



KGK DIAMONDS

Architectural Design for a Diamond Processing Factory and Office

Client:	M/s Alok Impex
Site Location:	'KGK Diamonds', Karanj, Kodianar, Surat, Gujarat- 395008
Plot Size:	76,120 sq ft / 7,070 sq m
Construction Area:	2,60,000 sq ft / 24,154 sq m
Cost of Project:	Confidential
Year of Completion:	2016
Services:	Architectural Planning, Interior Design, Landscape, MEP Integration, Art Integration
Firms Involved:	EssTeam, Oblique



THE PROJECT:

The client is one of the global leading firms in diamond processing and finishing. Their unique vertically integrated business is spread in retail, marking their invincible presence across the pipeline of the gems and jewelry industry and translating it into a value chain offering considerable competitive advantages.



THE SITE:

The site is located in an industrial area in the city of Surat amidst many large sized diamond factories. It is a plot with 7,070 sq m area with an access road towards the South and low-rise structures towards North.

01. MONUMENTALITY

02. SPATIAL FLEXIBILITY

03. WELL RESOLVED SERVICES

04. LANDSCAPE

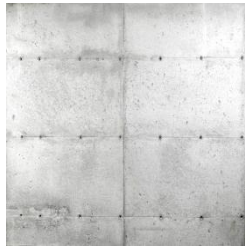


The factory intends to portray monumentality through its grand scale with columns and rising landscape beneath- to raise it, as if on a green pedestal to give the building the royal aesthetics it deserves.

01. MONUMENTALITY



CORE10 STEEL



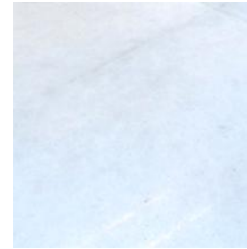
FORM FINISHED
CONCRETE



SOLID TEAK WOOD



KOTA STONE



INDIAN WHITE
MARBLE

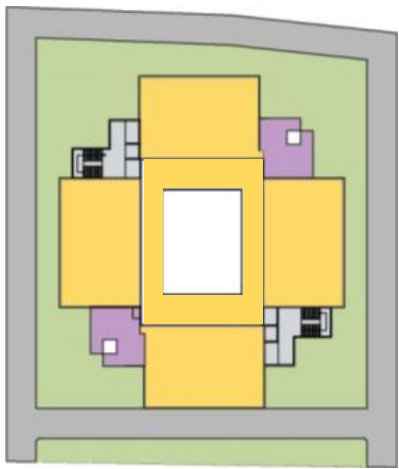


GLASS

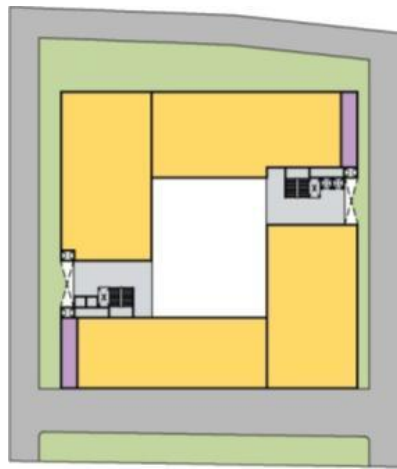
The building is encompassed in form finish concrete giving it a strong character having the front face covered with untreated cor10 steel facade. With the value to use only Indian natural stones in the building uplifts the ethnic space quality and feel with the contrast of contemporary minimal forms for the exteriors as well as the interiors.



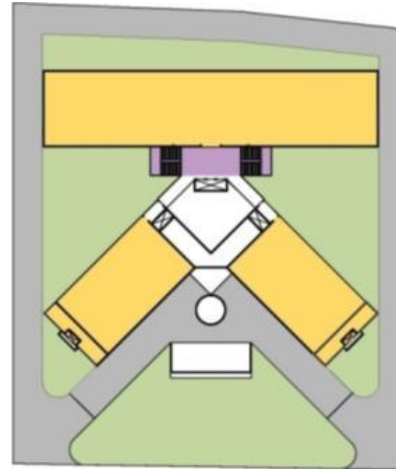
01. MONUMENTALITY



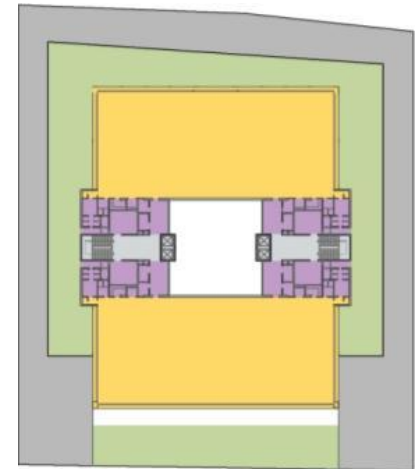
OPTION 01



OPTION 02



OPTION 03



OPTION 04



PROS:

- Building would appear less massive because of freeing-up the corners.

- Minimum circulation areas.
- 2 large Production halls of about 9000 sq ft each on each floor.

- Outer landscape area.
- Grand entrance with ramp from ground to first floor.
- Service at the edge of each flange.
- Minimum ground coverage.

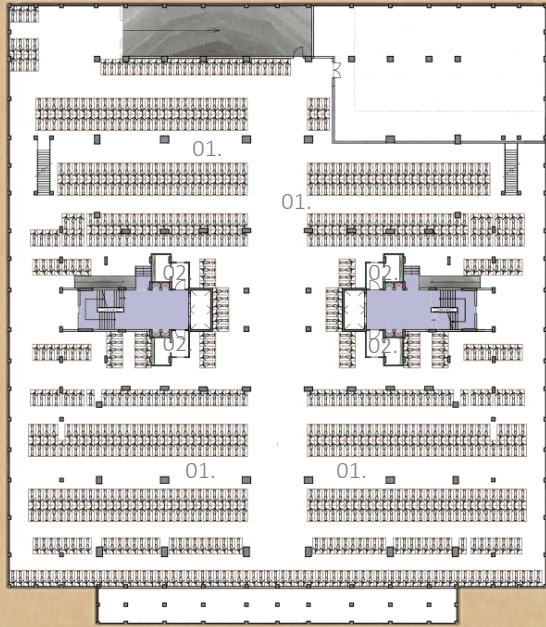
- Minimum circulation areas.
- 2 large Production halls of about 10000 sq ft each on each floor offering maximum flexibility of planning.

CONS:

- Individual production halls reduces the flexibility of usage.
- Excess circulation areas.

- L shaped halls are difficult to use for diamond processes.

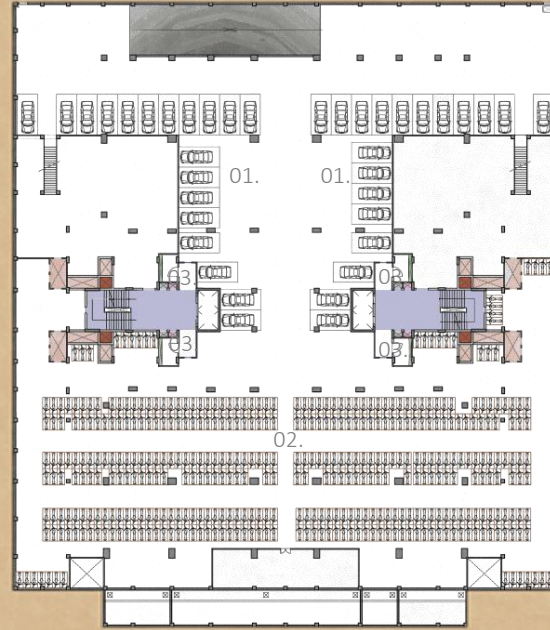
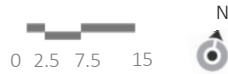
- Need to provide 4 fire staircases.
- Very little flexibility.
- Circulation between halls would be cumbersome.



LOWER BASEMENT PLAN

Lower basement floor has parking facility for two-wheelers.

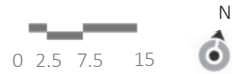
- 01. Two-wheeler Parking
- 02. Electrical Room

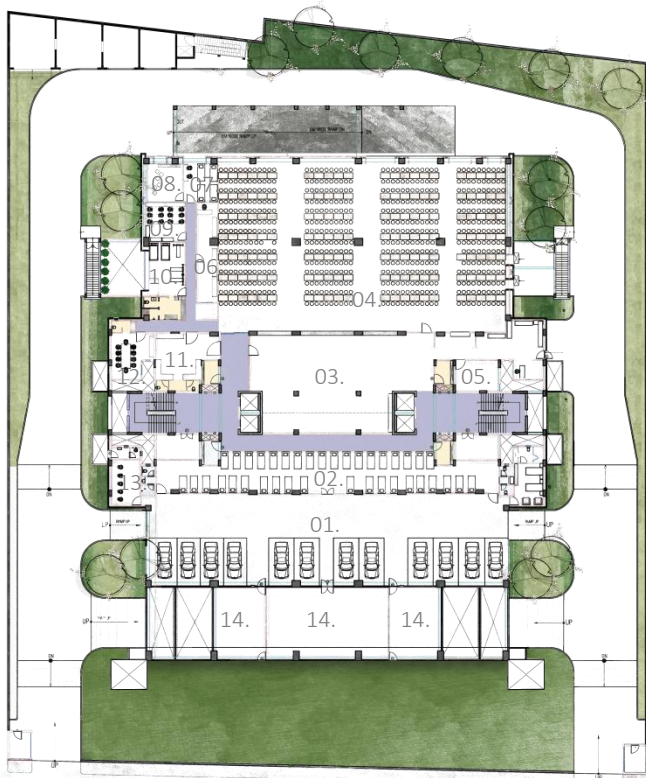


UPPER BASEMENT PLAN

Upper basement floor has parking facility for two-wheelers as well as four wheelers.

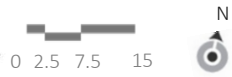
- 01. Car parking
- 02. Two-wheeler parking
- 03. Electrical room



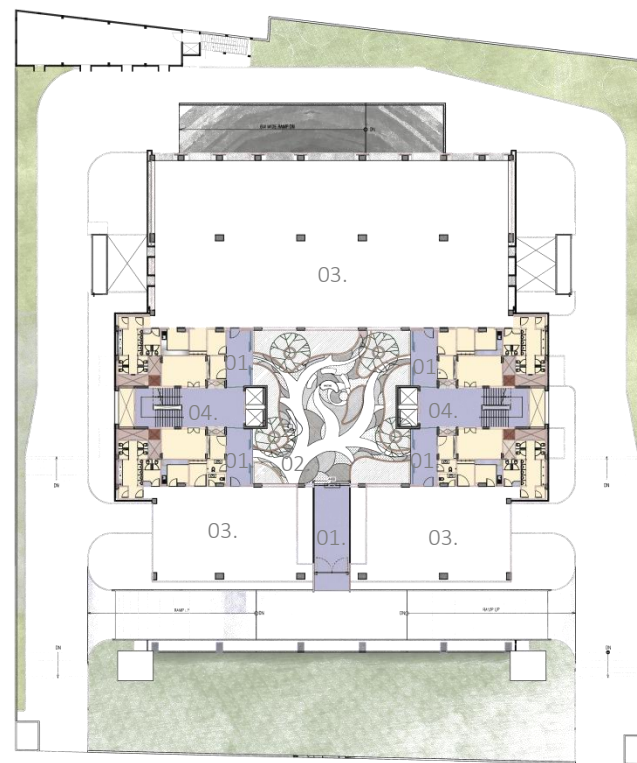


GROUND FLOOR PLAN

- 01. Executive Car Parking
- 02. Dormitory Room
- 03. Kitchen
- 04. Dining Hall
- 05. Wash Area
- 06. Central Storage
- 07. Medical Room
- 08. Creche
- 09. Library
- 10. Gymnasium
- 11. Hand wash & Toilets
- 12. Executive Dining Area
- 13. BMS Department
- 14. Store

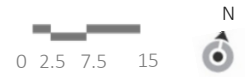


Ground Floor has a dormitory room for staff with dining area and Kitchen. A gymnasium, library and medical room is provided for the staff. Toilets, bathing area and electrical rooms are provided in service core of this floor.

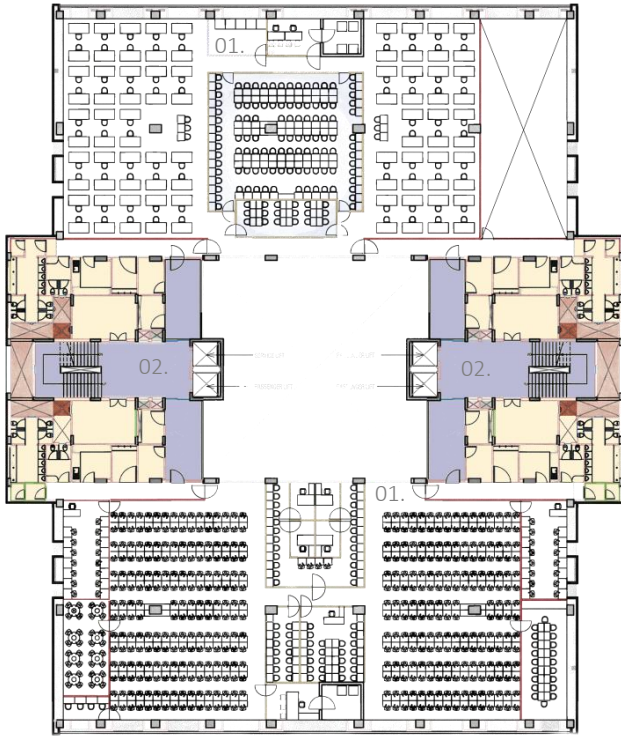


FIRST FLOOR PLAN

- 01. Entrance Passage
- 02. Waiting Area
- 03. Production Hall
- 04. Service Core



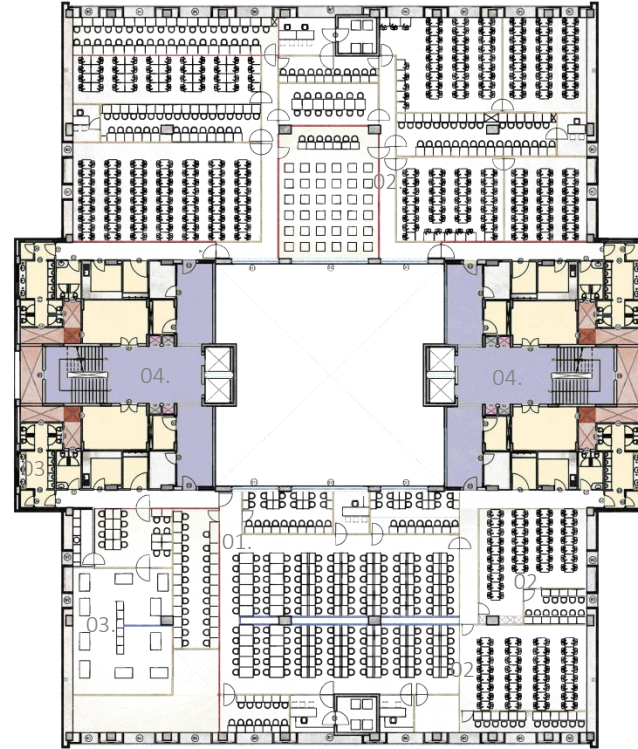
Entrance for visitors is provided on this floor with waiting area and production hall. Service core on this floor has toilets and electrical room.



SECOND FLOOR PLAN

This floor has production hall where Laser- sawing and Polishing takes place. Service core on this floor has toilets and electrical room.

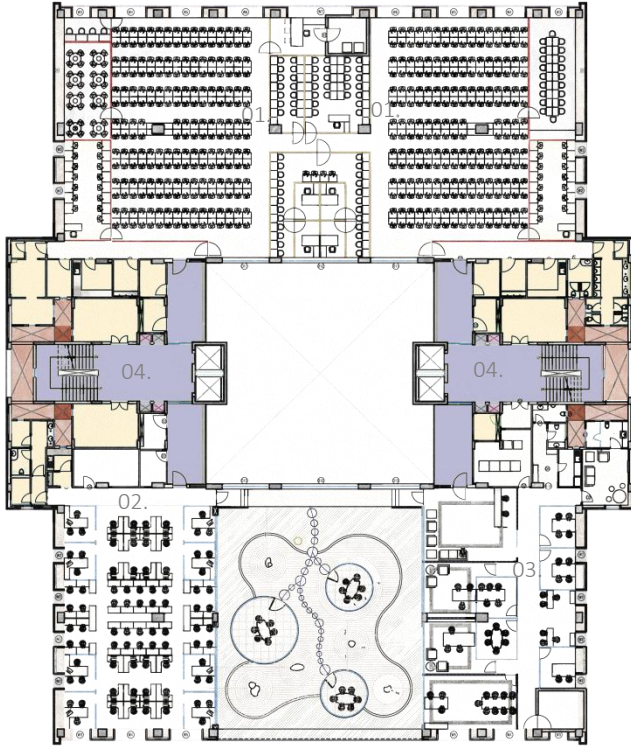
01. Production Hall
02. Service Core



THIRD FLOOR PLAN

The third floor too has production hall where Laser - sawing and Polishing takes place. Service core on this floor has toilets and electrical room.

01. Production Hall
02. Polishing Mills
03. Offices
04. Service Core



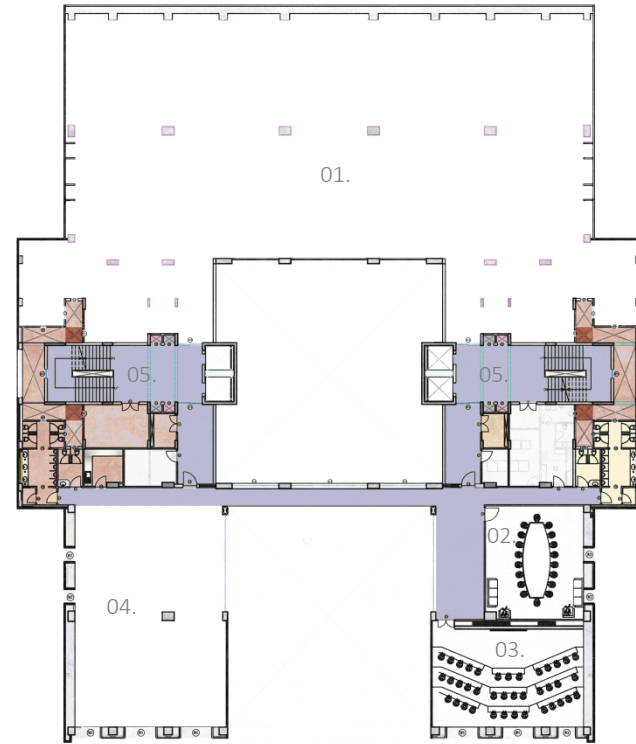
FOURTH FLOOR PLAN

- 01. Production Hall
- 02. Administration department
- 02. Polishing Mills
- 03. Offices
- 04. Service Core



This floor has production hall where Laser-sawing and Polishing takes place. Administration department and office spaces and a production hall is also a part of this floor. Service core on this floor has toilets and electrical room.

02. SPATIAL FLEXIBILITY- PLAN



FIFTH FLOOR PLAN

- 01. Terrace
- 02. Conference Room
- 03. Auditorium
- 04. Future Hall
- 05. Service Core



The fifth floor is partially covered by terrace. The other areas of this floor has a Conference room, Auditorium and a hall for miscellaneous purpose. Service Core on this floor has toilets and electrical room.



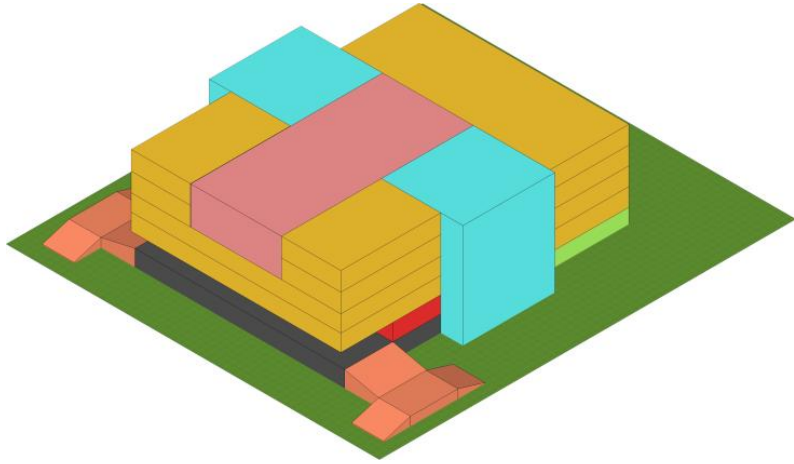
RECEPTION AREA



DIRECTOR'S CABIN

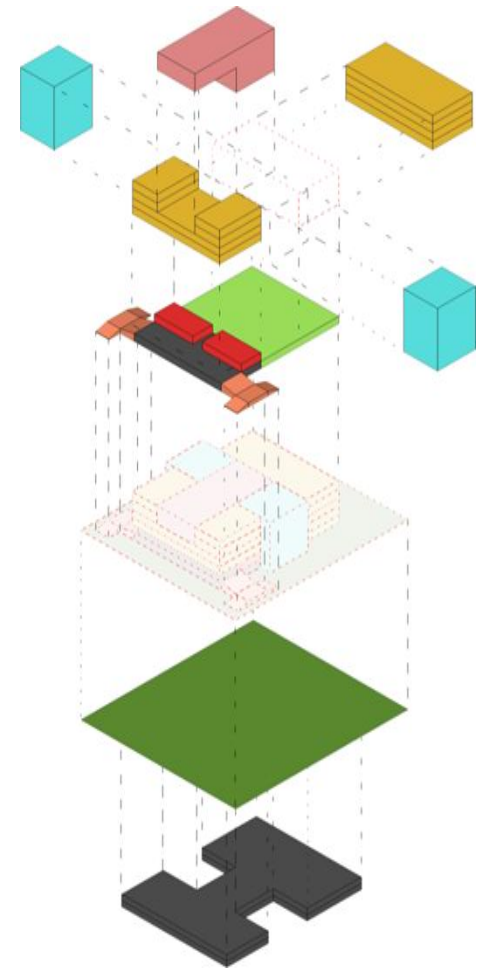


DIRECTOR'S CABIN






Over 80,000 square feet of Production Area is obtained in this design with minimum circulation. Around seven clear rectangular halls offer wonderful flexibility to accommodate the changing dynamics of the diamond processing business. The services are well resolved and placed on the two ends to not hinder any crucial spaces of the factory. The exploded three-dimensional diagram shows the division of spaces planned exactly in accordance to the requirements of the factory.

- Parking
- Site
- Ramp
- Admin blocks
- Kitchen and dining
- Working blocks and production house
- Service blocks
- Boolean void





SECTION THROUGH ATRIUM

-  PRODUCTION HALLS
-  DINING HALL
-  PARKING



A green Atrium in the centre of the building provides natural light and ventilation to every working space surrounding it. The landscape is let to flow from outside to the inner space of the atrium and then to the executive floor courtyard, symbolically connecting all the space giving the people a somewhat natural environment.



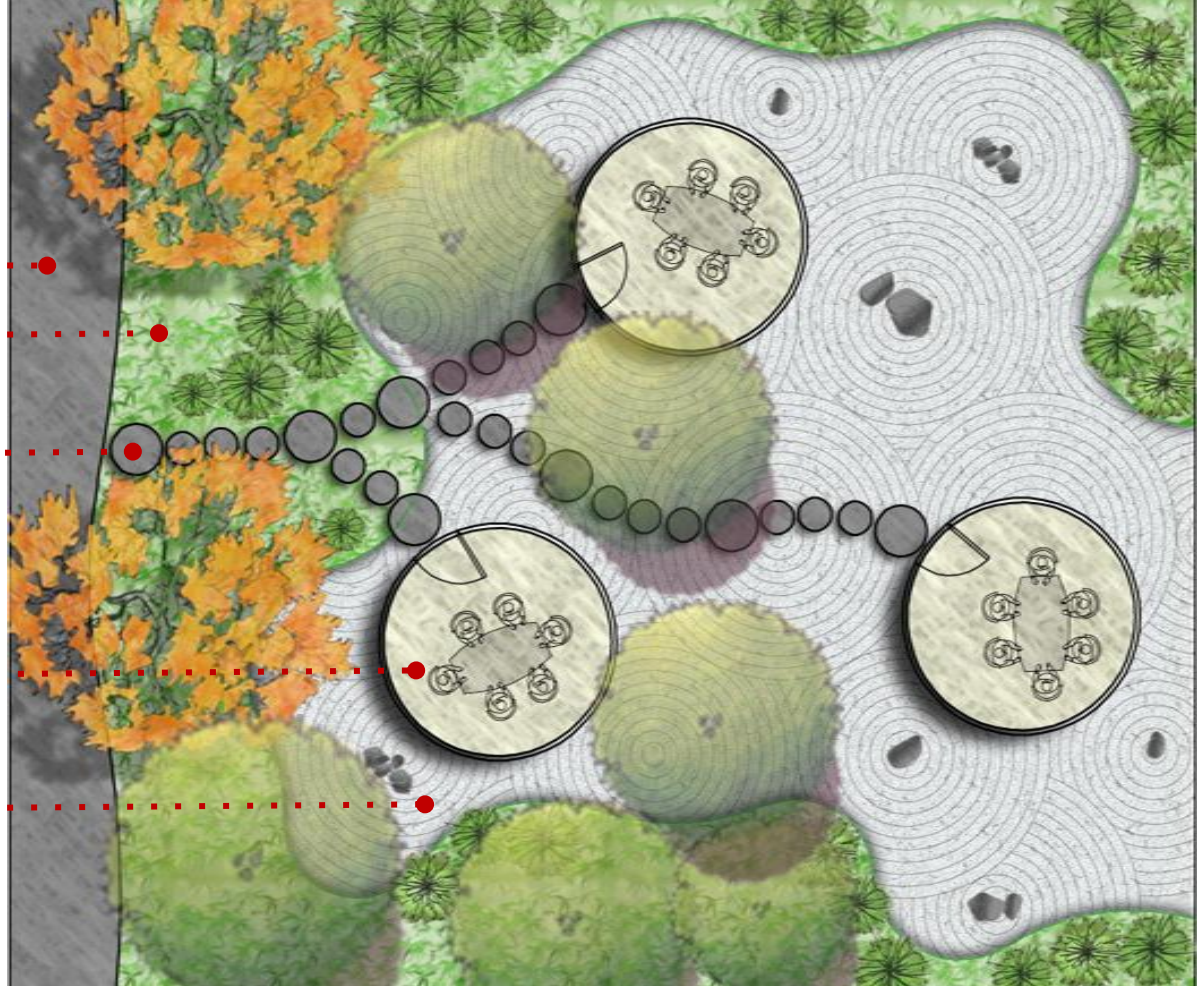
Walkway

Shrub bed

Stepping stones

Discussion rooms

Gravel landscape











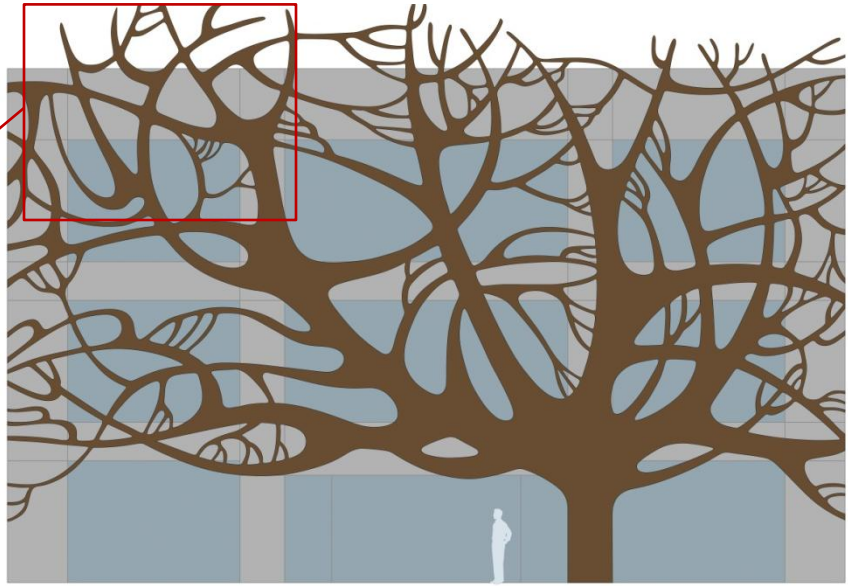
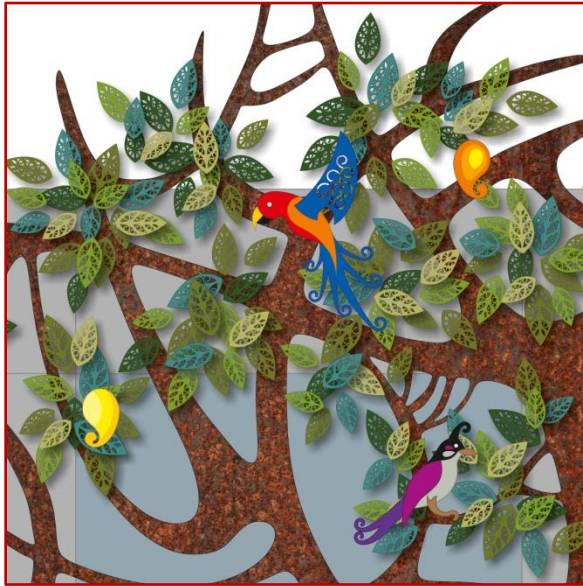








The proposed artwork on this wall intends to serve the purpose of being conceptually in continuation of the ambience of the atrium itself, as well as be an element which connects the 'gardens' of the ground floor with that on the fourth floor. For this, we have envisaged creating a huge and colorful abstract mango tree on this wall.



The mango tree is one of the most popular trees in India since centuries. The leaves of the mango are auspicious for Hindus, and are hung across doorways for any special occasion and in temples. Sanskrit Poetry tends to celebrate the fragrant mango flower more than the fruit or than the leaves and as a result it is vasanta (spring) not grima (summer) that is the season of the mango. Vasanta starts as the mango tree puts forth buds and sprouts which gradually turn in to a blossom as the season reaches its height. The Mango tree was considered to be the essence of the spring season. The Mango tree attracts several different kinds of birds and insects towards it too, creating its own ecosystem. Through this mural we wish to recreate the association with being under the sprawling foliage of mango trees in orchard – with all the accompanying birds, bees, insects etc. and with the lovely golden mangoes too. In addition to several small colorful birds, we intend to make one glorious on one of the lower branches of the tree. On the whole, when one would look at the mural, it would look like a live, vibrant, colorful tree where one can almost hear the chirping of the birds, and get the sweet fragrance of the mangoes!



The proposed mural would be made out the laser-cut Mild steel or Aluminum sheets with paint or powder-coating respectively. It would be made in 4 to 5 different layers giving it a depth from the wall on which it is mount. The basic tree with all its branches would form one layer, while the foliage made with the leaves having intricate laser cutting and the golden mango fruits would be made in 2-3 different layers. Then a further layer would include the colorful birds on the tree. We also intend to suspend 2-3 from ceiling such that it gives an impression as if they are flying toward the tree.



05. ARTWORK PROPOSAL: MATERIAL AND FINISHES



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