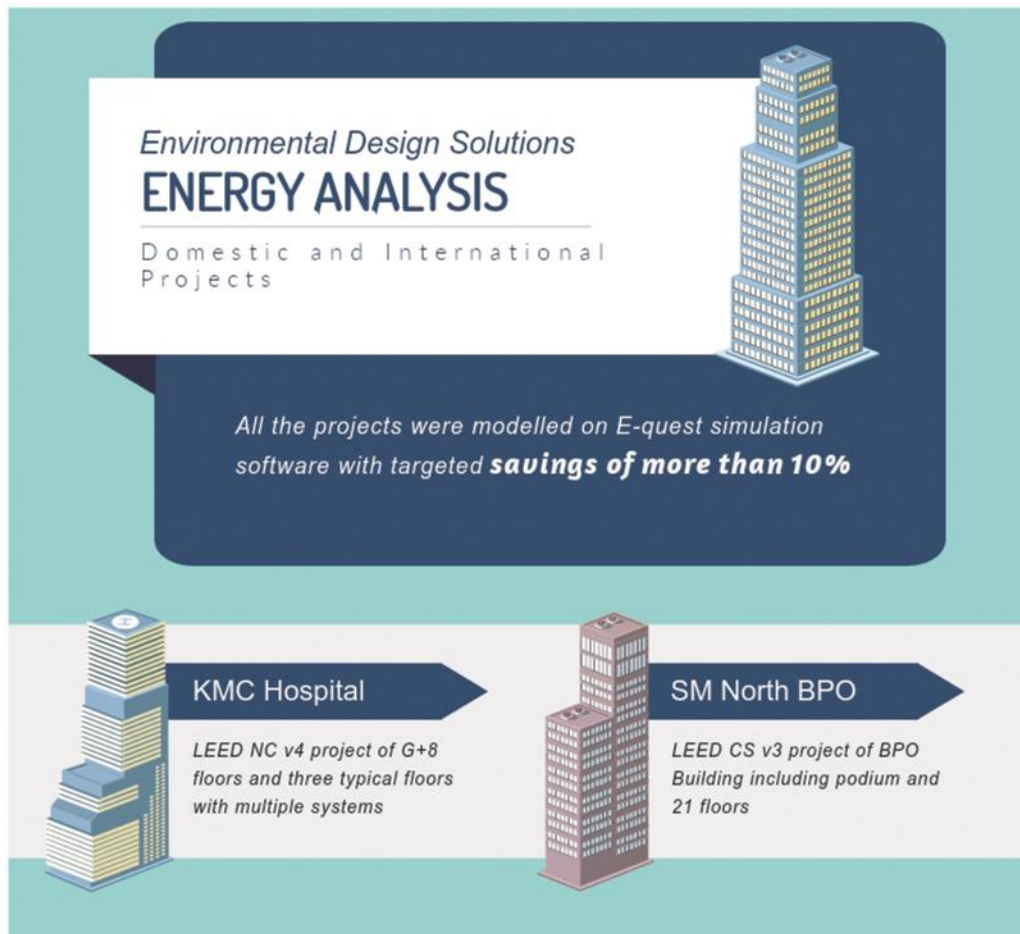


ARCHITECTURE PORTFOLIO

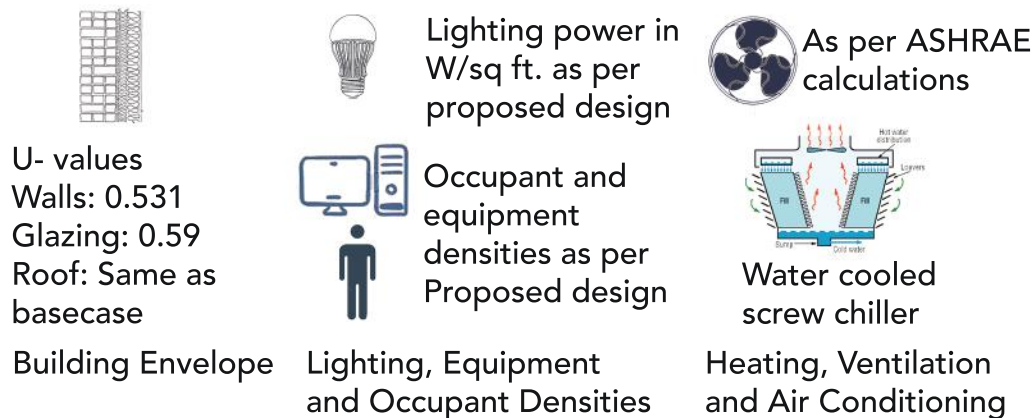


MAITREYEE FADNAVIS

PROFESSIONAL WORK



SIMULATION PARAMETERS FOR KMC HOSPITAL



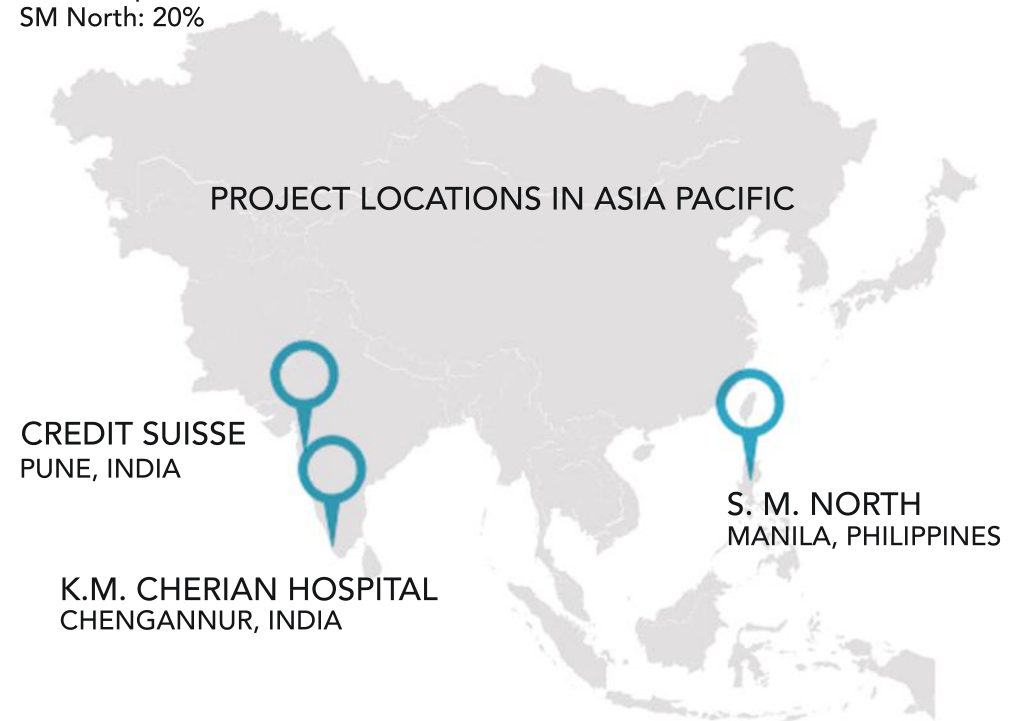
ENERGY ANALYSIS FOR LEED

Professional projects

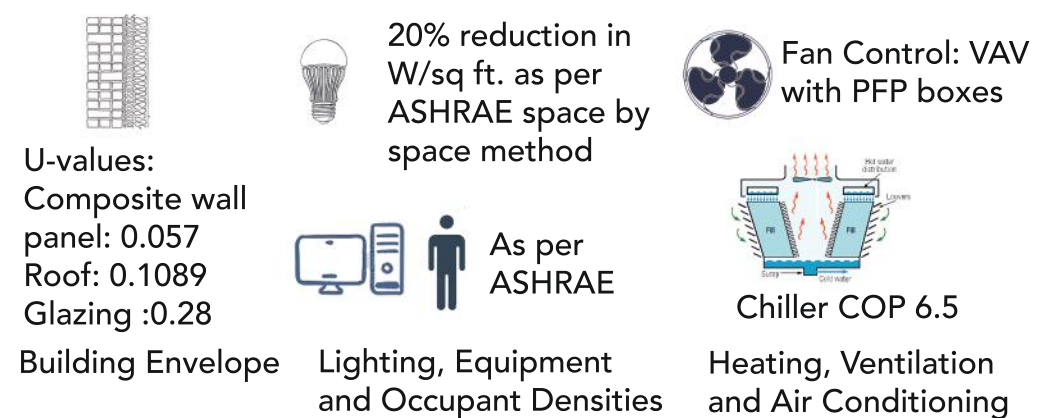
The energy analysis of these two projects majorly differed by the rating system and the proposal scale. The basic tweaks of U-value of envelope and system installed and used was entirely client's input. Both are modelled on E-quest and our targeted savings

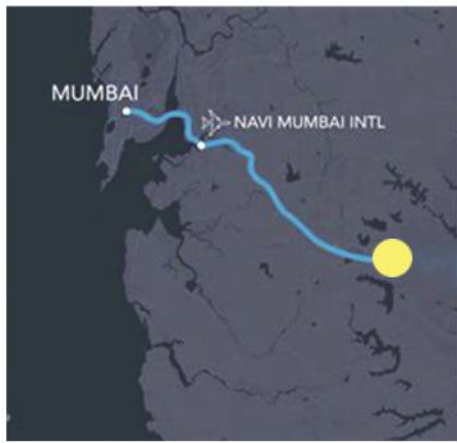
KMC Hospital: 18%

SM North: 20%



SIMULATION PARAMETERS FOR SM NORTH BPO





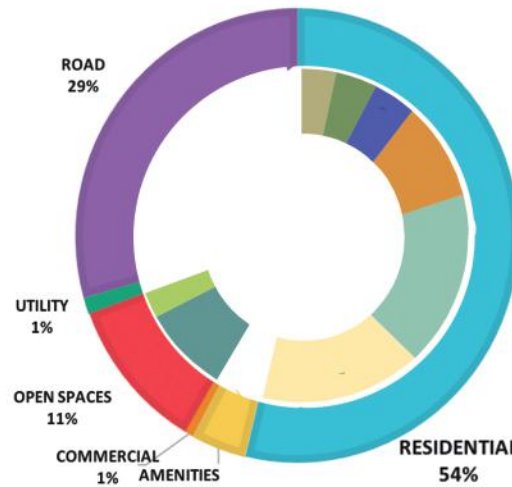
RIVER'S EDGE ON MUMBAI MAP



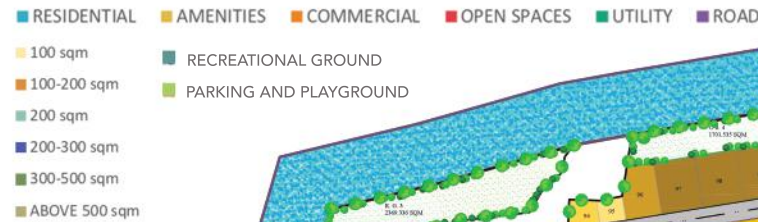
LOCATION OF RIVER'S EDGE ON MAP



PLAN SUPER IMPOSED ON GOOGLE MAP



NUMBER OF PLOTS OF ALL TYPES



RIVER'S EDGE

Internship project

Location of site: Village Warad, Taluka Khalapur, District Raigad

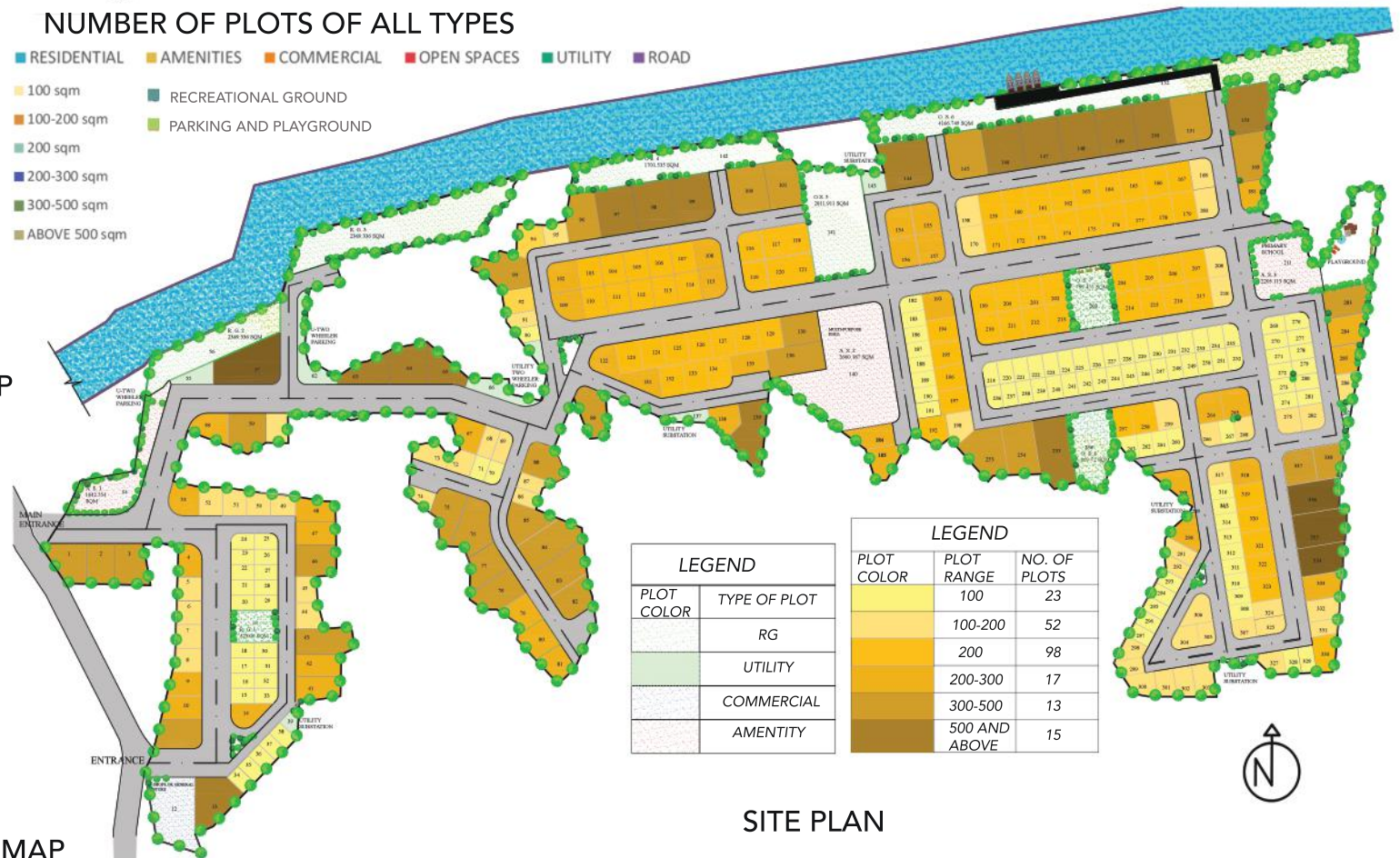
Site area: 30 Acres

The site in Warad comes under MSRDC Regional planning. The entry to the site is proposed on two sides facing expressway and service road adjacent to it. The land is adjoining a major water course i.e. Patalganga river.

PROPOSAL:

The project sets the idea of using the open space along the river as the mandatory setback from minor water course.

Utility and open space were strategically planned as per by laws and utility and amenities in the random shaped corners where plots couldn't be planned.



SITE PLAN

BOARDING SCHOOL

Internship project

Location of site: Village Wakas, Taluka Karjat, District Raigad

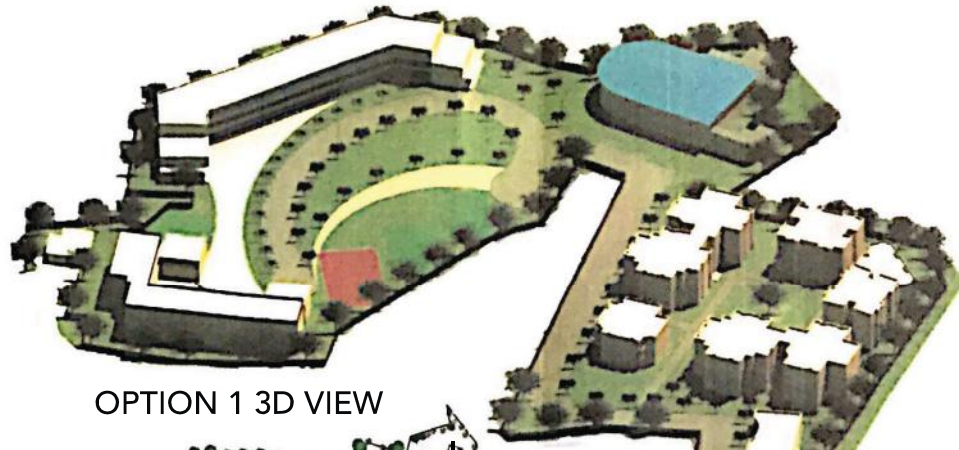
The layout of the school is planned according to features like central courtyards and buffer spaces

Site area - 48000 sqm

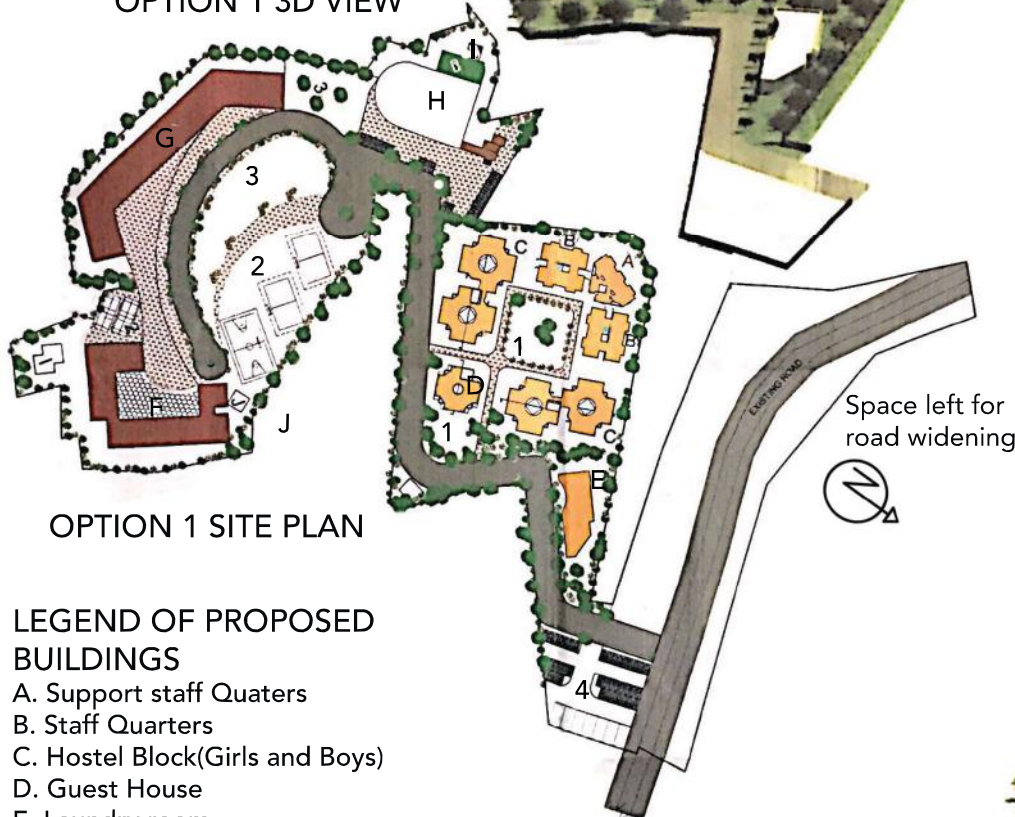
PROPOSAL:

The south west zone is planned with minimum building footprint. Buffer spaces are inclusive of basketball, volleyball, badminton courts and kids play area.

The buffer zone created in the south west part of the layout includes semi open area for cafe



OPTION 1 3D VIEW



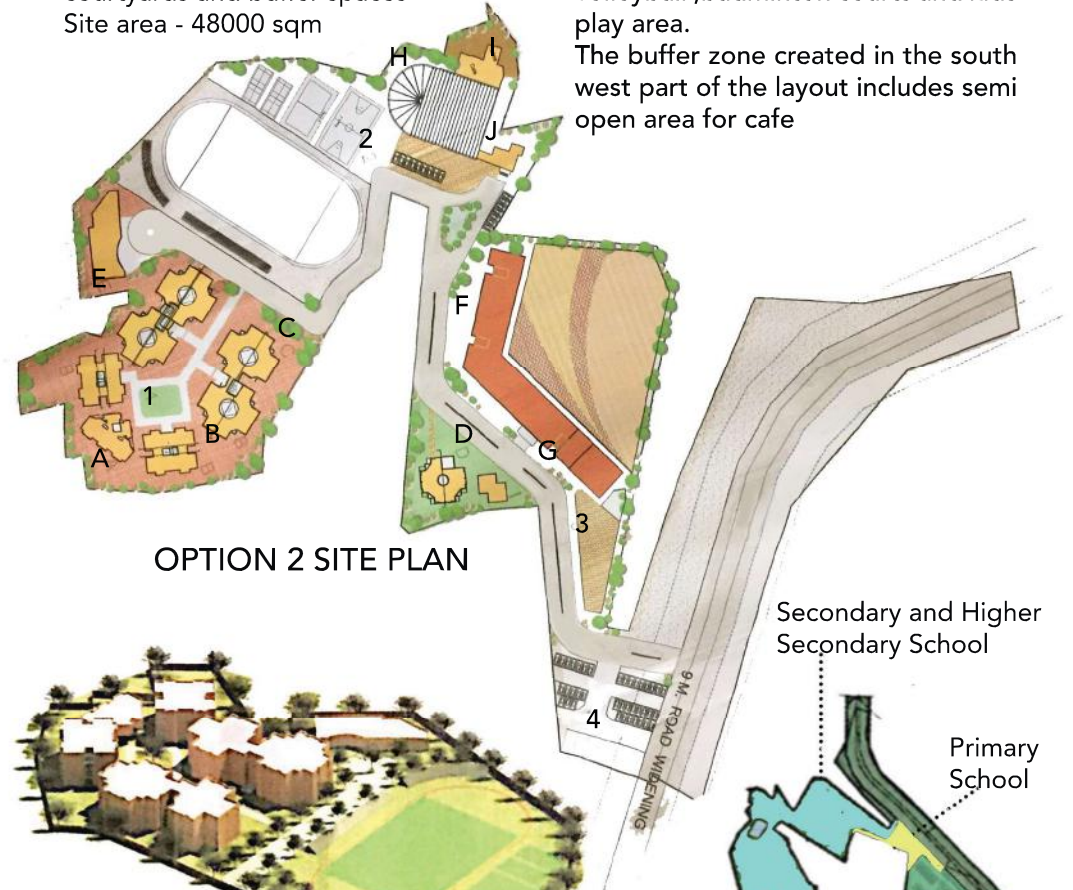
OPTION 1 SITE PLAN

LEGEND OF PROPOSED BUILDINGS

- A. Support staff Quarters
- B. Staff Quarters
- C. Hostel Block (Girls and Boys)
- D. Guest House
- E. Laundry room
- F. Secondary and Higher Secondary school
- G. Primary School
- H. Auditorium
- I. Canteen
- J. Apparatus room

LEGEND OF PROPOSED RECREATIONAL GROUND

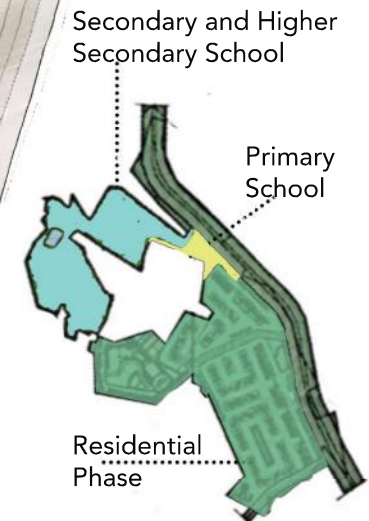
- 1. Garden
- 2. Courts (Hardscape)
- 3. Kids Play area (Softscape)
- 4. Parking



OPTION 2 SITE PLAN



OPTION 2 3D VIEW



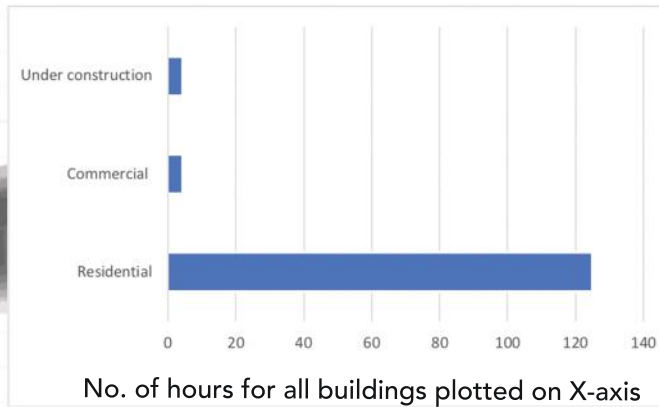
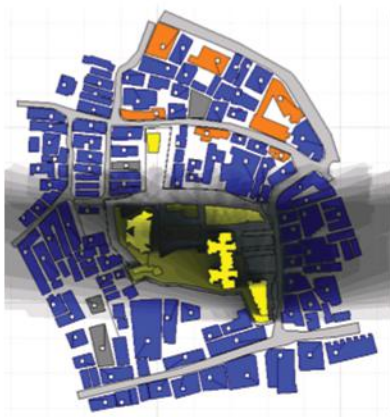
KEY PLAN

SHREEPATI JEWELS

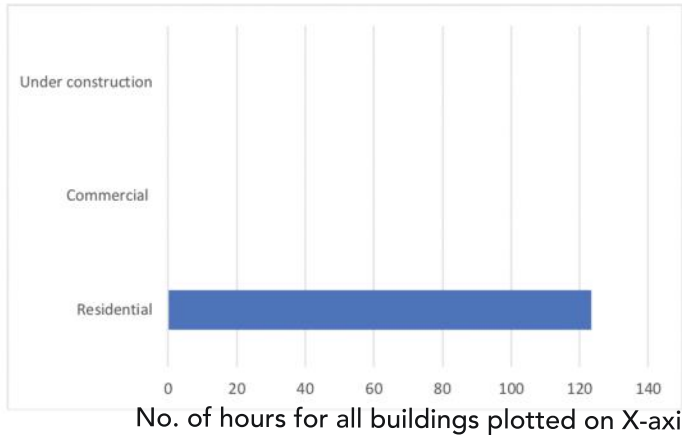
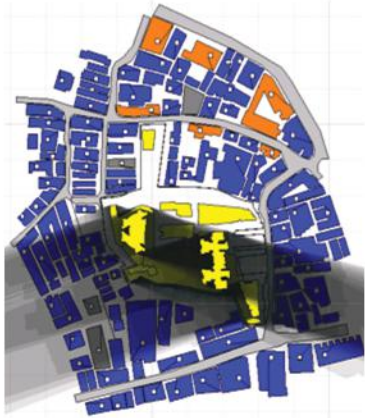
Internship project

Shadow Analysis report of proposed residential building

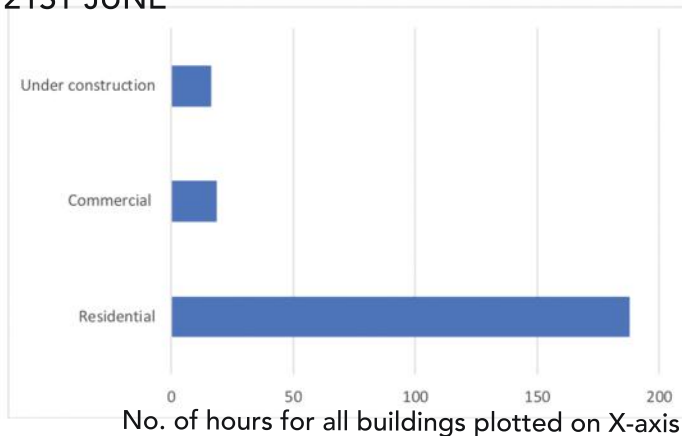
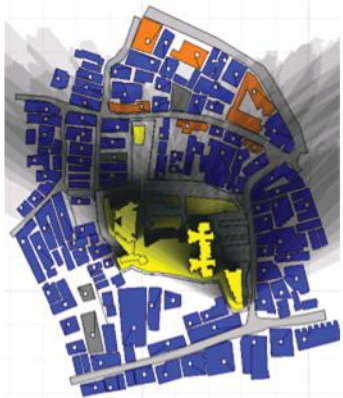
Height of proposed residential building exceeds 70mts. and falls under high rise category and the shadow falling on 132 surrounding buildings was considered as they were covered in 100 m radius from the proposal.



SHADOW ANALYSIS FOR 21ST MARCH



SHADOW ANALYSIS FOR 21ST JUNE



SHADOW ANALYSIS FOR 21ST DECEMBER



LEGEND

- Proposed building
- Residential Building
- Under Construction Building
- Commercial Building



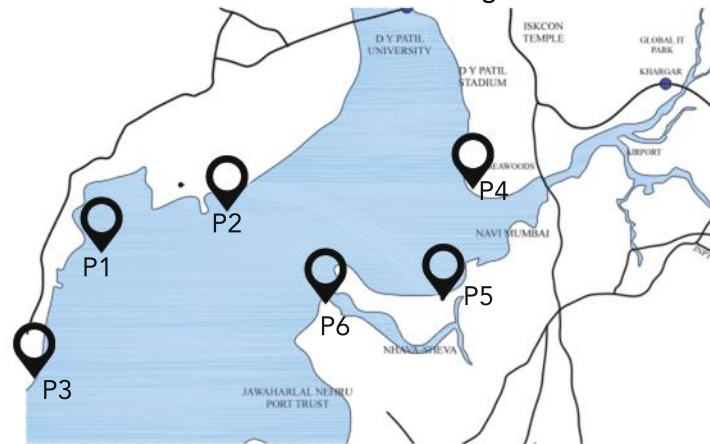
SANDERLINGS FROM P1

AVIAN SURVEY:

There were total five surveys conducted of 3-4 days in five months each for studying the kinds of birds living in the habitat. The maximum number of birds found are Flamingos. The rest are mostly waders, plovers, godwits, terns, gulls, and many more. Also noise survey was conducted to get readings of decibel levels and avian surveys were conducted from February to May.



SANDERLINGS FROM P1



SURVEY LOCATIONS ON MUMBAI CREEK MAP

MUMBAI TRANS-HARBOUR LINK

Internship project

Client name: JICA and SOWIL

Bridge from Sewri to Uran (JNPT)

Developers: MMRDA

The proposal included Avian survey, Marine Survey, Mangrove survey (Benthic survey). For marine surveys, tide levels increased constraints during survey. Accordingly in co-ordination with the fisherman in surrounding areas, the boats were deployed in creek.

IMPACT FACTORS: The piling for foundation of piers of bridge would increase noise level entirely and will hamper the shallow water habitats thus disturbing the habitat. The noise of the construction at the start point and end point of the bridge

The land and water points for survey are marked as follows:

- P1: Sewri Port (Land)
- P2: Sewri mudflat (Water)
- P3: Near BPT road on water (Water)
- P4: T. S. Chanakya, Seawoods (Land)
- P5: Shivaji Nagar Uran Phata (Land)
- P6: T. S. Rahman College (Land)



MUD SKIPPERS AT ALL LOCATIONS



BROWN & BLACK HEADED GULLS FROM P3



GREATER FLAMINGOS FROM P2



GULLED BILLED TERN FROM P6

ACADEMIC WORK



ENTRANCE



COURTYARD

THESIS : ART SCHOOL

FINAL YEAR

Typology of this building is **Art school** with thrust area as **barrier free design**

Ground floor Built up Area: 1677 sqm

Site area: 4856.22 sqm

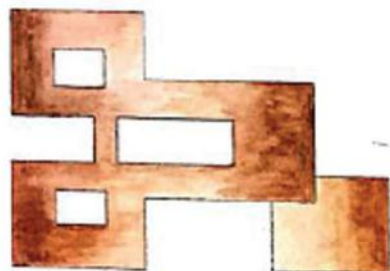
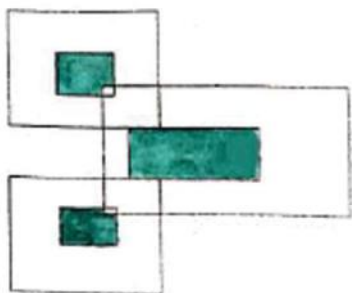
PROPOSAL:

Art school with design considerations for visually challenged caters the elementary ,Secondary, graduate and post graduate level education.
Integrated learning center for all artists including the visually challenged.

The study emphasizes the design requirements for higher education for the who choose arts and are visually impaired.

To understand the intake of university for the higher education for fine, applied and performing arts.

To understand the requirements of different spaces to learn arts.



CONCEPTUAL COURTYARD DEVELOPMENT



SITE PLAN



OBJECTIVES:

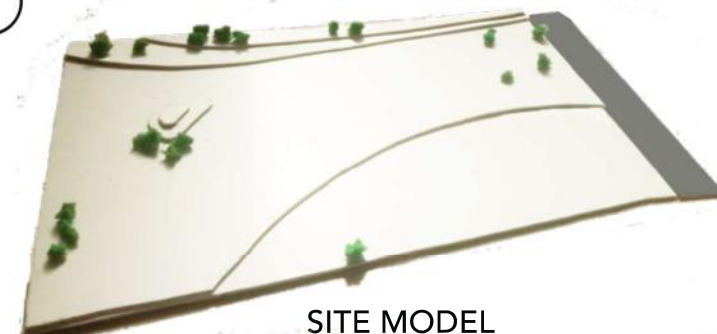
To study and analyze the design requirements for higher education for the who choose arts and are visually impaired.

To understand the intake of university for the higher education for fine, applied and performing arts.

To understand the requirements of different spaces to learn arts.



COURTYARD VIEWS



SITE MODEL



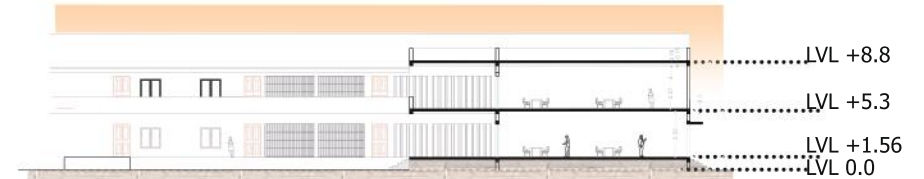
FINE ARTS DEPARTMENT GROUND FLOOR



FINE ARTS DEPARTMENT GROUND FLOOR

WORKSHOPS IN COURTYARDS

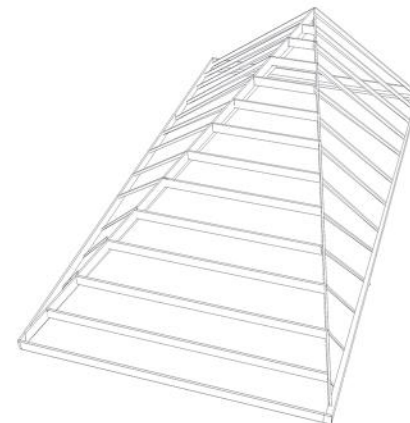
Art school has best interactive spaces as courtyards to increase involvement of project work by working both outdoors and indoors. The natural daylight will enable visually challenged students to explore by themselves. Integrated learning center sets a benchmark in society for involvement of all kinds of students with equal enthusiasm.



SECTION



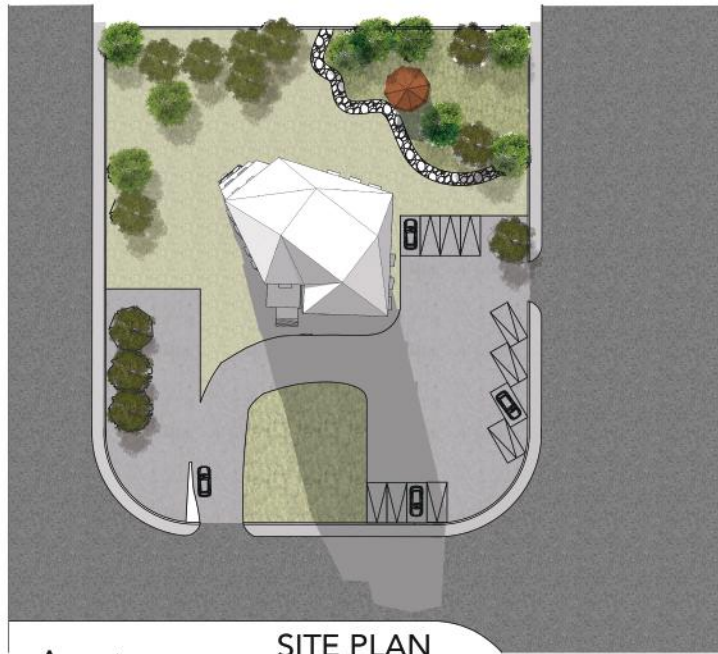
SECTION



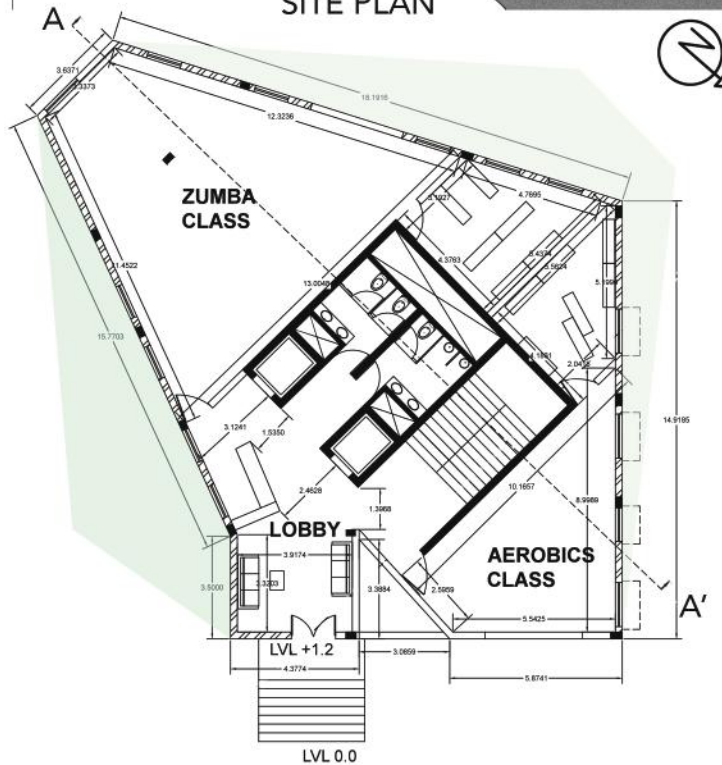
SINGLE EDGE PITCH ROOF FORM



FRONT ELEVATION



SITE PLAN



GROUND FLOOR PLAN

PROPOSAL:

This commercial building is located in **Earthquake zone IV**. It's symmetrical designing, use of shear walls or shear core, bracings and other cardinal structural components like lintel bands are essentially used for strengthening the structure. Magnolia are suitable for alluvial soil as they prevent soil liquefaction which is harmful in earthquakes.

EARTHQUAKE RESISTANT DESIGN

Fourth year project

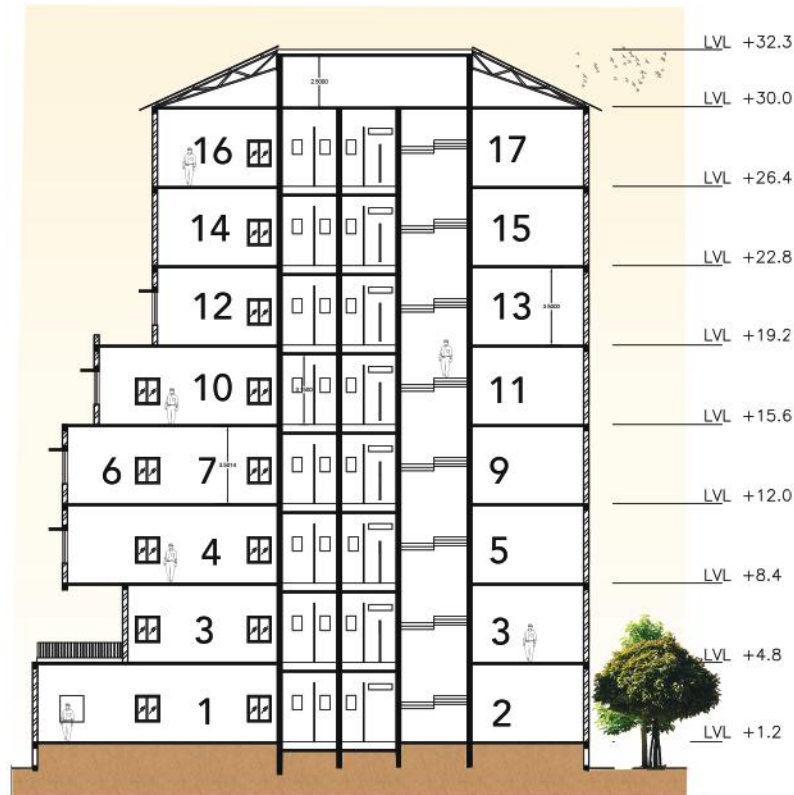
Typology of this building is **fitness center**.

Built up Area - 1314.19 sqm

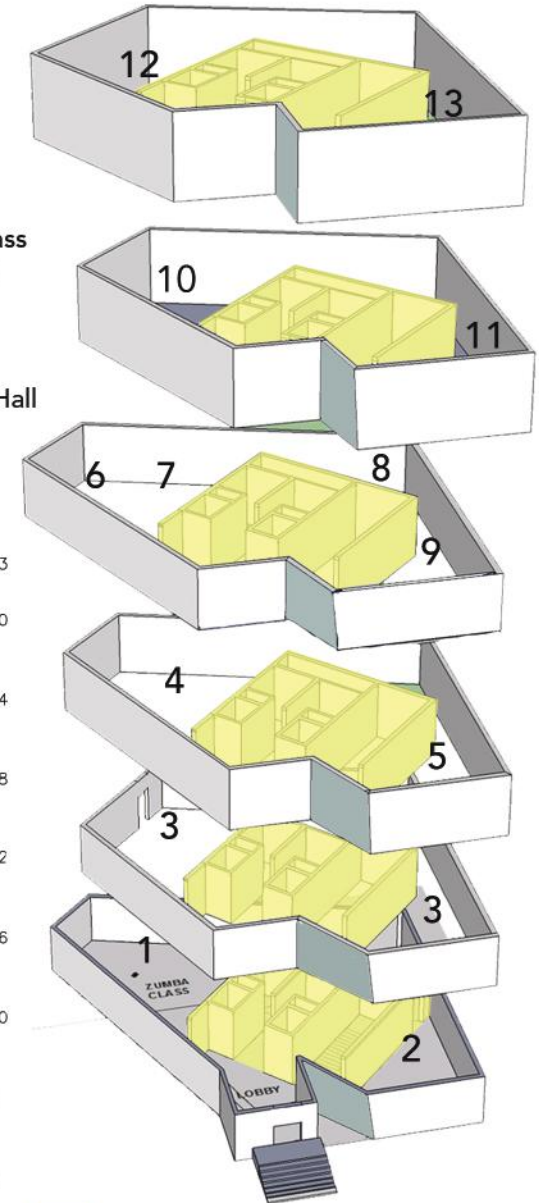
Site area - 3186.17 sqm

LEGEND

- | | |
|-------------------------|---------------------|
| 1. Zumba Class | 2. Aerobics Class |
| 3. Gym | 4. Table tennis |
| 5. Accupressure therapy | 7. Store |
| 6. Office | 8. Kitchen |
| 10. Yoga Hall | 9. Cafe |
| 12. Massage and spa | 11. Meditation Hall |
| | 13. Saloon |



SECTION AA'



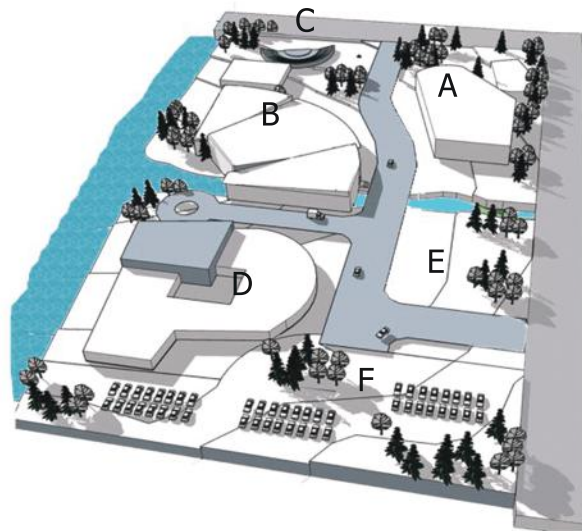
SHEAR CORE

SLANT WALL

EXPLODED VIEW



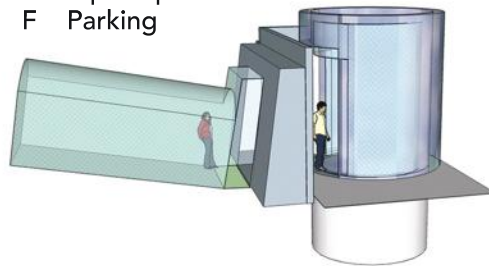
SITE PLAN



BACKWATERS INLET

LEGEND:

- A Folk art Center
- B Oceanarium
- C Amphitheater
- D Trade center
- E Open space
- F Parking



GLASS TUNNEL

OCEANARIUM

Fourth year project

Detailed building is Oceanarium in the precinct along with Folk art center and Trade Center

Built up Area - sqm

Site area - 24,600 sqm

PROPOSAL:

The project is majorly detailed with services and research on salt water studies. Marine biologists work is sprightly emphasized through a glass tunnel inside the backwaters.



LEGEND:

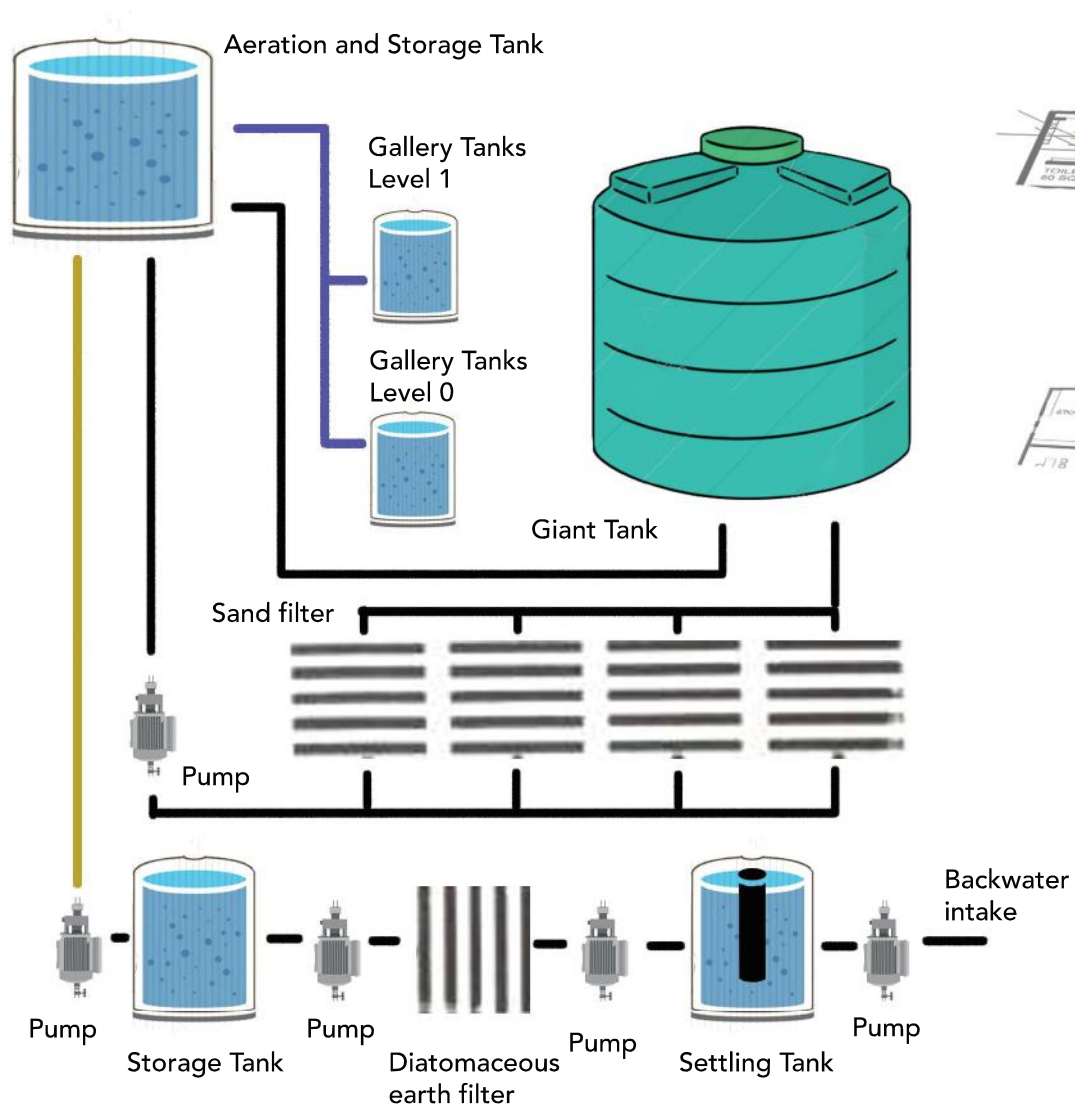
- 1. Fishtanks
- 2. Control rooms
- 3. AV room
- 4. Library
- 5. Lecture room
- 6. Office
- 7. Classroom
- 8. Baggage counter
- 9. Staff area
- 10. Entrance
- 11. Touch pools
- 12. Preservation center

LEGEND

- 13. Diver's pod
- 14. Toy shop
- 15. Laboratory
- 16. Cabins
- 17. Storage tank
- 18. Services
- 19. Restaurant
- 20. Glass tunnel entry

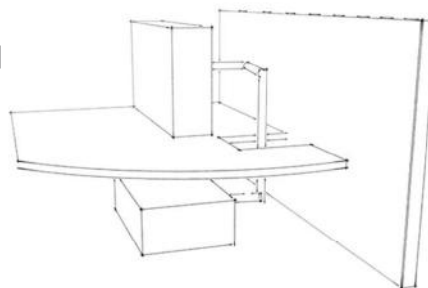
GROUND FLOOR PLAN

BASEMENT PLAN

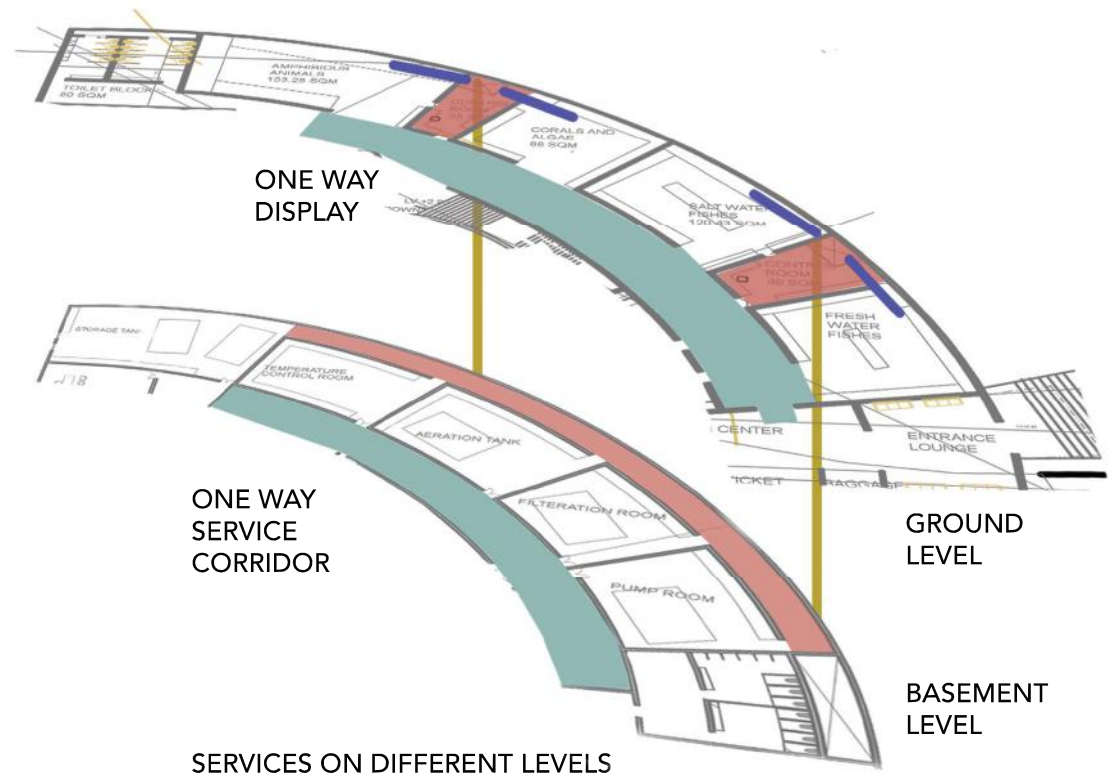


SERVICES OF WATER TANKS IN OCEANARIUM

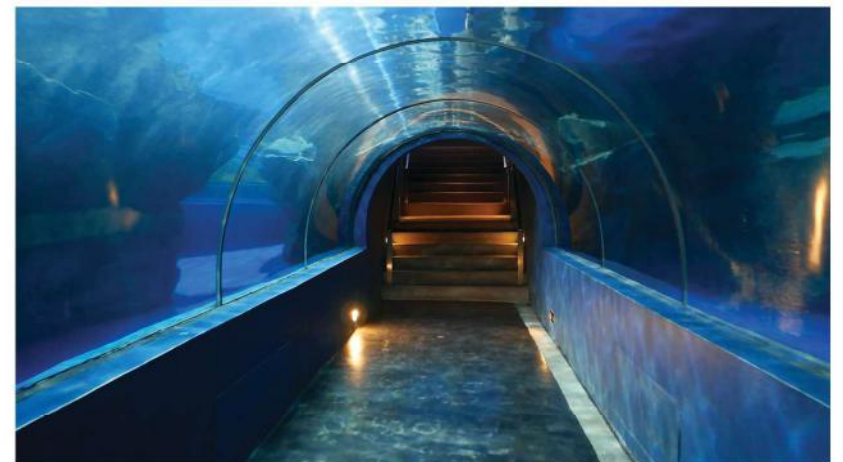
The display area is viewed on the "one way" pattern and the exit is leading to a small museum or exhibition place providing additional information mainly through preserved specimens and panels, posters and computer programs



TANK LOCATION ON DIFFERENT LEVELS



SERVICES ON DIFFERENT LEVELS



GLASS TUNNEL EXIT FROM BASEMENT

HOUSING FOR SENIOR CITIZENS

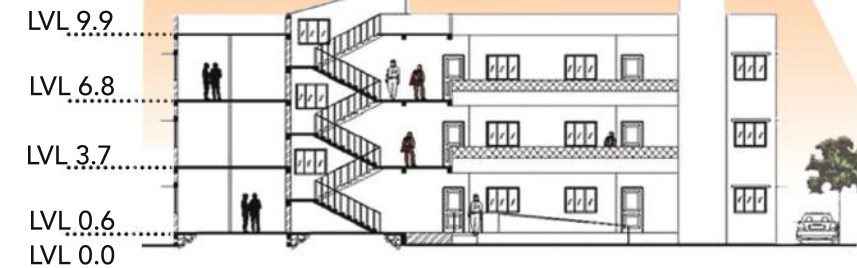
3rd year project

Site area : 22500 sqm

Built up area: 15765.59 sqm

The phase A of the entire site plan is used for Housing development for senior citizens. With amenities on site like auditorium, super market, pharmacy, etc the facilities are within proximate distance for ease of access.

1. Auditorium
2. Pharmacy and clinic
3. Super market
4. Playground
5. Physiotherapy Park
6. Parking
7. 2BHK Apartment
8. Row House
9. Studio Apartment
10. 1BHK Apartment
11. Dormitory



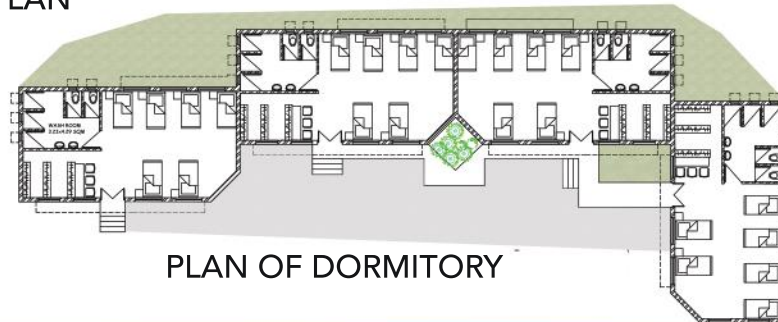
SECTION OF 1BHK APARTMENT



PHYSIOTHERAPY PARK



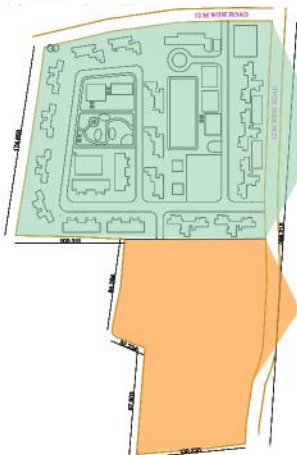
SITE PLAN



PLAN OF DORMITORY



SECTION OF DORMITORY

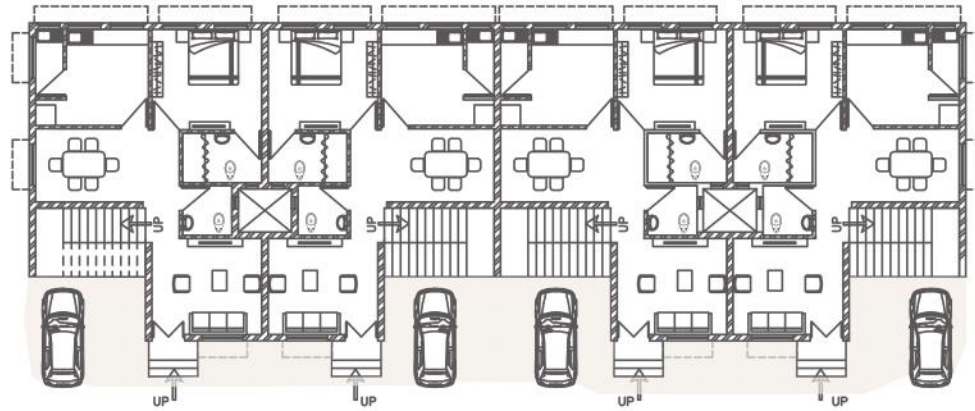


KEY PLAN

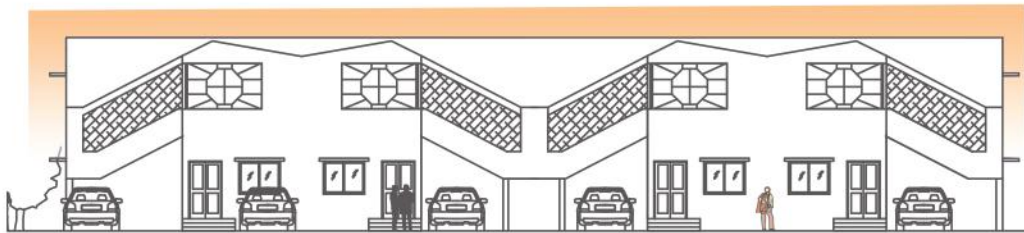
PHASE FOR PROPOSAL

PHASE FOR FUTURE PLANNING

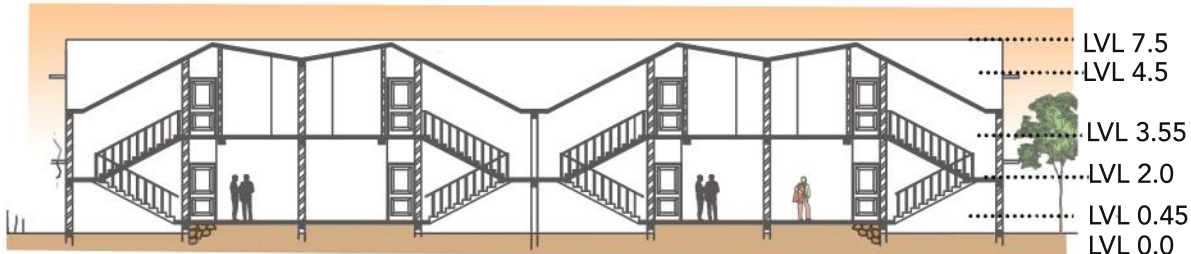
The housing development for senior citizens includes planning with amenities necessary for elderly. Other services on site like DG set, water tank and STP are also located on site and substation with metered connections



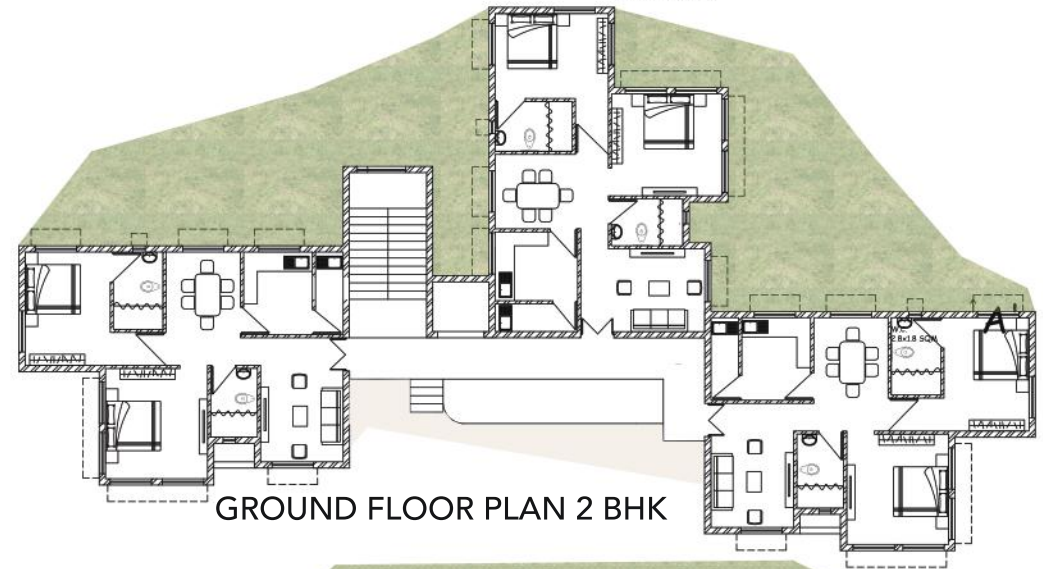
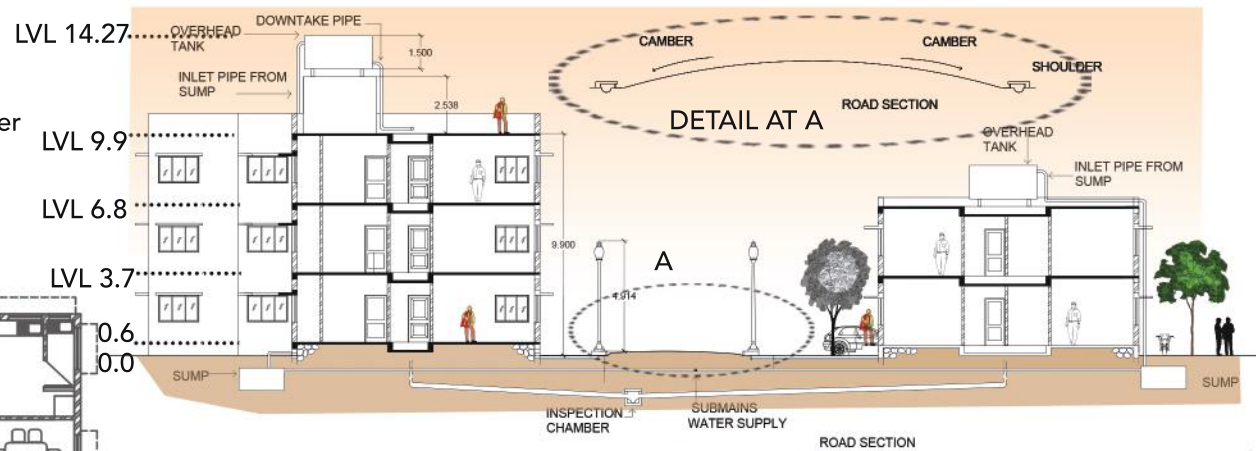
GROUND FLOOR ROW HOUSE PLAN



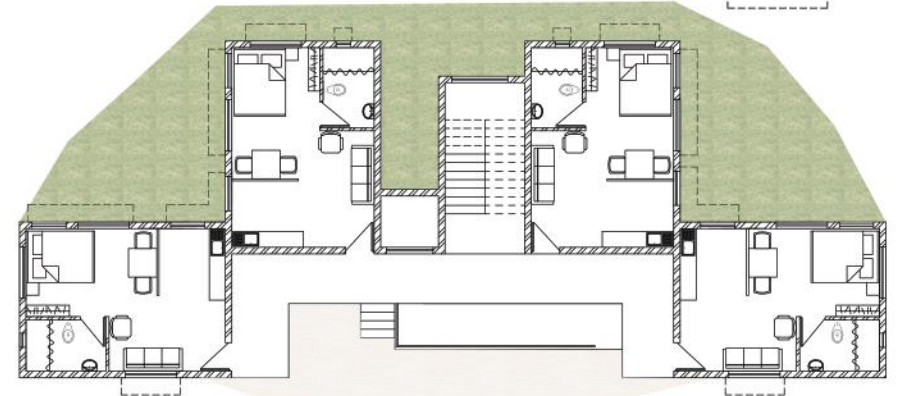
FRONT ELEVATION ROW HOUSE



SECTION ROW HOUSE



GROUND FLOOR PLAN 2 BHK



GROUND FLOOR PLAN STUDIO APARTMENT

UTOPIA : 3 STAR HOTEL

Fourth year project

Typology of this building is 3 Star Hotel

Ground floor Built up Area - 1450 sqm

Site area - 4090 sqm

PROPOSAL:

Two basements
95 rooms, 3 Banquets halls,
Conference rooms, Swimming
pool, Restaurant, Bar and
lounge, Cafe, Gym, etc.

LEGEND OF GROUND FLOOR

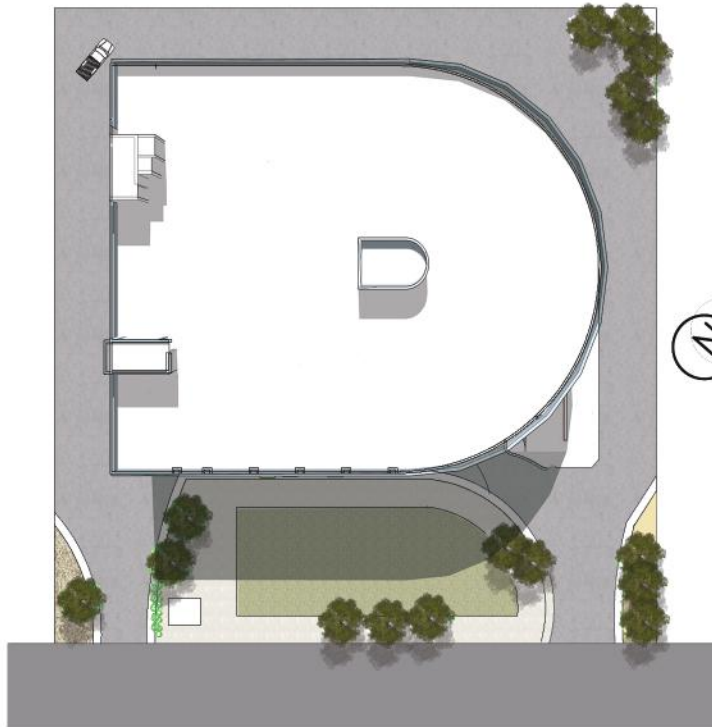
- | | |
|-------------------|-----------------|
| 1. Entrance Lobby | 2. Reception |
| 3. Cafe | 4. Toilets |
| 5. Store | 6. Kitchen |
| 7. Bar and Lounge | 8. Restaurant |
| 9. Toilets | 10. Back office |

LEGEND OF FIRST FLOOR

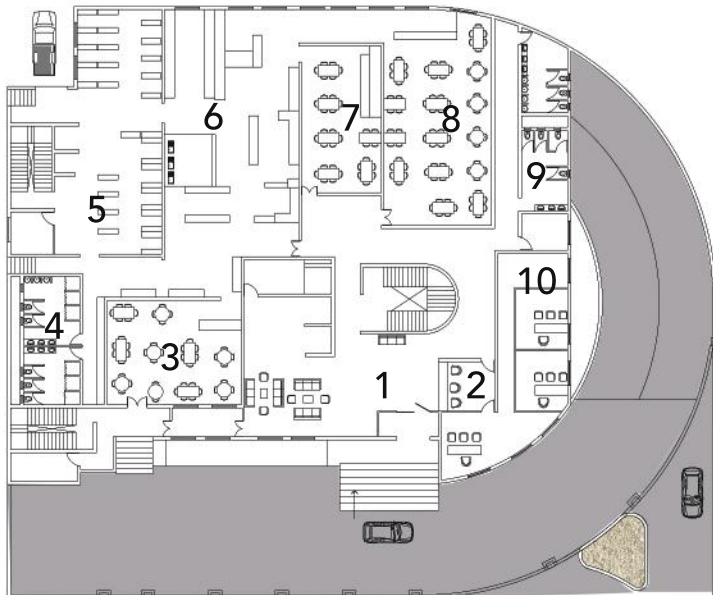
- | | |
|--------------------|---------------------|
| 1. Storage | 2. Kitchen |
| 3. Banquet hall | 4. Banquet hall |
| 5. Toilet | 6. Lobby |
| 7. Meeting room | 8. Meeting room |
| 9. Conference hall | 10. Conference Hall |
| 11. Banquet Hall | |



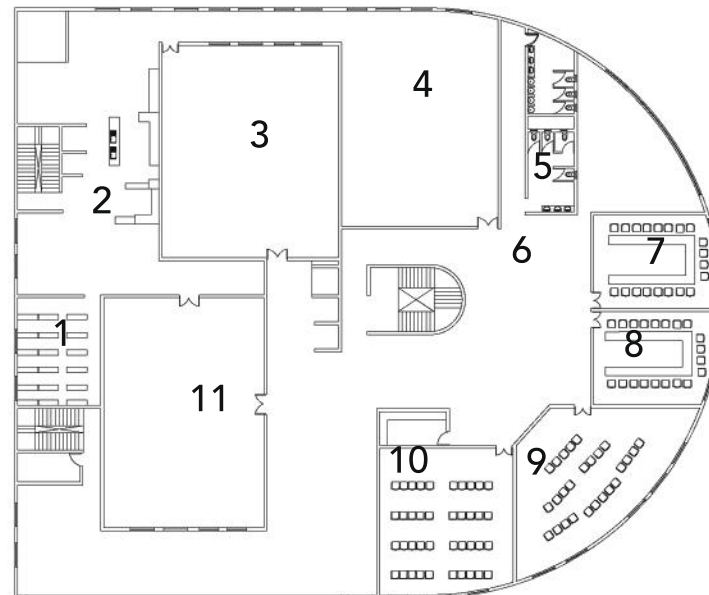
HOTEL VIEW FROM FRONT



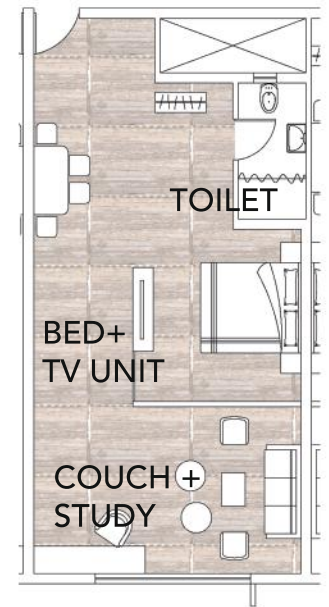
SITE PLAN



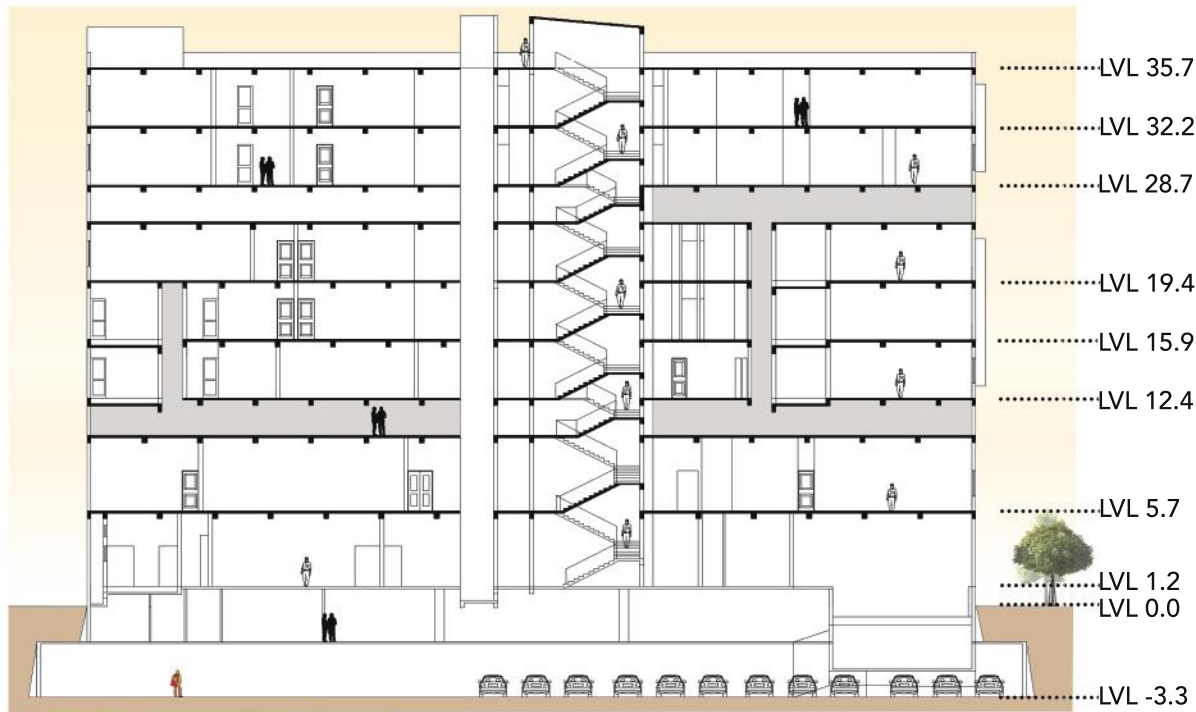
GROUND FLOOR PLAN



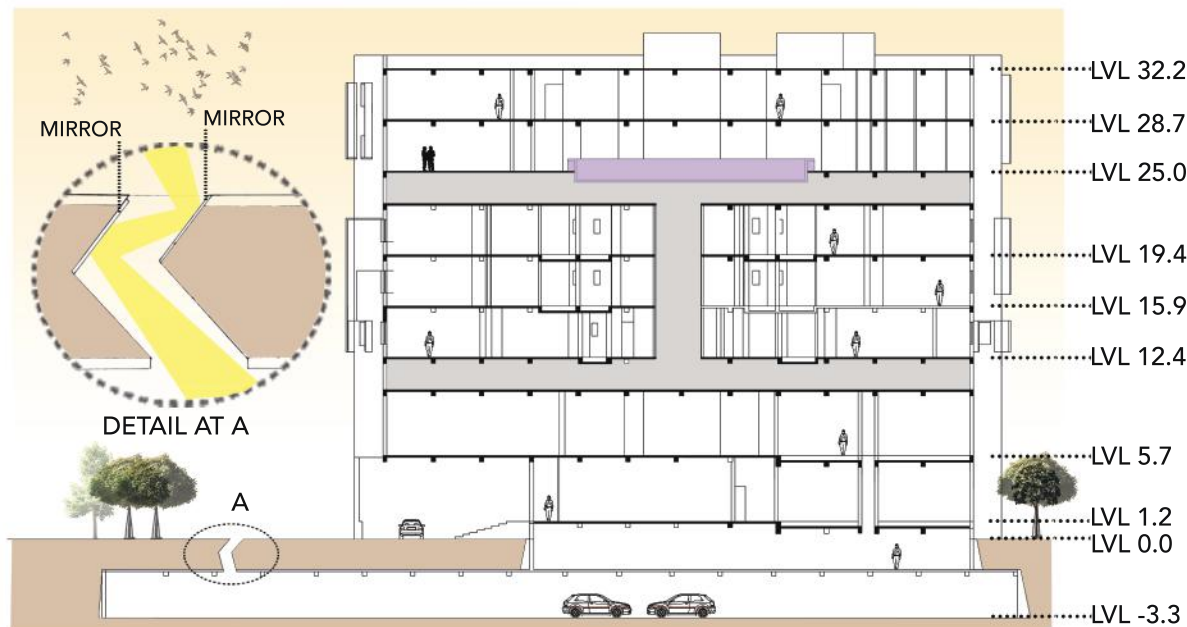
FIRST FLOOR PLAN



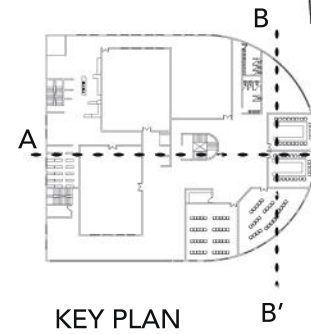
EXECUTIVE ROOM PLAN DELUXE ROOM PLAN



SECTION AA'



SECTION BB'



- LEGEND
- EXECUTIVE ROOMS
 - DELUXE ROOMS
 - SWIMMING POOL
 - SERVICE FLOORS
 - SERVICE CORE ON ALL FLOORS
 - PRESIDENTIAL SUITES
 - A LIGHT TUNNEL WITH MIRROR

