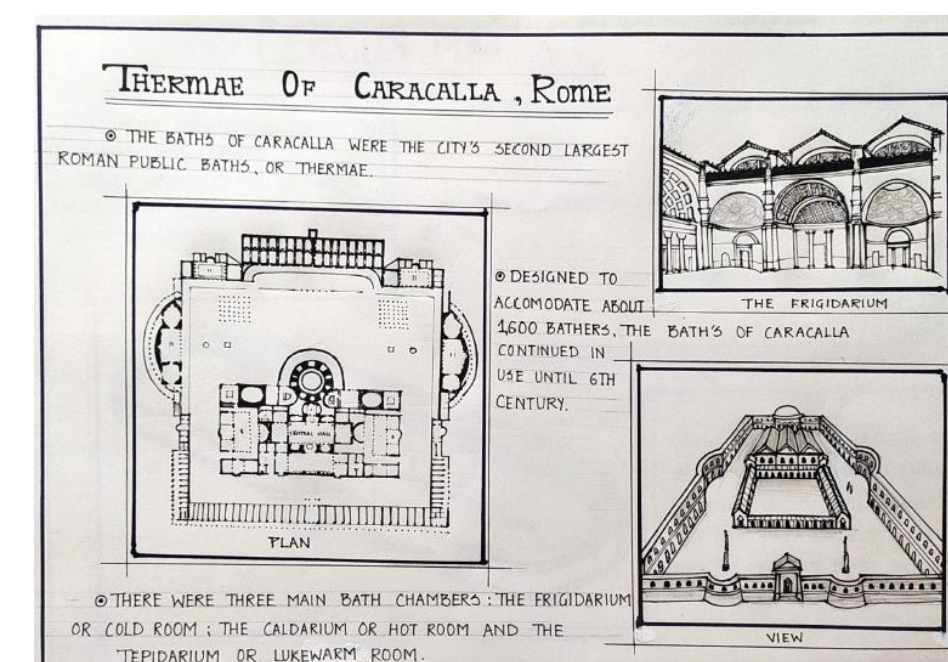
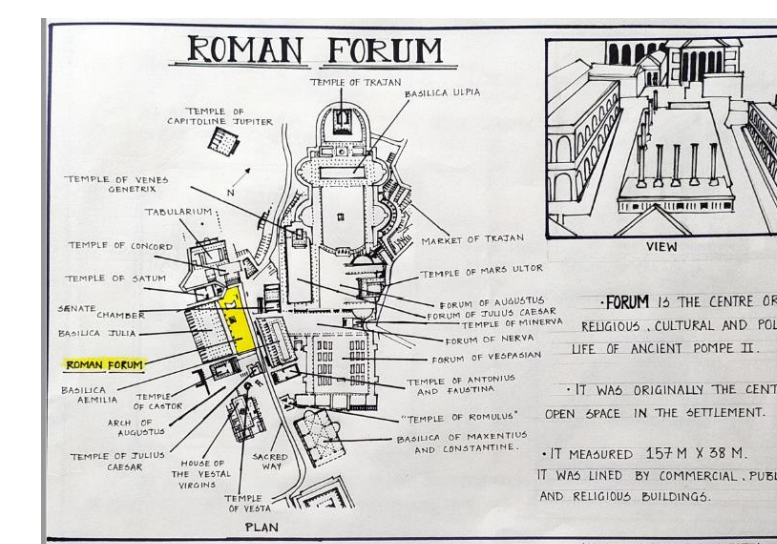
ISOMETRIC SECTION

NAME : SWARALI. B. KURAPATTI

Byzantine Architecture



Greek Architecture



Roman Architecture

2nd Year B.Arch 2021-2022 History of Architecture and Culture III

Sketches of Architecturally important structures

Sinhgad College of Architecture, Pune

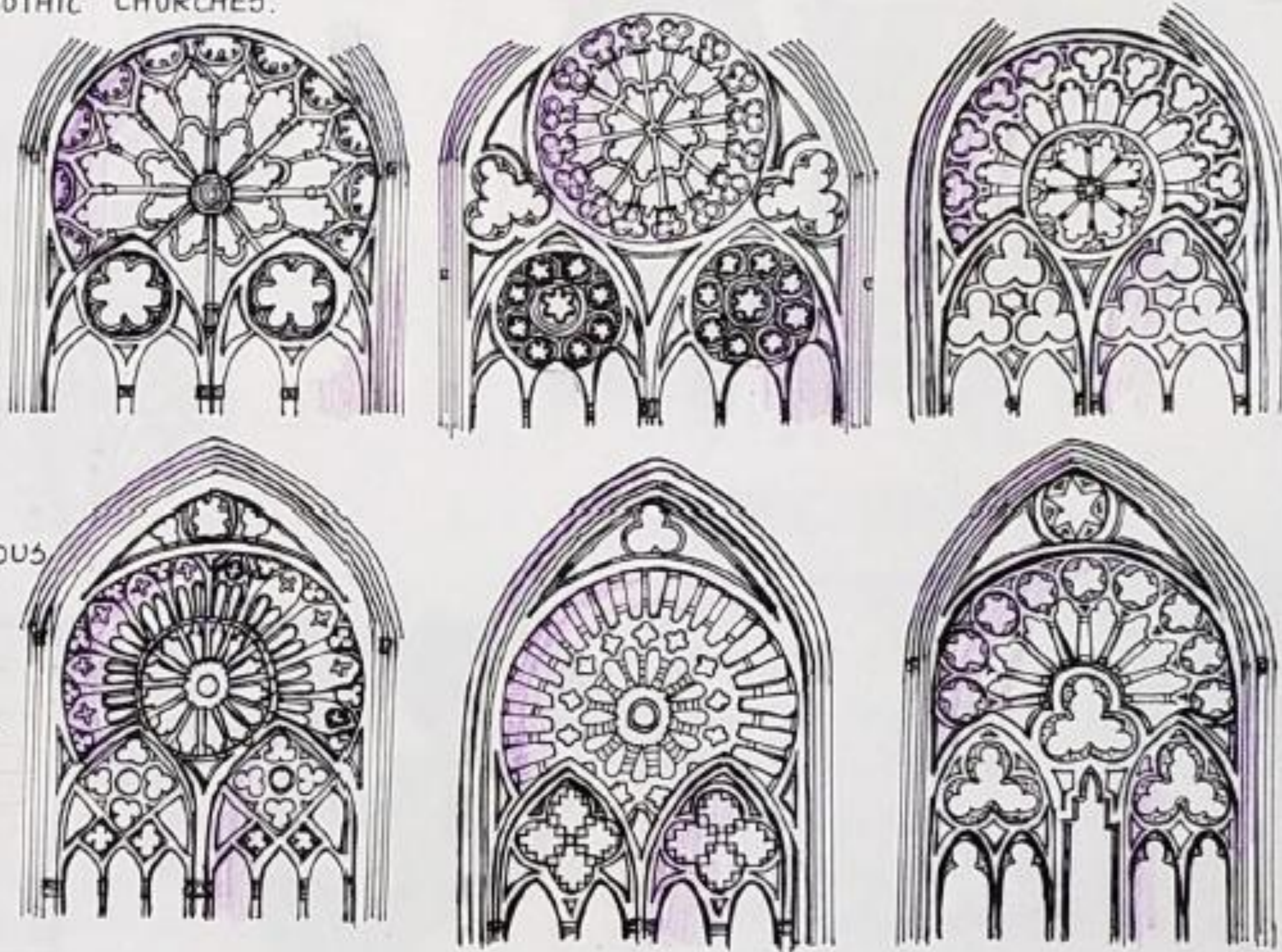
GOTHIC FEATURES



GARGOYLES

- GARGOYLES WERE DECORATIVE MONSTROUS LITTLE CREATURES THAT SAT ALONG THE ROOF AND BATTLEMENTS OF GOTHIC CASTLES AND BUILDINGS.
- GARGOYLES HAVE TWO PURPOSES, AND ONE WAS TO DRAIN OFF RAINWATER OFF THE ROOF, GUSHING THROUGH THEIR MOUTH THEN PLUMMETING TO THE GROUND.
- ANOTHER PURPOSE WAS TO STRIKE FEAR IN THE ILL-EDUCATED PEASANTS AND SCARE THEM INTO THE GOTHIC CATHEDRAL OR CHURCH.

• ROSE WINDOWS ARE THE LARGE CIRCULAR STAINED GLASS WINDOWS FOUND IN GOTHIC CHURCHES.



ROSE WINDOWS

GOTHIC ARCHITECTURE

CHECK1	CHECK2	SIGN	NAME: SWARALI. B. KURAPATTI	STAMP
			ROLL NO: 37 YEAR: 3.Y DIV: B	
			SUB: H. III DATE:	

Objectives of syllabus:

1. To understand the development of European architecture through the historical period till 17th century AD.
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5. Gothic Architecture
6. Renaissance Architecture

Student: Swarali Kurapatti

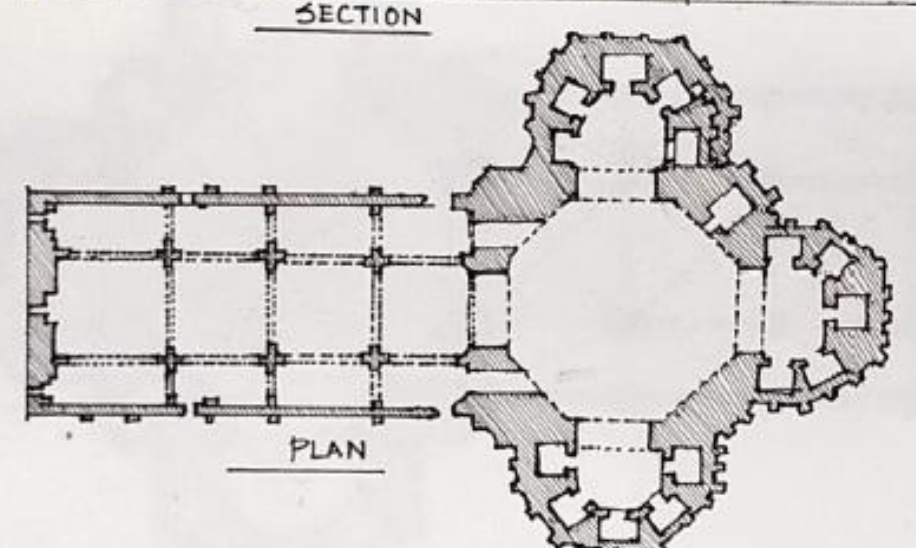
Faculty: Ar. Leena Jain

Gothic Architecture

FLORENCE CATHEDRAL



SECTION



PLAN

- THE BASILICA IS ONE OF ITALY'S LARGEST CHURCHES.
- THE WHOLE PLAN FORMS A LATIN CROSS.
- THE NAVE AND AISLES ARE SEPARATED BY WIDE POINTED GOTHIC ARCHES RESTING ON COMPOSITE PIERS.
- THE GOTHIC INTERIOR IS VAST AND GIVES AN EMPTY IMPRESSION.
- AS THIS CATHEDRAL WAS BUILT WITH FUNDS FROM THE PUBLIC, SOME IMPORTANT WORKS OF ART IN THE CHURCH, HONOUR ILLUSTRIOUS MEN AND MILITARY LEADERS OF FLORENCE.

• ARCHITECT: ARNOLFO DI CAMBIO
• LOCATION: FLORENCE, ITALY
• DATE: 1296 TO 1462

NAME: SWARALI. B. KURAPATTI

Gothic Architecture



EXTERIOR VIEW

ST. PAUL'S CATHEDRAL

- THE MOST NOTABLE EXTERIOR FEATURE IS THE DOME.
- THE MOST UNUSUAL CHARACTERISTIC OF THIS STRUCTURE IS THAT IT IS OF SQUARE PLAN RATHER THAN CIRCULAR OR OCTAGONAL.
- THE BUILDING IS OF TWO STOREYS OF ASHLAR MASONRY ABOVE BASEMENT AND SURROUNDED BY A BALUSTRADE ABOVE THE UPPER CORNICE.



INTERIOR VIEW

Baroque Architecture

2nd Year B.Arch 2021-2022
History of Architecture and Culture III

Sketches of Architecturally important structures

Sinhgad College of Architecture, Pune

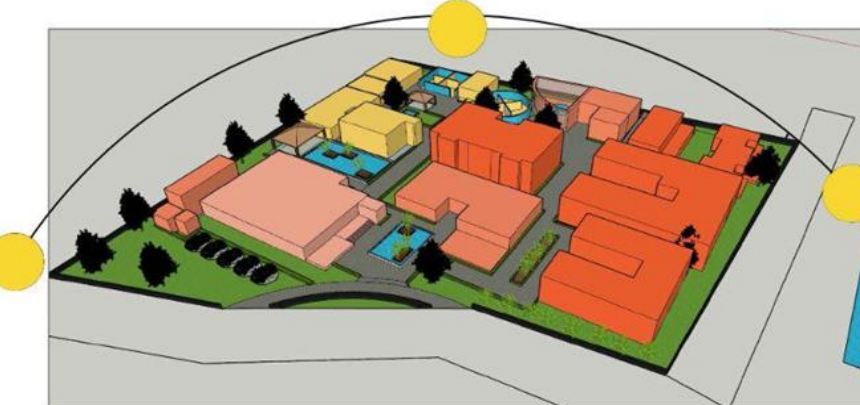


Site Plan



Green Architecture

- All the blocks constructed with Green Architecture.
- As the project is Naturopathy Centre, there is greenery all over site.
- It maintains the temperature around all seasons.



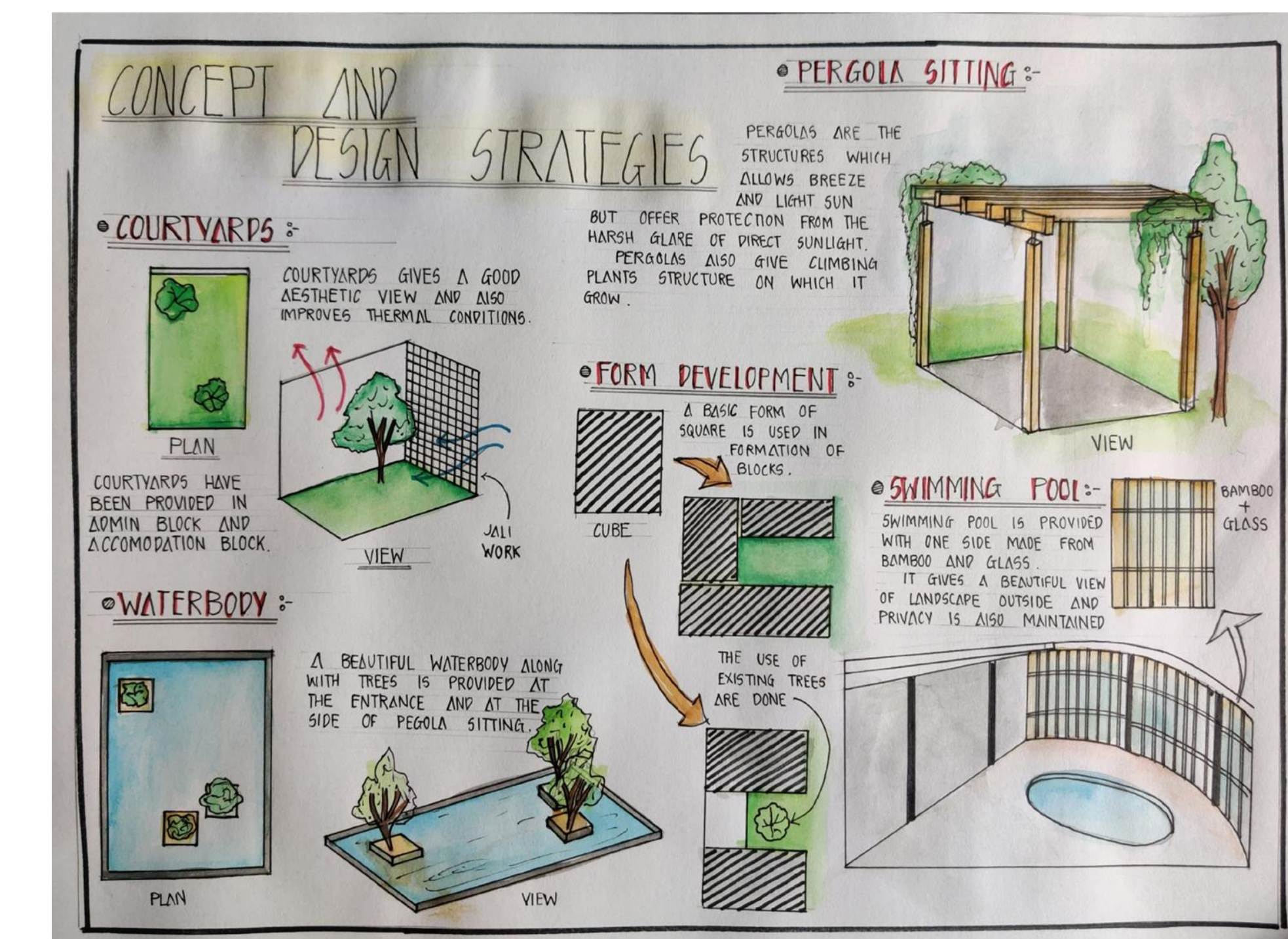
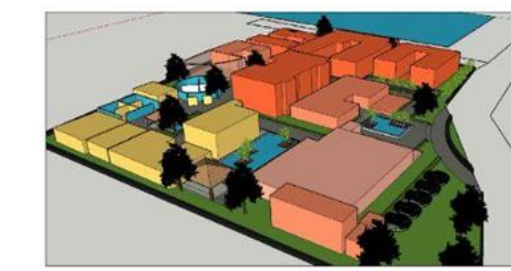
Buildings Placement

- All the blocks are placed by keeping mind Air circulation.
- All the Accommodation Blocks are placed to the west side of site getting a beautiful view of Existing Lakes.



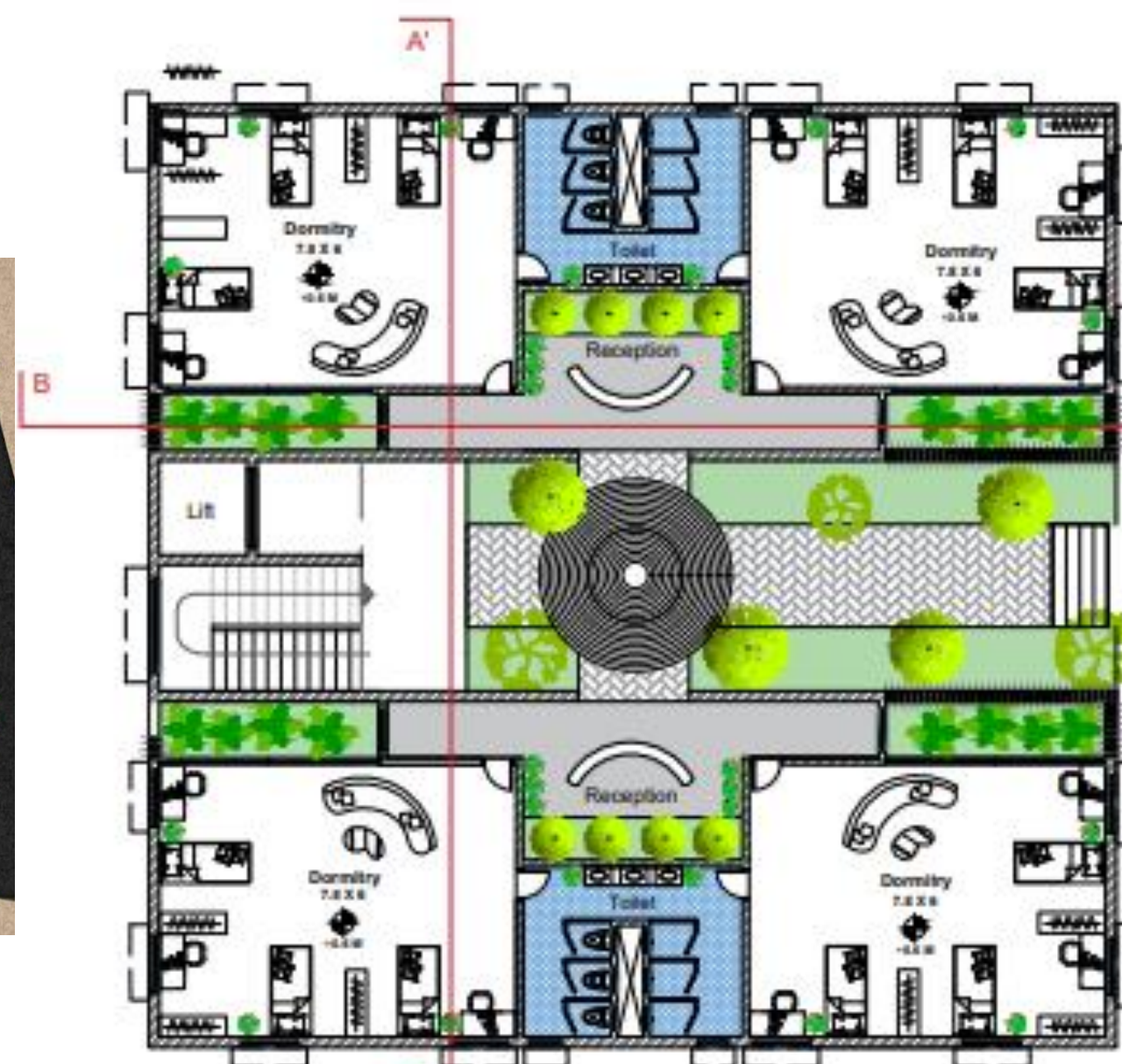
Lime Stone

Massing

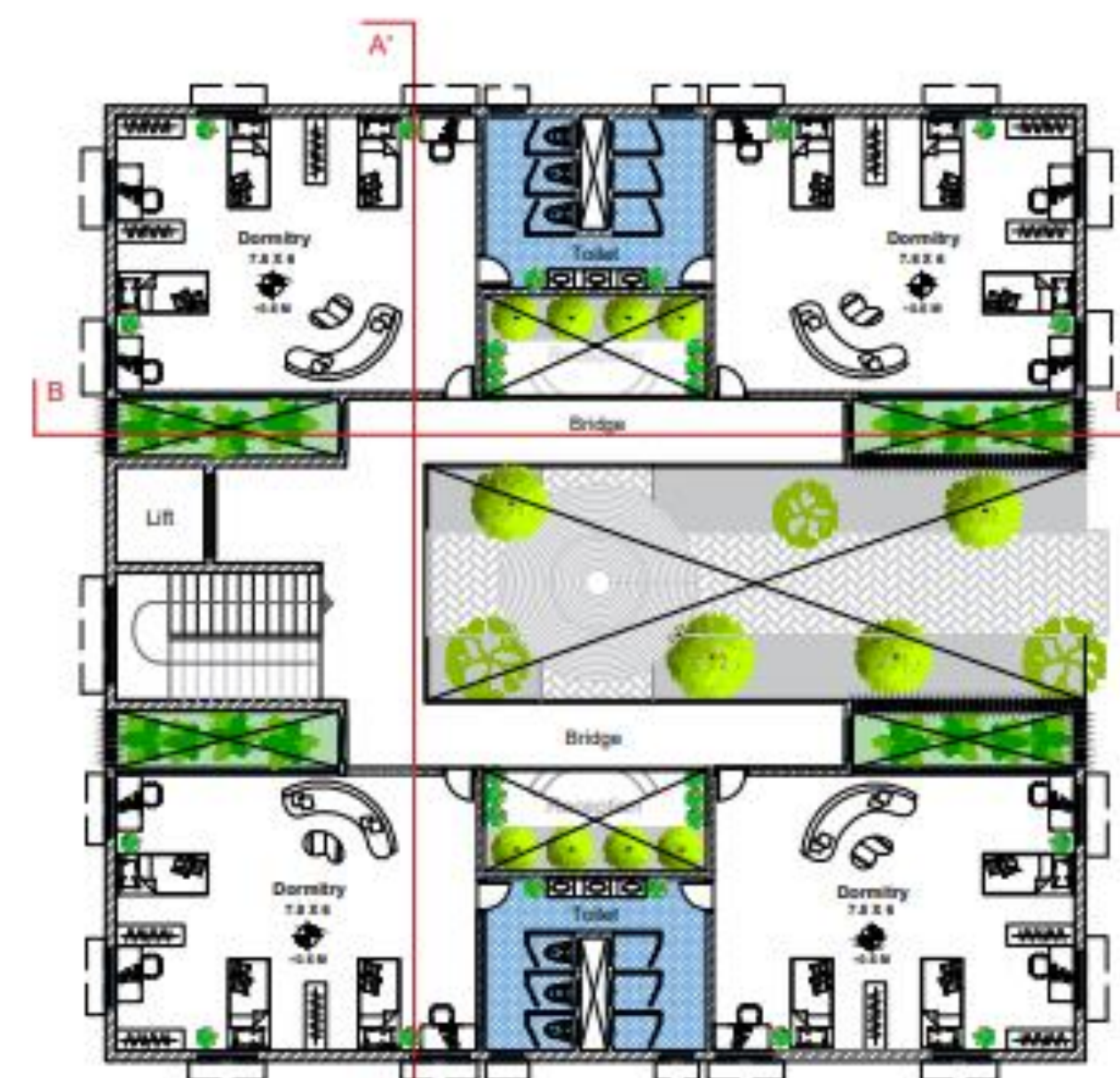


3rd Year B.Arch 2021-2022 Architectural Design IV

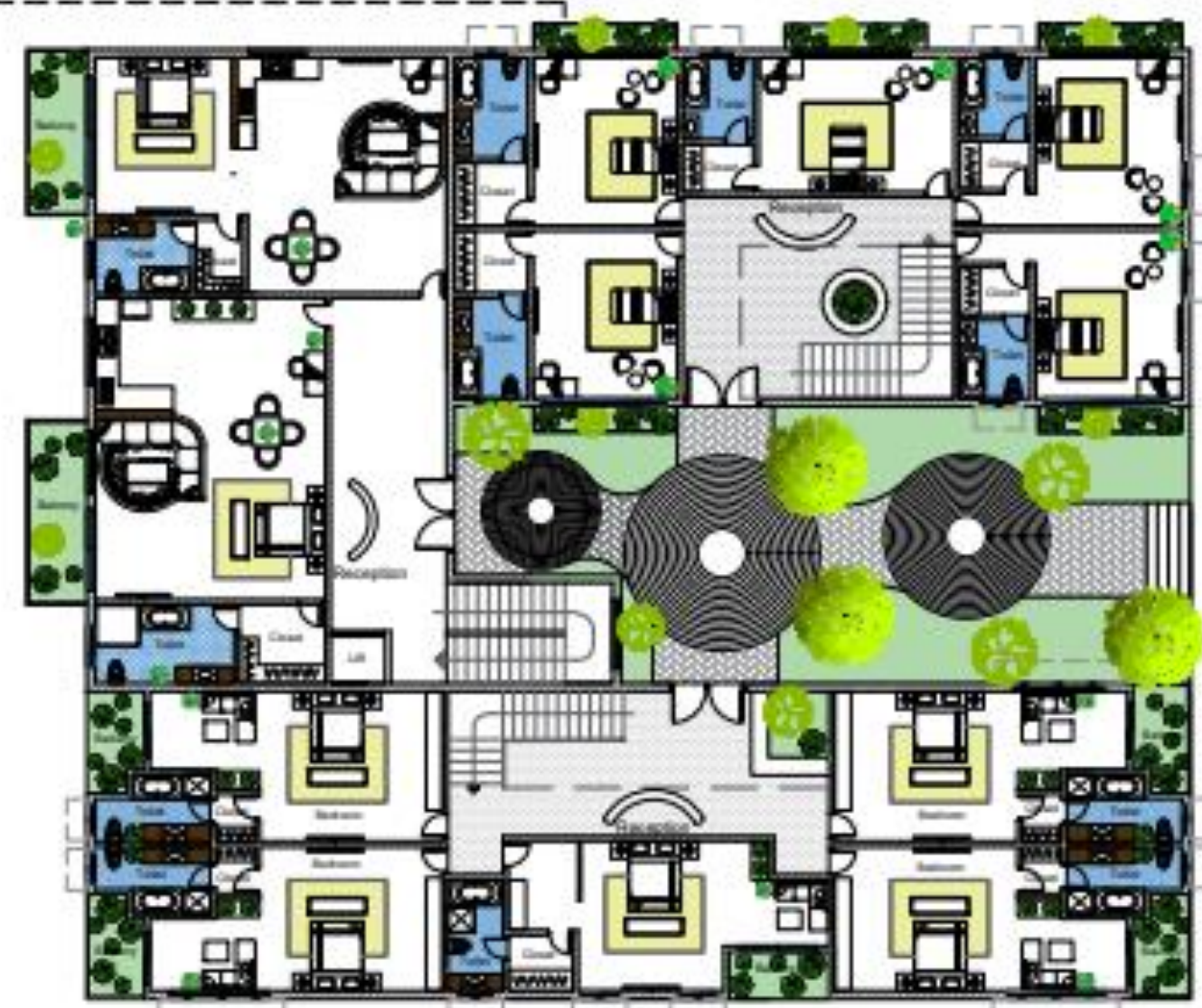
Naturopathy Centre, Near Hinjewadi Pune



Ground Floor Plan



First Floor Plan



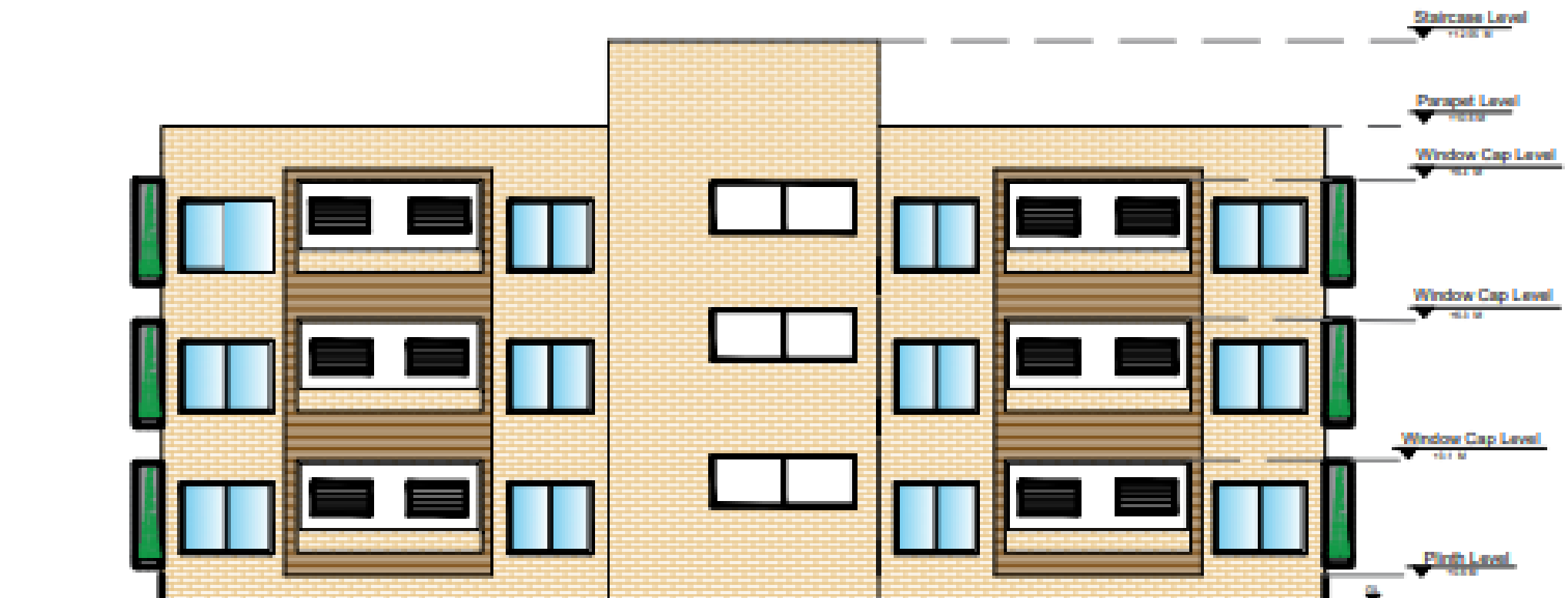
Ground Floor Plan



First Floor Plan



North Side Elevation



South Side Elevation

Student- Kshitija Mahale
Faculty: Ar. Niketa Patil, Ar. Bijal Vakhariya

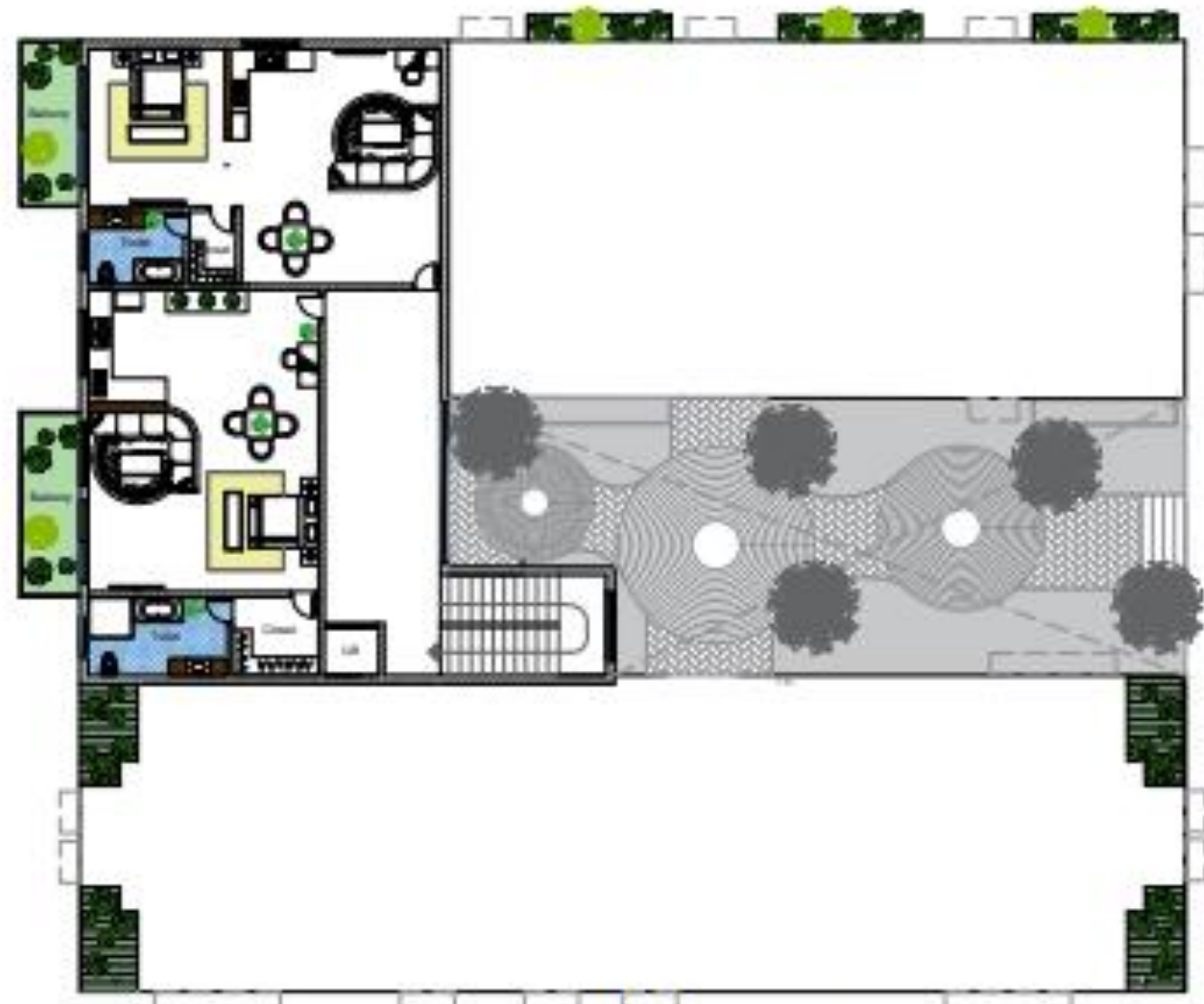
3rd Year B.Arch 2021-2022 Architectural Design IV

Naturopathy Centre, Near Hinjewadi Pune

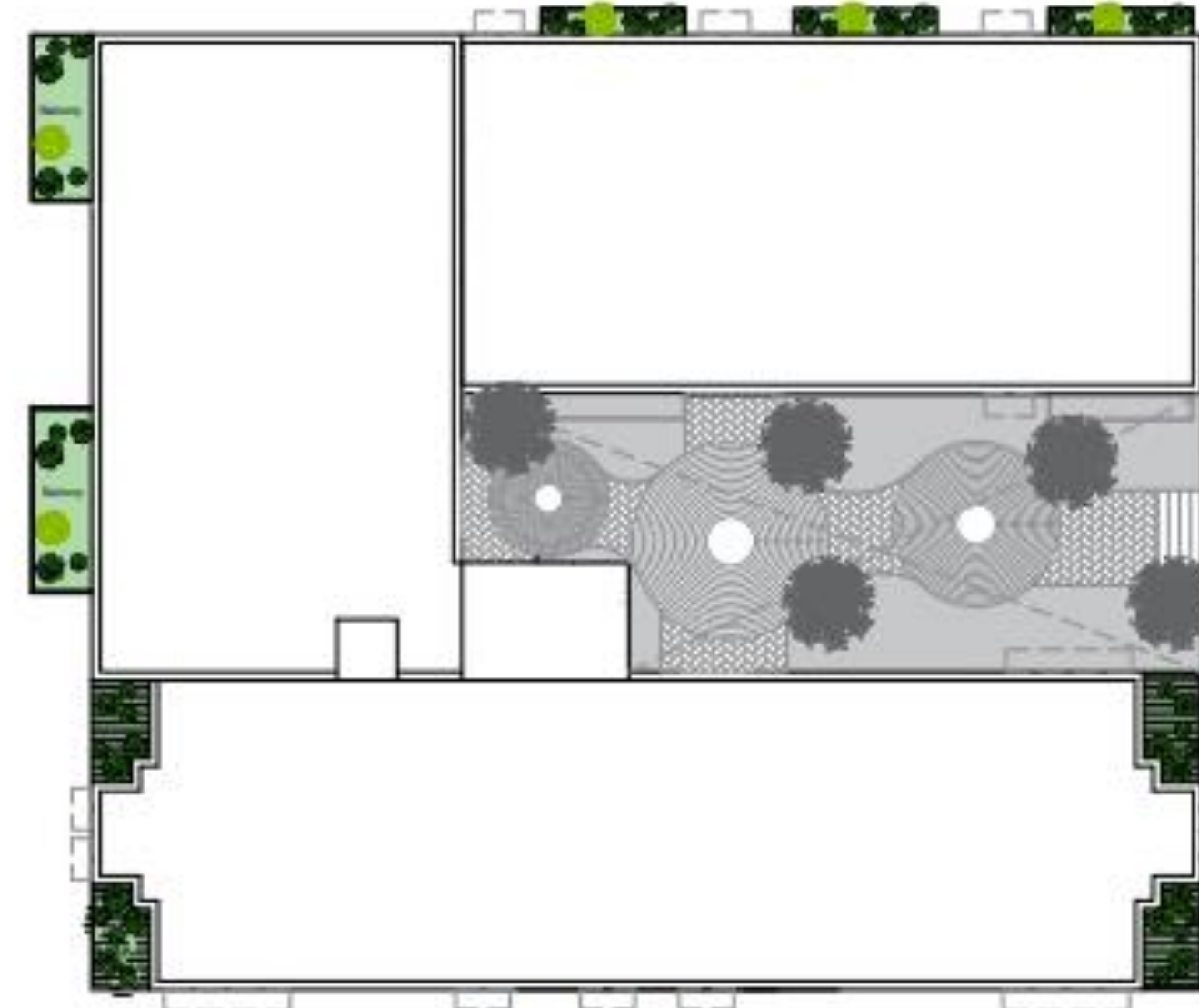
Sinhgad College of Architecture, Pune



Key Plan



Second Floor Plan



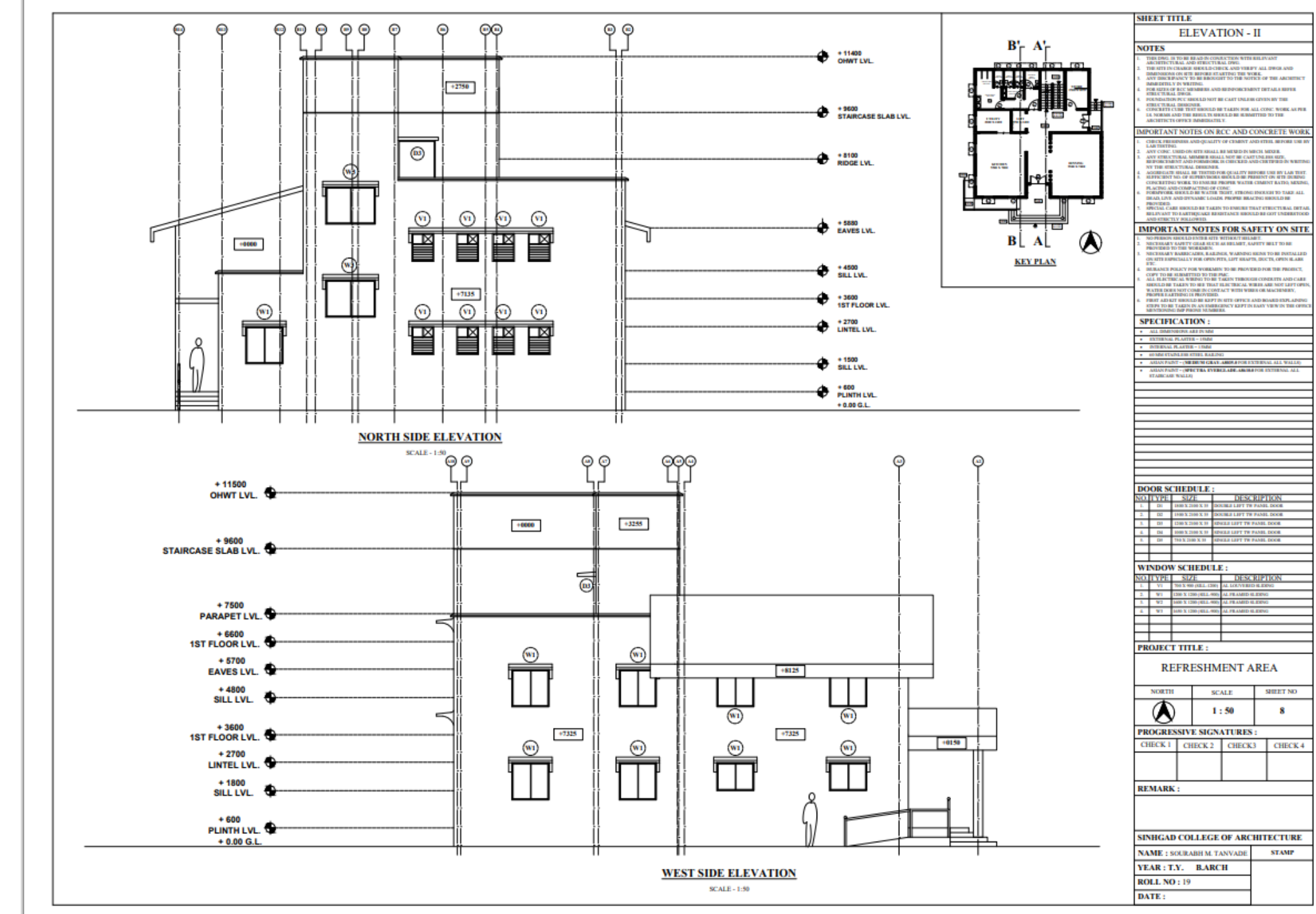
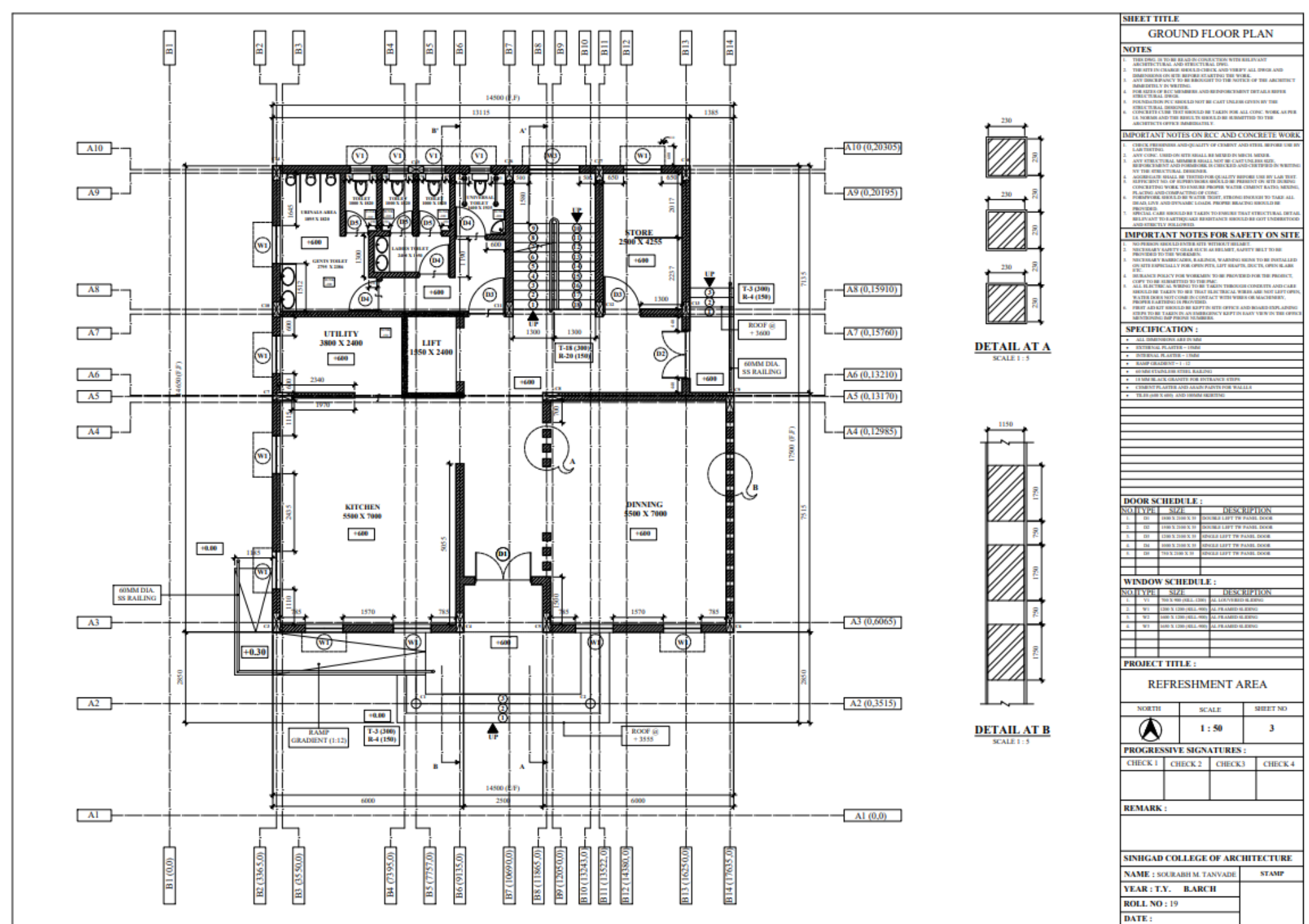
Roof Floor Plan



North Side Elevation



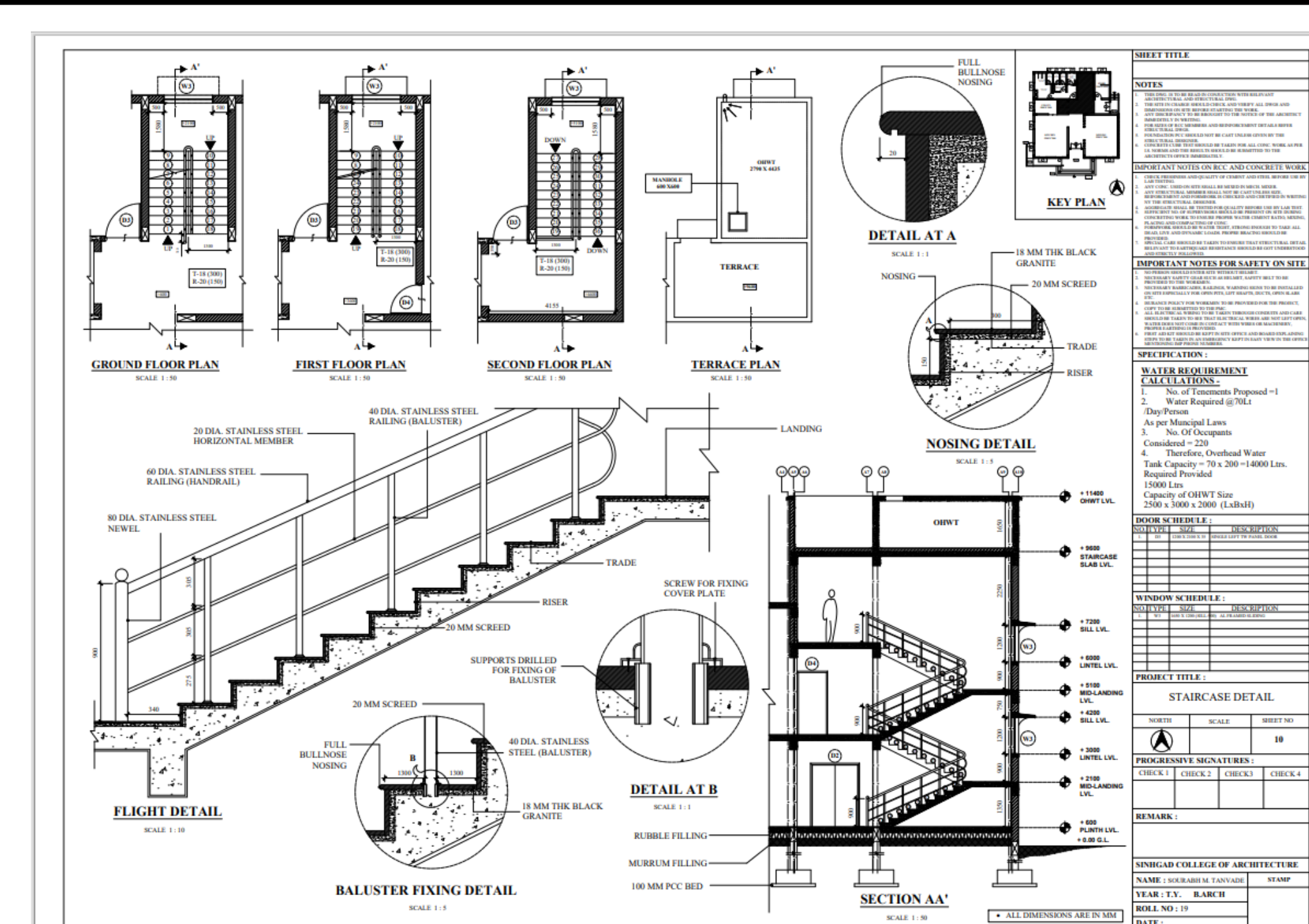
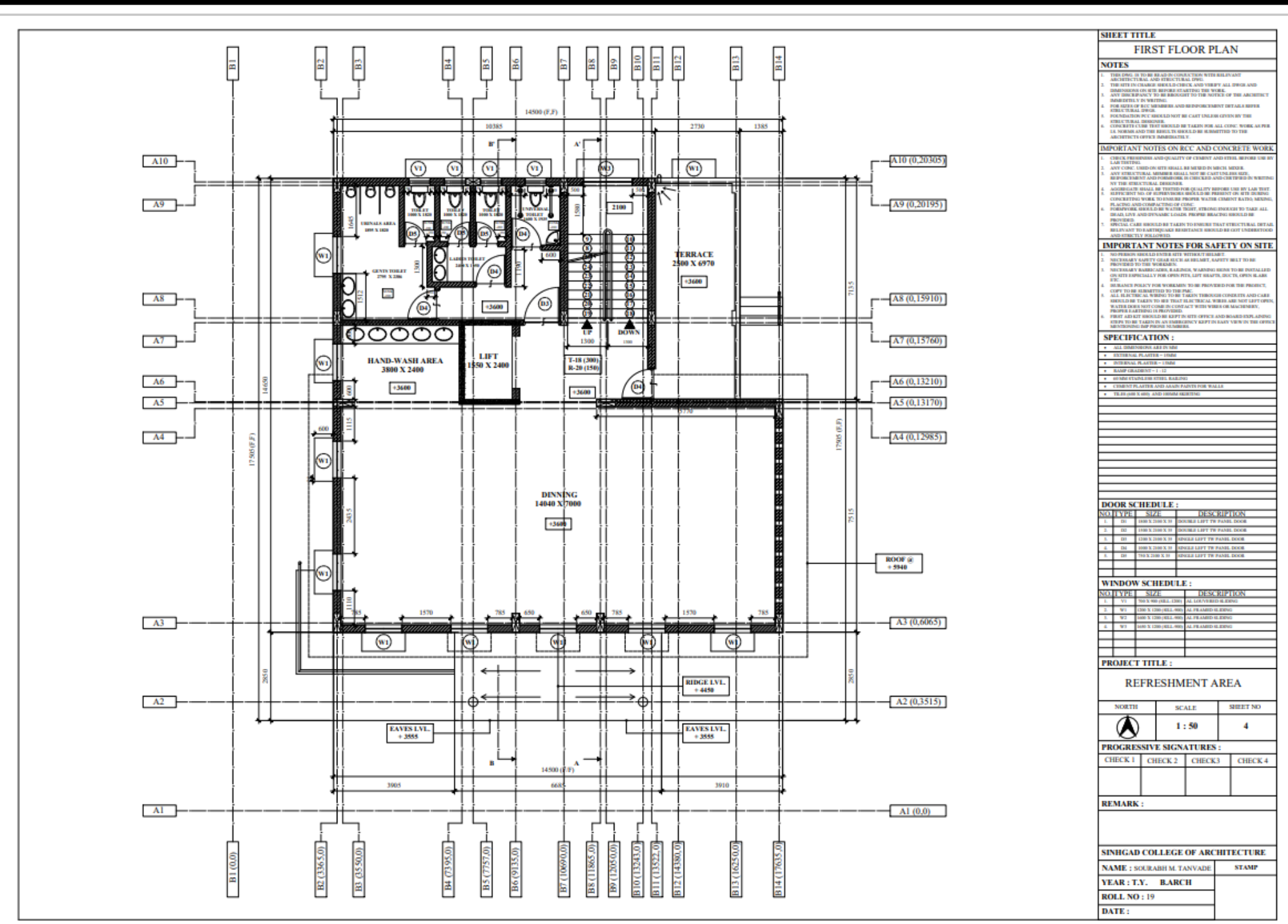
East Side Elevation



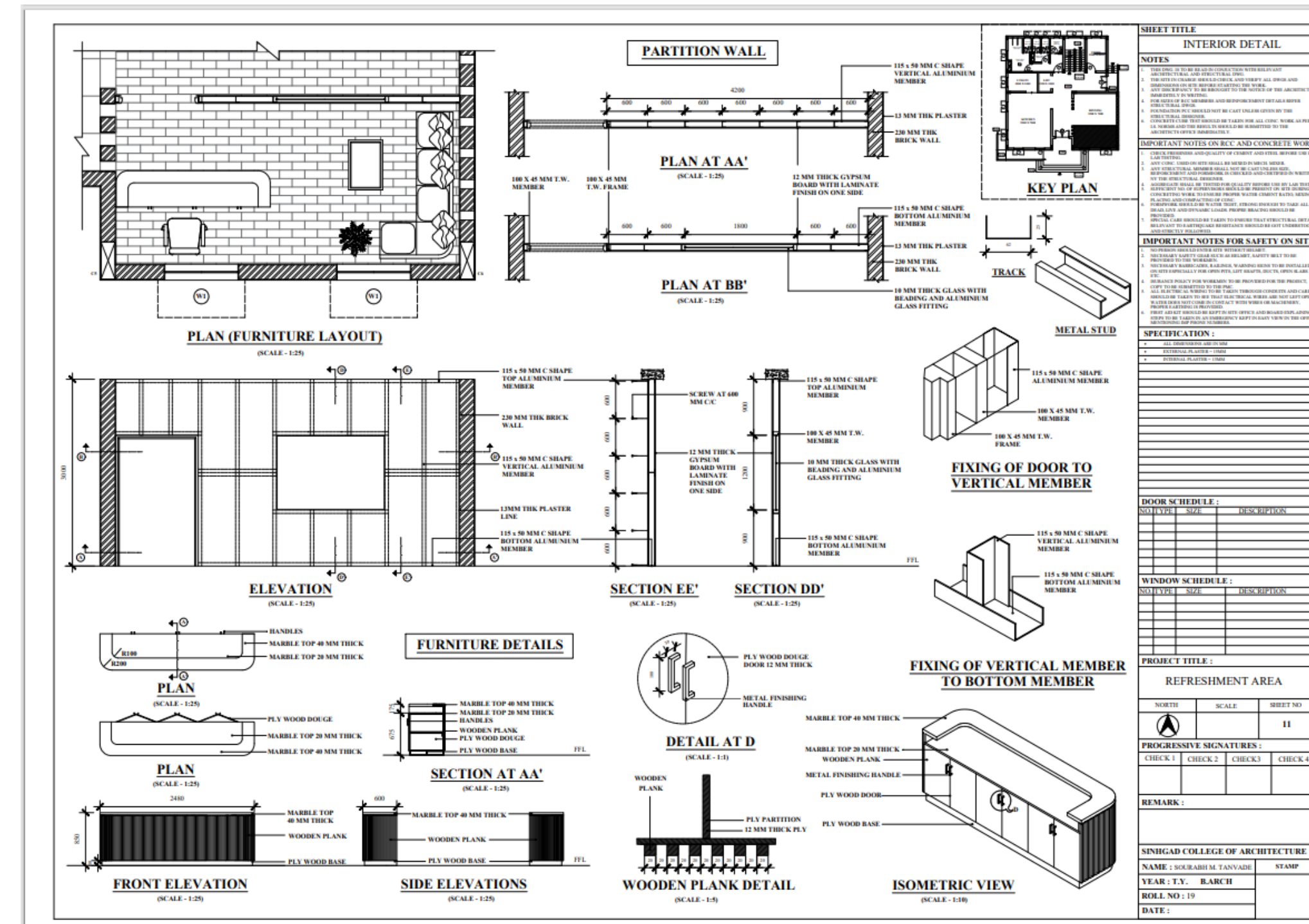
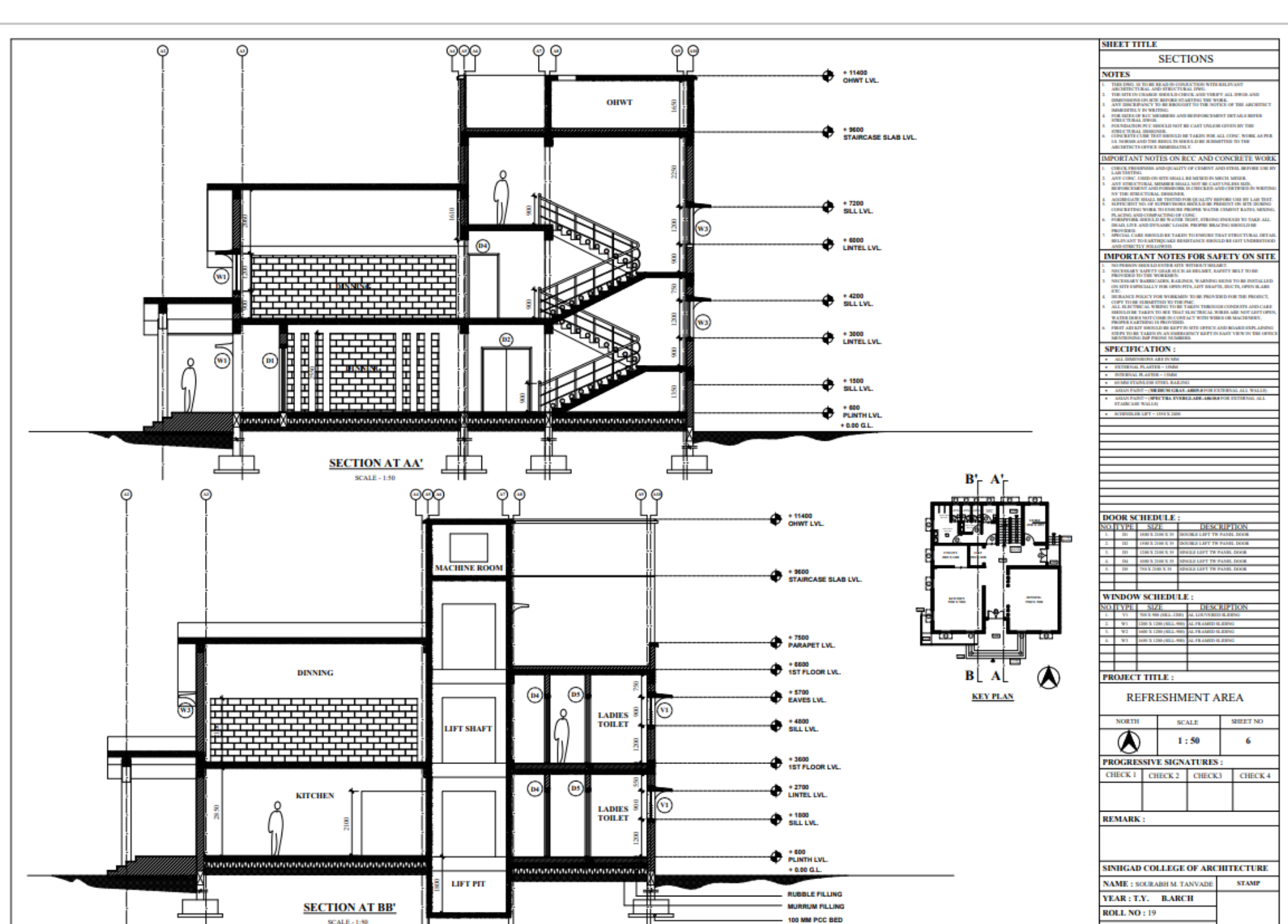
Objective:

- To Introduce idea of Design Development and detailing and its relevance in converting ‘concept design’ to working drawing and hence the realization of design on site.
- To imbibe further the importance of working drawings as an essential tool for effective site execution and execution of a building contract.
- To expose to the standard methods, conventions, drawing annotations including International standards, IS codes, its application in working drawing set with material and component and schedules.

Student: Saurabh Tanvade
Faculty: Ar. Anita Kavathekar, Ar. Mukta Pandit, Ar. Harshada Akolkar



3rd Year B.Arch 2021-2022 Working Drawing II



Objective:

-To Introduce idea of Design Development and detailing and its relevance in converting 'concept design' to working drawing and hence the realization of design on site.

- To imbibe further the importance of working drawings as an essential tool for effective site execution and execution of a building contract.

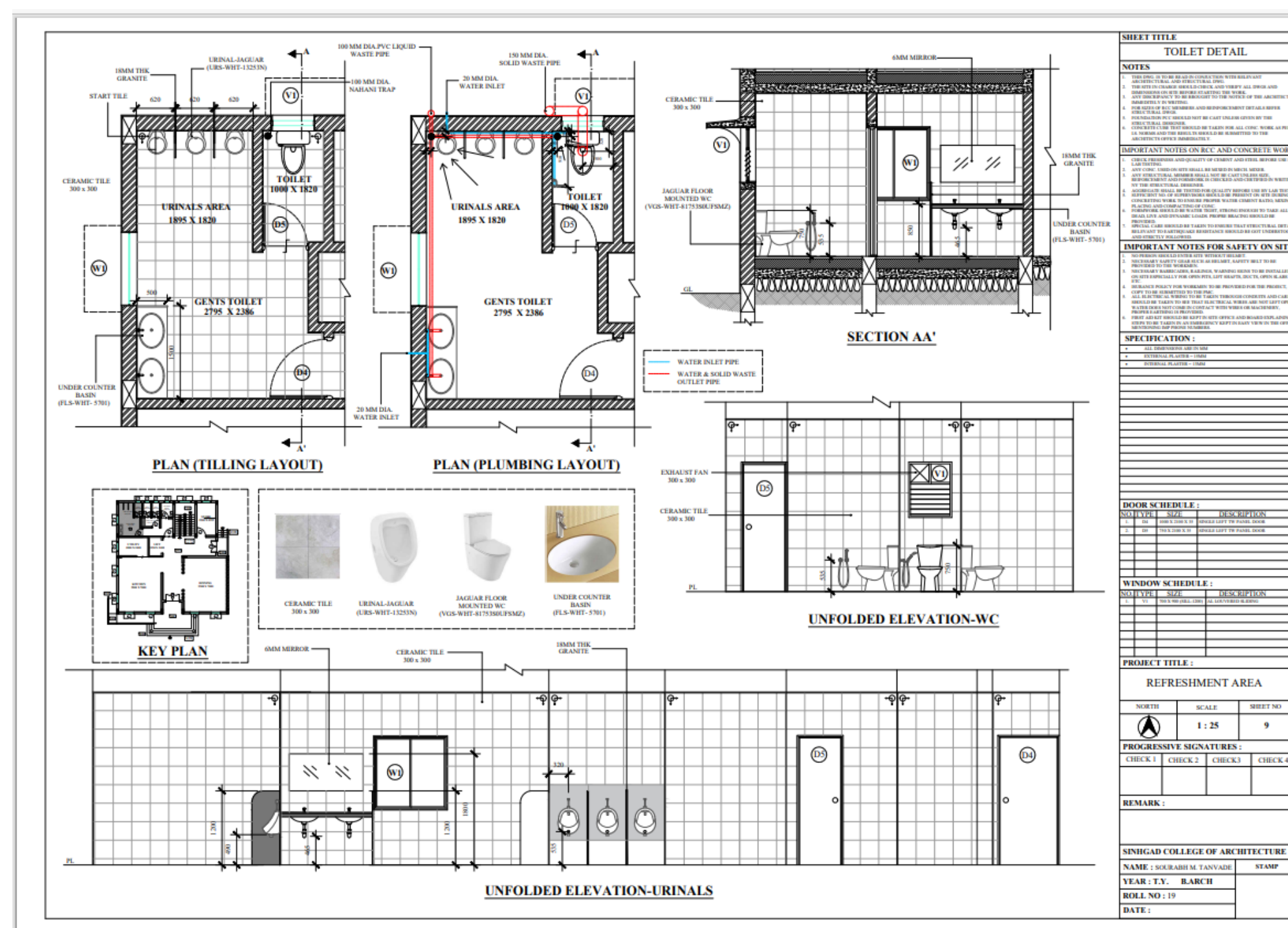
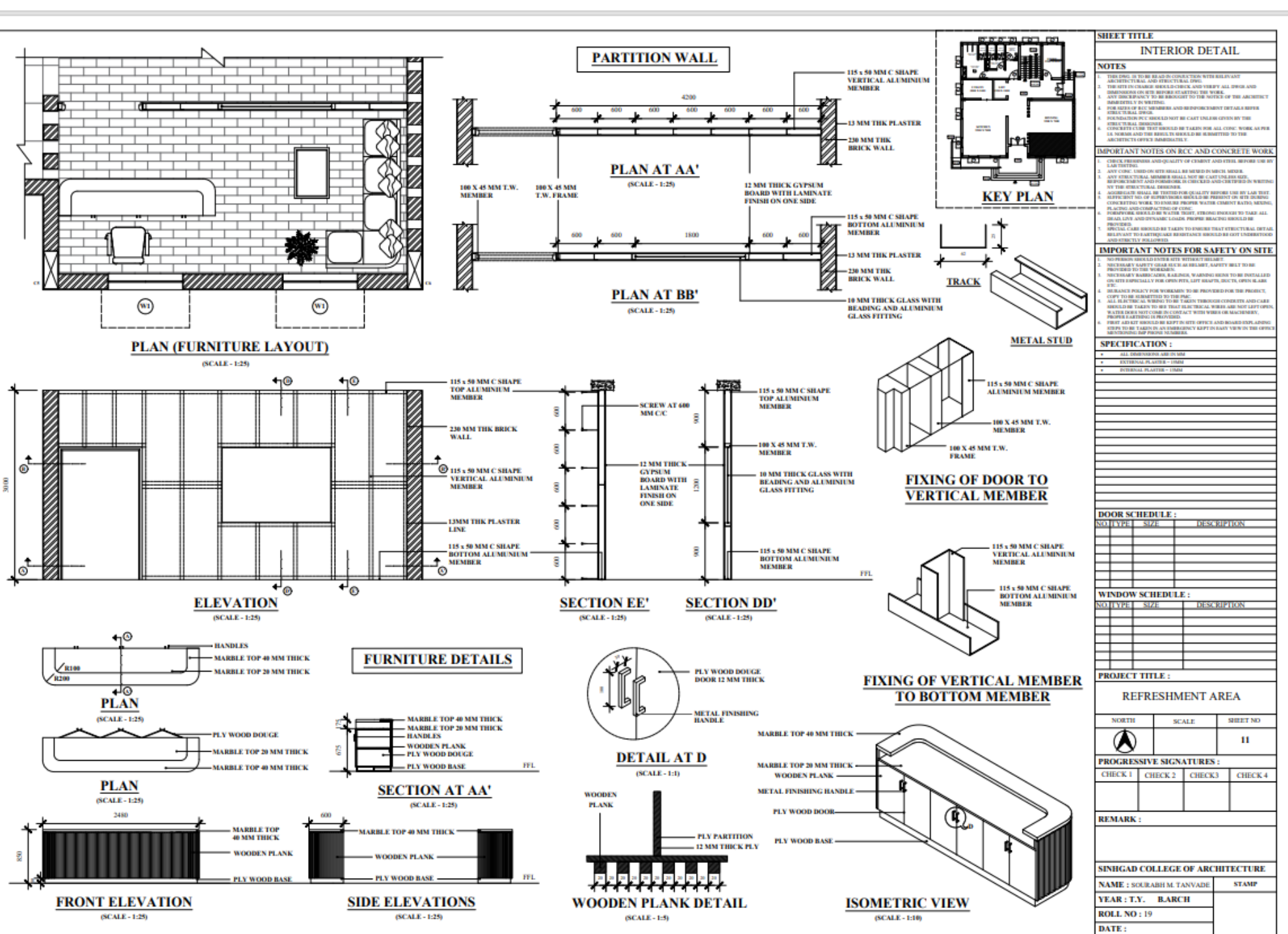
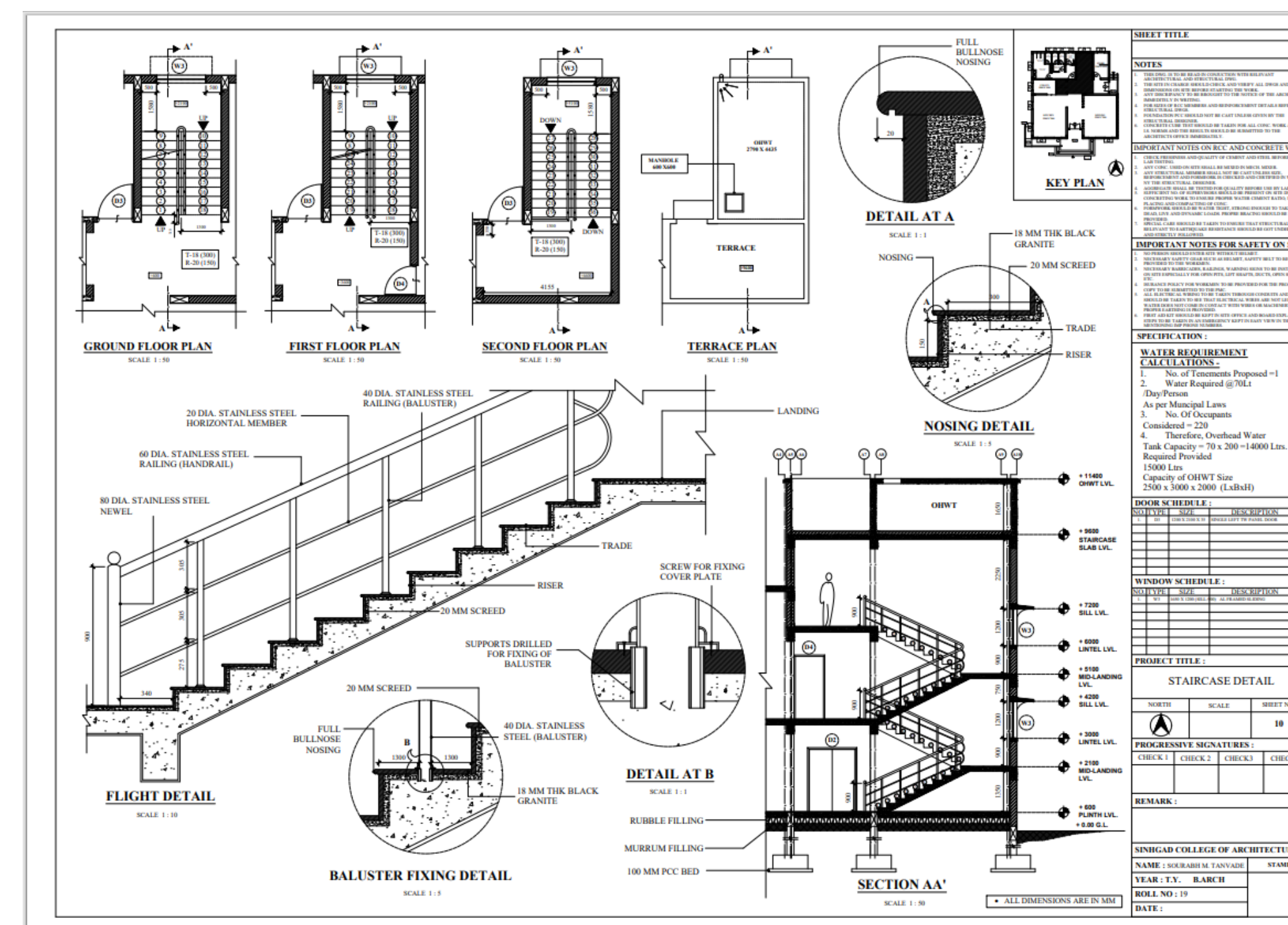
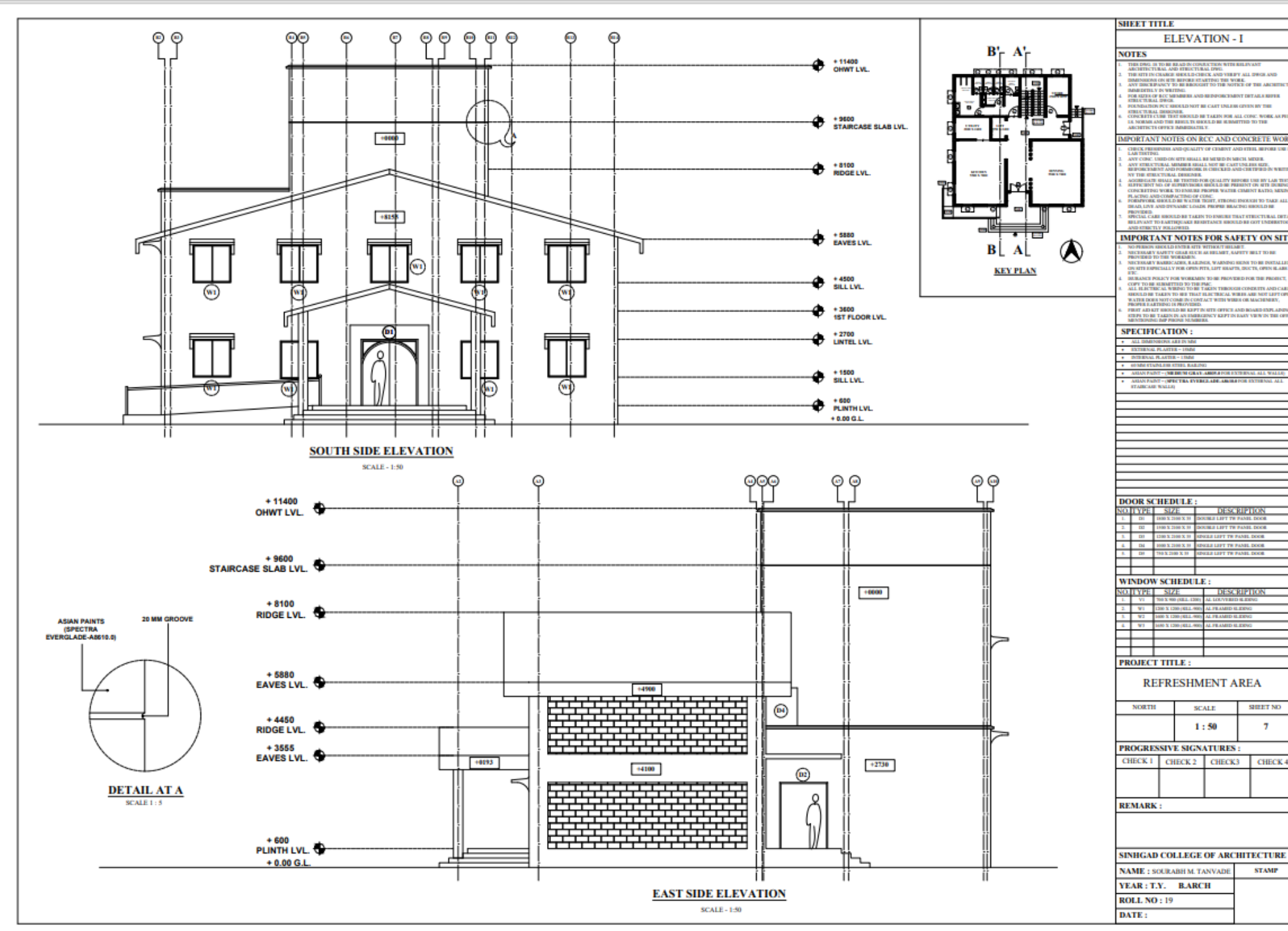
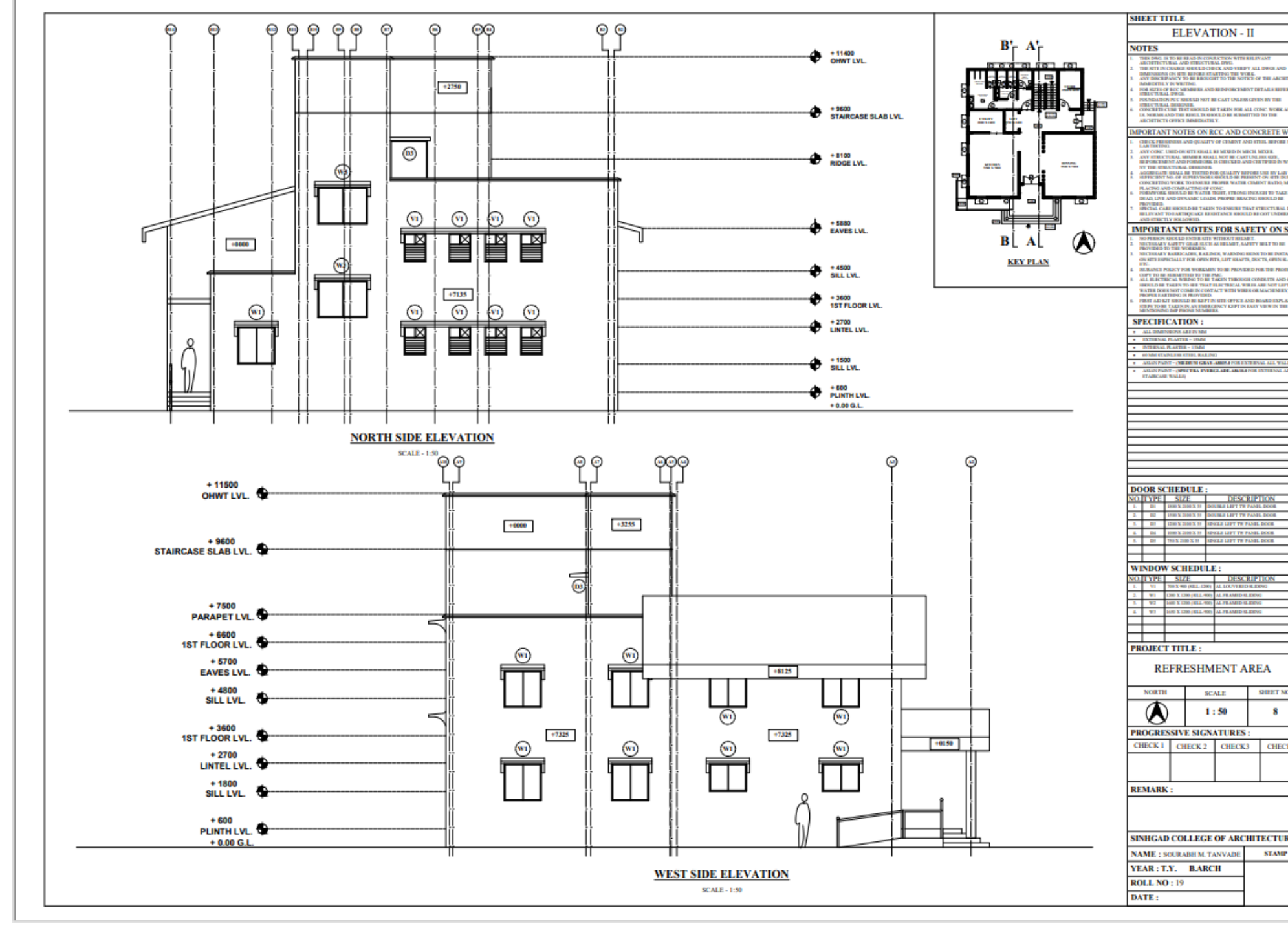
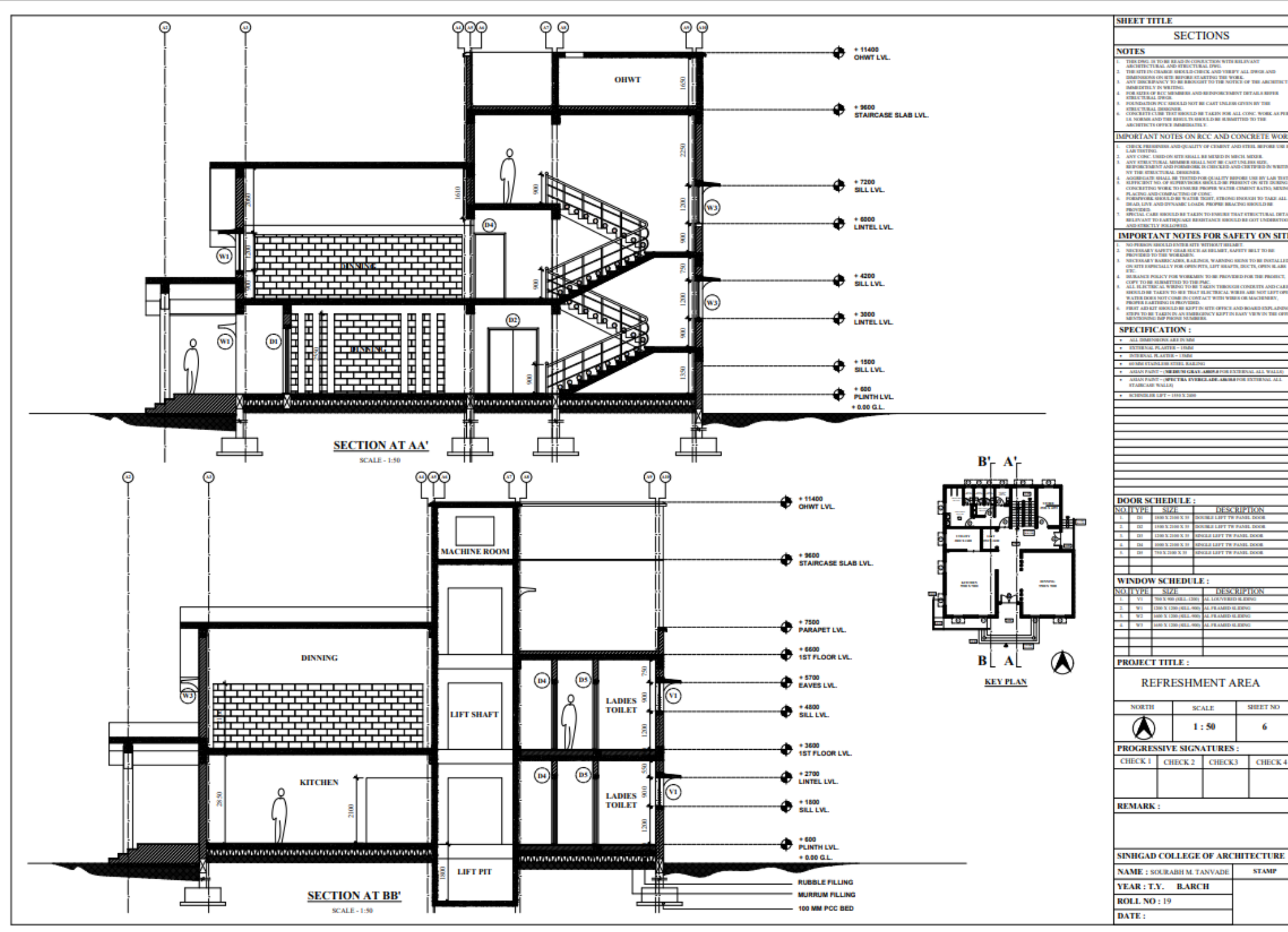
- To expose to the standard methods, conventions, drawing annotations including International standards, IS codes, its application in working drawing set with material and component and schedules

Student: Saurabh Tanvade

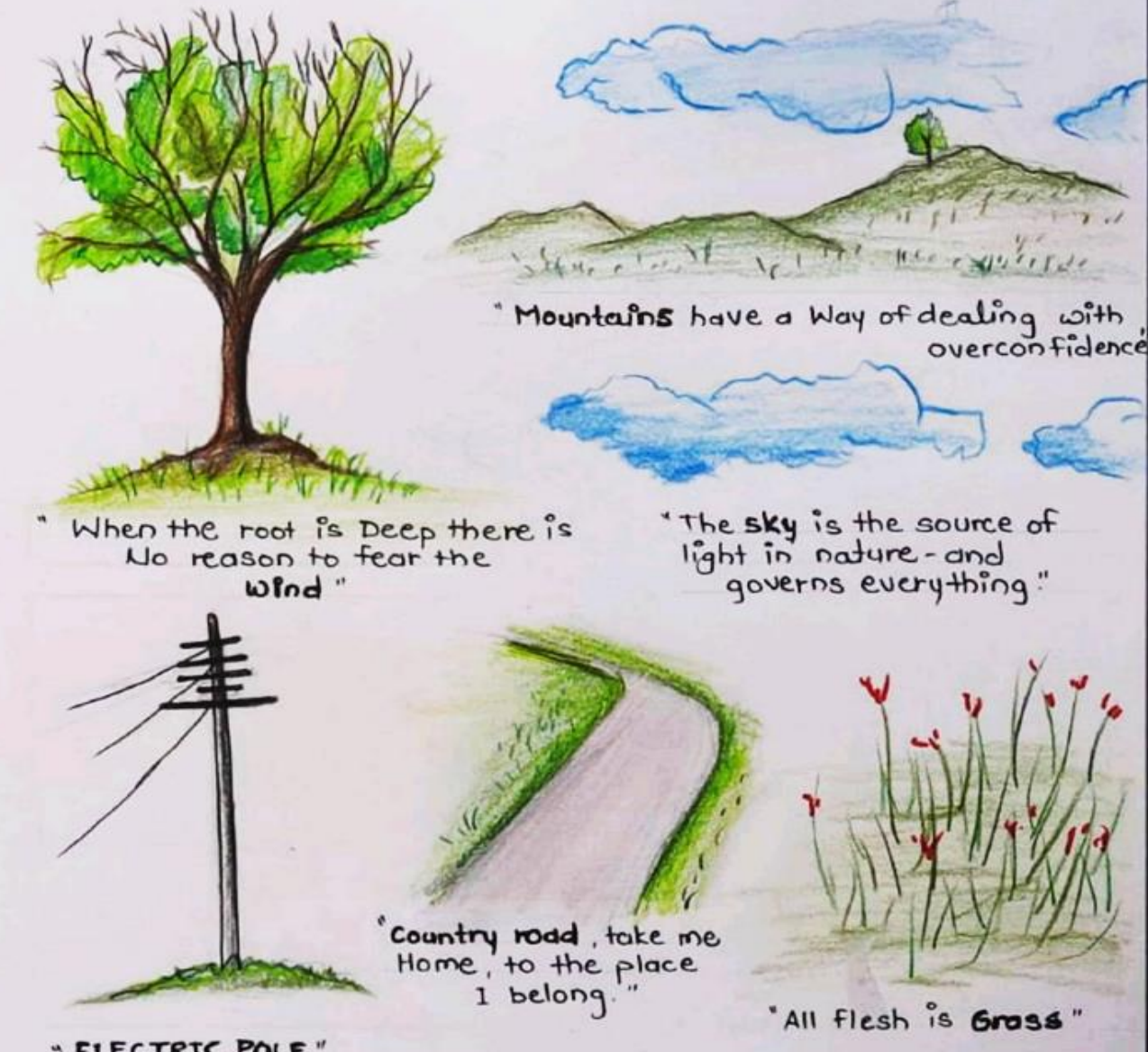
Faculty: Ar. Anita Kavathekar, Ar. Mukta Pandit, Ar. Harshada Akolkar

3rd Year B.Arch 2021-2022 Working Drawing II

Sinhgad College of Architecture, Pune



• A COUNTRY ROAD - BY JOAN EARDLEY



• ARTIST - Joan Eardley
• Year - 1957
• MEDIUM - Oil on Canvas
• LOCATION - Scotland

• A COUNTRY ROAD •

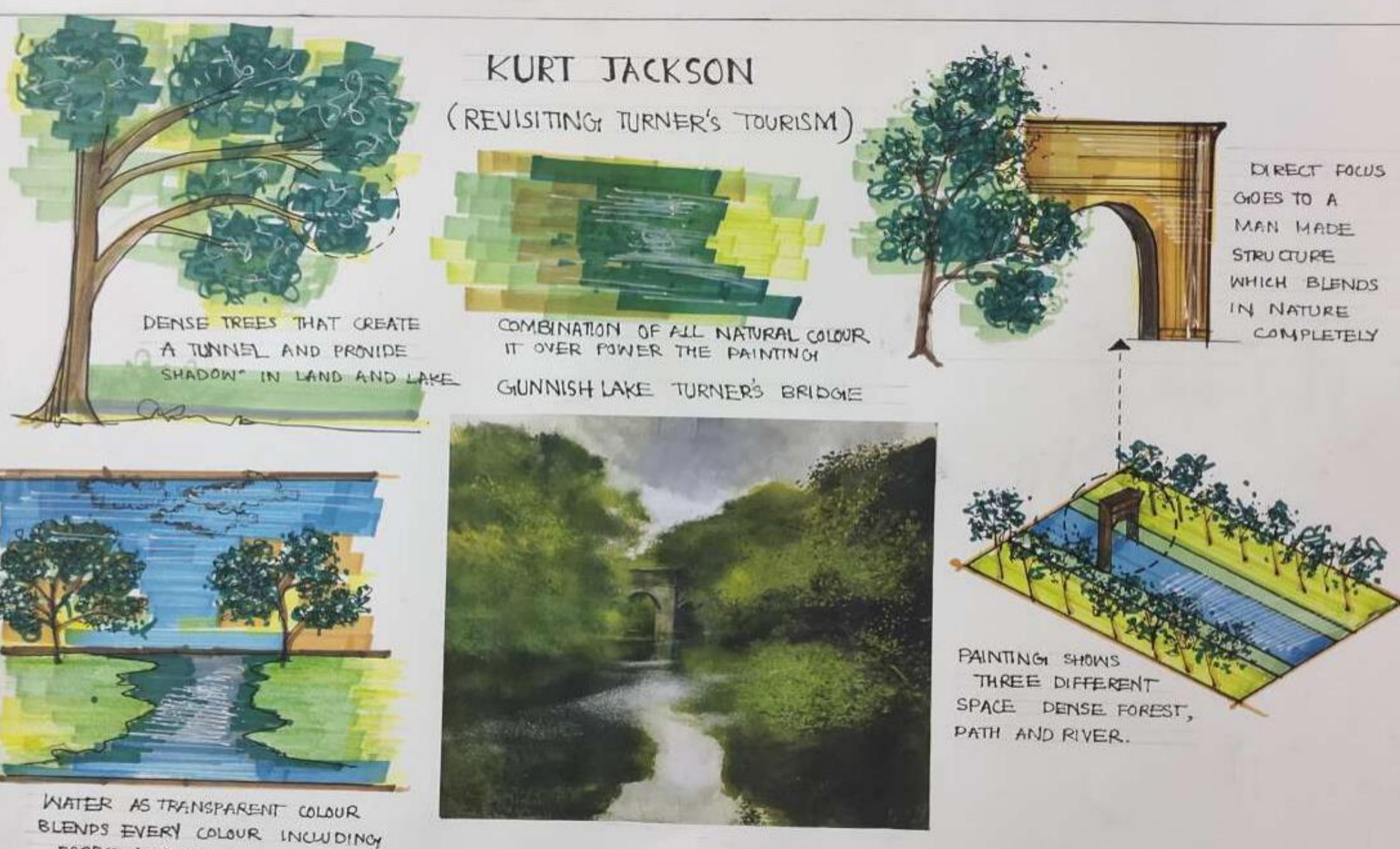
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	SOURABH M. TALVADE	
	T.Y. SEM-I ROLL NO-13	
	L.A. (I)	

LAND WATER VEGETATION HARDCAPE

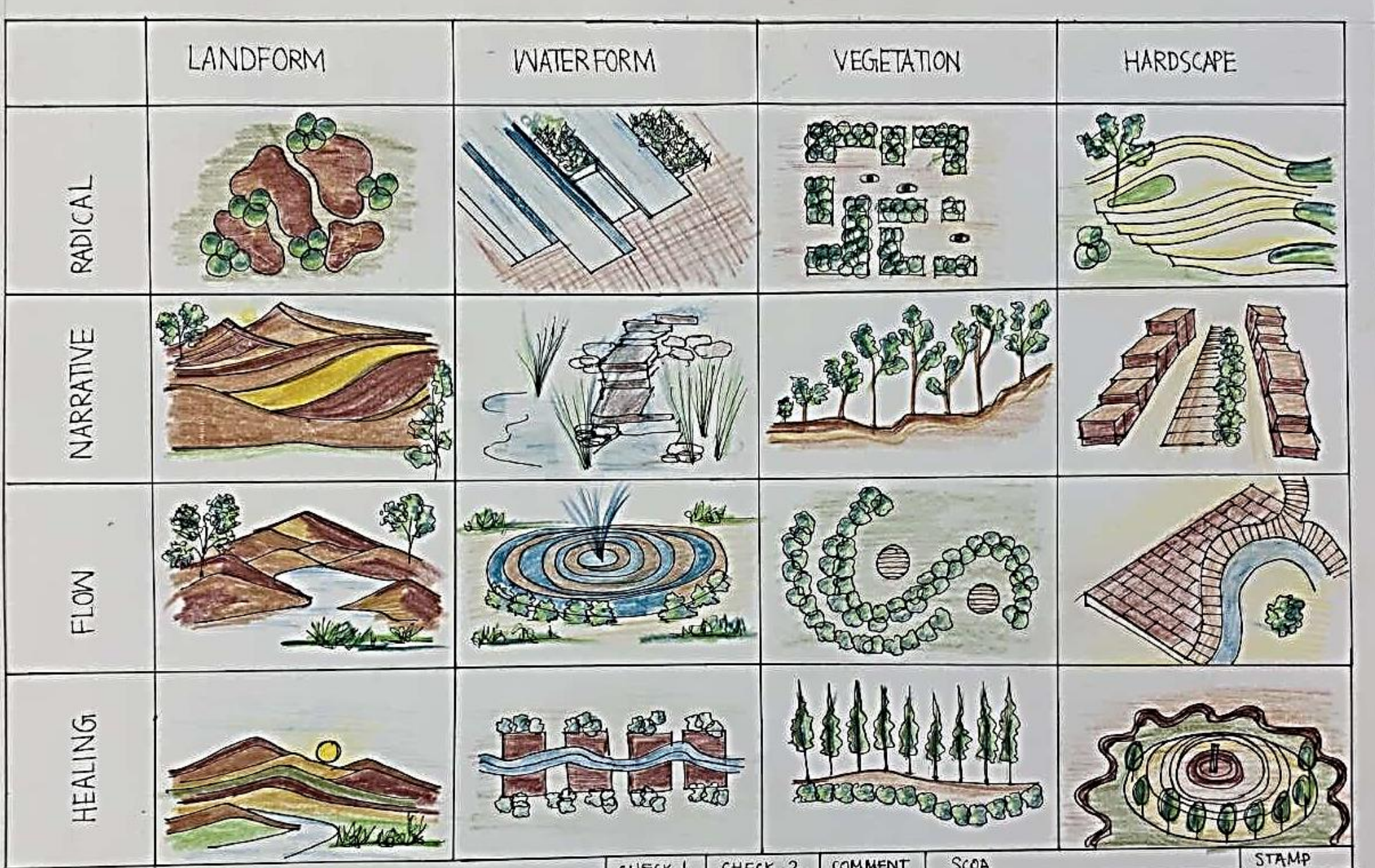


• ELEMENTS AND PRINCIPALS

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		SOURABH M. TALVADE	
		T.Y. (1 st SEM) ROLL NO-13	
		L.A. (I)	



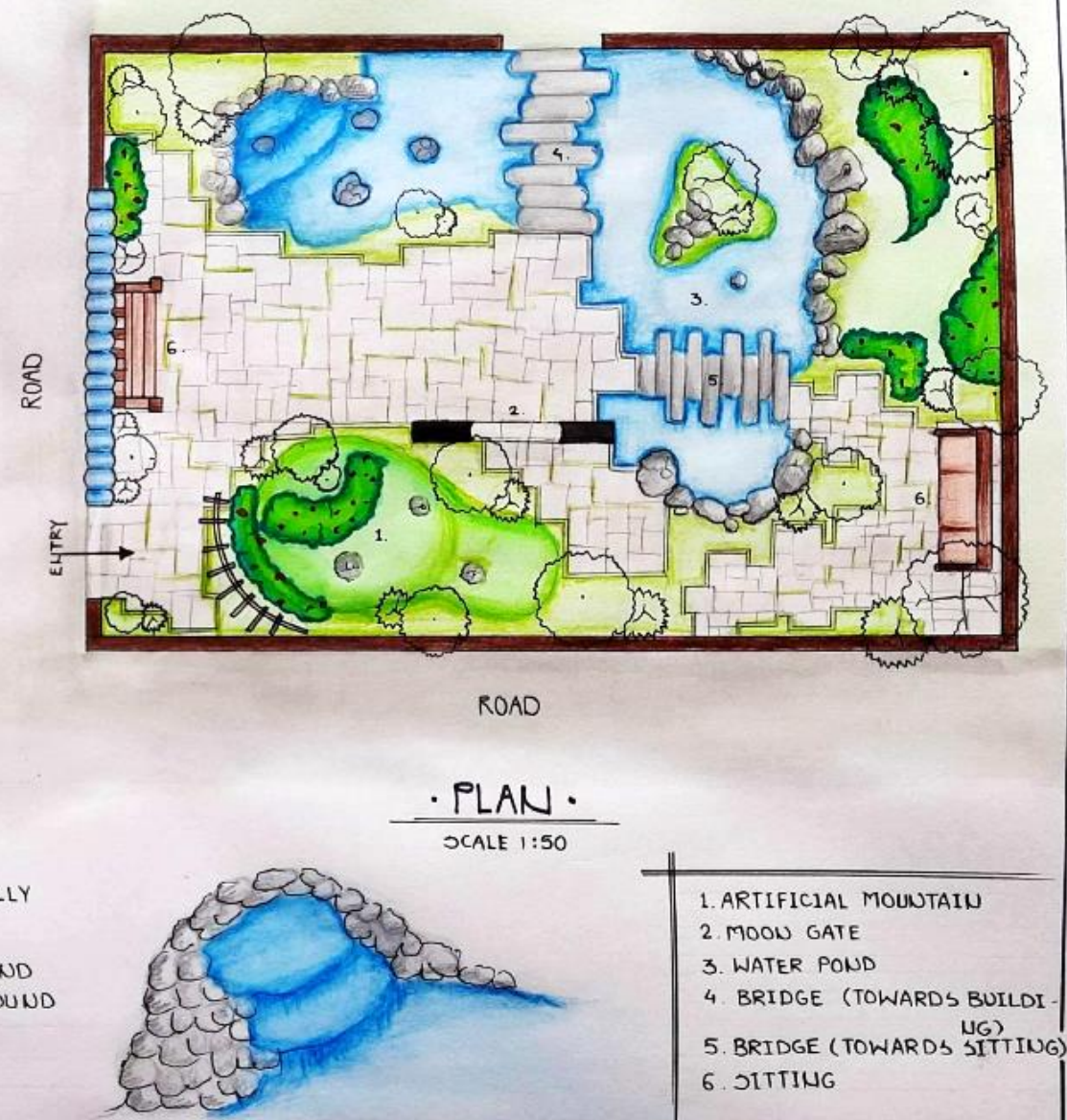
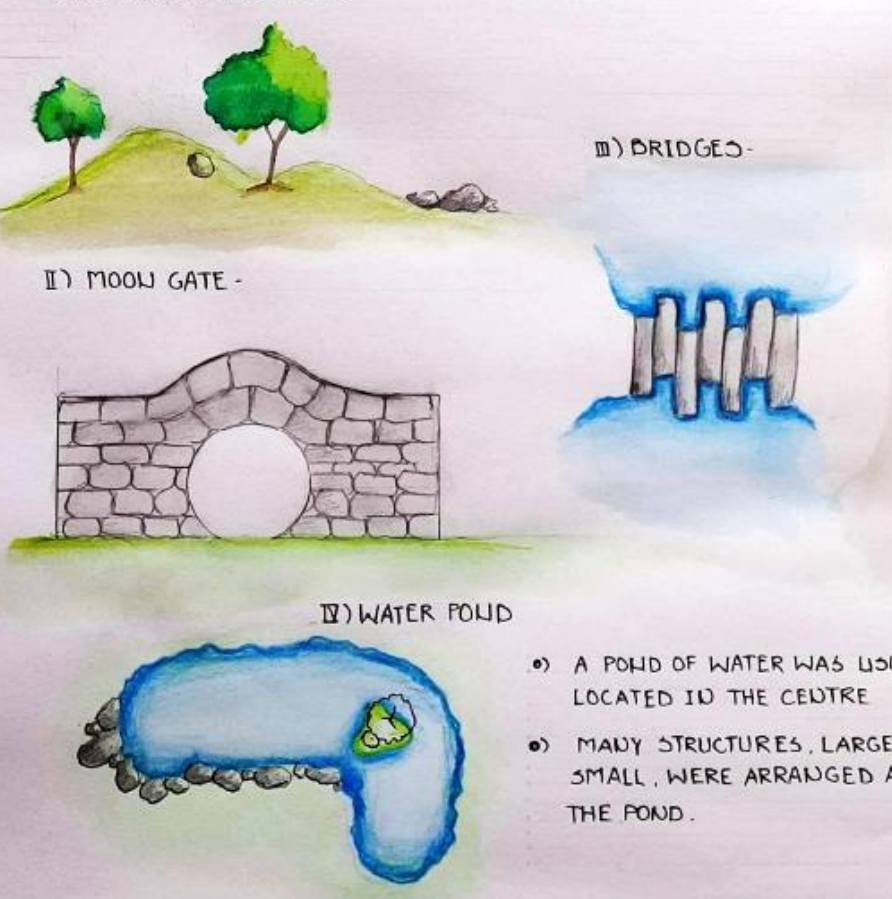
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			TANUSHRI SAMIR KUNDU	
			S.N-D ROLL NO. 02 LA-1	



CHECK 1	CHECK 2	COMMENT	SCOA	STAMP
			TANUSHRI KUNDU T.Y-D	
			ROLL NO: 02	
			LA-I (LANDSCAPE DESIGNING)	

• CHINESE LANDSCAPE •

- CHINESE GARDENS ARE ALSO CALLED AS CHINESE CLASSICAL GARDENS
- A PLACE FOR SOLITARY OR SOCIAL CONTEMPLATION OF NATURE
- TWO MAIN TYPES: 1) IMPERIAL GARDEN 2) PRIVATE GARDEN
- CHARACTERISTICS AND ELEMENTS: 1) ARTIFICIAL MOUNTAINS



CHECK I	CHECK II	S.C.O.A. PUJE	STAMP
		SOURABH M. TALVADE	
		T.Y. (D) ROLL NO-19	
		LANDSCAPE ARCHITECTURE	

JAPANESE LANDSCAPE ARCHITECTURE



- DESIGN PRINCIPAL**
- NATURE IS THE IDEAL THAT YOU MUST STRIVE FOR. YOU CAN IDEALIZE IT, EVEN SYMBOLIZE IT, BUT YOU MUST NEVER CRETE SOMETHING THAT NATURE ITSELF CANNOT!
 - BALANCE, OR SUMI.
- BASIC RULES IN THE DESIGN**
- NATURAL : THAT SHOULD MAKE THE GARDEN LOOK IF IT GREW ITSELF
 - ASYMMETRY : THAT CREATES THE IMPRESSION OF IT BEING NATURAL
 - SIMPLICITY : THAT FOLLOWS THE IDEA OF 'LESS IS MORE'
 - CONTRAST : THAT CREATES TENSION BETWEEN ELEMENTS
 - LINE : THAT CAN CREATES TENSION BOTH TRANQUILITY
 - CURVES : THAT SOFTENS THE EFFECT.

CHECK 1	CHECK 2	COMMENT	SCOA	STAMP
			TANUSHRI KUNDU T.Y-D	
			ROLL NO: 02 SUB: LA-I	


Objective:
To introduce the students to Landscape Architecture and its scope. To understand the elements and principles of landscape design and role of landscape elements in design of outdoor environments on the site and their application in achieving functional, aesthetic, environmental and cultural goals
Principles and approaches in Landscape Design. Illustrations can be from contemporary as well as historic landscapes for understanding various approaches of design.

3rd Year B.Arch 2021-2022 Landscape Architecture

Psidium guajava

A
B
C
D
E
F
G

Recommended Seed Types




GENERAL INFORMATION

Native: Native Exotic Endemic Deciduous Tropical climate Full Sun


Family: Myrtaceae

Heat Tolerance: Needs full sun

Special Properties: Rich in vitamin C, Lycopene & Antioxidants




Flowers



Fruits

Life Cycle Pattern (YEARS)




■ Fruit ■ Flower ■ Regime Change


Life Cycle Pattern (YEARS)

- Life span: Approximately 40 Years
- Moderate growth rate: It can add between 10 and 15 inches to its height in a single growing season.

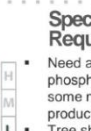
Feature



Ecological Value



Ornamental



Shade Cover

■ Propagation to Seedling
■ Seeding to Semi-mature
■ Maturity
■ Senescence

Special Maintenance Requirements

Need a high amount of nitrogen, phosphoric acid, and potassium, along with some magnesium for maximum fruit production.

Tree should be planted in well-drained soil where its roots have room to spread.

Tolerance

Drought

Low

Moderate

High

Waterlogging

Low

Moderate

High

Wind

Low

Moderate

High

Roadside Pollution

Low

Moderate

High

Pest & Disease Resistance

Low

Moderate

High

Pruning

Low

Moderate

High

Soil Compaction

Low

Moderate

High

Root System

Aggressive

Moderate

Manageable

Soil Volume

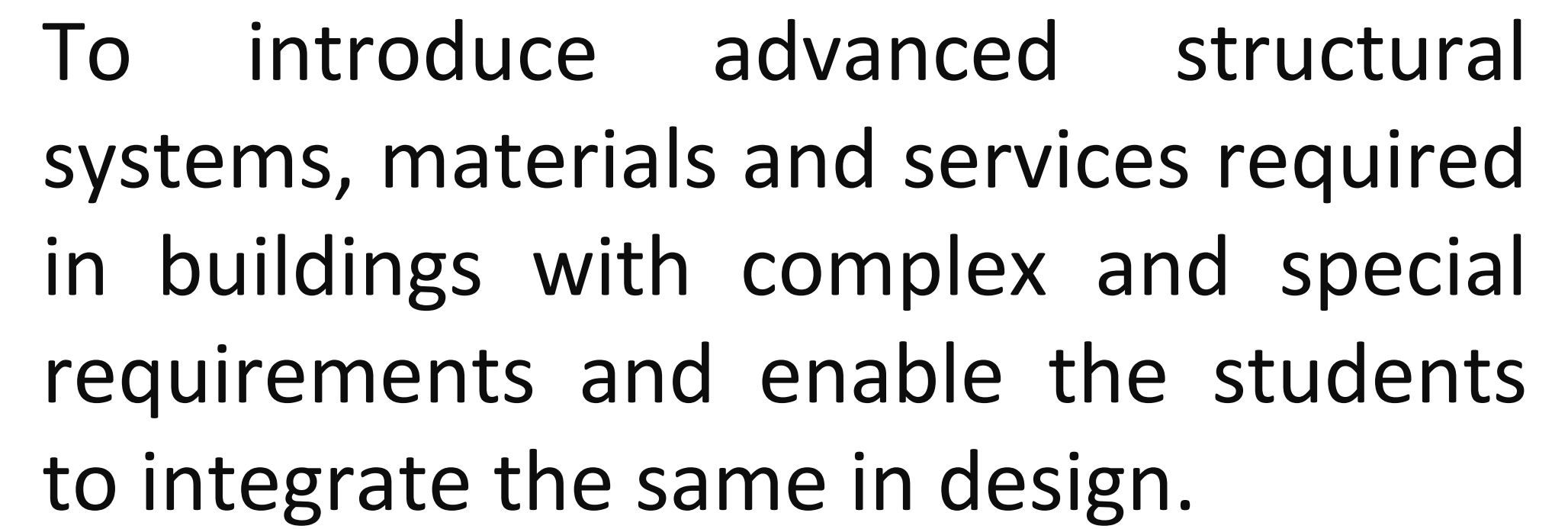
Large

Medium

Small

pH

Adaptability



1.Study of Hard landscape (civil work) details with respect to materials and construction techniques.

MAGNOLIA GRANDIFLORA

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

Recommended Street Types

GENERAL INFORMATION

Native Evergreen Shrub Full sun Full sun

Family: MAGNOLIA
Halt Tolerance: HIGH
Special Properties: ITS BRANCHES TYPICALLY STRAIGHTEN BACK THAT FORMED A DENSE, PYRAMIDAL CROWN

Flowers

Fruits

Legend: Fruit Flower Foliage Change

- Propagated by Seedling
- Seedling to Semi-mature
- Mature
- Senescence

LIFE CYCLE PATTERN (80-120 YEARS)

Feature

Scouting Value

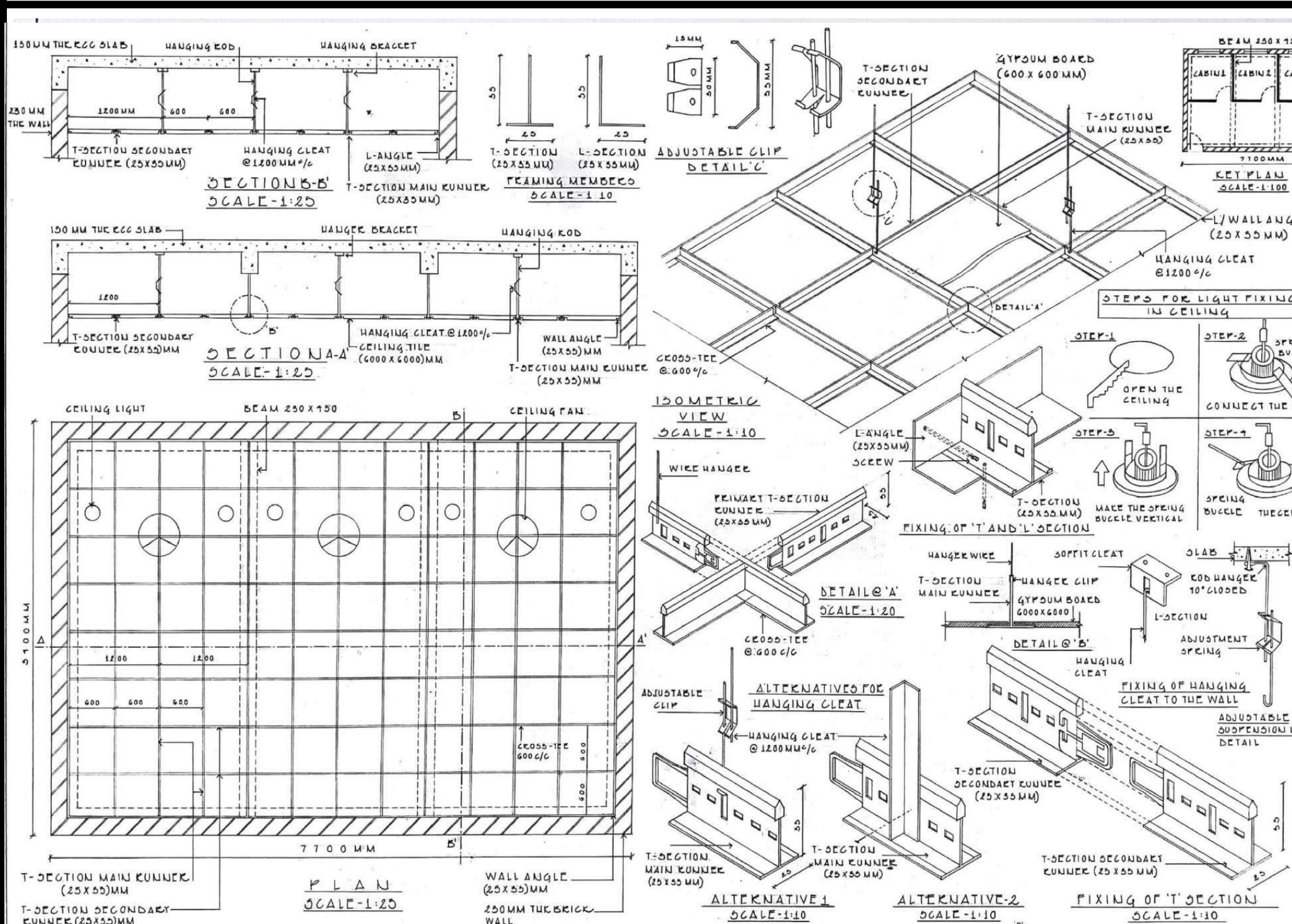
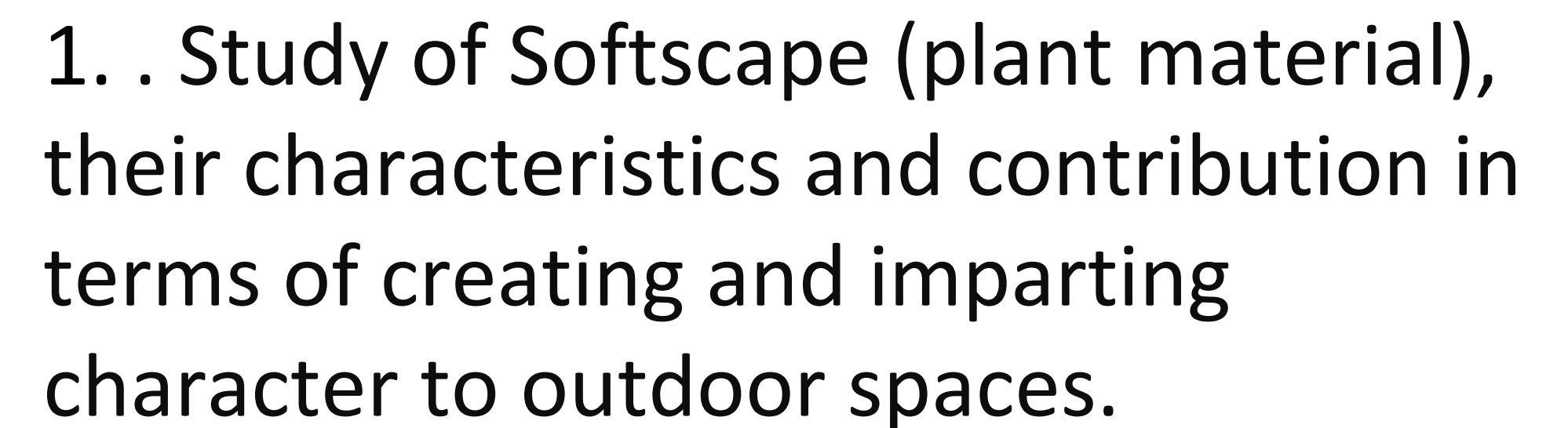
Ornamental

Shade Cast

Special Maintenance Requirements

- Due to dense foliage, need watering in regular interval

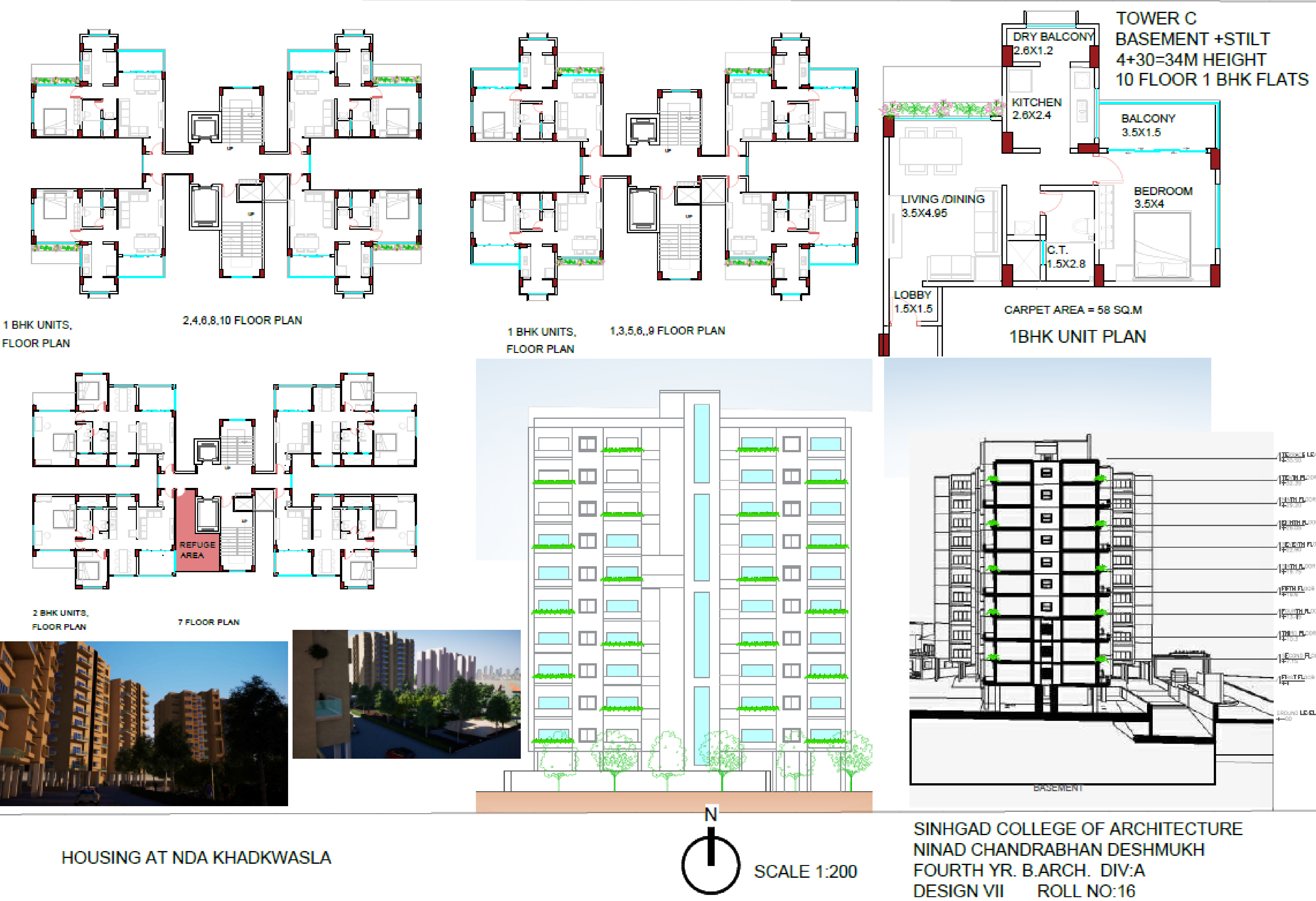
Tolerance



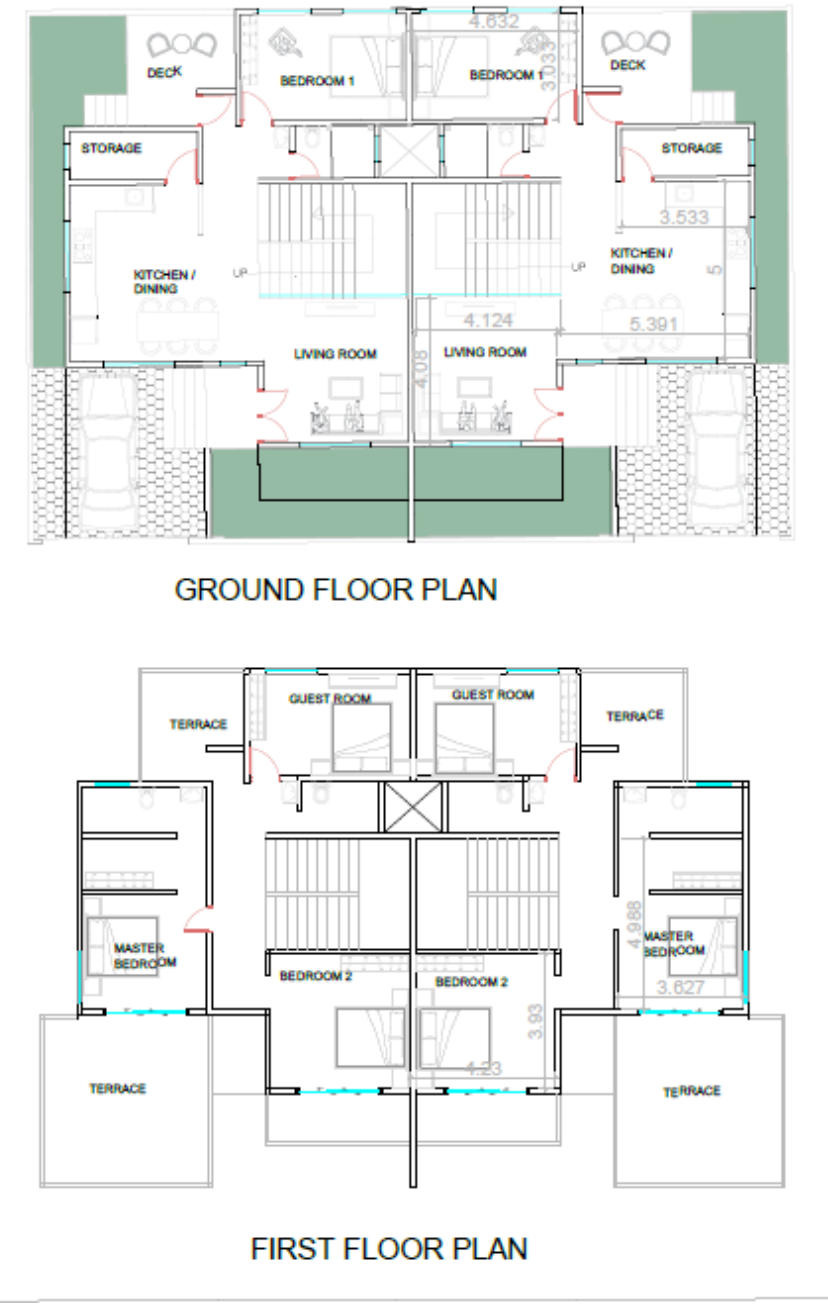
3rd Year B.Arch 2021-2022

Landscape Architecture

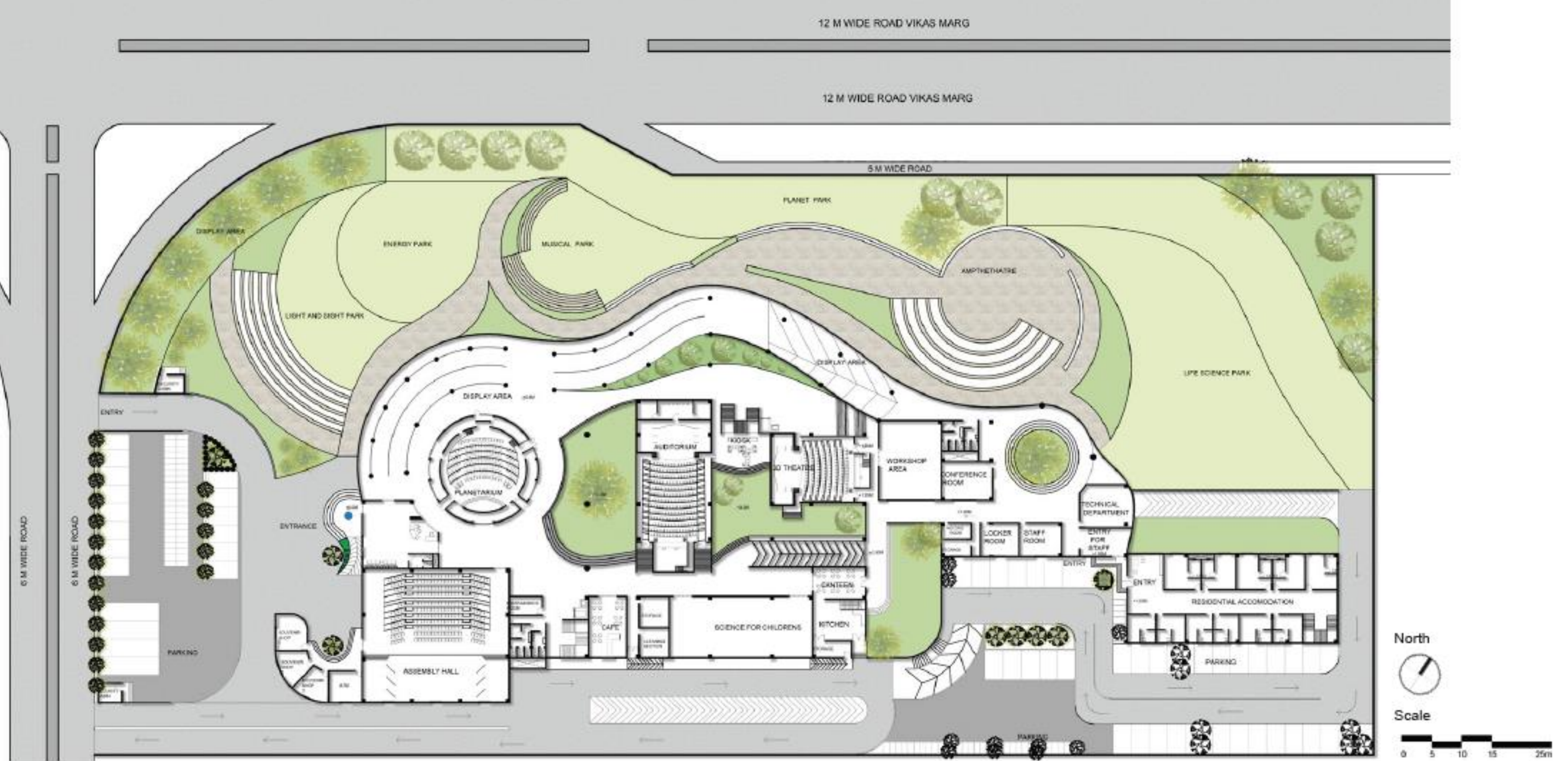
Sinhgad College of Architecture, Pune



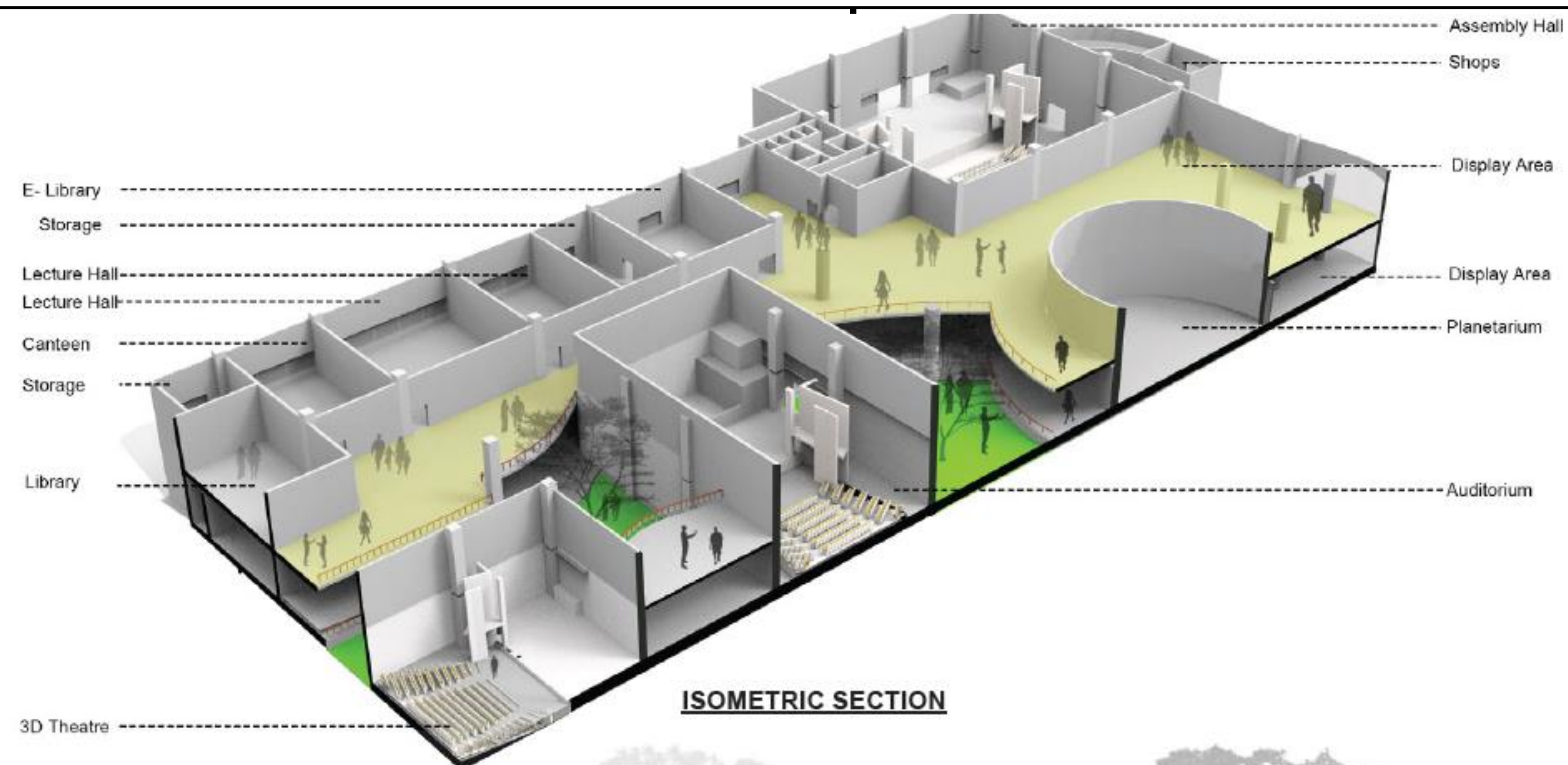
ROW HOUSE



4th Year B.Arch 2021-2022 Design-VII HOUSING



SITE PLAN



ISOMETRIC SECTION

Akshada S. Chaukhande
4th year

**4th Year B.Arch 2021-2022
Design-VIII**

URBAN DESIGN PROJECT

Sinhgad College of Architecture, Pune

PROJECT DETAILS

Introduction:

To introduce advanced structural systems, materials and services required in buildings with complex and special requirements and enable the students to integrate the same in design.

1.Design and construction of medium-scale industrial structures with reference to all architectural, and constructional details. The assignment will be on the same.

Student: Yasmeen Shaikh

Faculty: Ar. Asmita Kale, Ar. Mukta Pandit

4th Year B.Arch 2021-2022 Advanced Building Construction and Services I Industrial Structures

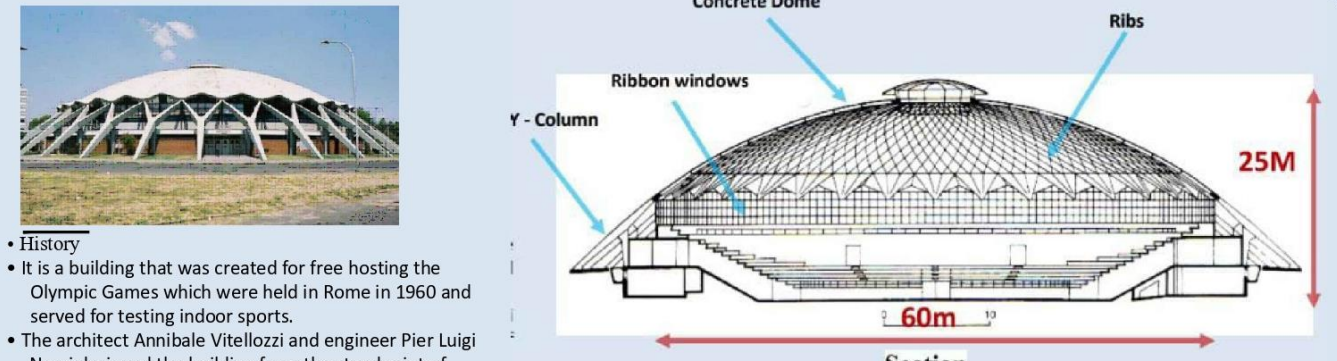
Sinhgad College of Architecture, Pune

Palazzetto dello Sport

- The Palazzetto dello Sport Small Sport Palace, also less commonly known as the PalaFlaminio.
- It is an indoor arena that is located in Piazza Apollodoro, in Rome, Italy.
- It has a 5,500 seating capacity for basketball games.
- It hosted boxing among other sports during the Olympic Games.
- Built – 1956-1960
- Architect – Annibale Vitellozzi
- Engg – Pier Luigi Nervi
- Surface- Active Structure
- Concrete shell dome

History

- It is a building that was created for free hosting the Olympic Games which were held in Rome in 1960 and served for testing indoor sports.
- The architect Annibale Vitellozzi and engineer Pier Luigi Nervi designed the building from the standpoint of economy, speed of execution and efficiency.



Concrete Dome
Ribs
25M
60m
Section

Structural design

- Concrete shell dome
- Diameter – 60m
- Height – 25m
- Thk of dome – 12cm
- Curved ribs – 0.5m
- Supports – 48 Y shaped columns
- Principles of isotactic stress are used to minimize the material requirement steel, concrete.
- Dome follows the isotactic lines of principle stress.
- The ribs of the dome maximizes the cross section reduces load.
- There are 48 Y shaped columns which holds the concrete dome and acts as buttress supports.

Load transfer

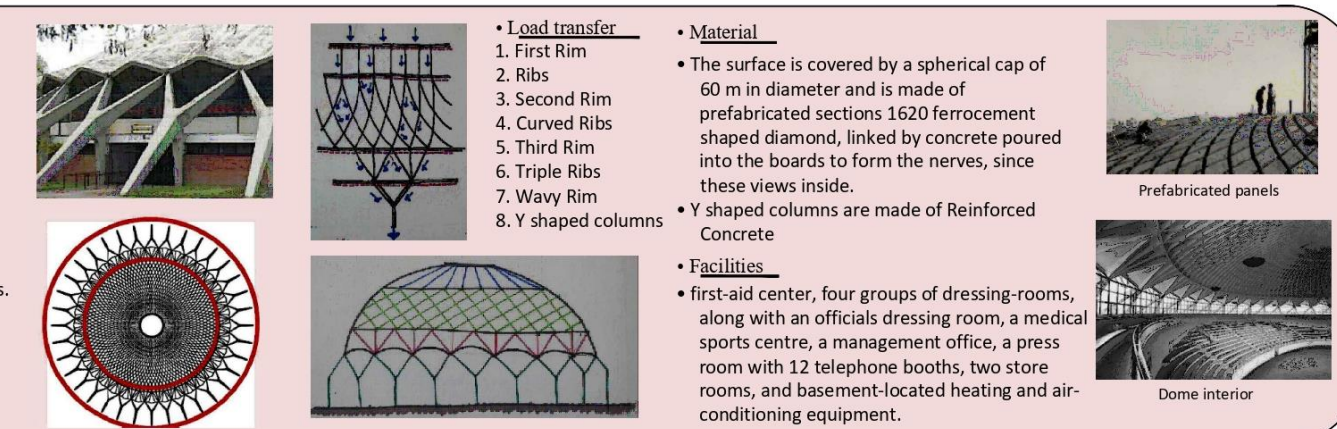
1. First Rim
2. Ribs
3. Second Rim
4. Curved Ribs
5. Third Rim
6. Triple Ribs
7. Wavy Rim
8. Y shaped columns

Material

- The surface is covered by a spherical cap of 60 m in diameter and is made of prefabricated sections 1620 ferroconcrete shaped diamond, linked by concrete poured into the boards to form the nerves, since these views inside.
- Y shaped columns are made of Reinforced Concrete.

Facilities

- first-aid center, four groups of dressing-rooms, along with an officials dressing room, a medical sports centre, a management office, a press room with 12 telephone booths, two store rooms, and basement-located heating and air-conditioning equipment.



Construction procedure

- Nervi Suggested prefabrication, the apparent advantage of the perfect executive for quality assurance of the clusters and the largest developing economy.
- It was hard to execute the project under normal shuttering and pouring procedure.
- The design was also difficult so to minimize the work load and easy construction there were prefabrication site was installed.
- Prefabrication site was placed near the project for ease of transportation and supervision of work.

Foundation

- The foundation is a reinforced concrete ring width of 2.50 m and 81.50 m in diameter.

Columns

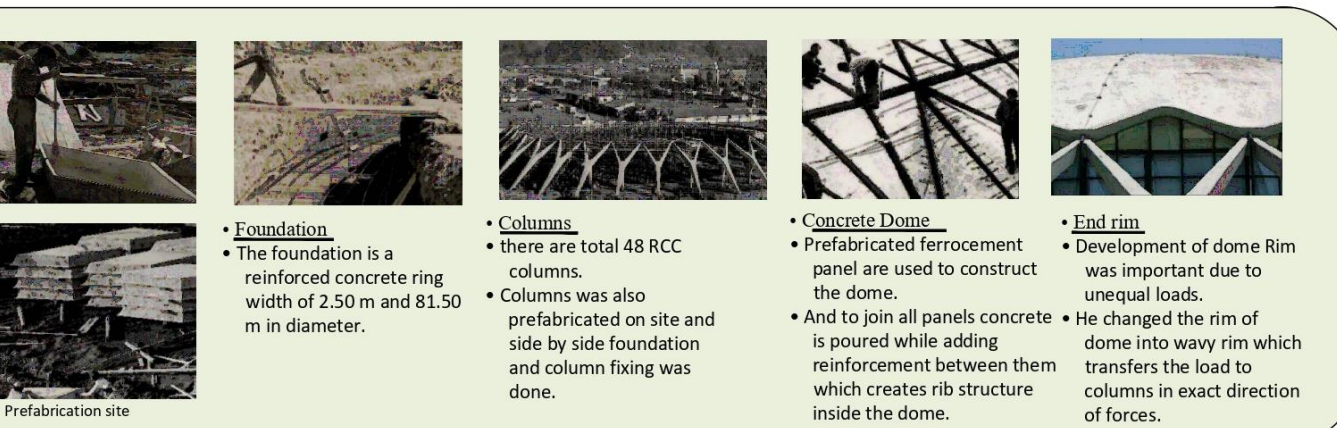
- There are total 48 RCC columns.
- Columns was also prefabricated on site and side by side foundation and column fixing was done.

Concrete Dome

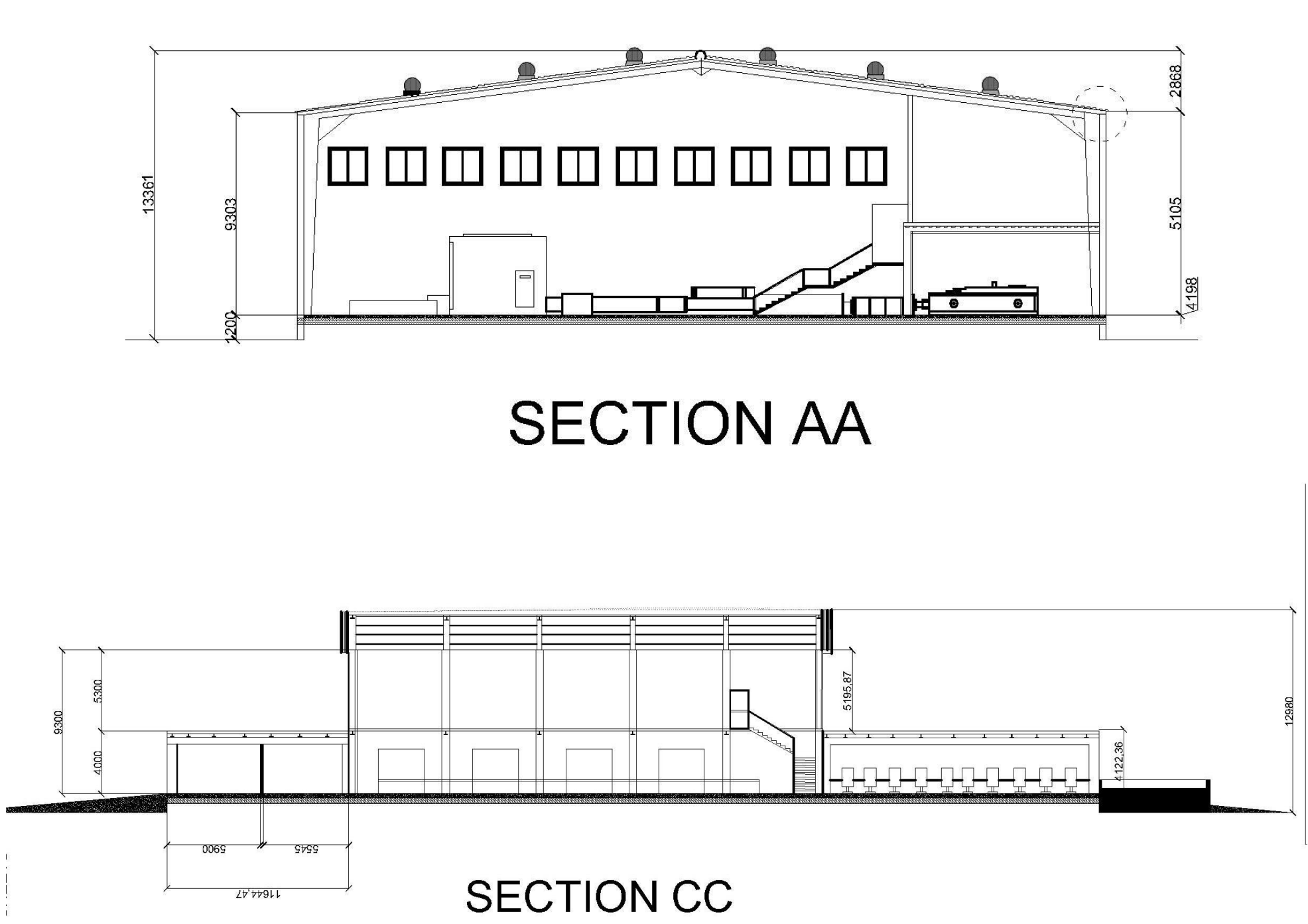
- Prefabricated ferroconcrete panel are used to construct the dome.
- And to join all panels concrete is poured while adding reinforcement between them which creates rib-structure inside the dome.

End rim

- Development of dome Rim was important due to unequal loads.
- He changed the rim of dome into wavy rim which transfers the load to columns in exact direction of forces.

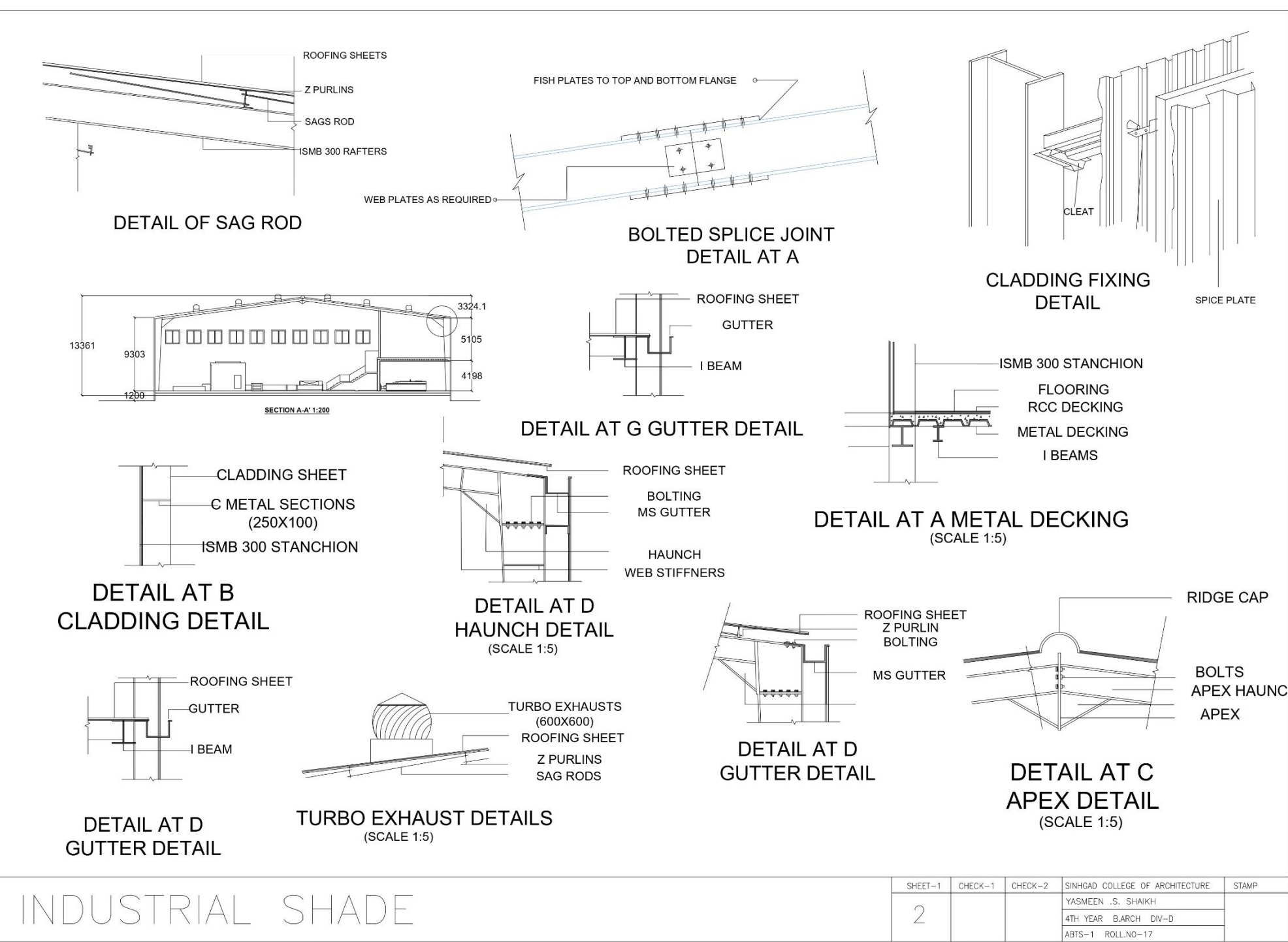


SCOA, YASMEEN SHAIKH, FOURTH YEAR, DIV-'D', ROLL.NO. - 17



SECTION AA

SECTION CC



DETAIL OF SAG ROD

BOLTED SPLICE JOINT DETAIL AT A

CLADDING FIXING DETAIL

DETAIL AT G GUTTER DETAIL

DETAIL AT A METAL DECKING (SCALE 1:5)

DETAIL AT B CLADDING DETAIL

DETAIL AT D HAUNCH DETAIL (SCALE 1:5)

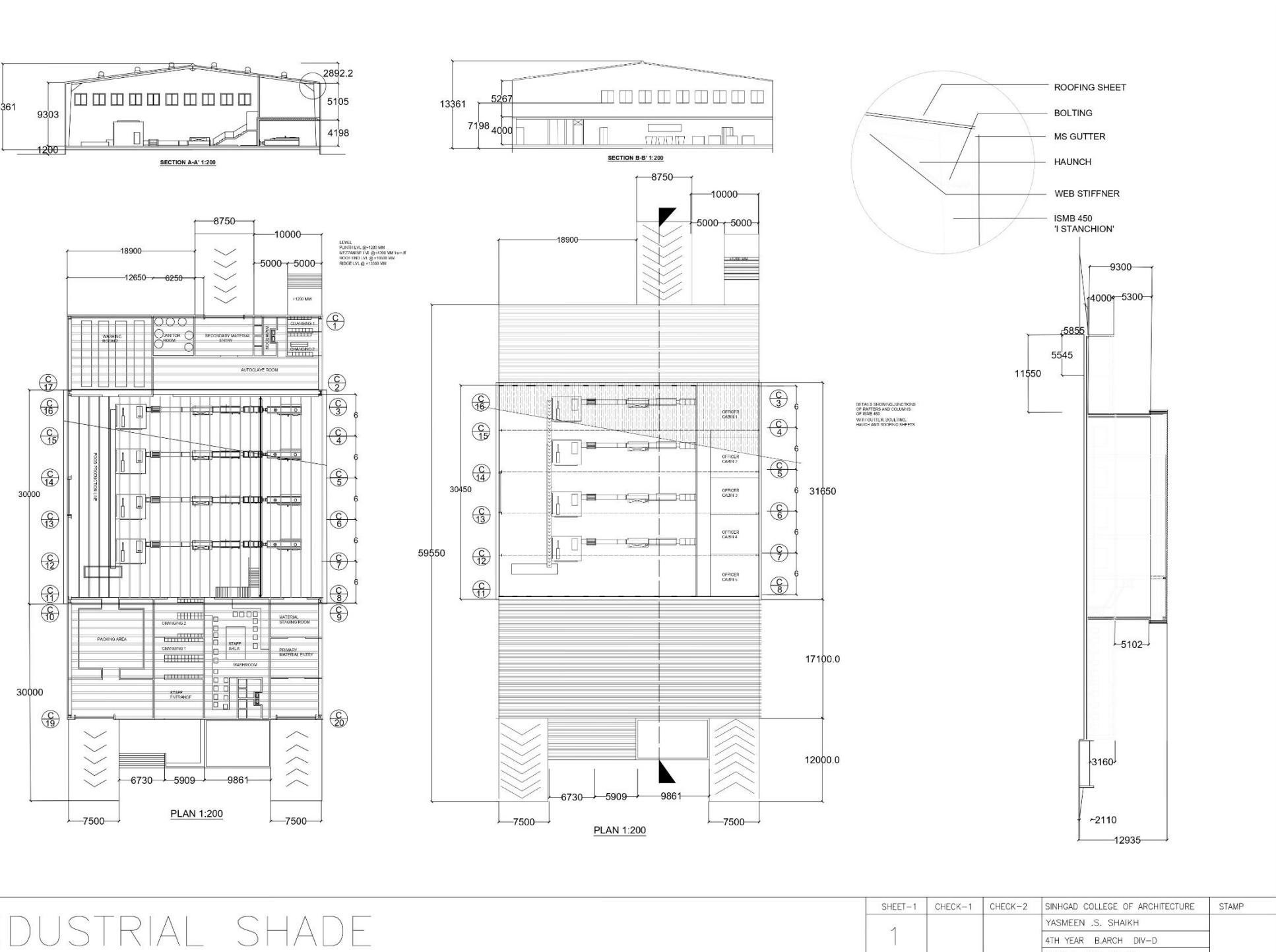
DETAIL AT D GUTTER DETAIL

TURBO EXHAUST DETAILS (SCALE 1:5)

DETAIL AT C APEX DETAIL (SCALE 1:5)

INDUSTRIAL SHADE

SHEET-1 CHECK-1 CHECK-2 SINHGAD COLLEGE OF ARCHITECTURE YASMEEN S. SHAIKH 4TH YEAR BARCH DIV-D ARTS-1 ROLLNO-17



SECTION AA SCALE 1:200

SECTION BB SCALE 1:200

PLAN 1:200

DETAIL AT D HAUNCH DETAIL

DETAIL AT B CLADDING DETAIL

DETAIL AT G GUTTER DETAIL

DETAIL AT A METAL DECKING

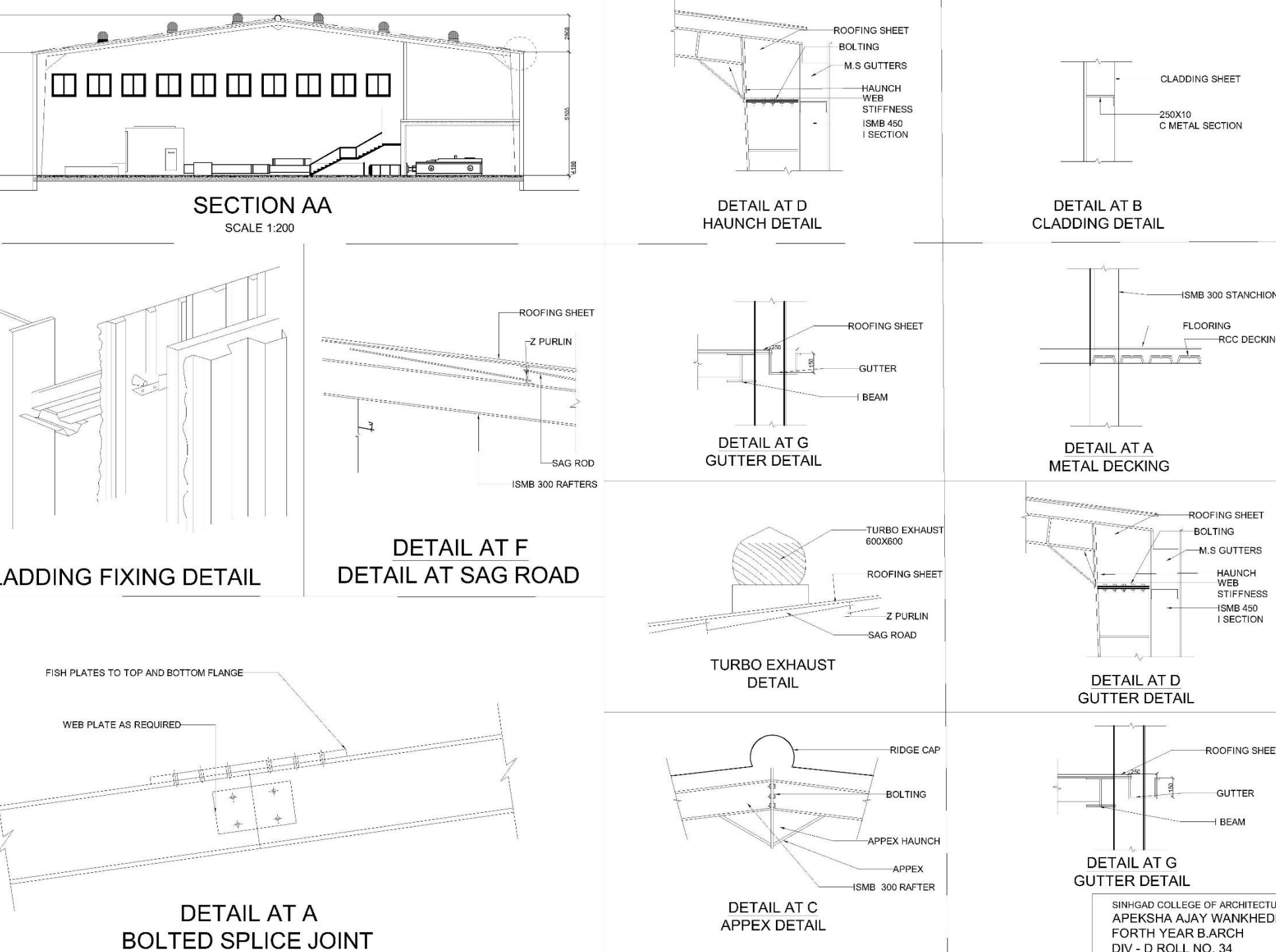
DETAIL AT D GUTTER DETAIL

TURBO EXHAUST DETAIL

DETAIL AT C APEX DETAIL

INDUSTRIAL SHADE

SHEET-1 CHECK-1 CHECK-2 SINHGAD COLLEGE OF ARCHITECTURE YASMEEN S. SHAIKH 4TH YEAR BARCH DIV-D ARTS-1 ROLLNO-17



SECTION AA SCALE 1:200

DETAIL AT D HAUNCH DETAIL

DETAIL AT B CLADDING DETAIL

DETAIL AT G GUTTER DETAIL

DETAIL AT A METAL DECKING

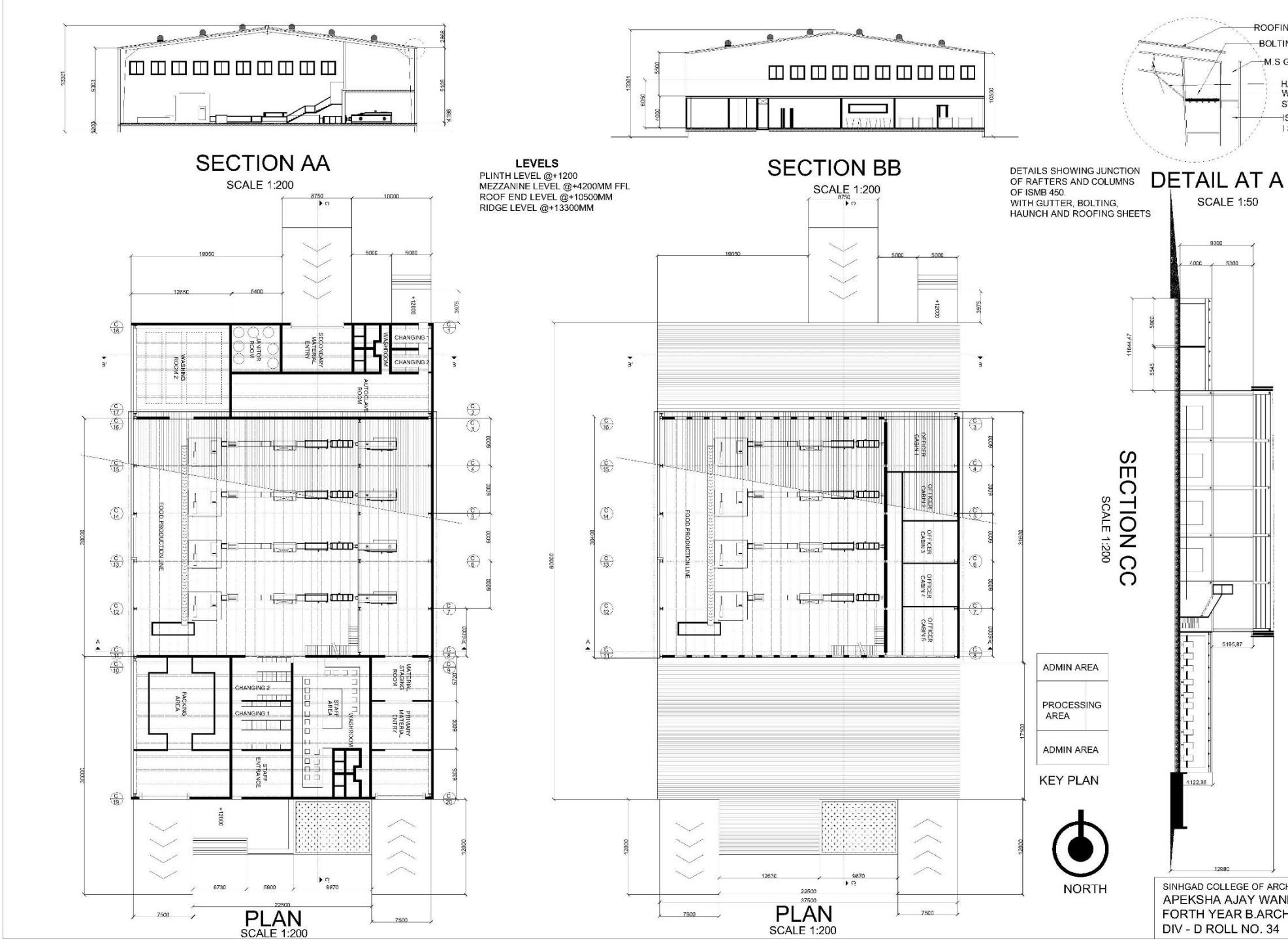
DETAIL AT D GUTTER DETAIL

TURBO EXHAUST DETAIL

DETAIL AT C APEX DETAIL

INDUSTRIAL SHADE

SHEET-1 CHECK-1 CHECK-2 SINHGAD COLLEGE OF ARCHITECTURE YASMEEN S. SHAIKH 4TH YEAR BARCH DIV-D ARTS-1 ROLLNO-17



SECTION AA SCALE 1:200

SECTION BB SCALE 1:200

DETAIL AT A METAL DECKING (SCALE 1:5)

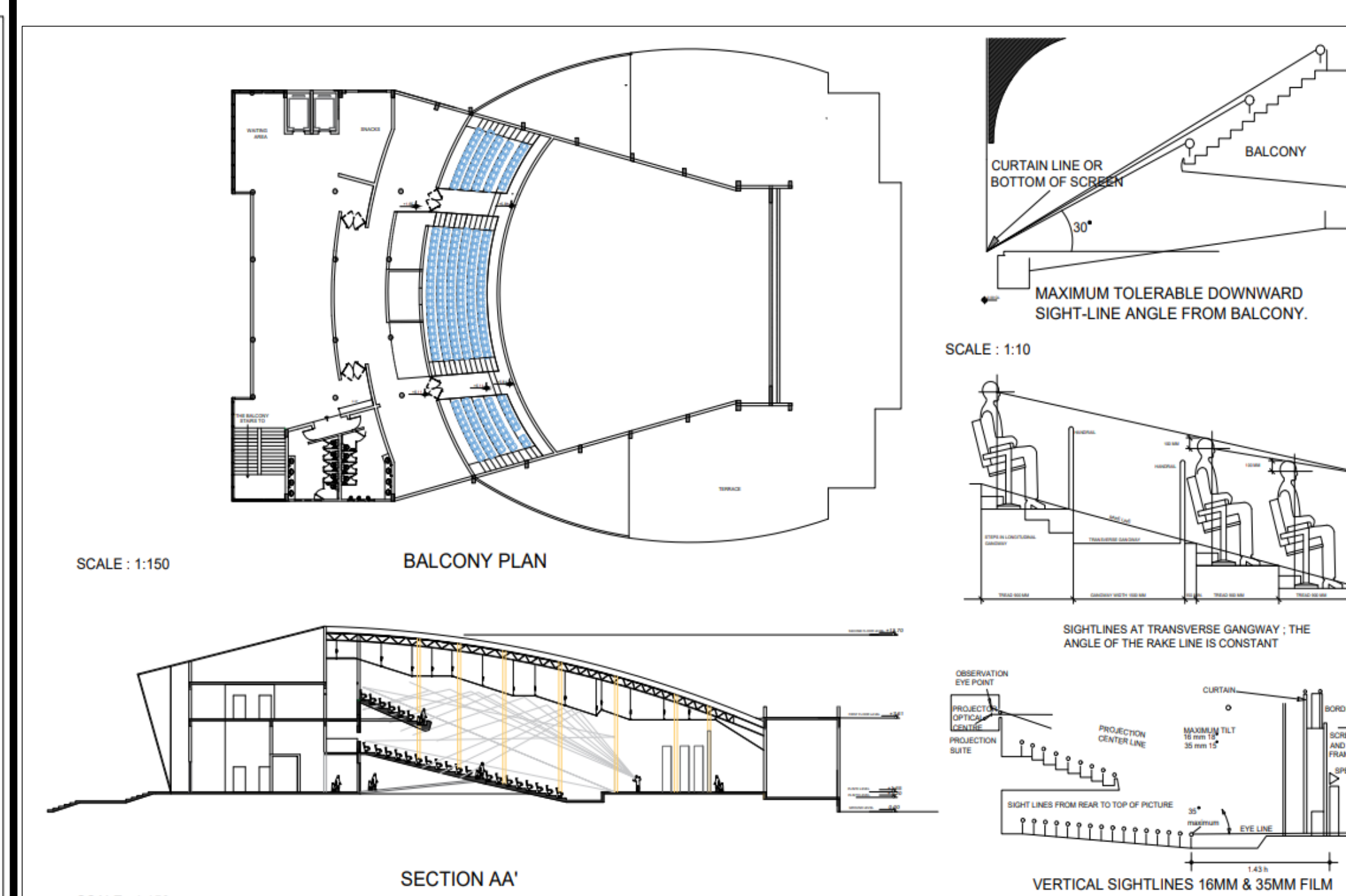
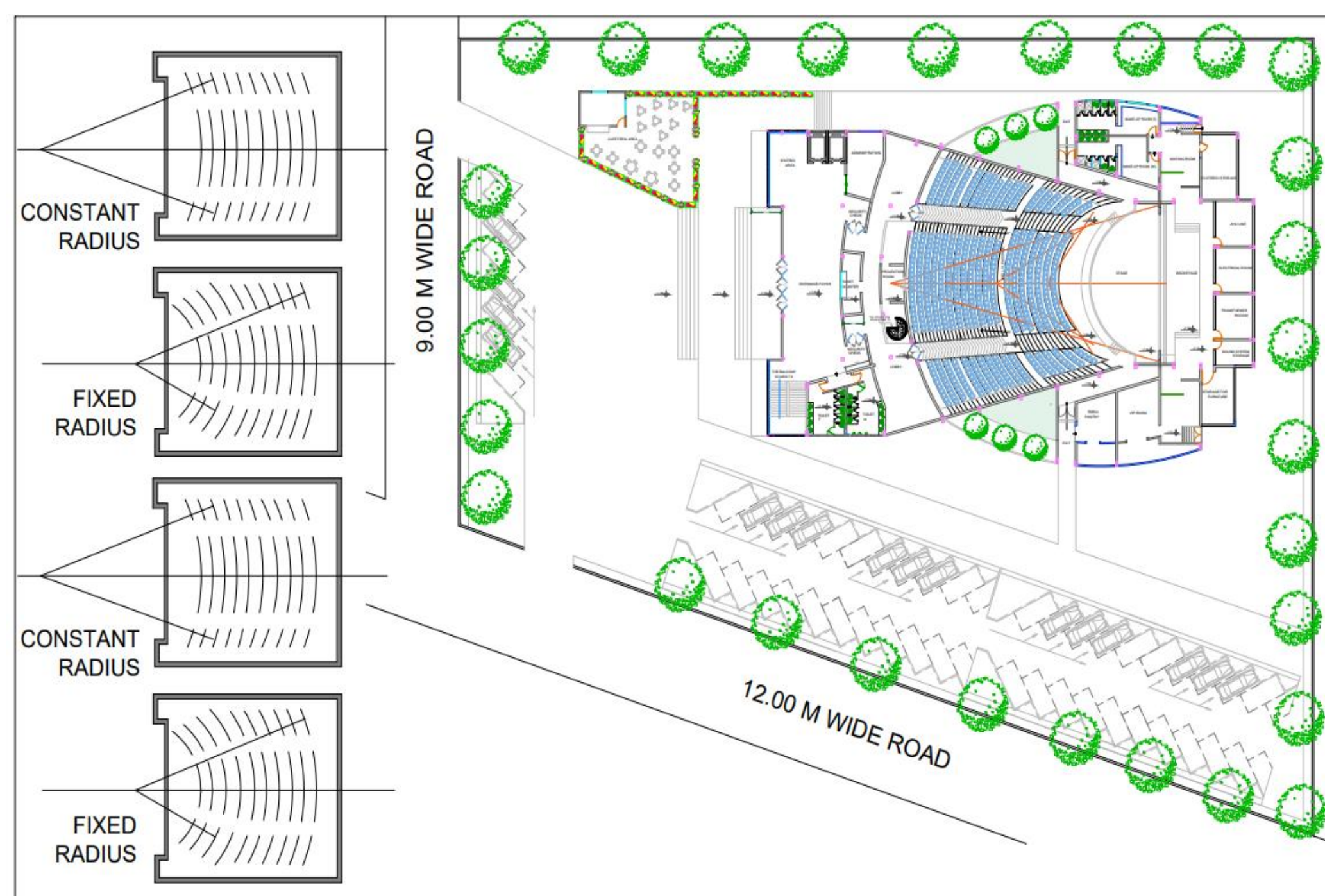
DETAIL AT D GUTTER DETAIL

TURBO EXHAUST DETAILS (SCALE 1:5)

DETAIL AT C APEX DETAIL (SCALE 1:5)

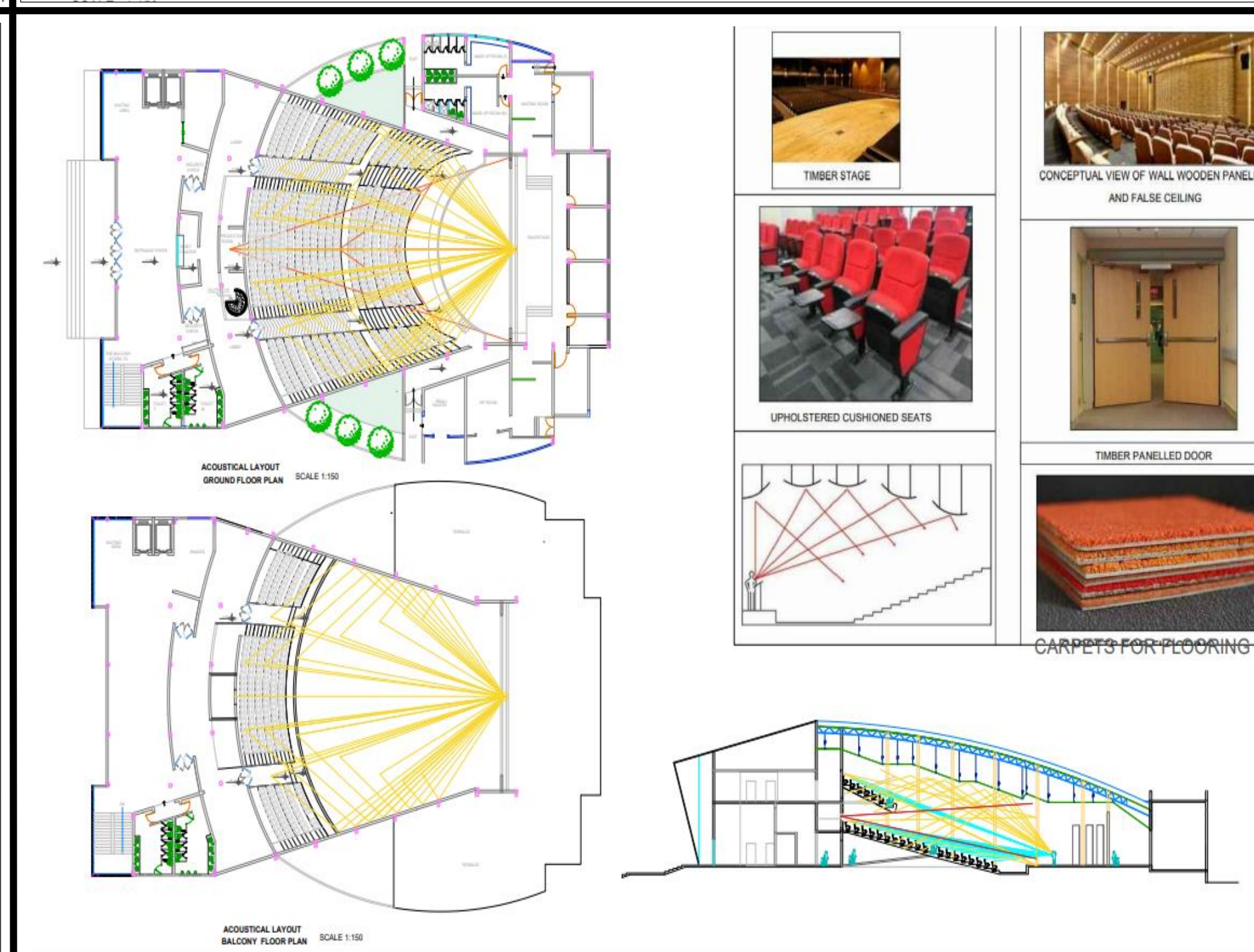
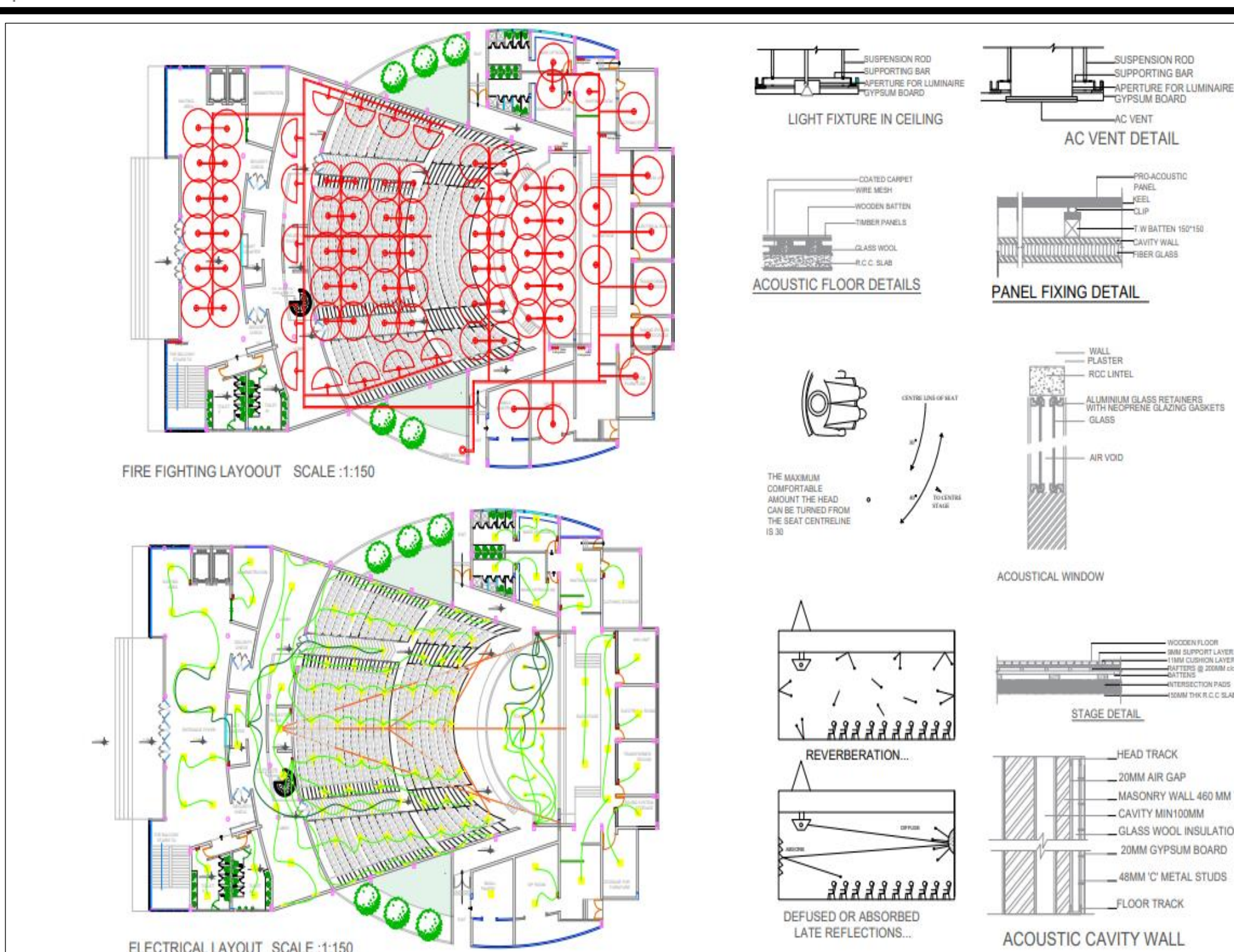
INDUSTRIAL SHADE

SHEET-1 CHECK-1 CHECK-2 SINHGAD COLLEGE OF ARCHITECTURE YASMEEN S. SHAIKH 4TH YEAR BARCH DIV-D ARTS-1 ROLLNO-17

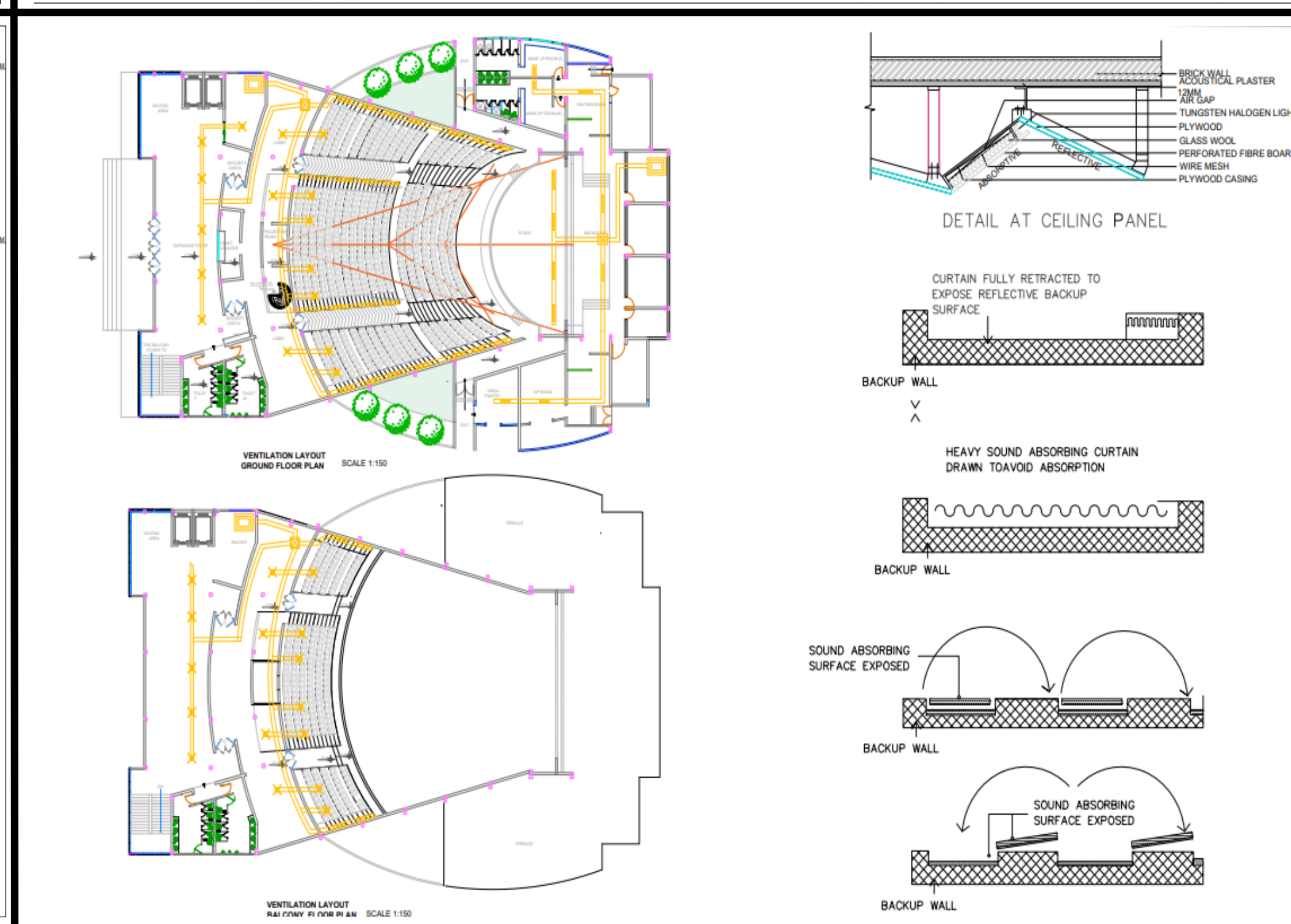
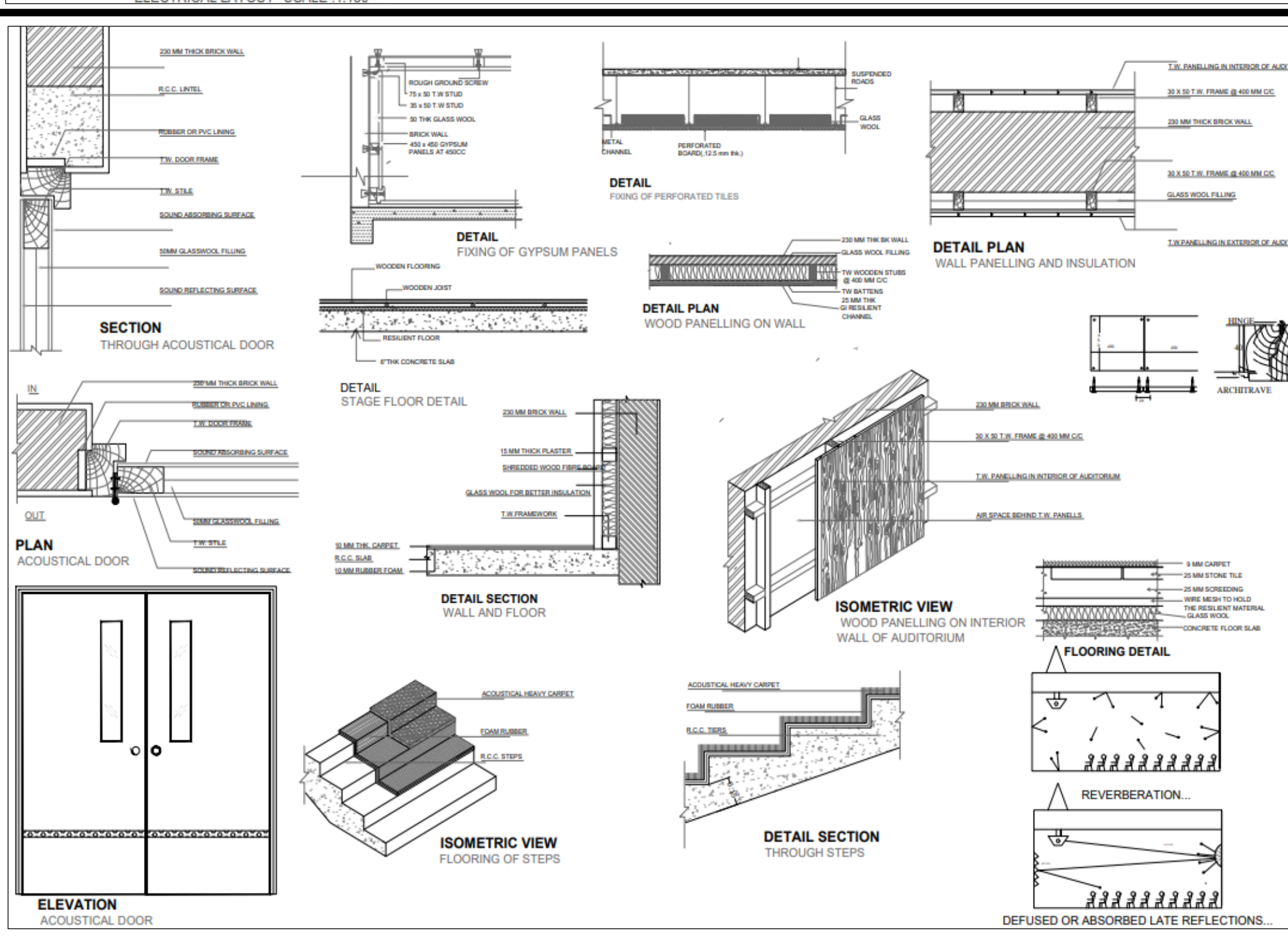


Objectives :

To Introduce Advanced structural systems, materials and services required in buildings with complex and special requirements and enable students to integrate the same in design.



Student: Ninad Deshmukh
Faculty: Ar. Manasi Khope



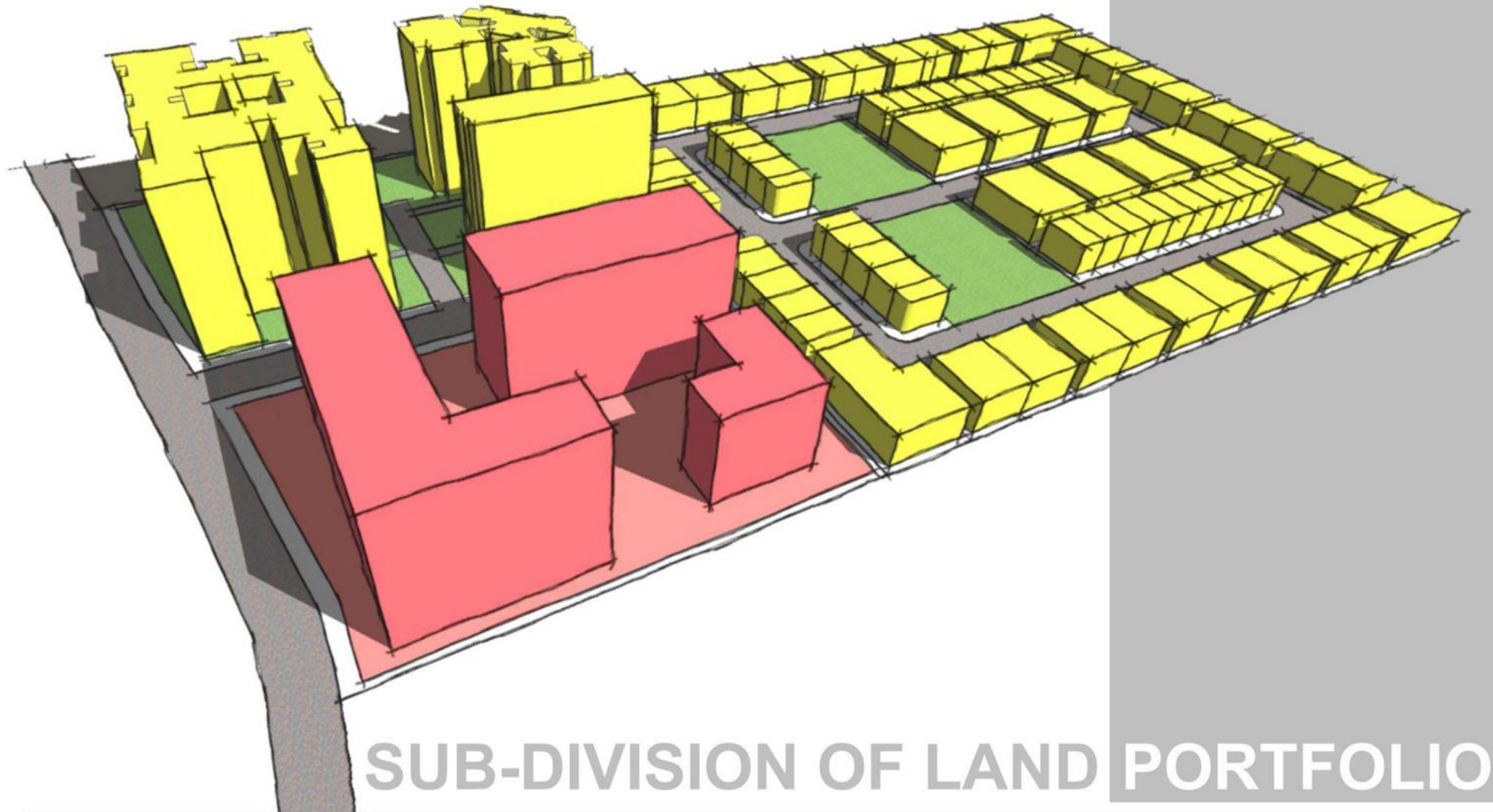
4th Year B.Arch 2021-2022 Advanced Building Technology and Services - II

Sinhgad College of Architecture, Pune

Sub-Division of Land

Subdivision of land for residential development (area 4Ha) –Individual assignment. The land piece is subdivided in no. of residential plots along with stipulated open space, amenity space and the road network as per the PMRDA rules and regulations. A service layout is also provided as a part of submission. Students were supposed to calculate the population density as well.

URBAN STUDIES - I



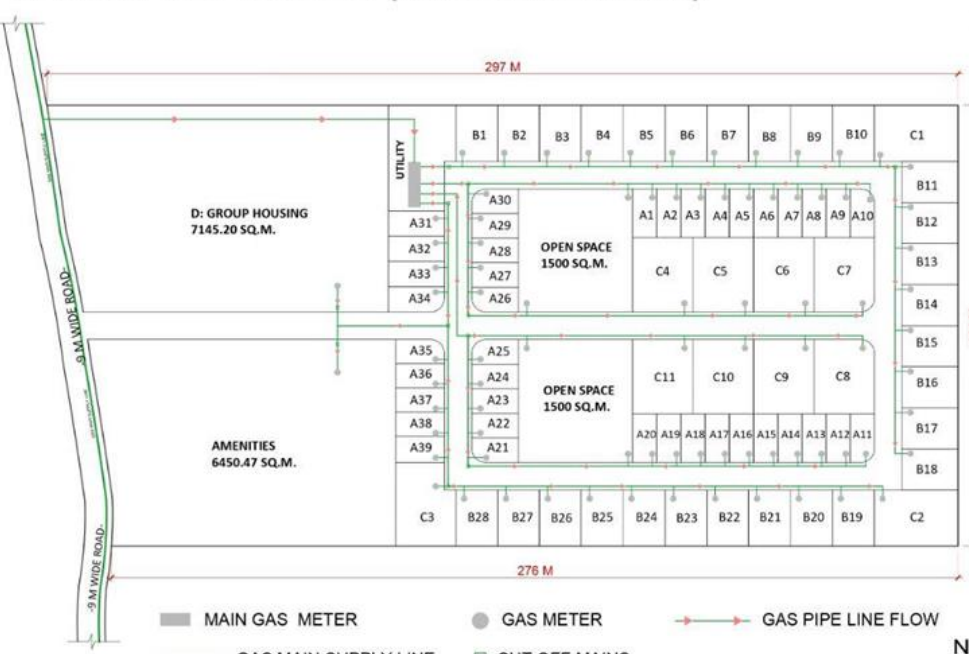
SUB-DIVISION OF LAND PORTFOLIO

SINHGAD COLLEGE OF ARCHITECTURE, PUNE
STUDENT- SHREYES ARUN KORADE
FOURTH YEAR B. ARCH DIV.-B ROLL NO.- 25
SUBJECT- URBAN STUDIES I

SERVICE PLANS

SUB – DIVISION OF LAND

GAS SUPPLY LAYOUT (MNGL LINE PLAN)-



GAS METER-

To measure the amount of gas that you use, the utility installs a meter between the incoming gas lines and the point of distribution at the house. A gas meter is driven by the force of the moving gas in the pipe, and also turns faster as the flow increases.



DISTRIBUTION BOX-

The distribution box serves as the load centre and distributor of electrical power. It is the central electrical supply system of any building or property.



METER BOX -

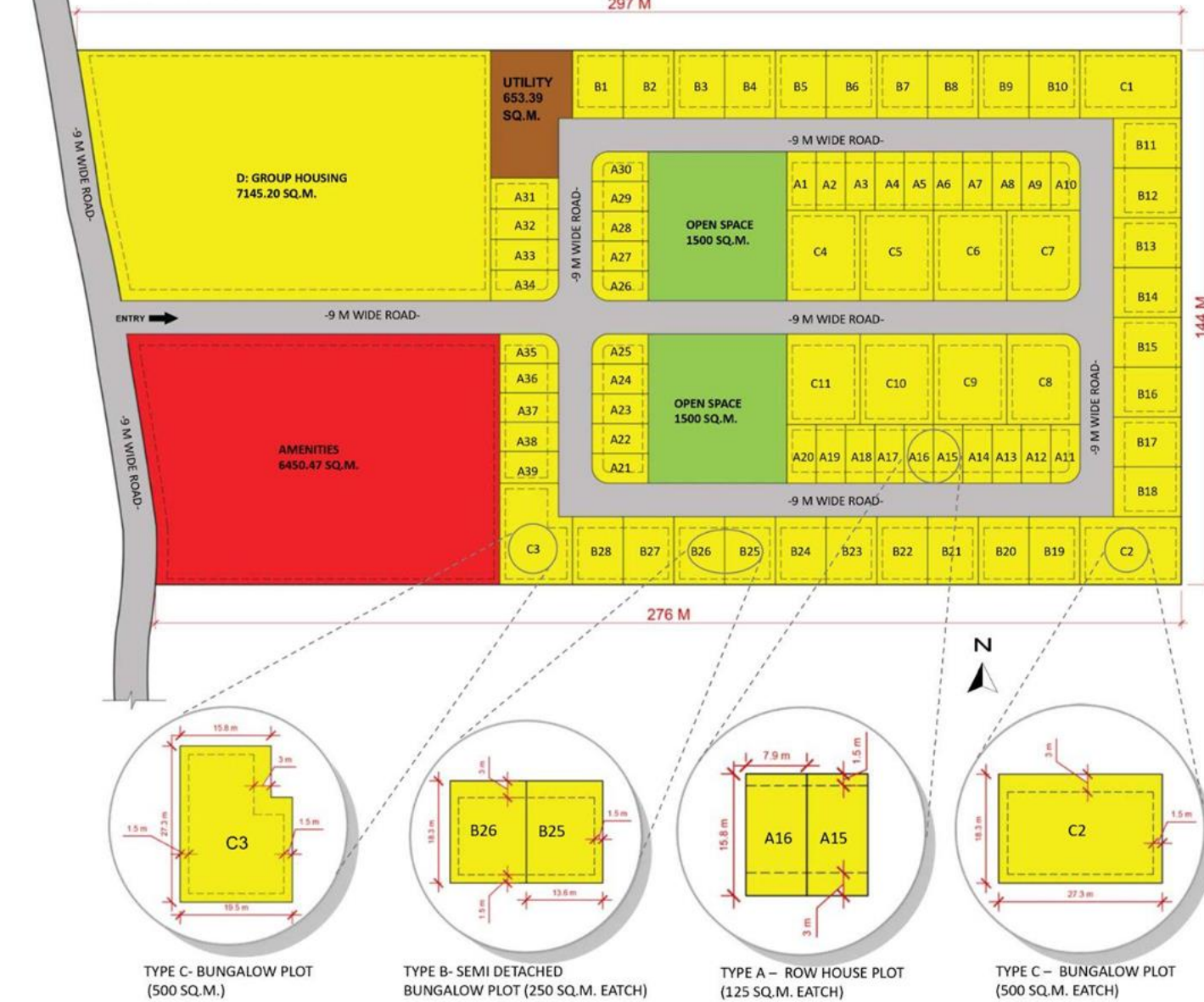
Inside the meter box will be the meter, a device that measures and records the amount of electricity used. It is usually enclosed on an external wall of a house or building. Fuses and circuit breakers, these control the flow of electricity into the home.

SINHGAD COLLEGE OF ARCHITECTURE, PUNE
STUDENT- SHREYES ARUN KORADE
FOURTH YEAR B. ARCH DIV.-B ROLL NO.- 25
SUBJECT- URBAN STUDIES I

SET BACK PLAN

SUB – DIVISION OF LAND

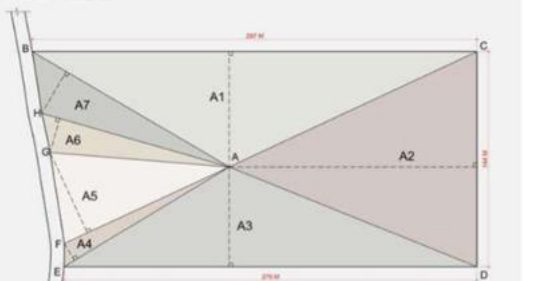
- AS PER DCR RULES FOR THE PLOT 3M SETBACK FROM ROAD SIDE AND 1.5 M FROM ALL OTHER SIDES IS PROVIDED.



BASIC PLANING OF SITE-

- As the site is located in baner pune, planning is done by considering climate and grid pattern.
- Open space (10%) is provided at central part of site, so that it is near to every type of house.
- Amenities are provided to front side (road facing) amenities are accessible from both the adjacent roads.
- Group housing is also provided near the adjacent road.
- Utility is also accessible from main road.

AREA CALCULATION BY TRIANGULATION METHOD-



PART	BASE (M)	HEIGHT (M)	AREA (SQ.M.)
A1	297.6	77.1	11,472.48
A2	144.0	166.0	11,992.00
A3	276.3	87.0	9,246.75
A4	129.2	13.2	852.72
A5	122.0	58.3	3,617.30
A6	130.4	24.0	1,564.80
A7	152.7	35.8	2,481.97
TOTAL GROSS AREA =			41,203.42

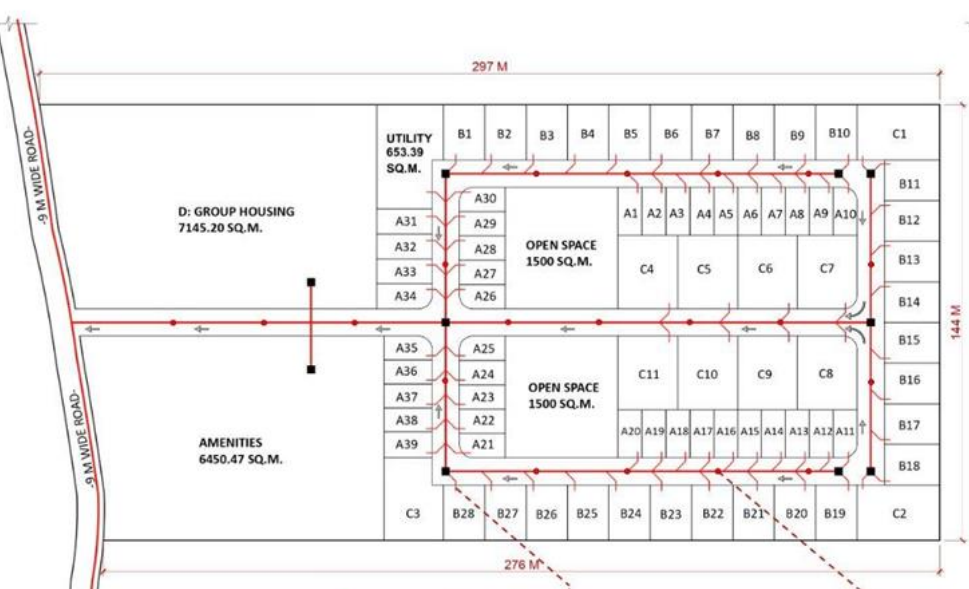
DISTANCES	
AB	152.6 M
AC	182.9 M
AD	178.8 M
AE	129.1 M
AF	121.6 M
AG	120.2 M
AH	130.4 M

SINHGAD COLLEGE OF ARCHITECTURE, PUNE
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FOURTH YEAR B. ARCH DIV.-B ROLL NO.- 25
SUBJECT- URBAN STUDIES I

SERVICE PLANS

SUB – DIVISION OF LAND

DRAINAGE LAYOUT -



INSPECTION CHAMBER

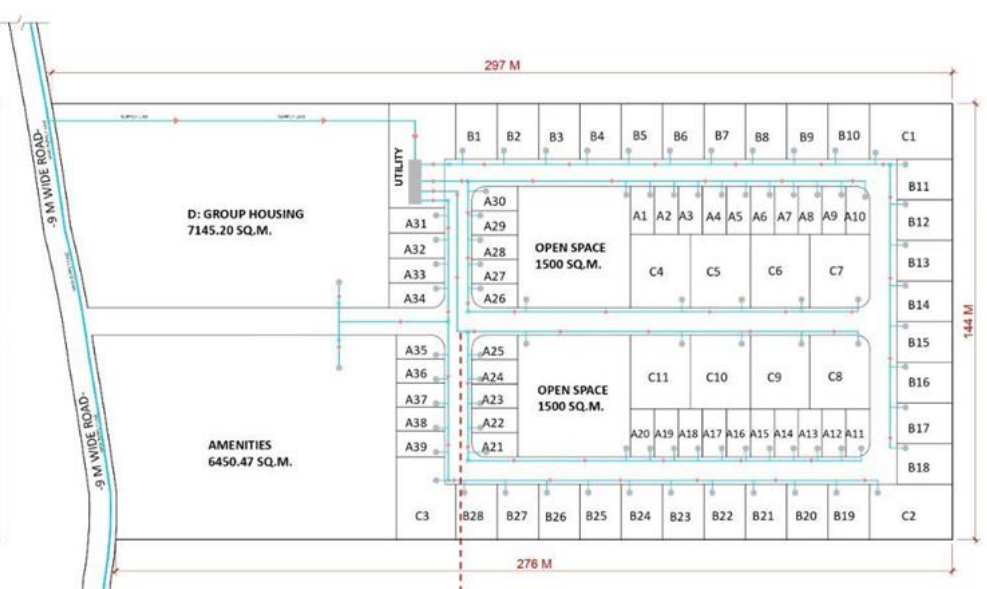
Inspection Chambers are a crucial part of any drainage system as they allow for testing, inspection and clearing of the system.



MANHOLE

Manholes are often used as an access point for an underground public utility, allowing inspection, maintenance, and system upgrades.

WATER SUPPLY LAYOUT -



WATER PUMP

A water pump is an essential tool to pump out water from the garden, pool, or under the ground. It controls the speed of the water and is incredibly useful in conserving water.



WATER METERING

Water metering is the practice of measuring water use. Water meters measure the volume of water used by residential and commercial building units that are supplied with water by a public water supply system.

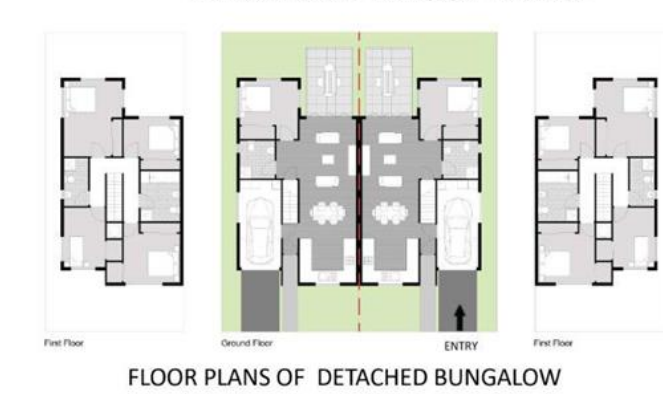
SINHGAD COLLEGE OF ARCHITECTURE, PUNE
STUDENT- SHREYES ARUN KORADE
FOURTH YEAR B. ARCH DIV.-B ROLL NO.- 25
SUBJECT- URBAN STUDIES I

BUILDING LAYOUT PLAN

SUB – DIVISION OF LAND



DETAIL UNIT LAYOUT PLANS -



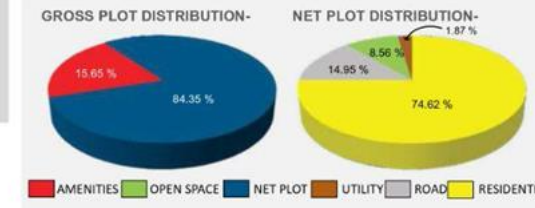
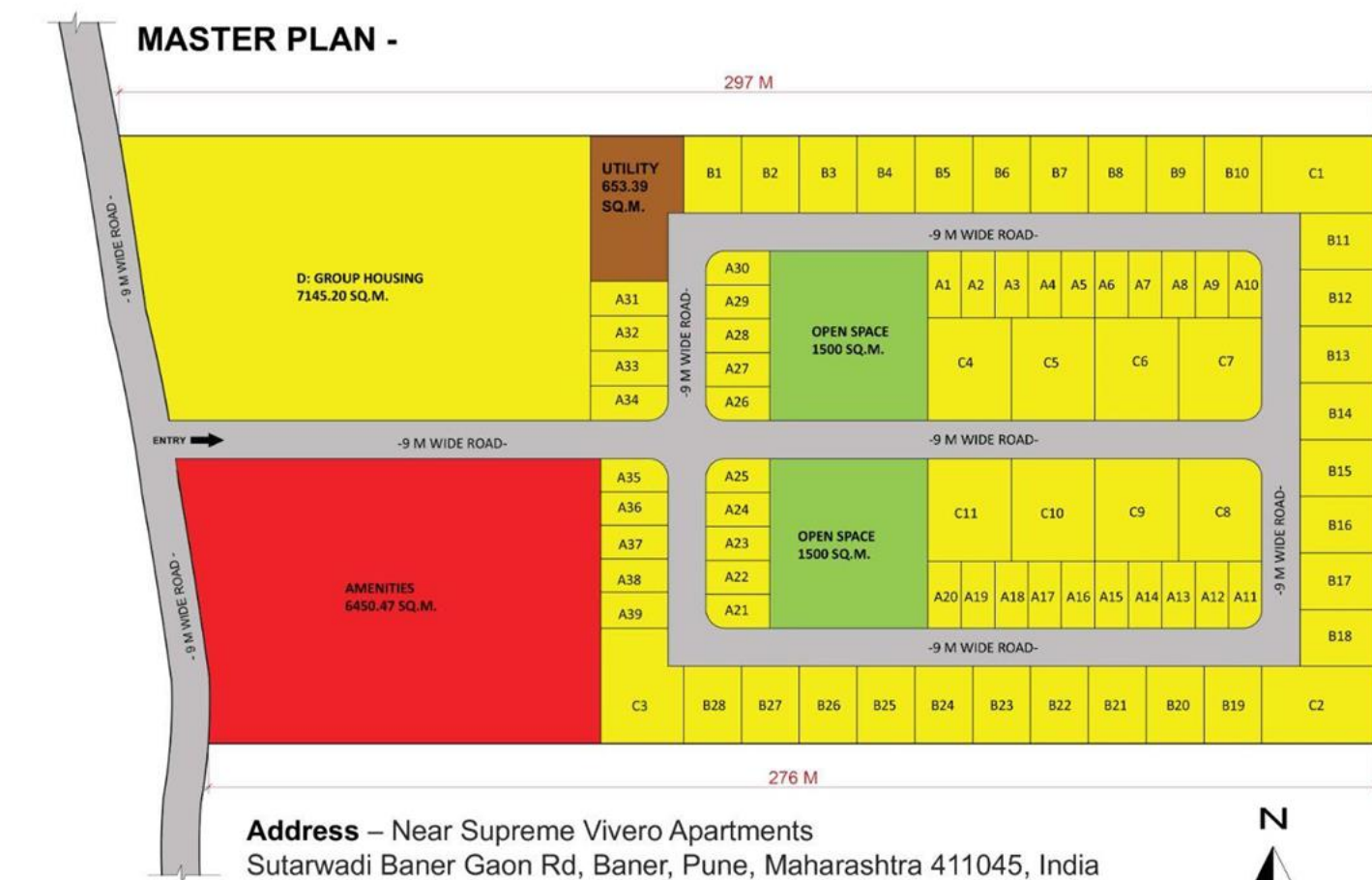
POPULATION CALCULATION

FOR TYPE A: 39 units X 5 persons = 195
FOR TYPE B: 28 units X 5 persons = 140
FOR TYPE C: 11 units X 5 persons = 55
FOR TYPE D:
PLOT AREA : 7145.20 SQ.M
FSI : 1.6
PERMISSIBLE AREA FOR BUILT UP :
7145.20 X 1.6 = 11,432.32 SQ.M
3BHK=50% = 11,432.32 X 50/100 =
5716.16 SQ.M
AREA OF ONE 3BHK = 150 SQ.M
NUMBER OF UNITS: 5716.16 / 150 = 38
POPULATION: 38 units X 5 persons = 190
2BHK= 30% = 11,432.32 X 30/100 =
3429.70 SQ.M
AREA OF ONE 2BHK = 90 SQ.M
NUMBER OF UNITS: 3429.70 / 90 = 38
POPULATION: 38 X 5 = 190
STUDIO =20% = 11,432.32 X 20/100 =
2286.46 SQ.M
AREA OF ONE 3BHK = 40 SQ.M
NUMBER OF UNITS: 2286.46 / 40 = 56
POPULATION : 56 units X 2 persons =112
TOTAL POPULATION :
195 + 140 + 55 +190 + 190 + 112 = 882
TOTAL AREA : 41230.42 SQ.M = 4.12
HECTARE
POPULATION DENSITY: 882 /4.12
= 214.08 / HECTARE

SINHGAD COLLEGE OF ARCHITECTURE, PUNE
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FOURTH YEAR B. ARCH DIV.-B ROLL NO.- 25
SUBJECT- URBAN STUDIES I

LANDUSE DISTRIBUTION

SUB – DIVISION OF LAND



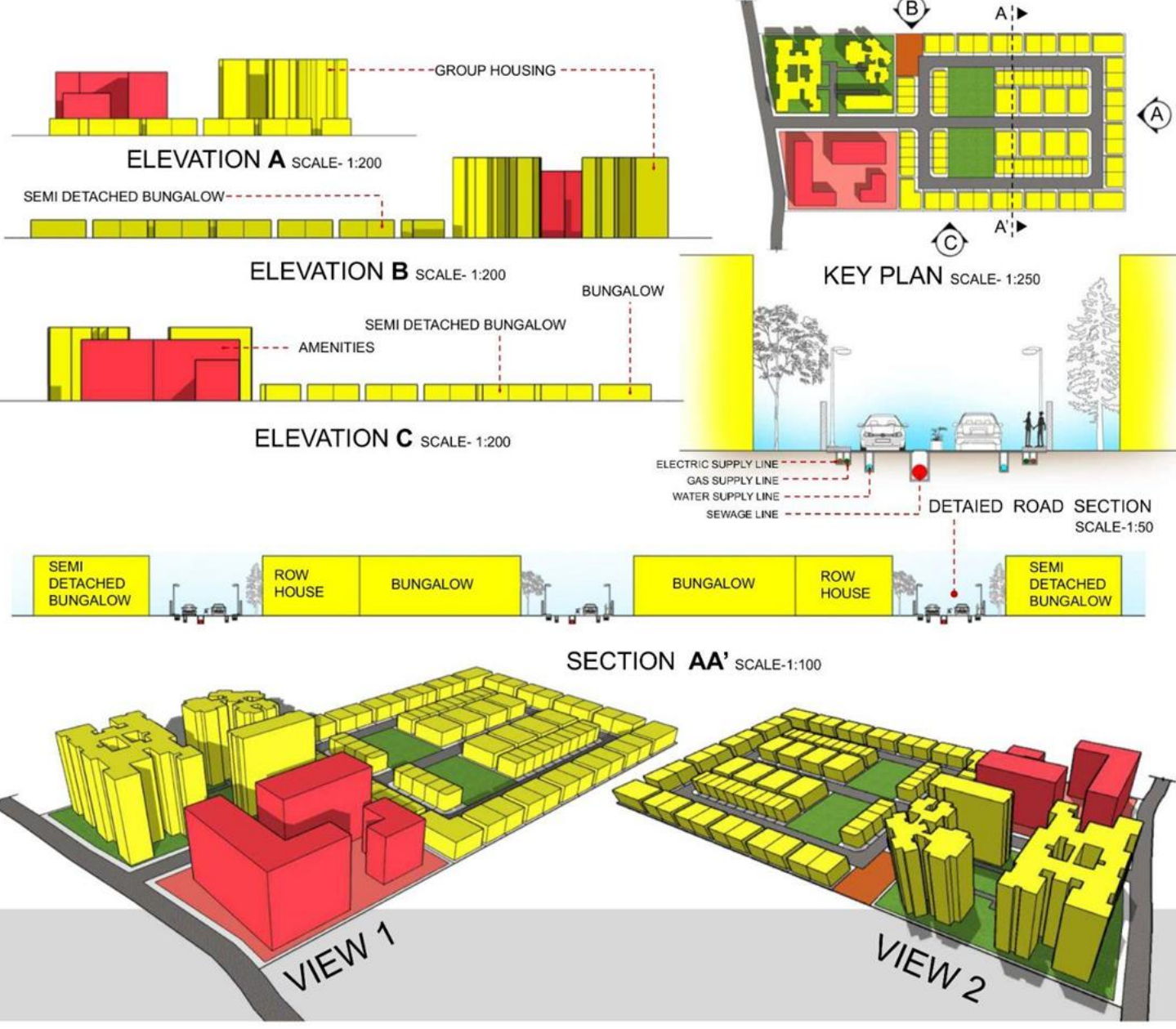
TYPE	PERCENTAGE (%)	AREA (sq.m.)
Group housing	15.65	8,430.47 sq.m.
Net plot area	94.35	36,023.97 sq.m.
Utility	1.87	653.39 sq.m.
Open space	8.56	3000.00 sq.m.
Road	14.56	5237.42 sq.m.
Residential	74.82	26,134.28 sq.m.

LANDUSE	PLOT	LENGTH (M)	BREADTH (M)	RATIO	AREA (SQ. M)	NO OF UNITS
A (Row housing)	A1 to A20	7.9	15.8	1.2	125	20
	A21 to A30	15.1	8.0	1.1	9	10
	A31 to A34	18.5	8.2	1.2	2	4
	A35 to A39	15.8	7.9	1.2	125	5
B (Semi detached bungalow)	B1 to B10	13.6	18.3	1.1	250	20
	B11 to B18	18.3	13.4	1.1	245.5	8
C (Bungalow)	C1,C2	27.3	18.3	1.1	500	2
	C3	-	-	-	500	1
	C4 to C13	19.8	24.3	1.1	480	8
D (Group housing)		-	-	-	7145.2	1
OPEN SPACE	OPEN SPACE 1	37.34	40.17	-	1500	1
	OPEN SPACE 2	37.34	40.17	-	1500	1
AMENITIES					6450.47	1
UTILITY					6450.47	1
ROAD					6425.3	1

SINHGAD COLLEGE OF ARCHITECTURE, PUNE
STUDENT- SHREYES ARUN KORADE
FOURTH YEAR B. ARCH DIV.-B ROLL NO.- 25
SUBJECT- URBAN STUDIES I

SITE SECTION ELEVATIONS & VIEWS

SUB – DIVISION OF LAND



SINHGAD COLLEGE OF ARCHITECTURE, PUNE
STUDENT- SHREYES ARUN KORADE
FOURTH YEAR B. ARCH DIV.-B ROLL NO.- 25
SUBJECT- URBAN STUDIES I

4th Year Year B.Arch 2021-2022 Urban Studies I

Sub-division of Land

Sinhgad College of Architecture, Pune

EXPERIMENT : No. Page No. Date

RIA - Assignment 1

1) What is research? Give its meaning & definition.

→ Research is defined as careful consideration of study regarding a particular concern or problem using scientific method. It is creative & systematic work undertaken to increase the stock of knowledge, which involves the collection, organisation & analysis of an issue.

2) What are the objective & characteristics of good research?

→ The objectives of a good research are for it to be relevant, feasible, logical, observable, unequivocal & measurable.

Characteristics:-

- Empirical - based on observations & experiments on theories.
- Systematic - Follows orderly & sequential procedure.
- Controlled - all variables except those that are tested/experimented upon are kept constant.
- Employs hypothesis - guides the process.

EXPERIMENT : No. Page No. Date

RIA - Assignment 2

Short Notes on:-

1) **Research Methodology.**

- It is a systematic way to solve the research problem.
- We study the various steps that are generally adopted by a researcher in studying his research problem along with the logic applied.
- It is necessary for a researcher to know the methodology along with the techniques, how is the problem defined, in what way & why the hypothesis has been formulated, what data have been collected & what particular methods are adopted, why a particular technique is used & various other questions are usually answered when we talk about research methodology.
- This means that it is necessary for a researcher to design his methodology for his problem.
- Research methodology constitute various methods & has many dimensions.

EXPERIMENT : No. Page No. Date

RIA - Assignment 3

Q1) What is research problem? Mention two main issues which should receive the attention of the researcher in formulation the research problem.

→ A research problem is a statement about an area of conduct, a conditioned to be improved a difficulty to be determined or troubling question in literature.

- Main function is to ~~clear~~ divide - what you want to find about & the way to formulate problem determines almost every step to follow.
- Source of research problems research revolves around four points P's: People, problems, programs, phenomenon.

Q2) What is the necessity of defining a research problem?

→ Defining a research problem is important to formulate a proper research. The problem is to be investigated & must be defined unanimously for that will help to discriminate relevant data from irrelevant ones.

- Defining a research problem is requisite for any study & is a step of the highest importance.

EXPERIMENT : No. Page No. Date

Q3) Techniques of defining a research problem.

- Statement of problems in a general way.
- Understanding nature of problems.
- Surveying the available literature.
- Developing the idea through discussions.
- Reframing the research problem in working proposition.

Q4) What is literature review, explain its necessity?

→ A literature review is a systematic and comprehensive analysis of books, scholarly articles & other sources relevant to a specific topic providing a base of knowledge on the topic.

Purpose of literature review is to:

- Provide foundation of knowledge on topic.
- Identify inconsistent gaps in research conflict in previous studies, open questions left from other research.
- Identify need for additional research.
- Identify the relationship of works in context of its contribution to the topic & other works.

Q5) Explain functions of a literature review?

A literature review has 3 functions:-

- To convey the researchers what ideas & knowledge have been established on a topic

Objectives:

Various themes such as kinds of variables, scope of variables, sample selection, Process of Research - Methodology, and how to conduct Literature Study are discussed, along with the purpose and necessity of research in architecture. To introduce students to Research in Architecture and its value in design .

Use of secondary sources, surveys, observations, and experiments in order to accomplish the goal of introducing students to architectural research and empowering them to create a research proposal.

Student: Utkarsha Chaphekar, Akshada Chaukhande, Raksha Alangi
Faculty: Dr. Pranoti Lad, Ar. Shreyas Paranjape

Akshada S. Chaukhande
4th year A
Roll No- 11 Date: / /

RIA I

Book Review

Title - Understanding Transition Spaces.
Importance and role in Indian Architecture.
Author - Ar. Rashmi Singh.

About Author - Rashmi Singh has completed bachelor of Architecture in Sushant school of Art and Architecture. Activities and societies - Debate team, Art and Craft. Received Merit award for Art and Crafts.

This paper talks about transition spaces - their importance and role in Indian Architecture. This paper also included case studies of projects by famous architects to understand the transition spaces better.

On studying & researching this paper and the case studies, I noticed that transition spaces plays a very important role in design & Architecture. We can also say that transition spaces, and the scale of it, plays a very important role in human behaviour, which in turn affects the planning of a city or building.

One of the most important function of transition spaces is sustainability in building design. The proper use and placement of these spaces in a building design may increase its energy efficiency. The design consideration should contain these space as a necessary feature and should not be considered a constraint. When architects talk about orientation of building, built form, site organization, topography, landscape then they should consider transition spaces as one of the aspects in building design.

Akshada S. Chaukhande
4th year A
Roll No- 11 Date: / /

About Your Research

Transition spaces between built & open spaces.

Transition spaces is the space of play and creativity - where our culture is created, where art is created.


Why transitional spaces?

Lot's of projects I love were actually located in a transitional space, where people normally won't stay. It's the place where people walk by everyday. But now take a second look, so I started to wonder what we can do with this space. I am interested in the temporality of the interactive art and want to dissect the interactivity and the philosophy behind of them.

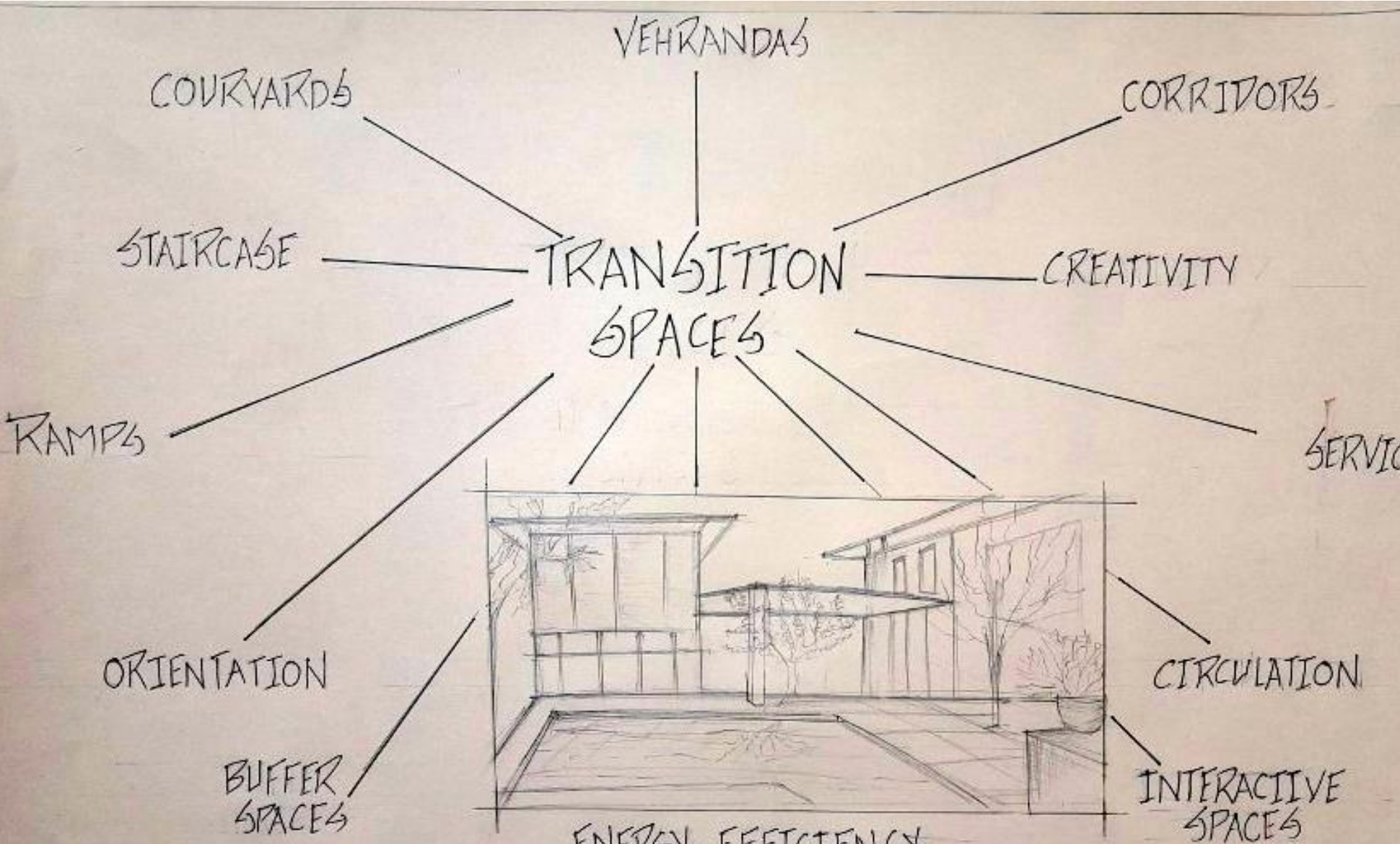
Types of Transition spaces.

1. Transition between two destinations.
2. Transition between exterior & interior.
3. Transition between nature & buildings.

Type 1



MIND MAP



CHECK-1	SINHGAD COLLEGE OF ARCHITECTURE	STAMP
	AKSHADA S. CHAUKHANDE	
	IV YEAR B.Arch DIV - A	
	SUB - RIA I ROLL NO - 11	

Akshada S. Chaukhande
4th year A
Roll No- 11 Date: / /

Book Review

In this paper we can study that, how the transition spaces could be beneficial by the sustainability perspective.

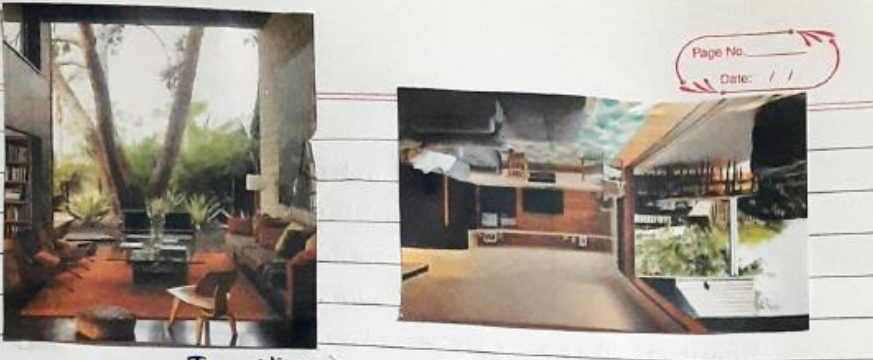
- The layer of corridor as transition space on the periphery of the built form/private rooms, reduce glare and direct sun, which results in cooler inside spaces.
- An enclosed or semi closed passage connecting two dwelling units creates a comfortable transition for the occupants. If the space is semi closed it can be used as a space of interaction or sit out.
- The provision of water bodies in a transition spaces water cool breeze giving out the cooling effect to the interior.
- Courtyards serves as nice interactive space. They also prevent heat and glare from directly entering the rooms and keep them cooler. Extended roofs in the courtyards makes the courtyard cooler itself.

Therefore, by understanding the transition spaces, we can say that it is very interesting space even all. It contributes the spatial quality of space, whatever be the setting and context. Its role functional, special, symbolic & visual and it serves a building from the perspective of sustainability also.


Akshada S. Chaukhande
4th year A
Roll No- 11 Date: / /

Research Proposal

Type 2



Type 3



Transition between Indoor & Outdoor

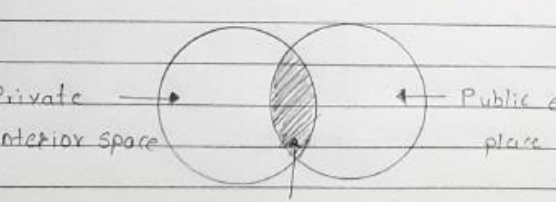
Transition between Nature & building.

Purpose of transition space spaces.

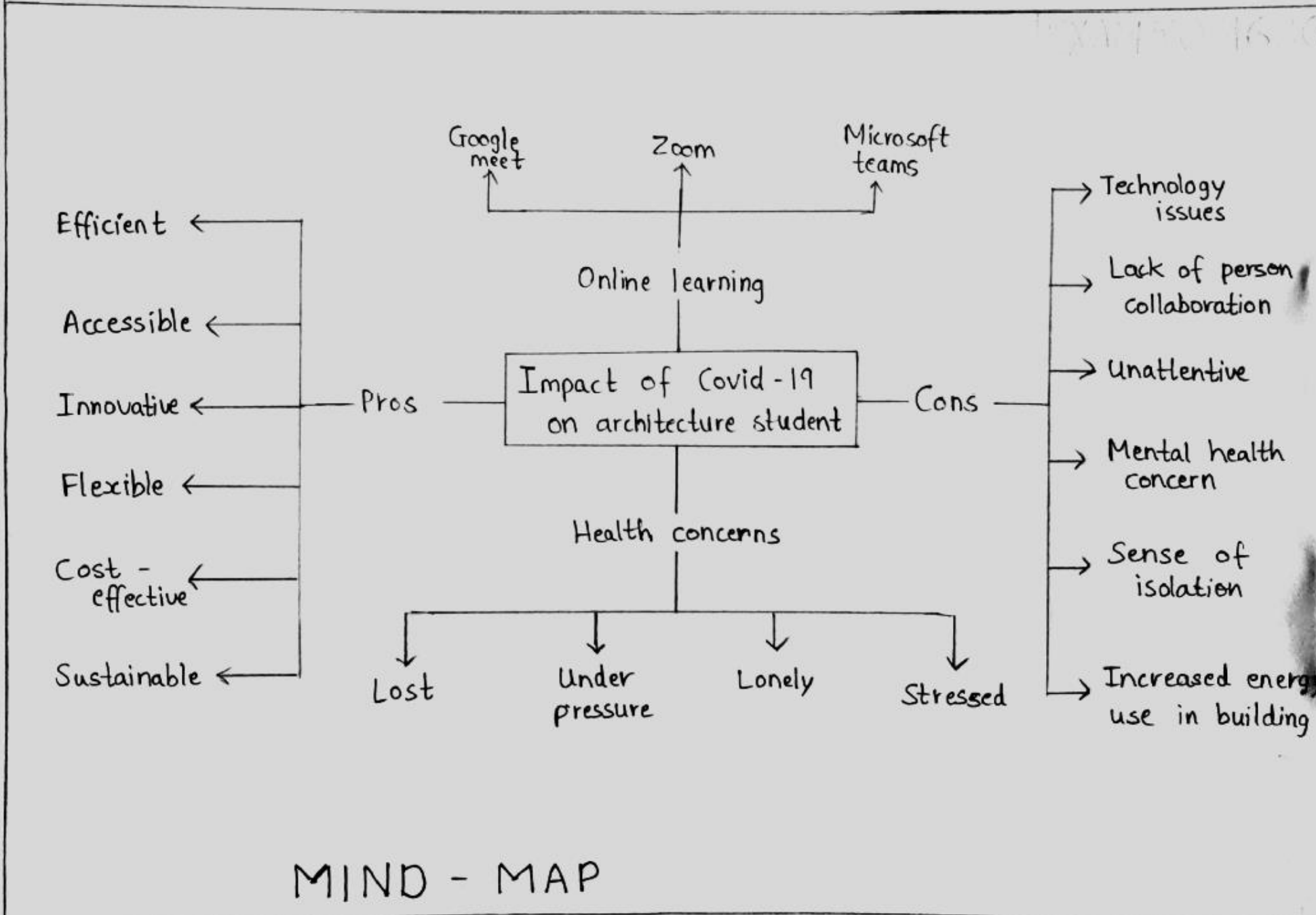
It is the space that processes a change from one condition to another, is located in between outdoor & indoor environments, and acts as both buffer space and physical link, other than being functional & circulatory route for the building.

Examples about transition spaces

Courtyards, Verandas, Corridors, staircase & ramps are common examples. These spaces are important as they make other static spaces, relate to each other.



MIND - MAP



4th Year B.Arch 2021-2022 Research In Architecture I

TUTORIALS BOOK REVIEW MINDMAP

Sinhgad College of Architecture, Pune

REDEFINING THE USE OF TRADITIONAL INDIAN ELEEMENTS IN CONTEMPORARY RESIDENTIAL STRUCTURES

AIM

To redefine the use of traditional Indian elements into contemporary residential structures.

OBJECTIVES

- 1. To redefine the use of these traditional Indian elements into the contemporary residential structures.
- 2. To understand how the traditional elements reflect on the Indian culture and their lives.
- 3. The use of elements and their evolution through different case studies.

RESEARCH QUESTION

- 1. Would you redefine the use of these traditional elements in contemporary structures?
- 2. What are the different types of elements that can be used?
- 3. Why has it become necessary to bring back the traditional elements?
- 4. Is the blending and use of the elements restricted to only residential structures?

NEED OF THE STUDY

Indian architecture contains various unique architectural styles having some typical elements of design which in present day can be incorporated in contemporary styles. These elements are a very important aspect as they constitute to establish architectural design. Therefore my paper aims to recognize and redefine the use of the traditional Indian elements.

SCOPE AND LIMITATION

This paper will also help to process and bridge the gap between the so-called traditional Indian elements and the contemporary structures. The paper limits its study on traditional elements that is columns, doors , windows, Jharokas, jaali , pitched roof and courtyards. This research paper will be also limited only to the study of Indian traditional elements in contemporary residential structures and not the overall traditional architectural style.

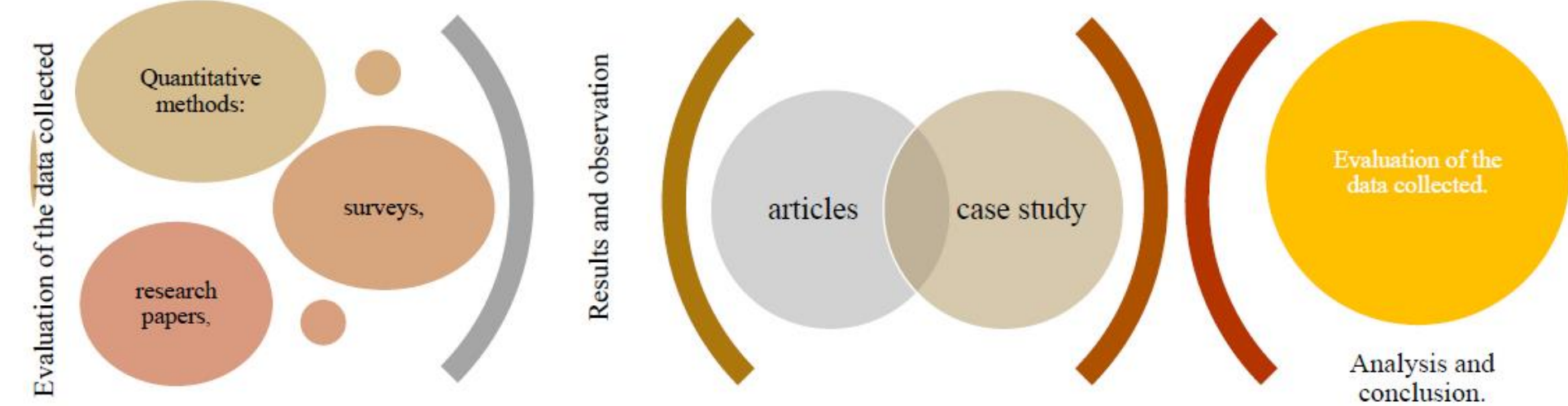
INTRODUCTION

Architecture and human growth have always been quadrated. History has taught us that the invasion of industrialization and modernization has frequently taken over centuries of antique traditions and cultures in many countries. The contemporary elements compared to the traditional ones lack sustainability as the traditional elements were typically made up of stone or wood.

ELEMENTS IDENTIFIED FOR STUDY



METHODOLOGY



LITERATURE REVIEWS

1. Use of Architectural Elements in Evolution of Regional Style in Jaipur by Shubham Sharma, 2009 – This paper aims to study the use of an architectural element in Jaipur and its evolution of style and to understand the different types of elements used and the evolution of its style throughout considering the climate.



Courtyard
Source : <https://www.slideshare.net/shubhamarch/use-of-architectural-elements-in-evolution-of-traditional-style>

Columns



Column
Source : [How to Infuse Traditional Indian Elements Into Your Modern Home \(houzz.in\)](https://houzz.in)

Carved door

2. Spatial narratives in traditional Indian architecture: An interpretation for contemporary relevance by Yatin Pandya, 10th May 2017 - To study the different related narratives in traditional architecture by understanding its contemporary relevance. The paper aims to study the different narratives of traditional architecture through the tradition and culture of India and to understand the contemporary relation through its interpretation. It further analyses how one can relate to the different spaces occupied within the architectural traditional style.



Jharokha
Source : <https://www.irjet.net/archives/V7/i5/IRJET-V7I5807.pdf>

Jali

3. How to infuse traditional Indian elements into modern homes by Preeti Singh, 10th may 2017 - To understand the different types of elements and how to blend in the elements. One can be successful in infusing these key traditional elements into modern homes with the right tactic spots.

4. Glimpses of Indian Traditional Architecture by Ar. Tania Bera, 5th May 2020 – This paper aims to study and understand the different types of traditional architectural styles that evolved in India and to understand how the religious diversity aspect has played an important role in these architectural styles. This paper has helped to understand the importance of tradition and culture and how it has reflected not only on our lives but also on the architectural style.

1. A bungalow in Mumbai

Address – Mumbai, India

Architect – Insitu by Kalakaarihaath

Photography – Suleiman Merchant

Elements include – door, ceiling and columns

This project in Mumbai is a renovated project that is a two-storey bungalow that is restored with traditional Kerala elements. The elements included in this are the heavy ceilings, columns, and a carved front door with a frame. “The main brief was to clean it up while maintaining the character of it, in a way that reconciled the aesthetic and the functionality of the space,” says the lead architect of the project.



Main entrance door
Source : Suleiman Merchant - Maram Bungalow



Wooden columns and ceiling recessed in the existing structure



View of a hall area

2. A house in Jalandhar

Address – Jalandhar, India

Architects – 23DC Architects

Lead Architects – Shiv Dada, Mohit Chawla

Photographs – Purnesh Dev Nikhanj

Project Year – 2018

This house in Jalandhar is one of the best example where the blend can be seen of traditional Indian elements in a contemporary structure. The elements that are blended in this structure are the columns, courtyard and carved door. A courtyard in this bungalow is an element that is open to the sky which provides an outdoor space but is designed in such a way that it is away from the public eye.

Other elements like ornamented stone columns can be seen along the garden area. These elements in the bungalow not only adds to the aesthetic but also contribute in the quality aspect of the space.



Ornamented stone columns along garden area

Source : <https://www.bing.com/search?q=house+in+jalandhar+with+traditional+elements&FORM=HDRSC1&ntref=1#>



Secondary entrance door

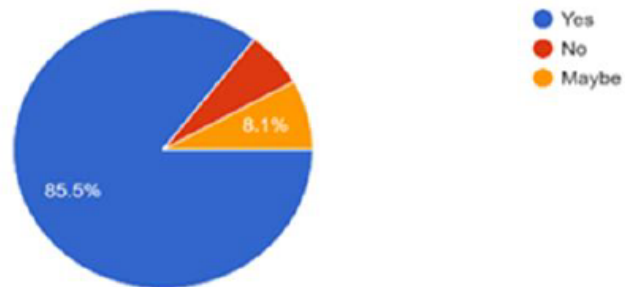


Courtyard area

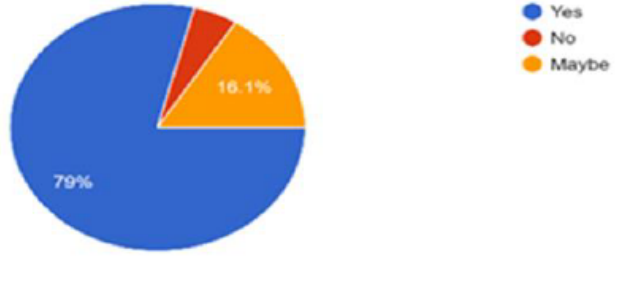
RESULTS AND OBSERVATION (SURVEY CONDUCTED FOR THE ARCHITECTURAL STUDENTS AND ARCHITECTS)

- The analysis of the data collected through survey shows that majority of the people (85.5%) would consider having traditional Indian elements in their home while 79% of people also consider redefining the use of it through blending them in the contemporary structure.
- The different elements people would consider having in their home are pitched roof, Intricate Jaalis patterns, carved doors and windows, Jharokhas, columns, and courtyard with a majority of people (41.9%) considering of infusing Intricate jaali pattern followed with other elements mentioned.

Would you consider having traditional elements in a contemporary house ?
62 responses



Do you think Indian traditional elements and contemporary can blend in together ?
62 responses



What type of traditional elements would you like to see in your home?
62 responses



SOURCE : Author

CONCLUSION

This paper reveals the use of these traditional elements in contemporary structure while redefining them. Blending in the traditional architecture along with contemporary designs is the best bet to keep alive the magic of the traditional Indian element along with the convenience of contemporary designs. Traditional Indian elements were not only about the aesthetic appeal but also rather blending in with the climate & atmosphere of a particular region. We must try and implement these aspects in our designs. The addition of the traditional Indian element should not be thought of as a mere aesthetic feature but should also contribute to the quality of the space. Provided these things are taken care of, Indian elements could very well be incorporated into contemporary residential structures.

REFERENCES

- i. [New tab \(houzz.in\)](#) (Singh, 2017)
- ii. [This Mumbai bungalow is a vision of old Kerala | Architectural Digest India](#) (Shankar, 2021)
- iii. [An Indian Modern House / 23DC Architects | ArchDaily](#)
- iv. [spatial narrative in traditional indian - Search \(bing.com\)](#) (Pandya, 2017)

Student: Janhavi Dhamdhare

Faculty: Ar. Pranoti Lad, Ar.Vrushali Dhamne

4th Year B.Arch 2021-2022
Research In Architecture II
SEMINAR PRESENTATION

Sinhgad College of Architecture, Pune

Structural defects



Earlier situations



Today's situation

Defects : Breaking the interiors mirrors.

Causes : Spontaneous breakage of tempered glass is most commonly caused by chipped or nicked edges during installation, stress caused by binding in the frame, internal defects such as nickel sulfide inclusions, thermal stresses in the glass, and inadequate thickness to resist high wind loads



Earlier situations



Today's situation

Defects : Fading

Causes : It means discoloration of the exterior walls, domes. This is mainly due to atmospheric agencies such as sunlight, moisture etc.

COURSE CONTENT:

- Mind map
- Inventory Information
- Structural Defect
- Poster for World Heritage Site
- Cultural Landscape – Case Study

Student: Ninad Deshmukh

Faculty: Ar. Avani Topkar

4th Year B.Arch 2021-2022
Elective-II

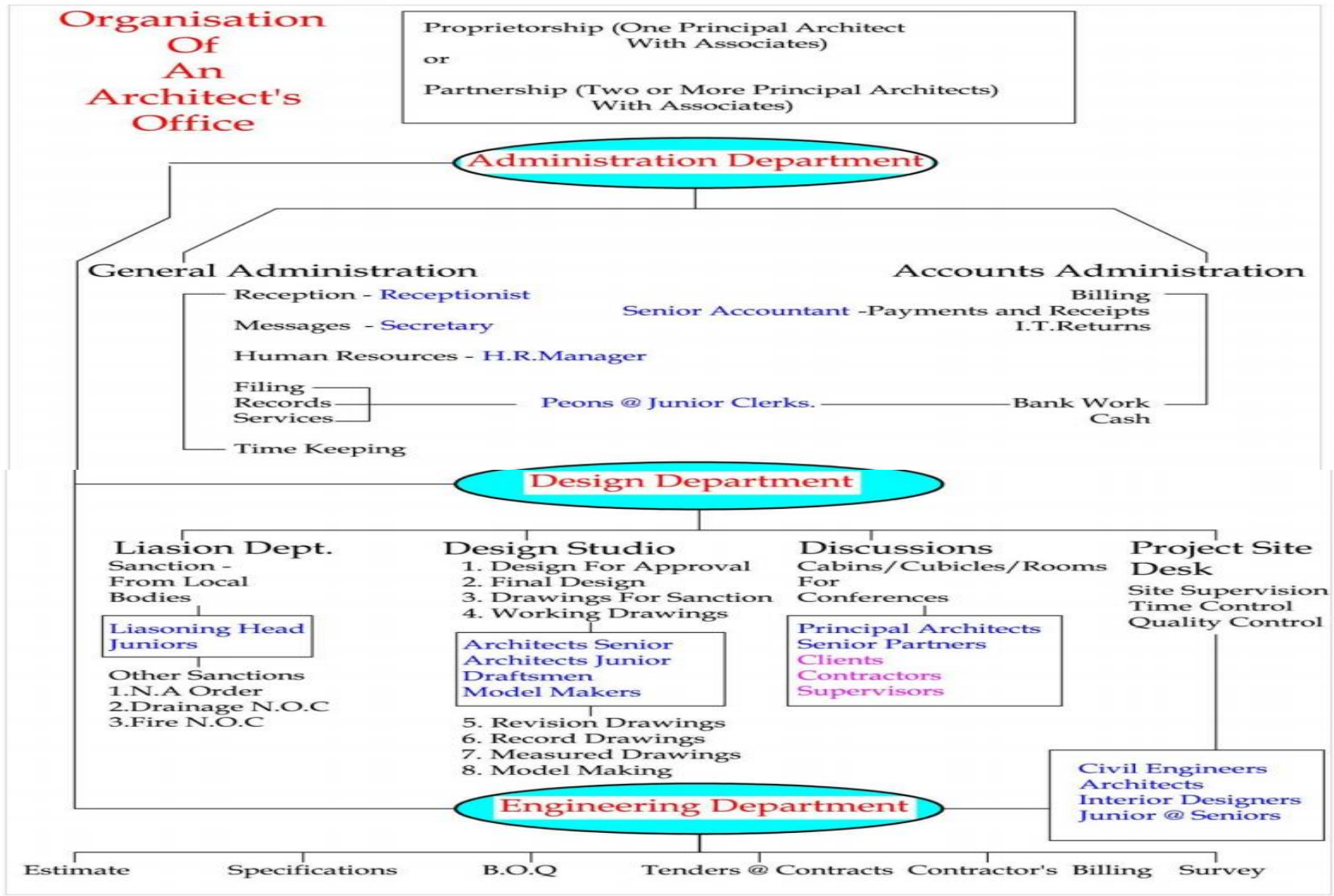
ARCHITECTURAL
CONSERVATION

Sinhgad College of Architecture, Pune



Sample of lecture and PPT content

Organisational Chart of an Architect's Office



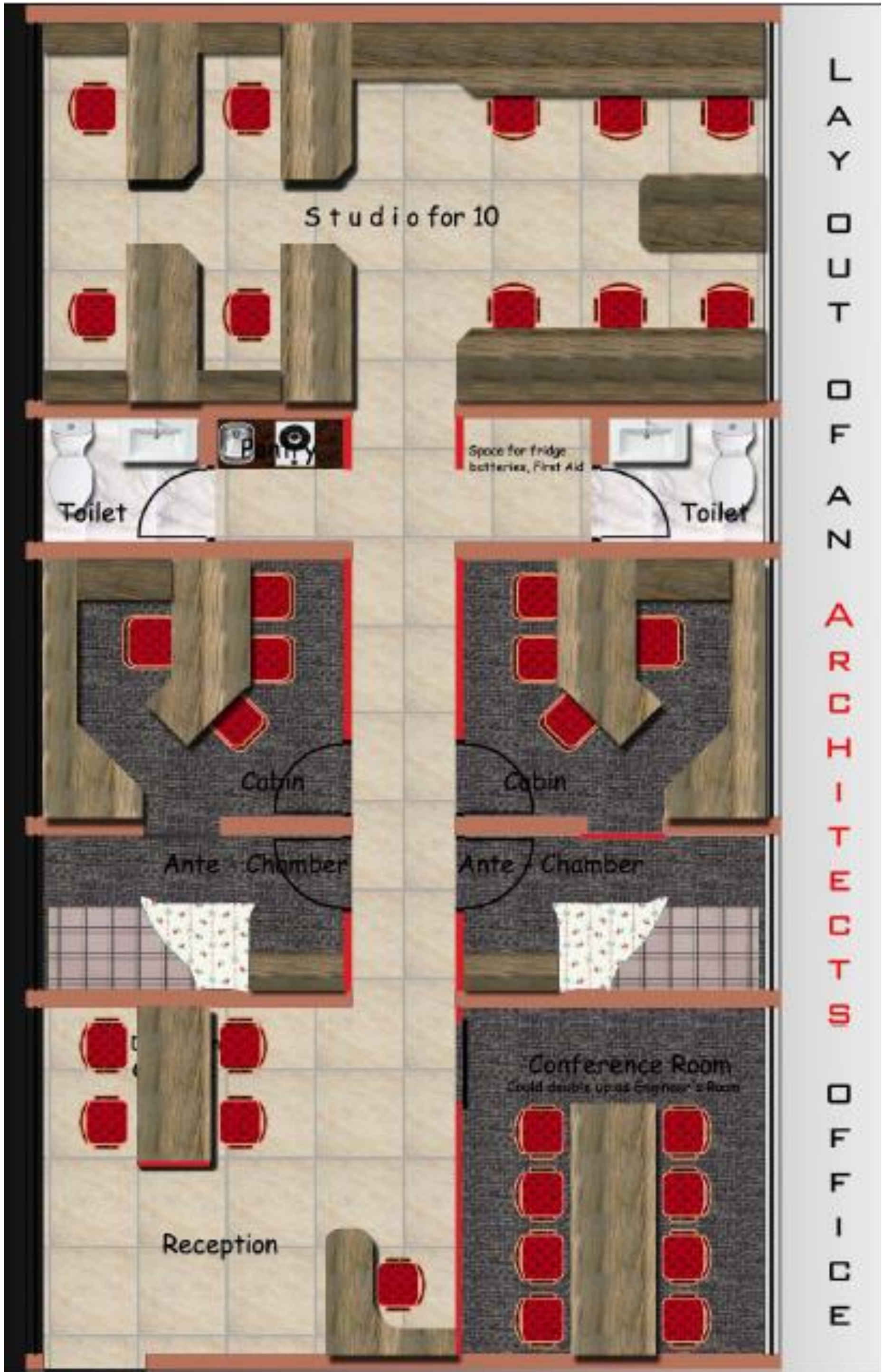
The Pune Context

Over the last few decades, the City of Pune has seen rapid growth. The once idyllic town has grown in leaps and bounds due to the Industrialization, Proliferation of Educational Institutes, and IT Boom and as such the 'Development' has not matched the 'Growth' of the City and hence the City is found wanting as far as certain Civic amenities are Concerned.

10 points/ issues in Pune context:

- 1. Traffic issues:** A lack of Strong Public transport , issues magnified by Lack of traffic discipline.
- 2. Pedestrian Insensitivity:** Lack of adequate infrastructure for Pedestrians
- 3. Increasing Environmental Pollution:** The Lesser said the better
- 4. Untreated Sewage Problem:** Sewage untreated but let in the river causing pollution and degradation of River.
- 5. Encroachments:** Encroachments in River by way of Roads, slums
- 6. Hills Endangered:** Development (Unauthorised or otherwise) of Hills and hill slopes surrounding the city.
- 7. Ground Water Depletion:** Unequal Water Supply in parts of Pune City leading to excessive use of ground water causing depletion.
- 8. Reduction in Green cover:** Green Cover Depletion to accommodate the growth of the City
- 9. Solid Waste Mismanagement:** The City generates huge amount of garbage everyday which is taken to land fill sites outside the City. Unavailability and resistance for of land fill sites has made garbage disposal a major issue for the City and there is urgent need to take up decentralized segregation, vermin composting of wet garbage and recycling to ensure a better Solid waste management.
- 10. Menace of Proliferation of Slums and Squatter settlements:** Due to increasing migration and lack of cheap housing Slums are on the increase resulting in settlements that lack basic sanitation and have poor living conditions.

Sensitivity to urban context



Course Objectives:

- To acquaint the Student with the Role and Stature of an Architect in Society, and understand the duties, responsibilities, liabilities and ethics as a professional.
- To acquaint the Student with the Scope and Avenues of professional Architectural services, and the demands and Mode of professional practice, and to prepare the Student for the professional field.
- To familiarize and prepare the Student with adequate knowledge of an Architect's office administration, documentation and procedures of office and site management to enhance his comprehension and utility during his professional training in the field in Semester IX.

Student: Trupti Khedkar
Faculty: Ar. Pallavi Patil

Sinhgad Technical Education Society's		
Sinhgad College Of Architecture, Pune		
MCQs for Subject :PPI		
Ar.No	Term I	2020-21
Questions		
1	Competition Guidelines are laid down by	
2	Aims of the competition is	
3	assist in the preparation and approval of the brief	
4	Registration certificate issued by	
5	is type of competition	
6	Competitors may be organised in	
7	who cannot compete in competition?	
8	What is important in competition?	
9	The appointment of the Assessors	
10	The Council of Architecture (COA) has been constituted by the Government of India under the provisions of the	
11	What does IIA stand for?	
12	An elected or nominated council member shall hold office for the term of	
13	Register of architects shall include following documents	
14	An architect may exhibit his name outside his office provided the lettering does not exceed in height	
15	The practice of profession of an architect is governed by	
16	How many council members are required for a Quorum?	
17	An architect's duty towards his client should be,	
18	The Council shall meet at least once in every months	
19	An architect is not liable for any liability, if the damage to the building has occasioned in the following circumstances:	
20	An architect's duty towards Society should be	
21	Regulations 1963 deals with	
22	What are the duties of registrar	
23	Section 29 and 30 in Architects Act is about	
24	An Architect can make Himself Visible through his Work as Architect and also through Advertisement	
25	A paid occupation involving training and qualification is termed as	
26	Architectural Practice is a	
27	First Step to Start a office is	
28	An Architect can put up banners and Hoardings to advertise self	
29	Should your company be	
30	Entering a competition can give you - 1 opportunity to present globally 2. Design futuristic 3. Get paid for participation 4. get recognized, 5. collaborate and work	
31	Social medium can help an Architect get noticed	
32	I should focus only on acquiring new clients	

33	What is the Full form of A.E.S.A?
34	Building your website and having a newsletter is good way of promotion
35	A Business man can be a Professional and vice versa
36	Single owned Practice is called as
37	Formal education is a must for running a Business
38	What is the reward when in Profession?
39	Shareholders, Limited Liabilities, Board Members, Liquidations, these terms are associated with
40	Who needs to give out public advertisements?
41	Are there monetary losses involved in Professional Practice?
42	When in Partnership, all liabilities are equally shared among all partners
43	One should collaborate with other professionals and update with the latest to keep up with ever changing scenario of the world
44	To get more clients, an architect can use different ways like
45	The main objectives of a Professional is
46	Architects should accept payments in return for specifying or endorsing a supplier, without letting other parties involved know about the arrangement
47	When acting as an arbitrator, an Architect should be
48	For sole proprietorship, the liability on the individual is
49	For partnership we need to have
50	Advantage of having corporations is
51	The main function of COA is
52	An architect's duty towards the client shall make him
53	As a professional duty, an architect shall bring to his task a reasonable degree of knowledge and skill and must exercise a reasonable degree of care
54	The architect's liability shall be limited to a maximum period of three years after the building is handed over to or occupied by the owner
55	Lawyer's firm can be classified as
56	Active promoting includes
57	Bank is
58	Current accounts suited for,
59	Current accounts earns
60	Withdrawals in current account is
61	Development banks are for
62	A professional association is generally
63	IIA's first stage of development was
64	IIA stands for
65	IIA is spread across country in how many regions
66	Apart from COA, only this institute can award the degree of B.Arch. after successful attempt of exams
67	Student membership is not available in which of the following organization

ASSIGNMENT NO. 1

1. would you recommend an Architect to promote himself or his firm for getting Architectural jobs? Give reasons for your answer.

→ Yes, I would recommend an Architect to promote himself for getting Architectural jobs.

In today's ever-growing and competitive world, one has to promote self to market and get projects which in turn will get us more projects. so they need to be smart and strategic in how they spread and how they bring in new work.

2. if you recommend promoting in the previous question, explain various ways of getting jobs into architectural firms.

→ following are few ways that can be accomplished easily -

1) Social Media for Architect promoting - this is the place that public is talking about their lives, architects should take part in joining that conversation.

ASSIGNMENT NO. 2

1. explain basic difference between business and profession with the following.

a) Basic definition:

→ 1) Business - A business is defined as an organization or enterprising entity engage in commercial, industrial or professional activities, irrespective of profession. A profession is a job at which someone works and for which they have had training.

a) Mode of establishment:

a) Business - A business establishment is defined as a location where business is conducted, goods are made or stored or processed or where services are rendered.

profession - the profession may commence on completion of a degree course & by getting a certificate of practise.

b) Nature of work:

a) Business - the nature of an employed work is best defined as the type of work that he does. the nature of this work may be summed up in

Circulated Question bank for MCQ

Handwritten notes by students

Sample of lecture and PPT content

- 1.1 Importance of Construction Management**
- Construction is a vital process to convert an Architect's Design into reality. **Most Architects may find this process a tedious one and not part of their creative journey specially the tendering and post tendering Site Management process;** however the process is an unavoidable part of an Architect's Professional Practice.
- Let us once again look at the stages of an Architects service to his client in brief against the fees due to him and draw some conclusions
- Stage.1** Conceptual Design and Rough Estimate – 10% of fees
- Stage.2** Preliminary Design and Estimate – 20%
- Stage.3** a: Final Design Approval and Local Approval Drawings – 30%
- Stage 3 b:** Final Client's approval necessary for construction Drawings making – 35%
- Stage.4** Working Drawings, Specifications, Quantities take off etc. – 45%
- Stage.5** Inviting Tenders, Receiving Tenders, Appointment of Contractors – 55%
- Stage.6** a: Drawings necessary for Commencement of work – 65%
- Stage.6 b: 1 to 5 – 20% to 80% to Virtual Completion of Work – 90%**
- Stage.7** Submitting Completion Report etc. – 100%
- It can be easily seen that we as Architects receive only 35% of our fees up-to the **Design Stage** as opposed to 65% i.e. major part of our fees is for the construction process. Though another way of looking could be 55% is received for office work and 45% for site work. While it can be argued that Design is a vital part of the Construction Process, and hence is the most important part of an Architect's Office work, the counter argument that deep knowledge of good construction practices, Building technology, Services, Structures, Quantities take-off, Specification Writing, Tendering, Site Management etc. should be as important to us. However neither do the academicians give these subjects their due place nor do we as students accord them their due pedestal. Herein I am lamenting the situation of our lack of interest and gathering of knowledge in these vital fields. Herein I am citing the reasons for giving importance to Stages 4, 5, 6 and 7.

- 3.a.10 The salient features of the revised NBC**
- The salient features of the revised NBC include, apart from the other changes made, the changes specially in regard to further enhancing our response to meet the challenges posed by natural calamities. The major changes incorporated in this third revision of the Code are as follows:
- Provisions for association of need based professionals and agencies have been updated to ensure proper discharge of responsibilities for accomplishment of building project.
 - With a view to ensuring ease of doing business in built environment sector, a detailed provision for streamlining the approval process in respect of different agencies has been incorporated in the form of an integrated approval process through single window approach for enabling expeditious approval process, avoiding separate clearances from various authorities.
 - Further, with a view to meeting the above objective, the provision on computerization of approval process has been detailed, enabling online submission of plans, drawings and other details, and sanction thereof, aiding in speedier approval process.
 - The mechanism of ensuring certification of structural safety of buildings by the competent professional and peer review of design of buildings have been further strengthened.
 - Requirements for accessibility in buildings and built environment for persons with disabilities and the elderly have been thoroughly revised and updated.
 - Provisions on fire and life safety have been thoroughly revised to meet the challenges of modern complex building types including the high rises.
 - Latest structural loading and design and construction codes including those relating to wind load, earthquake resistant design of buildings, steel design and foundations have been incorporated with a view to ensuring structural safety of buildings including against a disaster.
 - Provisions relating to all building and plumbing services have been updated keeping also in view the latest international practices as related to the country.
 - Provisions have been updated to ensure utilization of number of new/alternative building materials and technologies to provide for innovation in the field of building construction.
 - Construction management guidelines have been incorporated to aid in timely completion of building projects with desired quality in a safe manner within the budgeted cost.
 - Guidance has been provided for making buildings and built environment energy efficient and environmentally compatible, through the newly introduced and updated chapter on sustainability, namely Part 11 'Approach to Sustainability'

4.f Quality of Construction: Inter-relationship of Cost, Quality and Economy

- Let us understand the factors that affect the Quality of Constructions.
- 1 | C's that affect Quality in construction:**
- CLIENT:** Unclear requirements, **Illogical** preferences and **Unrealistic expectations** of the client results into misunderstandings among stakeholders, delay in schedule and cost overruns - affecting the quality of the end result.
 - COST:** Cost overruns are a major hindrance to quality. To save upon costs, the first thing that is sacrificed is the quality of the material, products being used, people being employed and the methods being chosen for construction.
 - CONTRACTOR:** Misunderstandings between the designer and the contractor about the quality of the product required, is often the case that end results in not up to the desired expectation.
 - CONSTRUCTION:** Construction Methods (Steel / Concrete / Wood / Composite) must be preplanned. Procurement of materials in required time and their quality check must not be ignored. Construction phase is the phase which has the highest impact on how the design is being executed and the quality is being achieved.
 - CONTRACT:** The nature of the contract will affect the quality of construction. More control over quality can be expected in design/build or a project with construction management than in a lump sum contract or a design-bid-build contract in which responsibilities and communication among stakeholders is limited.
 - CONSULTANT:** Quality is achieved when the teams work collaboratively. When sub-consultants are involved in the project from the very beginning and are brought together for making important decisions, communication gaps are reduced and deliverables are produced with higher awareness and higher quality.

- 3.a.9 A0 - INTEGRATED APPROACH TO THE APPLICATION OF NATIONAL BUILDING CODE**
- PART- 0** in Volume-1 of the National Building Code of India deals with a guideline for an **INTEGRATED** approach and application of all the provisions of the National Building Code. This part recognizes the need for a **TEAM APPROACH** to Building Design, Construction management, Operations and Maintenance
 - The purpose and essence of this Section which has been included in the latest Edition of the National Building Code is that, Building Construction today, is no longer the domain of an individual Architect or Developer with respect to adoption of standards of quality and safety. A **TEAMWORK** approach is now necessary to manage construction.
 - As a result of the growing magnitude and complexity of projects, a **TEAM** of specialist consultants and experts in different aspects of the construction project are necessary now to achieve a successful completion. The stakeholders TEAM of qualified and experienced professionals in various fields required today include

The Architect: who Plans and Designs the project in consultation with the Owner and allied Technical Consultants, Specifies the materials, works out the Quantities, Estimates the construction cost, procures official Approvals and Sanctions from the Authorities, and, thereafter Supervises and Monitors the construction on site

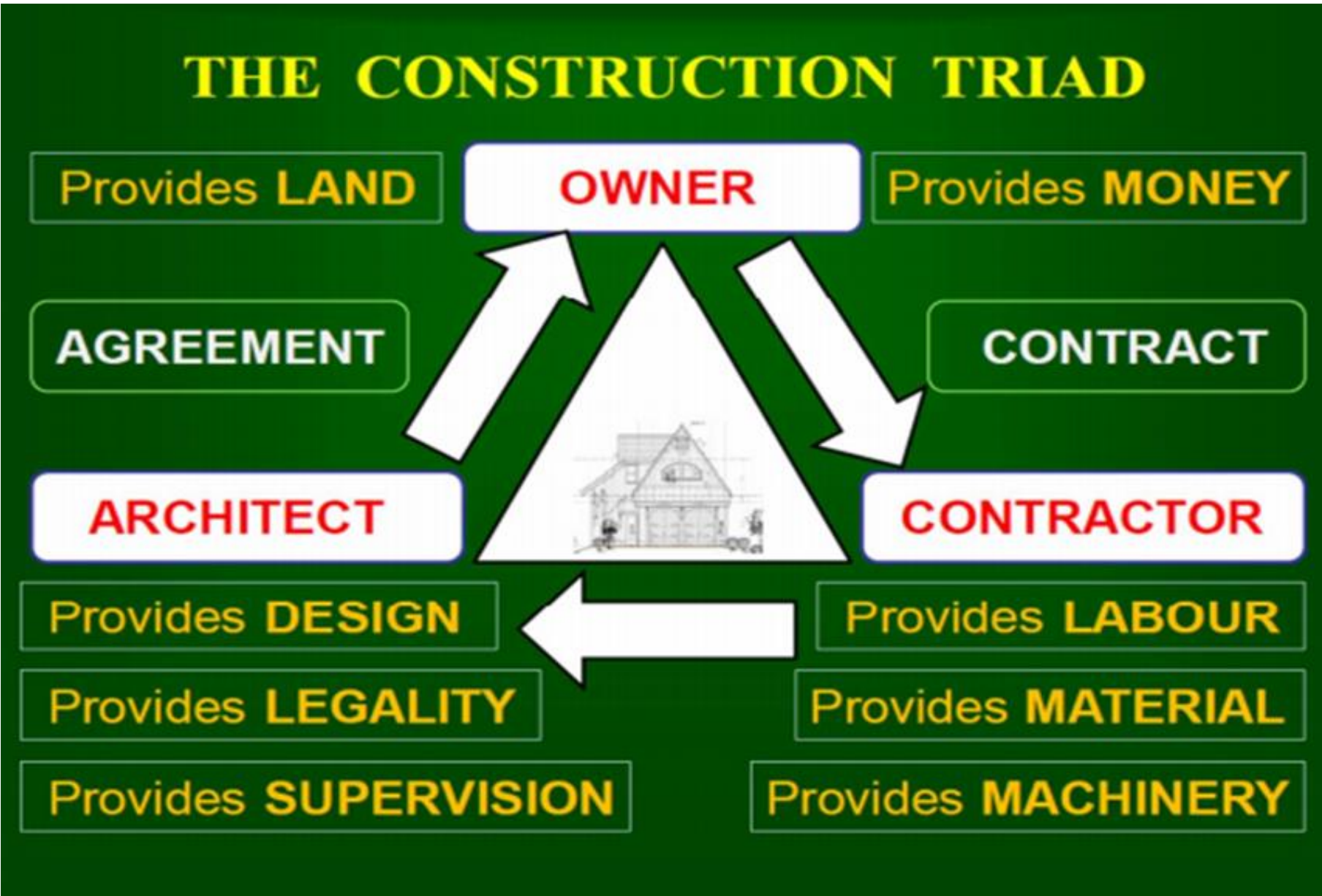
Role and Responsibilities of the Architect:

- An Architect is appointed by the Owners / Clients to Design And Technically translate their dreams and desires into Architectural Drawings, Structural Engineering systems, Essential Services, Quantities, Specifications, etc. and finally, into a **Built Reality!**
- An Architect is also expected to Design buildings in accordance with Development Control Rules and Assist the Owner / Client in obtaining official initial Building Permission and the final Occupancy Certificate from the Local Municipal Authorities and to certify the Quality of the construction and its fitness for Occupation by the Owner.
- Finally, An Architect is supposed to assist the Owner / Client in **Appointing** a Contractor for construction, and **Monitoring** and **Supervising** the Quality, Cost and Time of the construction

The Contractor: who quotes the price for construction, enters into a Contract with the Owner to construct the project at a committed Cost, with required Quality and within a given span of Time, by providing the Labour, Materials, Tools and Machinery and Technical expertise to construct the building as per the Architects design

Role and Responsibilities of a Contractor:

- A Contractor is so called because he undertakes to execute a building project 'Under Legal Contract', sealed and signed with the Owner.
- The Contractor is normally expected to be Qualified in Civil Engineering and should, ideally, have adequate field experience of Construction Work
- The Contract is a legally enforceable Agreement between the Owner and the Contractor to carry out the construction work in return for some money.
- The Contractor is expected to study the drawings, details, specifications and instructions and Quote his rates / charges for construction.
- He is also expected to study and understand the Terms of Contract stipulated by the Architect on behalf of Owners, and strictly abide by them.
- The Contractor is primarily responsible for the Speed, Quality and Cost of the project as per Commitment in the Contract, under supervision of the Architect.



Understanding role of major stakeholders in the construction process

Assignments or Suggested Theory Questions:

- Write a short note on Good for Constructions Drawings and Shop Drawings.
- Write a comprehensive note on Site Visits w.r.t the following points
 - Observations on a Site Visit
 - Frequency of Site Visits
 - Site Meetings : Agenda and Minutes of the Meeting
- Write a comprehensive note on Instructions on site w.r.t the following points
 - Need
 - Validity
 - Notice to Comply
- Write a Short note on Verbal Instructions
- List and explain the various factors that affect the quality of Construction
- Explain the Architects role in controlling time of construction including his own prompt response to contractor's Queries
- Explain in brief the following
 - Centre Line Checking
 - Checking before column casting
 - Checking before slab and beam casting.
- How does an Architect Monitor the time Schedule of Construction
- Explain the Architects role in the following parts of monitoring construction on site
 - Material Management
 - Labor Management
 - Machinery Management
 - Money Management
 - Quality Checks and Testing

5.c Theory Questions:

- Explain Cost Price and Value with examples
- Compare and contrast among Cost Price and Value
- Define Valuation and Explain the various purposes of Valuation
- Define Market Value and explain the different Market Values
- Write a Short Note on Distress Value
- How can Valuation be done. Explain the different methods to arrive at the value of a property.
- Write short notes on Free hold and Lease Hold Properties comparing and contrasting between the two
- What are the factors affecting value of a land
- Write a Short note on Sinking Fund
- Define Arbitration. Explain different kinds of Arbitration
- Explain salient features of an Arbitration process.

Course Objectives:

- To acquaint the Student with the Role and Stature of an Architect in Society, and understand the duties, responsibilities, liabilities and ethics as a professional.
- To acquaint the Student with the Scope and Avenues of professional Architectural services, and the demands and Mode of professional practice, and to prepare the Student for the professional field.
- To familiarize and prepare the Student with adequate knowledge of an Architect's office administration, documentation and procedures of office and site management to enhance his comprehension and utility during his professional training in the field in Semester IX.

Student: Srushti Gore

Faculty: Ar. Pallavi Patil

4th Year B.Arch 2021-2022

PROFESSIONAL PRACTICE – II

ASSIGNMENT - 1
UNIT - 1

- Explain the need for Construction Management.
- Large building construction projects with huge capital investments, a high level of technical complexity, and a rigid time-frame for completion and commissioning, requires meticulous planning and coordination.
- In addition to efficient financial management, correspond- ing Technical, legal, safety and quality, Human resource and Time Management become vital in the execution of such construction projects.
- Every major building construction project today is strictly time bound to deliver the expected return on the investment, and legally bound to deliver superior construction quality and safety.
- Even large housing projects today have to be registered under the Real Estate Regulatory Act of 2016 which legally requires the developer to abide by strict time schedules.
- Efficient construction management, therefore, has become vitally important.

ASSIGNMENT - 3
UNIT - 1

- List the essential parts of a Tender.
- Name and registered office of the owner, Architect, quantity surveyor and other major consultants.
- Full details of work for which the tender is called, in both form of bill and general description of work and some indicative items, including specific requirements.
- Letter of invitation to the contractor.
- Pre-tender instructions to the contractor.
- Draft of covering letter for submission of the Tender.
- Draft of the Offer letter from the contractor.
- Salient features of the tender.
- Special conditions of safety and security.
- Special conditions of safety and security.
- Acceptable brands / make of materials.
- particular specifications.
- feasible mode of measurement and bill quantities.
- The specific time for construction.
- At least information that may affect the make of the project.

ASSIGNMENT - 4
UNIT 2 - CONTRACTS

- Define construction contract list the salient features of a construction contract.
- A construction contract is a legal document that formally confirms in writing, with a seal and signature, an agreement that binds two or more parties into a firm commitment or obligation enforceable by law, in accordance with mutually accepted terms and conditions of reference, in respect of the scope, quality, duration and cost of a construction project.
- Salient features of a construction contract:
 - A contract is executed on a stamp paper.
 - It should state the date of the agreement and the place of execution.
 - The details of the 1st signatory should be given with all contact details and designation.
 - The details of the 2nd signatory should be given with contact details and designation.
 - The purpose of the contract should be stated with location & salient details.
 - The method of execution should be given clearly with details of all involved.
 - The monetary agreement should be given with payment schedule if any.

Handwritten notes by students

Sinhgad College of Architecture, Pune

Suggested Questions shared with students for all units



- List of works -**
- Presentation Drawings
 - 3D Modelling
 - 3D Visualization
 - Electrical Looping Layout
 - Site Visits

Poured Concrete

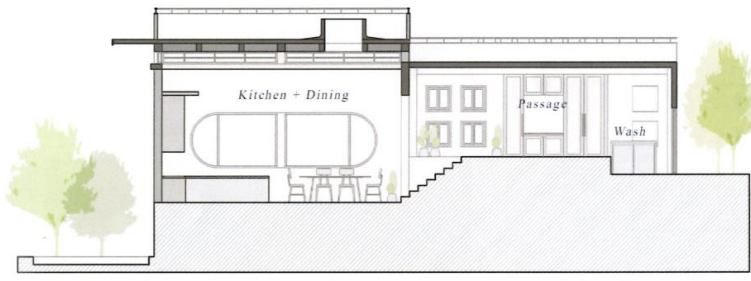
Birch Wood

Rattan

Exposed Bricks



Living Area



Section at CC' NTS



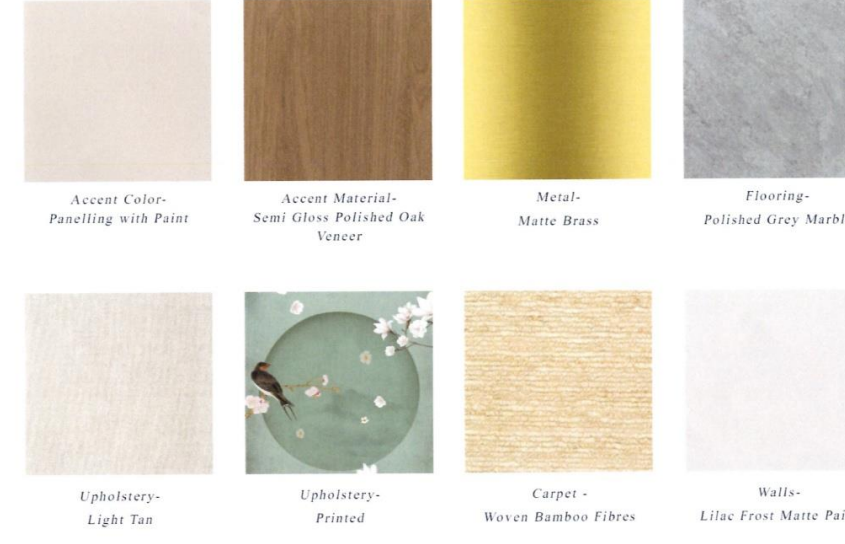
Section at DD' NTS



Living Area View



Living Area View



Dining Area View

About AADI Design

AADI Design is an interdisciplinary studio based in Pune. The brainchild of two Los Angeles exports, the firm is founded by an architect and an automobile designer. They have a repertoire of architecture and interior, furniture and product, graphic and branding, exhibition and installation. They are a design locus with 'user happiness' at its core.

Kunal Kulkarni

Founder & Principal Designer

Kunal studied mechanical engineering from MIT, Pune, before pursuing his dream of becoming a designer. After graduating from ISD, Pune, as an automobile designer, he honed his design at ArtCenter College of Design in Pasadena, as a scholar. His thesis proposal looked at simplifying user-experience and introducing sustainability for shared transport systems. Kunal's work experience includes a stint at ToolTech and Mercedes-Benz Research & Development India. When he is taking a break from his pursuit of all things 'eco-cool', his vision of a sustainable future, he forays into the realm of sketching, product design, logo design and graphics.

Meenakshi Dravid-Kulkarni

Founder & Principal Architect

A self confessed design junkie, Meenakshi forms one half of AADI design. Graduating with academic distinction in both her Bachelor's and Master's in Architecture, she has been arduous design student with commendations and designs to show for. After completing her B.Arch from University of Pune, she pursued her M.Arch at SCL Arc (Southern California Institute of Architecture), L.A. A 'Blythe and Thom Mayne' scholar, Meenakshi had a widely published thesis project.

Her work experience includes working as an architect with P.K. Das in Mumbai. In L.A, she has worked for her mentors including a short internship at Atelier Manferdini and later working with Pritzker Prize winning architect Frank Gehry.

Meenakshi Dravid
AADI DESIGN
ARCHITECTURE, INTERIOR
& GRAPHIC DESIGN
Yashwantrao Chavan Road,
Next to Ganware College,
Off. Karve Road, Pune-411 004

About Kulkarni Engineers-
A facility for industrial production and storage which demanded durable and robust infrastructure and a corporate interior design for the offices and workspaces. The design reflects industrial design with plenty of storage in the modification of a pre existing structure.



Accounts

AADI DESIGN

www.aadidesign.com

Yashwantrao Chavan Road,
Off. Karve Road, Pune-411 004

CONTACT: 020-26666666
020-26666666

NOTES

1. All work shall be done in accordance with the specifications provided by the client.

2. All work shall be done in accordance with the specifications provided by the client.

REVISION

1. Revised electrical layout after 13.07.2021

STAGE:

TITLE:

SHEET COUNT: 1/1

DATE:

CLIENT:

CLIENT APPROVAL:

CLIENT:

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TV Cabinet View

Master Bed TV Cabinet View

Master Bedroom View

Master Bed TV Cabinet View

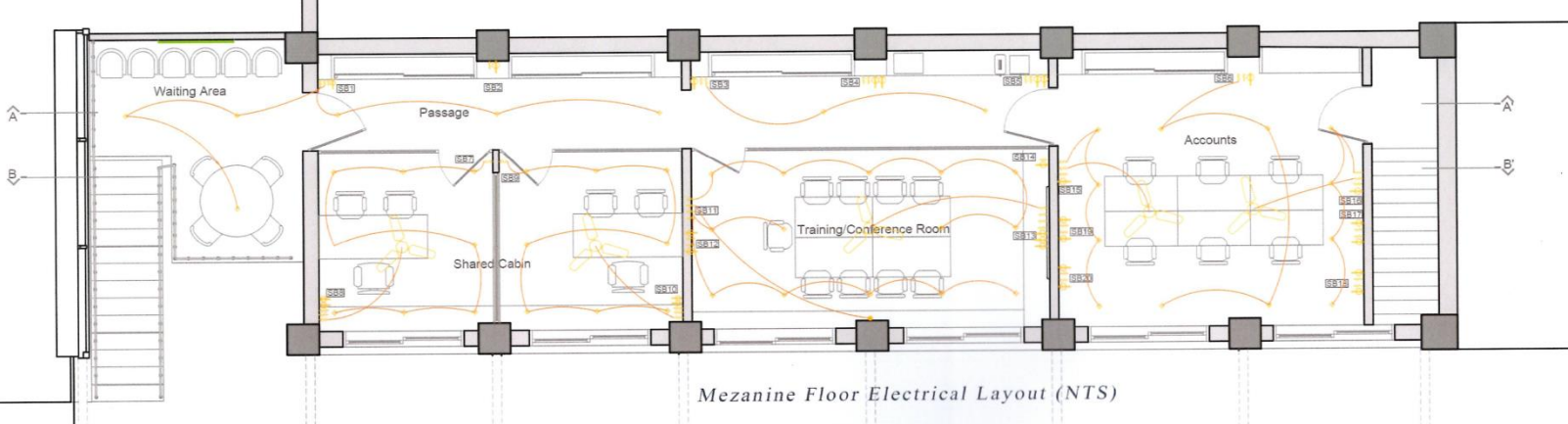
Student: Omkar Dandawate
Faculty: Ar. Avani Topkar

- Switch Boards
- Wall Fan
- Ceiling Lights
- Plug Points
- Switch
- Projector

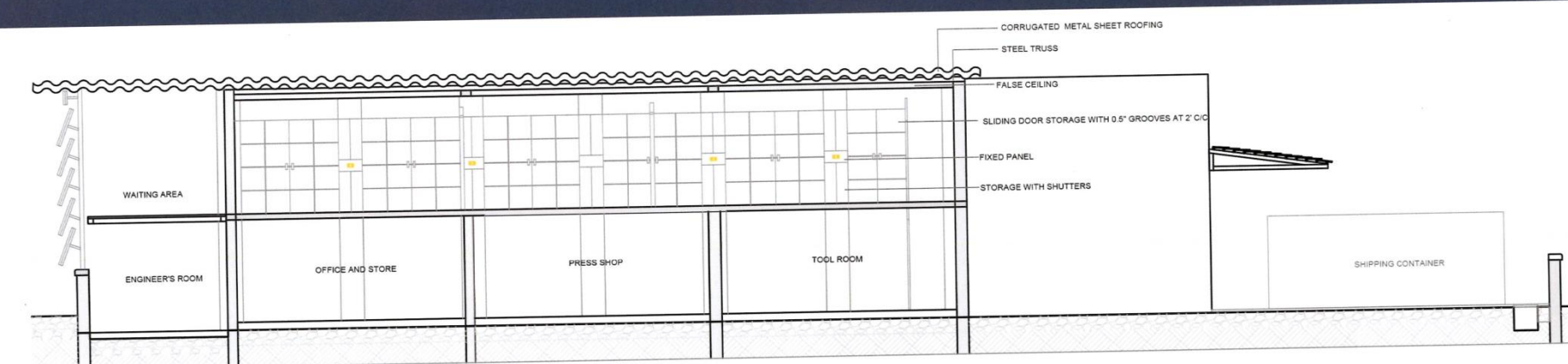


Rendered Section AA' (NTS)

- List of works -**
- 3D Modelling
 - 3D Visualization
 - Electrical Looping
 - Structural Details



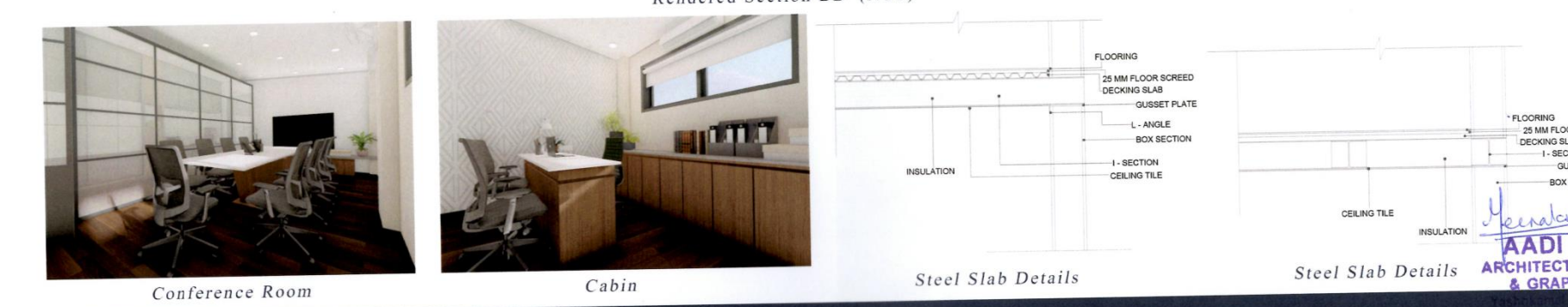
Mezzanine Floor Electrical Layout (NTS)



Section AA' (NTS)



Rendered Section BB' (NTS)



Conference Room

Cabin

Steel Slab Details

Steel Slab Details

Other Visualizations

Restaurant Design - Undisclosed Project



Montessori Design - Competition Project



Devrai Resort - Proposed Project



Hex Media - Competition Project



Share Co. - Competition Project

AADI DESIGN
ARCHITECTURE, INTERIOR
& GRAPHIC DESIGN
Yashwantrao Chavan Road,
Next to Ganware College,
Off. Karve Road, Pune-411 004

5th Year B.Arch 2021-2022
Practical Training

Sinhgad College of Architecture, Pune

STIPEND DETAILS

Date : 03-06-2021

To

Mr. Tanmay Sawant,
Student,
Sinhgad College of Architecture,
Pune.

Sub : Stipend Details

This is to certify that you Mr. Tanmay Sawant, student of Sinhgad College of Architecture, Pune have been accepted as an intern at ARCUS for a period of 120 days as mentioned by your institute.

For this time period, you will be paid 5000/- per month.

With Regards,

RELIEVING LETTER

Date : 30-11-2021

To

Whomsoever it may concern,

This is to certify that Mr. Tanmay Sawant, student of Sinhgad College of Architecture, Pune has completed his internship at ARCUS Ahmedabad from 14th June 2021 to 30th November 2021.

He has completed 129 working days of his internship at this firm and has been relieved from all the duties as an intern.

With Regards,

JOINING LETTER

Date : 03-06-2021

To

Mr. Tanmay Sawant,
Student,
Sinhgad College of Architecture,
Pune.

Sub : Confirmation of Internship at ARCUS

This is to certify that you Mr. Tanmay Sawant, student of Sinhgad College of Architecture, Pune have been accepted as an intern at ARCUS for a period of 120 days as mentioned by your institute.

We welcome you at ARCUS. We hope you do experience and explore more about architecture by working as a team member with us.

With Regards,

INTERNSHIP CERTIFICATE

Date : 30-11-2021

To

Whomsoever it may be of concern,

This letter is to certify that Mr. Tanmay Jyoti Pramod Sawant has completed his full term of internship - 120 working days with **Architecture Relevance In Contemporary Urban Studio (ARCUS)**. He started his internship from 14th June, 2021, and has worked till 30th Nov., 2021.

During his tenure as an intern, he was part of site visits, design exploration, preparation of working/Documentation drawings of traditional pol houses in Old City of Ahmedabad (**India's First World Heritage City-UNESCO**).

Some of key projects in which he was involved

• Architectural Documentation of listed structures and sites with **Ahmedabad World Heritage City Trust (AWHCT)** and **Ahmedabad Municipal Corporation**.

• **Reimagining Walkable City : Patan** (Ancient Capital city of Gujarat)

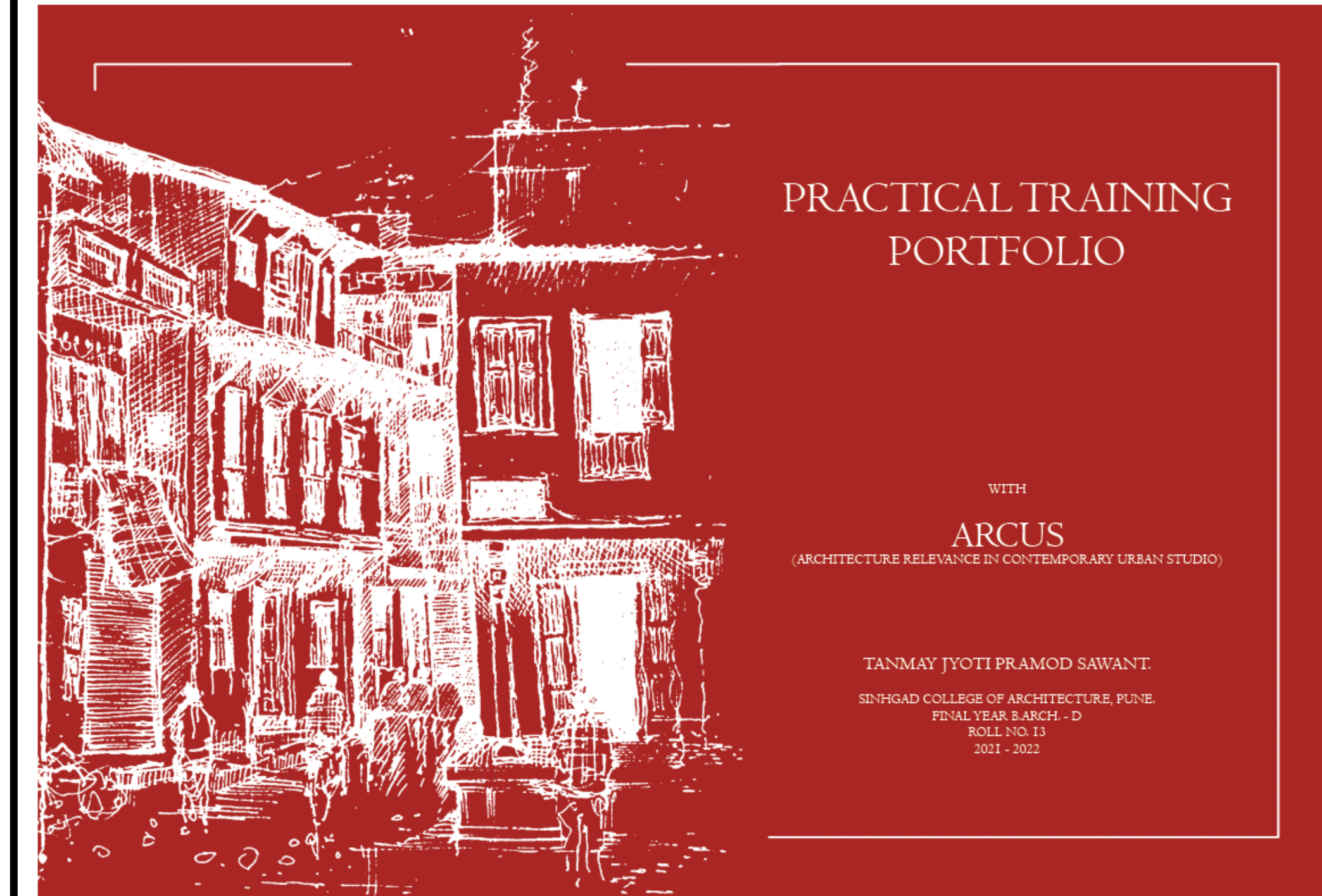
• Anuj Gupta's Flat for interior design

• Ankit Patel's Flat for interior design

We at ARCUS found **Tanmay Sawant** to be an inquisitive, who is motivated, duty bound and hardworking. He performed diligently and is well behaved. He has good hand on 2D as well as 3D design software. He has worked sincerely on his project and his performance was par excellence.

We at ARCUS wish him all the best for his future endeavors and recommend him for firms across the world.

Yours Sincerely,



PRACTICAL TRAINING PORTFOLIO

WITH
ARCUS
(ARCHITECTURE RELEVANCE IN CONTEMPORARY URBAN STUDIO)

TANMAY JYOTI PRAMOD SAWANT,
SINHGAD COLLEGE OF ARCHITECTURE, PUNE.
FINAL YEAR B.Arch - D
ROLL NO. 13
2021 - 2022

ARCUS (ARCHITECTURAL RELEVANCE IN CONTEMPERARY URBAN STUDIO)

IS A MULTI DISCIPLINARY, AHMEDABAD BASED FIRM SINCE 2017 WHICH PRIMARILY DEALS WITH CONSERVATION BASED PROJECTS, URBAN PLANING & DESIGN AS WELL AS ARCHITECTURAL & INTERIOR DESIGN PROJECTS OF VARIOUS SCALE. WE AS A TEAM BELIEVE FOR ANY GOOD DESIGN A THOROUGH RESEARCH IS THE BASE AND HOW IT WILL BE USEFUL TO THE COMMUNITY & SOCIETY WILL DETERMINE ITS SUCCESS. AS A CONERVATION & URBAN FOCUS, WE TRY TO IMPLICTAE & LEARN THROUGH OUR EXPEIRENCE & GREAT EXAMPLES THAT HAVE BEEN NOT ONLY CULTURALLY ENRICHED BUT CONTEXT WISE STRONG APPEAL. WITH COMMUNICATION AS A KEY, WE TRY TO KEEP A WORK FRIENDLY ENVIRONMENT IN OUR STUDIO WHICH HELPS IN THE PROCESS OF CREATIVITY & BETTER OUTPUT.



AR. HARDIK PATEL
BARCH
INSTITUTE OF ARCHITECTURE,
H.N.G.U, PATAN-GUJRAT.
MARCH (URBAN DESIGN)
SPA, NEW DELHI.
CO - FOUNDER OF ARCUS



AR. THOMAS MATTHAI
BARCH
SARVAJANIK COLLEGE OF ENGL &
TECHNOLOGY, SURAT
MARCH (CONSERVATION)
CEPT, AHMEDABAD.
CO-FOUNDER OF ARCUS



AR. HETANSHI PATEL
BARCH
IJ SCHOOL OF ARCHITECTURE,
AHMEDABAD.
ASSOCIATE ARCHITECT
ASSOCIATED WITH ARCUS SINCE
2019, SHE LEADS ALL THE
INTERIOR PROJECTS FOR THE
FIRM.
SHE BELIEVES IN MINIMAL
APPROACH & ATTENTION TO
DETAILS IS KEY TO A
BETTER DESIGN.



AR. MAYANK KALOLIYA
BARCH
IJ SCHOOL OF ARCHITECTURE,
AHMEDABAD.
ASSOCIATE ARCHITECT
BEEN WITH ARCUS FOR LAST
ABOUT 3 YEARS, HE HAS A KEEN
INTREST IN CONSERVATION
FIELD.
WITH HIS TECHNICAL SKILLS AS
FORTE, HE DEALS WITH
CONSERVATION PROJECT & ON-
SITE TECHNICALITIES.



TANMAY SAWANT
FINAL YEAR BARCH
SINHGAD COLLEGE OF
ARCHITECTURE, PUNE.
INTERIN



TANMAY RATHOD
FOURTH YEAR BARCH
IJ SCHOOL OF ARCHITECTURE,
AHMEDABAD.
INTERIN



DHRUV GOLAKIYA
FOURTH YEAR BARCH
IJ SCHOOL OF ARCHITECTURE,
AHMEDABAD.
INTERIN



PRAKRUTI AMRANIA
FOURTH YEAR BARCH
SAL SCHOOL OF ARCHITECTURE,
AHMEDABAD.
INTERIN



OUR SERVICES :

- A. CONSERVATION PROJECTS.
- B. URBAN DESIGN & SOLUTIONS.
- C. ARCHITECTURAL DESIGN SOLUTIONS.
- D. INTERIOR DESIGN.

&
ORGANIZATION OF SETTLEMENT STUDY,
DOCUMENTATION & RESEARCH PROGRAMS

ON GOING PROJECTS :

AHEMEDABAD WORLD HERITAGE CITY DOCU-
MENTATION ALIGNED WITH AMC, GUJRAT.

URBAN INSERT - PATAN WALKABLE CITY
ALIGNED WITH PATAN NAGARPALIKA.

ARCHITECTURAL PROJECTS

INTERIOR PROJECTS

ARCUS
(ARCHITECTURE RELEVANCE IN
CONTEMPORARY URBAN STUDIO)

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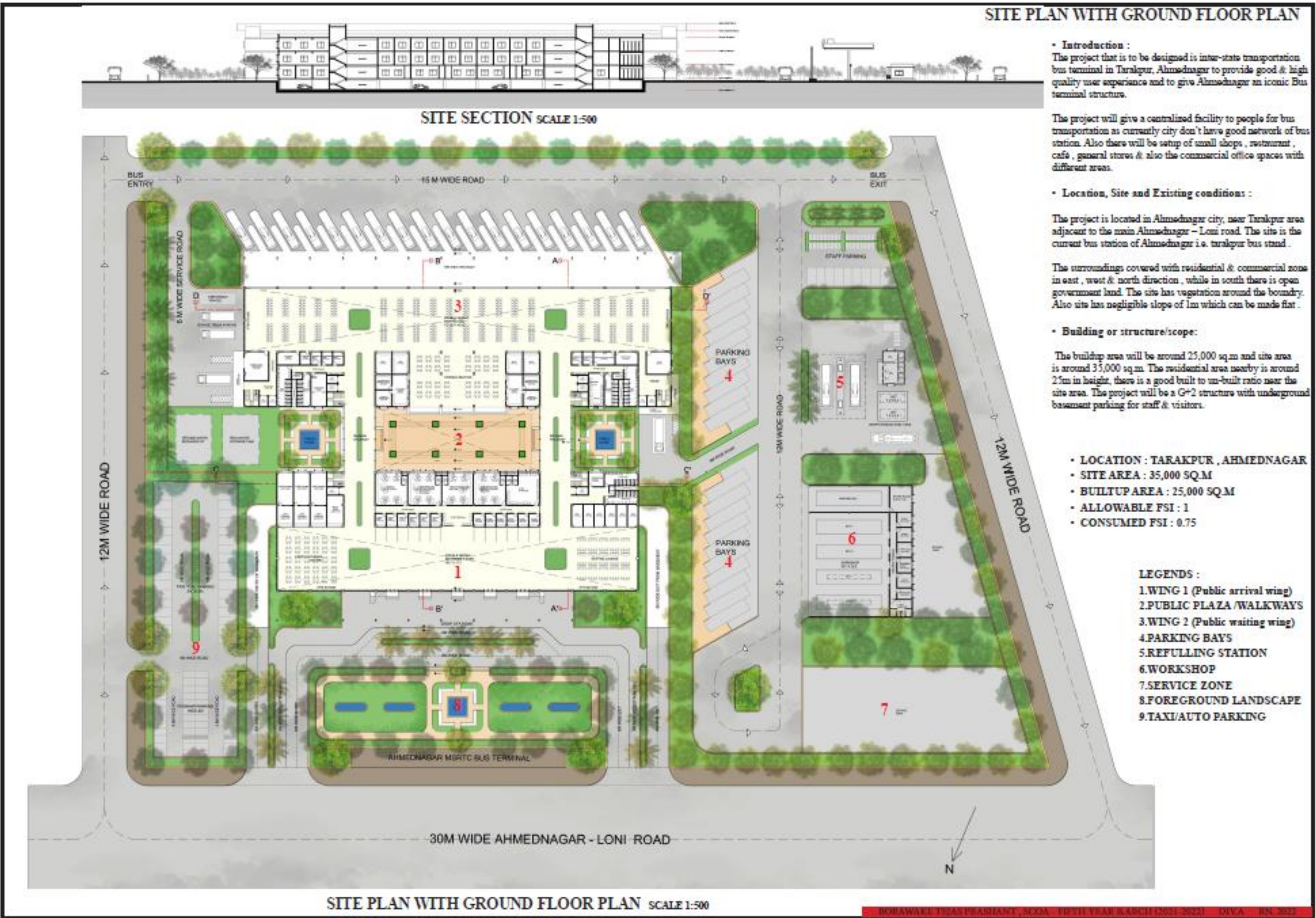
Student: Tanmay Sawant
Faculty: Ar. Kirti Bajare

5th Year B.Arch 2021-2022
Practical Training

Sinhgad College of Architecture, Pune

PROJECT DETAILS

The project that is to be designed is inter-state transportation bus terminal in Tarakpur, Ahmednagar to provide good & high quality user experience and to give Ahmednagar an iconic Bus terminal structure.

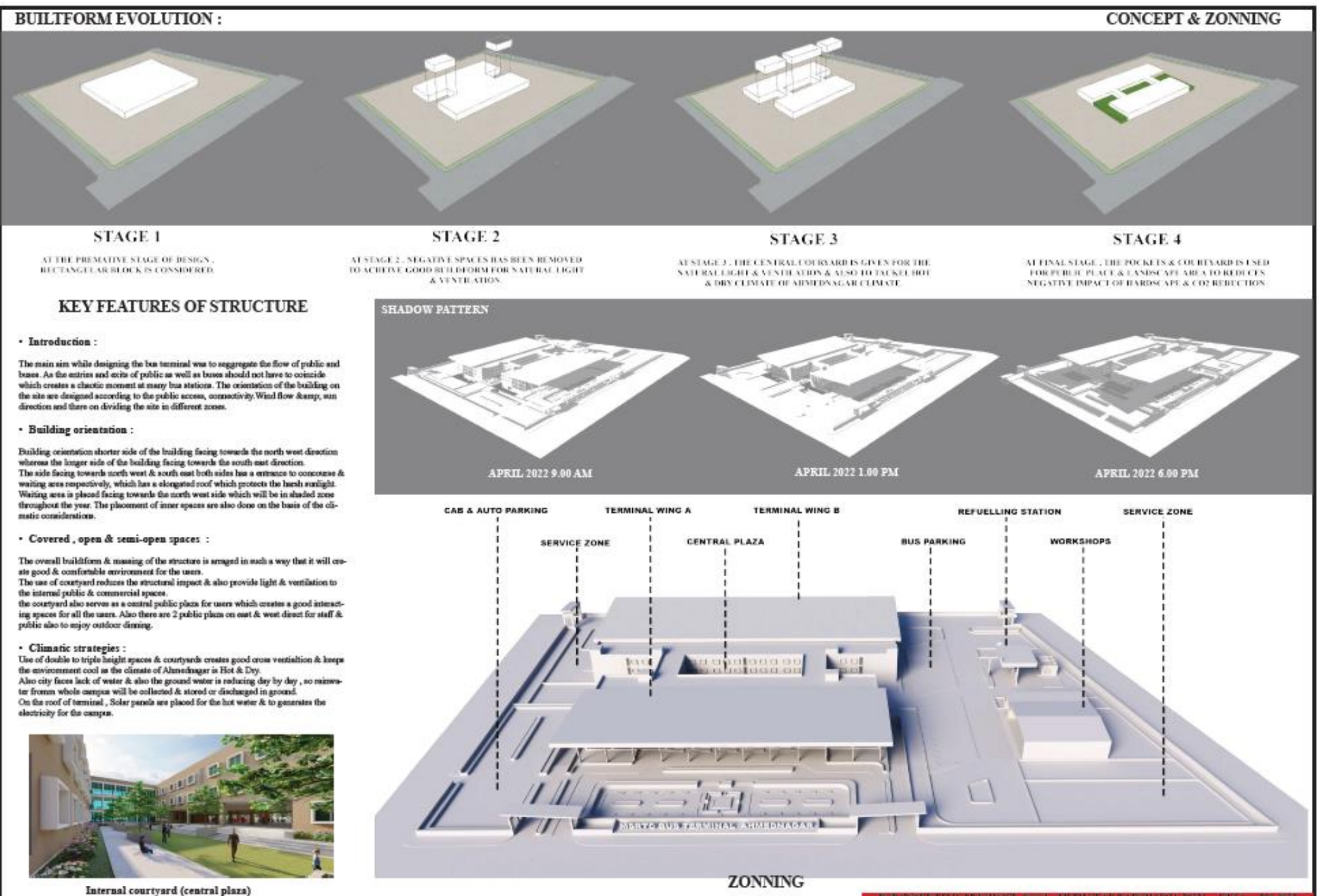


Student: Tejas Borawake
Guide: Prof.Kalpna Hadap

5th Year B.Arch 2021-2022 Architectural Design Project

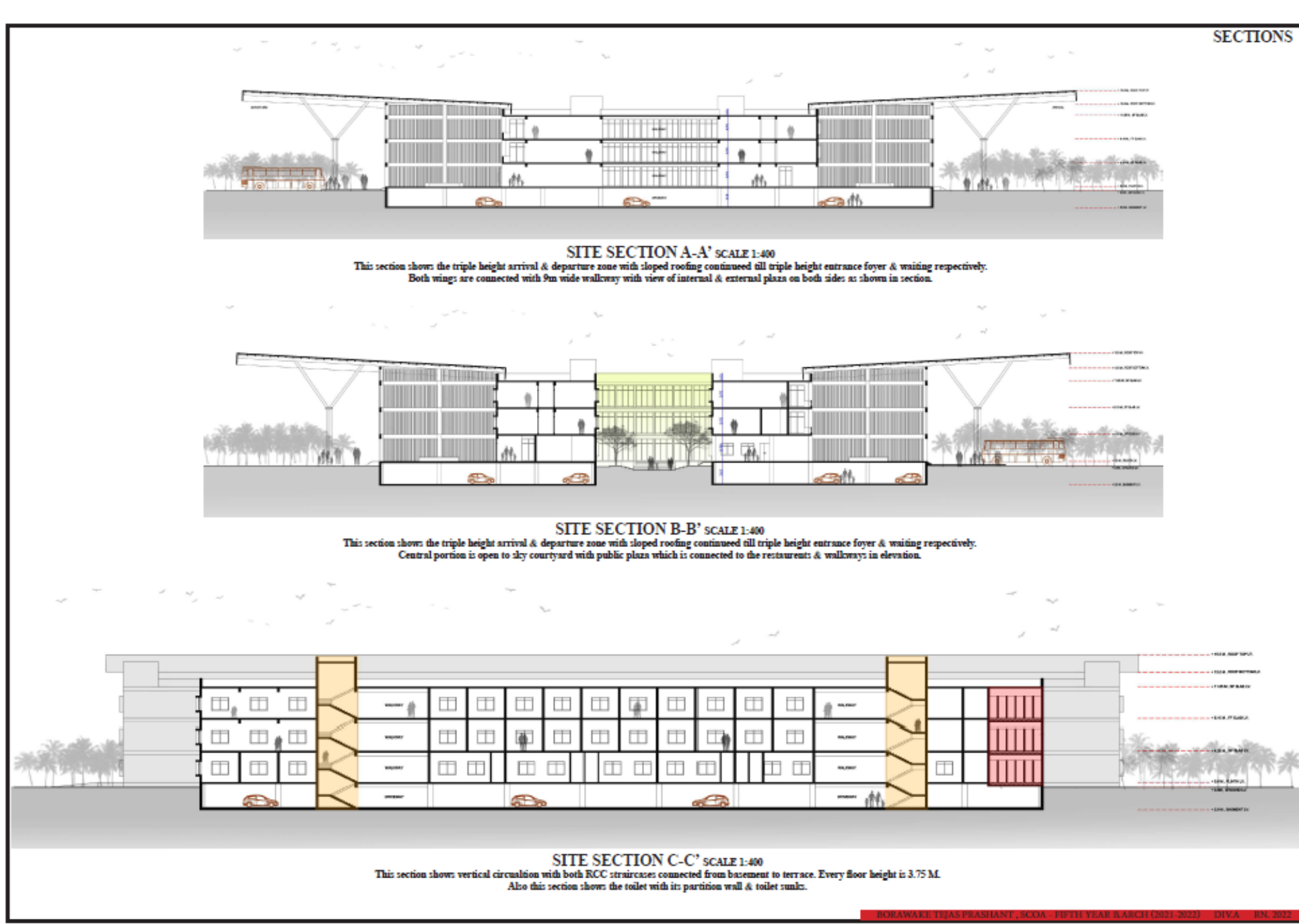
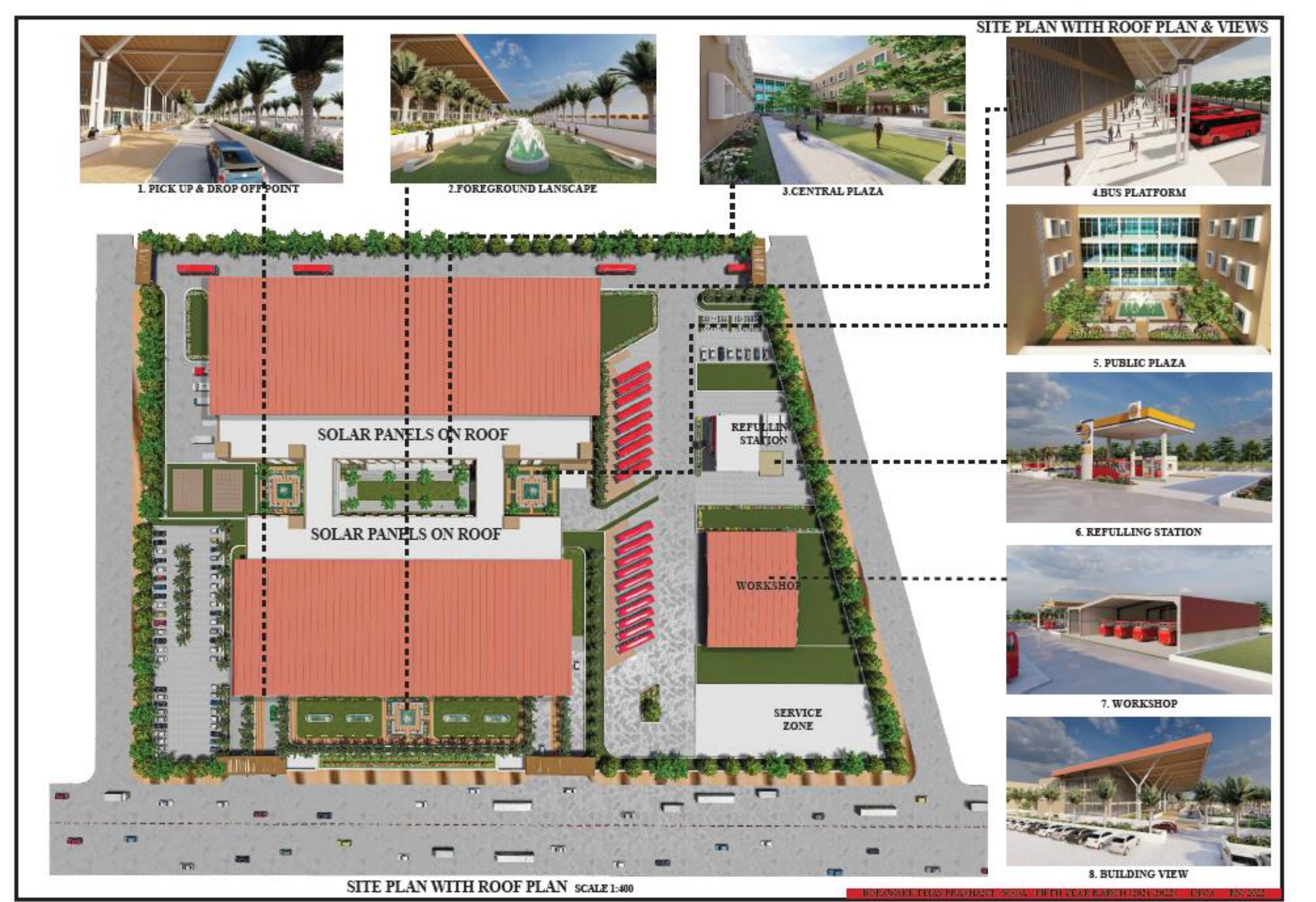
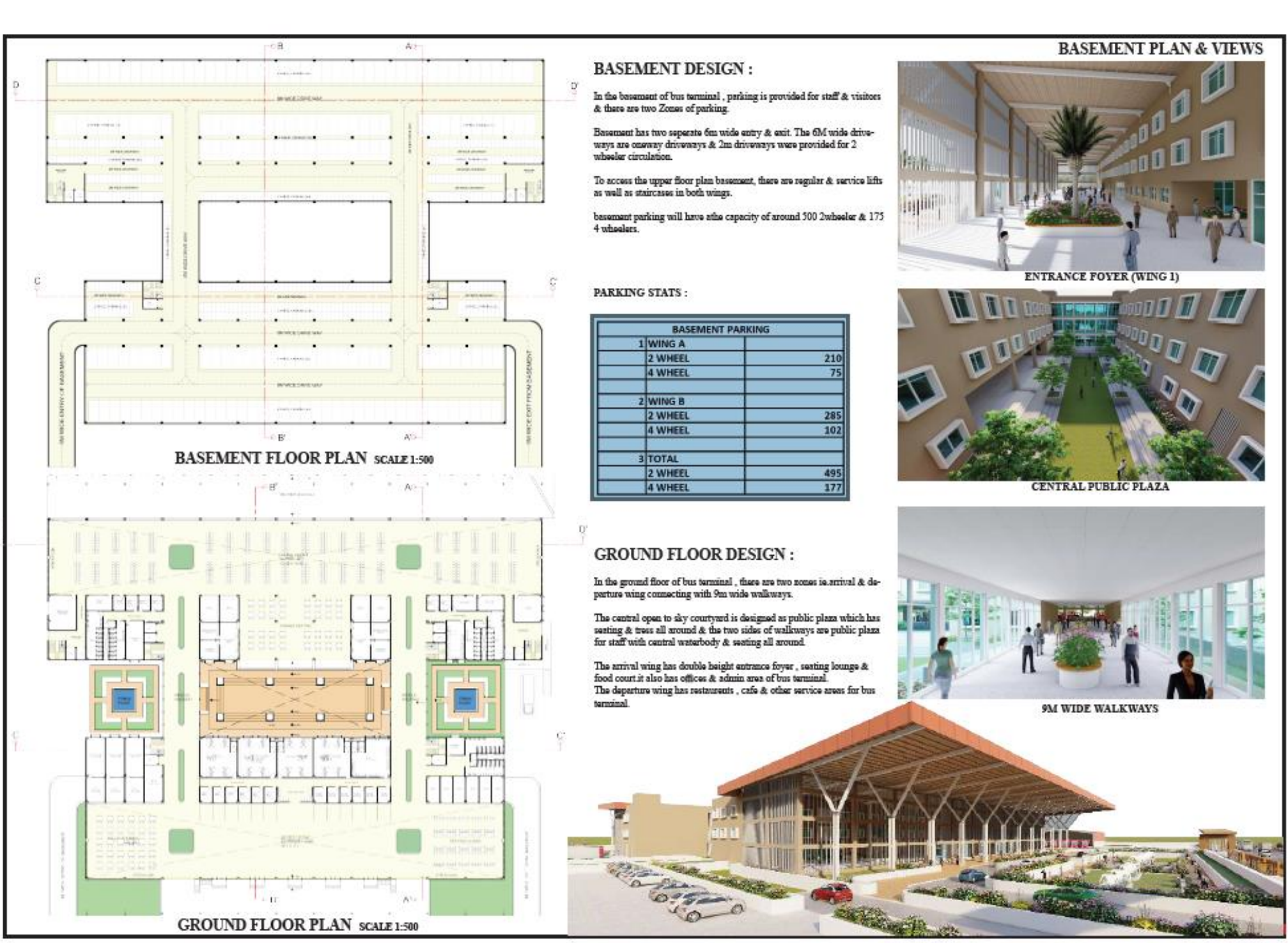
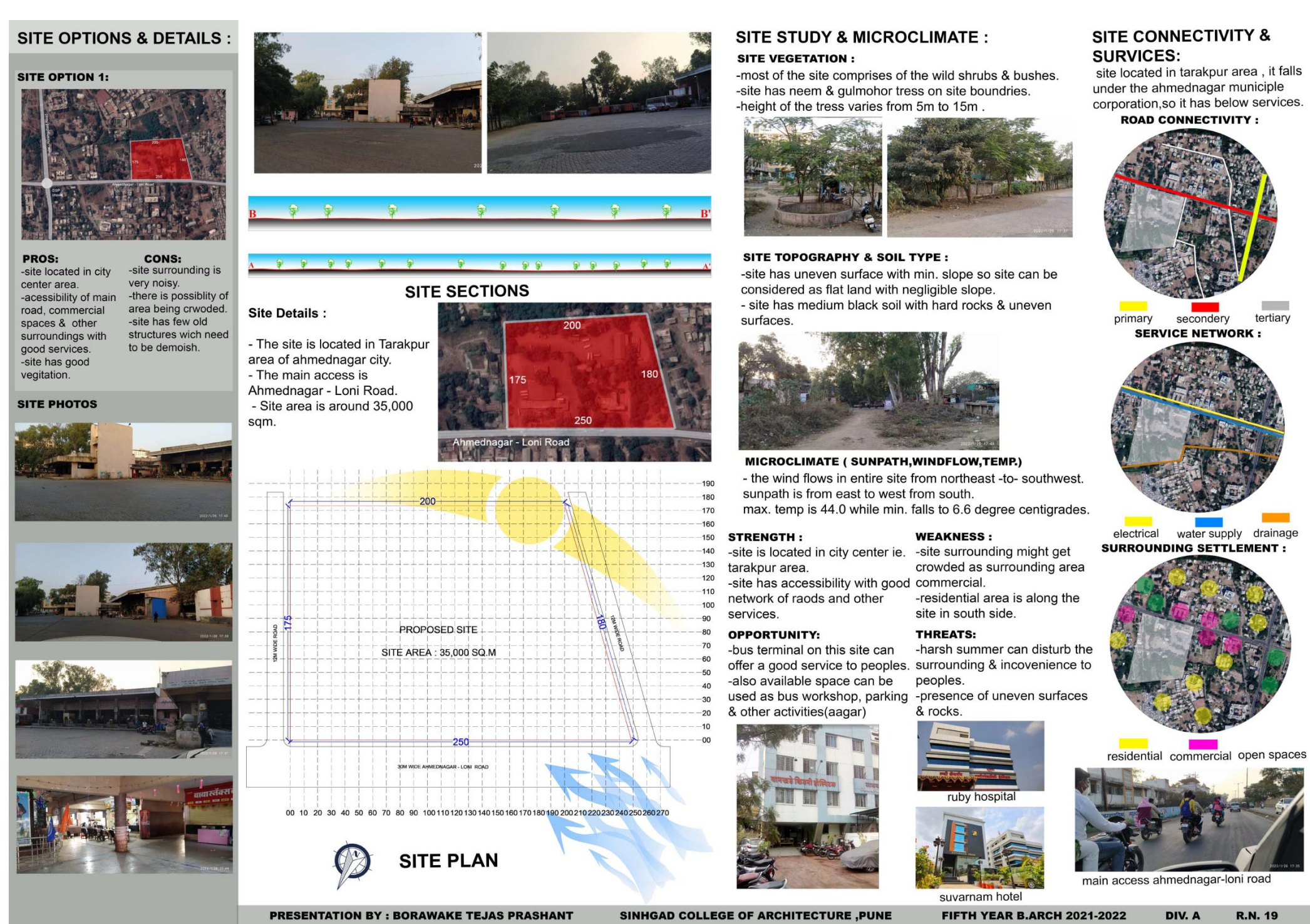
BUS TERMINAL AT AHMEDNAGAR

Sinhgad College of Architecture, Pune

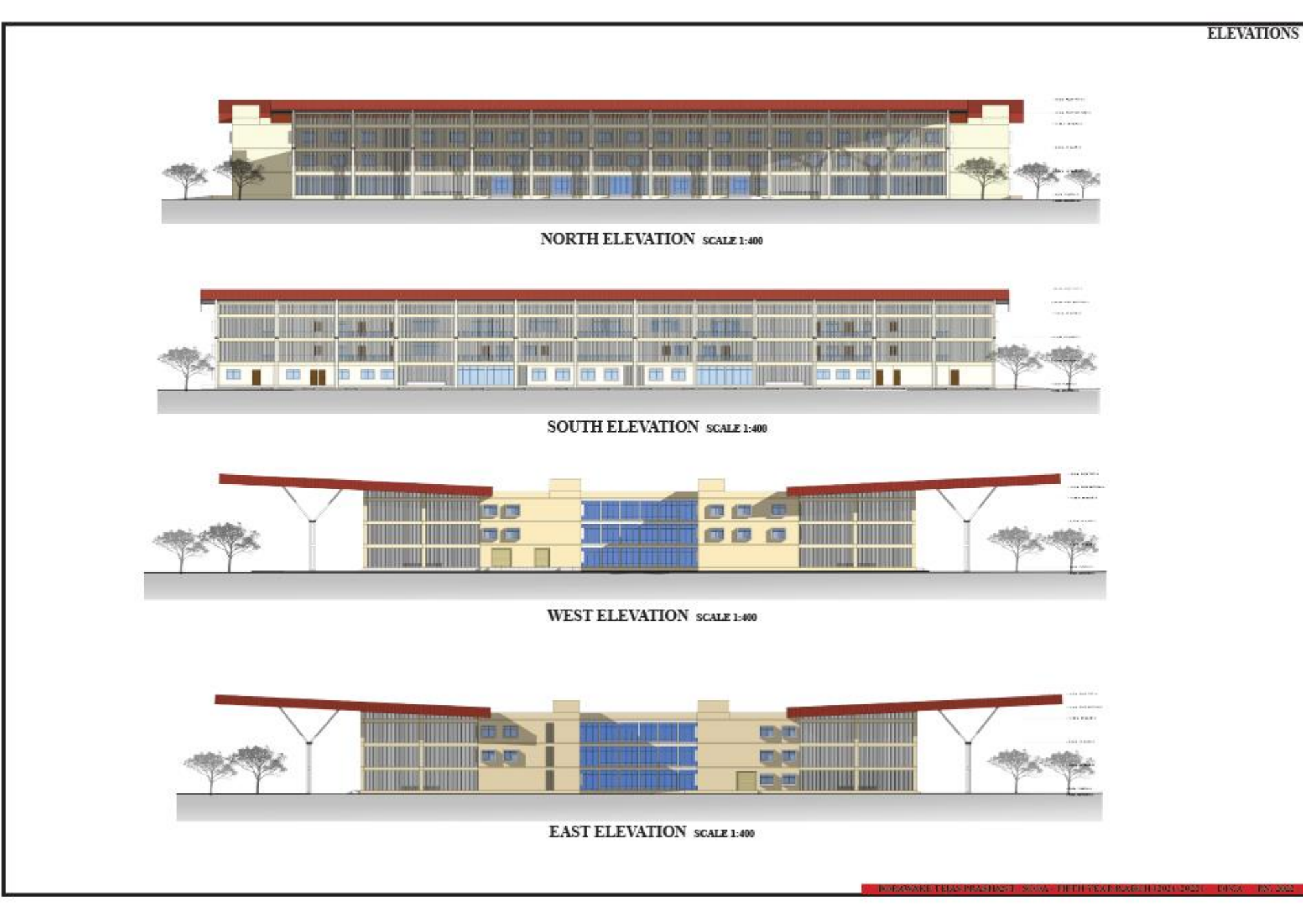
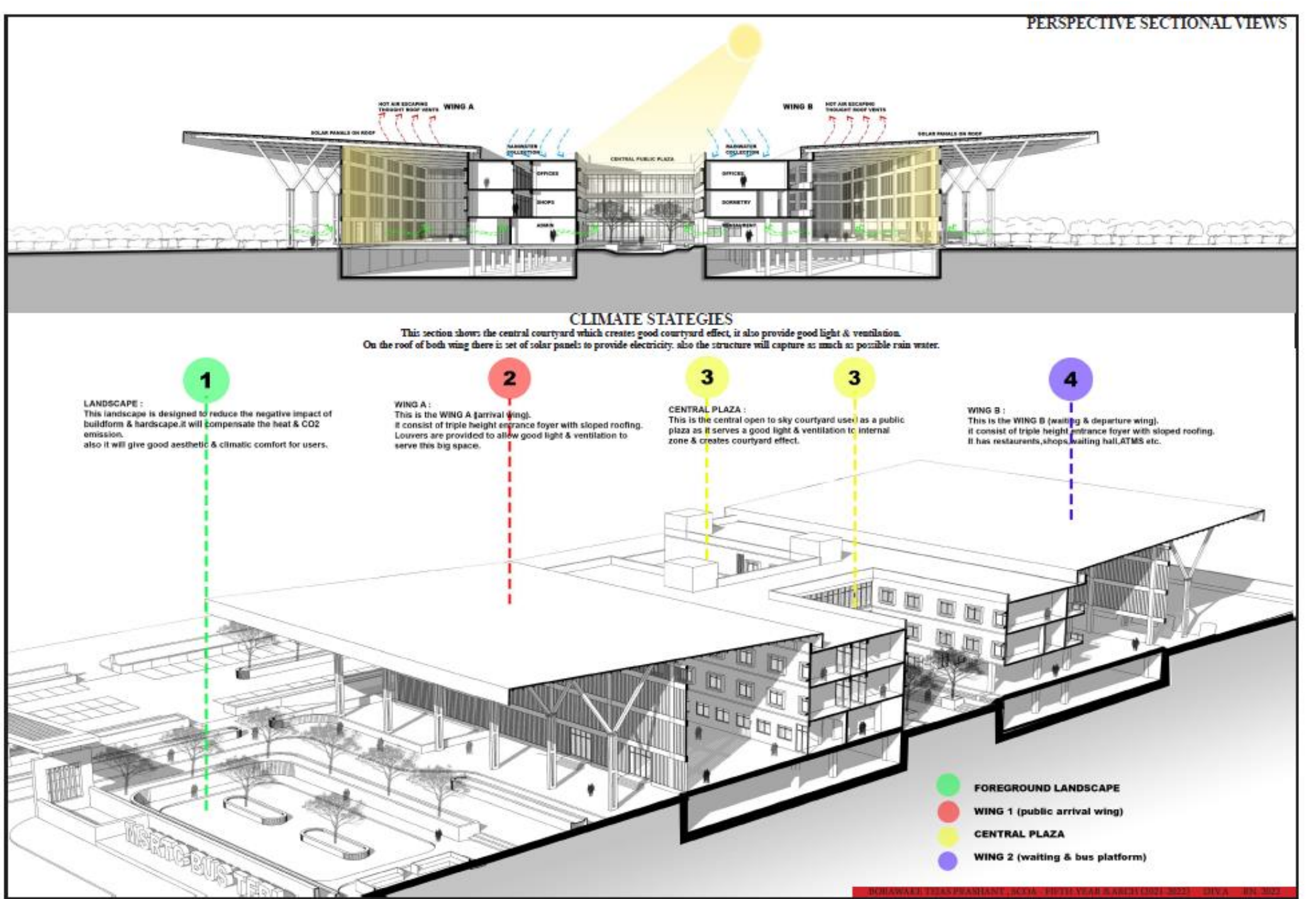


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PROJECT DETAILS

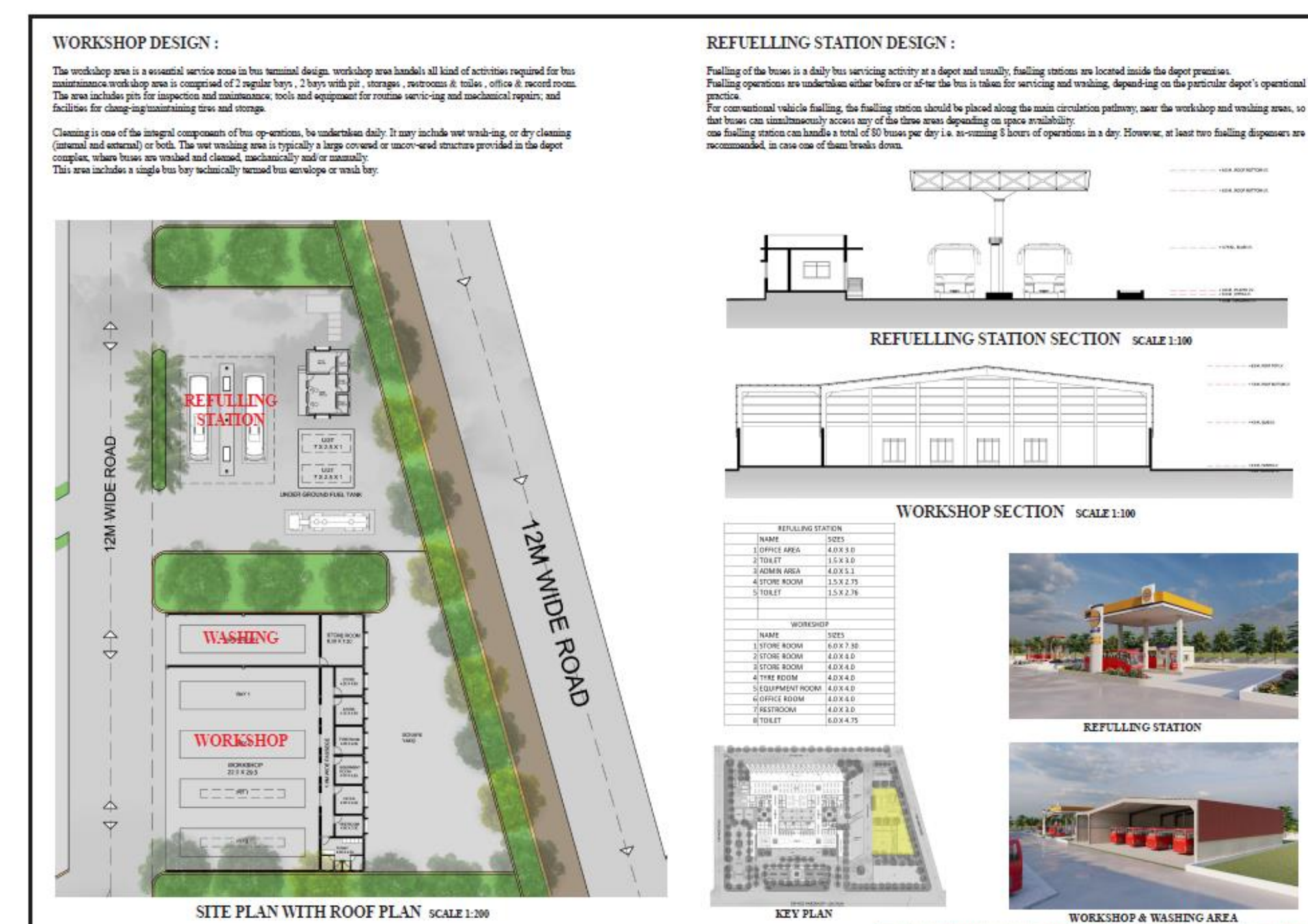
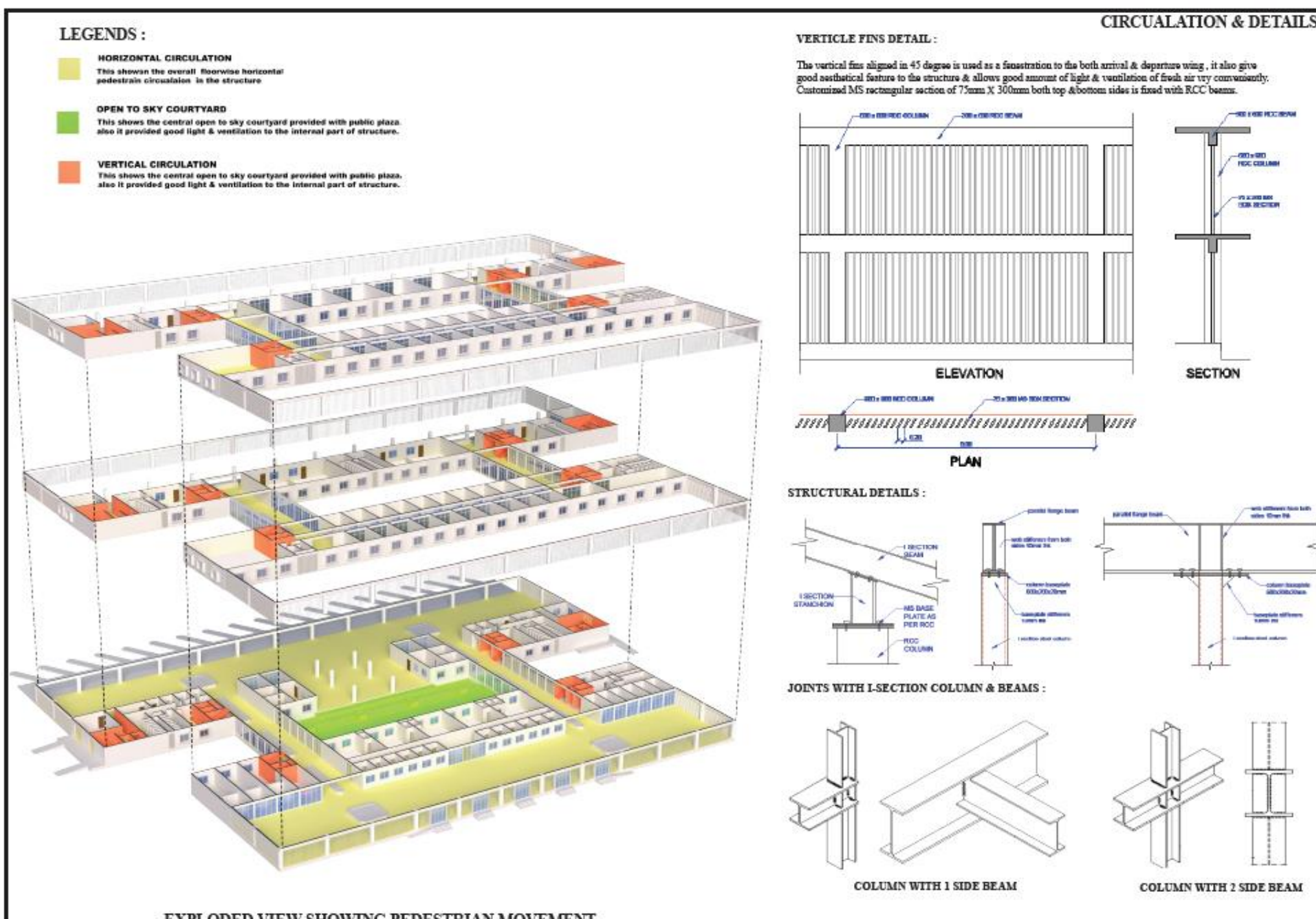
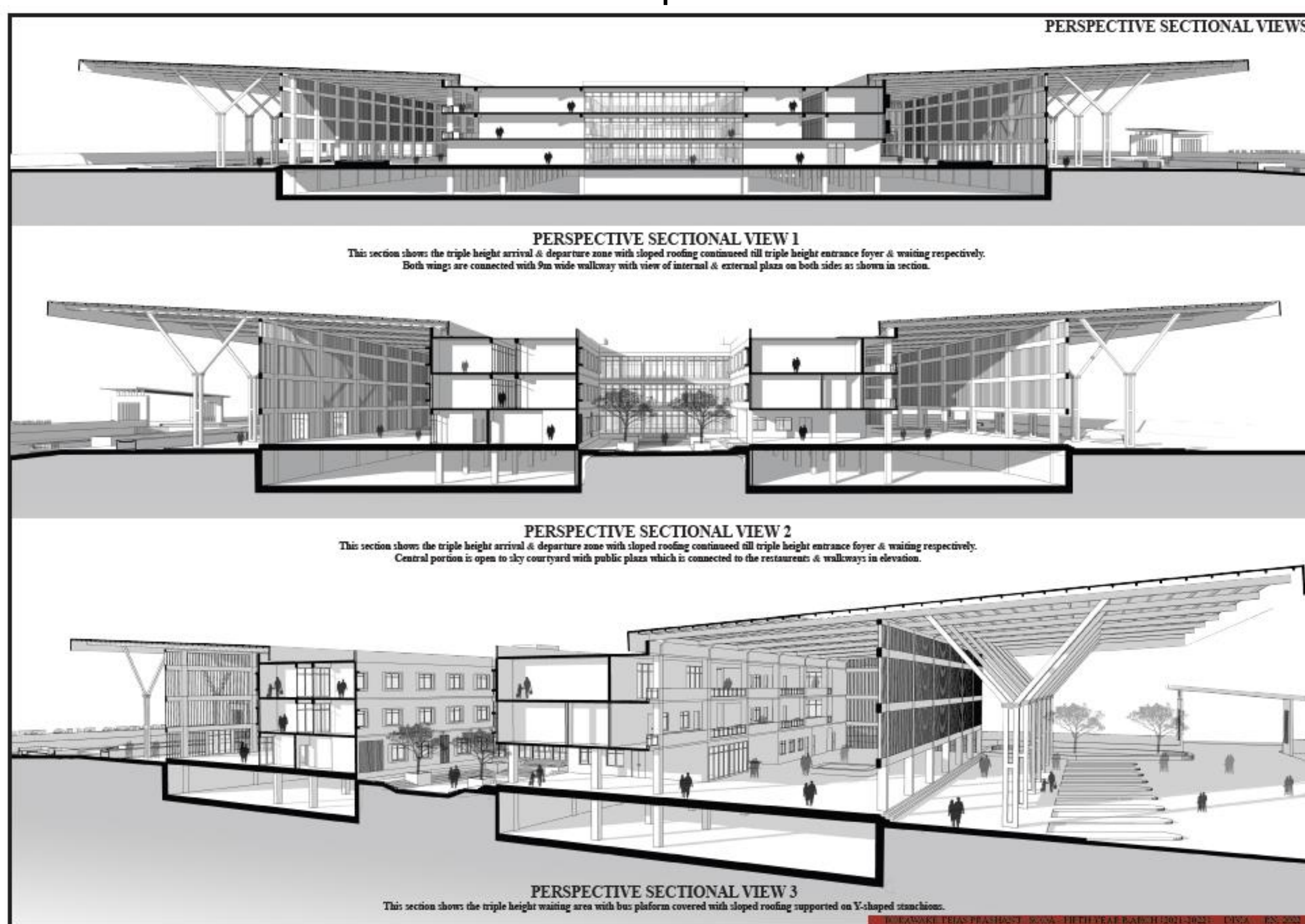
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Architectural Design Project

BUS TERMINAL AT
AHMEDNAGAR

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Find out the range of thermal comfort zone (temperature and relative humidity) for Indian people.

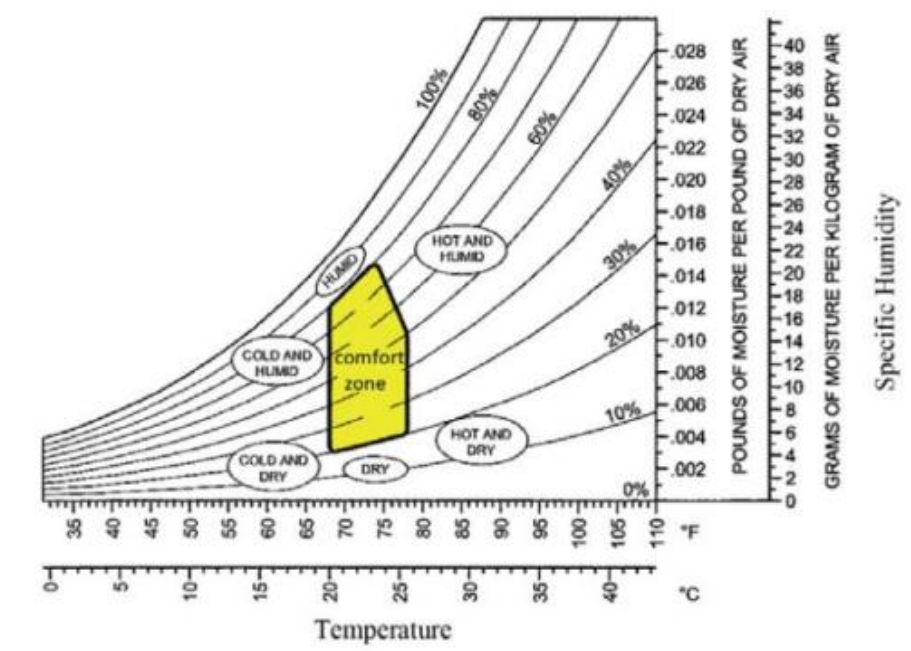


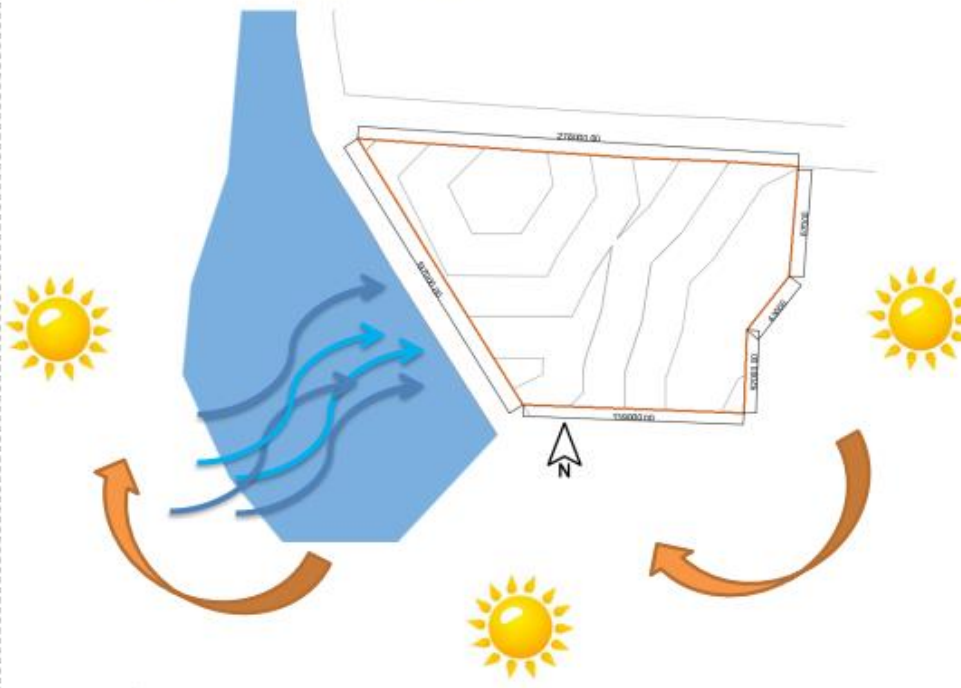
Figure 4.8a The comfort zone and various types of discomfort outside that zone are shown on this psychrometric chart.

Thermal comfort: Indian scenario

- There is a lack of comfort standards for buildings in India.
- The National Building Code (NBC) prescribes two narrow ranges, i.e. 23°C–26°C and 21°C–23°C during summer and winters for all types of buildings.

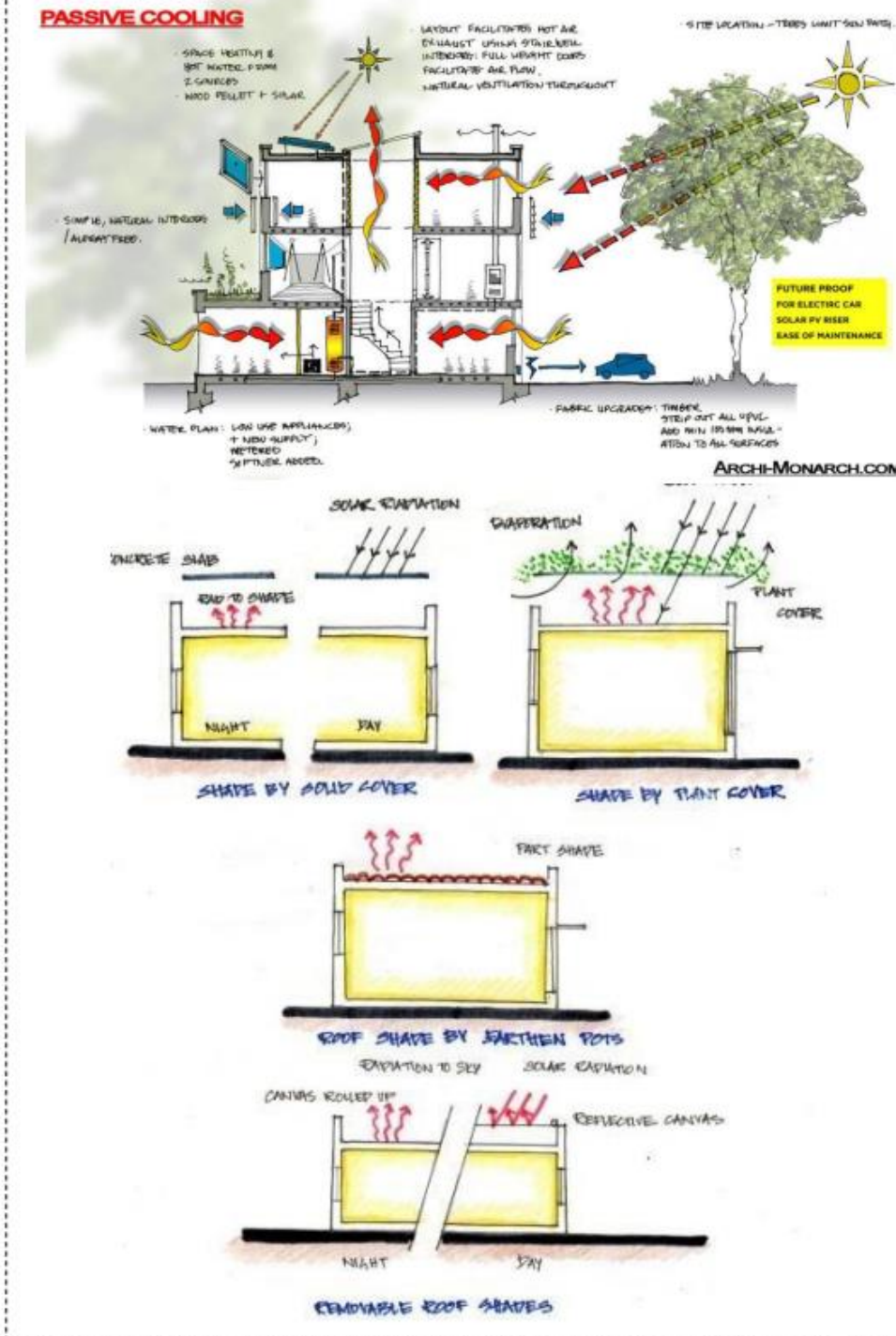
Find out the climate zone for your thesis project site and identify the ideal envelope option/s based on the concepts introduced.

Location : Malad, Mumbai, Maharashtra, India.

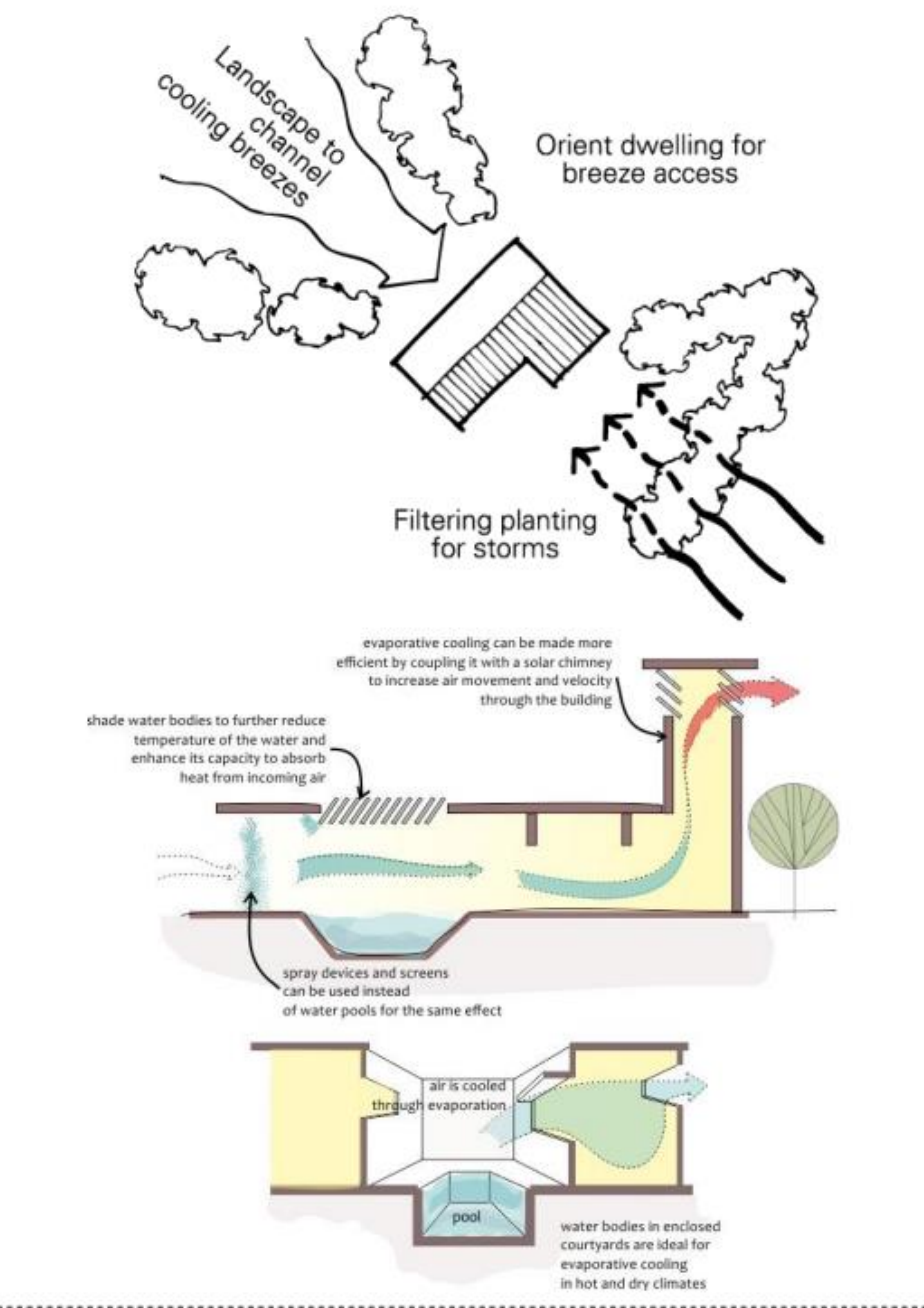


CLIMATE :

- The climate of the Mumbai city is **hot and humid with extreme precipitations**.
- The near by water body affect micro climate of the site and lies in the wind direction.
- Also the passive cooling techniques to tackle the climate.

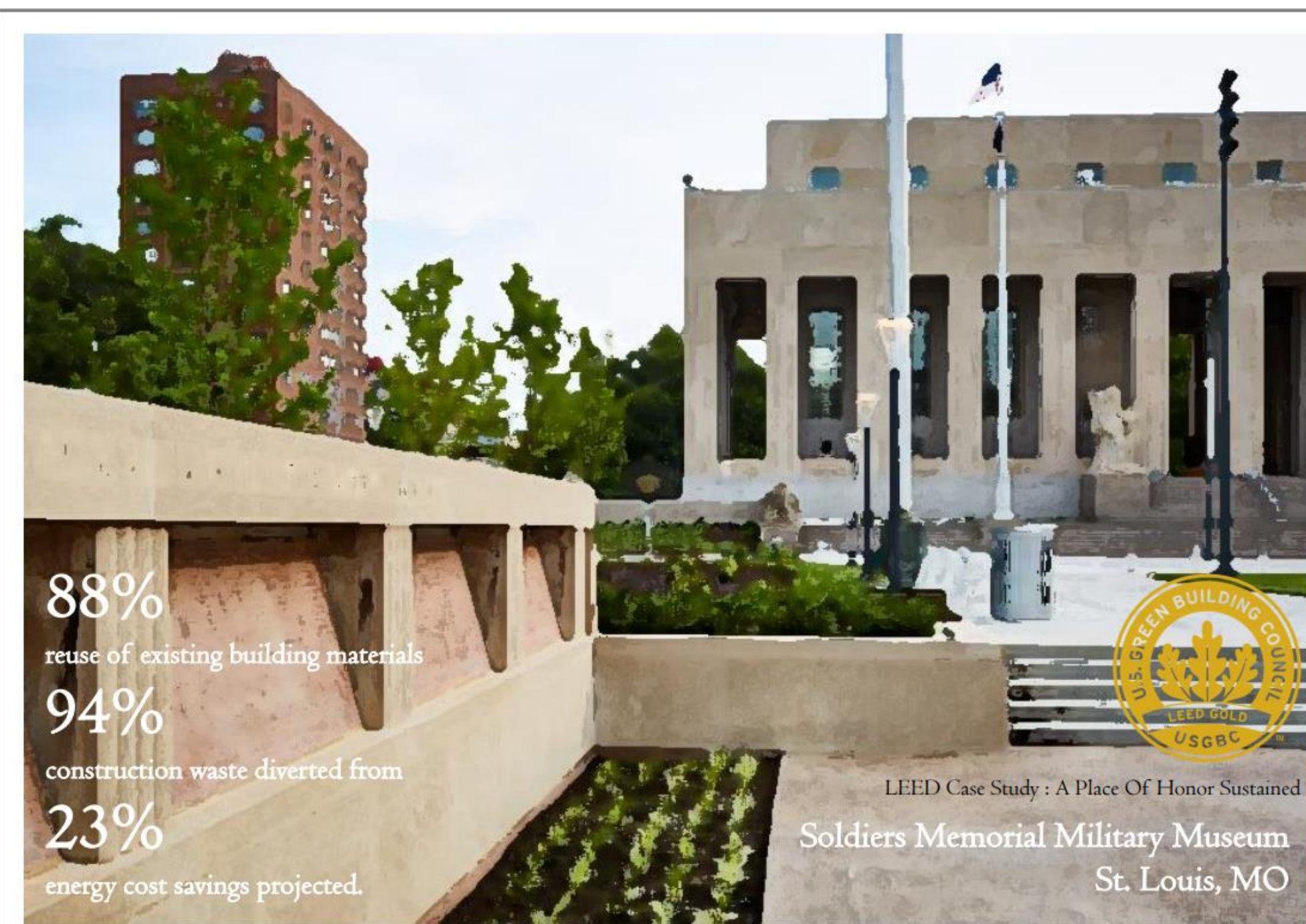


The passive design strategies are **improving skin thermal insulation, natural ventilation by vertical operable vents, and solar shading by operable louvers.**



PROJECT DETAILS

- Identify climate zone and comfort range for your thesis project site.
- Identify ideal envelope section and passive design strategies for the same.
- Carry out case study of certified green building project of your own thesis project typology.



88%
reuse of existing building materials

94%
construction waste diverted from

23%
energy cost savings projected.

LEED Case Study : A Place Of Honor Sustained
Soldiers Memorial Military Museum
St. Louis, MO

LEED ® Facts

Soldiers Memorial Military Museum
St. Louis, MO

LEED for 2009, Version: NC
Certification awarded February 8, 2019

Gold 60*

Sustainable Sites	19/26
Water Efficiency	4/10
Energy & Atmosphere	11/35
Materials & Resources	10/14
Indoor Environmental Quality	10/14
Innovation & Design	3/6
Regional Priority Credits	3/4

*Out of a possible 110 points

The information provided is based on that stated in the LEED® project certification submissions. USGBC and Chapters do not warrant or represent the accuracy of this information. Each building's actual performance is based on its unique design, construction, operation, and maintenance. Energy efficiency and sustainable results will vary.

LEED PROJECT PROFILE



Soldiers Memorial Military Museum

Preserving the Past for a Sustainable Future

Historic Renovation & Materials Reuse lead the way to LEED Gold

PROJECT BACKGROUND :

Soldiers Memorial Military Museum is a **state-of-the-art museum facility honoring local military service members, veterans, and their families**. The Missouri Historical Society assumed operation of the Soldiers Memorial in November, 2015. Thanks to the work of Mackey Mitchell Architects, much of the original architectural and historic integrity of the memorial remains. The updated museum honors the beautiful, classical-style building and seamlessly incorporates contemporary museum design.

STRATEGIES AND RESULTS

In pursuing LEED certification, the project team addressed multiple aspects of the building design and its operation. Below is an overview of the approach.

Sustainable Sites.

- The MHS renovated the Court of Honor at Soldiers Memorial by developing an **outdoor space that encourages community connection and engagement**.
- Updates to the Court of Honor were designed to **encourage visitors and pedestrians to spend as much time outside** as they would inside.
- The renovations took into account **alternative transportation and included a new electric charging station** for electric vehicles.
- The use of a **white roof** reduces the heat island effect, which helps minimize effects of greenhouse gases.



Energy.

- MHS optimized energy performance by **installing new, efficient HVAC systems**.
- Staff **measure and verify energy** so the Society can continue to optimize their operations.
- The Society worked with St. Louis Antique Lighting **to restore the original Guth Lighting fixtures**.
- The historic **1938 fixtures were renovated** and rewired to use LED bulbs, decreasing energy consumption.

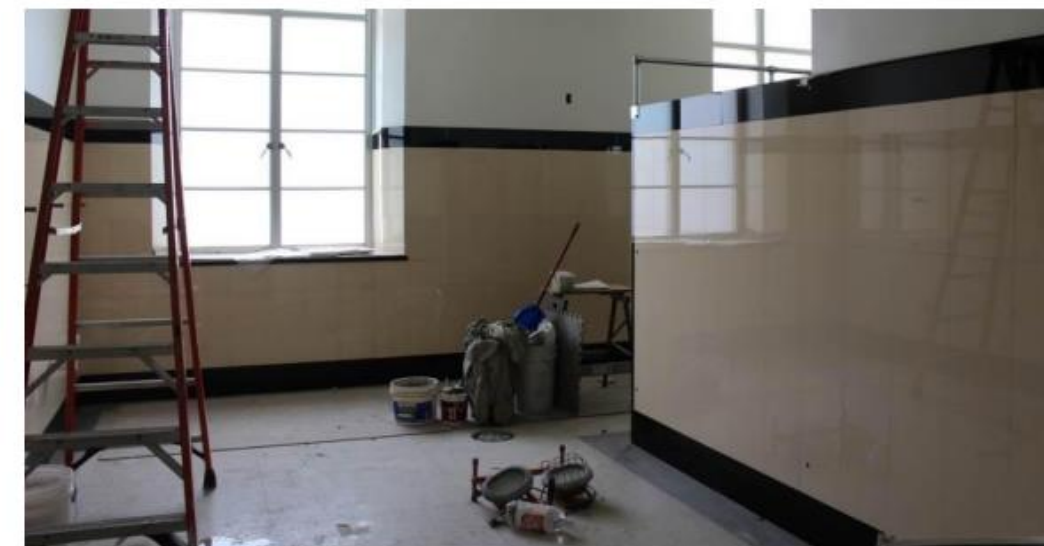


STRATEGIES AND RESULTS

In pursuing LEED certification, the project team addressed multiple aspects of the building design and its operation. Below is an overview of the approach.

Materials & Resources.

- MHS **reused materials whenever possible**, including granite steps, marble walls, and in the original bathrooms the Vitrolite panels.
- Original terrazzo floors were restored**.
- When it was not feasible to reuse materials, MHS purchased materials that had **been recycled, sourced locally, and/or were from a certified responsible source**.
- Materials were recycled, and a **local hauler was used to dispose of waste generated**.



Indoor Environmental Quality.

- After an extended period of time, **volatile organic compounds (VOCs) can greatly impact air quality in a building** and in turn negatively affect the health of employees and visitors.
- Low emitting materials were used during construction** and for permanent features within Soldiers Memorial.
- Sustainable cork flooring was installed in meeting rooms**.

Innovation.

- A priority in the St. Louis region is **indoor air quality**.
- MHS addressed this priority by using **environmentally responsible materials and effective use of operational equipment**.

5th Year B.Arch 2021-2022 Elective IV

ENVIRONMENT AND ENERGY MANAGEMENT

Sinhgad College of Architecture, Pune