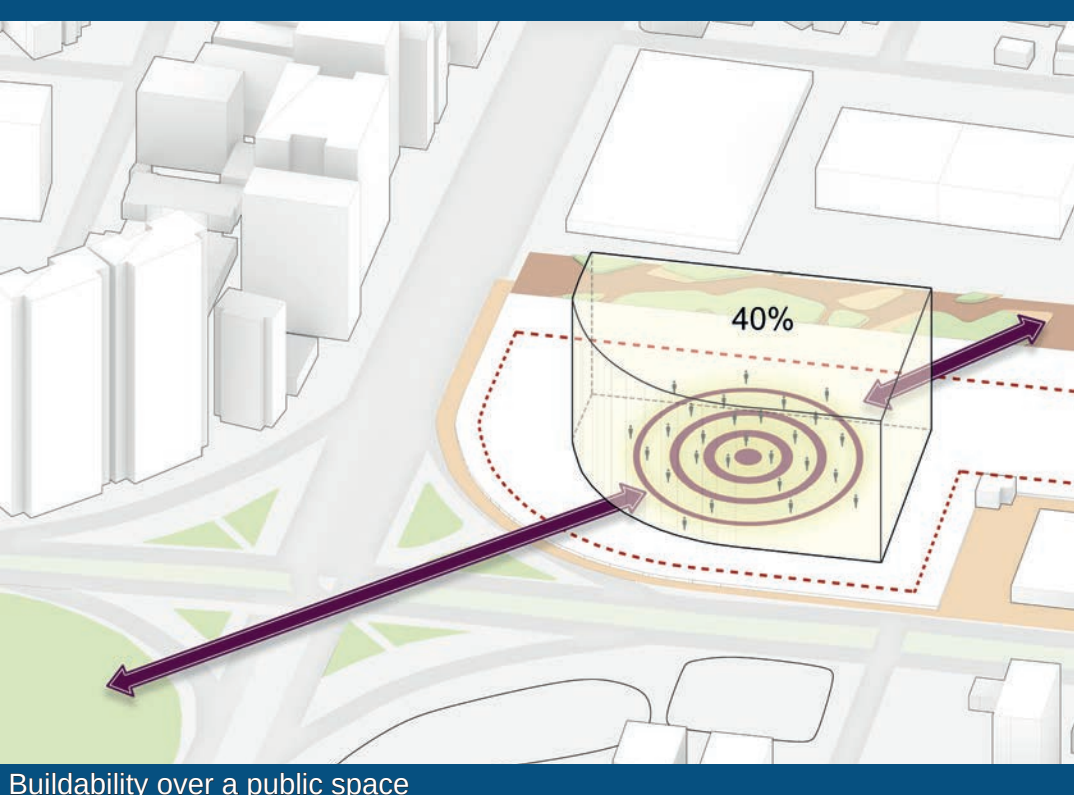
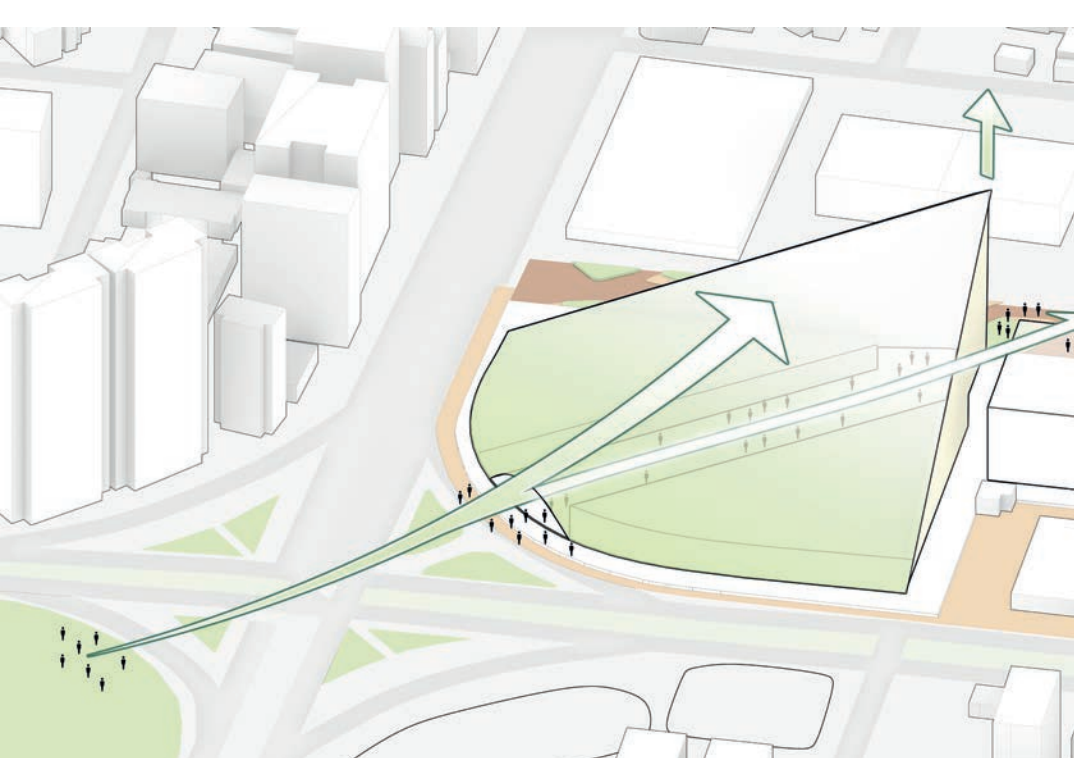


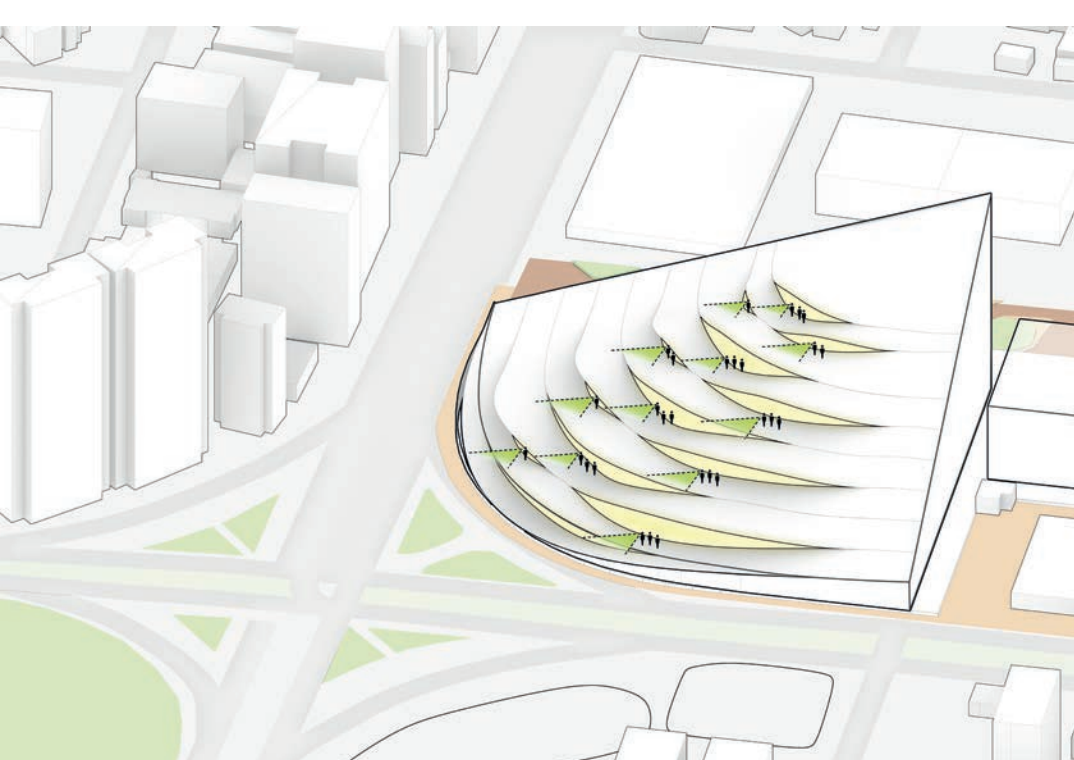




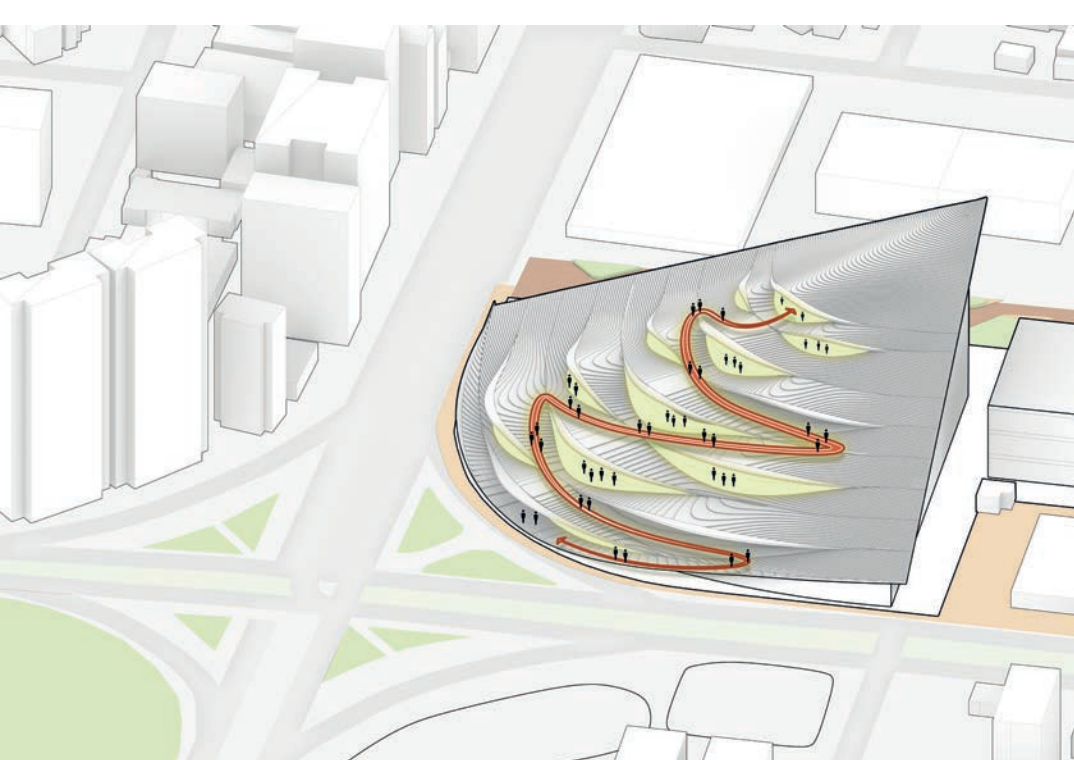
Buildability over a public space



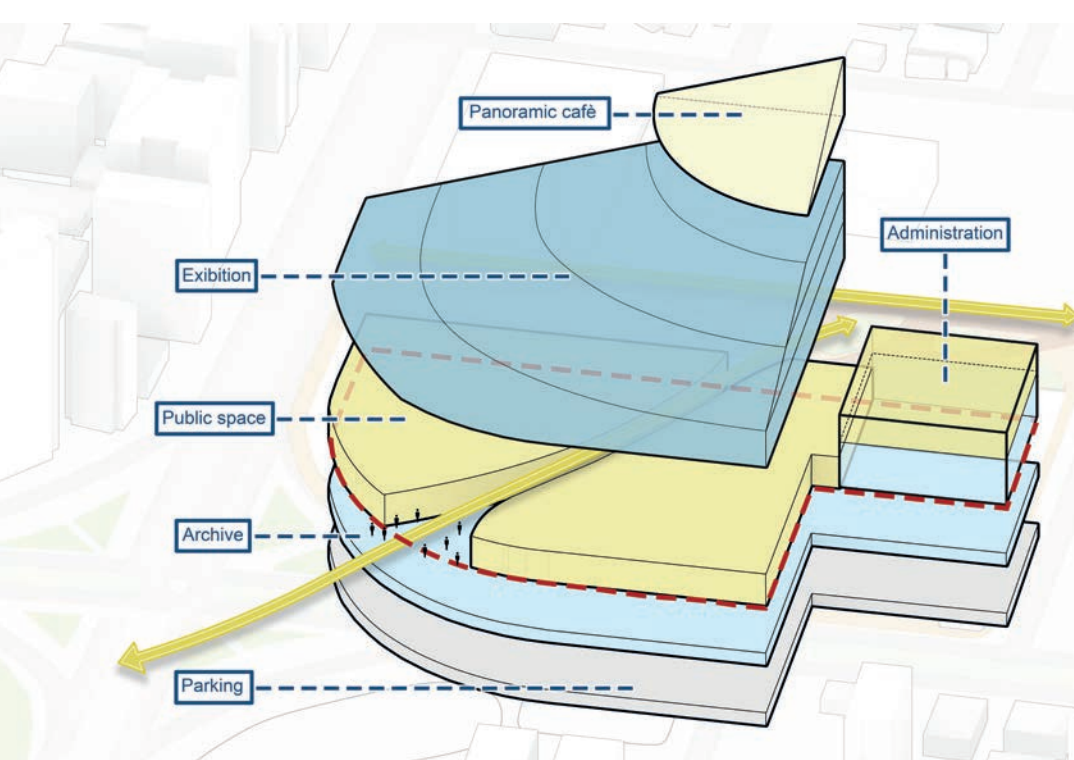
La Carolina Park as generative ecosystem



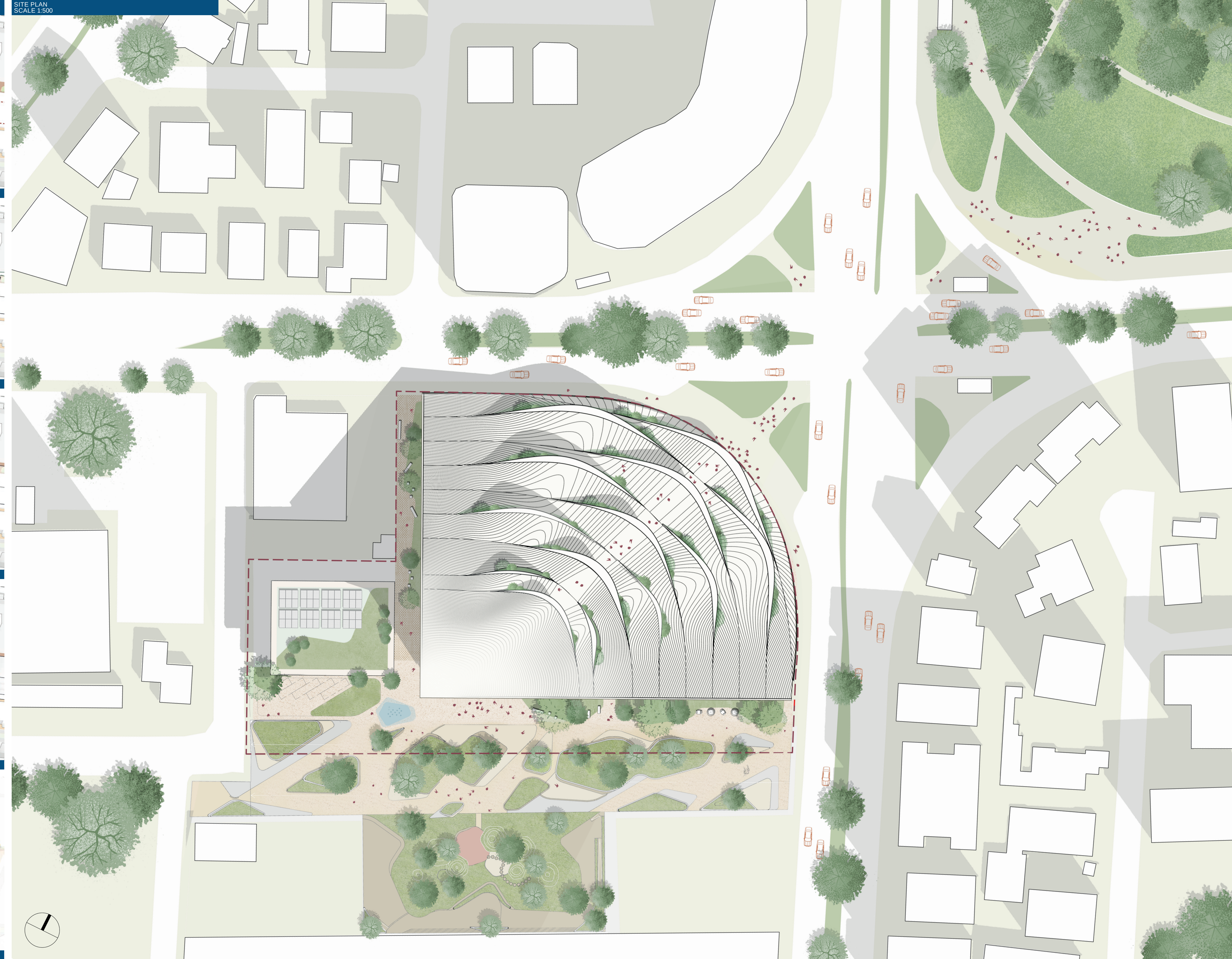
The exhibition of the city heritage



Building reappropriation and public climbable path



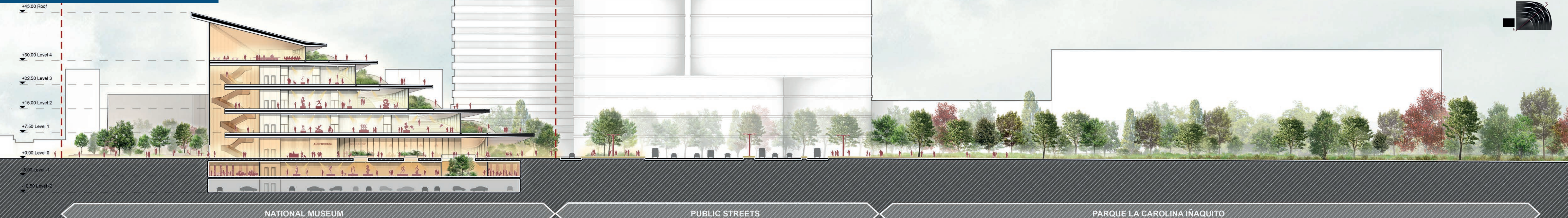
Functional and rational subdivision of activities



Biophilic continuity - seamless physical and spatial connection

Ecological extension - public landscape expanding and strengthening urban ecology

Social connector - boulevard as primary catalyst for everyday public life

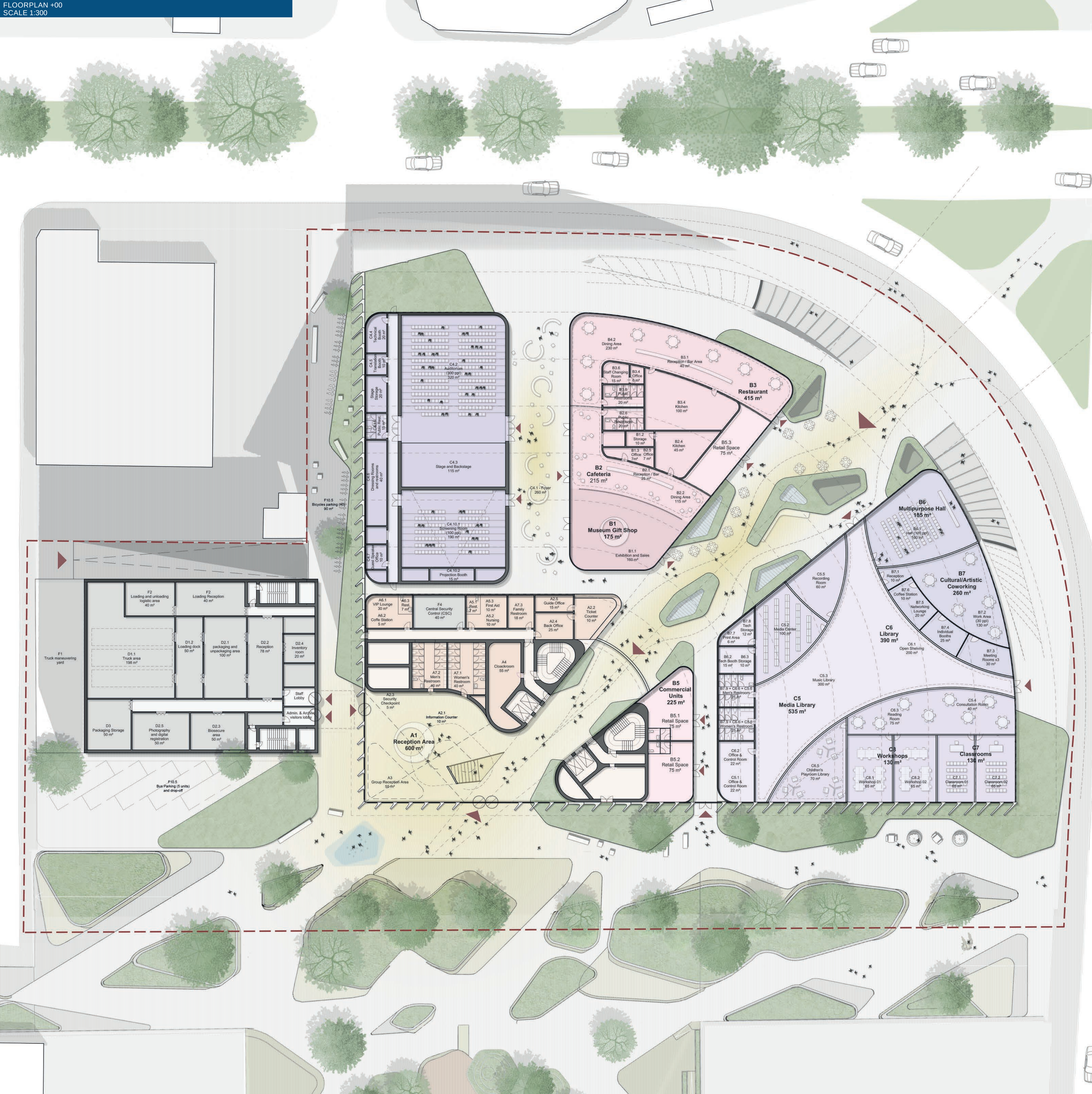
LONGITUDINAL SECTION
SCALE 1:500

New urban front
What could have been perceived as secondary or rear façades become a new urban front thanks to the pedestrian boulevard. A more protected and welcoming space is created facing the pedestrian life of the district.

Open cultural corridor
The diagonal route is the main spatial strategy through which the project redefines the site. It crosses the plot, activates the ground floor functions facing it and establishes a direct relationship with the new pedestrian boulevard.

Nature permeates the building
The museum becomes the continuation of the park, integrating nature as an essential architectural element that supports wellbeing at every floor.





A. ENTRANCE LOBBY AREA

- A1 Reception Area
- A2 Information and Ticket Area
- A3 Group Reception Area
- A4 Cloakroom
- A5 Visitor Services
- A6 Vip Area / Protocol Area
- A7 Public Restrooms

B. SERVICES

- B1 Museum Gift Shop
- B2 Cafeteria
- B3 Restaurant
- B4 Panoramic Restaurant
- B5 Commercial Units
- B6 Multipurpose Hall
- B7 Cultural/Artistic Coworking

C. ACTIVITIES (EXHIBITION AREAS)

- C1 Permanent Exhibition
- C2 Temporary Exhibition
- C3 Discovery Area
- C4 Auditorium
- C5 Media Library
- C6 Library
- C7 Classrooms
- C8 Workshops

D. COLLECTIONS STORAGE

- D1 Loading & Unloading Area
- D2 Reception Area
- D3 Packaging Storage
- D4 Collections Storage
- D5 Documentary Collection Storage
- D6 Audio-visual Collections Storage
- D7 Collection Storage
- D8 Conservation and Restoration Laboratories
- D9 Conservation and Restoration Offices
- D10 Restrooms

E. ADMINISTRATIVE AREA

- E1 Reception / Secretary's Workspace
- E2 Executive Management
- E3 Cinematheque Management
- E4 National Museum Technical Offices
- E5 Cinematheque Staff
- E6 National Museum Archive
- E7 Cinematheque Archive
- E8 Meeting Rooms
- E9 Cafe
- E10 Restrooms

F. LOGISTICS AREA

- F1 Truck Maneuvering yard
- F2 Loading & Unloading Logistics
- F3 Logistics Reception
- F4 Central Security Control
- F5 Maintenance Workshop
- F6 Museography Workshop
- F7 Staff Facilities
- F8 General Storage
- F9 Technical Area
- F10 Parking Area

VEHICLE ACCESS

- LOADING TRUCKS ACCESS
- BUS ACCESS
- UNDERGROUND PARKING ACCESS

PEDESTRIAN ACCESS

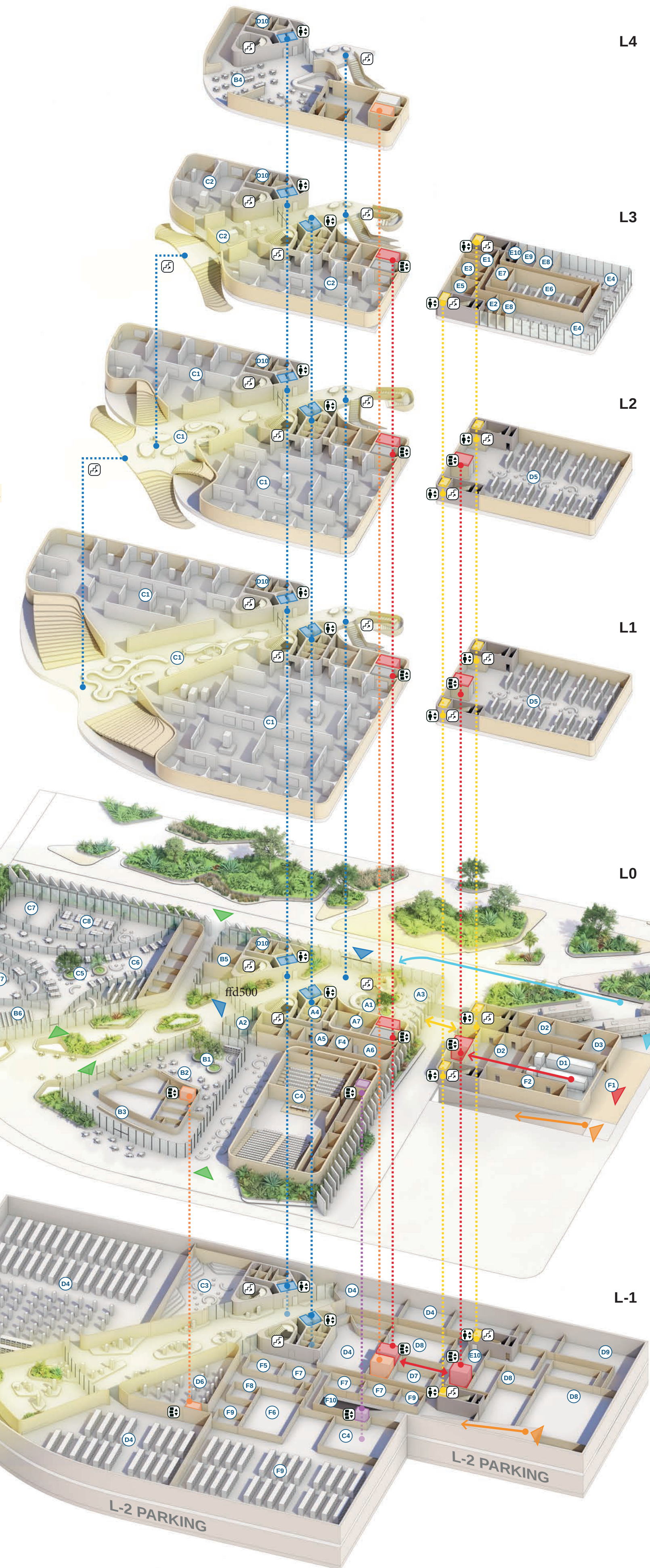
- PUBLIC SPACES AND COMMERCIAL ACCESS
- MUSEUM VISITORS ACCESS

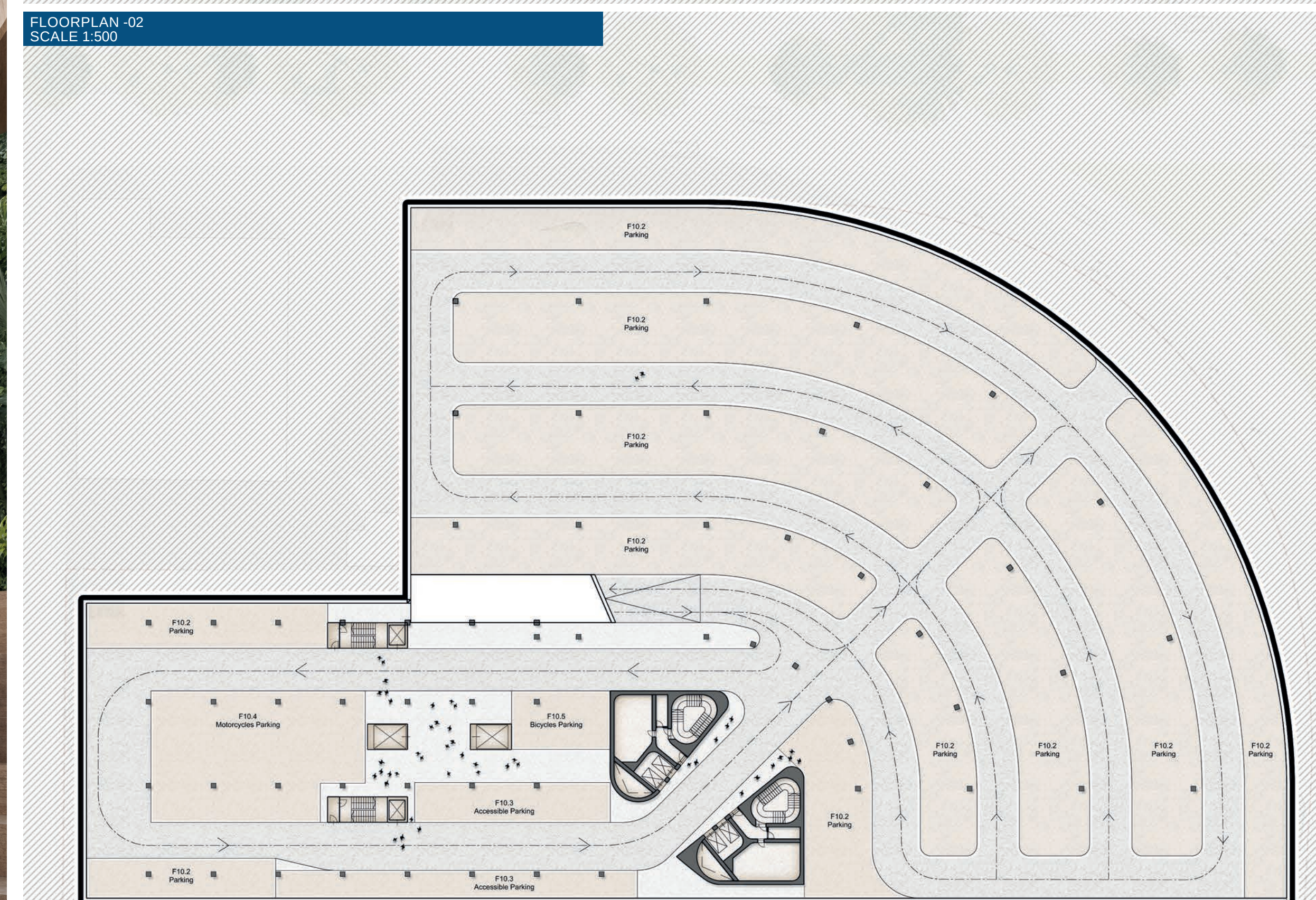
HORIZONTAL CIRCULATION

- ARTWORKS LOGISTIC
- PARKINGS RAMP
- ADMINISTRATION/STAFF
- BUS DROP VISITORS

VERTICAL CIRCULATION

- VISITORS
- STAFF/ADMINISTRATION
- CAFE/RESTAURANT
- AUDITORIUM
- ARTWORKS
- PEOPLE ELEVATOR
- GOODS ELEVATOR
- STAIRS





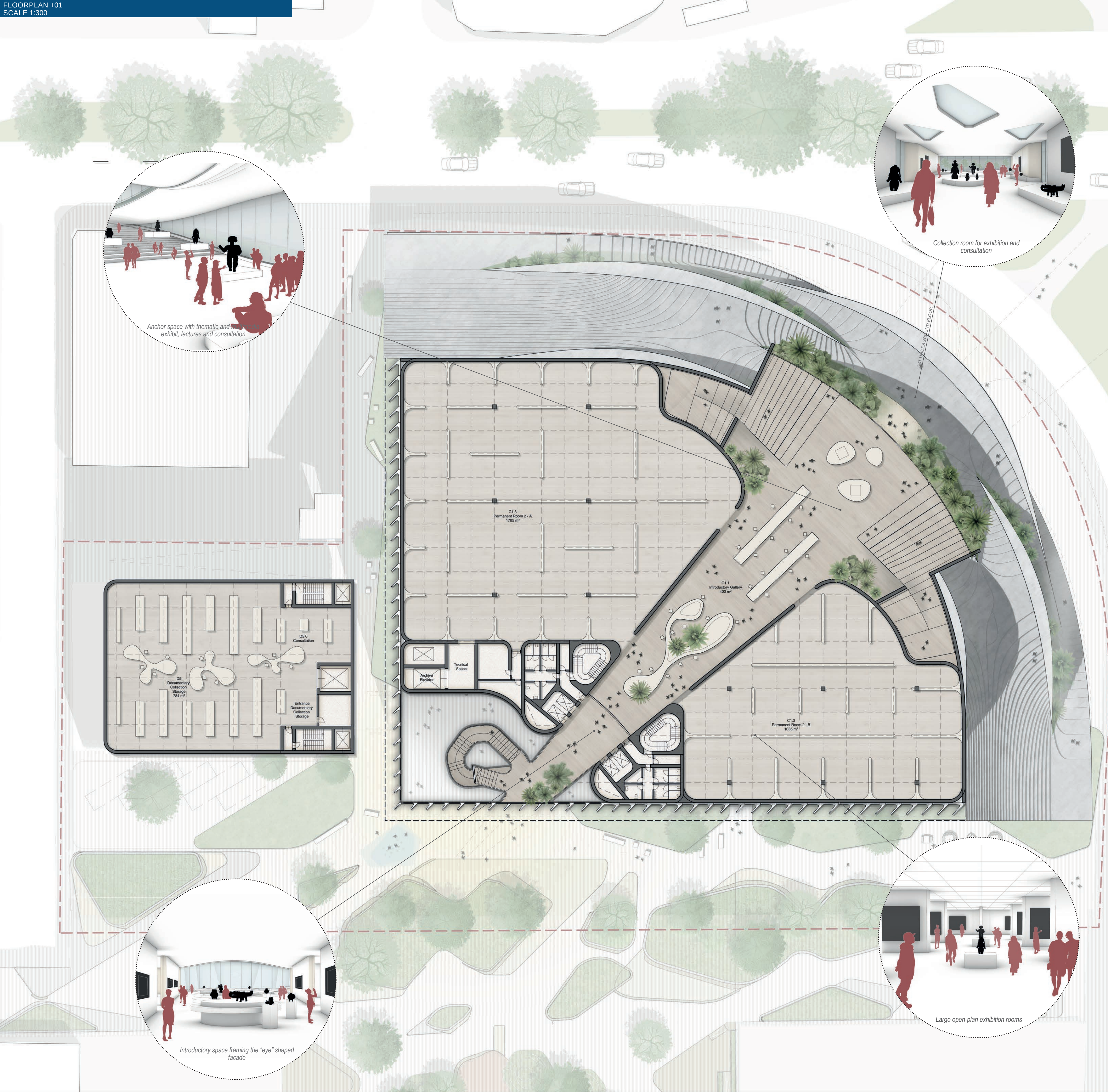


EXHIBIT STRATEGY

LEVEL 3

- C2.2 TEMPORARY EXHIBITION 2
- C2.3 TEMPORARY EXHIBITION 3
- C2.1 TEMPORARY EXHIBITION 1

LEVEL 2

- C1.2 PERMANENT ROOM 1
- C1.3 PERMANENT ROOM 2B
- C1.1 INTRODUCTORY GALLERY
- C1.3 PERMANENT ROOM 2A

LEVEL -1

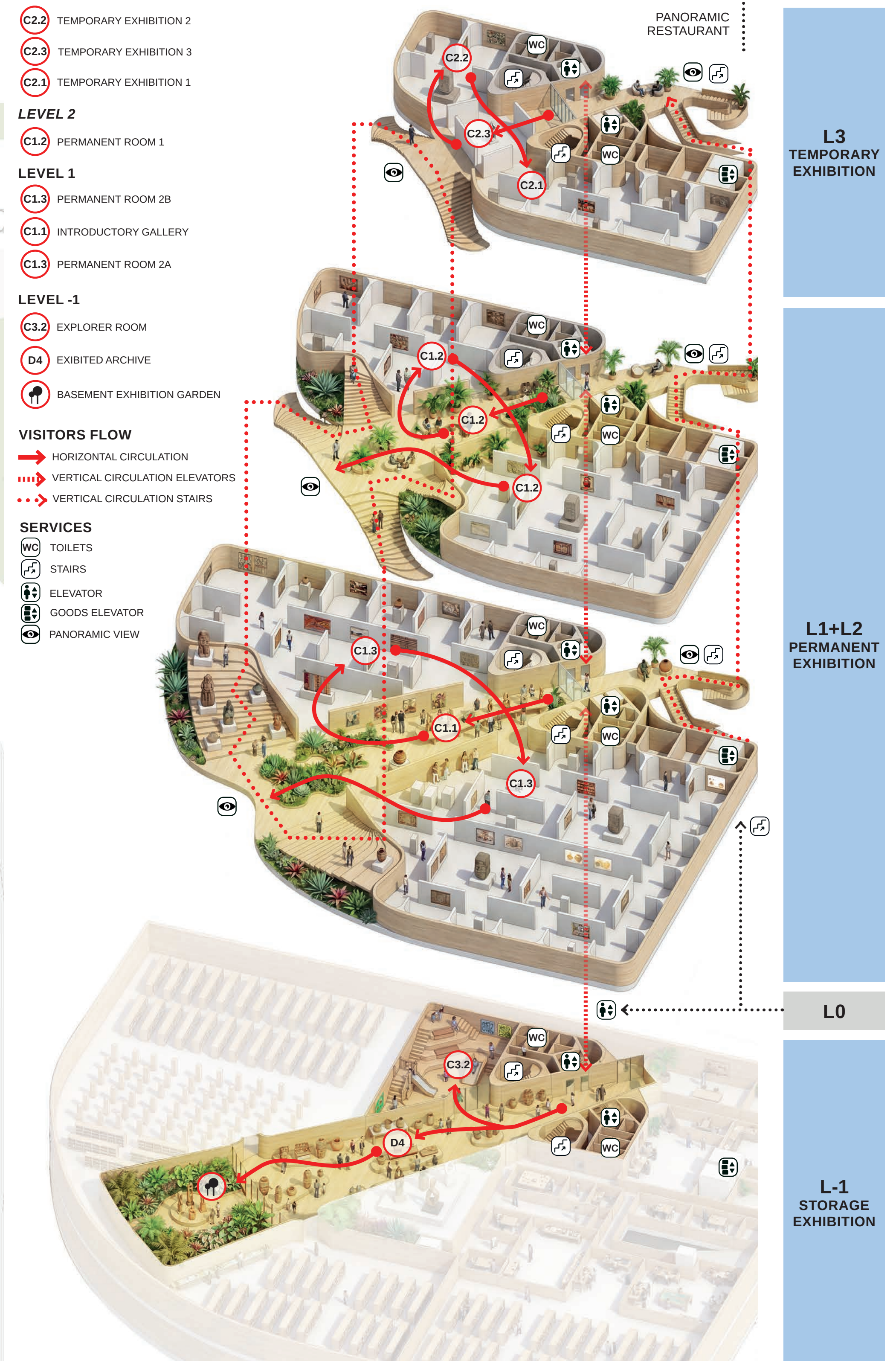
- C3.2 EXPLORER ROOM
- D4 EXHIBITED ARCHIVE
- BASEMENT EXHIBITION GARDEN

VISITORS FLOW

- HORIZONTAL CIRCULATION
- VERTICAL CIRCULATION ELEVATORS
- VERTICAL CIRCULATION STAIRS

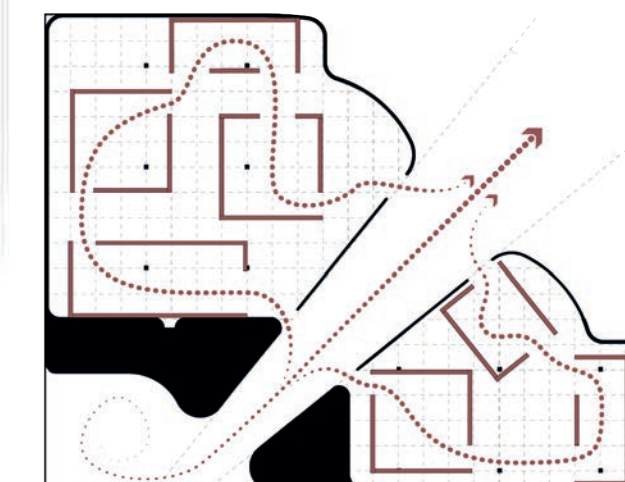
SERVICES

- WC TOILETS
- STAIRS
- ELEVATOR
- GOODS ELEVATOR
- PANORAMIC VIEW

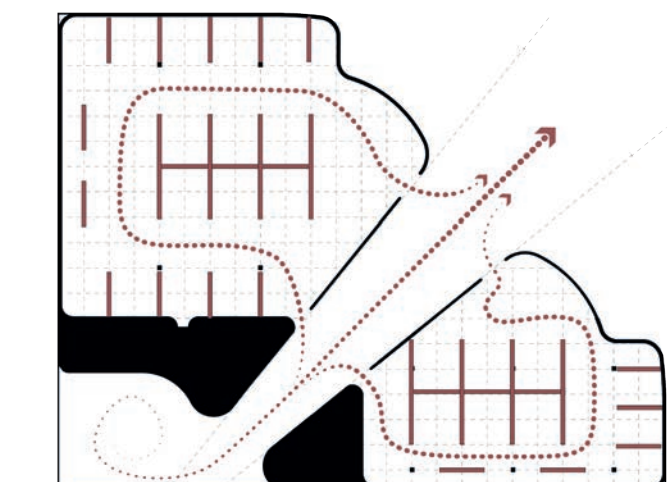


CONCEPT FOR MUSEOGRAPHY

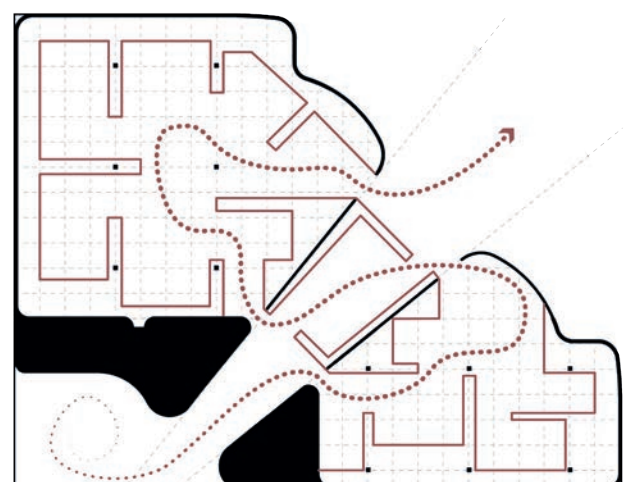
Flexible Exhibition Roomscape



Continuous gallery



Cave sequence



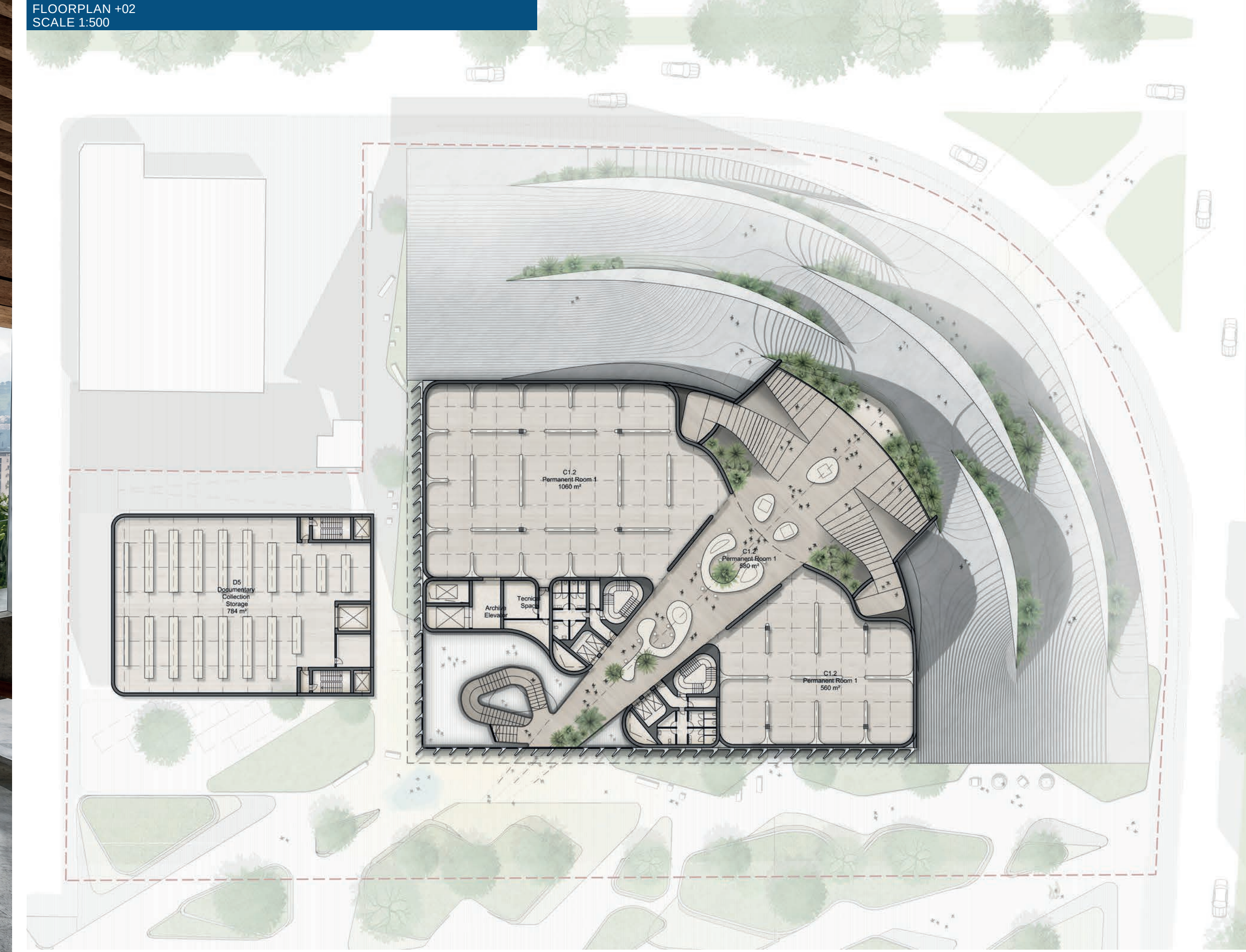
Large open-plan exhibition rooms designed for flexible and adaptable exhibition layouts



VIEW FROM THE PANORAMIC RESTAURANT



FLOORPLAN +02
SCALE 1:500



FLOORPLAN +03 AND +04
SCALE 1:500





FRONT ELEVATION
SCALE 1:500



BULEVAR LA PRADERA

NATIONAL MUSEUM

PUBLIC STREET

PARQUE LA CAROLINA INAQUITO

OPERATIONAL ENERGY AND CARBON

Passive Design

- Enhanced thermal insulation, airtightness and thermal bridging
- Exposed thermal mass
- Operable windows and louvers for mixed-mode ventilation, when appropriate
- Atrium stack ventilation
- Solar control glazing
- External shading in the form of horizontal canopies and vertical fins according to façades orientation

Active Design

- Underfloor air distribution (UFAD) system with high-level extract from cores
- Mechanical ventilation with heat recovery (MVHR)
- Low fan power systems
- Minimised heat losses from heating, cooling and air conditioning (HVAC) systems
- Low energy lighting (LED lamps and smart controls)
- Regenerative lifts
- Smart and demand-led controls
- Smart energy metering

Energy Generation & Renewables

- All-electric building
- Ground source heat pump (GSHP) system as primary system for space heating and cooling, subject to geotechnical survey
- Air source heat pump (ASHP) system for space heating and cooling top-up
- Photovoltaic (PV) mounted on roof canopy of ancillary building
- Building integrated photovoltaic (BIPV) onto southern façades and roof top

EMBODIED CARBON AND CIRCULAR ECONOMY

- Lean design approach to minimise weight and material use
- High recycled content materials, including façades and internal finishes
- Materials passports to allow for maintenance, disassembly and reuse
- Design of façades and interiors for end-of-life and disassembly
- Design of flexible spaces to facilitate asset longevity
- Low global warming potential (GWP) refrigerants and thermal/acoustic insulation
- Responsibly sourced and Cradle-to-Cradle certified materials (e.g. FSC certified wood, C2C certified products)
- Locally sourced materials (e.g. local stone)
- Bio-based materials for internal finishes (e.g. timber)

WATER AND BIODIVERSITY

- Water-efficient fittings and appliances
- Leak detection system on mains water supply
- Flow control devices in toilet facilities
- Smart water metering
- Drought-proof native planting
- Rainwater harvesting and greywater/condensate recycling for toilet flushing and irrigation
- SuDS planters to manage rainwater and reduce flood risk
- Low-impact outdoor lighting to preserve biodiversity

HEALTH AND WELLBEING

- Daylight optimisation through façade and layout design
- Glare control through external shading
- Carbon filters in air handling units (AHUs) for improved air quality, subject to air quality assessment
- Finishing materials with low volatile organic compound (VOC) emissions
- Accessible ramps and terraces with planting for biophilia
- Active design with central open stairs
- Cycle storage and cyclist facilities for staff
- Bike docking stations for QuitoBici cycle sharing scheme across the road
- Provision of a public transport information system
- No on-site car parking for staff and visitors

CLIMATE RESILIENCE

- Fossil fuel free development
- Passive design solutions
- Space allowance for increased cooling system capacity
- Design for structural and fabric resilience and durability
- Stormwater management system sized for climate change scenario

BREEAM OUTSTANDING



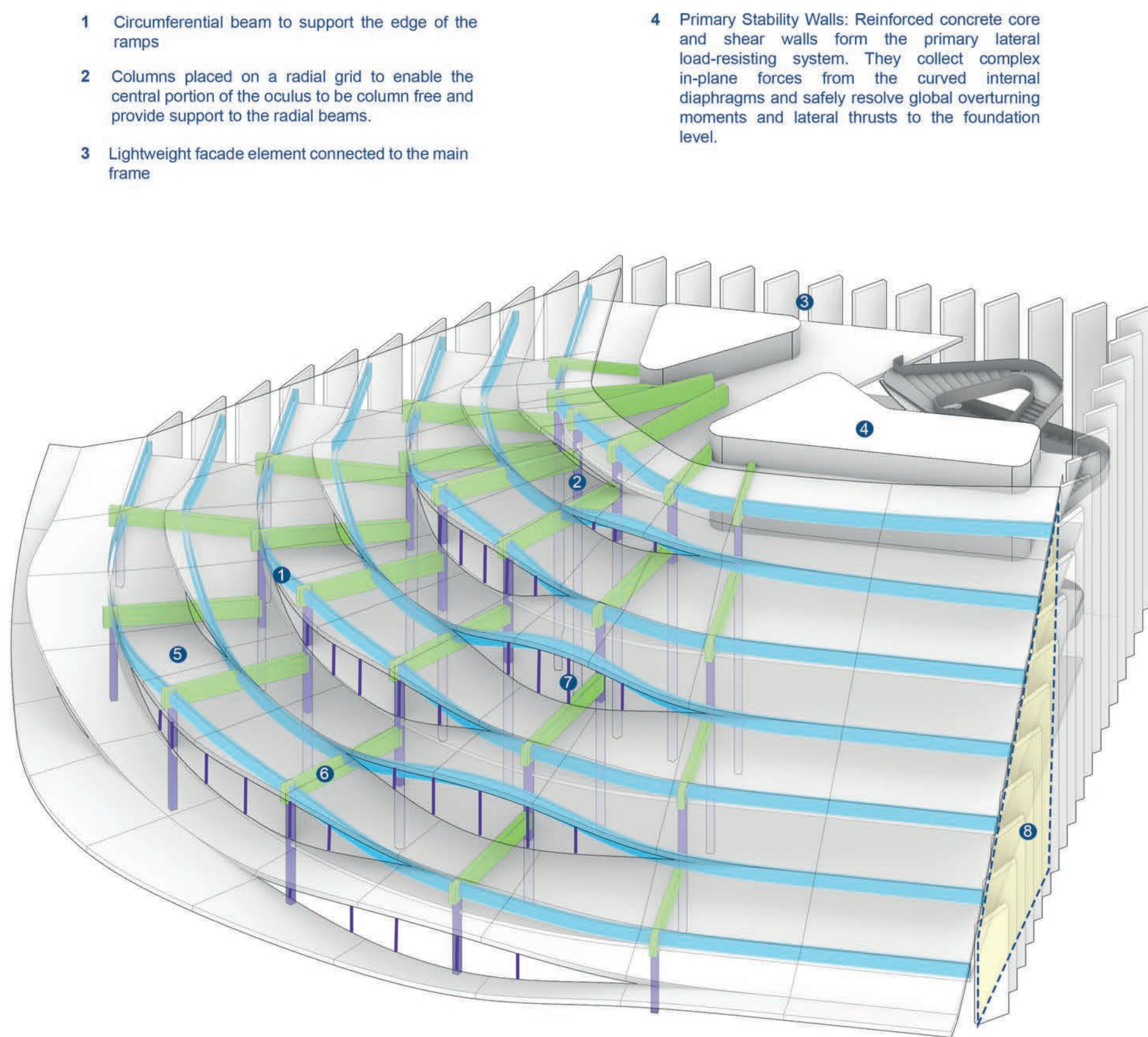
LEED PLATINUM



WELL GOLD



EDGE ADVANCED (ZERO CARBON READY)



- Circumferential beam to support the edge of the ramps
- Columns placed on a radial grid to enable the central portion of the Oculus to be column free and provide support to the radial beams.
- Lightweight facade element connected to the main frame

- Primary Stability Walls: Reinforced concrete core and shear walls form the primary lateral load-resisting system. They collect complex in-plane forces from the curved internal diaphragms and safely resolve global overturning moments and lateral thrusts to the foundation level.

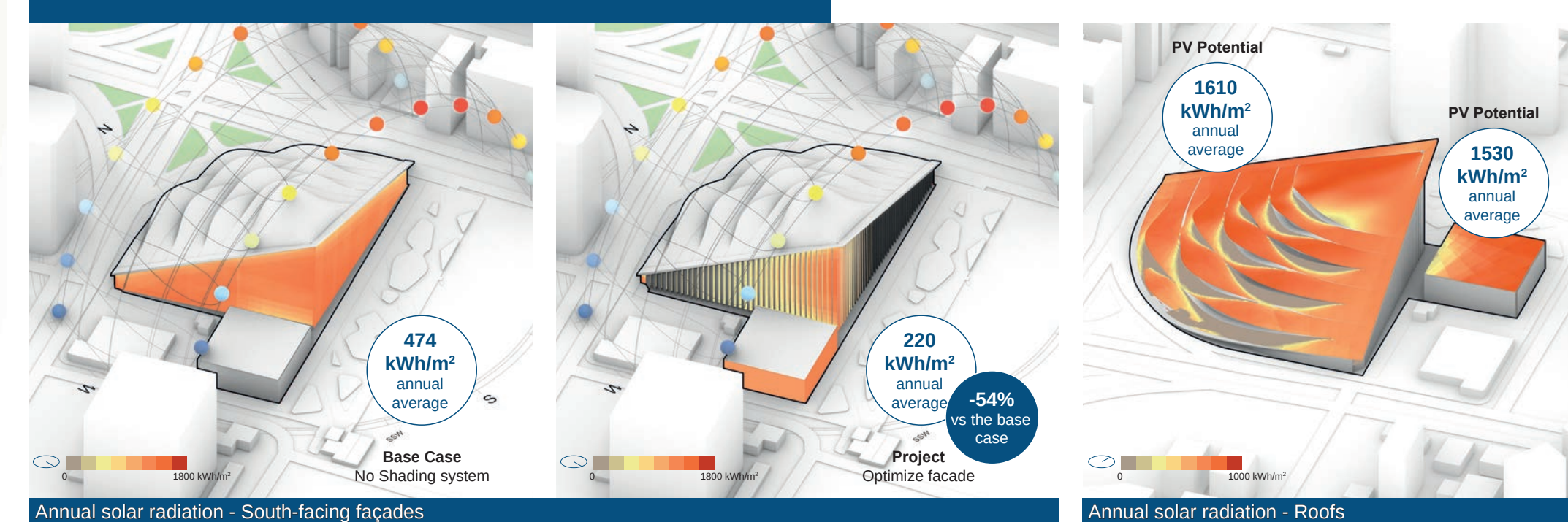
- The continuous ramp structure acts as an inclined rigid diaphragm, transferring in-plane lateral forces and local horizontal thrusts between floor plates and connecting them to the primary stability core system (not shown for clarity)

- Vertical struts at regular centres along the glazing line act as load-bearing mullions, tying the upper and lower framing to control edge deflections and reduce radial span requirements.

- Radial beams to provide stiff support to the external ramps.

- Primary Stability Walls: Reinforced concrete core and shear walls form the primary lateral load-resisting system.

SOLAR RADIATION ANALYSIS

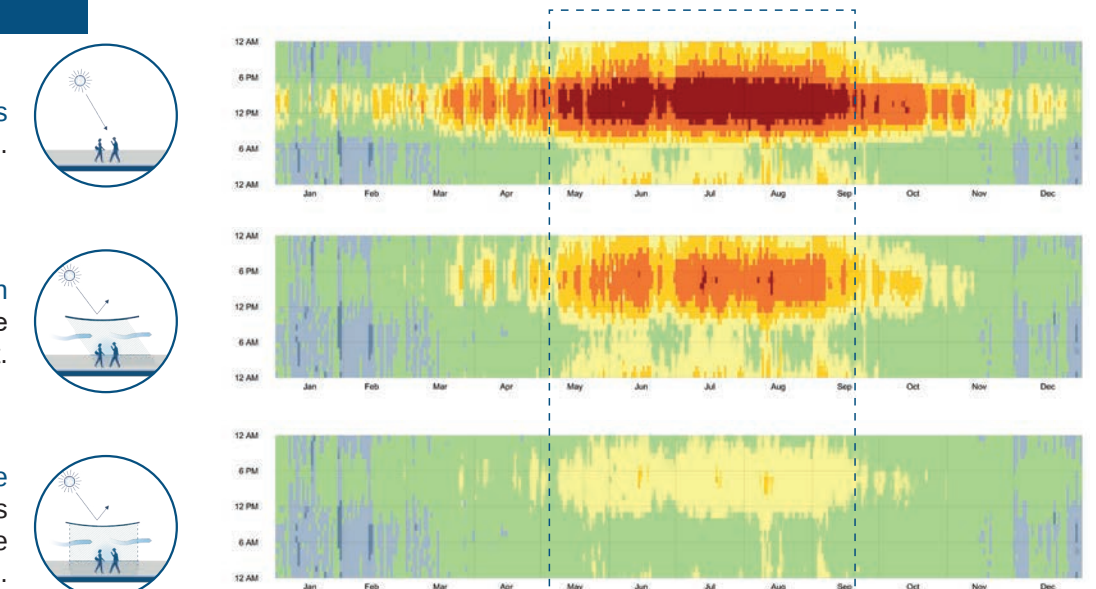


OUTDOOR THERMAL COMFORT

Outdoor thermal comfort was evaluated through the **Universal Thermal Climate Index (UTCI)**, which estimates the perceived temperature based on environmental conditions and human thermal response. The following scenarios compare the **effectiveness of passive cooling strategies in reducing heat stress and improving user comfort**.

UTCI target

- Base Case - No strategies
High solar exposure and heat stress.
- Canopy + Ventilation
Shade and airflow reduce heat exposure and improve comfort.
- Transitional Space
Shading and permeable side screens create a cooler transitional microclimate with improved ventilation.



Outdoor thermal comfort