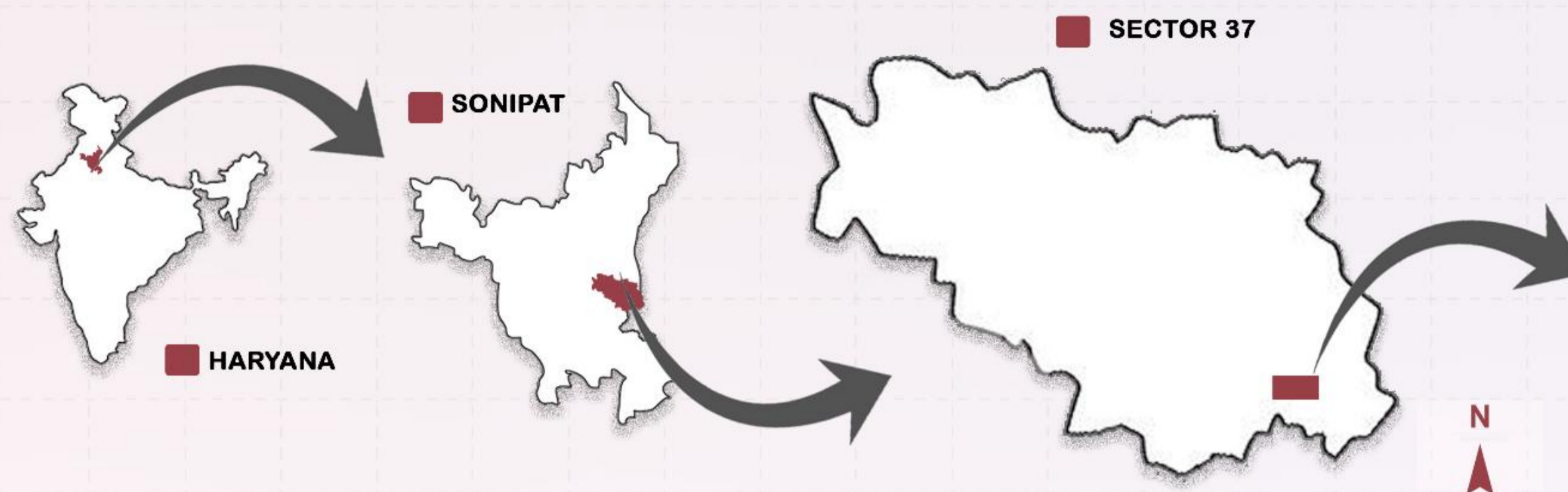


# SITE ANALYSIS

## LOCATION

SITE LOCATION: SECTOR 37, SONIPAT 131001, HARYANA  
 COORDINATES: 28°56'57.0"N 77°05'32.0"E  
 STATUS: FALLOW LAND  
 SITE AREA: 5 ACRES  
 PERMISSIBLE F.A.R.: 100%  
 GROUND COVERAGE: 35%



## ACCESS

SONIPAT BUS STAND - 14.3 KM  
 BAHALGARH BUS STOP - 3KM

SONIPAT JUNCTION - 13KM

INDIRA GANDHI INTERNATIONAL AIRPORT - 60KM

## PROPOSD SITE

PLOT AREA: 5 ACRES (20234.281 M<sup>2</sup>)  
 SET BACKS: FRONT 10 M, BACK 5 M, SIDES 5 M  
 PERMISSIBLE GROUND COVERAGE: 35% OF 20234.281 M<sup>2</sup> = 7081.99835 M<sup>2</sup>  
 PERMISSIBLE FAR: 100% OF 20234.281 M<sup>2</sup> = 20234.281 M<sup>2</sup>  
 PERMISSIBLE HEIGHT: UNRESTRICTED



SOURCE - HBC 2017



## SWOT ANALYSIS

### STRENGTH

- PLACEMENT IS NEAR HIGHWAY (NH44).
- EASY TRANSPORTATION.
- EMERGING EDUCATIONAL HUB.
- PEACEFUL ENVIRONMENT.

### WEAKNESS

- BAD SOIL STRENGTH DUE TO HIGH WATER TABLE.
- SOIL QUALITY DOES NOT SUPPORT MANY VEGETATION TYPES.
- HIGH HUMIDITY IN THE AREA.
- EXTREME TEMPRATURE RANGES DURING WINTERS AND SUMMERS.

### OPPORTUNITIES

- SCOPE FOR FUTURE DEVELOPEMENT ON EMPTY LANDS.
- NETWORKING OPPORTUNITIES AS IT IS NEAR MATROPOLITAN CITY - DELHI (40KM).
- WITH AMPLE SPACE AND RELATIVELY LESS CONGESTED ENVIRONMENT, THIS INSTITUTION HAS POTENTIAL TO DEVELOPE A SUSTAINABLE, GREEN CAMPUS.

### THREATS

- DEGRADED WATER QUALITY SUITABLE FOR INDUSTRIAL PUPOSE BUT NOT FOR DRINKING AND DOMESTIC USE.
- LACK OF SAFETY DURING EVENING HOURS AS THE PLACE IS AWAY FROM SETTLEMENT.

## CLIMATE ANALYSIS

SONIPAT, LOCATED IN THE COMPOSITE CLIMATE ZONE OF INDIA, EXPERIENCES A MIX OF EXTREME WEATHER CONDITIONS THROUGHOUT THE YEAR. SUMMERS ARE INTENSELY HOT, ACCOMPANIED BY DRY WINDS, WHILE WINTERS CAN BE QUITE COLD. THE TRANSITIONAL SEASONS, SPRING AND AUTUMN, ARE RELATIVELY SHORT BUT MORE PLEASANT, OFFERING MODERATE TEMPERATURES AND COMFORTABLE CONDITIONS. THIS VARIABILITY IN CLIMATE REQUIRES ARCHITECTURAL AND URBAN PLANNING STRATEGIES THAT BALANCE HEAT MITIGATION, NATURAL VENTILATION, AND THERMAL COMFORT YEAR-ROUND.

### TEMPERATURE

Temperature - Sonipat, India



THE WARMEST MONTHS - MAY TO AUG. (40°C)  
 THE COLDEST MONTHS - JAN. TO MAR. (8°C)

### HUMIDITY

Humidity - Sonipat, India



HIGHEST RELATIVE HUMIDITY - AUG. (71%)  
 LOWEST RELATIVE HUMIDITY - APRIL (32%)

### RAINFALL



THE WETTEST MONTH - AUGUST (201MM)  
 THE DRIEST MONTH - NOVEMBER (4MM)

### DAYLIGHT HOURS



LONGEST DAYS IN JUNE (AVG. DAYLIGHT - 14H)  
 SHORTEST DAYS IN DEC. (AVG. DAYLIGHT - 10.3H)

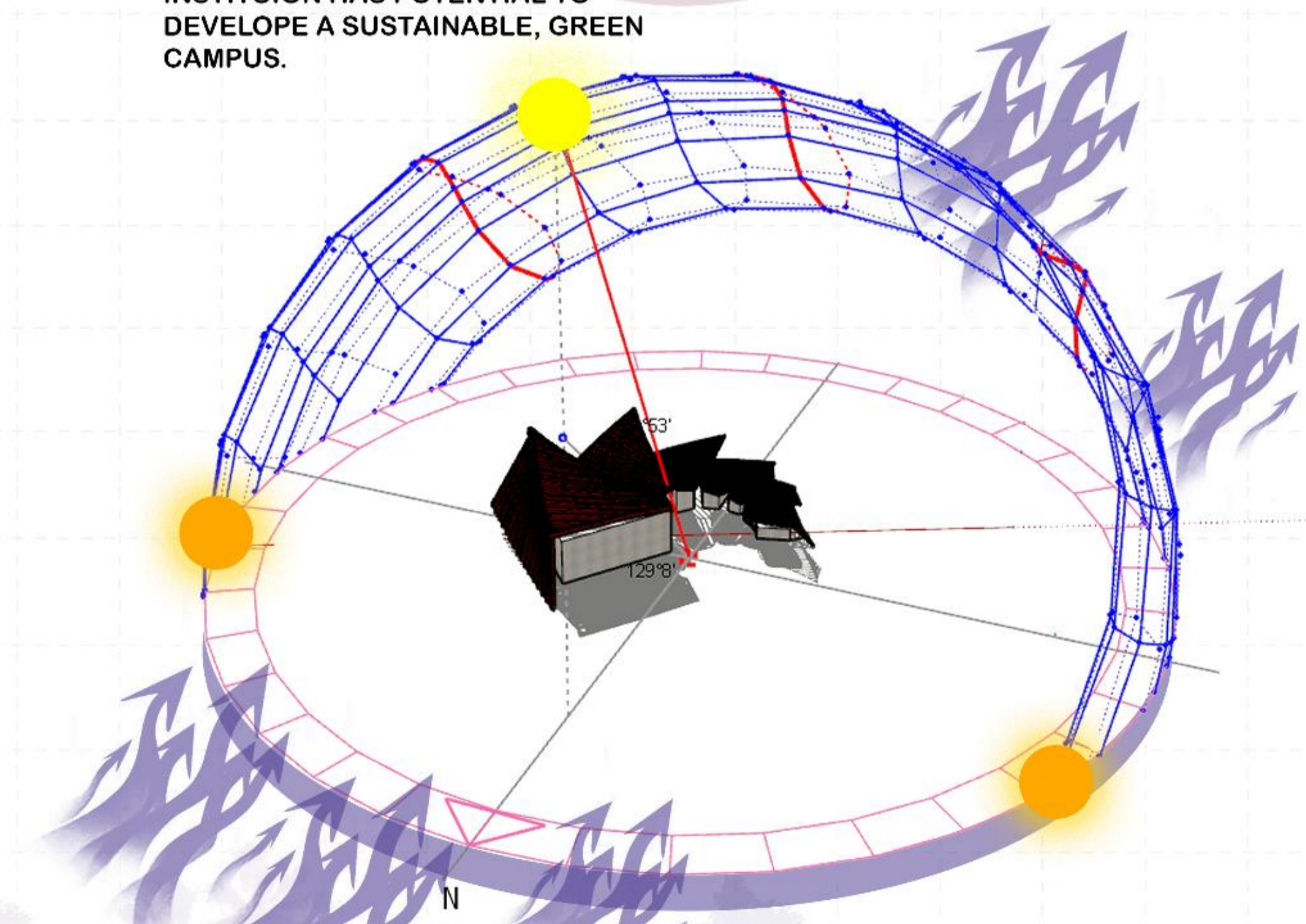
## TOPOGRAPHY & VEGETATION

THE SITE IS ON PLAIN GROUND WITH NO SLOPE. THE SOILS PRESENT AROUND THE SITE ARE SANDY (RAITALI), SANDY LOAM (BHURI).

FOUNDATION SYSTEMS LIKE ISOLATED FOOTINGS OR RAFT FOUNDATIONS CAN BE USED, DEPENDING ON THE LOAD AND THE SPECIFIC SOIL CONDITIONS. MITIGATION MEASURES MAY BE REQUIRED IN AREAS PRONE TO SOIL SALINITY TO ENSURE STRUCTURAL DURABILITY.

### LOCAL PLANT SPECIES AVAILABLE NEAR SITE

 MANGIFERA INDICA (MANGO) Avg. Height - 33'	 PSIDIUM GUAJAVA (GUAVA) Avg. Height - 25'	 MORUS NIGRA (SHAHTUT) Avg. Height - 35'	 ACACIA NILOTICA (KIKAD) Avg. Height - 30'
 AZADIRACHTA INDICA (NEEM) Avg. Height - 49'	 FICUS BENGHALENSIS (BARGAD) Avg. Height - 60'	 FICUS RELIGIOSA (PEEPAL) Avg. Height - 60'	 EUCALYPTUS GLOBULUS (SAFEDA) Avg. Height - 90'



# RECREATIONAL CLUB DESIGN

BATCH - 2K22  
 ARCHITECTURAL DESIGN - V

# CONCEPT

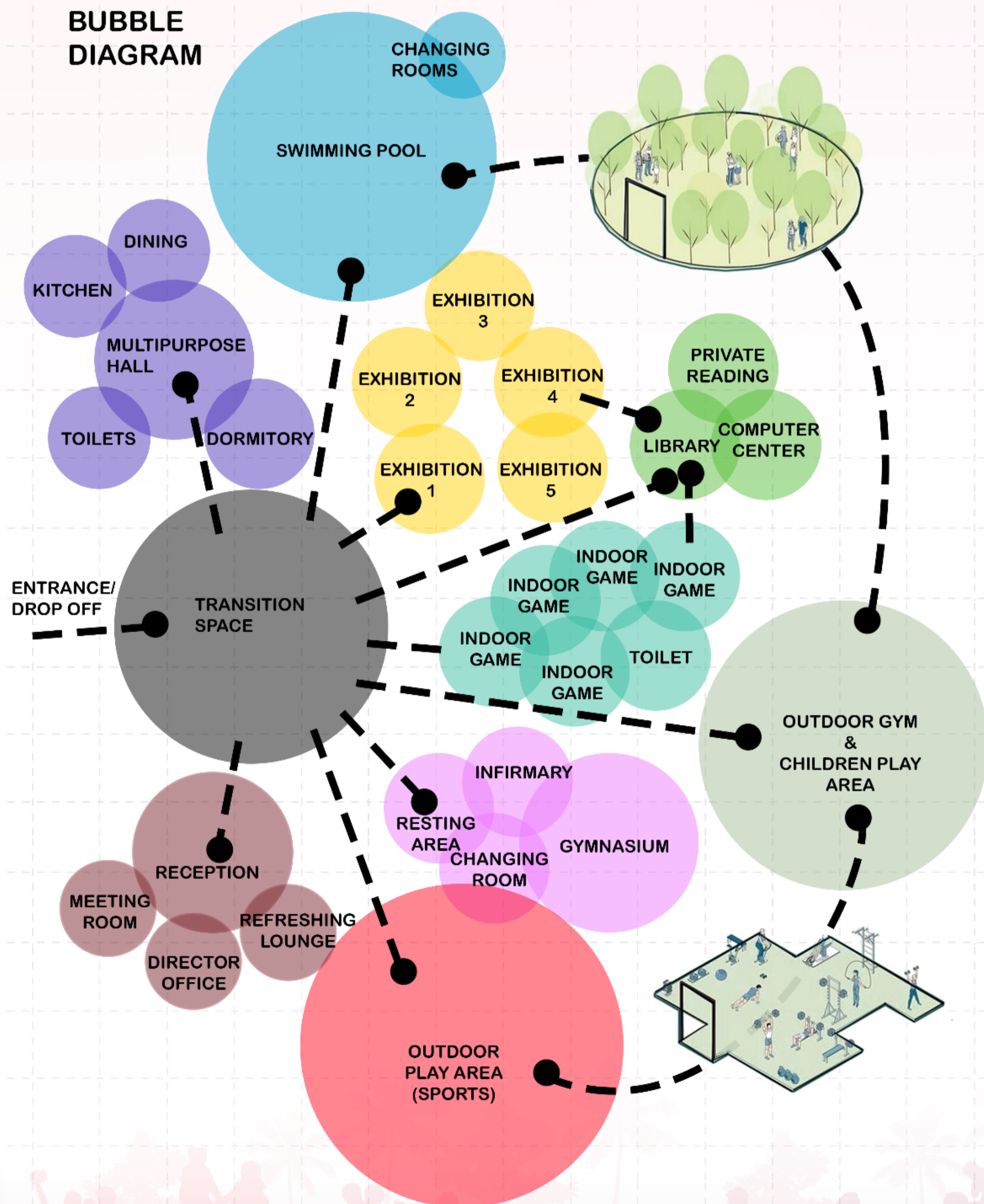
## WHAT IS RECREATION???

- RECREATION**
- ACTIVITY THAT PEOPLE ENGAGE DURING THEIR FREE TIME
  - ACTIVITY THAT PEOPLE RECOGNIZE AS HAVING SOCIALLY REDEEMING VALUES.
  - ACTIVITY THAT PEOPLE ENJOY.
  - MORALLY ACCEPTABLE NOT JUST TO THE INDIVIDUAL, BUT ALSO TO SOCIETY AS A WHOLE.

## AIM

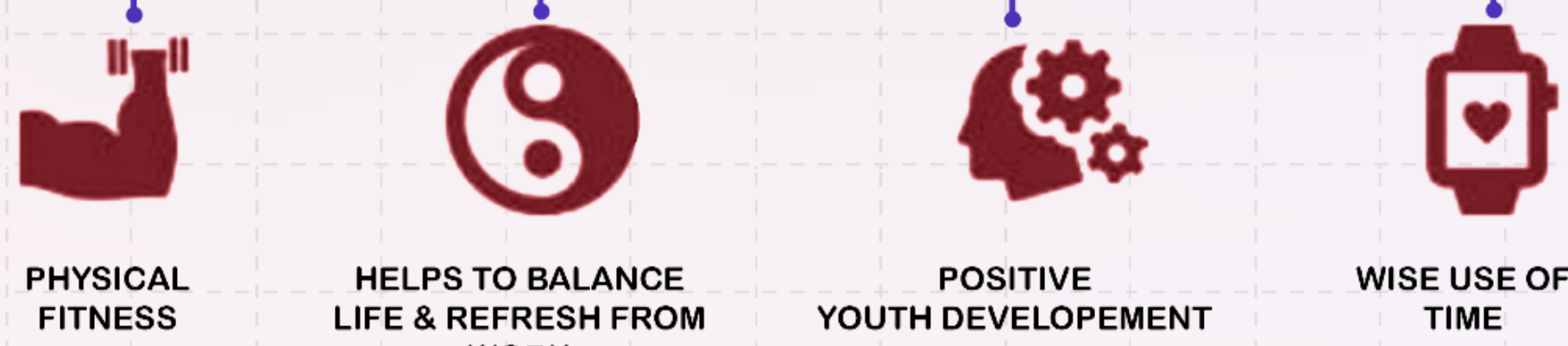
THE AIM IS TO DESIGN A **RECREATIONAL CLUB** WHICH IS AN INCLUSIVE, VIBRANT, AND MULTIFUNCTIONAL SPACE THAT CATERES TO THE **DIVERSE INTERESTS, NEEDS, AND PREFERENCES** OF INDIVIDUALS ACROSS DIFFERENT STAGES OF LIFE. THE CLUB WILL SERVE AS A HUB FOR **RELAXATION, PHYSICAL FITNESS, CULTURAL ENRICHMENT, AND SOCIAL INTERACTION, FOSTERING A SENSE OF COMMUNITY AND BELONGING.** IT WILL BE THOUGHTFULLY DESIGNED TO ENSURE ACCESSIBILITY, COMFORT, AND ADAPTABILITY, WITH DEDICATED ZONES FOR **CHILDREN, YOUTH, ADULTS, AND SENIOR CITIZENS,** OFFERING FACILITIES SUCH AS SPORTS COURTS, INDOOR GAMES, READING AREAS, MULTIPURPOSE HALLS, AND SERENE OUTDOOR SPACES.

## BUBBLE DIAGRAM

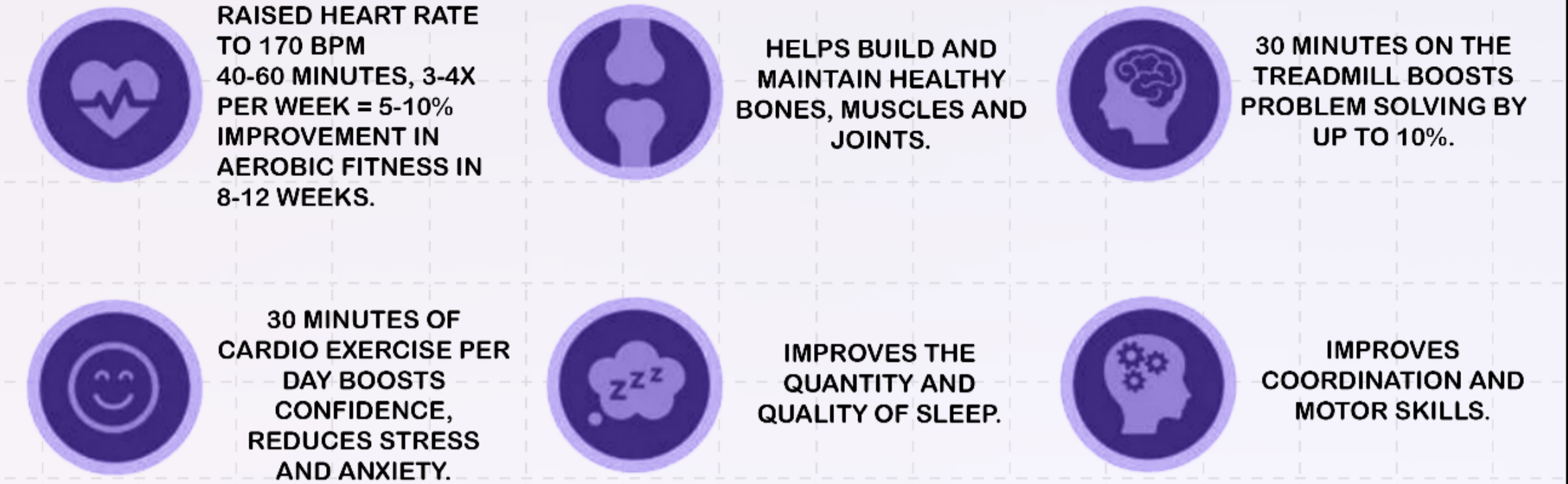


## OUTCOMES OF RECREATIONAL ACTIVITY

(THE SPECIFIC ACTIVITY PERFORMED IS LESS IMPORTANT THAN THE REASONS FOR PERFORMING THE ACTIVITY.)

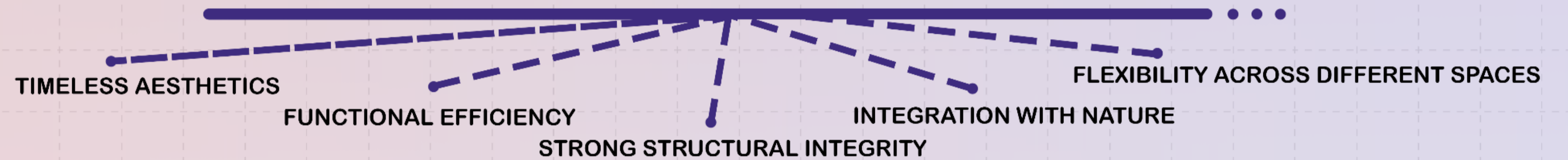


## HEALTH BENEFITS OF RECREATIONAL ACTIVITIES

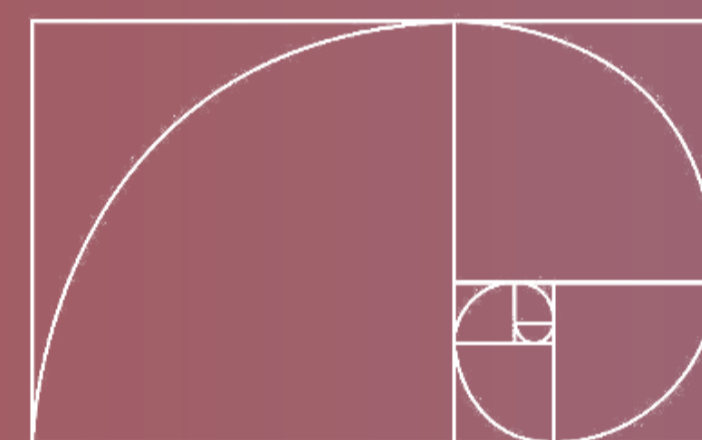


## CONCEPT

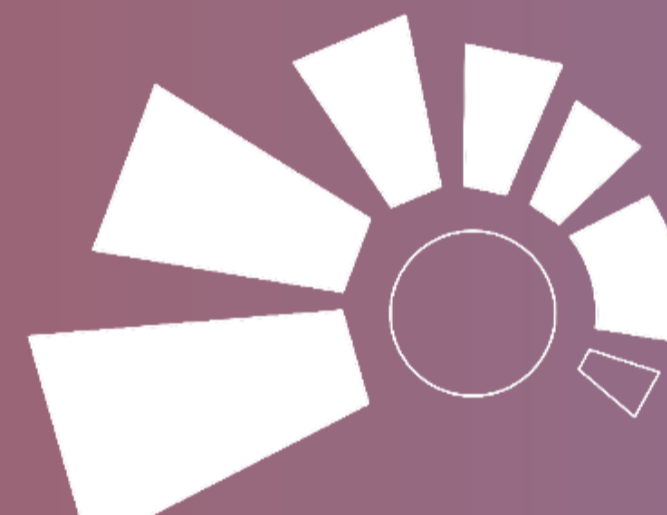
THE CONCEPT OF **THE GOLDEN RATIO** FOR THE RECREATIONAL CLUB PROJECT STEMS FROM ITS TIMELESS APPEAL AND INTRINSIC HARMONY. ROOTED IN NATURE AND CELEBRATED IN HISTORIC ARCHITECTURE, THE GOLDEN RATIO (1:1.618) ENSURES VISUALLY PLEASING PROPORTIONS THAT EVOKE A SENSE OF BALANCE AND COMFORT. BY APPLYING THIS PRINCIPLE, THE DESIGN WILL SEAMLESSLY INTEGRATE THE DIVERSE FUNCTIONS OF THE CLUB—MULTIPURPOSE HALL, EXHIBITION HALL, LIBRARY, INDOOR GAMES, AND OUTDOOR GAMES—INTO A COHESIVE AND INVITING SPACE. THE RATIO GUIDES SPATIAL LAYOUTS FOR OPTIMIZED CIRCULATION, ENHANCES NATURAL LIGHT AND VENTILATION, AND PROMOTES STRUCTURAL INTEGRITY IN LARGE-SPAN AREAS LIKE THE MULTIPURPOSE HALL. MOREOVER, IT FOSTERS A SYMBOLIC CONNECTION WITH PERFECTION AND BEAUTY WHILE BLENDING HARMONIOUSLY WITH OUTDOOR LANDSCAPES, CREATING AN ENVIRONMENT THAT IS NOT ONLY FUNCTIONAL AND EFFICIENT BUT ALSO AESTHETICALLY ICONIC.



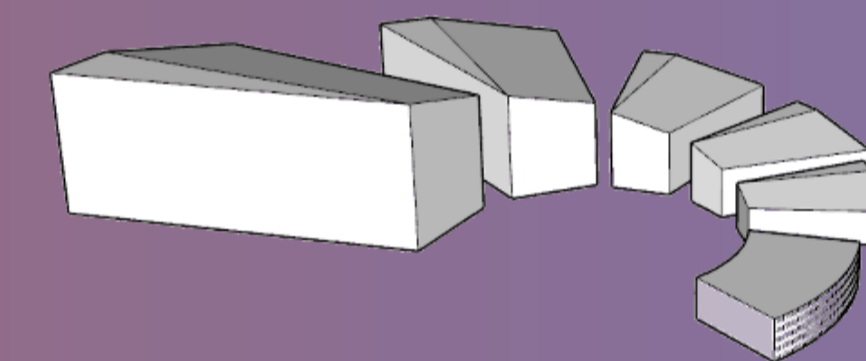
## FORM-SHAPE DEVELOPEMENT



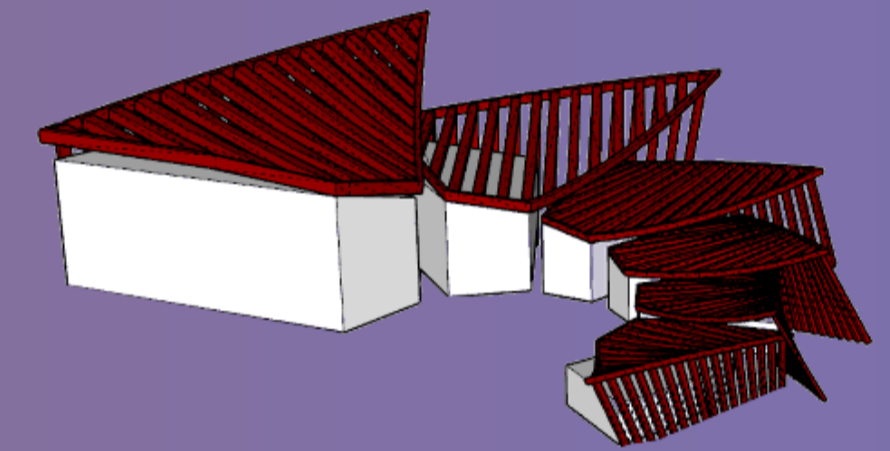
GOLDEN RATIO



ARRANGING SPACES (CLUSTERED ARRANGEMENT)



DIFFERENCES IN HEIGHTS AS PER REQUIREMENTS



ROOF COVERINGS MAKE THE SPACE ATTRACTIVE AND CURIOUS

## ACTIVITY ANALYSIS

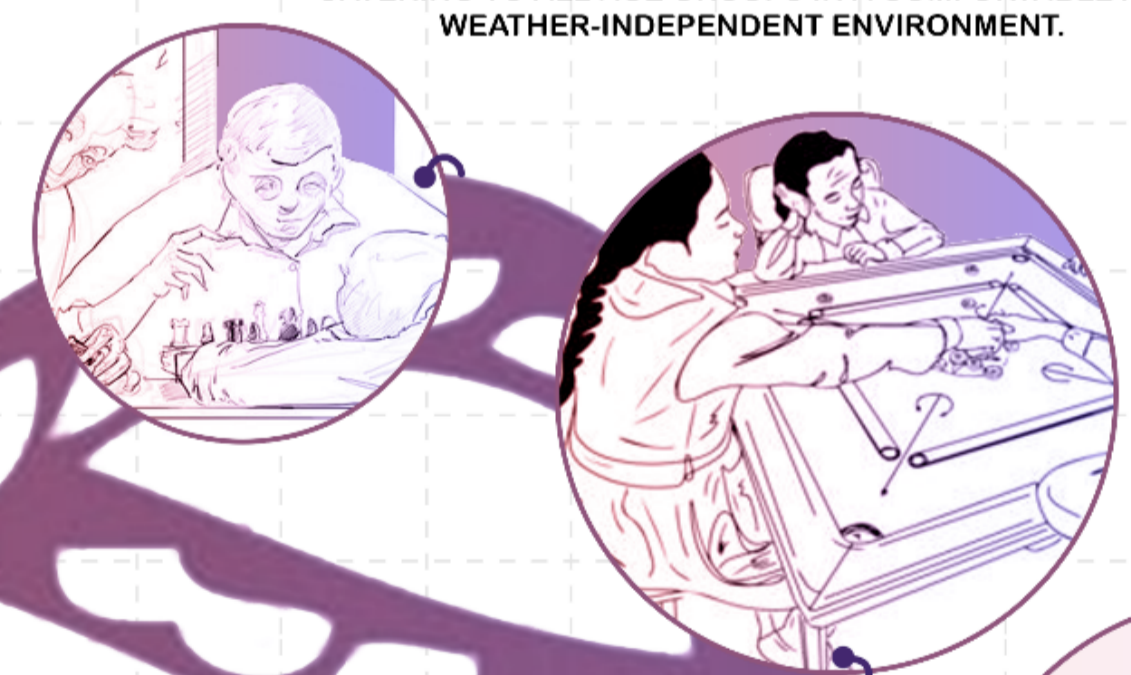
**MULTIPURPOSE HALL (BANQUET HALL)**  
FOR HOSTING MARRIAGE CEREMONIES, RECEPTIONS, ETC. IT IS DESIGNED TO ACCOMMODATE LARGE GATHERINGS, WITH FEATURES LIKE A SPACIOUS SEATING AREA, A STAGE FOR CEREMONIES, AND FACILITIES FOR CATERING AND ENTERTAINMENT.



**EXHIBITION HALL**  
DYNAMIC SPACE FOR SHOWCASING ART, CULTURE, AND INNOVATION, CATERING TO A WIDE RANGE OF EVENTS.



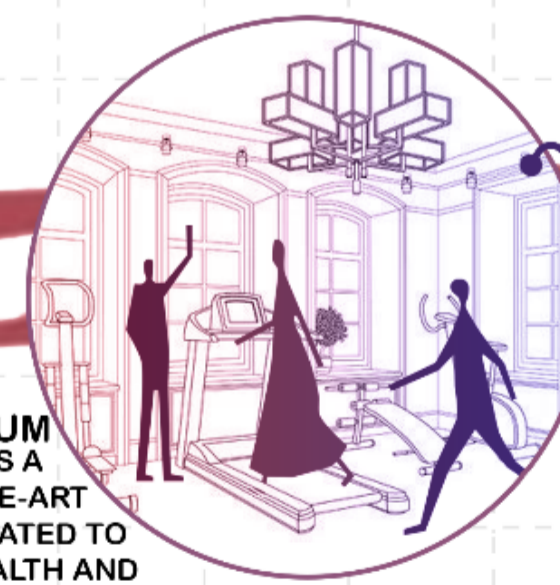
**INDOOR GAMES**  
A DEDICATED SPACE FOR LEISURE AND COMPETITIVE ACTIVITIES, CATERING TO ALL AGE GROUPS IN A COMFORTABLE AND WEATHER-INDEPENDENT ENVIRONMENT.



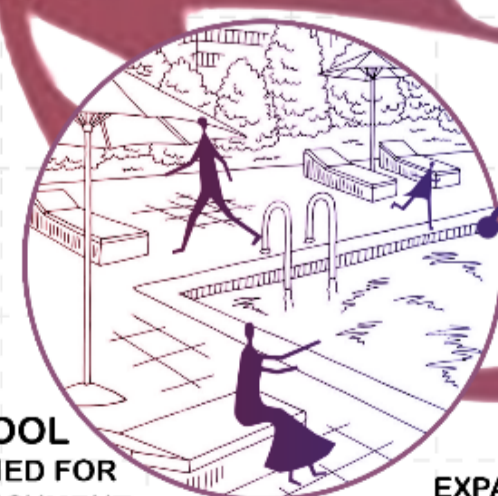
**OUTDOOR GYM**  
UNIQUE FITNESS EXPERIENCE, COMBINING PHYSICAL ACTIVITY WITH THE BENEFITS OF FRESH AIR AND NATURAL SURROUNDINGS. EQUIPPED WITH DURABLE, WEATHER-RESISTANT WORKOUT STATIONS.



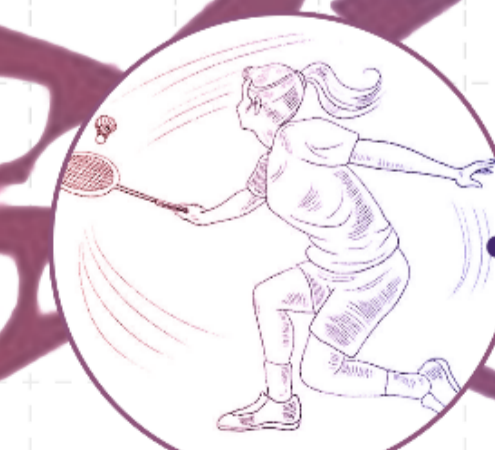
**GYMNASIUM**  
SERVES AS A STATE-OF-THE-ART FACILITY DEDICATED TO PROMOTING HEALTH AND FITNESS FOR MEMBERS OF ALL AGE GROUPS.



**SWIMMING POOL**  
REFRESHING AND VERSATILE FACILITY DESIGNED FOR RELAXATION, FITNESS, AND RECREATIONAL ENJOYMENT. IT TYPICALLY INCLUDES LEISURE ACTIVITIES, AND CHILDREN'S PLAY, CATERING TO USERS OF ALL SKILL LEVELS AND AGE GROUPS.



**OUTDOOR SPORTS**  
EXPANSIVE, OPEN SPACES DEDICATED TO PROMOTING PHYSICAL FITNESS, TEAM SPIRIT, AND RECREATIONAL ENJOYMENT. THESE FACILITIES TYPICALLY INCLUDE WELL-MAINTAINED COURTS AND FIELDS FOR SPORTS LIKE TENNIS, BASKETBALL, FOOTBALL, CRICKET, AND VOLLEYBALL, DESIGNED TO ACCOMMODATE PLAYERS OF VARYING SKILL LEVELS.



**CHILDREN PLAY AREA**  
DESIGNED TO ENGAGE AND ENTERTAIN YOUNG MEMBERS, ENCOURAGING PHYSICAL ACTIVITY, CREATIVITY, AND SOCIAL INTERACTION.

# RECREATIONAL CLUB DESIGN

BATCH - 2K22  
ARCHITECTURAL DESIGN - V

OTHER PROPERTY

210M

6M SETBACK

70 M

OTHER PROPERTY

6M SETBACK

10M SETBACK

6M SETBACK

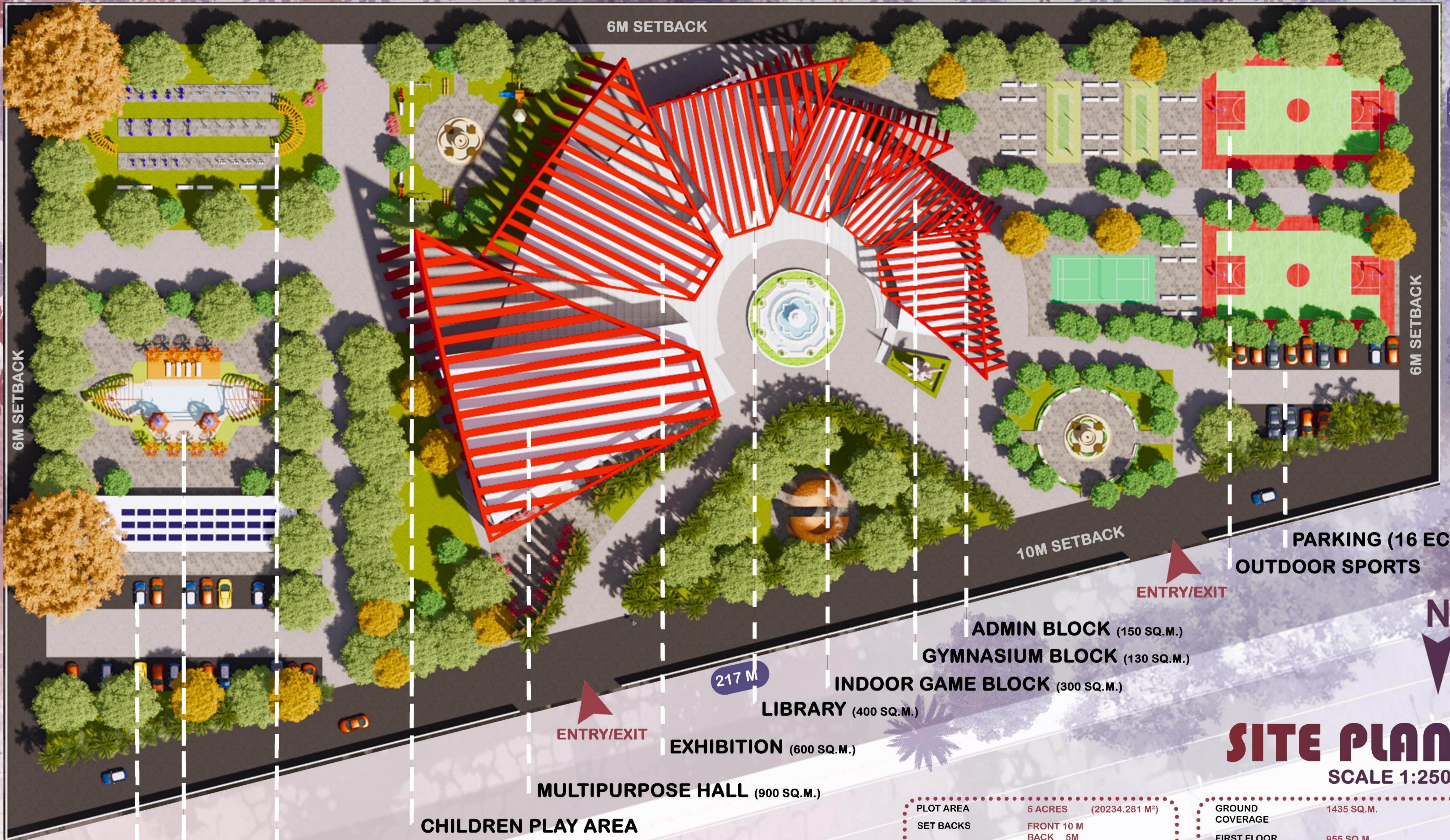
123 M

9M SIDE ROAD

15M

FRONT ROAD

# RECREATIONAL CLUB DESIGN



SWIMMING POOL AND CHANGING AREAS BLOCK  
 PARKING (32 ECS)

OPEN-AIR GYM

CHILDREN PLAY AREA

MULTIPURPOSE HALL (900 SQ.M.)

EXHIBITION (600 SQ.M.)

LIBRARY (400 SQ.M.)

INDOOR GAME BLOCK (300 SQ.M.)

GYMNASIUM BLOCK (130 SQ.M.)

ADMIN BLOCK (150 SQ.M.)

PARKING (16 ECS)  
OUTDOOR SPORTS

ENTRY/EXIT

217 M



## SITE PLAN


SCALE 1:250

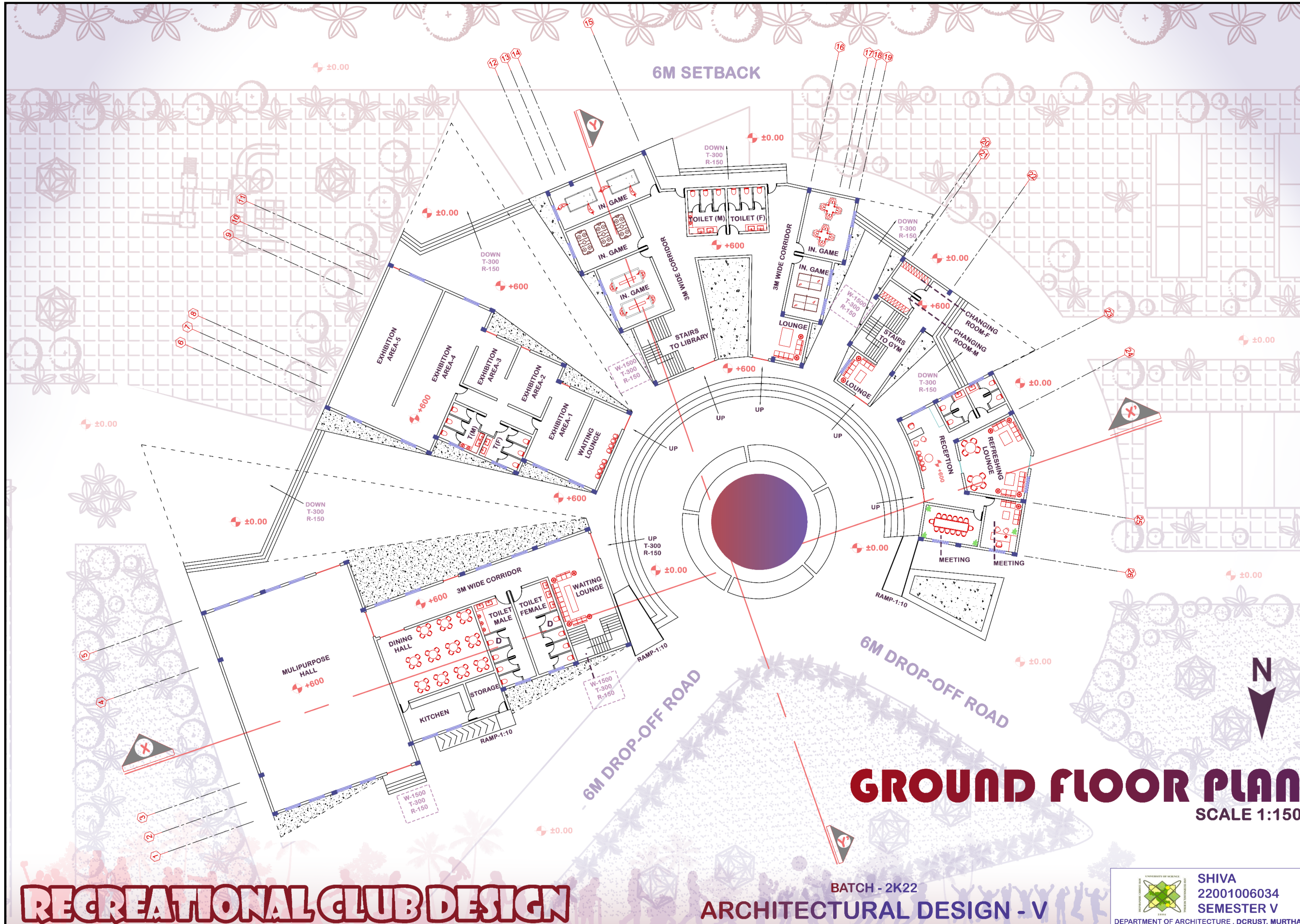
PLOT AREA	5 ACRES	(20234.281 M <sup>2</sup> )
SET BACKS	FRONT 10 M	BACK 5M
	SIDES 5M	
PERMISSIBLE GROUND COVERAGE	35% OF 20234.281 M <sup>2</sup>	=7081.99835 M <sup>2</sup>
PERMISSIBLE FAR	100% OF 20234.281 M <sup>2</sup>	=20234.281 M <sup>2</sup>
PERMISSIBLE HEIGHT	UNRESTRICTED	

GROUND COVERAGE	1435 SQ.M.
FIRST FLOOR AREA	955 SQ.M.
TOTAL FAR	2390 SQ.M.
PARKING	2ECS / 100 SQ.M. 2/100 X 2390 = 48ECS

BATCH - 2K22

ARCHITECTURAL DESIGN - V


**SHIVA**  
 22001006034  
 SEMESTER V  
 DEPARTMENT OF ARCHITECTURE, DCRUST, MURTHAL

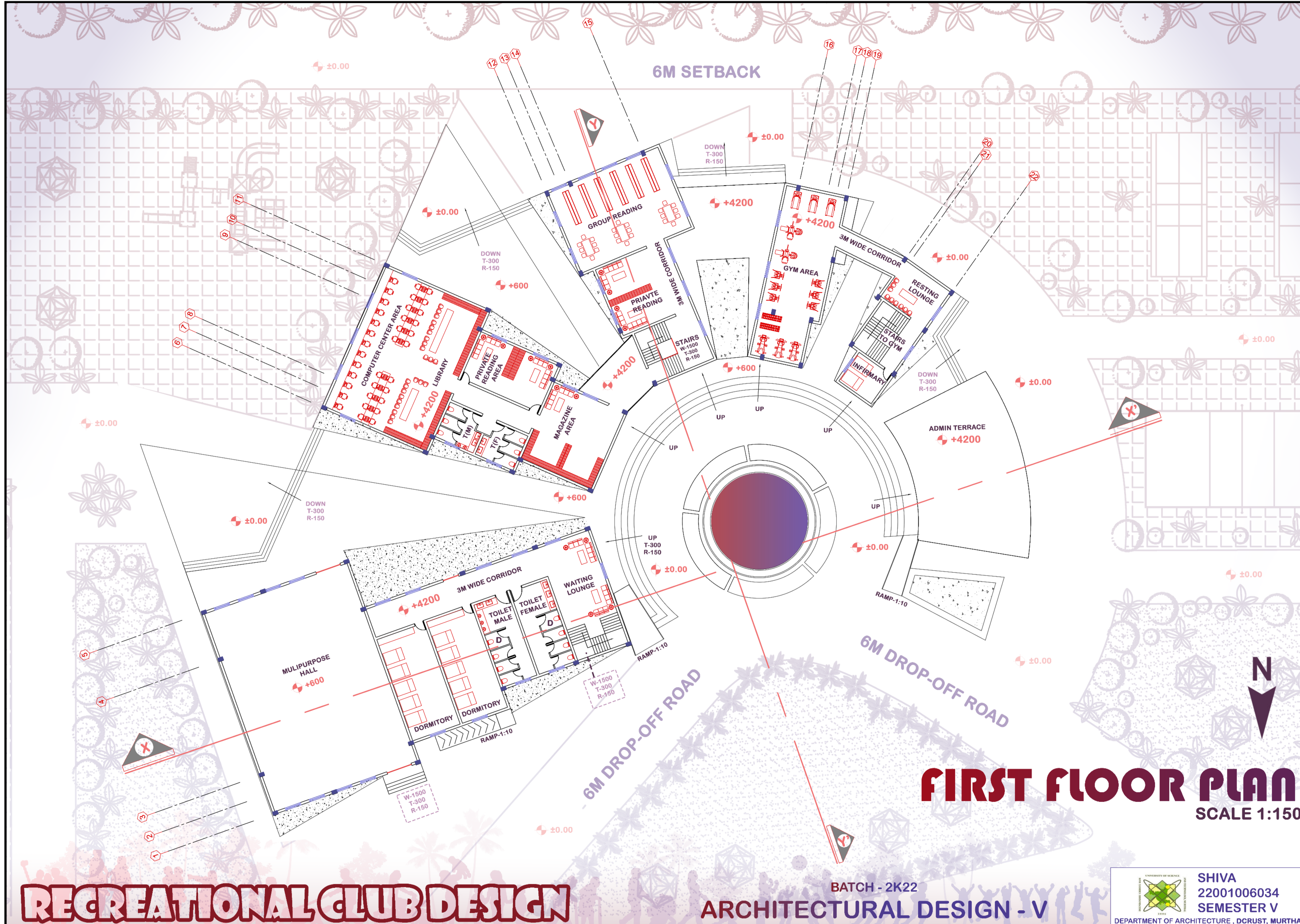


# RECREATIONAL CLUB DESIGN

# GROUND FLOOR PLAN

SCALE 1:150

BATCH - 2K22  
 ARCHITECTURAL DESIGN - V



# FIRST FLOOR PLAN

SCALE 1:150



# RECREATIONAL CLUB DESIGN

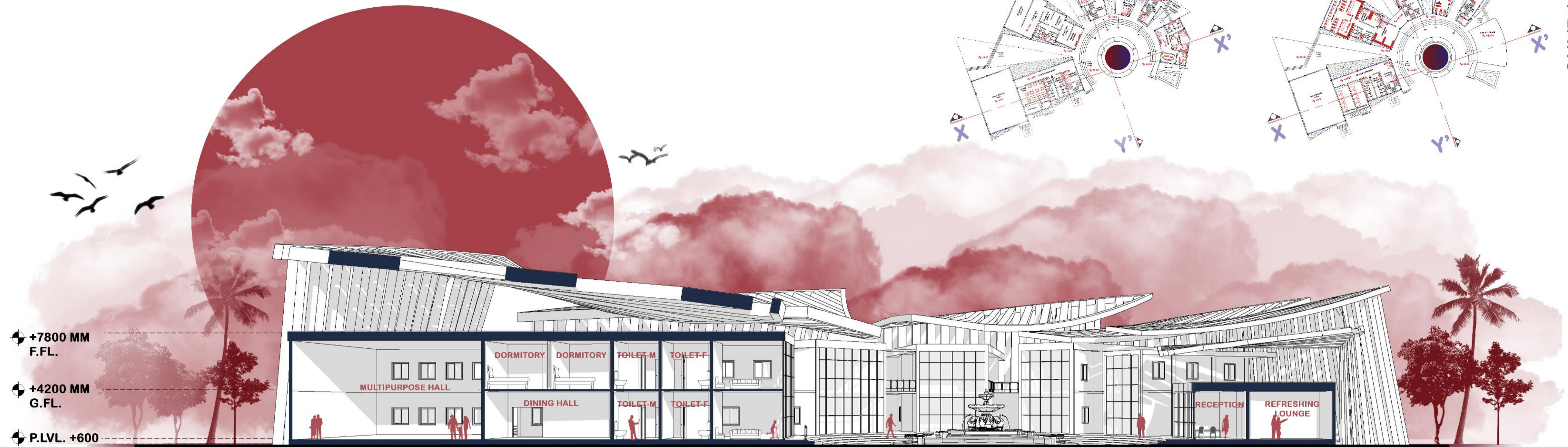
BATCH - 2K22  
 ARCHITECTURAL DESIGN - V

# SECTIONS

GROUND FLOOR PLAN

FIRST FLOOR PLAN

KEY PLANS



- +7800 MM F.F.L.
- +4200 MM G.F.L.
- P.LVL. +600
- NGL. ± 0.00

**SECTION - X-X'**  
SCALE 1:150



- +7800 MM F.F.L.
- +4200 MM G.F.L.
- P.LVL. +600
- NGL. ± 0.00

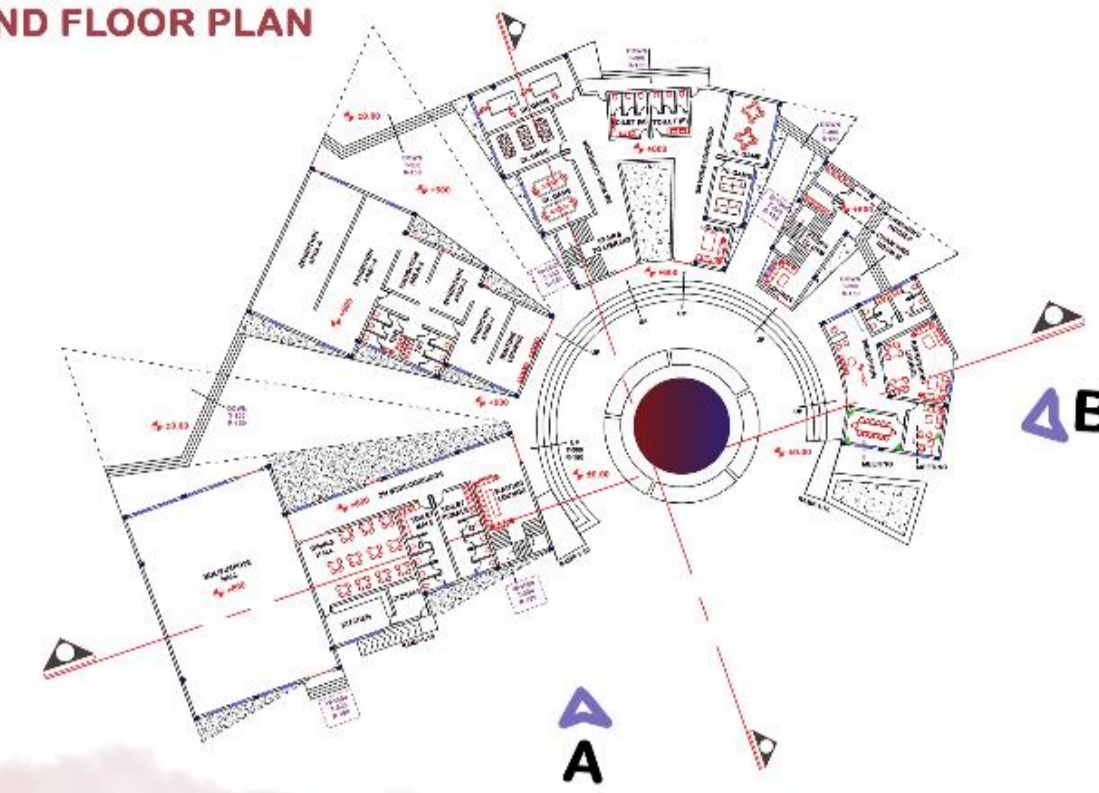
**SECTION - Y-Y'**  
SCALE 1:150

# RECREATIONAL CLUB DESIGN

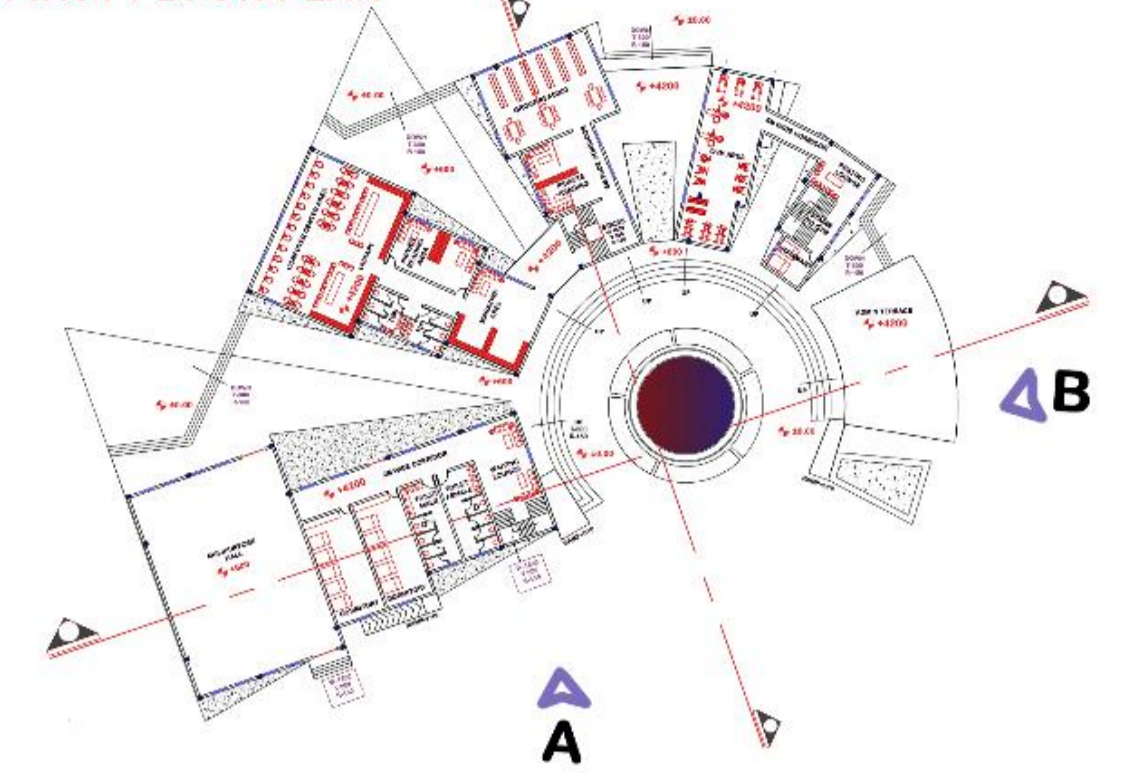
BATCH - 2K22  
ARCHITECTURAL DESIGN - V

# ELEVATIONS

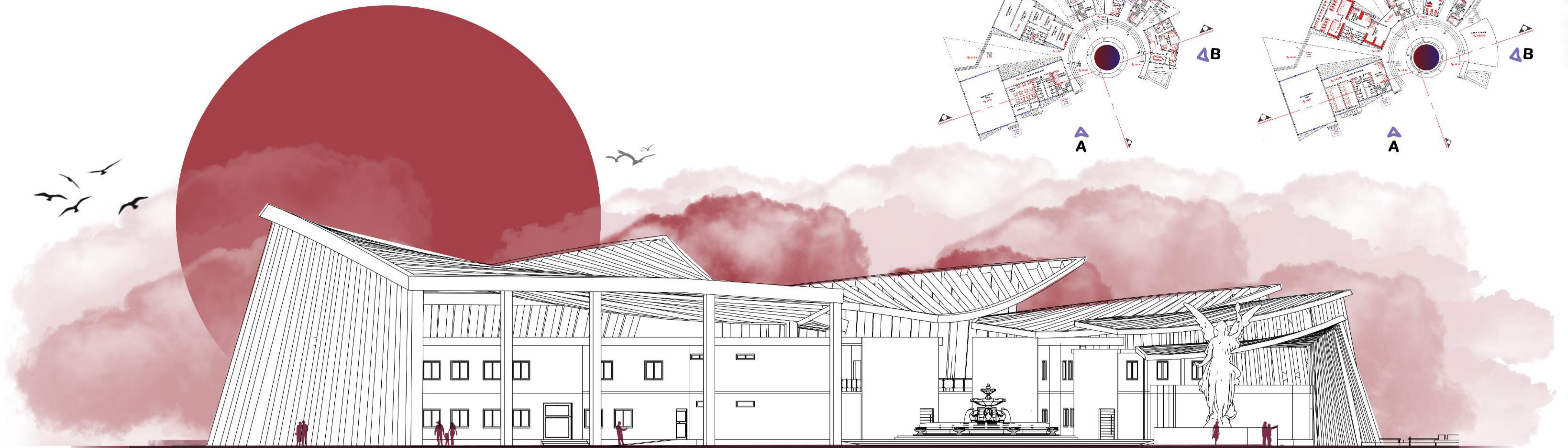
GROUND FLOOR PLAN



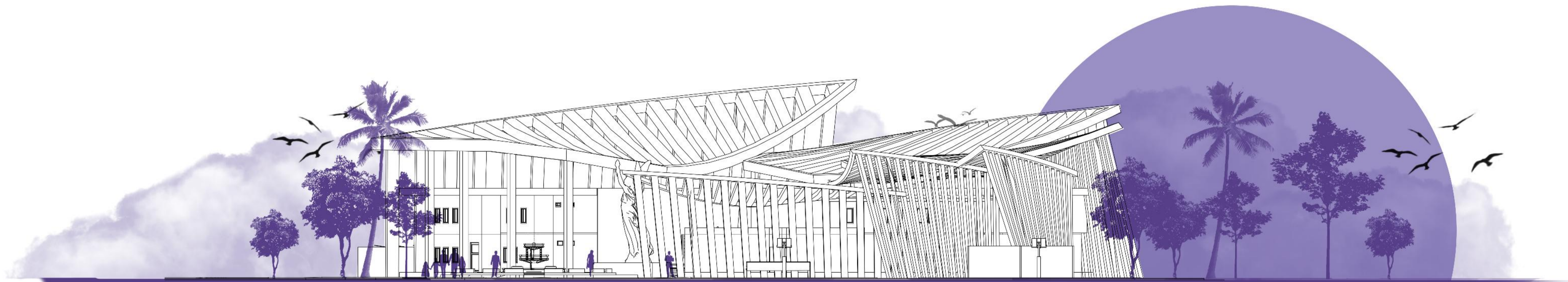
FIRST FLOOR PLAN



KEY PLANS



**ELEVATION A**  
SCALE 1:150



**ELEVATION B**  
SCALE 1:150

**RECREATIONAL CLUB DESIGN**

BATCH - 2K22  
**ARCHITECTURAL DESIGN - V**

# VIEWS & DESIGNS

A RECREATIONAL CLUB IS A FACILITY OR ORGANIZATION DESIGNED TO PROVIDE A VARIETY OF LEISURE, RECREATIONAL, AND SOCIAL ACTIVITIES FOR ITS MEMBERS AND VISITORS.

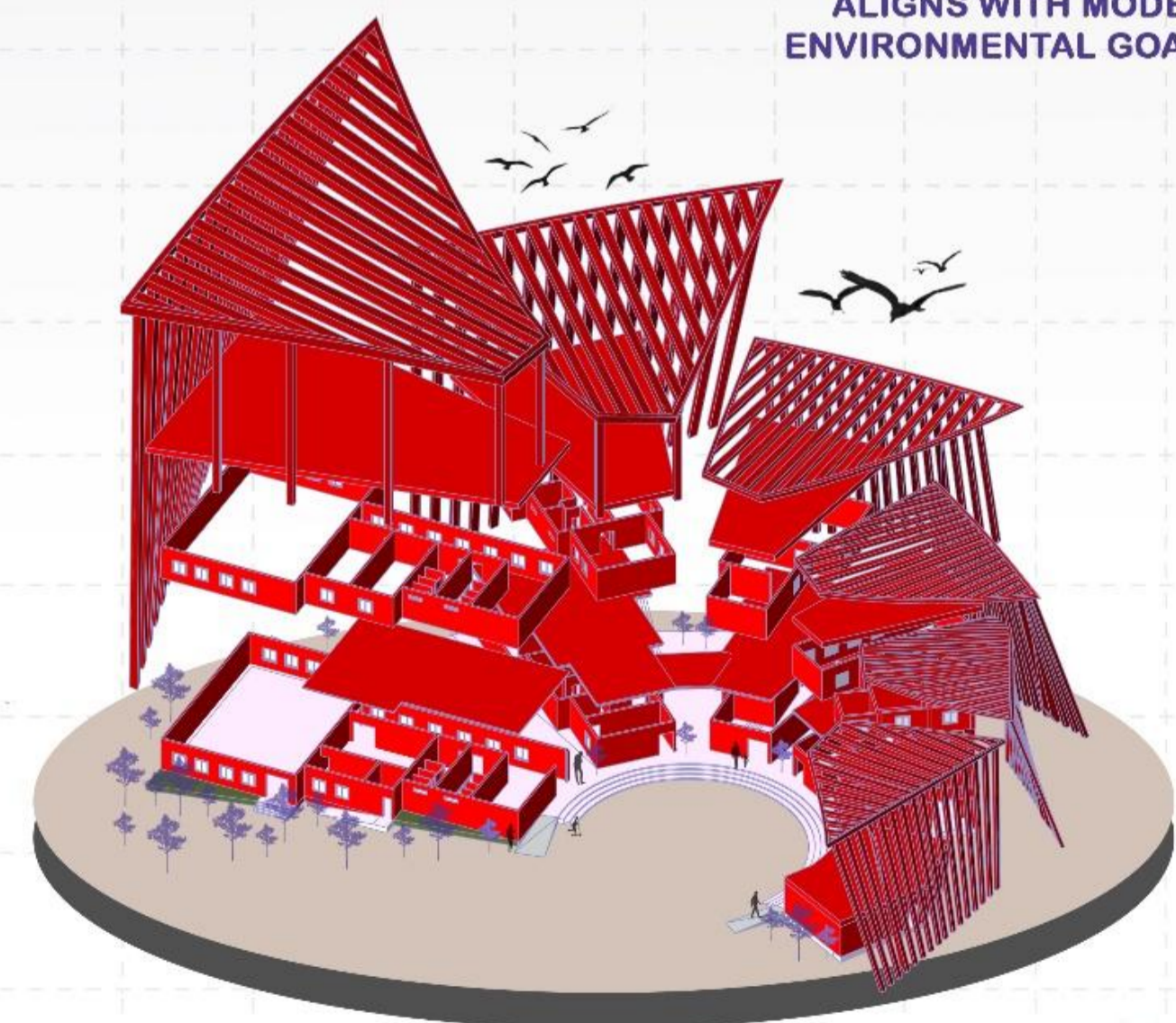


## POOL AREA

THE SWIMMING POOL IN A RECREATIONAL CLUB IS A REFRESHING AND VERSATILE FACILITY DESIGNED FOR RELAXATION, FITNESS, AND RECREATIONAL ENJOYMENT.



SOLAR PANELS INSTALLED ON THE ROOFS OF A RECREATIONAL CLUB REPRESENT A SUSTAINABLE AND ENERGY-EFFICIENT FEATURE THAT ALIGNS WITH MODERN ENVIRONMENTAL GOALS.



EXPLODED ISOMETRIC



OUTDOOR GYM

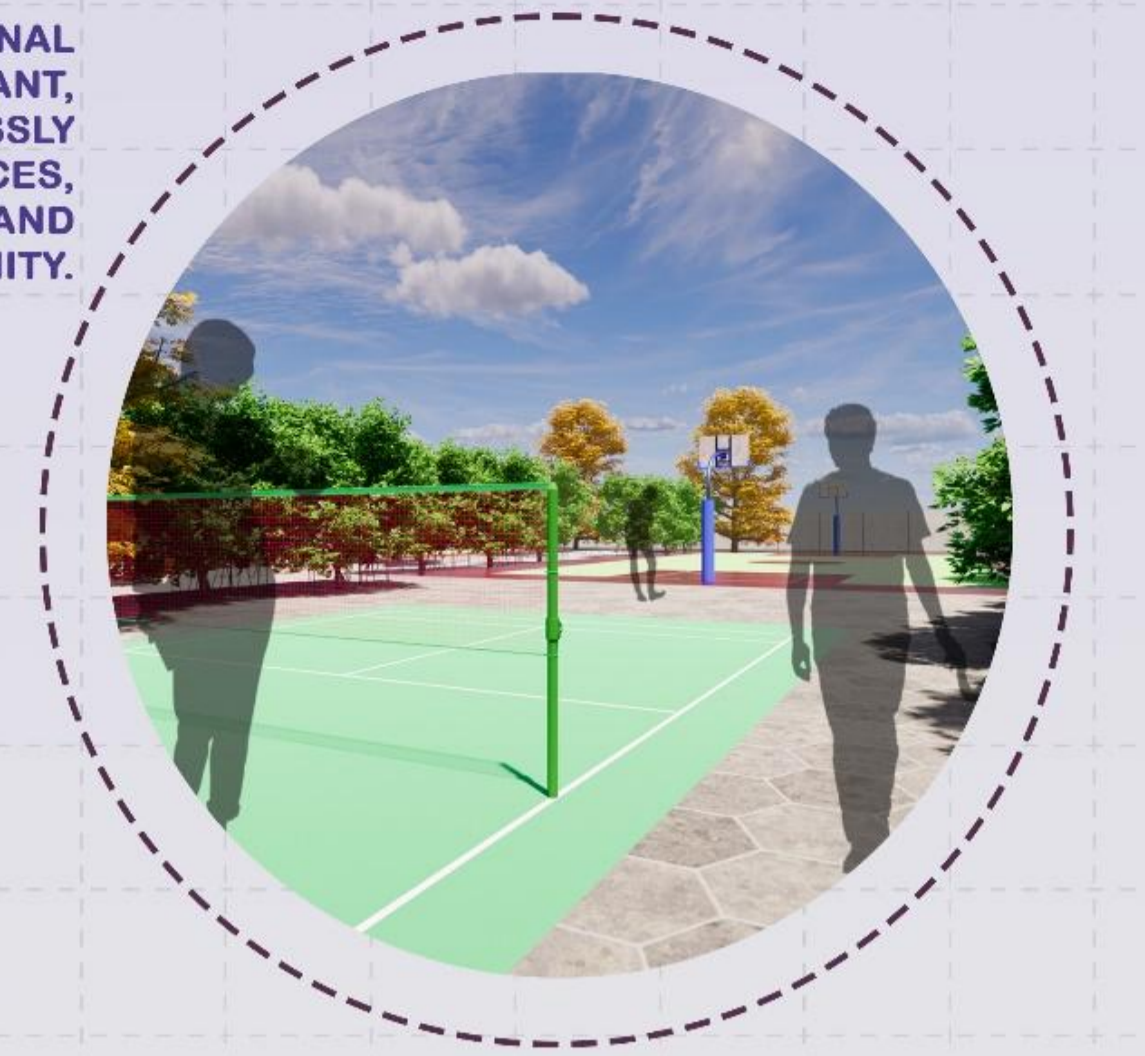


CHILDREN PLAY AREA



## CENTRAL SQUARE

THE CENTRAL SQUARE IN A RECREATIONAL CLUB SERVES AS A VIBRANT, MULTIFUNCTIONAL HUB THAT SEAMLESSLY CONNECTS VARIOUS ACTIVITY SPACES, FOSTERING A SENSE OF UNITY AND COMMUNITY.



INDOOR OUTDOOR CONNECTIVITY

## OUTDOOR SPORTS

THE OUTDOOR SPORTS FACILITIES IN A RECREATIONAL CLUB PROVIDE EXPANSIVE, OPEN SPACES DEDICATED TO PROMOTING PHYSICAL FITNESS, TEAM SPIRIT, AND RECREATIONAL ENJOYMENT. THESE FACILITIES TYPICALLY INCLUDE WELL-MAINTAINED COURTS AND FIELDS FOR SPORTS LIKE TENNIS, BASKETBALL, ETC



ENTRY DESIGN



OUTDOOR SEATINGS



## PARKING SPACES

48 ECS DIVIDED OVER TWO AREAS FOR COMFORTABLE PARKING.



# RECREATIONAL CLUB DESIGN

BATCH - 2K22  
ARCHITECTURAL DESIGN - V