



INTRODUCTION

"For many people, hospitals are the places where life begins, where suffering is confronted, and where healing or loss occurs; Architecture therefore plays a critical role in shaping these deeply human experiences." (Jencks C., Architecture of Hope, 2010)

Hospitals are an essential part of everyday life. They are not just places where people get treated, but environments where people experience some of the most important moments of their lives i.e. Death and Birth.

Modern healthcare design is no longer focused only on efficiency and cleanliness; it also considers how spaces affect emotions, recovery, and the well-being of doctors and staff. "The hospital of the future is not a machine for curing, but a place for caring."

(Mazuch R., Healthcare Architect & Researcher)



Sculpturous circulation area



Healing Ward Area

Righospitalet, North wing, Denmark, Source: www.archdaily.com

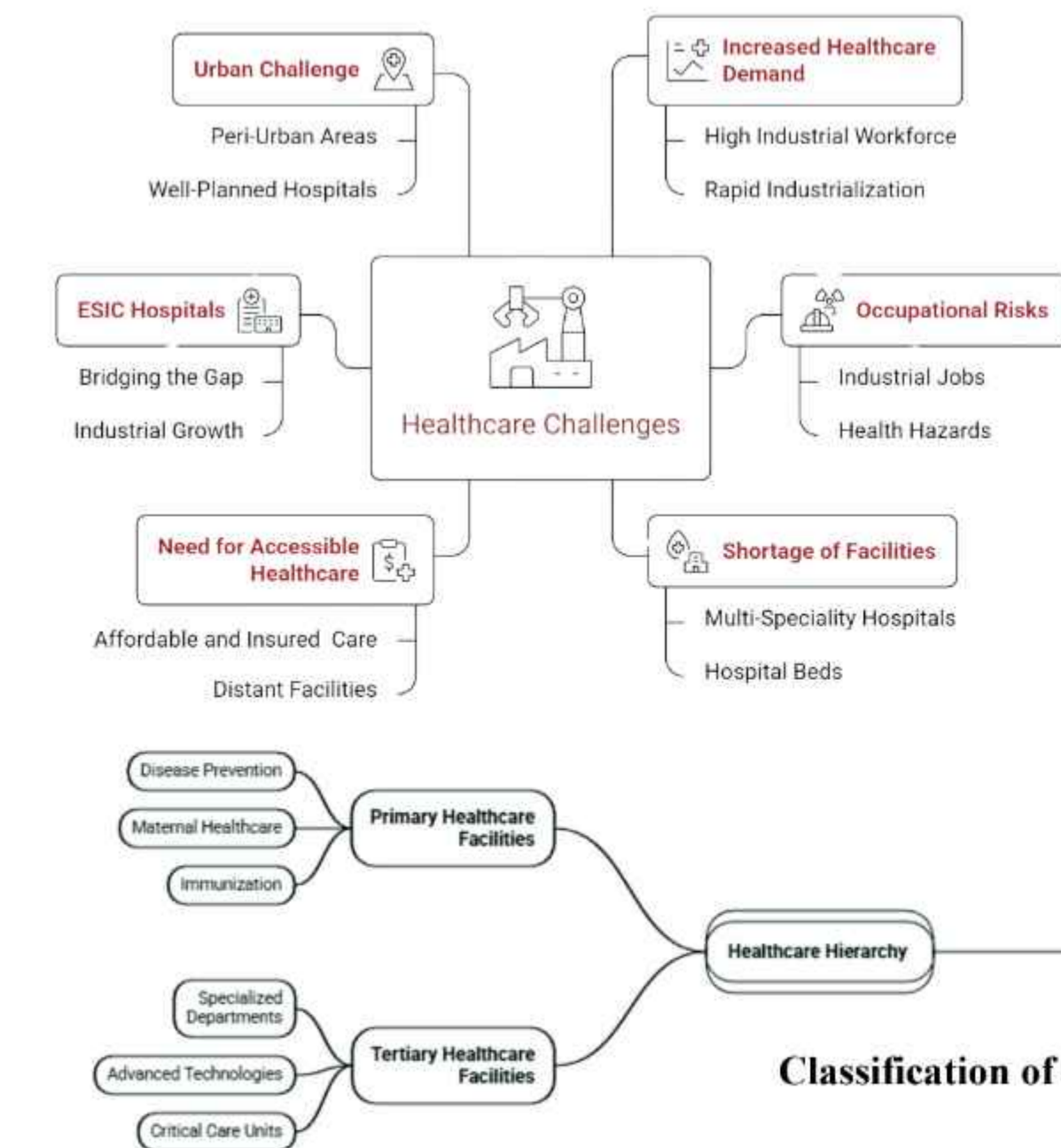


BACKGROUND

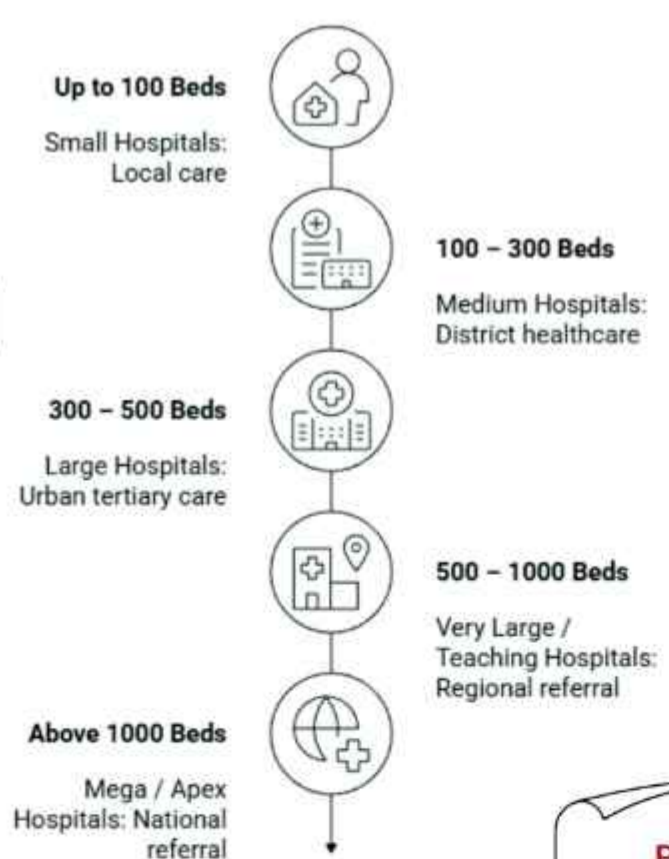
India's healthcare infrastructure is uneven, with major gaps outside metropolitan areas. Industrial and peri-urban regions have high healthcare demand due to dense workforces and occupational risks. Public and insured facilities remain limited, with a shortage of hospital beds and multi-speciality hospitals.

Historical Context: Post-Independence, focus was on industrialization and public sector growth, while healthcare remained basic. After 1991, private hospitals expanded under schemes like the National Health Mission. India still has 1.3-1.6 beds per 1,000 people, below the WHO standard of 3 beds, and public healthcare spending is low (2.1% of GDP), limiting access for poorer populations.

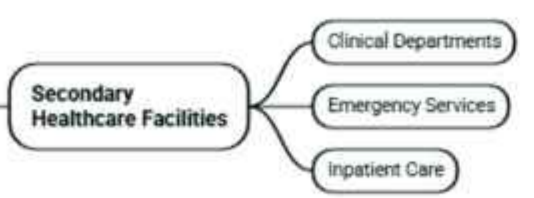
IMT Manesar Context: IMT Manesar, a dense industrial zone in NCR, lacks nearby advanced healthcare. A comprehensive ESIC hospital is needed to provide insured, affordable care for workers and the community.



Classification of Hospitals



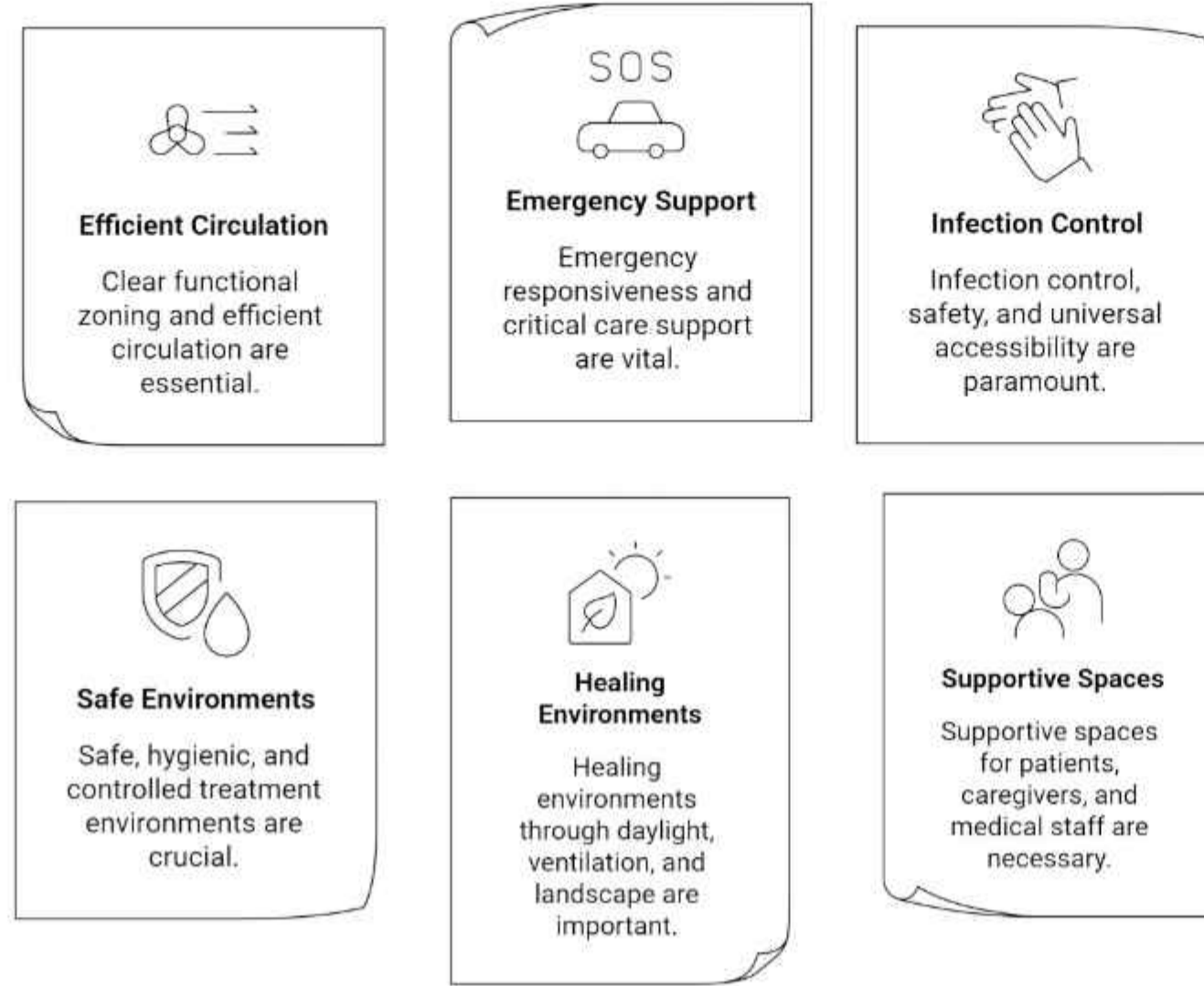
Classification of Healthcare facilities



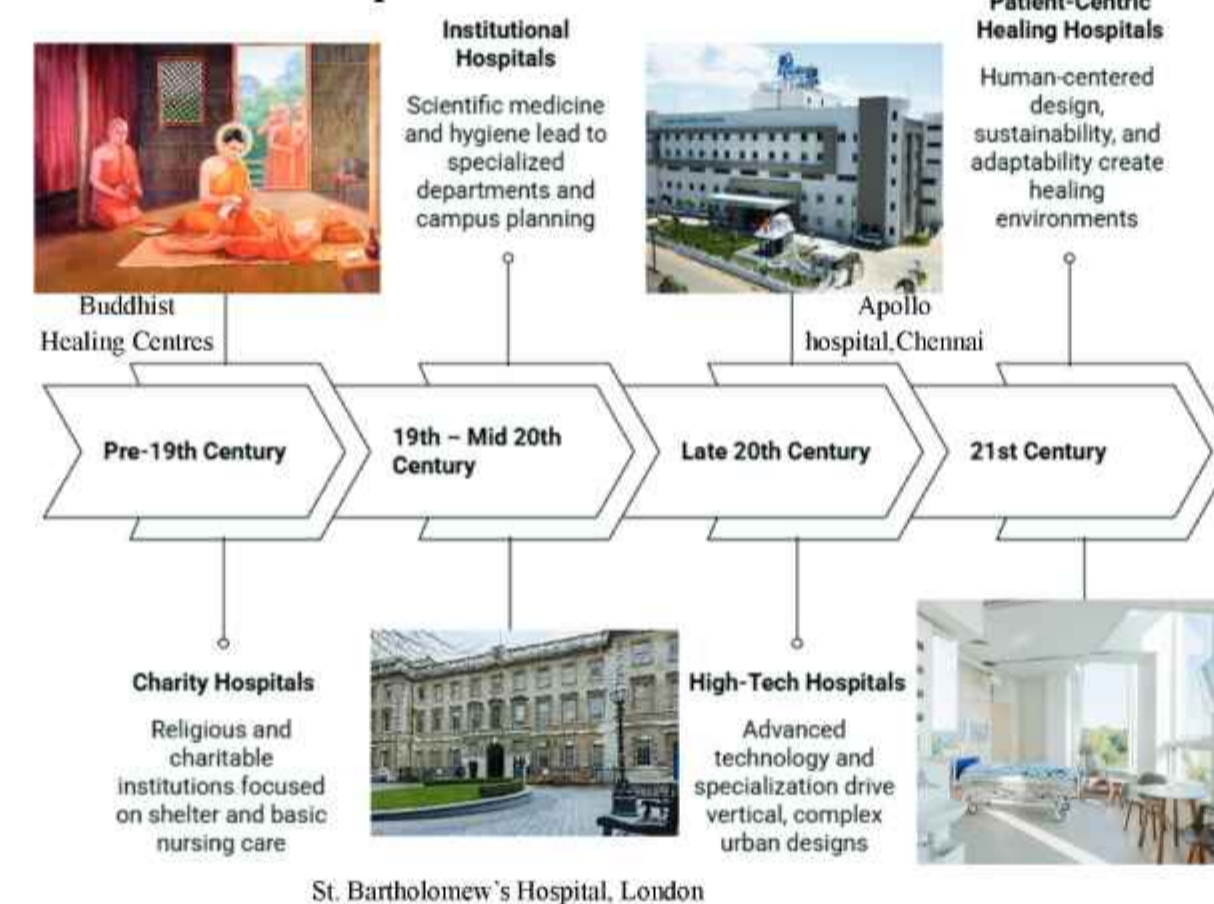
WHAT IS A HOSPITAL?

A hospital is a comprehensive healthcare facility that delivers preventive, diagnostic, curative, and rehabilitative services while supporting healing through efficient and humane design.

Key aspects:



Healthcare Development over the time



INTENT OF CHOOSING THE TOPIC

The proposed ESIC hospital is located in Sector-2, IMT Manesar due to its central position, good connectivity, and proximity to industrial and residential areas. The site serves a growing workforce with high occupational health risks, while existing facilities are limited, often requiring travel to Gurgaon or Delhi. Its industrial context creates strong demand for affordable, insured, and multi-speciality healthcare, making it ideal for improving access and strengthening regional medical services.

The following points explain the intent:



AIM:

To design a 500-bedded Multi-Speciality Hospital that combines advanced medical care with wellness and community-focused facilities, creating a healing environment that supports treatment, research, and the well-being of patients, staff, and the surrounding community.

SCOPE

The project focuses on the planning, design, and functional layout of a Multi-Speciality Hospital, incorporating the following key components:



PROJECT DESCRIPTION

In order to meet the growing healthcare needs of the region, the Employees' State Insurance Corporation (ESIC), a government organization, has proposed the a "500 bedded Multi-Speciality Hospital" in Manesar, Gurugram, Haryana. The site is situated in Sector-2, IMT, Manesar. The site is located within a planned industrial township developed by theHSIIDC. Due to the high level of industrial activity in the area, the risk of occupational accidents and injuries are higher, making a well-equipped healthcare facility essential for the industrial workforce as well as the surrounding population.



Master Plan Of Manesar

Site marked as red in the master plan of manesar with context of industrial area

SITE INFORMATION

1. Site Dimensions – Collective Dimensions of pocket A, Pocket B1 and Pocket B2 and road in between the pocket as given in the adjacent image.
2. Site Area - 8.68acres 35126 sqm.
3. Ground Coverage - 25%
4. Permissible Basement – 4
5. Height Restriction - unrestricted
6. Permissible FAR - 1.5
7. Setback Regulation - Min. Front Setback- 4.5m, Min. Side & Rear Setback - 4m
8. Parking Norms - 1.0 ECS for every 2 beds and visitors parking as 1 ECS for every 4 beds.

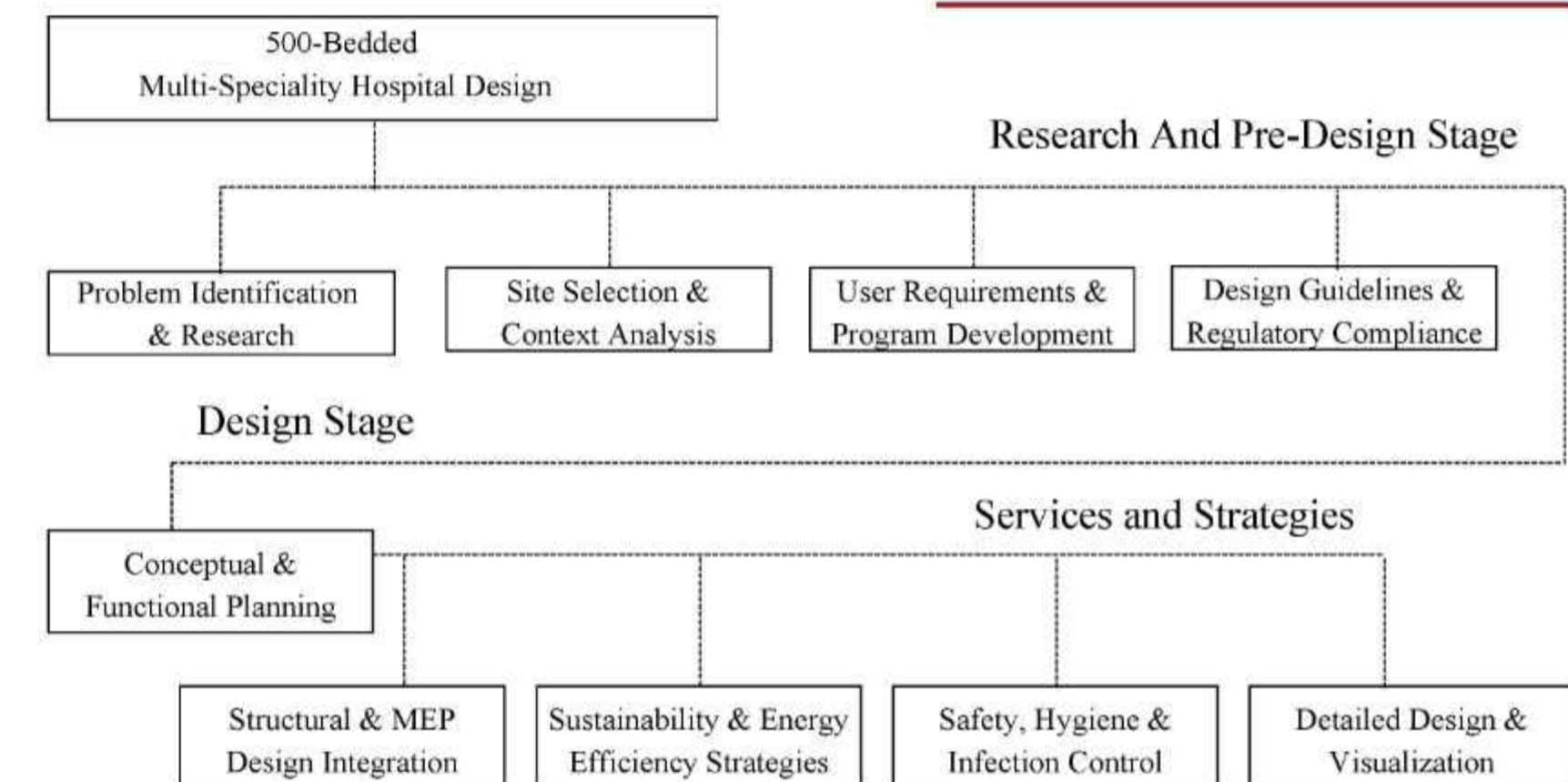
OBJECTIVES

1. To design a practical and well-organized layout that accommodates multiple medical specialties efficiently.
2. To enhance wellness and recovery through well designed green areas, recreational spaces, and patient-centered amenities.
3. To design smooth and safe circulation for patients, staff, and visitors within the hospital.
4. To design spaces that foster healing environment, community interaction and engagement, reflecting the hospital's role beyond healthcare.

LIMITATIONS

1. 10% of the total built-up area was mandated to be reserved for residential accommodation for hospital staff, this component has not been developed in detail within the scope of this thesis.
2. Due to the fixed timeframe, some areas of research may not be explored in full depth.
3. Rapid changes in medical technology and hospital design trends may not be fully reflected in the study.

METHODOLOGY



CLIENT'S BRIEF

INDICATIVE AREA FOR 500 BED ESIC HOSPITAL		
Sl. No.	Clinical Facilities	Standard 500 Bedded Areas in Sqft
1	Casualty	10,820.00
2	OPD	
A	Central Registration, Pharmacy & Sample Collection Area (Including Waiting)	9,080.00
B	Out Patient Department (General)	15,835.00
B1	Waiting Out Patient Department (General)	15,835.00
C	Super Speciality OPD	6,040.00
C1	Waiting Super Speciality OPD	6,040.00
3	Radiology	8,225.00
4	Laboratories	
A	Pathology & Haematology	4,750.00
B	Biochemistry	3,050.00
C	Microbiology	5,420.00
5	Blood Centre	3,080.00
6	Physiotherapy & Occupational therapy	3,400.00
7	Gynae casualty with Labour Room Complex	6,720.00
8	Operation Theatre Complex	15,294.00
9	Intensive Care Area ICU (including PICU & NICU)	
A	Intensive Care Area ICU (excluding PICU & NICU)	8,970.00
B	PICU, NICU and Nursery	6,490.00
10	IPD	8,980.00
11	Laundry	4,590.00
12	CSSD	3,550.00
13	Kitchen	5,515.00
14	Hospital Stores	8,050.00
15	Gas Manifold	1,500.00
16	Administration	20,770.00
17	Mortuary	1,500.00
TOTAL		1,83,504.00

USER & ACTIVITY ANALYSIS
Patient care and treatment activities

Activity	User Group	Frequency/Timing	Spatial Needs
Patient Registration & Outpatient Consultations	Patients, Admin, Patients, Doctors	High, continuous, High (daily)	Reception, triage area, OPD clinics
Inpatient Treatment & Monitoring	Patients, Clinical Staff	Continuous	Wards, ICU, HDU
Diagnostics (Labs, Radiology)	Patients, Technicians	Scheduled, Emergency	Labs, imaging suites
Surgery & Procedures	Inpatients, Surgeons	Moderate (planned/emergency)	OT block
Emergency Care	Patients, Trauma Team	Sporadic high	ER & trauma bays
ICU / Critical Care Monitoring	Nurses, Doctors, Patients	ICU, HDU	Continuous monitoring, accessibility

Clinical and Medical staff workflow activities

Activity	User Group	Frequency	Spatial Needs
Nurse Rounds	Nurses	Very high	Wards, duty stations
Clinical Meetings / Case Reviews	Doctors	Regular schedules	Conference rooms
Records & Data Entry	Admin, Accountants	Continuous	Admin offices, HIS zones
Supply & Inventory	Support Staff	Daily	Stores, service corridors
Staff Rest & Welfare	Doctors, Nurses, Support Staff	Staff Lounges, Cafeterias, Rest	Comfortable seating, natural
Pharmacy & Medication	Pharmacists, Nurses, Patients	Pharmacy, Medicine Storage	Secure storage, controlled
Patient Education / Health	Patients, Visitors, Staff	Seminar Halls, OPD Lounges	Visual aids, seating
Training & Continuing	Doctors, Nurses, Staff	Seminar Halls, Training Rooms	AV systems, flexible seating
Research & Clinical Trials	Doctors, Lab Staff, Patients	Labs, Research Offices, Patient	Secure documentation,

Support & Service Activities

Activity	User Group	Frequency	Spatial Needs
Cleaning & Sanitation	Support Staff	Continuous	Service zones
Food & Catering Delivery	Support, Patients	Scheduled	Kitchen, dining areas
Waste Management	Service Staff	Daily	Biomedical waste zones
Maintenance	Technical Staff	On demand	Mechanical rooms, service
Security & Surveillance	Security Staff, IT Admin	Entrances, Restricted Areas	CCTV, controlled access,
Transport & Logistics	Ambulance Drivers, Support Staff	Ambulance Bays, Service Corridors	Clear entry/exit, priority ER access,

Research and Learning oriented

Activity	User Group	Frequency	Spatial Needs
Patient Education / Health Awareness	Patients, Visitors, Staff	Seminar Halls, OPD Lounges	Visual aids, seating arrangements, interactive spaces
Training & Continuing Medical Education (CME)	Doctors, Nurses, Staff	Seminar Halls, Training Rooms	AV systems, flexible seating, daylight, comfortable environment
Research & Clinical Trials	Doctors, Lab Staff, Patients	Labs, Research Offices, Patient Rooms	Secure documentation, controlled access and integration

Category	Design Element	NBC Requirement
Ramps	Minimum clear	2.4 m
	Maximum slope	1:12 (preferred 1:15)
	Landing length	Minimum 1.5 m
	Handrails	On both sides
Corridors	Main corridors	Minimum 2.4 m
	Patient ward	2.1 - 2.4 m
	Corridors with	Minimum 2.4 m
	Dead-end	Maximum 6.0 m
Staircases	Minimum width	2.0 m
	Riser height	Maximum 150 mm
	Tread (going)	Minimum 300 mm
Lifts	Bed/patient lift	2.4 m x 1.5 m minimum
	Door width (bed)	Minimum 1.2 m
	Lift lobby	Fire-separated and smoke-
Doors	Patient room	Minimum 1.2 m
	OT doors	Minimum 1.5 m,
	Fire exit doors	Open in direction of
Means of Escape	Number of exits	Minimum 2 remote exits
	Exit door width	Minimum 1.5 m
	Travel distance	30 m (≤45 m if sprinklered)
	Refuge areas	Mandatory for buildings

OPD BLOCK

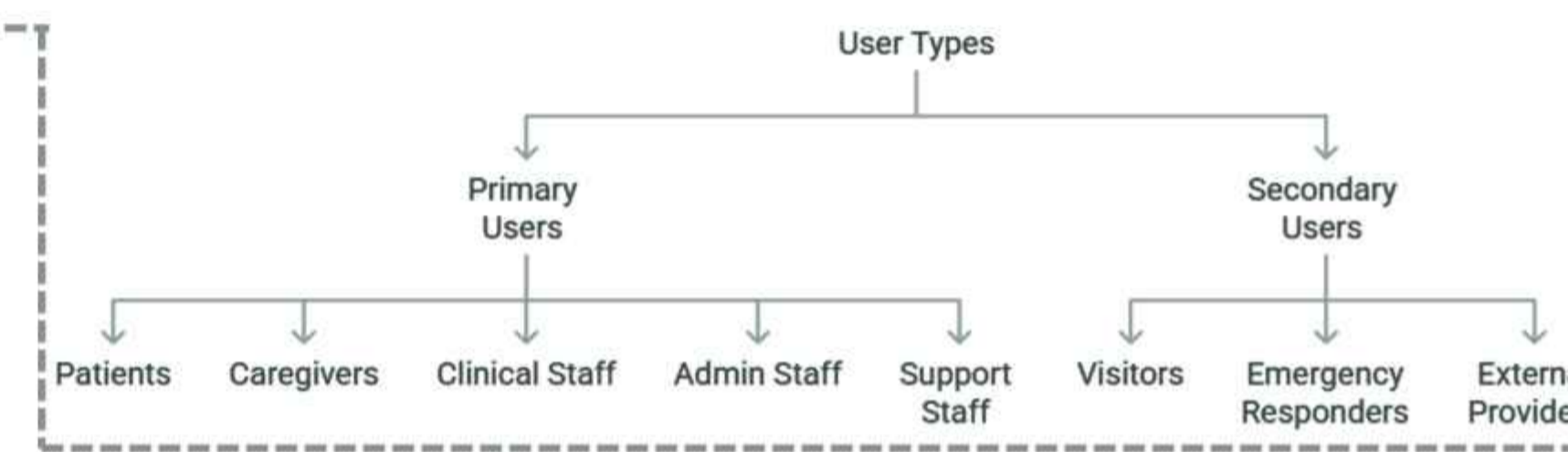
Room	Size
OPD consultation and	
Consultation / Examination	4267 x 3658 mm
Door Width	1219 mm (clear)
Hand Wash Basin	Mandatory
Running Water	Mandatory
Treatment and Procedure	
Procedure / Treatment	4267 x 3658 mm
Door Width	1524 mm (clear)
Hand Wash Basin	Mandatory
Waiting Areas	
Main Waiting Lobby	As per OPD load
Sub-Waiting Lobby	30 seats per OPD
Partition between seating	1524 mm height
Support Rooms	
Vital Signs Examination	4267 x 3658 mm
Counselling / Interview	4267 x 3658 mm
OPD Phlebotomy Room	4572 x 4267 mm
Sample Collection Space	2438 x 2438 mm

STANDARDS FOR HOSPITAL DESIGN

OPD BLOCK
 Min. space required by doctor for patient examination. Source: Neufert Architects' Data
 Min. space required by taking a Blood sample (left) and physiotherapy (right) examination. Source: Neufert Architects' Data
 Min. space requirement for Examination and treatment room (left) and doctor's duty room (right). Source: Neufert Architects' Data
 Min. space requirement for ward, doctor room and senior doctor room. Source: Neufert
 Min. space requirement of washroom for specially abled

ICU & NICU
 ICU Type bed Space Size
 Adult ICU Bed 12-15 sqm
 NICU Bed 7.43 sqm
 Isolation ICU 23-25 Sqm

PARKING NORMS
 Ambulance Standards
 Min. space requirement for C.T. & MRI Scan



LITERATURE REVIEW

S.No	Literature Category	Name of Literature	Author / Organization	Key Insights	Relevance to This Study
1	Research Paper	Strategic Planning for Clinical Services in Indian Health Care System	Minu Bajpai & Abhijat Sheth	Emphasizes strategic, population-based planning and efficient allocation of clinical services in Indian healthcare.	Provides a framework for planning multi-speciality services in public hospitals based on demand and capacity.
2	Research Paper	The Role of the Hospital in a Changing Environment	Martin McKee & Judith Healy	Describes hospitals as evolving socio-technical systems responding to demographic and technological change.	Supports the need for flexible, future-ready hospital design.
3	Book	Indian Public Health Standards (IPHS) - Sub District Hospital and District Hospital	Ministry of Health & Family Welfare, Govt	Defines minimum service standards, bed norms, and infrastructure requirements for public hospitals.	Acts as a baseline reference for capacity planning and service provision.
4	Book	Manual of Hospital Planning and Designing	Ajay Garg & Anil Dewan	Provides guidelines on zoning, circulation, and functional relationships in hospitals.	Guides spatial organization and functional planning of departments.
5	Research Paper	Dynamics of Architectural and Urban Planning: Hospital Systems Evolution	Irina Bulakh, Olena Chala & Viktor Divak	Explores hospitals as dynamic systems shaped by social, cultural, and technological forces.	Informs adaptable, human-centric, and system-based design approach.
7	Book	Architectural Planning Standards: Architects' Data	Ernst Neufert	Provides standardized dimensions and ergonomic guidelines for healthcare spaces.	Assists in accurate space planning and layout development.
8	Book	Hospital Planning and Safety Standards (NBC 2016)	Bureau of Indian Standards (BIS)	Specifies fire safety, accessibility, and building regulations for hospitals.	Ensures statutory compliance and safety in hospital design.
9	Book	Hospital Planning and Safety Standards as per Haryana Building Code	DTCP, Haryana	Outlines state-specific development controls and planning regulations.	Aligns hospital design with local planning and approval requirements.

OPD BLOCK

Ward Type	Area per Bed
General Ward	7.43 - 9.29 sq.m
Sharing Room (2-3 beds)	12 - 14 sq.m per bed
Single Private Room	15 - 18 sq.m per bed
Deluxe Room	20 - 22 sq.m per bed
Suite / Super Deluxe	22 - 25 sq.m per bed
NICU	7.43 sq.m per baby
ICU (Adult)	12 - 15 sq.m per bed

SUPPORT ROOMS

Room	Minimum Size
Nurses Station	Centrally located &
Clean Utility	3658 x 3658 mm
Dirty Utility / Sluice	3658 x 3658 mm
Doctors Duty Room	3658 x 4267 mm
Ward Pantry	3658 x 3658 mm

LABOUR/ MATERNITY BLOCK

Room / Area	Size (m ²)	Dimensions
Labour / Pre-labour Room (Single)	15.6	4267 x 3658
Labour / Pre-labour Room (3 Beds)	27.9	4572 x 6096
Delivery Room	20-30	
Examination / Preparation Room	13.4	3658 x 3658
Clean Supply Room	16.7	4572 x 3658
Dirty Utility Room	9.3	3048 x 3048
Labour Room In-Charge Office	19.5	4572 x 4267
Doctor's Duty Room	12-15	3658 x 4267
Infant Resuscitation Area	10-12	3048 x 3658

O.T. BLOCK

Room	Size
Standard Operation	37-40 sqm
Hybrid OT	55.74 sqm
Hybrid OT (CT/MRI)	Up to 74.32 sqm
Preparation Room	3658 x 3658 mm
Surgeons Lounge	6096 x 4572 mm
OT In-charge Room	4572 x 4267 mm
Pre-OP and recovery	
Pre-Op Bed Area	7.43 - 9.29 sqm per bed
PACU / Recovery Bed	10-12 sqm per bed



Max Super Speciality Hospital, Shalimar Bagh is a major private Quaternary-care hospital in North-West Delhi, part of the Max Healthcare network. It serves Delhi and neighbouring regions including Haryana and Western Uttar Pradesh, offering advanced multi-specialty and super-specialty services.

- Address: FC-50, C & D Block, Shalimar Bagh, New Delhi, 110088
- Latitude: 28.7133° N
- Longitude: 77.1612° E
- Beds: above 402 (still growing)
- Site Area: 2.47 acres, 1Ha
- Built up area: 27,685 sq. m.



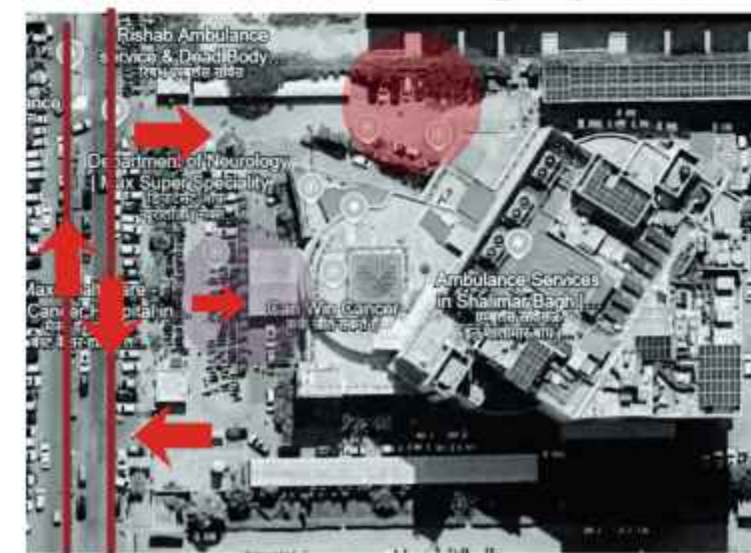
Dialysis Area



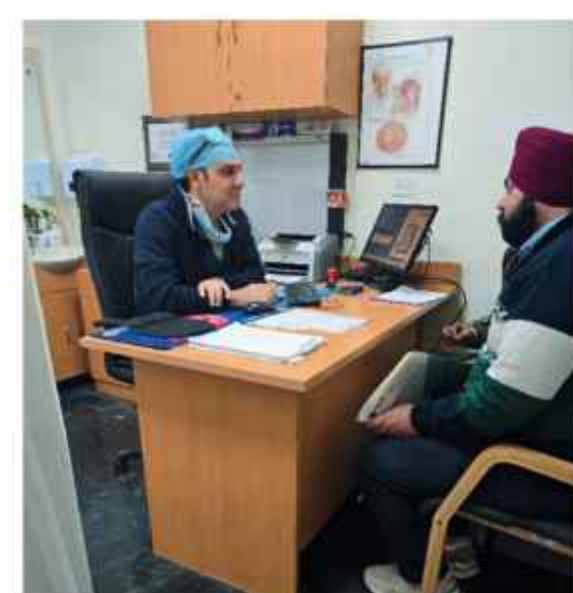
Single room unit

FLOOR PLANS

Emergency access



Site Plan



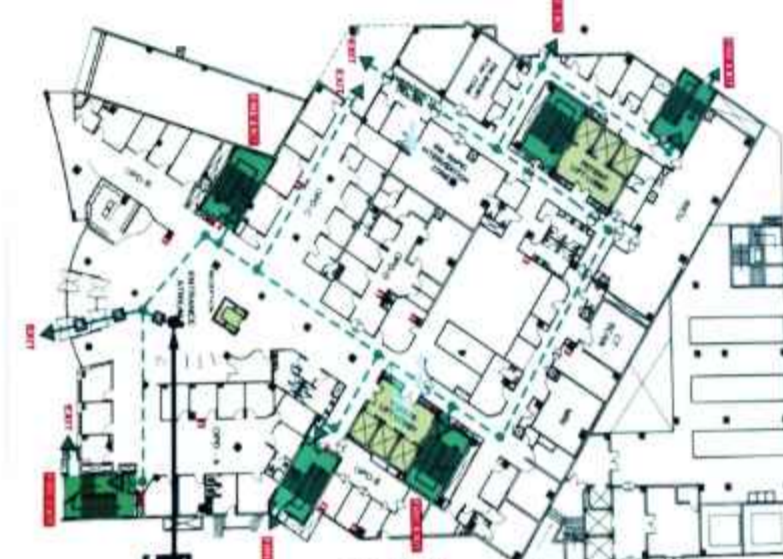
OPD Room



Entrance and lobby area



Stack car parking



G.F Plan

It consists of clustered O.P.D, registration areas, emergency, diagnosing and ICU at back



Lower Basement Floor

It consists of clustered O.P.D, registration areas, dialysis area and diagnosing area



First.F Plan

It consists of O.T, Cath labs, nurse rooms etc.



Second.F Plan

It consists of different ICU and other Support Rooms



Third.F Plan

It consists of all services, kitchen and labs.



Fourth.F Plan

It consists of I.P.D, Double suits and general ward area.



Fifth.F Plan

It consists of I.P.D single unit, Double unit and Vip suites



Seventh.F Plan

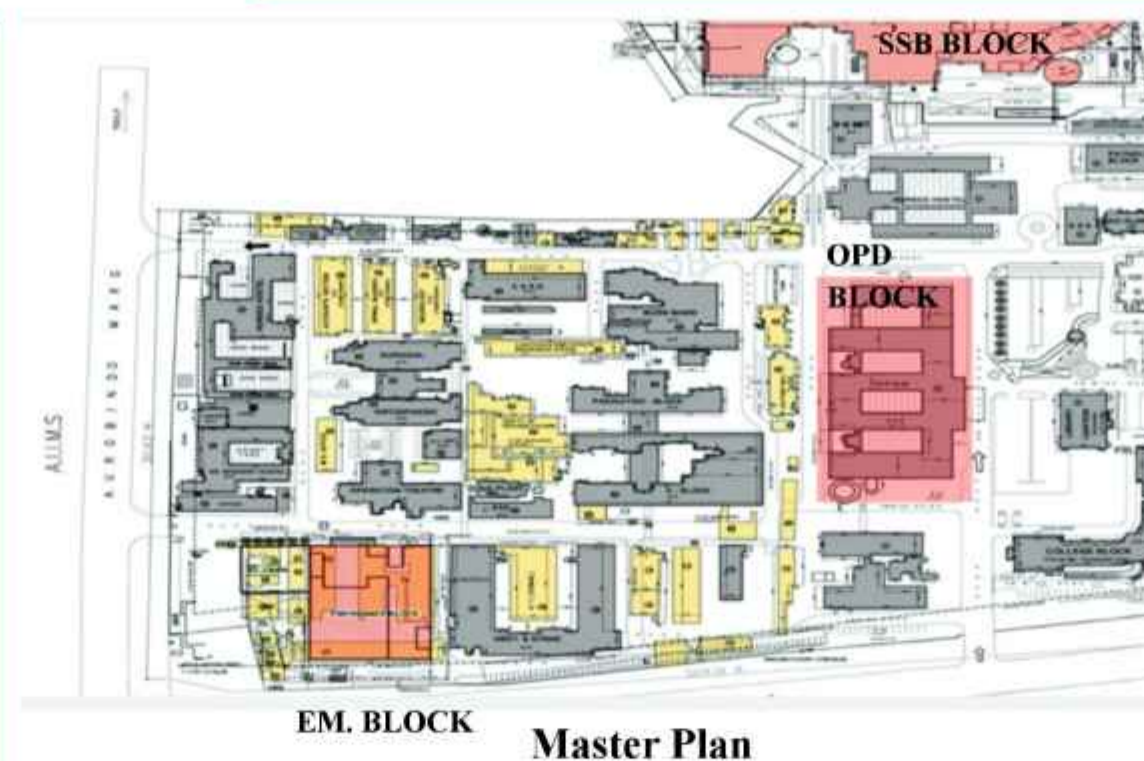
It consists of I.P.D single unit, Double unit and Vip suites

DESIGN ANALYSIS

Parameter	Key Insights
Healthcare Model & Context	<ul style="list-style-type: none"> • Private tertiary healthcare facility operated by Max Healthcare • Located in a dense urban setting serving specialized medical needs
Planning & Growth	<ul style="list-style-type: none"> • Vertical hospital tower responding to limited urban land • Integrated building planning with scope for future technological upgrades
Zoning & Circulation	<ul style="list-style-type: none"> • Clear zoning between OPD, IPD, emergency, and diagnostics • Separate circulation systems for patients, staff, and services
Patient Care Environment	<ul style="list-style-type: none"> • Majority single and twin-sharing patient rooms • Emphasis on privacy, comfort, and controlled patient flow
Clinical & Support Areas	<ul style="list-style-type: none"> • OT complexes and ICUs clustered for efficient workflow • Dedicated service floors for building systems and hospital utilities
Environmental & Energy Aspects	<ul style="list-style-type: none"> • Orientation designed to maximize daylight • Energy-efficient systems contributing to LEED Gold certification
Overall Inference	<ul style="list-style-type: none"> • Efficient vertical planning for urban healthcare delivery • High-quality patient environment with advanced medical infrastructure

DESIGN INFERENCES

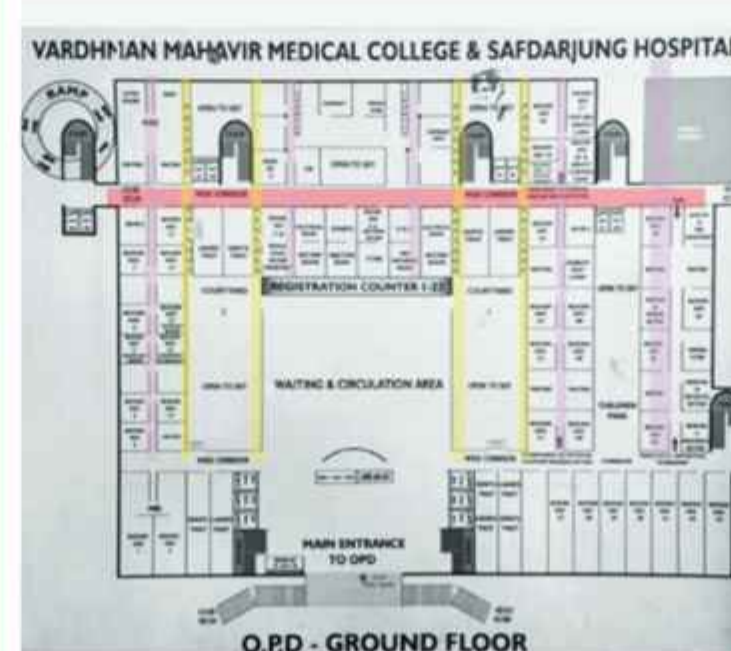
- Vertical Planning**: High-rise medical tower with multiple floors.
- Functional Zoning**: Ground floor for outpatient, lower for critical care, upper for inpatient.
- Separate Entrances**: Entrances for visitors, emergency, and service areas.
- Efficient Circulation**: Clear paths for patients, visitors, and staff.
- Discrete Movement**: Separate routes for inpatient and outpatient circulation.
- Central Lift Cores**: Centrally located lifts serve patients and staff.
- Service Floor**: Dedicated floor for administrative and building services.
- Natural Light**: Patient areas designed to receive natural light.



EM. BLOCK Master Plan

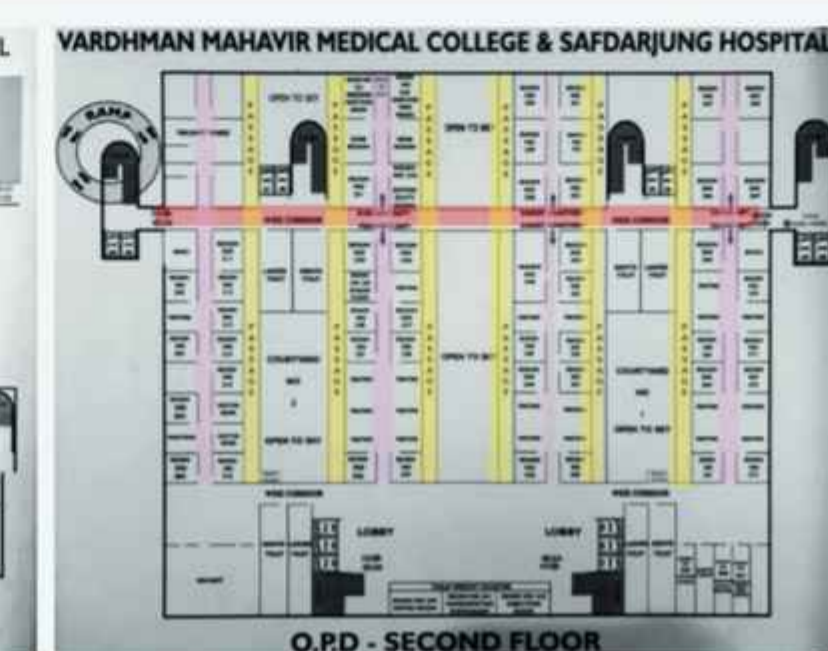
Safdarjung Hospital is one of India's largest and most significant tertiary-care public hospitals, functioning under the Ministry of Health and Family Welfare (MoHFW), Government of India. It acts as a national referral hospital, catering to patients from Delhi as well as neighbouring states such as Uttar Pradesh, Haryana, Rajasthan, Bihar, and Madhya Pradesh.

- Address: Ring Road, Safdarjung, New Delhi
- Latitude: 28.5667° N
- Longitude: 77.2070° E
- Site Area: 19 Ha (overall campus), 47 acres
- Built up area: opd, emer. and ssb 3,03,085 sqm
- No. of beds: 800, 500(E)



O.P.D - GROUND FLOOR

It consists of clustered O.P.D, registration areas, waiting and diagnosing area.



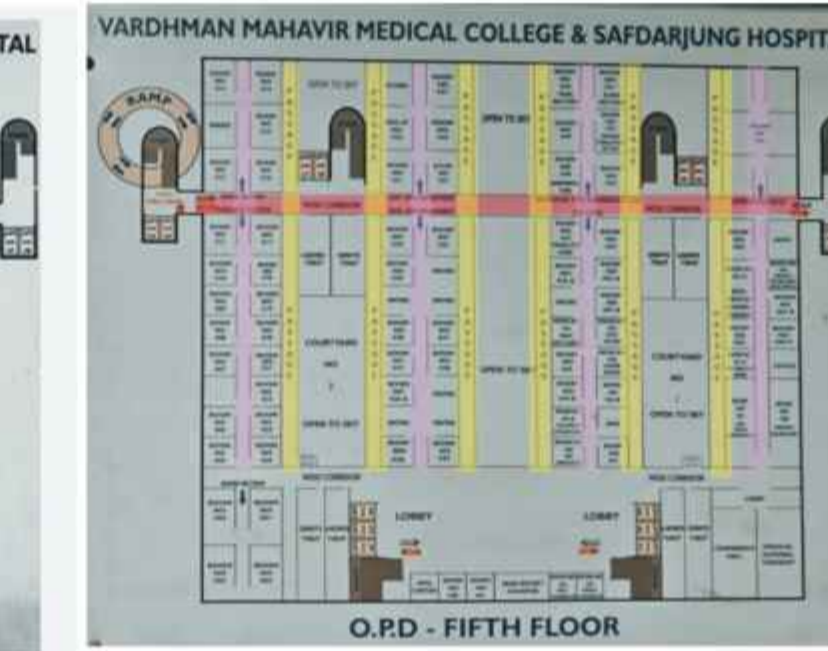
O.P.D - SECOND FLOOR

It consists of clustered O.P.D for gynae, labour rooms, waiting and diagnosing area and sample collection area.



O.P.D - THIRD FLOOR

It consists of CGHS OPD and other governmental services, pediatrics opd, and SS OPD



O.P.D - FIFTH FLOOR

It consists of OTHER SUPER SPECIALITY O.P.D



Yellow Zone in Emergency



OPD Room



Triage Area in Emergency



OPD Room



Waiting Area



Entrance and lobby area

Parameter	Key Insights
Healthcare Model & Context	<ul style="list-style-type: none"> • Public, government-funded tertiary hospital • Located in a dense metropolitan setting • Serves extremely high patient volumes
Planning & Growth	<ul style="list-style-type: none"> • Horizontal campus model • Incremental and unplanned expansion over decades • Lack of cohesive master planning
Zoning & Circulation	<ul style="list-style-type: none"> • Shared circulation for patients, staff, and attendants • High congestion and infection risk
Patient Care Environment	<ul style="list-style-type: none"> • Large multi-bed wards • Low privacy and dignity • Overcrowded OPD and waiting areas
Clinical & Support Areas	<ul style="list-style-type: none"> • OT and ICU functionally segregated but spatially constrained • MEP systems uneven across campus
Environmental & Energy Aspects	<ul style="list-style-type: none"> • Poor daylight and ventilation • High noise and thermal discomfort • Limited passive design strategies
Overall Inference	<ul style="list-style-type: none"> • Efficient in capacity delivery • Spatial quality and patient experience compromised

INFERENCES
ANALYSIS

- Large Institutional Campus Planning**: The hospital is planned as a large healthcare campus with multiple independent blocks spread across the site.
- Multi-Block Functional Layout**: The complex consists of OPD block, emergency block, inpatient wards, specialty centers, and diagnostic facilities located in separate buildings.
- Zoning of Medical Functions**: The campus is divided into major zones such as outpatient services, inpatient wards, emergency care, diagnostics, and administration.
- Separate OPD Planning**: A dedicated OPD building handles the majority of daily patient visits.
- Emergency Accessibility**: Emergency facilities are located near main road access to ensure quick ambulance entry and rapid patient transfer.
- Ward-Based Inpatient System**: The hospital primarily uses large ward planning with multiple beds, along with some private rooms and specialized wards.
- Integrated Diagnostic Facilities**: Radiology, laboratories, and diagnostic services are located close to treatment areas to minimize patient movement across the campus.
- Academic Integration**: The hospital is associated with Vardhman Mahavir Medical College, integrating medical education, research, and clinical practice within the campus.
- Separate Circulation Systems**: Circulation routes are organized for patients, hospital staff, service vehicles, and emergency access to improve operational efficiency.
- Provision for Future Expansion**: The campus planning allows new medical blocks and infrastructure upgrades, supporting the growing healthcare demand in Delhi.

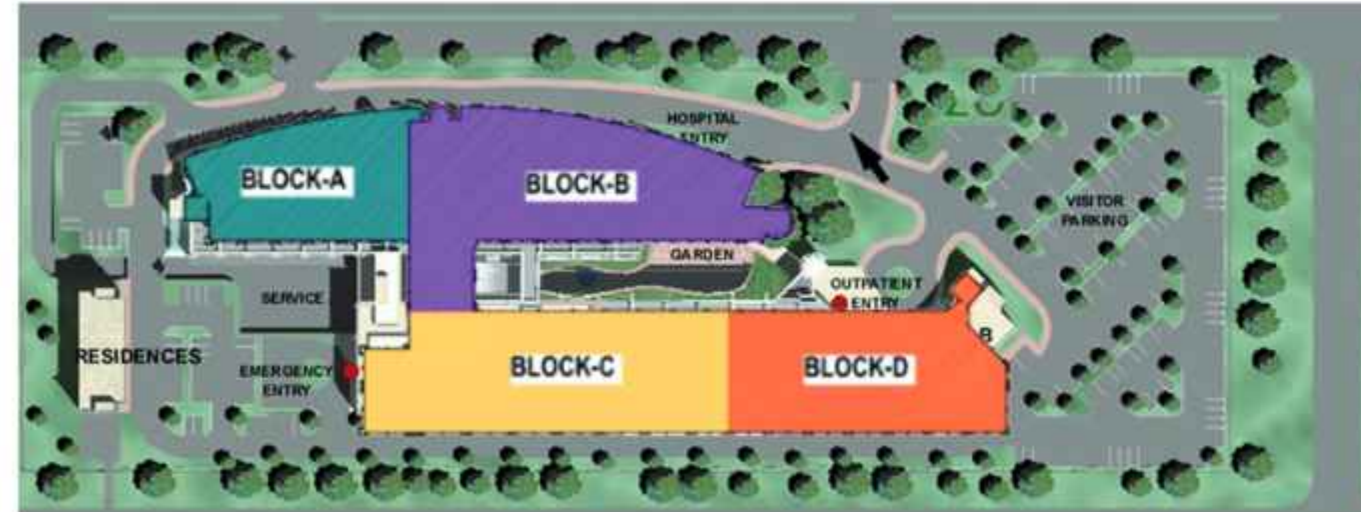


ARCHITECTURAL THESIS



Fortis Hospital, Mohali, is a flagship tertiary care facility under Fortis Healthcare Ltd., functioning as a major referral and treatment centre for North India. It caters to patients from Punjab, Haryana, Himachal Pradesh, Jammu & Kashmir, and adjoining regions, offering advanced diagnostics, transplant services, and super-speciality care. Its location within a planned urban sector allows controlled vehicular access, segregated service entry, and future infrastructural augmentation, aligning with the operational needs of a large private hospital.

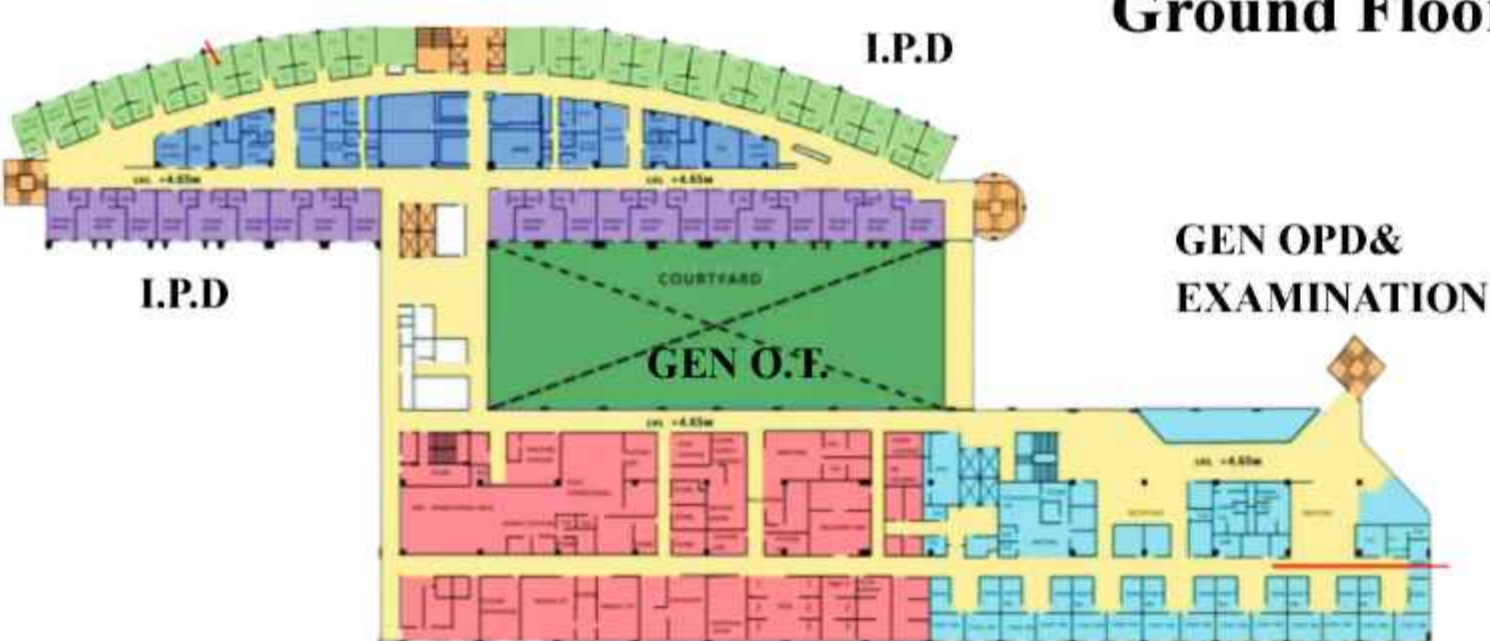
- Address: Sector 62, Phase VIII, Mohali, Punjab
- Latitude: 30.7050° N
- Longitude: 76.7179° E
- Site Area: 8.22 acres
- Built up area: 33,265 sq. m.
- No. of beds: 402



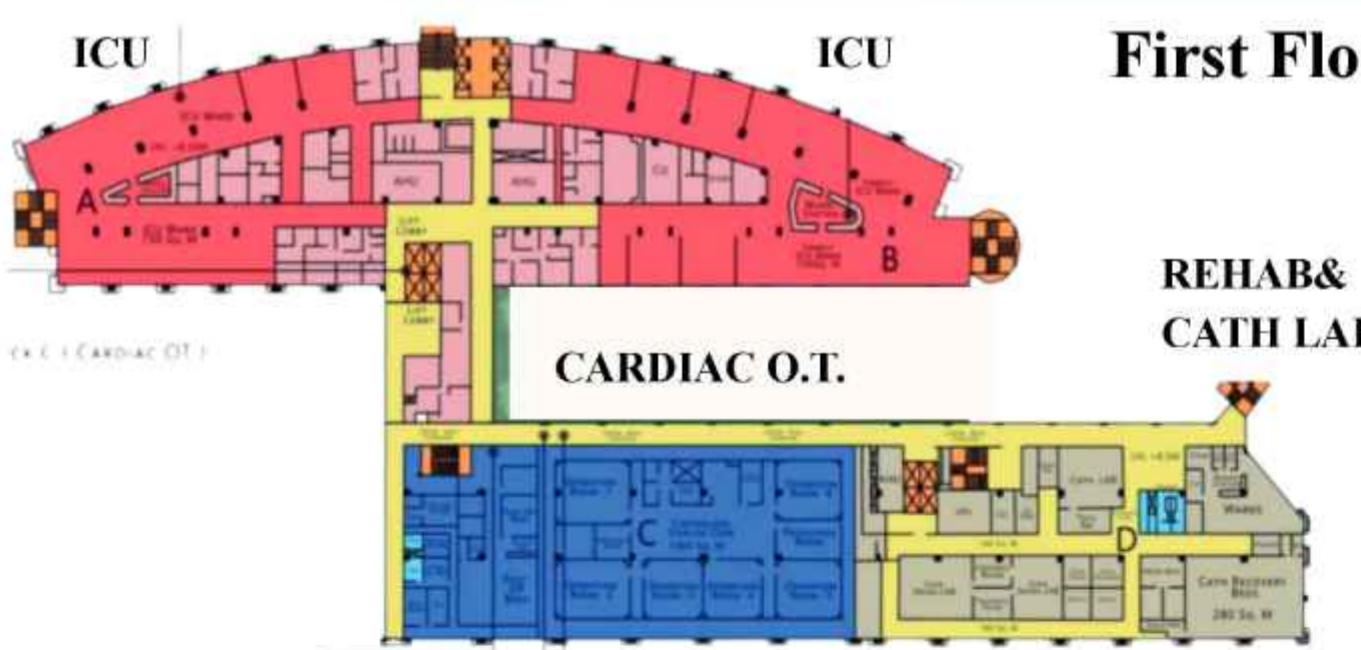
Master Plan



Ground Floor Plan



Second Floor Plan



First Floor Plan



Third Floor Plan



Reception Area



Ward Area



ICU Area



Ward Area

DESIGN INFERENCES

- Multi-Block Planning**: Four main building blocks accommodating different functions.
- Orientation**: Oriented towards the north-east for glare-free daylight.
- Functional Zoning**: Five major zones planned for efficient campus layout.
- Patient-Centric**: Wards designed for privacy, comfort, and easy access.
- Separate Entry**: Separate access for patients, visitors, staff, and emergency vehicles.
- Landscape Integration**: Landscaped areas and courtyards create a healing environment.
- Efficient Circulation**: Clear corridor networks and vertical circulation connecting floors.
- Parking Planning**: Basement parking for staff and service vehicles.

DESIGN ANALYSIS

Parameter	Key Insights
Healthcare Model & Context	<ul style="list-style-type: none"> • Private, corporate tertiary care hospital • Located in a planned urban sector
Planning & Growth	<ul style="list-style-type: none"> • Compact vertical planning typology • Pre-planned and technology-driven development
Zoning & Circulation	<ul style="list-style-type: none"> • Strict zoning of public, clinical, and service areas • Fully segregated circulation systems
Patient Care Environment	<ul style="list-style-type: none"> • Mix of private and shared rooms • Moderate to high privacy and comfort
Clinical & Support Areas	<ul style="list-style-type: none"> • Modular OT and ICU planning • Strong integration of MEP systems
Environmental & Energy Aspects	<ul style="list-style-type: none"> • Mechanically controlled indoor environment • High dependence on HVAC systems
Overall Inference	<ul style="list-style-type: none"> • High operational efficiency • Limited passive and human-centric design



Rigs Hospitallet is Denmark's foremost national university hospital and a critical pillar of Copenhagen's public healthcare infrastructure. The North Wing is not conceived as a standalone building but as an integral continuation of Rigs Hospitallet's evolving campus, respecting its urban context while simultaneously redefining its architectural language.

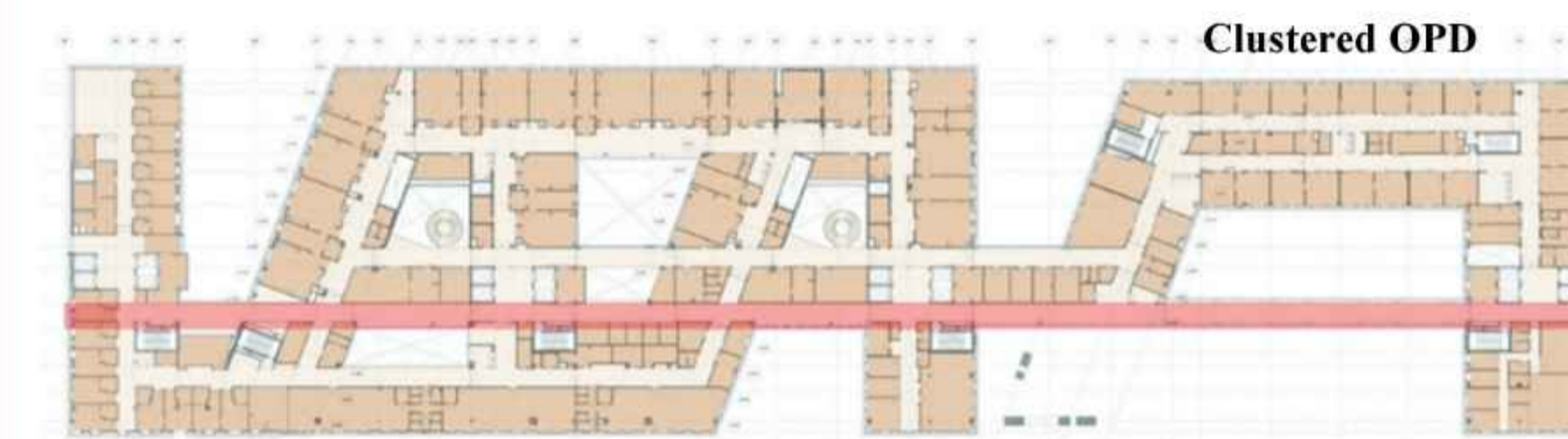
- Architects: LINK Arkitektur + 3XN
- Location: Copenhagen, Denmark
- Site Area: 190,000 sq. m. (overall campus)
- Built up area: 54000 sqm
- No. of beds: 209 single rooms units



Floor plans



Ground Floor plan incorporated general OPD and Diagnosing areas



First & Second Floor plan are clusteres OPD, OT and ICU



Third to fifth typical Floor plan is basically I.P.D having single rooms



Circulation Area

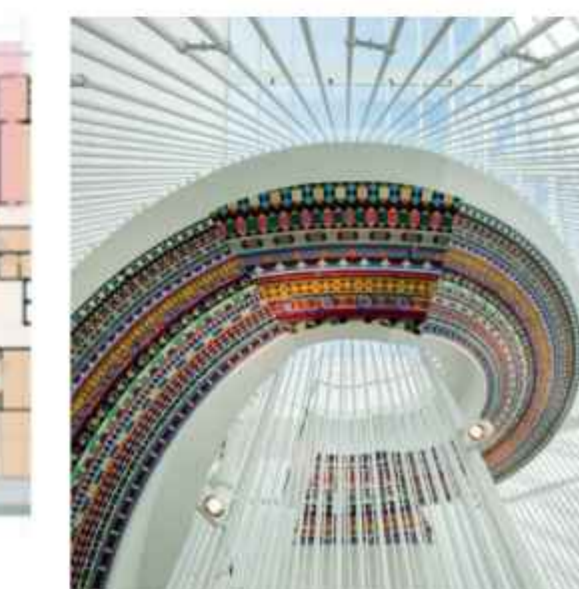


Ward Area



Operation Theatre

DESIGN INFERENCES



Diff colour codes has been given to each floor

- Zigzag Building Form**: Cardiogram-inspired geometry increases facade length for natural daylight.
- Central Circulation Spine**: Linear main corridor improves connectivity and reduces travel time.
- Efficient Functional Zoning**: High-activity areas are closer to the axis, patient rooms are away.
- Departmental Clustering**: Related medical functions are grouped together for faster response.
- Clear Wayfinding Strategy**: Distinct colors and visual markers help patients navigate easily.
- Efficient Functional Zoning**: High-activity areas are closer to the axis, patient rooms are away.
- Integration with Urban Context**: Building mass steps down toward residential surroundings.
- Departmental Clustering**: Related medical functions are grouped together for faster response.
- Flexible Planning Layout**: Layout allows for future modification of departments and technologies.
- Vertical Circulation Nodes**: Elevator cores and staircases are strategically placed for quick access.
- Healing Environment Approach**: Planning prioritizes quiet areas, daylight, and reduced stress.
- Daylight-Oriented Planning**: Patient wards are oriented toward maximum daylight and green views.

DESIGN ANALYSIS

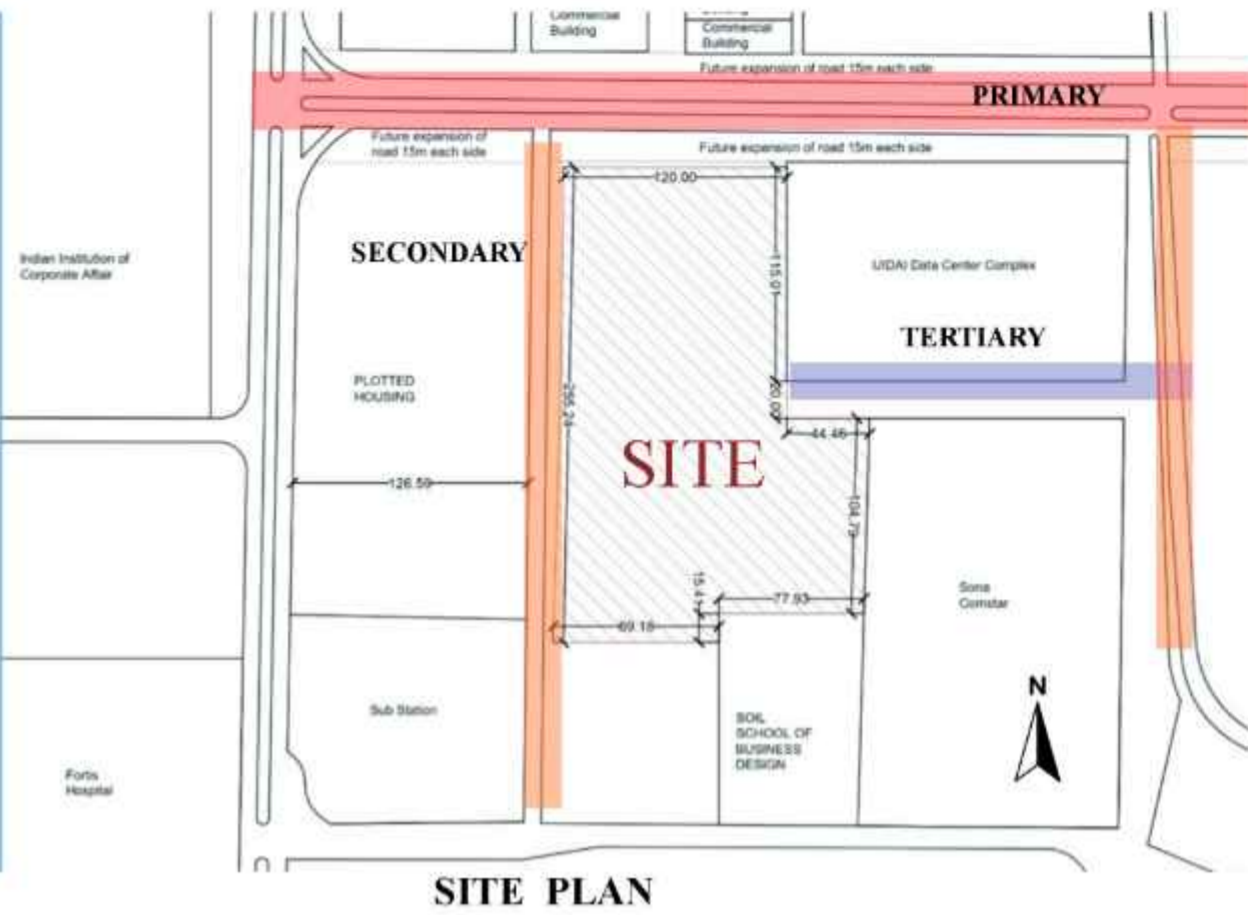
Parameter	Key Insights
Healthcare Model & Context	<ul style="list-style-type: none"> • Public welfare-based national hospital • Integrated within a dense urban fabric
Planning & Growth	<ul style="list-style-type: none"> • Long-term master planning approach • Designed for future expansion
Zoning & Circulation	<ul style="list-style-type: none"> • Clear hierarchical zoning • Intuitive circulation using spatial cues
Patient Care Environment	<ul style="list-style-type: none"> • Single-patient rooms in small clusters • Very high privacy, dignity, and comfort
Clinical & Support Areas	<ul style="list-style-type: none"> • Highly modular and adaptable clinical floors • Embedded and flexible service infrastructure
Environmental & Energy Aspects	<ul style="list-style-type: none"> • Extensive daylight and visual connection to outdoors • Passive strategies integrated with systems
Overall Inference	<ul style="list-style-type: none"> • Strong balance between efficiency and healing • Model for future public hospital design

METHODOLOGY

The site is located in Sector 2, IMT Manesar, along the NH-48 corridor, which serves as one of North India's most important arterial routes connecting Delhi, Gurugram, Manesar, Rewari, and Jaipur. The location provides regional accessibility while being embedded within an employment-intensive industrial ecosystem, making it highly suitable for a large institutional healthcare facility.

Site Details

1. Location: Sector 2, IMT Manesar, Gurugram, Haryana
2. Coordinates: 28.368° N, 76.936° E
3. Distance from NH-48: 1 km



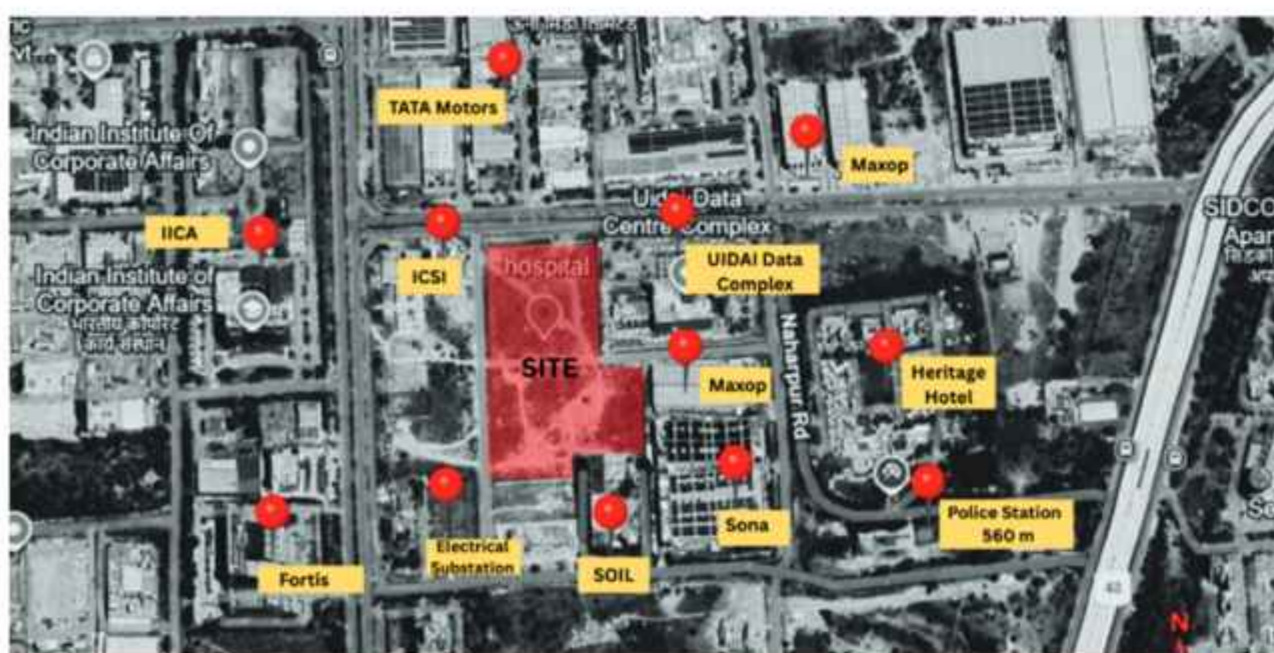
APPROACH & ACCESSIBILITY



Map showing the major connecting Highway and expressways to the Site, Source: Author



Map showing the immediate connecting Roads to the Site, Source: Author

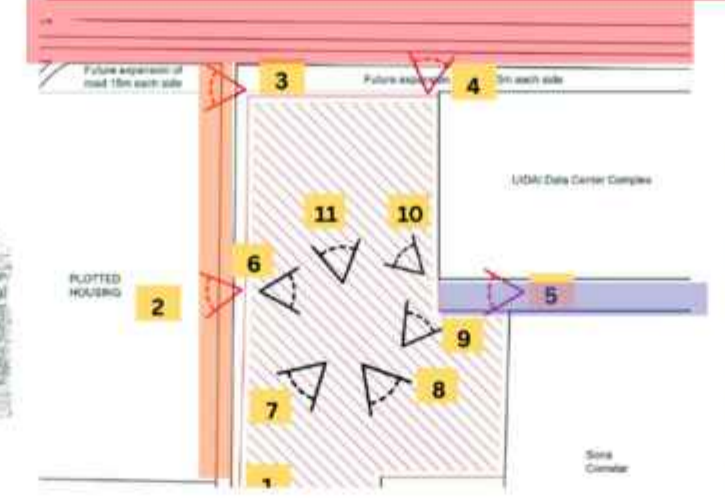


Map showing the nearby context and built typology to Site, Source: Author

SITE VIEWS



Master Plan Of Manesar



View Points on Site, Source: Author



View at 1, power station and access road



View at 2, vacant plot for plotted housing



View at 3 proposed board and secretary office



View at 4, view from the site



View at 5, Site image showing the road



View at 6, site image showing boundary



View at 7, Site image



View at 8, site image showing SOIL institute

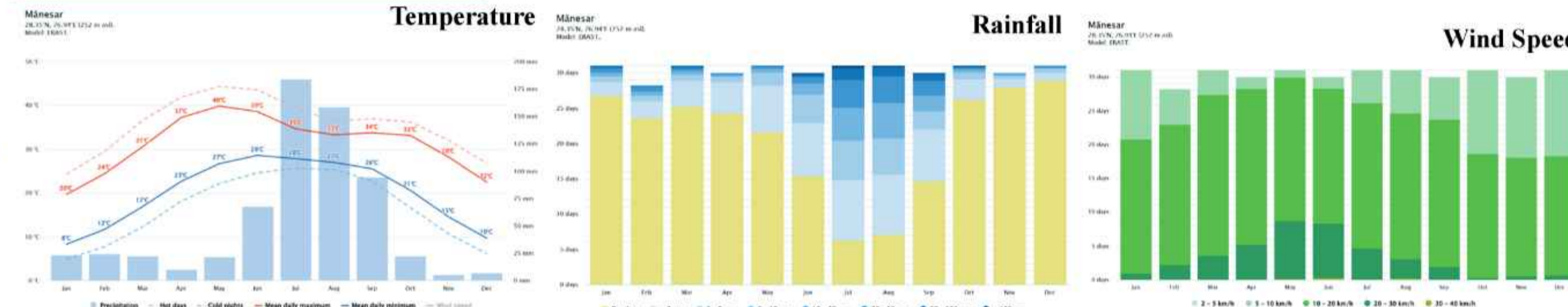


View at 9 showing UIDAI Data Centre



View at 10, Site Image

CLIMATE ANALYSIS



1. Peak summer (May-June): 33-34°C
2. Winter minimum (January): -14°C
3. Moderate seasons: March-April and September-October (20-30°C)

Wind pattern

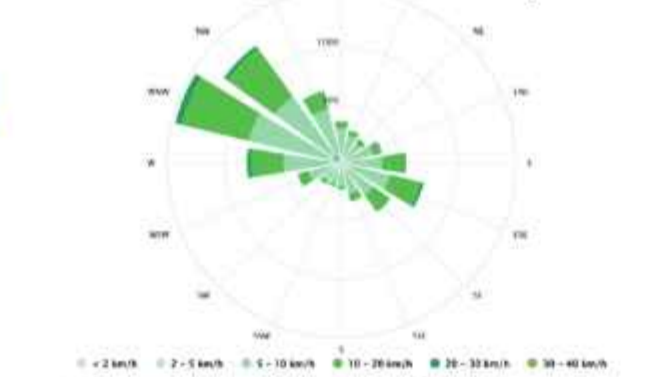
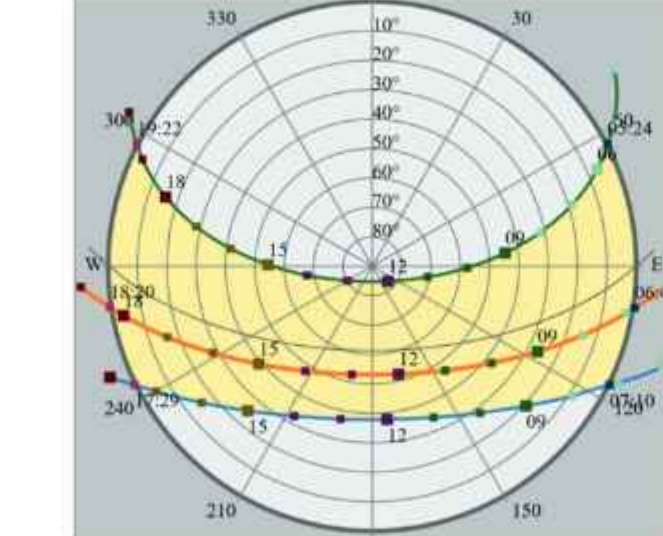


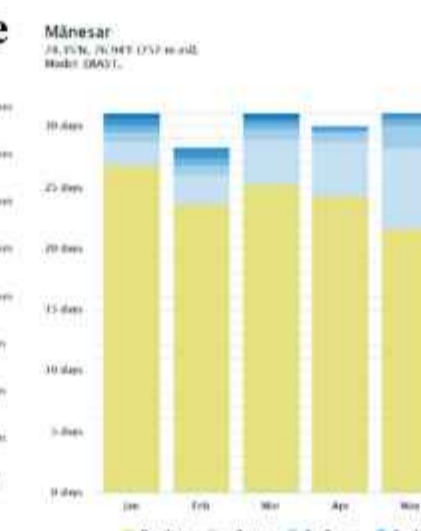
Diagram would help in designing fenestrations and courtyards in order to use the passive ventilation

Sun Path

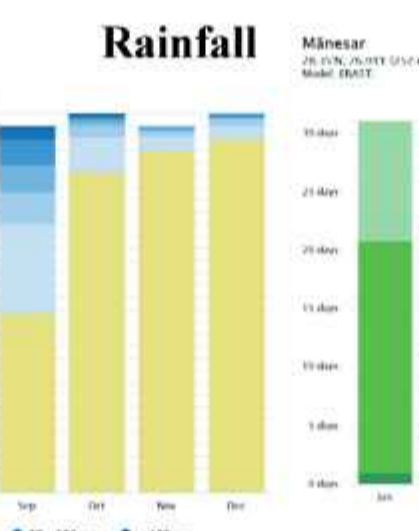


1. Long summer sun exposure requires shading on southern and western façades.
2. Winter sun penetration can be utilized for passive thermal comfort.
3. Courtyards and shaded walkways become essential for thermal moderation.

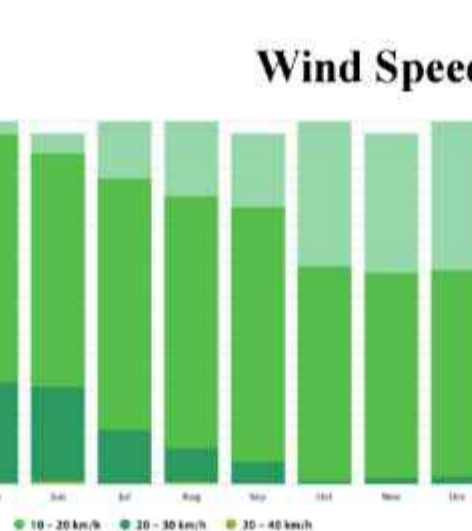
Temperature



Rainfall



Wind Speed



1. Monsoon months (July-August): 230-250 mm/month
2. June & September: Moderate rainfall
3. October-May: Predominantly dry

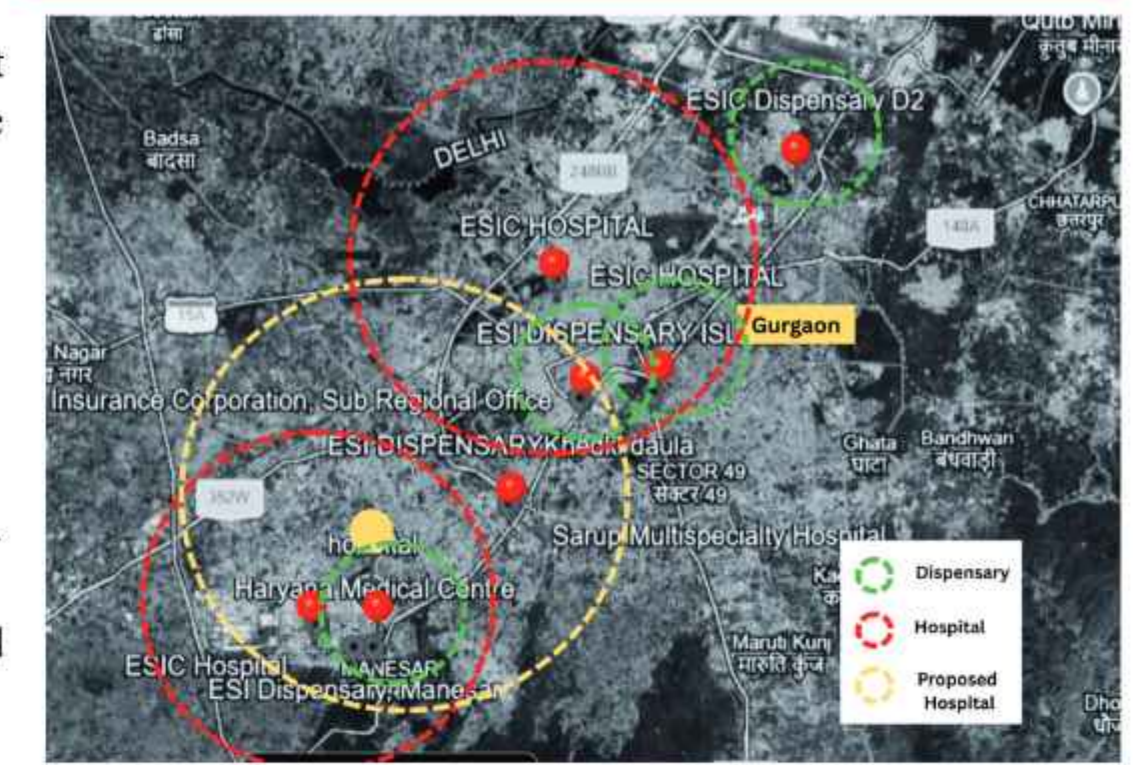
SWOT ANALYSIS

Parameter	Strengths	Weaknesses	Opportunities	Threats
Location & Connectivity	Near NH-48 ensures good access for patients, emergencies, and logistics.	Peak-hour congestion may affect access.	Potential to serve as a regional healthcare hub.	High industrial traffic may delay emergency movement.
Surrounding Context	IMT Manesar location ensures consistent demand from workers and residents.	Industrial setting may reduce environmental comfort.	Scope for ESIC and occupational healthcare focus.	Industrial emissions may impose environmental constraints.
Site Characteristics	Flat terrain allows efficient planning and easy expansion.	No existing site services require full infrastructure development.	Enables phased and modular hospital growth.	Initial infrastructure costs may be high.
Emergency & Safety	Close to police and fire services supports emergency response.	Dependence on external agencies during major events.	Potential for trauma and emergency care centre.	Industrial accidents may strain emergency capacity.
Existing Conditions	Vacant site allows optimized zoning and circulation planning.	Higher initial planning and setup effort required.	Implementation of best-practice hospital layouts.	Approval and service delays may affect timelines.
Environmental Factors	Scope for green buffers and landscape integration.	Noise and air pollution from traffic and industry.	Passive design strategies can enhance healing spaces.	Stringent environmental regulations may affect design.

SITE INFORMATION

1. Site Dimensions – Collective Dimensions of pocket A, Pocket B1 and Pocket B2 and road in between the pocket as given in the adjacent image.
2. Site Area - 8.68 acres 35126 sqm.
3. Ground Coverage - 25%
4. Permissible Basement – 4
5. Height Restriction - unrestricted
6. Permissible FAR - 1.5
7. Setback Regulation - Min. Front Setback- 4.5m, Min. Side & Rear Setback - 4m
8. Parking Norms - 1.0 ECS for every 2 beds and visitors parking as 1 ECS for every 4 beds.

CATCHMENT AREA



PROPOSED FLORA & FAUNA



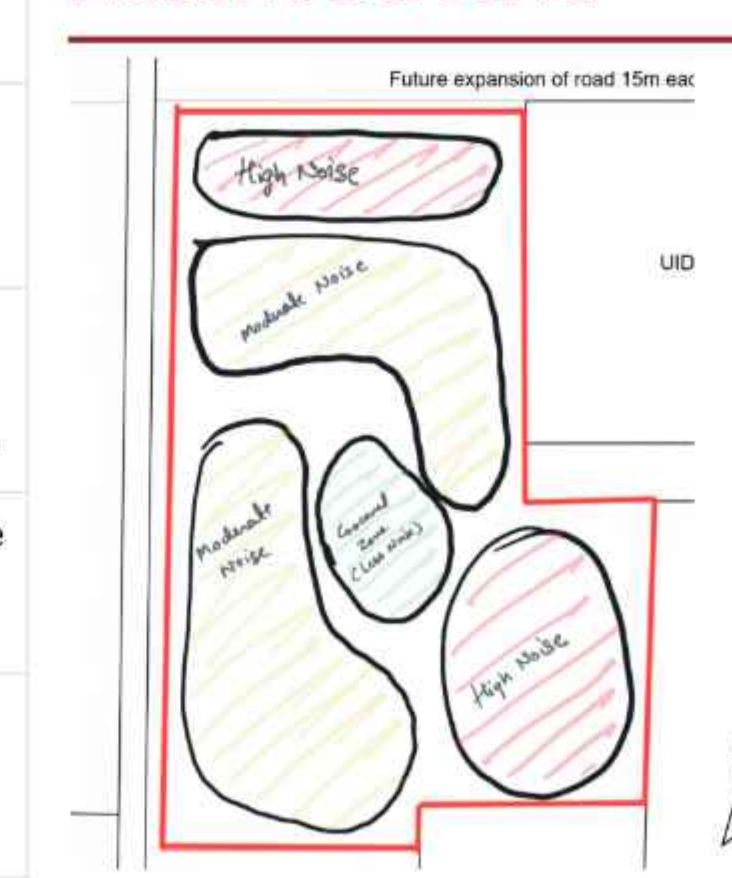
1. Manesar falls within a composite climate zone, hence hardy, native, low-maintenance species such as **Neem, Peepal, Banyan, Arjun, Amaltas, along with Ashoka, Bamboo, and Karanj**, are suitable for shade, pollution control, and buffering.
2. Shrubs and ground cover like **Bougainvillea, Hibiscus, Tulsi, and Aloe Vera** support visual comfort, medicinal value, and water efficiency.
3. Overall, the landscape strategy enables shaded healing spaces, noise and dust mitigation, microclimate regulation, and improved psychological well-being, functioning as an ecological and climatic design response.

EXISTING SERVICES



1. Stronger winds during May-June (10 kph) ;natural ventilation.
2. Post-monsoon months experience calmer conditions.
3. Seasonal winds support cross-ventilation strategies.

NOISE MAPPING



SOCIAL PARAMETERS

Parameter	Description
Population Profile	Predominantly industrial workers, support staff, and their families & migrant populations.
Healthcare Needs	High demand for affordable, insured, emergency, trauma, and healthcare services.
Socio-Economic Character	Middle- and lower-income groups relying on public and ESIC healthcare facilities.
Occupational Risks	Increased exposure to industrial injuries, respiratory issues, and work-related stress.
Settlement Pattern	Mix of labour colonies, residential sectors, and informal settlements.
Role of Hospital	Acts as a key public healthcare and social security institution for workers & Family

PHYSICAL PARAMETERS

Parameter	Description
Location	Sector-2, IMT Manesar, within the NCR industrial corridor.
Land Use	Predominantly industrial with nearby residential and commercial pockets.
Topography	Flat terrain suitable for efficient planning and construction.
Connectivity	Direct access from NH-48 and arterial roads for patients and emergencies.
Environmental Conditions	Moderate noise and air pollution due to industrial activity and traffic.
Design Implications	Need for green buffers, controlled access, and inward-focused healing spaces.

DESIGN IMPLICATIONS

1. Flat terrain and low ground coverage enable clear zoning and Vertical segregation based planning future expansion.
2. Industrial context demands robust emergency and trauma infrastructure.
3. Social profile requires high-capacity OPD planning ensuring the dignity.
4. Early integration of services and circulation is critical due to site surroundings and segregation of services.

Parameter	Safdarjung Hospital, New Delhi	Max Hospital, Shalimar Bagh, New Delhi	Fortis Hospital, Mohali	Rigshospitalet – North Wing, Copenhagen
Healthcare Model	Public, government-funded tertiary care	Private, corporate tertiary-care hospital	Private, corporate tertiary care	Public welfare-based national hospital
Urban Context	Dense metropolitan setting with unplanned growth	Planned urban sector location with controlled access	Planned urban sector with controlled access	Dense European city with strong public infrastructure
Planning Typology	Horizontal campus model	Compact vertical hospital configuration	Compact vertical hospital	Fragmented campus extension with courtyards
Growth Pattern	Incremental, unplanned additions over decades	Pre-planned, technology-driven development	Pre-planned, technology-driven development	Long-term, future-ready planned expansion
Master Planning	No single cohesive master plan	Strong centralized planning framework	Strong centralized planning framework	Integrated master plan aligned with urban fabric
Zoning Structure	Partially defined, organically evolved	Strict and clearly enforced zoning hierarchy	Strict and clearly enforced zoning	Highly legible and hierarchical zoning
Public Zones	Overcrowded OPD and registration areas	Controlled OPD and reception environments	Controlled OPD and reception spaces	Transparent, calm, daylight-oriented public areas
Circulation System	Shared corridors for patients, staff, attendants	Fully segregated patient, staff, and service circulation	Fully segregated circulation systems	Intuitive circulation guided by spatial cues
Emergency Planning	Extremely high load, circulation conflicts	Direct ground access with controlled vertical connectivity	Direct access with controlled vertical links	Integrated emergency access within urban network
Ward Typology	Large multi-bed wards	Mix of private and shared patient rooms	Mix of private and shared rooms	Single-patient rooms in small clusters
Patient Privacy & Dignity	Low	Moderate to high privacy standards	Moderate to high	Very high
OT & ICU Planning	Functionally segregated but spatially constrained	Modular, service-intensive clinical planning	Modular, service-intensive planning	Highly modular and adaptable clinical floors
Spatial Standards	Often below recommended norms	Closely aligned with international standards	Closely aligned with international standards	Exceeds minimum standards
MEP Integration	Partial and uneven across campus	Fully integrated, MEP-led building systems	Fully integrated, MEP-led design	Embedded, flexible service infrastructure
Environmental Quality	Poor daylight, noise, and thermal comfort	Controlled internal thermal, acoustic, and lighting	Controlled internal environment	Strong daylight, views, acoustic and thermal comfort
Energy Strategy	High operational stress, limited passive design	Mechanically dependent, energy-intensive systems	Energy-intensive, mechanically dependent	Passive strategies integrated with systems
Wayfinding	Signage-dependent, informal guidance	Controlled signage with defined access points	Controlled signage and access points	Spatial legibility reduces signage reliance
Flexibility & Adaptability	Limited due to ad-hoc growth	Moderate adaptability within planned systems	Moderate, within predefined systems	Very high, designed for long-term change
Overall Architectural Character	Utilitarian and infrastructure-driven	Corporate, efficiency-driven healthcare architecture	Corporate and efficiency-driven	Human-centric and healing-oriented

Design Aspect	What to Take	What to Avoid
Master Planning	Long-term, flexible master planning accommodating phased growth	Incremental expansion without spatial or service foresight
Zoning Strategy	Clear hierarchy of public, semi-restricted, restricted, and service zones	Overlapping zones causing functional and hygienic conflicts
Circulation Design	Segregated circulation for patients, staff, emergency, and services	Shared corridors leading to congestion and infection risk
OPD Planning	Generous waiting areas sized for realistic patient volumes	Undersized OPDs with spillover into circulation spaces
Emergency Design	Direct access and rapid connectivity to ICU and OT	Emergency routes intersecting public movement
Ward Planning	Smaller ward clusters with improved privacy and daylight	Large multi-bed wards with poor dignity and infection control
Patient-Centric Design	Incorporation of daylight, views, and acoustic comfort	Purely functional spaces ignoring psychological well-being
OT & ICU Layout	Modular planning with strict clean-dirty segregation	Inconsistent zoning and insufficient recovery spaces
MEP Integration	Flexible service shafts and modular infrastructure	Rigid, non-upgradable service systems
Energy & Sustainability	Passive design strategies integrated with mechanical systems	Total reliance on energy-intensive HVAC solutions
Wayfinding	Spatial legibility using light, courtyards, and landmarks	Excessive dependence on signage and informal guidance
Flexibility for Future Needs	Structural grids and adaptable floor plates	Fixed layouts that cannot respond to evolving healthcare models
Public Hospital Design	Capacity planning that balances efficiency with dignity	Designing only for maximum bed count
Overall Design Approach	Context-sensitive, humane, and scalable hospital architecture	Blind replication of foreign or corporate hospital models

Sl. No.	Department / Clinical Facility	Area (sqm)
1	Casualty / Emergency	1,100
2	Central Registration, Pharmacy &	1,880
3	OPD – General	3,950
4	Waiting OPD – General	2,650
5	Super Speciality OPD	1,850
6	Waiting Super Speciality OPD	1,450
7	Radiology	2,350
8	Pathology, Biochemistry &	3,150
9	Blood Centre	900
10	Physiotherapy & Occupational	1,000
11	Gynae Casualty with Labour Room	1,800
12	Operation Theatre Complex	3,750
13	Intensive Care Units (ICU, PICU,	4,750
14	IPD Wards (500 Beds)	18,400
15	CSSD	1,200
16	Laundry	1,200
17	Kitchen & Dietary	1,600
18	Hospital Stores	1,900
19	Medical Gas Manifold	400
20	Administration	2,800
21	Mortuary	400
22	Circulation (corridors, lobbies, lifts)	5,160

EMERGENCY

Sub Spaces	Area (sqm)
Triage	120
Examination	180
Trauma / Resuscitation	200
Minor Procedure	80
Observation Beds	250
Plaster Room	60
Nurses Station	60
Emergency Pharmacy	70
Waiting	60
Staff Duty Room	20
Total	1100 sqm

I.P.D WARDS

General Wards	9000
Semi Private	4500
Private Rooms	2500
Nursing Stations	500
Utility Rooms	500
Doctor Rooms	300
Pantry	200
Stores	200
Total	18,000 sqm

LAUNDRY

Linen Sorting	200
Washing Area	300
Drying & Ironing	200
Clean Linen Storage	200
Total	900 sqm

MORTUARY

Body Receiving	60
Cold Storage	120
Post Mortem	80
Viewing Room	40
Total	300 sqm

TOTAL BUILT-UP

Category	Area
Functional Departments	36,560 sqm
Circulation (5000)	16,130 sqm
TOTAL BUILT-UP AREA	52,690 sqm

CLIENT'S BRIEF

Sl. No.	Clinical Facilities	Standard 500 Bedded Areas in Sqft
1	Casualty	10,800.00
2	OPD	
A	Central Registration, Pharmacy & Sample Collection Area (Including Waiting)	9,080.00
B	Out Patient Department (General)	15,835.00
3	Waiting and Pre-op Department (General)	3,140.00
C	Super Speciality OPD	6,040.00
C1	Waiting Super Speciality OPD	6,040.00
3	Radiology	8,225.00
4	Laboratories	
A	Pathology & Haematology	4,750.00
B	Biochemistry	3,050.00
C	Microbiology	2,420.00
5	Blood Centre	3,080.00
6	Physiotherapy & Occupational Therapy	2,400.00
7	Gynae casualty with Labour Room Complex	6,720.00
8	Operation Theatre Complex	15,294.00
9	Intensive Care Area ICU (Including PICU & NICU)	8,970.00
A	Intensive Care Area ICU (Including PICU & NICU)	8,970.00
B	PICU, NICU and Nursery	6,490.00
10	IPD	8,980.00
11	Laundry	4,590.00
12	CSSD	3,550.00
13	Kitchen	5,515.00
14	Hospital Stores	8,070.00
15	Gas Manifold	1,500.00
16	Administration	20,770.00
17	Mortuary	1,500.00
TOTAL		1,83,594.00

Department	Sub-Spaces / Functional Components
Casualty / Emergency (1100 sqm)	<ul style="list-style-type: none"> • Triage area • Emergency examination rooms • Trauma / resuscitation bay • Minor procedure room • Observation beds • Plaster room • Nurses station
Central Registration, Pharmacy & Sample Collection	<ul style="list-style-type: none"> • Registration counters • Medical records room • Pharmacy dispensing counters • Drug storage room • Sample collection rooms
OPD – General	<ul style="list-style-type: none"> • Consultation rooms • Examination rooms • Treatment rooms • OPD nurses' station • Patient counselling room
Waiting OPD – General	<ul style="list-style-type: none"> • Main waiting hall • Sub waiting areas near consultation rooms • Public toilets

Super Speciality OPD	<ul style="list-style-type: none"> • Specialist consultation rooms • Diagnostic examination rooms • Procedure rooms
Waiting Super Speciality OPD	<ul style="list-style-type: none"> • Waiting lounges • Patient registration desk
Radiology Department	<ul style="list-style-type: none"> • X-Ray rooms • CT scan room • MRI suite • Ultrasound rooms • Control rooms • Patient preparation
Pathology, Biochemistry & Microbiology Labs	<ul style="list-style-type: none"> • Sample receiving area • Haematology lab • Biochemistry lab • Microbiology culture lab
Blood Centre	<ul style="list-style-type: none"> • Blood collection room • Donor waiting area • Blood testing laboratory

Physiotherapy & Occupational Therapy	<ul style="list-style-type: none"> • Therapy halls • Exercise rooms • Hydrotherapy room • Consultation rooms • Equipment storage
Gynae Casualty & Labour Room Complex	<ul style="list-style-type: none"> • Labour rooms • Delivery rooms • Pre-labour ward • Post-natal recovery room • Newborn care room • Nurses' station
Operation Theatre Complex	<ul style="list-style-type: none"> • Major operation theatres 7 • Minor operation theatre 2 • Pre-operative holding area • Post-operative recovery room • Scrub rooms • Sterile store • Anaesthesia room • Staff changing rooms

CSSD	<ul style="list-style-type: none"> • Decontamination area • Washing and sterilization area • Packing room • Sterile storage • Distribution area
Laundry	<ul style="list-style-type: none"> • Linen sorting area • Washing machines area • Drying and ironing room • Linen storage

Hospital Stores	<ul style="list-style-type: none"> • Medical supplies storage • Equipment storage • Inventory management office
Medical Gas Manifold	<ul style="list-style-type: none"> • Oxygen storage cylinders • Gas distribution system room • Monitoring
Administration	<ul style="list-style-type: none"> • Administrative offices • Accounts section • HR department • Meeting / conference rooms
Mortuary	<ul style="list-style-type: none"> • Body receiving area • Cold storage chambers • Post-mortem room • Autopsy preparation room • Viewing room for

OXYGEN MANIFOLD

Oxygen Cylinder	120
Gas Distribution	80
Total	200 sqm

ADMIN AREA

Administrative Offices	400
Medical Superintendent	150
Accounts Department	200
HR Department	200
Conference Rooms	250
Total	1200 sqm

HOSPITAL STORES

Medical Supplies	400
Equipment Store	300
General Store	200
Store Office	100
Total	1000 sqm

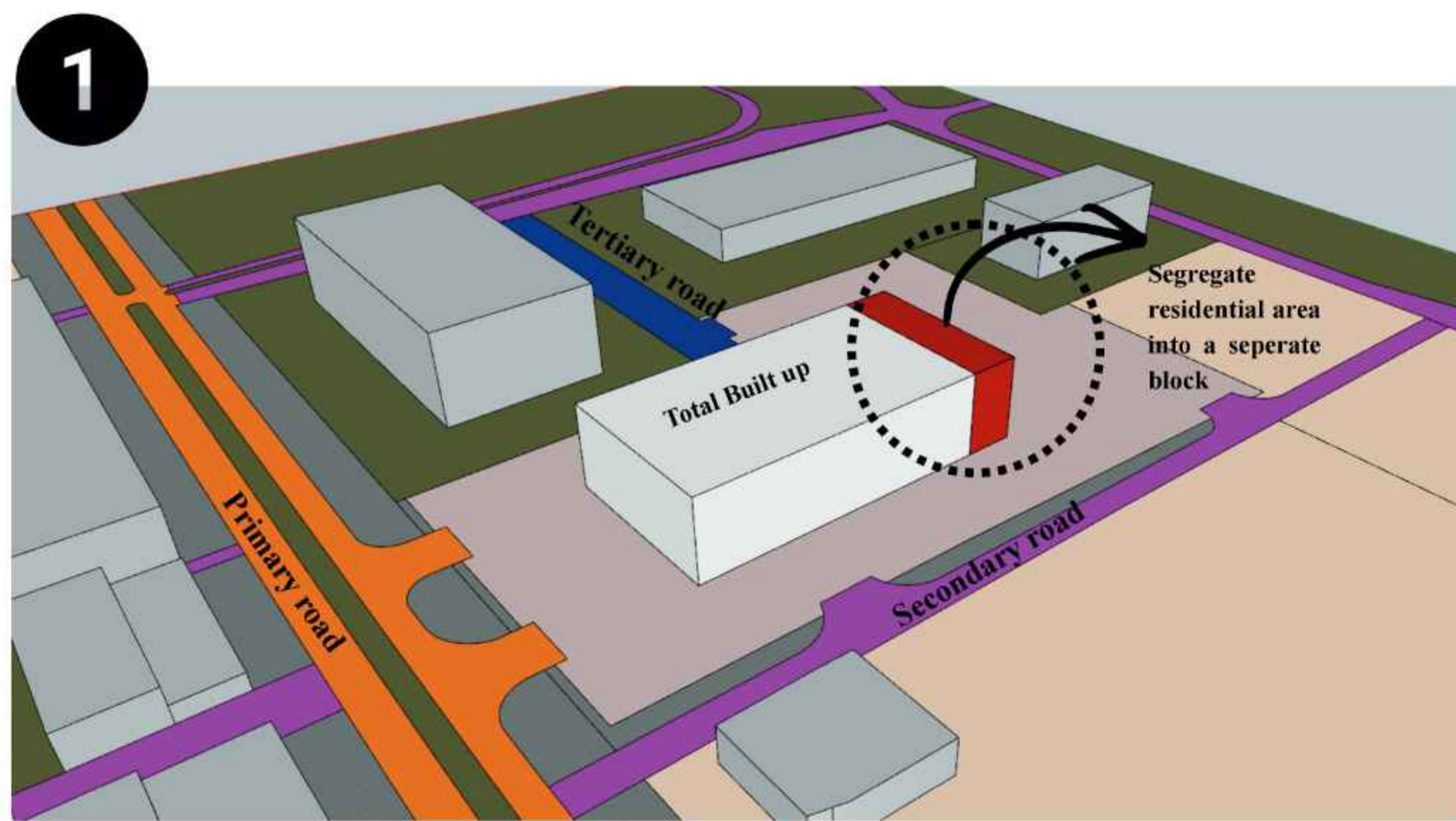
CSSD

Decontamination Area	200
Washing Area	200
Packing Room	150
Sterile Storage	150
Distribution Area	100
Total	800 sqm

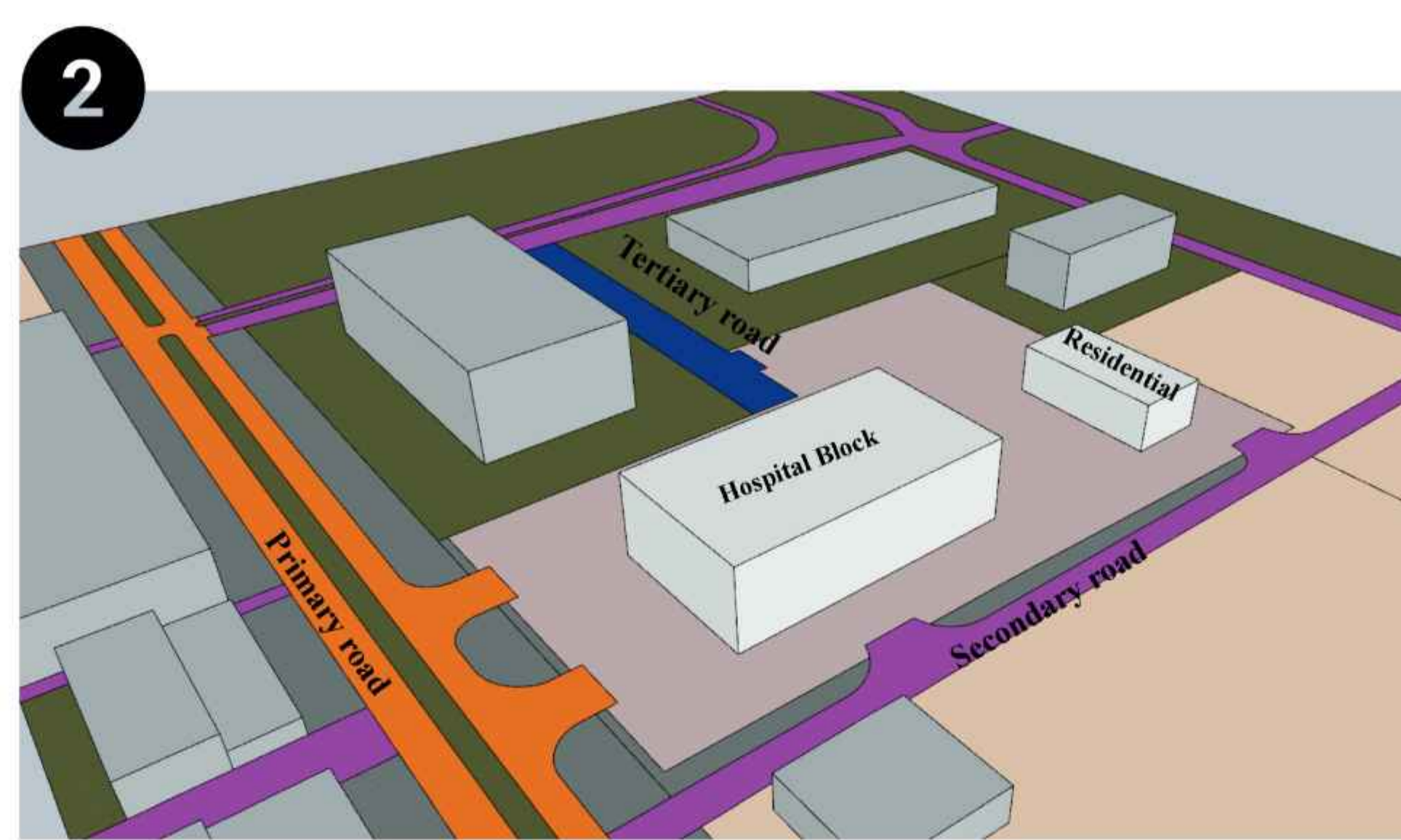
KITCHEN

Food Preparation	80
Cooking Area	120
Dish Washing	50
Food Distribution	50
Total	300 sqm

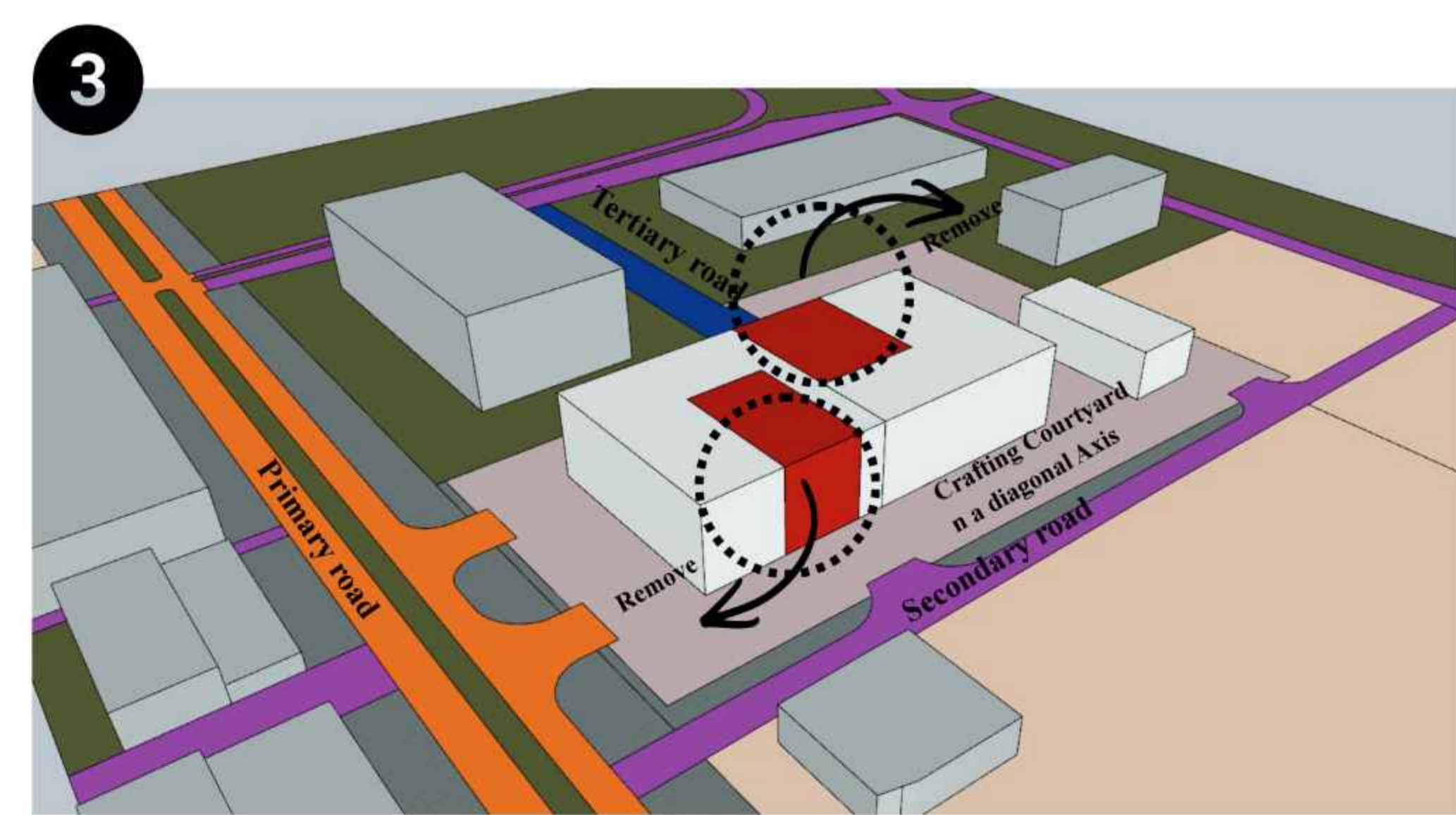




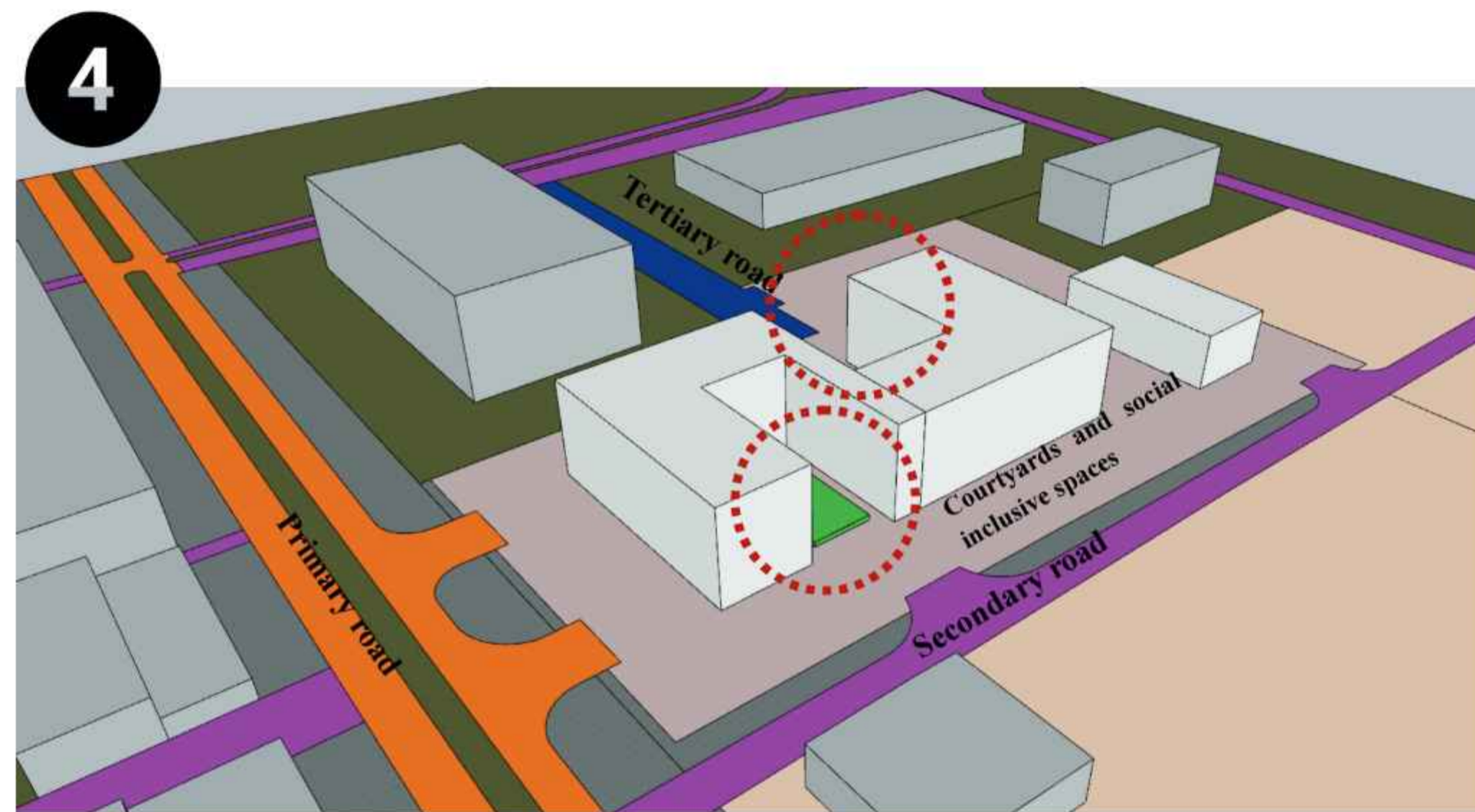
Assuming all the mass and total built up area as a single unit.



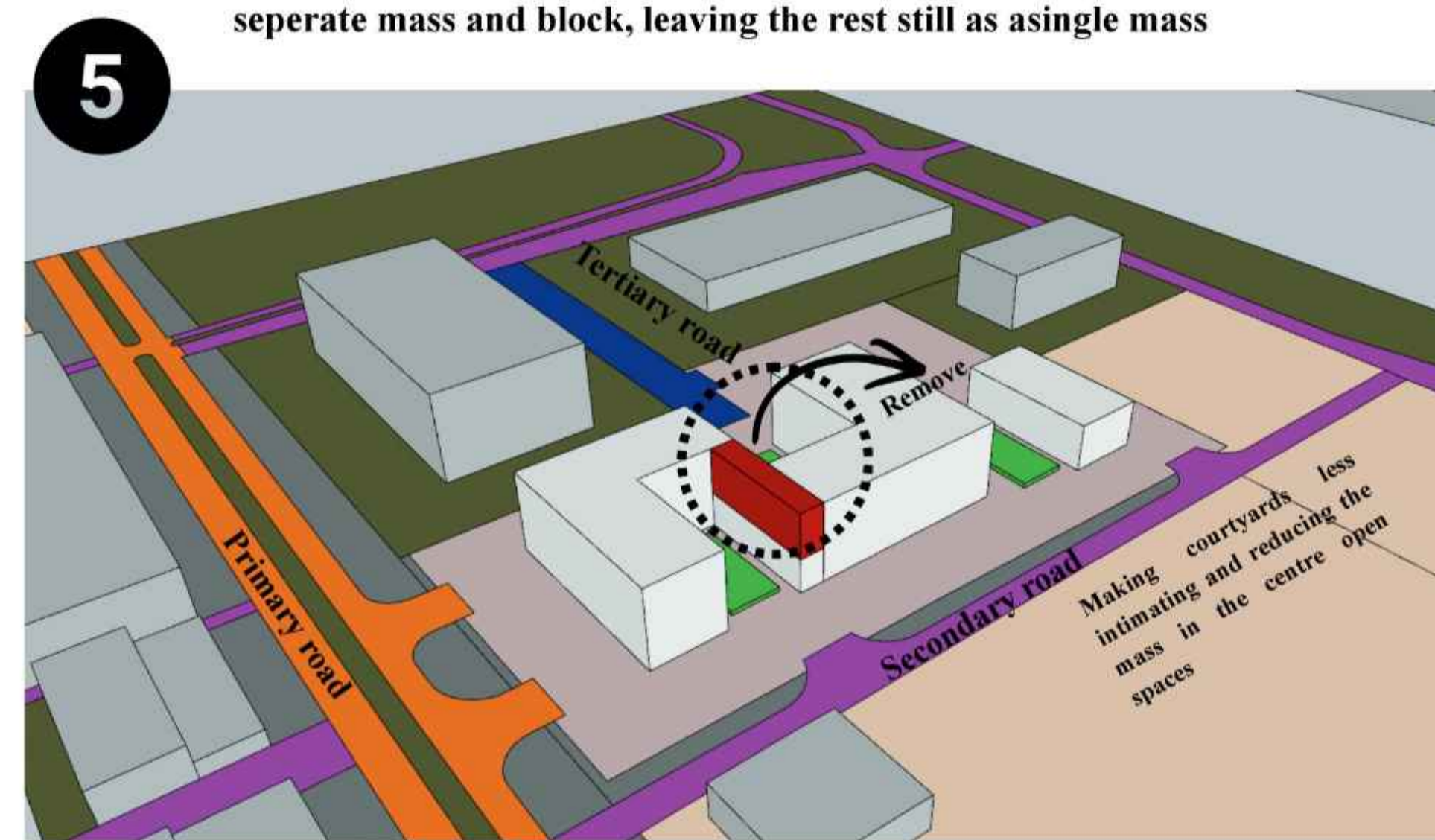
Segregating the 10% total built up area, residential area as a separate mass and block, leaving the rest still as a single mass



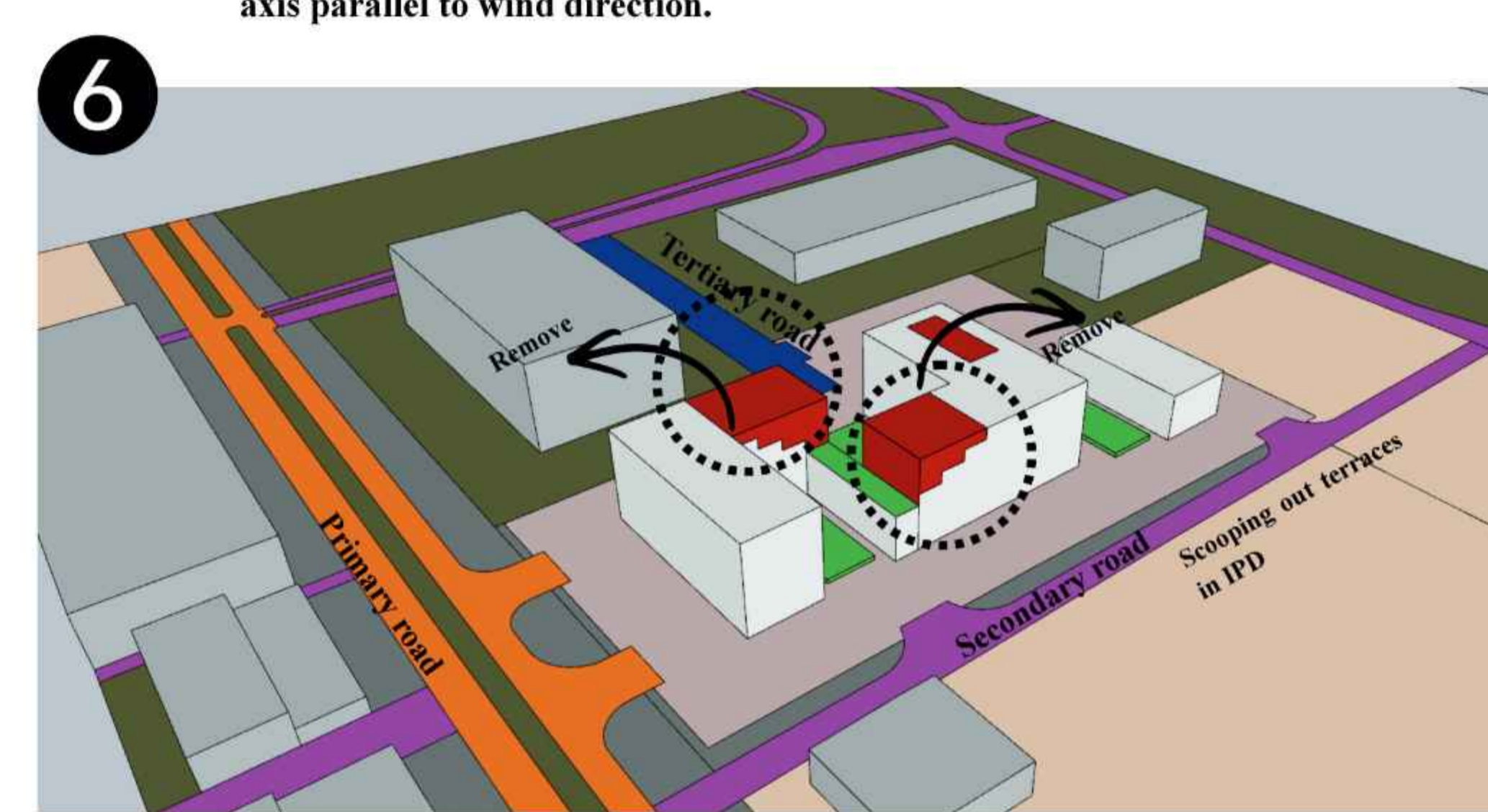
Instead of developing a single mass, crafting green courtyards in the axis parallel to wind direction.



Placing open courtyards in the direction of prevailing wind direction



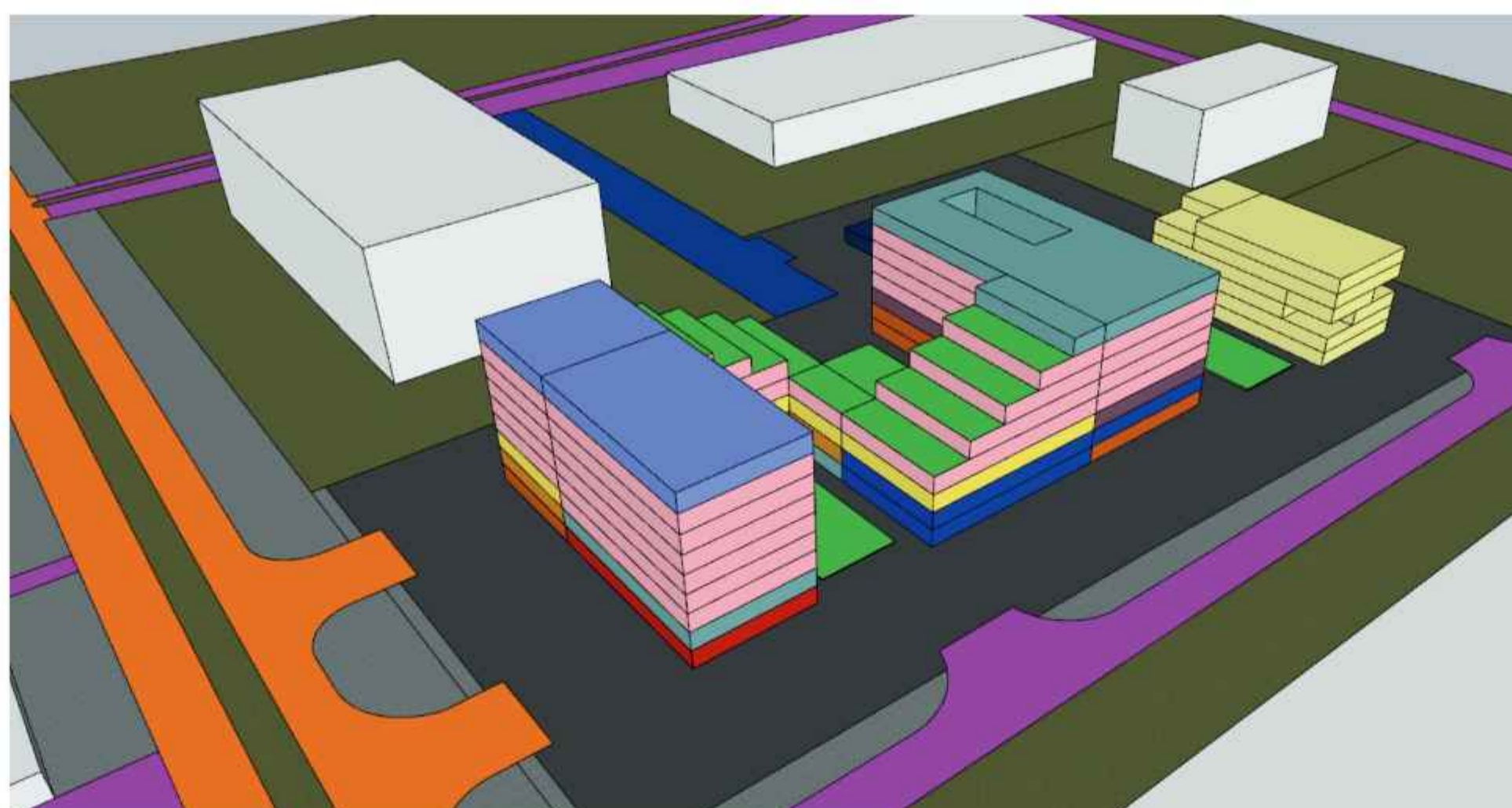
Reducing the mass at the link between two blocks, and providing link ICU and OT floor, and making the block individual when IPD are begins



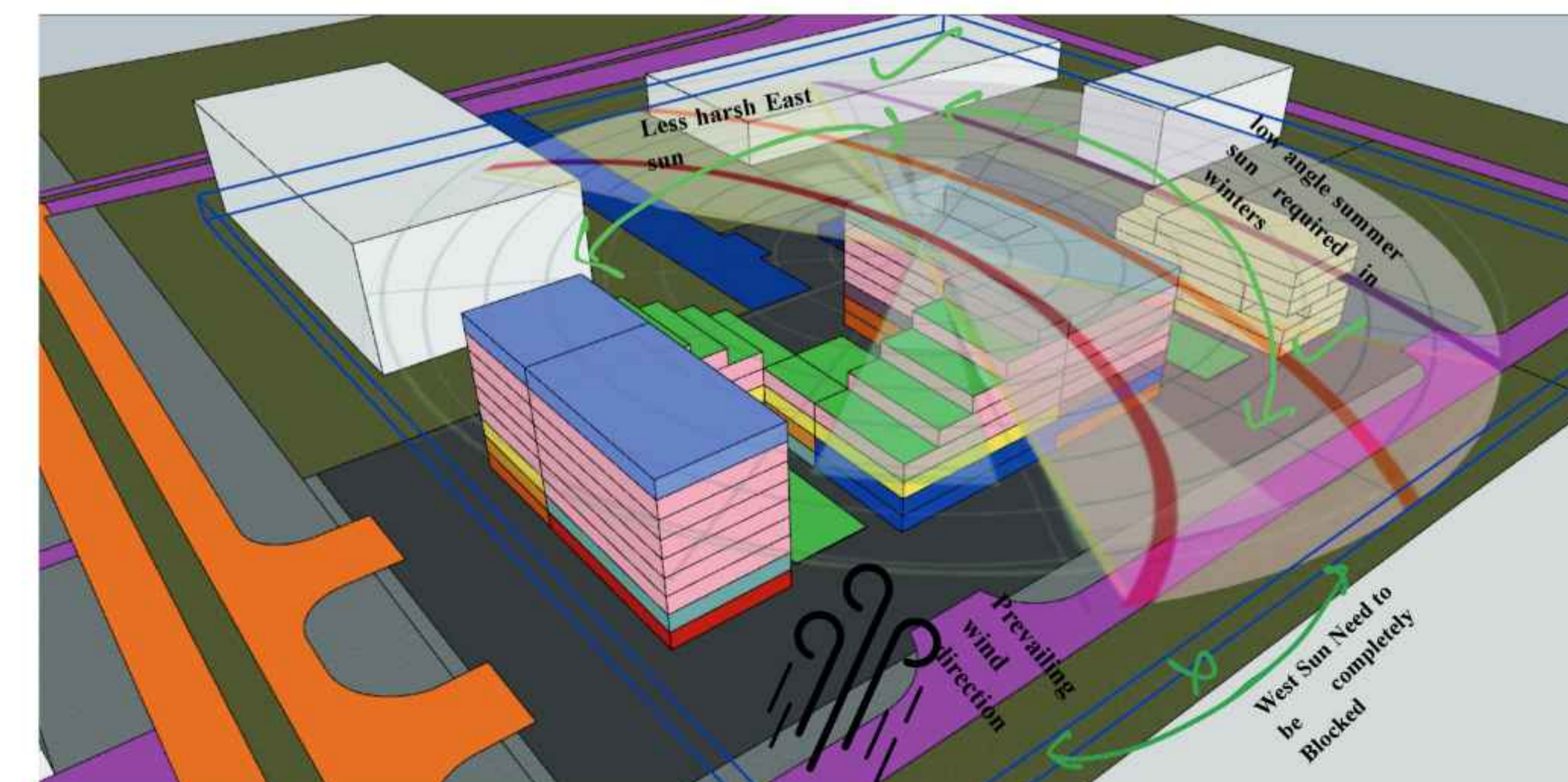
Crafting out Terraces in IPD blocks so that the patients and family members have access to outdoor areas, apart from the traditional means.



Terraces in IPD blocks and the bulky hospital outlook in the front, establishes a cocoon shaped state of art building which focusses on service as well as quality of spaces.



Vertical Segregation with emergency and OPD in lower floors, ICU and OT sandwiched between IPD above and OPD below, Admin area is placed at the top floor.



Sun Path and wind rose diagram placed above the developed concept to showcase, how the courtyards have been planned diligently along the axis of prevailing wind direction and also the terraces remain shaded (when all the strategies have been followed to avoid unwanted sun)

Commercial Building

Commercial Building

Future expansion of road 15m each side

Towards National Highway

Towards IMT Sector

UIDAI Data Center

Sona Comstar

SOIL School of Business Design

Commercial

Plotted Housing

Sub Station



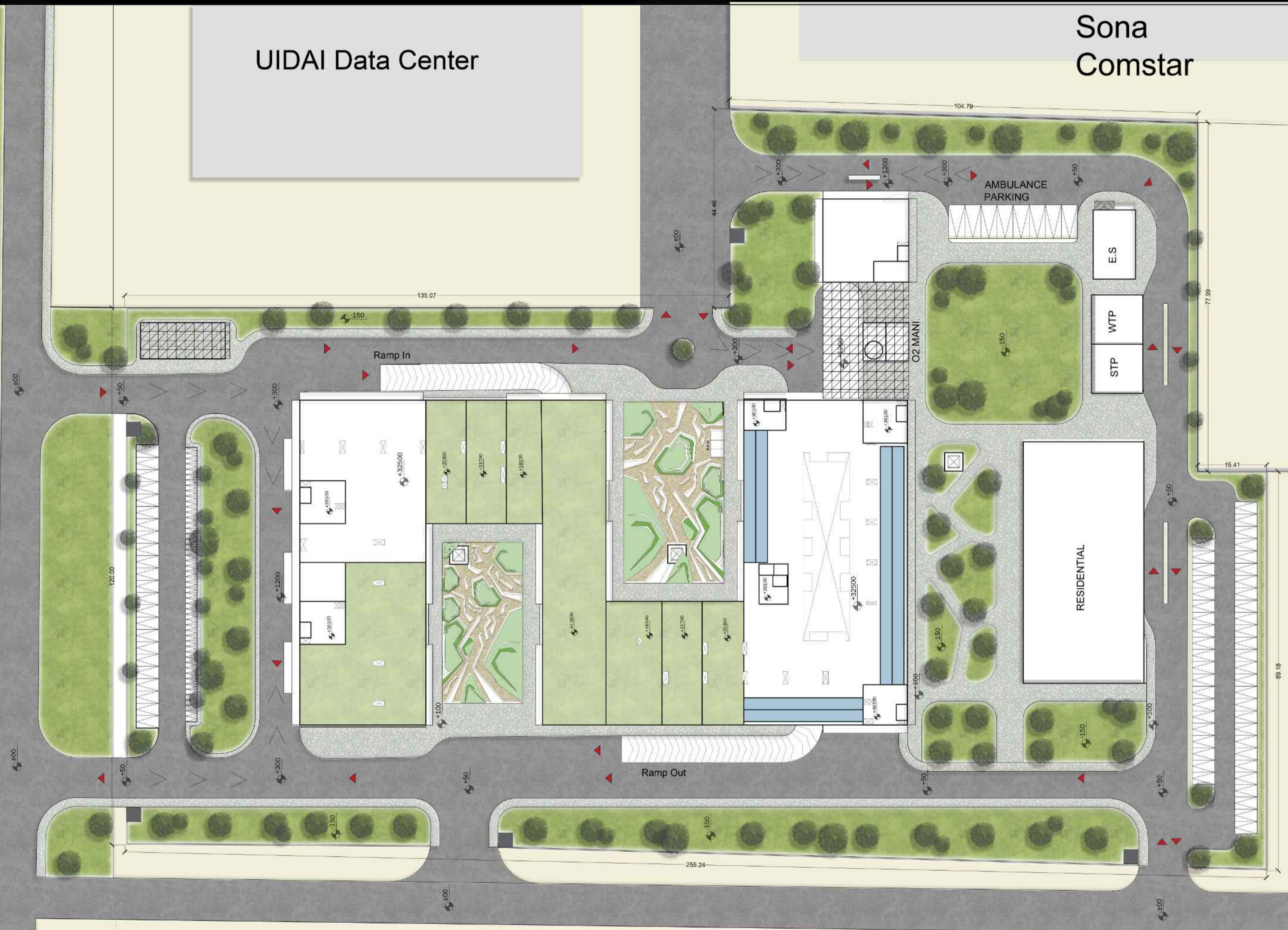
ARCHITECTURAL THESIS

10

500 BEDDED MULTISPECIALITY ESIC HOSPITAL, MANESAR

SITE PLAN

MANNAT
GCAD/21/116
SCALE (1:500)



Commercial Building

Commercial Building

Future expansion of road 15m each side

Towards National Highway

Towards IMT Sector

UIDAI Data Center







Sona Comstar

SOIL School of Business Design

Commercial

Plotted Housing

Sub Station

	EMERGENCY		DIAGNOSIS		PHARMACY
	CANTEEN		MORTUARY		OPD

LEGEND



ARCHITECTURAL THESIS

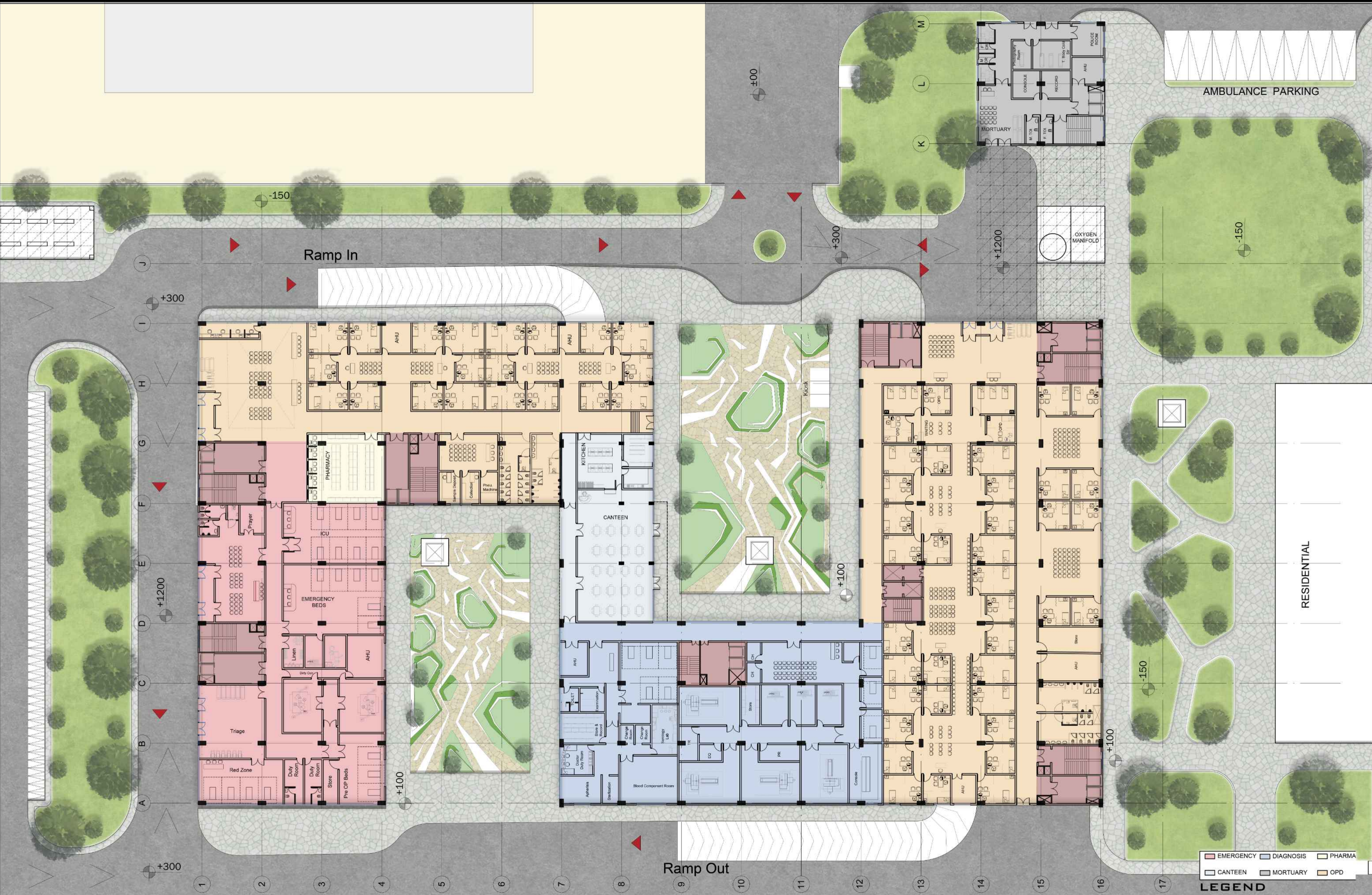


500 BEDDED MULTISPECIALITY ESIC HOSPITAL, MANESAR

ENTRY LEVEL FLOOR PLAN

MANNAT
GCAD/21/116
SCALE (1:500)





LEGEND

EMERGENCY	DIAGNOSIS	PHARMA
CANTEEN	MORTUARY	OPD



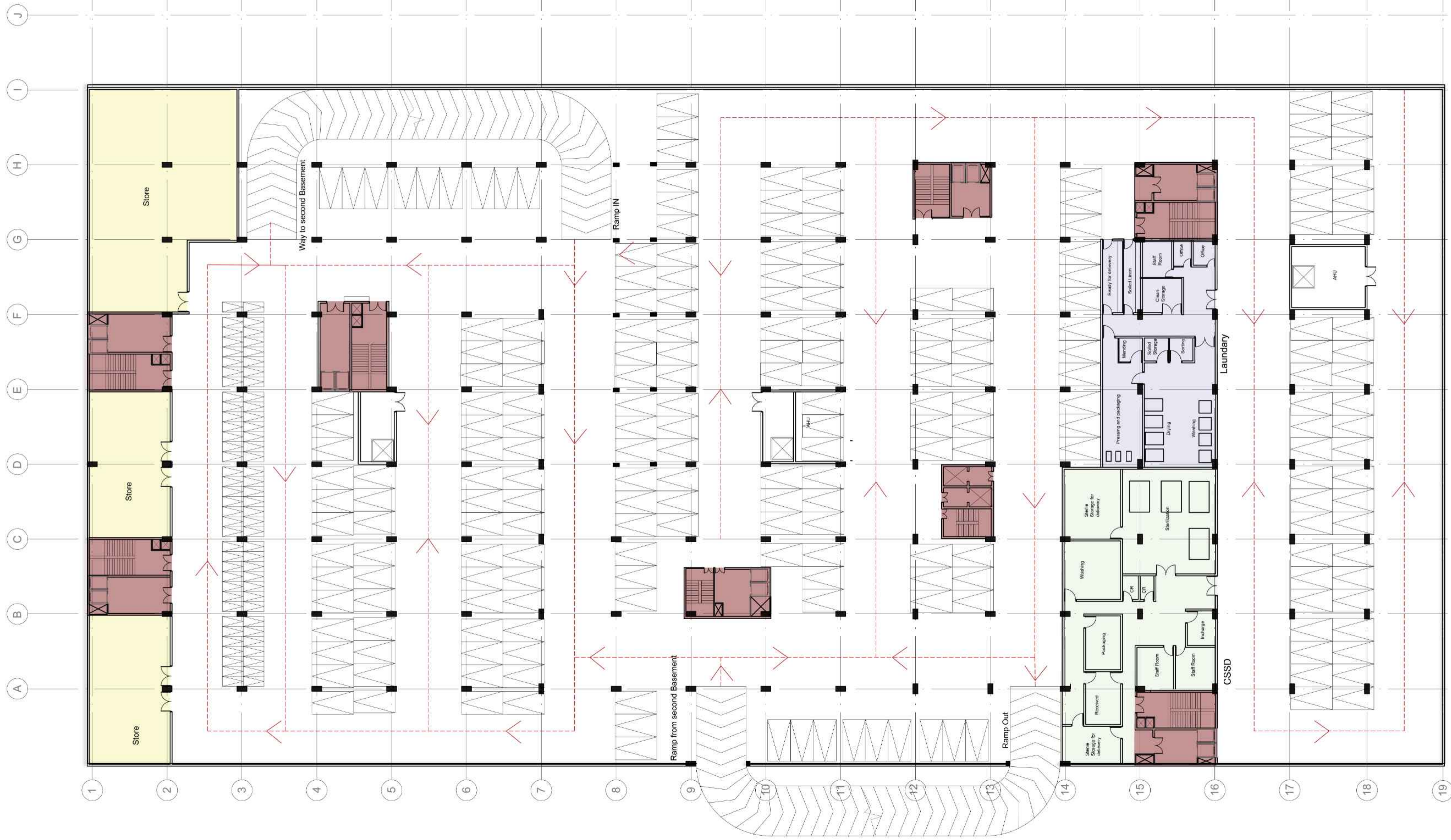
ARCHITECTURAL THESIS

12

500 BEDDED MULTISPECIALITY ESIC HOSPITAL, MANESAR
GROUND FLOOR PLAN

MANNAT
GCAD/21/116
SCALE (1:250)





CSSD	LAUNDRY
STORE	

LEGEND





 O.P.D	 KITCHEN	 GYNAE & OBS
 DIAGNOSIS	 MORTUARY	 PICU & NURSERY

LEGEND

RESIDENTIAL



J
I
H
G
F
E
D
C
B
A



RESIDENTIAL

ICU O.T. DAYCARE
 DIALYSIS
LEGEND

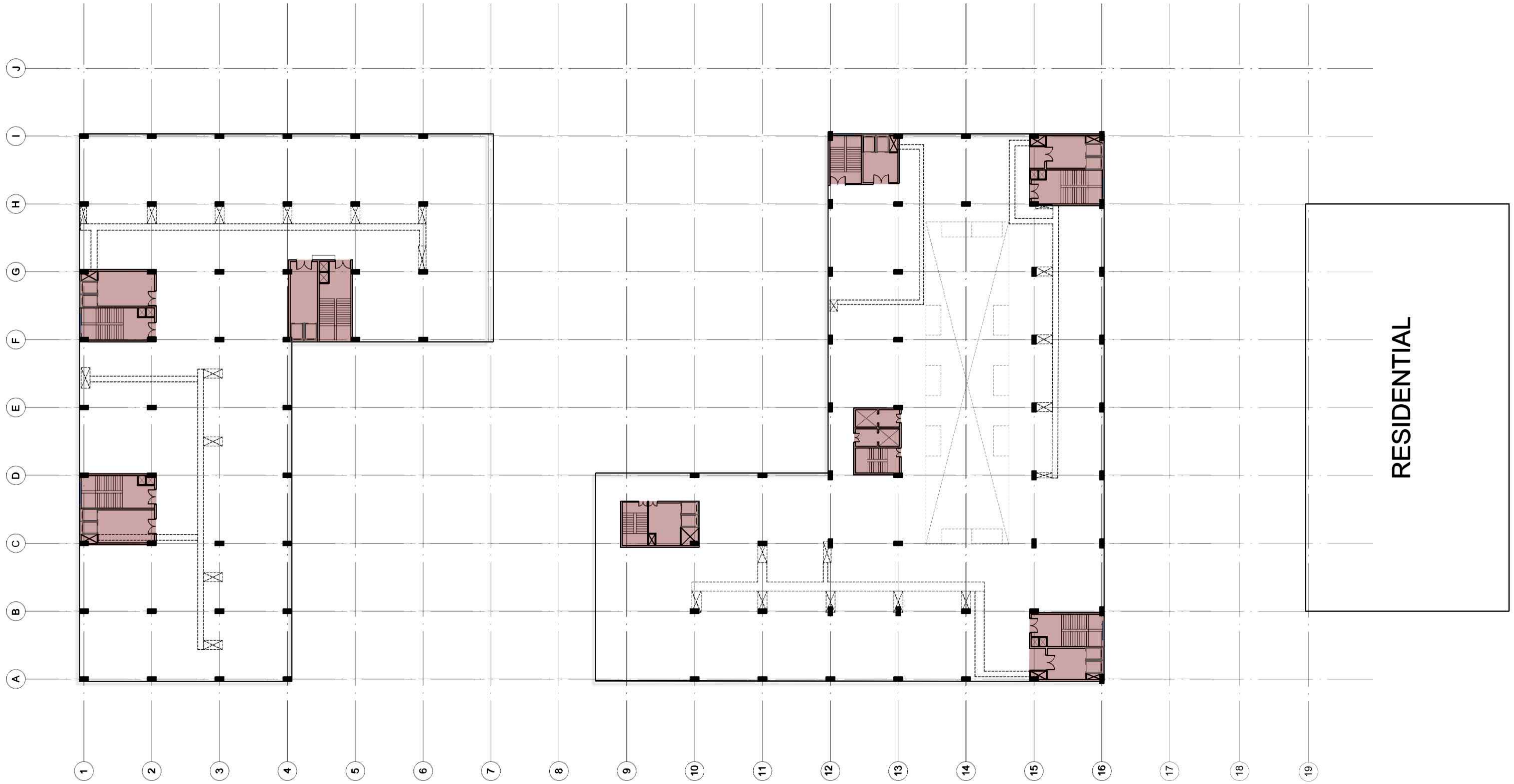


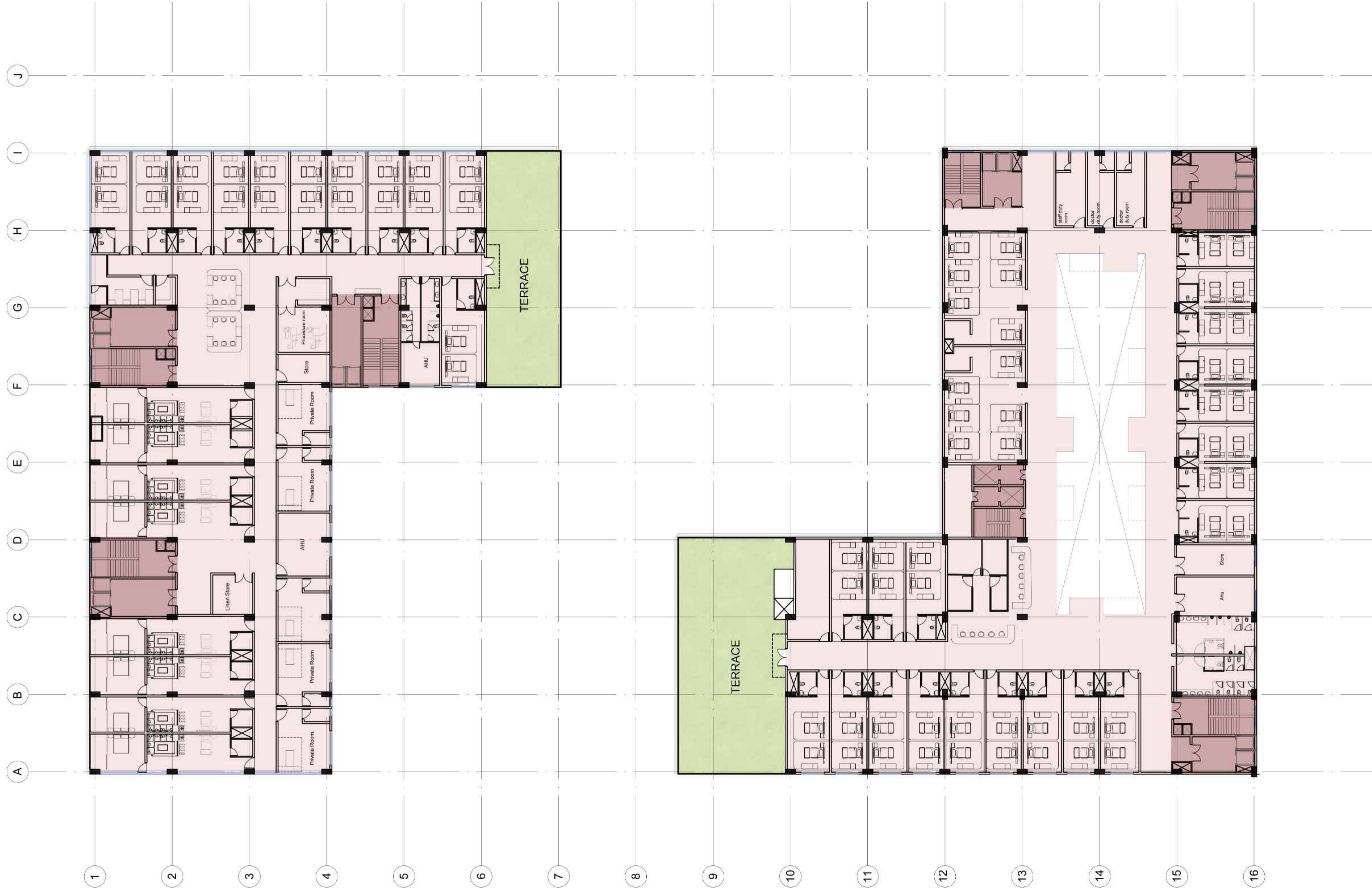


RESIDENTIAL

IPD
LEGEND



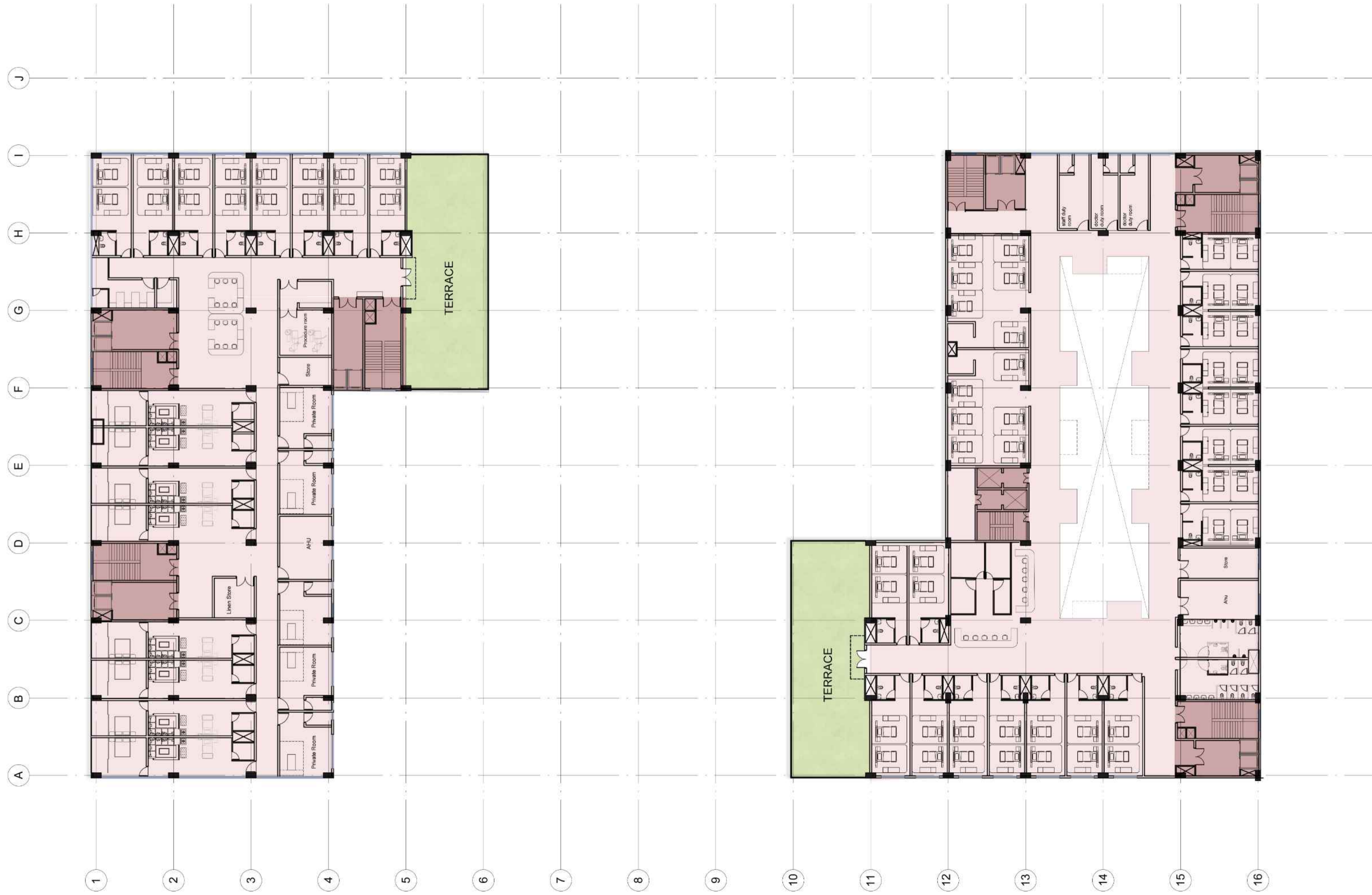




RESIDENTIAL

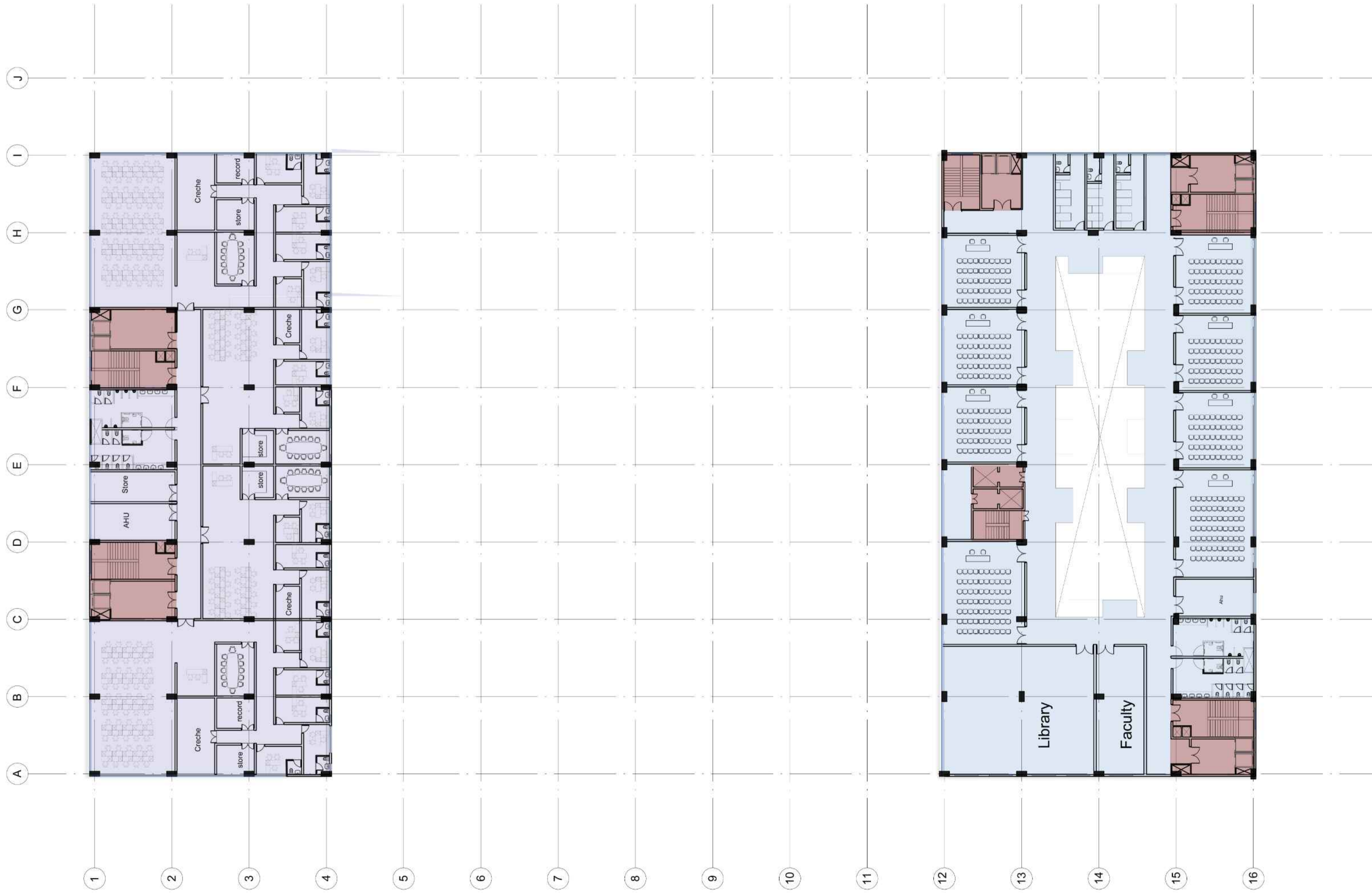
IPD
LEGEND





IPD
LEGEND

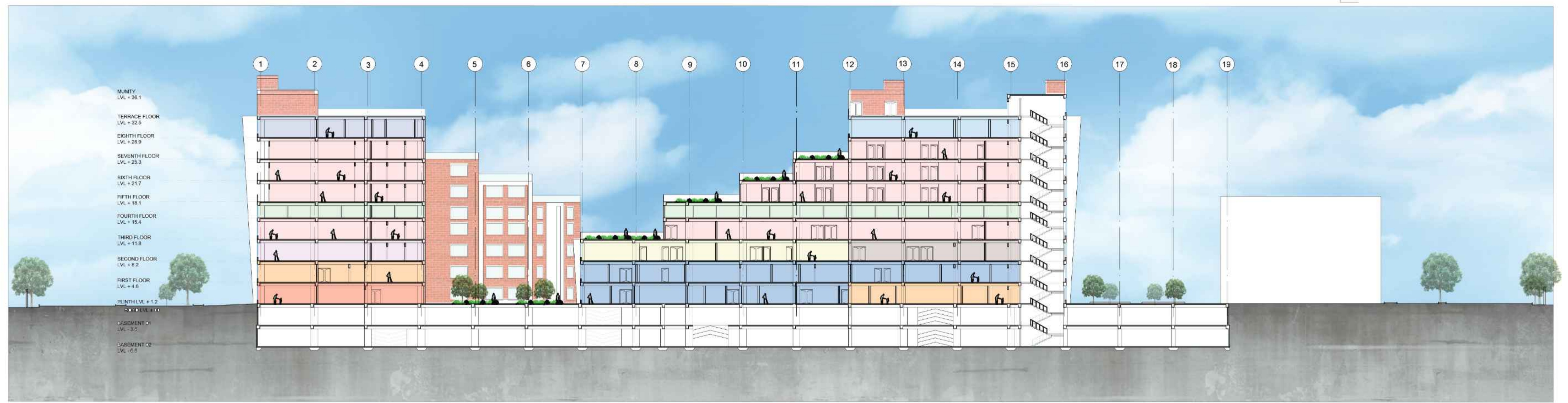
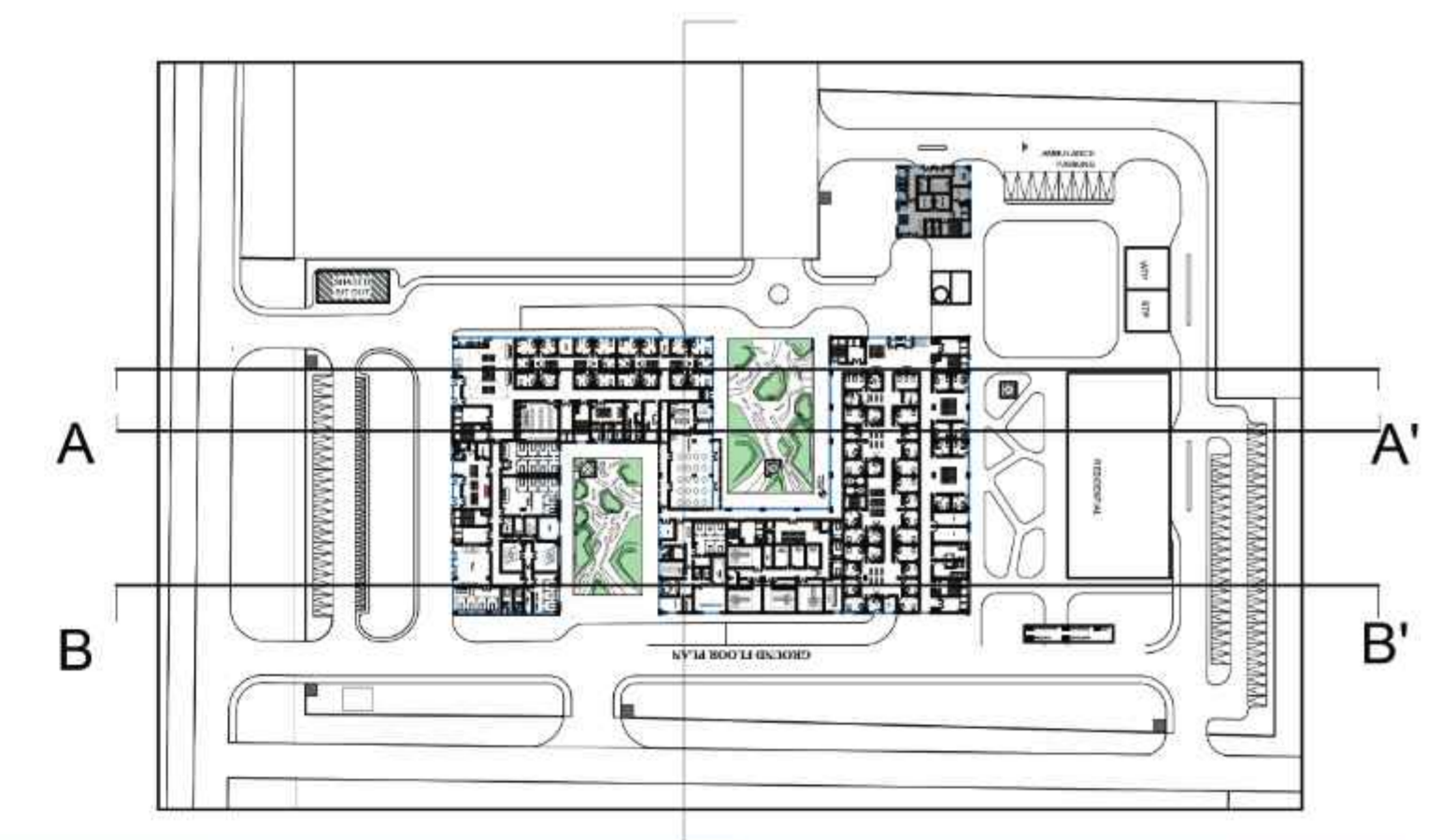




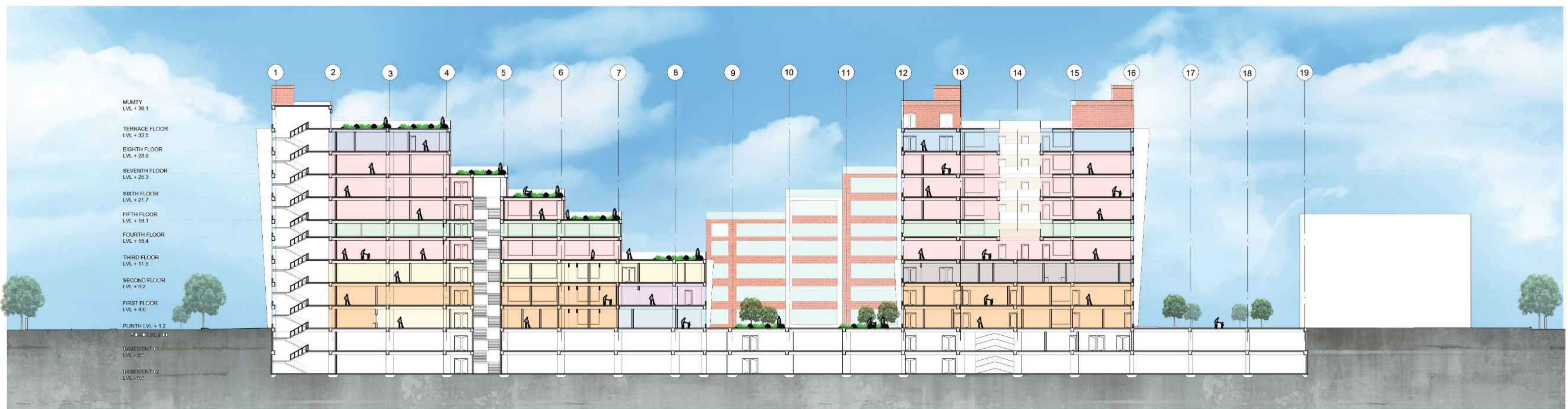
Admin Area
 DNB classes

LEGEND





SECTION AA'

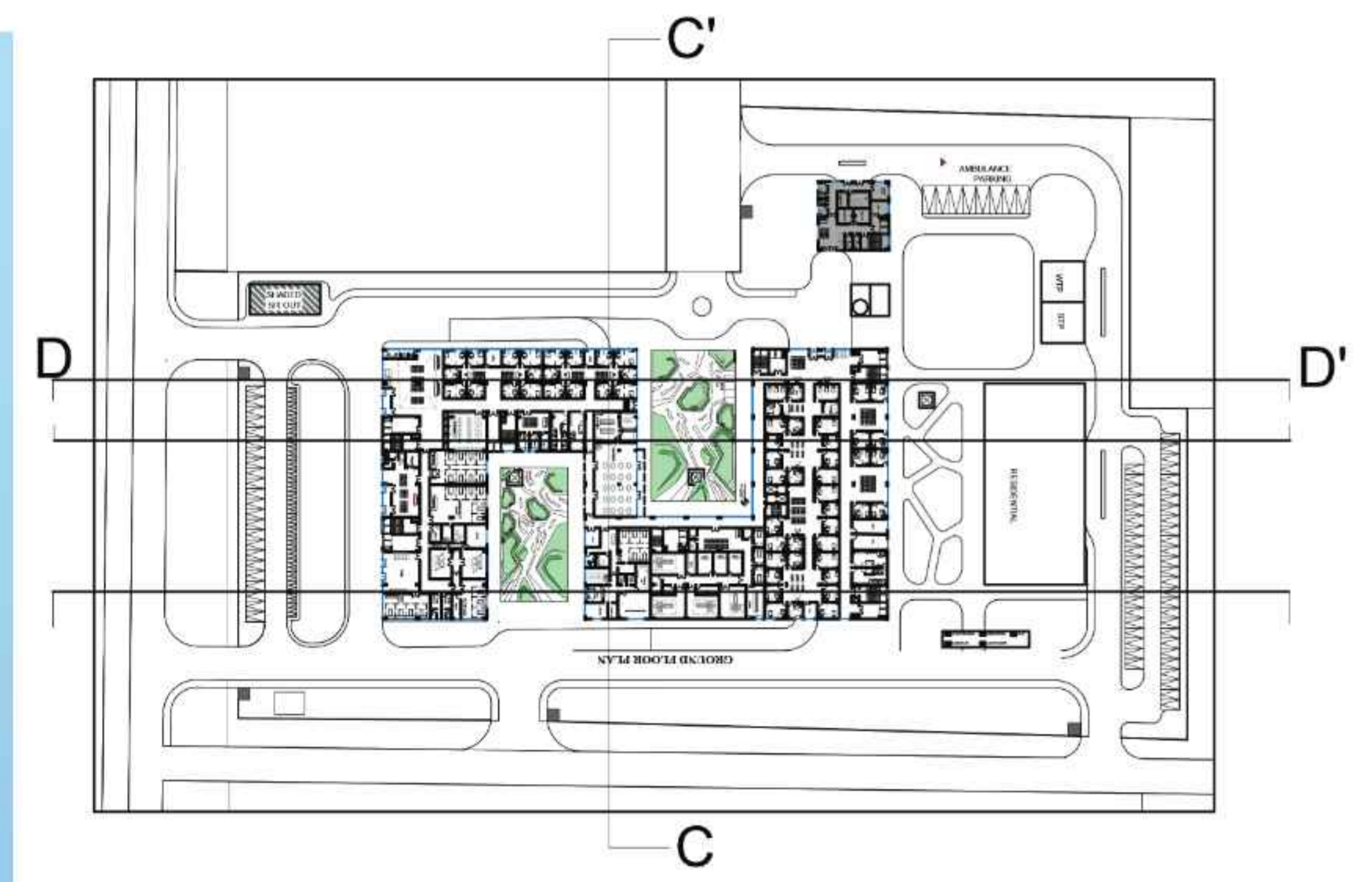
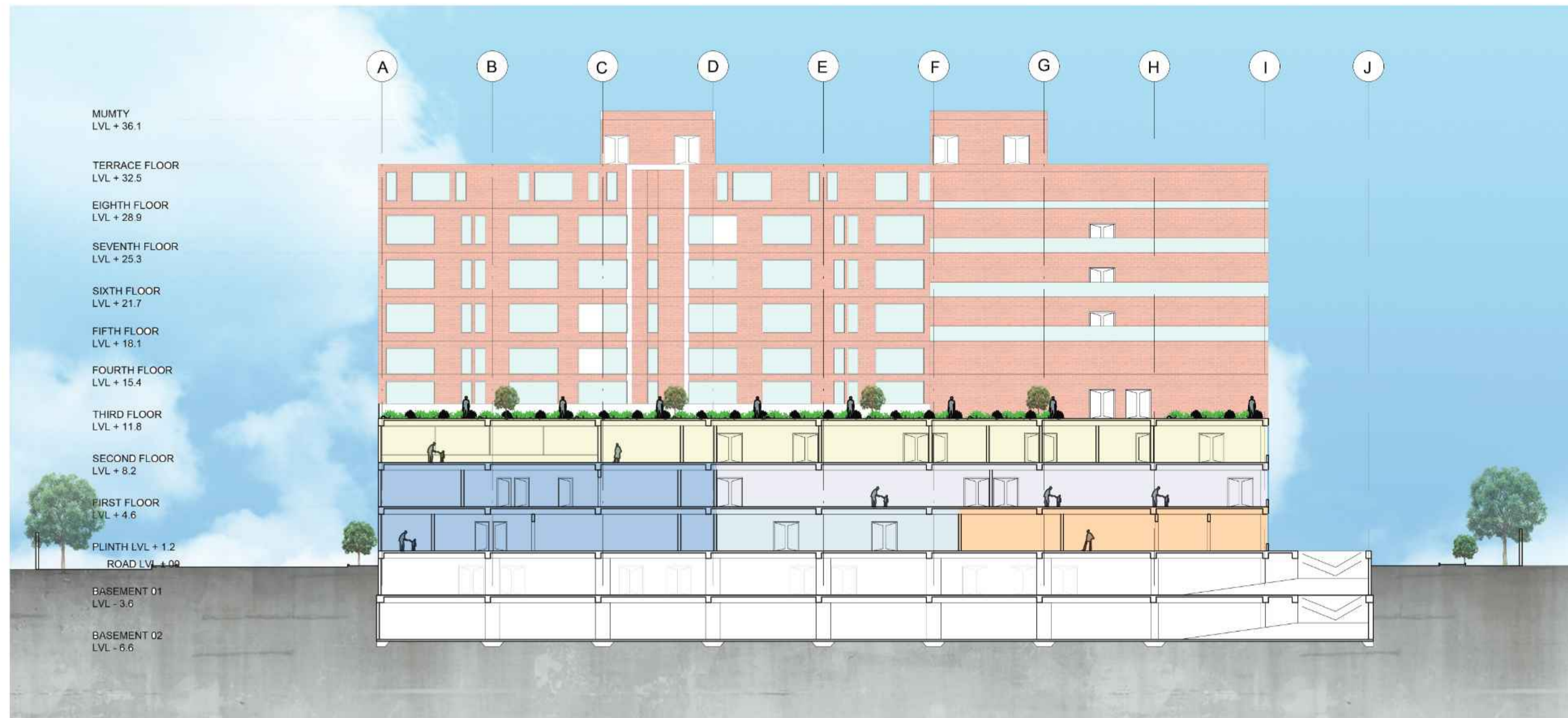


SECTION BB'

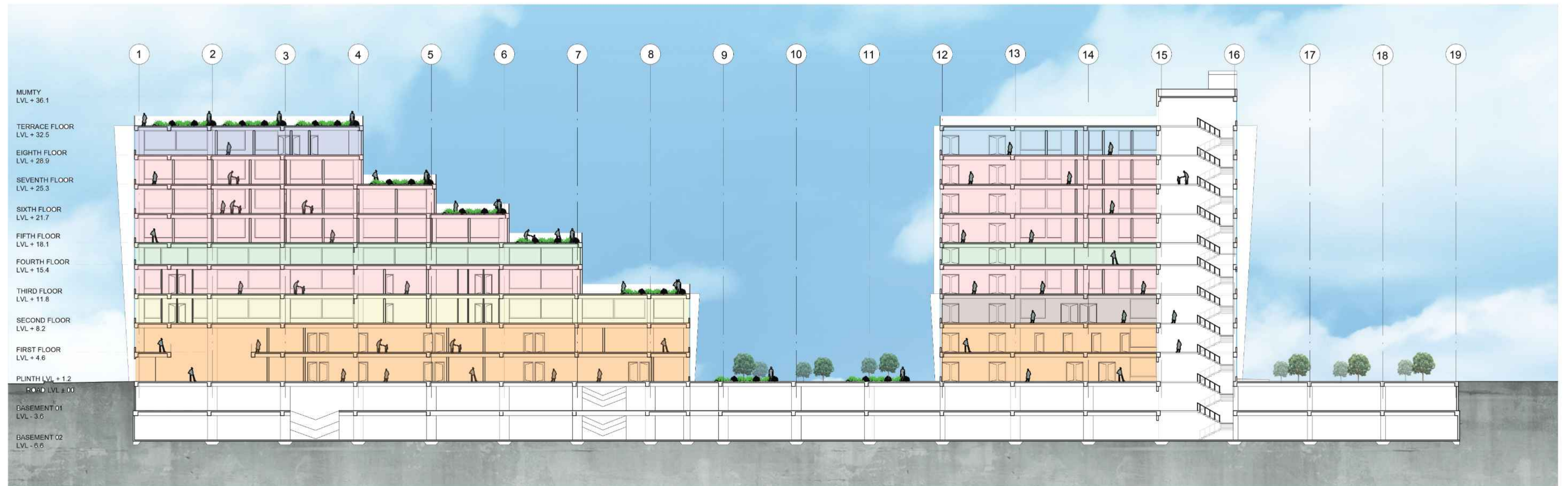
ICU	O.T.	DAYCARE	EMERGENCY	DIAGNOSIS
DIALYSIS	IPD	CANTEEN	OPD	PHARMACY



ARCHITECTURAL THESIS



SECTION CC'



SECTION DD'

ICU	O.T.	DAYCARE	EMERGENCY	DIAGNOSIS
DIALYSIS	IPD	CANTEEN	OPD	PHARMACY

MUMTY
LVL + 36.1

TERRACE FLOOR
LVL + 32.5

EIGHTH FLOOR
LVL + 28.9

SEVENTH FLOOR
LVL + 25.3

SIXTH FLOOR
LVL + 21.7

FIFTH FLOOR
LVL + 18.1

FOURTH FLOOR
LVL + 15.4

THIRD FLOOR
LVL + 11.8

SECOND FLOOR
LVL + 8.2

FIRST FLOOR
LVL + 4.6

PLINTH LVL + 1.2

ROAD LVL ± 00



MUMTY
LVL + 36.1

TERRACE FLOOR
LVL + 32.5

EIGHTH FLOOR
LVL + 28.9

SEVENTH FLOOR
LVL + 25.3

SIXTH FLOOR
LVL + 21.7

FIFTH FLOOR
LVL + 18.1

FOURTH FLOOR
LVL + 15.4

THIRD FLOOR
LVL + 11.8

SECOND FLOOR
LVL + 8.2

FIRST FLOOR
LVL + 4.6

PLINTH LVL + 1.2

ROAD LVL ± 00









