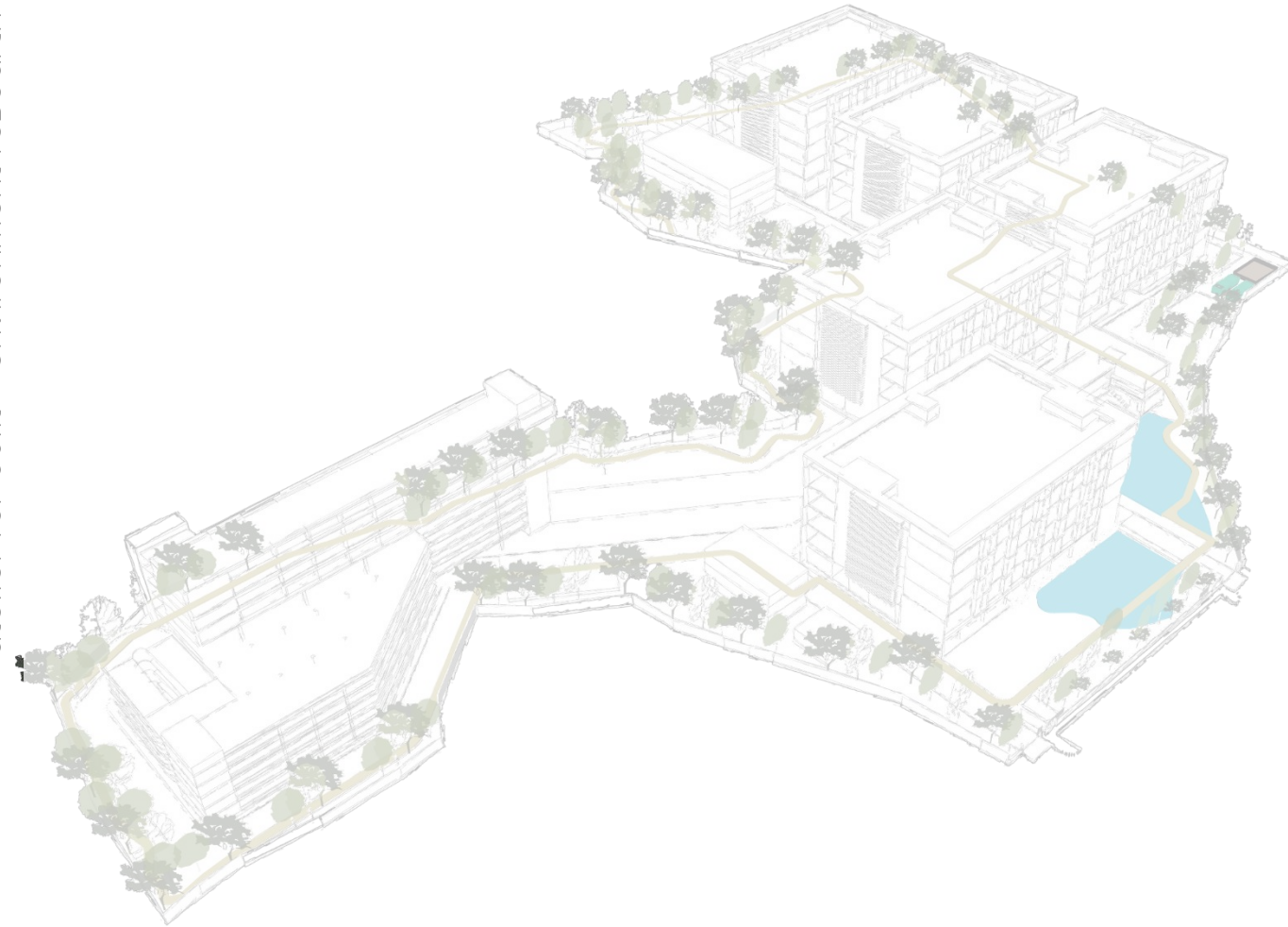


Biopolis Presentation

23rd January 2024

atelier for built - environment research & design



Preliminary Masterplan Presentation

Life-Science Campus outside India

A number of real-estate developers based in the USA are developing life-science campuses across United States and United Kingdom.

Healthpeak Properties

- Britannia Pointe Grand
- The Cove at Oyster Point

Breakthrough Properties

- The 105, Boston
- Fenway Center, Boston

Longfellow

- Avia Labs, Millbrae
- Bioterra, San Diego

Biomed Realty

- Gateway of Pacific III
- Babraham B960



Healthpeak Properties- Britannia Pointe Grande



- Site Area- **14.4 acres** with eleven buildings.
- Built-up area: **300000 sq ft**
- Consists of state of art **fitness center and indoor/outdoor restaurants.**
- A typical floor plate consists of- **40% Office spaces, 30% Lab spaces and 20 % Vivarium** with remaining for circulation and services.
- **Surface Parking** available.

Learning:

- Sites with a large area can have zones for different functions.
- A typical floor plate to have three main functions- office, lab and vivarium.
- Parking spaces to have a separate zone.

Healthpeak Properties- The Cove at Oyster Point



- Site Area- **6 acres** with five buildings.
- Built-up area-**1000000 sq ft**
- Equipped with a **cafe, restaurant and lounge and a full amenity court with basketball and other sports courts.**
- A typical floor plate consists of- **50% Office spaces, 25% Lab spaces and 15% Vivarium** with remaining for circulation and services.
- **Surface Parking** available.

Learning:

- Sites with a large area can have zones for different functions.
- A typical floor plate to have three main functions- office, lab and vivarium.
- Parking spaces to have a separate zone.

Breakthrough Properties- Torrey View



- **10-acre campus** with three buildings and an amenity center
- Built-up area- **500000 sq ft.**
- To be equipped with a **Fitness space, meeting areas, all-hands conference facilities and dining venues.**
- **17400 - 46700 RSF floor plates**
- 1400 Parking spaces structure lies partially below amenities building.

Learning:

- Sites with a large area can have zones for different functions.
- Pivotal to have amenity spaces for the well-being and recreation of the employees and break their monotony.

Breakthrough Properties- The 105



- Site area- **1.2 acre**
- Built-up area- **263,500 sq ft.**
- To be equipped with **Café, fitness center, locker room with showers and indoor bicycle storage room, 50-people meeting room and Outdoor terrace** on the 2nd & 3rd floors.
- **42000 RSF Leasable laboratory floor plates**

Learning:

- Pivotal to have amenity spaces for the well-being and recreation of the employees and break their monotony.

Longfellow- Avia Labs	Longfellow- Bioterra	Biomed Realty- Gateway of Pacific III	Biomed Realty- Babraham B960
			
• Site area- 2.1 acre • Built-up area- 315000 sq ft • The project will feature an amenity center that includes a café, fitness center, conference rooms, outdoor terrace. • Typical lower floor plate to consist of 40% lab spaces, 30% offices, 20% amenity and wellness with remaining for circulation. • Upper floor plate to consist of 50% lab, 40% offices and remaining for circulation.	• Site Area- 4.1 acre • Built-up area-323000 sq ft. • The project will feature an amenity center that includes a café, fitness center, conference facilities and an exterior terrace. • Designed to have a LEED Gold with the building to be 100% electric.	• Site Area- 50.5 acre • Gateway of Pacific III Built-up area- 360000 sq ft. • Average floor plate size: 36000 sq ft. • The project will feature an amenity center that includes a restaurants and bars with a fitness center, meeting spaces and a conference hub. • Typical floor size consists of:- 50% offices, 30% labs and 20% for circulation and ancillary.	• Site Area- 50.5 acre, getting developed in phases. • Babraham B960 Built-up area-40000 sq ft • The project will feature an amenity center that includes a health and wellness centre, day care nursery and restaurants. • Typical floor plate consists of- 40% offices, 40% labs, 10% ancillary and remaining for circulation
<u>Learning:</u> •Lower floors to consist of three functions with amenity and wellness as the third function with office and labs. •Upper floors to have two functions- Office and labs.	<u>Learning:</u> •Pivotal to have amenity spaces for the well-being and recreation of the employees and break their monotony.	<u>Learning:</u> •A typical floor plate to consist of two functions- office and labs with considerable space left for circulation. •Important to include amenities for the wellness of the employees.	<u>Learning:</u> •A typical floor plate to consist of two functions- office and labs •To also consist of Amenity block to consist of recreational activities for the wellness of employees.

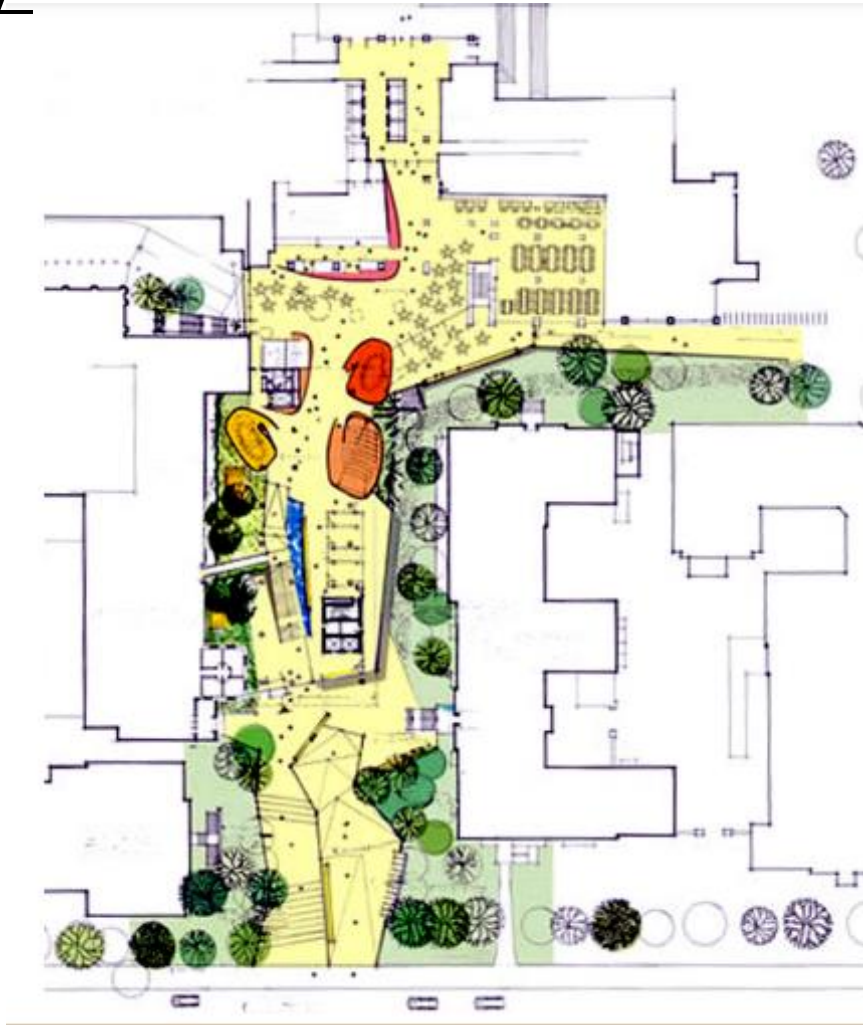
Case Study for Ground Level Studies-

Donnelly Centre for Cellular and Biomolecular Research,
Toronto, Canada.

- **Architect:** Behnisch Architekten, Stuttgart, 2005.
- **Size:** 20750 sq m (5 acres)
- It is a twelve storey building consisting of a service floor in the middle and it is elevated above a public concourse.
- The concourse, housing offices, seminar facilities and a faculty cafeteria are stretched from the external street to the interior of the building.
- The architectural language of the lower level has been deliberately made contrasting than that of the overlying building volume.

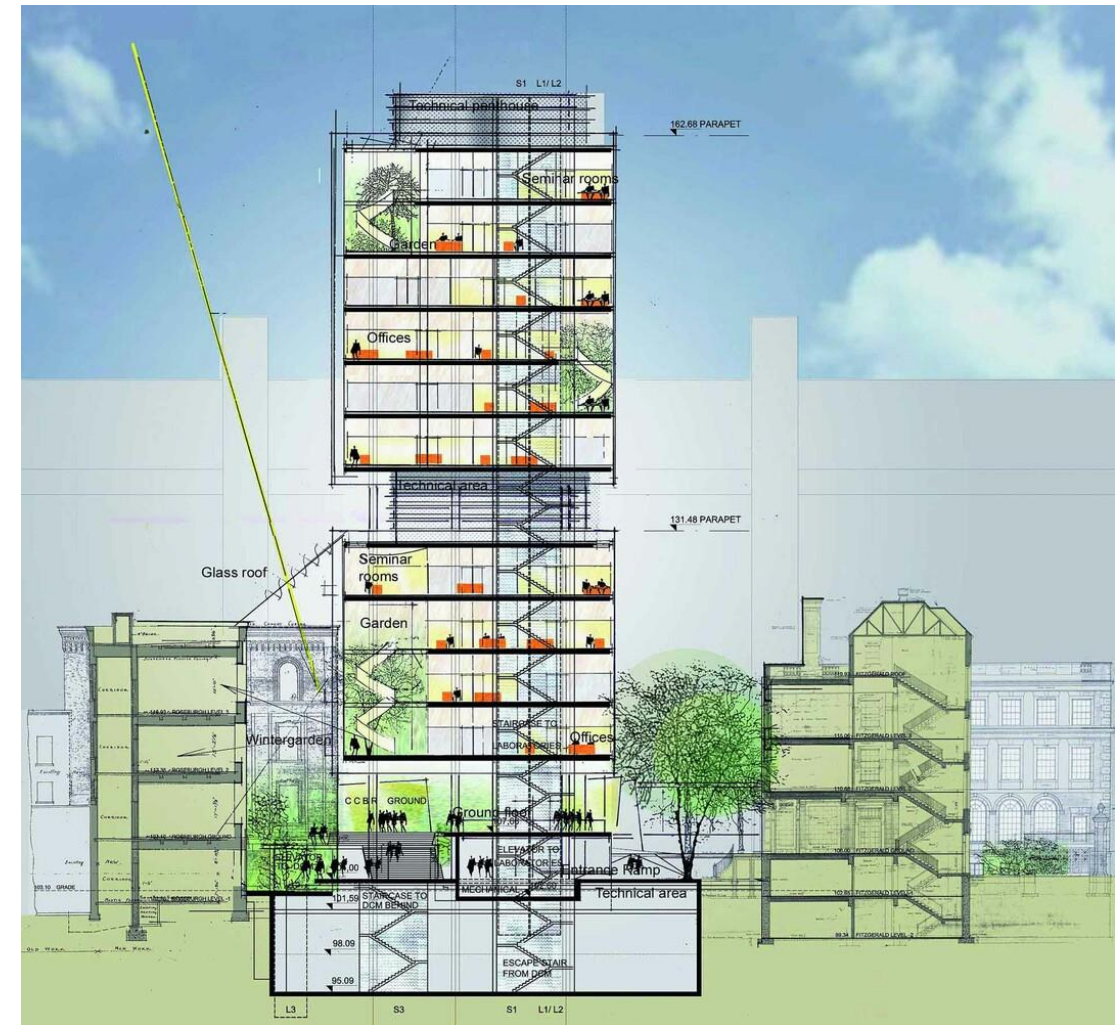


Case Study-



Ground level plan-

The naturally ventilated atrium is a focal area with gardens drawing people into the center of the complex. Stairs provide direct interdepartmental connections between floor levels and allow the garden to be viewed or experienced from quite different perspectives.



Building section-

In the upper levels, single and double story garden spaces characterize the layout, providing alternative workstations to the individual workspaces with glass facades and allowing natural light to seep in.

Ground level as a Collab space: Avia Labs



Avia Labs

Ground floor to act as a lobby with cafeterias and offices. Entrance to the complex through a plaza with green pods and seating spaces.

Ground level as a Collab space: Bioterra



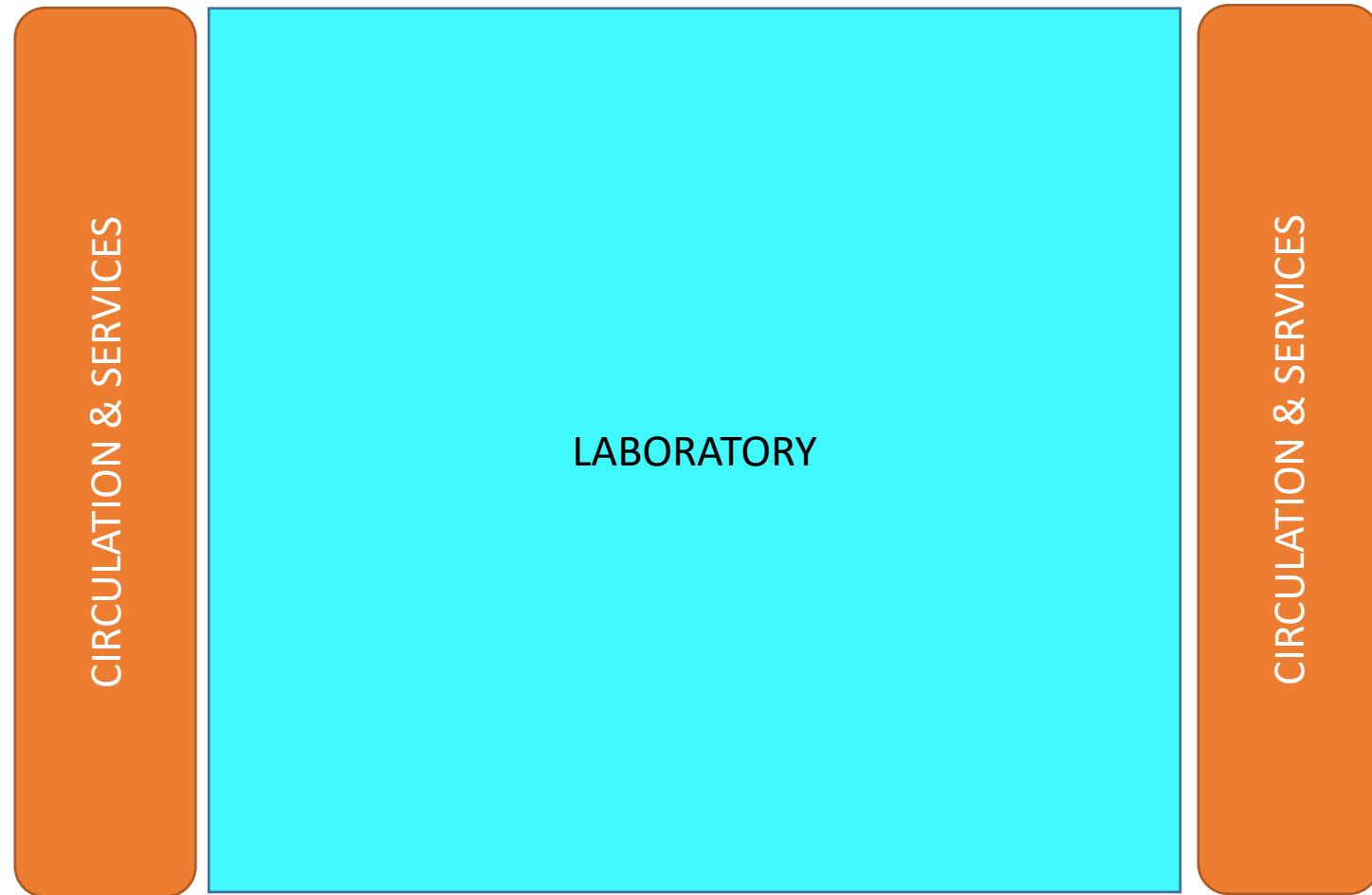
Bioterra

Ground floor to act as a lobby consisting of offices. Entrance to the complex through a plaza with seating spaces and lush greens.



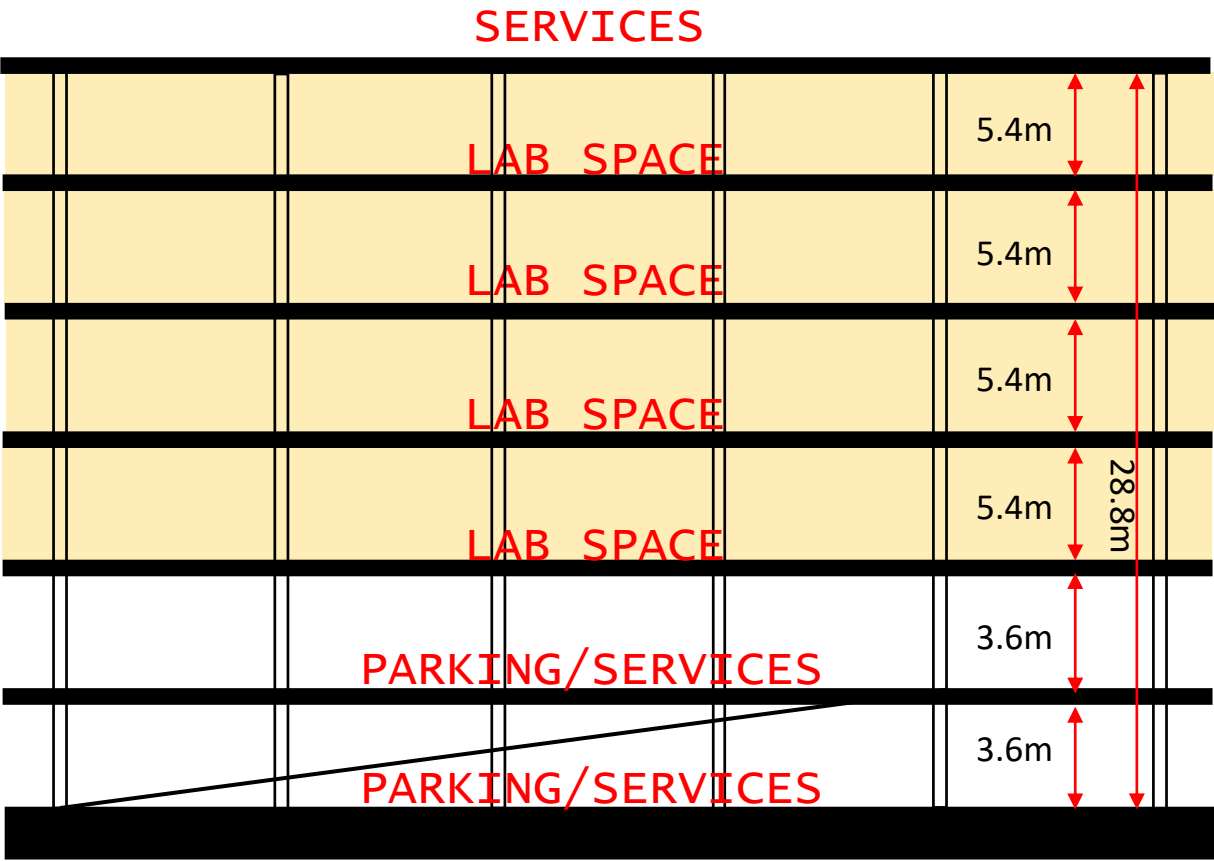
TYPICAL BLOCKS

B I O P O L I S



CONCEPTUAL SECTION

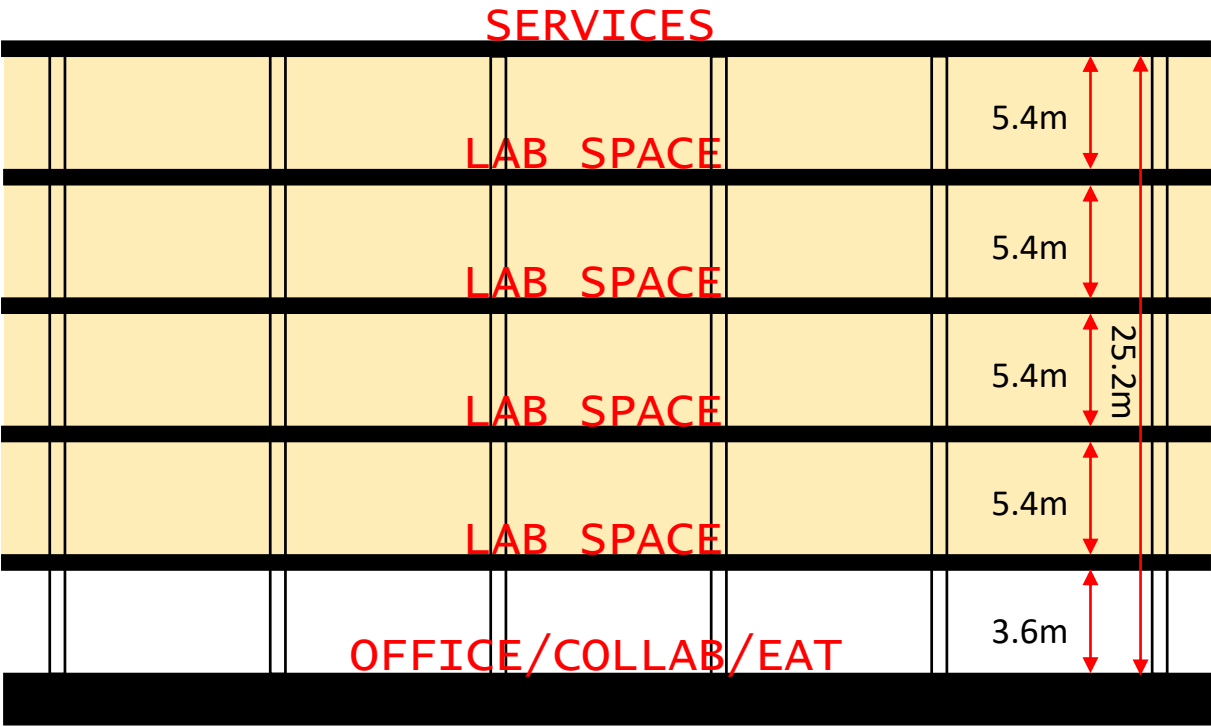
Option 1



2 Stilt (Parking & Services) Approx. 50,000 Sq.ft
4 Floors (Labs) – Approx. 100,000 Sq.ft
Services on Terrace

Total Built-up – 150,000 Sq.ft
60.6m x 40.6m

Option 2



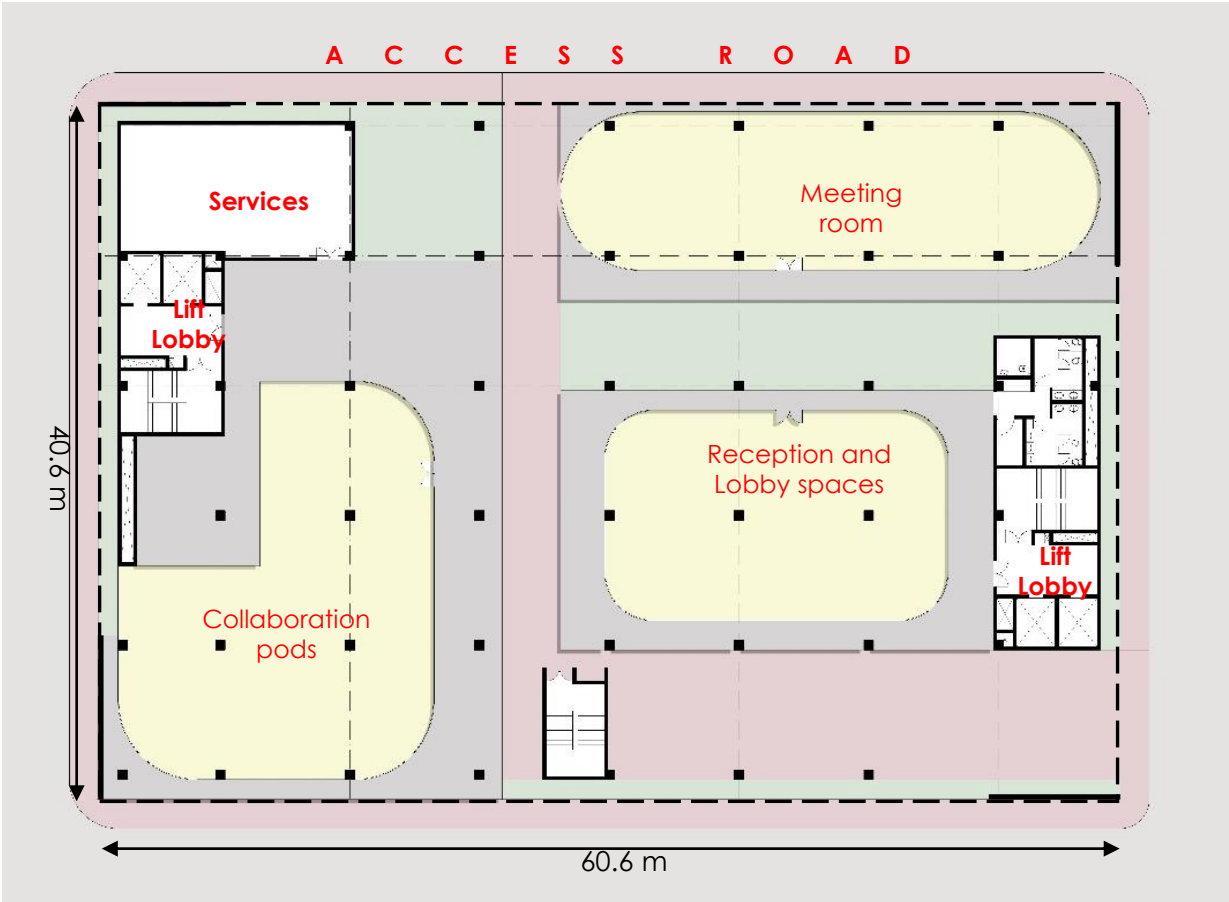
1 Stilt (Offices & Collab.) Approx. 25,000 Sq.ft
4 Floors (Labs) – Approx. 100,000 Sq.ft
Services on Terrace

Total Built-up – 125,000 Sq.ft
60.6m x 40.6m

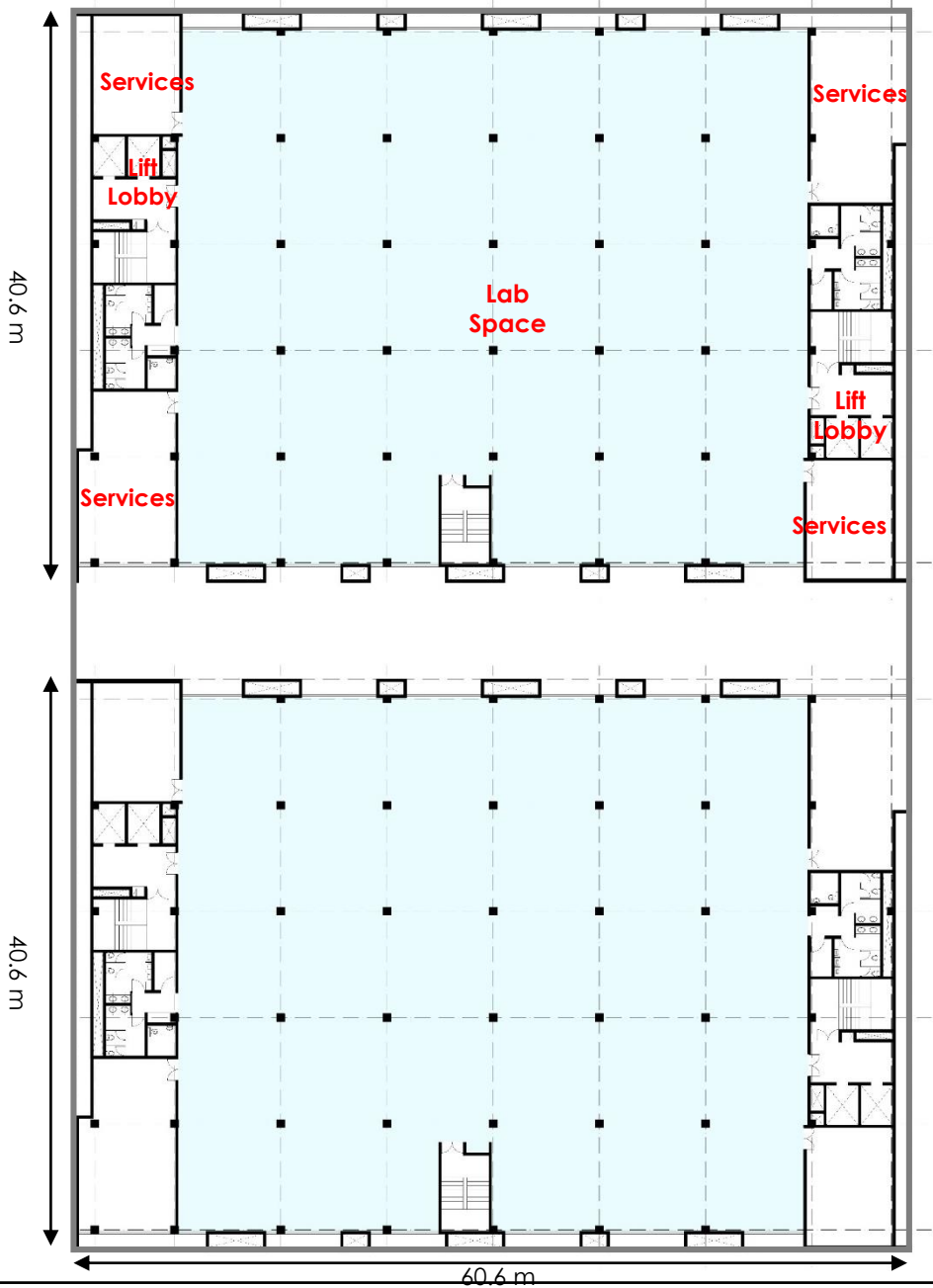
Option 1



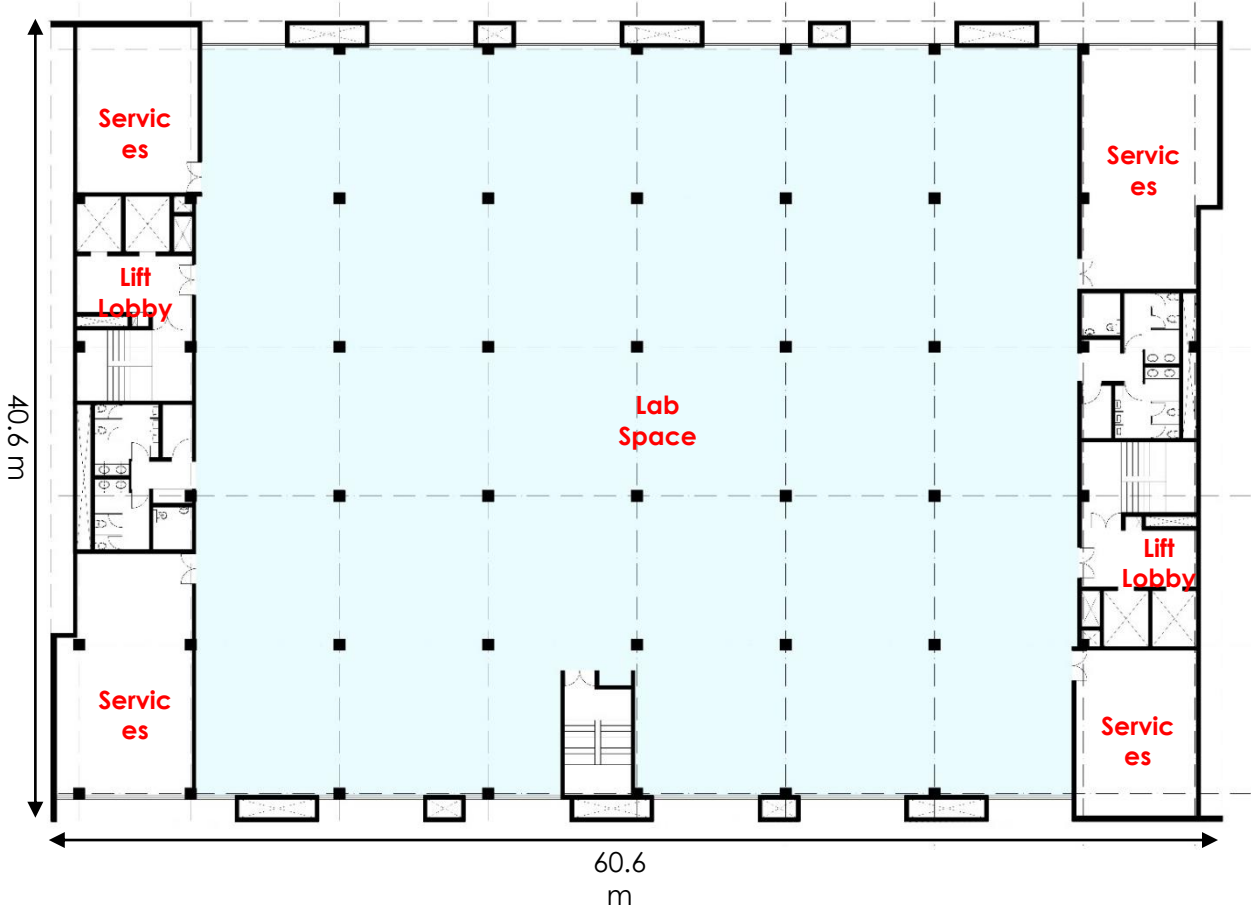
Option 2

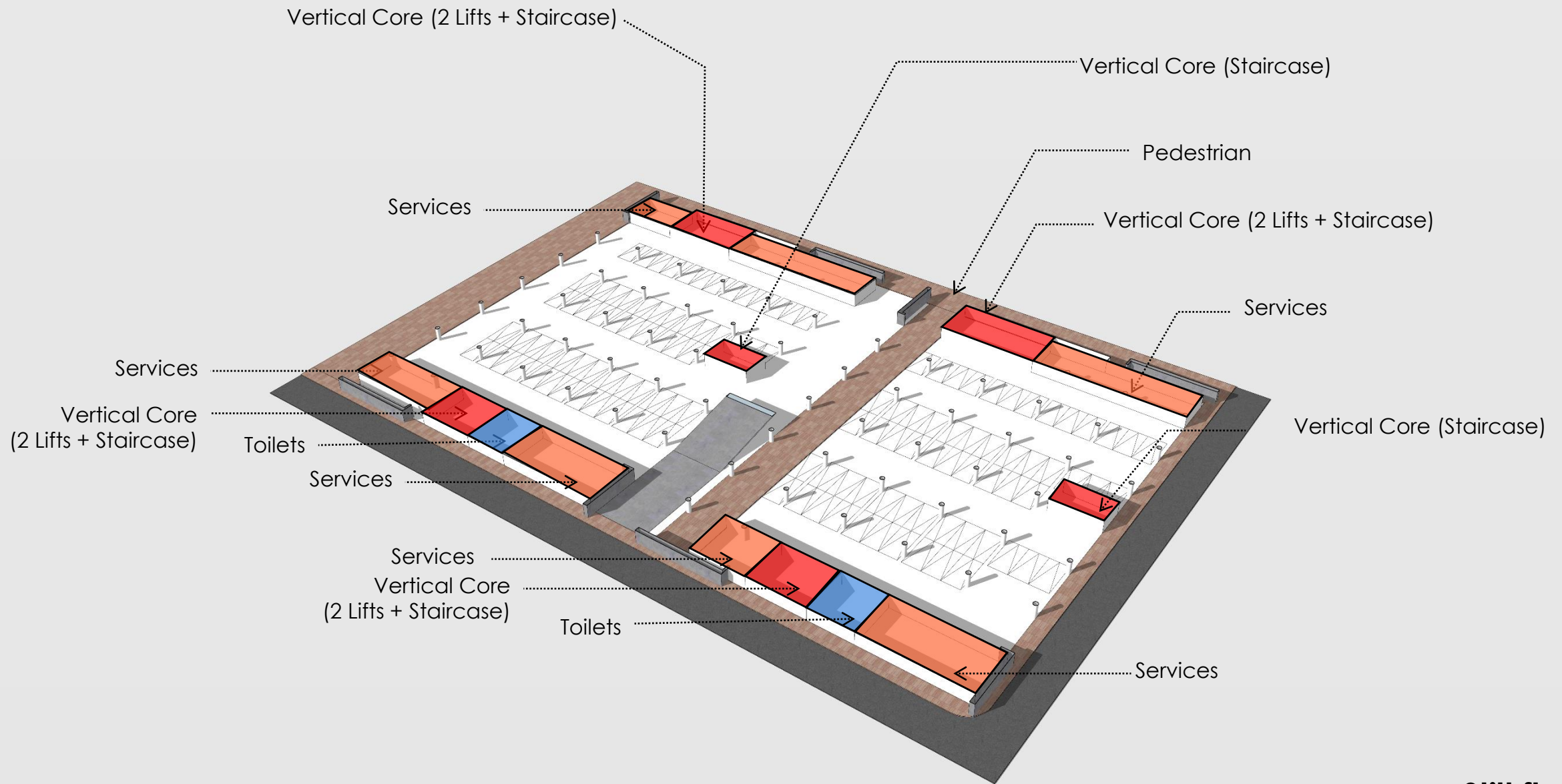


Option 1

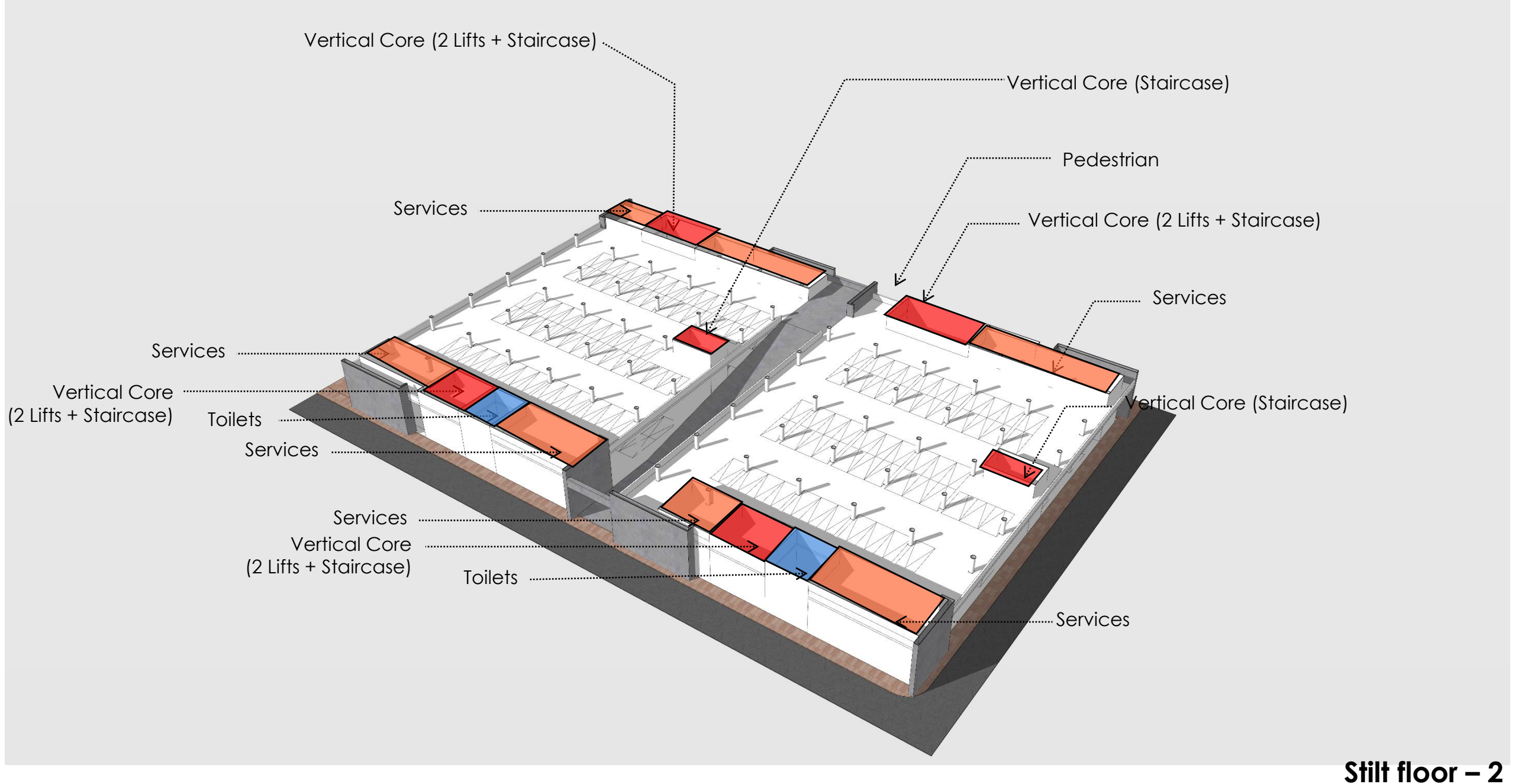


Option 2

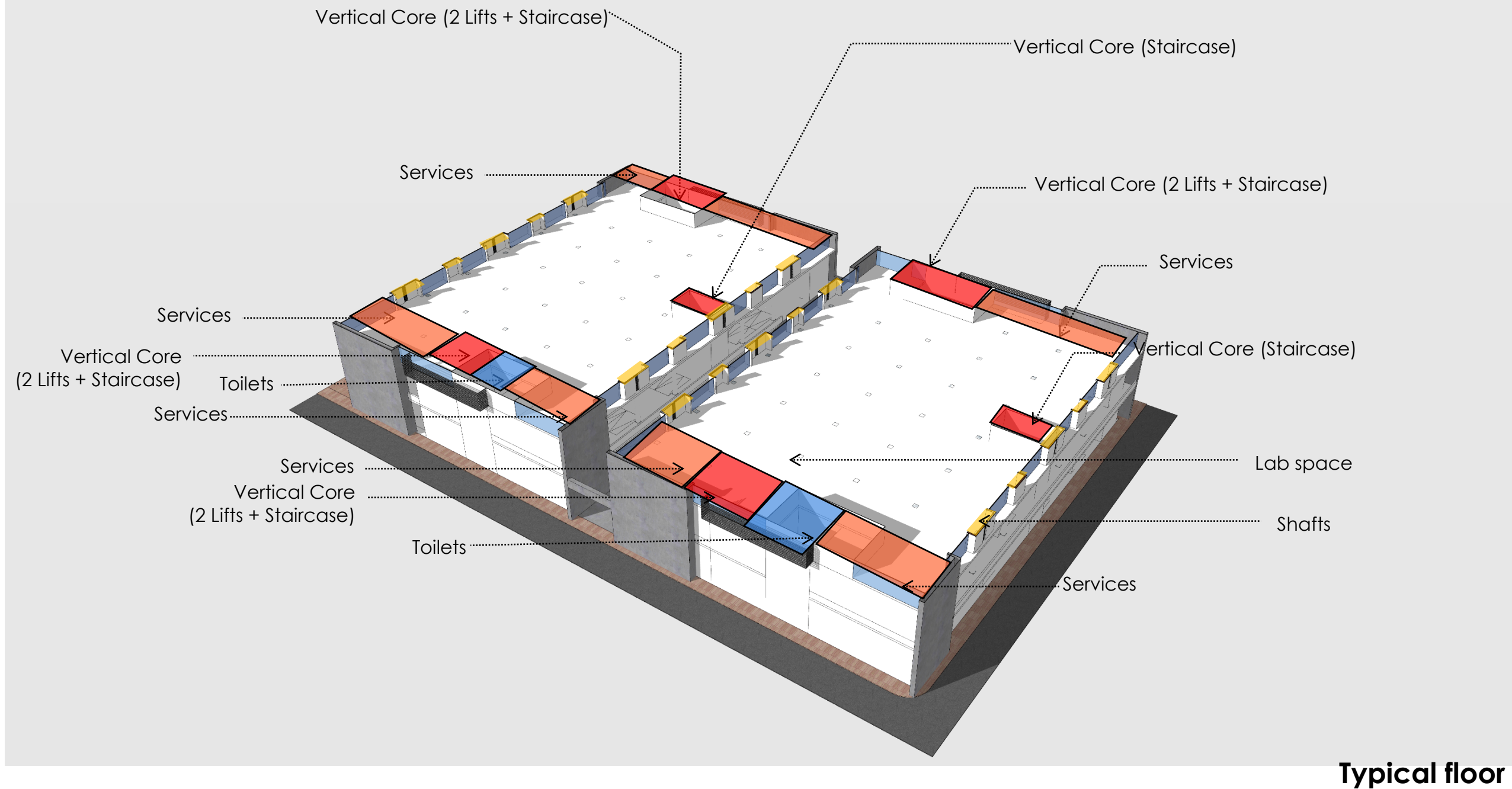




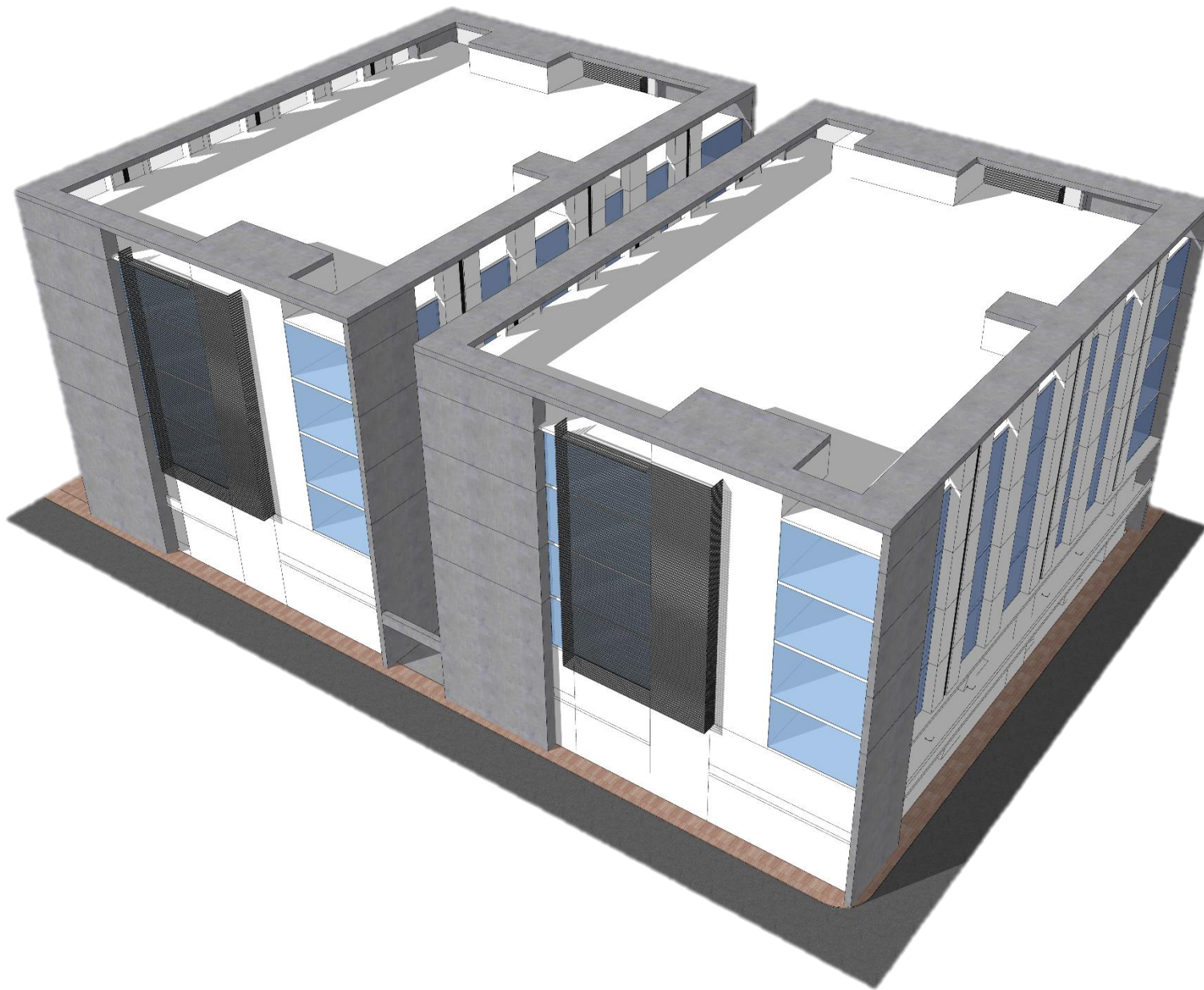
Stilt floor - 1



Stilt floor – 2



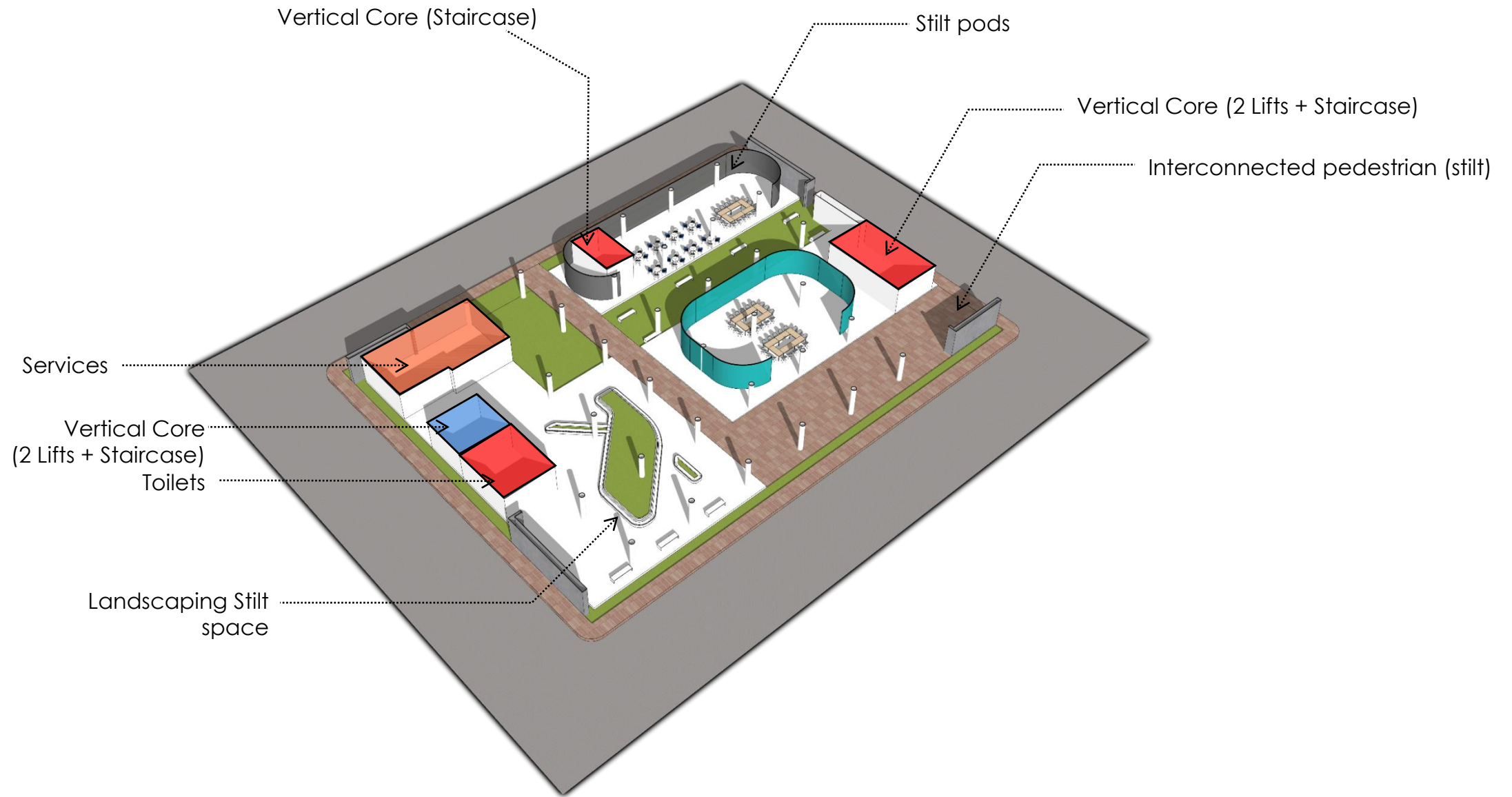
Typical floor



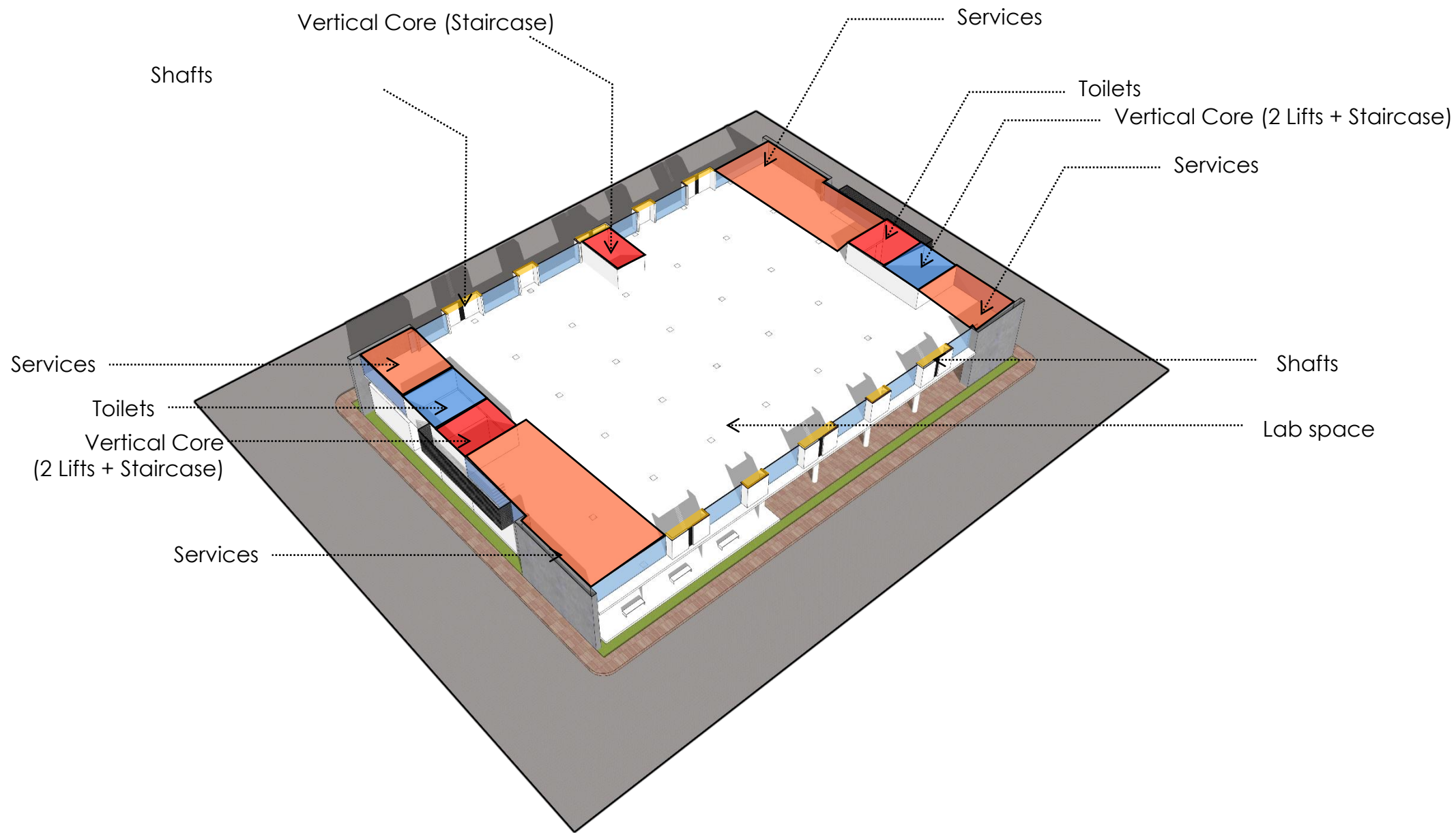
Aerial view

Option – 1

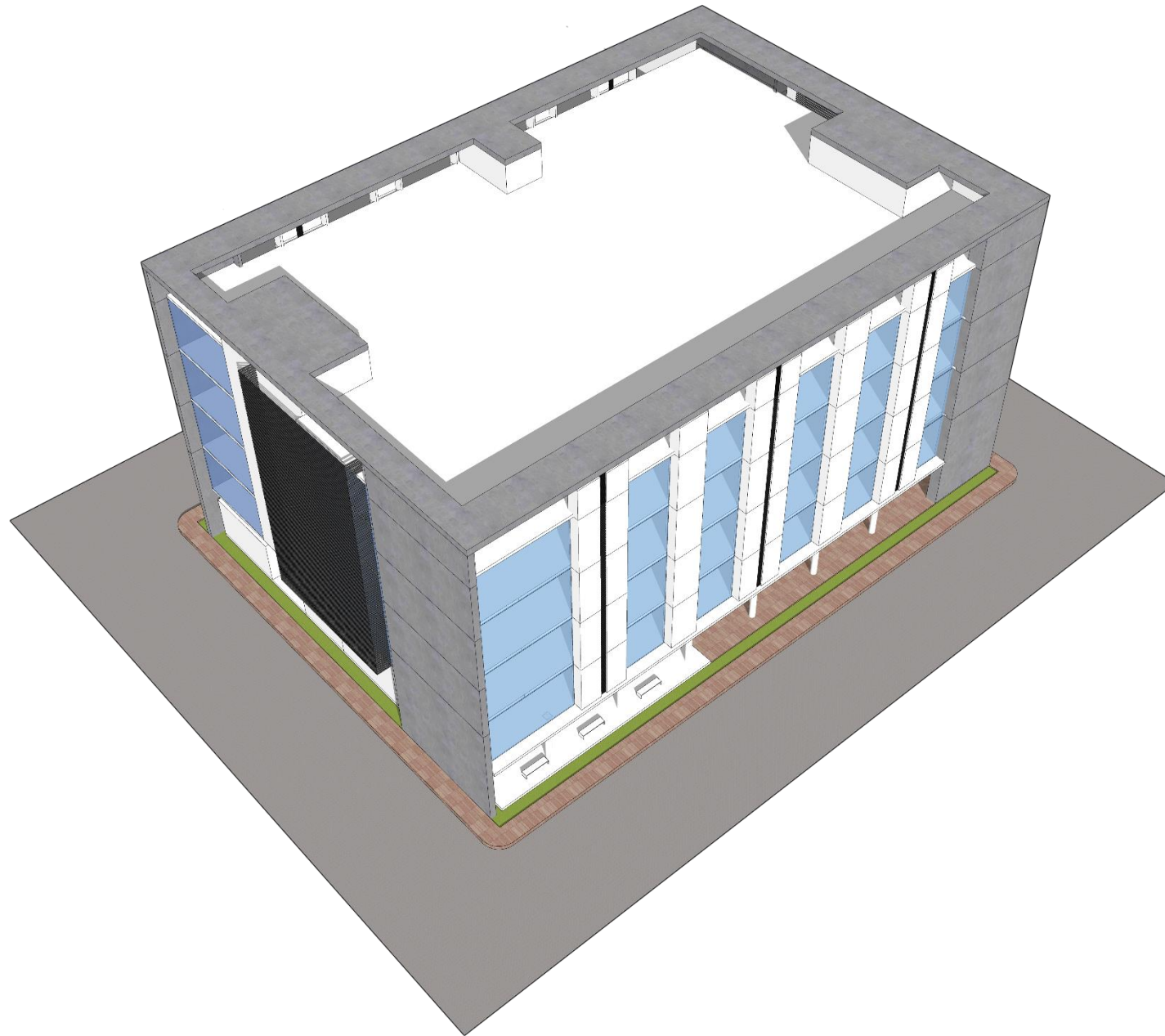
B I O P O L I S



Ground floor



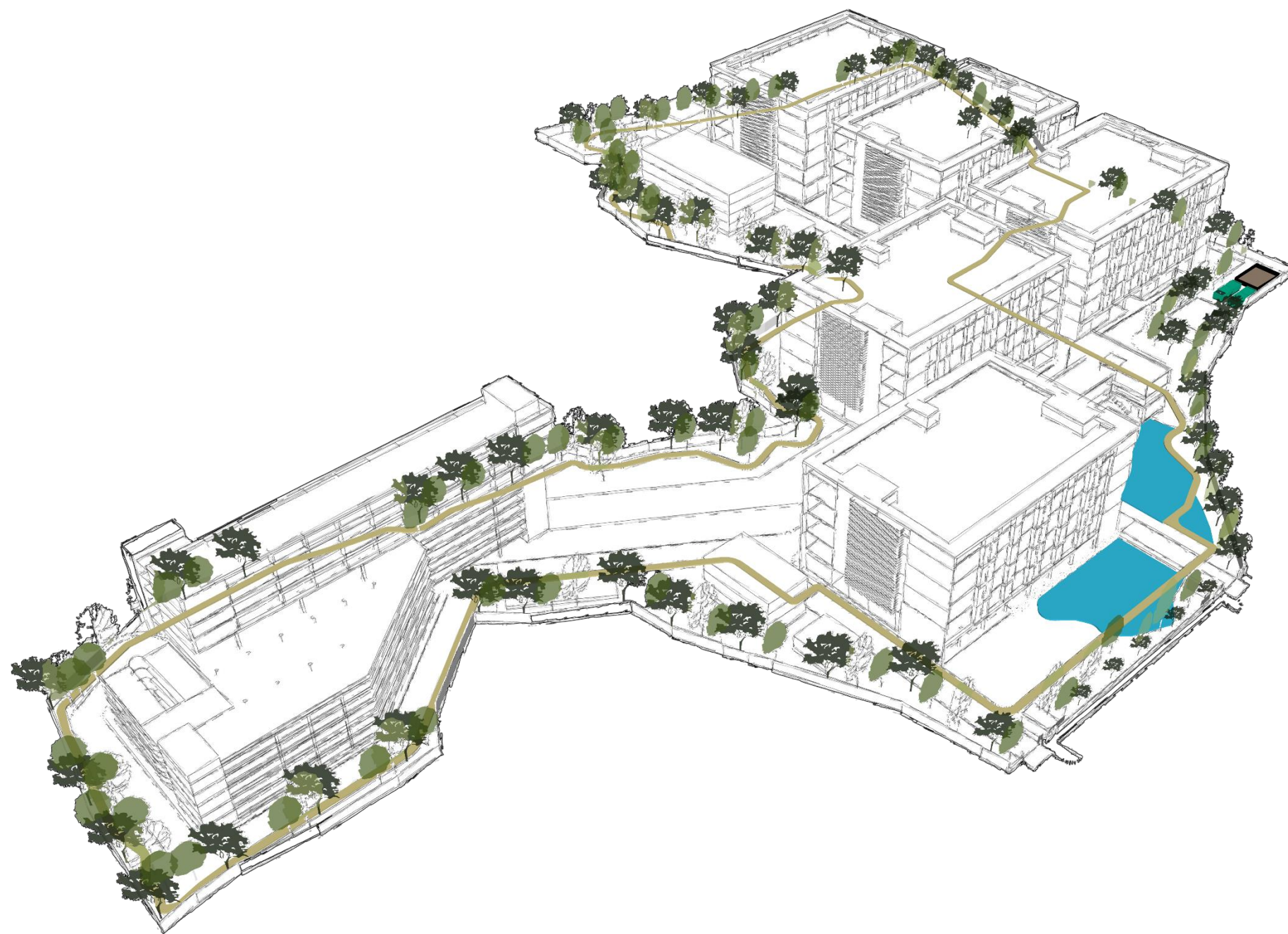
Typical floor



Aerial view

Option – 2

B I O P O L I S



MASTER PLAN

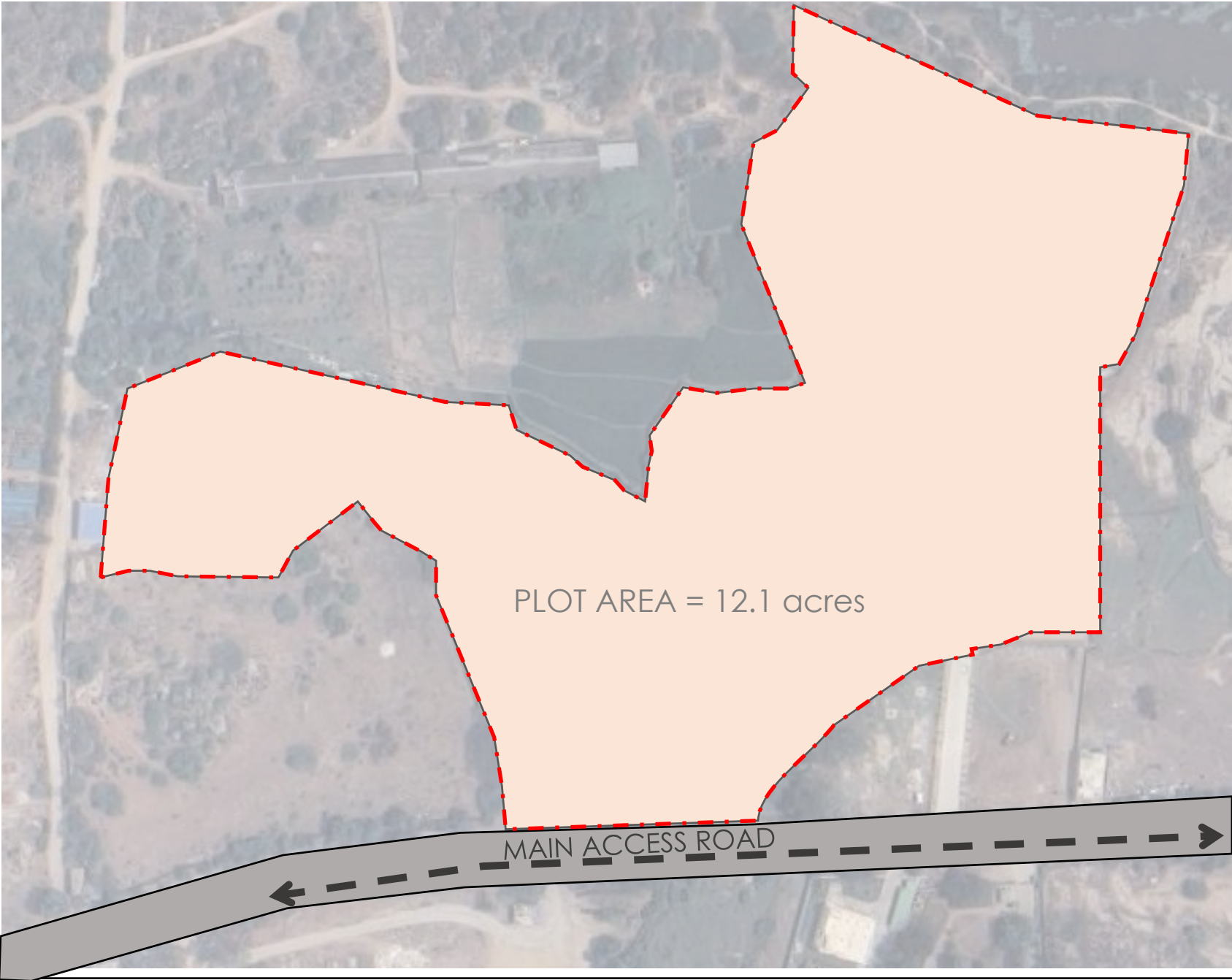
B I O P O L I S

MASTER PLAN

Option 1

DESIGN DEMONSTRATION
DIAGRAM

BIOPOLIS



PLOT AREA = 12.1 acres

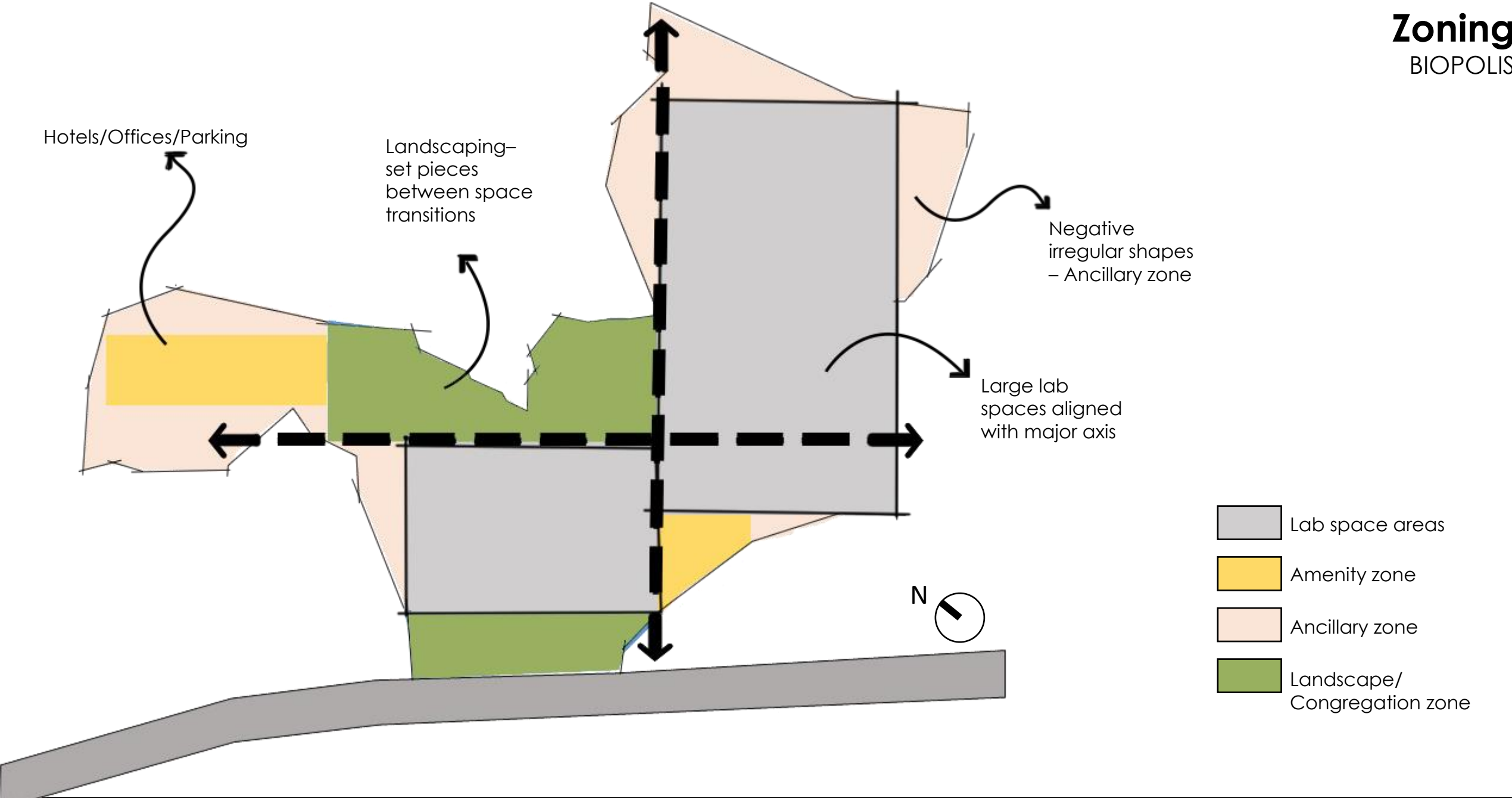
MAIN ACCESS ROAD



B I O P O L I S

Zoning

BIOPOLIS



B I O P O L I S

- Lab space areas
- Amenity zone
- Ancillary zone
- Landscape/Congregation zone

Ground floor plan

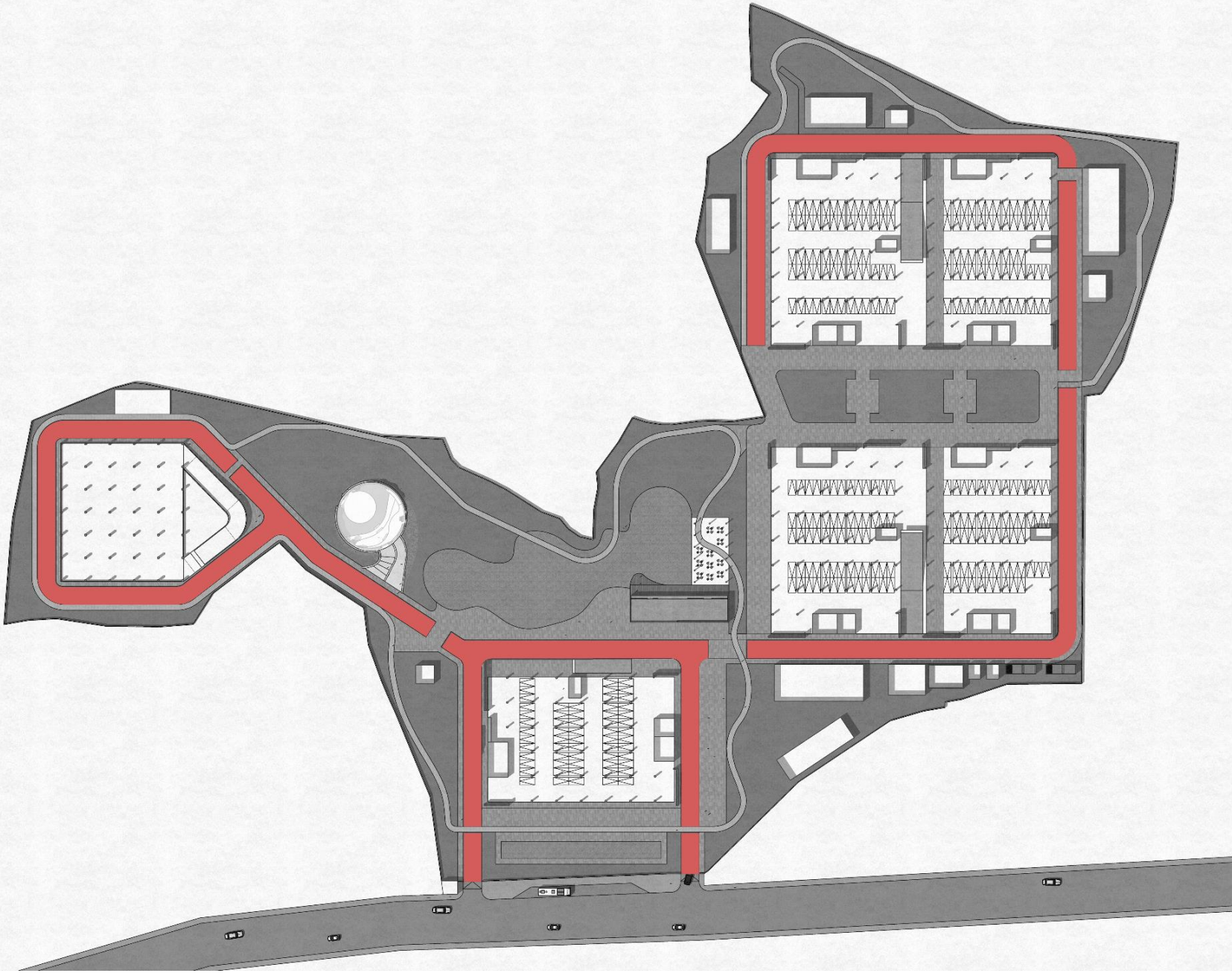


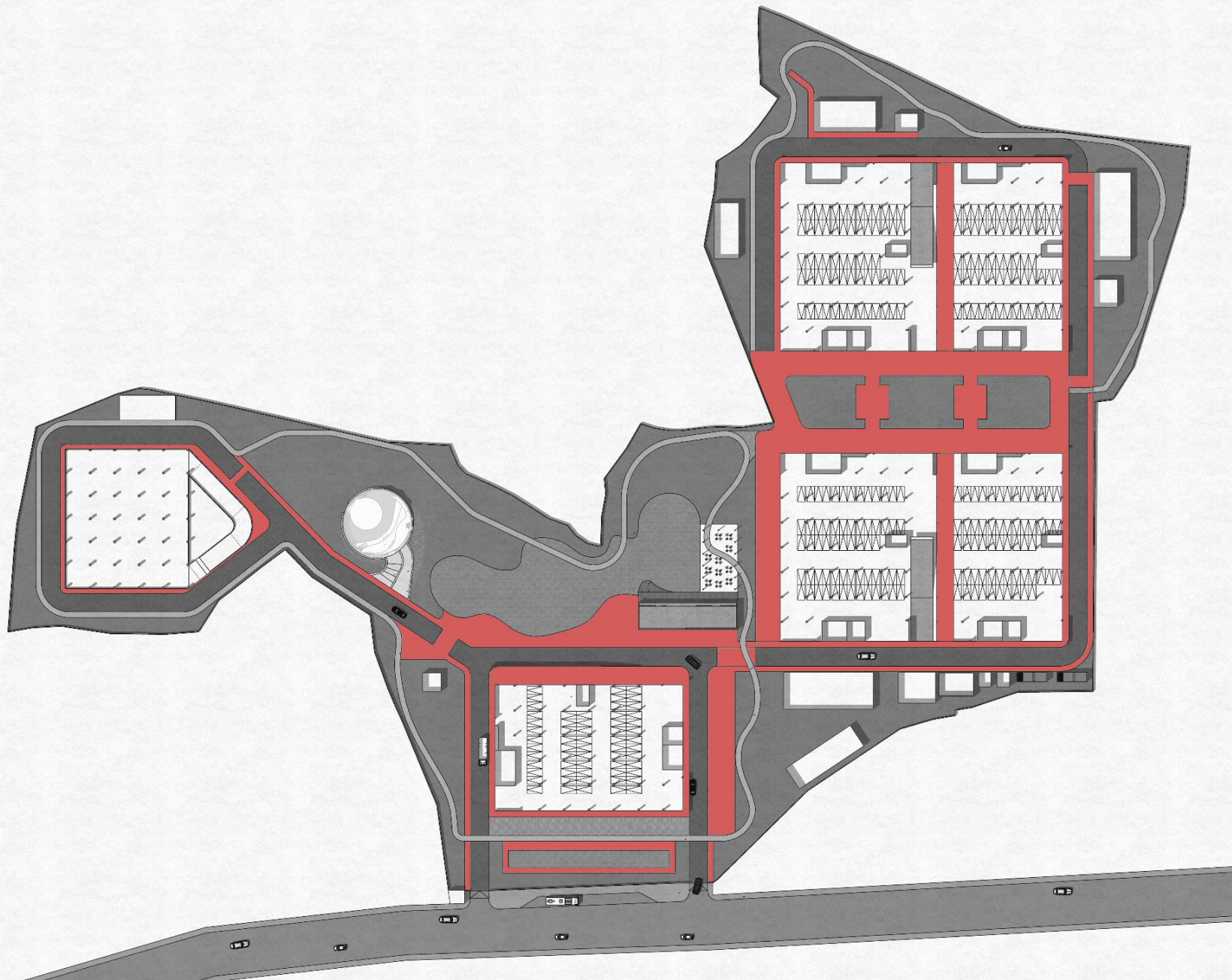
↔ Entry/Exit ramp
To parking stilt

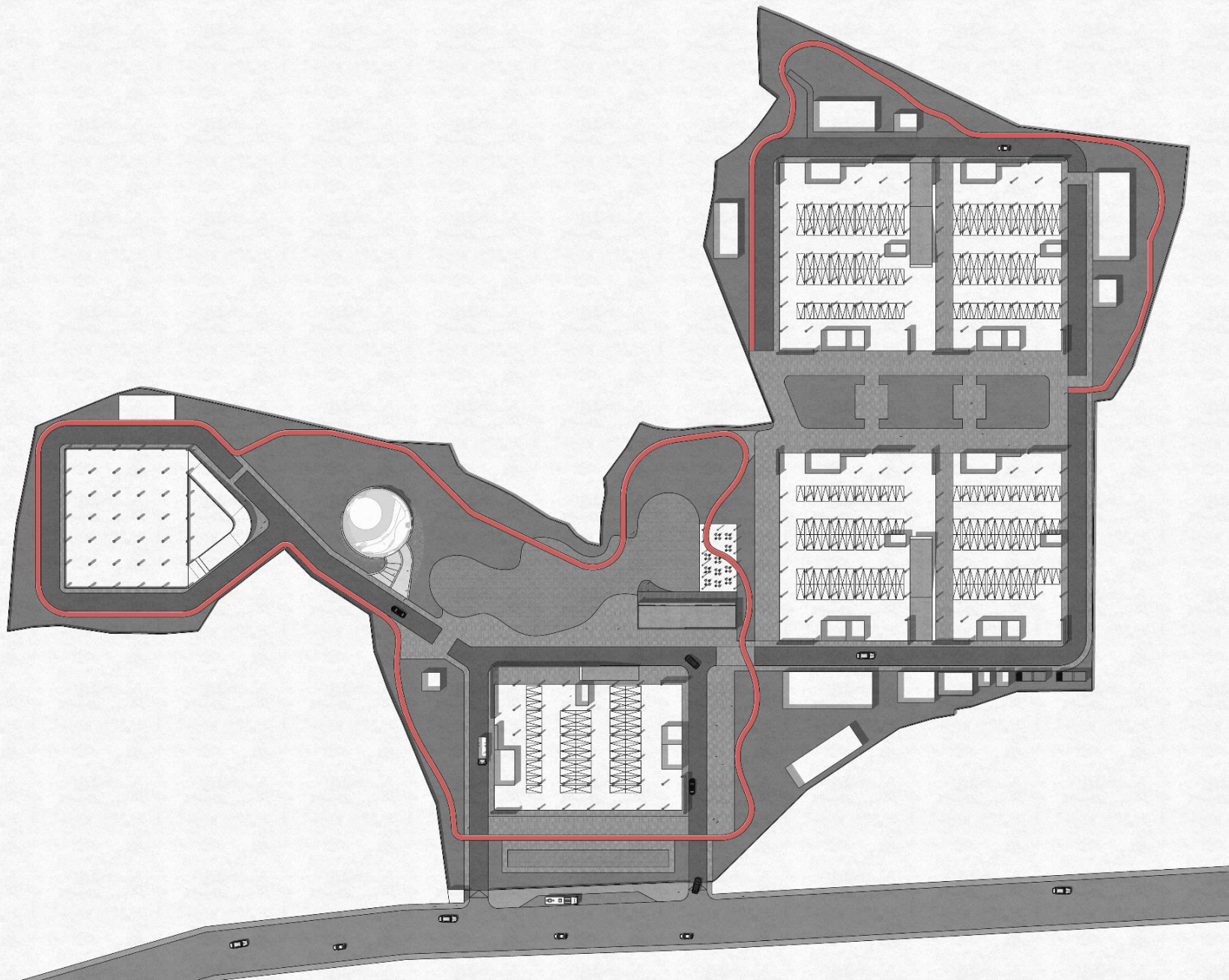
LEGENDS

- ① Entry
- ② Parking
- ③ Amenities /Dining
- ④ Aqua-pond
- ⑤ Outdoor pavilion
- ⑥ Exit

B I O P O L I S







Master plan option 1

Total Plot area = 5,27,527 Sq.ft
Total Ground coverage = 2,02,503 Sq.ft
Open space area = 3,25,024 Sq.ft
Open space percentage = 61.61 %

LEGENDS

- ① Entry/Exit Gate
- ② LAB block 1 (2 Stilt+4) – 150,000 Sq.ft
- ③ LAB block 2 (2 Stilt+4) – 150,000 Sq.ft
- ④ LAB block 3 (2 Stilt+4) – 150,000 Sq.ft
- ⑤ LAB block 4 (2 Stilt+4) – 150,000 Sq.ft
- ⑥ LAB block 5 (2 Stilt+4) – 150,000 Sq.ft
- ⑦ Amenities /Dining (G+2) – 30,000 Sq.ft
- ⑧ MLCP/Hotel/Offices (20 Floors) – 300,000 Sq.ft
- ⑨ Chemical store - 3 x (G+2) – 40,000Sq.ft(5%)
- ⑩ Solvent store -3 x (G)– 7500 Sq.ft
- ⑪ ESS/DG set/HSD Yard
- ⑫ Hydrogenation room -4 x (G)– 1560 Sq.ft
- ⑬ Bus drop off
- ⑭ STP/ETP
- ⑮ Outdoor Pavilion



B I O P O L I S



B I O P O L I S

Aerial view – South west



B I O P O L I S

Aerial view – South west



B I O P O L I S

Aerial view – South



B I O P O L I S

Aerial view – South East



B I O P O L I S

Aerial view – North East



B I O P O L I S

Aerial view – North West





B I O P O L I S

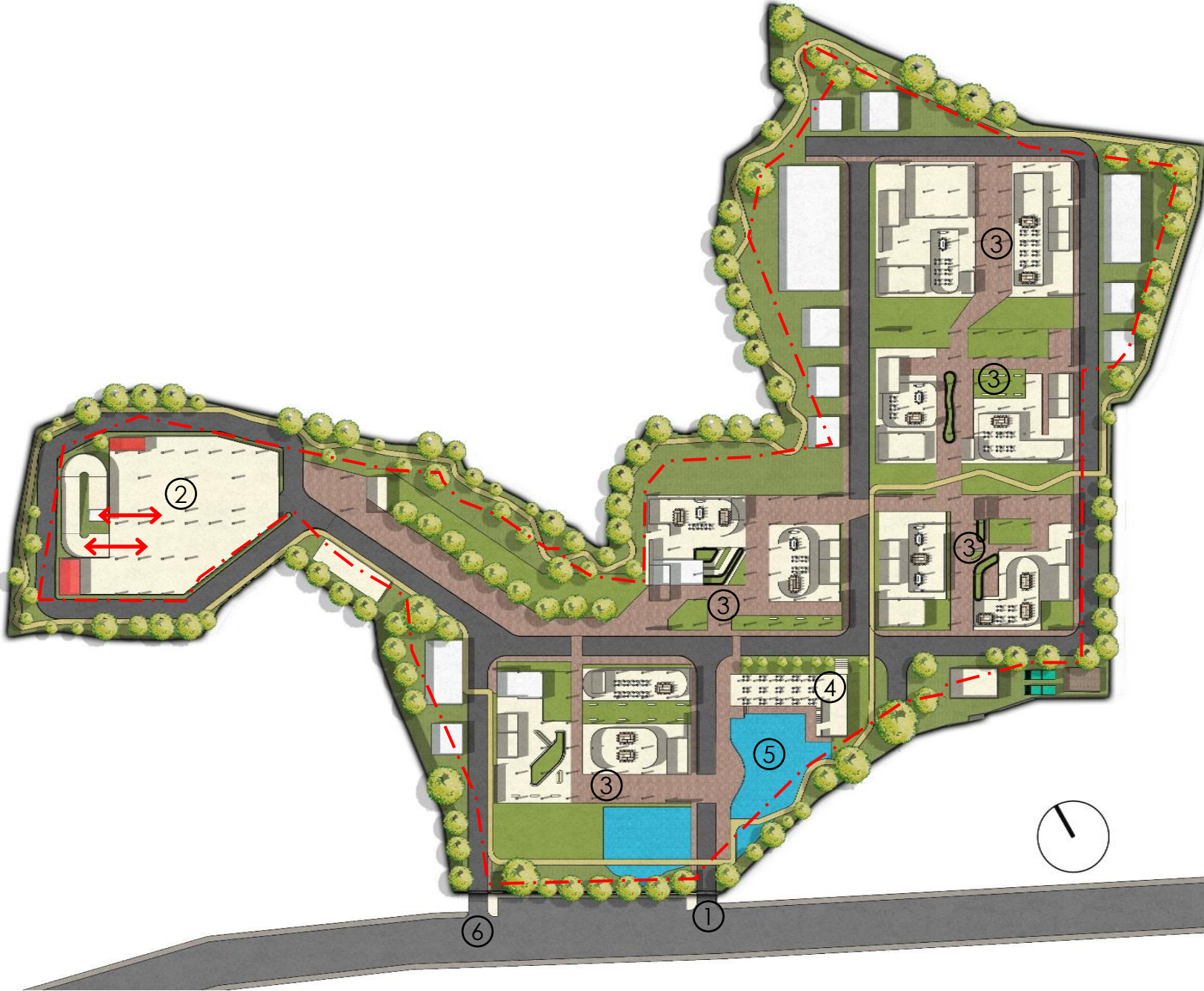
View from Road – Entry

MASTER PLAN

Option 2

Ground floor plan

Interconnected Ground

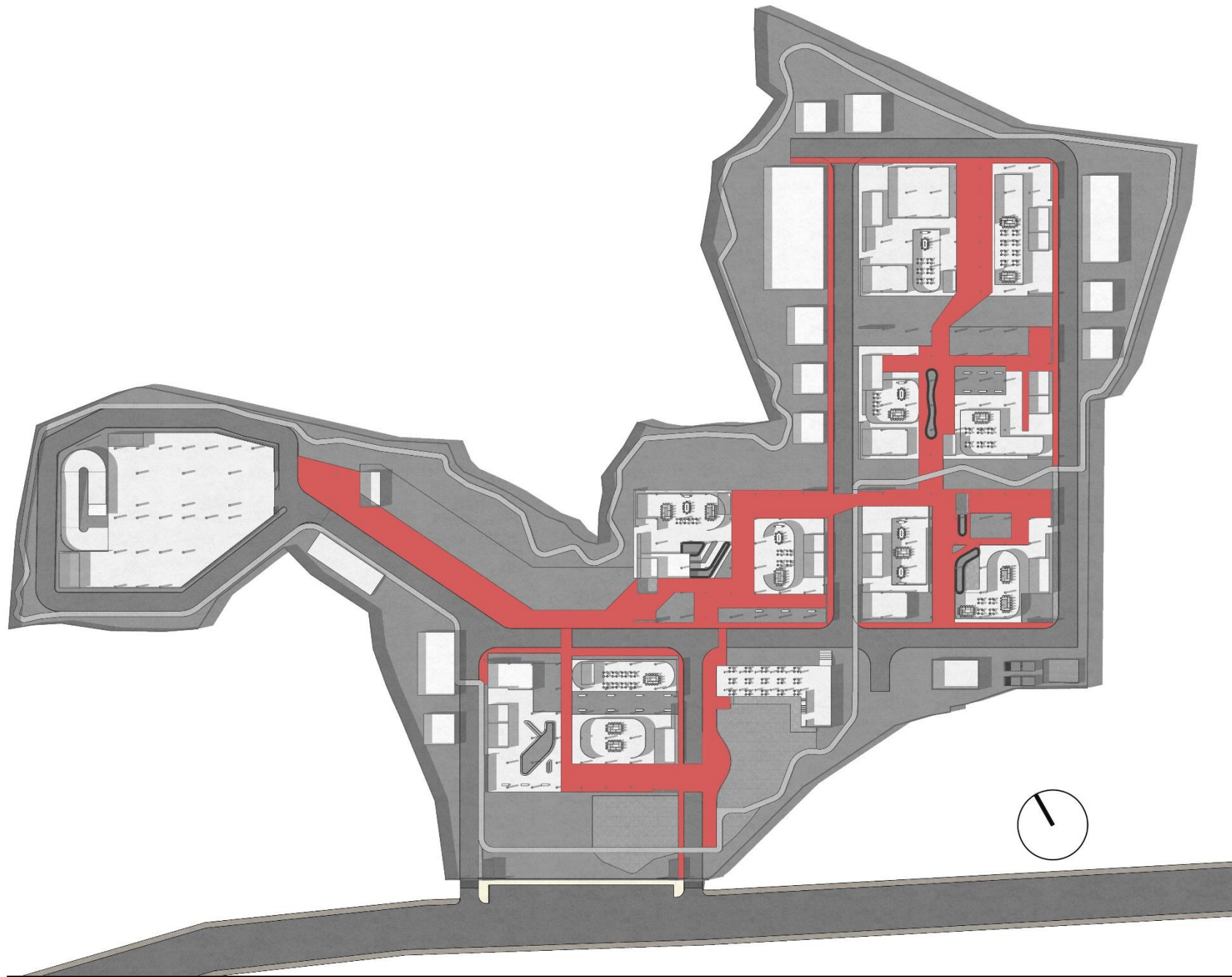


↔ Entry/Exit ramp
To parking stilt

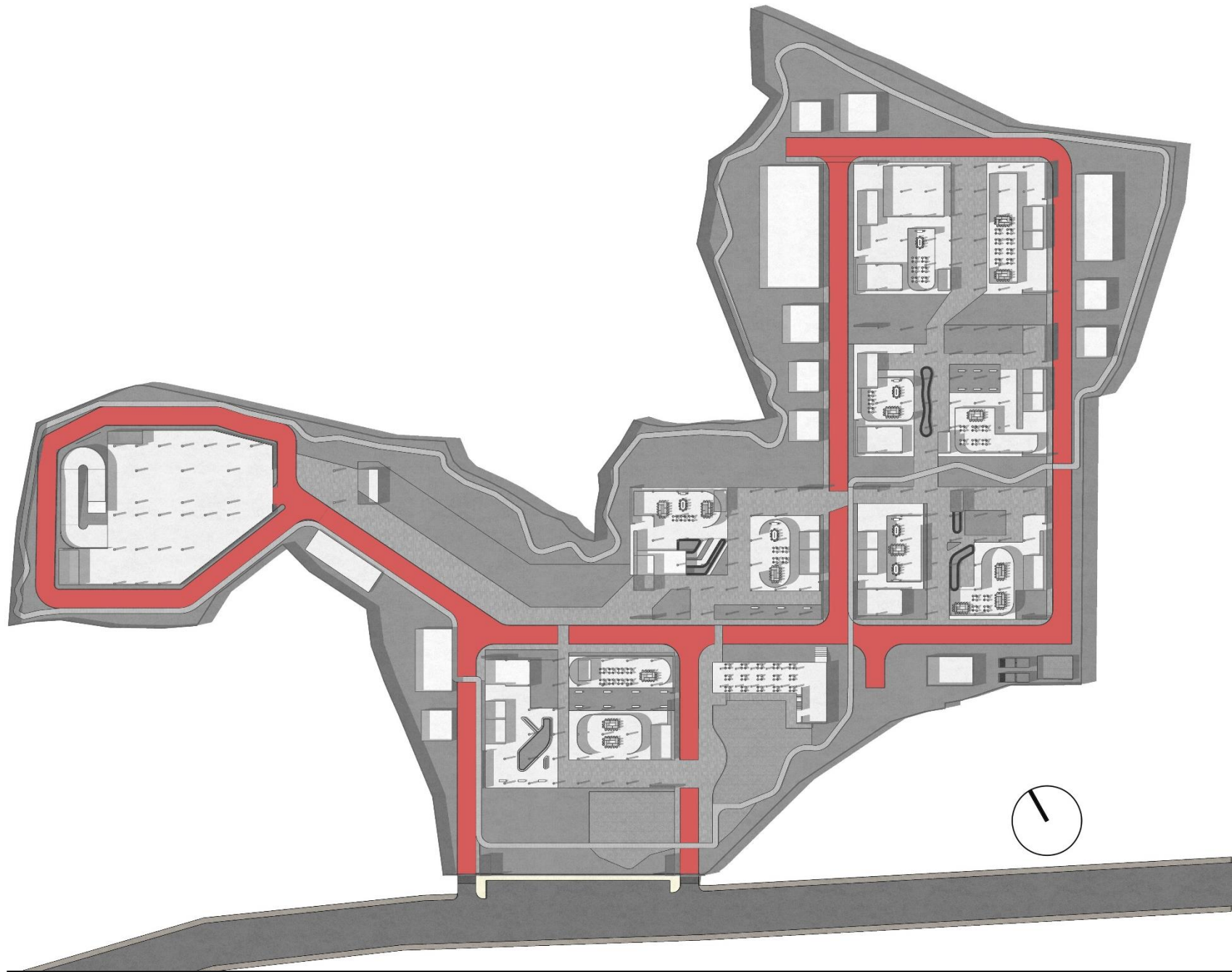
LEGENDS

- ① Entry
- ② Parking
- ③ Offices/Collab.space/
Landscape
- ④ Dining/Amenities
- ⑤ Aqua-pond
- ⑥ Exit

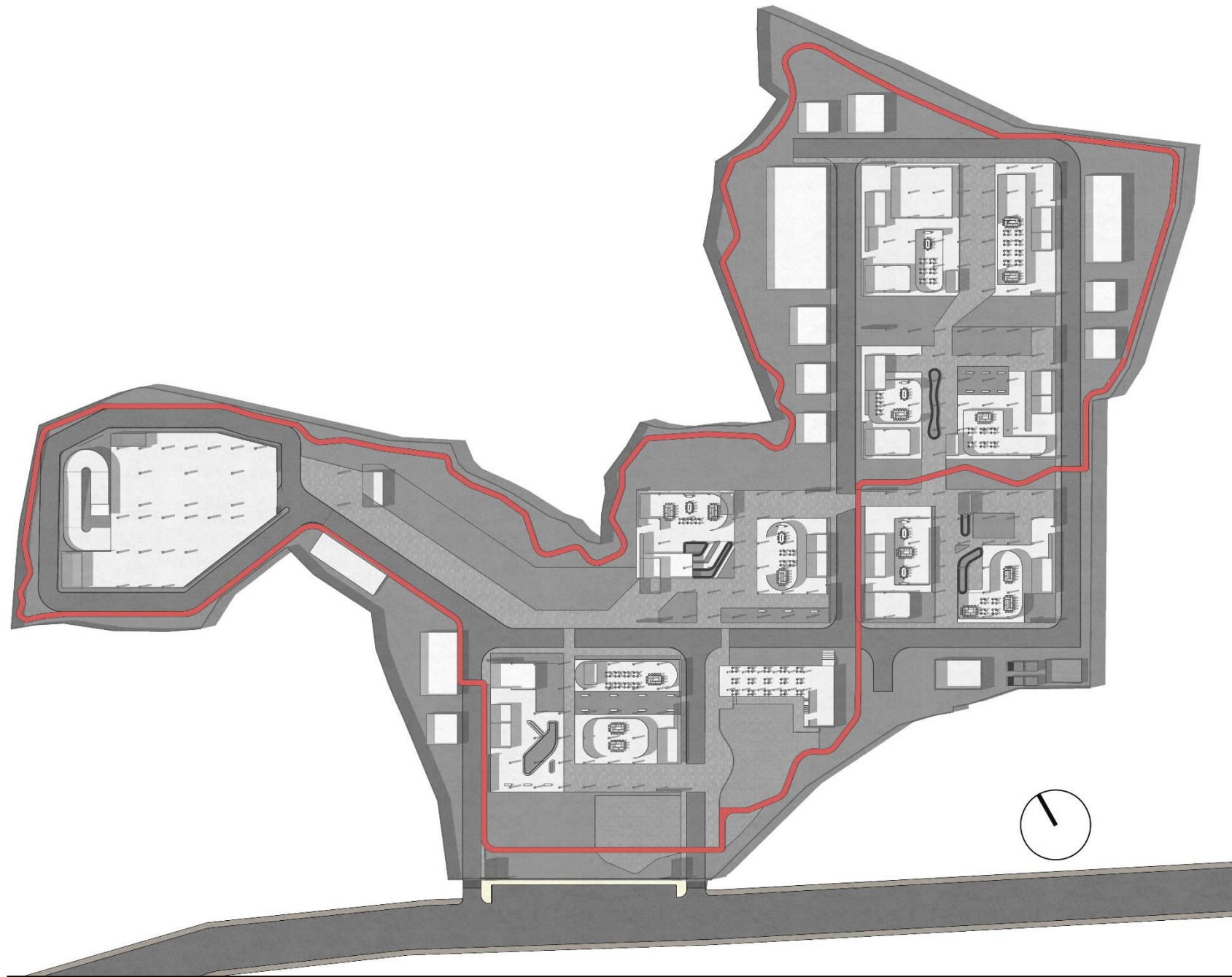
B I O P O L I S



B I O P O L I S



B I O P O L I S



Master plan option 2

Total Plot area = 5,27,527 Sq.ft

Total Ground coverage = 2,17,621 Sq.ft

Open space area = 3,09,906 Sq.ft

Open space percentage = 58.75 %

LEGENDS

- ① Entry/Exit gates
- ② LAB block 1(2 Stilt+4) – 125,000 Sq. ft.
- ③ LAB block 2(2 Stilt+4) – 125,000 Sq. ft.
- ④ LAB block 3(2 Stilt+4) – 125,000 Sq. ft.
- ⑤ LAB block 4(2 Stilt+4) – 125,000 Sq. ft.
- ⑥ LAB block 5(2 Stilt+4) – 125,000 Sq. ft.
- ⑦ Amenities /Dining (G+2) – 30,000 Sq.ft
- ⑧ MLCP/Hotel/Offices (10 Floors) – 300,000 Sq.ft
- ⑨ Chemical store -3 x(G+2) – 45,000Sq.ft(5%)
- ⑩ Solvent store – 3 x (G) – 6500 Sq.ft
- ⑪ ESS/DG set/HSD Yard
- ⑫ Hydrogenation room – 4100 Sq.ft
- ⑬ Bus drop off
- ⑭ STP/ETP



B I O P O L I S



B I O P O L I S

INTERCONNECTED STILT SPACES
AEIRAL VIEW – SOUTH WEST



B I O P O L I S

AEIRAL VIEW – SOUTH WEST



B I O P O L I S

AEIRAL VIEW – SOUTH



B I O P O L I S

AEIRAL VIEW – SOUTH EAST



B I O P O L I S

AERIAL VIEW – NORTH EAST



B I O P O L I S

AERIAL VIEW – NORTH WEST



B I O P O L I S

VIEW FROM ROAD – WEST END



B I O P O L I S

VIEW FROM ROAD – EAST END



B I O P O L I S

MAIN ENTRY

THANK YOU

atelier for built environment research & design

C-22, GOLF VIEW APARTMENTS

SAKET, NEW DELHI - 110017

TEL: 011 46542974

EMAIL: abrdarchitects@gmail.com

WEBSITE: www.abrdarchitects.com