THESIS REPORT ON

SCHOOL OF PLANNING AND ARCHITECTURE VASANTKUNJ, NEW DELHI

Submitted in partial fulfilment of the Requirement for the award of degree of Bachelors of Architecture (B.Arch.)

Submitted by

MOHD REHAN

Guided by

AR. AANSHUL SINGH

BABU BANARSI DAS UNIVERSITY

LUCKNOW(226028)

2019-2020

DECLARATION,

I, **MOHD REHAN**, hereby declare that the Thesis report entitled' "**SCHOOL OF PLANNING AND ARCHITECTURE** " submitted in the partial fulfilment of the requirements for the award of the degree of Bachelors of Architecture is my original design/ research work and that the information taken from secondary sources is given due citations and references.

DATE:
TIME:

MOHD REHAN
B. Arch
B.B.D.U.
LKO

BBD UNIVERSITY

CERTIFICATE

In the partial fulfillment of the **B. Arch (Architecture)** degree program, this is to certify that '**MOHD REAN**" has worked on the thesis project entitled "**SCHOOL OF PLANNING AND ARCHITECTURE"**under my guidance and supervision. This work is carried out by Shim under my guidance.

GUIDE **DEAN**

External Examiner 1 **External Examiner 2**

External Examiner 3 **External Examiner 4**

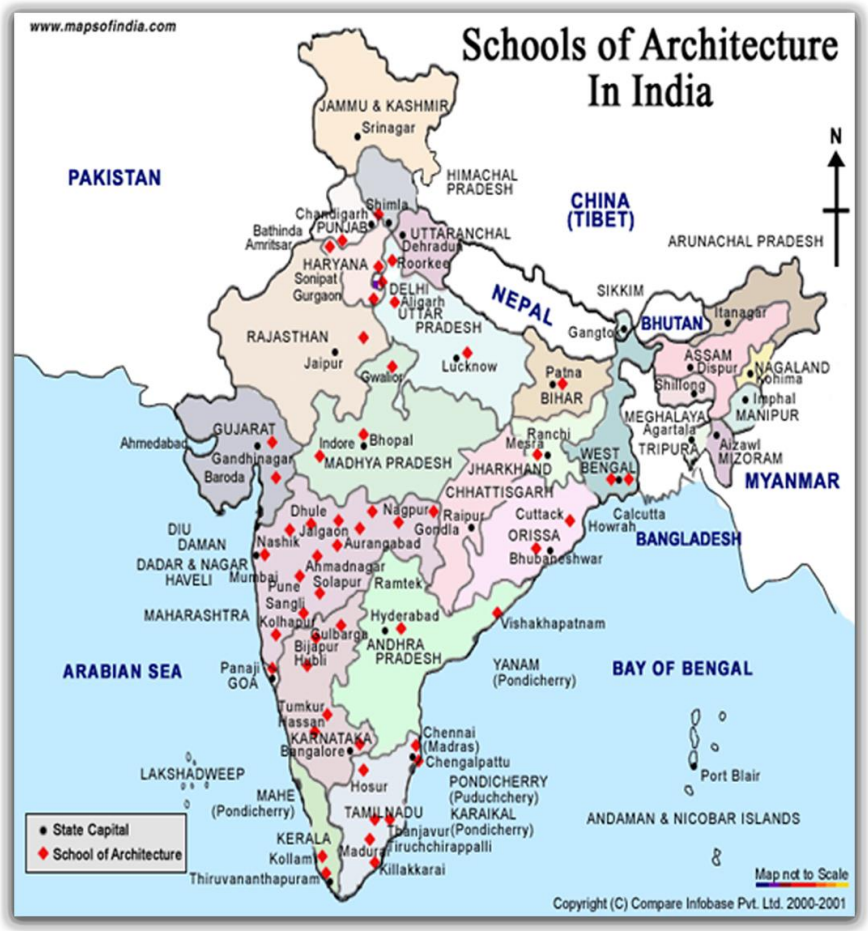
INTRODUCTION

- Architecture Colleges in India can be called foundation stones for building varied career in architecture. Architecture in India is very ancient and can be traced back to Indus Valley Civilization.

- The civilization was known for its grid layout planning of the cities with roads at exact right angles.

- Architecture institute in India came up during 1857. Sir J.J. school of Architecture, Mumbai was the First Modern College which introduced a structured course in architecture. In prevalent times there are more than 135 institutes of architecture in India.
- The standards of education imparted in all architecture institutes in India is governed by Council of Architecture

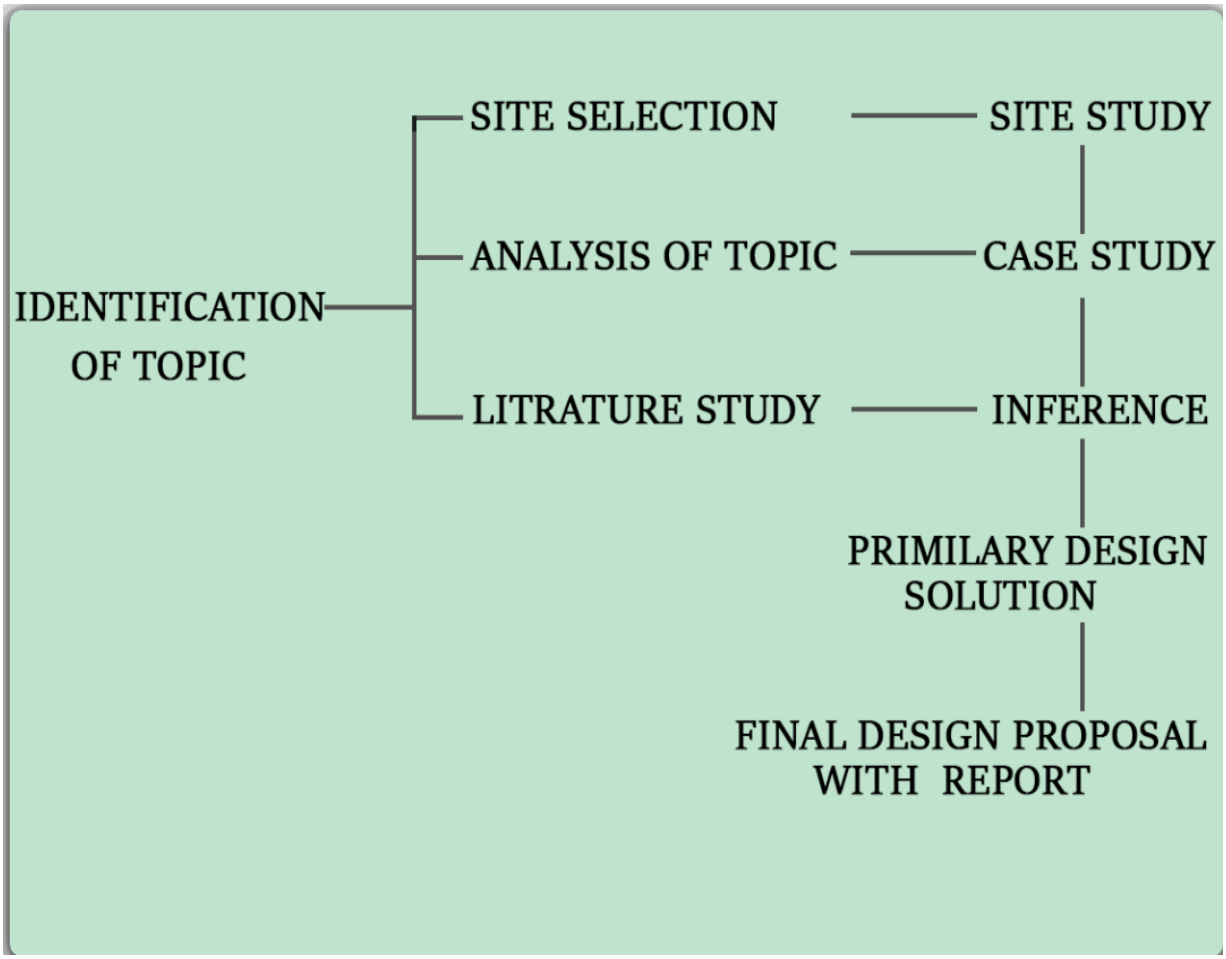
- School of Planning & Architecture, New Campus, Vasant Kunj which effectively and sensitively address the institutional objectives and requirements of SPA as an integrated, inter-related, holistic campus on one hand and the unique demands of the site, its location in the city on the other.



OBJECTIVES

- To understand spaces through case studies and data analysis.
- To carefully design spaces so as to bring about interaction among the students and teachers and make the building an ideal place for education.
- It should ensure an environment suitable for moulding young designers of good quality.
- The design should have enough freedom so that it can keep itself away from external pressure.
- The design should have no feeling of restriction for the exchange of ideas and the faculty and the students should have freedom to teach and learn anywhere apart from classrooms.

METHODOLOGY



REASON TO SELECT THIS TOPIC

- After being an architecture student for 4 and half years I felt that there is a need to prepare professionals with ethical standards based on genuine concern for improving the quality of life of individuals and society.

- My aim is to what they exactly want and help them mould themselves in that particular field.

- On the other hand there is'nt much architecture college in india in comparison to UK and United States. Thus the aim is to have an architecture college with full equipped from facilities to educational system and to be equal with an architecture college's standard.

SCOPE OF DESIGN

- School of Planning and Architecture is a big institute and developing a campus in itself is a big task.

- The scope of my design would basically concentrate on the overall master planning of the campus of architecture institute. Therefore few areas would not be detailed and will just be marked for future development.

- Areas which will be detailed out are:-
  - Undergraduate degree course for architecture (B.Arch)
  - Postgraduate degree course for architecture (M.Arch)

SITE ANALYSIS

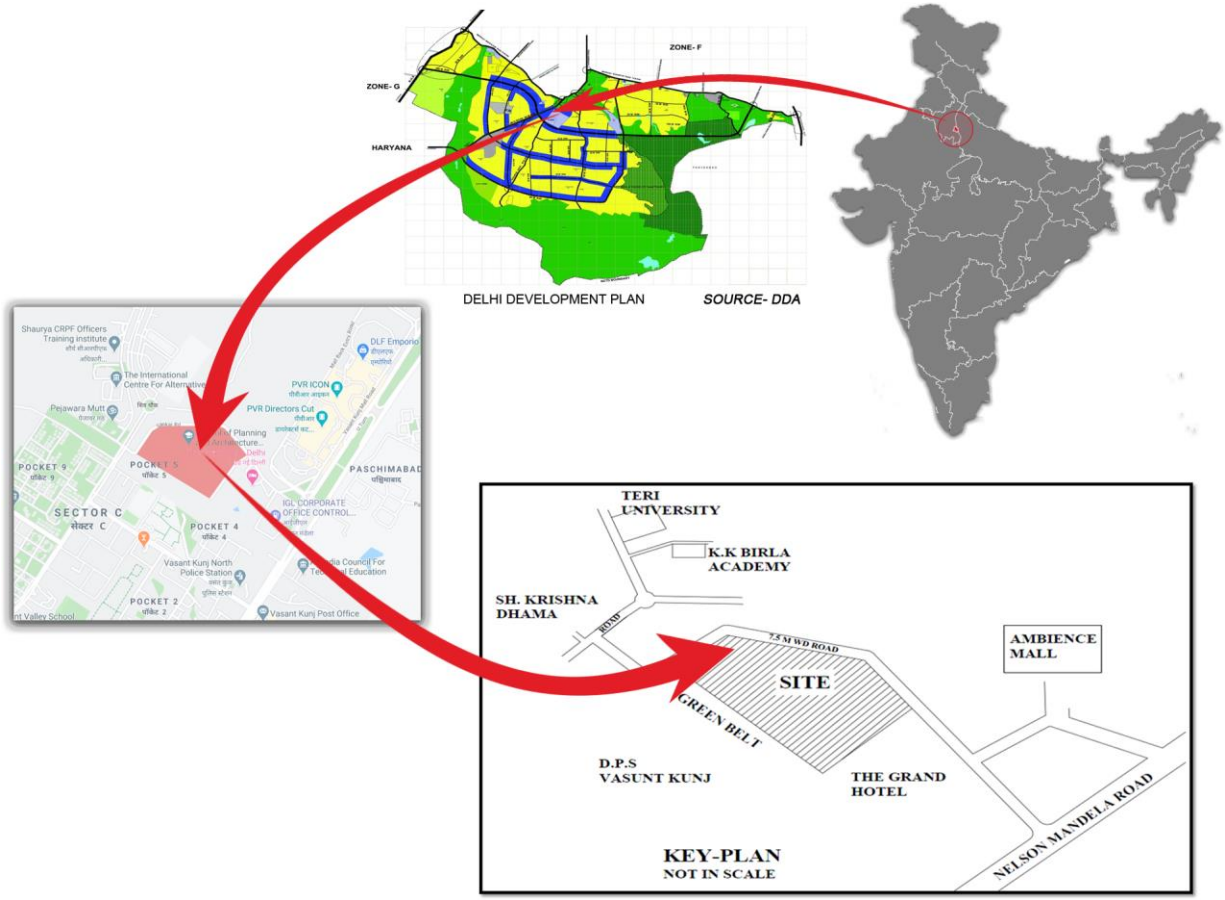
- The SPA is proposed to be designed on a plot of land measuring 80000 SQ.MTS OR 19.79 ACRES, in Vasant Kunj . The site is adjoining The Grand Hotel.

- The site is largely Contour , partially filled up and is sloping towards south end.

- The site is vacant and there are lots of natural shrubs flora and fauna.

- The site is an irregular shape. Site contains chasm approximatly 180 meter long and having an average width of 4o meter and depth of 5 meter.

- The plan responds to the demands of the local climate which features large variations in temperature, high levels of solar radiation and the monsoon season and it also had to respond to the topography of the site.



LOCATION AND APPROACH TO SITE

- The site is lotcated close to 45m wide 8 lane Nelson Mandela Road and connected via 7.5M service road.
- It has near Qutub Minar 4 km ,AIIMS 14 km,Connaugt Place 17 km, Teri University 1 km etc.
- The nearest metro station is the Chatarpur Metro Station (yellow line) within 2km from the site.
- Our site is close to bus stand. Our site is just 3 km from sonipat main bus stand. And just 6.6 km from G.T Karnal Road.
- Our site have 234.14 M. hight from sea Level.
- From our site New Delhi railway stationis 19 km and IGI airport is 7.7 km.

AREA ANALYSIS

S NO.	SITE MEASURE	DESCRIPTION
1.	Site Area	80,000 sqm
2.	Permissible Ground Coverage	35%
3.	Floor Area Ratio	1.5
4.	Permissible height	17 m
5.	Hence FAR available	1,20,000
6.	Soil	Alluvial Soil
7.	Landuse	Institutional area
8.	Water Supply	Ground resource and through Muncipal water pipeline
9.	Approach Road	Front Road- 7.5 m (2 lane)

POWER SUPPLY

The 11 KW electric lines run throughout the periphery of the site at a distance of nearly 20-30 M.

The main source of power to the site is the road side poles.

WATER SUPPLY

Water supply through the underground reservoirs and also connected to Delhi Municipal Corporation. Rainwater and sewage through drains below the green strips connecting to Nelson Mandela Road

VEGETATION

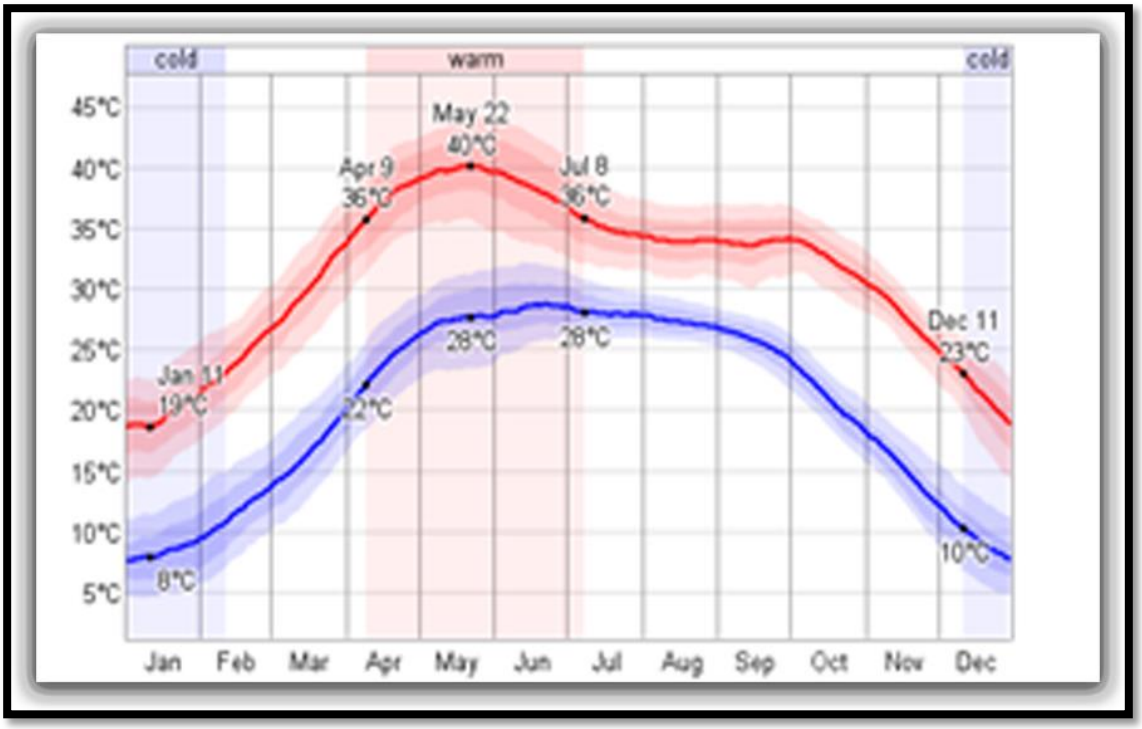
Site covered with dense shrubs, herbs and grassland.
There are no prominent large trees on the site.
In the south side of the site forest exisist.

CLIMATE STUDY OF SITE

The plan responds to the demands of the composite climate which features large variations in temperature, high levels of solar radiation and the monsoon season and it also had to respond to the topography of the site.

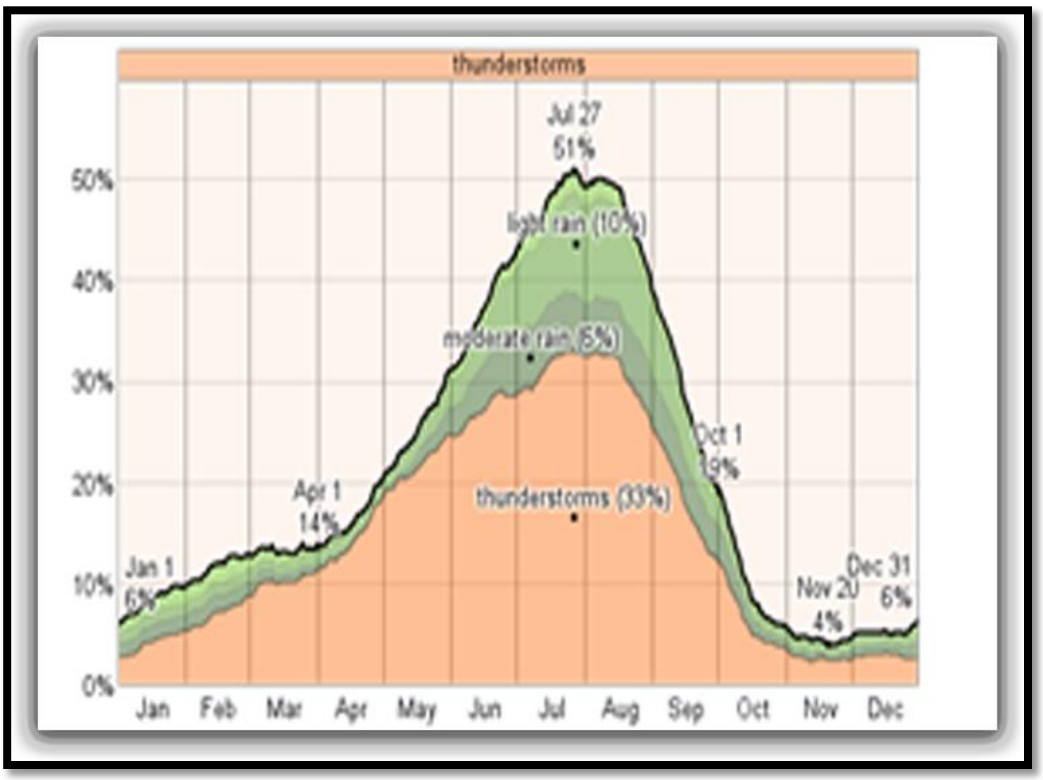
TEMPERATURE

- Over the course of a year, the temperature typically varies from 8°C to 40°C and is rarely below 5°Cor above 44°C.
- The warm season lasts from April 9 to July 8 with an average daily high temperature above 36°C.
- The cold season lasts from December 11 to February 11 with an average daily high temperature below23°C.



PRECIPITATION

- The probability that precipitation will be observed at this location varies throughout the year.
- Precipitation is most likely around July 27, occurring in 51% of days
- Precipitation is least likely around November 20, occurring in 4% of days.

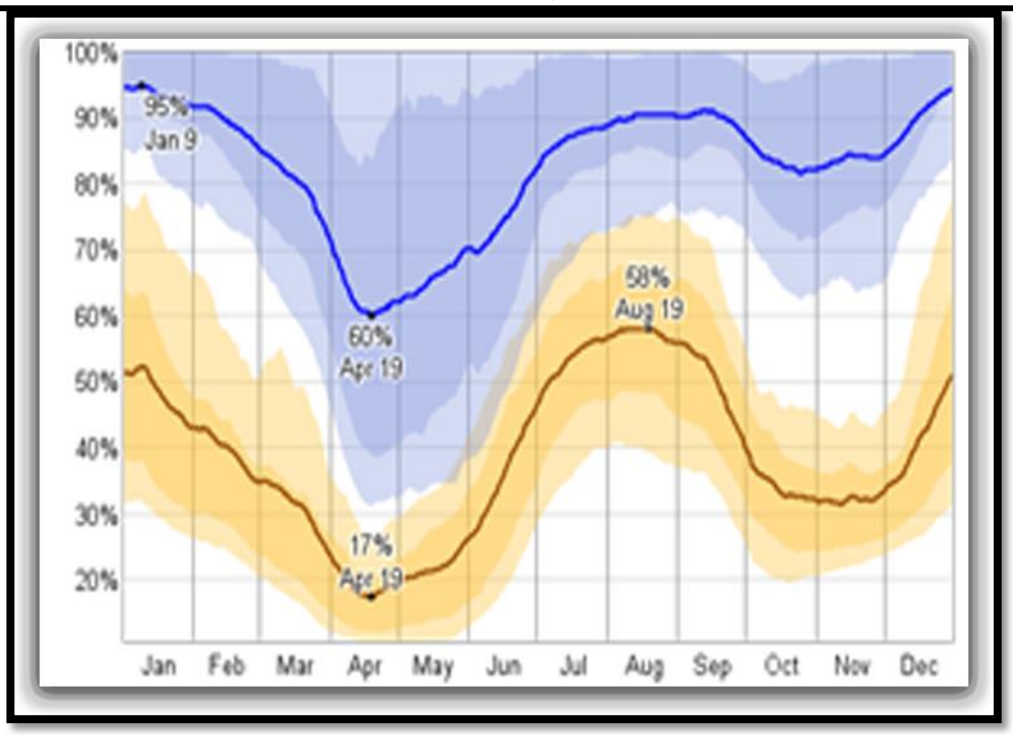


PRECIPITATION

The relative humidity typically ranges from 17% (dry) to 95% (very humid) over the course of the year.

Rarely dropping below 11% (very dry) and reaching as high as 100% (very humid).

Humidity is high from august to october

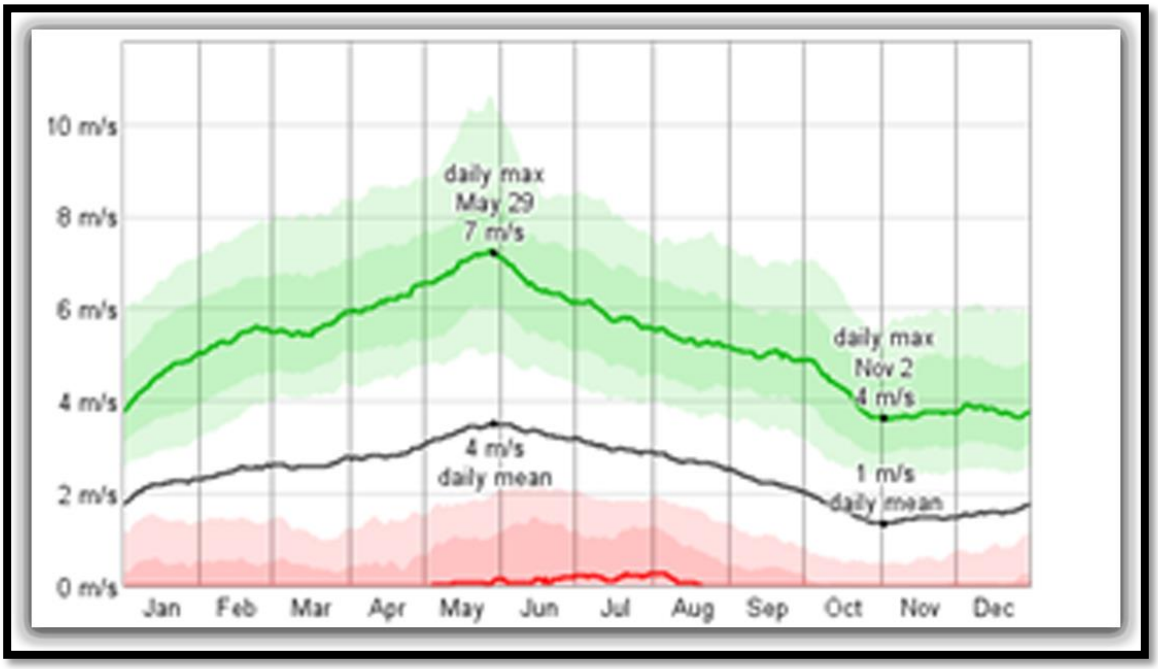


WIND SPEED

- Over the course of the year typical wind speeds vary from 0 m/s to 7 m/s (calm to moderate breeze), rarely exceeding 11 m/s (fresh breeze).

- The highest average wind speed of 4 m/s (gentle breeze) occurs around May 29, at which time the average daily maximum wind speed is 7 m/s (moderate breeze).

- The lowest average wind speed of 1 m/s (light air) occurs around November 2, at which time the average daily maximum wind speed is 4 m/s (gentle breeze).



CASE STUDY – 1

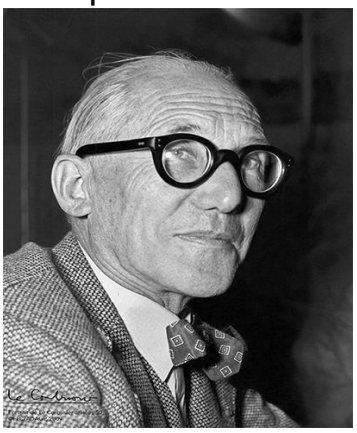
CHANDIGARH COLLEGE OF ARCHITECTURE

INTRODUCTION

The Chandigarh College Of Architecture (CCA) is a college imparting education and research in the field of architecture.

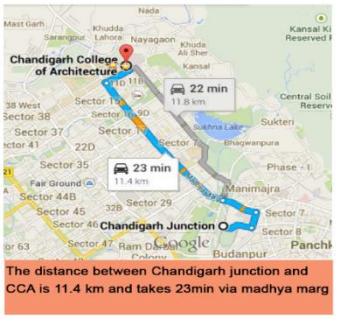
It covers the north-western region of India incliuding the states of Punjab, Haryana, Himachal Pradesh, Jammu & Kashmir as well as union territory of Chandigarh. The college has an enrolment of 200 undergradutes.

The Chandigarh college of architecture (CCA) was established on 7th august 1961 and was setup as a part of the great ''Chandigarh Experiment'' to impart education in architecture.



APPROACH

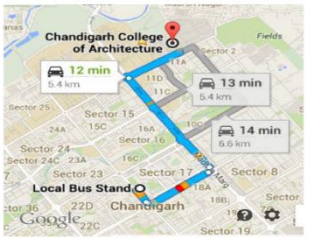
The distance between Chandigarh junction and CCA is 11.4 km and takes 23min via madhya marg.



The distance between Airport and CCA is 15.2 km and takes 29 min via udyog path.

The distance between Airport and CCA is 15.2 km and takes 29 min via udyog path.

The distance between Bus stand and CCA is 5.4 km and takes 11 min via madhya marg.



LOCATION

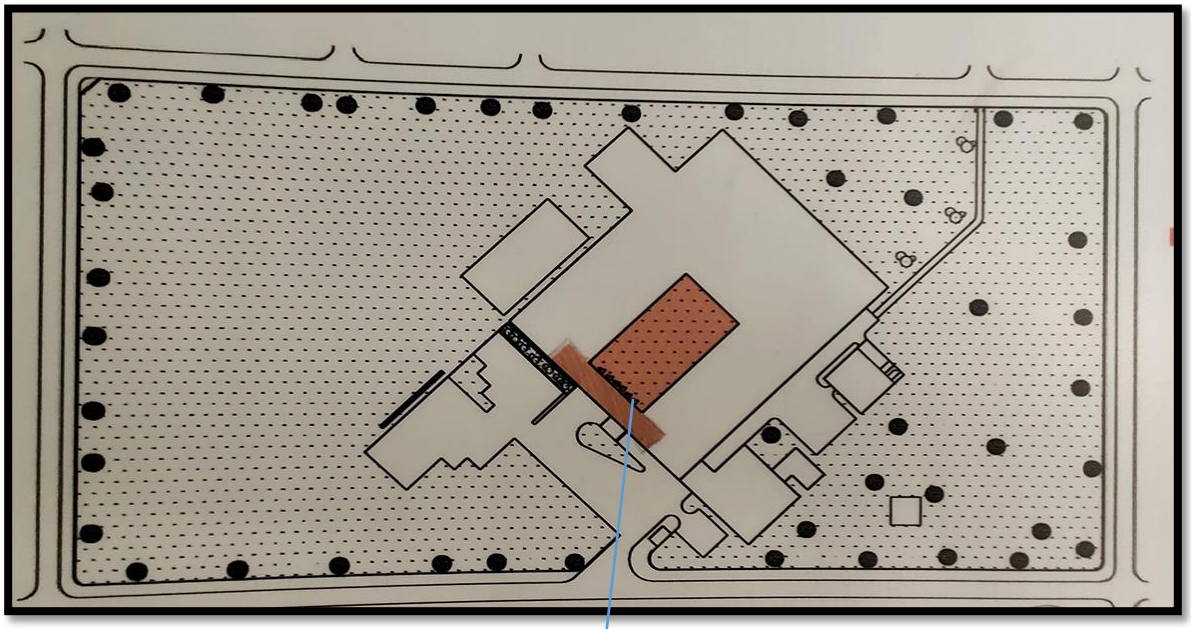
The college is situated on vidhya path sector-12D Chandigarh.
The campus is housed at the Punjab Engineering College Campus.

CCA is widely spread in 5-acre campus with its own cricket ground, basketball court, volleyball court.

LOCATION ON MAP

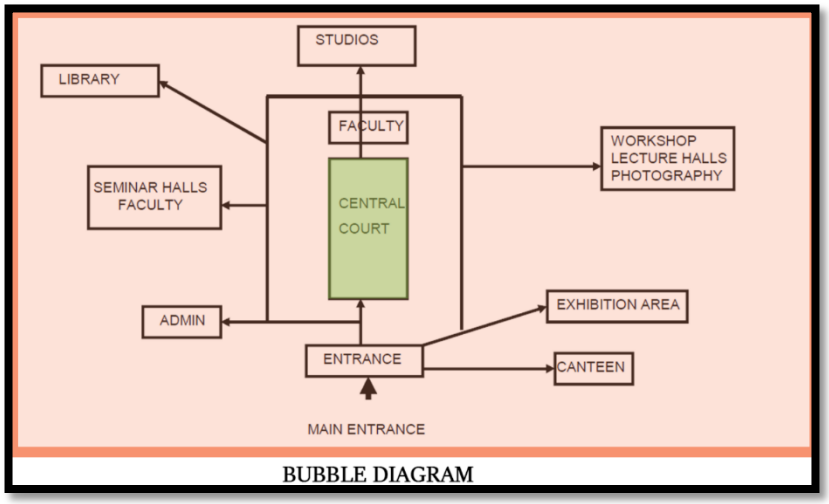
CONCEPT

The concept of planning around an open court is used in designing CCA there is central court in the middle of the building and the spaces are planned around that courtyard this court is used for multi- purpose and open lectures and workshops thus placed centrally and also as the response to the climatic zone.



Concept can be understood from the design of main building.
The use of north light concrete roof with an open lawns as a central courtyard and minimal openings on the west wall indicates the climate as a reason behind the design.
Long corridors with squarish built form gives resemblance to the character of Chandigarh city.

INTERNAL CONNECTIVITY

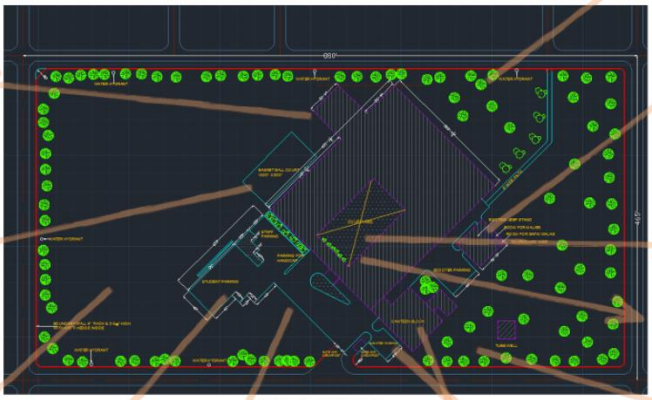


BUBBLE DIAGRAM

SITE PLAN







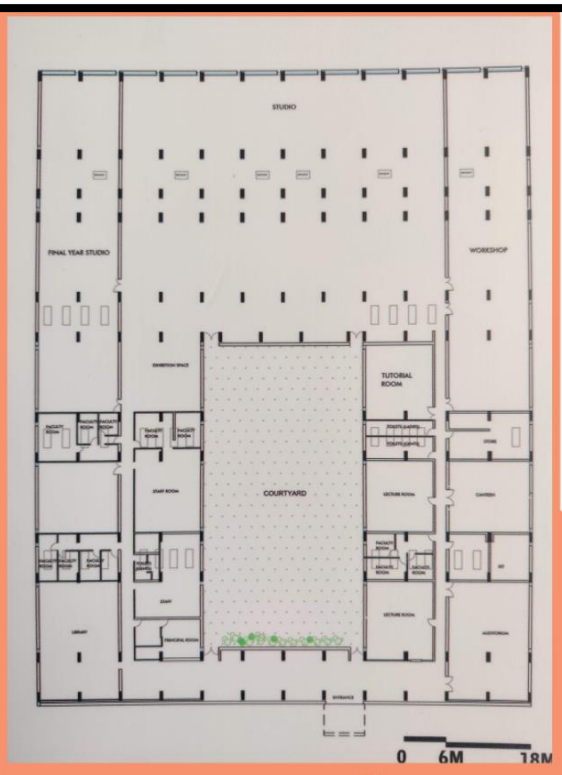
SITE PLAN (CCA)

The building sits on a angle of about 45 degree to the geometry of the site in order to take in ample amount of north light. The 8-13 acres piece of flat land is situated in campus of Punjab University. The plot is surrounded by road along the four sides.

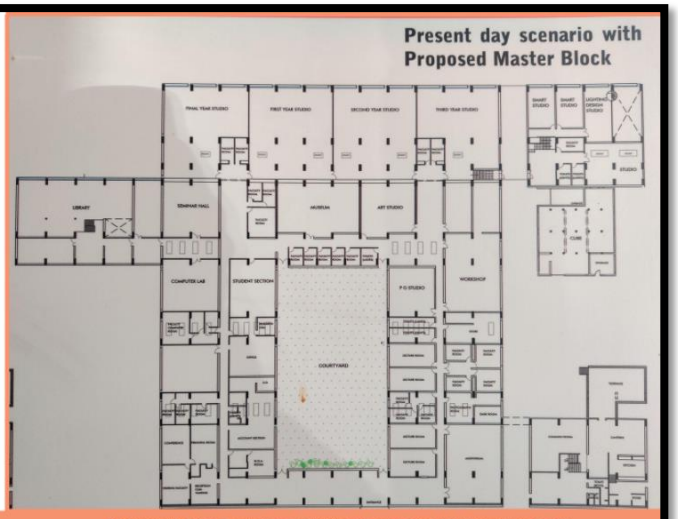





FLOOR PLANS



INITIAL FLOOR PLAN **1961**



PRESENT DAY SCENARIO WITH PROPOSED MASTER BLOCK

The present day plan includes The 'cube' and a proposed master block as an addition to existing structure.
The cube has been used for various purposes over the years and now function as night studio for the students.

AREA ANALYSIS

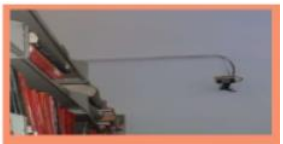
SPACES	AREA
SITE AREA	20,000 SQM
BUILT UP AREA	5553
PARKING	3338
ENTRANCE	1000
CENTRAL PLAZA	870
ADMIN	300
SPORTS AREA	BASKETBALL COURT, FOOT BALL,CRICKET
STUDENT CENTRE	384
CAFETERIA	300
CENTRAL LIBRARY	500

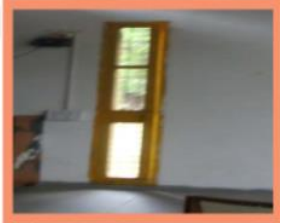
SPACES	AREA
STUDIO	80 SQM
CLASS ROOM	60 SQM
COMPUTER CENTER	60 SQM
FACULTY ROOM	100 SQM
MEETING ROOM	60 SQM
ENTRANCE	5 METER
MULTIPURPOSE HALL	100 SQM
WORKSHOP	100 SQM
CONSTRUCTION YARD	274 SQM
GUARD ROOM	9 SQM
HOSTEL	875 SQM
JURY AREA	IN STUDIO

SERVICES

There are many services provided in the campus mention below-

- •Advance fire alarm.
- • CCTV cameras.
- • Best usage of north light.
- •Fire extinguisher are provided
- •White colour of internal walls which reflect light and the space
- • At the main entrance display area is provided.
- •For emergency backup generator is provided.







ELECTRICAL SUPPLY

Electricity transfer in the campus through the electrical poles. Safety measures regarding electricity are taken into consideration.

WATER SUPPLY

Water is store in a water tank from submersible pump and govt. water supply.

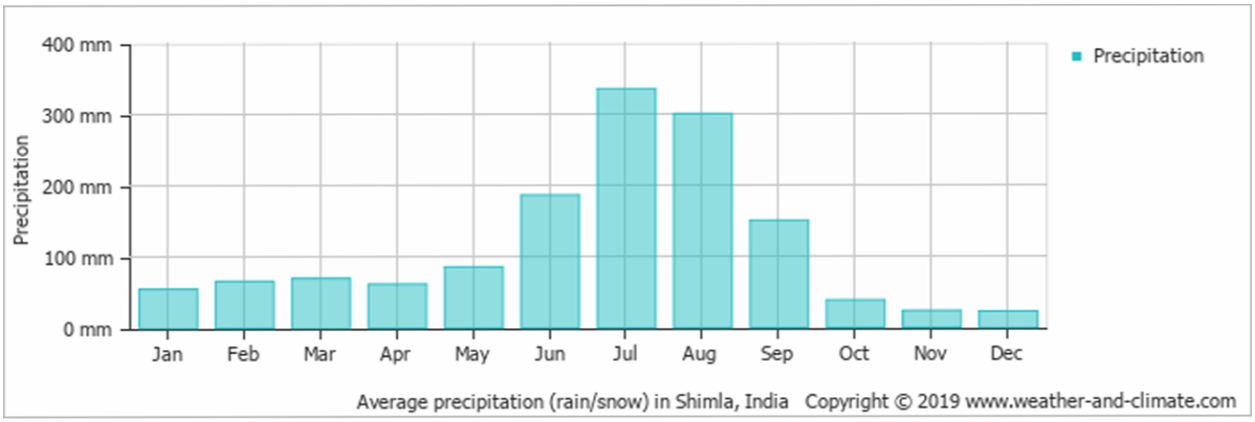
Water cooler are provided at the two corners of the corridor.

CLIMATE

Chandigarh has a humid subtropical climate characterised by a seasonal rhythm: very hot summers, mild winters, unreliable rainfall and great variation in temperature−1 °C to 45°C

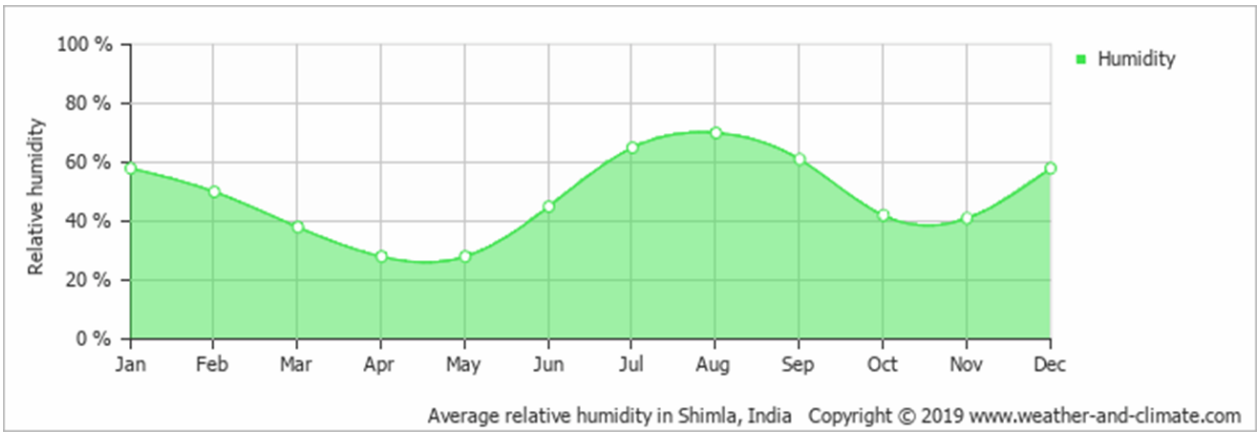
PRECIPITATION

Precipitation here is about 979 mm | 38.5 inch per year.



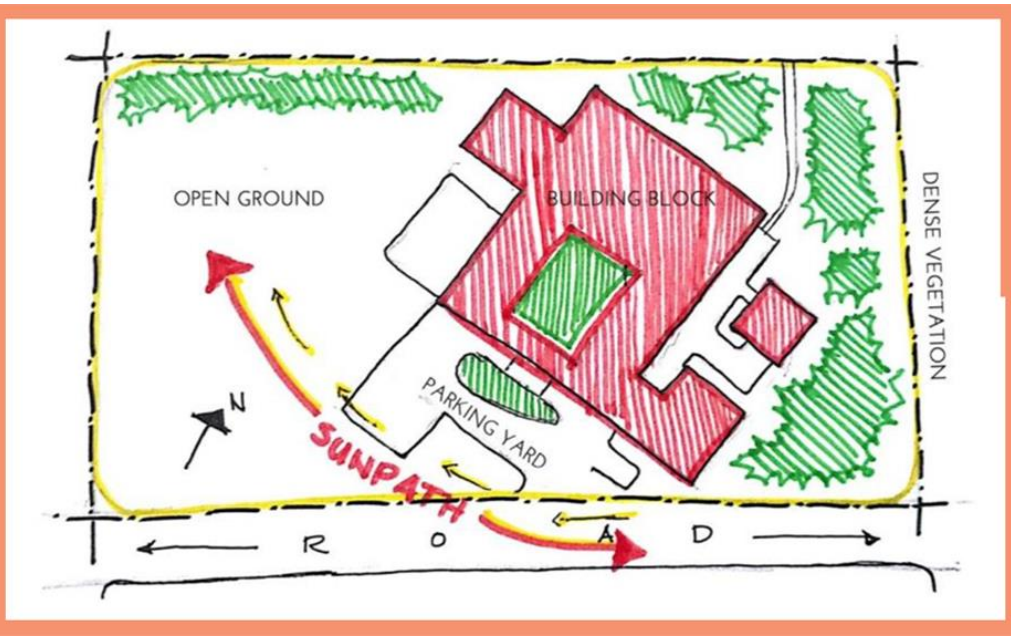
HUMIDITY

Humidity in chandigarh from july to mid september is about 65% and average humidity is 30% to 35%



SUN PATH

The building sits on a angle of about 45 degree to the geometry of the site in order to take in ample amount of north light.



INFERENCES

MERIT

• Courtyard is the only open space in the college which is well linked to the rest of the college. It is a grassy lawn, used by students to relax during their spare time.

• The classrooms, studios are other spaces lighting is good during day time.
• Vertical small window, which are present on the outside walls.
The north sidewindows are large and near the ceilings.

• Now days, further partitions have been put in studios to divide them into subspaces.
• The studios are quite spacious and they are separated by low height walls.

DEMERIT

Architect has failed to link the courtyard in an active manner with rest of the building. As a result,it is dead space.

• In rainy season if heavy rain occured rain water filled in the building though courtyard

• Being a concrete building it absorbs heat thus it become very hot in the summer.

• corridor width is about 1.2 m so the circulation of the building is not good

• No medical room in the college.

• Girls hostel situated in another sector.

CASE STUDY – 2

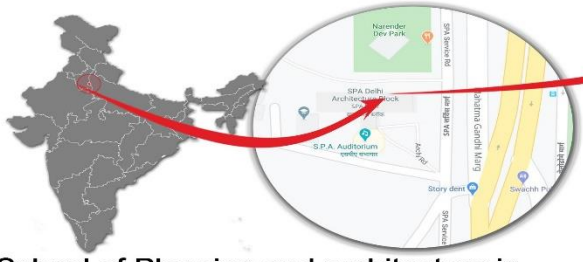
SCHOOL OF PLANNING AND ARCHITECTURE ,DELHI

INTRODUCTION

School offers planning, architecture and design courses both at undergraduate and postgraduate levels.
The design of school was done by architect T.J.Manickman. While the Bachelor of Architecture course is one of the oldest in the country, highly successful Bachelor of Planning course was started in 1989.
The various Departments in the School are as follows :
Department of Architecture
Department of Urban Planning
Department of Housing
Department of Transport Planning
Department of Landscape Architecture
Department of Urban Design
Department of Environmental Planning
Department of Physical Planning
Department of Regional Planning
Department of Architectural Conservation
Department of Industrial Design
Department of Building Engineering and Management

LOCATION AND APPROACH

The current SPA Delhi campus is locaed near ITO in Indraprastha infront of KD JADHAV Hall New Delhi.



School of Planning and architecture is located close to Mahatma Gandhi road.

It has near proximity to TNCP (town and country planning) building.

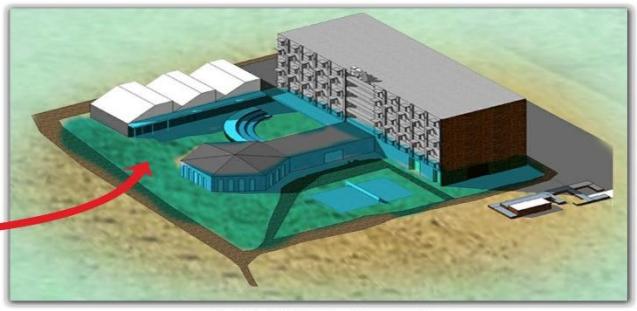
The nearest metro station is ITO Metro Station(Voilet line) within 1 km from the campus.

Campus is 3.8 km from Connaught place , 2.8 km from New Delhi railway station and 17 km from IGI Airport.

Right side set back of campus used as parking.
11 kv electricity transfarmer situated right side corner of the campus

HISTORY

It was Walter George who chose to stay back when the British left India. During those days there were hardly any architects in the city. There were only two schools in India for training architects, and these were located in Bombay and Baroda. Walter George and his colleagues thus began the work of establishing the first institution in Delhi for imparting training to students of architecture. It was in 1942 that the Department of Architecture came into existence as a part of the Delhi Polytechnic at Kashmiri Gate in northern Delhi. While W.W. Wood became the first Principal of the newly established Delhi Polytechnic, Mr.Mirza became the first Head of the Department of Architecture . The first batch of students received their national diplomas in Architecture in 1950.



SPA DELHI BIRD EYE VIEW

SITE PLAN

The plan is in the form of I shape with studies ,admin ,canteen and library situated vertical and multipurpose hall ,workshops and Industrial Design working space perpendicular to it .

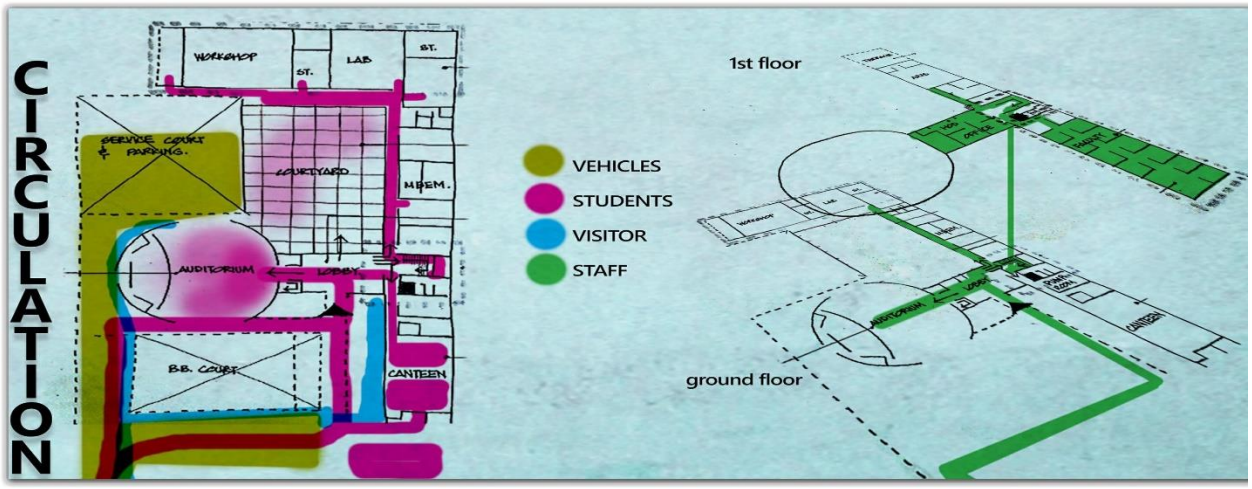
The building lacks architectural character building is too high and thus the scale does not match and fit in the site , the building is planed on a grid of 3 m . The service core containing the staircase.

SITE PLAN SPA DELHI

TYPE OF BUILDING	INSTITUTIONAL
SITE AREA	2 ACRE
BUILTUP AREA	6500 SQM
GROUND COVERAGE	1600 SQM

SITE AREA SPA DELHI

BUILDING CIRCULATION



VERTICAL CIRCULATION

Vertical circulation in building through the stair case and through a lift.
There are only one satircase in the building and no fire exit are provided for emergency exit.

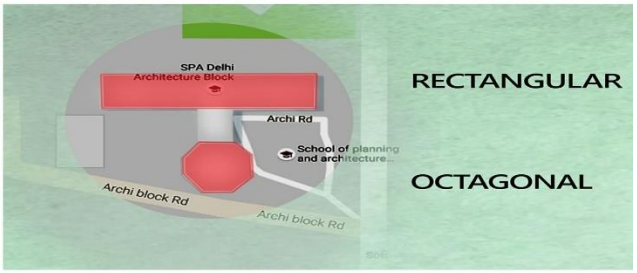
Ground Floor Plan


Staircase


Lift

SHAPE OF THE BLOCK

The plan is in the form of octagonal and rectangular bloc.
octagonal block consist auditorium in basement and admin block on the first floor.
while rectangular block consist library, studio,canteen, workshop, staff room etc.



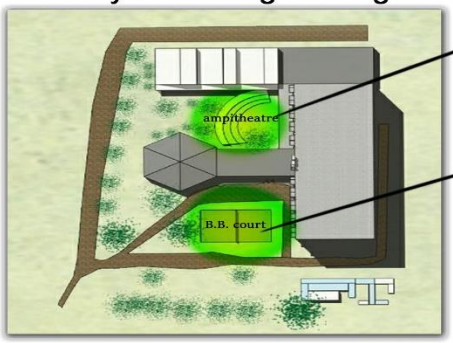
COVERED AREA ON EACH FLOOR

FLOOR	COVERED AREA
FIRST FLOOR	1343 SQM
SECOND FLOOR	882 SQM
THIRD FLOOR	882 SQM
FOURTH FLOOR	882 SQM
FIFTH FLOOR	882 SQM

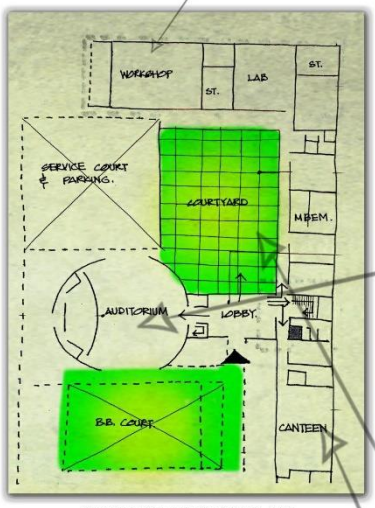

ELEVATION OF SPA DELHI

COURTYARDS

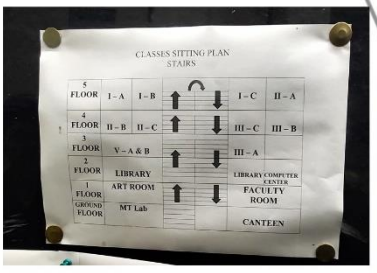
There are two courtyard in the campus west side courtyard is use as intraction and it contains an ampitheatre in it.
Other east site courtyard of campus consist basket ball court.
Both court yard have good vegetation



GROUND FLOOR EXISTING

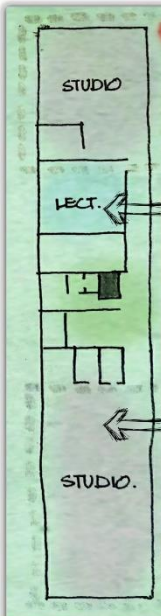


GROUND FLOOR PLAN



CLASSES SITTING PLAN

FLOOR PLANS



3rd, 4th, 5th Floor Plan

3rd, 4th,5th,floor consist same planning at each floor.
These floors consists LECTURE ROOM, and STUDIOS.

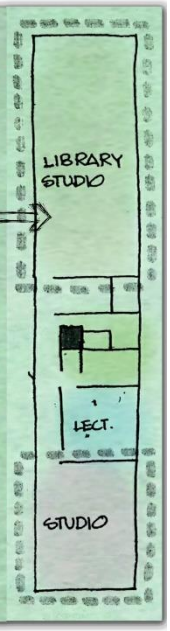
In summer all the studios and lecture rooms are not comfortable for study.

2nd Floor plan

Academic activity takes place here,
One side is having Library and other having STUDIOS, LECTURE ROOMS, STORES.

Lecture rooms are crowded and bad natural canteen

SPACES	AREA
STUDIO	110 SQM
LECTURE ROOM	100 SQM
LIBRARY	300 SQM
LIFT	20 SQM
DIRECTOR ROOM	40 SQM
REGISTRAR ROOM	20SQM
DEAN ROOM	20 SQM
CLASS OFFICERS	45 SQM
STORE	40 SQM
MODLE STORE/STATIONARY	200 SQM
AUDITORIUM	100 SQM
CANTEEN	200 SQM
GUARD ROOM	6 SQM



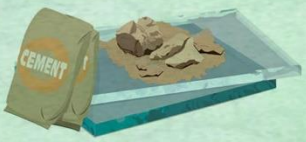
BUILDING MATERIAL

EXTERIOR

Wall :- Exposed brick, Plaster on surface
Double skin facade(jaali)
Floor :- Kota stone,
Sculpture :- Tile brick, Stone







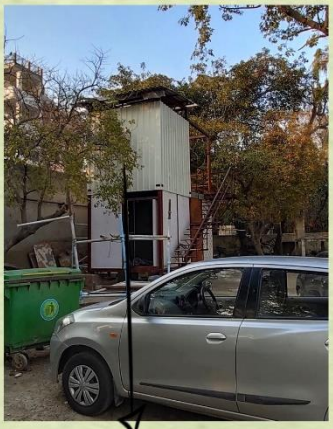
INTERIOR

Wall :- Brick wall, plaster
Floor :- Kota stone, Granite stone
Roof :- Rcc slab



SERVICES

In the campus services are very lessbecause the campus is old construction.
In the institutional building there are no fire exit. only one stair case and one lift given in the building core.
Water supply through the pump room to the over head tank.
11 KW electricity conection in the campus through a tranformer .
There are 2 fire extinguisher on each floor.
Fire alarm is also given on each floor



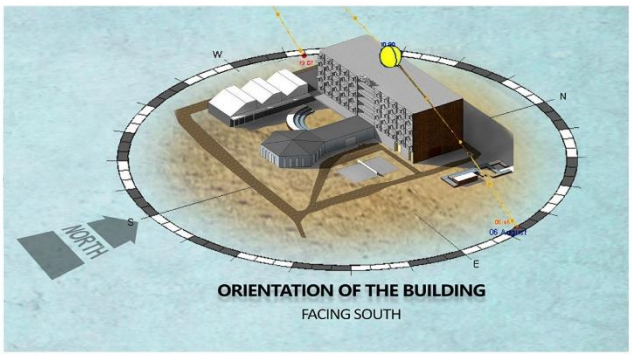
CLIMATE

The campus responds to the demands of the composite climate which features large variations in temperature, high levels of solar radiation and the monsoon season and it also had to respond to the topography of the site.

In summers day time temperature is 32-45 degree Celsius and during night time temperature is 27-32 degree Celsius. In winters day time temperature

SUN PATH

Campus is facing south so in summer building inner tempreature is higher than a normal room tempreature.there are no thermal comfort in summer season.



ORIENTATION OF THE BUILDING
FACING SOUTH

COMPRATIVE ANALYSIS

TOPIC	SPA DELHI	CCA,CHANDIGARH
Relevance to topic	School offers planning, architecture and design courses both at undergraduate and postgraduate levels	The school provides Education in architecture
Location	Delhi	Chandigarh
Site planning	Semi formal planning	Formal Planning
Site zoning	Building evolved open space out side of building	Building evolved around a central open space
Parking	Vehicular parking is provide in side campus But its not in proper way	Vehicular parking inside & outside campus is provided
Entrance	RCC pathways shaded by trees on one sides. secured entrance with guard room.	No such pathways leadings to main entrance. two way road approach to campus
Open spaces	Planned two formal court out side of the building one of them is basket ball court and other one is amphitheatre	Planned formal central court with informal space for sitting and gathering
Light & Ventilation	South facing orientation of building with large openings permitting sunlight inside.	Building is oriented 45 degree facing south. All the windows are in north facing.
Building Services	Due to the water supply as leakage is there are dampness in the walls .	Building Services are maintained properly in all over the building blocks
Administrative Areas	Separate Administrative Connected with the passage on first floor	Office and administrative areas are connected with and within the academic blocks
Lobby	Lobby is interpreted in the form of long narrow passage with one side open	Lobby is interpreted in the form of long passage
Library	Central library is in the building on second floor but lack of natural light	Library with natural light coming inside
Classrooms	classrooms with semi visual contact between two classrooms	Classrooms don't have visual contact and they are beside each others
Staff room	Provided in the institutional block on first floor	Staff rooms are provided in opposite site of the studio.
Staircase & circulation core	Simple stair case are provided width 1.5 m Lift is also provided	No Staircase provided

DETAILING OF INFRASTRUCTURE REQUIREMENTS BASED ON MINIMUM STANDARDS

A: SPACE

Sr. No.	Year of Operation →	1st Year			2nd Year			3rd Year			4th Year			5th Year			Remarks
	Sanctioned Intake →	40	80	120	40	80	120	40	80	120	40	80	120	40	80	120	
	Activity Spaces (Carpet Area)																
1.	**Studio** - 120 sq. m each	1	2	3	2	4	6	3	6	9	4	8	10	4	8	10	Flexibility in terms of studio spaces can be based on local conditions, provided that area of 3 Sq. M. per student of sanctioned intake is made available. **In case of e-studios, the requirement of the space for such studios may be reduced by 20%**
2.	**Class room** - 60* sq. m each	1	2	3	2	4	6	3	6	8	3	6	9	3	6	8	*- Maximum 2 class rooms can be combined together to cater to theory class of maximum 80 students i.e. 120 sq.m. Provided with digital projection facilities and sound amplifier system.
3.	**Labs and Workshops** - 60 sq. m each	2	2	2	2	3	4	3	4	5	3	4	5	3	4	5	
4.	**Computer Centre** - 60 sq. m	-	-	-	1	1	1	1	1	1	1	1	1	1	1	1	
6.	**Multipurpose Hall**																
	400 sq. m											1	-		1	-	
	600 sq.m											-	1		-	1	
7.	**Resource Centre** - 60 sq. m	-	-	-	-	-	-	-	1	1	-	1	1	1	1	1	Documentation included.
8.	**Library** - 120 sq. m							-	-	-	1	-	-	1	-	-	Desirable: 0.5 sq. m per student of sanctioned strength upto 3rd Year even when not mentioned.
	150 sq.m								1	-		1	-		1	-	
	200 sq. m								-	1		-	1		-	1	
9.	**Submission & Exam Room**																
	30 sq. m				1	-	-	1	-	-	1	-	-	1	-	-	
	60 sq. m				-	1	-	-	1	-	-	1	-	-	1	-	
	90 sq. m				-	-	1	-	-	1	-	-	1	-	-	1	
10	**Students' Centre**																
	30 sq. m							1	-	-	1	-	-	1	-	-	
	60 sq. m							-	1	-	-	1	-	-	1	-	
	90 sq. m							-	-	1	-	-	1	-	-	1	
11	**Girls' Common Room**																With attached toilets and rest room
	30 sq. m				1	-	-	1	-	-	1	-	-	1	-	-	
	60 sq. m				-	1	1	-	1	1	-	1	1	-	1	1	
12	**Boys' Common Room**																With attached toilets and rest room
	30 sq. m				1	-	-	1	-	-	1	-	-	1	-	-	
	60 sq. m				-	1	1	-	1	1	-	1	1	-	1	1	
13	**Staff Rooms / Cabins** - Professor- 12 sq. m each Associate Professor- 8 sq. m each Assistant Professor- 6 sq. m each																As per the COA faculty norms in the yearly progressive fashion
14	**Staff Lounge**																For Visiting Faculty
	30 sq. m				1	-	-	1	-	-	1	-	-	1	-	-	
	60 sq.m				-	1	1	-	1	1	-	1	1	-	1	1	
15	**Principal's Cabin** - 30 sq.m	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	with waiting lobby
16	**Administrative Office** -																
	30 sq. m	1	-	-	1	-	-	1	-	-	1	-	-	1	-	-	
	60 sq.m	-	1	1	-	1	1	-	1	1	-	1	1	-	1	1	
17	**Toilets, Corridors, Lobbies, Store, Parking etc.**																As per building standards
18	**Construction Yard** - 200 sq. m																Open space activity from second year onwards

LITERATURE STUDY – 1

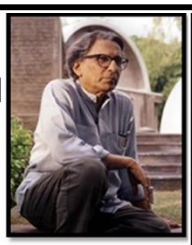
CENTRE FOR ENVIRONMENTAL PLANNING

INTRODUCTION

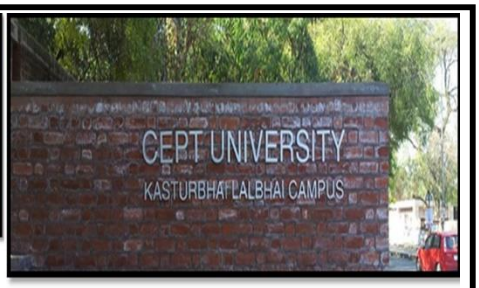
The School of architecture at Ahmedabad is a part of the campus of Centre For Planning and Technology (CEPT).
This school of architecture is the most contemporary school in India. The design is selectively developed and a large area isused for landscape.

The school of architecture was first built in 1962 with adequate facilities of expansion.
The CEPT has four schools functioning under it :

School of Planning
School of Architecture
School of Building Science & Technology
School of Interior Design



Architect: Ar. B V Doshi



SITE

The 5 acre campus stands on the site in the middle of Gujarat University and can be approached from all sides.
Architectural Building based on L-Shaped configuration.
There are 3 entrances for the site :-
- North Facing connecting Architecture Department.
-West Facing connecting Community Science centre.
-South Facing connecting SBST Department.
Architecture Block has two entrances :
- North Facing
- South Facing
The main approach for the Architecture Block is from South Facing entrance.

LOCATION

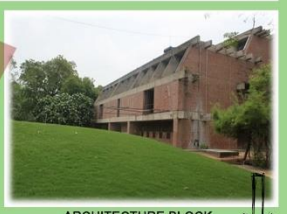
The campus is located over 5 acres in the Navrangpura area of the city of Ahmedabad, Gujrat .The site is 6.7 km from Ahemdabad railway station,6.9 km from Ahemadabad Bus stand and11.8 km from Ahemdabad airport.

Latitude : 23° 04'N
Longitude : 72° 38'E
Altitude : 55 Meters above mean sea level

PLANNING

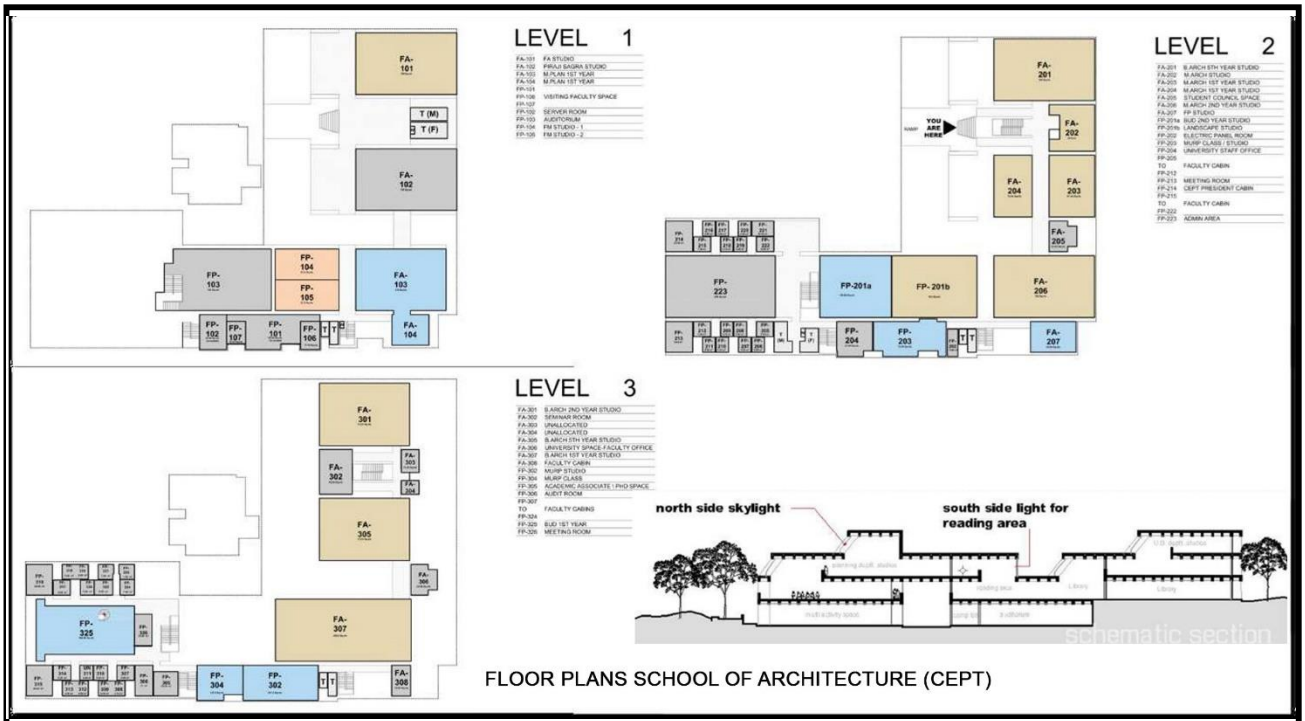
The overall planning done around the central court with built masses on sides and green it gives the campus noise protection from traffic.
Architect has included uneven contours into the plan transforming a drawback into a delightful experience of campus

SITE PLAN(CEPT)



ARCHITECTURE BLOCK

STUDIO



FLOOR PLANS SCHOOL OF ARCHITECTURE (CEPT)

SERVICES

Water Supply

For the water supply system two types of storage tanks were provided:

Overhead Water Storage tank
Under-ground Water Storage Tank

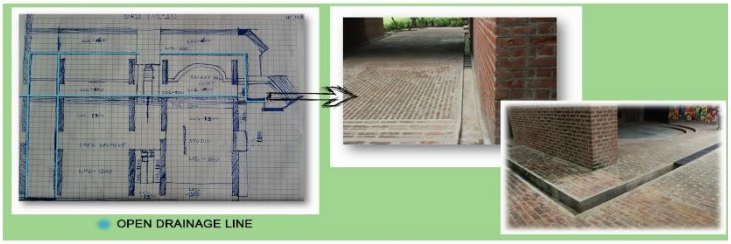
UNDER GROUND WATER TANK

HVAC:

HVAC service provided in the AdminBlock, Computer Labs, Faculty Room, Principal's Room.

DRAINAGE:

There was no Rain Water Harvesting system in the campus.
Rain water and Storm water run through these open drains.



OPEN DRAINAGE LINE

LANDSCAPE

Trees, landscaped courts and planters give shade in the hot climate.There are also small plants within the building and plotted plants at places which makes nice entry gesture.There exists a harmony running throughout the whole campus, building and nature coexisting in a comfortable relationship.

BUILDING MATERIAL

The design was built-up by locally available material.
The design was built to ensure a low cost and easy to maintain.
Structure is made full of Bricks and Concrete.
Exposed Brick work was done.
Concrete Slabs were laid on four parallel load bearing walls.

GRANITE USED IN FLOORING

RAILING MADE OF CONCRETE

Granite stone is used in the flooring of studios and lecture rooms.
Granite Stone is used in the corridors and staircases and the staircase railing is made up of concrete.

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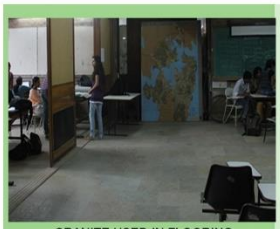

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RAILING MADE OF CONCRETE

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Granite Stone is used in the corridors and staircases and the staircase railing is made up of concrete.

PARKING

Underground parking was not available in the university, only the surface parking was available by the main entrance.

LIBRARY

CEPT library houses approx. 50000 books , technical videos and reading material in the subject of architecture, interior design, construction, technology, and management, urban and regional planning, housing, environmental planning, urban design, landscape architecture, civil engg. Structure design, visual art, humanities etc.

CLIMATIC CONDITIONS

Ahmedabad lies in Warm-Humid Climatic Zone.
Annually mean Max. Temp : 40.7˚C.
Annually mean Min. Temp : 11.9˚C.
Annual Rainfall is about 600-800 mm.
Annually mean Min.Relative Humidity : 36.8%.
Max. Relative Humidity lies in period of July-86% , August-84% ,September-80%

DESIGN FEATURES

All buildings are oriented in the north-south direction.

Open spaces on the north & south side respectively allow fresh air for ventilation

The open spaces is linked to the office and library area , workshop and canteen.

The design is intended to be close to nature and experiment the designing skills, play with levels.

There are two types of buildings in CEPT campus -Wide spanning , multiple storeyed

LITERATURE STUDY – 2

YALE ART +ARCHITECTURE
NEW HAVEN

INTRODUCTION

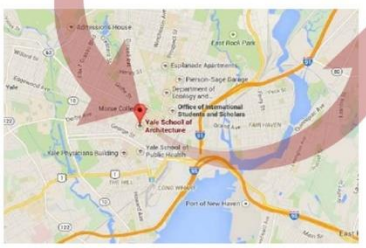
The Department of Architecture was established in the School of the Fine Arts in 1916. In 1959 the School of Art and Architecture as it was then known, was made into a fully graduate professional school.

In 1972 Yale designated the School of Architecture as its own separate professional school.

The School is housed in the masterwork of its former Architecture Department Chair, Paul Rudolph. Rudolph Hall, formerly the Yale Art and Architecture Building was rededicated and reoccupied in November 2008 following an extensive renovation and addition carried out by a team which included renowned New Yorkarchitect and Yale alumnus Charles Gwathmey.

LOCATION





ARCHITECT'S PHILOSPHY

"External forces dictated that this building turn the corner and relate to the modern building opposite as well as suggest that it belongs to Yale University. The internal forces demanded an environment suitable for ever varying activities which will be given form and coherence by the defined spaces within. As the years go by, it is hoped other interests and activities will take place within the spaces, but the space itself will remain." - Paul Rudolph.

CLIMATE

TEMPERATURE- Over the course of a year, the temperature typically varies from -4°C to 28°C and is rarely below -12°C or above 31°C.

SUN- The length of the day varies significantly over the course of the year. The shortest day is December 21 with 9:11 hours of daylight; the longest day is June 20 with 15:09 hours of daylight.

PRECIPITATION- The probability that precipitation will be observed at this location varies throughout the year. Precipitation is most likely around February 10, occurring in 45% of days. Precipitation is least likely around September 11, occurring in 34% of days.

DESIGN FEATURE

Rudolph envisioned the building as a teaching tool, peppering his Modernist castle with fragments of history: plaster casts of Assyrian reliefs and Parthenon friezes; Le Corbusier's Modular measure; original Louis Sullivan gates; and locally salvaged Ionic capitals. Incorporated with remarkable self-confidence despite the contemporary sway of Bauhaus ahistoricism, many of these items have been preserved or restored.

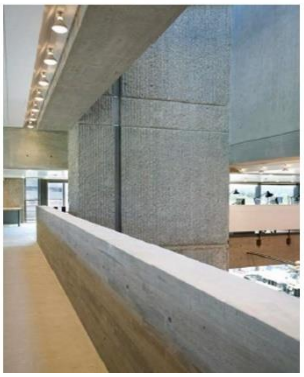
His spatial theatricality reached its climax in the building's heart, the two-story drafting room, presided over by a marble Roman statue of the goddess Minerva.

STRUCTURAL SYSTEM

Internally the building is organized around a central core space defined by four large concrete slab columns that, similar to the external towers, are hollow to accommodate mechanical services.

Cast-in-Place Concrete [RCC]

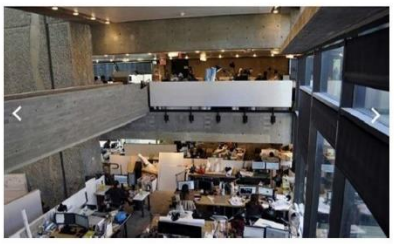
Bush Hammered Finish to the face of the exposed concrete



BUILDING CONSTRUCTION SYSTEM

The 114,000sqft Brutalist building, which is constructed of cast-in-place concrete, has a total of 37 different levels on nine floors, two below grade, and is a cornerstone of Yale's vibrant arts campus.

Completed in 1963, the building is formed of intersecting volumes of bush-hammered concrete. Smooth concrete and glass horizontal elements are supported by a sequence of towers that protrude above the roof in a series of turrets.

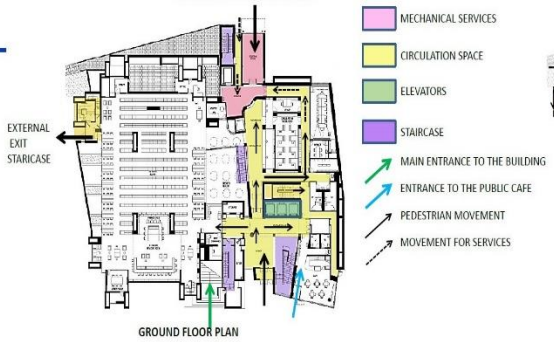


Slabs of ribbed concrete run in vertical sections on the interior and exterior of the 11,000-square- metre building.

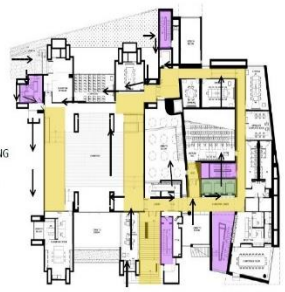
The main entrance is set back from the street, accessed through a chute and stairwell between two concrete columns.

Inside, the complex floor plan is made up of 37 terraced levels spaced across seven main storeys and two basement floors. Each level overlooks a central atrium that features a sunken pit and is topped by a series of skylights, while narrow concrete walkways connect the spaces on either side of the well.

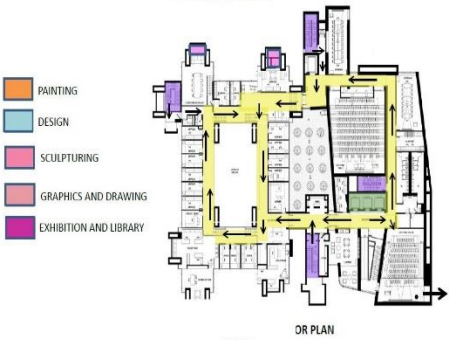
FLOOR PLANS



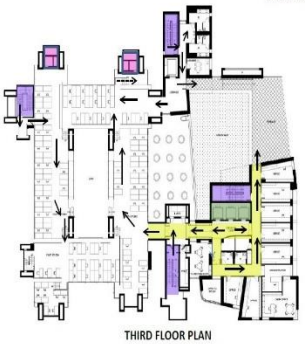
GROUND FLOOR PLAN



FIRST FLOOR PLAN

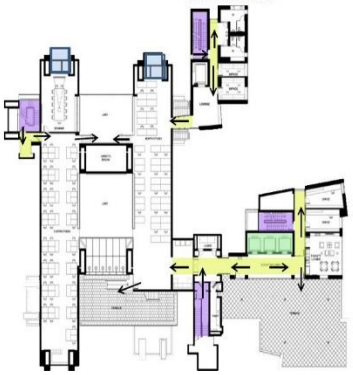


OR PLAN



THIRD FLOOR PLAN

CADE MATERIAL



COMPARATIVE ANALYSIS

TOPIC	CEPT,AHMEDABAD	YALE UNIVERSITY
Relevance to topic	The premier institute imparting education in the field of art and architecture with the appropriate work atmosphere created through architectural space	This university provides Education in architecture as well as 15 other courses
Location	Ahmedabad	New Haven (USA)
Site planning	Semi formal planning	Conjusted Planning on different level
Site zoning	Building evolved around a central open space with smaller courtyards	Building dosen't evolve any central courtyard in it
Parking	Vehicular segregation at the main entrance in north and south pedestrian campus	Vehicular parking outside campus is provided
Entrance	Paved pathways shaded by trees with lawn on both sides.no direct entry. secured entrance	pathways leadings to main entrance
Open spaces	Planned formal court	Planned formal central court open sky with informal space for sitting and gathering
Light & Ventilation	North-South orientation of building with large openings permitting ample of sunlight inside	building with large openings permitting ample of sunlight inside

Administrative Areas	Separate Administrative	Office and administrative areas are connected with and within the academic blocks
Lobby	Lobby is interpreted in the form of double heighted amphitheatres or courtyards	Lobby is interpreted in the form of long passage and have different levels
Library	Central library building but lack of natural light	Library with ample natural light coming inside
Classrooms	Open classrooms with visual contact between two classrooms	Classrooms don't have visual contact and they are beside each others
Staff room	Provided in the central administrative block	Staff rooms are provided in the academic quadrangle to easily reach to the classrooms

CONCEPT

THE FIRST MENTION OF OM WAS IN THE UPANISHADS, MORE SPECIFICALLY THE MANDUKYA UPISHAD, WHICH IS A SACRED HINDU TEXT THAT FOCUSES ON THE DIFFERENT THEORIES OF THE OHM MEANING.
IN THIS TEXT, IT SAYS THAT OM IS IMPERISHABLE AND THAT IT IS ALL STATES OF THE TIME, PAST, PRESENT, FUTURE, AS WELL AS TRANSCENDING TIME ITSELF.

HOLY TRINITY

THE DIFFERENCE IN THE SPELLING OF THE WORD OM, OHM OR AUM, SIMPLY COMES FROM ITS TRANSLATION FROM THE SANSKRIT VERSION: AUM. THERE IS NO DIFFERENT MEANING BEHIND THE SPELLING ALTHOUGH AUM REFERS TO THE ACTUAL SOUND OF THE WORD, WHILE OM OR OHM IS HOW IT IS USUALLY SPELLED.

THE THREE PHONETIC COMPONENTS OF AUM REPRESENT THE RULE OF THREE, AS FAITHS ARE GENERALLY BUILT AROUND SOME SORT OF HOLY TRINITY. NOT ONLY DOES AUM REPRESENT THE THREE STATES OF CONSCIOUSNESS,

BUT THE THREE REALMS: EARTH, HEAVEN, AND THE UNDERWORLD, AS WELL AS THE HINDU TRIUMVIRATE OF GODS:

BRAHMA (THE CREATOR),
VISHNU (THE SUSTAINER), AND
SHIVA (THE DESTROYER).

UPPER CURVE SHOWS THE I MAGINATION OR DREAM STATE

POINT SHOWS THE I CONNECTION TO DIVINE

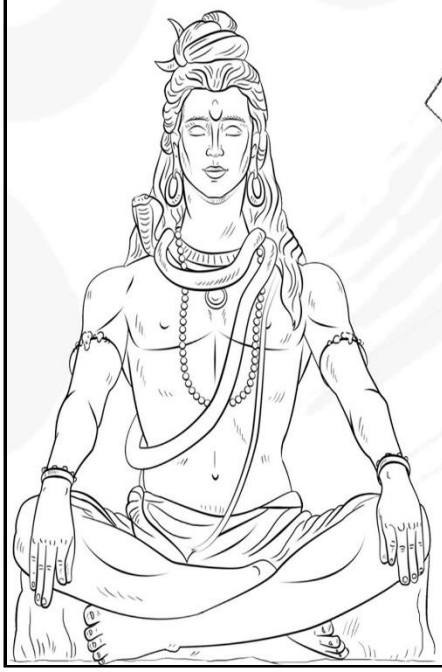
THIS PART SHOWS THE ILLUSIONS REACHING THE HIGHEST STATE OF BLISS

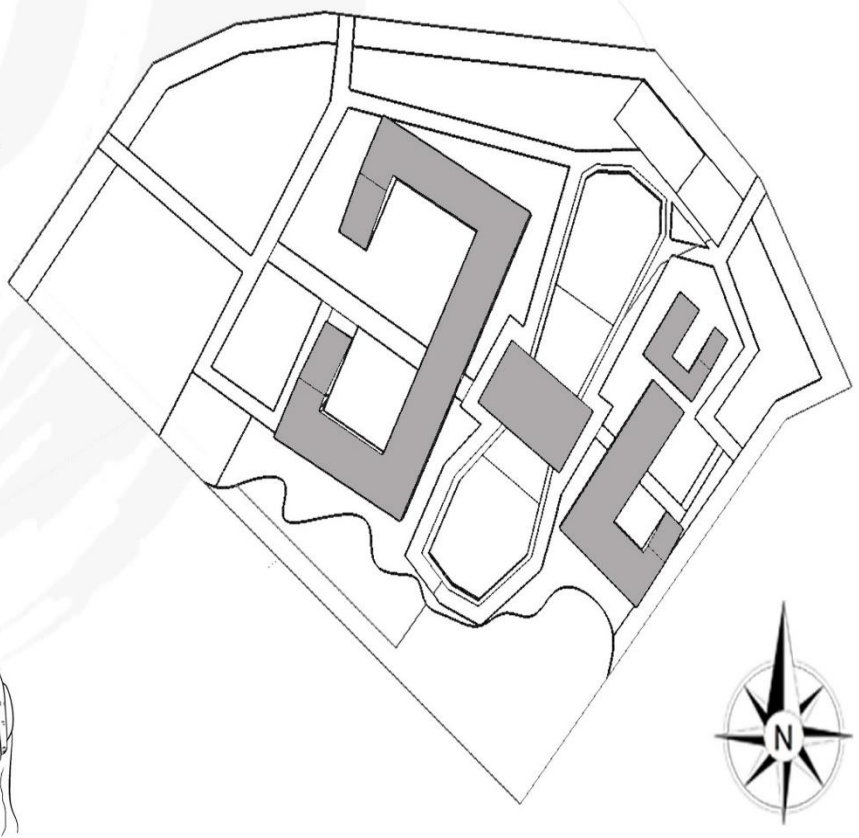
LOWER CURVE SHOWS THE WAKING OR PROGRESSIVE STATE

ELEMENTS OF OM

THE OM SYMBOL IS A COMBINATION OF CURVES, A CRESCENT, AND A DOT. THE MEANING OF THE OM SYMBOL, WHILE PURELY LOOKING AT ITS VISUAL FORM, COMES FROM THE STATES OF CONSCIOUSNESS THAT AUM REPRESENTS. T HE LETTER 'A' REPRESENTS THE WAKING STATE, 'U' REPRESENTS THE DREAM STATE AND 'M' IS THE UNCONSCIOUS STATE, OR STATE OF DEEP SLEEP.

IN THE SYMBOL, THE WAKING STATE IS REPRESENTED BY THE BOTTOM CURVE, THE DREAM STATE OR IMAGINATION IS THE MIDDLE CURVE AND THE STATE OF DEEP SLEEP IS REPRESENTED WITH THE UPPER CURVE. THE CRESCENT SHAPE ABOVE THE CURVES DENOTES MAYA, OR ILLUSION, WHICH IS THE OBSTACLE THAT SITS IN THE WAY OF REACHING THE HIGHEST STATE OF BLISS. THE DOT AT THE TOP OF THE SYMBOL REPRESENTS THE ABSOLUTE STATE, WHICH IS THE FOURTH STATE OF CONSCIOUSNESS AND IS ABSOLUTE PEACE AND BLISS. THIS FOURTH STATE IS BELIEVED TO BE THE STATE IN WHICH SOMEONE COULD TRULY CONNECT WITH THE DIVINE.





UNDERWORLD, AS WELL AS THE HINDU TRIUMVIRATE OF GODS:

BRAHMA (THE CREATOR),
VISHNU (THE SUSTAINER), AND
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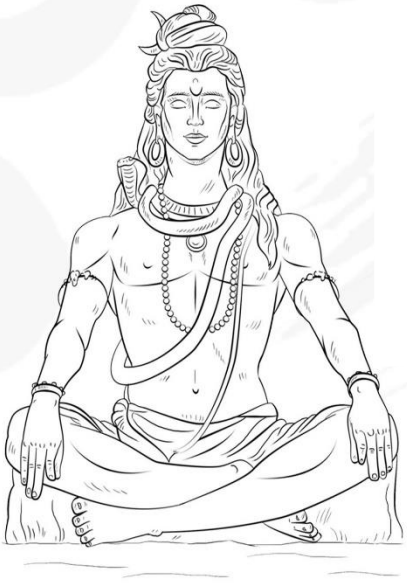


AREA ANALYSIS

STANDARDS

As per AICTE (All India council of Technical Education) And COA (Council of Architecture)

UNDERGRADUATE

- Maximum students in a class =40
- Teacher student ratio =1:8
- H.O.D./professor or, Asst. professor, Lecturer ratio =1:2:4
- Area for studio @5sq.m./student
- Lecture hall area @1.2sq.m./student
- Cycle stand = 1sq.m./cycle
- Scooter stand =3sq.m/scooter
- Car garage =25sq.m./car
- Bus garage =55sq.m./bus
- Circulation area of 25% of sum of institutional, administration and amenities is desired.
- When intake considering all program courses is more than 420, min area requirement would be 600sq.m.
- The institute of Architecture should be located in a building with floor area of about 15sq.m. per student.

POSTGRADUATE

- Maximum of 20s students in a class.
- Faculty student ratio 1:5
- H.O.D./Professor, Asst. Professor, Lecturer ratio =1:2:2

COMMON

- Principal's office =30sq.m., H.O.D. =200sq.m.
- Student activity centre =0.25sq.m./student
- Toilet blocks =10sq.m. for each 100 students
- Cycle and scooter stand = open or covered @15% of the plinth area of the college.
- Play area =25000sq.m.

AREA ANALYSIS

Total academic builtup area required	28,500 sqm
Total residential area built up required	16,300 sqm
Total recreation at built up required	1,900 sqm
Site area	80,000 sqm
Permissible ground coverage	35%
Ground coverage permissible	28,000 sqm
FAR	150
Permissible height	17m
Hence FAR available	1,20,000 sqm

UNDERGRADUATE PROGRAMS

B.Arch

- Annual intake =120(3 divisions of 40 students each)
- Total no. of students =120*5 =600
- Teacher student ratio =1:8
- No. of teachers =75
- H.O.D. =1; Professors =9; Asst. Professor =21; Lecturers =44
- Permanent faculty =45; Visiting faculty =30

	Units	Area Unit(sqm)	Area(sqm)
Studio(40st./class 5sq.m/student)	15	200	3000
Arts and graphic centre (2sq.m./student)	1	250	250
Material testing lab	1	150	150
Surveying and levelling lab	1	150	150
Climatology lab	1	150	150
Acoustic lab	1	200	200
Workshop	1	250	250
Special subject/project room	1	200	200
H.O.D. Room	1	20	20
Faculty rooms	44	10	440
Conference room	1	100	100
Visiting faculty room	1	50	50
Store & toilets			100

Planning

- Annual intake=40
- Total no. of students =40*4=160
- Teacher student ratio =1:8
- No. of teachers =20
- H.O.D. =1, Professors =2, Asst. Professors =6, Lecturers =11
- Permanent faculty =12, Visiting Faculty =8

	Units	Area/Unit(sqm)	Area(sqm)
Studio(40st/class 5sq.m/student)	4	200	3000
Special subject/project room	1	100	100
Centre for special planning	1	200	200
H.O.D. room	1	20	20
Faculty rooms	11	10	110
Conference rooms	1	100	100
Visitng faculty room	1	30	30
Store & toilets			100
		Total	1560

	Units	Area/unit(sqm)	Area(sqm)
Display room	2	40	800
Department library	1	250	250
Academic record & model store	1	100	100
Resource centre	1	100	100
Computer centre	2	100	100
		Total	730

AS PER OTHER STANDARDS

Services

- All buildings, which are 15m and above all institutional buildings occupancies. Having area more than 500sqm on each floor shall have a minimum of two staircases.
- Min width of staircase in institutional buildings upto 30m high is 1.5m. Thread 300mm riser 150mm & max no of steps in a flight 15.
- Min illumination value for all working areas =150 lux; lecture threatres, library & workshops 300 lix; labs, seminar rooms & art studios is 500 lux; circulation areas =lux
- Generally, while taller openings give greater penetration, broader openings give better distribution of light. It is preferable that some of sky at an altitude of 20 to 25 degrees should light up the work plane.
- Openings in deep reveals tend to minimize glare effect.
- Lighting from sides in general will be unsatisfactory if the effective width of the room is more than 2 to 2.5 times the distance of floor to the top of the opening.

PARKING

- 23sqm of space for open parking.
- 28sqm for stilt and ground floor parking.
- 32sqm for basement parking.

REQUIREMENTS

Academic zone = 28,500sqm

- Undergraduate

1. B.Arch (5yr @120 students/yr)=8,578sqm
2. B.planning (4yrs @40 students/yr)

POSTGRADUATE (2yrs)

1. Architectural conservation (20 seats) =1048.4sq.m
2. Indus trial design (30 seats) =1174sq.m
3. Urban design (20 seats) =775sq.m
4. Building engineering & management (40 seats) =1207sq.m
5. Landscape architecture (30 seats) =1080sq.m
6. Environmental planning (20seats) =672sq.m
7. Housing (30 seats) =1080sq.m
8. Regional planning (20 seats) =643sq.m
9. Urban planning (40 seats) =1085sq.m
10. Transport planning (30 seats) =1199sq.m

- Common facilities

1 Lecture theatres=2804sq.m
2 Computer centre=950sq.m
3 Central library=1093sq.m
4 Auditorium(100 seats)=1390sq.m

- Administration

1 Offices=914sq.m
2 Staff facilities=396sq.m
3 Main entrance

- Recreational zone

Student centre=815sq.m
Gymnasium=1075sq.m

- Amenities

Canteen, underground water tank, Parking, etc.

POSTGRADUATE PROGRAMS

Architectural conservation

- Annual intake =20
- Total no. of students =20*2=40
- Teacher student ratio =1:5
- No. of teachers =8
- H.O.D. =1, Asst. Professors =3, Lecturer =4
- Permanent faculty =6, Visiting Faculty =2
- Researchers =10
- Centre for conservation studies

	Unit	Area/unit(sqm)	Area(sqm)
Studio(20st/class; 5sq.m/student)	2	100	200
Display room	1	100	100
Computer lab	2	40	80
H.O.D. room	1	20	20
Faculty room	5	10	50
Researchers room	10	10	100
Documentation room	1	100	100
Store & toilets			100
		Total	650

URBAN DESIGN

- Annual intake =20
- Total no. of students =20*2 =40
- Teacher student ratio =1:5
- No. of teachers =8
- H.O.D. =1, Asst. Professors =3, Lecturers =4
- Permanent faculty =7, Visiting faculty =1
- Researchers =9
- Centre for research in urban design

	Unit	Area/unit(sqm)	Area(sqm)
Studio(20st/class; 5sq.m/student)	2	100	200
Display room	1	100	100
Computer lab	2	40	80
H.O.D. room	1	20	20
Faculty rooms	6	10	60
Researchers rooms	9	10	90
Documentation room	1	100	100
Store & toilets			100
		Total	650

Landscape Architecture

- Annual intake =30
- Total no. of students =30*2 =60
- Teacher student ratio =1:5
- No. of teachers =12
- H.O.D. =1, Asst. Professors =5, Lecturers =5
- Permanent faculty =9, Visiting faculty =3
- Researchers =10
- Centre for studies in landscape Architecture

	Unit	Area/unit(sqm)	Area(sqr
Studio(15st/class; 5sq.m/student)	4	75	300
Display room	1	100	100
Computer lab	2	40	80
H.O.D. Room	1	20	20
Faculty rooms	9	10	90
Researchers room	10	10	100
Documentation room	1	100	100
Store & toilets			100
		Total	790

Housing

- Annual intake =30
- Total no. of students =30*2 =60
- Teacher student ratio =1:5
- No. of teachers =12
- H.O.D. =1, Professors =1, Asst. Professors =5, Lecturer =
- Permanent faculty =9, Visiting faculty =3
- Researchers =11
- Centre for housing studies

	Unit	Area/unit(sqm)	Area(sqr
Studio(15st/class; 5sq.m/student)	4	750	300
Display room	1	100	100
Computer lab	2	40	80
H.O.D. room	1	20	20
Faculty oom	8	10	80
Researchers room	11	100	110
Documentation room	1	100	100
Store & toilets			100
		Total	790

Industrial design

- Annual intake =30
- Total no. of students =30*2 =60
- Teacher student ratio =1:5
- No. of teachers =12
- H.O.D. =1, Professors =1, Asst. Professors =5, Leccturers =5
- Permanent faculty =9, Visiting faculty =3
- Researchers =10
- Centre for industrial design

	Unit	Area/unit(sqm)	Area(sqm)
Studio(15st/class; 65sq.m/student)	4	100	400
Display room	1	100	100
Computer lab	2	40	80
H.O.D. room	1	20	20
Faculty room	8	10	80
Researchers room	10	10	100
Documentation room	1	100	100
Store & toilets			100
		Total	880

Building engineering and management

- Annual intake =40
- Total no. of students =40*2 =80
- Teacher student ratio =13
- H.O.D. =1, Professors =1, Asst. Professors =5, Lecturers =6
- Permanent faculty =10, Visiting faculty =3
- Researchers =11
- Centre for analysis and system studies

	Unit	Area/unit(sqm)	Area(sqm)
Sudio(20st/class; 5sq.m/student)	4	100	400
Display room	1	100	100
Computer lab	2	50	100
H.O.D. room	1	20	20
Faculty rooms	9	10	90
Researchers room	11	10	110
Documentation room	1	100	100
Store & toilets			100
		Total	940

Environmental Planning

- Annual intake =20
- Total no. of students =20*2 =40
- Teacher student ratio =1:5
- No. of teachers =8
- H.O.D. =1, Asst. Professor =3, Lecturers =4
- Permanent faculty =6, Visiting faculty =2
- Researchers =6
- Centre for environmental studies

	Unit	Area/unit(sqm)	Area(sqm)
Studio(20st/class; 65sq.m/student)	2	100	200
Display room	1	100	100
Computer lab	2	40	80
H.O.D. room	1	20	20
Faculty rooms	5	10	50
Researchers room	6	10	60
Documentation room	1	100	100
Store & toilets			100
		Total	610

Regional Planning

- Annual intake =20
- Total no. of students =20*2 =40
- Teacher student ratio =1:6
- No. of teachers =7
- H.O.D. =1, Asst. Professors =3, Lecturers =3
- Permanent faculty =5, Visiting faculty =2
- Researchers =7
- Centre for regional development studies

	Unit	Area/unit(sqm)	Area(sqm)
Studio(15st/class; 65sq.m/student)	2	100	200
Display room	1	100	100
Computer lab	2	40	80
H.O.D. room	1	20	20
Faculty rooms	4	10	40
Researchers room	7	10	700
Documentation room	1	100	100
Store & toilets			100
		Total	610

Urban Planning

- Annual intake =40
- Total no. of students =40*2 =80
- Teacher student ratio =1:5
- No. of teachers =16
- H.O.D. =1, Asst. Professors =6, Professors =2, Lecturers =7
- Permanent faculty =9, Visiting faculty =7
- Researchers =11
- Centre for urban students

	Unit	Area/unit(sqm)	Area(sqm)
Sudio(20st/class; 5sq.m/student)	4	100	400
Display room	1	100	100
Computer lab	2	40	80
H.O.D. room	1	20	20
Faculty room	8	10	110
Researchers room	11	10	110
Documentation room	1	100	100
Store & toilets			100
		Total	910

Common facilities

Lecture theatre for undergraduate course

	Unit	Area/unit(sqm)	Area(sqm)
Capacity 40 @1.2sq.m/student	10	50	500
Capacity 80 @1.2sqm/student	2	100	200
Capacity 120 @1.2sq.m/student	2	150	300

Total undergraduate academic area =7350+1000 =8350
Circulation and wall =30% of 8350+2505
Total undergraduate academic area =10855sqm

Total postgraduate academic area =7760+625=8385
Circulation and wall =30% of 8385+2515
Total undergraduate academic area =10900sqm

Central library =1100sqm

- Audio visual unit
- Space journal
- Documentation and publication unit
- Sitting

Canteen =500sqm
Central workshop =500sqm
Parking
As per norms 1.33 ECS/100sqm of built up area

Transport Planning

- Annual intake =30
- Total no. of students =30*2 =60
- Teacher students ratio =1:5
- No. of teachers =12
- H.O.D. =1, Professors =1, Asst, Professors =5, Lecturers =5
- Permanent faculty =11, Visiting faculty =1
- Researchers =10
- Centre for transport design

	Unit	Area/unit(sqm)	Area(sqm)
Studio(15st/class; 65sq.m/st)	4	75	300
Display room	1	100	100
H.O.D. ROOM	2	40	80
Faculty room	1	20	20
Researchers room	10	10	100
Documentation room	10	10	100
Store & toilets	1	100	100
		Total	800

Lecture theatre for postgraduate course

	Unit	Area/unit(sqm)	Area(sqm)
Capacity 20 @1.2sqm/student	3	25	75
Capacity 40 @1.2sqm/student	6	50	300
Capacity 80 @1.2sqm/student	1	100	100
Capacity 20 @1.2sqm/student	1	150	150
		Total	625

STANDARDS

As per AICTE (All India council of Technical Education) And COA (Council of Architecture)

UNDERGRADUATE

- Maximum students in a class =40
- Teacher student ratio =1:8
- H.O.D./professor or, Asst. professor, Lecturer ratio =1:2:4
- Area for studio @5sq.m./student
- Lecture hall area @1.2sq.m./student
- Cycle stand = 1sq.m./cycle
- Scooter stand =3sq.m/scooter
- Car garage =25sq.m./car
- Bus garage =55sq.m./bus
- Circulation area of 25% of sum of institutional, administration and amenities is desired.
- When intake considering all program courses is more than 420, min area requirement would be 600sq.m.
- The institute of Architecture should be located in a building with floor area of about 15sq.m. per student.

POSTGRADUATE

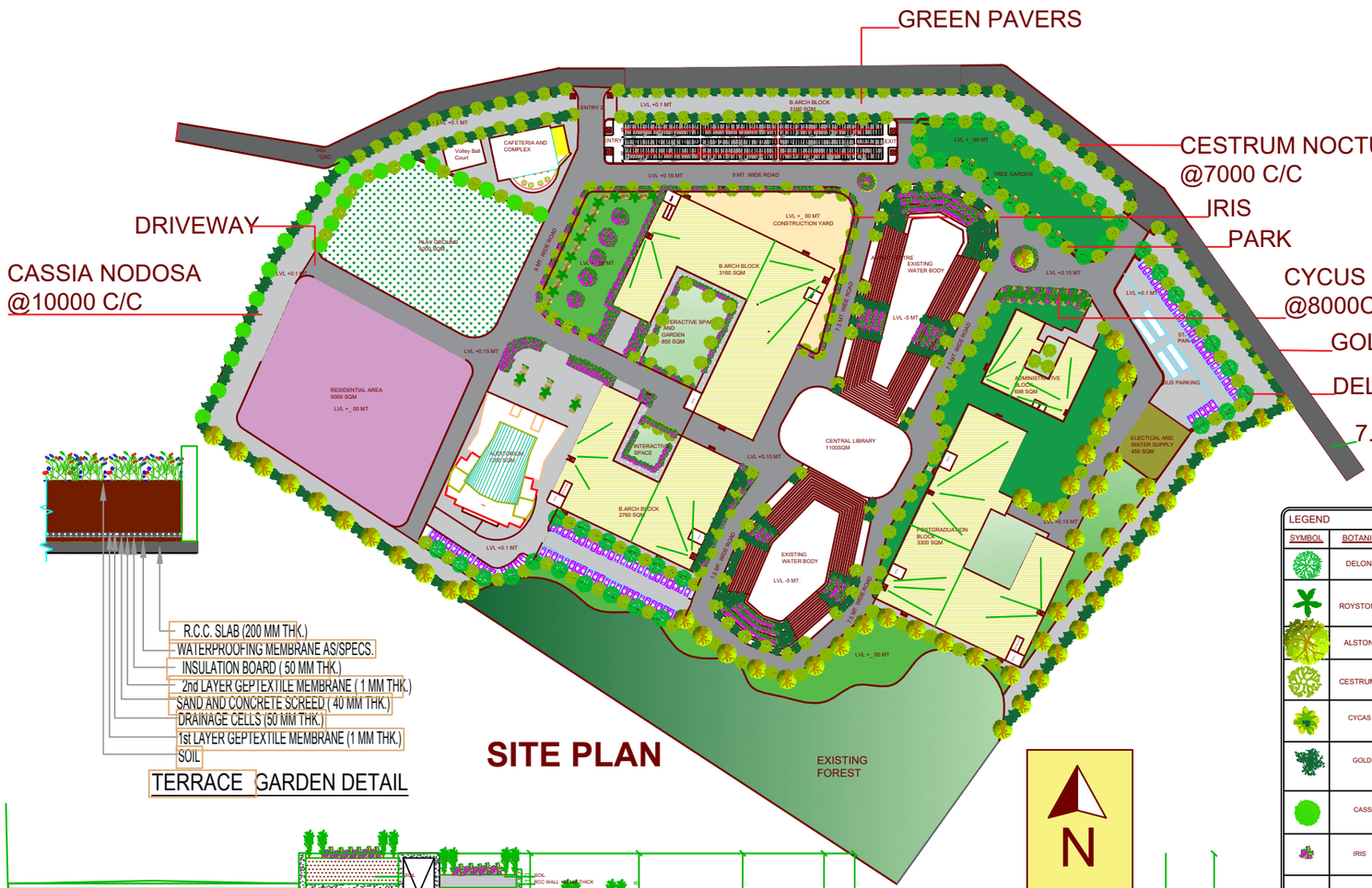
- Maximum of 20s students in a class.
- Faculty student ratio 1:5
- H.O.D./Professor, Asst. Professor, Lecturer ratio =1:2:2

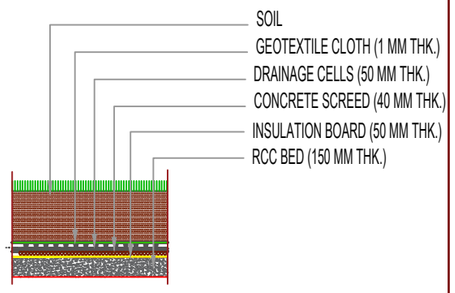
COMMON

- Principal's office =30sq.m., H.O.D. =200sq.m.
- Student activity centre =0.25sq.m./student
- Toilet blocks =10sq.m. for each 100 students
- Cycle and scooter stand = open or covered @15% of the plinth area of the college.
- Play area =25000sq.m.

AREA ANALYSIS

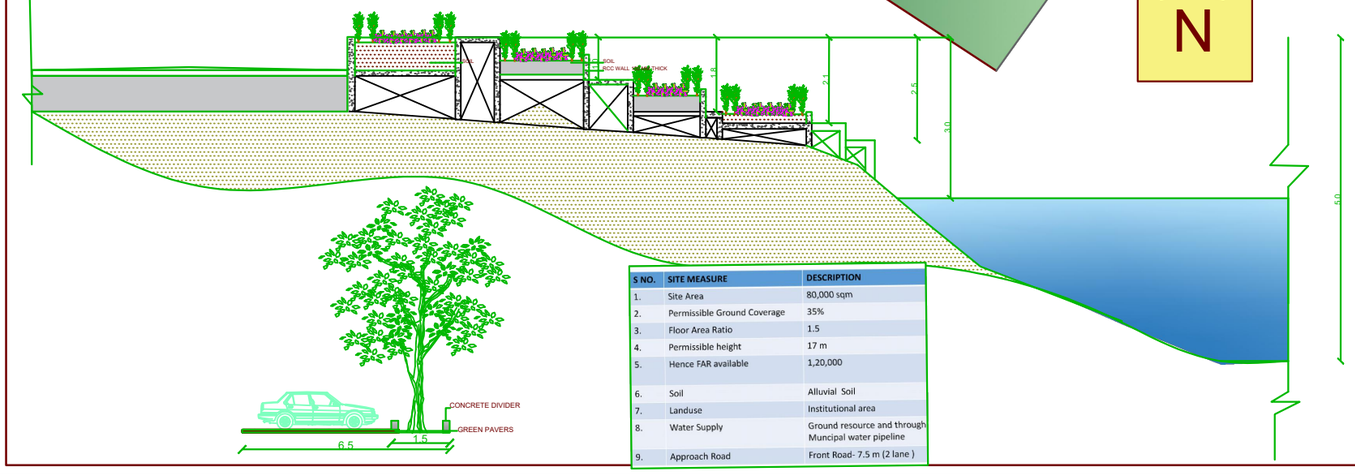
Total academic builtup area required	28,500 sqm
Total residential area built up required	16,300 sqm
Total recreation at built up required	1,900 sqm
Site area	80,000 sqm
Permissible ground coverage	35%
Ground coverage permissible	28,000 sqm
FAR	150
Permissible height	17m
Hence FAR available	1,20,000 sqm





TERRACE GARDEN DETAIL

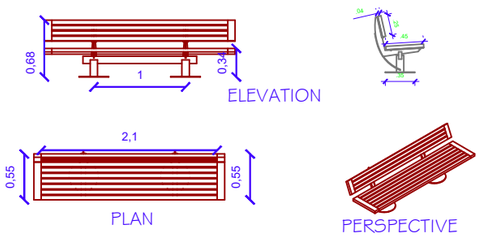
SITE PLAN



S NO.	SITE MEASURE	DESCRIPTION
1.	Site Area	80,000 sqm
2.	Permissible Ground Coverage	35%
3.	Floor Area Ratio	1.5
4.	Permissible height	17 m
5.	Hence FAR available	1,20,000
6.	Soil	Alluvial Soil
7.	Landuse	Institutional area
8.	Water Supply	Ground resource and through Muncipal water pipeline
9.	Approach Road	Front Road- 7.5 m (2 lane)

LEGEND

SYMBOL	BOTANICAL NAME	COMMON NAME	SPACING(MM)	SPECIFICATION:HEIGHT, FOILAGE
	DELONIX REGIA	GULMOHAR	12000C/C	8000,10000
	ROYSTONA REGIA	ROYAL PALM TREE	SPECIFIC PLACE	9000,3000
	ALSTONIA SCHOLARIS	BLACKBOARD TREE/SCHOLAR TREE (SAPTAPARNI)	10000 C/C	20000/25000,9000
	CESTRUM NOCTURNUM	QUEEN OF NIGHTS	7000 C/C	4000,2000/3000
	CYCAS REVOLUTA	CYCUS	8000 C/C	9000
	GOLDEN DURANTA	SKY FLOWER	SPECIFIC PLACE	450/500
	CASSIA NODOSA	PINK CASSIA	10000 C/C	12000, 8000
	IRIS		SPECIFIC PLACE	300,DENSE



DETAIL OF BENCH

SCHOOL OF PLANNING AND ARCHITECTURE, VASANTKUNJ, NEW DELHI

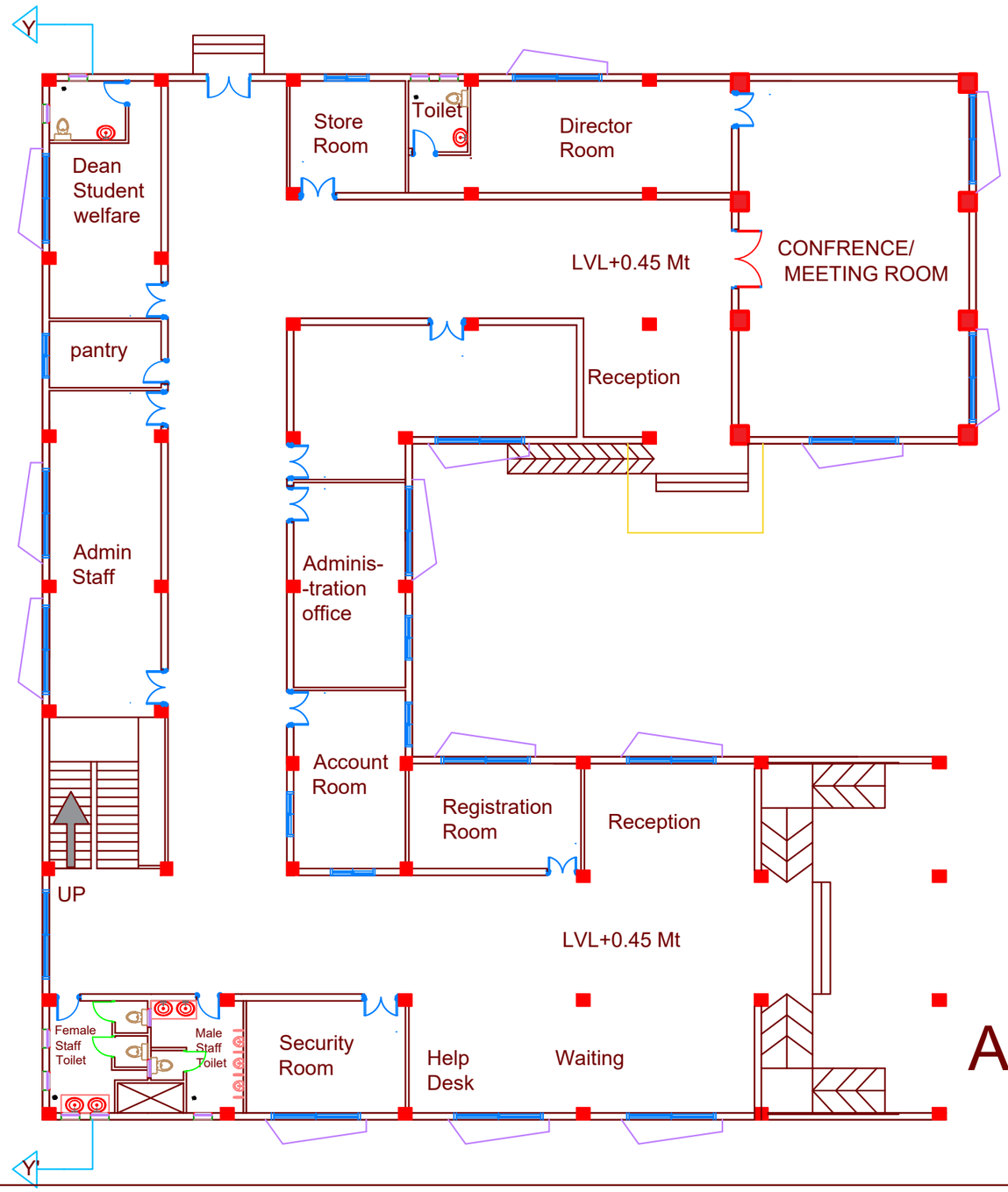
MOHD REHAN

UNI. ROLL NO. : 115101044

THESIS YEAR - 2019/20

B.B.D.U , L.K.O

FLOOR PLANS



Administrative block

INSTITUTIONAL BLOCK

SCHOOL OF PLANNING AND ARCHITECTURE, VASANTKUNJ, NEW DELHI

MOHD REHAN

UNI. ROLL NO. : 115101044

THESIS YEAR - 2019/20

B.B.D.U , L.K.O

FLOOR PLANS

B.ARCH BLOCK
GROUND FLOOR

INSTITUTIONAL BLOCK

SCHOOL OF PLANNING AND ARCHITECTURE, VASANTKUNJ, NEW DELHI

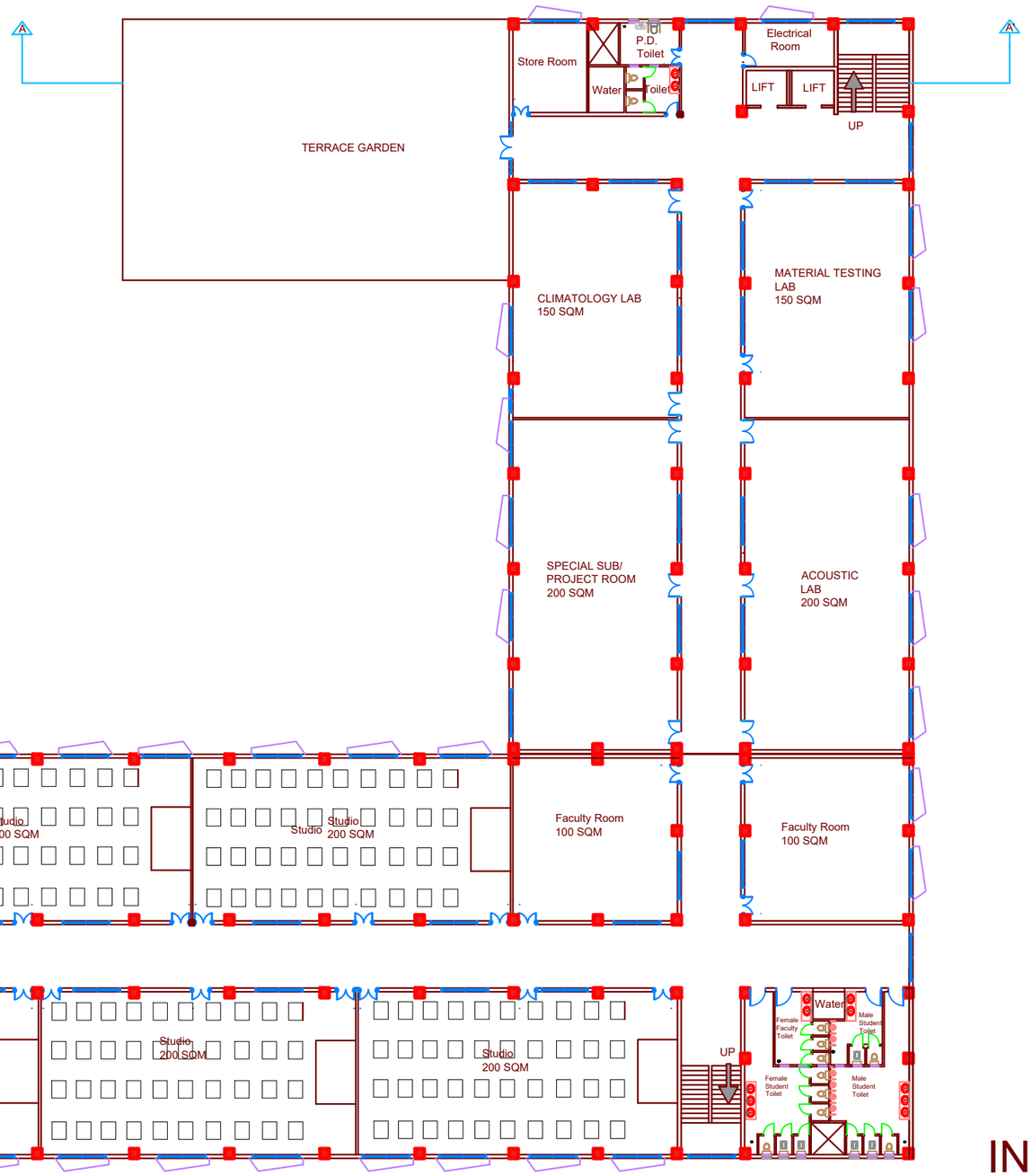
MOHD REHAN

UNI. ROLL NO. : 115101044

THESIS YEAR - 2019/20

B.B.D.U , L.K.O

FLOOR PLANS



B.ARCH BLOCK
FIRST FLOOR

INSTITUTIONAL BLOCK

SCHOOL OF PLANNING AND ARCHITECTURE, VASANTKUNJ, NEW DELHI

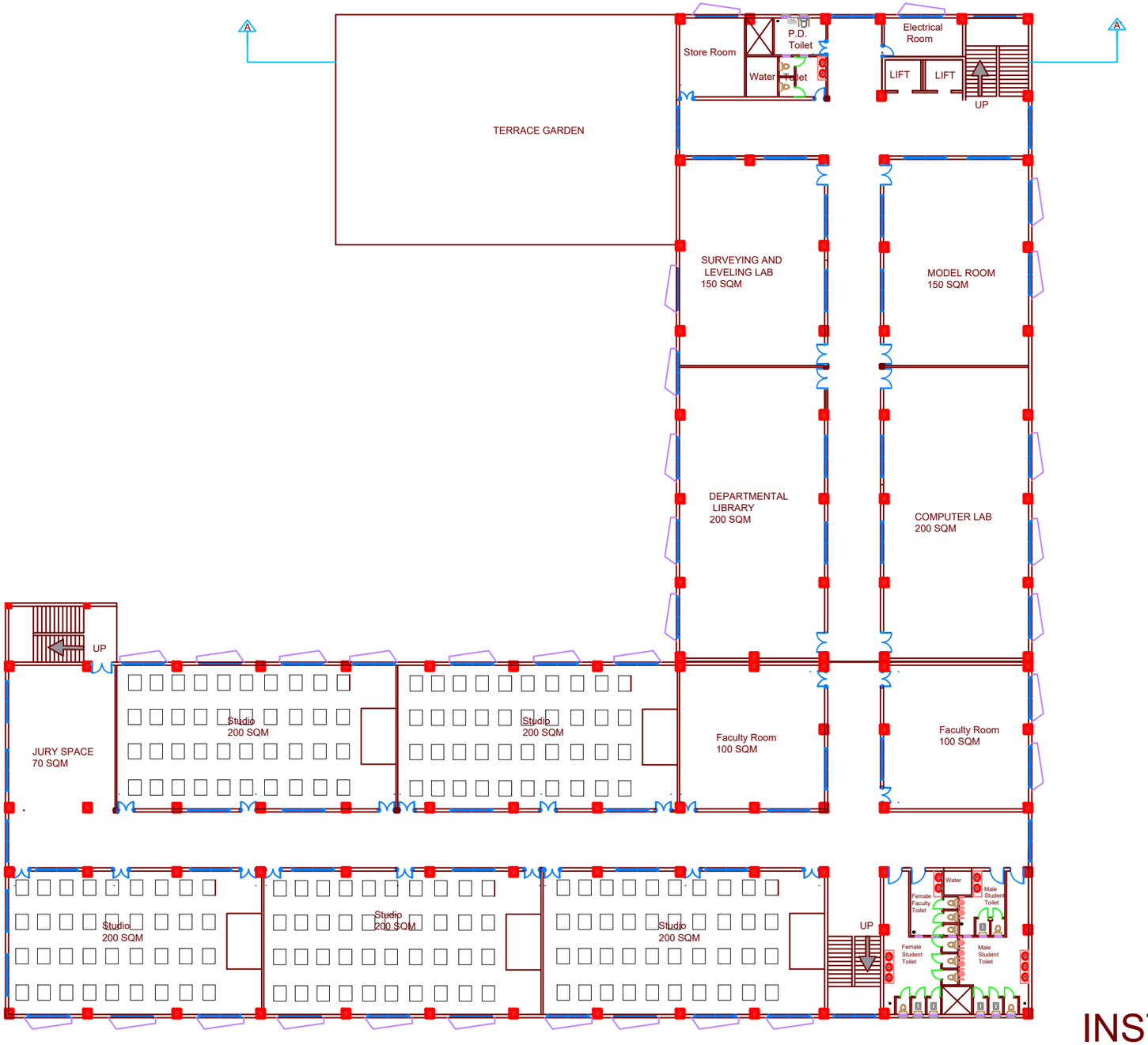
MOHD REHAN

UNI. ROLL NO. : 115101044

THESIS YEAR - 2019/20

B.B.D.U , L.K.O

FLOOR PLANS



B.ARCH BLOCK
SECOND FLOOR

INSTITUTIONAL BLOCK

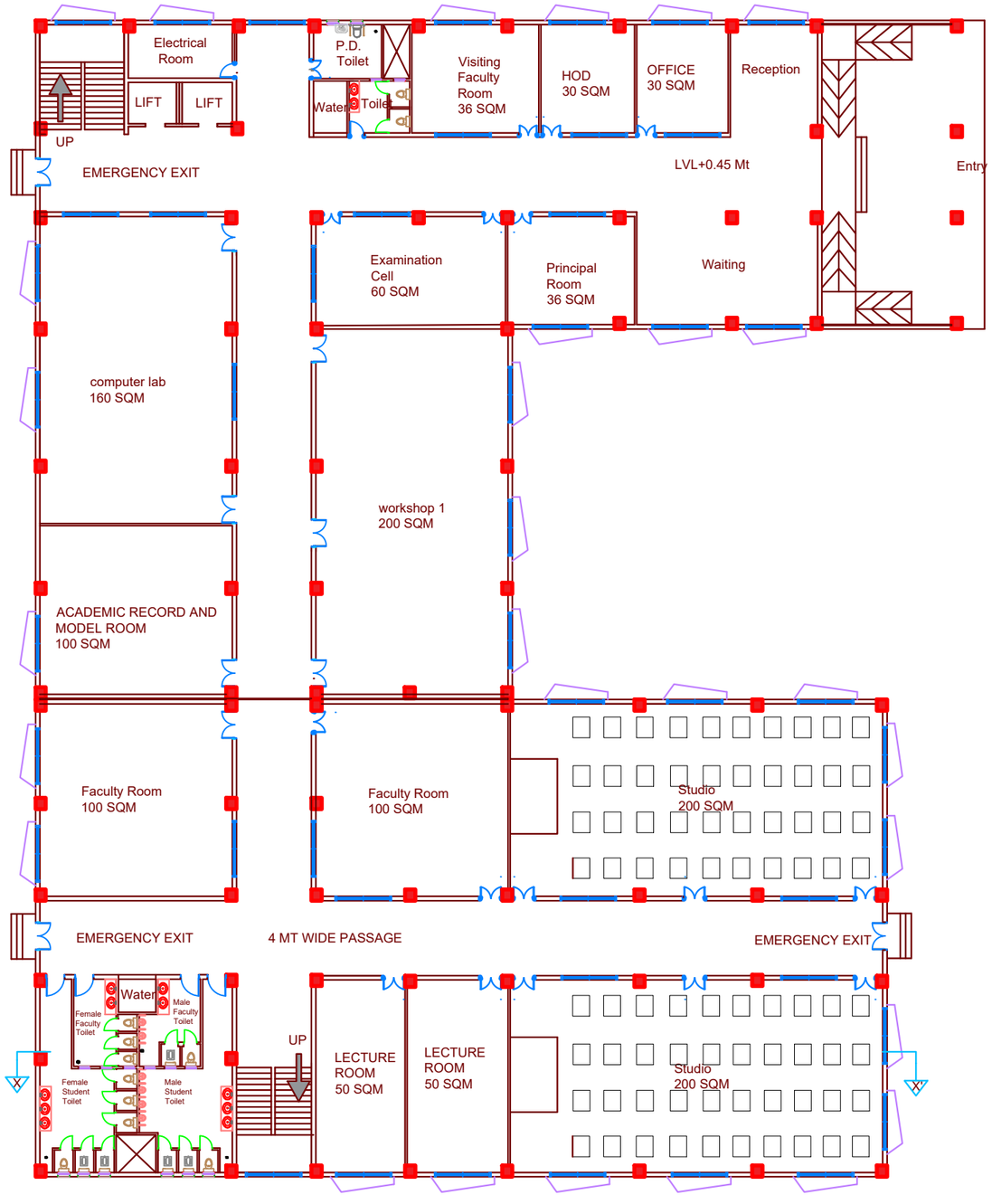
SCHOOL OF PLANNING AND ARCHITECTURE, VASANTKUNJ, NEW DELHI

MOHD REHAN
UNI. ROLL NO. : 115101044

THESIS YEAR - 2019/20

B.B.D.U , L.K.O

FLOOR PLANS



B.PLANNING BLOCK
GROUND FLOOR

INSTITUTIONAL BLOCK

SCHOOL OF PLANNING AND ARCHITECTURE, VASANTKUNJ, NEW DELHI

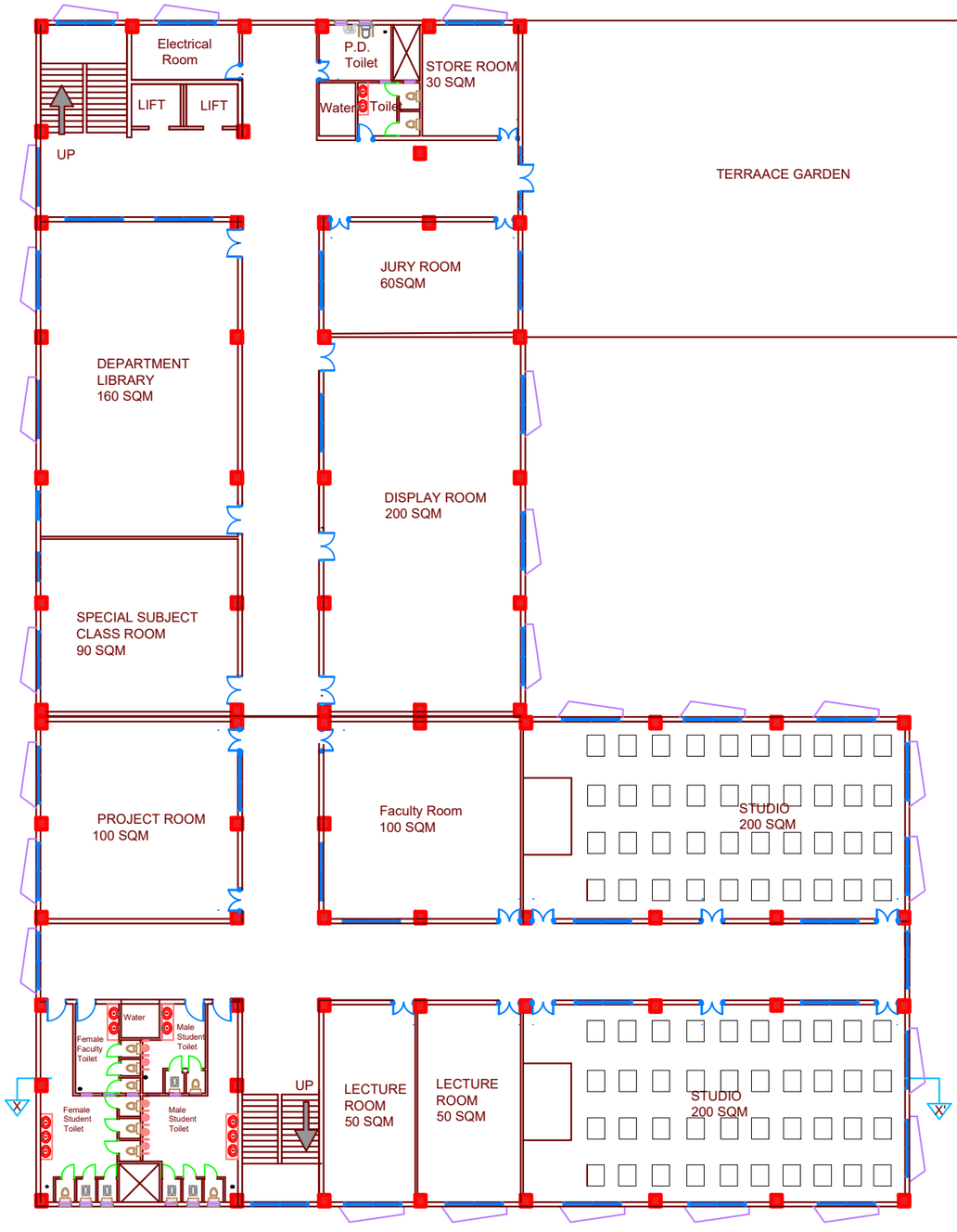
MOHD REHAN

UNI. ROLL NO. : 115101044

THESIS YEAR - 2019/20

B.B.D.U , L.K.O

FLOOR PLANS



B.PLANNING BLOCK
GROUND FLOOR

INSTITUTIONAL BLOCK

SCHOOL OF PLANNING AND ARCHITECTURE, VASANTKUNJ, NEW DELHI

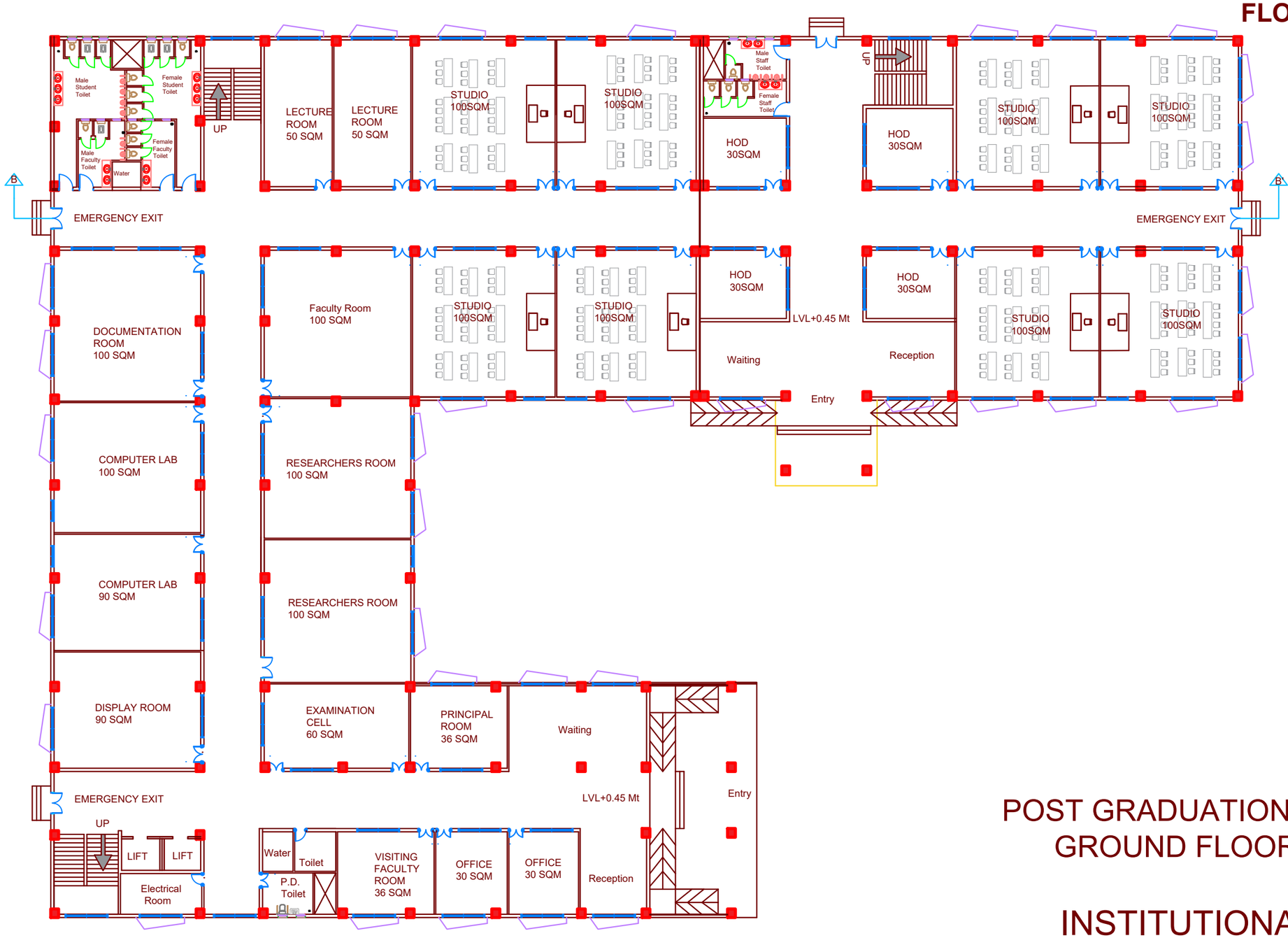
MOHD REHAN

UNI. ROLL NO. : 115101044

THESIS YEAR - 2019/20

B.B.D.U , L.K.O

FLOOR PLANS



POST GRADUATION BLOCK
GROUND FLOOR

INSTITUTIONAL BLOCK

SCHOOL OF PLANNING AND ARCHITECTURE, VASANTKUNJ, NEW DELHI

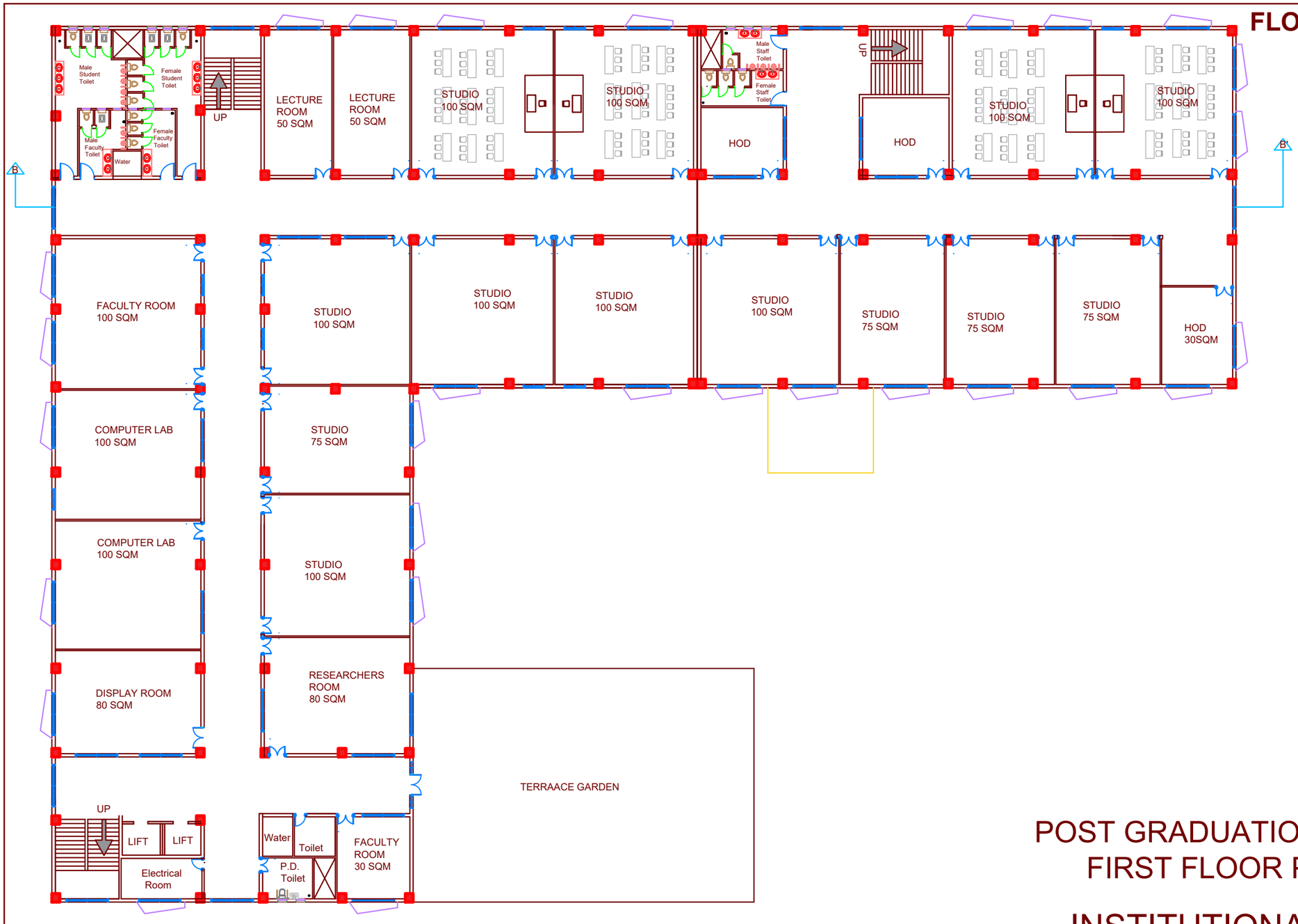
MOHD REHAN

UNI. ROLL NO. : 115101044

THESIS YEAR - 2019/20

B.B.D.U , L.K.O

FLOOR PLANS



POST GRADUATION BLOCK
FIRST FLOOR PLAN

INSTITUTIONAL BLOCK

SCHOOL OF PLANNING AND ARCHITECTURE, VASANTKUNJ, NEW DELHI

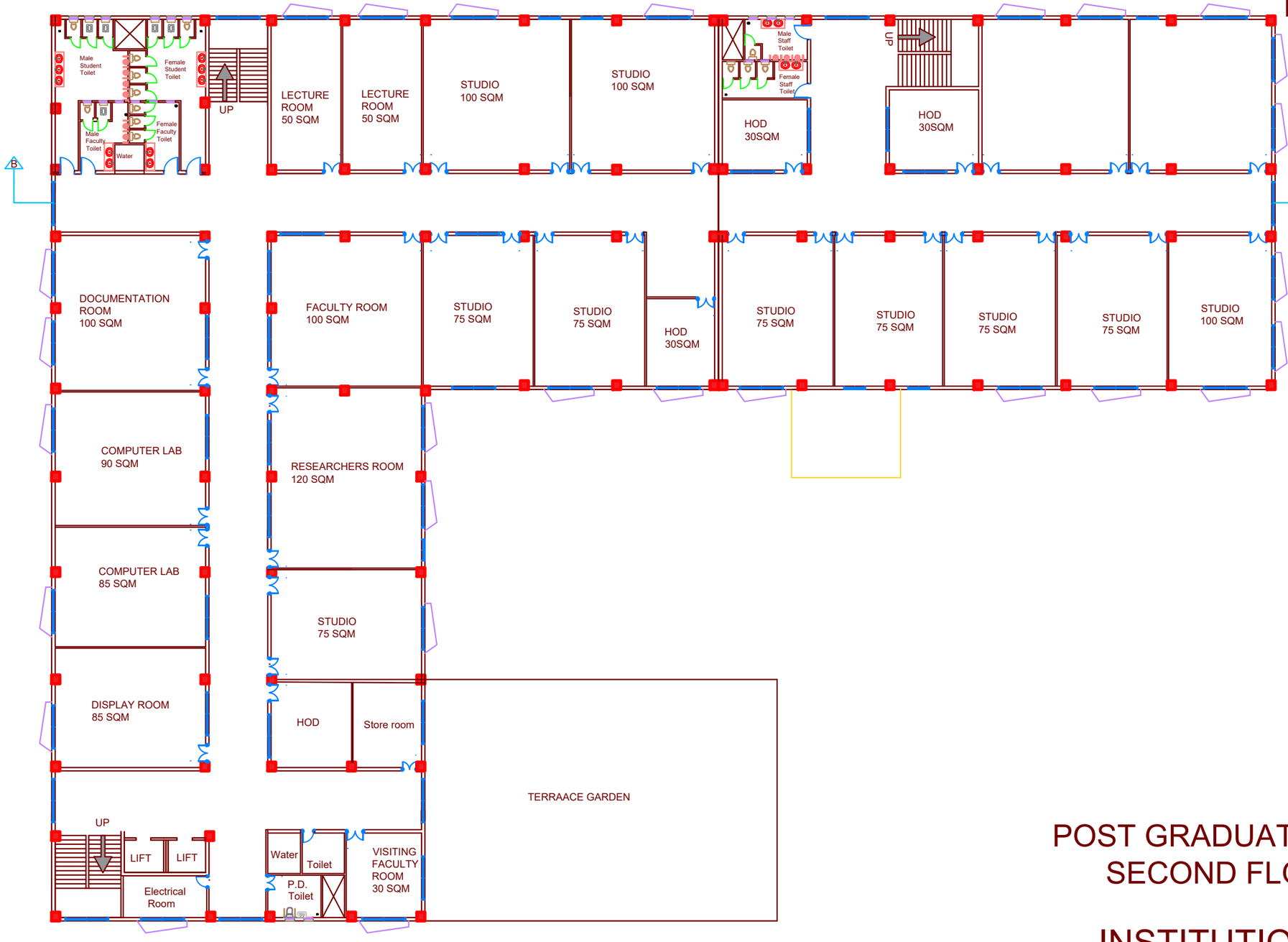
MOHD REHAN

UNI. ROLL NO. : 115101044

THESIS YEAR - 2019/20

B.B.D.U , L.K.O

FLOOR PLANS



POST GRADUATION BLOCK
SECOND FLOOR PLAN

INSTITUTIONAL BLOCK

SCHOOL OF PLANNING AND ARCHITECTURE, VASANTKUNJ, NEW DELHI

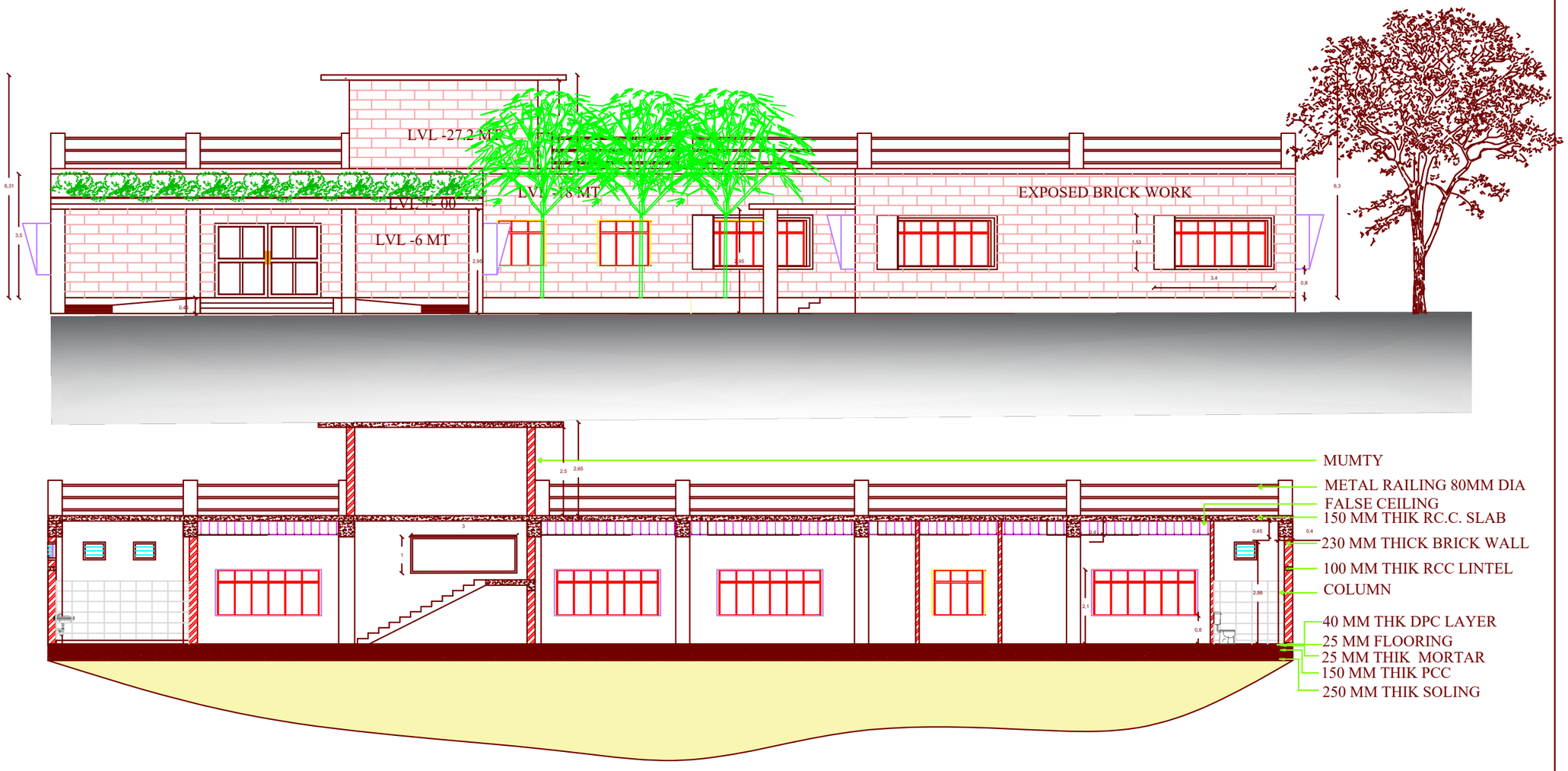
MOHD REHAN

UNI. ROLL NO. : 115101044

THESIS YEAR - 2019/20

B.B.D.U , L.K.O

ELEVATION AND SECTION

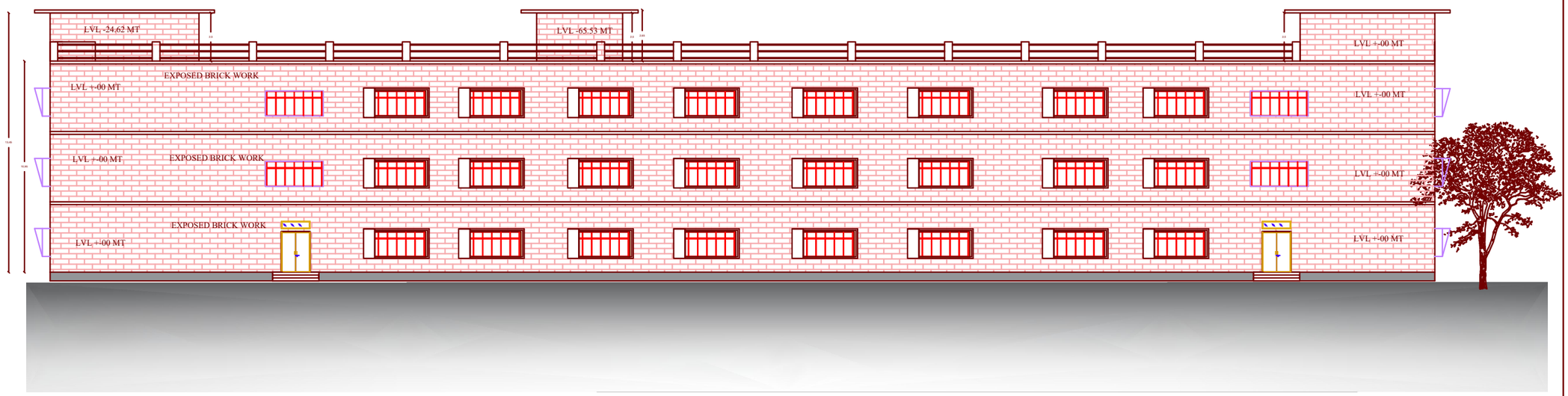


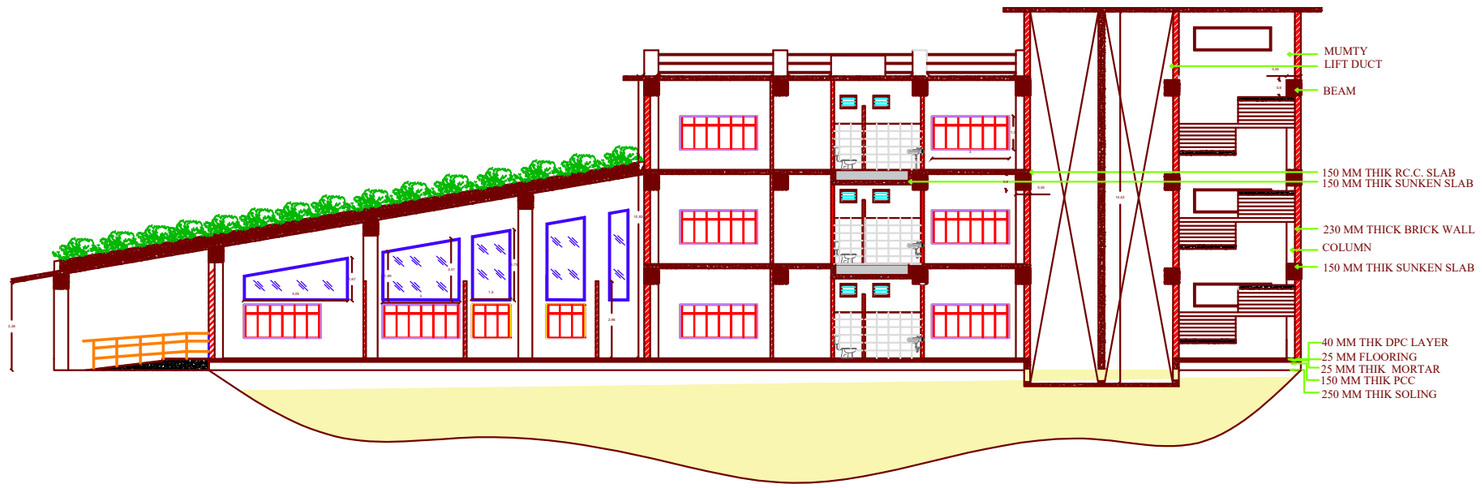
ADMINISTRATIVE BLOCK SECTION

INSTITUTIONAL BLOCK

SCHOOL OF PLANNING AND ARCHITECTURE, VASANTKUNJ, NEW DELHI	MOHD REHAN
	UNI. ROLL NO. : 115101044
	THESIS YEAR - 2019/20
	B.B.D.U , L.K.O

ELEVATION AND SECTION



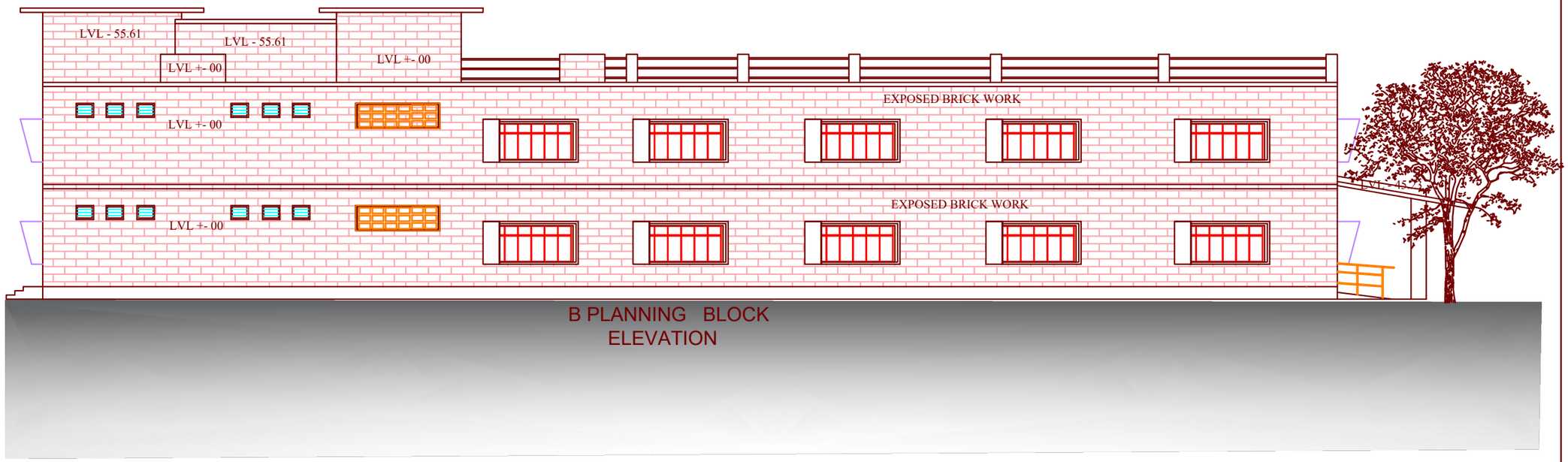


B.ARCH BLOCK SECTION

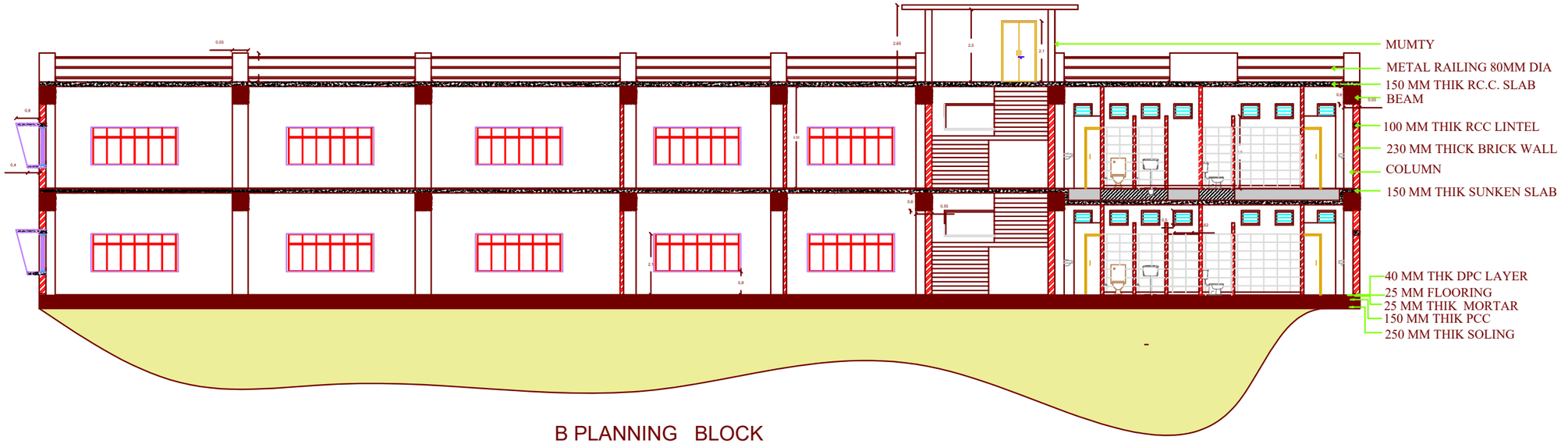
INSTITUTIONAL BLOCK

SCHOOL OF PLANNING AND ARCHITECTURE, VASANTKUNJ, NEW DELHI	MOHD REHAN
	UNI. ROLL NO. : 115101044
	THESIS YEAR - 2019/20
	B.B.D.U , L.K.O

ELEVATION AND SECTION



B PLANNING BLOCK
ELEVATION

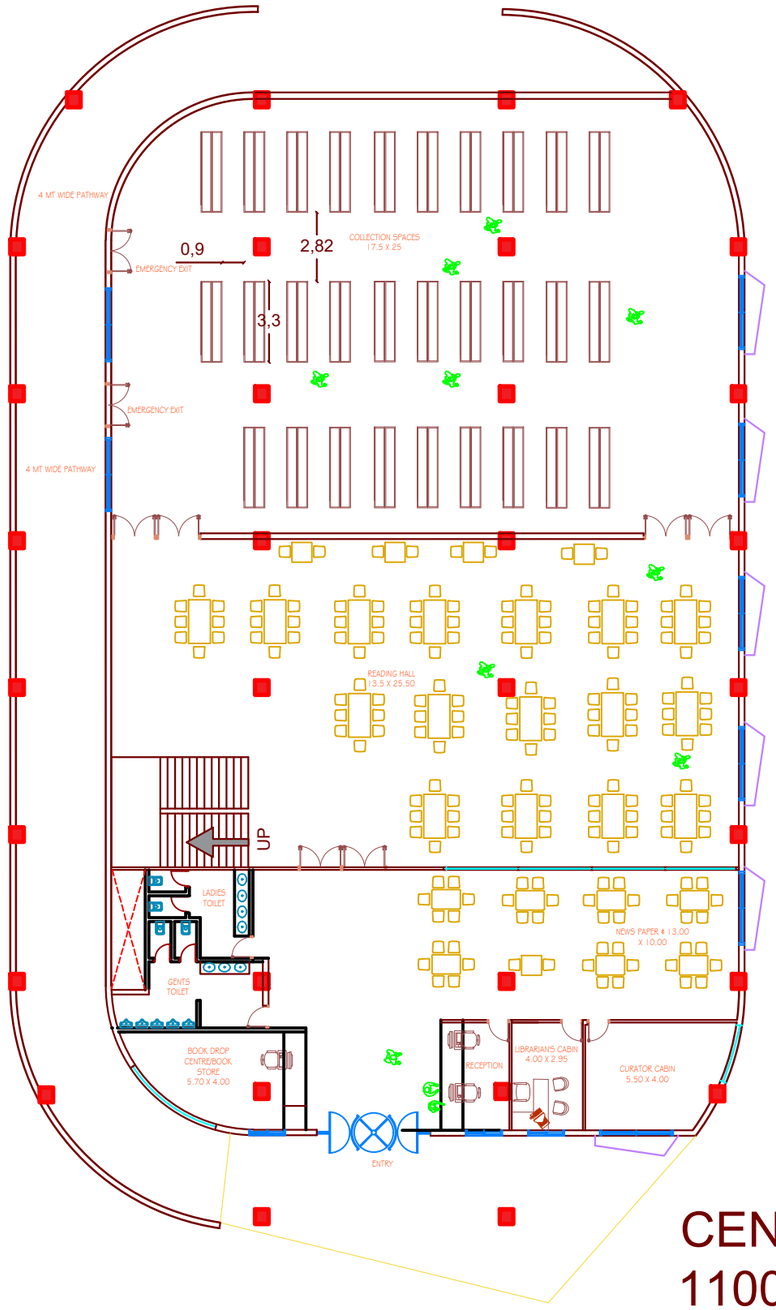


B PLANNING BLOCK
SECTION

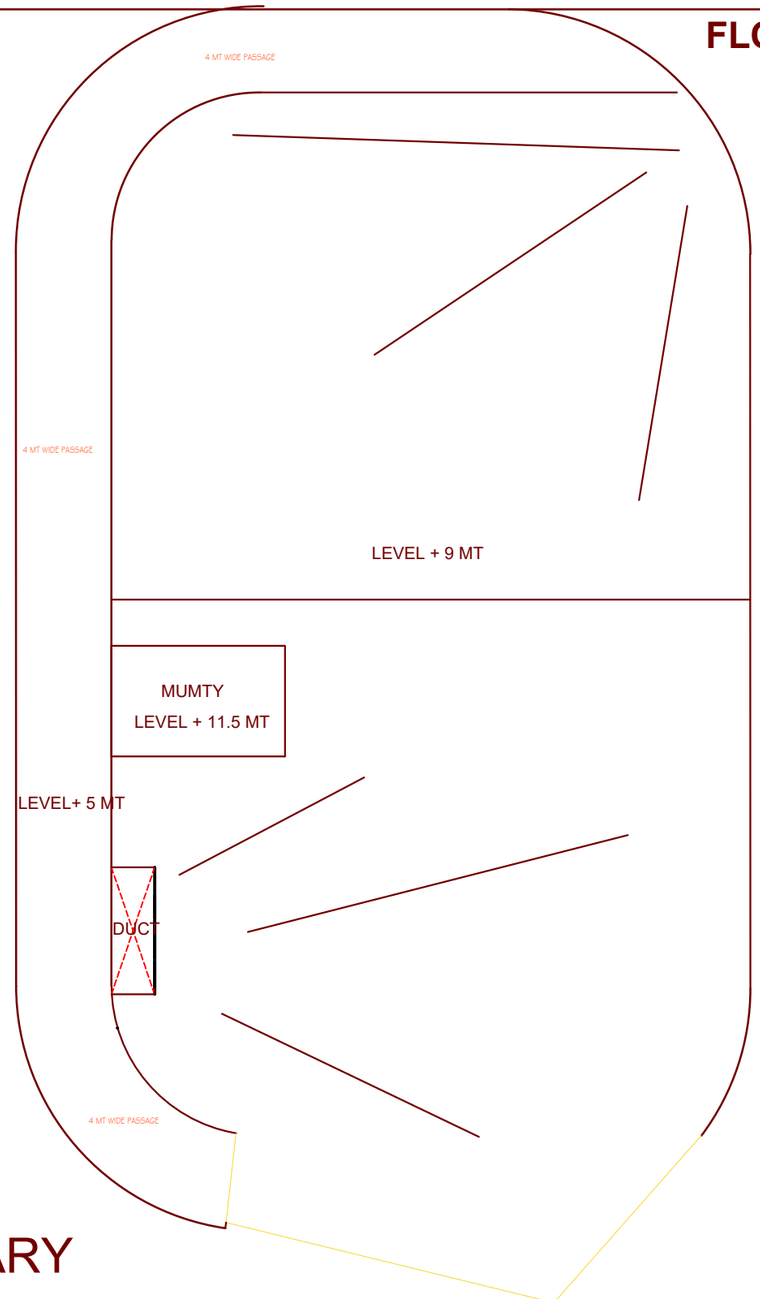
INSTITUTIONAL BLOCK

SCHOOL OF PLANNING AND ARCHITECTURE, VASANTKUNJ, NEW DELHI	**MOHD REHAN**
	UNI. ROLL NO. : 115101044
	THESIS YEAR - 2019/20
	B.B.D.U , L.K.O

FLOOR PLANS



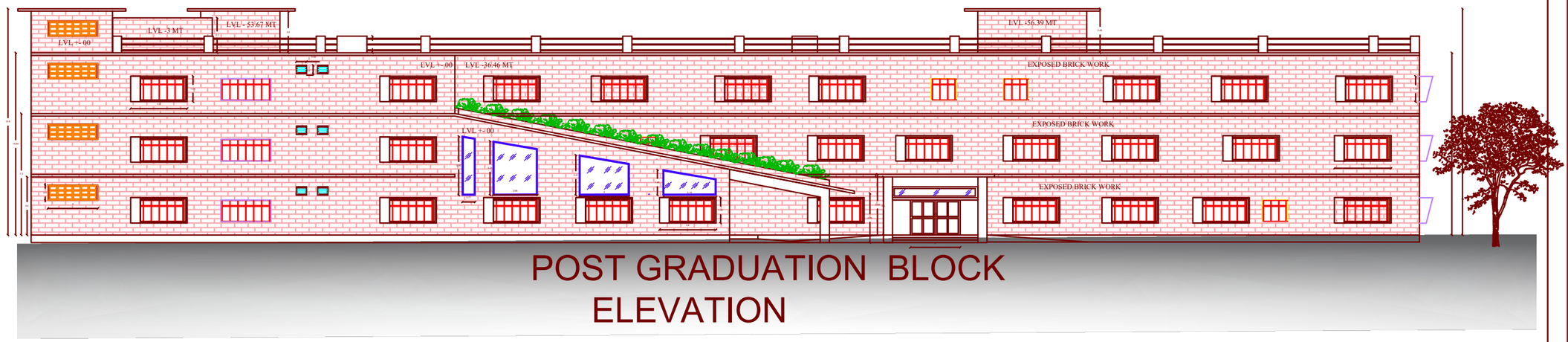
CENTRAL LIBRARY
1100 SQM



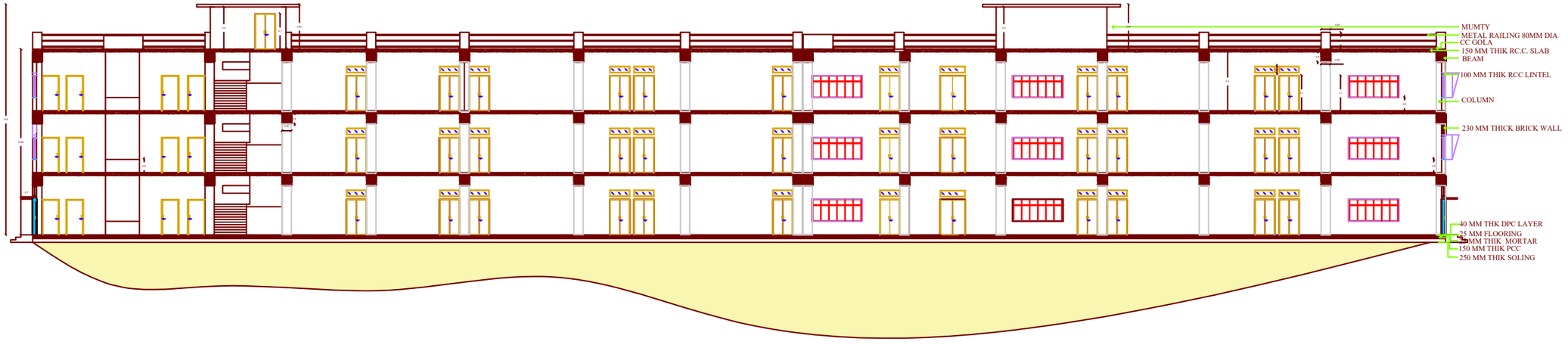
TERRACE PLAN

SCHOOL OF PLANNING AND ARCHITECTURE, VASANTKUNJ, NEW DELHI	MOHD REHAN
	UNI. ROLL NO. : 115101044
	THESIS YEAR - 2019/20
	B.B.D.U , L.K.O

ELEVATION AND SECTION



POST GRADUATION BLOCK
ELEVATION



POST GRADUATION BLOCK
SECTION

INSTITUTIONAL BLOCK

SCHOOL OF PLANNING AND ARCHITECTURE, VASANTKUNJ, NEW DELHI	MOHD REHAN
	UNI. ROLL NO. : 115101044
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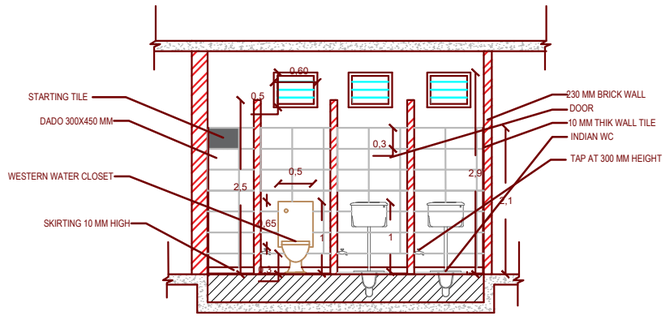
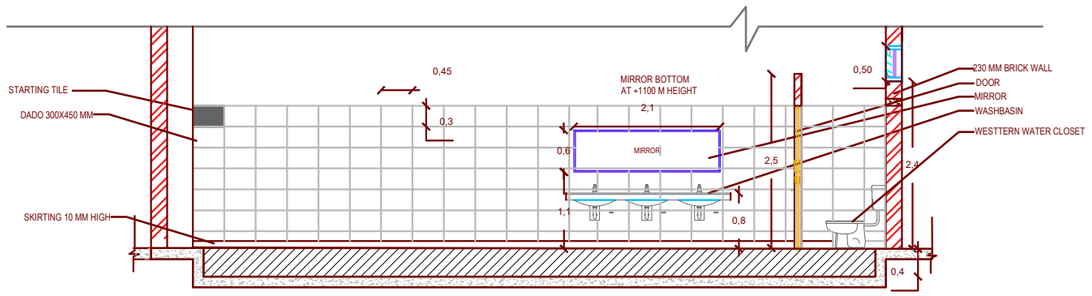
	B.B.D.U , L.K.O

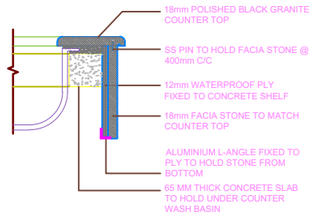
ELEVATION AND SECTION



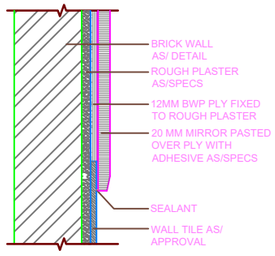
SECTION AT YY'



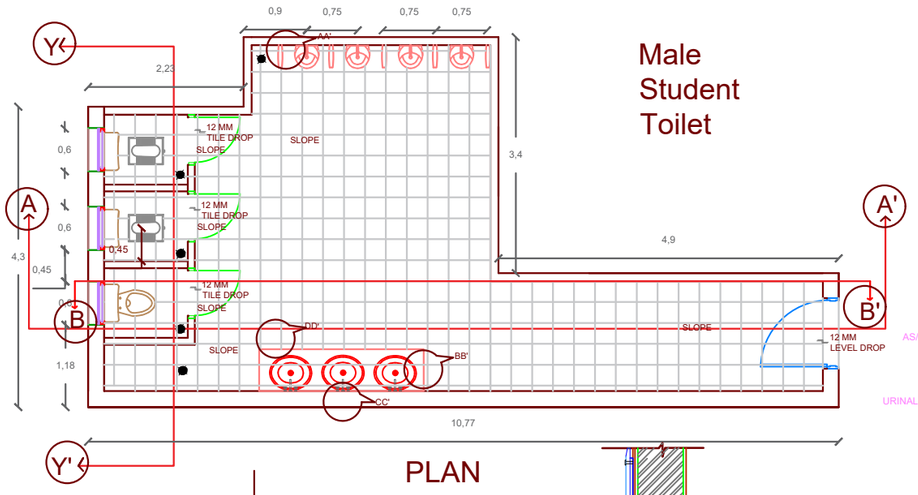
SECTION AT BB'



DETAIL AT DD'

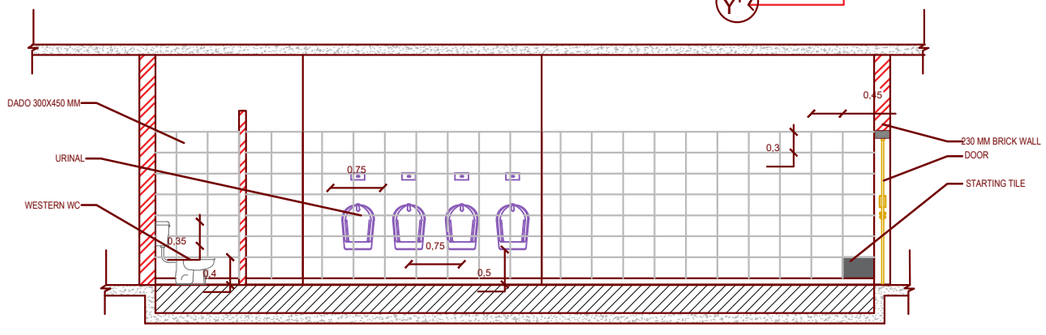


DETAIL AT CC'

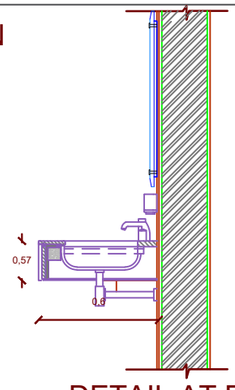


PLAN

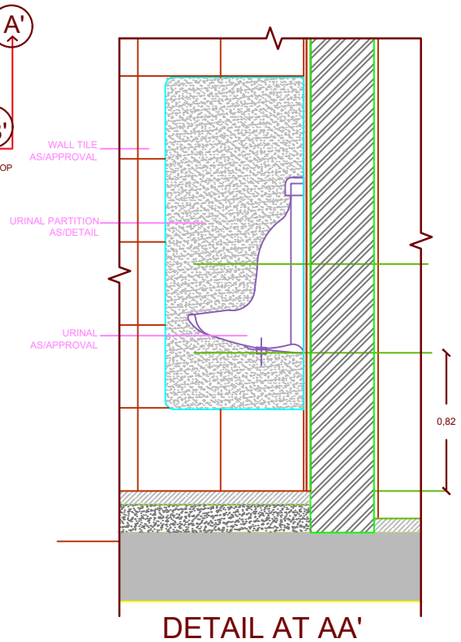
Male
Student
Toilet



PLAN



DETAIL AT BB'



DETAIL AT AA'

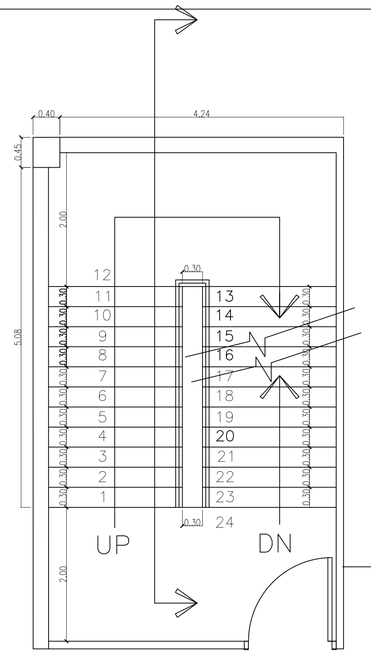
SCHOOL OF PLANNING AND ARCHITECTURE, VASANTKUNJ, NEW DELHI

MOHD REHAN

UNI. ROLL NO. : 115101044

THESIS YEAR - 2019/20

B.B.D.U , L.K.O



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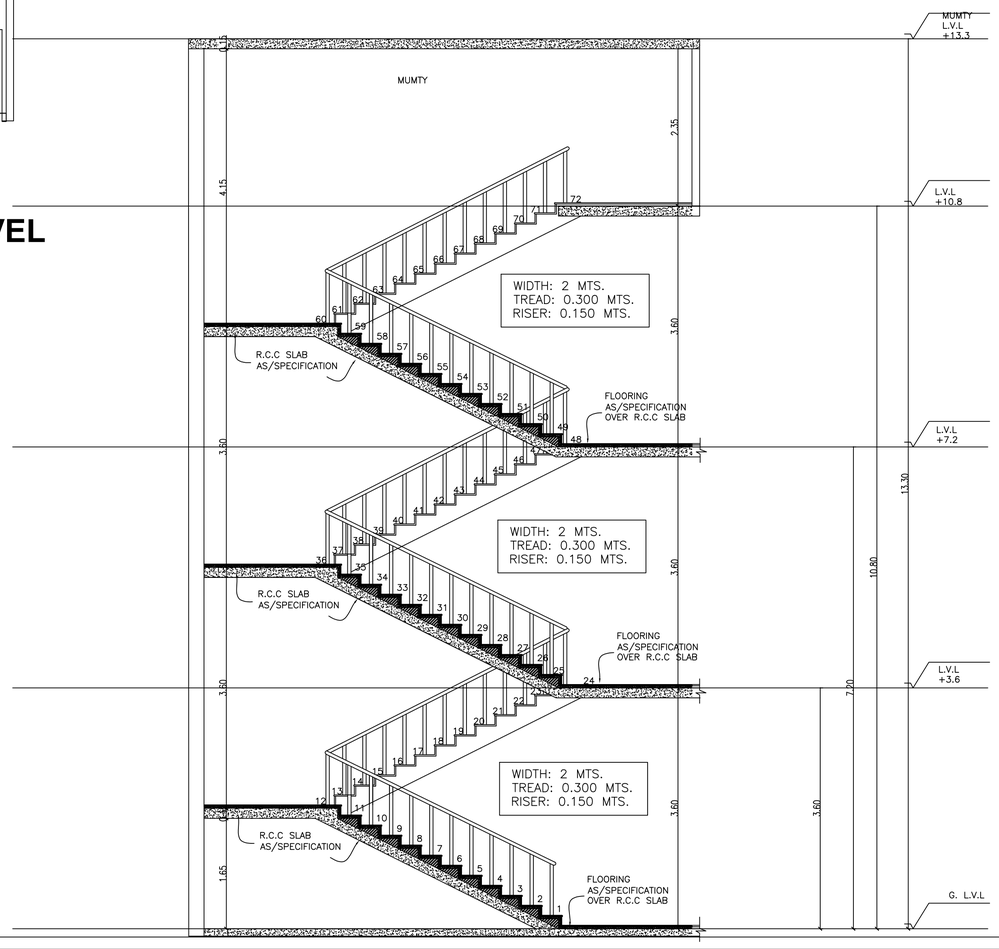
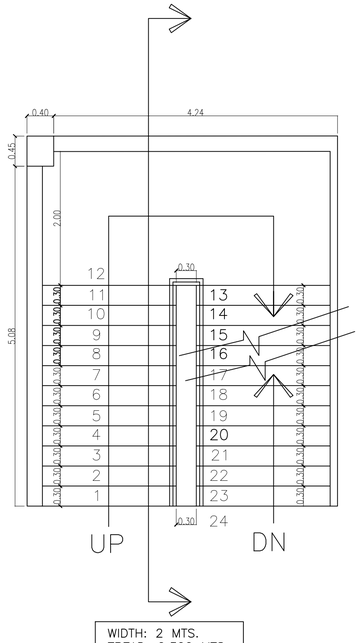
TREAD: 0.300 MTS.
RISER: 0.150 MTS.

PLAN AT MUMTY LEVEL





WIDTH: 2 MTS.
TREAD: 0.300 MTS.
RISER: 0.150 MTS.

PLAN

STAIR CASE DETAIL

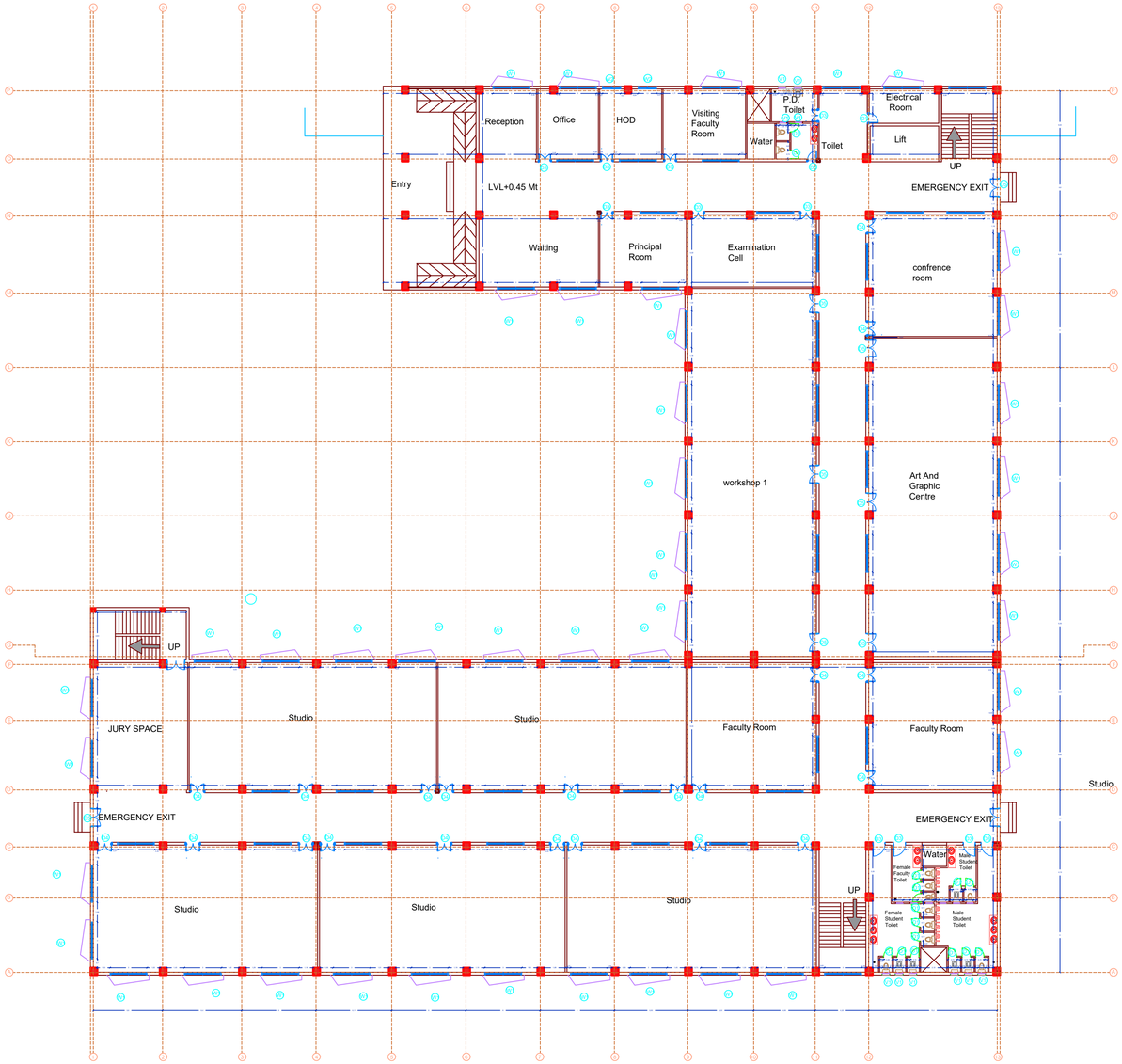
SCHOOL OF PLANNING AND ARCHITECTURE, VASANTKUNJ, NEW DELHI

MOHD REHAN

UNI. ROLL NO. : 115101044

THESIS YEAR - 2019/20

B.B.D.U , L.K.O



B.ARCH BLOCK
GROUND FLOOR

DOOR SCHEDULE

SR. NO.	ITEM	WIDTH	SILL	LINTEL
1	D-1	700 MM		2100 MM
2	D-2	800 MM		2100 MM
3	D-3	1000 MM		2100 MM
4	D-4	1200 MM		2100 MM
5	D-5	1500 MM		2100 MM

WINDOW SCHEDULE

	ITEM	WIDTH	SILL	LINTEL
1	W-1	3000MM	800MM	2100MM
2	W-2	1500MM	800MM	2100MM
3	V-1	600MM		

SCHOOL OF PLANNING AND ARCHITECTURE, VASANTKUNJ, NEW DELHI

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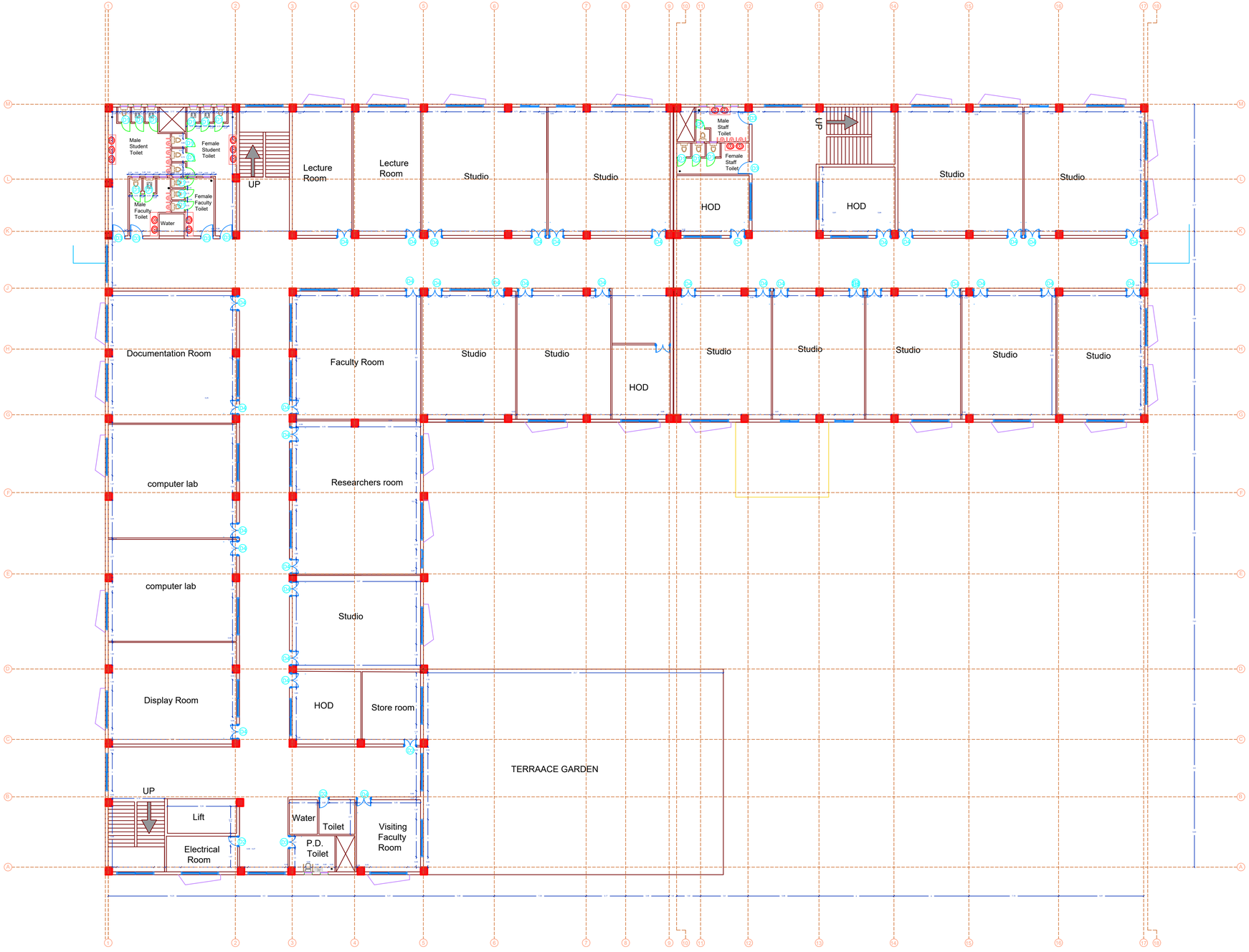


POST GRADUATION BLOCK
SECOND FLOOR PLAN

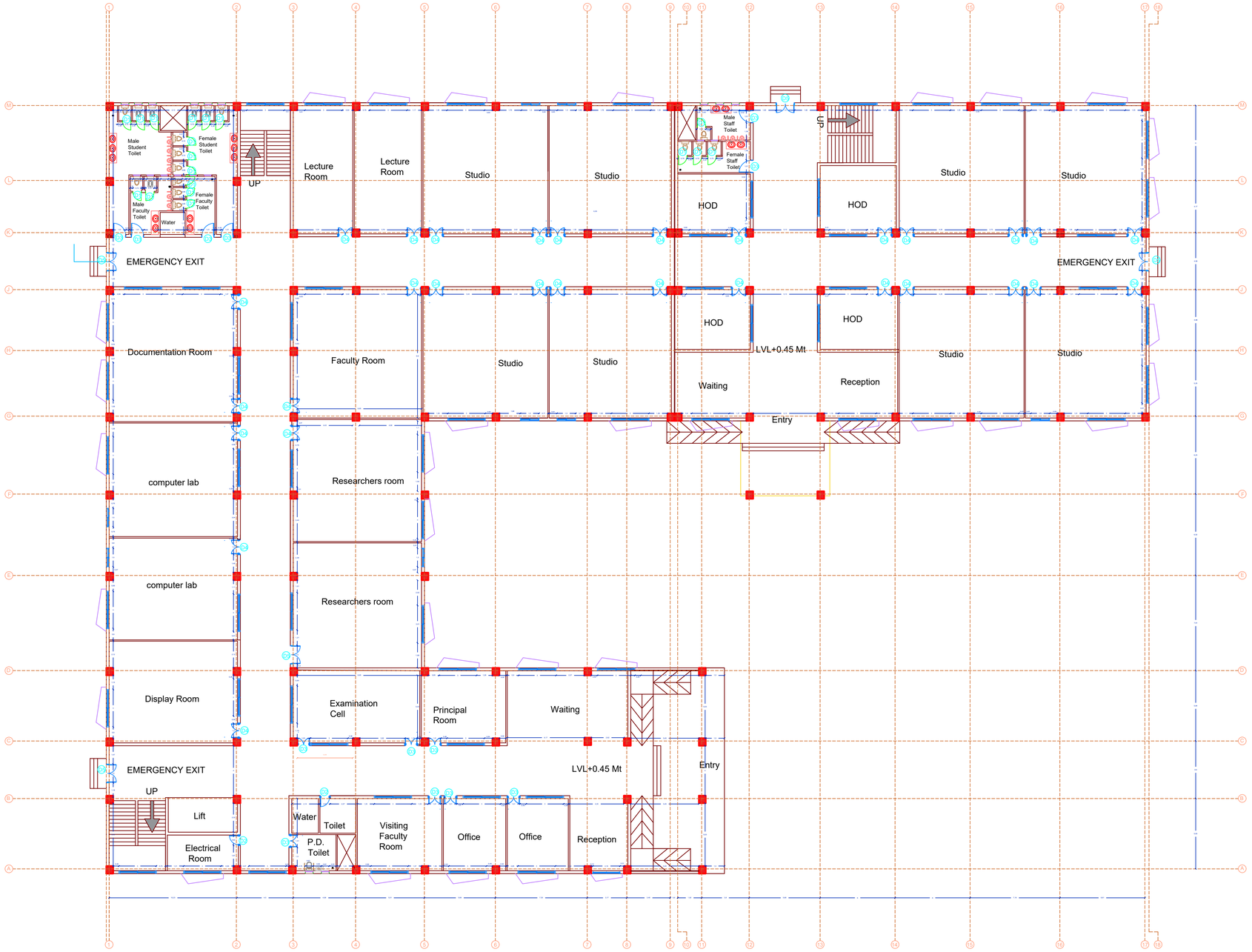
SCHOOL OF PLANNING AND ARCHITECTURE, VASANTKUNJ, NEW DELHI

MOHD REHAN

UNI. ROLL NO. : 115101044

THESIS YEAR - 2019/20

B.B.D.U , L.K.O



POST GRADUATION BLOCK
GROUND FLOOR

SCHOOL OF PLANNING AND ARCHITECTURE, VASANTKUNJ, NEW DELHI

MOHD REHAN
UNI. ROLL NO. : 115101044
THESIS YEAR - 2019/20
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