

# ARCHITECTURAL DESIGN PROJECT

TOPIC : "AYUSH HEALTH RESORT" AT KARAKALA, UDUPI

SUBMITTED BY:

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XTH SEM (A)



**INTRODUCTION :**

THE MINISTRY OF AYUSH WAS FORMED ON 9 TH NOVEMBER 2014, EARLIER IT WAS KNOWN AS THE DEPT OF INDIAN SYSTEM OF MEDICINE AND HOMEOPATHY (ISM&H) WHICH WAS CREATED IN MARCH 1995 AND RENAMED AS DEPT OF AYURVEDA, YOGA AND NATUROPATHY, UNANI, SIDHA, AND HOMEOPATHY. IN NOVEMBER 2003, WITH A VIEW TO PROVIDE FOCUSED ATTENTION FOR THE DEVELOPMENT OF EDUCATION AND RESEARCH IN AYURVEDA, YOGA, AND NATUROPATHY, UNANI, SIDHA, AND HOMOEOPATHY.

**THE PURPOSE OF MEDICAL TOURISM :**

- TO UPGRADE THE EDUCATIONAL STANDARDS OF INDIAN SYSTEMS OF MEDICINES AND HOMEOPATHY COLLEGES IN COUNTRY.
- TO STRENGTHEN EXISTING RESEARCH INSTITUTIONS AND TO ENSURE A TIME - BOUND RESERCH PROGRAMME ON IDENTIFIED DISEASES FOR WHICH THESE SYSTEMS HAVE AN EFFECTIVE TREATMENT
- TO DRAW UP SCHEMES FOR PROMOTION, CULTIVATION AND RECENTRATION OF MEDICAL PLANTS USED IN THESE SYSTEMS.

TO EVOLVE PHARMACOPOEIAL STANDARDS FOR INDIAN SYSTEMS OF MEDICINE AND HOMEOPATHY DRUGS

**ABOUT MEDICAL TOURISM :**

MEDICAL TOURISM CAN BE DEFINED AS THE PROCESS OF TRAVELLING OUTSIDE THE COUNTRY OF RESIDENCE FOR THE PURPOSE OF RECVING MEDICAL CARE. MEDICAL TOURISM CAN BE DEFINED AS THE PROCESS OF TRAVELLING OUTSIDE THE COUNTRY OF RESIDENCE FOR THE PURPOSE OF RECVING MEDICAL CARE.

INDIA'S LEADING DESTINATIONS OF MEDICAL TOURISM ARE KARNATAKA, ANDRA PRADESH, NEW DELHI, KERALA, TAMIL NADU AND MAHARASTRA. INDIA RECIVES MEDICAL TOURIST ACROSS THE GLOBE, HOWEVER FROM DEVELOPED AND UNDER DEVELOPED COUNTRIES FROM A MAJOR PORTION OF THE PIE.

MEDICAL TOURISM IS A GROWING SECTOR IN INDIA. IN OCTOBER 2015, INDIA'S MEDICAL TOURISM SECTOR IS ESTIMATED TO BE WORTH OF US\$ 3BILLION. THE TOP 10 SOURCE COUNTRIES FOR PATIENTS HAVE AUSTRALIA, CANADA, UK, RUSSIA, UNITED STATES, OMAN, KENYA, AFGANISTAN, IRAQ, BANGLADESH.

BEING ON OF THE FASTEST GROWING MEDICAL DESTINATIONS AROUND THE WORLD, INDIA IS PREDICTED TO DRIVE HIGHER WITH TIME. EVERYBODY CAN GET TERTIARY MEDICAL TREATMENT IN INDIA WHICH IS EITHER NOT AVAILABLE OR PEOPLE CANNOT AFFORD IT IN THEIR HOME COUNTRY.

HERE ARE THE 7 MAJOR FACTORS WHICH MAKE INDIA AN IDEAL MEDICAL TOURISM SPOT,

LOW COST OF TREATMENT WHEN COMPARED TO THE FIRST WORLD COUNTRIES LIKE USA AND UK.

GETTING VISA FOR MEDICAL PUPOSE IS MUCH EASIER THAN EVER.

ACCES TO IMMEDIATE SERVICE IS WHAT ATTRACTS THE FORGIEN MEDICAL TOURISTS. SURGERIES ARE DONE ALMOST IMMEDIATELY.

EVEN THOUGH INDIA IS A DEVELOPING COUNTRY , IT PROVIDES WORLD - CLASS AND STANDERDIZED MEDICAL SERVICES AND CARE WITH THE HELP OF THE LATEST TECHNOLOGY.

POST TREATMENT RECOVERY PROVIDE TO THE PATIENTS WITH THE THERAPIES LIKE AYURVEDA, NATUROPATHY AND YOGA.

INDIA PROVIDES AN OPPORTUNITY TO THE MEDICAL TOURISTS TO VIST SOME OF THE MOST ALLURING AND AWE-INSPIRING PLACES BY TAKING THEM ON AMEDICAL TOURISM TRIP.

INDIA HAS A STRONG BASE OF QUALIFIED SKILLED DOCTORS. ANOTHER MAJOR FACTOR THAT HAS MADE INDIA SUCCEED IN INVITING THE MEDICAL TOURISTS IN THE POPULANCE OF GOOD ENGLISH SPEAKING DOCTORS, GUIDES AND MEDIA CL STAFF WHICH MAKES EASIER.

AS THE LATEST DRAFT RELEASED BY THE KARNATAKA TOUSRISM DEPARTMENT 2019 . THE PRIME FOCUS IS TO PROVIDE SUCH AMENITIES LIKE MEDICAL TOURISM INORDER TO INCREASE PEOPLE VISTING, GENERATE REVENUE, AND PROVIDE EMPLOYMENT FOR THE LOCAL PEOPLE (AS KARKALA IS CATEGORISED IN MEDICAL TOUSRISM) BASED ON THE VARIOUS AYURVEDIC PRACTISES NATIVE TO THAT PARTICULAR REGION



**WELLNESS TOURISM :**

THE POTENTIAL OF WELLNESS SYSTEMS, DEVELOPED THROUGH CENTURIES OF WISDOM OF THIS ANCIENT CIVILIZATION WOULD BE FULLY TAPPED. THIS IS BEING DONE BY POSITIONING INDIA AS A CENTRE OF AYURVEDA , YOGA, SIDHA, NATUROPATHY, ETC TOGETHER WITH THE SPIRITUAL PHILOSOPHY THAT HAS BEEN INTERGAL TO INDIAN WAY OF LIFE.

MINISTRY OF TOURISM HAS DRAFTED GUIDELINES FOR WELLNESS TOURISM. THESE GUIDELINES ADDRESS ISSUES REGARDING MAKING AVAILABLE QUALITY PUBLICITY MATERIAL, TRAINING AND CAPACITY BUILDING FOR THE SERVICES PROVIDERS , PARTICIPATION IN INTERNATIONAL & DOMESTIC WELLNESS REALTED EVENTS ETC.

MUSHROOMING OF WELLNESS CENTRES IN THE COUNTRY HAVEN GIVEN RISE TO THE CONCERN FOR QUALITY SERVICE. THE GUIDELINES FOR ACCREDITATION OF WELLNESS CENTRES HAVE BEEN DEVELOPED BY NATIONAL BOARD FOR ACCREDIATION OF HOSPITALS & HEALTH CARE SERVICES (NABH) IN CONSULTATION WITH AYUSH AND RELEASED DURING THE WORKSHOP ON WELLNESS TOURISM ORGANISED BY MINISTRY OF TOURISM ON 15 FEB 2011 .

THE MINISTRY OF TOURISM HAS ALSO EXTENDE ITS MARKET DEVELOPMENT ASSIATANCE (MDA) SCHEME TO WELLNESS TOURISM SERVICE PROVIDERS INCLUDING ACCERDITED WELLNESS CENTRES . PRESENTLY THE WELLNESS CENTRES ACCREDITED BY STATE TOURISM DEPARTMENT ARE ALSO ELIGIBLE FOR MDA.

THE INITIATIVE OF ACCREDIATION OF WELLNESS CENTRES BY NABH AND AYUSH HAS BEEN GREATLY DRIVEN BE THE MINISTRY OF TOURISM AS ALSO CONSULTATION WITH THE WELLNESS TOURISM SERVICE PROVIDERS, STATE GOVERNMENT AND STAKE HOLDERS.

**AIM :**

THE PRIME FOCUS IS TO PROVIDE MEDICAL TREATMENT FOR THE NATIVE PEOPLE AS WELL AS TOURIST VISITING FROM VARIOUS PARTS OF WORLD THROUGH THE INDEGNIUS PRACTISES OF AYURVEDA, YOGA, NATUROPATHY, HOMEOPATHY.

**OBJECTIVE :**

BEING ABLE TO PROVIDE TREATMENT FOR VARIOUS AILMENTS FOR THE PEOPLE THROUGH THE RICH AYURVEDIC PRACTISE, AS WELL PROVIDE EMPLOYMENT OPPORTUNITY OF PEOPLE ASSOCIATE WILL MEDICAL AS WELL AS TOURISM SECTOR

**JUSTIFICATION :**

AS THE PRACTISES OF AYURVEDA, HOMEOPATHY, UNANI, NATUROPATHY WERE ORIGINATED FROM INDIA, INCLINATION OF MORE PEOPLE TOWARDS THESE METHODS OF TREATMENT. HELPS TO PROVIDE AN HEALTHY SOCIETY AS WELL BOAST THE COUNTRY'S REVENUE TOWARDS MEDICAL TOURISM.

**SCOPE OF THE PROJECT :**

PROMOTING THE VARIOUS PRACTISES OF YOGA, AYURVEDA, HOMEOPATHY THROUGH THE MEDICAL TOURISM

PROVIDING EMPLOYMENT OPPORTUNITIES TO THE PEOPLE RESIDING IN THAT PARTICULAR REGION

CREATING AN HEALTHY ENVIRONMENT BY PROVING TREATMENT TO WIDER RANGE OF PEOPLE

INCREASE THE COUNTRY'S REVENUE & TOURISM.

**FESIABILITY OF THE PROJECT :**

IN DAKSHINA KARNATAKA, A TOWN KARKALA WHICH IS FAMOUSLY KNOWN AS JAIN KASHI IN INDIA HOUSING MORE THAN 18 JAIN BASADI, AND AN 43FT TALL GOMMATESWARA STATUE INSTALLED (ON HILL TOP) IN 1432AD, CHATURMUKHA BASADI, ANNNEKERE BASADI, SAAVIRA KHAMBADA BASADI, ADITHYANATH SAWMIY TEMPLE. EVEN WITH SUCH RICH CULTURE THE AREA LACKS AN CONSIDERABLE AMOUNT OF TOURISM AS COMPARED TO THAT OF SHARVANBELAGONA , DHARMASTHALA AND MYSURU

AS THE LATEST DRAFT RELEASED BY THE KARNATAKA TOUSRISM DEPARTMENT 2019 . THE PRIME FOCUS IS TO PROVIDE SUCH AMENITIES LIKE MEDICAL TOURISM IN ORDER TO INCREASE PEOPLE VISTING, GENERATE REVENUE, AND PROVIDE EMPLOYMENT FOR THE LOCAL PEOPLE (AS KARKALA IS CATEGORISED IN MEDICAL TOUSRISM) BASED ON THE RICH AYURVEDIC PRACTISES IN THAT PATICULAR REGION.

PEOPLE VISIT KARKALA ONLY DURING THE ANNUAL RATHOSTAVA WHICH IS HELD IN THE MONTH OF THE FEBURARY EVERY YEAR ABOUT 5000-7000 PEOPLE TURN UP FOR THE 3 DAY FAIR.

AS WELL AS DURING THE MAHAMASTHAKA ABHISHEKA WHICH IS HELD ONCE IN EVERY 12 YEARS IN ACCORDANCE TO HINDU CALANDER ABOUT 18,000-20,00 PEOPLE TURN UP DURING THE GRAND EVENT.

ACCORDING TO THE LATEST TOURISM DRAFT RELEASED BY THE KARNATAKA STATE GOVERNMENT IS TRYING FOCUSING ON AREAS WHICH HAVE AN RICH CULTURAL HISTORY BUT LACK BASIC NEED SUCH AS EDUACATION , HELATH , AND TRANSIT FACILITIES.

THE TOURISM DEPARTMENT ALONG WITH THE LOCAL BODIES SUCH AS NMPT(NEW MANGLORE PORT TRUST) IN THIS CASE TRY TO BUILD SUCH AMENITIES WHICH LEADS TO PROGRESS OF PUBLIC SECTOR.

THE NMPT HAS TAKEN UP SOME OF OTHERS PROJECTS SUCH AS BUILDING REST ROOMS NEAR THE TEMPLES IN KADRI NAD KUDROLI

ACCORDING TO THE SURVEY IT IS SIGNIFICANT THAT AN WIDE RANGE OF TOURIST VISIT KARKALA ON A DAY BASIS TO WITNESS THE 14TH CENTURY OLD HINDU ARCHITECTURE.

**ADVANTAGES :**

MOST ESTIMATES FOUND THAT TREATMENT COST IN INDIA START AROUND ONE - TENTH OF THE PRICE COMPARABLE TREATMENT IN THE UNITED STATES AND UNITED KINGDOM. THE MOST POPULAR TREATMENT SOUGHT IN INDIA BY MEDICAL TOURISTS ARE ALTERNATIVE MEDICINES, BONE MARROW TRANSPLANT, CARDIAC BY PASS, EYE SURGERY, AND HIP TRANSPLANT.

INDIA HAS 39 JCI ACCREDITED HOSPITALS. HOWEVER , FOR A PATIENT TRAVELING TO INDIA , IT IS IMPORTANT TO FIND THE OPTIMAL DOCTOR- HOSPITAL COMBINATION. AFTER THE PATIENTS HAS BEEN TRETED, THE PATIENT HAS THE OPTION OF EITHER RECUPERATING IN THE HOSPITAL OR AT A PAID ACCOMADATION.

THE CITY OF CHENNAI HAS BEEN TERMED "INDIA'S HEALTH CAPITAL" MULTI AND SUPER - SPECIALITY HOSPITAL ACROSS THE CITY BRING AROUND 45% OF THE HEALTH TOURISM FROM ABROAD.

BUT IN CASE KARNATAKA HAS SLIGHT GROWTH IN MEDICAL AND WELLNESS TOURISM ABOUT 20-25% FROM PAST FEW YEARS.

THE GOVERNMENT HAS REMOVED VISA RESTRICTIONS ON TOURISTS VIS THAT REQUIRED A TWO MONTH GAP B/W COSECTIVE VISITS FOR THE PEOPLE FROM GILF COUNTRIES WHICH IS LIKELY TO BOOST MEDICAL TOURISM. A VISA ON ARRIVAL SCHEME FOR TOURISTS OF SELCTED COUNTRIES HAS BEEN INSTITUTED WHICH ALLOWS FOREGIN NATIONALS TO STAY IN INDIA FOR 30 DAYS FOR MEDICAL REASONS , IN 2016 CITIZENS OF BANGLAESH, AFGANISTAN, MALDIVES, REPUBLIC OF KOREA, AND NIGERIA AVAILTHE MOST MEDICAL VISAS.



Sl. No.	Tahsil	Districton Identified for Tourism	Category					Tourist Amenities			
			A	B	C	D	E	High	Medium	Low	
100	Channarayana	Channarayana									
101	Channarayana	Channarayana									
102	Channarayana	Channarayana									
103	Channarayana	Channarayana									
104	Channarayana	Channarayana									
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## LITERATURE STUDY

### DEFINATION

- Naturopathy or naturopathic medicine is a form of alternative medicine that employs an array of pseudoscientific practices branded as "natural", "non-invasive", and as promoting "self-healing". The ideology and methods of naturopathy are based on vitalism and folk medicine, rather than evidence-based medicine.
- Naturopathic practitioners generally recommend against modern medical practices, including but not limited to medical testing, drugs, vaccinations, and surgery. Instead, naturopathic study and practice rely on unscientific notions, often leading naturopathic doctors to diagnoses and treatments that have no factual merit.

### ORIGIN OF NATURE CURES

- Nature cure comes into existence with the origin of nature. Therefore, naturopathy or nature cure is one of the oldest systems of all the prevailing healing sciences. Moreover, you can also find major of its principles and concepts in ancient text such as the Vedas. You can find water therapy and fasting description Vedas and their benefits to cure diseases. Since ancient times, Indians have used fasting and water therapy to cure many ailments



### HISTORY

- The term "naturopathy" was created from "natura" (Latin root for birth) and "pathos" (the Greek root for suffering) to suggest "natural healing". Naturopaths claim the ancient Greek "Father of Medicine", Hippocrates, as the first advocate of naturopathic medicine, before the term existed.

Naturopathy has its roots in the 19th-century Natural Cure movement of Europe. In Scotland, Thomas Allison started advocating his "Hygienic Medicine" in the 1880s, promoting a natural diet and exercise with avoidance of tobacco and overwork.

- The term naturopathy was coined in 1895 by John Scheel, and purchased by Benedict Lust, whom naturopaths consider to be the "Father of U.S. Naturopathy". Lust had been schooled in hydrotherapy and other natural health practices in Germany by Father Sebastian Kneipp; Kneipp sent Lust to the United States to spread his drugless methods. Lust defined naturopathy as a broad discipline rather than a particular method, and included such techniques as hydrotherapy, herbal medicine, and homeopathy, as well as eliminating overeating, tea, coffee, and alcohol.

He described the body in spiritual and vitalistic terms with "absolute reliance upon the cosmic forces of man's nature". According to the Merriam-Webster Dictionary, the first known use of "naturopathy" in print is from 1901

- A 2004 survey determined the most commonly prescribed naturopathic therapeutics in Washington State and Connecticut were botanical medicines, vitamins, minerals, homeopathy, and allergy treatments. An examination published in 2011 of naturopathic clinic websites in Alberta and British Columbia found that the most commonly advertised therapies were homeopathy, botanical medicine, nutrition, acupuncture, lifestyle counseling, and detoxification.

- From 1901, Lust founded the American School of Naturopathy in New York. In 1902, the original North American Kneipp Societies were discontinued and renamed "Naturopathic Societies". In September 1919, the Naturopathic Society of America was dissolved and Benedict Lust founded the American Naturopathic Association to supplant it. Naturopaths became licensed under naturopathic or drugless practitioner laws in 25 states in the first three decades of the twentieth century. Naturopathy was adopted by many chiropractors, and several schools offered both Doctor of Naturopathy (ND) and Doctor of Chiropractic (DC) degrees

Estimates of the number of naturopathic schools active in the United States during this period vary from about one to two dozen.

- Naturopaths are often opposed to mainstream medicine and take an anti vaccinationist stance.

The particular modalities used by a naturopath vary with training and scope of practice.

These may include herbalism, homeopathy, acupuncture, nature cures, physical medicine, applied kinesiology, colonic enemas, chelation therapy, color therapy, cranial osteopathy, hair analysis, iridology, live blood analysis, ozone therapy, psychotherapy, public health measures and hygiene, reflexology, rolfing, massage therapy, and traditional

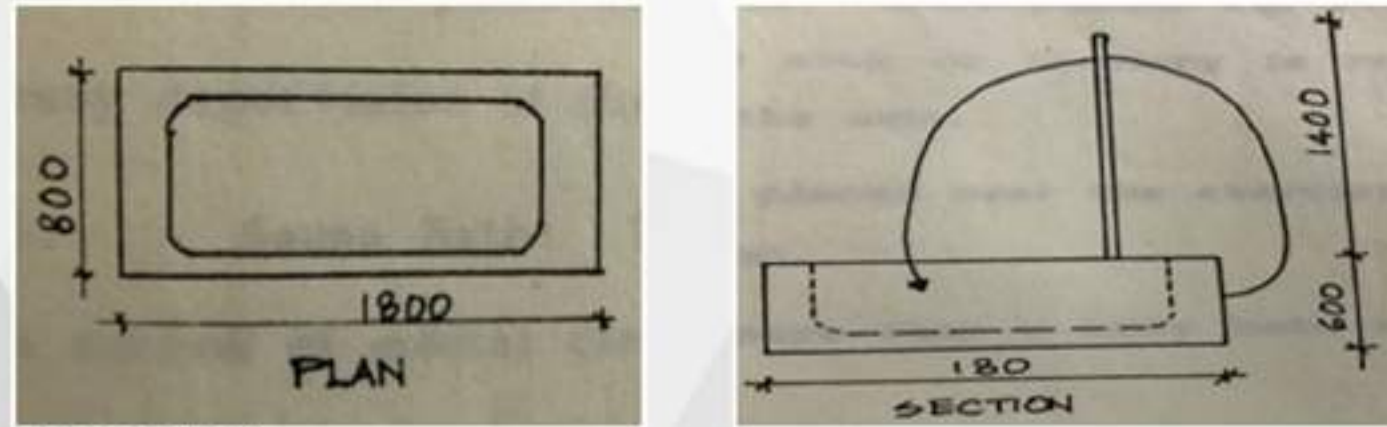
Chinese medicine. Nature cures include a range of therapies based on exposure to natural elements such as sunshine, fresh air, or heat or cold, as well as nutrition advice such as following a vegetarian and whole food diet, fasting, or abstention from alcohol and sugar.

Physical medicine includes naturopathic, osseous, or soft tissue manipulative therapy, sports medicine, exercise, and hydrotherapy. Psychological counseling includes meditation, relaxation, and other methods of stress management.

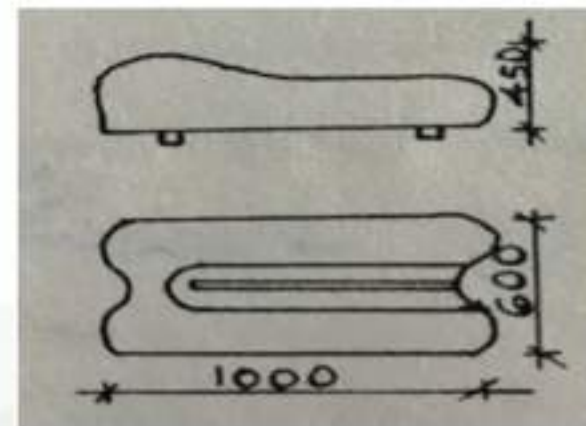


DATA COLLECTION :

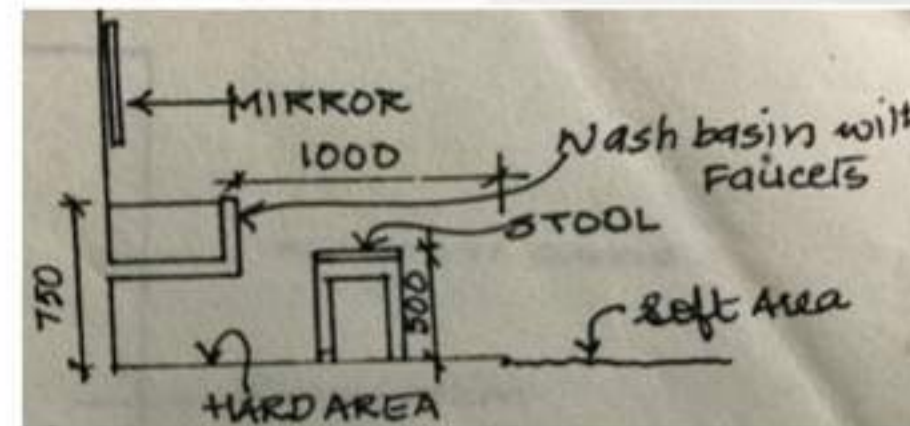
UNDER WATER MASSAGE



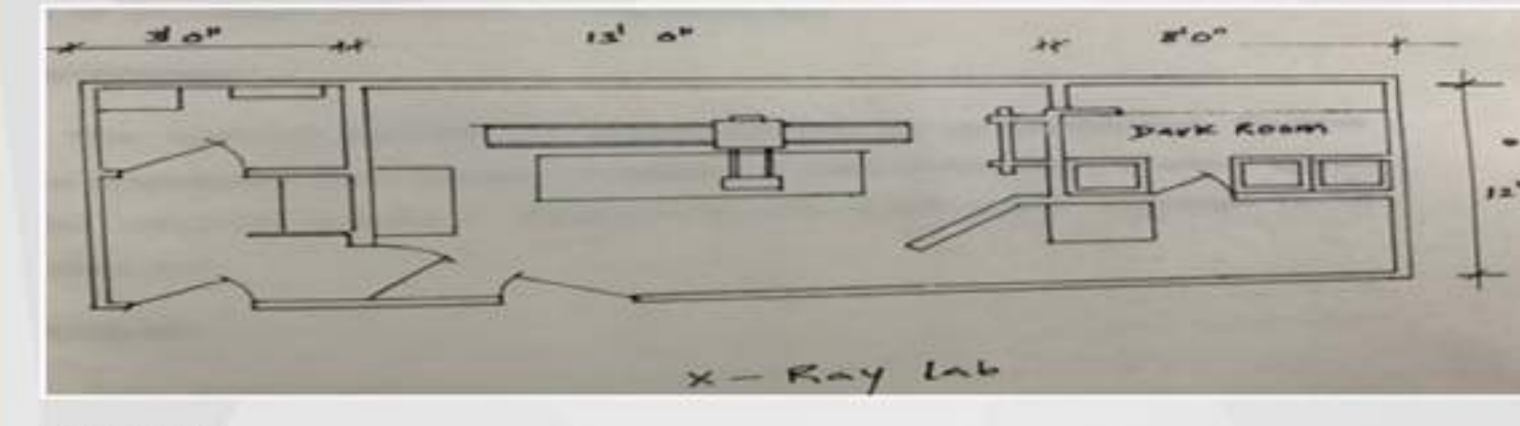
SPINAL BATH



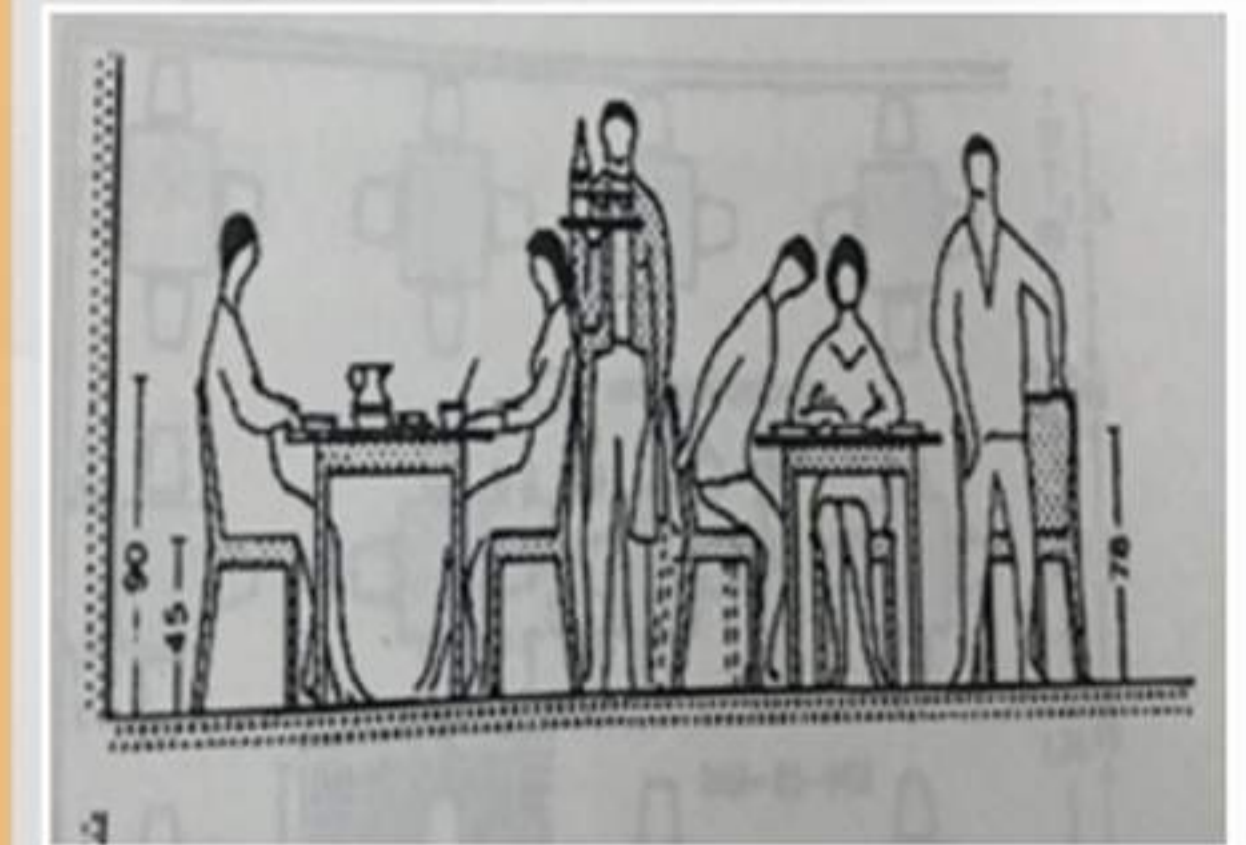
YOGIC KRIYAS



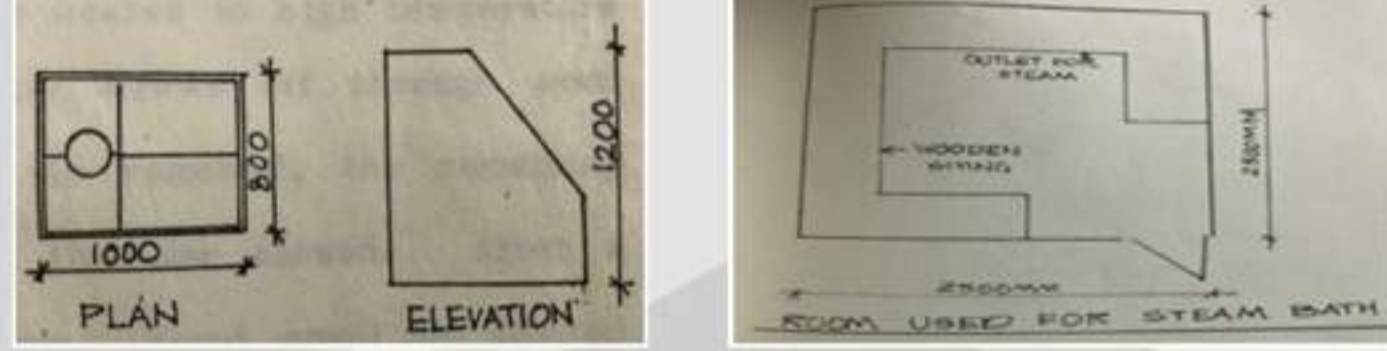
X RAY LAB



DIET CENTRE



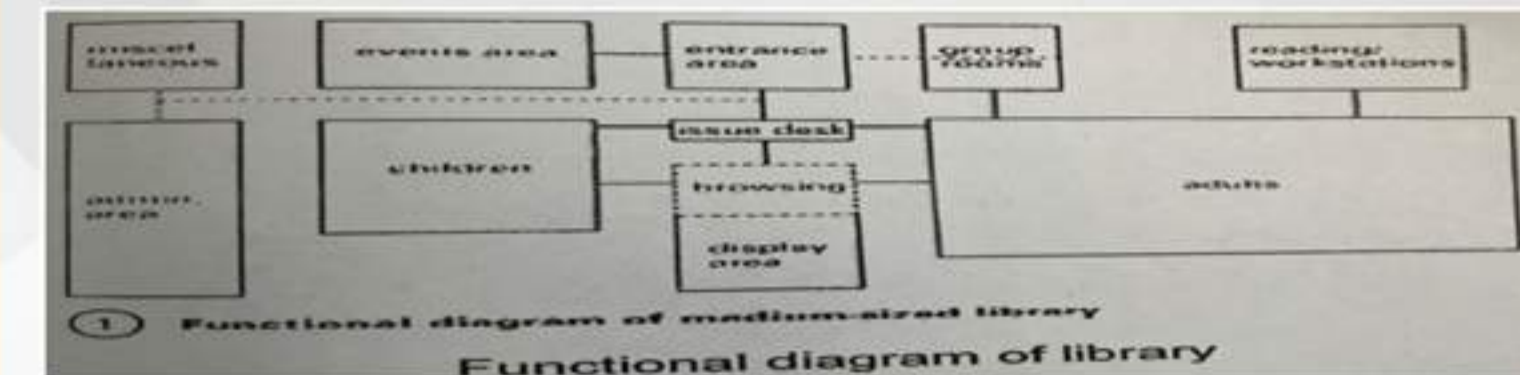
STEAM BATH



HAND BATH



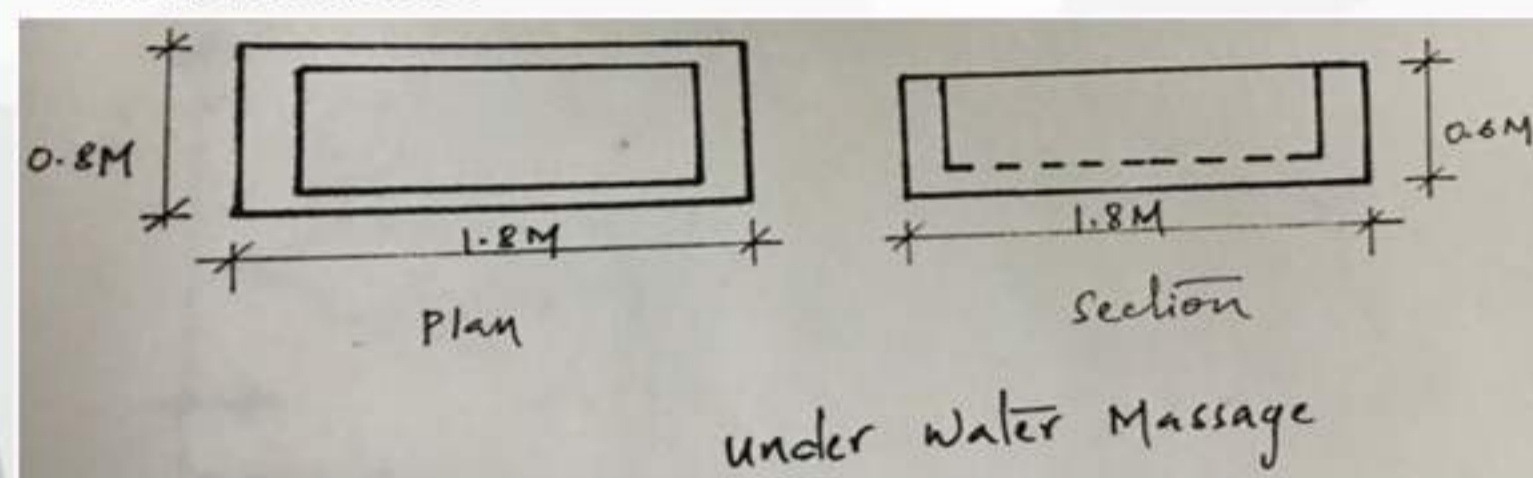
LIBRARY



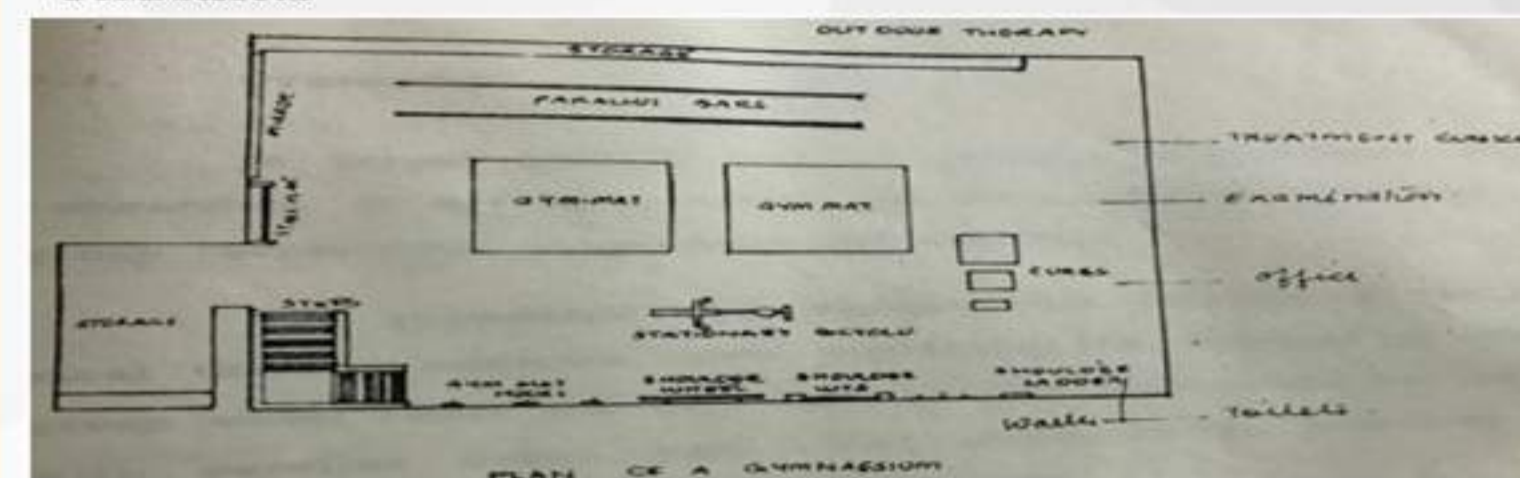
JET SPRAY AND CIRCULAR SPRAY JET



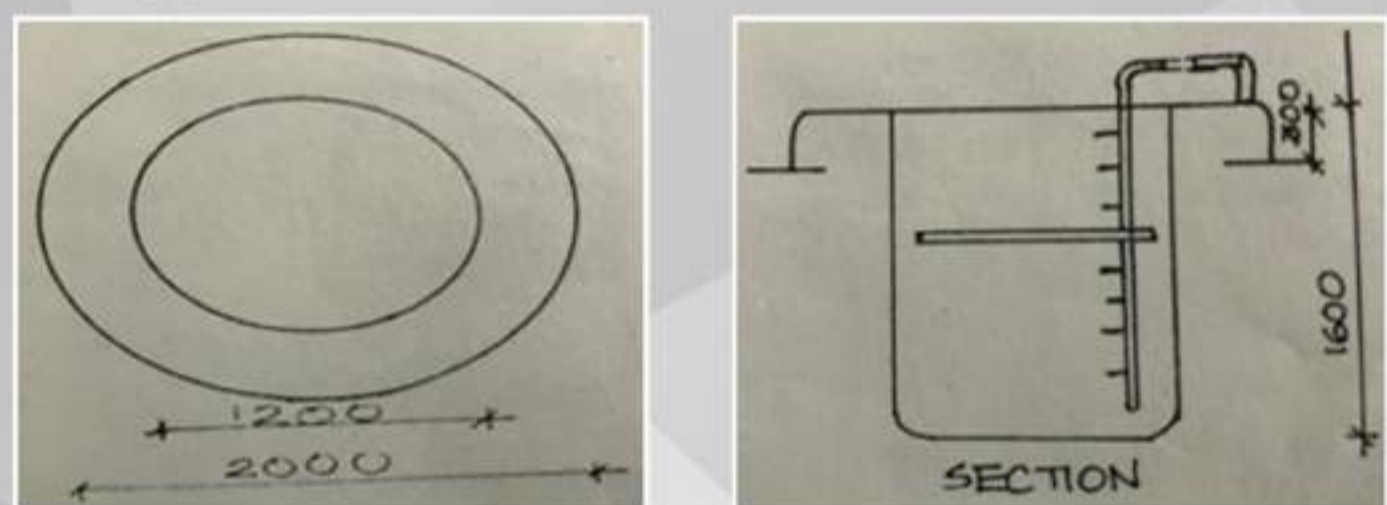
UNDER WATER BATH



GYMNASIUM



WHIRPOOL BATH



SHOWER AND BATH



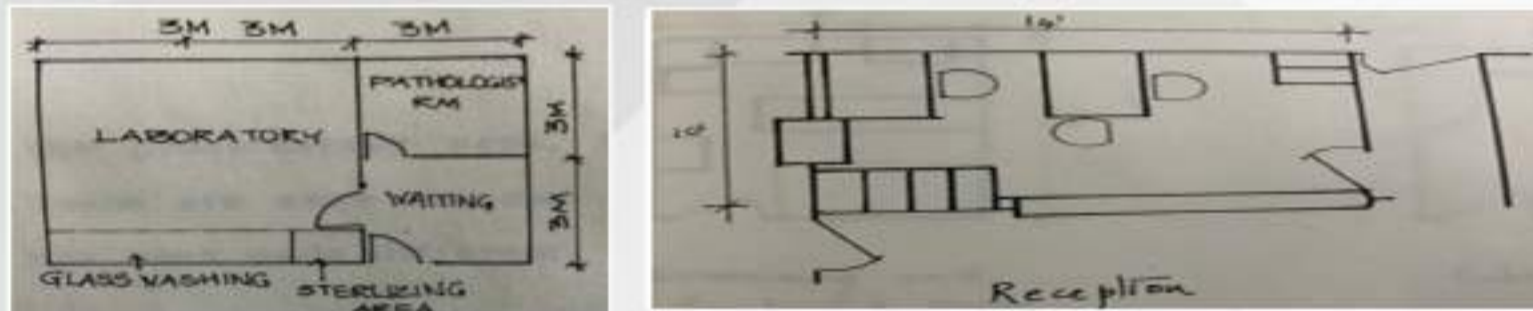
HANDICAPPED DETAILS



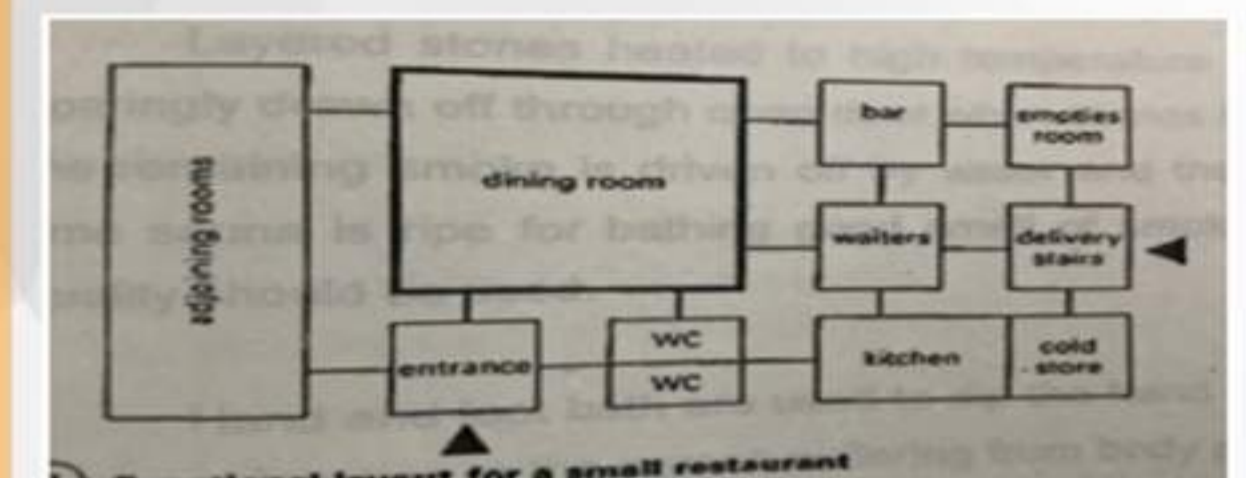
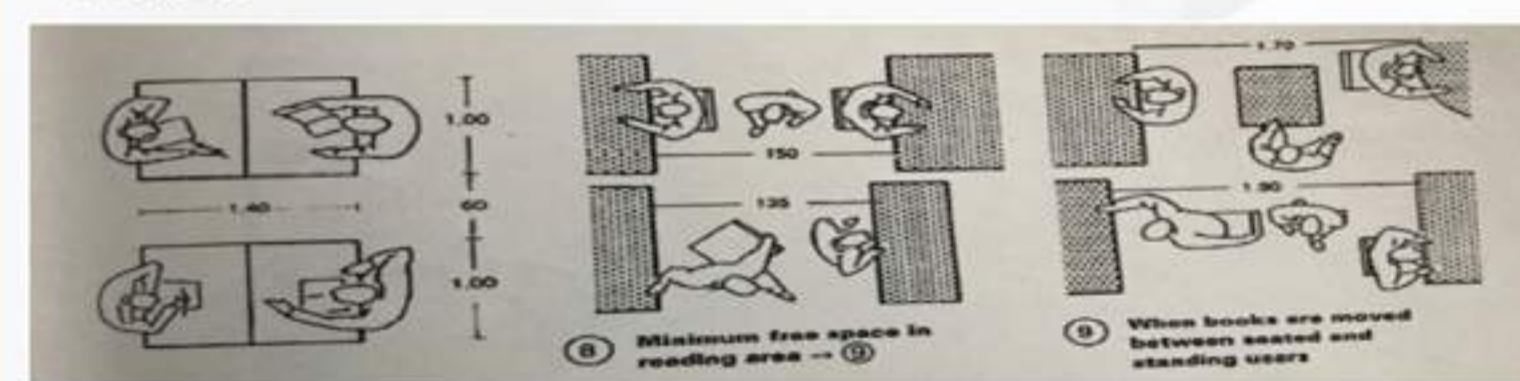
SAUNA BATH



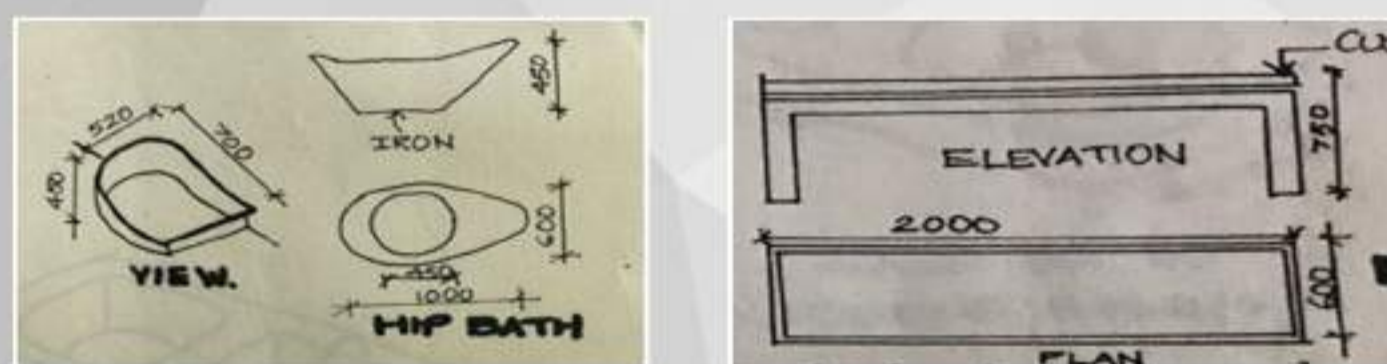
CIRCULAR DIAGRAM: LANROTARY RECEPTION



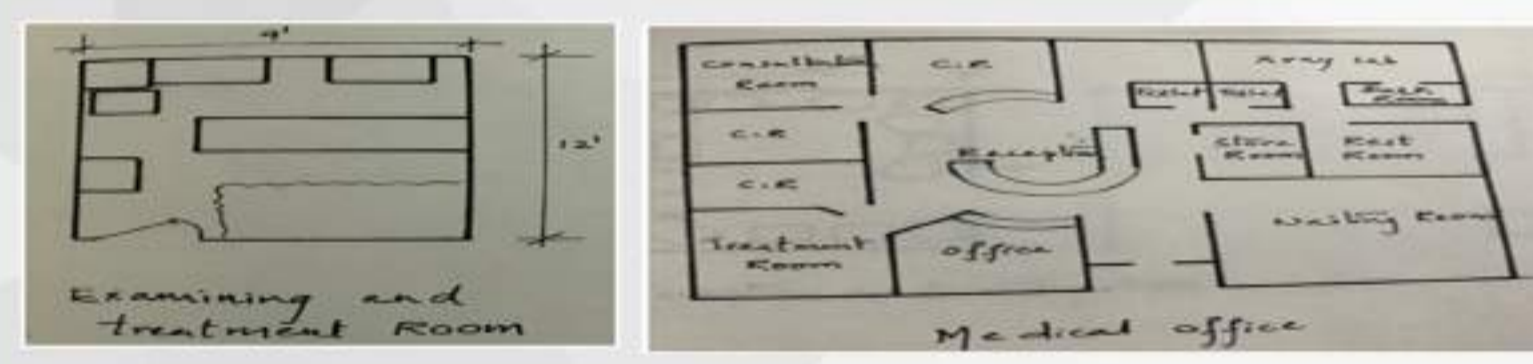
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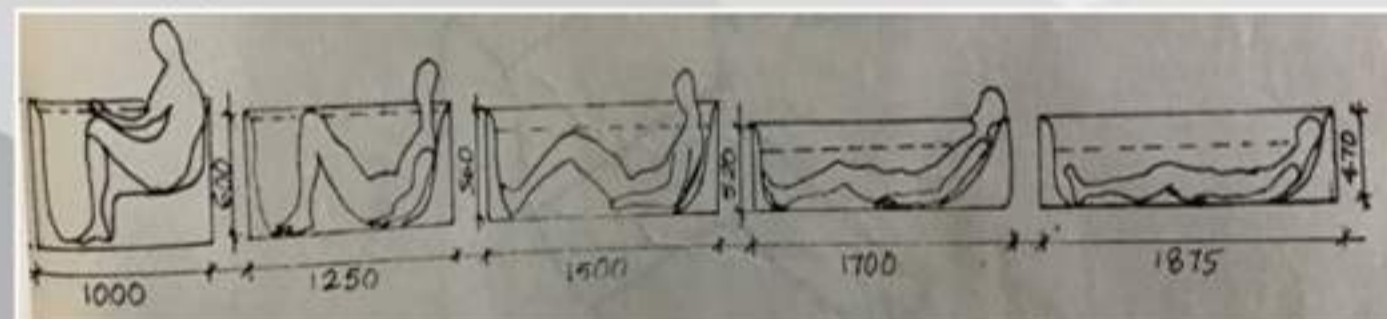
HIP BATH 7 BENCH



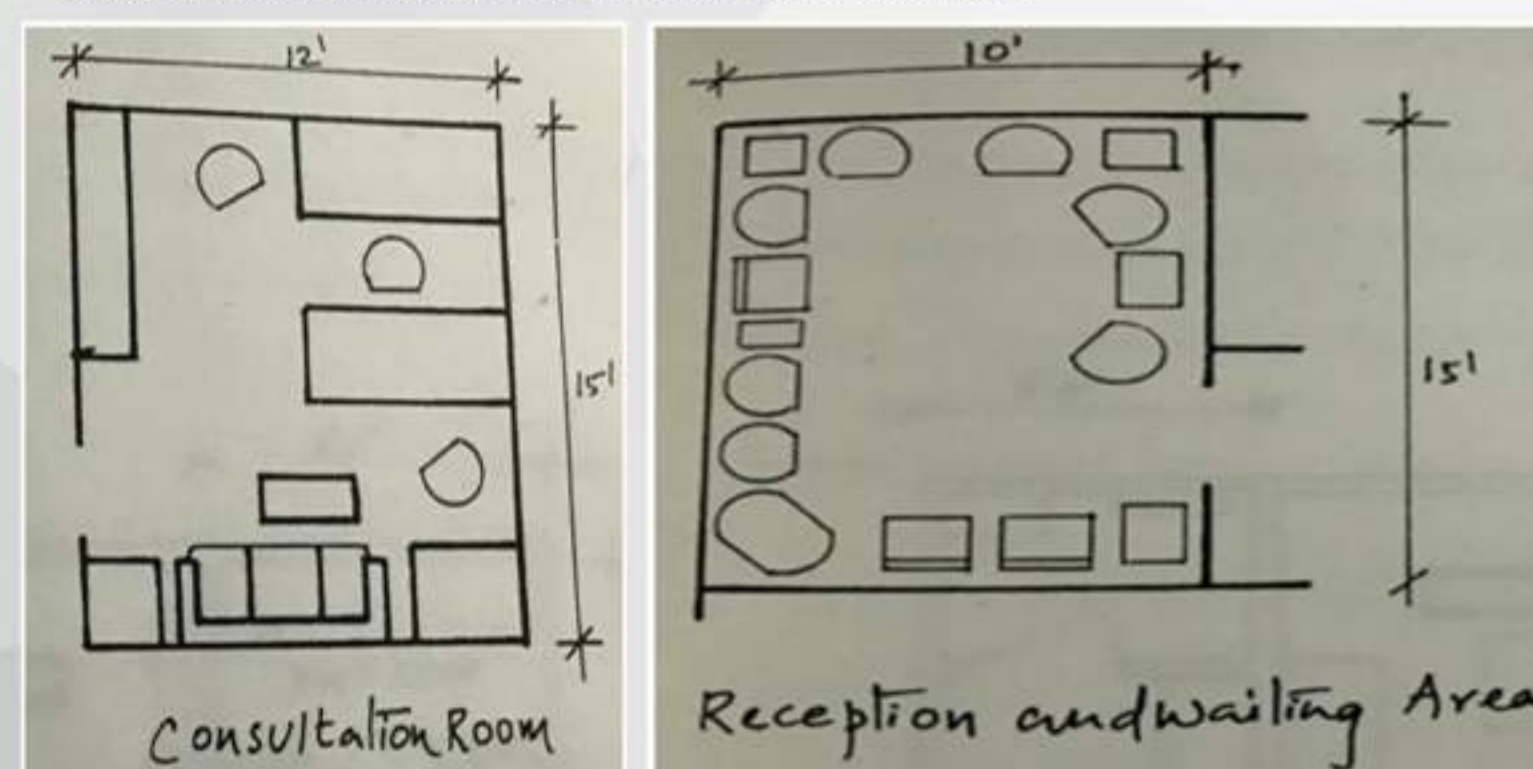
TREATMENT ROOM MEDICAL OFFICE



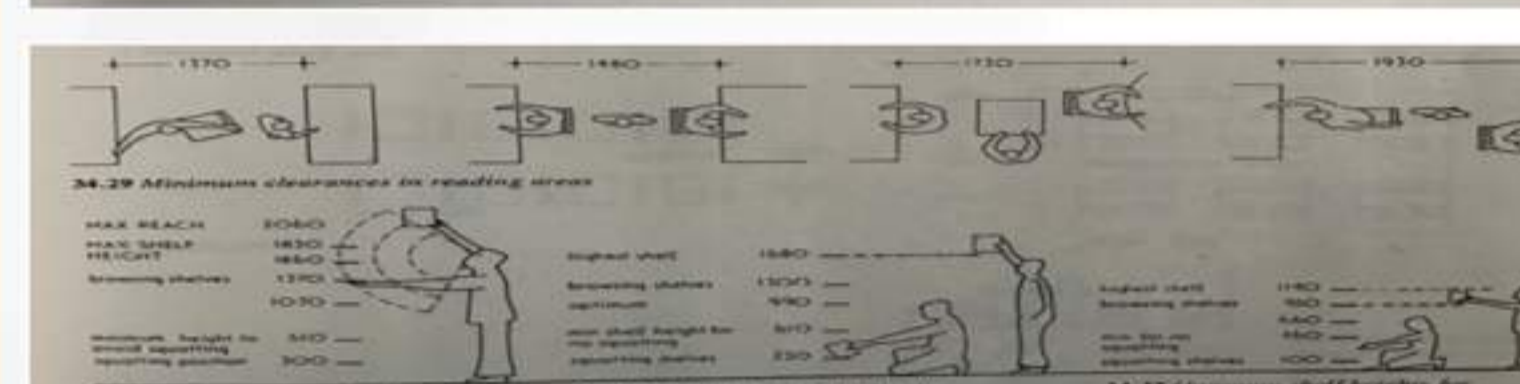
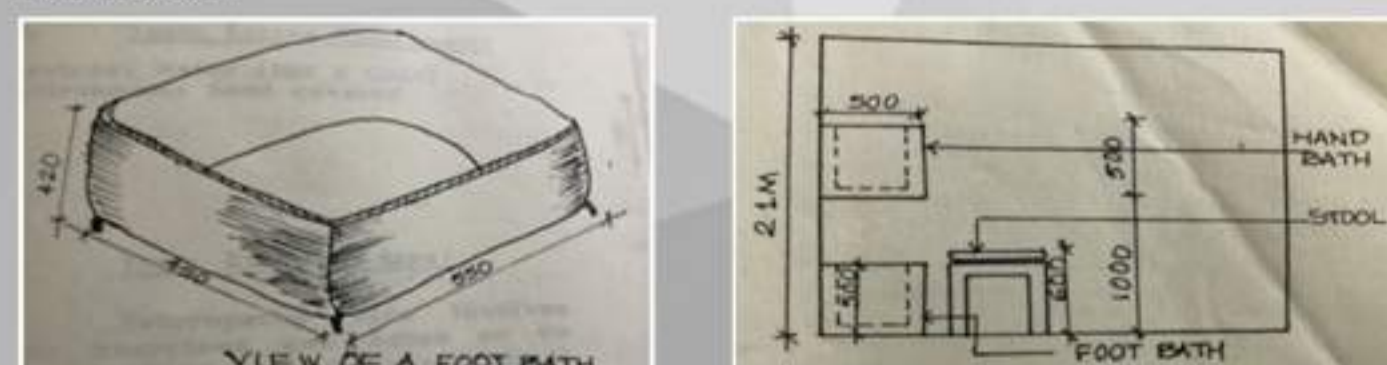
IMMERSION BATH



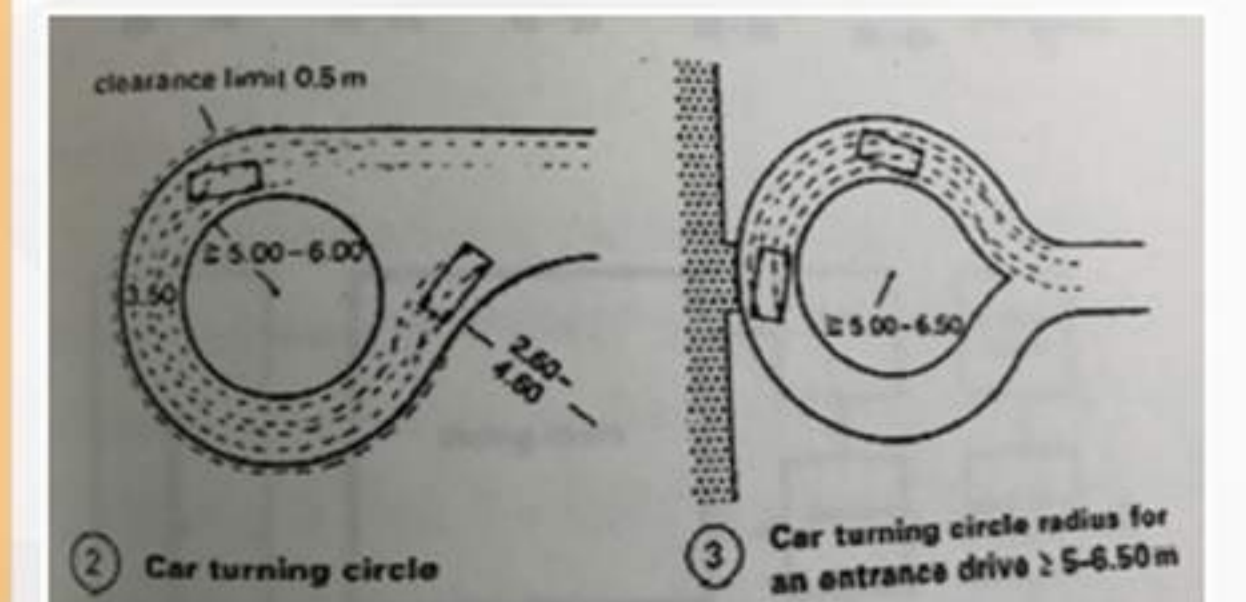
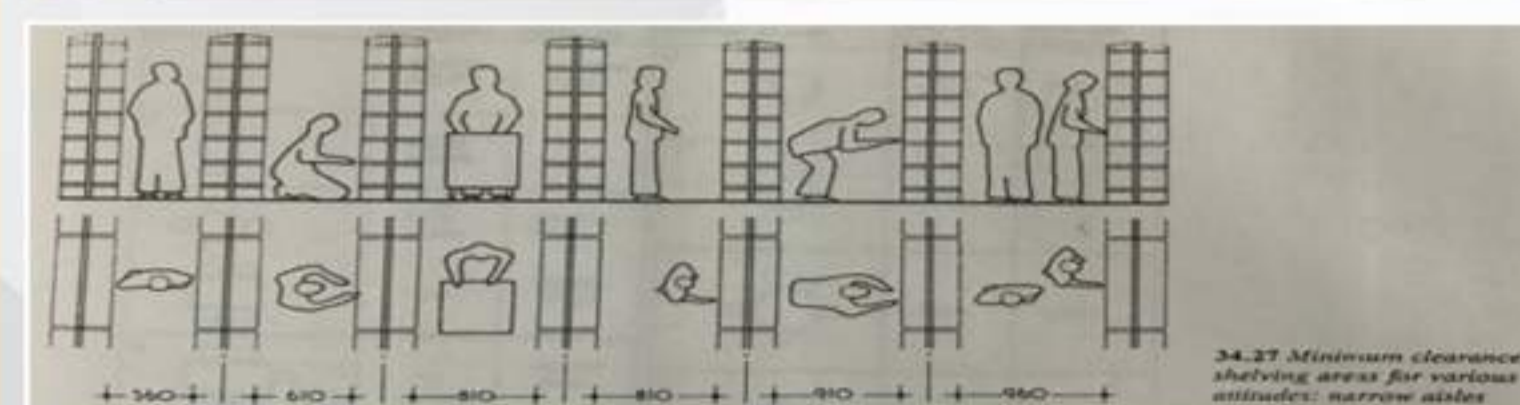
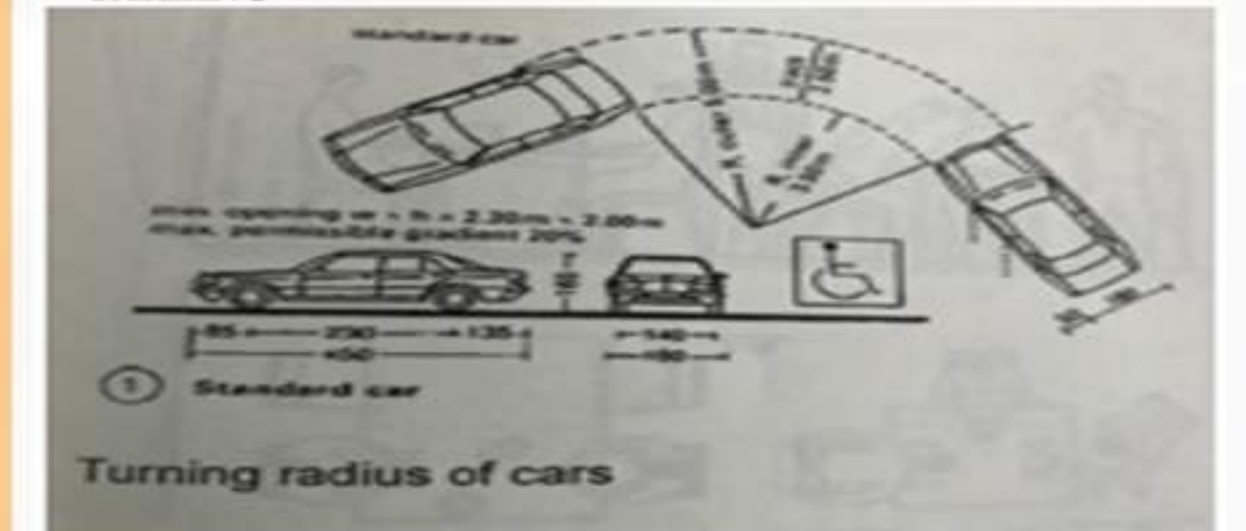
CONSULTATION ROOM RECEPTION AND WAITING



FOOT BATH



PARKING



# CASE STUDY 1 - INSTITUTE OF NATUROPATHY AND YOGIC SCIENCES, BANGALORE

## INTRODUCTION

\* JNI is a leading health care hospital of drugless therapy and specialised in Naturopathy and Yoga .It has pioneered modern drugless treatment in India. It has a holistic approach and it follows evidence-based traditional medical wisdom of India  
 \* JNI is not merely a hospital that treats and cures specific diseases by detoxifying the body of toxins , but it helps you learn a new way of life, enhancing the quality of your total health comprising physical, mental and social aspects

### Details:

- \* Latitude – 12 deg 8 min N
- \* Longitude – 77 deg 37 min E
- \* Architect – PMK architects Bangalore.
- \* Year of establishment – 1976
- \* Owner – jindal foundation.
- \* Climate - moderate

## DELUXE NEXT

Deluxe Nest is a premium accommodation with two expansive bedrooms and an exclusive balcony overseeing lake and patients will receive personalised care by a dedicated team of Doctors, Therapists and Coordinators, as is the speciality of this segment.

Impeccably designed for space and comfort, it is meant for those who care for a leisure of grace, languor and comfort along with health care activities. Minimum 2 patients are required to book a Deluxe Nest, and it can accommodate 4.

## DELUXE HUT

Deluxe Hut is a suite accommodation in Deluxe Section for a family of two. Here patients will receive a personalised care by doctors. The accommodation is fully air-conditioned, and has a richly furnished bedroom with 2 beds, TV and Telephone facility. Its has designed interiors, living room, dressing room cum walk-in-wardrobe, attached bath-cum-treatment room, a sit-out with a splendid lake view, private lawn, servant room etc.,

## ECONOMY SINGLE OR DOUBLE ROOM

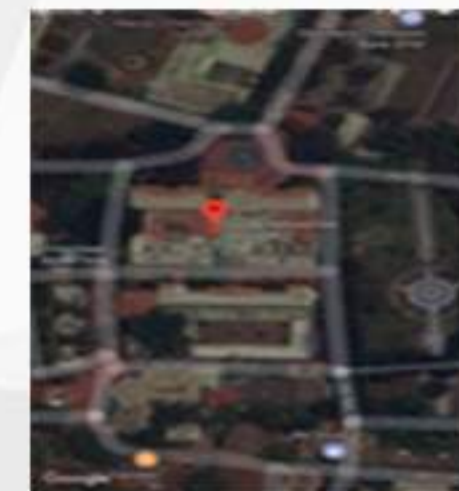
An Economy Room is a well ventilated compact room meant for single or double occupancy. It has wonderful patio around a well maintained lawn. The block is centrally located. It is meant for economically weaker section of the society and hence the accommodation and treatment charges for these rooms are highly subsidized. Ideal for those who suffer from genuine diseases looking for treatments at subsidized rate.



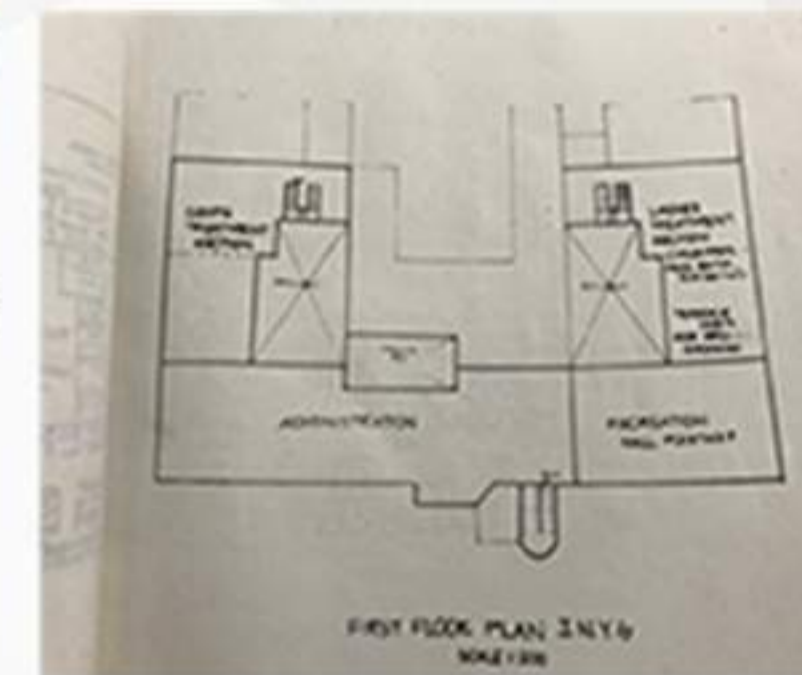
### LOCATION :



Jindal Institute Location



AERIAL VIEW OF JNI

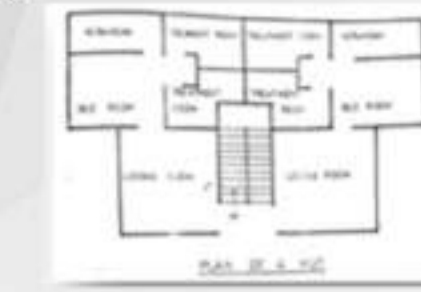


\* It is located on the outskirts of the garden city of bangalore which enjoys the reputation of its climate throughout the year it spreads over a stretch of 40 acres of the green land on the national highway no. 4 (tumkur road). Its building lawns, parks, gardens and the 20' high fountain provide real natural surroundings to rejuvenate the body and relax the mind

\* All buildings are oriented towards north, breadth of the building east west, the main building consists of 2 stores, the sawn bagh, staff quarters, workers quarters, workshop, reflexology track are found on the east side. On the side of the peripheral walkway is situated the power room, toilet, store room, guard room, time office and the staff room.

## HUT

\* Hut is a suite accommodation for a family of two.  
 \* It is most conveniently located in the institute.  
 \* The accommodation is ideal for those who look for privacy and comfort in an idyllic ambience. Single Occupancy will also be permitted.  
 \* It is designed to accommodate 16 people



## EXECUTIVE SINGLE OR DOUBLE BLOCK

\* An Executive Single or double Room is a well maintained, fully furnished, spacious room meant for single or double occupancy with one or two bed attached to a well equipped bath room.  
 \* It has a decent decor, and is air-conditioned.  
 \* It is located in a wonderfully designed 4-storey building.



## SWIMMING POOL

\* The pool is located on the western side of the site towards the lake  
 \* It is used for water walk and other exercises.  
 \* The pool has been covered to avoid the entry of dust.



## COTTAGE

\* Cottage is a suite accommodation very conveniently located in the midst of the overall sylvan beauty of the place. It is provided with a bedroom with 2 beds, attached to a bath-cum-treatment room, a dressing room-cum-walk-in wardrobe, a lavish living room, independent sit-out and a private lawn.  
 \* Total accommodation is 16 people.



## LIBRARY

\* It is placed on the southern side in between the yoga hall and diet centre  
**INFERENCE**  
 it isn't on a proper location

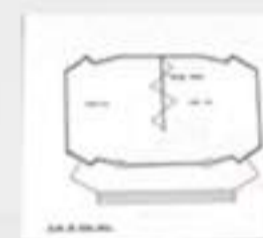


## YOGA HALL

\* The jai mahal hall faces the north it is made up of large partitioned multi purpose halls, which are separate for ladies and gents. Space equipments for indoor games like table tennis has been provided  
 \* It can accommodate about 200 people at once it has well furnished library.

### INFERENCES

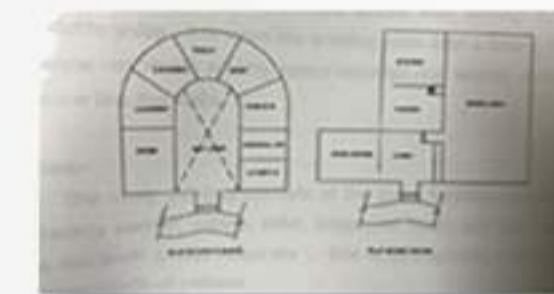
\* There is no dressing or toilet facility  
 \* The indoor games and library should have been separately provided



## DIET CENTRE

### UTILITY BLOCK

\* It is situated on the south eastern side of the time square  
 \* It is about 1540 sq m.  
 \* It has a well equipped kitchen, dining hall, washing area pantry and a basement store  
 \* There are about 45 closely places tables in the hall  
 \* All 3 halls together can accommodate 300 people.

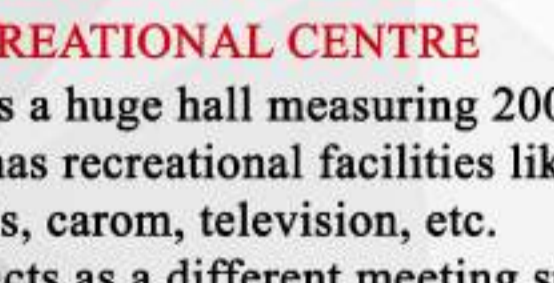


### INFERENCE

\* the dining space is not sufficient

## RECREATIONAL CENTRE

\* It is a huge hall measuring 200 sq meters  
 \* It has recreational facilities like table tennis, carom, television, etc.  
 \* It acts as a different meeting spaces for the patients



## AMPHITHEATRE

\* The amphitheatre is also called as open air theatre located on the eastern side of the site.  
 \* It is used for open air exercises and laughing therapy , etc.

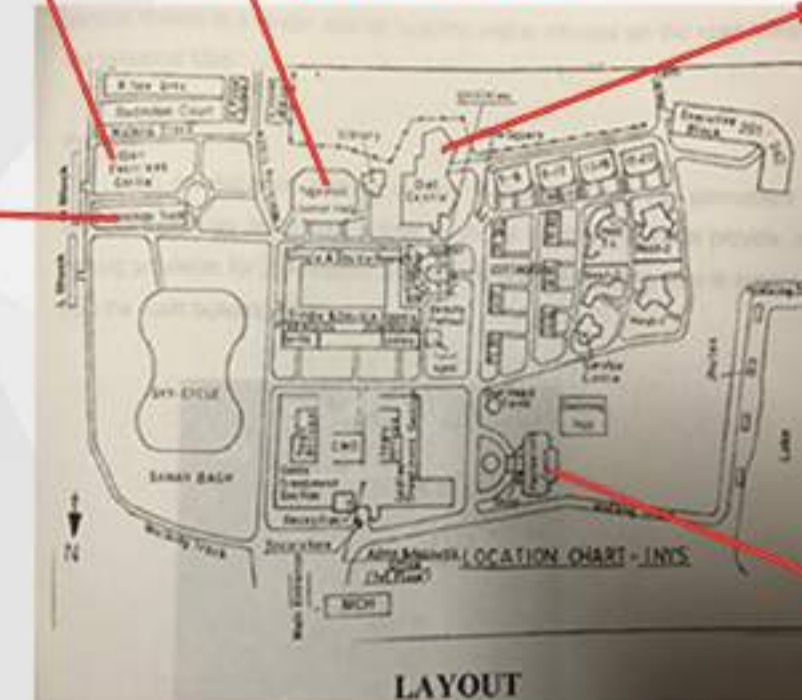


## REFLEXOLOGY TRACK

\* It is 15 meters long, partially filled with water and has stones at bottom to act as acupressure to the foot.



## SITE PLAN



LAYOUT

## OTHER SERVICES



LAKE VIEW POINT



LAWN TENNIS COURT



HEALTH MUSEUM



GYM

### MERITS

\* The stretch consist of a hospital, post office, travel agent, ATM, beauty parlour and a bank  
 \* To the west of the institute there is a lake adding to the view of the site  
 \* Parking is at a proper location  
 \* The landscape areas add for the beauty and are well maintained.

### DEMERITS

\* The yoga block should be accorded more prominence  
 \* The patient accommodation should have more privacy  
 \* The areas facing the lake has not been utilised to its full potential  
 \* The recreation centre is not in its full use  
 \* the staff accommodation are not very spacious.



## CASE STUDY 2 - J.G CO-HOSPITAL NATUROPATHY & YOGA CENTRE GHATAPRABHA, BELGAUM

PROJECT : SMT. PARUJATI BASAVRAJ BHOOLAPUR NATUROPATHY & YOGA CENTRE

LOCATION : GHATAPRABHA, BELGAUM

CLIMATE : TROPICAL SAVANNA

TEMPERATURE : 39° C DURING SUMMER  
33° C DURING WINTERS

RELATIVE HUMIDITY : 63%

PRECIPITATION : 1775MM OF ANNUAL RAINFALL

COSTRUCTED : 2003

APPROACH : THE SITE IS LOCATED 1.6KM FROM THE GHATAPRABHA RAILWAY STATION, 16KM FROM GOKAK BUS STATION.

SHRI J.G. CO-OPERATIVE HOSPITAL SOCIETY WAS ESTABLISHED IN THE YEAR 1951 WITH AN OBJECTIVE OF PROVIDING COST EFFECTIVE AND QUALITY HEALTH CARE TO THE NEEDY POOR PEOPLE OF THE SURROUNDING VILLAGES BY ESTABLISHING A MODERN MEDICAL HOSPITAL WITH ALL THE SPECIALITIES, DIAGNOSTIC LABORATORIES WITH EQUIPMENTS AND AMENITIES.

TO POPULARISE OUR OLD AND TRADITIONAL METHOD OF PROPER HEALTH MAINTENANCE, THE INSTITUTE ESTABLISHED AYURVEDIC MEDICAL COLLEGE WITH AN ACADEMIC FACILITY

WITH AN IDEA OF PROVIDING HOLISTIC & NATURAL HEALTH CARE, THE INSTITUTE HAS ESTABLISHED SMT. PARUJATI BASAVARAJ BHOOLAPUR NATUROPATHY AND YOGA CENTRE. THIS NATUROPATHY AND YOGA CENTRE WAS INAUGURATED BY HIS HOLINESS SHRI. SHRI. RAVISHANKAR GURUJI OF ART OF LIVING FOUNDATION BANGALORE ON 15-OCTOBER-2003. IN THE PRESENCE OF HIS HOLINESS OUR PRESIDENT SHRI JAGADGURU GURUSIDDHA RAJAYOGINDRA MAHASWAMIJI OF MOORUSAVIRA MATH, HUBLI, KARNATAKA.

THE MAIN AIM OF INTRODUCING NATUROPATHY & YOGA THERAPY IS TO BUILD A DISEASE FREE SOCIETY AND TO SAVE THE SUFFERING PEOPLE FROM THE CLUTCHES OF DRUGS AND THEIR IRREPARABLE SIDE EFFECTS, WHICH ARE AT TIMES FATAL HEALTH IS NOT A COMMODITY THAT CAN BE BROUGHT FROM A DRUG STORE BUT HAS TO BE OBTAINED BY CHANGING THE LIFE STYLE AND IMPLEMENTING THE LAWS OF NATURE WITH THE RIGHT MENTAL ATTITUDE.

NATUROPATHY IS A NATURAL HEALING TECHNIQUE USING THE HEALING POWERS OF NATURE. NATUROPATHY BELIEVES "ALL HEALING POWERS ARE WITH IN OUR BODY". HENCE NATUROPATHY IS A COMPLEMENTARY AND ALTERNATIVE TREATMENT OF MEDICINE, WHICH EMPHASIZES THE BODY'S INTRINSIC ABILITY TO HEAL AND MAINTAIN ITSELF. HUMAN BODY POSSESSES INHERENT RE-CONSTRUCTIVE AND SELF-THERAPEUTIC POWERS. NATUROPATHS USE NATURAL ELEMENTS AND NATURAL REMEDIES TO HELP THE BODY HEAL ITSELF.

YOGA IS THE PHYSICAL, MENTAL, AND SPIRITUAL PRACTICE OR DISCIPLINE WHICH WAS ORIGINATED IN ANCIENT INDIA WITH A VIEW TO ATTAIN A STATE OF PERMANENT PEACE, FOR INCREASING FLEXIBILITY AND BALANCE. YOGA IS A FORM OF EXERCISE THAT USES SLOW MOVEMENTS AND STRETCHING. IT IS ALSO GOOD FOR RELIEVING STRESS AND TO GET RELAXED.



YOGA HAS BEEN USED AS A MEDITATION TECHNIQUE FOR THOUSANDS OF YEARS. THUS YOGA IS THE SCIENCE AND ART OF HEALTHY LIVING - PHYSICALLY, MENTALLY, MORALLY AND SPIRITUALLY. IT AIMS AT THE DEVELOPMENT OF PERFECT BALANCE BETWEEN THE BODY AND THE NATUROPATHY IS A NATURAL HEALING TECHNIQUE USING THE HEALING POWERS OF NATURE. NATUROPATHY BELIEVES "ALL HEALING POWERS ARE WITH IN OUR BODY".

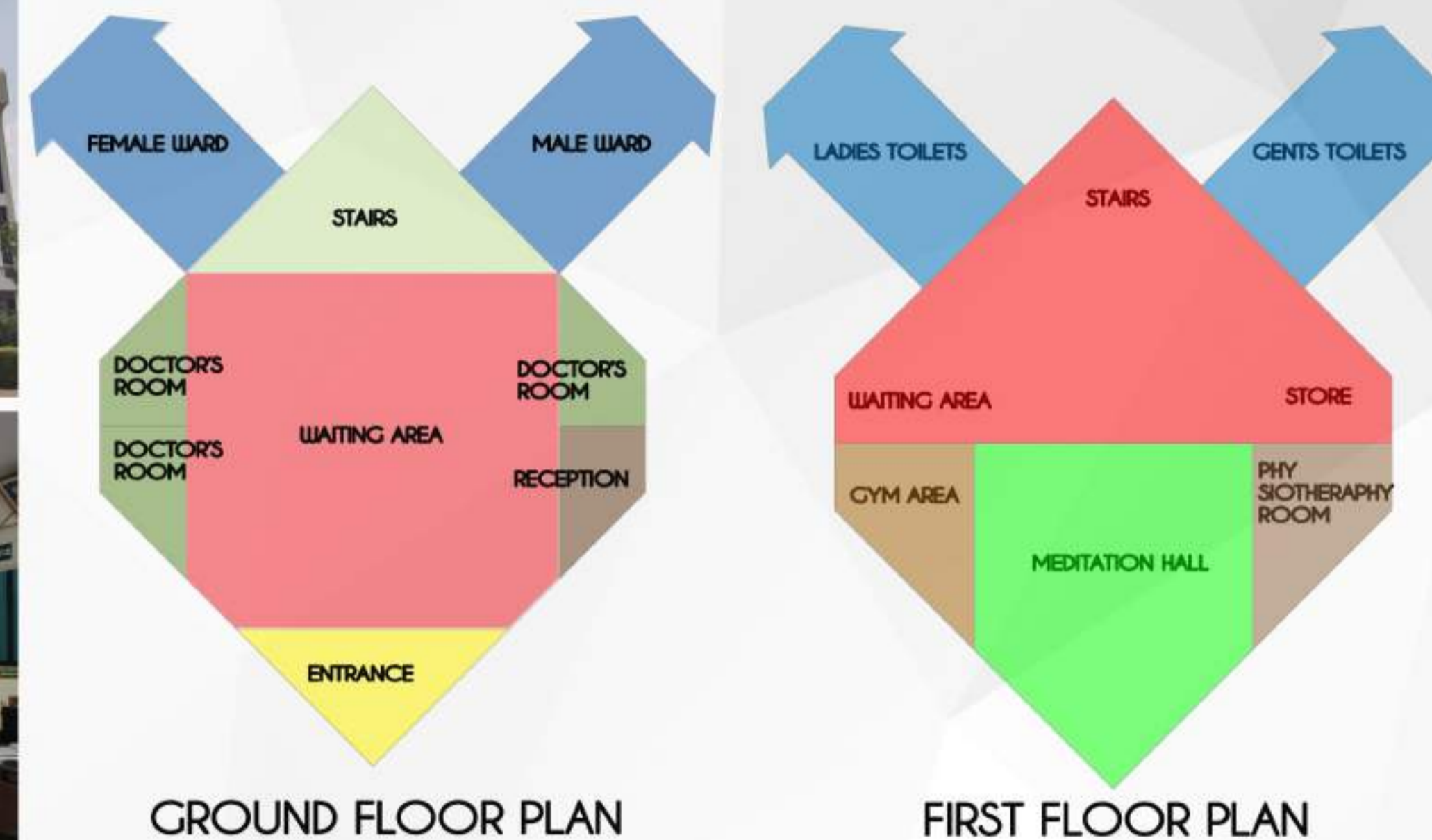
IT AIMS AT THE DEVELOPMENT OF PERFECT BALANCE BETWEEN THE BODY AND THE MINNATUROPATHY IS A NATURAL HEALING TECHNIQUE USING THE HEALING POWERS OF NATURE. NATUROPATHY BELIEVES "ALL HEALING POWERS ARE WITH IN OUR BODY".



### BUBBLE DIAGRAM:



### FLOOR PLANS:



THIS 19 ACRE CAMUS WAS CONSTRUCTED BY AN KOLAPUR BASED ARCHITECT. THE BUILDINGS CONSISTS OF MUTIPLE OPEN TO SKY ON EITHER SIDE.

THE BUILDING IS AN BRICK MASONRY STRUCTURE WITH MAIN BLOCK COMPRISES OF :  
GROUND FLOOR

RECEPTION  
DOCTOR'S CONSULTING ROOM  
OFFICE ROOM  
MALE TREATMENT WARD  
FEMALE TREATMENT WARD  
AND SERVICES

FIRST FLOOR

GENERAL WARD  
MEDITATION HALL  
GYM ROOM  
PHYSIO THERAPY ROOM  
GENTS & LADIES TOILETS  
STORE ROOM

IT ALSO HAS AN 15 BED GENERAL WARD WITH 8X2 16 SUPER LUXURY ROOMS, AND 5 COTTAGES EACH OF 2 BEDS.

AN DINNING HALL OF AROUND 300 CAPACITY AND AN LIBRARY OF 50 CAPACITY WITH ALSO AN RECREATIONAL SPACE, WITH SERVICE ROOM PLACED NEXT TO LIBRARY BLOCK.

THE ARCHITECT HAS BEAUTIFULLY CRAFTED THE STRUCTURE WITH MINIMALISTIC APPROACH WITH SYMMETRICAL PLANNING CONCEPT ALONG WITH SAME PRINCIPLE BEING USED IN THE ELEVATION OF THE BUILDING.

THE BUILDING IS WELL LIGHT WITH NATURAL AIR AND LIGHT VENTILATION,

THE ARCHITECT HAS SENSIBLY USED THE LOCALLY AVAILBLE MATERIALS IN ITS DESIGN.



# CASE STUDY 3 - SHRI DHARMASTHALA MANJUNATHA INSTITUTE OF YOGA AND NATUROPATHY, UJIRE, DHARMASTHALA

## INTRODUCTION

- \*The netravathi nature cure hospital made an humble attempt to consolidate and systemize some of the natural methods known for curing diseases, including yoga which is too a drugless therapy.
- \* The institute believes that the nature is a best healer and nature cure is the adaption of natures own tools, the five great elements of nature earth, water, sky, wind and fire to cure the diseases that afflict the man kind.
- \* The institute believes that the first step in curing a patient is in educating him about the system of nature cure and yoga.

## Details:

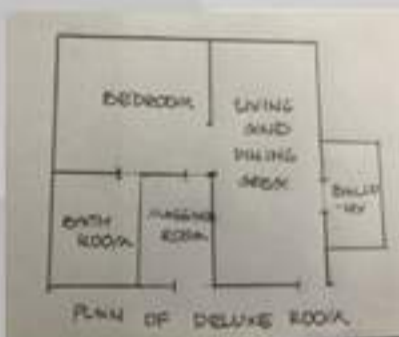
- \* Site area – 14 acres
- \* Site covered – 5 acres
- \* Architect – ar. Pierre elvardo
- \* Owner – dr. Veerendra hegde
- \* Climate – warm humid

## SURROUNDING AREA:

- \* The site is surrounded by profusely wooded surroundings the sloping terrain is advantageous. the approach road is towards the north across which is the river netravathi.
- \* The site is located in an hilly area and the architect has beautifully designed the hospital according to the slope with particular levels.

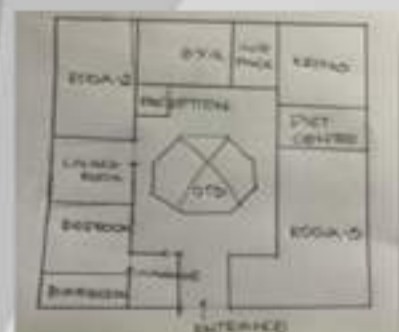
## DELUXE BLOCK:

- \* There are total 8 deluxe rooms each room consists of 2 beds along with an attached bathroom which measures 2.5 x 1.5 mts
- \* This block is approached through the covered corridors staircase and covered bridges are used for the circulation.
- \* The block is ground and first.



## VIP COTTAGE:

- \* The VIP cottage has 2 blocks.
- \* This block is also ground and first floor.
- \* The rooms in this block have a living, bedroom, bathroom and treatment area.
- \* This block has a separate diet centre, gym and space for mud baths, etc.
- \* There is space for parking which can allmost accommodate 10 – 12 cars.



## PARKING:

- \* The parking space for doctors, staff visitors is provided outside in from of the main block, and is about 25 cars.
- \* The parking for the VIP, deluxe rooms is provided near the particular blocks.
- \* The doctors visit the cottages treat the patients.

## INFERENCE:

- \* There is no separate doctors and staff parking.
- \* The parking is not properly defined for long and short term.



## LOCATION :



## LOCATION:

- \*The site is located in the middle of the evergreen forest and besides the river netravathi dharmasthala is the pilgrimage centre in dhakshina kannada district, Karnataka.
- \* The nature cure hospital is located 3 kms from dharmasthala.
- \*The institute is located at an ideal location away from the city its scenic atmosphere and the interior location makes it an ideal place.

## ACCESS FROM ROAD:

- \* The access to the institute is from the main road connecting dharmasthala to ujire. The access road carries both heavy and light traffic

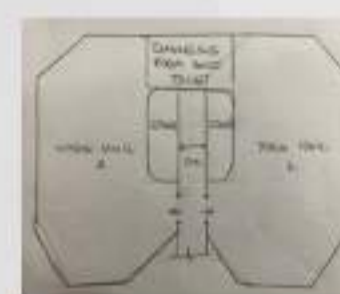
## AUDITORIUM:

- \*There is a hall where the yoga was conducted earlier, now it is being used for the recreational area.
- \* It consists of TV, book racks, seating area even cultural programs are conducted in this hall.
- \* The area of the hall is about 130 sq m.



## YOGA HALL:

- \*There are 2 new yoga halls constructed.
- \* Each one measures about 250 sq m.
- \* There are semi octagonal in shape in the interiors and are well furnished with acoustical materials and have a stage in front for the instructor.
- \* The yoga hall consists of images of yoga postures on the glass
- \* There is very goof light and ventilation.
- \* There is a lobby between the two yoga halls which measures 3 mts.
- \* Polished stone is covered on the floors.
- \* There are toilets and changing rooms provided in the yoga hall.



## INFERENCE:

- \* There is good light and ventilation
- \* The size of the yoga hall is sufficient enough.
- \* They are at a appropriate location where there is no disturbance or noise pollution.

## STEAM BATH:

- \* This section shows steam bath where 4 rooms of 2.5 x 2.5 m is provided.

## GENERAL WARD:

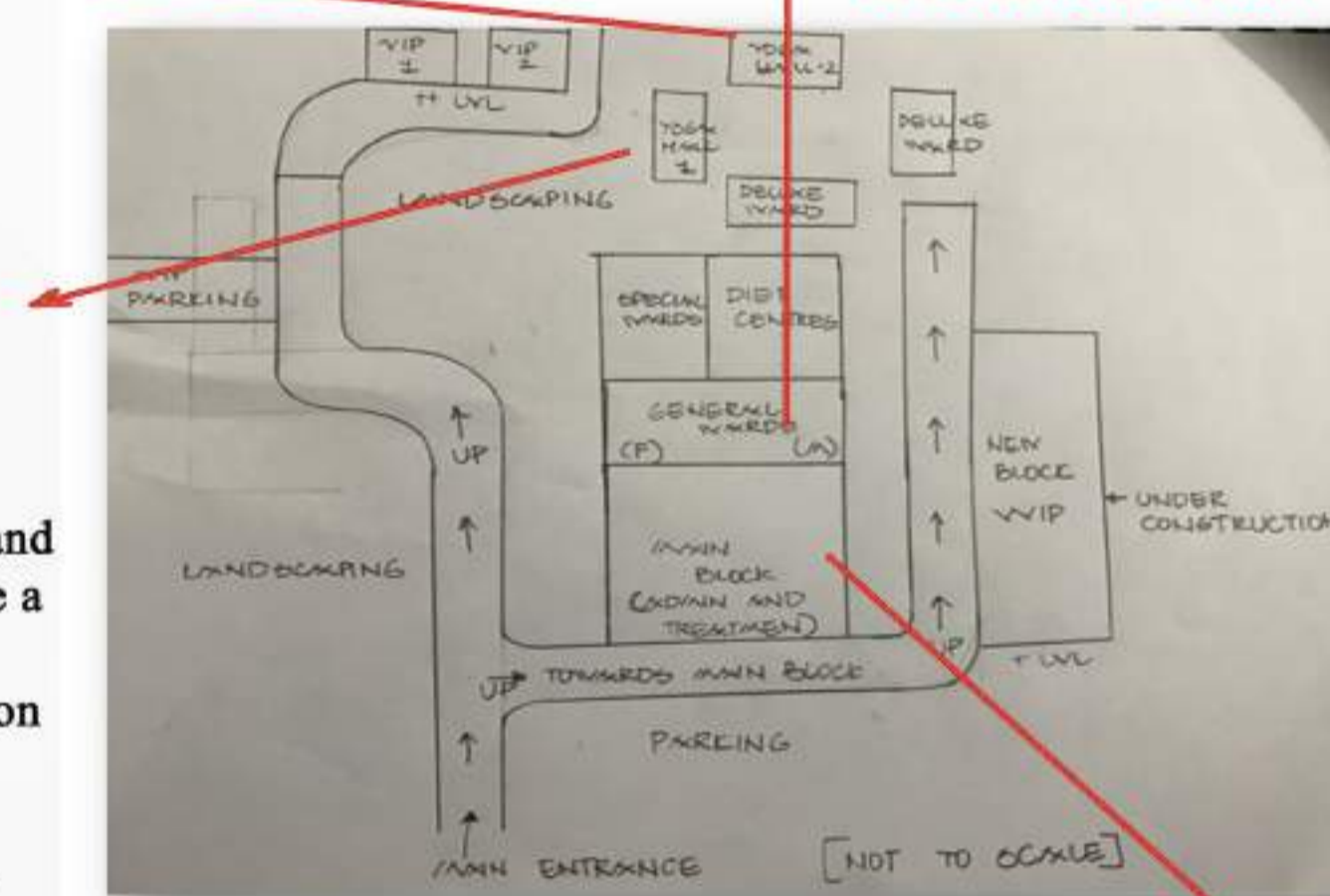
- \*There are separate general wards for ladies and gents.
- \* The gents general ward is ground and first and accommodates about 100 beds.
- \* Whereas the female general ward accommodates about 50 beds which also being ground and first.
- \* The area of gents general ward is about 350 – 400 sq m and the area of ladies ward is about 200 sq m.
- \* The wards are well furnished of natural wood and are properly planned.

## INFERENCE:

- \*There is no sufficient light and ventilation in the gents ward.
- \* There are no lockers provided in the wards.
- \* The gents treatment section is far from the gents ward.
- \* The ladies treatment section is near the ladies ward.
- \* There are sufficient no of beds in the general wards.



## SITE CIRCULATION



## TREATMENT SECTION:

- \* The treatment area is the most important area provided with the well connected corridors and is easily accessible. the gents treatment section is towards the left side after the end of waiting area.
- \* Whereas one has to go a little far to reach the ladies treatment section which is allmost at the end of the building and it is near to the accommodation.

## MERITS:

- \* The institute is located at an ideal place away from the city.
- \* Its scenic atmosphere and the interior location makes it an ideal location.
- \* The public zone is close to the entrance.
- \* There are different classes of accommodation making its convenient for the patients to choose according to their economic status.
- \* The staff quarters is at the proper location.
- \* The site landscaping is well maintained and adds to the scenic view.

## ZONING:

- \*The public zones is close to the entrance such as reception, admin offices, doctors cabins, laboratories, etc.,
- \* The semi private zone consists of the treatment section, yoga hall, diet centre, gymnasium, physiotherapy, etc.,
- \* The private zone consists of the general ward , special ward, dormitories, deluxe rooms and VIP cottages

## INFERENCE:

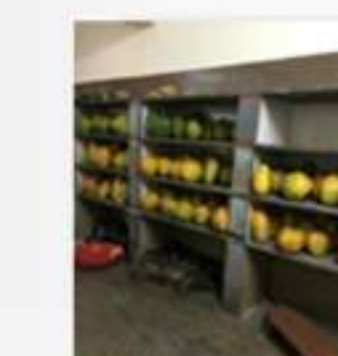
- \* There is proper zoning done
- \* There is horizontal planning due to the sloping terrain.
- \* The private zoning has no disturbance and is properly located
- \* The public zone is at a proper location and is easily accessible.

## SECURITY ROOM:

- \* The security room is most important in any type of building.
- \* It is most important in the nature cure hospital so that the patients are not allowed inside with the outside food items, etc.
- \* The security room measures 2.5 x 2.5 m and is located on the right side of the entrance.

## KITCHEN:

- \* The kitchen is provided with washing area, dry and cold storage, boiling area and a common area.



## DIET CENTRE:

- \* The diet centre consists of the seating area and the serving area that is the pantry.
- \* There is a corridor separating the kitchen from the diet centre.
- \* There is outdoor seating provided for the diet centre which is covered with Mangalore tiles.
- \* The diet centre is different for different categories of diets like liquid, boiled and raw diet.

## INFERENCE:

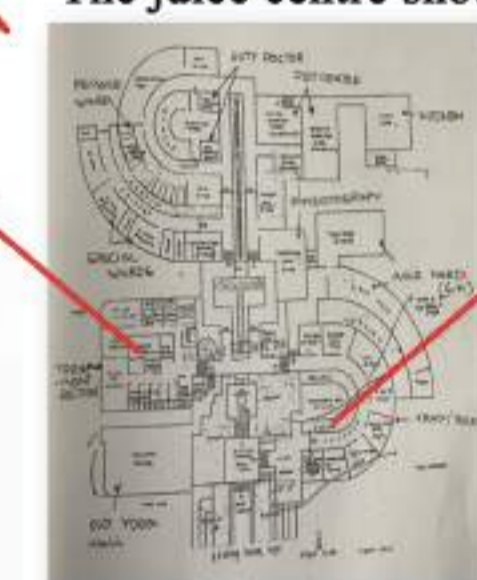
- \* The kitchen should have been beside the diet centre but not separated by the corridor. This will result in the disturbance of the other circulation of the building. The juice centre should have been more near to the kitchen

## ADMINISTRATION:

- \*The administration is provided just in front of the reception separately in this area place for 1 manager, 2 clerks and 1 cashier is provided.
- \* Huge window has been used for maximum entry of natural light and ventilation.
- \* The area is about 45 sq m and is well furnished.

## INFERENCE:

- \* There is sufficient area provided for the admin section There is proper light and ventilation in this area

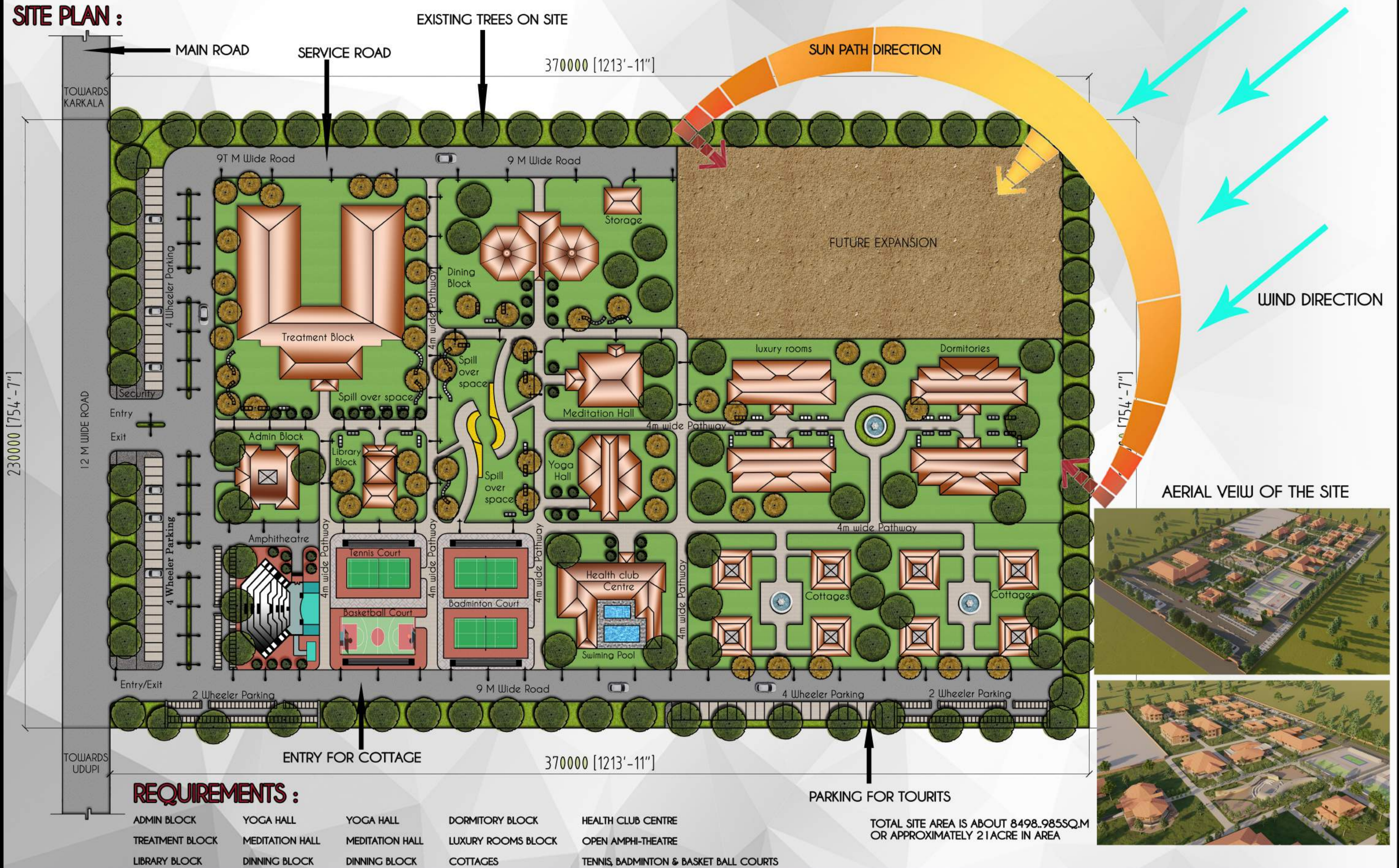


## DEMERITS:

- \* Due to the parking in front of the main building its view is lost and entrance is obstructed.
- \* The levels makes the circulation very difficult for the patients.
- \* Dormitories for the patients are within the main block.
- \* The staff accommodation is not spacious.



**SITE PLAN :**



**REQUIREMENTS :**

- |                 |                 |                 |                    |  |
|-----------------|-----------------|-----------------|--------------------|--|
| ADMIN BLOCK     | YOGA HALL       | YOGA HALL       | DORMITORY BLOCK    | HEALTH CLUB CENTRE                     |
| TREATMENT BLOCK | MEDITATION HALL | MEDITATION HALL | LUXURY ROOMS BLOCK | OPEN AMPHI-THEATRE                     |
| LIBRARY BLOCK   | DINNING BLOCK   | DINNING BLOCK   | COTTAGES           | TENNIS, BADMINTON & BASKET BALL COURTS |

TOTAL SITE AREA IS ABOUT 8498.985SQ.M OR APPROXIMATELY 21ACRE IN AREA



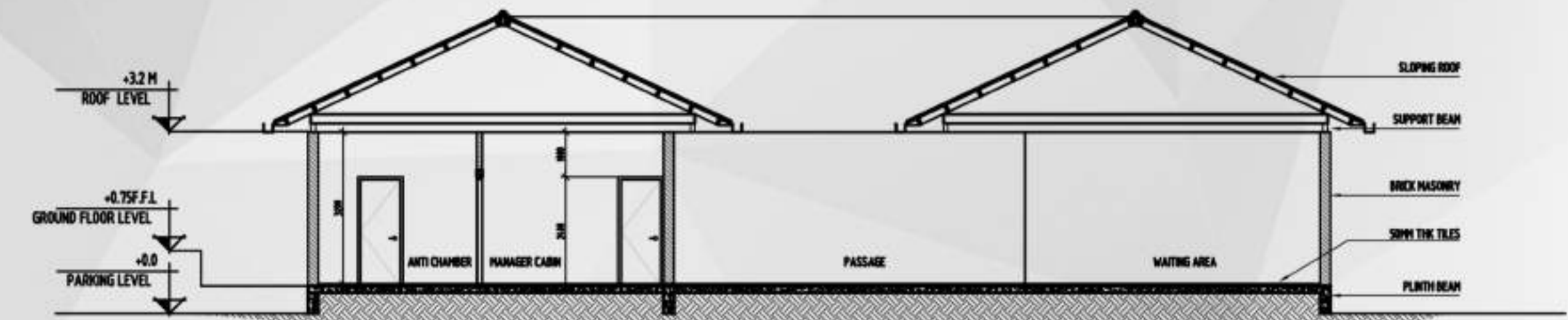
**ADMIN BLOCK :**



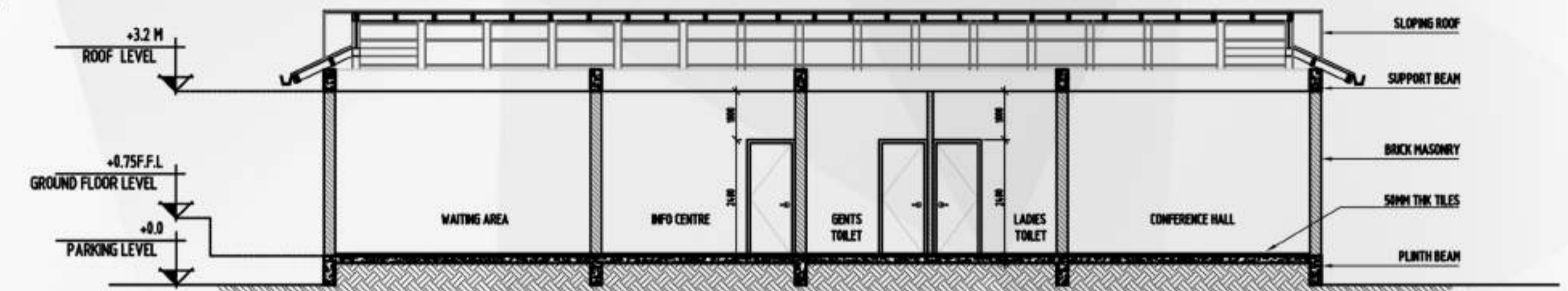
GROUND FLOOR PLAN

**LEGENDS :**

- MANAGER CABIN
- WAITING AREA
- INFORMATION DESK
- RECEPTION
- ASSISTANT MANAGER CABIN
- OFFICE
- DINNING AREA
- CONFERENCE HALL
- INFORMATION DESK
- GENTS TOILET
- LADIES TOILET



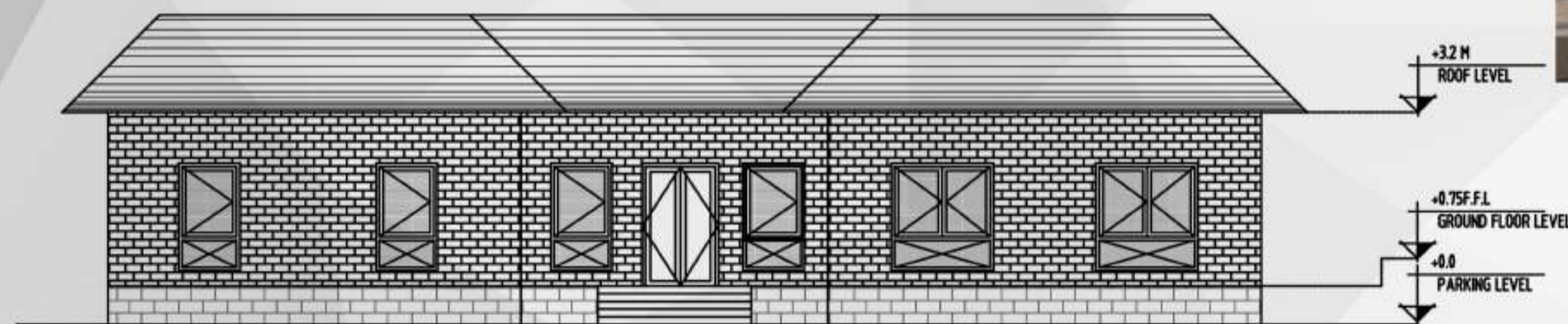
SECTION @ A-A'



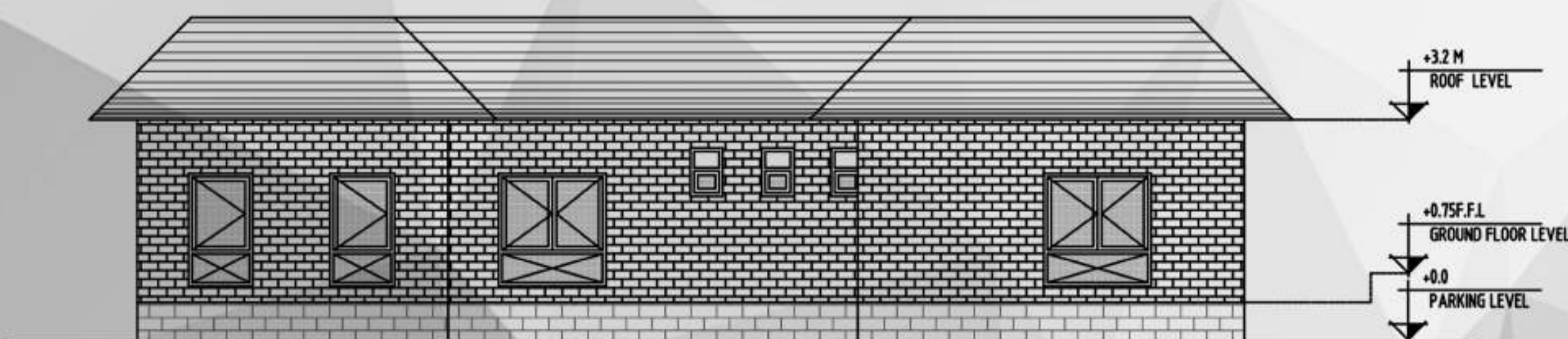
SECTION @ B-B'



VEIWS OF ADMIN BLOCK



ELEVATION @ 01



ELEVATION @ 02



KEY PLAN

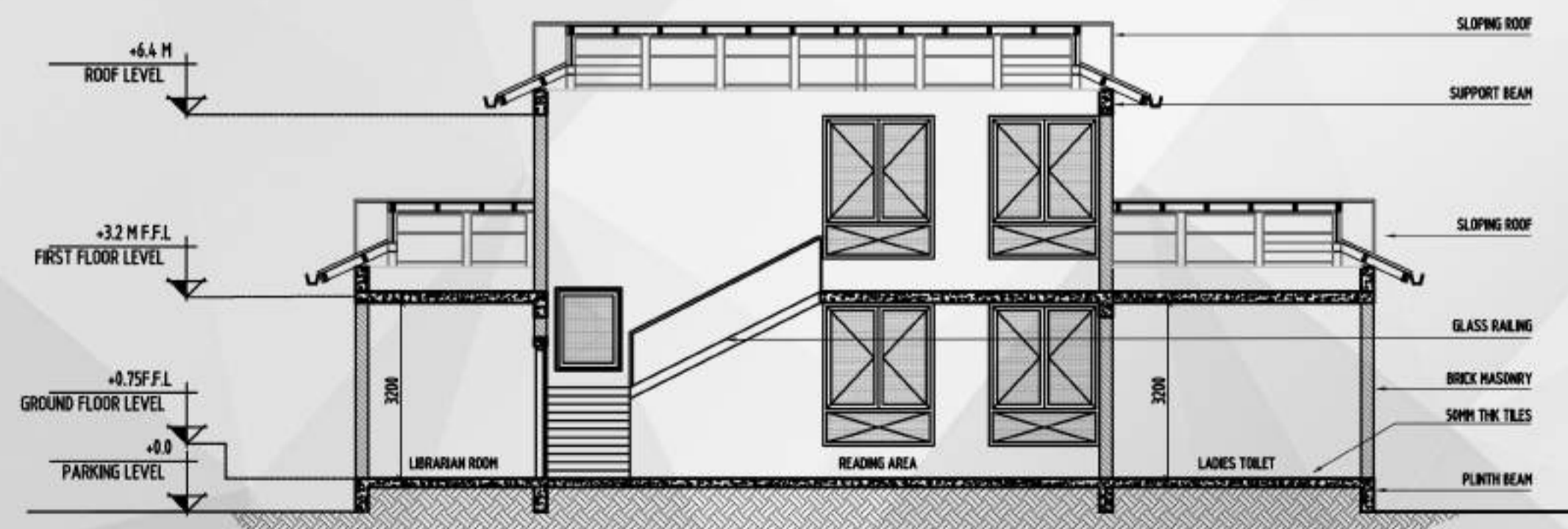
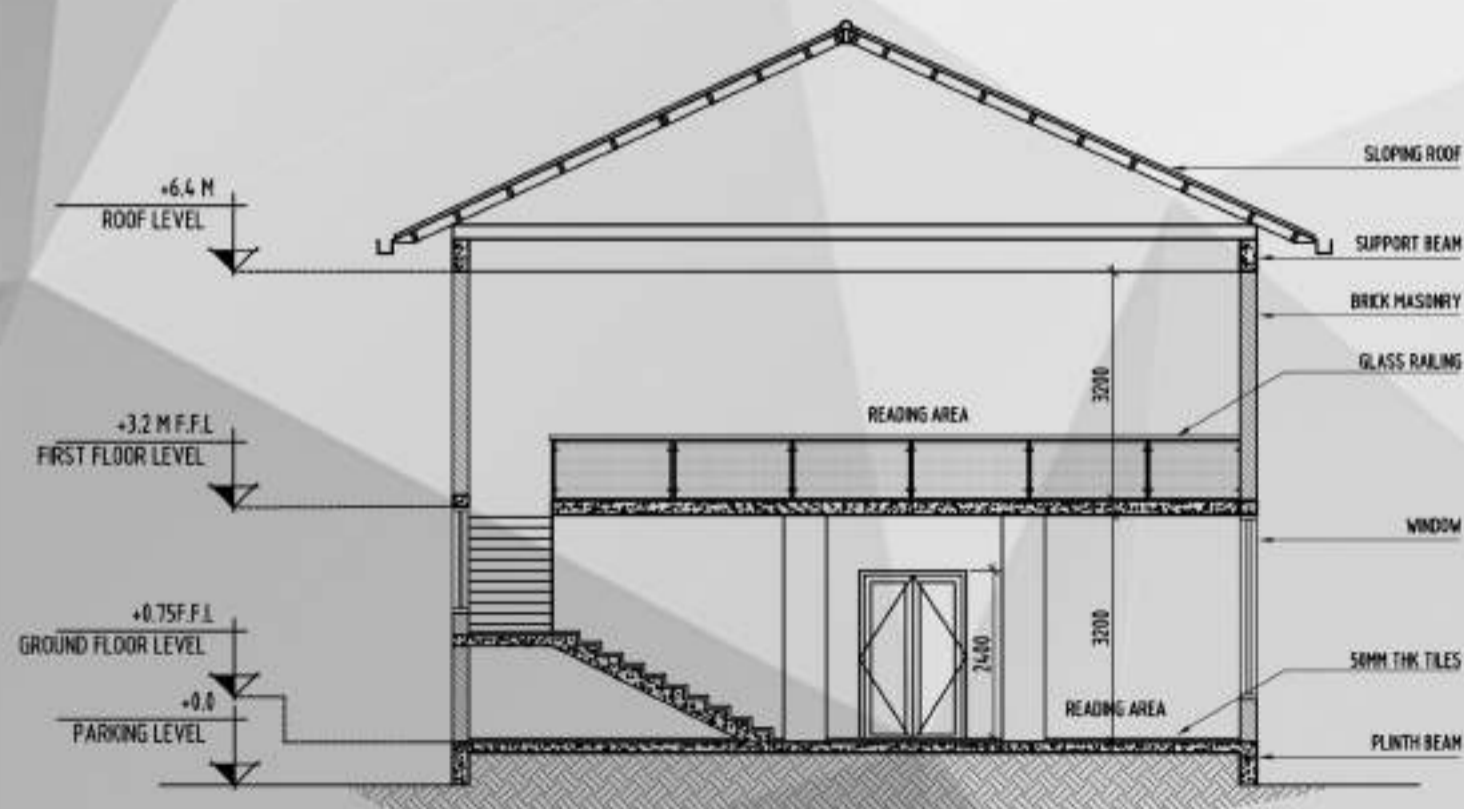
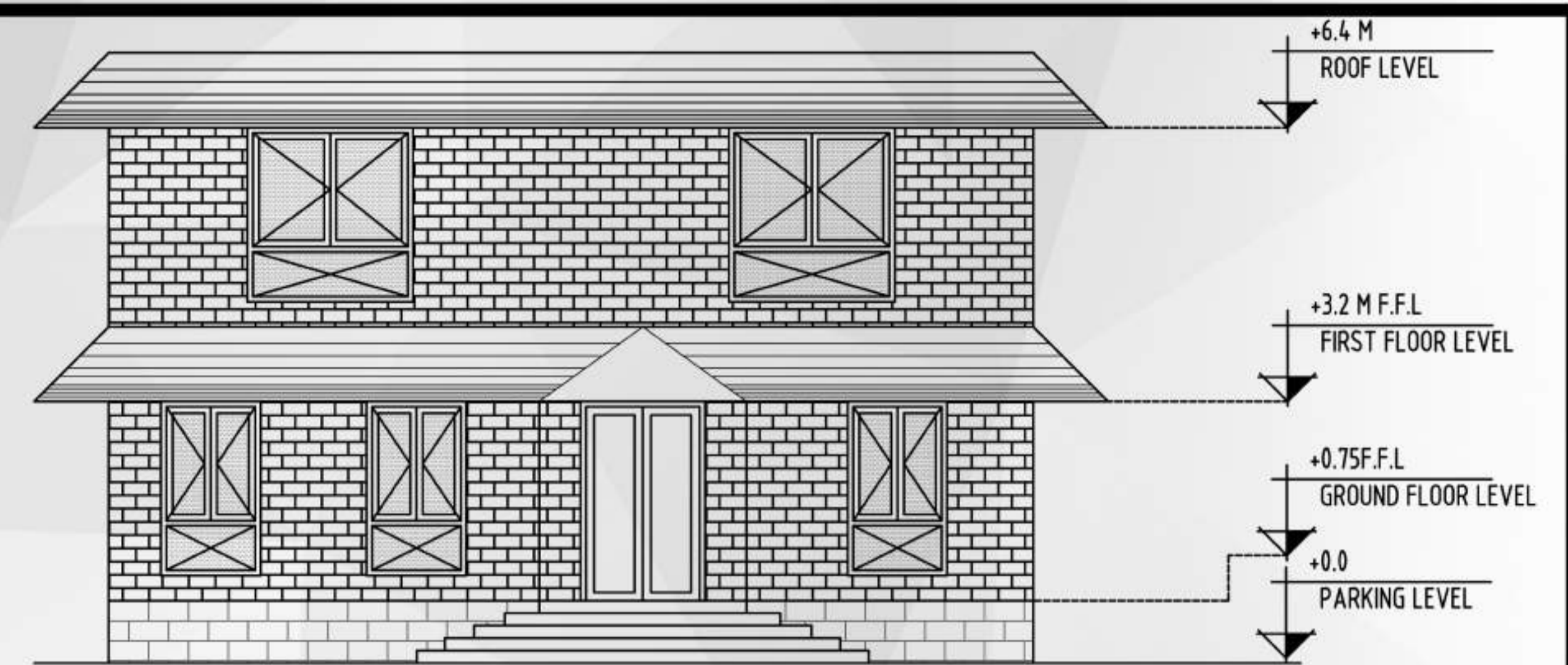


# LIBRARY ROOMS :



## LEGENDS :

- LIBRARIAN OFFICE
- BAG COUNTER
- STORE ROOM
- READING AREA
- READING AREA ON MEZZANINE AREA
- DISCUSSION ROOM
- BOOKS STORE ROOM
- DRINKING WATER AREA
- GENTS TOILET
- LADIES TOILET

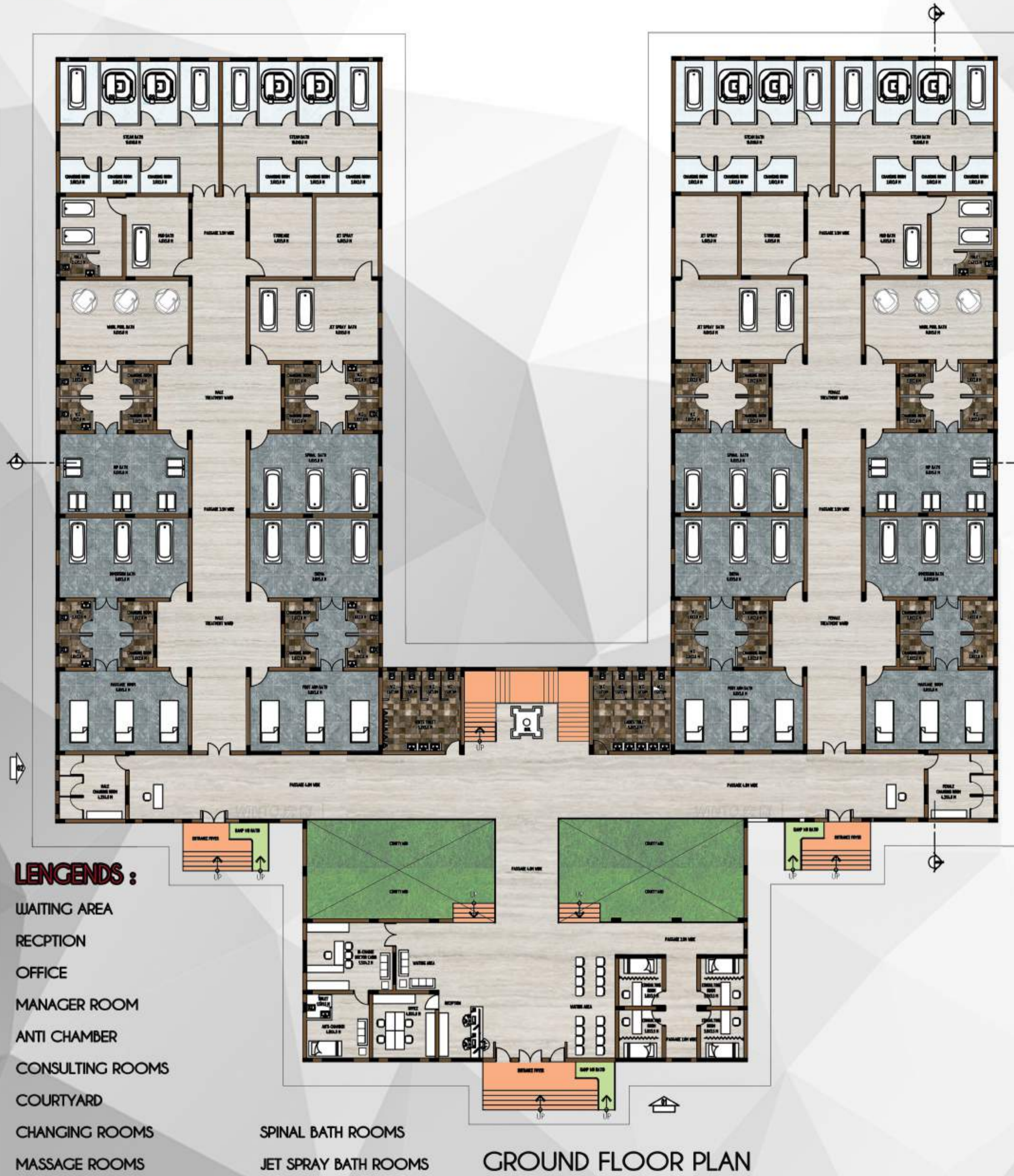


VEIWS OF LIBRARY BLOCK

## KEY PLAN



**TREATMENT BLOCK :**



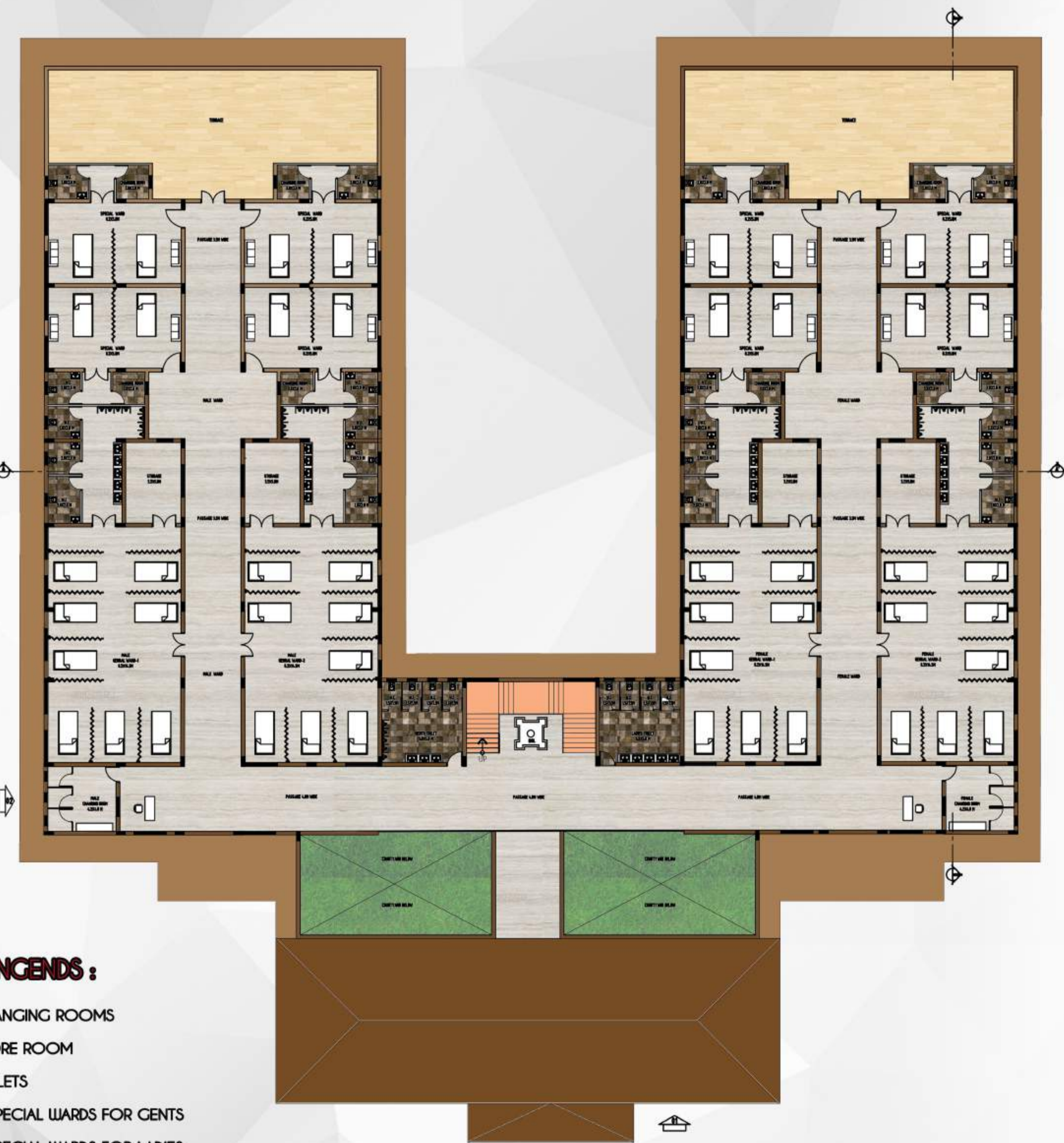
**LEGENDS :**

- WAITING AREA
- RECEPTION
- OFFICE
- MANAGER ROOM
- ANTI CHAMBER
- CONSULTING ROOMS
- COURTYARD
- CHANGING ROOMS
- MASSAGE ROOMS
- FOOT ARM BATH ROOMS
- IMMERSION BATH ROOM
- HIP BATH ROOM
- ENEMEA ROOM
- SPINAL BATH ROOMS
- JET SPRAY BATH ROOMS
- MUD BATH ROOMS
- STEAM BATH ROOMS
- GENTS TOILET
- LADIES TOILET

GROUND FLOOR PLAN

**LEGENDS :**

- CHANGING ROOMS
- STORE ROOM
- TOILETS
- 4 SPECIAL WARDS FOR GENTS
- 4 SPECIAL WARDS FOR LADIES
- TERRACE

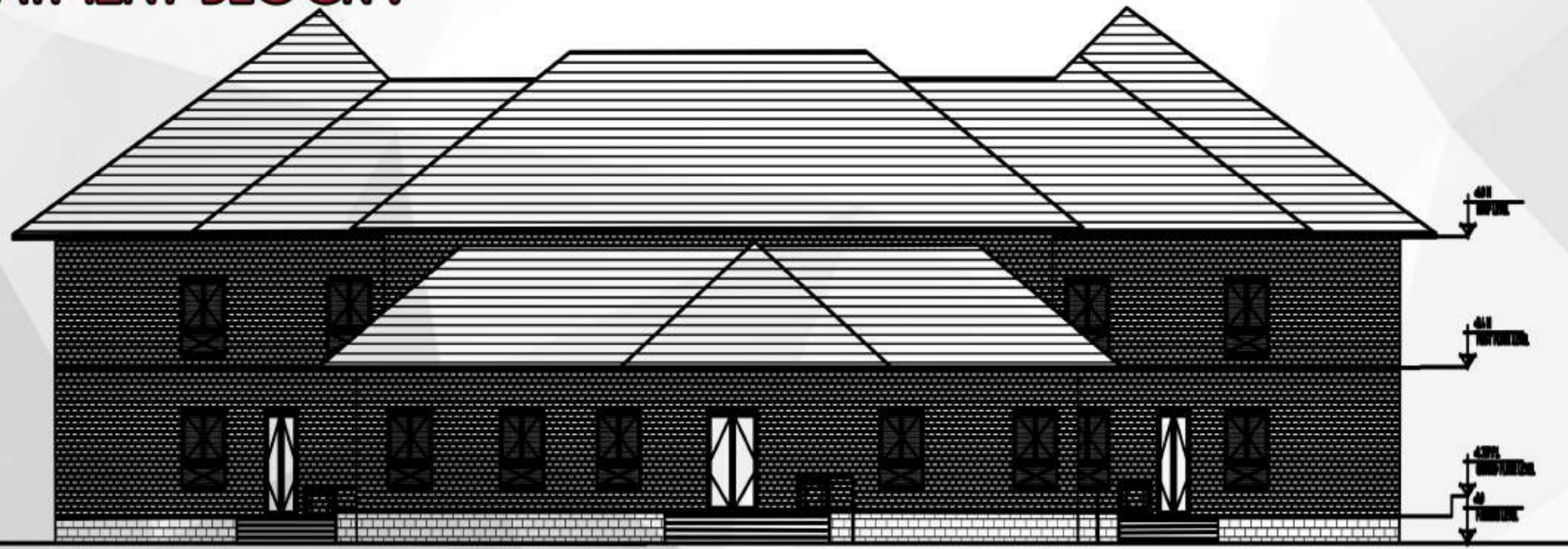


FIRST FLOOR PLAN

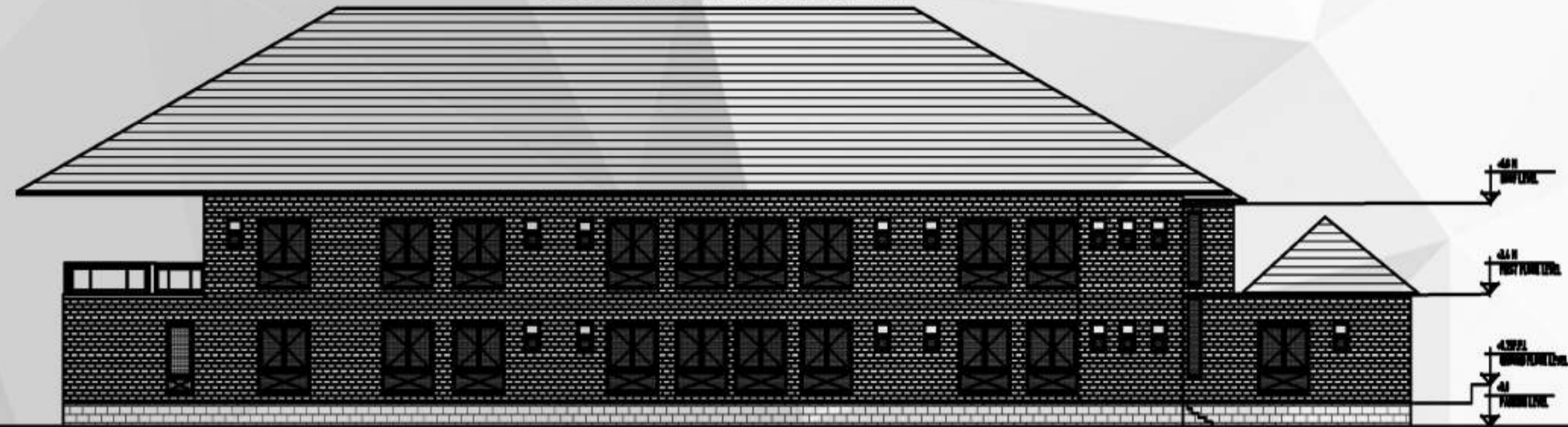
KEY PLAN



TREATMENT BLOCK :



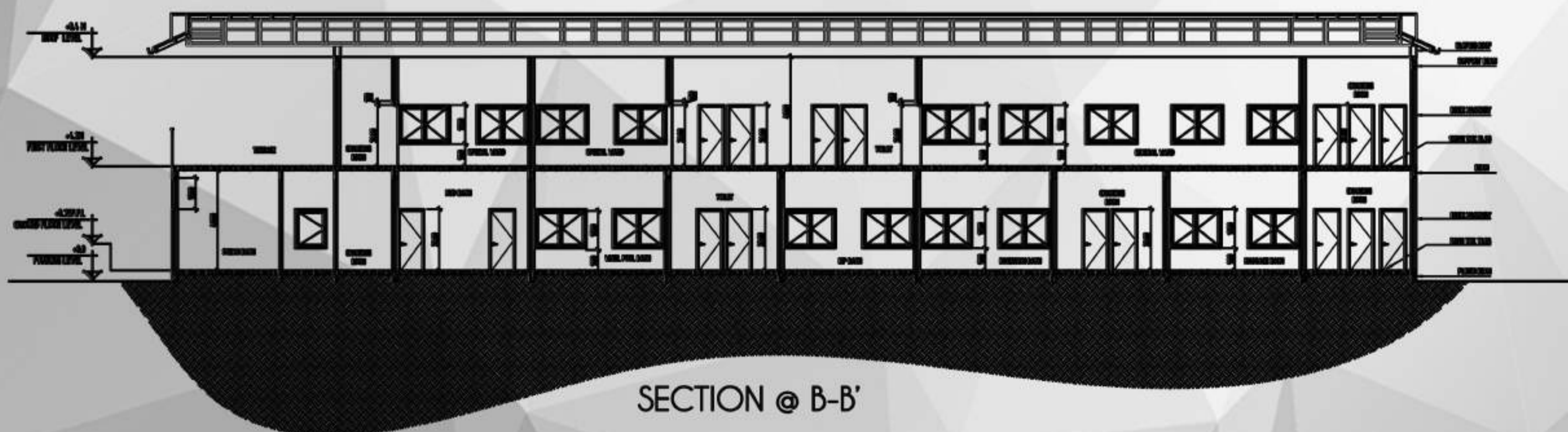
GROUND FLOOR PLAN



FIRST FLOOR PLAN



SECTION @ A-A'



SECTION @ B-B'



VEIWS  
TREATMENT  
BLOCK



KEY PLAN

AYUSH HEALTH RESORT

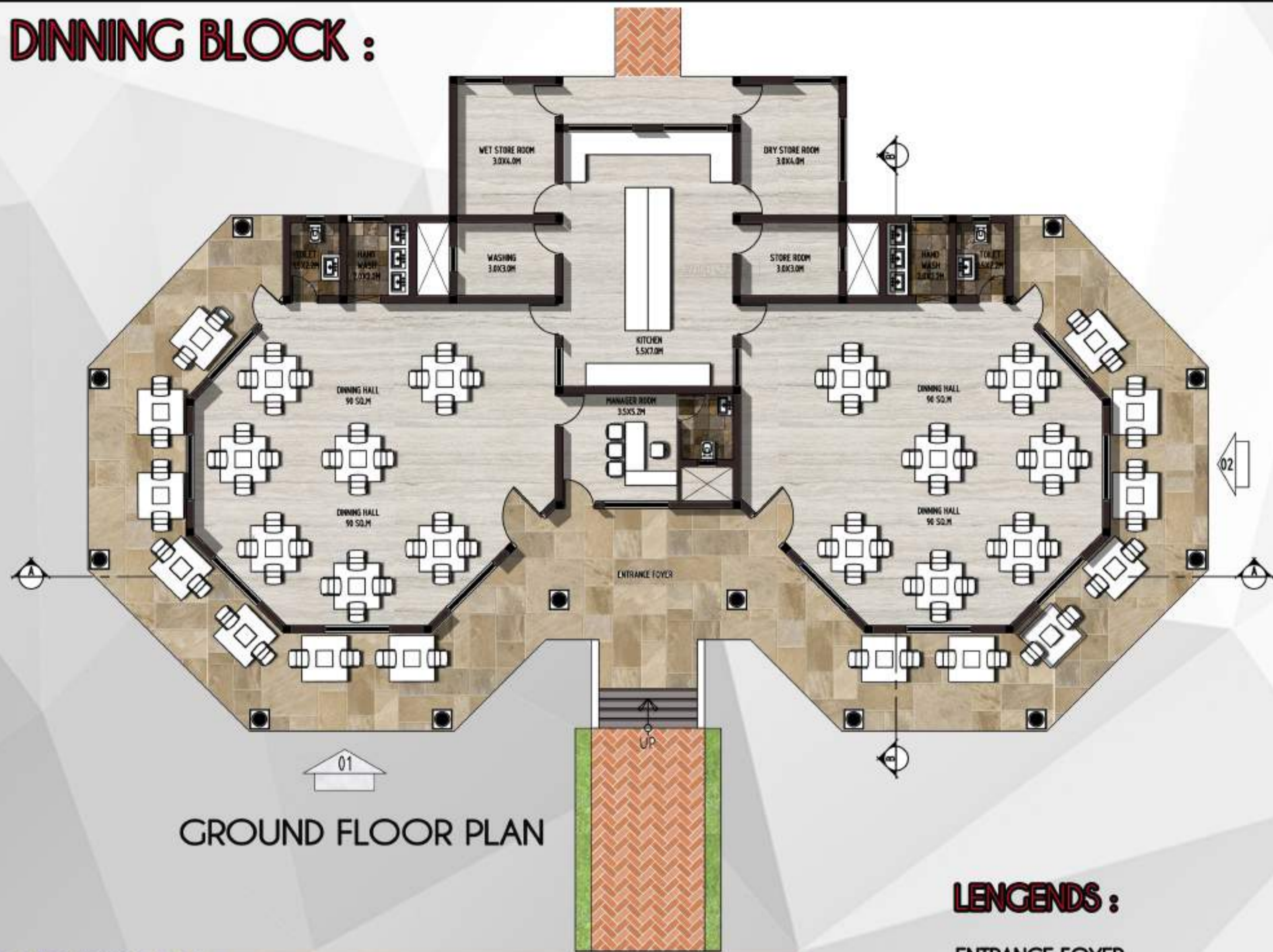


DATE:  
SHEET NO :  
DRWG NO:  
SCALE :

SIGN:

BHUVANESH .I.K  
3PD15AT009  
X SEM ( A )  
P.D.A.C.E.K

**DINNING BLOCK :**



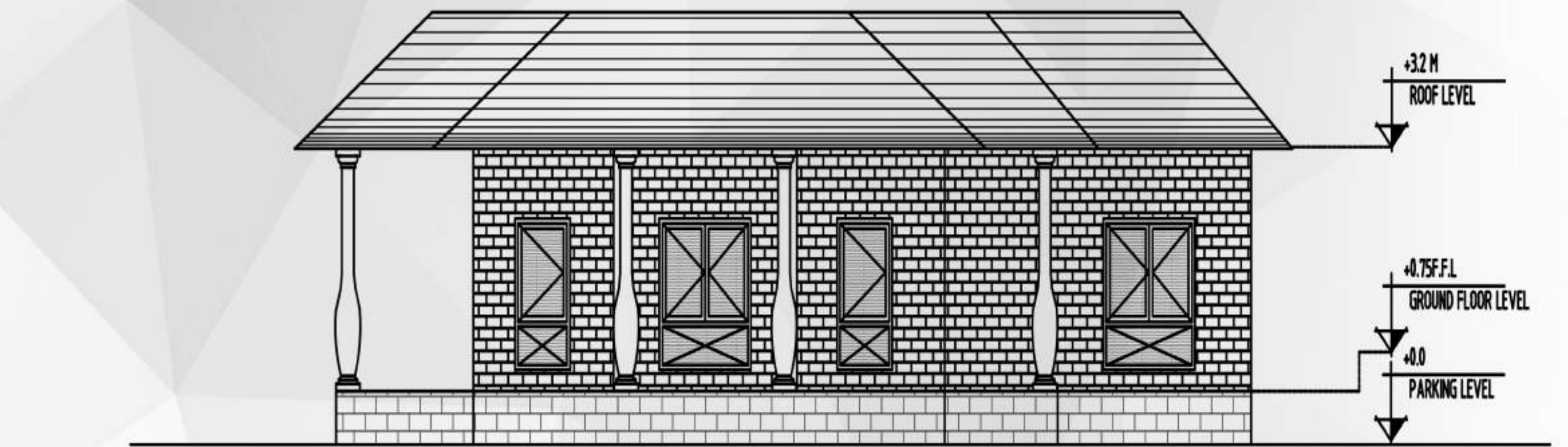
GROUND FLOOR PLAN

**LEGENDS :**

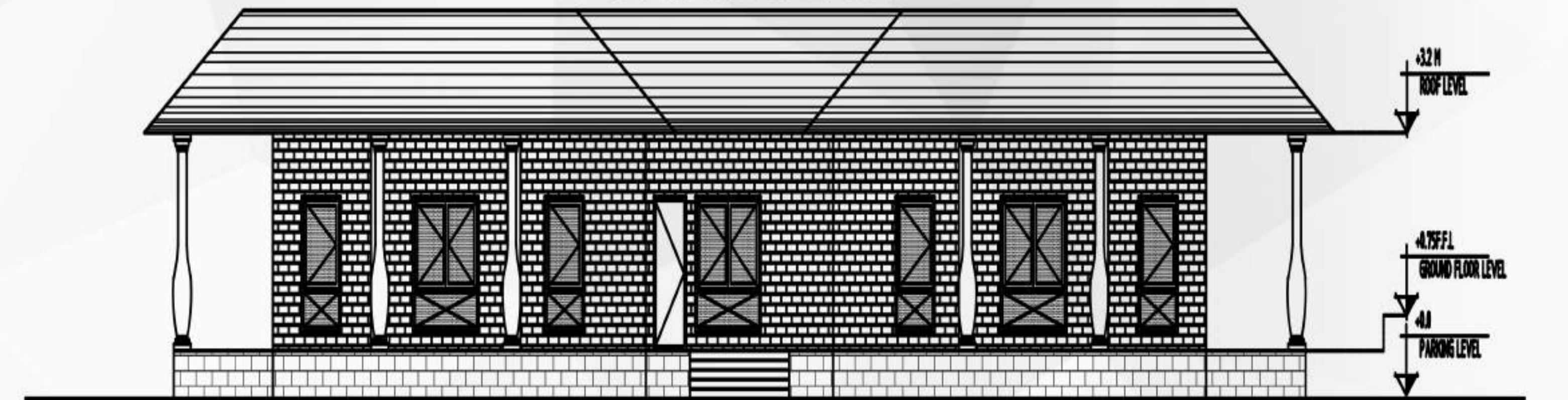
- ENTRANCE FOYER
- 2 SEPERATE DINNING AREA
- MANAGER ROOM
- KITCHEN
- STORE ROOM
- WASHING AREA
- WET & DRY STORAGE
- HAND WASH
- TOILETS
- OUTSIDE SITTING AREA



VEIWS OF DINNING BLOCK



ELEVATION @ 02



ELEVATION @ 01



SECTION @ A-A'

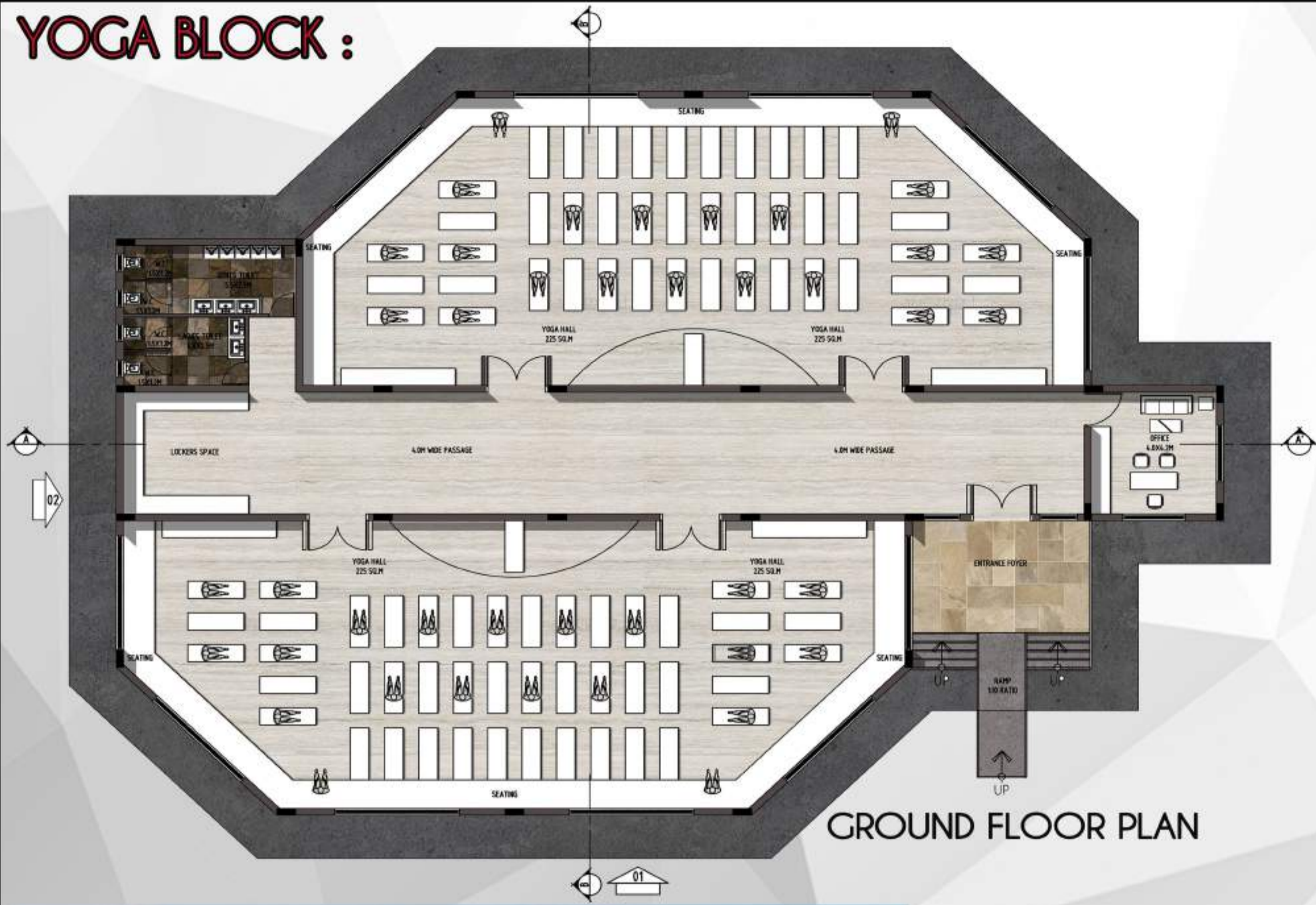


SECTION @ B-B'

KEY PLAN



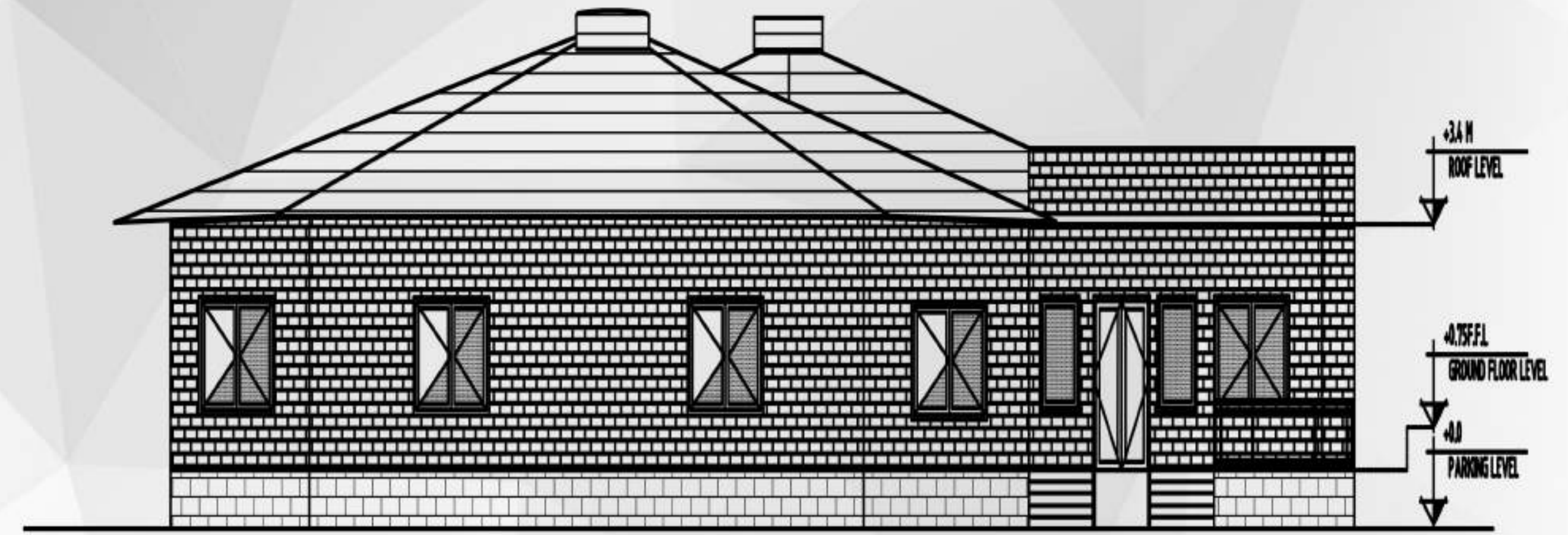
**YOGA BLOCK :**



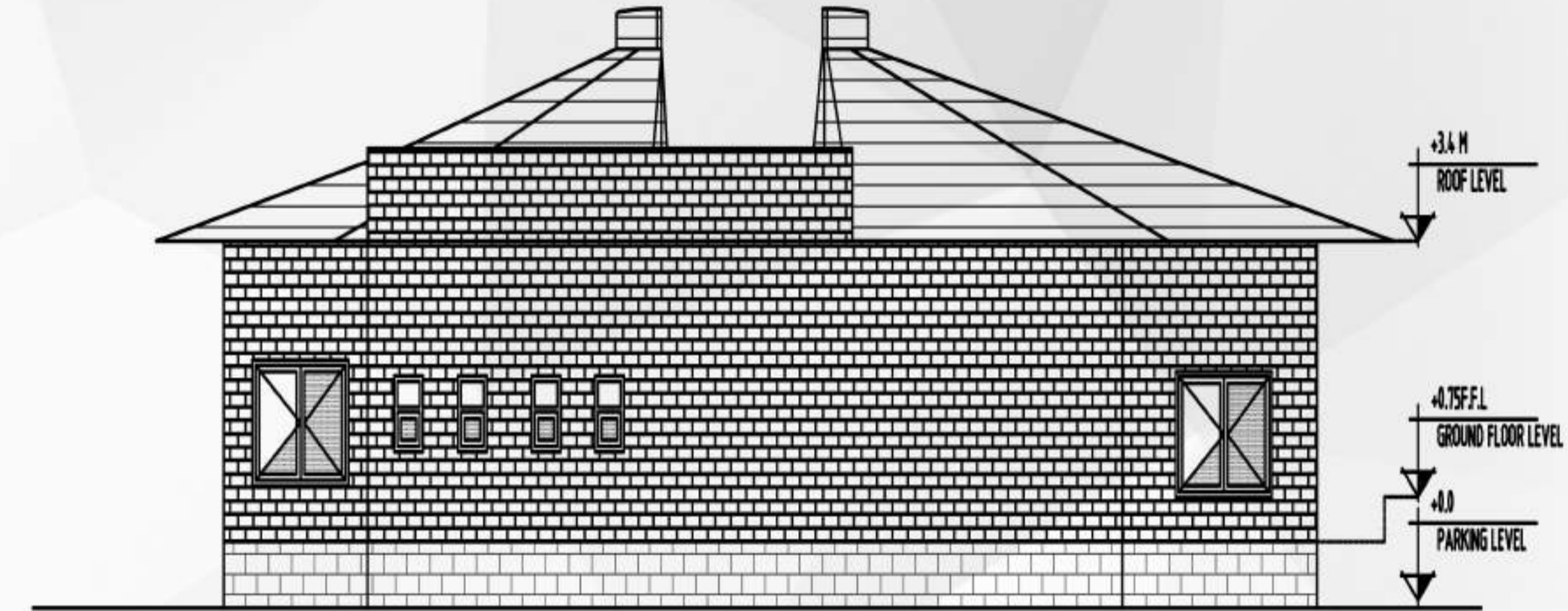
GROUND FLOOR PLAN

**LEGENDS :**

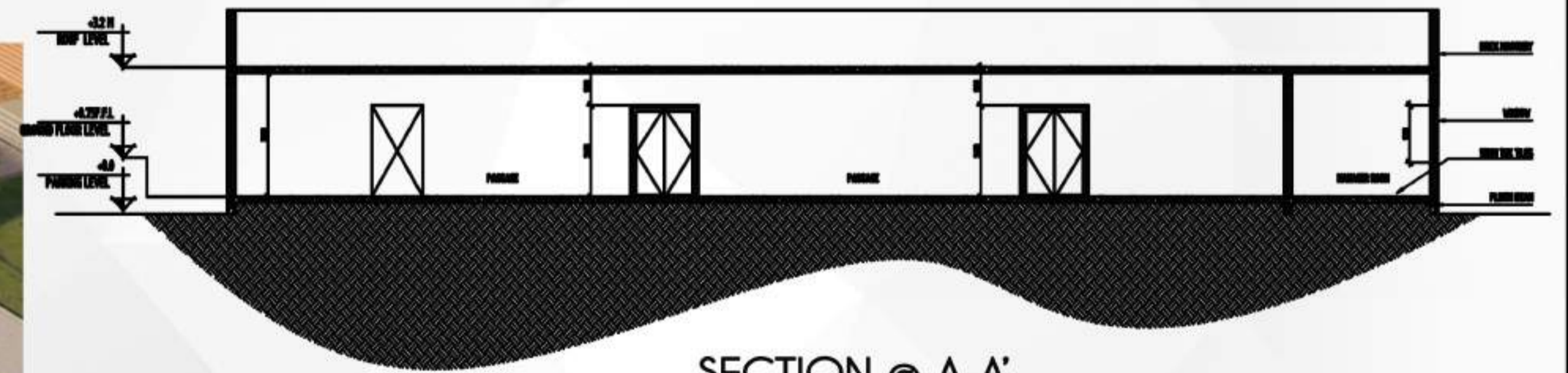
- ENTRANCE FOYER
- OFFICE
- 2 YOGA HALL
- SPACE FOR LOCKERS
- GENTS TOILET
- LADIES TOILET



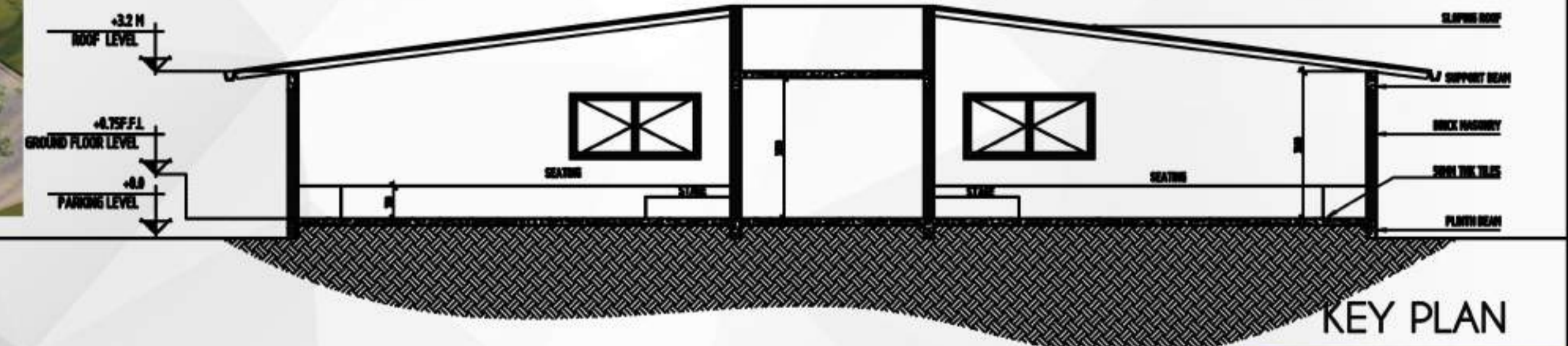
ELEVATION @ 01



ELEVATION @ 02



SECTION @ A-A'



SECTION @ B-B'

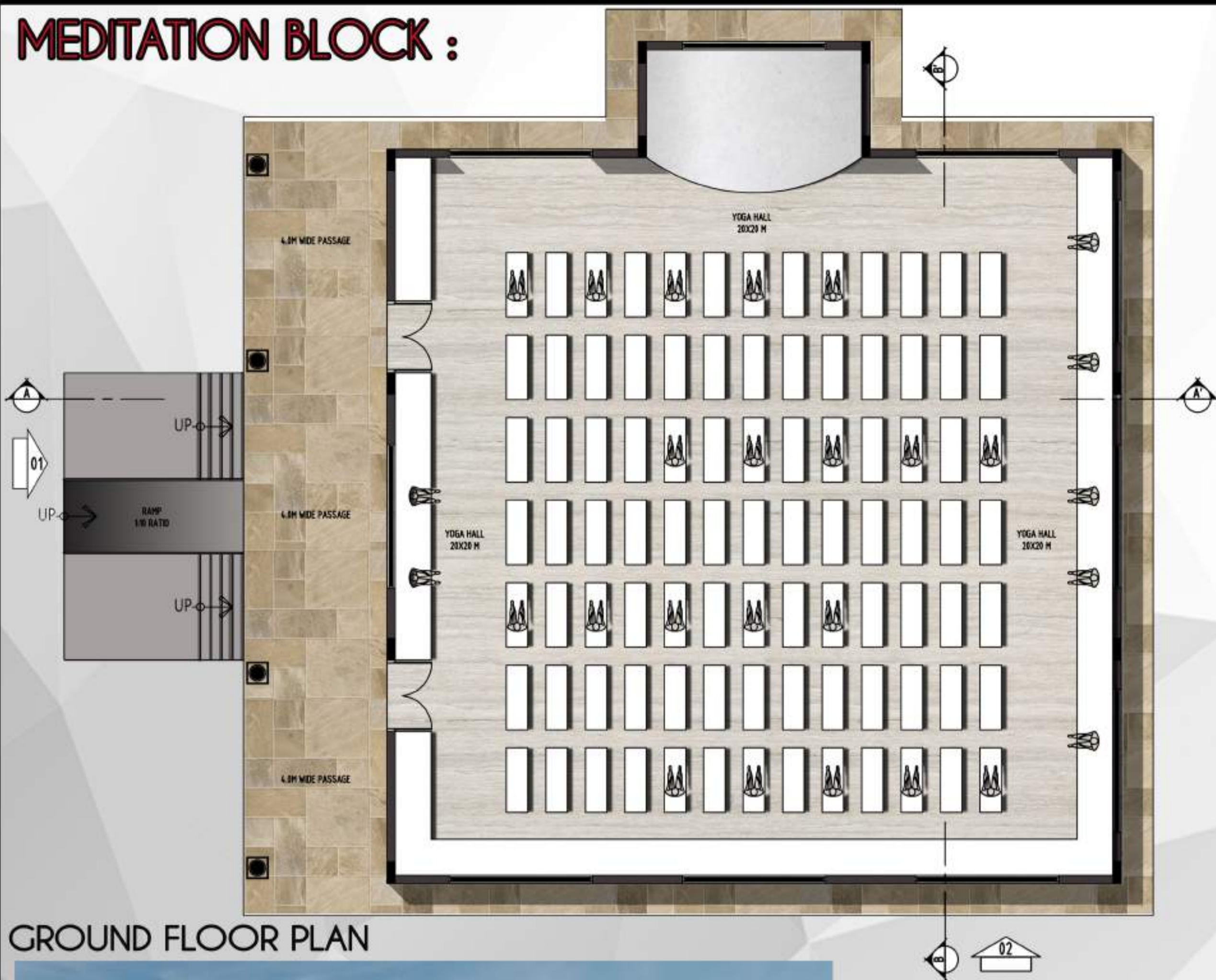
KEY PLAN



VEIWS OF YOGA BLOCK



# MEDITATION BLOCK :



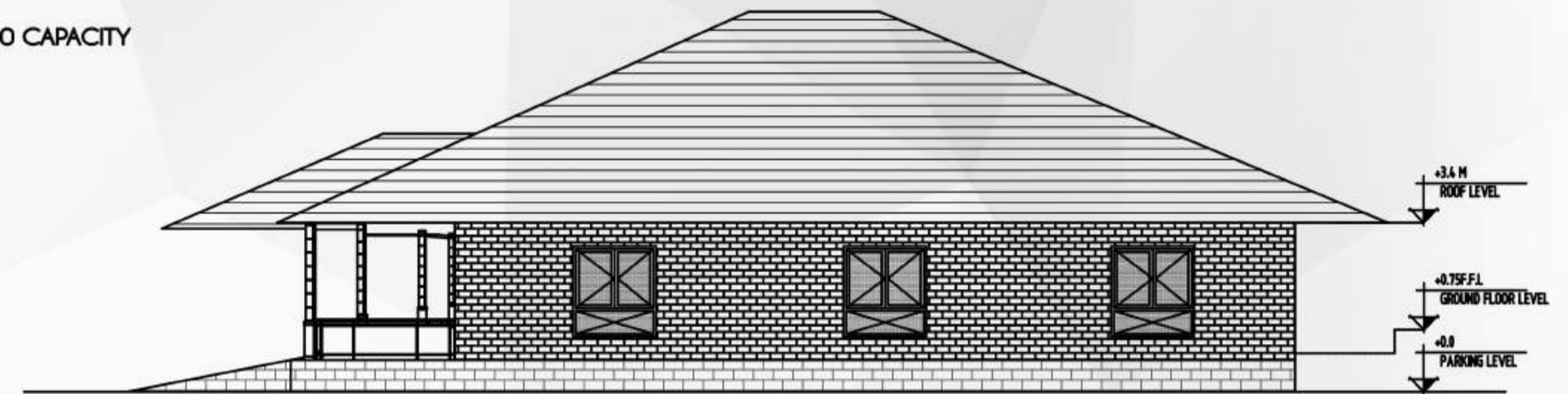
GROUND FLOOR PLAN

## LEGENDS :

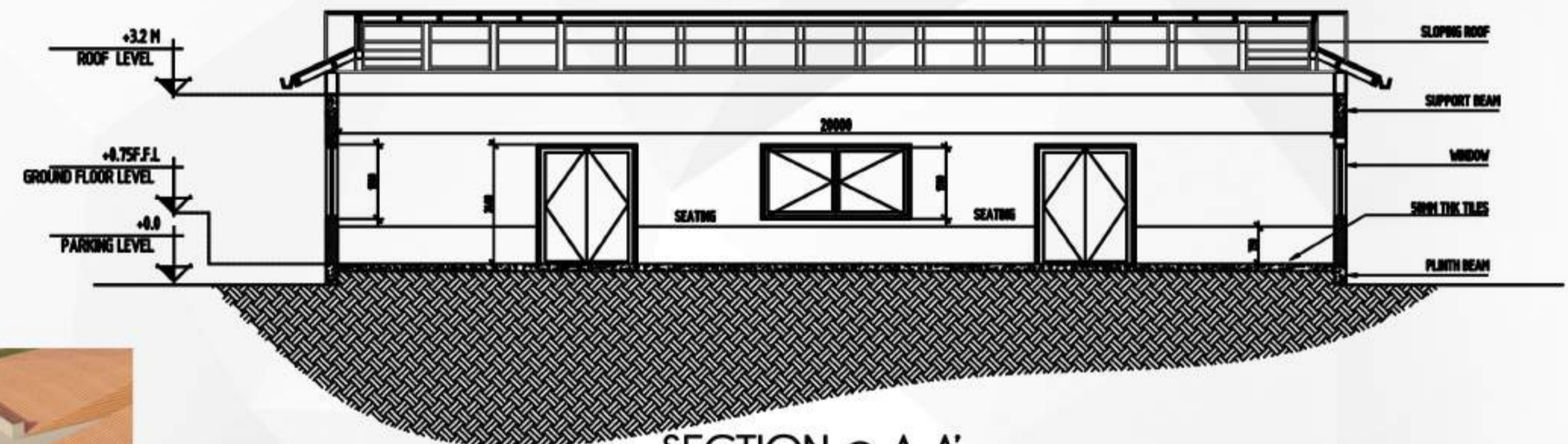
- ENTRANCE FOYER
- MEDITATION HALL OF 100 CAPACITY
- STAGE



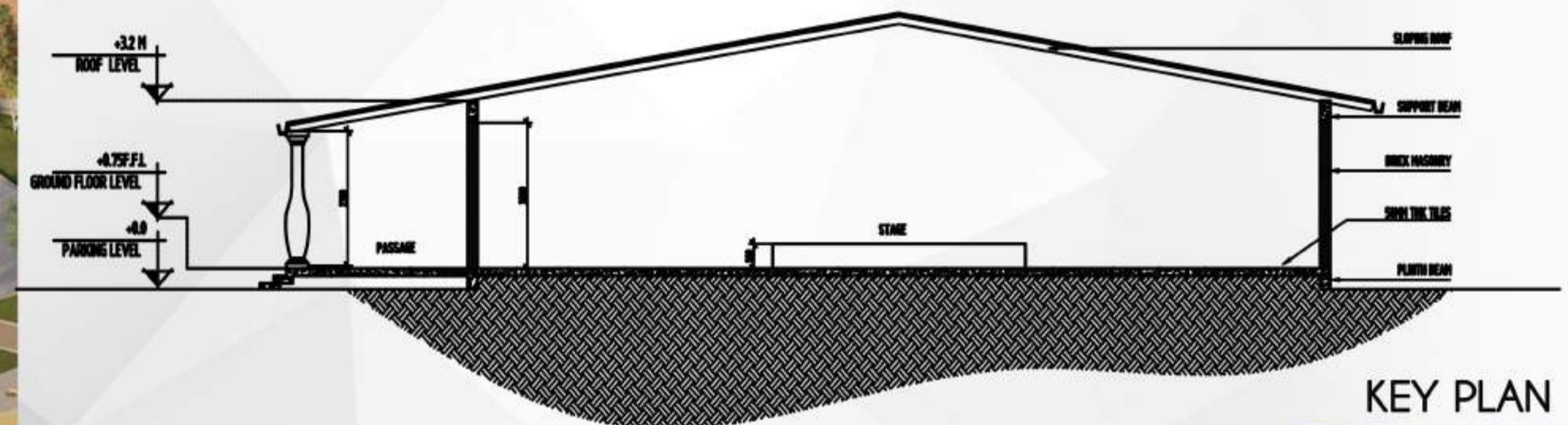
ELEVATION @ 01



ELEVATION @ 02



SECTION @ A-A'



SECTION @ B-B'

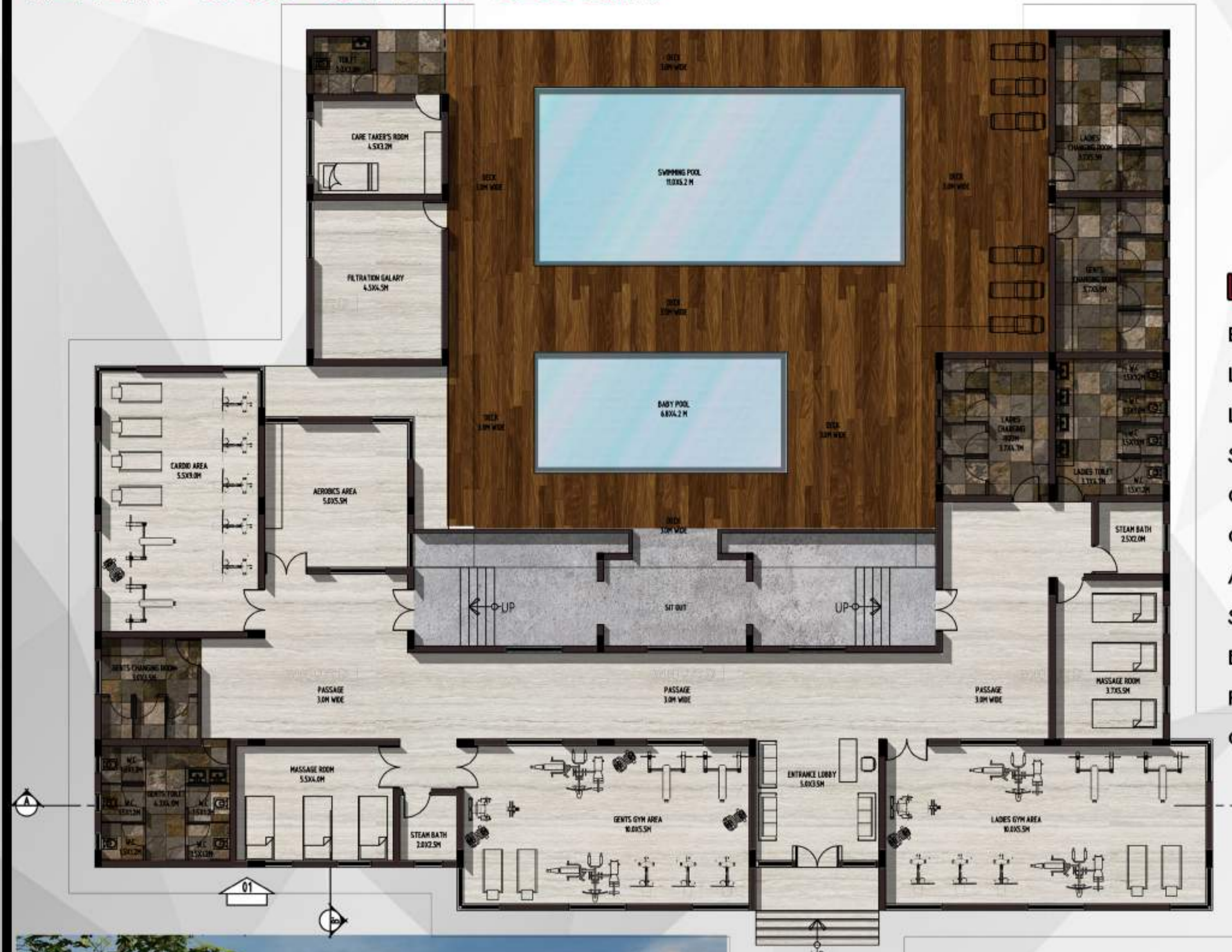


VEIWS OF MEDITATION BLOCK

KEY PLAN



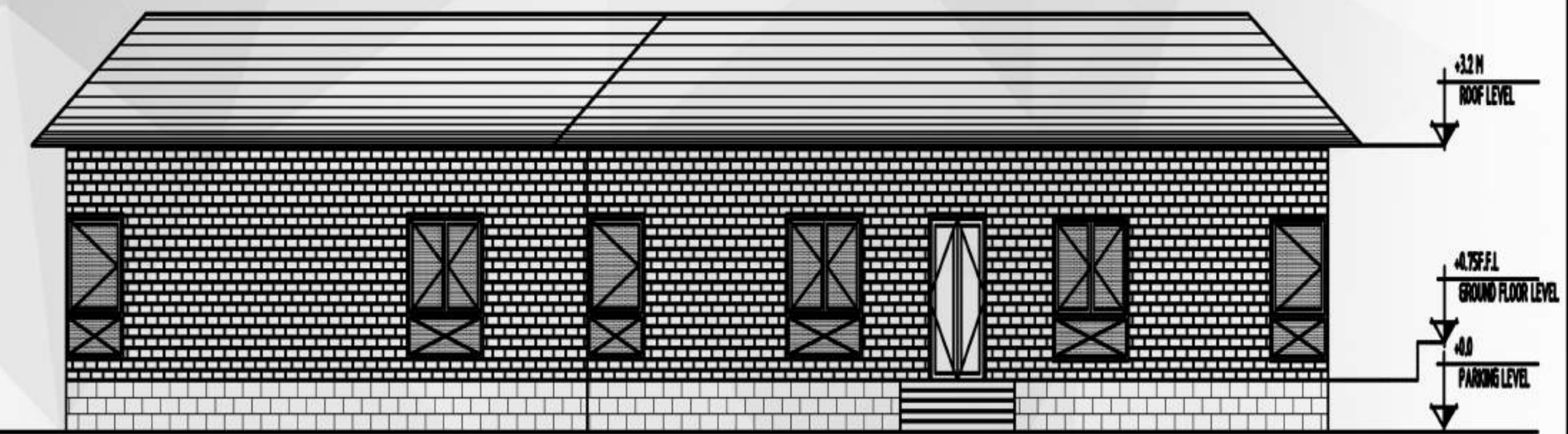
# HEALTH CLUB CENTRE BLOCK :



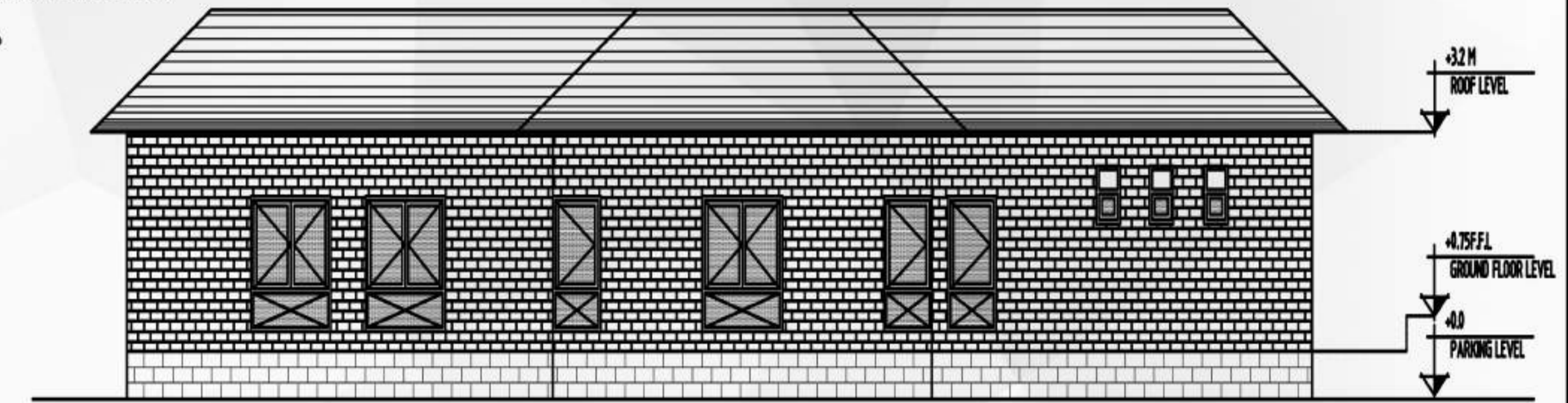
GROUND FLOOR PLAN

## LEGENDS :

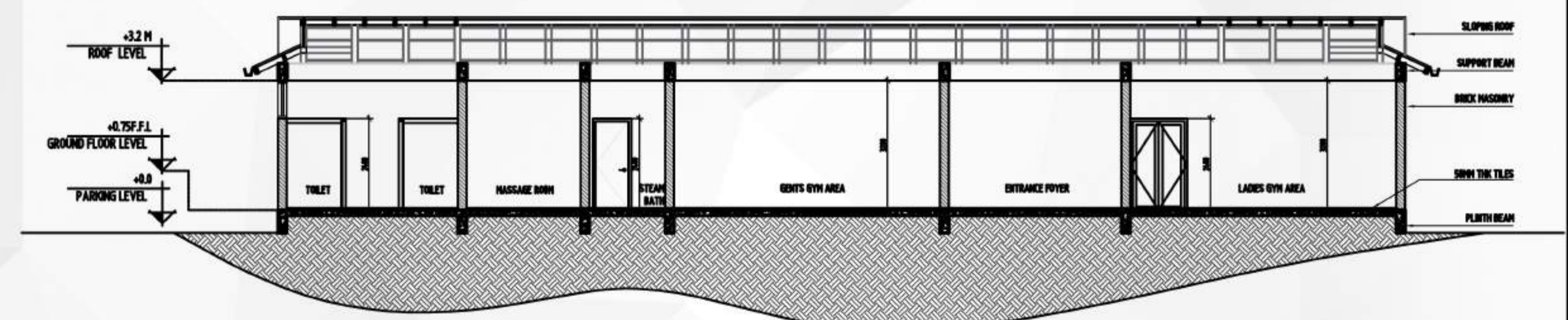
- ENTRANCE LOBBY
- LADIES & GENTS SEPERATE GYM AREA
- LADIES & GENTS SEPERATE MASSAGE ROOMS
- SEPERATE CHANGING ROOMS
- GENTS & LADIES TOILETS
- CARDIO AREA
- AEROBICS
- SWIMMING POOL
- BABY POOL
- FILTRATION ROOM
- CARE TAKER ROOM



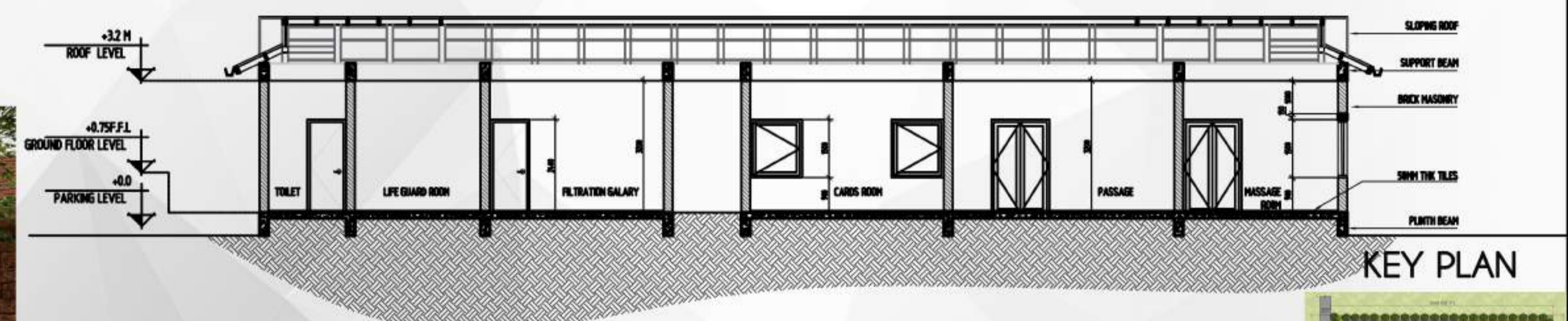
ELEVATION @ 01



ELEVATION @ 02



SECTION @ A-A'



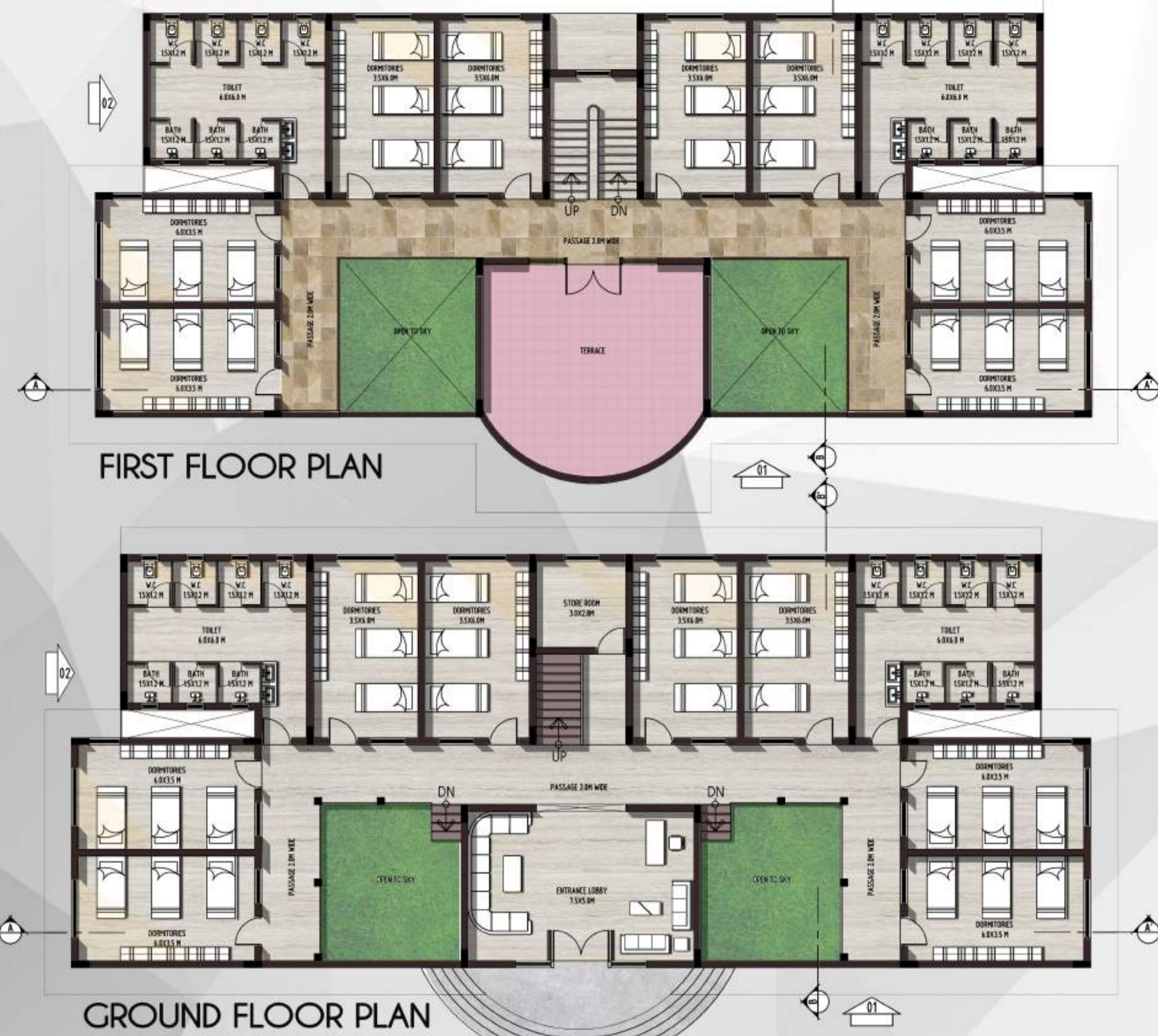
SECTION @ B-B'



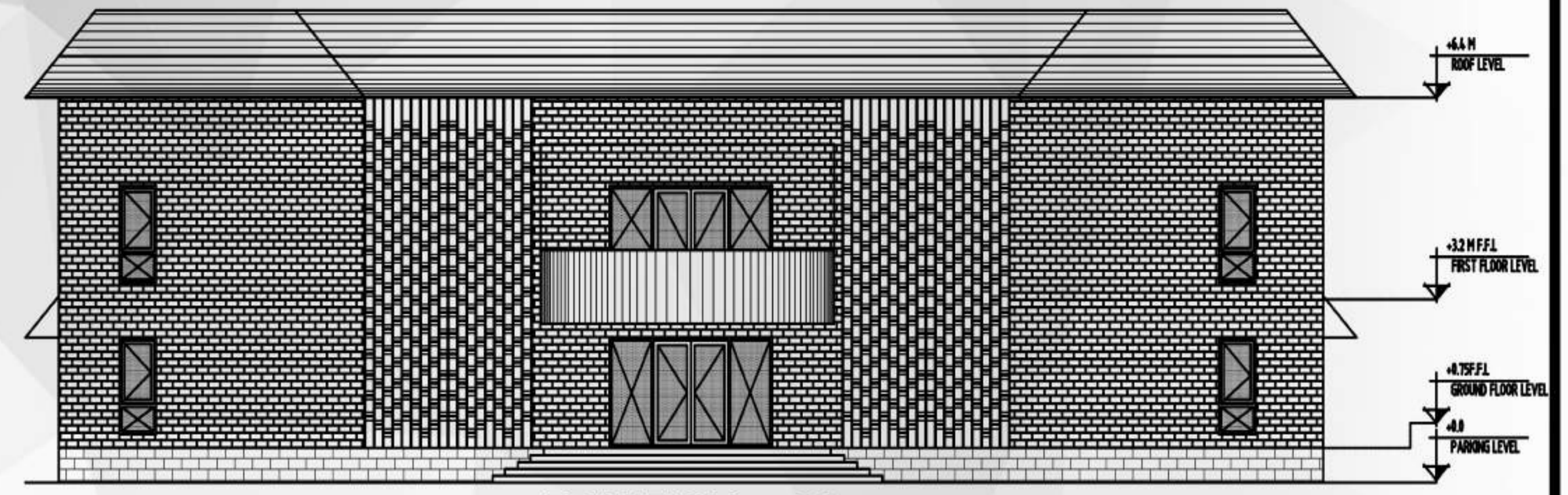
VEIWS OF HEALTH CLUB CENTRE



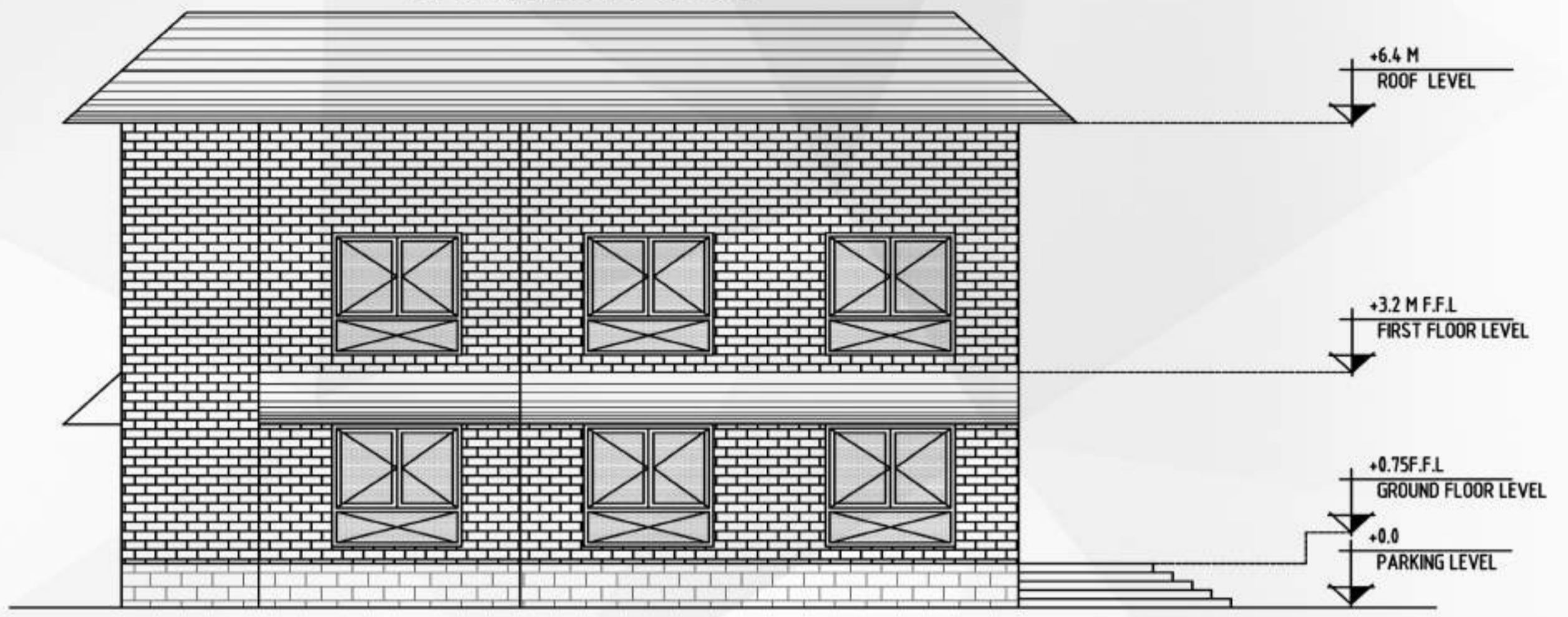
**DORMITORY BLOCK :**



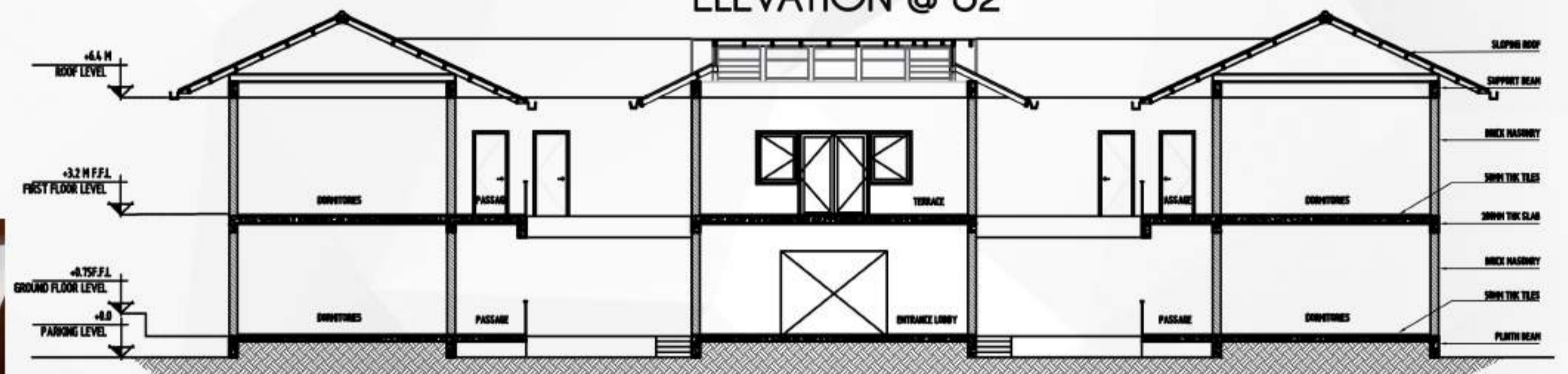
- LEGENDS :**
- ENTRANCE LOBBY
  - WAITING AREA
  - 8 DORMITORIES BLOCKS ON GROUND FLOOR
  - STORE ROOM
  - COMMON TOILET
  - 8 DORMITORIES ON FIRST FLOOR
  - TERRACE AREA
  - OPEN TO SKY



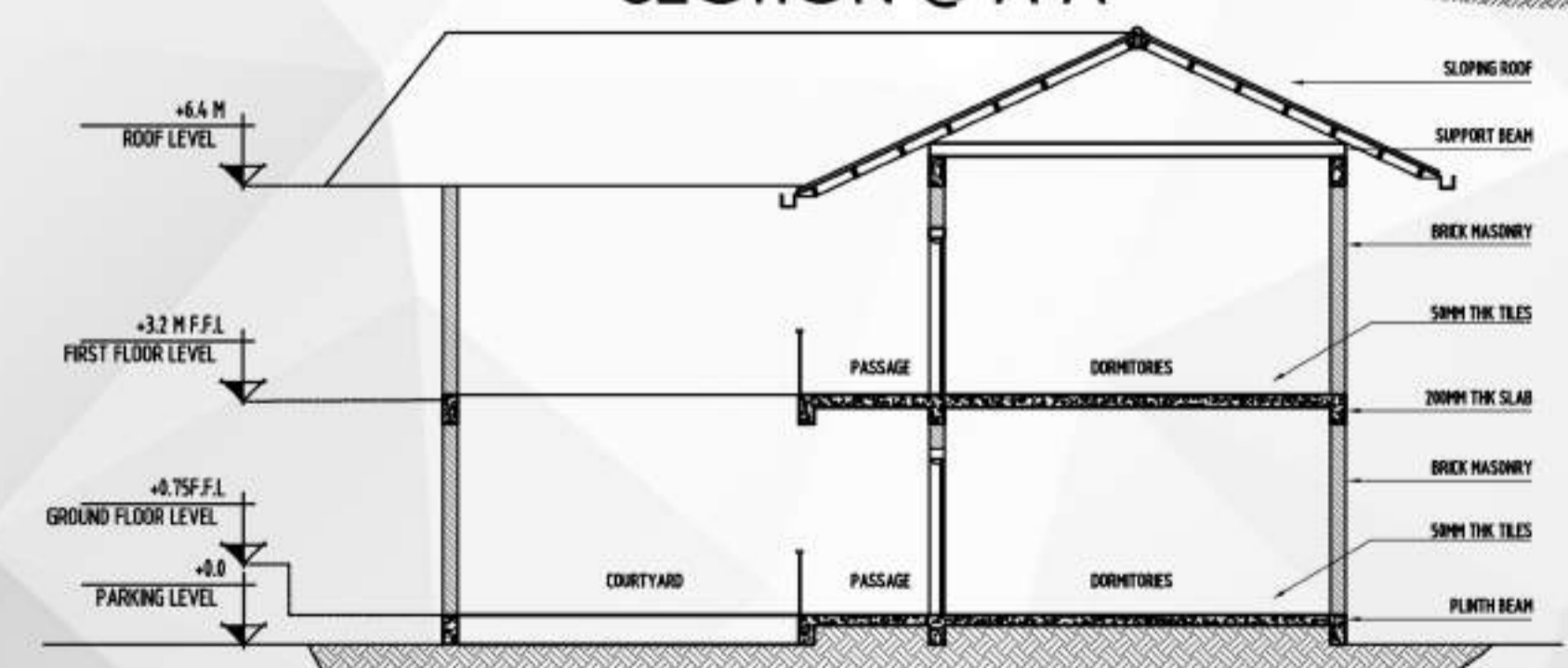
ELEVATION @ 01



ELEVATION @ 02



SECTION @ A-A'



SECTION @ B-B'



VEIUS OF DORMITORY BLOCK

KEY PLAN



**LUXURY ROOMS :**



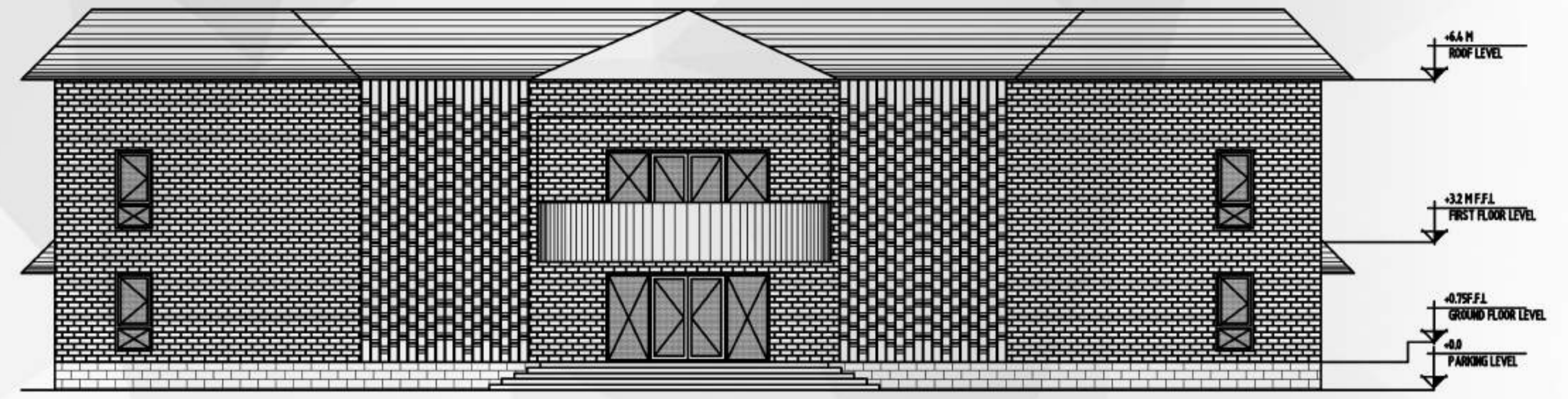
FIRST FLOOR PLAN



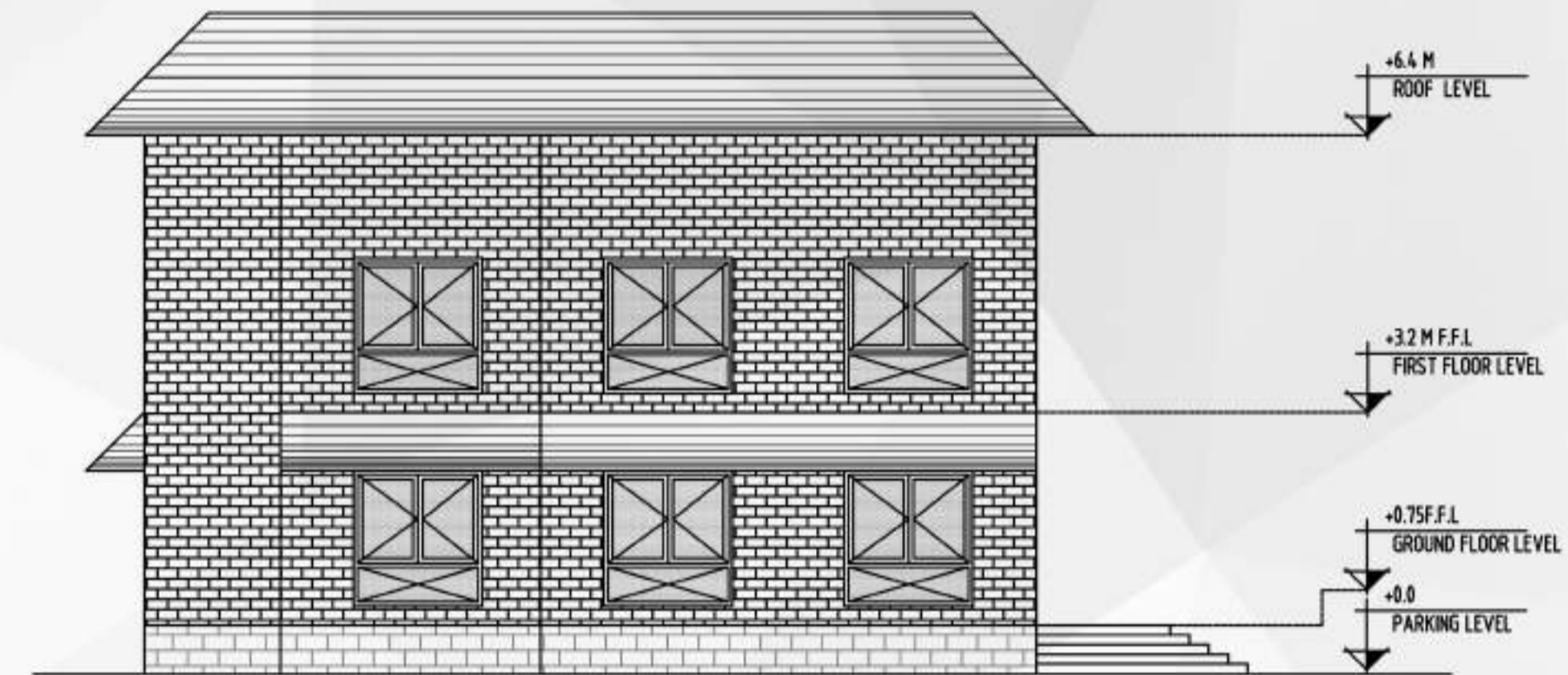
GROUND FLOOR PLAN

**LEGENDS :**

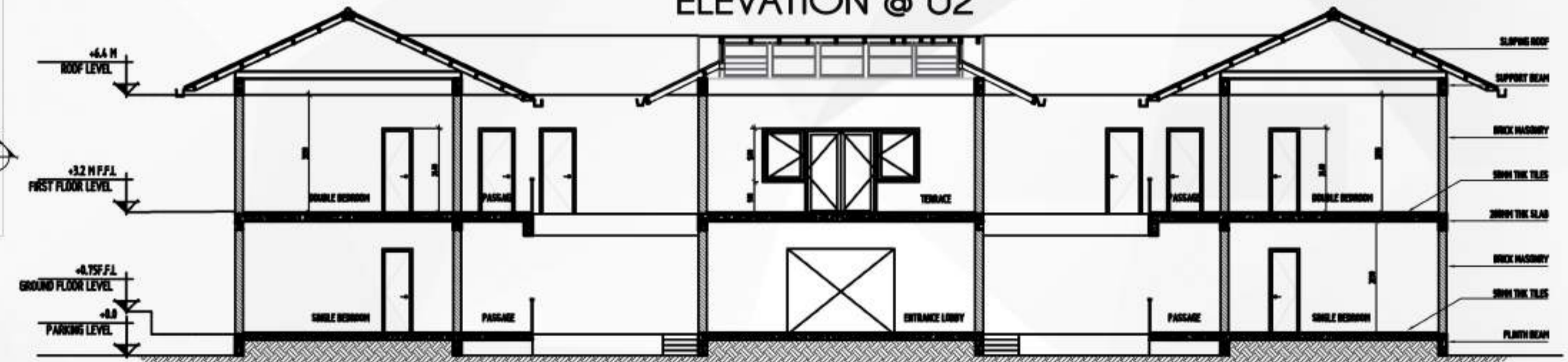
- ENTRANCE LOBBY
- 10 NO. SINGLE BED ROOMS
- 10 NO. DOUBLE BED ROOMS
- ATTACH TOILET FOR EACH ROOM
- STORE ROOM
- COURTYARD



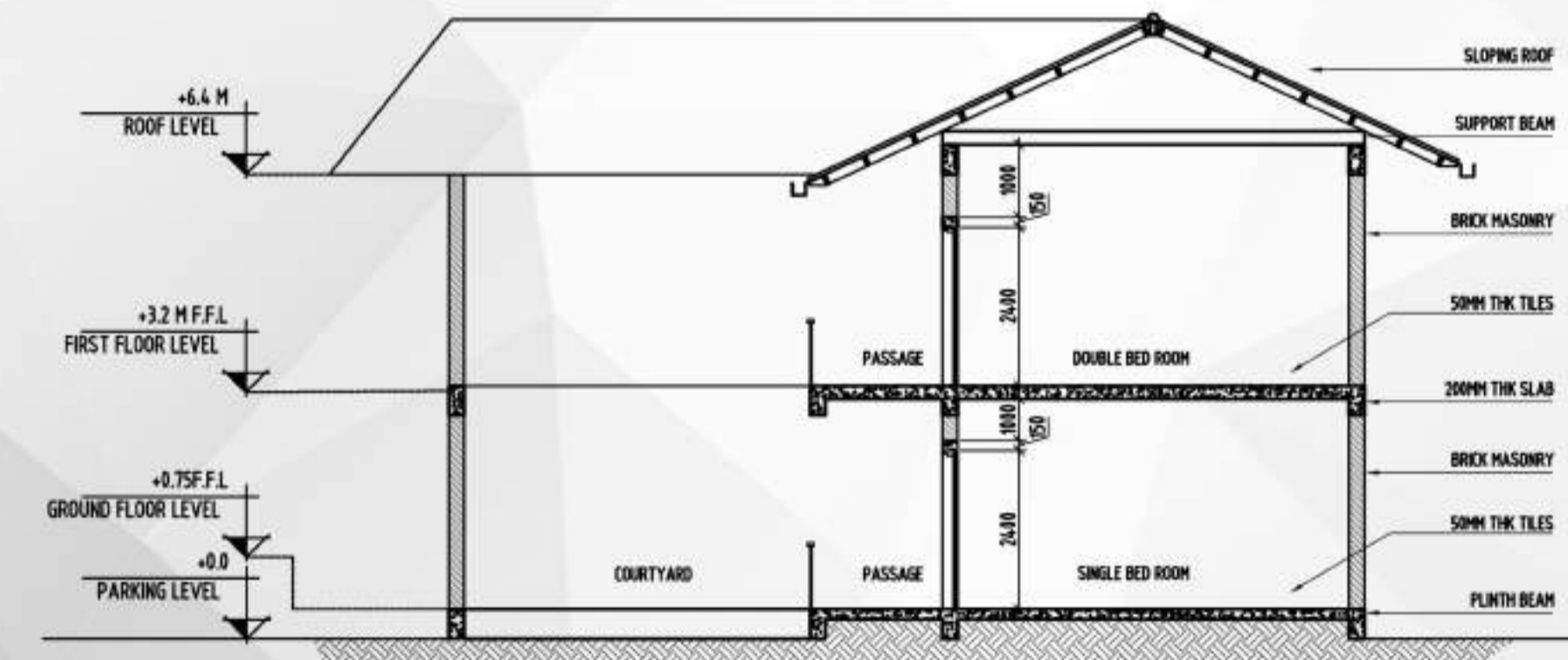
ELEVATION @ 01



ELEVATION @ 02



SECTION @ A-A'



SECTION @ B-B'



VEIWS OF LUXURY ROOMS BLOCK

**KEY PLAN**



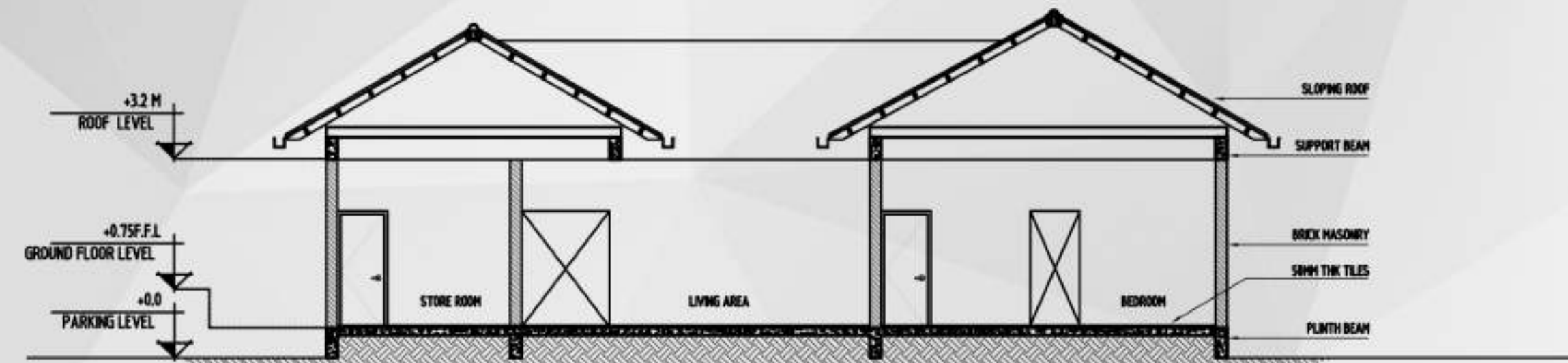
**COTTAGE BLOCK :**



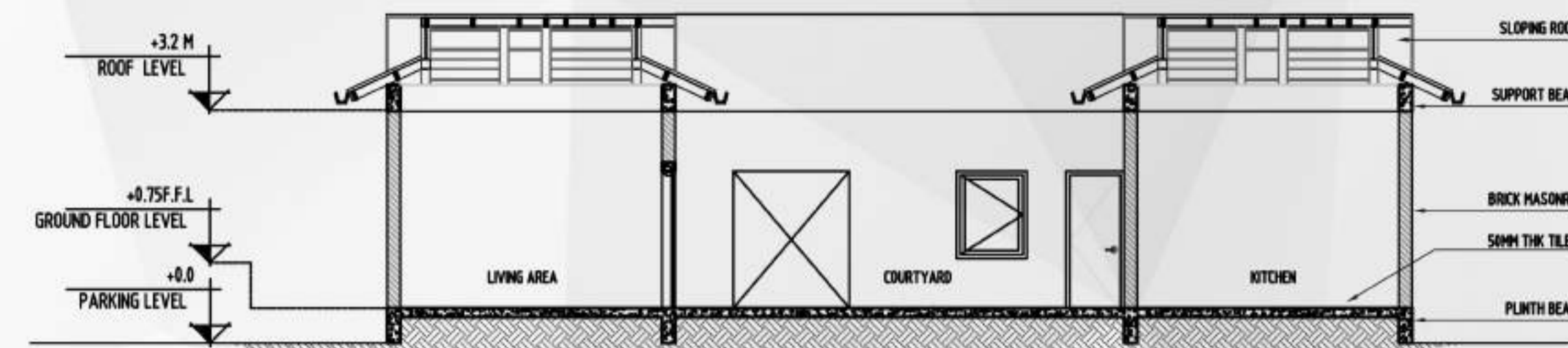
GROUND FLOOR PLAN

**LEGENDS :**

- LIVING AREA
- BEDROOMS
- FAMILY LOUNGE
- MASSAGE ROOM
- KITCHEN
- DINNING AREA
- COURTYARD
- TOILETS



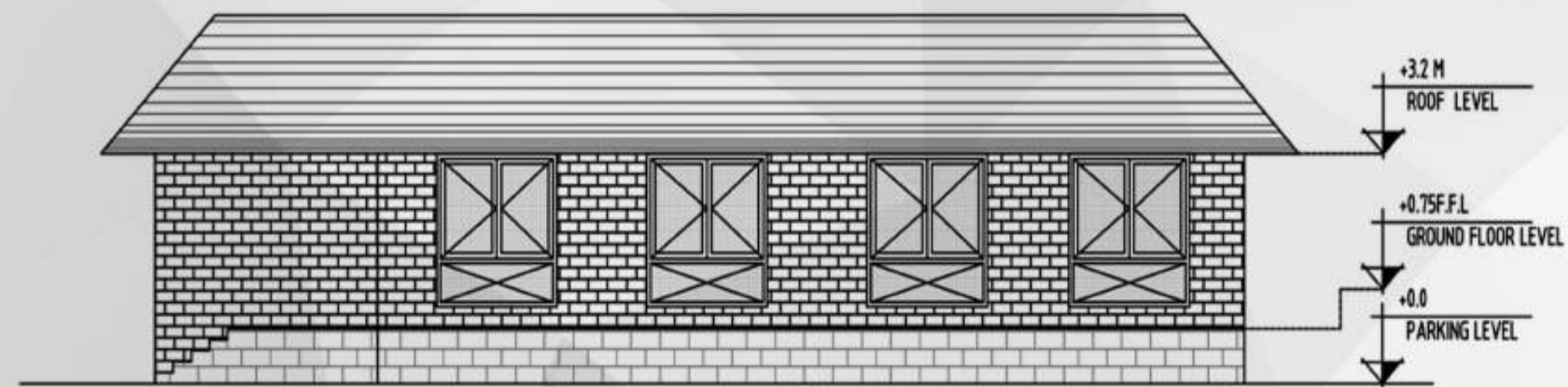
SECTION @ A-A'



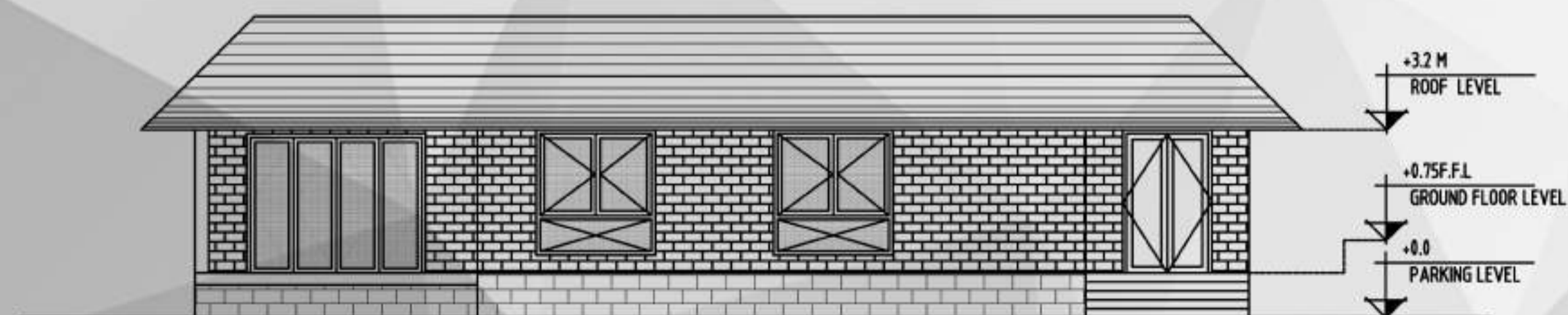
SECTION @ B-B'



VEIWS OF COTTAGE BLOCK



ELEVATION @ 01



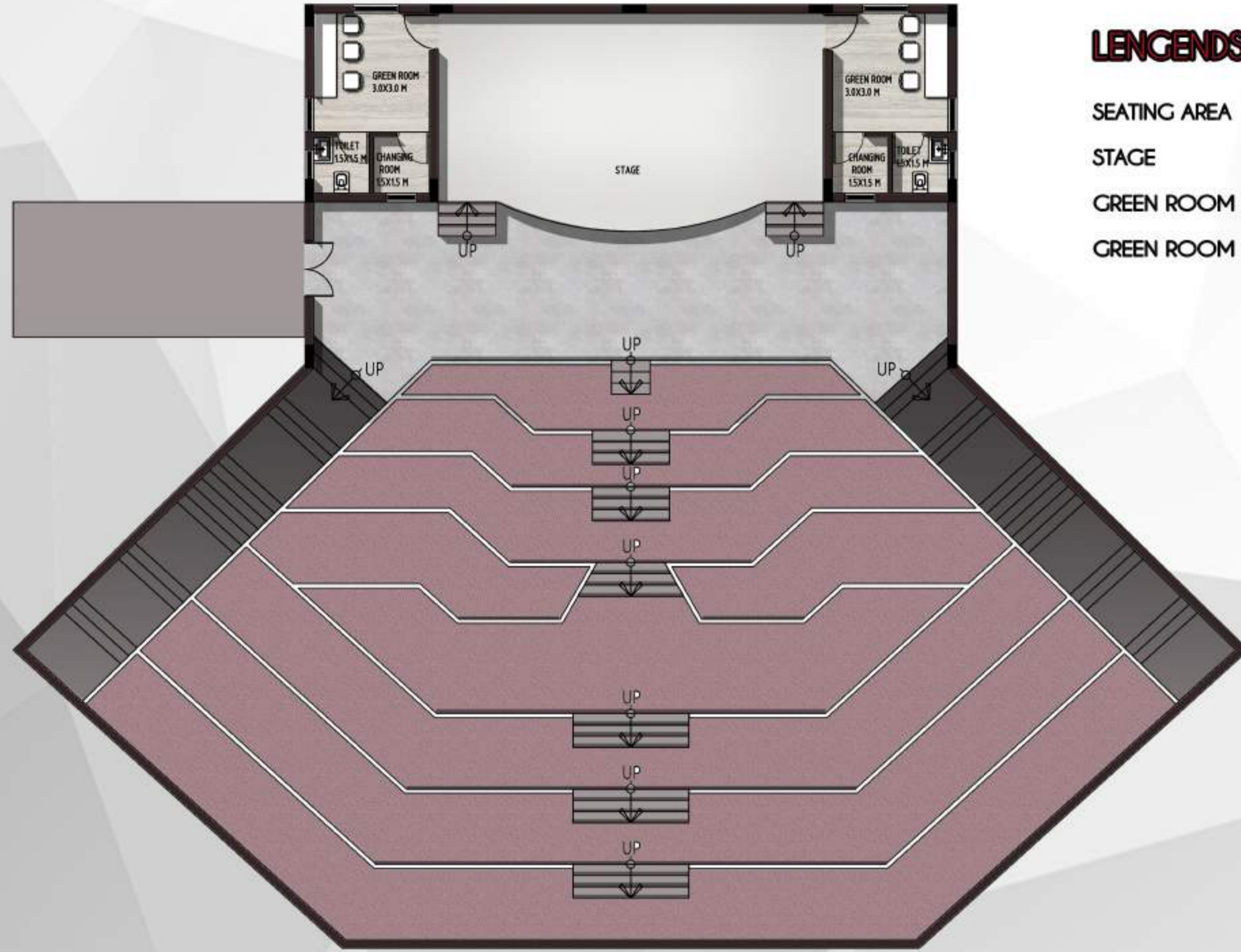
ELEVATION @ 02



KEY PLAN



# AMPHI THEATRE :



## LEGENDS :

- SEATING AREA
- STAGE
- GREEN ROOM FOR GENTS
- GREEN ROOM FOR LADIES

PLAN OF AMPHI-THEATRE



VIEW OF AMPHI-THEATRE



KEY PLAN



AERIAL VIEW OF AMPHI-THEATRE



AERIAL VIEWS OF THE SITE



SPILL OVER AREA



ENTRANCE GATE



AMPHITHEATRE



DORMITORY BLOCK



**CONSTRUCTION MATERIAL :**

**SLOPING ROOF :**

THE RIDGED ROOF PITCHED AT ANGLES BETWEEN 30DEGREE TO 40DEGREE

THE ROOF WITH INTRICATELY CARVED GABLES PROTRUDING FROM THE ROOF WITH OVERHANGS SUPPORTED BY WOODEN BRACKETS.

THE ROOF IS PREFABRICATED THAT IS DIFFERENT MEMBERS ARE FIXED ON THE GROUND AND ASSEMBLED AT THE TOP.

NO NAILS ARE USED.

THE ROOF IS KEPT IN POSITION BY INTERLOCKING WITH THE HOLE IN THE RAFTERS.

WALLS MADE OF TIMBER OR EARTH AND ROOF OF COCONUT LEAVES OR TILES ARE COMMON IN MANY PARTS OF KERALA

**BUILDING MATERIAL:**

THE MOST COMMON TYPE OF FLOORING WAS THAT OF BEATEN EARTH POLISHED WITH COW DUNG AT REGULAR INTERVALS

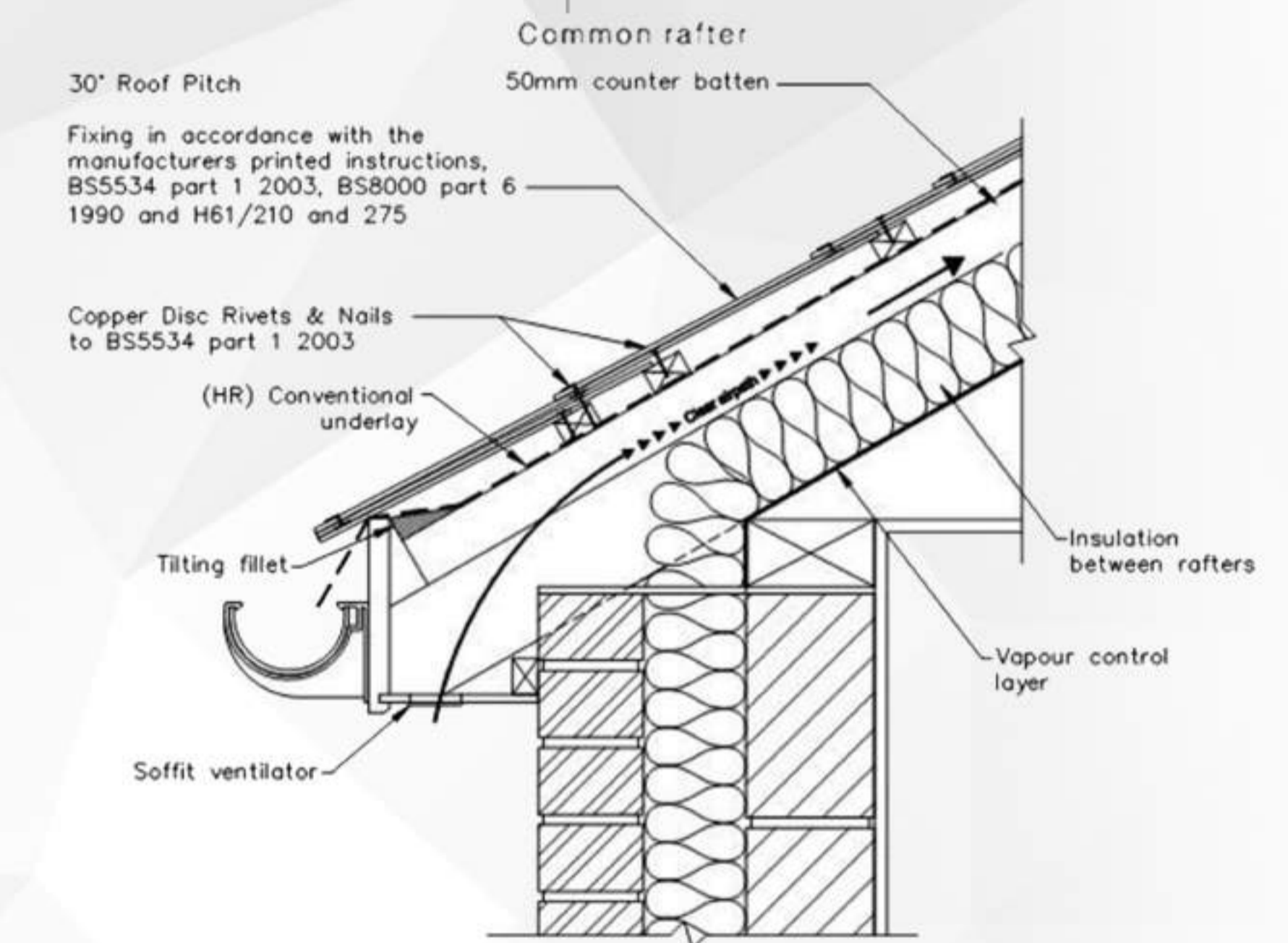
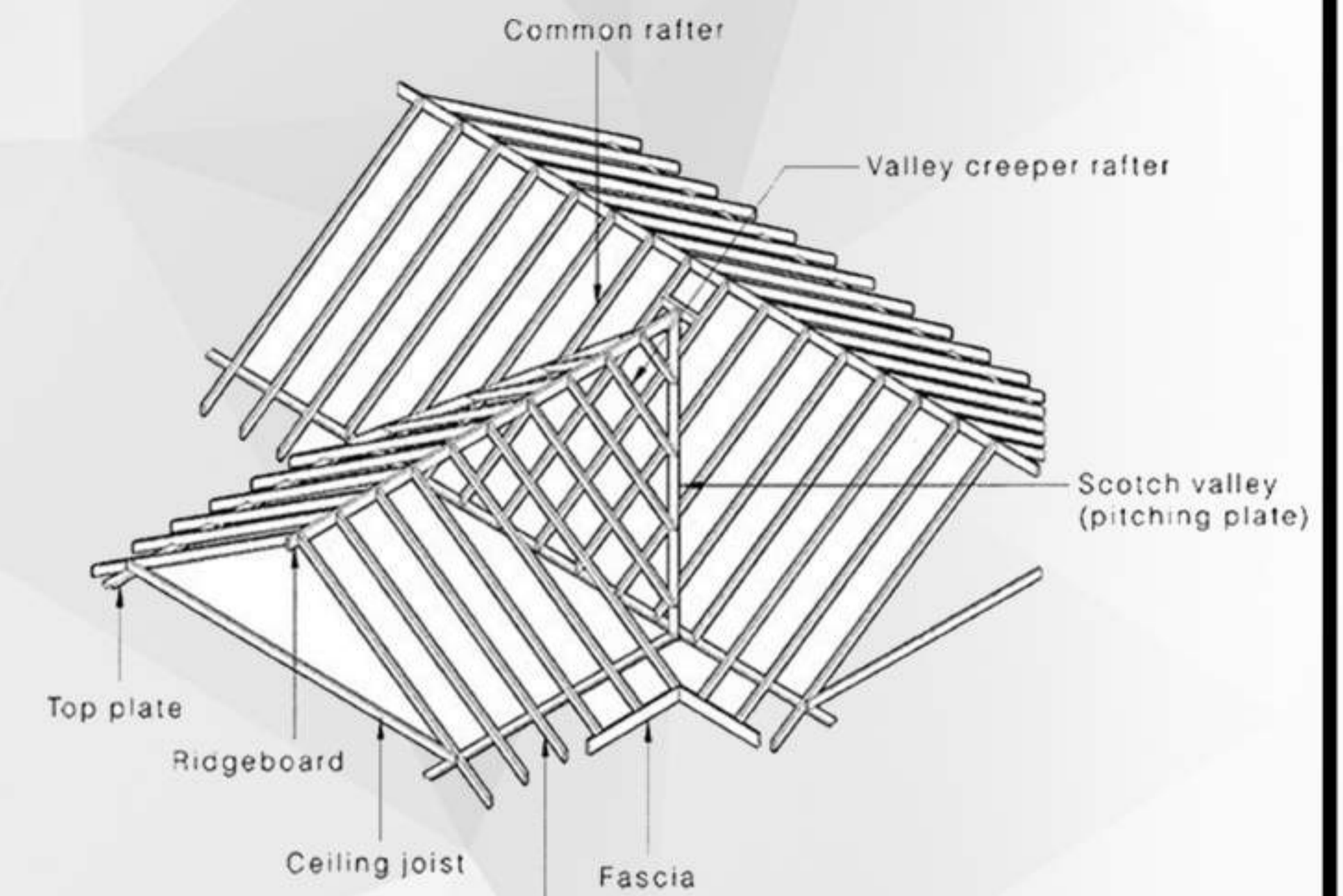
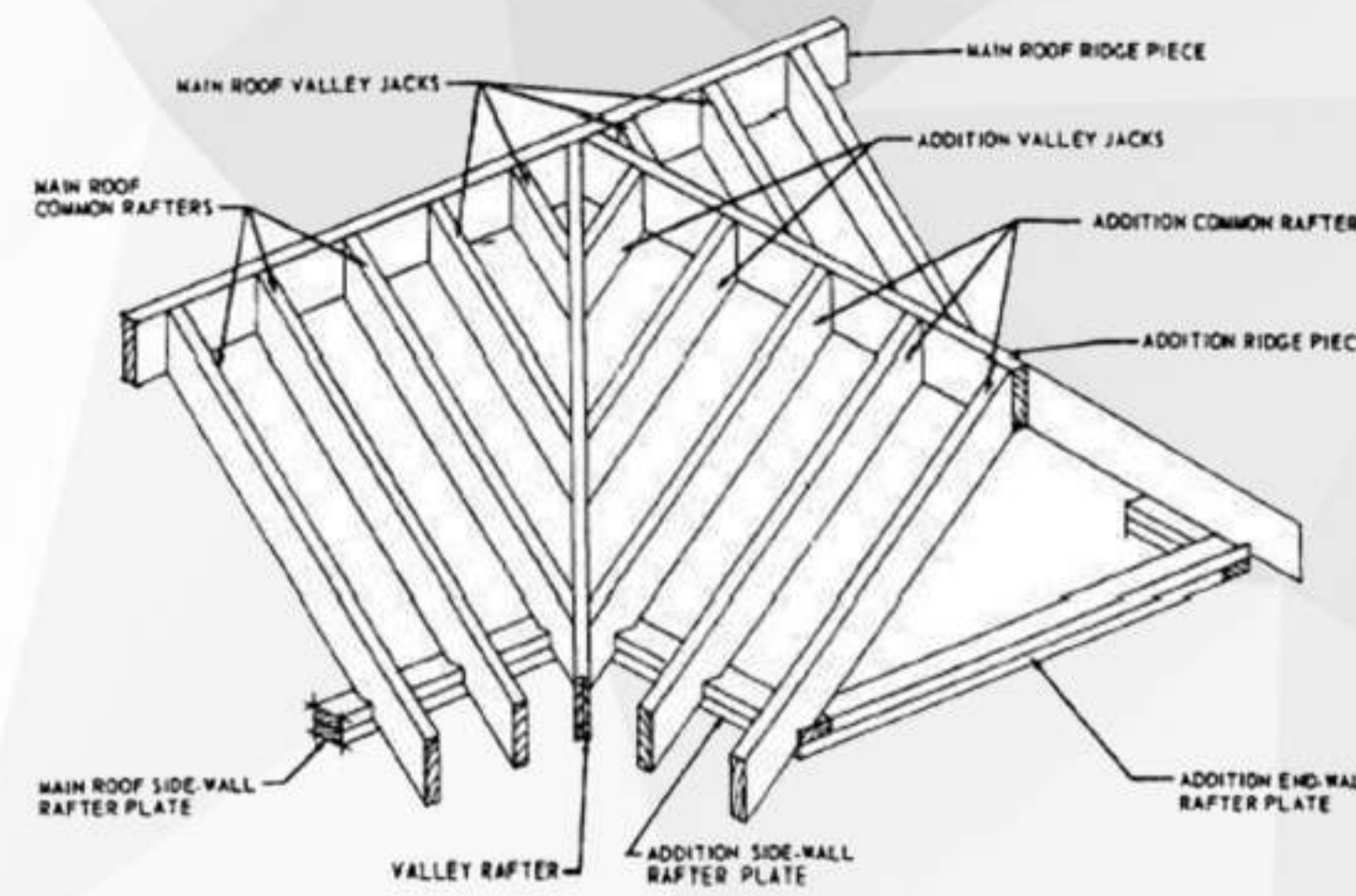
BLACK COLORED TRADITIONAL FLOORING USED IN THE MORE EXPENSIVE BUILDINGS WAS DONE WITH THE MIXTURE OF LIME, SAND, COCONUT SHELL, WHITE OF EGG, JAGGERY, COCONUT WATER AND OTHER VEGETABLE EXTRACTS. THE SMOOTHNESS WAS ACHIEVED BY POLISHING THE FLOOR WITH A PARTICULAR VARIETY OF BANANA.

STONE FLOORING, WOODEN FLOORING, BURNT CLAY BRICK FLOORING ARE ALSO POPULAR STYLES OF FLOORING DONE USING NATURALLY AVAILABLE MATERIALS

THE AVAILABILITY OF GRANITE -A STRONG AND DURABLE BUILDING STONE IS RESTRICTED MAINLY TO THE HIGHLANDS AND MARGINALLY TO SOME HILLY ZONES. ACCORDINGLY, THE SKILL IN QUARRYING, DRESSING AND SCULPTURING OF STONE IS SCARCE IN KERALA

LATERITE STONE HOWEVER, IS ABUNDANTLY FOUND SOFT LATERITE AVAILABLE AT SHALLOW DEPTH CAN BE EASILY CUT, DRESSED AND USED AS BUILDING BLOCKS. IT IS A LOCAL STONE THAT GETS STRONGER AND DURABLE WITH EXPOSURE TO THE ATMOSPHERE. BLOCK OF THIS STONE MAY BE BONDED IN MORTARS OF SHELL LIME, - THE CLASSIC BINDING MATERIAL USED IN TRADITIONAL BUILDINGS.

**CONSTRUCTION TECHNIQUES :**



THANK YOU

