



Oikopolis III

The Rise of the Cooperative

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What is Mass housing for me?

I believe that mass housing is about multiple small concerns related to day-to-day life of people, the Idea of housing design can be looked at as a negotiated process of **varying small concerns at different scales where decisions at each scale is equally important.**

my project is about dealing with these varying small concerns at three different scales:

- 1. Building scale - At the scale of Community
- 2. Unit scale - At the scale of Household
- 3. Individual scale - The way we Inhabit the space



Concerns at Three different scale

A. Building scale - At the scale of Community

There are a few major concerns when it comes to the building scale. here, Questions like **What is the sense of community/togetherness in mass housing?** **Where is the threshold or an Inbetween space that can cater to multiple activities** or a space that can be a catalyst in strengthening the feeling of community?



B. Unit scale - At the scale of Household

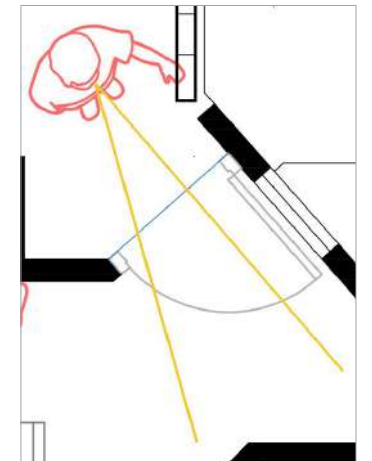
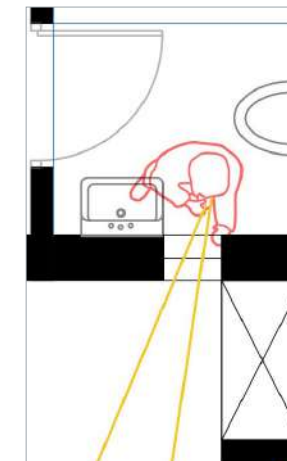
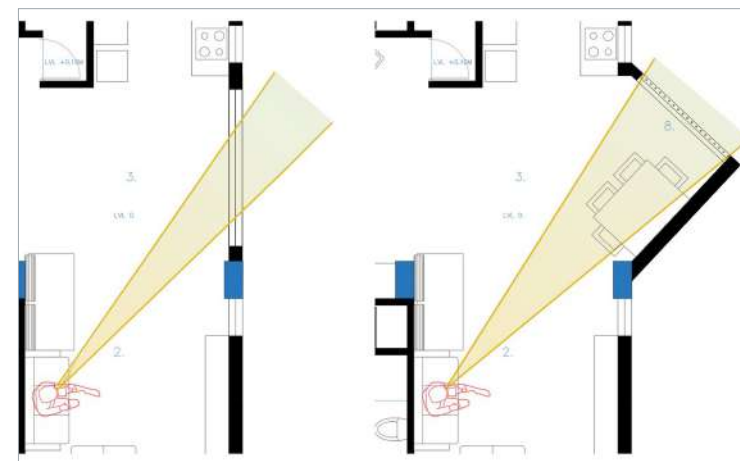
There are few Integral elements of the house that gets lost in the Highrises, for example **where did the verandah of a bungalow disappeared in an apartment?** **or where did the Opla go?** or the questions like **Do we have a getaway space within the house?** or what about the question of privacy?



C. Individual scale - The way we Inhabit the space

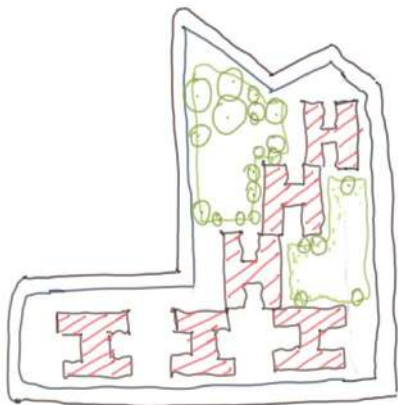
At an Individual scale, different Articulations are made as a response to the way people Inhabit the space. for eg. **What do you see from the window at an acute angle?** or **What should be an apparent size of the window?** similarly, multiple articulations are done at the scale of the unit.

Concerns at these three scales are explored in the parts of the design.

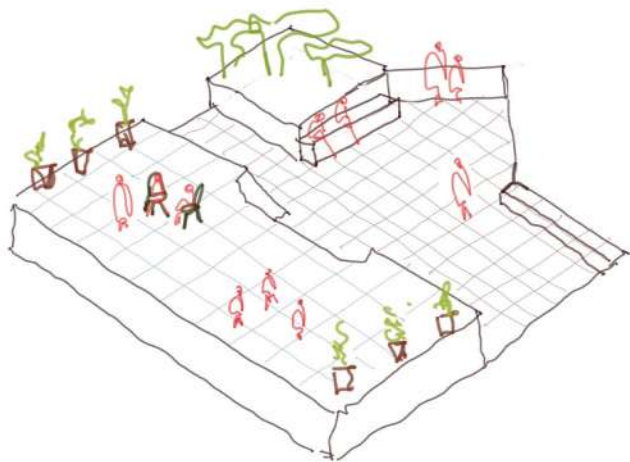


1. Building scale - At the scale of Community

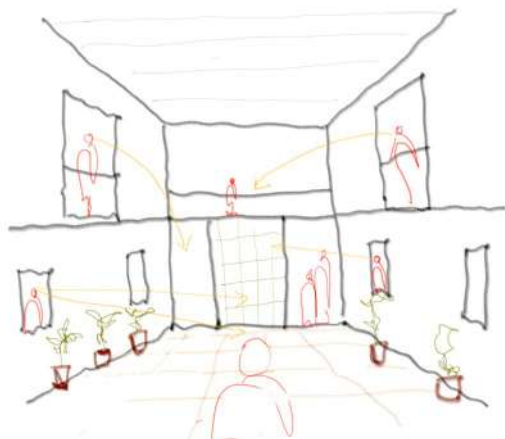
Major decisions :



A. Two big grounds for two different experiences



B. Stepping terrace developed as an usable area for community.



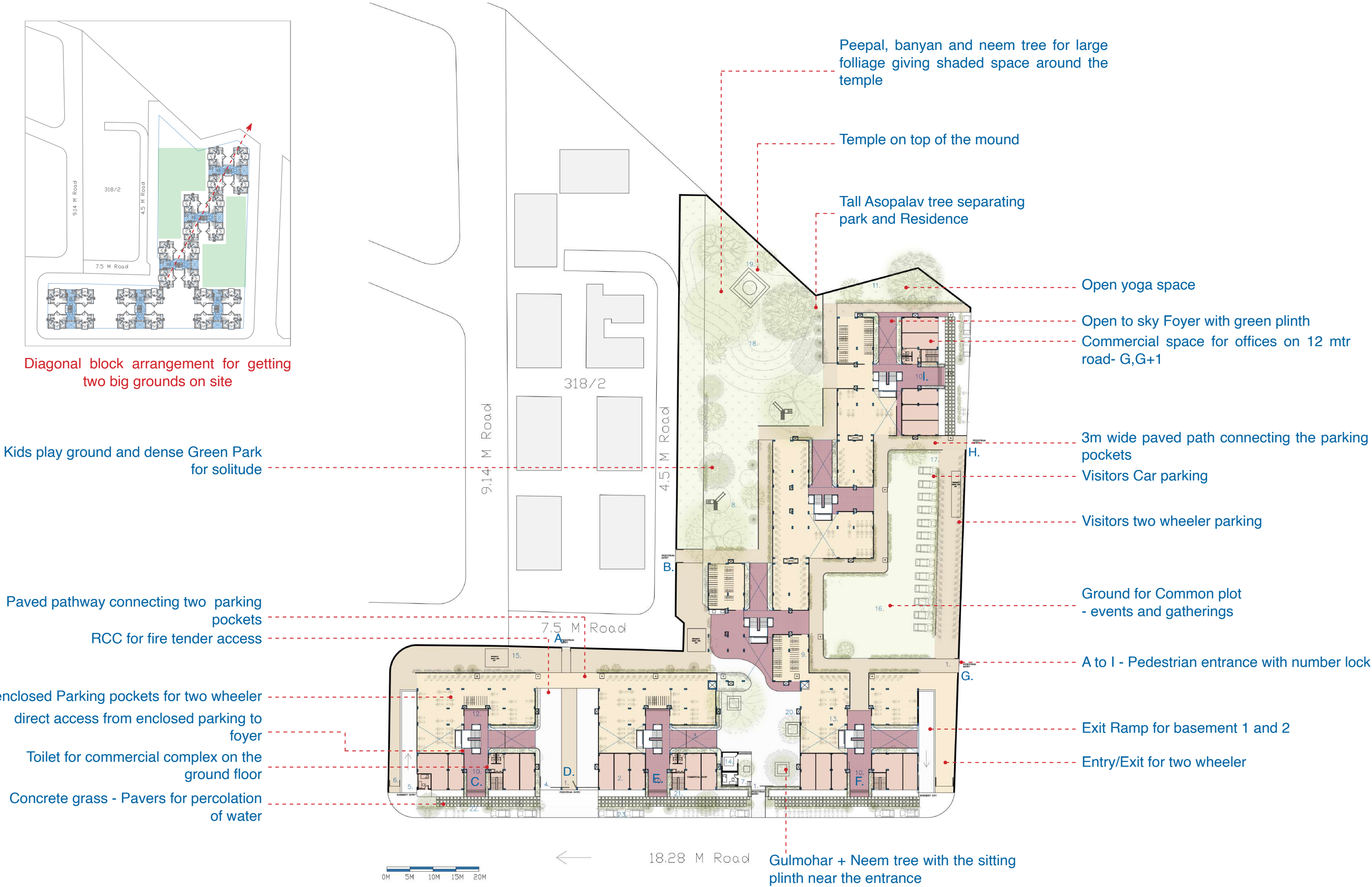
C. Large shared community space for a group of four houses at each level.



Building section through community space

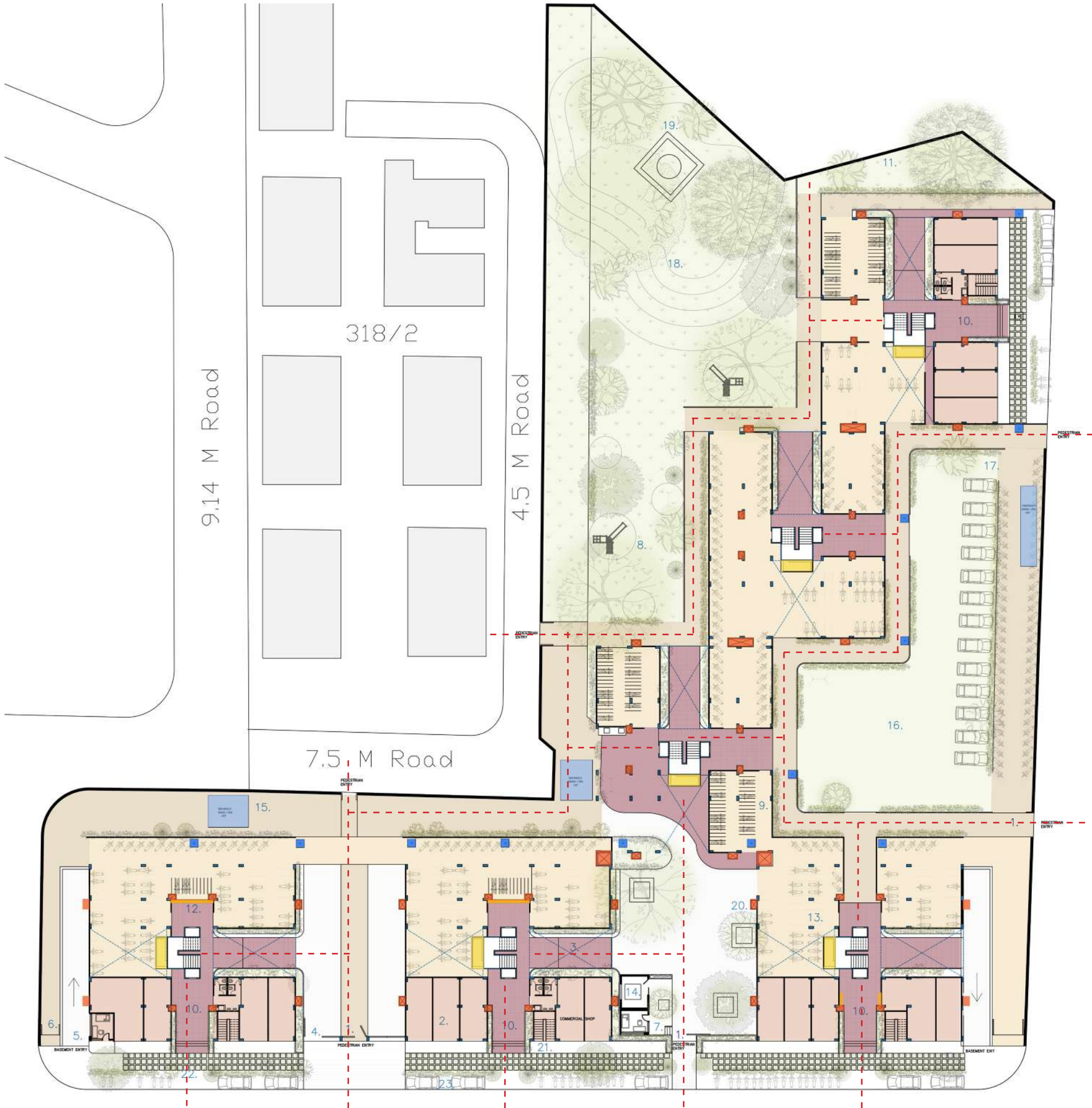
A. Ground with two different experience

decisions and articulations



A.1 Site development : Amenities and services

Site development



Legend - General

- 1. PEDESTRIAN ENTRY
- 2. COMMERCIAL SHOPS
- 3. OTS FOYER
- 4. FIRE TENDER ENTRY
- 5. CAR RAMP
- 6. TWO WHEELER ENTRY
- 7. SECURITY CABIN
- 8. PLAY AREA
- 9. BICYCLE PARKING
- 10. RESIDENTS ENTRY
- 11. OPEN YOGA SPACE
- 12. POST BOX
- 13. BIKE PARKING
- 14. TRANSFORMER ROOM
- 15. U.G.T
- 16. COMMON PLOT
- 17. VISITORS PARKING
- 18. DENSE GREEN PARK
- 19. TEMPLE
- 20. SITTING SPACES
- 21. COMMERCIAL STAIRCASE
- 22. JOGGING TRACK
- 23. COMMERCIAL PARKING

Legend - Services

- Enclosed parking pockets
- Paved pathway
- Foyer
- Commercial
- Green Park + Common plot
- Pedestrian Path
- UGT - 50,000 ltrs each
- Inspection chamber
- Services duct
- Meter room
- Letter + Parcel box

A.2 Site development : Amenities and services

Parking



No of **car parking spaces**: basement 1 + basement 2 + car space on ground

$$180 + 180 + 23 = 383 \text{ car park}$$

Visitors car parking total: 30 cars

Visitor car parking on ground: 13 cars

Commercial car parking total: 20 cars

Commercial car parking on ground: 10 cars

Total number of car park for residents: 333 spaces (Req: 274)

Total number of **two-wheeler parking space**: basement1 + basement 2 + stilt parking on ground

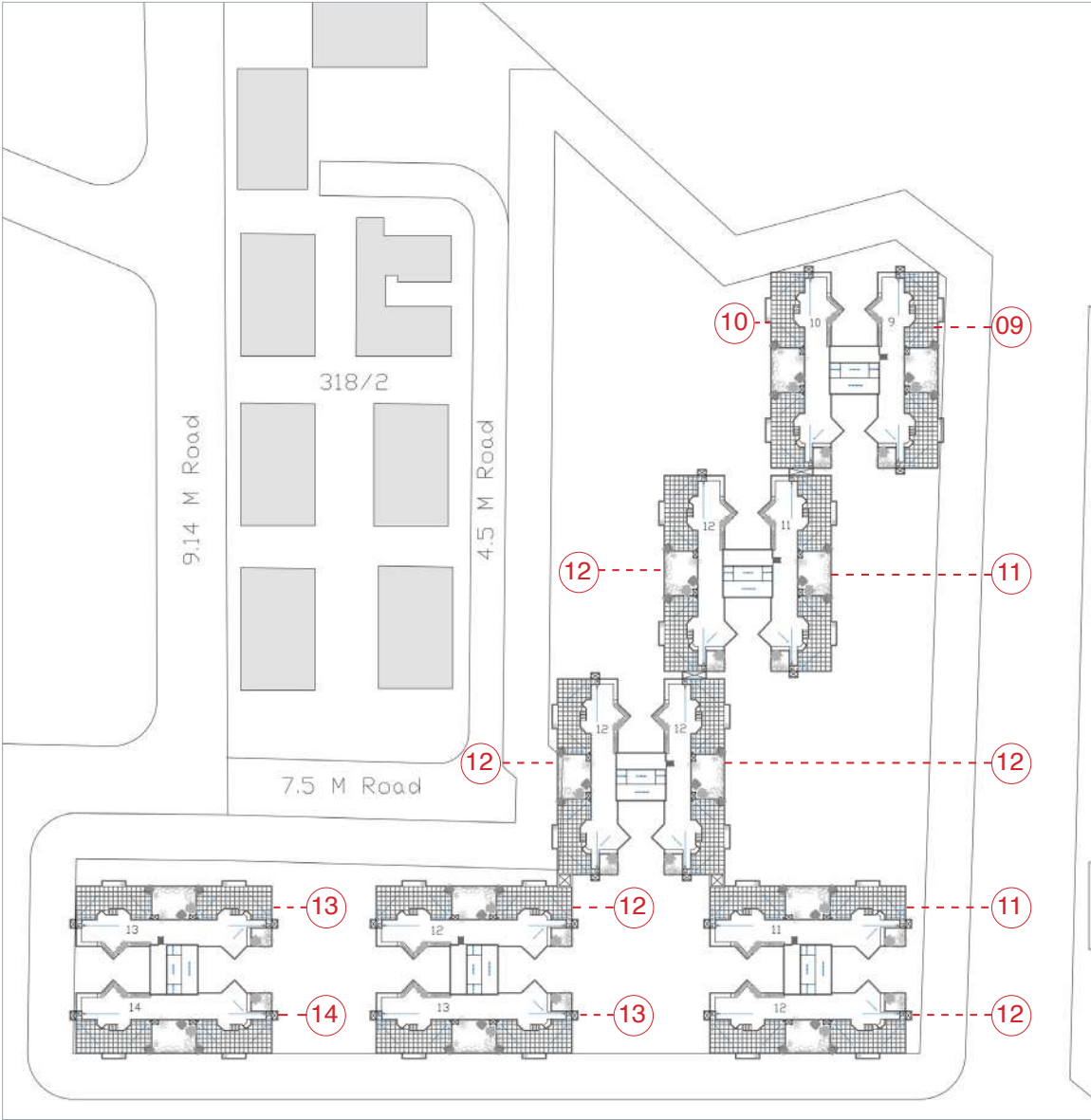
$$32 + 32 + 480 = 544$$

Parking Plan : Basement 1 and 2

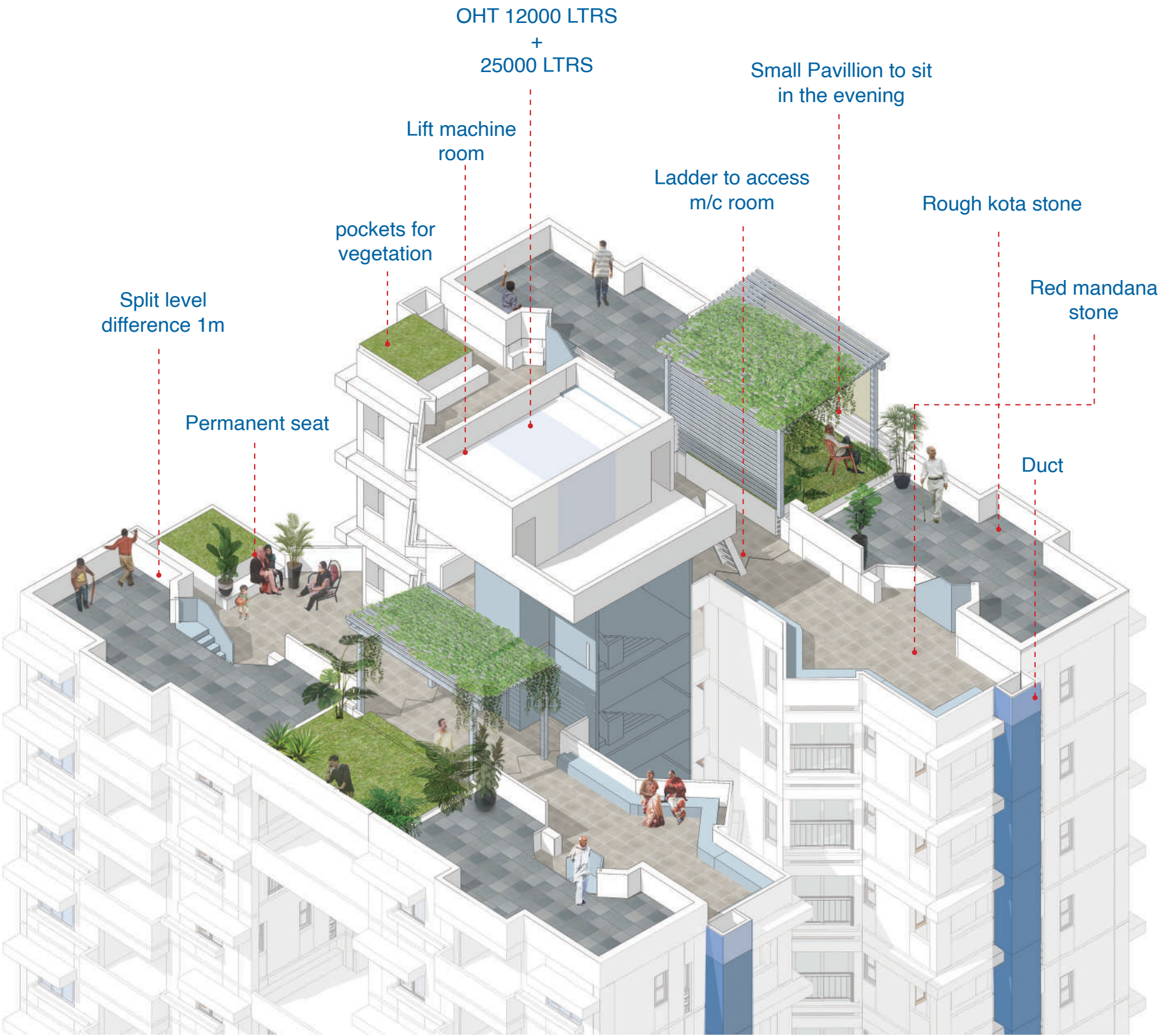
B. Terrace as an usable community space



Each block has a terrace of different height, The stepping terraces are developed as an easily accessible community space that can be used frequently by the members of the society for small gatherings or events in the evening or night. the articulations and services are illustrated in the view below.



Plan: block organisation with number of floors



C. Shared community space : Elevated ground to an unit

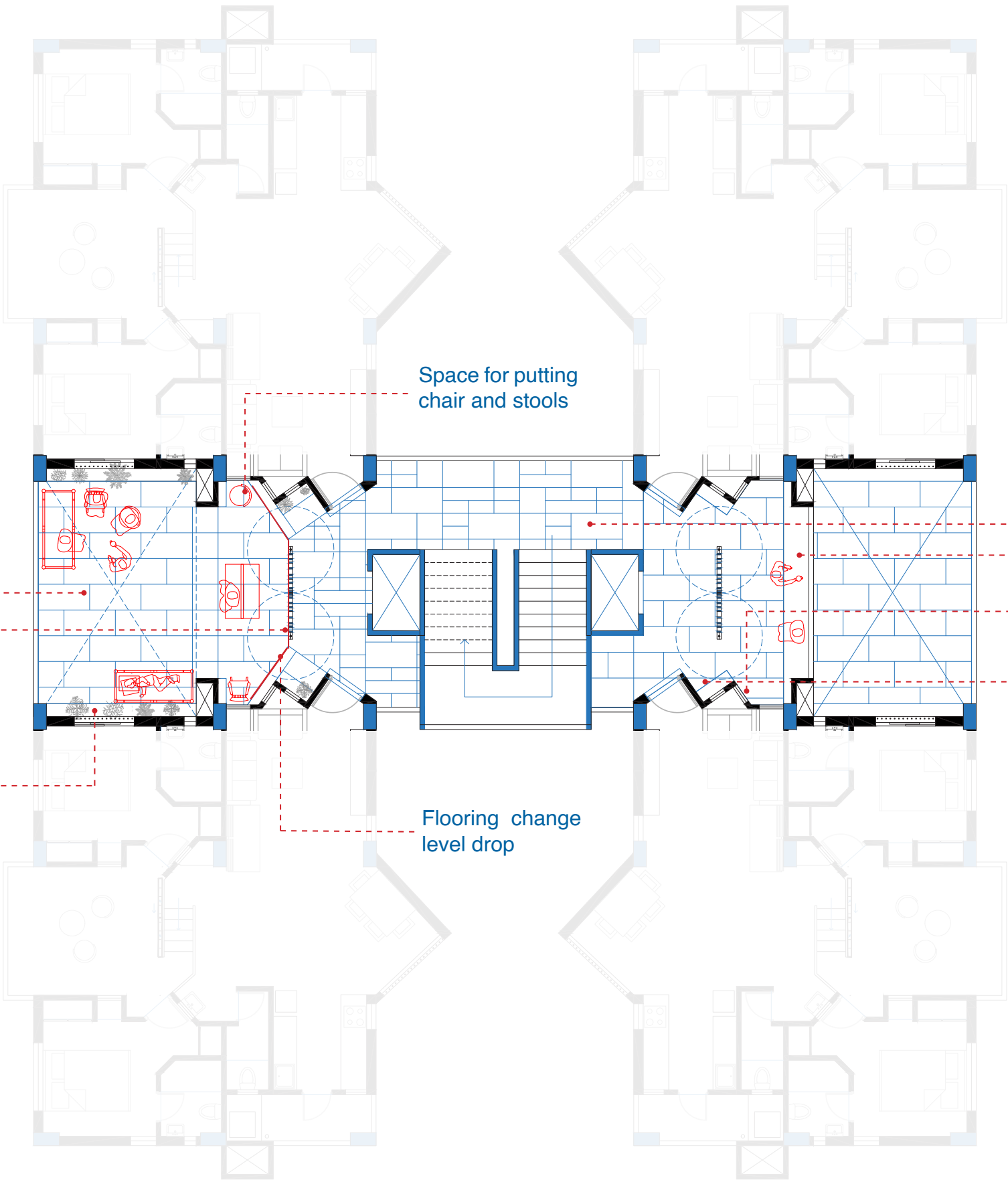


Grey smooth Kota stone in the shared space. size: 600x1200



Pivoted Terracotta jali wall as a Semi-transparent separation between lift lobby and shared space

300mm wide and 500 mm high plinth for planters ensuring privacy in bedroom.

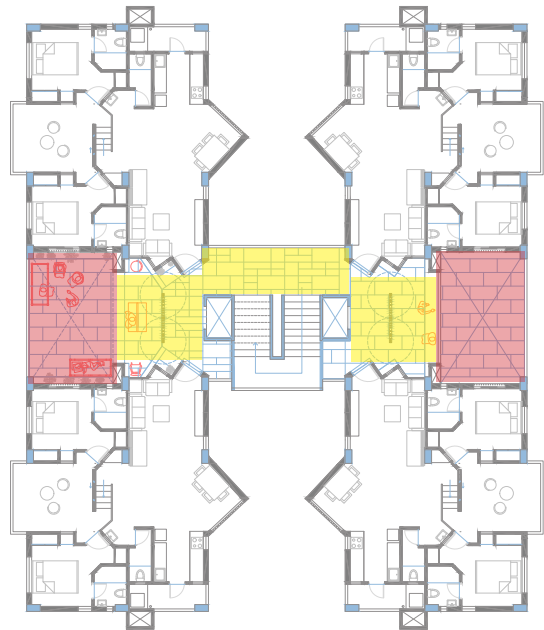


Polished mandana stone as a part of lift and staircase lobby.

sittings space overlooking the Community space

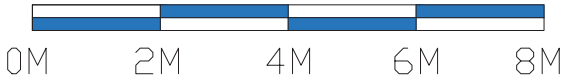
Window connecting the shared space and the living room

Personalized Space for shoerack in front of the house



- free of FSI Area achieved through lift lobby configuration
- paid FSI Area

60% of the community space is achieved free of FSI through lift lobby configuration

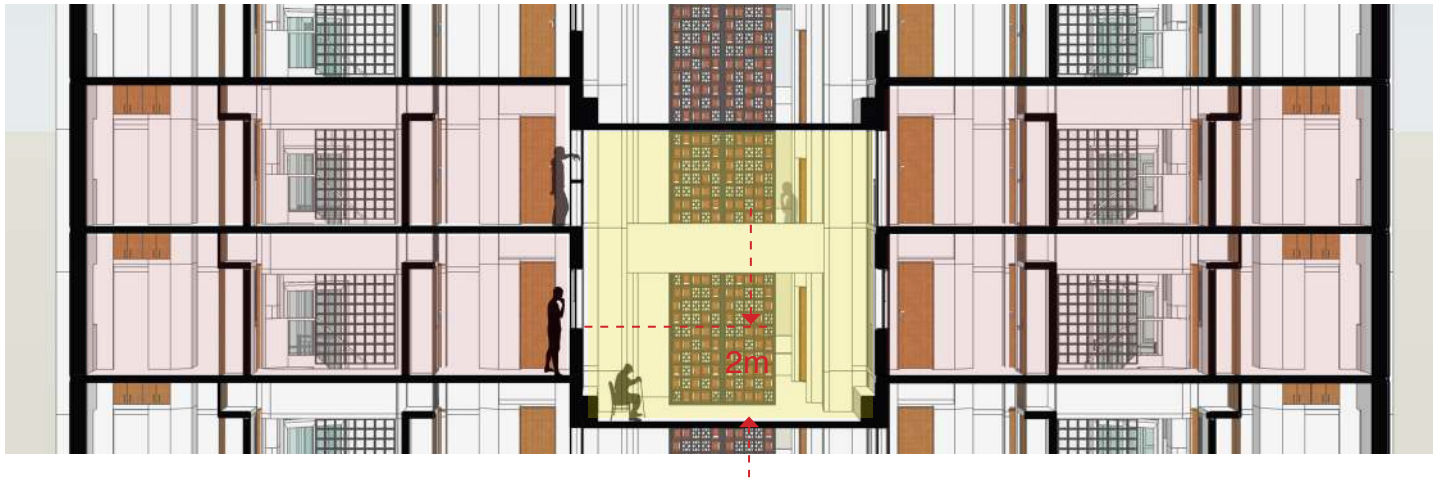
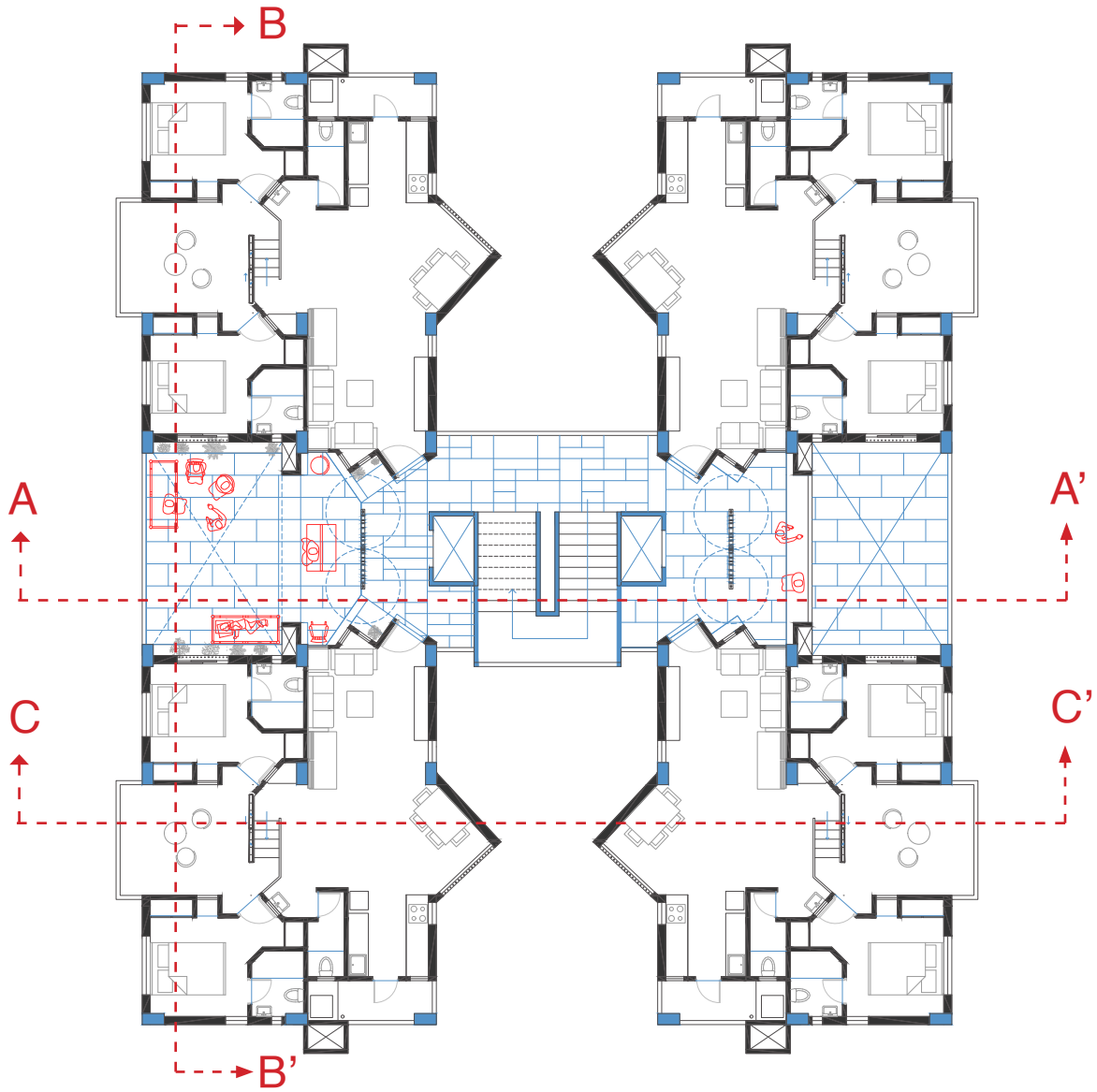


C.1 Sectional Relationship



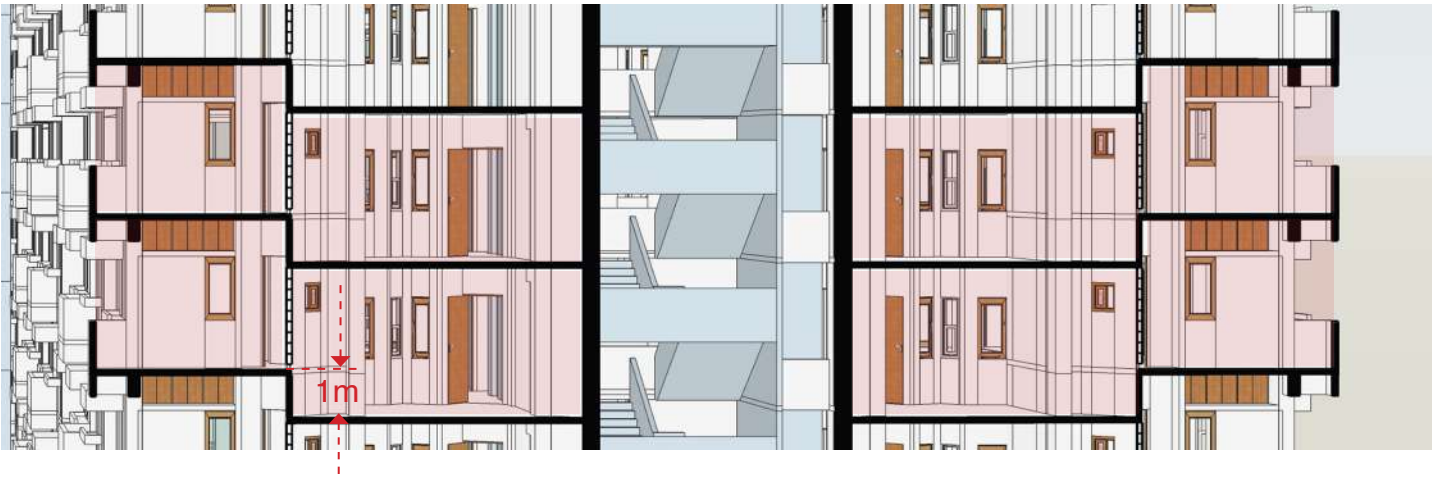
AA' - Shared Community space:

Each floor has a community space on one side and over looks in to one on the opposite side, multiple openings from the unit and the circulation area allows to overlook the shared space creating a possibility of chance interaction at any time of the day



BB' - Relationship with Shared space:

Shared space and bedroom opening has 2 m level difference to maintain the privacy of bedroom.



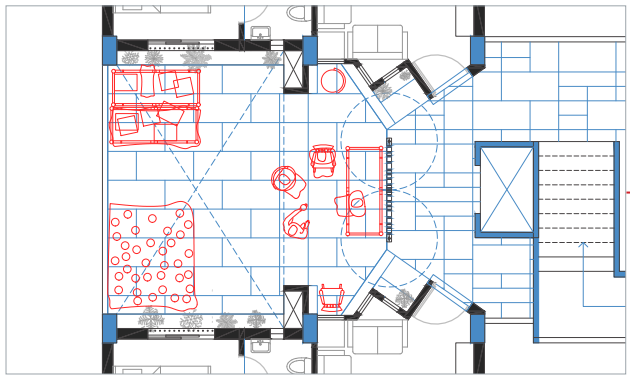
CC' - Split level Interlocking:

Unit is divided in to upper bay and lower bay through split level of 1m, upper bay is more private and lower bay is more public.

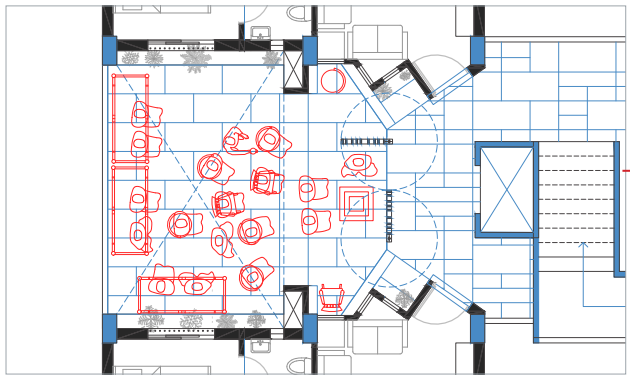
C.2 Shared community space : Activities

Community space act as a margin or a large threshold to the unit where day to day life fosters like a house on the ground.

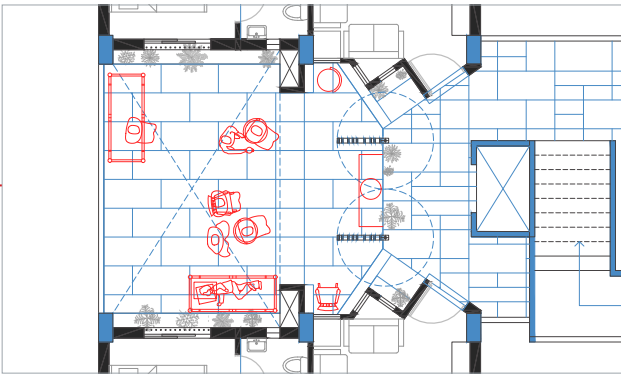
Various activities are imagined in community space as illustrated in the part plan here:



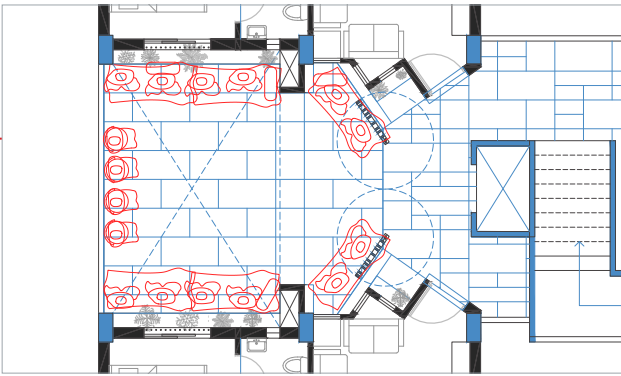
Community space used for drying things occassionally while cleaning the house



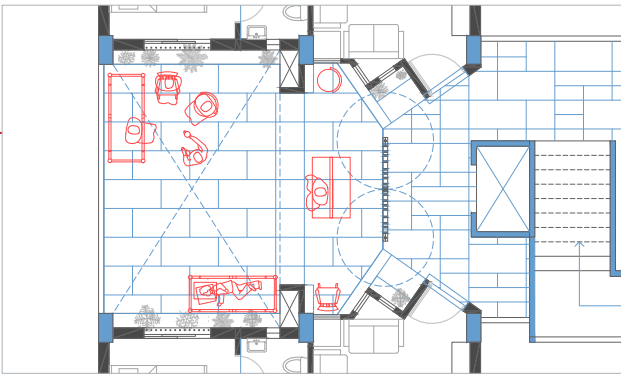
Community space used occassionally for traditional event



Community space used during a festive occasion



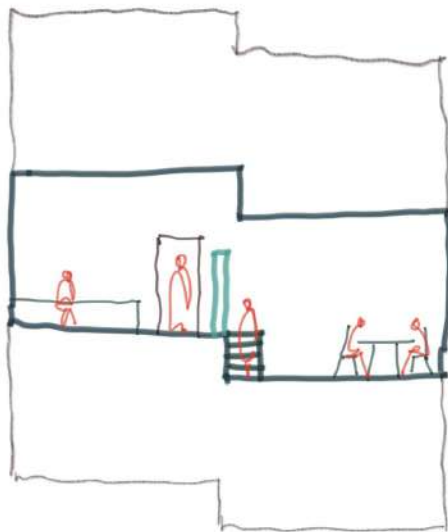
Community space used as an extension of the house during large gatherings in the house



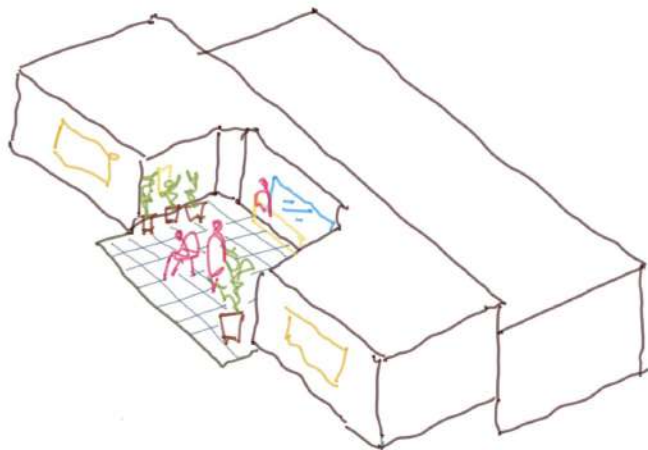
Community space used for neighbourly conversation in the evening.

2. Unit scale - At household scale

Major decisions at Unit scale



A. Split level in the unit to differentiate public and private

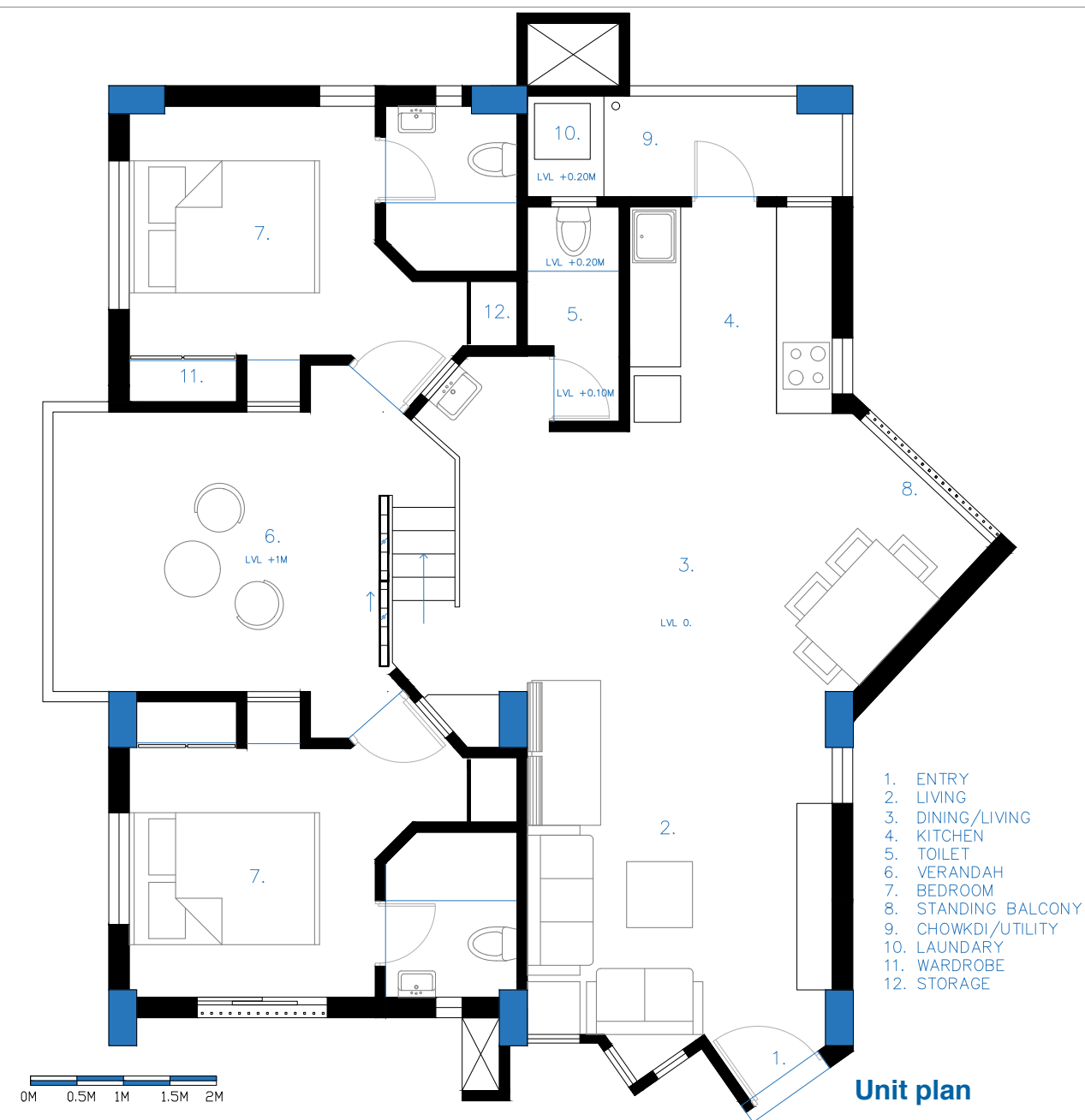


B. house with a verandah to cater multiple activities



Building section through Unit

2.A Unit



View: Unit

To address the concern of **privacy** and **getaway space within the house**, The unit is divided by a **split level** of 1metre to achieve two different bays where upper bay is more private with a verandah and bedrooms whereas the lower one has primarily public area with a living, dining and kitchen.

Unit builtup : 90 sq.m (84 sq.m as a part of the unit + 6 sq.m as a part of community space)
Carpet area: 76 sq.m
Total number of units: 204 for redevelopment + 74 for units for sale

Split levels:

The decision of a split level is taken as a part of the seminar study where unit configurations were reimagined through level differences to achieve certain spatial benefits.

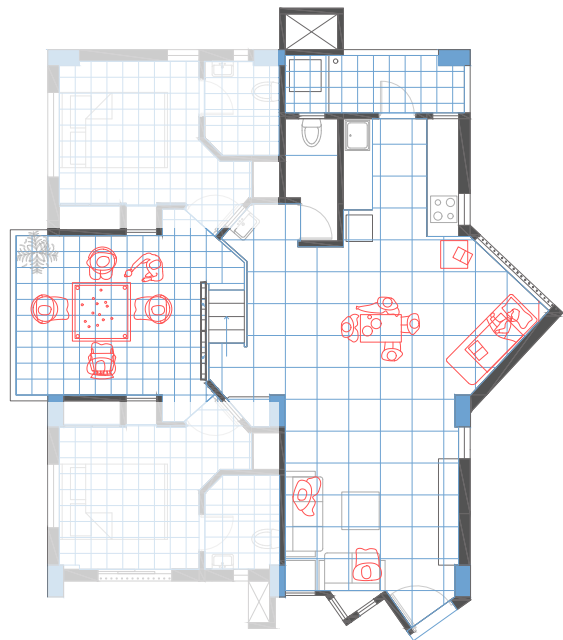


View: Balconies and extension of Shanti Apartments

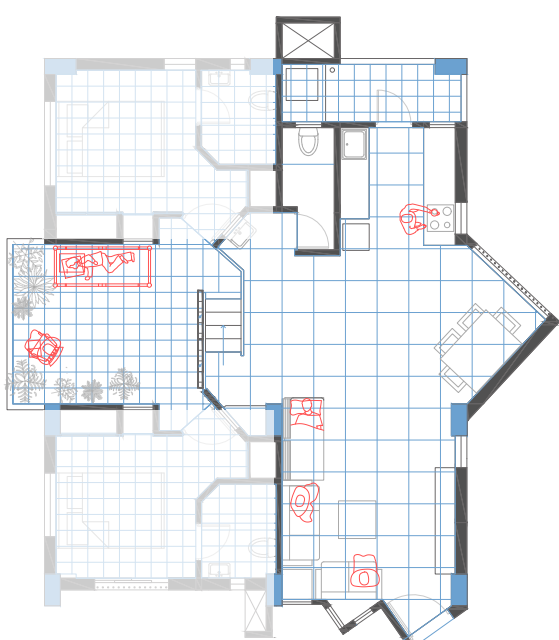
Verandah: The verandah in a unit is a response to Traditional large balconies or extensions made by the people of Shanti apartments where multiple activities happen.

2.B Verandah : Activities

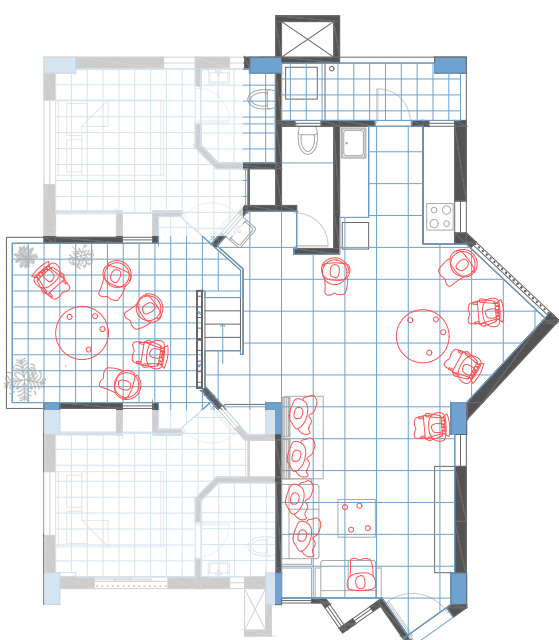
Since the verandah is an replacement to Otila, balcony or an extensions made by people, it is an Integral part of the unit where different activity happens at different times or each user use it differently as illustrated in the part plans here.



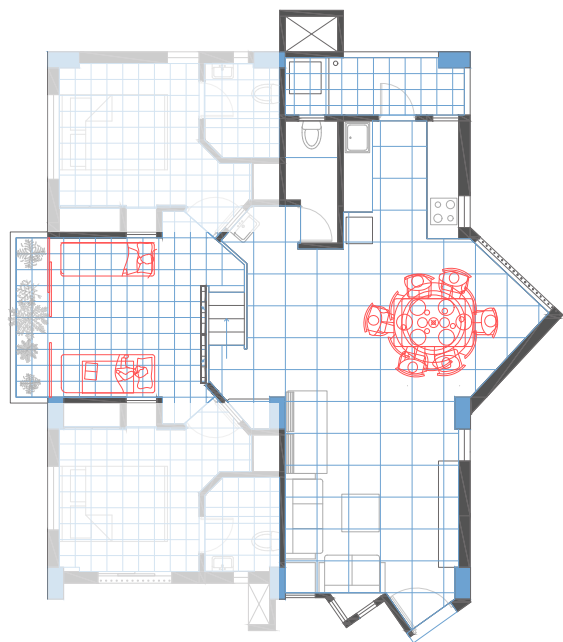
for kids it is the place to play in the afternoon or while the dining space is used by elders.



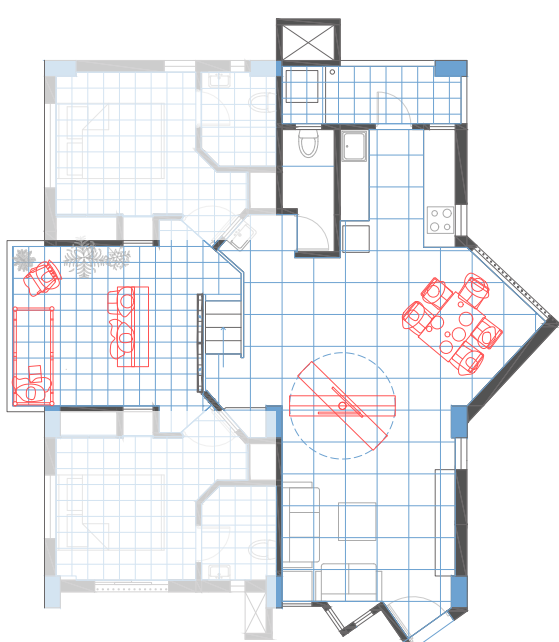
for an Introvert or a plant lover it is a personalized space to spend time.



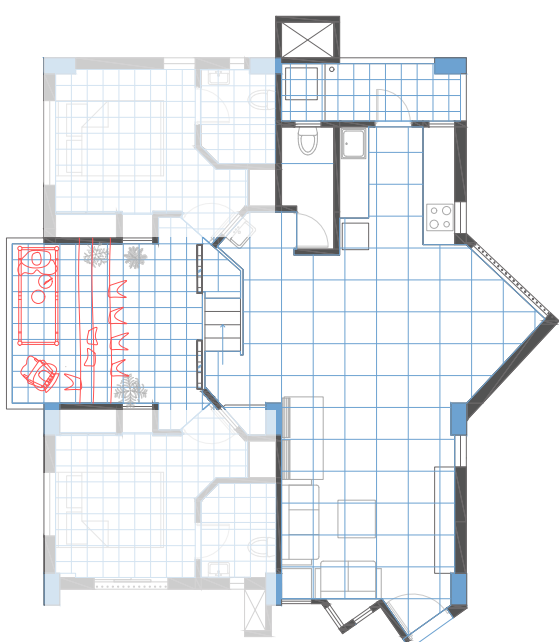
for some it is an extension of a living used for sitting during large gatherings in the house



for some it might be a productive space that can be merge with the house to make a workspace or kids bedroom



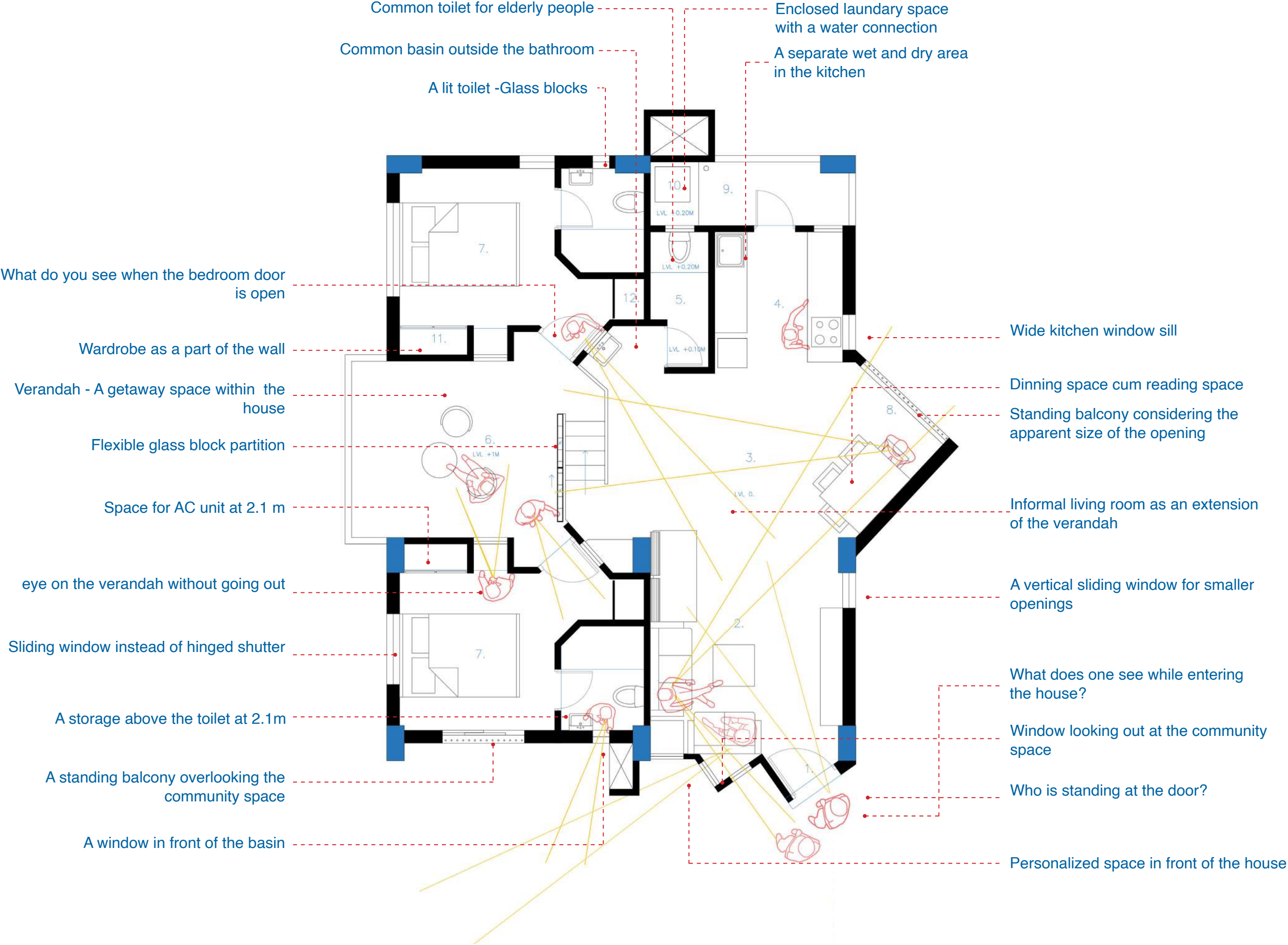
for some it is an everyday place to sit in the evening or a go to place after the lunch or dinner.



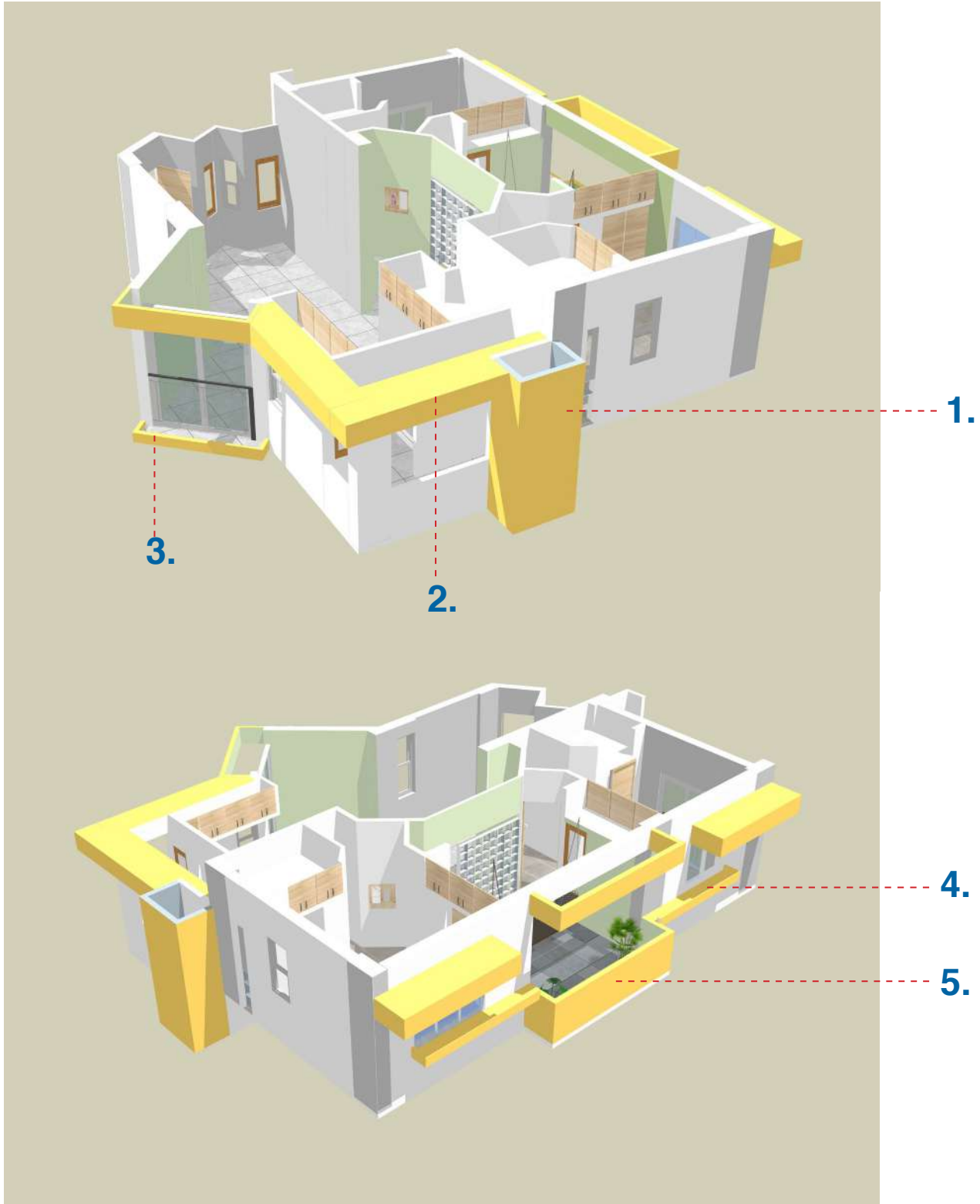
some people would like to use it as a large utility space.



3.A Individual scale - Concerns-decisions-Articulations



3.B Individual scale - Concerns-decisions-Articulations



Facade projections
600mm - Free of FSI

- 1. Service shaft (700x900)
- 2. 600 mm projection for utility
- 3. 300mm projection for planters- slab level - standing balcony
- 4. 300mm projection for planters- sill level - bedroom window
- 5. 600mm balcony projected as a part of verandah



Flooring Layout

- 1. Grey vitrified tiles (600x600)
- 2. Light brown vitrified tiles(600x600)
- 3. Smooth Kota stone (300x300)

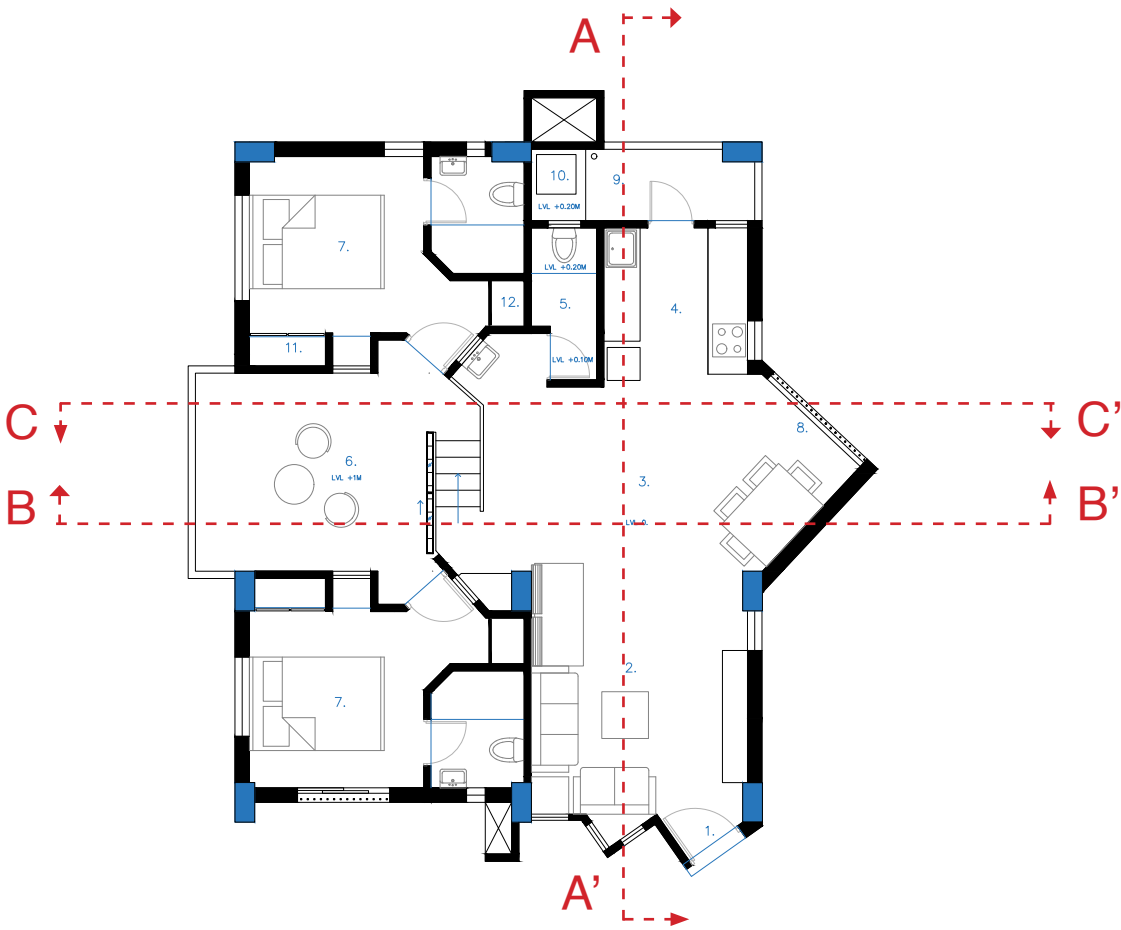
3.C Individual scale - Unit sections



A-A'



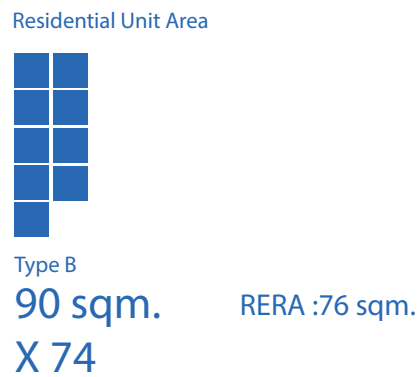
B-B'



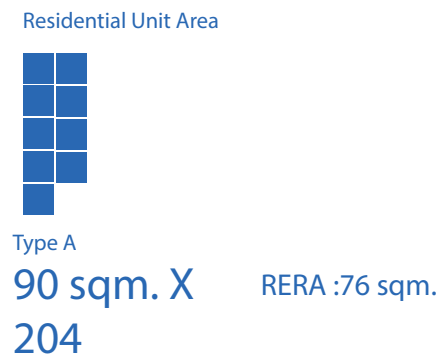
C-C'

4. Project Calculuations

Sale Component

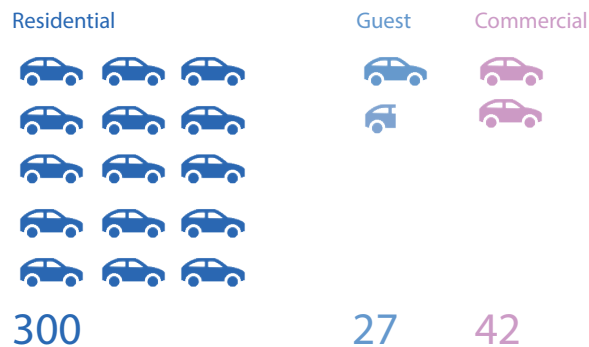


Non-Sale Component



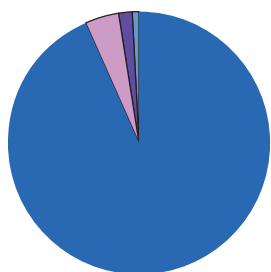
10 sqm. area

Parking



20 Cars 10 Cars

Total Area %



FSI Achieved : 2.7

Project Cost and Profitability Calculations :

Project Redevelopment cost:

1. Site area : 9850 Sq.m
2. FSI : 2.7
3. Total buildable FSI Area : 26,595 Sq.m
4. Construction cost: 21460 rs / Sq.m of FSI + 15%
= 65 Cr
5. Rent for Residence: 14000 rent for 204 units for 12 months
= 12 Cr
6. Transportation Fees: one time transport fees 10k for 204 units
= 20 lacs
7. FSI fees jantri rate: 6 cr
8. Demolition cost : 240/ Sq.m
Old FSI 1 + 15%
= 27 lacs
9. Rera permission expense: 2.95 lacs
10. Structural engineer fees : 5.3 lacs
11. Register development agreement : 22.33 lacs
12. Scrutiny fees: 1.5 lac
13. Fire permission: 25000
14. Misc Cost : 1Cr

Total Redevelopment cost : Sum(4 to 14) : 84.5 Cr

Total Saleable Component :

1. Saleable units: 74 units of 90 lacs each
= 66.6 Cr
2. Saleable Commercial: 36 Shops of 26 sq.m
= 20.59 Cr

Commercial cost : 2.2 lac/sq.m
one shop : 57,20000

Total Saleable component : Sum (1+2) : 87.20 Cr

Project Profitability:

Total Profit : Total Sale - Total Redevelopment Cost
= 87.20 Cr - 66.6 Cr

Total Project Profit : 2.69 Cr

