THESIS REPORT ON

DRUG DE-ADDICTION AND REHABILITATION CENTRE AT SECTOR 32A, CHANDIGARH

A Thesis Submitted

in Partial Fulfillment of the Requirements for the Degree of

BACHLOR OF ARCHITECTURE

In

Field of specialization (ARCHITECTURE)

By

PRIYANSHI AGARWAL

Enrollment no.-1150101058

Under the guidance of AR-ANSHU RASTOGI

Assistant prof. BBDU, Lucknow

to the

School of Architecture



BABU BANARASI DAS UNIVERSITY,

LUCKNOW

SESSION 2019-20

ACKNOWLEDGEMENT

The journey which started 5 years ago has culminated....as I step into the world a series of people flash in my memory without whose support and good will this journey wouldn't have been easy and free flowing.....

To start with. First and foremost gratitude towards almighty GOD for his blessings. Then I would like to thank all my faculty members who have supported and guided me all these memorable 5 years.

I would like to thank my thesis guide AR. ANSHU RASTOGI who has been extremely co-operative since the very beginning and who helped me to utilize my skills and creativity to the utmost...

I would further like to show my gratitude to my juniors for giving full assistance whenever required and being there with me in all ups and downs. Their motivation and support helped me to be more dedicated and inclined towards my goal.

Last but not the least all friends, family and love one who give their all kind of support and concern .The lovely friends who helped me whenever needed. Poornima, Shivam Thank you so much for the efforts.

I have put in my best of efforts and worked day and night to make this project a success .hope u too will appreciate my endeavor.....

I wish to dedicate this work to my love ones.....Who are always their in my heart.

BABU BANARASI DAS UNIVERSITY, LUCKNOW CERTIFICATE OF THESIS SUBMISSION FOR EVALUATION

1. Name :PRIYANSHI AGARWAL		
2. Roll No. :1150101058		
3. Thesis title:DRUG DE-ADDICTION AND RECENTRE, CHANDIGARH		
4. Degree for which the thesis is submitted:BACHELOR ARCHITECTURE	OF	
5. Faculty of the University to which the thesis is submittee	1	
		••
6. Thesis Preparation Guide was referred to for preparing		
the thesis.	YES 🗌	NO
7. Specifications regarding thesis format have been closely		
followed.	YES	NO
8. The contents of the thesis have been organized based on		
the guidelines.	YES	NO
9. The thesis has been prepared without resorting to		
plagiarism.	YES 🗌	NO
10. All sources used have been cited appropriately.	YES	NO
11. The thesis has not been submitted elsewhere for a		
degree.	YES	NO
12. Submitted 4 spiral bound copies plus one CD.	YES 🗌	NO

Signature(s) of the Guide AR. ANSHU RASTOGI BBDU, Lucknow. (Signature of the Candidate) Name: PRIYANSHI AGARWAL Enrollment no. 1150101058

BABU BANARASI DAS UNIVERSITY

B. Arch Thesis 2019-20

Certificate

Name of Student: PRIYANSHI AGARWA	L Roll no. 1150101058
Department:	••••••
Thesis Title (in capital): DRUG DE-ADDIC CENTRE, CHANDIGARH.	CTION AND REHABILITATION
Thesis guide:AR. ANSHU RASTOGI	
Remarks: Satisfactory / not Satisfactory (in	n case of not Satisfactory give
Comments):	
•••••••••••••••••••••••••••••••••••••••	
Sign of Thesis	Sign of External

Guide

Sign of External Examiner 1

Thesis coordinator

Sign of External Examiner 2

Sign of Head of Department Sign of Dean of School

CONTENTS

- 1. Introduction
- 2. Site and Climate Study
- 3. Case Studies
 - > National drug dependence and treatment centre, Ghaziabad.
 - Post graduate institute of medical education and research, Chandigarh.
- 4. Literature Study
 - Nityanand rehab centre, pune.
 - Ledge hill drug centre, Canada.
- 5. Comparative analysis
- 6. Research study and library study (standards)
- 7. Inferences
 - > Requirements
 - > Area analysis
- 8. Concept designing
- 9. Site plan with area calculation
- 10. All floor plans, elevations, sections
- 11. Elective drawing 1
- 12. Elective drawing 2
- 13. Final views / model
- 14. Bibliography.

TOPIC DRUG DE-ADDICTION AND REHABILITATION CENTRE,

CHANDIGARH.

ADDICTION THE DISEASE THAT MAKES YOU TOO SELFISH TO SEE THE HAVOC U CREATED OR CARE ABOUT THE PEOPLE WHOSE LIVES U HAVE SHATTERED.

INTRODUCTION

Addiction is a chronic, relapsing disease, characterized by compulsive drug seeking and use. Traditionally, drug addiction has been defined as physical dependence. But it is now known that both physical and

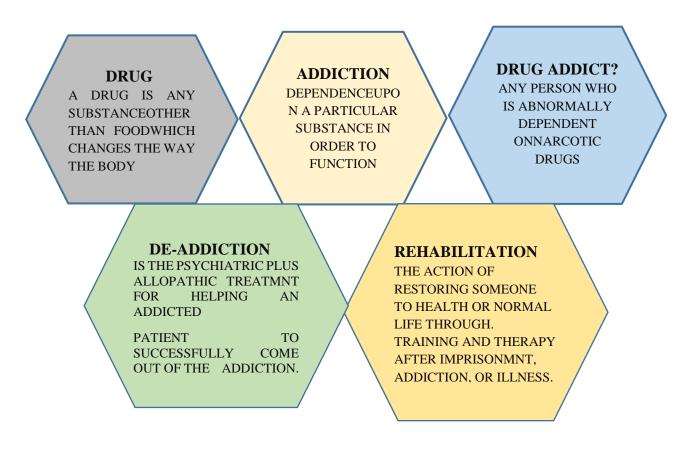
physical dependence. But it is now known that both physical and psychological dependence have a biochemical basis in the brain and the distinction between the two is blurred.

Drug addiction is a treatable disorder. Many rehabilitation centers work with these drug addicts to help them return to normal, productive lives to re-integrate them into society as independent, self-sufficient individuals by giving them the social and working skills they need to become solid citizens in the future.

HISTORY AND BACKGROUND

As drugs have been abused for hundreds of years all over the world, their effects have been felt for just as long. Since drug have been used, there were always who abused them, which led to full-blown addiction. And the bevy of side effects that come with it. As the physical and mental health implications of addiction become clearer, rehabilitation efforts began to appear. As a result, the history of rehabilitation in the United States dates back hundreds of years.

One of the founding father of America, Benjamin rush, was one of the first to believe that alcoholism was not a matter of personal willpower but rather due to the alcohol itself. Rush challenged the accepted belief at the time that alcoholism was a moral failing, thereby progressing the concept of addiction as a disease. Per the University of Utah, in the past, addiction was treated as a criminal offense, with intensive faith - based prayer, or in mental, institutions, but this signified a shift to viewing addiction as an illness that could be managed.





THE PROBLEM

Drug addicts are considered to be a stigma in the society. We generally labeled them rather but if one tries to evaluate the contribution of our country towards them, it is more or less nil.



This thesis has been selected to create an ideal world for these people, living an isolated and alienated life, by establishing a more interactive relationship with the environment and society. There by helping them to integrate themselves to return to sobriety.

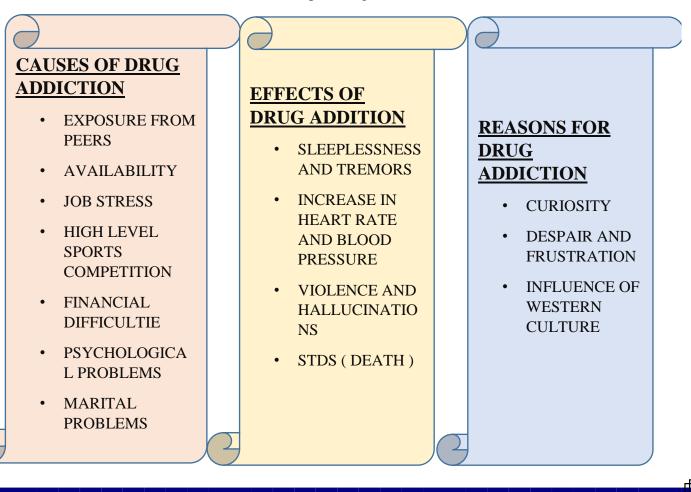
NEED WHEN DOES A PERSON BECOME DRUG ADDICT...?

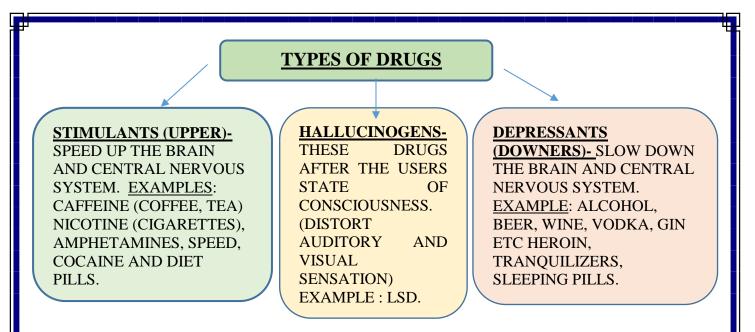
As the person indulge in the drugs to escape from his alienate and isolated life but they make their life more isolated. Thus such persons need to be unconditionally accepted by their friend, as s human being, differentiating his behavior and his personhood.

Such centers make them believe that every individual is rational, constructive, positive, trustworthy and full of potential. He may occasionally act, think, feel, irrationally but is capable of correcting his feelings, thoughtful actions, if he realizes that they are causing hindrances in his life. One of the reasons of addiction is the absence of love and security, thus security and love are the very important needs of an addict. Restoring faith in human values is the essence of recovery.

Re-integration in the family set up is the key of rehabilitation. Human beings are happiest when they establish their goals of life and actively strive to achieve them.

The process satisfaction is relatively more relevant than the point satisfaction. Healthy things like arts, music or some other constructive hobbies can prove a good substitute to addiction.





WHY DRUG DE-ADDICTION?

Drug addiction is a chronic, relapsing disease, characterized by compulsive drug seeking and use and by neurochemical and molecular changes in the brain.

Drug addiction is becoming a major health problem in India with some estimates indicating that as many as 15 million people in India could become addicts by the end of 2015.



AIMS /OBJECTIVE OF DESIGN

The main aim of the rehabilitation center is to help the addicts to integrate themselves to return to sobriety and become productive member of society. This aim can only be achieved by fulfilling the following objectives.

- Understanding the psychology and behavioral aspects of the addicts.
- Identify the possibilities of achieving therapy through design.
- Provide a healing environment through indoor and outdoor greenery and landscaping.
- Bridging the gap between the therapeutic philosophies and the physical design.
- To arrive a set of design parameters for a sensitive and responsive environment.
- Create an ideal world for the rehabilitation of the drug addicts by establishing a more interactive relationship with the environment.

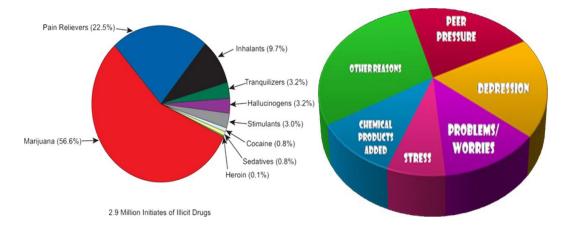
BASIC ISSUES RELATED TO REHABILITATION CENTER



At present only a limited number of rehabilitation center and rehabilitation programs provide a comfortable, spiritually healing setting to help people suffering from drug addiction, alcoholism or either chemical dependencies discover a new life. Thus an environment renowned for helping people and their families reach their goals to be developed in the form of built environment and its coordination with open spaces.

The basic principles behind a rehab center are to:

- Believe that every individual is rational, constructive, positive, trustworthy and full of potential. He may occasionally, act, think, feel irrationally; but is capable of correcting his feelings, thoughtful actions, if he realizes that they are causing hindrances in life.
- Security and love are the very important needs of an addict.
- Restoring faith in human values is the essence of recovery.
- Work is recovery.
- Re-integration in the family set up is the key of rehabilitation.
- Information and knowledge is the power.
- Relationships are important in the recovery process. We focus on positive enrichment in relationships.



METHODOLOGY

The framework or methodology to arrive at a comprehensive design solution is as follows:

• Identification of aims and objectives of the thesis with reasons for selection and potential for architectural design.

- Understanding all aspects of the therapies involved and their proper documentation, their symptoms, withdrawals and other treatment methods.
- Thirdly, understanding the effects of various forms, light and color on the behavioral patterns of the addicts.
- The study of the different therapeutic approaches in this field.



- Reference study of the Mutagen, Pune and NDDTC, Delhi.
- Identify a set of design philosophies based on above study taking into consideration both the physical and psychological needs of these people.
- Set out the spaces required in center with their areas and user capacity.
- Identify the site for this center and a complete study and analysis of the site by surveying all existing features associated with it.
- Formulation of a site specific program based on the earlier study.
- The next stage would be the design concept taking into consideration all the design guidelines. The concept would include zoning of various areas, and activities taking into consideration the circulation pattern, spatial concept, and visual concept.
- Arrive at a built environment and incorporate various services required in the center.
- Final stage is arriving at a detailed architectural proposal for a truly sensitive solution for the rehab Centre.

<u>SITE STUDY – SECTOR 32A CHANDIGARH</u>

ABOUT THE CITY

Chandigarh is a city and a union territory in the northern part of India that serves as the capital of the states of Haryana and Punjab. As a union territory,

the city is ruled directly by the Union Government of India and is not part of either state.



INTRODUCTION

- > Site study for particular piece of land for its potentials. These potentials are being considered so the design of building shall be in harmony with the nature by taking into account all the resources. This study provides guidelines for the development to be taken palace. For these reasons, a comprehensive program for the project analysis has to be formulated which includes identification of potentials and problems, site observation, natural factors, etc. Site analysis has to be on the relevant factors and their relationship. Such a data provides a base on which the design will be made.
- Site conditions play a vital role in designing solution for a site. A through site analysis is highly essential for the design of built mass. Site analysis, the process of analyzing/understanding the existing site qualities, considering factors that determine a site character, the purpose each factor serve & location of each factor in some manner. Factors that determine a sites character include natural factors and manmade factors. Natural factors include water, vegetation, topography, orientation, climate etc., whereas man made factors include access, surrounding buildings, services etc.

CITY HIGHLIGHTS



SUKHNA LAKE

ROCK GARDEN

ROSE GARDEN

GOVT. MUSEUM AND ART GALLERY

NATURE OF NEAR BY BUILDING

- Exposed brick work on façade.
- Maximum G+2
- Low height building. \geq
- Frame structure is generally used. \geq
- Material used; bricks, cement mortar, reinforced cement concrete.





ABOUT THE SITE:-

PROJECT BRIEF

DOUG DE HOUTTONK TREATMENT CENTRE TRESSEPAISSING = PROHIBITED

SITE FOR नशा निवारण व चिकित्सा केन्द्र

PROJECT:- DRUG DE-ADDICTION & REHABILITATION CENTRE

CLIENT: - CHANDIGARH DEVELOPMENT AUTHORITY

DEVELOPMENT AUTHORITY: - CHANDIGARH DEVELOPMENT AUTHORITY

LOCATION: - DAKSHAN MARG, SECTOR-32A, CHANDIGARH

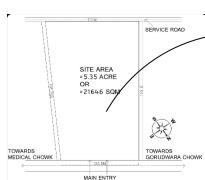
TYPE: - MEDICAL

<u>AREA: -</u> 5.35 ACRES

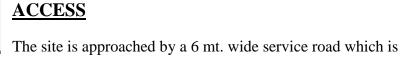
STATUS: - LIVE & NOT CONSTRUCT

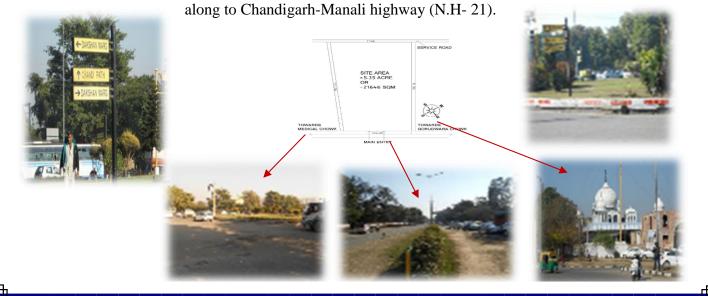
SITE LOCATION:

- > ON CHANDIGARH MANALI HIGHWAY- 21, ABOUT 2KM DISTANCE GURUDWARA CHOWK IS SITUATED. ON
- > THIS HIGHWAY JUST 250 M AHEAD TOWARDS THE MEDICAL CHOWK THE SITE IS LOCATED.
- ➤ AREA : 5.35 ACRES
- > LATITUDE : 300 42" 28" NORTH
- ▶ LONGITUDE : 760 46" 49" EAST
- > ALTITUDE : 330 M





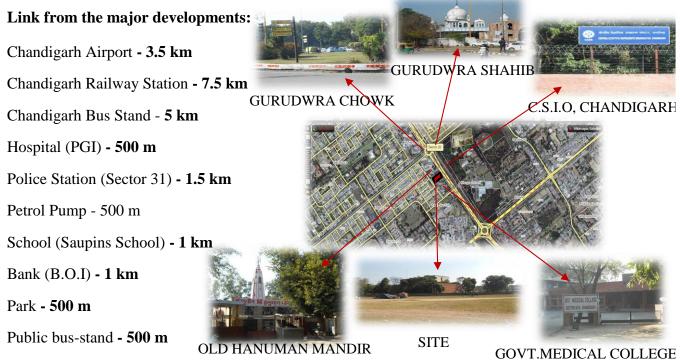






NEIGHBORHOOD:

Site is located in sector-32a, Chandigarh. We can access the site Chandigarh-Manali highway (N.H. -21).



Temple adjacent to site Market (Sector-32) - 1 km

SOIL TOPOGRAPHY

The soils in Chandigarh are loamy sand at surface and calcareous sandy loam in subsurface layers. The hard clay forms pan at depths varying between 20 and 30m. In northern parts the soil is sandy to sandy loam where as it is loamy to silt loam in southern parts. The soils in Chandigarh are light yellowish brown to pale brown in color. Soils are calcareous and normally having kankar. Almost all the soils are deficient in nitrogen, phosphorous and potash.

WATER TABLE

The average depth of the water table below ground surface is 15 mt.

VEGETATION

There is no tree lies on the site but the ground is covered by grass, but the site is surrounded banyan and eucalyptus trees.

Type of vegetation of Chandigarh is Tropical Thorn.

RAIN WATER HARVESTING

Rain Water Harvesting is proposed for the site.

WATER SUPPLY

Water is supplied from the Water Works, sector 32-A



SERVICES

ELECTRICAL

Electricity is supplied from the 66KV. Grid Sub-station, sector 32-A

DRAINAGE

The drainage channel is constructed along the front road.

ZONING BYE LAWS

For the purpose of ensuring health and safety of allotters and for proper aesthetics and a desirable street picture, Chandigarh Development Authority (CDA) Erection of Buildings Regulations, has been framed, which besides other design/ structural requirements, specify the proportion of the site which may be covered with buildings, F.A.R., Max. Height etc. in the case of different types of buildings. The land use for the site is medical.

- Ground coverage 40%
- Floor area ratio 1.2
- Front setback 9m
- Side setback 6m
- Rear setback 6m
- · Car parking 0.50-1.50 per100 sqm of floor area.

CLIMATE STUDY

NATURE OF CLIMATE

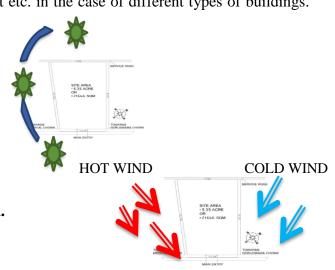
Chandigarh has a humid subtropical climate characterized by a seasonal rhythm: very hot summers, mild winters, unreliable rainfall and great variation in temperature (-1 °C to 46 °C). The average annual rainfall is 1110.7 mm. The city also receives occasional winter rains from the Western Disturbance originating over the Mediterranean Sea. Cold winds usually tend to come from the north near Shimla, capital of himanchal Pradesh and from the state of Jammu and Kashmir, both of which receive their share of snowfall during wintertime.

Summer: The temperature in summer (**from Mid-April to June-end**) **may rise to 44** °C. The temperatures might sometime rise to 44 °C in mid-June. Temperatures generally vary between 40 to 42 °C.

<u>Monsoon:</u> During monsoon (from early-July to mid-September), Chandigarh receives moderate to heavy

rainfall and sometimes heavy to very heavy rainfall (generally during the month of August or September). Usually, the rain bearing monsoon winds blow from southwest/south-east. Mostly, the city receives heavy rain from south (which is mainly a persistent rain) but it generally receives most of its rain during monsoon either from North-west or North-east. Maximum amount of rain received by the city of Chandigarh during monsoon season is 195.5 mm in a single day.

			C	limate dat	a for Cha	ndigarh							(hid
Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
Record high °C (°F)	27.7 (81.9)	32.8 (91)	37.8 (100)	42.6 (108.7)	44.6 (112.3)	45.3 (113.5)	420 (107.6)	39.0 (102.2)	17.5 (59.5)	370 演員会	340 (932)	38.5 (50.2)	45.3 (113.5)
Average high °C ("F)	20.4 (68.7)	23.1 (73.5)	28.5 (63.3)	345 (945)	38.3 (100.9)	38.6 (101.5)	348 (63.2)	328 (91)	33.1 (61.6)	31.8 (88.2)	27.5 (81.1)	22.1 (71.8)	30.38 (86.67)
Daily mean °C (°F)	13.3 (55.9)	15.7 (60.3)	21.0 (69.8)	26.7 (60.1)	30.8 (87.4)	121 (881)	29.8 (84.2)	28.0 (82.4)	27.4 (81.3)	24.4 (75.9)	19,4 (85,9)	14.4 (57.9)	23.51 (74.31
Average low "C ("F)	6.1 (43)	8.3 (46.9)	13.4 (58.1)	18.9 (86)	23.2 (73.8)	25.4 (77.7)	24.8 (75.2)	23,3 (73,9)	21.8 (71.2)	17.0 (62.6)	10.5 (50.9)	6.7 (44.1)	16.55 (61.78
Record low °C (°F)	0.0 (32)	0.0 (32)	4.2 (39.6)	7.8 (46)	13.4 (58.1)	14.8 (58.6)	14.2 (57.6)	17.2 (63)	14.3 (57.7)	9,4 (48.9)	3.7 (38.7)	0.0 (32)	0 (32)
Rainfall mm (inches)	46.6 (1.835)	33.9 (1.335)	29.3 (1.154)	11.3 (0.445)	24.2 (0.953)	1126 (4.433)	276.3 (10.878)	282.8 (11.134)	173.0 (7.047)	41.6 (1.638)	6.7 (0.264)	18.9 (0.744)	1,063.0 (41.85
Avg. rainy days	3.8	3.9	2,6	2.4	2.5	7.1			61	1.9	13	19	59.7
% humidity	80	76	66	48	45	62	79	84	81	71	69	78	69.9
Wean monthly sunshine hours	275	280	341	360	403	390	310	279	300	341	300	279	3,862



CASE STUDY 1-

NATIONAL DRUG DEPENDENCE TREATMENT CENTRE AIIMS,

(GHAZIABAD)



INTRODUCTION:

The Drug Dependence Treatment Centre, AIIMS was established in the year 1988 and was functional from the premises of the Deen Dayal Upadhyay hospital, New Delhi. In 2003 it was upgraded as the national centre (National Drug Dependence Treatment Centre) and is fully operational from its new premises in Ghaziabad since April 2003.

FIRST FLOOR

CLASSROOMS

FACULTY ROOM

ACTIVITY AREA

ASSESTANT ROOM

LIBRARY

WARDS

TOILETS

LOCATION OF SITE:

Sector 19, Kamal Nehru Nagar, near C.G.O. Complex, hapur Road, Ghaziabad Uttar Pradesh.

OBJECTIVE OF CASE STUDY

The Under Centre Is the Best Drug De Addiction Centre Uttar Pradesh Area of Delhi.

PROJECT BRIEF

ARCHITECT OF PROJECT: - P.R. SAJAN.

AREA OF THE SITE: - 8.9 ACRE.

GROUND COVERAGE: - 25%

TYPE OF PROJECT: - MEDICAL

KIND OF CONSTRUCTION:- Reinforced Concrete Is Used For

Making Structure and Form Follow

Function Is Used. Two Domes Are

Used For Ventilation Purpose.

SEOND FLOOR ADMINISTRATION BLOCK DOCTOR CABINS

FUNCTION DISTRIBUTION

GROUND FLOOR

REGISTRATION DESK ENOUIRY OFFICE

O.P.D.

LABS PHARMACY

TREATMENT ROOM

CONSULTATION ROOM

OFFICER'S DUTY ROOM CONFERENCE HALL WARDS

NURSE CUBICAL

SAMPLE **COLLECTION**

RECORD ROOM

DAY CARE UNIT

TOILETS

and

LABORATORY

In this campus the lab is just near of the O.P.D .There are two type of lab.

- Urine test
- Blood test

In drug addicted people we can test blood & urine for check the availability of drug in human body.

WARDS

The ward zone is placed separately for security purposes. It's just right side of the O.P.D. The ward is divided into two categories.

- Private ward
- Common ward

In common ward 6 beds is placed in a cubical area & 1 private ward is available for serious case.

NURSE CUBICAL

Nurse cubical is placed central part of the common ward and front of the **private ward. Three sides of the cubical** are made by transparent glass because nurse is see all over the beds which is placed in the ward for the patient.

DAY CARE CENTRE AND ACTIVITY ROOM

Both The Functions Are Provided In A Single Hall At First Floor.

- The First Floor Has A Library At The Entrance Which Is Accompanied By Four Classrooms. At The Opposite Corner There Are Different Areas Are Provided Like Assistant Rooms, Wards, and Toilets Etc.
- > The Second Floor Has Administrative Area And Doctors Room.

OTHER FEATURES

- > The Sky Light Is Provided For Getting Maximum Natural Light At Day Time.
- And Cut Out Is Provide At The First Floor So That Maximum Light Can Reach At The Ground Floor Corridor. This Is A Good Way to Use Natural Light in Building.

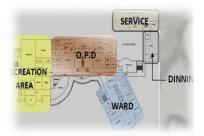
PATIENT CUBICAL

Different cubical for different age group and for females but no privacy is maintained because all the cubicles are open.

DESIGN CONCEPT

 \succ The site was in square so the major design was done.











- They are 4 main building block in all over the side. <u>O.P.D Block</u> (in this block all services is available like administrative, treatment ward & physical treatment)
- 1. Hostel Block
- 2. Services Block
- 3. Canteen Block
- O.P.D block is left side on the site.
- ▶ Hostel, Services & Canteen Block is right side on the site.

The site is divided by a central main road which is going on the back side of the side.

FUNCTIONAL DEFINITION

> Most of the development on site is G+2 stories.



CLEANING AND MAINTANCE

- Trees & plantation is all over the site of the drain so the planning of the entire site was done by composing a large number of small blocks.
- A landscape is design between the blocks for create micro-climate for the particular block.
- Most of the site is green land so the climate of entire site is good for human health.
- > Dome is also used for daylight in the O.P.D block.

CIRCULATION SITE COMPONENTS ENTRY STAFF THROUGH OPD The OPD BLOCK site has PUBLIC WAITING **DINNING BLOCK** components. CUM FAMILY THERAPY ROOM HOSTEL BLOCK ENTRY NURSE STATION Entrance \triangleright SERVICE BLOCK CHANGING ROOM **STAFF PARKING** ENTRY TO IPD Guard room WARD KITCHEN PARKING Administrative, DOCTOR LANDSCAPE 1 RECREATIONAL ROOM TOILET LANDSCAPE 2 O.P.D, Ward block \geq COUNSELLERS LANDSCAPE 3 DRINKING ROOM Hostel block WATER LANDSCAPE 4 LANDSCAPE 5 Canteen block LANDSCAPE 6 Electrical sub-station Pump room Parking Open parking ¢ Covered parking 9 6

<complex-block>

FIRST FLOOR PLAN

KIND OF CONSTRUCTION

The construction type used in the buildings was FUNCTION FOLLOW FORM architecture, since the Location of the site is in the normal range the kind of construction justifies itself. Height of the building is 10 meter.

SERVICES

ELECTRICITY

- > Electrical distribution board is providing in each building.
- > Site has its own transformer for electricity supply.
- > Generator is also available for backup electricity.
- There is no high tension line running through the campus within the campus there is an electrical circuit lies along the adjoining road on the east.

DRINKING WATER

Drinking water is provided at the end of the corridor of the

Building.







TOILET:-

- Separate toilets are providing for male and female.
- ➢ Some toilets consist of handrail across the w.c and washbasin or the comfort

Of Disabled person.

FIRE FIGHTING

- The building had an overhead water storage tank as well as 1 below the ground level to cater to the firefighting requirements. 2 overhead tank capacity10, 000 capacities each. Underground water tank capacity-50000 capacity.
- Fire hydrants installed near escape routes 4 hose reels were installed at four corners of the building and its length was 70m each fire hose is either connected to fire engine or fire hydrant and indoors it is permanently attached to the buildings plumbing system.

HVAC

The cooling and hvac system is installed is right side and near for the ward side of the o.p.d block. This hvac plant is provide better thermal comport for the patient of wards and also provide the doctor room and nurse station those made in ward section.

SIGNAGES

• The signage's board is placed at every point where requirement are is compulsory for visitor or staff & for users.

PARKING

• Two type of parking is used on the site. First one is covered parking for staff & another one is surface parking for common people or visitors.

RAIN WATER DISPOSAL

- > Catch basins are constructed for the disposal of rain water.
- > This catch basin is installed around all over site and also installed near the building block.









<u>CASE STUDY – 2</u>

POST GRADUATE INSTITUTE OF MEDICAL EDUCATION & RESEARCH

(CHANDIGARH)



INTRODUCTION

Drug de-addiction centre is operational in PGIMER to take care of patients addicted to substances abuse. This centre is located near the OPD block and provides comprehensive care for prevention, treatment and rehabilitation of these patients.

PROJECT BRIEF:

- **Location-** Sector-12 Chandigarh.
- **Total site area-** 227 ACRE (all over campus).
- **Total block area-** 776 SQM
- ➤ Total covered area-40%
- > **Development Authority**-Chandigarh development Authority

SITE LOCATION

- On Chandigarh-Manali highway- 21, about 2km distance Gurudwara Chowk is situated. On this highway just 1km ahead towards the Medical Chowk the site is located.
- ➤ Latitude : 300 36" 28" North
- **Longitude** : 760 42" 49" East
- ➢ Altitude : 331 m

HOW TO REACH

PGI is located in sector-12, Chandigarh. We can access the site Chandigarh-Manali highway (N.H. - 21). Link from the major developments:

- > Airways- Old Terminal of Chandigarh Airport- 3.5km
- **Railways-** Chandigarh railway station- 7.5km
- **Bus stand-** Chandigarh bus stand- 5km
- > Hospital- Govt Medical Hospital- 1km
- Police station- Sector 31- 2.5km
- Petrol Pump- Indian oil sector 33B-1km
- School- Supine Public School-2km
- **Temple-** Pracheen Hanuman Mandir- 2km
- Market- Sector 32 -2km
- **Bank-** Punjab National Bank Sector32 -2km



NEED OF THE PROJECT

Drug addiction is a problem all over the world and Chandigarh is no exception. Particularly painful is the sight of young people, and even girls, throwing their lives away because of intoxicants. And the ugly reality of drug addiction touches all classes of society.

ZONING BYE LAWS

For the purpose of ensuring health and safety of allotters and for proper aesthetics and a desirable street picture, Chandigarh Development Authority (CDA) Erection of Buildings Regulations, has been framed, which besides other design/ structural requirements, specify the proportion of the site which may be covered with buildings, F.A.R., Max. Height etc.

Junior

resident

doctors

egistrat

ion

in the case of different types of buildings. The land use for the site is medical.

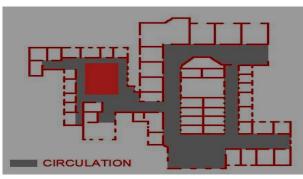
- ➤ Ground coverage 40%
- **Floor area ratio** 1.2
- Front setback 9m
- Side setback 6m
- Rear setback 6m
- Car parking

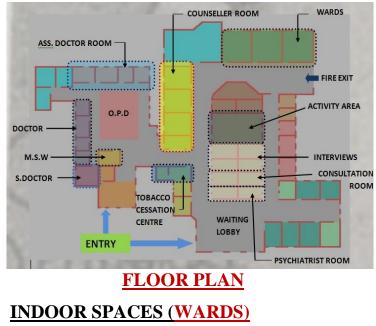
- 0.50-1.50 per100 SQ.M of floor area.

PLANNING & CIRCULATION

PLANNING-

The building is cement finishes which merges with the other buildings in campus. Courtyard planning is used in the campus and drug rehabilitation block also. The counselling rooms and administrative area are radically located around the reception and waiting area.





tollet

Blood

sample

collection

opd

Activity

room

Counselors

Doctors

waiting

Nurse

cabin

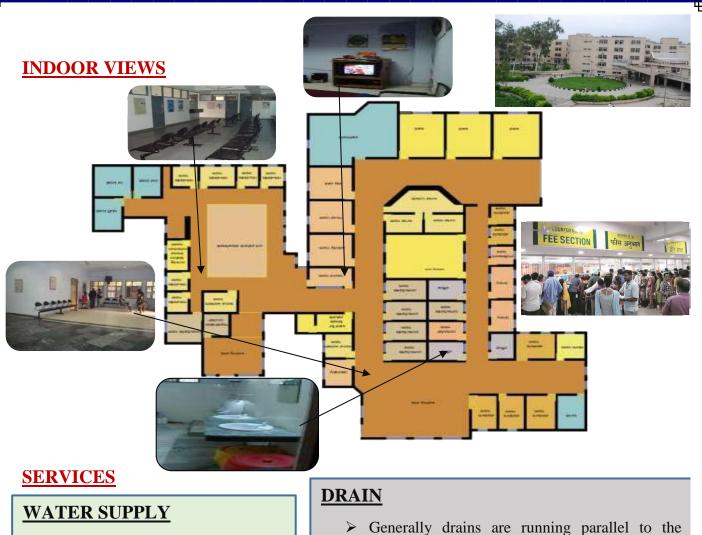
Three wards are there which can accommodate18 beds. Patients are kept in the group of 6

> One private ward is provided for the special patient who can't be kept in general ward.

NURSE CUBICAL-

It is placed so that the view of wards can be taken but the proper view of wards is achieved because of all partitions in between the ward and nurse cubical.





Water is supplied from the Water Works, sector 32-A.

ELECTRICITY

Electricity is supplied from the 66KV. Grid Sub-station, sector 32-A.

Service road & main road. Drainage system on the site is not constructed yet.

RAIN WATER HARVESTING

Rain Water Harvesting PIT is installed on the site

INFERENCES

- One entry and one exit has been provided for the staff and patient exit point to the site keep maximum security. Same entry is being served for the service also.
- Site is inside pgi campus so i is very easy for the people to reach the place or can run to hospital in case of emergency.
- The patients re more prone to commit suicide and escape from the centre during detoxification so it is good that all the services is provided one the ground floor ,especially wards for the inpatients.
- Since patients spend their most of the time in ward so the sense of privacy in ward is being achieved by cutting off direct view of interior through partition.
- Nurse cabin don't have direct visual contact with the ward patients.
- No private lockers are separate storage space creates confusion and mess in the ward.

<u>LITERATURE STUDY- 1</u> <u>NITYANAND REHABILATION CENTRE</u>,

(<u>PUNE)</u>



<u>SITE</u>

The site is located in a-6 Qutub institutional area on the sat sang vihar Marg, south of the India institution of technology. It is surrounded by institution like federation of deaf- multipurpose training centre, India national scientific documentation and Guru Nanak institution for comparative study of religion etc. The site area is 1906.35sqm.

PROJECT BRIEF:

- **LOCATION-** KATRAJ, PUNE
- > ARCHITECT- GIRISH DOSHI AND ASSOCIATES
- > YEAR OF COMPLETITION 29 AUG 1986
- **FOUNDER** DR. NITIN DALAYA

ABOUT INSTITUTE

The nityanand rehabilitation centre for artist and drug addicts is a privately run organization founded by dr. Nitin dalaya in 1999.

The centre house both mental and drug addicts patients. Since its foundation the nityanand institute has treated more than 5000 cases of drug addiction and mental patients.

In addiction it has conduct over 500 awareness programmes in schools, colleges, industries and community at large.

Today nityanand is leading institute in the field of drug abuse prevention and improvement centre for mental patients.

ACTIVITIES

This centre of nityanand offers the following services-

- Crises intervention-nityanand crises invention is 'walk in' centre for persons wanting to talk about their problems, nityanand counsels through correspondence also.
- Day centre for activity based group therapy for certain kinds of mental illness- the day care centre includes activities like candle making, arts and crafts, pottery, group discussions, workouts and exercise, yoga, plays, carpentry etc.
- Referrals- with regards to the special needs of its client nityanand refers its client to various other professional services like legal advices, medical treatment, drug de-addiction centre etc which it does not provide.
- Community outreach programme.
- The community outreach programme deals with spreading awareness about mental illness to the community which is done with the help of interactive workshops, seminars, lectors, televisions, distribution of pamphlets and handout etc.







FACILITIES

- Nityanand consist of one common court meant for meditation and activities such as Candle making and for any indoor games. It do not carter to any outdoor activity.
- During area is in open and is present at the rear of the building which is surely not Advisable owning to heavy rains in the region.

CIRCULATION

- Daily and continuous movement is common sight in de-addiction especially in which encompasses various activities .in nityanand this circulation is Based around the centre courtyard and two staircase which includes the Movement of services.
- External public movement and private patient movement is not segregated.
- Despite the small area of the institute the architect manages to create visual transparency throughout the building which is quite commendable.
- The semi-private ward as well planned creating private spaces for the patients.
- The general wards on each floor connected directly to doctor's room.
- Staircases from the drawback in movement and also there is no segregation between movement of patients and visitors.

BUILT FORM AND ARCHITECTURAL EXPRESSION

- The building has normal cement finish which easily merges with the surroundings.
- Interior spaces in the buildings are quite congested not suiting the ambience of space.
- The place look more like a prison than a rehabilitation centre.
- Interior walls also do have grid finish to reduce the monotony interior spaces.

INFERENCES

- Segregation between movement of the patients and visitors is necessary.
- Visual transparency of the institute despite its small is quite critical for the staff to keep an eye on the activities of the patients and for the betterment of the patient.
- Segregation between the severe patients and the stable patients is necessary and nityanand identifies this feature of rehab centre.
- Open spaces and a lot of interaction area are necessary for such an institute and nityanand also faces the same problem.











LITERATURE STUDY-2

LEDGEHILL DRUG ADDICTION & RECVERY CENTRE,

(CANADA)



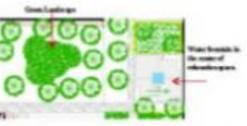
<u>SITE LOCATION</u>- 7608 highway 201#1, Lawrence town, ns boos 1mo, Canada.

Site of an 1800's farm the property covers more than 110 acres of

filed and woods. Formerly a cooperate training centre and a four star inn. Numerous paths and quite areas are found around the property.

SITE PLAN





The layout design illustrate a major path from the main pedestrian access from which the facilities were placed both on the left and right side. The pedestrian path serve as a symmetrical axis linking the facilities.

About 50% of the layout was used

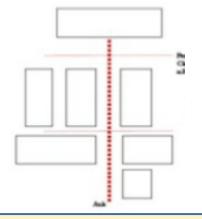
for landscaping and recreational purposes to create healing and relaxing



spaces for the users Of the facility. The use of fountains also helps in performing the function as the green landscape.

Position of caleteria for

ACC US 5



An asymmetrical balance as the ordering Design principle for the layout design.

ADAPTATIONS & CONCLUSION

- Water features to cool the environment.
- Vegetation to remove dust pollutants
- Therapeutic treatments
- Gardens (reduce stress)

PATIENTS

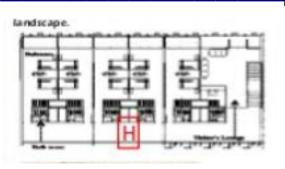
- Reconnect with their bodies
- Care for their spirit
- Reignite their sense of fun and adventure.

AMENITIES & HOLISTIC SERVICES

- Single , double & private rooms
- Yoga, acupuncture, massage & guided meditation
- Physical therapy
- Nutritional counselling

CONCLUSION

• The rational behind the addiction centre is to engage patients more inti physical activities to enhance successful recovery



Residential treatment centre whose mission is to provide hope, strength and inspiration for Individuals and families suffering from addiction.

- NATURAL ELEMENTS
 - TREES
 - PLANTS
 - FLOWERS
 - ROCKS
 - WATER BODIES
 - COLORS











Hall

COMPARISION ANALYSIS

QUALITATIVE ANALYSIS	CASE 1- NDDTC, GAZIABAD	CASE 2- PGI, CHANDIGARH	LIT. 1- NITYANAND REHABITATIONAL CENTRE ,PUNE	LIT. 2- LEDGEHILL DRUG E ADDICTION & RECOVERY CENTRI
ARCHITECTURL EXPRESSION	VARIOUS BUILDING HAVE THEIR OWN IDENTITY.	CEMENT FINISHES WHICH MERGE WITH THE OTHER BUILDING IN	CEMENT FINISHES WHICH MERGE WITH THE OTHER BUILDING	CANADA WOODEN FINISH WHICH MERGE WITH PITCH ROOF AND SURROUNDED
		CAMPUS.	SURROUNDING.	BY TREES.
TYPE OF PLANING	CAMPUS TYPE PLANING	COMPACT PLANING	COURTYARD PLANING	MULTIPLE COURTYARD PLANING
ACTIVITIES	INORGANIC PLANING	GROUNG AND 1ST FLOOR WITH RESIDENTIAL ROOM	ON THE PLINTH.	ON THE PLINTH.
SECHRITY	MAINTAINFD	MAINTAINED	MAINTAINED	MAINTAINED
STORAGE	ADEQUATE	INSUFFICIENT	INSUFFICIENT	ADEQUATE
MATERIALS AND	REGULAR BRICK WORK.	REGULAR BRICK CONST. WITH PAINT.	REGULAR BRICK CONST. WITH PAINT.	
FINISHES.				TILES
QUANTITY OF LIGHT	OPEN FROM ALL THE SIDES SO LIGHT INSUFFICIENT NATURAL LIGHT.	INSUFFICIENT NATURAL LIGHT.	COURTYARD IS POTERNIAL SOURCE	OPEN FROM ALL THE SIDES SO LIGHT
IN MAJOR AREAS	IS ENOUGH IN ALL THE PLACES.		OF LIGHT. BUT AS THE COURTYARD	IS ENOUGH IN ALL THE PLACES.
			IS SMALL SO LIGHT IS NOT PROPER.	
RECREATIONAL	NUMEROUS	NIL	POTENTIAL ACTIVITIES.	NUMEROUS
FACILITIES				
LOCATION OF SITE	OUT SKIRT OF THE CITY	ON THE CAMPUS OF PGI, CHANDIGARH IN RESIDENTAIL AREA	H IN RESIDENTAIL AREA.	OUT SKIRT OF THE CITY
INTERACTION SPACES.	. GREEN AREA OUTSIDE THE WARD	GREEN AREA OUTSIDE THE WARD	CENTRAL COURTYARD . NO PROPER	GREEN AREA OUTSIDE THE WARD
TRANSPORTATION	OWN RIISES OF AITMS	HAVE TO DEDEND ON DITRUC	DWN WANS AND CARS	OWN VANS AND CARS
FACILITIES		TRANSPORT	CAN'N VANNA CAN'NA VIANA	4 NURSES. 4 DOCTORS FOR WARDS
NO. OF CAREGIVERS/	4 NURSES, 4 DOCTORS FOR WARDS	4 NURSES. 4 DOCTERS FOR WARDS	4NURSES. 4 DOCTORS FOR WARD	OF 25 PEOPLE.
MANAGERS/SUPERVISORS. OF 25 PEOPLE.	ORS. OF 25 PEOPLE.	OF 20 PEOPLE.	OF 25 PEOPLE.	
CIRCULATION	HORIZONTAL + VERTICAL	HORIZONTAL + VERTICAL	HORIZONTAL	HORIZONTAL + VERTICAL
SCOPE OF EXTENSION	IMMENSE	IMMENSE	NO SCOPE	IMMENSE
FIRE FIGHTING	ON EVERY FLOOR	ON EVERY FLOOR	ON EVERY FLOOR	ON EVERY FLOOR
ENTRY TO THE MAIN	MANY ENTRANCES	ONE MAIN ENTRANCE	ONE ENTRANCE FOR EACH BLOCK	MANY ENTRANCES
BUILDING				PARTITION IS CREATED IN BETWEEN
PRIVACY OF INMATES	NO PRIVACY IS GIVEN NOR REQUIRED	NOT AMONG WARDS	NOT IN WARDS	THE WARDS FOR SEMI INTERACTION
FEELING OF HOME/ INSTITUTION	INSTITUTIONAL FACILITIES	HOSPITAL LIKE FEELING	AN INSTITUTION	HOME LIKE FEELING
PLANING OF WARDS	2 WARDS, BOTH ARE CUBICAL WHICH	WARD SHAPE MOSTLY ARRANGED	LINEAR ARRANGEMENT OF THE BEDS	S SINGLE & DOUBLE BEDED WARDS
	ARE DIVIDED BUT VISUAL INTERACTION RECTANGULAR ON GROUND AND		ON THE PERIPHERY OF THE BUILDING. WITH ALL LUXURIES FACILITIES	G. WITH ALL LUXURIES FACILITIES
	CAN STILL DONE ON ALL THE FLOORS	GROUND FLOOR ONLY.		

RESEARCH STUDY

& <u>LIBRARY STUDY (STANDARDS)</u>



HOLISTIC TREATMENT

Under the supervision of a doctor.

ETOXIFICATION











90 DAYS REHAB PROGRAM
Moderate to serve addiction condition
60 DAYS REHAB PROGRAM
Mild to moderate addiction condition
30 DAYS REHAB PROGRAM
Mild addiction condition

IMPATIENT SERVICE

The impatient service is normally impatient facilities. During this time, patients live at the facility and intract with their peers and doctors. This allows for medical care to be available at all times, which is perfect for those who may have psychological dependencies that need assistance.

OUTPATIENT SERVICE

Outpatient service offers treatment t patients without staying overnight. Provides flexible times that allow individuals to participate in both their daily affairs and treatment. It is common to continue outpatient treatment after a 90-day drug rehab program has been completed.

THERAPEUTIC GARDENS Patients reconnecting with nature.

GARDENS

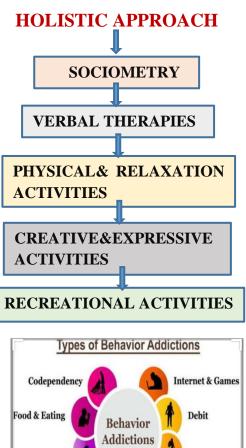
Nature plays a very important role in reducing stress. Gardens will be incorporated in the design to help rehab consumers work out stress will create environment for outdoor work and interaction.

THERAPEUTIC GARDEN:

A therapeutic garden includes aspect that promotes restoration and more than any other gardens. The purpose of a therapeutic garden is the intend to support the patients cure and recovery in the medical environment. It can imply treatment of a remedy with the expectation of a positive measurable outcome.

Function of therapeutic garden

Aid in clinical treatment injury and illness (e.g. post-traumatic stress disorder, physical disabilities)



Gambling



Shopping

Provide a positive distraction from illness and concerns

Reduce stress and blood pressure

Normalize the environment, the setting, offer more "real life" application for treatment

Improve mood, function and socialization

DESIGN PRINCIPLES FOR A SUCCESSFUL GARDEN

- Variety of spaces: both group and solitary occupancy
- A prevalence of green material
- Encourages exercise
- Provides positive distraction
- Minimizes intrusions
- Minimizes ambiguity

SUSTAINABLE CONSIDERATIONS

RAINWATER HARVESTING

Rainwater which falls on roof will be collected and ensure adequate supply of water through the year.

PREDOMINANT USE OF NATURAL VENTILATION & LIGHTING

INCORPORATING MULTIPLE COURTYARD SYSTEMS

- Provides safe and secured environment with minimum supervision
- Enhances different and multiple activities
- Improves ventilation

SECURITY

Closed circuit television- to monitor both staff and patients activities. Hidden cameras will also be used in the facility.

FIRE SAFETY

WAY FINDING AND SIGNAGES

APPROIATE

HEALTH FACILITY

Way finding and signages that allows patient and visitors to navigate to and throughout any mental health unit.

TAMPER PROOF ELECTRICAL APPLIANCES

MATERIAL

USED

IN







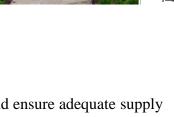


















NURSE STATION

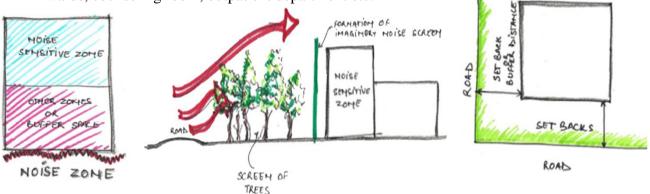
Bedroom corridors and primary patient activity area should be directly visible from the nursing station.



STANDARDS

PLANNING

- Drug rehabilitation center's sites should be placed far away from outside sources of noise.
- Provide adequate setback or buffer distances between noise sources and the sensitive receiving environment
- The building should be so arranged on the site that sensitive areas like wards, consulting and treatment rooms, counseling and staff bedrooms are placed away from outdoor sources of noise.
- Provide mechanical ventilation to rooms most sensitive to noise such as those for sleeping, relaxation or study.
- The internal planning should be done such that the common service areas, visitors' areas, kitchen and other noisy areas will be placed away from the quiet areas like wards, counseling room, outpatient department etc.



WALKWAYS AND PATHS

• Smooth, hard level surface suitable for walking and wheeling.

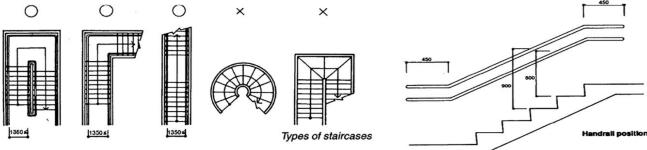
- Minimum walkway width: 1200 mm, for two way moderate traffic:1650-1800 mm.
- Longitudinal walk gradient: 30-50 mm in 1 m.
- For walks exceeding 60 m in length, rest area with space for bench seats are provided, 320-425 mm high.
- For blind people- texture change in walkways adjacent to benches.

CORIDOOR

- Wide corridors are used for high traffic areas, service equipment etc.
- Overhanging obstacles and signs should be mounted at a height of 2.0 m.
- Changes in surface level of more than 13mm should be ramped.
- Floor surface should be even and carpets should be fastened.
- Thresholds and gratings should not be more than 12 mm
- The unobstructed width of a public corridor should not be less than 1.50 m. There commended width is 1.80 m.
- The unobstructed width of a low traffic corridor should not be less than .90 m.

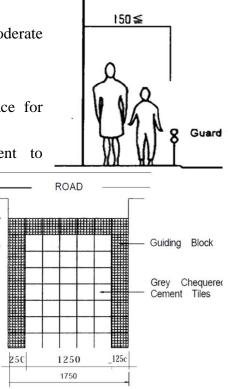
STEPS AND STAIRS

- Uniform riser 150 mm and tread 300 mm.
- Stairs edges should have bright contrasting colors minimum 50 mm.
- Maximum height of a flight between landings to be 1200 mm.
- Landing should be 1200 mm deep without any door swing.
- The steps should have an unobstructed width of at least 1200 mm.
- Have continuous handrails on both the sides including wall at 850-900 mm.
- Warning strip should be placed at 300 mm at the beginning and beyond stairs.



PARKING

• Should be within 30 m of main building entrance.



300

- Two accessible parking lots with overall minimum dimension 3600 X 4800 mm should be provided.
- It should have international signage painted on the ground and also on sign board.
- There needs to be directional signs guiding people to the accessible parking.
- Wheel stoppers to be provided to avoid vehicles to occupy space on the pedestrian pathway

standard car







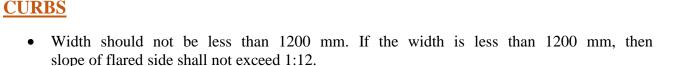
Parking parallel to the road



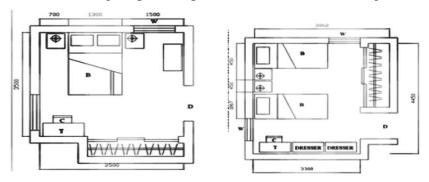
45 degrees oblique parking:one way traffic only

30 degrees oblique spaces, easy entry & exit but for use only with one way traffic

90 degrees parking: 5.5m wide road parking space 2.5 m wide



- Useful for smooth transition, specifically at pedestrians crossing and in the vicinity of building entrances.
- Pavements should be dropped, to be flush with roadway, at a gradient no greater than 1:10 on both
- Sides of necessary and convenient crossing points.
- Warning strips to be provided on the curb side edge of the slope.



AREA ANALYSIS

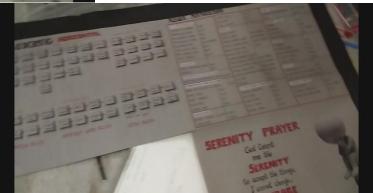
FUNCTION	NO.		AREA	TOTAL
			(SQ.MTS.)	(SQ.MTS.)
OUT PATIENT AREA				
Doctor's chamber		1	16	16
Counselling room		1	16	16
Psychiatrist's room		1	16	16
Psychologist's room		1	16	16
Treatment room		2	17	34
Main waiting room		1	55	55
Sub waiting room		1	35	35
Toilet complex		1	26	26
PHARMACY				
Drug dispensing		1	29	29
room Storage		1	18	18
RECORDS AND				
REGISTRATION				
Outpatient registration				
Admission		1	12	12
ADMINISTRATIVE				
AREA AND STORES				
Room for officer in change				
Office area		1	134	134
Toilet complex		1	26	26
Reception		1	6	6
Waiting area		1	25	25
LABORATORY				
Report/ sample collection				
		1	35	35
Laboratory		1	155	155
Waiting area		1	25	25
Reception		1	6	6
Toilet complex		1	26	26
WARDS				
Patient room:				
Critical ward		4	58	232
Double sharing ward (with			• 0	• • • •
balcony)	10		29	290
Triple sharing ward		20	28	560

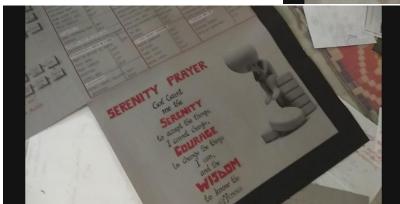
Nursing station with resting			
area and toilet	6	22	132
Common washroom complex	u		
Triple sharing ward	4	43	172
Critical and double sharing			
ward	4	22	88
Patients living area	4	38	152
Interview/ treatment room	3	28	84
Day care	1	194	194
Storage	2	23	46
ACTIVITY BASED			
TREATMENT			
Theatre workshop	1	100	100
Art room and paper	1	210	210
recycling room			
Dance room	1	90	90
Music room	1	90	90
Indoor games	1	360	360
OTHER TREATMENT			
Sauna (with lockers and			
changing room)	4	25	100
Gym	1	185	185
RESOURCE CENTRE			
Library	1	260	260
Auditorium	1	200	200
Lecture room	2	44	44
Higher education classroom	1	90	90
	±		
SERVICES			
Laundry	1	60	60
Kitchen storage	1	45	45
Kitchen washing area	1	34	34
Kitchen and dining	1	350	350
Toilet complex	1	20	90
SECURITY			
Guard room for OPD area	1	10	10
Guard room for art gallery area	1	10	10
Guard room for service area	1	10	10
	T	10	10

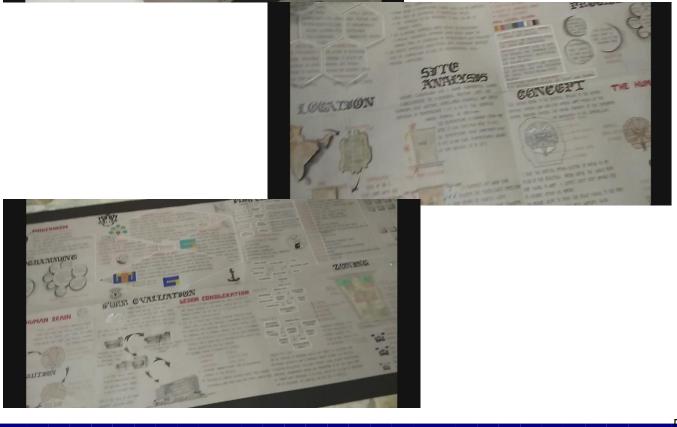
CONCEPT DESIGNING



_





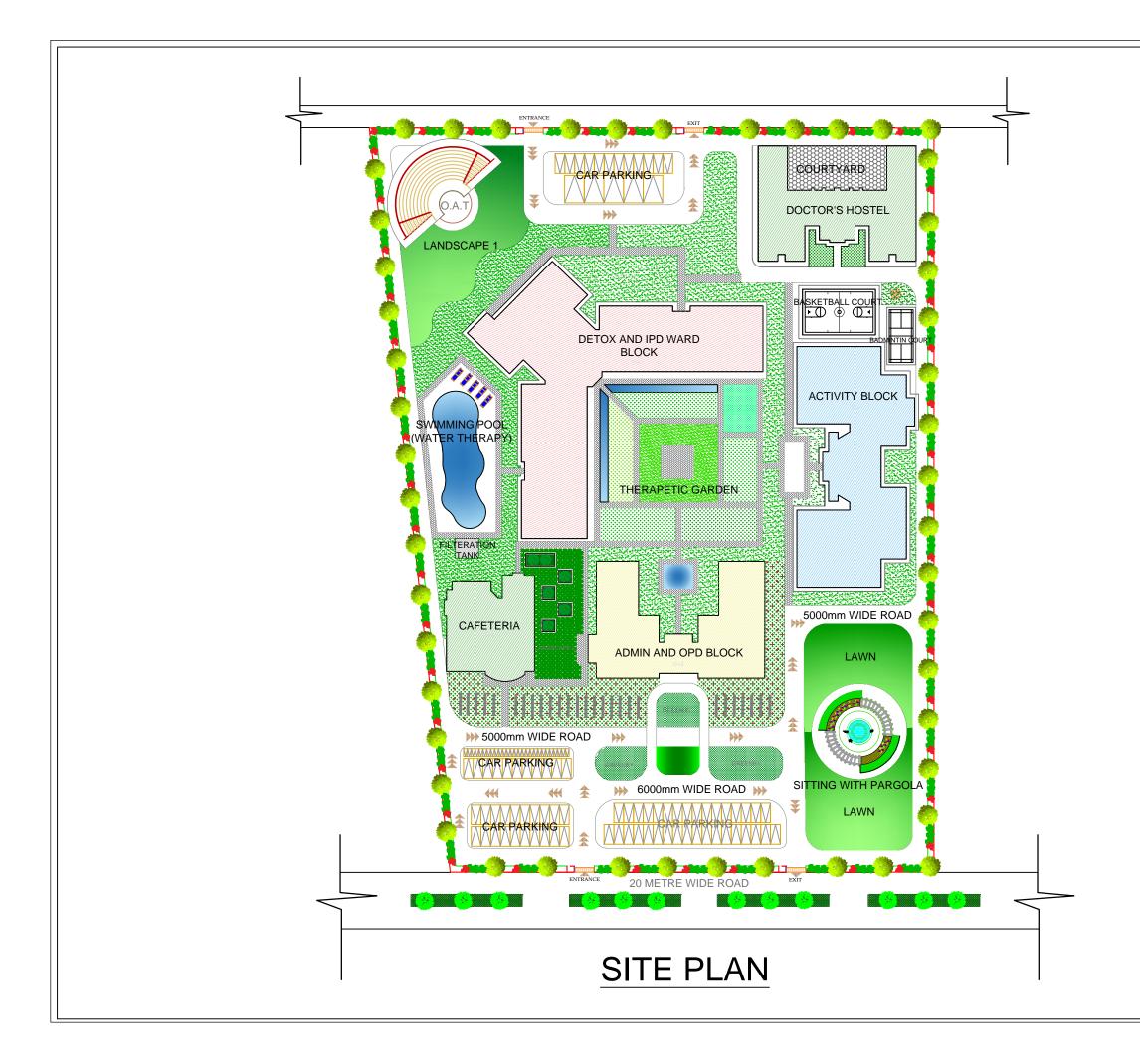


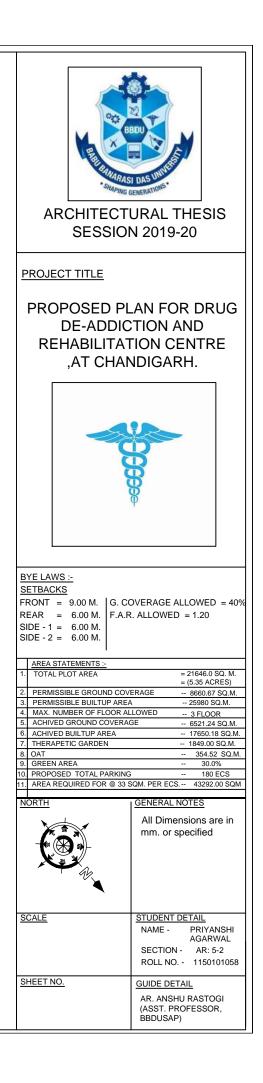
BIBLIOGRAPHY

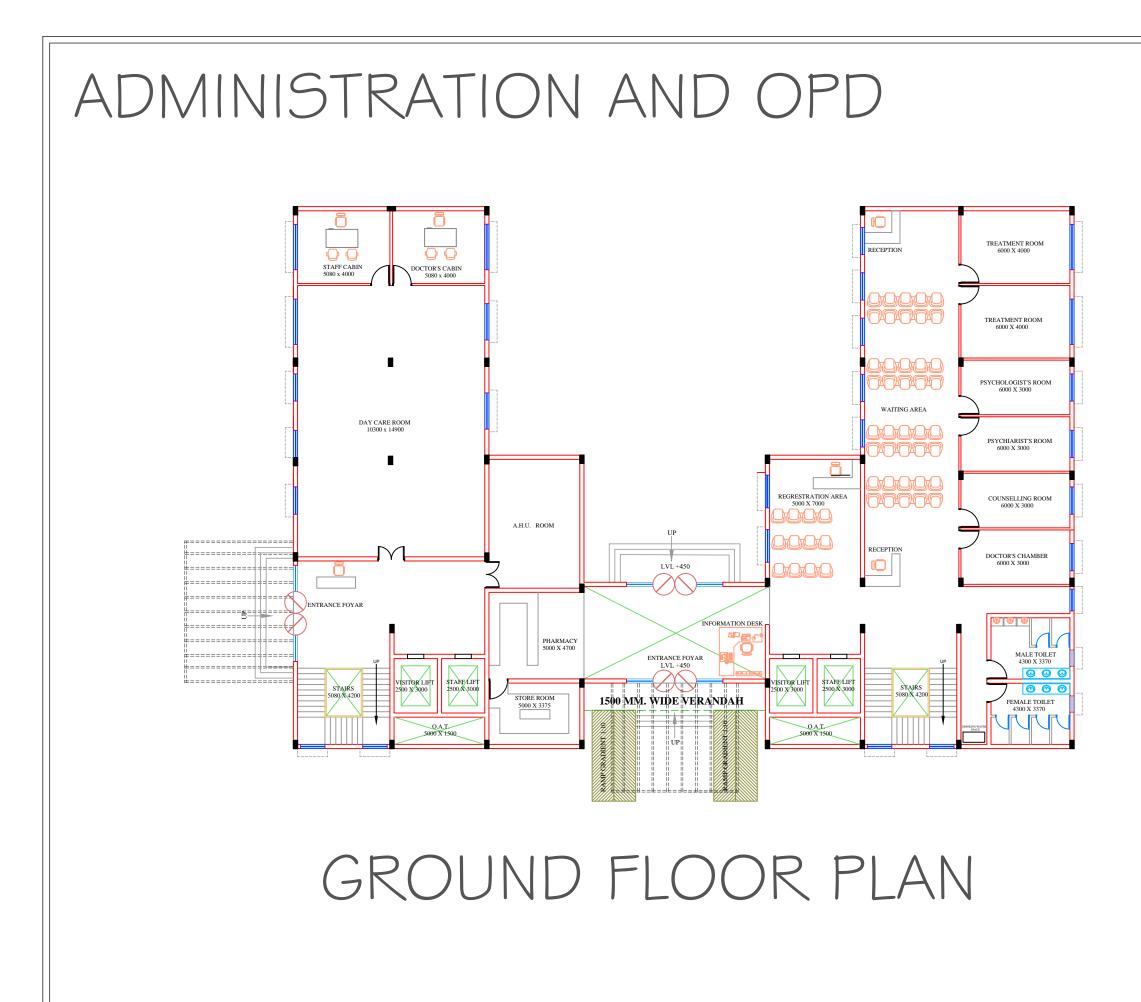
THE REFERENCE FOR THE THESIS HAS BEEN TAKEN FROM-

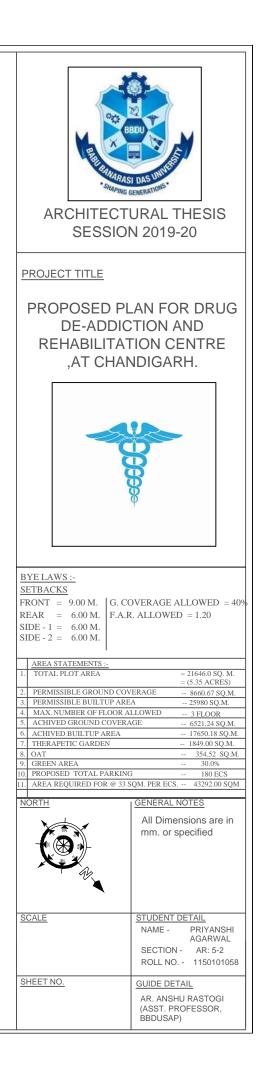
NEUFERTS
 ARCH DAILY.COM
 NATIONAL BUILDING CODE
 GOOGLE.COM
 SUE.COM
 HEALTH DEPARTMENT



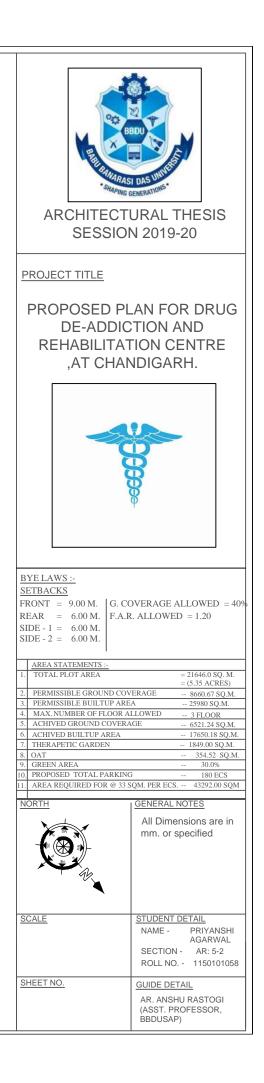




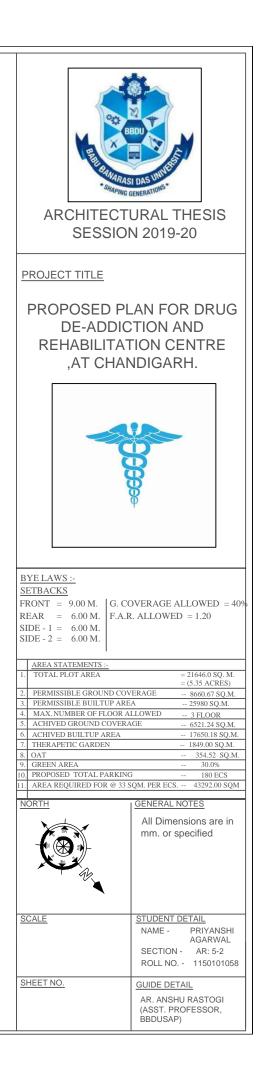




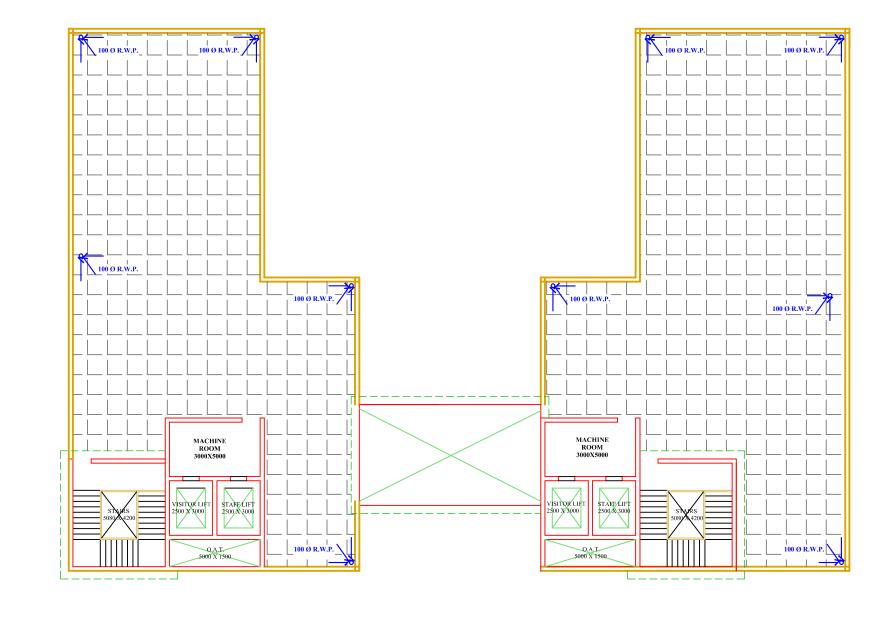
ADMINISTRATION AND OPD LIBRARY FOR DOCTORS 10300 X 8000 URINE AND BLOOD TEST LABORATRY 11300 X 13400 CLASSROOM 3 8200 X 4250 RIDOR -COR CLASSROOM 2 WIDE õ WAITING AREA 8200 X 4250 10300 X 7100 2000MM SAMPLE COLLECTION A.H.U. ROOM AND REPORT ROOM 6000 X 7100 CLASSROOM 1 8200 X 4250 MALE TOILET 4300 X 3370 \odot \odot \odot STAFF LIFT 2500 X 3000 STAFF LIF 2500/X 300 000 MEDICAL RECORD FEMALE TOILET 4300 X 3370 ROOM 5000 X 4730 FIRST FLOOR PLAN



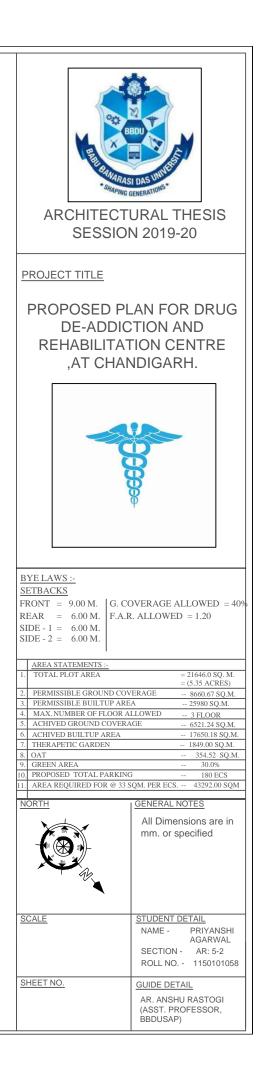
ADMINISTRATION AND OPD JUNIOR DOCTOR OFFICE 4630 X 4000 PROJECTOR ROOM 4630 X 8000 Ξ CCTV CONTROL ROOM 4630 X 4000 DOCTOR'S LOUNGE MAINTAINCE SECTION SENIOR DOCTOR'S OFFICE 4630 X 3000 4630 X 3000 SENIOR DOCTOR'S OFFICE 4630 X 3000 ESTABLISHMENT OFFICE 4630 X 3000 ASSISTANCE DIRECTOR ROOM 4630 X 3000 A.H.U. ROOM BOARD ROOM 9800 X 6100 M DIRECTOR'S ROOM 4630X 3000 Ξ MALE TOILET 4300 X 3370 $\Theta \Theta \Theta$ STAFF/LIFT 2500/X 3000 STAFF LIFT 2500 X 3000 OR LI 000) **x 30**00 STORE ROOM FEMALE TOILET 4300 X 3370 5000 X 4730 SECOND FLOOR PLAN

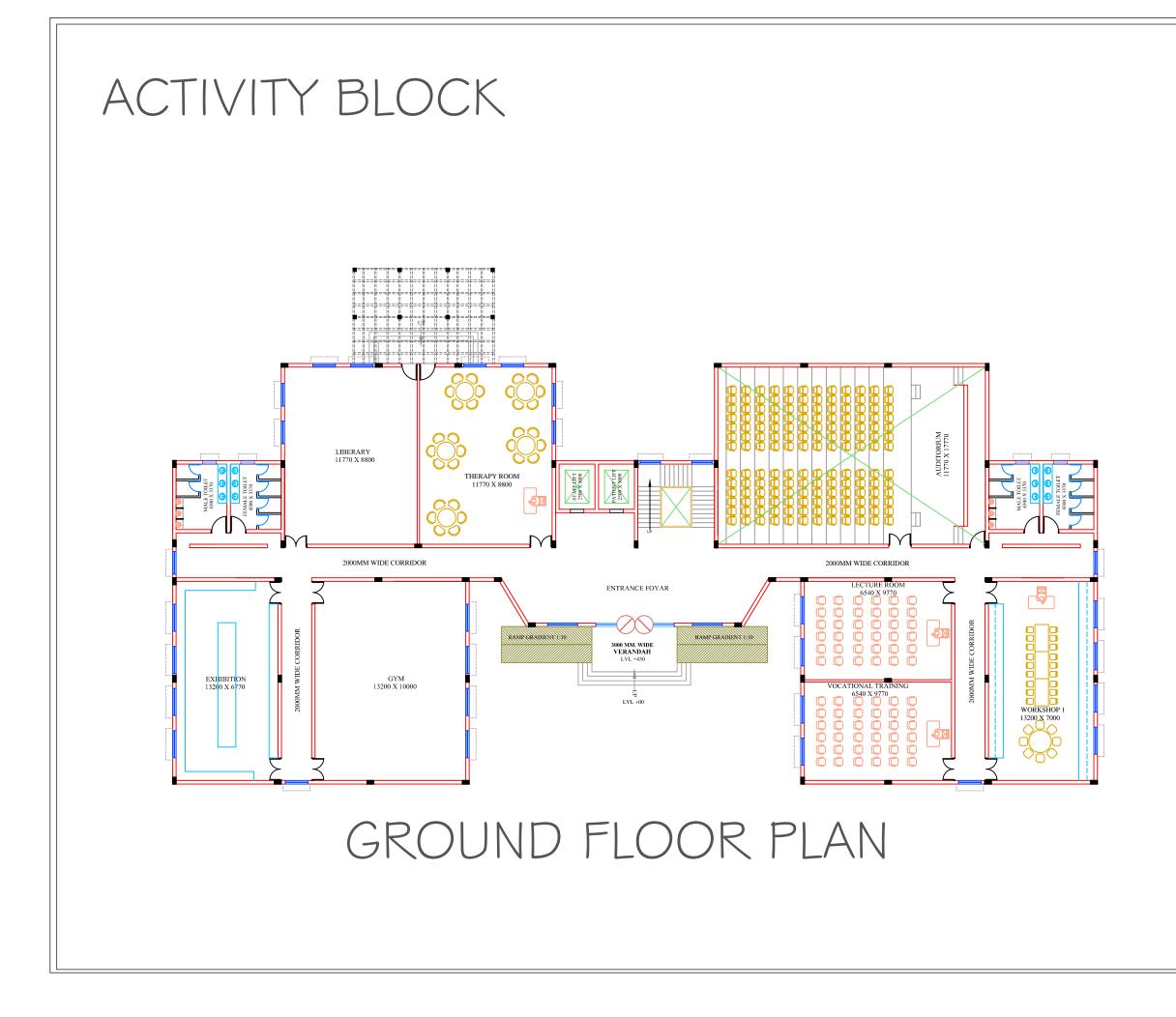


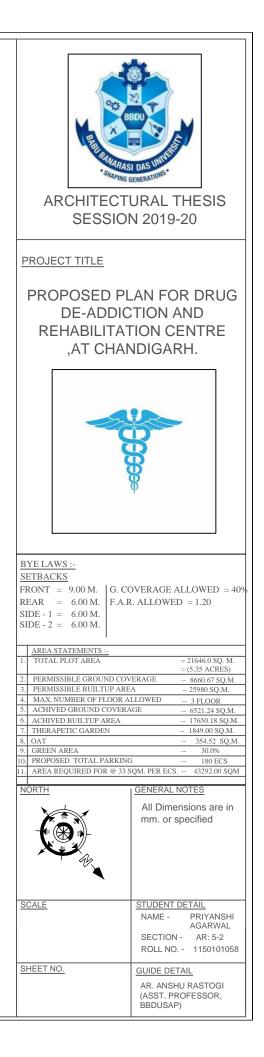
ADMINISTRATION AND OPD

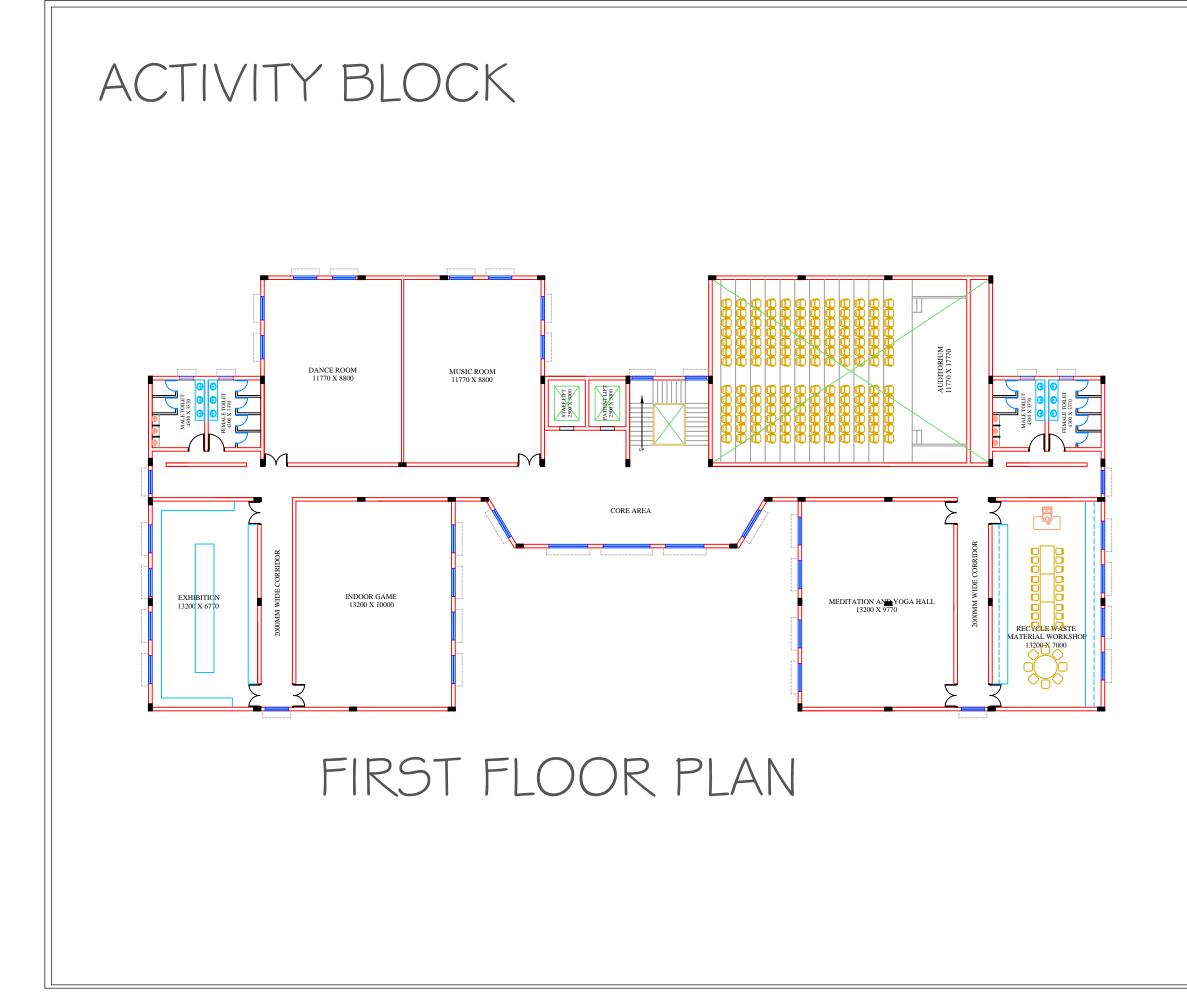


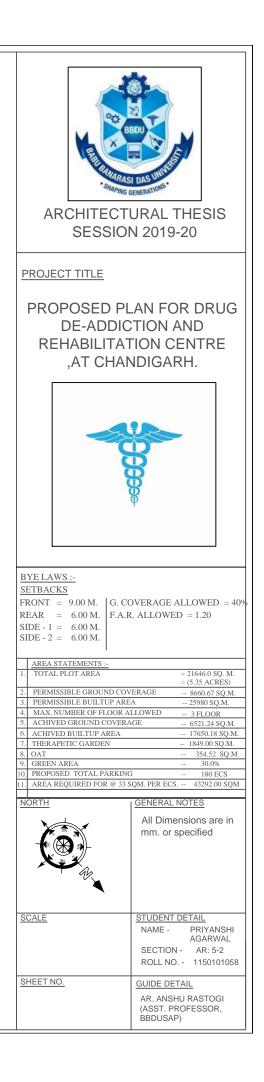
TERRACE FLOOR PLAN

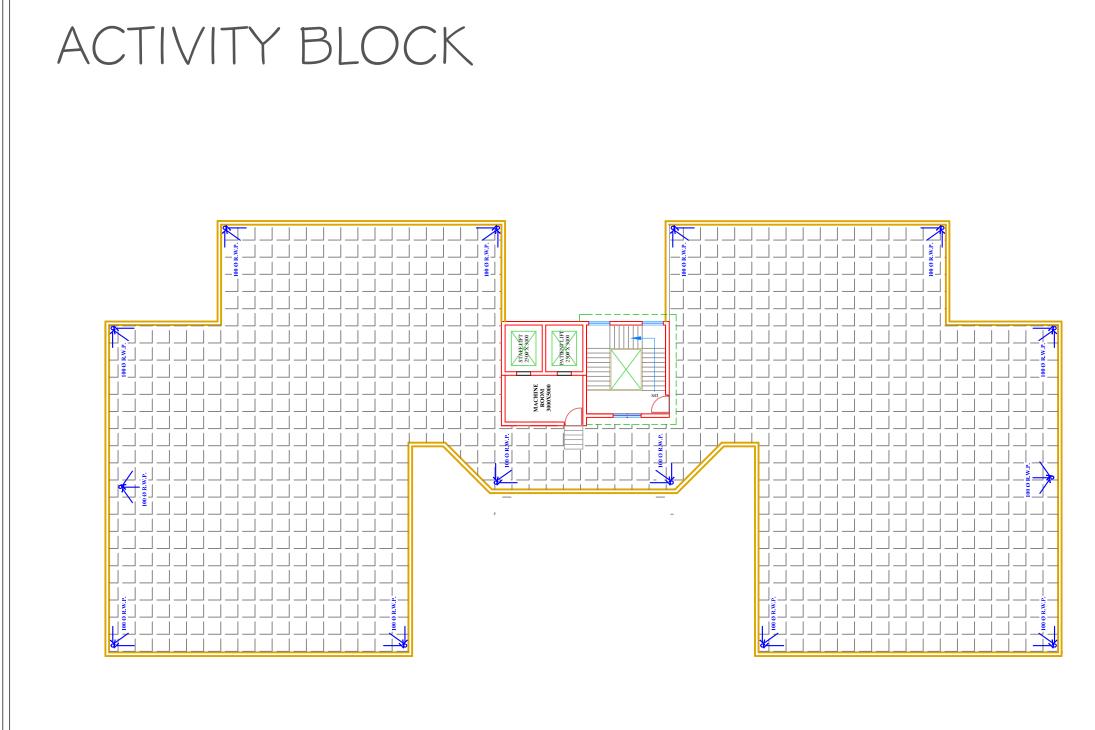




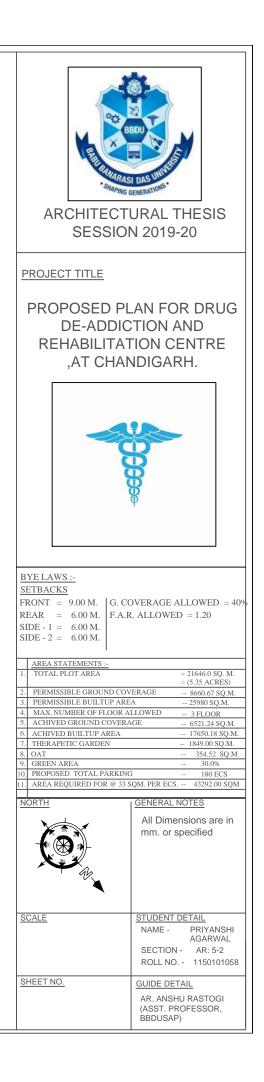






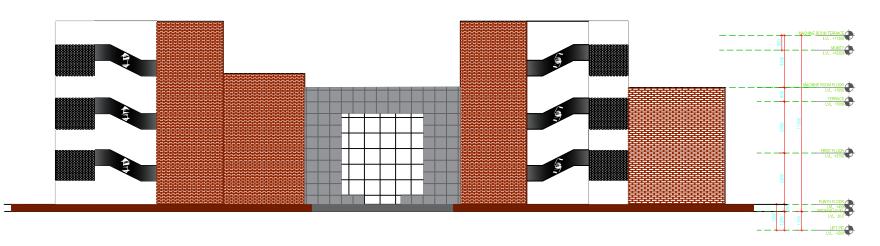


TERRACE FLOOR PLAN

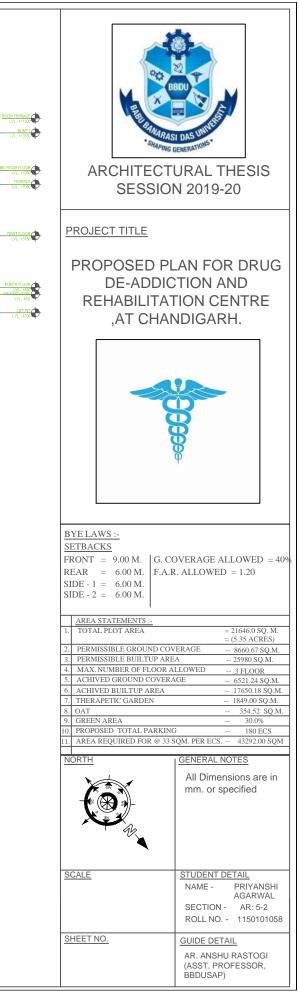


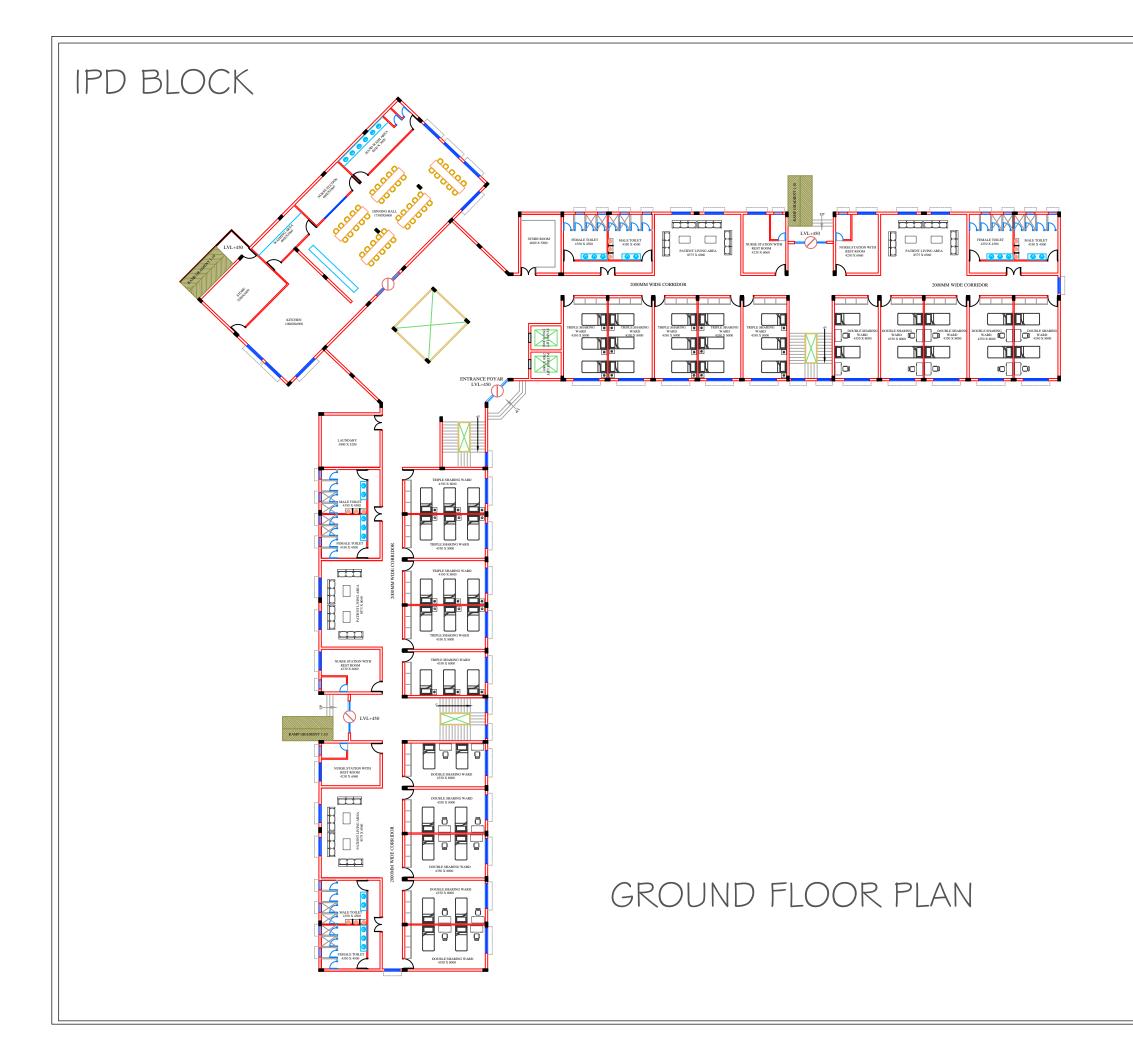


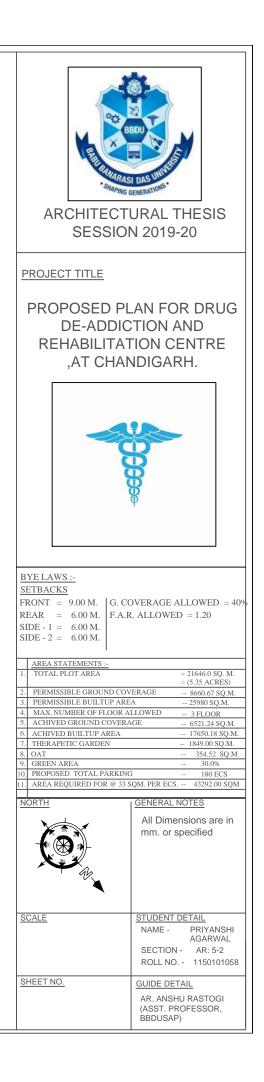
ELEVATION OF ACTIVITY BLOCK

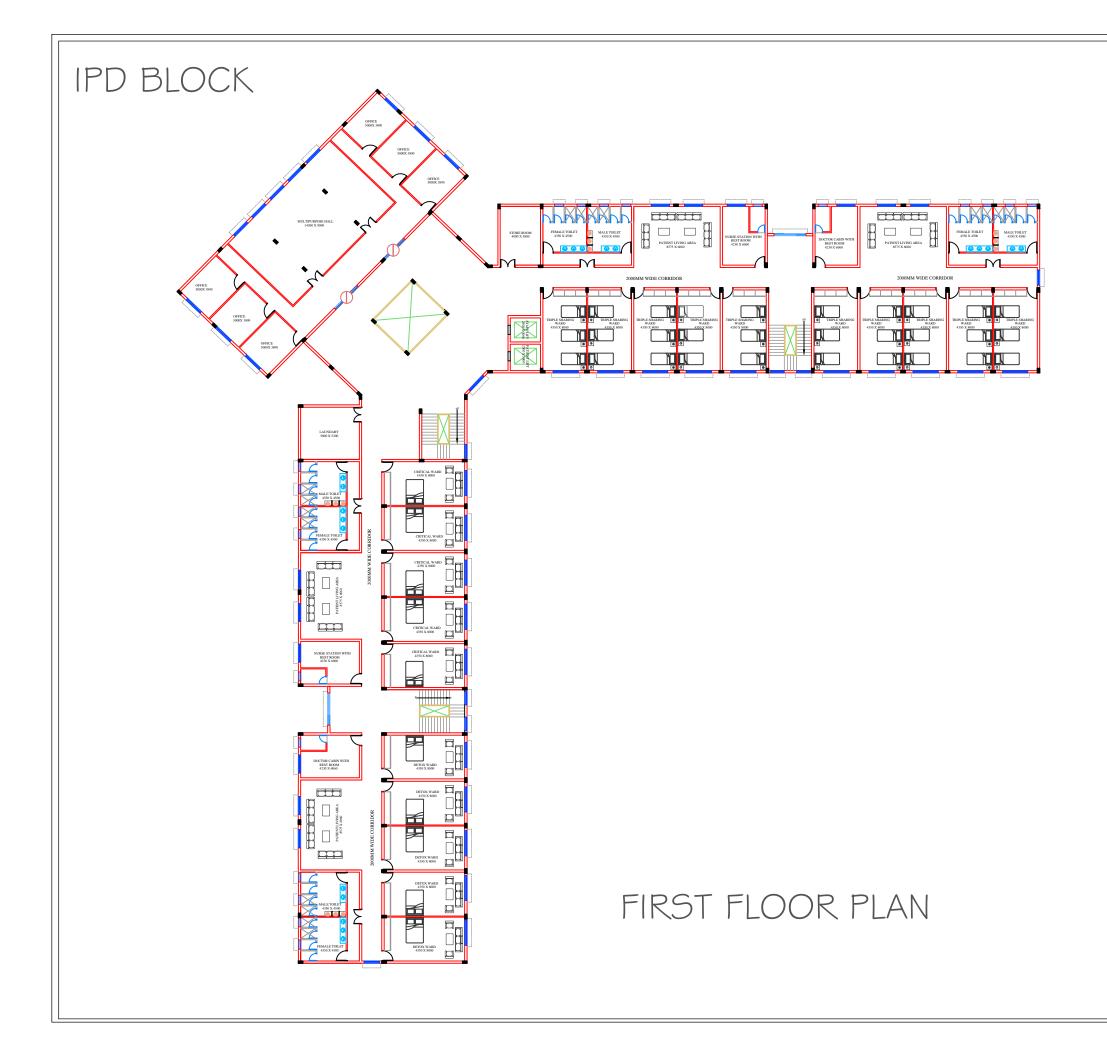


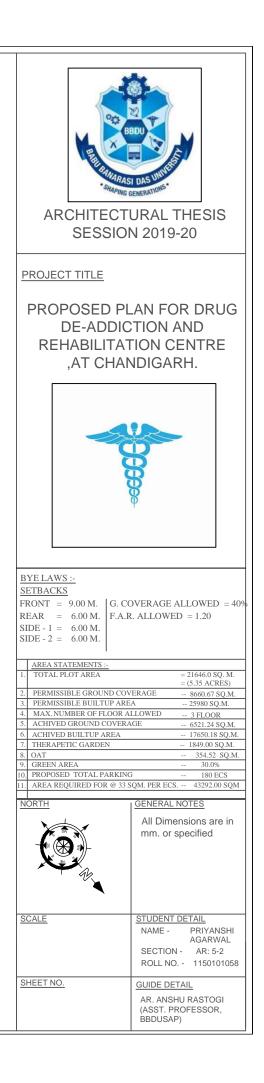
ELEVATION OF ADMIN BLOCK

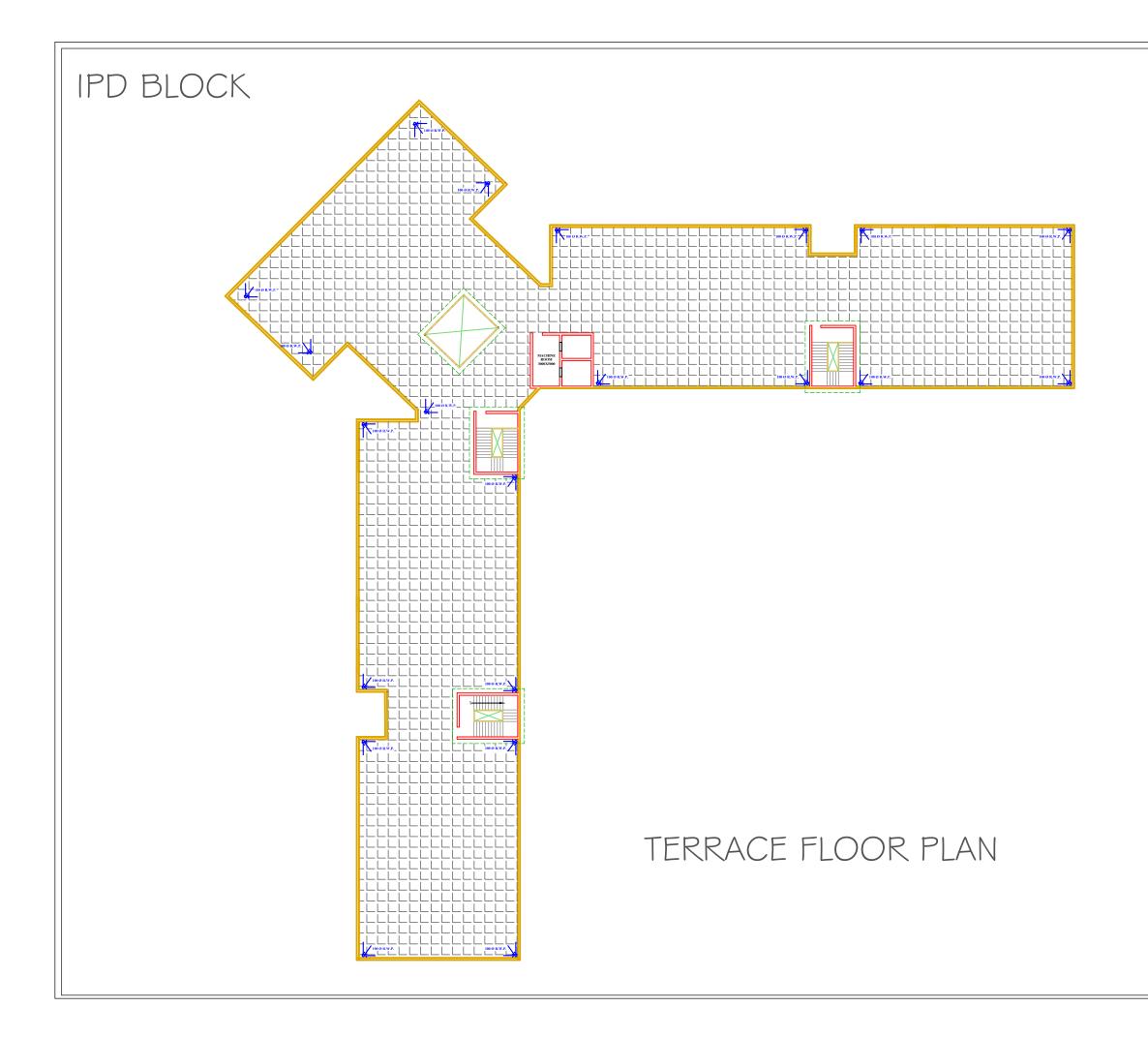


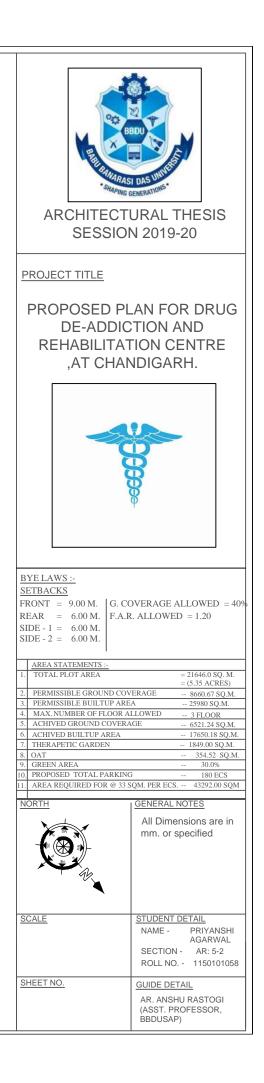




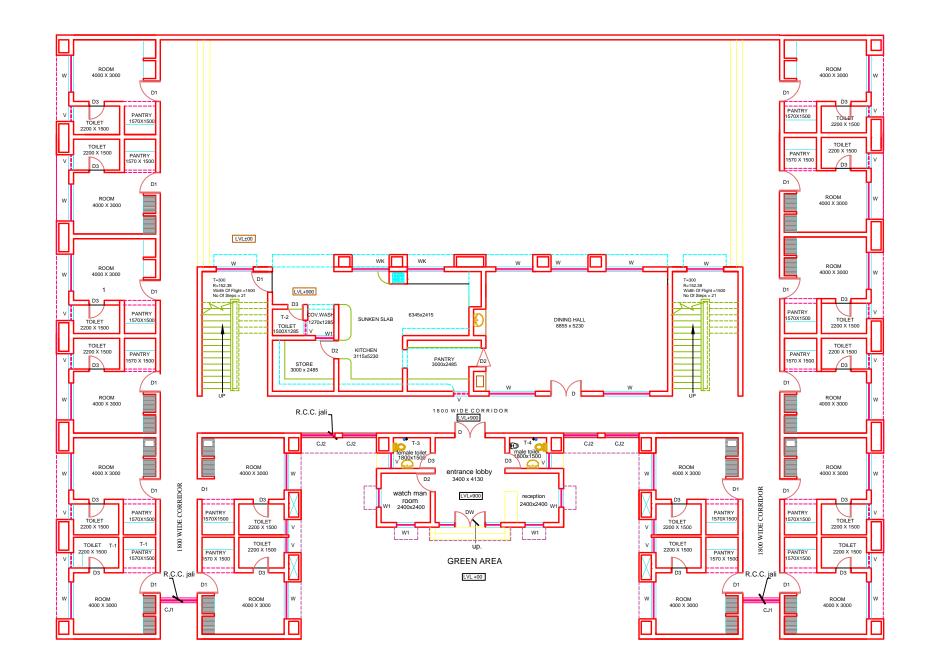




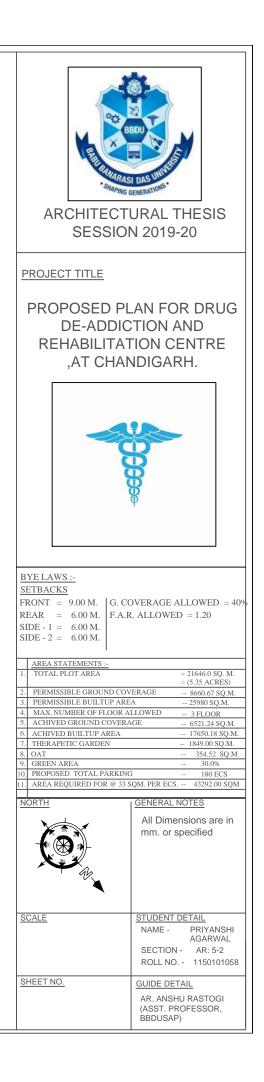


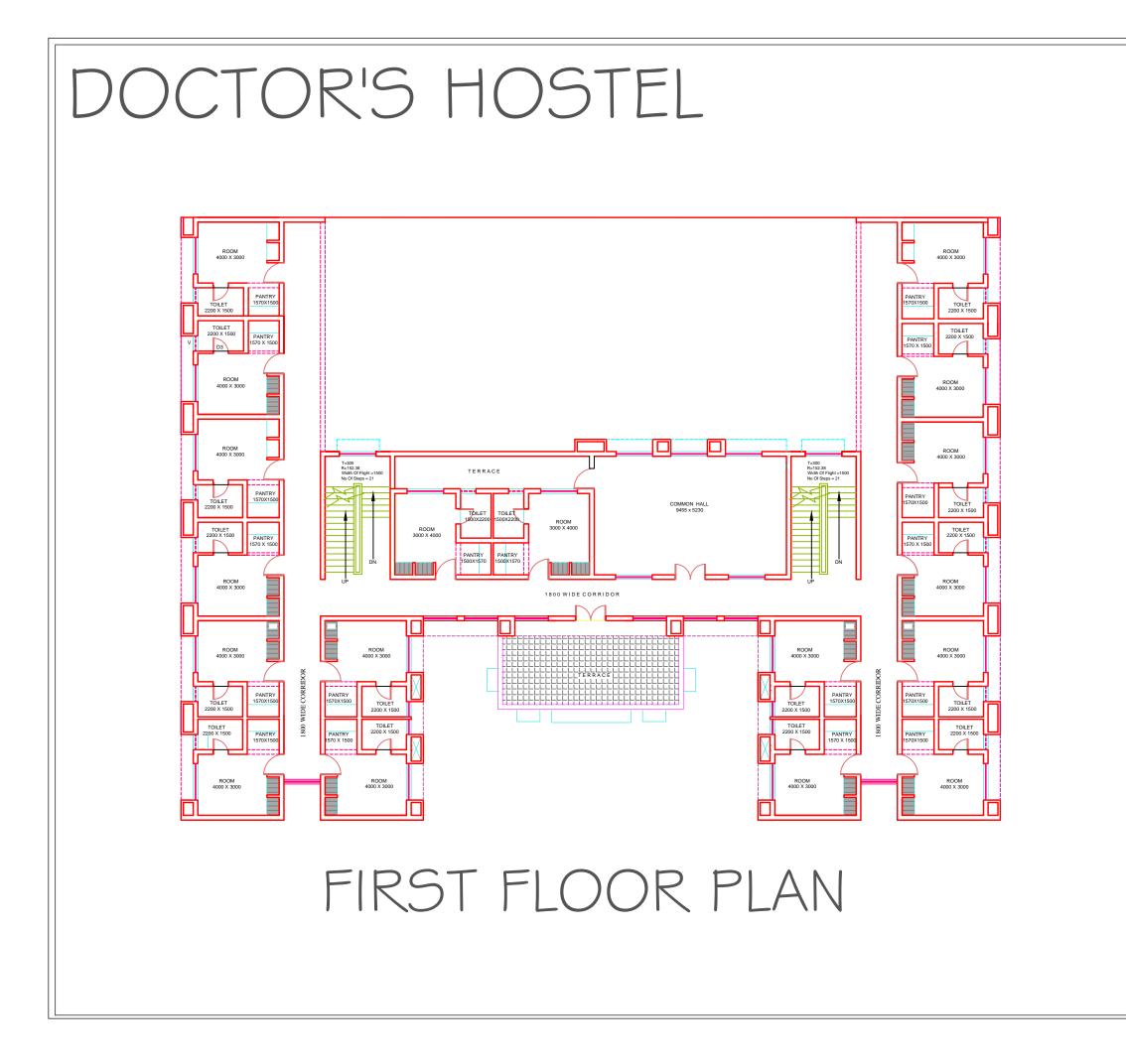


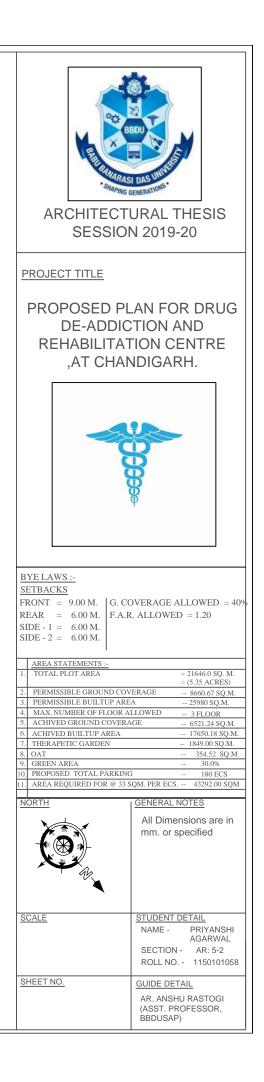
DOCTOR'S HOSTEL

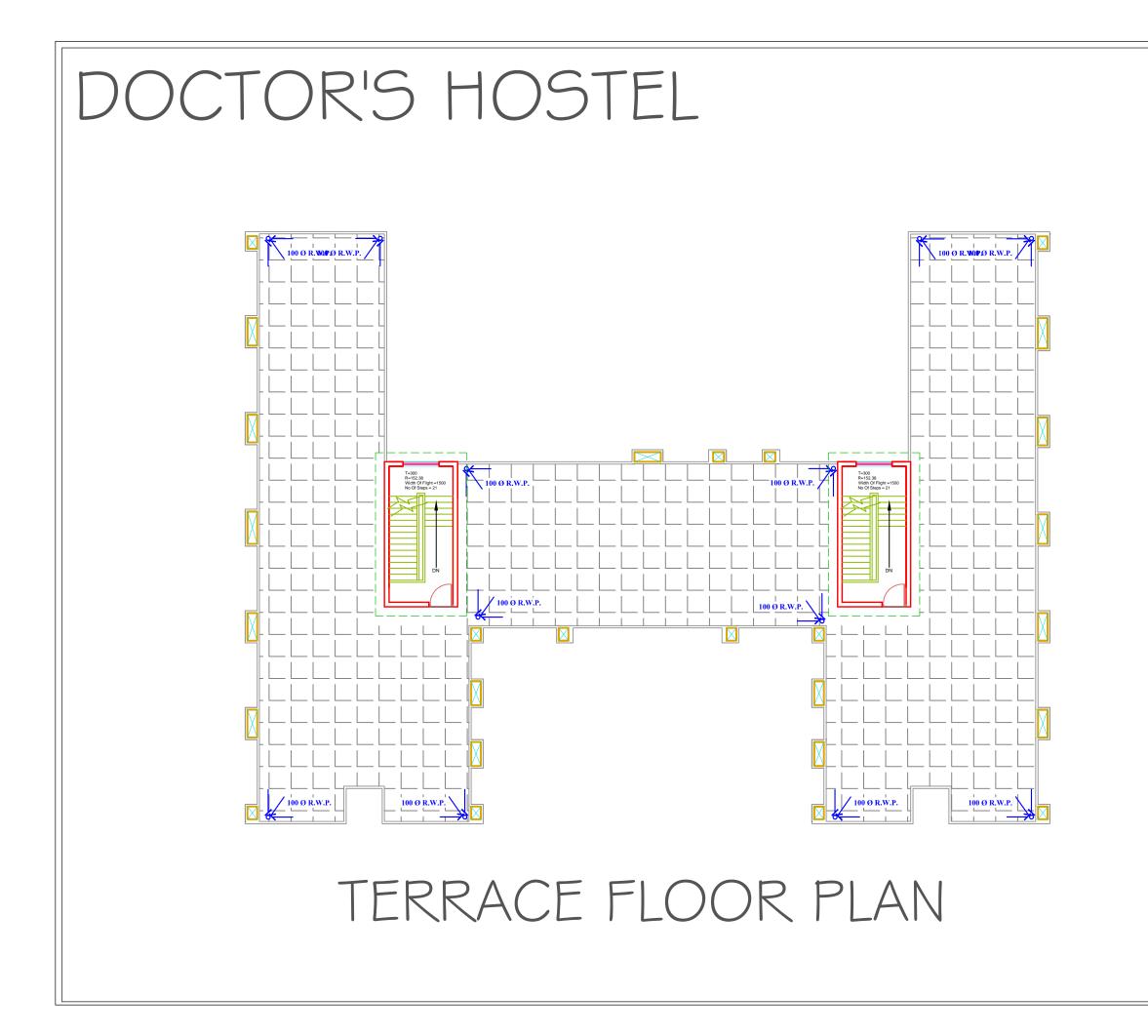


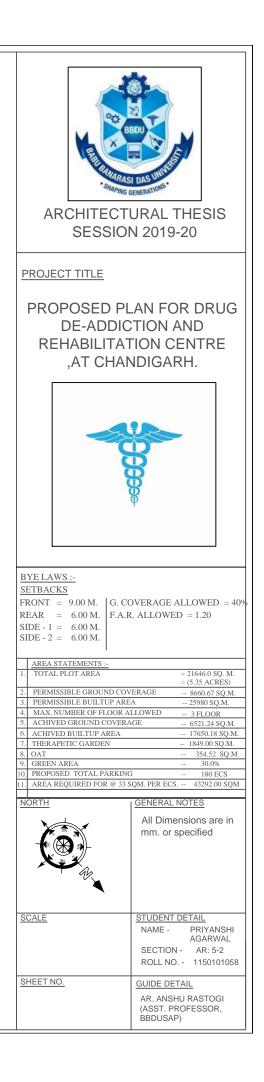
GROUND FLOOR PLAN

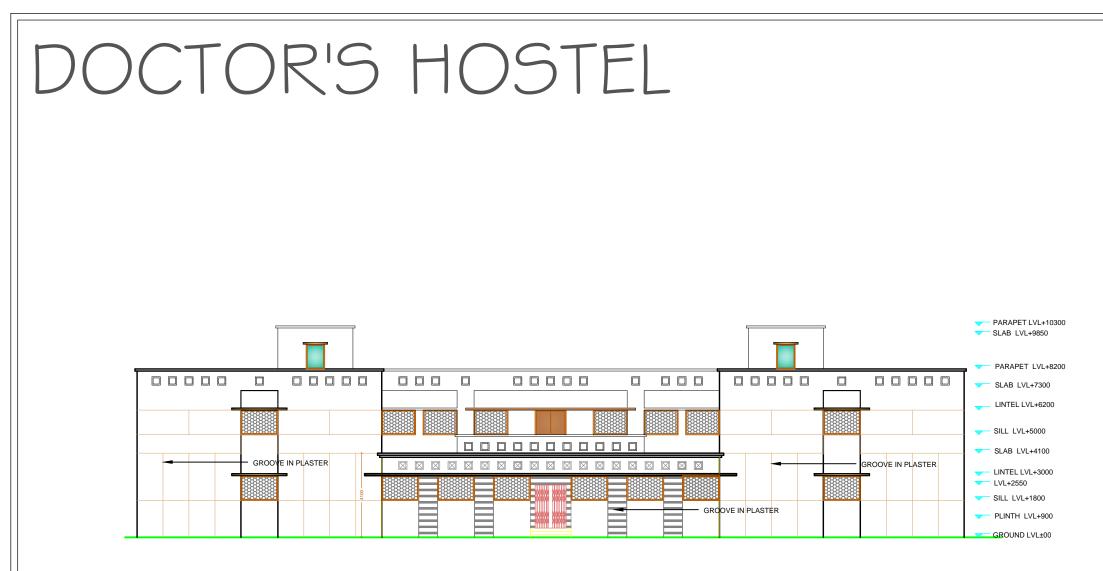




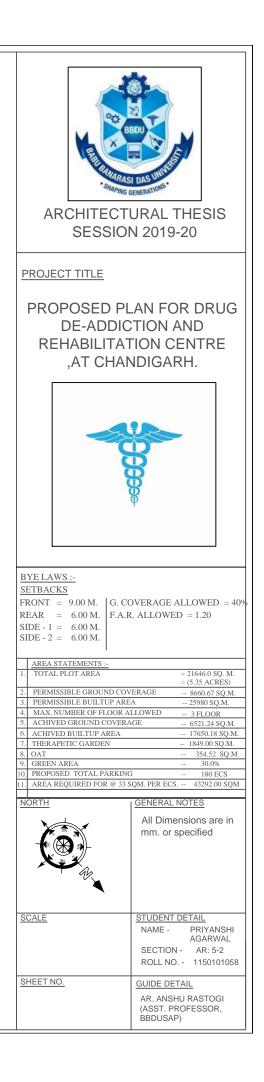




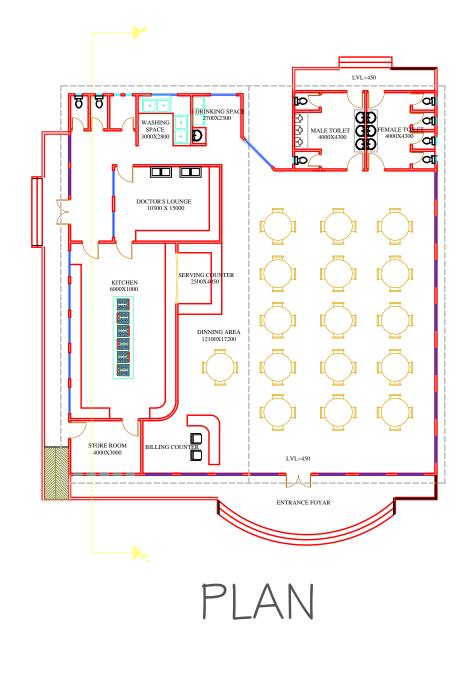


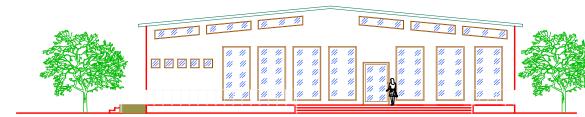


FRONT ELEVATION

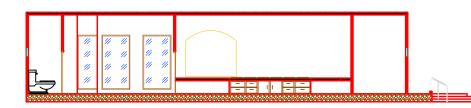


CAFETARIA

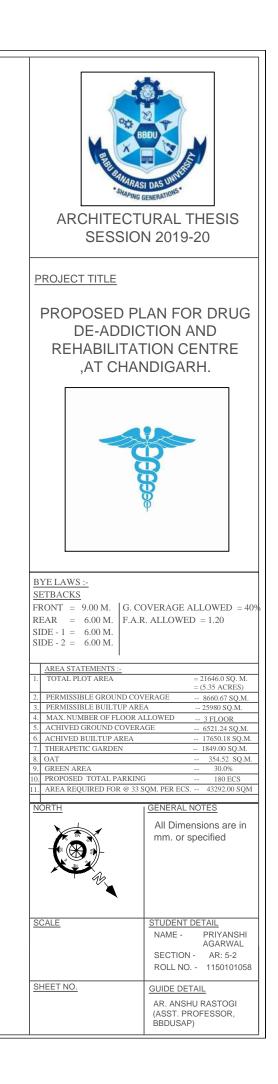


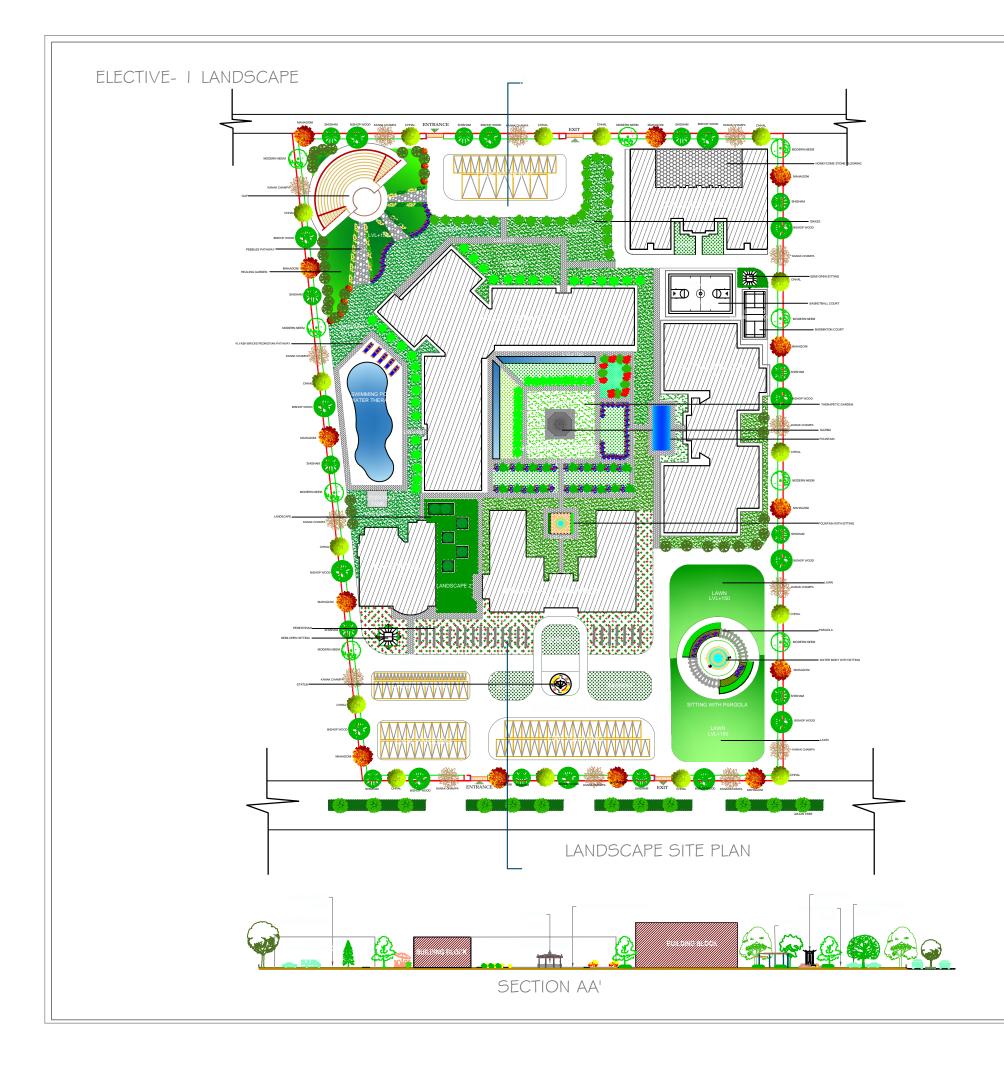


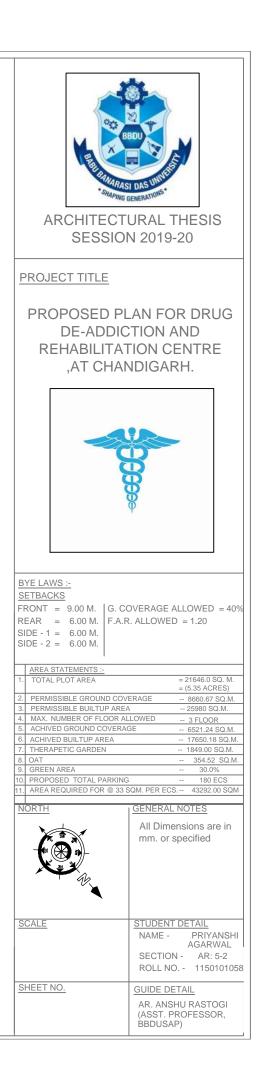
FRONT ELEVATION

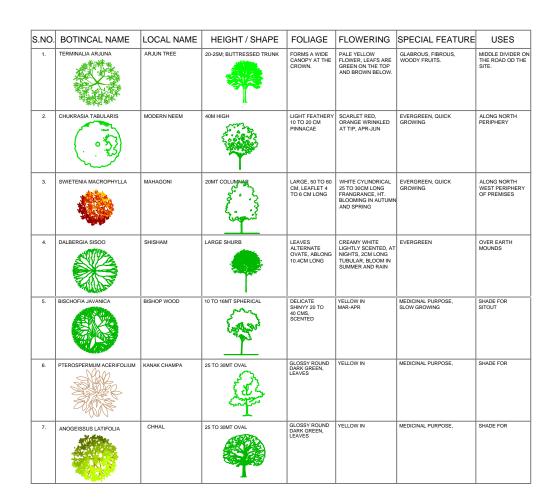


SECTION XX'





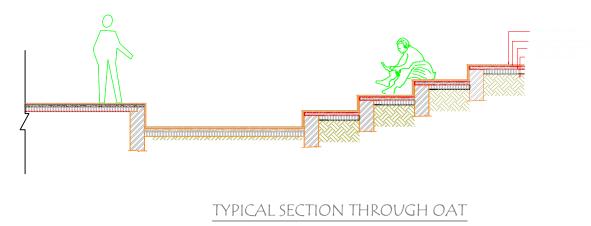


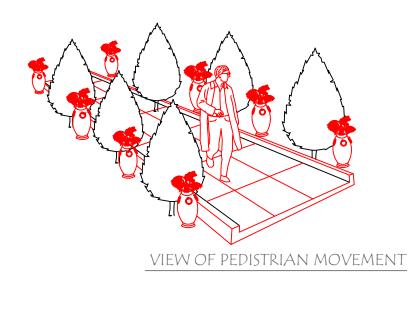


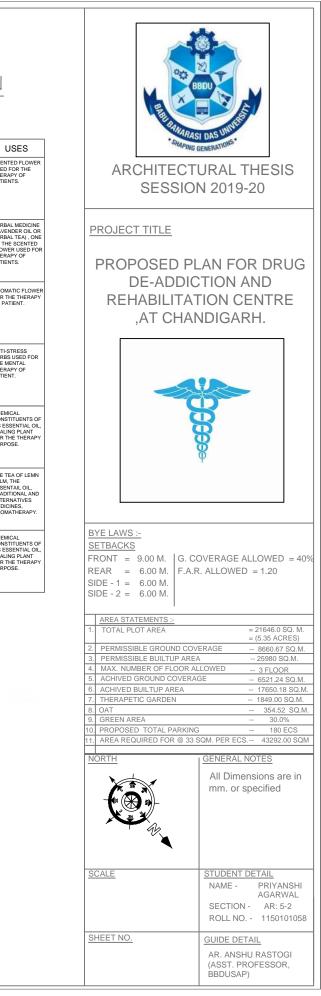
TREES USED ON SITE

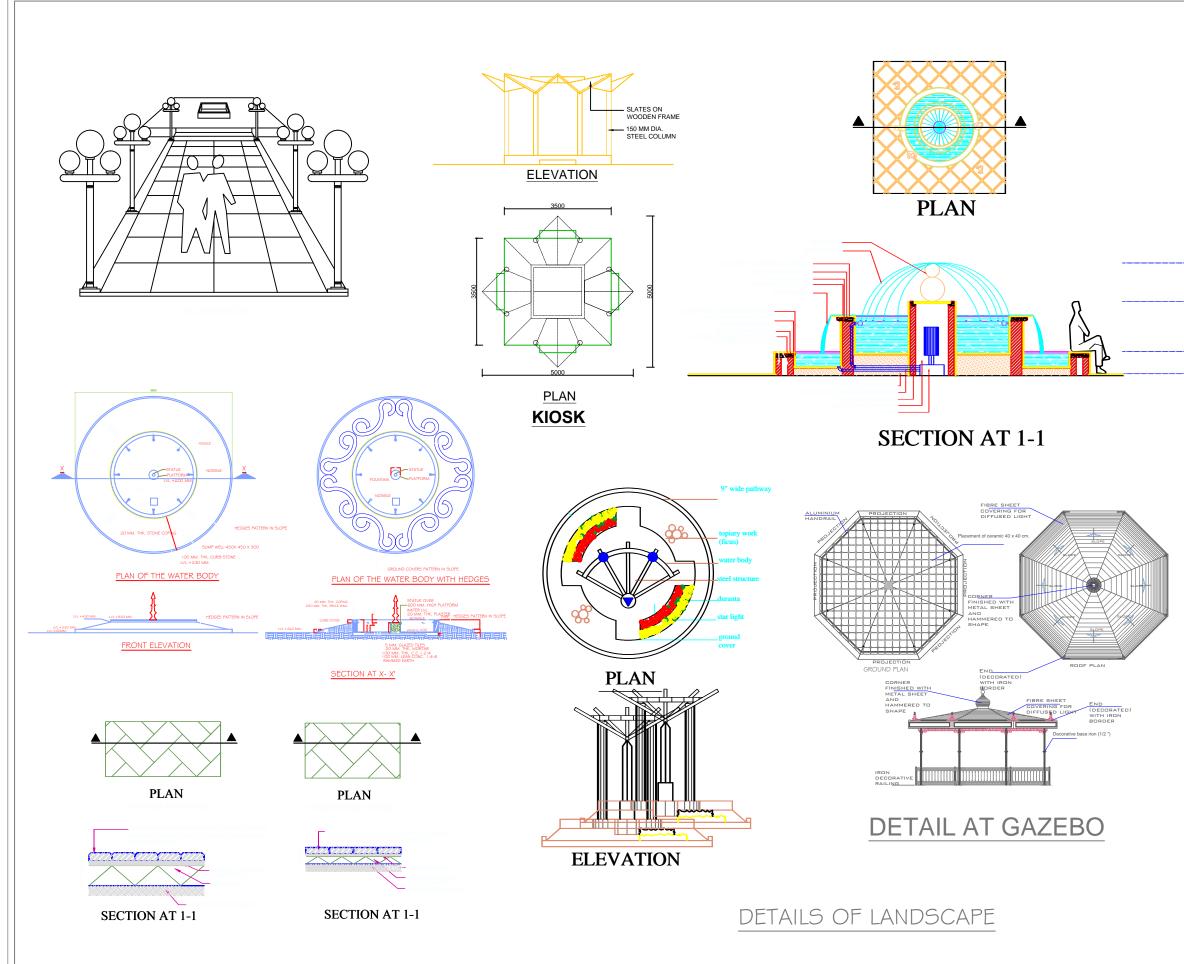
MEDICAL, SCENTED, ANTI-STRESS PLANTS AND HERBS USED IN THERAPEUTIC GARDEN FOR PATIENT THERAPY

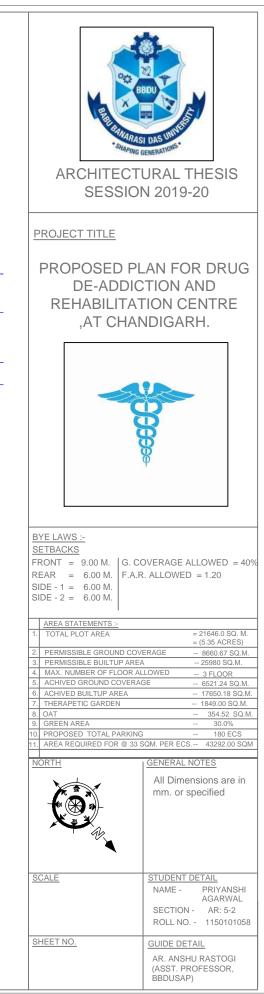
S.NO.	BOTINCAL NAME	LOCAL NAME	HEIGHT / SHAPE	FOLIAGE	FLOWERING	SPECIAL FEATURE	ι
1.	ROSA DAMASCENA	DAMASK ROSE/ ROSE OF CASTILE	2.2M; STEMS DENSELY ARMED WITH STOUT, CURVED PRICKLES AND STIFF BRISTLES	LIGHT FEATHERY THE LEAVES ARE PINNATE,WITH FIVE LEAFLETS.	THE ROSES ARE A LIGHT TO MODERATE PINK TO LIGHT RED.	COSIDERED AN IMPORTANT TYPE OF OLD ROSE.	SCENT USED THER/ PATIEI
2.	LAVANDULA OFFICINALS	ENGLISH LAVENDER	1-2M HIGH	2-8 CM LONG AT THE TOP OF SLENDER, LAEFLESS STEMS 10-30CM LONG.	FLOWERS ARE PINKISH- PURPLE	EVERGREEN, 2-6CM LONG, 4-6MM BROAD	HERB/ (LAVEI HERB/ OF TH FLOWI THER/ PATIEI
3.	SWEET PEAS	CHILDHOOD PLANT	1-2 M , SUITABLE SUPPORT IS AVAILABLE.	2-3.5CM BROAD, LAGER AND VERY VARIABLE IN COLOR IN MANY CULTIVARS.	OLD-FASHIONED WILD PLANT PINKS-PURPLE , SMALL PETALS	AROMATIC, OLD-FASHINED, SWEET PEAS BECAUSE THOSE MEMORIES ARE LOST LAST.	AROM FOR T OF PA
4.	VALERIANA OFFICINALIS	VALERIAN	1.5 M HIGH		SWEETLY SCENTED PINK OR WHITE FLOWERS	EVERGREEN , CONSUMED AS FOOD BY THE LARVAE OF SOME BUTTERFLY AND GREY PUG.	ANTI- HERB THE M THER PATIE
5.	GERMAN CHAMOMILE	SCENTD MAYWEED	15-60CM , BRANCHED, ERECT AND SMOOTH STEM.	LONG AND NARROW LEAVES ARE BIPINNATE OR TRIPINNATE.	WHITE RAY FLORETS ARE FURNISHED WITH A LIGULE, WHILE THE DISC FLORETS ARE YELLOW.	FLOWERS CONTAIN A BLUE ESSENTIAL OIL, WHAT GIVES IT THE CHARACTERISTIC SMELL AND INTERESTING PROPERTIES.	CHEM CONS ITS ES HEALI FOR T PURP
6.	LEMON BALM	BALM MINT	70-150CM	LEAVES HAVE A MILD LEMON SCENT SIMILAR TO MINT.	SMALL WHITE FLOWERS FULL OF NECTAR APPEAR.	ORNAMENTAL PLANT AND FOR ITS OIL	THE T BALM, ESSEN TRADI ALTER MEDIC AROM
7.		DAY- BLOOMING JESSAMINE.	70-150CM	NUMERIOUS LEAFY BRANCHES.	SWEET WHITE-SMELLING FLOWER	THE STYLE IS FILIFOE=RM AND GLABROUS.	CHEM CONS ITS ES HEALI FOR T PURP

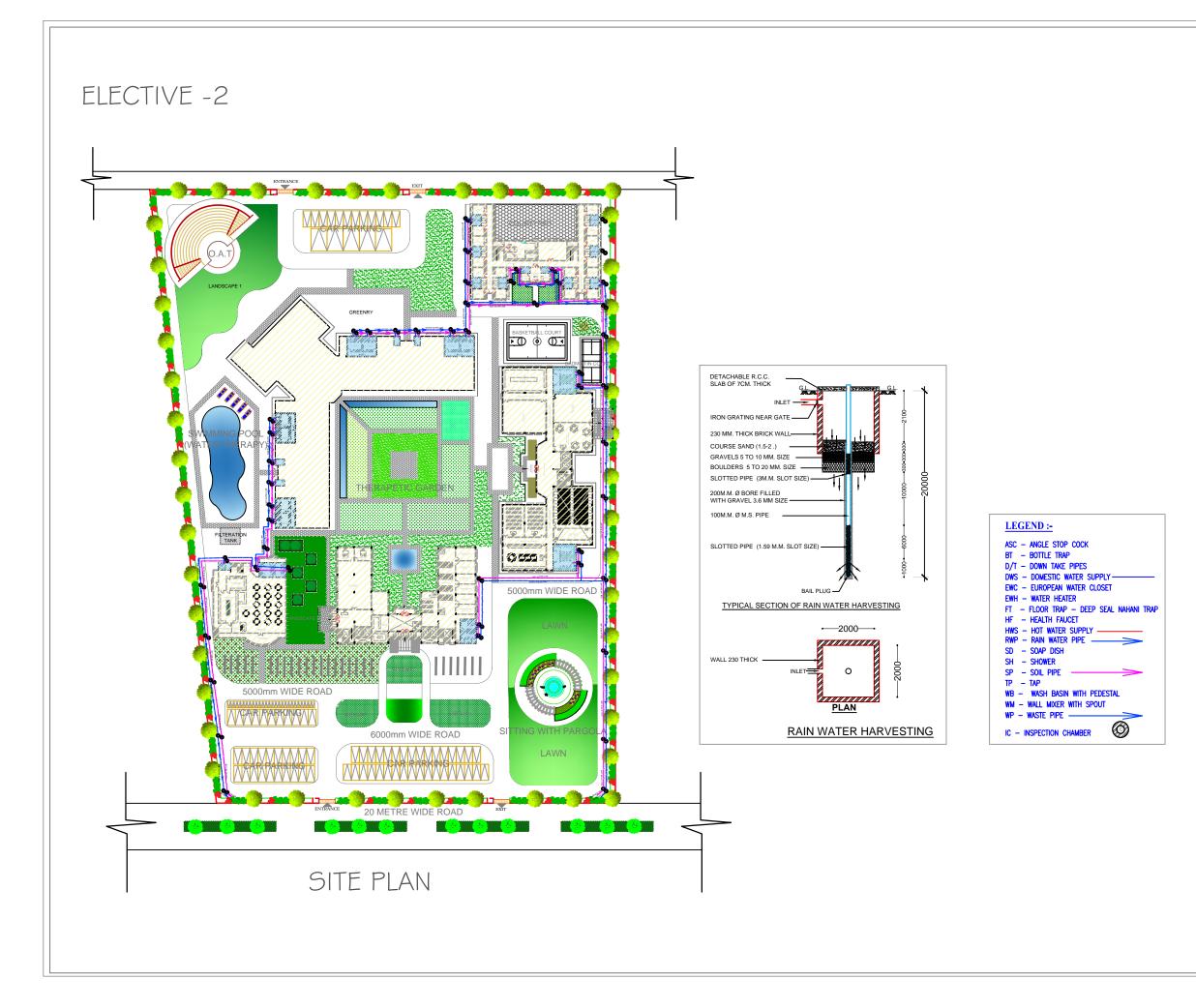


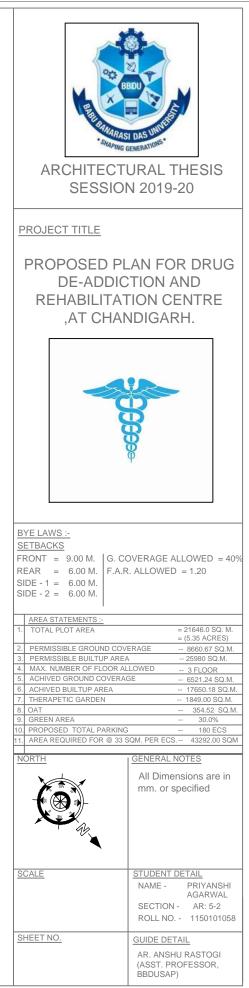


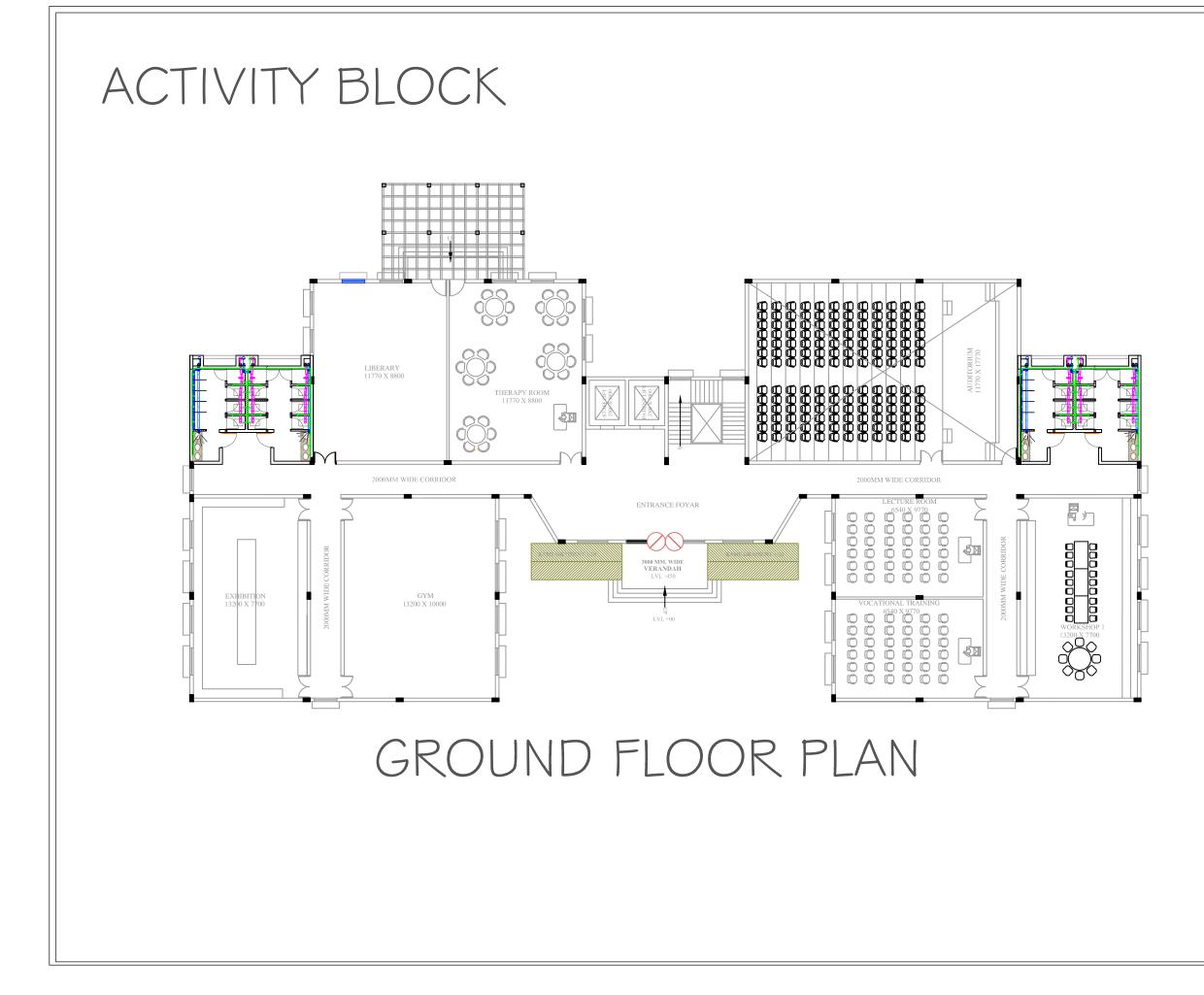


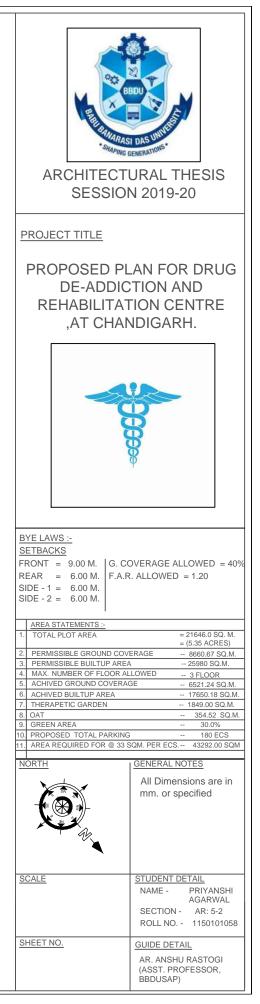


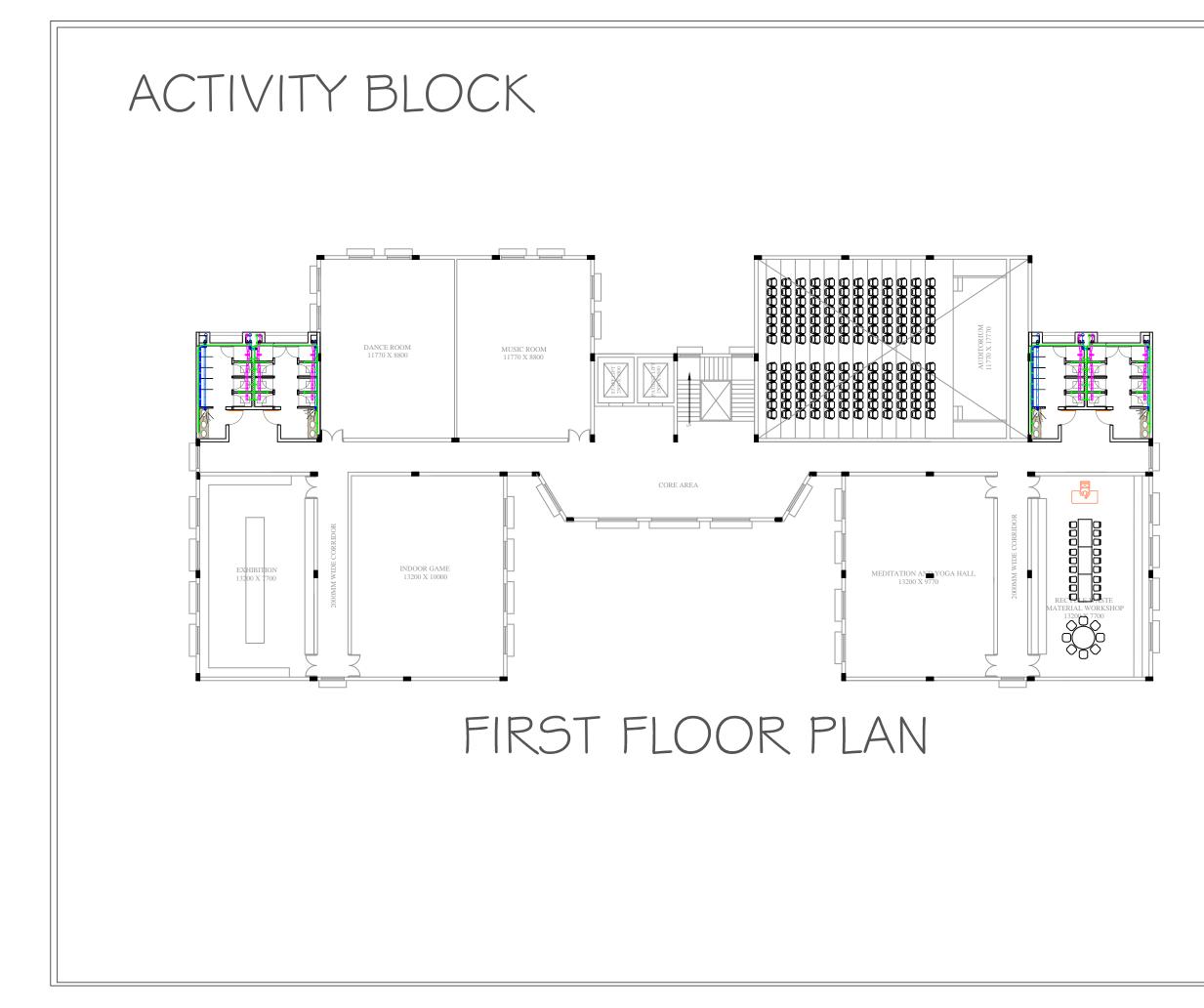


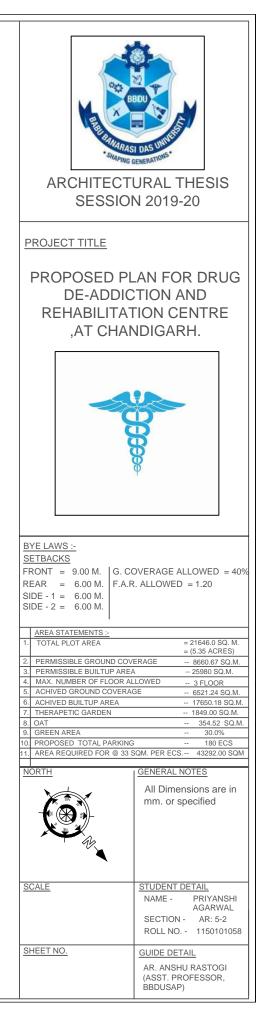


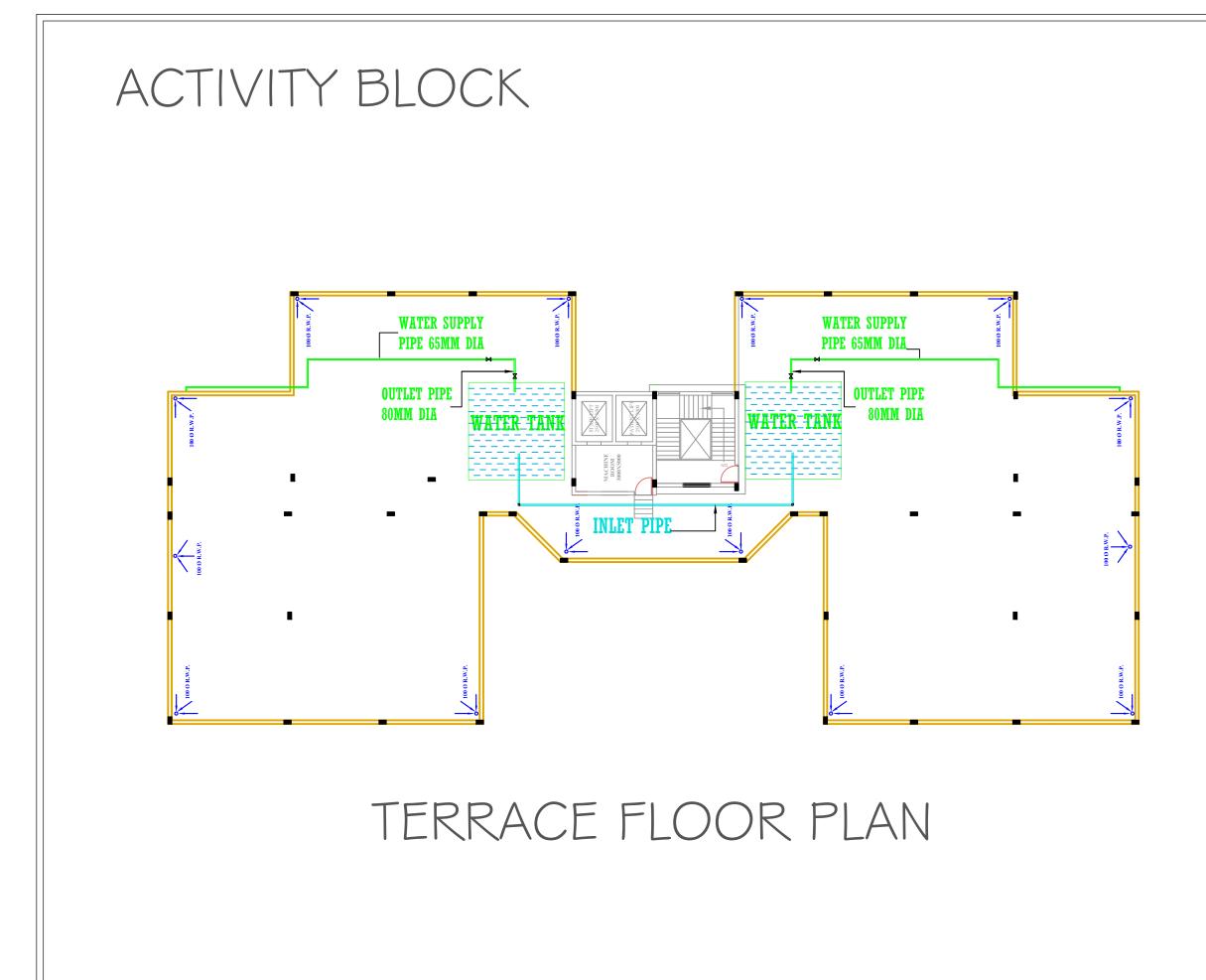


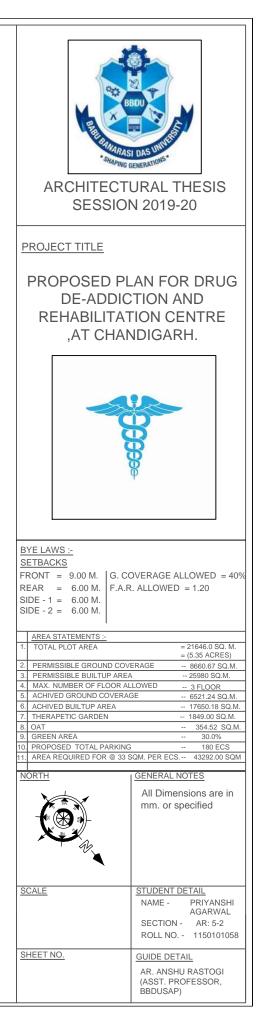


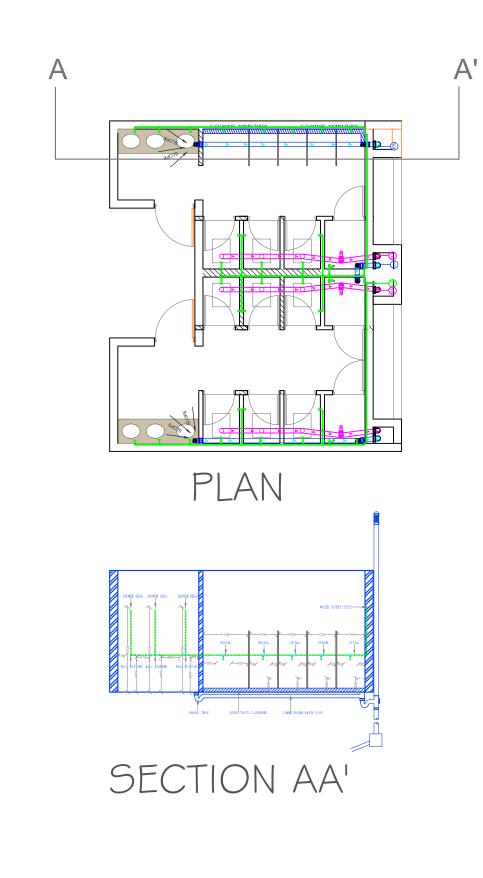


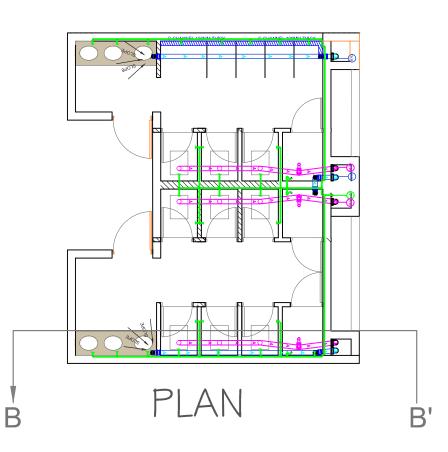


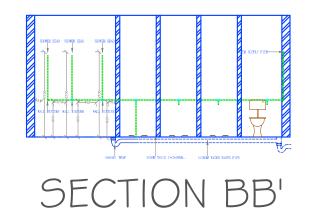


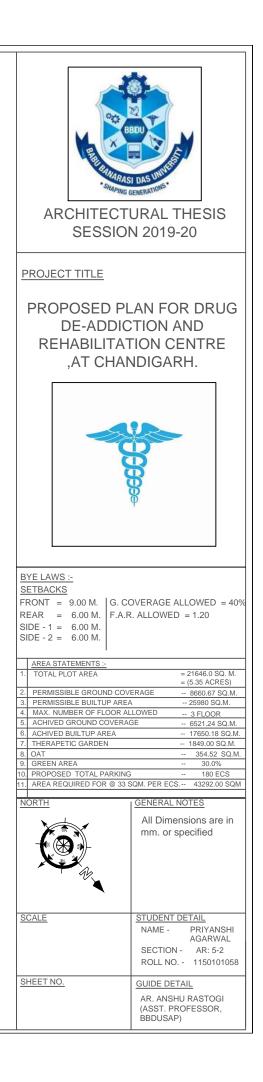


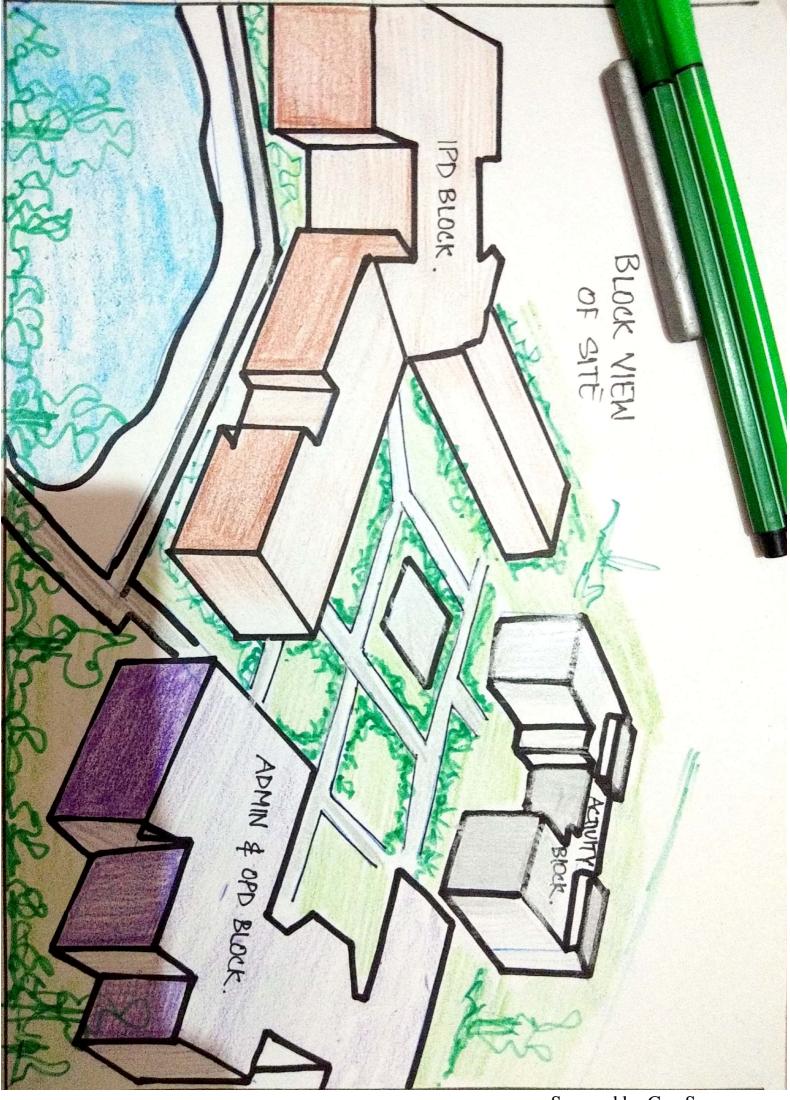












Scanned by CamScanner