ADAA 2024-25

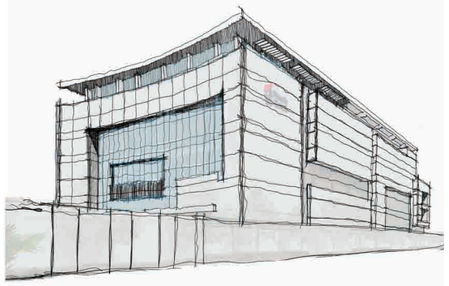
Factory & Industrial Structures

Project Timeline

JAN 2016

01

Tender Awarded



DEC 2016



02

Execution Starts

2017-2018

03

Scope Increases



DEC 2020



04

Execution Completes

Contents

01

PROJECT DESCRIPTION

Narrative for the project, including objectives, how they were met, design challenges, technological and/or material innovations.

02

ARCHITECTURAL LAYOUTS

plans, elevation and section.

03

IMAGES AFTER EXECUTION

built images of final execution of the architecture.

04

FIRM'S INTRODUCTION

Short Resume/ Bio/ Introduction of the Firm

05

SRA/ELA

Why this project shall be considered for Socially Responsive Award/Environment Leadership Award.
Video Link

Project Description

CLIENTS BRIEF AND ITS SPATIAL TRANSFORMATION

a). Plot Area: **3.181 acres, or 138,500 sq. ft.**
b). Built Up Area: **G+4** is permitted at **65%.**
c). Total constructed/proposed areas: **298,000 sq. ft**.
d). Parking Area: Around **60, 000** sq. ft.
e). Landscape Areas: Around **15,000** sq. ft.

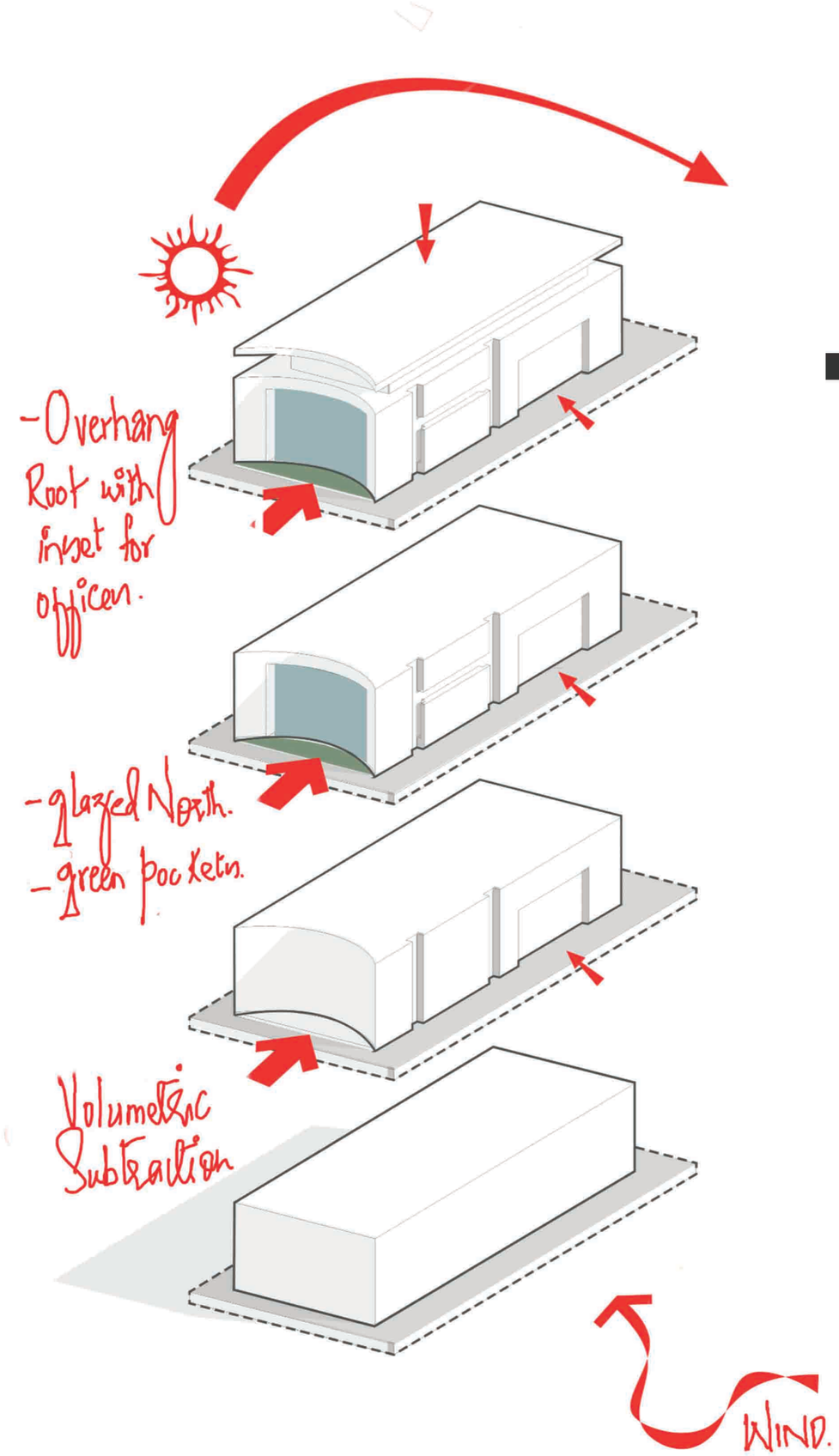
Our client entrusted us with designing a state-of-the-art **pharma production** and **warehouse facility**, leveraging our expertise in pharma projects, on approximately 50% of the available land. The client's requirements included:

- Two **production suites** on two floors
- One for **general products** (OSD, liquid, and semi-solids)
- One for dedicated **sterile products**

- Additional spaces:
  - Technical Area for production machinery
  - Quality control lab
  - New Product Development (NPD) area
  - Offices
  - Canteen
  - Prayer space
  - Parking and ancillary spaces for a specified headcount

Due to provisioning of **raft footing,** the basement is provided, utilized for **parking spaces**. The **warehouse and first production suite** were placed on the **ground floor** for easy material handling and dispatch. The offices, canteen, and NPD area were **strategically** located on the **northern/southern** part of the plot, taking advantage of **natural light** and energy, accordingly.

The **second production suite** was placed on the **second floor** for future development of **sterile products**. The **quality control lab** and **technical areas** were sandwiched between the two production suites, connected by **vertical shafts, lifts, and dumb-waiters** for efficient material and personnel movement.



Project Description

CONSTRAINTS AND SOLUTIONS ACHIEVED

Soil Bearing Capacity:

Initially, the building was not feasible to achieve **G+4** as allowed by the local authority. Thus we engaged the **soil specialist (Consolidated Engineering Services),** who used soil improvement techniques to improve the bearing capacity, making the building feasible to achieve the maximum potential.

Waterlogged and sulfate-prone soil;

we proposed a **raft foundation** with a double water proofing system that is **negative and positive**, which not only packed the **substructure** against the **raised water level** but also helped us to provide a **basement** for clients functional uses. **SRC cement** was used to make the **substructure sulfate resistant.**

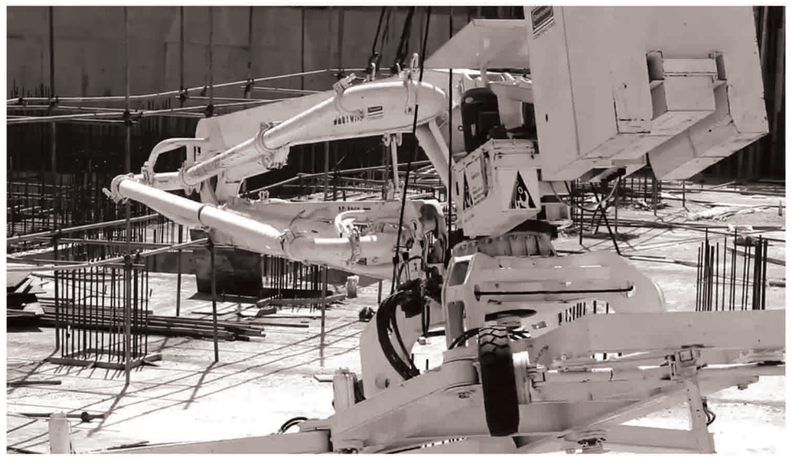
A. Use of a **spider machine** for the pouring of concrete to save on time as well as **construction joints** for a raft footing of around 40,000 sq ft.

B. **Prefab panels** imported from China were used, which took around **2 months** to install at the site on an area of around 30,000 sq ft.

C. Being the **modular approach**, Prefab Panels also provided the **required flexibility** to change/adopt as per the changing trends and needs.

D. Use of **double-sided solar panels**. Waterproofing with a **mirrored-type TOP coat** was used to reflect back the rays to the bottom side of solar panels.

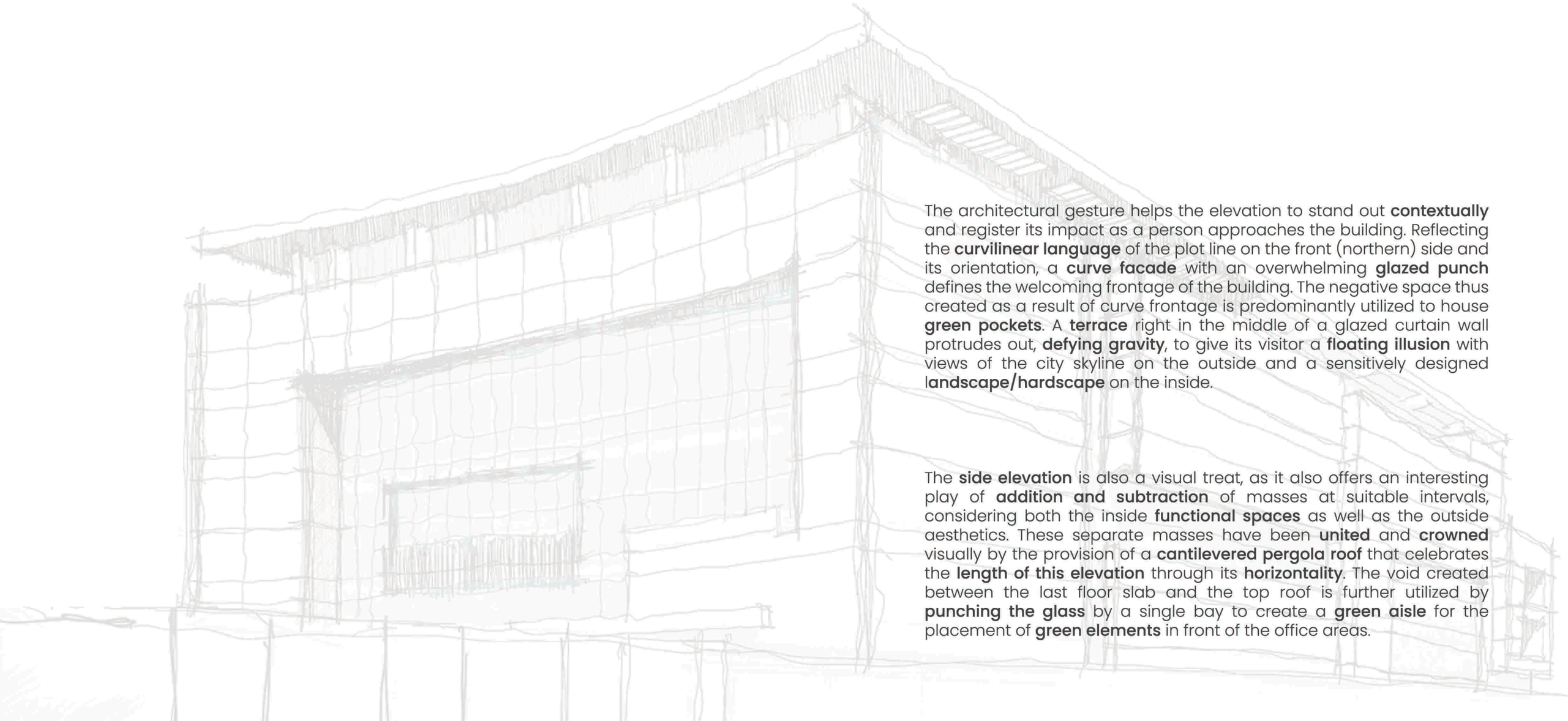








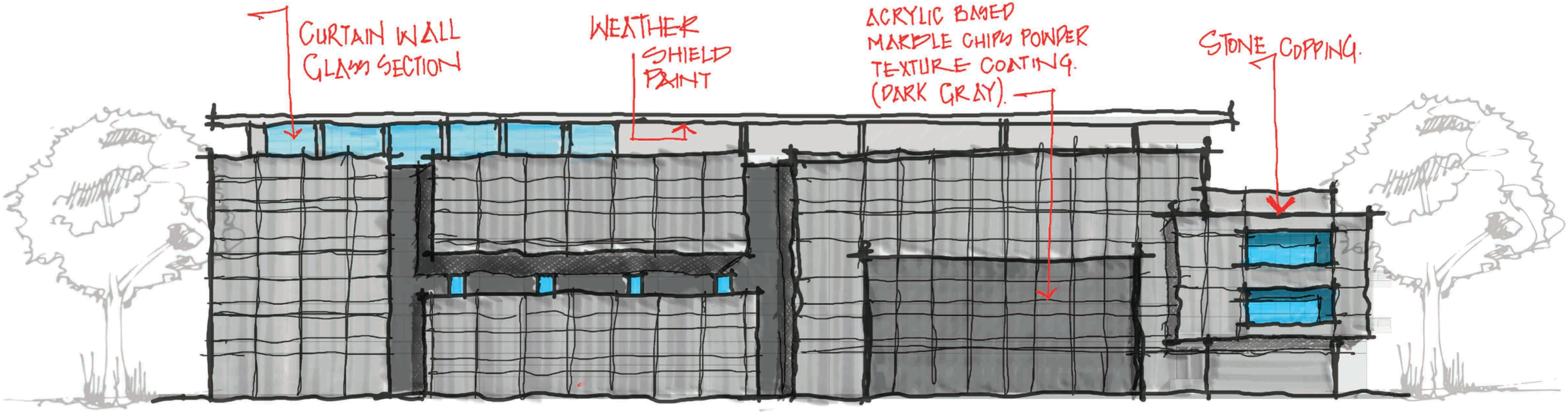
Architect's narration



The architectural gesture helps the elevation to stand out **contextually** and register its impact as a person approaches the building. Reflecting the **curvilinear language** of the plot line on the front (northern) side and its orientation, a **curve facade** with an overwhelming **glazed punch** defines the welcoming frontage of the building. The negative space thus created as a result of curve frontage is predominantly utilized to house **green pockets**. A **terrace** right in the middle of a glazed curtain wall protrudes out, **defying gravity**, to give its visitor a **floating illusion** with views of the city skyline on the outside and a sensitively designed l**andscape/hardscape** on the inside.

The **side elevation** is also a visual treat, as it also offers an interesting play of **addition and subtraction** of masses at suitable intervals, considering both the inside **functional spaces** as well as the outside aesthetics. These separate masses have been **united** and **crowned** visually by the provision of a **cantilevered pergola roof** that celebrates the **length of this elevation** through its **horizontality**. The void created between the last floor slab and the top roof is further utilized by **punching the glass** by a single bay to create a **green aisle** for the placement of **green elements** in front of the office areas.

Details of Materials



Imported Materials;

Walls, Doors, Windows & Ceiling for production areas: Prefab panels imported from KUNSHAN MAX, China for production areas(Local vendor: Gulf Prefab)

Flooring for production areas; IQ Optima homogeneous vinyl floors by Tarkett(made in Sweden), locale vendor(First Floor)

Curtain wall- External Facade; Burhani (Dubai) tempered double glazed sandwich panels from Guardian.

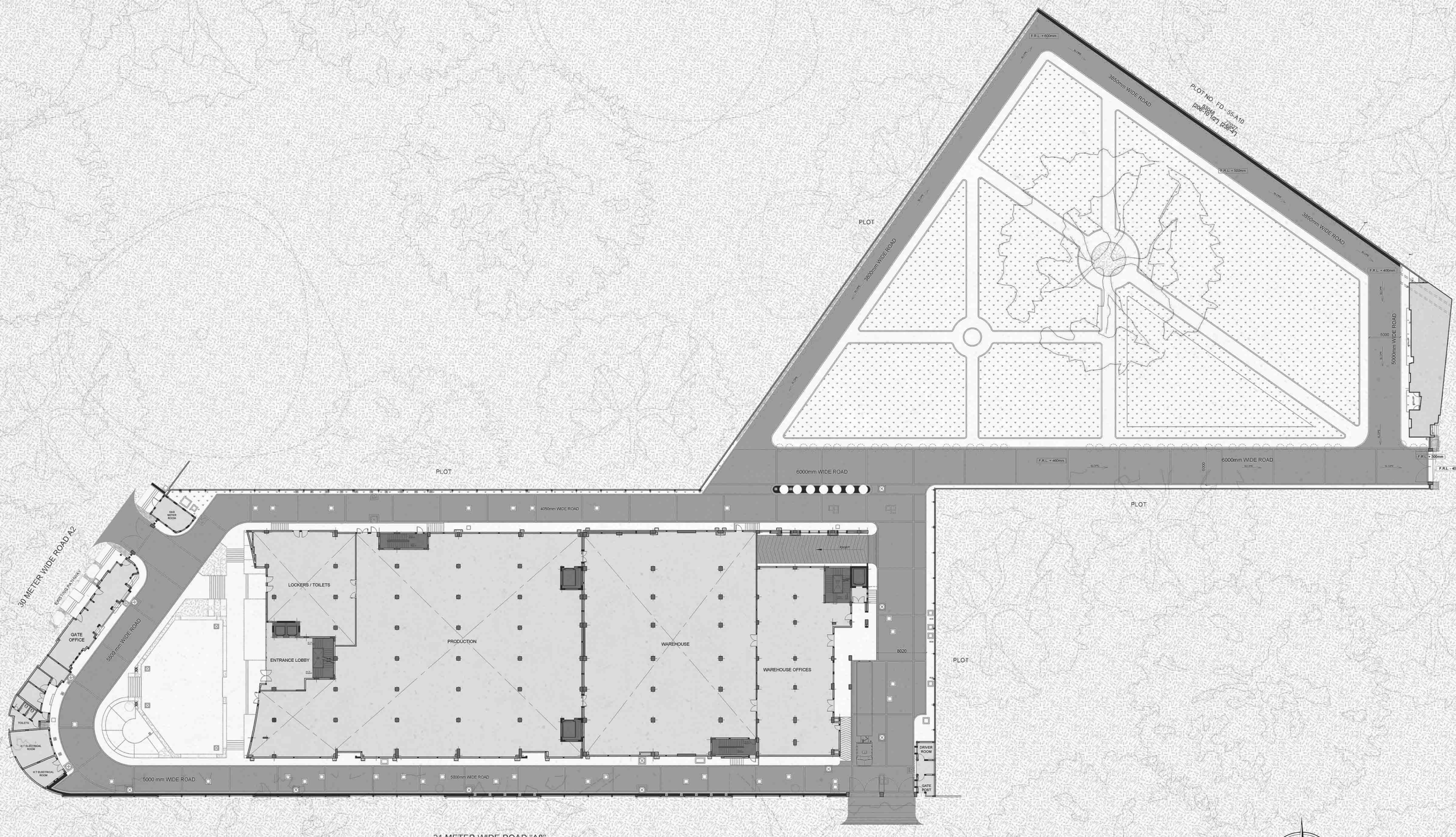
Local Materials;

Block Masonry- Plaster- Paint.
Grano Flooring in Warehouses.
Pigmented Terrazzo Industrial Tiles in technical Areas.
Porcelain tiles/Carpets/Laminate tiles for office flooring.
Cemtrox (marble powder with acrylic base) by Ar. Textures for Facades
Concrete Pavers by Envicrete for external areas.

N

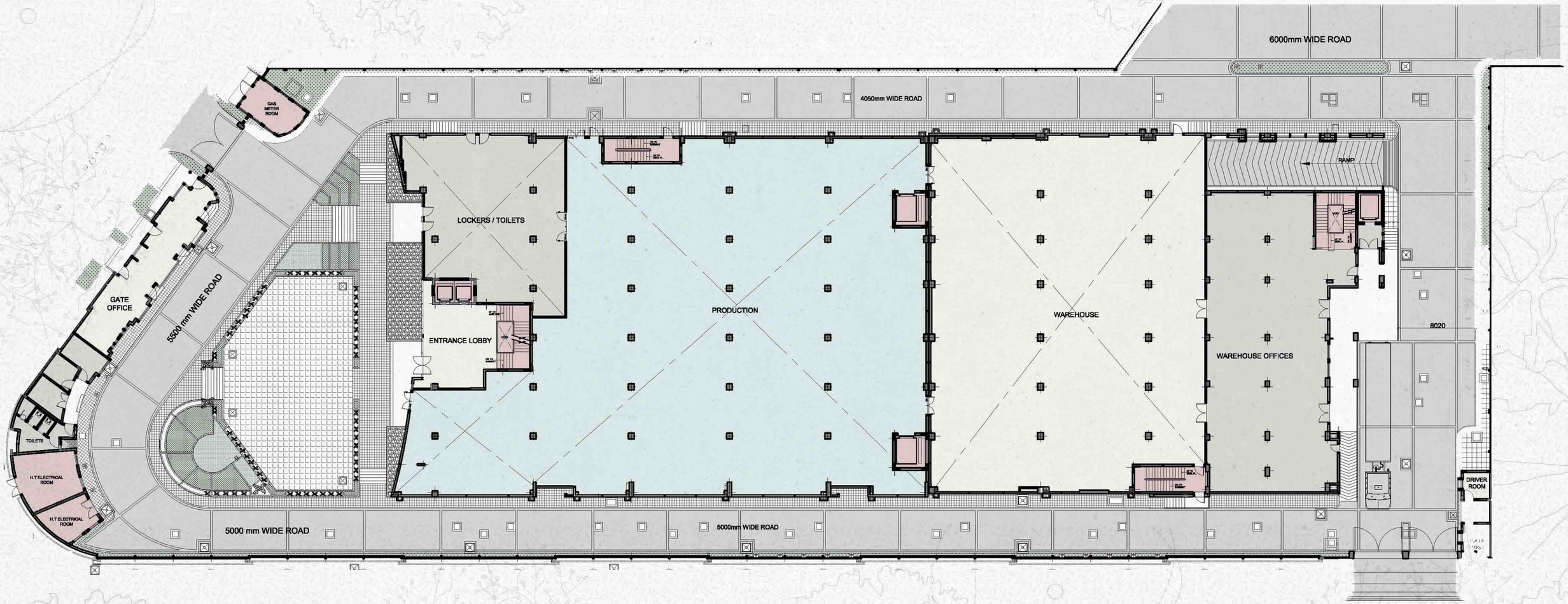
Approach

SITE



Proposed Master Layout

Scale: 1" is equal to approximately 60'



Ground Floor Plan

Scale: 1" is equal to approximately 40'

N



Mezzanine Floor Plan

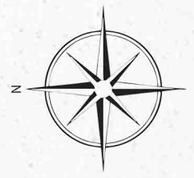
Scale: 1" is equal to approximately 25'

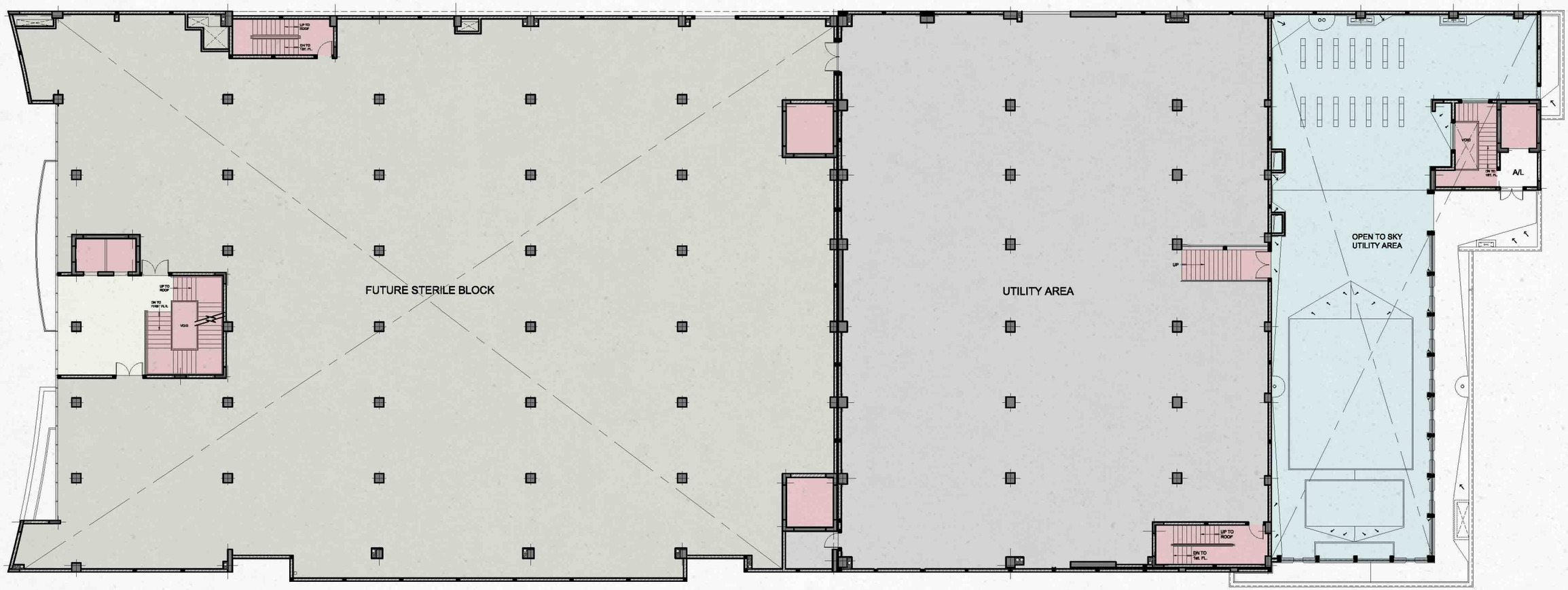
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First Floor Plan

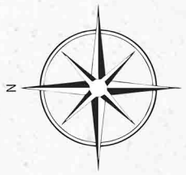
Scale: 1" is equal to approximately 25'





Second Floor Plan

Scale: 1” is equal to approximately 25’

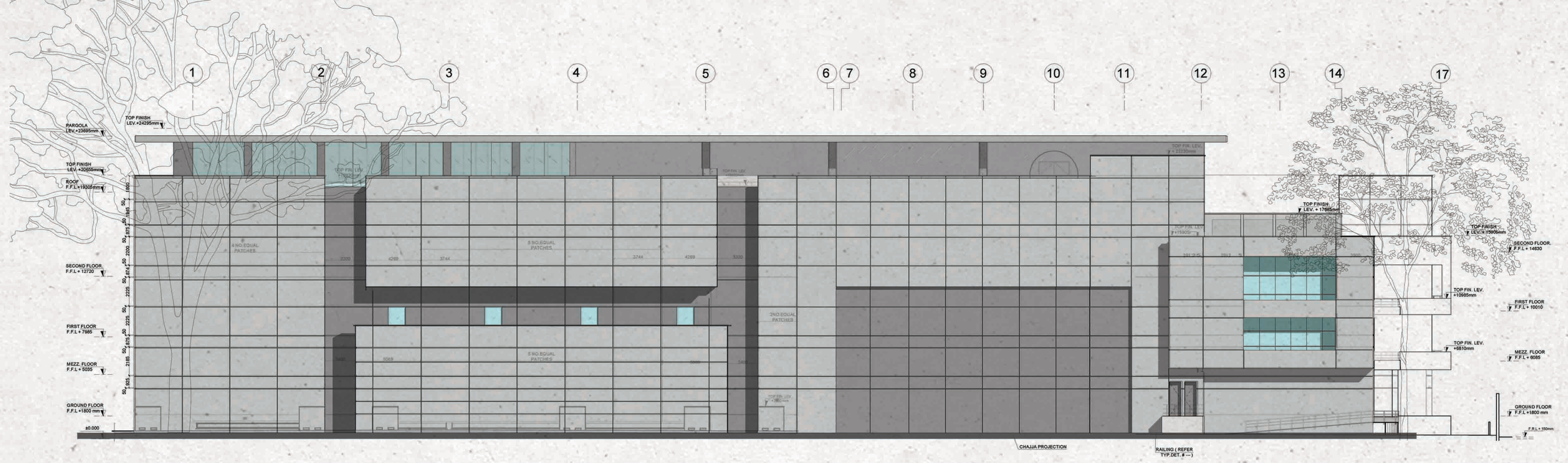




Third Floor Plan

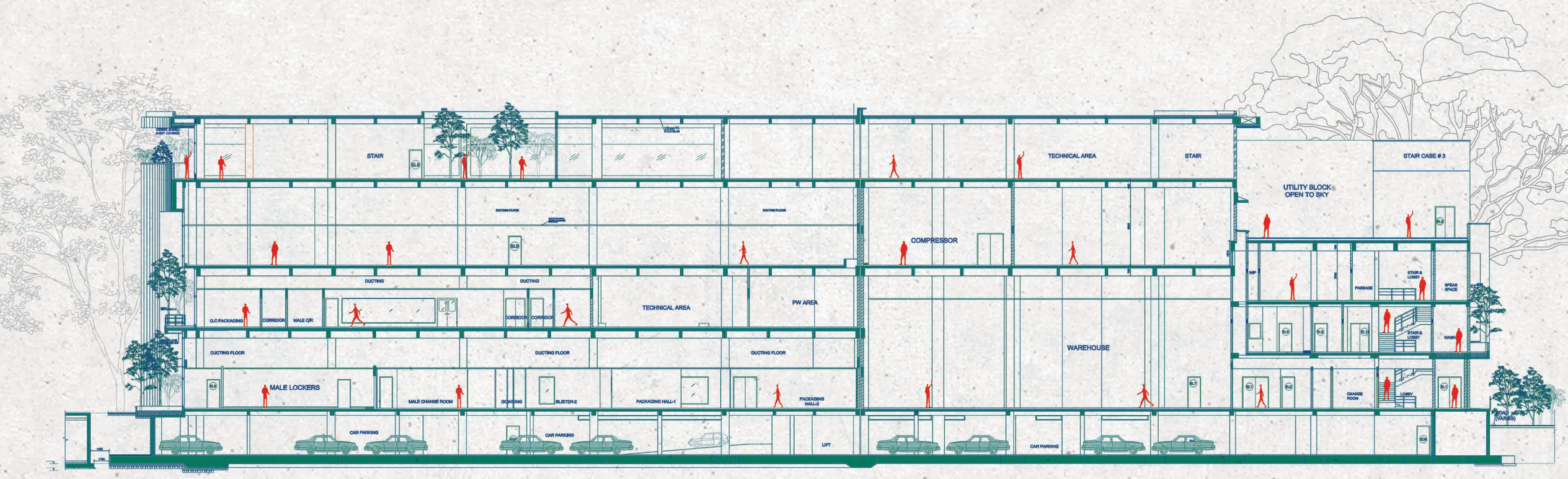
Scale: 1" is equal to approximately 25'

Note; The internal planning/Interior Design of Office on this floor are not part of our scope except for the Central Courtyard HIGHLIGHTED IN GREEN



West Elevation

1 "is equal to approximately 25'-0"



SECTION AA

1 "is equal to approximately 25'-0"

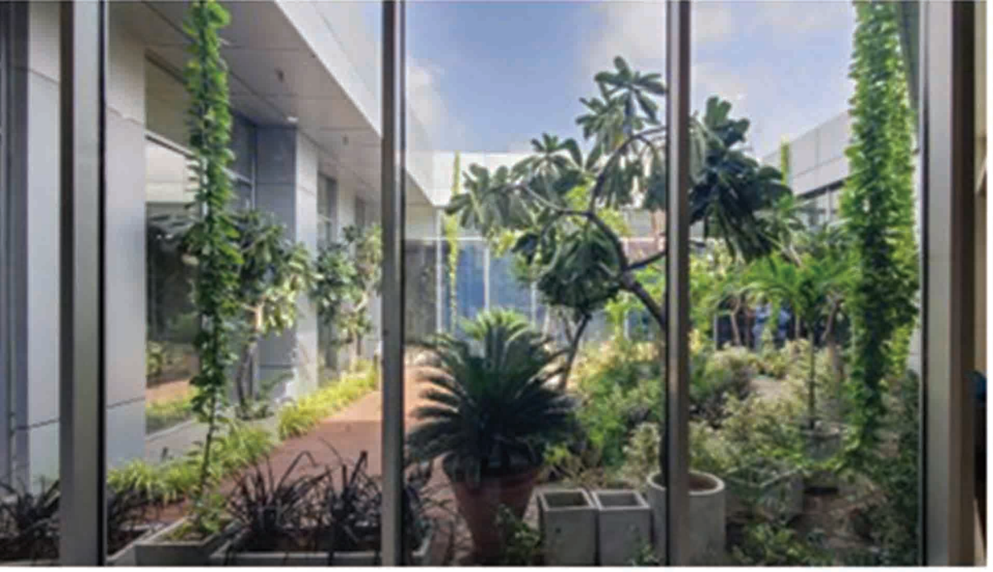

Hoora
PHARMA
Pinnacle
Biotech

















We believe that designing a comfortable space for workers is equally important as designing for higher-ups. Thus, while the CEO, directors, and managers are getting an outside view of the landscape, being placed on the peripheral sides of the building, an open-to-the-sky courtyard right in the middle of the office has been designed to bring in the natural light and energy to motivate the assistants.

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SRD/ELA

WHY THIS PROJECT SHALL BE CONSIDERED FOR SOCIALLY RESPONSIVE AWARD/ENVIRONMENT LEADERSHIP AWARD.

As an **Architectural Design**;

Pinnacle Biotech is a state-of-the-art pharmaceutical industrial project that seamlessly integrates functionality with sustainable design. Located in a bustling industrial jungle, the dull grey background is beautifully offset by green pockets, softening the industrial fabric through its presence.

The project boasts cutting-edge features, including advanced **concrete pouring** techniques, imported **prefab GI panels**, and a **solar-equipped facility** designed to meet global standards **(PICS and WHO guidelines)**. With its focus on s**ustainability,** Pinnacle Biotech is poised to achieve **LEED certification**, setting a new benchmark for eco-friendly industrial design.

As a **company**;

As a pharmaceutical industrial project, Pinnacle Biotech plays a critical role in producing **life-saving** medications, making it a significant contributor to the **healthcare industry**.

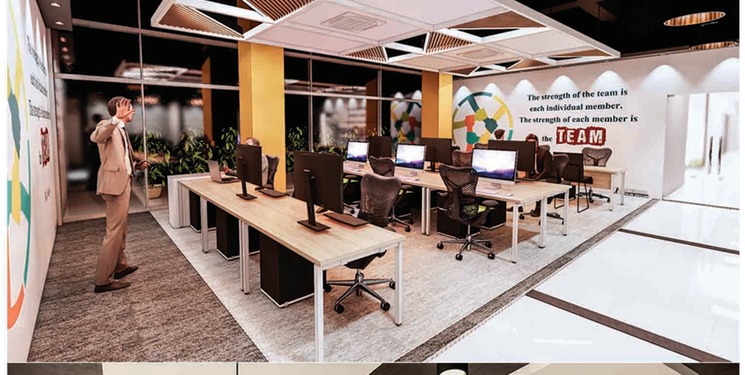
VIDEO LINK

Please refer to clients corporate video on YouTube for detailed internal planning, specially prefab panels

https://www.youtube.com/watch?v=rPLz-3f0xAI&t=23s









SRD/ELA

Landscape Design Rationale

CATALYZING HUMAN AND ENVIRONMENTAL CONNECTION THROUGH LANDSCAPE DESIGN

The **Landscape Project** seeks **Environmental justice** for the area suffering from extensive **Industrialization** and Pollution, resulting in the abandonment of **Wild life**.

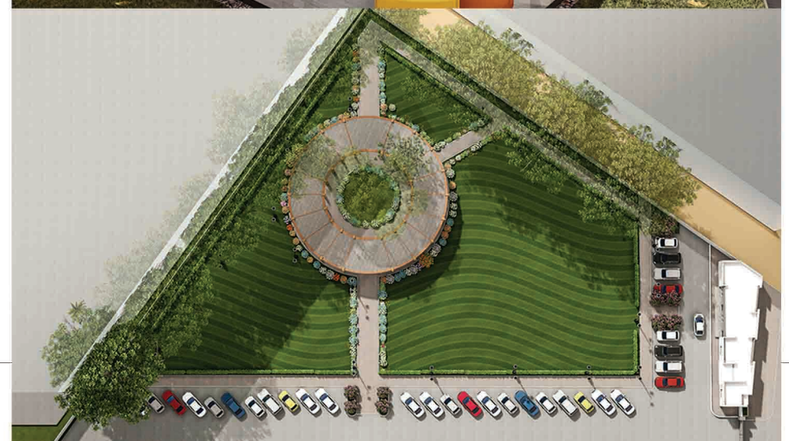
A **biodiverse** set of **native** plant species that can provide **Food and Shelter** to **Birds and other Creatures** were carefully selected, Low Maintenance, Long-lived throughout, and disease-resistant Trees/Plants that give out Minimal **Volatile Organic Compounds VOCs** were given priority.

To reduce **Carbon Footprint** 100% of the plants were procured **locally**. The Design Team paid special attention to **Climate Change** which is happening faster than we can anticipate and selected the plant species that are **drought tolerant** and can survive in harsher future climates.









About The Firm

The firm was established in Bombay in 1929 by the late Mr. A.M Thariani, under the title Abdul Hussain M. Thariani & Co. It soon succeeded in establishing itself as one of the leading firms of architects in Bombay, with its practice extending all over the sub-continent.

In 1947 alone, the firm was carrying out over 60 projects. With the birth of Pakistan, Mr. Abdul Hussain M. Thariani came over to Karachi, where he was initially associated with M/s. Haydari Construction Co. as its managing director.

Several projects were carried out under his aegis in those early years, and subsequently, the firm of THARIANI & CO. was launched with the admission of his sons, Mr. Saleem and Azad, as partners.

In the year 1950, Mr. Saleem Thariani launched the firm in then-East Pakistan, returning to Karachi after the establishment of Bangladesh.

During this period of nine years of practice in Dhaka, the name Thariani became a byword for good architecture.

The firm designed the head offices for the State Bank of Pakistan, the National Bank of Pakistan, PIDC, and the Adamjee Group. The jewel in its professional crown was the Bait-ul-Mukarram Mosque, which is the National Mosque of Bangladesh.

In 1992, with the induction of Ar. Gul Ahmed Mayari, initially as senior architect and then managing partner, the firm Gul & Thariani was launched.

Since the last two decades, the company's focus has primarily been on the pharmaceutical industry. The master piece has been Astola Getz Pharma, which is the only LEED Platinum-certified project in its category in South Asia.

After the demise of Mr. Thariani, the firm has been working under the same name, "Gul & Thariani Pvt Ltd, with the addition of new directors.

PROJECT ARCHITECT & DIRECTOR:
AR. SALMAN AHMED

