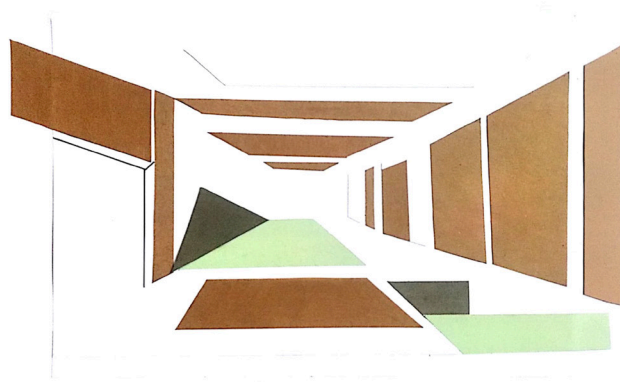


House of knowledge

16BAR002

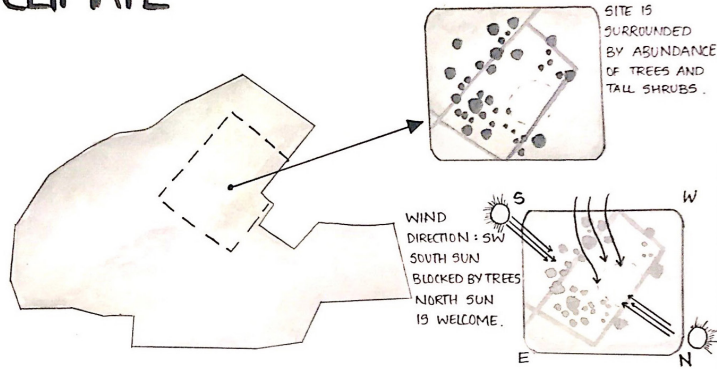


CONCEPT

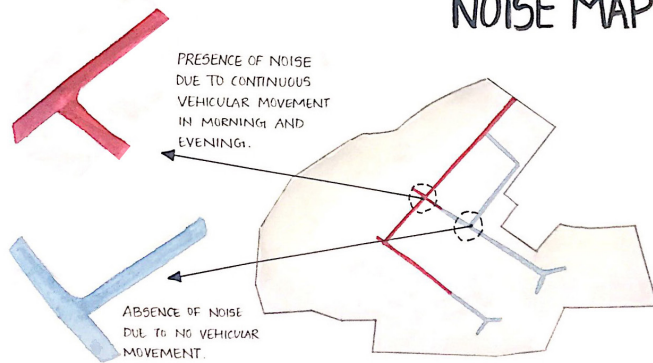


Situated in the green lung of Ahmedabad, C.N. Vidhyavihar, the project does not emerge from the ground as overpowering, breaking down the complexity that is innate in architecture. Various green zones are introduced in the building space acting as a natural blind from the intense heat of Ahmedabad. A sense of simplicity is projected that drives in line with the very philosophy of C.N. The project aims to create a space that lets wind inside naturally and helps to intermingle the users with nature.

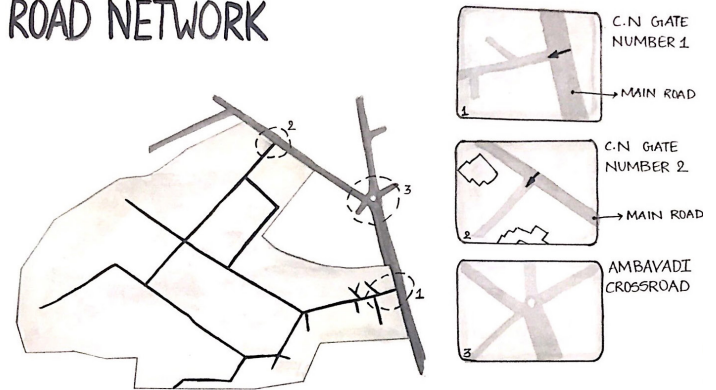
SITE ANALYSIS CLIMATE



SITE ANALYSIS NOISE MAP



SITE ANALYSIS ROAD NETWORK



SITE ANALYSIS CONTEXT

FINE ARTS SHISHUVIHAR



HEIGHT: G+1
USAGE: LIBRARY, CAFE
EXHIBITION, WORKSHOP

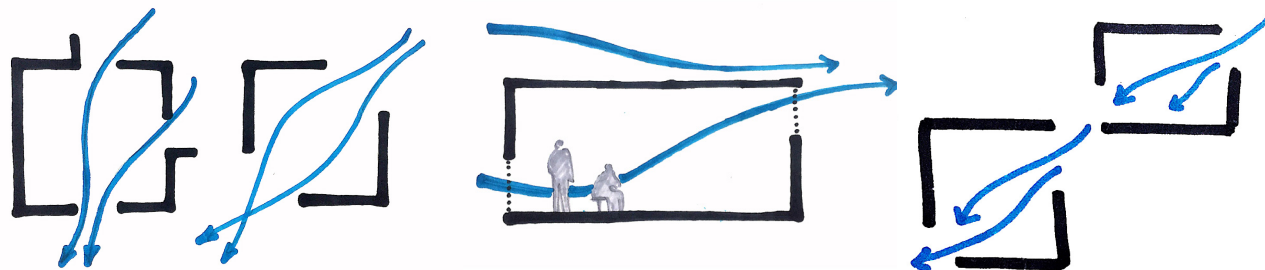
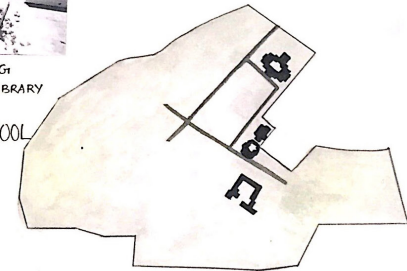


HEIGHT: G
USAGE: LIBRARY

ENGLISH MEDIUM SCHOOL



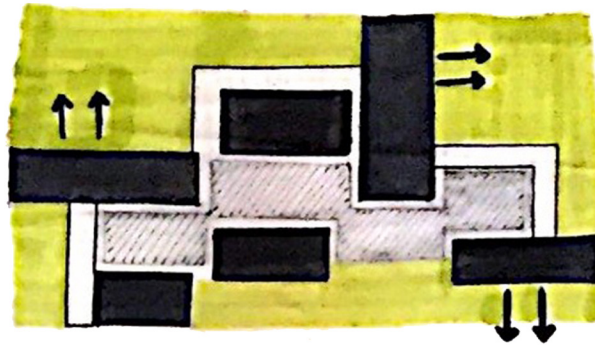
HEIGHT: G+1
USAGE: LIBRARY, EXHIBITION,
CAFE, SEMINAR.



CONCEPTUAL IDEAS

Configuration of spaces and placement of openings to let wind inside the building. The placement and height of a space/volume with respect to the spaces adjacent to it is important for achieving proper wind circulation in the building.

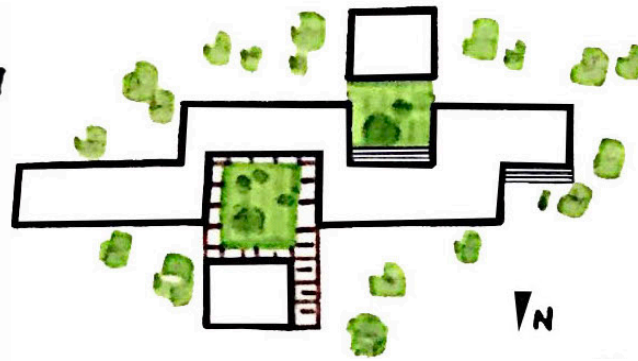
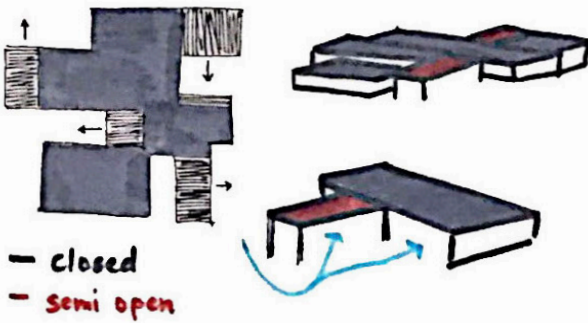
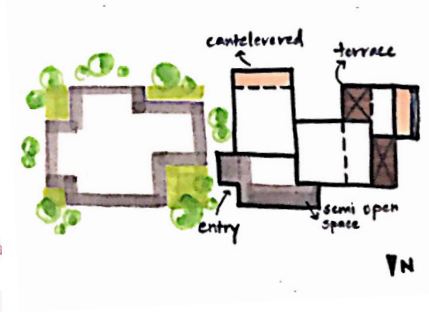
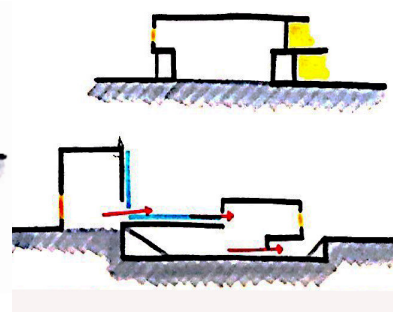
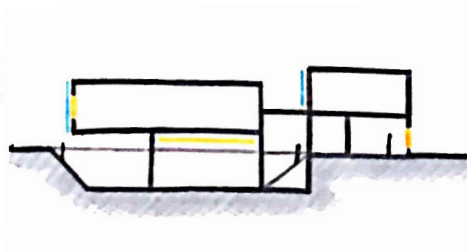
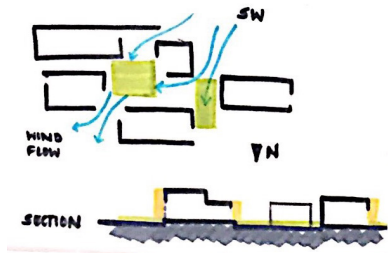
DESIGN DEVELOPMENT



The concept of interaction with nature was taken forward in the sense that there will be spaces in the building that will look towards nature and spaces which will open up to nature. The idea was to diminish the boundary between interior and exterior spaces, letting the person be in contact with nature as he walks through the building. The configuration of the plan was thought according to:

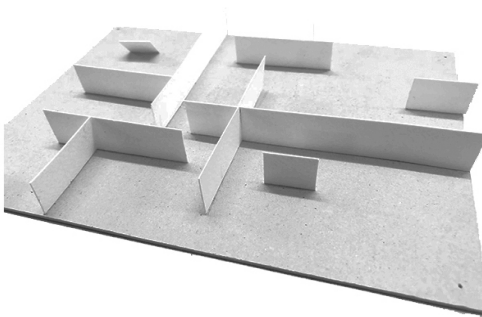
1. Existing trees
2. Wind movement
3. Light

INITIAL SKETCHES

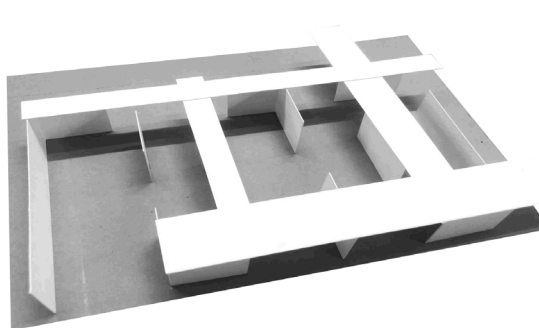


Various configurations were worked in order to design a space that is simple and interactive with nature, but yet interesting. The output was a series of spaces with different heights and functions, creating two semi enclosed courtyard spaces opened to the south west for wind movement.

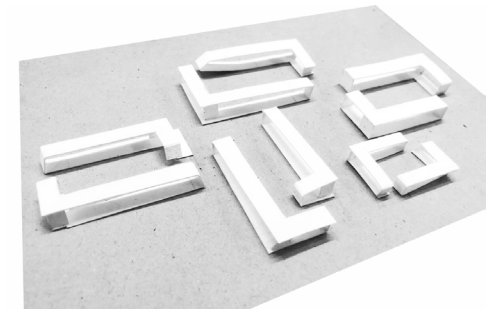
CONCEPT MODELS



MODEL 1: INTERSECTING WALLS,
MULTIDIRECTIONAL MOVEMENT

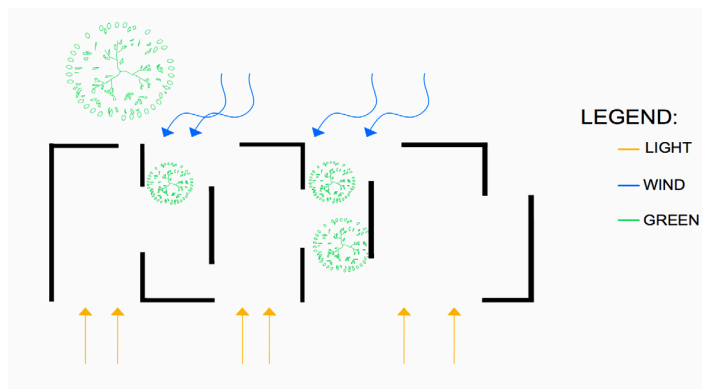


MODEL 2: PARALLEL WALLS WITH
EXTENDING FLAT ROOFS



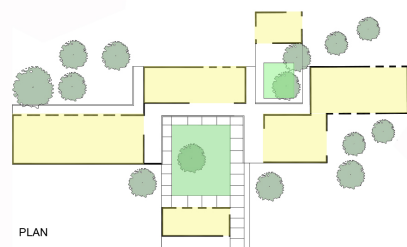
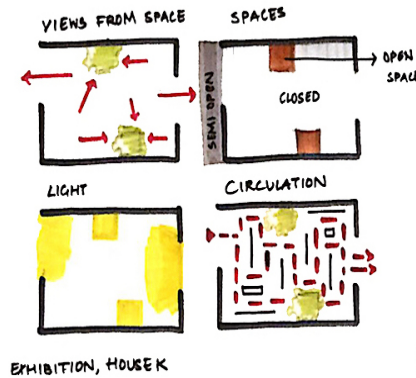
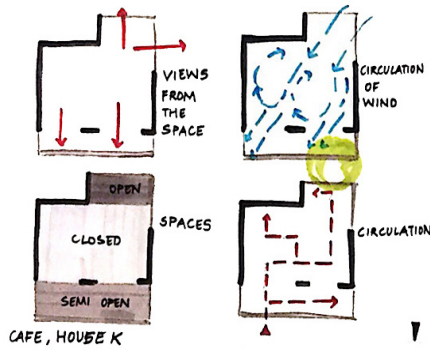
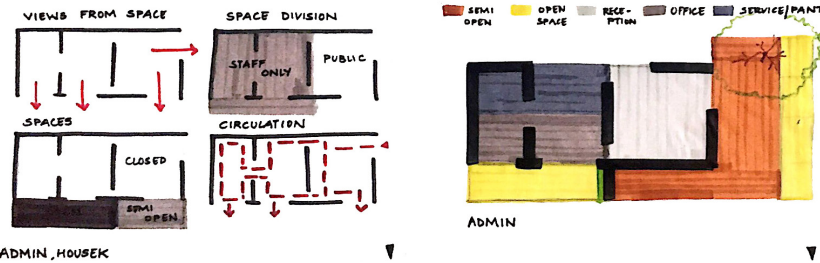
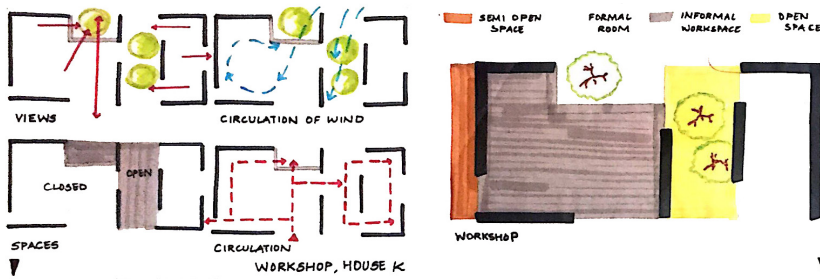
MODEL 3: VOLUMES WITH INTERMEDIATE
OPEN SPACES FOR WIND

INTERNAL SPACES

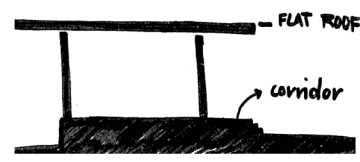


The internal individual spaces were worked with the help of North-South parallel walls providing views to open spaces. The configuration of the walls, with alternate partition accommodate better wind movement and the trees surrounding the building will help in cooling of the air. Open spaces were inserted inside individual spaces so that a person is never disconnected from the outside. The idea was that when a person is in the building, he starts to appreciate and value nature.

- The individual spaces were worked out in terms of :
1. Views
 2. Circulation
 3. Green spaces
 4. Wind movement
 5. Semi-open, open and closed
 6. Public and Private space



The heights of each space differs according to the function that they are to house, The plan is a interlocking of volumes, that are spread out on the site, connected with semi-open and open spaces.

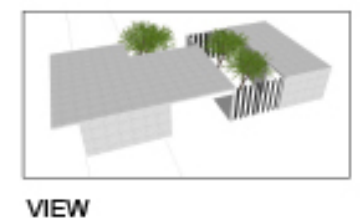
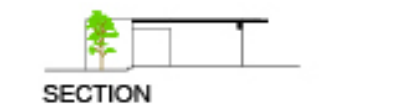


Flat roofs extending outside the space connecting the interior and exterior, and shading the semi open corridors that connects the different volumes.

INDIVIDUAL SPACES

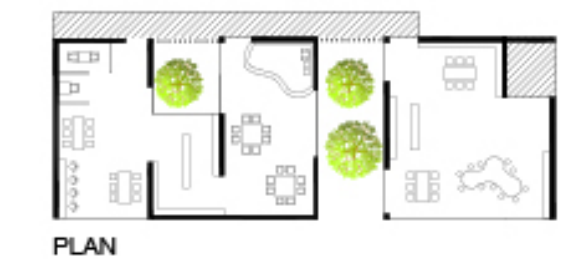
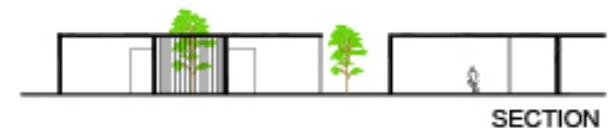
WORKSHOP

SCALE- 1:100



LIBRARY

SCALE- 1:100



CASE STUDY



A case study was introduced as an exercise for an in depth study of a given building and analysing various aspects of the spatial character. The concept, context, functioning, circulation, services were important aspects for the basis of the study. House N, located in Japan, designed by Sau Fujimoto was taken as a case study for this project. Alongside the case study, an analysis of the project was done ,in order to give depth to design understanding.

CASE STUDY, HOUSE N

CONCEPT

NO DISTINCT BOUNDARY BETWEEN INSIDE AND OUTSIDE
INCREASING CONNECTION BETWEEN HOUSE AND STREET

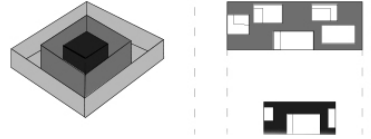


Conventional House

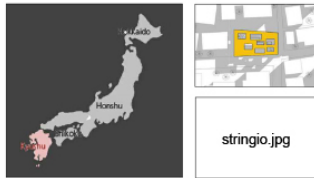
Future House !

CONCEPT

GRADATION IN DOMAIN, WITH LAYERS OF PRIVACY
THREE NESTED SHELLS THAT INDICATE CONTINUUM

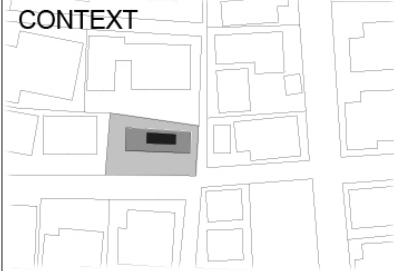


LOCATION



OITA, JAPAN

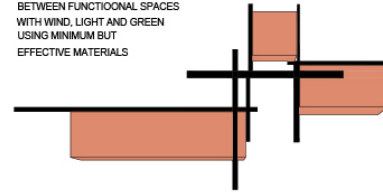
CONTEXT



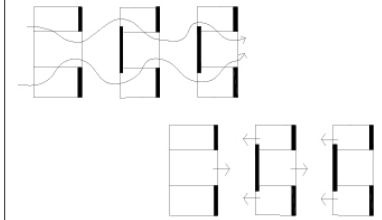
CASE STUDY, HOUSE K

CONCEPT

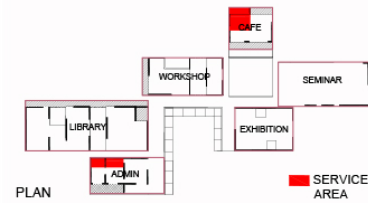
MAXIMIZING THE CONNECTION BETWEEN FUNCTIONAL SPACES WITH WIND, LIGHT AND GREEN USING MINIMUM BUT EFFECTIVE MATERIALS



CONCEPT



FUNCTIONS AND SERVICES

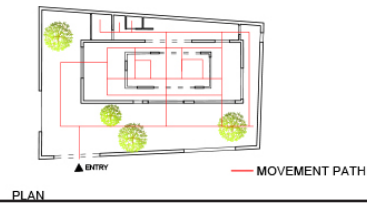


LOCATION

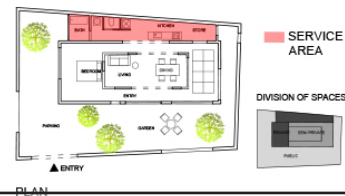


SHETH C.N. VIDHYALAYA AHMEDABAD

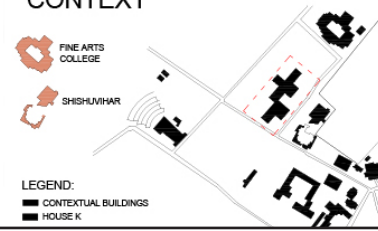
CIRCULATION



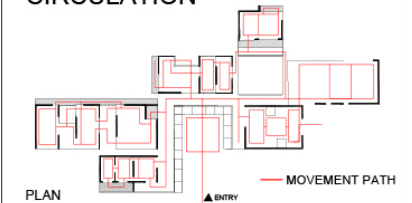
FUNCTIONS AND SERVICES



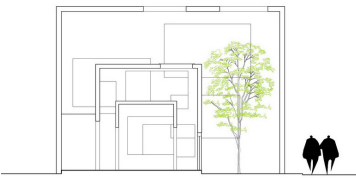
CONTEXT



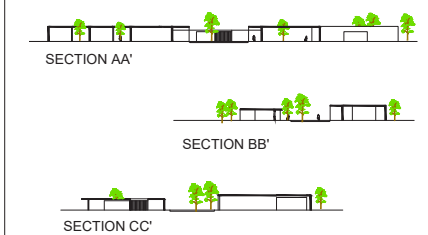
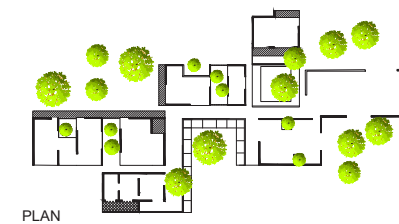
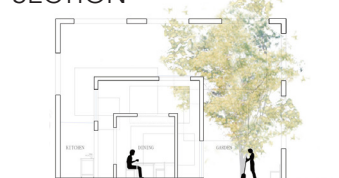
CIRCULATION



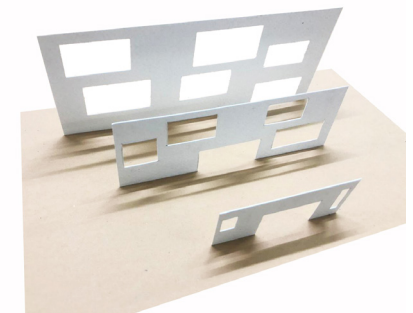
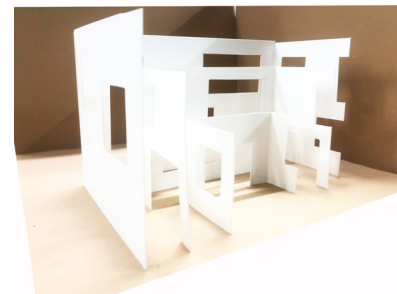
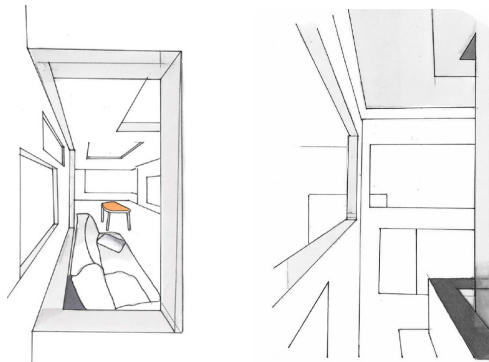
SECTION



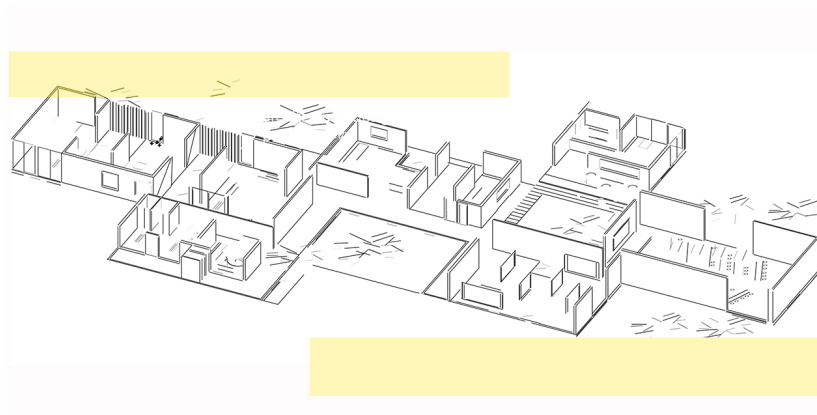
SECTION



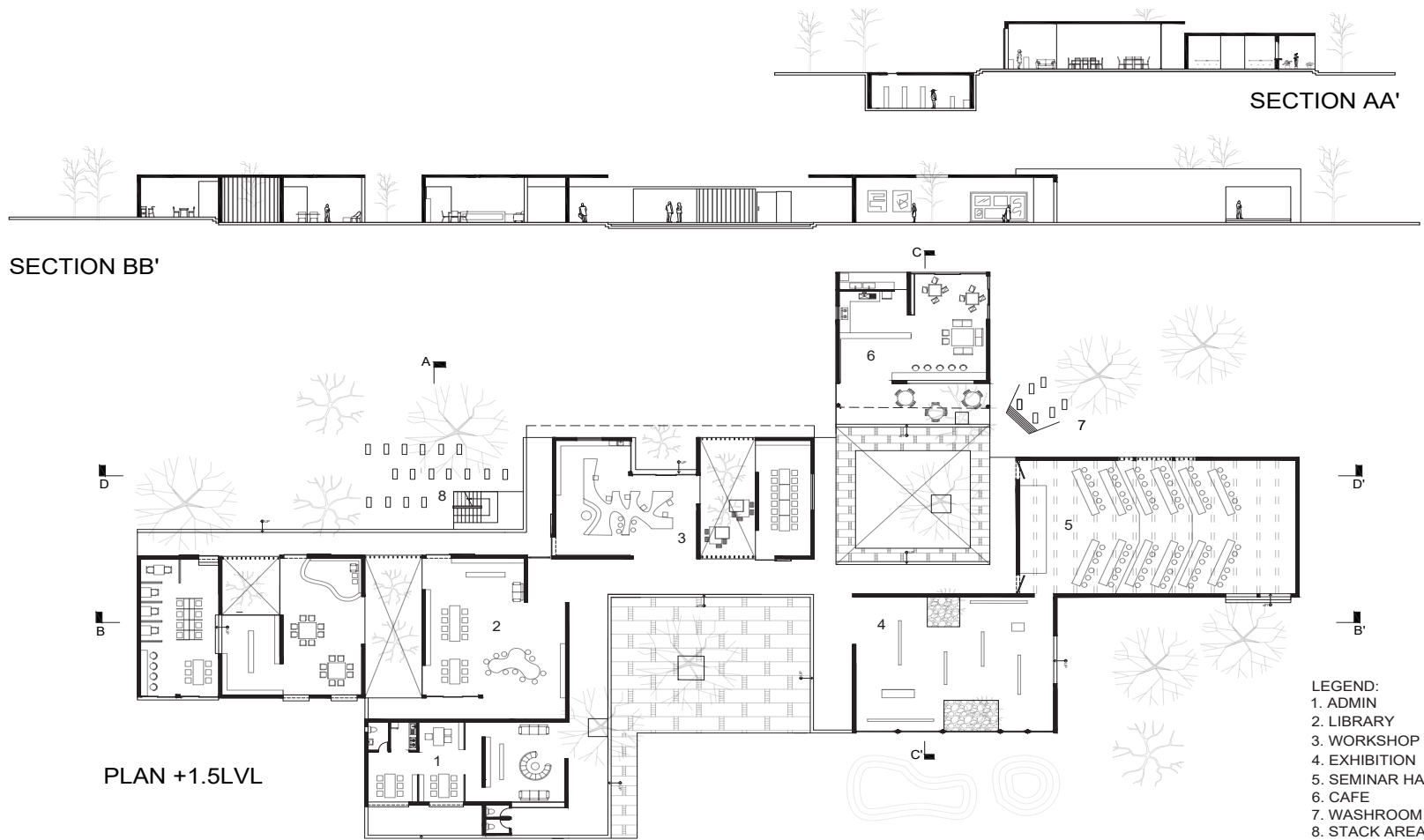
SKETCHES AND MODELS, HOUSE N



THE DESIGN



The Project, House K (house of knowledge) is located in C.N. Vidhyavihar, Ahmedabad. It consists of a library, exhibition space, admin area, seminar hall, workshop and a cafeteria. These spaces are configured in different volumes connected by corridors that lead to green open-spaces. The individual volumes are further partitioned by parallel walls creating an opportunity for green, light and wind to penetrate the building. The building is single storied and has flat roofs, seems as if it is born from the ground itself.



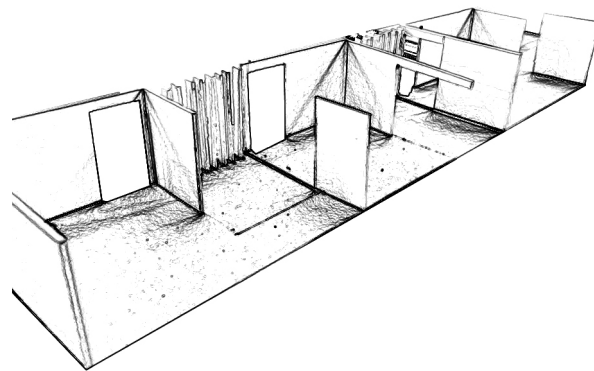
MODEL VIEWS



RENDERED VIEWS

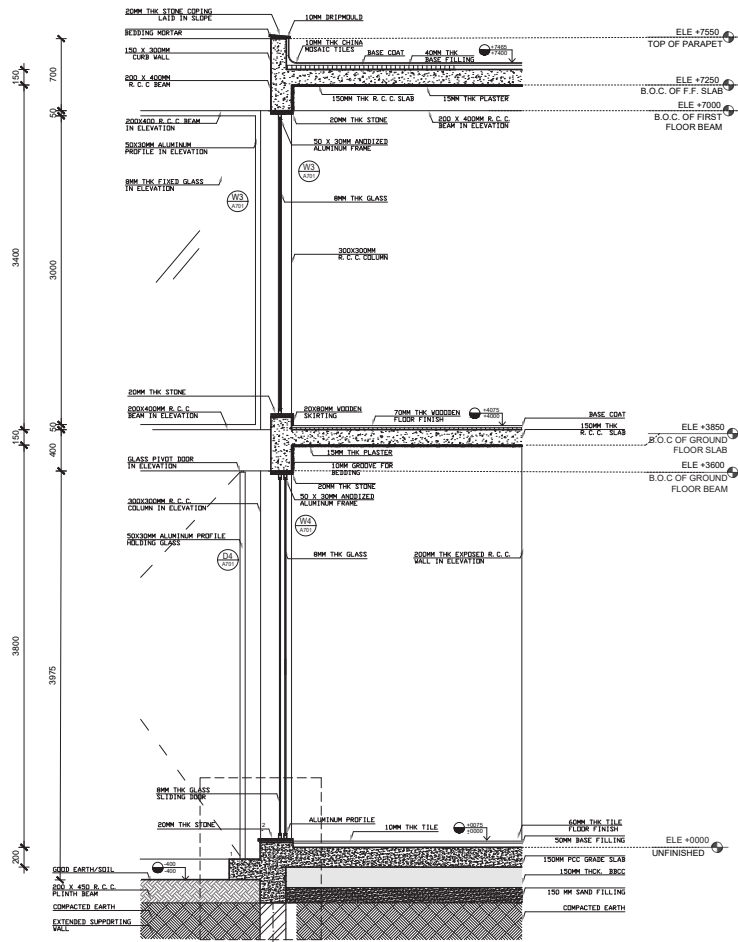


WALL SECTION AND DETAILS



The walls are the major element of a building connecting the interior and the exterior. The walls have been thought of including huge openings having glass and wooden doors that can be opened to access the open space or to let wind/light inside the space. Interior walls have plaster except a few walls which are exposed r.c.c. walls highlighted with texture and cove lighting, or skylight. The slab extends out from the walls facing towards the main courtyard forming shaded corridors.

DETAILS

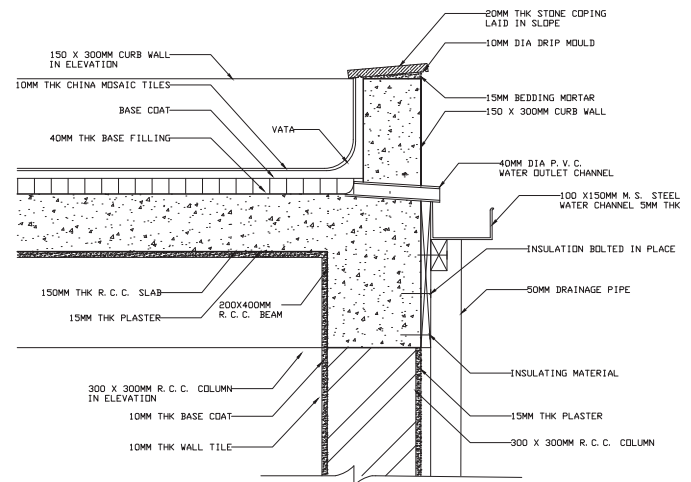


FIRST FLOOR
GROUND FLOOR

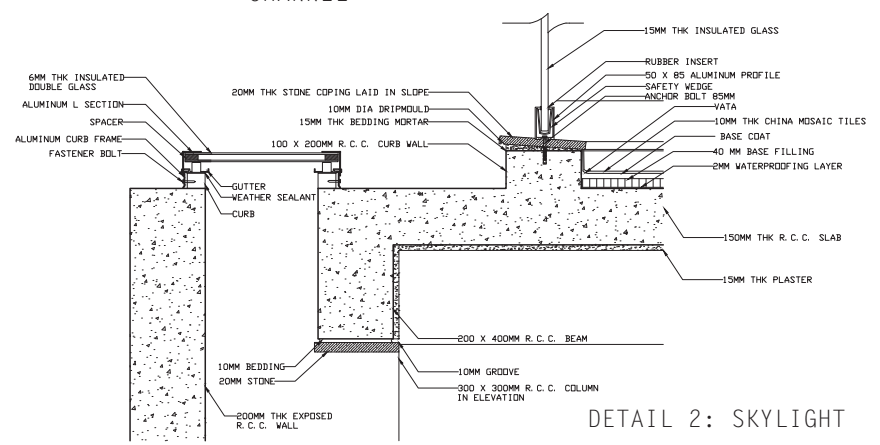
D. T. S.
D. T. S.

READING AREA 3
READING AREA 2

WALL SECTION



DETAIL 1: RAINWATER CHANNEL



DETAIL 2: SKYLIGHT

DETAIL MODELS



MODEL1: WALL SECTION

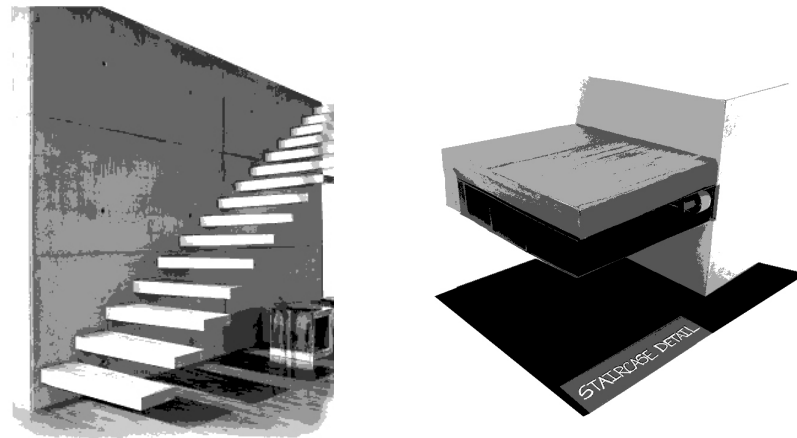


MODEL2: PLINTH DETAIL



MODEL3: SKYLIGHT

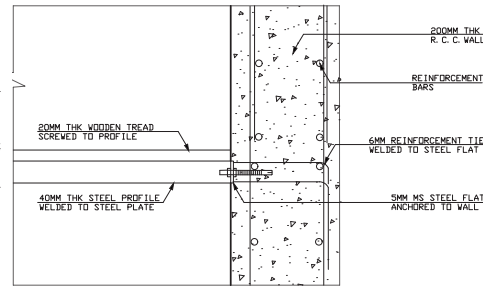
DESIGN DETAIL: STAIRCASE



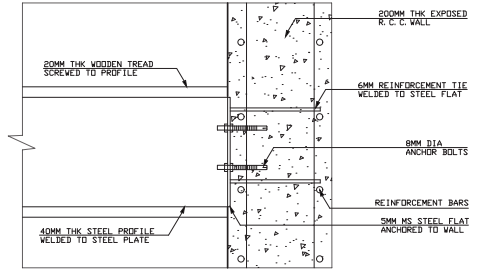
The idea was to design a light wooden staircase that cantileveres out of the adjacent concrete wall. The concrete wall is exposed and highlighted with the help of cove lighting. The staircase seems to be a number of floating wooden treads supported on a steel profile that is anchored to the wall. The railing is made of glass fitted to the side of the tread along with a wooden capping. This detail makes the railing seem to be a part of the tread and not an independent element. There is a fixed glass window on the landing which enables the users to look outside towards green.

DETAILS

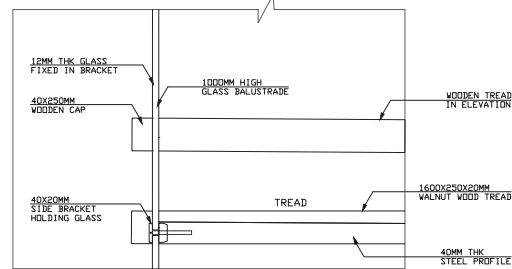
DETAIL 1: SECTION-TREAD JOINERY



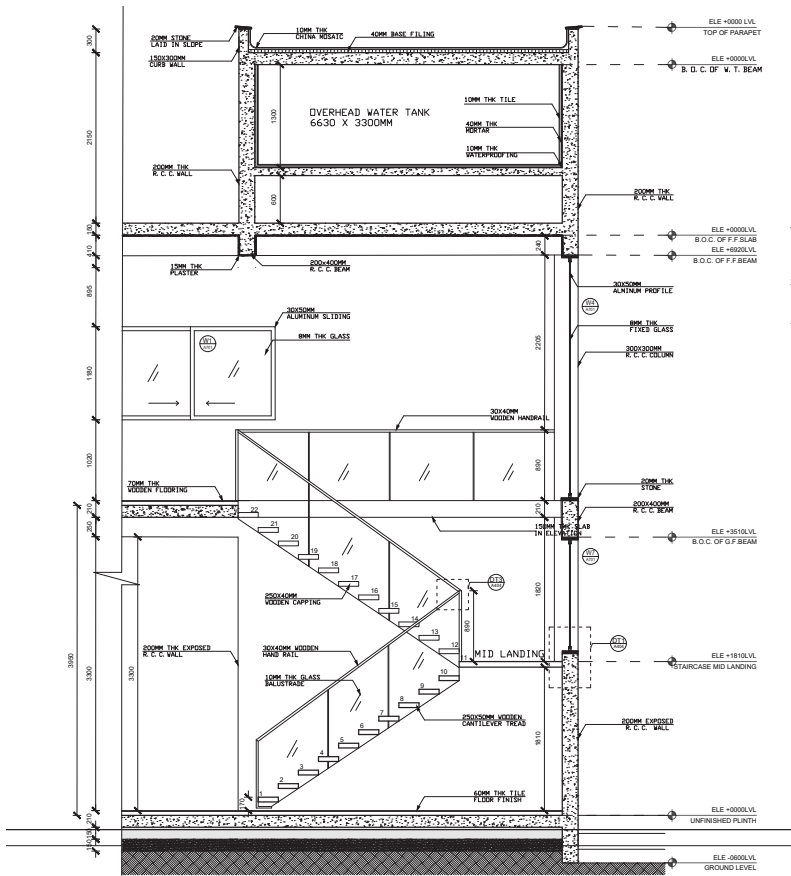
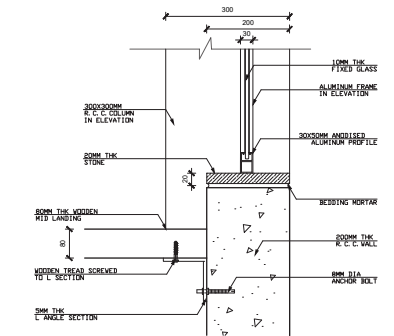
DETAIL 2: PLAN-TREAD JOINERY



DETAIL 3: RAILING JOINERY

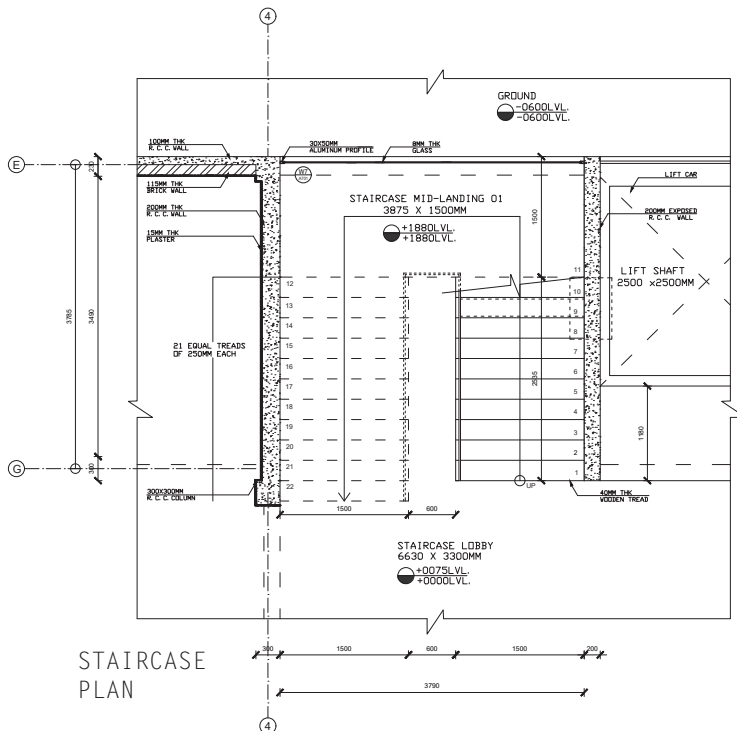


DETAIL 4: MID LANDING DETAIL



STAIRCASE SECTION

DETAIL MODELS



STAIRCASE PLAN

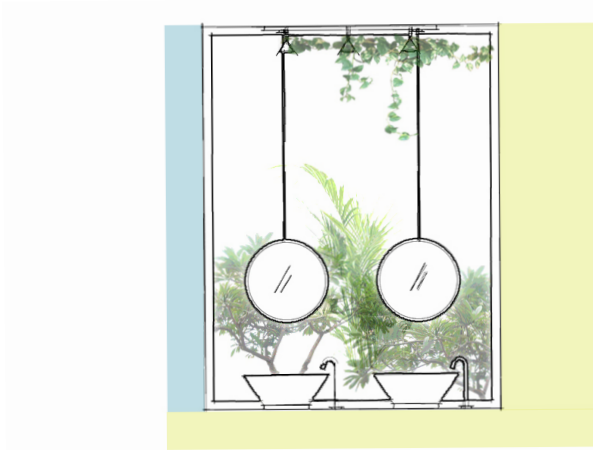


MODEL 1: TREAD TO WALL JOINERY

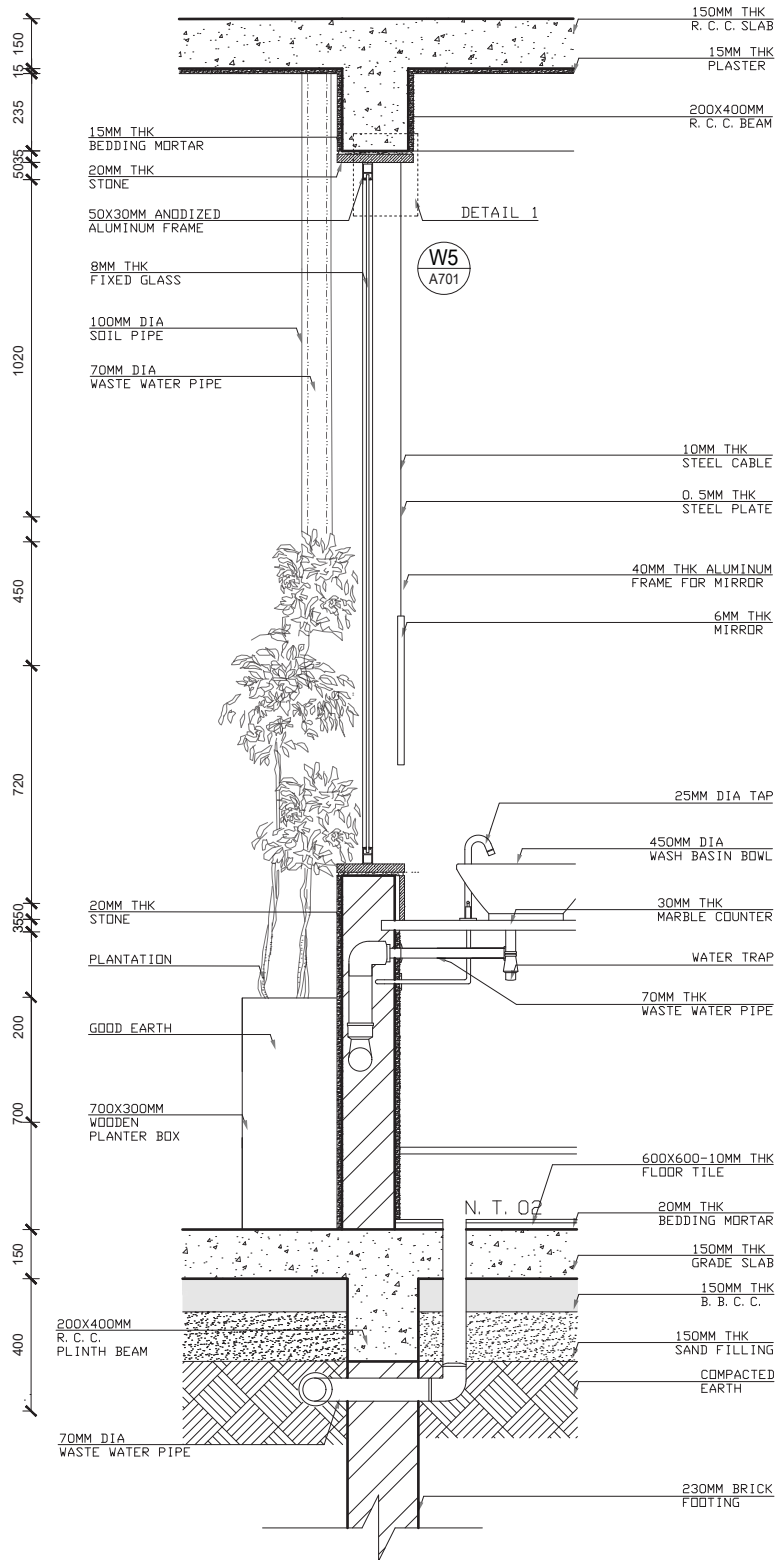


MODEL 2: RAILING JOINERY

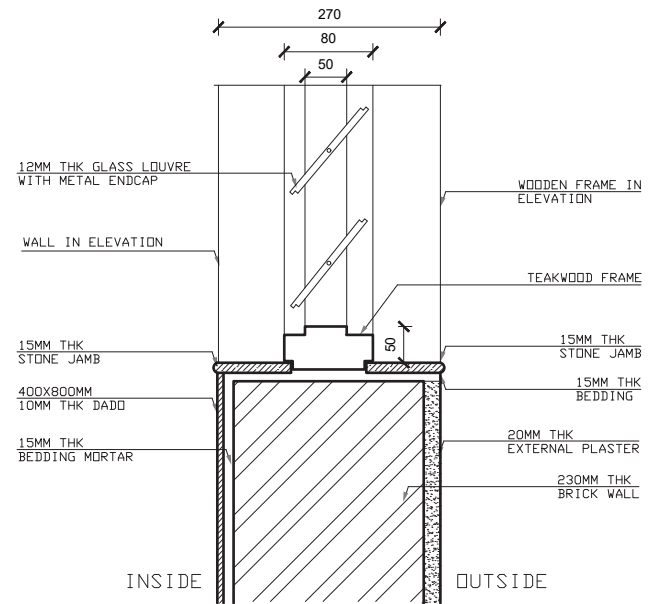
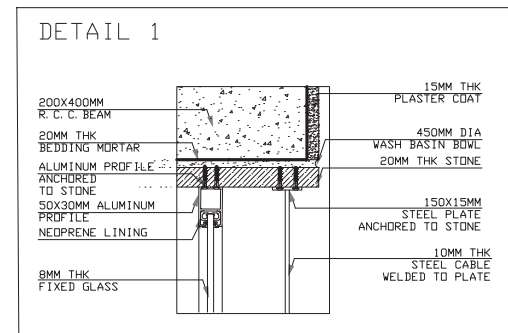
DESIGN DETAIL: WASHROOM



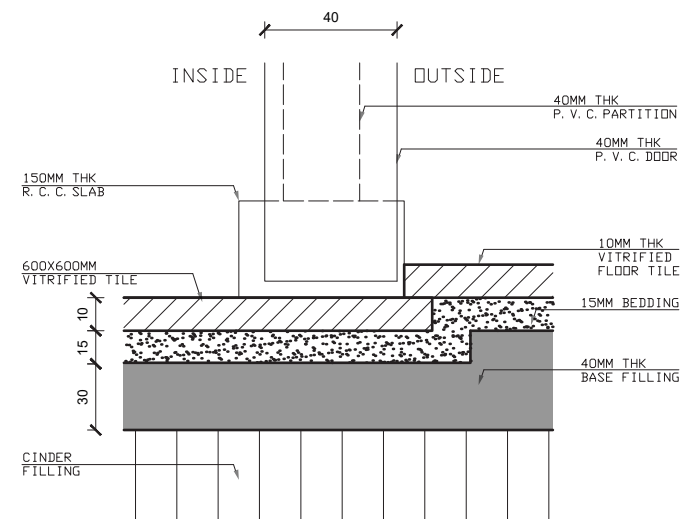
With the idea of further enhancing the concept of bringing nature inside the building, a notable detail was worked out in the service block (washroom) of the building in the wall adjoining the basin area of the male and female washrooms. The wall above the basin has a fixed glass (one way) window that looks over to the plantation outside, with a circular mirror hung independently from the ceiling in the front. The users should be able to get a glimpse of nature as they wash their hands.



WALL SECTION

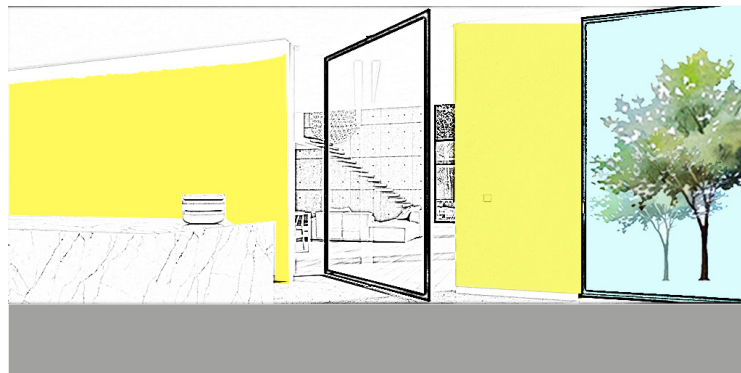


DETAIL 1: LOUVERED WINDOW DETAIL



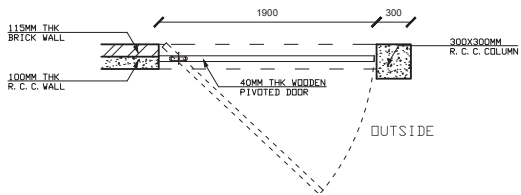
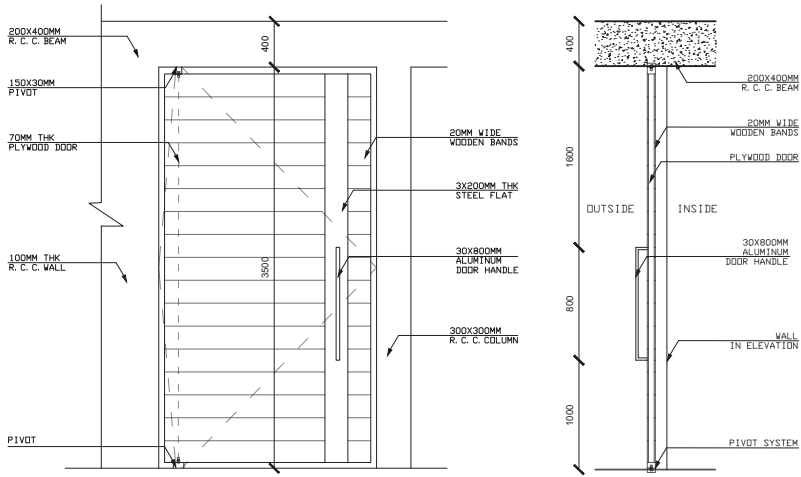
DETAIL 2: TILE DROP DETAIL

DESIGN DETAIL: DOOR-WINDOW



A House of knowledge should be flooding with natural light. The doors and windows inside the spaces were designed with the extensive use of glass to promote transparency and encourage the people to go outside, sit under a tree, read, and enjoy nature. Sliding glass doors are provided for the purposes of letting wind inside the building from the s-w direction. Main entrance doors are mainly wooden pivoted doors that provide huge opaque partitions to separate individual volumes.

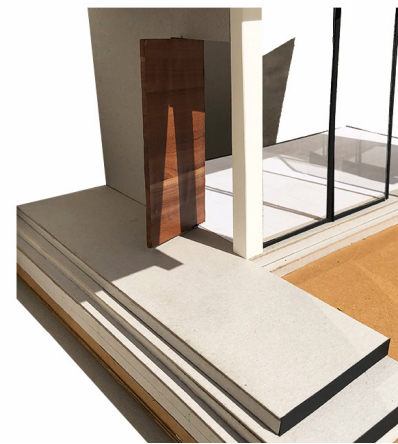
DETAIL MODELS



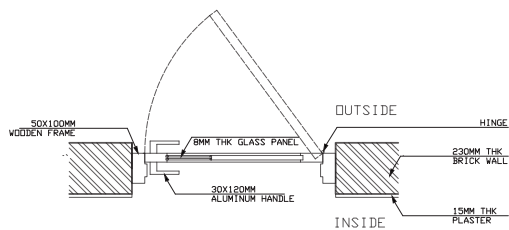
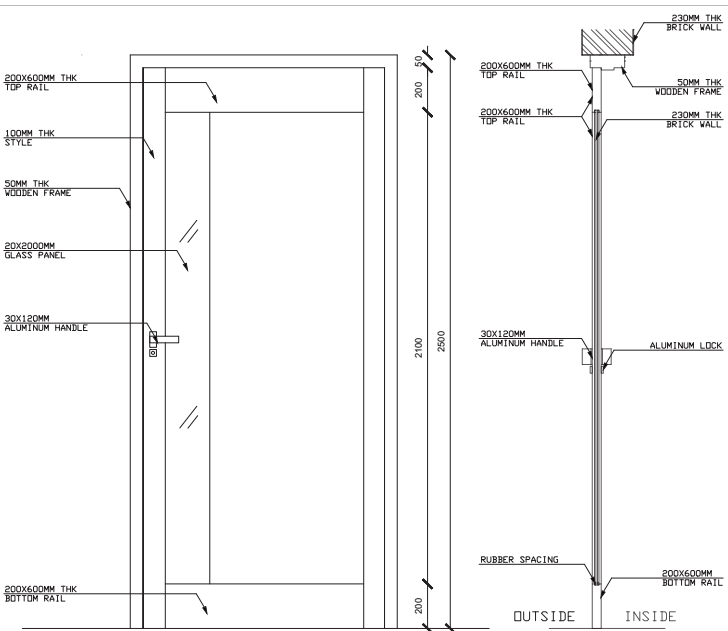
DETAIL 1:
WOODEN PIVOT DOOR



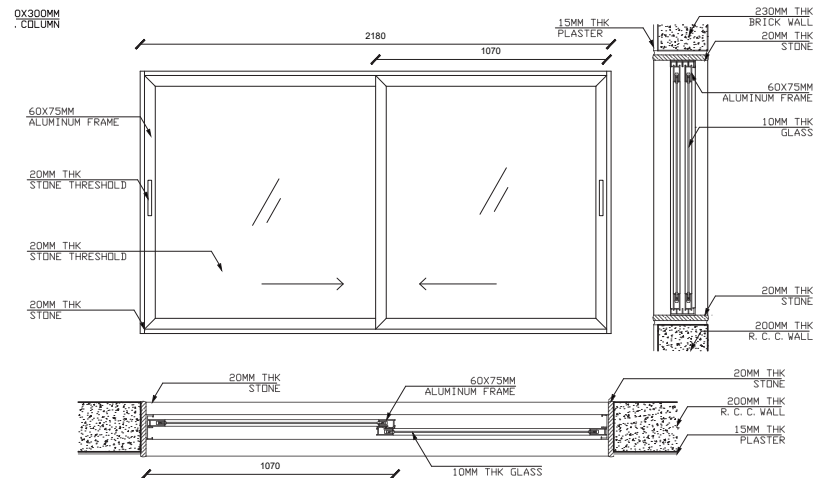
MODEL 1: GLASS DOORS



MODEL 2: WOODEN
PIVOT DOOR



DETAIL 2:
WOODEN HINGED DOOR



DETAIL 2: GLASS SLIDING DOOR

