

ARCHITECTURAL DESIGN V

**Abiyyu Arya Putra
(2702351292)**



BINA NUSANTARA UNIVERSITY
FACULTY OF ENGINEERING
DEPARTEMENT ARCHITECTURE
ACADEMIC PERIOD 2024/2025

**HONG KONG EXHIBITION
AND CONVERENCE CENTER**

CENTRAL FERRY PIER

AND SURROUNDING

500 METER FROM
EXHIBITION CENTER TO

PROMEDNADE AND PARK PEDESTRIAN AREA

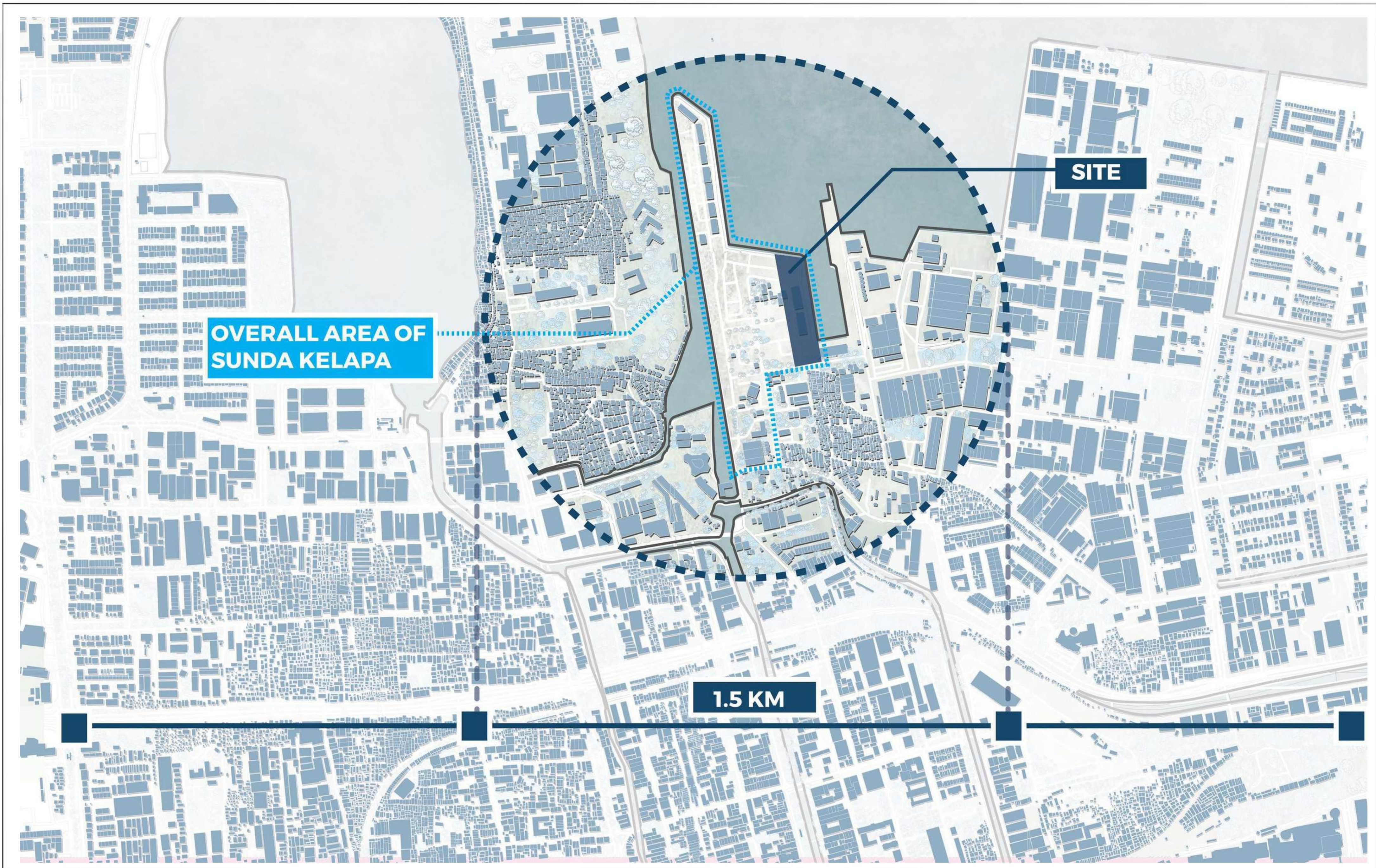
SITE DATA AND CLIMATE

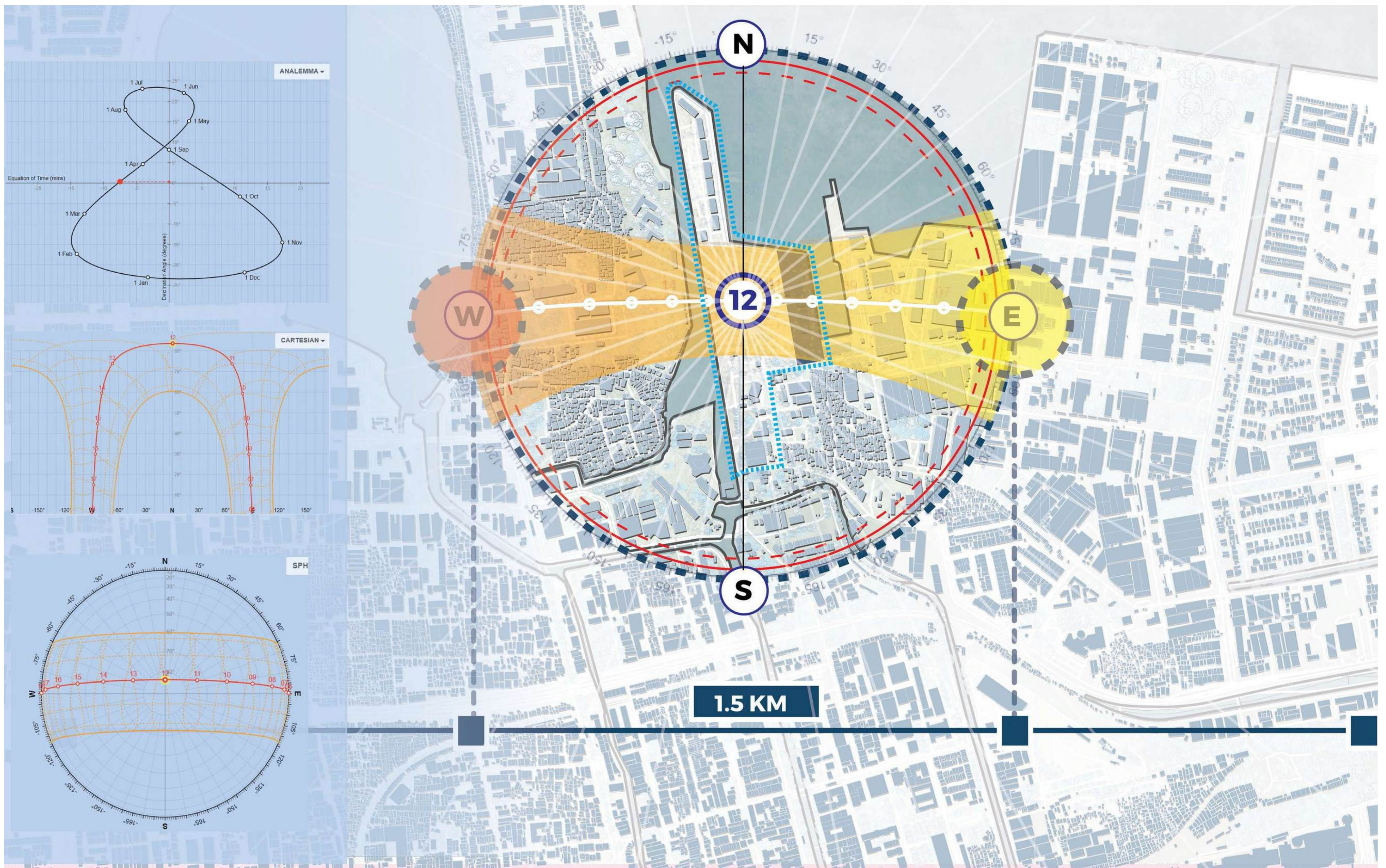
CENTRAL FERRY PIER

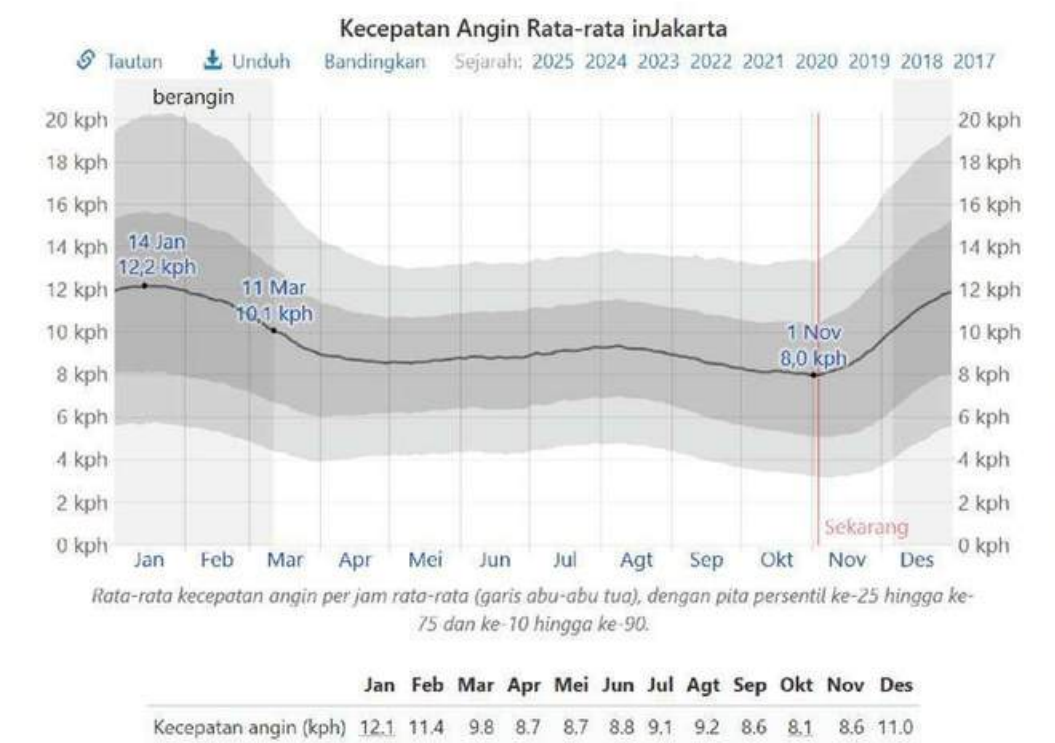
HONG KONG OBSERVATION WHEEL

CENTRAL FERRY PIER

ion and Convention Centre
Wan Chai waterfront, where
small parks, and pier areas
to the Central Ferry Pier. The
s to flow easily between the
the active public waterfront,
accessible edge of the

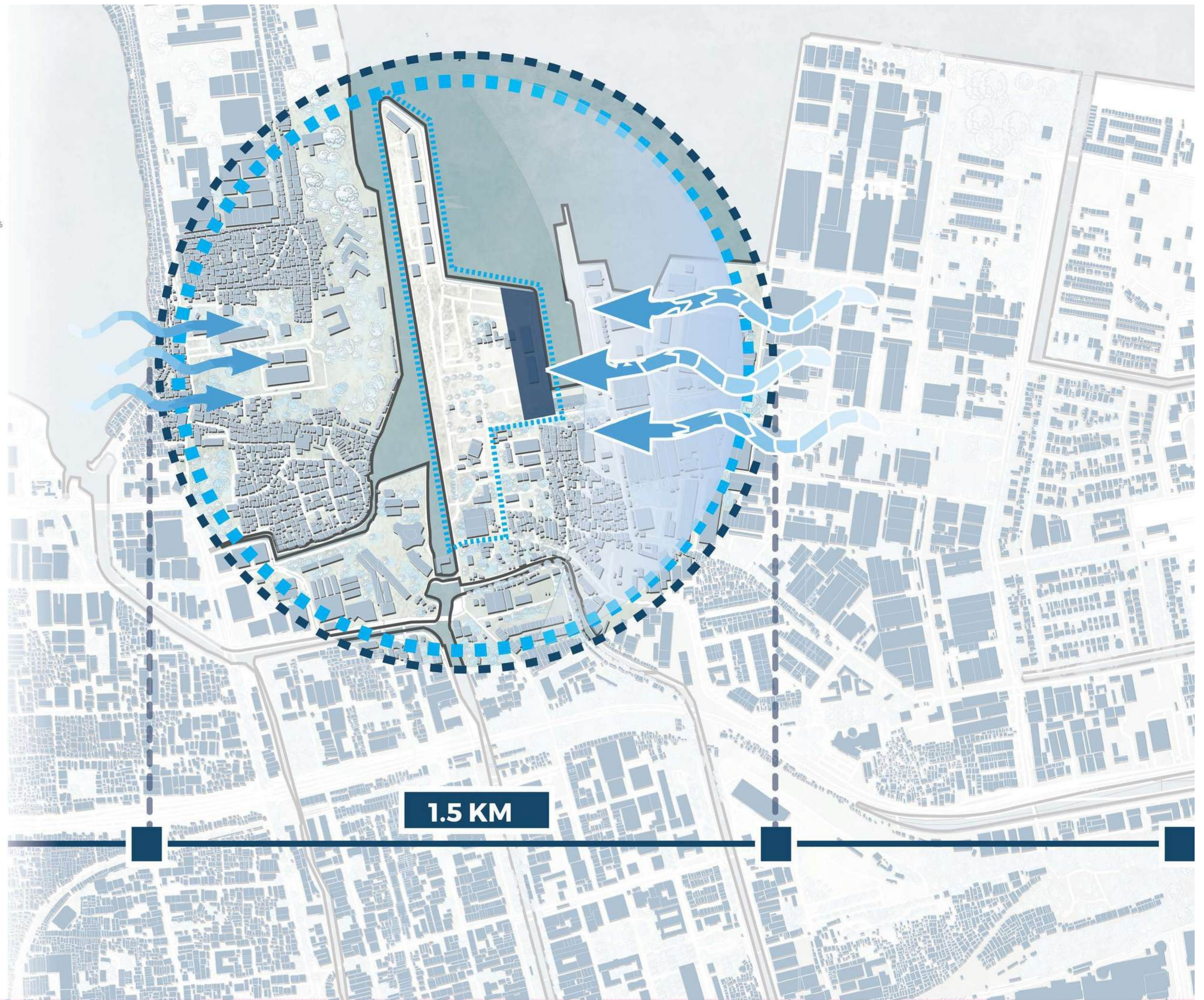






WIND PERIOD
DES 5 - MAR 11
>10.1 KM/H

CALMER PERIOD
MAR 11 - DES 5
<10.1 KM/H



HONG KONG EXHIBITION
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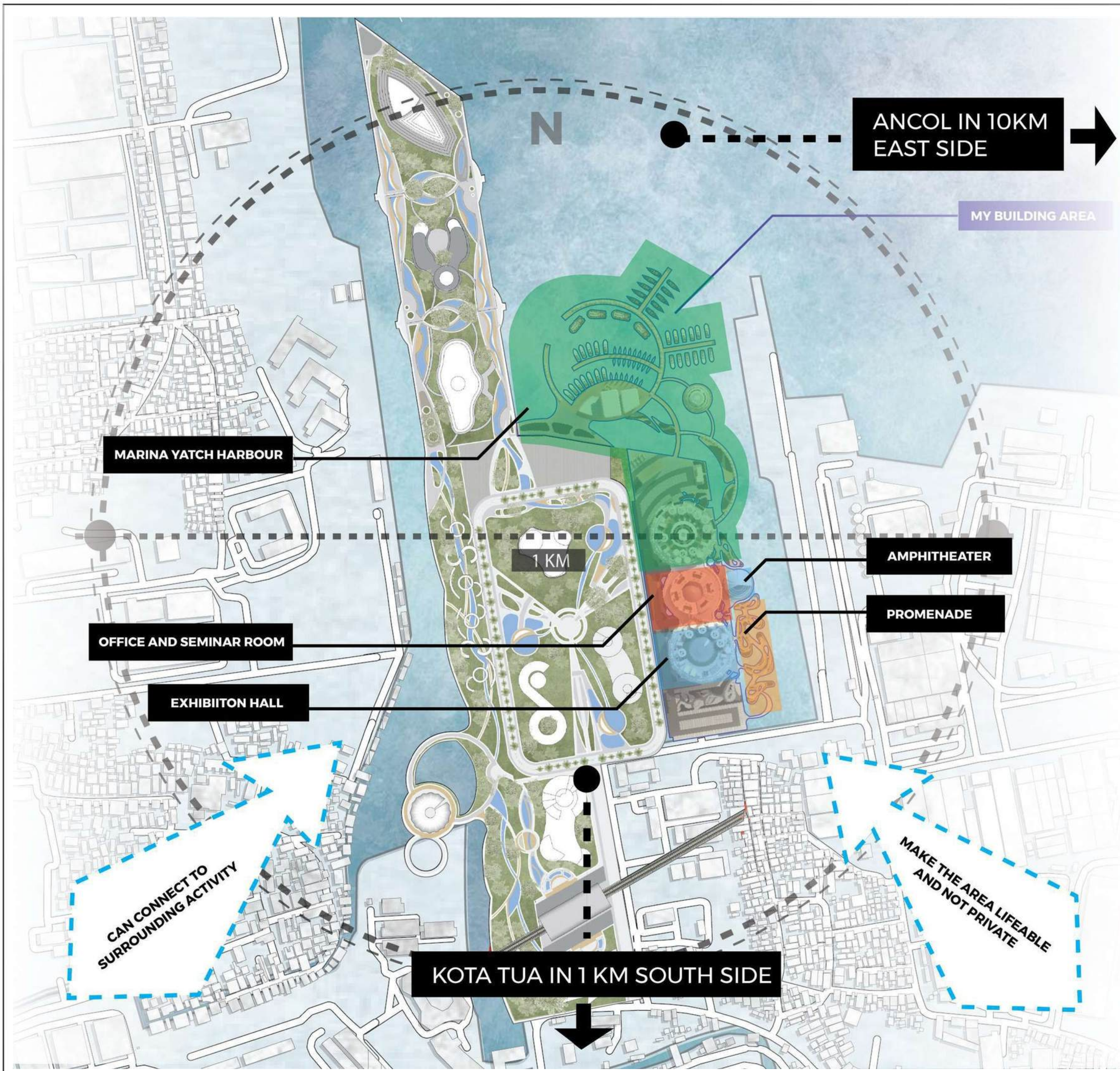
PROJECT BRIEF AND OBJECTIVE

CENTRAL FERRY PIER

HONG KONG OBSERVATION WHEEL

CENTRAL FERRY PIER

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STRENGTH

A prime waterfront location near Kota Tua and Ancol creates a unique blend of history, tourism, and business.



WEAKNESS

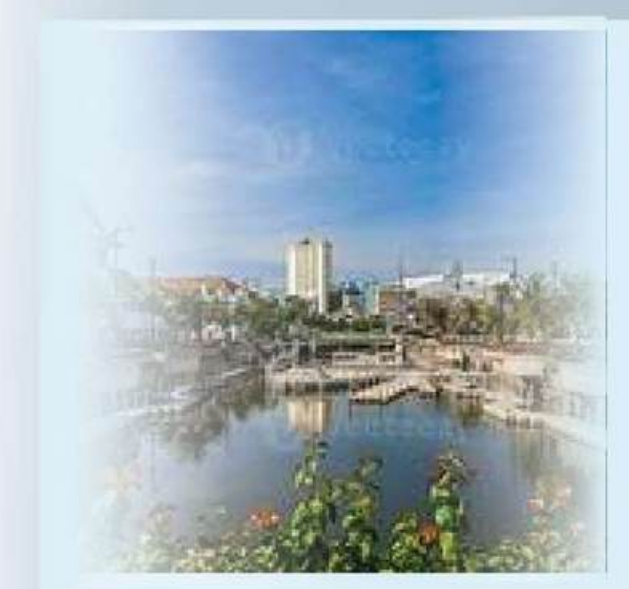
Aging port infrastructure requires revitalization to support modern mixed-use development.

BEFORE CONDITION*



OPPORTUNITY

Strong potential for tourism, MICE, and maritime-based activities through integration with nearby heritage and leisure areas.



THREATS

Competition from other Jakarta destinations demands a strong maritime-cultural identity.

AFTER AND PROJET OBJECTIVE

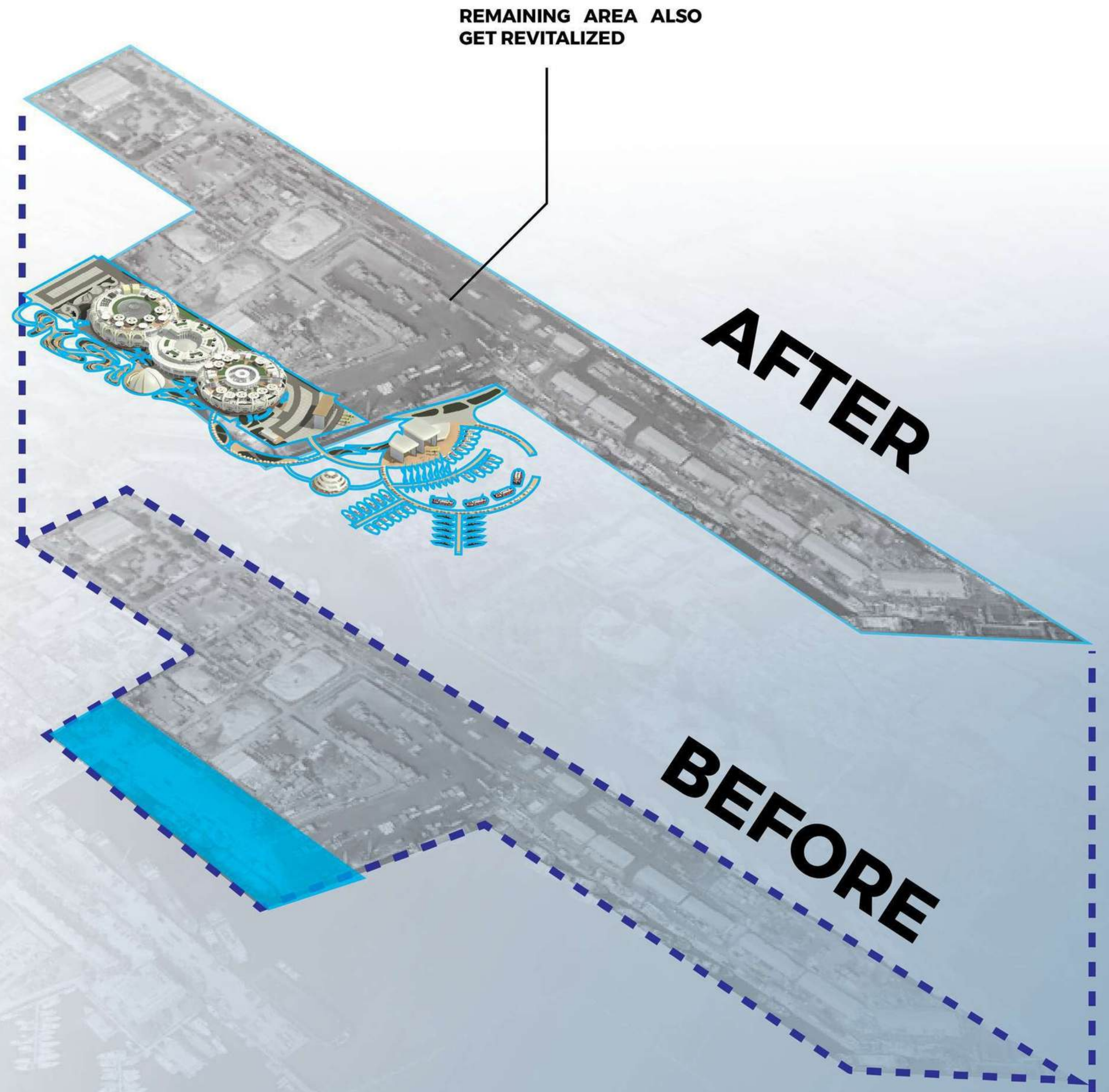


To relocate and reorganize the existing port activities and reorient the area by 180 degrees into a sustainable waterfront tourism and marina destination. Combining Marina harbour, Office, and Exhibition Area.

BEFORE



Sunda Kelapa functions as a dense and deteriorated port area dominated by informal activities, limited public access, and low environmental quality.



4 ANCHOR MARINA HARBOUR



CORE FACILITIES

- Floating and fixed pontoons for recreational yachts
- Secure mooring system with international-standard bollards and fenders
- Adequate basin depth and navigation channels for medium to large yachts
- Shore power and fresh water supply at each berth
- Fuel dock
- Waste management systems (sewage, garbage, oil)



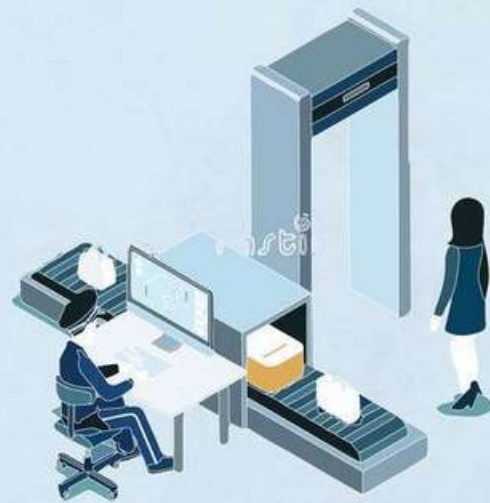
VESSEL SERVICE

- Light repair and routine maintenance services
- Travel lift or crane for boat handling
- Dry storage and docking area
- Marina fire-fighting system



ONSHORE AMENITIES

- Marina office and harbor master services
- Clean restrooms and shower facilities (hotel standard)
- Sufficient parking area
- Restaurant, café, or clubhouse
- Marine supply shop
- Wi-Fi connectivity



SAFETY AND SECURITY

- 24-hour security personnel and CCTV
- Controlled access to docks and pontoons
- Emergency response systems and safety signage
- Full marina lighting at night



OPERATIONAL REGULATION

- Clear procedures for berthing and vessel movement
- Mandatory vessel and crew registration
- Compliance with environmental regulations
- Defined operating hours and service schedules
- Valid vessel insurance and user liability requirements



SERVICE STANDARD

- High cleanliness and marina upkeep
- Professional and responsive marina staff
- Weather and navigation information available
- High comfort level, below ultra-luxury (5-Anchor) standard

HONG KONG EXHIBITION
AND CONVERENCE CENTER

CENTRAL FERRY PIER

AND SURROUNDING

500 METER FROM
EXHIBITION CENTER TO

PRECEDENT ANALYSIS

PROMEDNADE AND PARK PEDESTRIAN AREA

CENTRAL FERRY PIER

HONG KONG OBSERVATION WHEEL

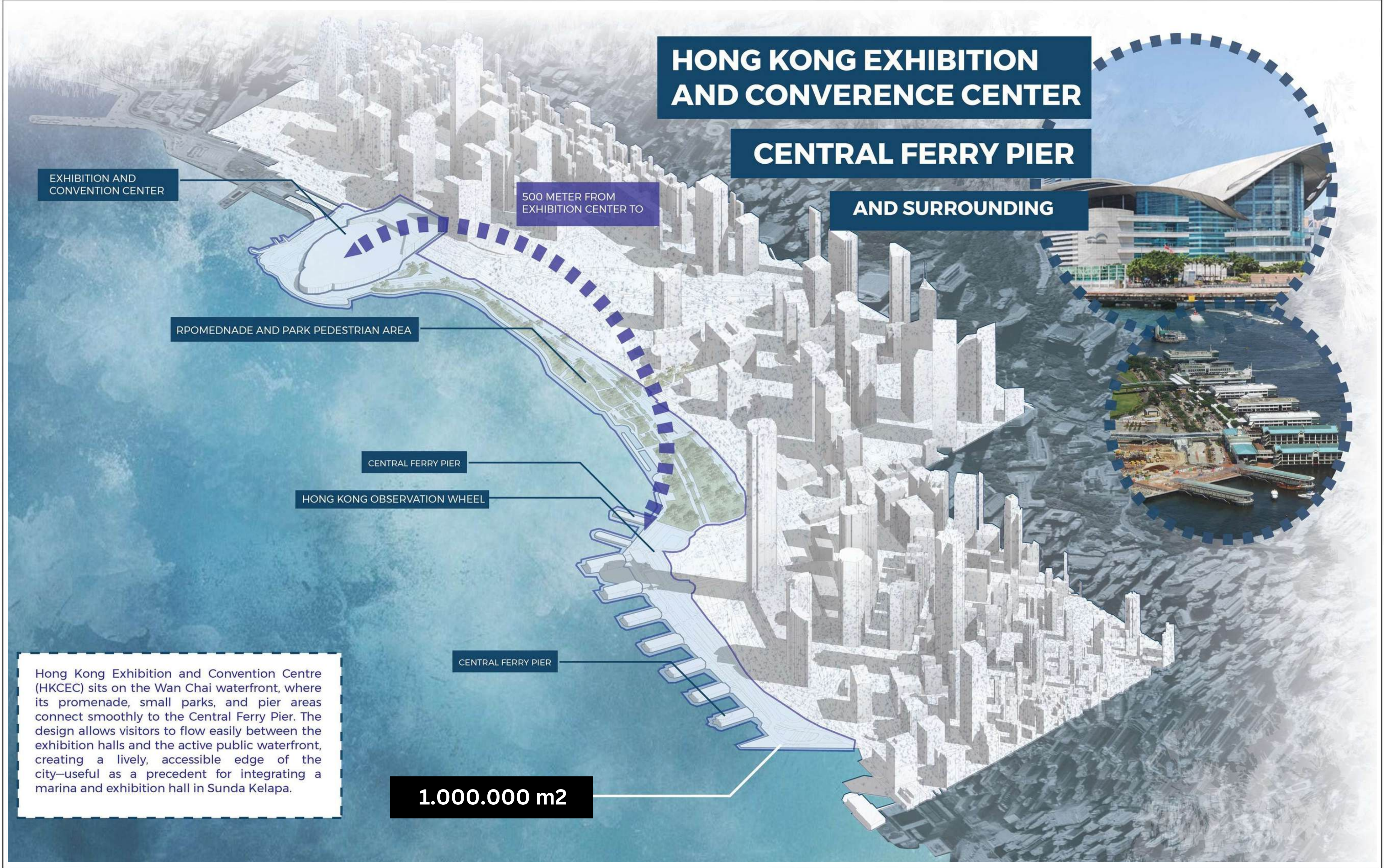
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HONG KONG EXHIBITION AND CONVENTION CENTER

CENTRAL FERRY PIER

AND SURROUNDING



EXHIBITION AND CONVENTION CENTER

500 METER FROM EXHIBITION CENTER TO

PROMENADE AND PARK PEDESTRIAN AREA

CENTRAL FERRY PIER

HONG KONG OBSERVATION WHEEL

CENTRAL FERRY PIER

1.000.000 m²

Hong Kong Exhibition and Convention Centre (HKCEC) sits on the Wan Chai waterfront, where its promenade, small parks, and pier areas connect smoothly to the Central Ferry Pier. The design allows visitors to flow easily between the exhibition halls and the active public waterfront, creating a lively, accessible edge of the city—useful as a precedent for integrating a marina and exhibition hall in Sunda Kelapa.



TUGAS PERANCANGAN ARSITEKTUR V
 JURUSAN ARSITEKTUR
 FAKULTAS TEKNIK
 UNIVERSITAS BINA NUSANTARA
 TAHUN AKADEMIK 2024/2025

JUDUL PROYEK : SUNDA KELAPA WATERFRONT CITY
 TOPIK / TEMA : SUNDA KELAPA REVILATLIZATION

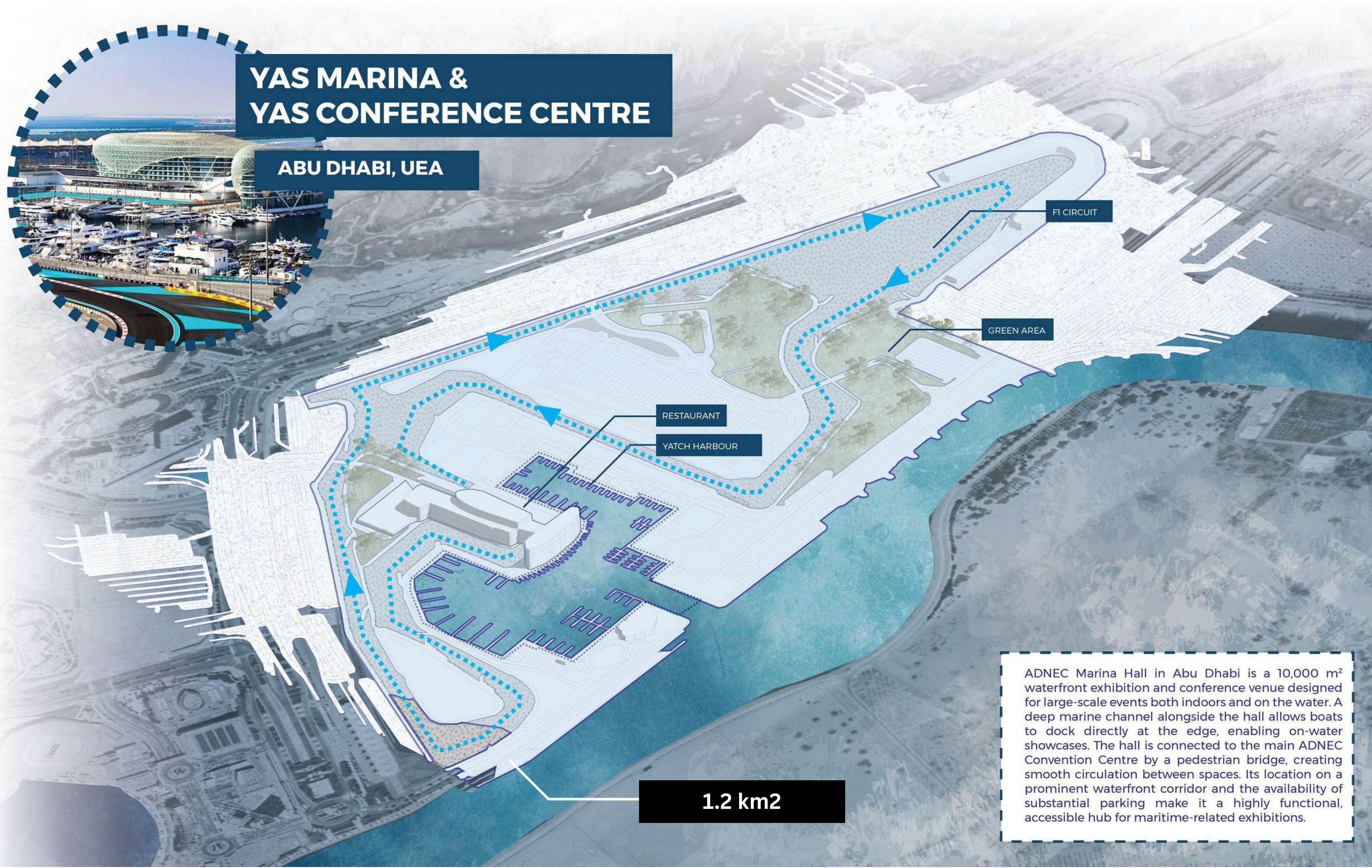
NAMA : ABIYU ARYA PUTRA
 NIM : 2702351292
 DOSEN : Ar. RELIGIANA HENDARTI, S.T., M.T., Ph.D., IAI
 Ir.ST. Trikariastoto, M.T.
 Ir. RIYADI ISMANTO, M.Arch.

GAMBAR :
 SKALA:
 HALAMAN :
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YAS MARINA & YAS CONFERENCE CENTRE

ABU DHABI, UEA



ADNEC Marina Hall in Abu Dhabi is a 10,000 m² waterfront exhibition and conference venue designed for large-scale events both indoors and on the water. A deep marine channel alongside the hall allows boats to dock directly at the edge, enabling on-water showcases. The hall is connected to the main ADNEC Convention Centre by a pedestrian bridge, creating smooth circulation between spaces. Its location on a prominent waterfront corridor and the availability of substantial parking make it a highly functional, accessible hub for maritime-related exhibitions.

1.2 km²

KAOSHIUNG EXHIBITION CENTER AND SURROUNDING



Kaohsiung Exhibition Center is a waterfront convention venue in southern Taiwan, known for its flowing, wave-inspired roof and its position facing the harbor. The building integrates indoor halls with an open public promenade, allowing visitors to move easily between exhibition spaces and the maritime edge. Its design emphasizes transparency and connection to the water, creating a vibrant public realm where events, leisure areas, and the harbor coexist seamlessly—making it a strong precedent for combining exhibition facilities with a marina setting.

350.000 m2

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VANCOUVER CONVENTION CENTER

COAL HARBOUR

AND SURROUNDING

250.000 m²

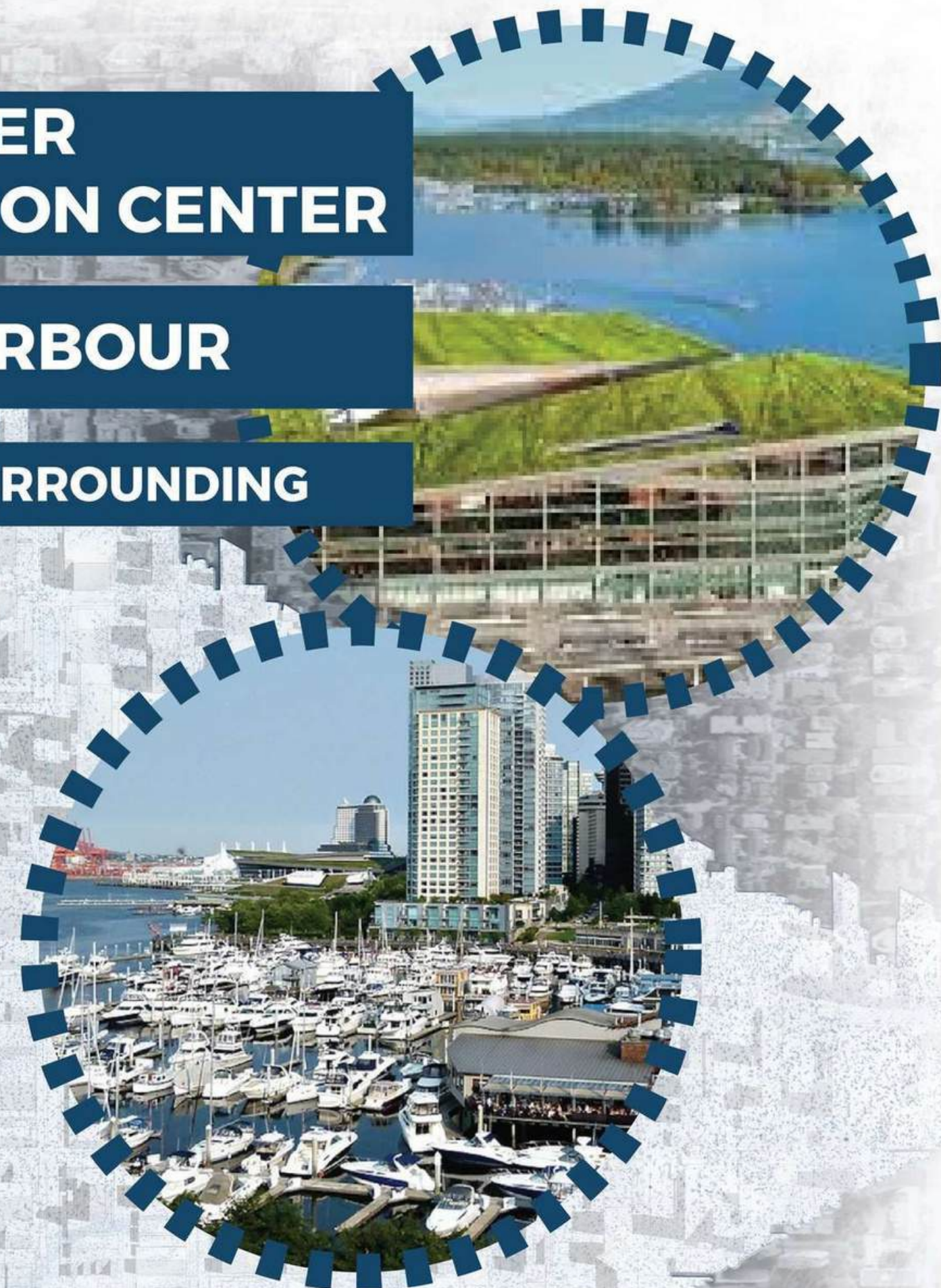
CONVENTION HALL TO HARBOUR IS AROUND 490 M

PLANE PARK

VANCOUVER CONVENTION CENTER

GREENERY PROMENADE

YATCH / BOAT AREA AND DOCK



Coal Harbour in Vancouver is a mixed-use waterfront district where marinas, promenades, parks, and cultural facilities blend seamlessly with high-rise development. The area features a continuous pedestrian and cycling path linking the convention center, public plazas, seawall edges, and yacht moorings, creating an active urban waterfront. Its design prioritizes open public access, clear sightlines to the water, and flexible spaces that support daily recreation as well as large civic events—an effective model for integrating marina functions with public and exhibition-oriented environments.



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PROJECT BRIEF

Exhibition / Convention Hall



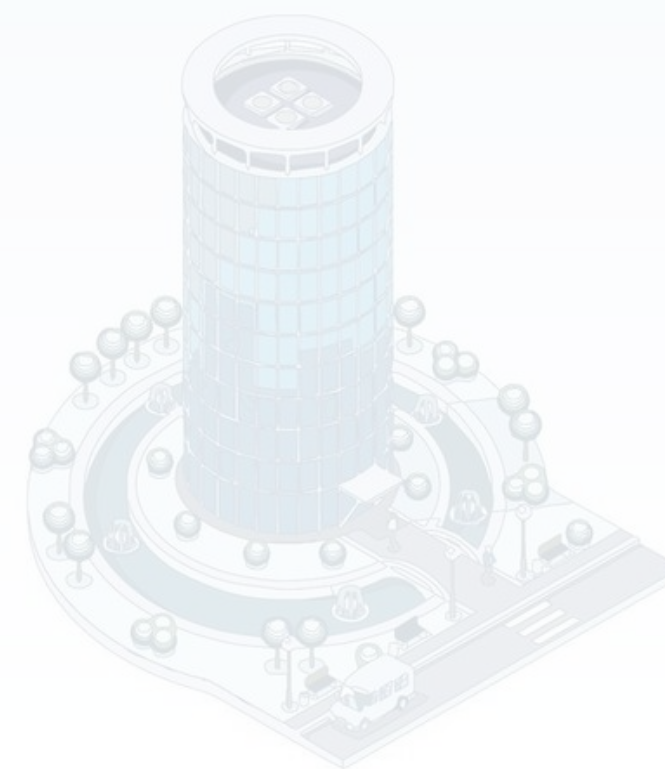
A flexible MICE venue with lobby-prefunction, main hall, meeting/VIP rooms, F&B, and BOH facilities including loading and AV control.



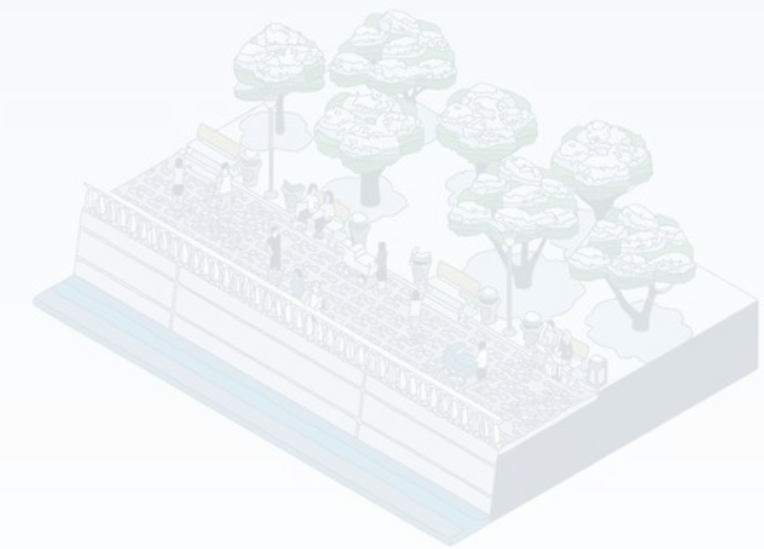
Passive Canal System

A controlled seawater canal using screen filters, settling basin, weirs, and tidal gates to maintain clean, stable water flow around the site.

Circular Building Massing



Three circular buildings—one for lobby, one for the exhibition hall—form a strong landmark identity and clear visitor circulation.



Promenade Visitor Experience

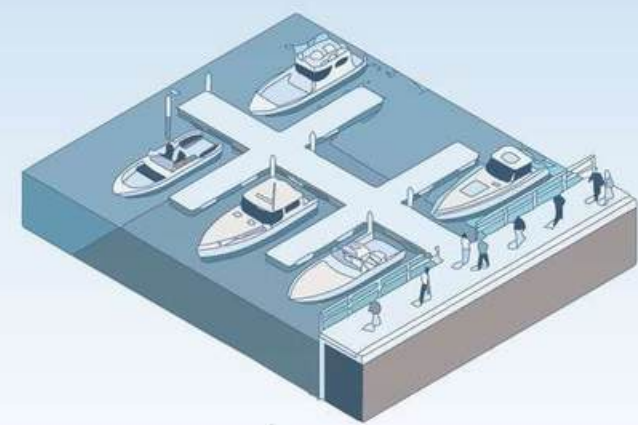
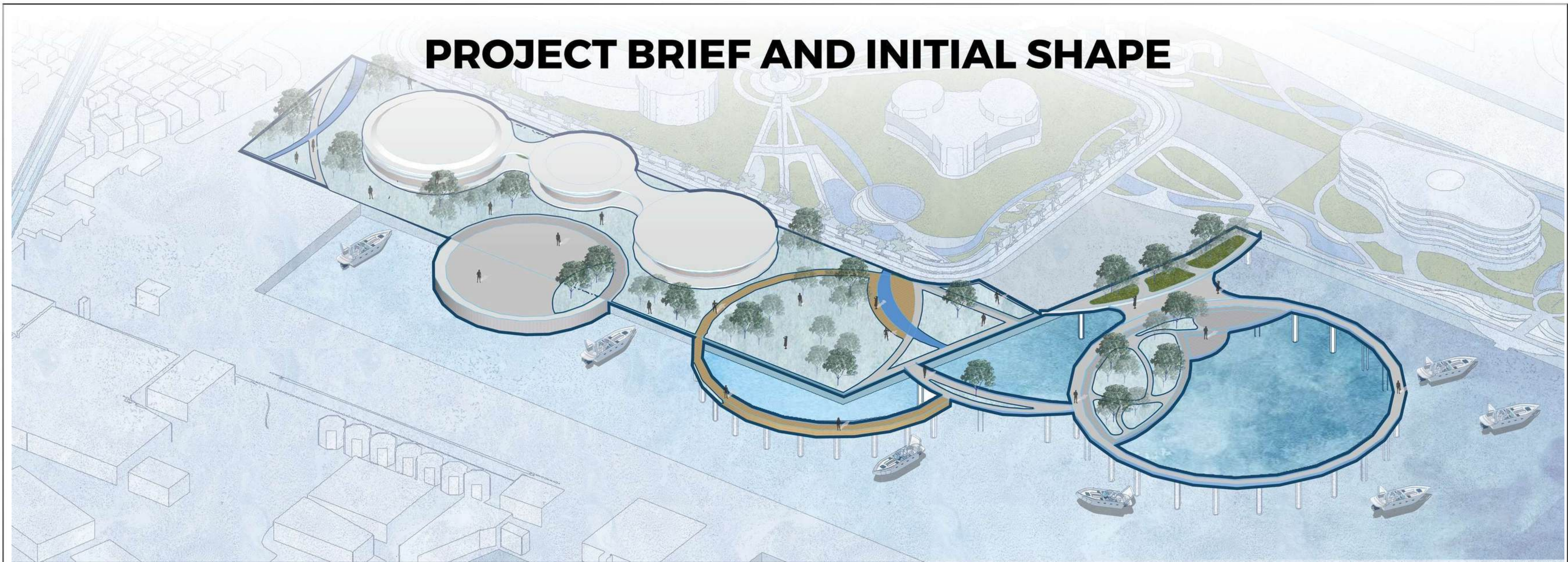
Visitors arrive through a waterfront promenade, enter the circular lobby, and continue naturally to the exhibition hall, marina lounge, or F&B.

New Sund



A landmark lighthouse to pavilion acts as a focal point of the revitalized waterfront.

PROJECT BRIEF AND INITIAL SHAPE



Marina (Small-Superyacht)

A modern leisure marina accommodating small boats to superyachts, complete with slips, marina office, reception/VIP lounge, power and water supply, and light maintenance. A waterfront promenade with F&B activates the edge and creates a clean, non-industrial recreational port.

Exhibition / Convention Hall



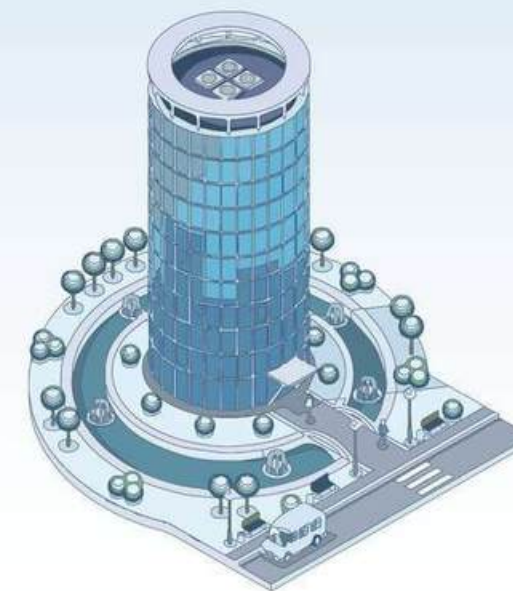
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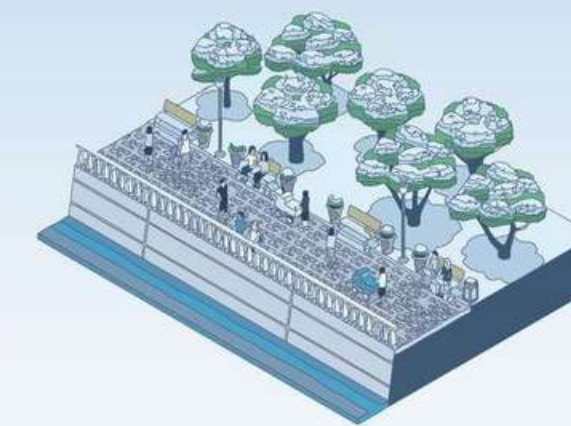
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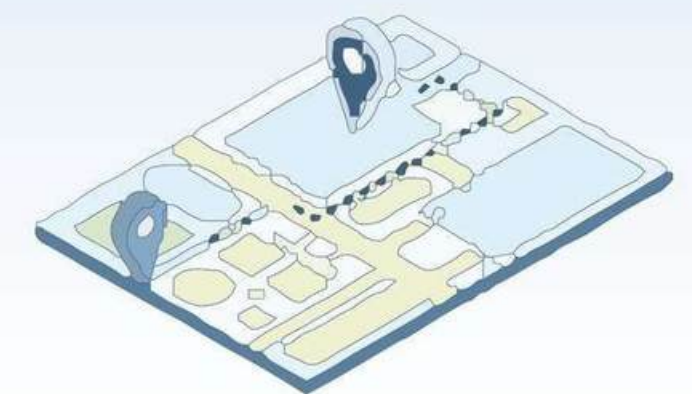
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Promenade Visitor Experience

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New Icon for Sunda Kelapa



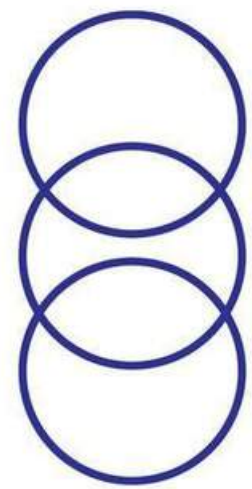
A landmark such as a modern lighthouse tower or sail-inspired pavilion acts as the new visual symbol of the revitalized waterfront.

WATER PASSIVE COOLING



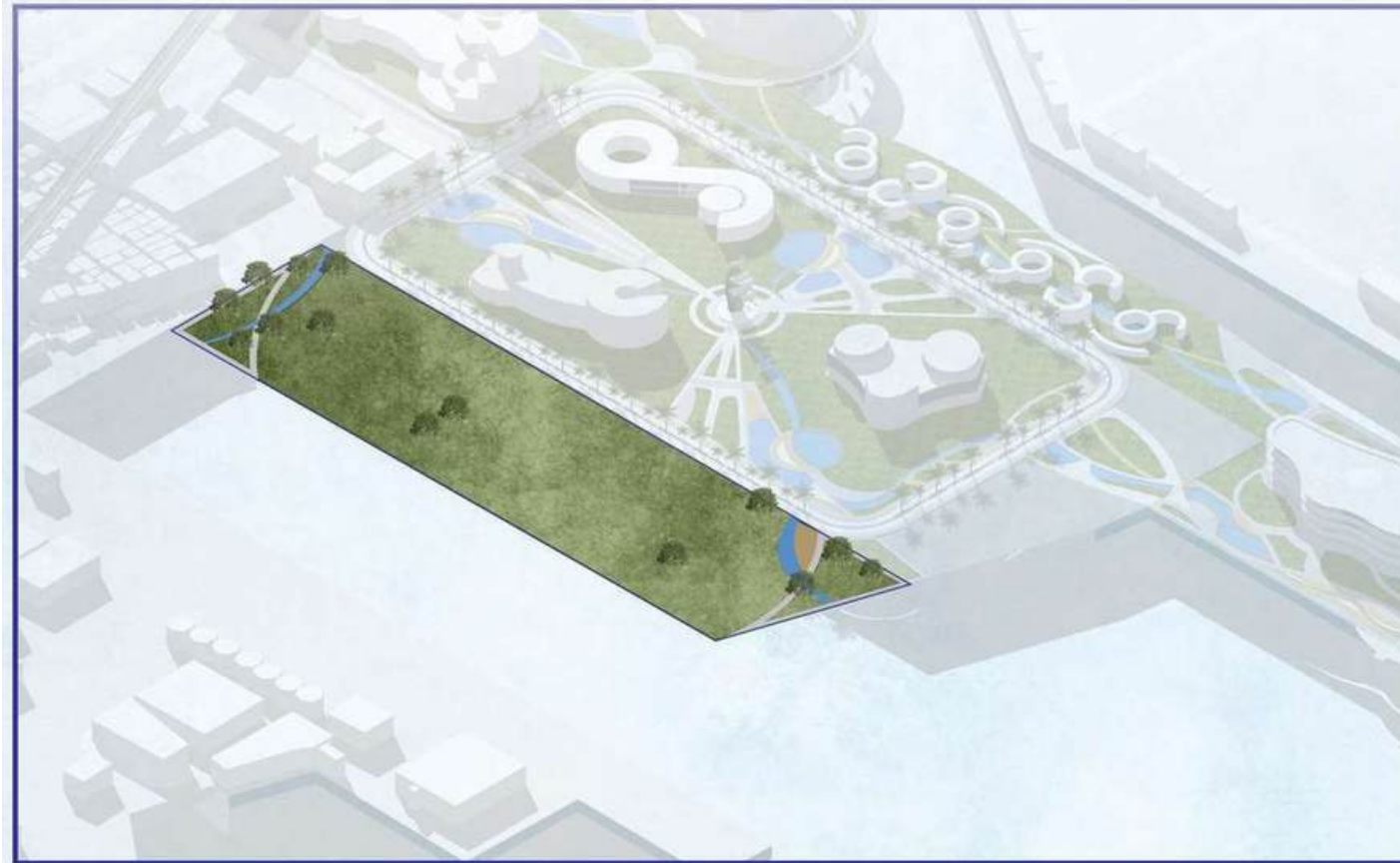
The seawater canal system naturally cools the site by circulating water through controlled inlets, filters, and shallow basins. The calm flow reduces heat gain, improves microclimate comfort, and becomes an active landscape element that enhances the waterfront experience.

CIRCULAR CONNECTIVITY CONCEPT

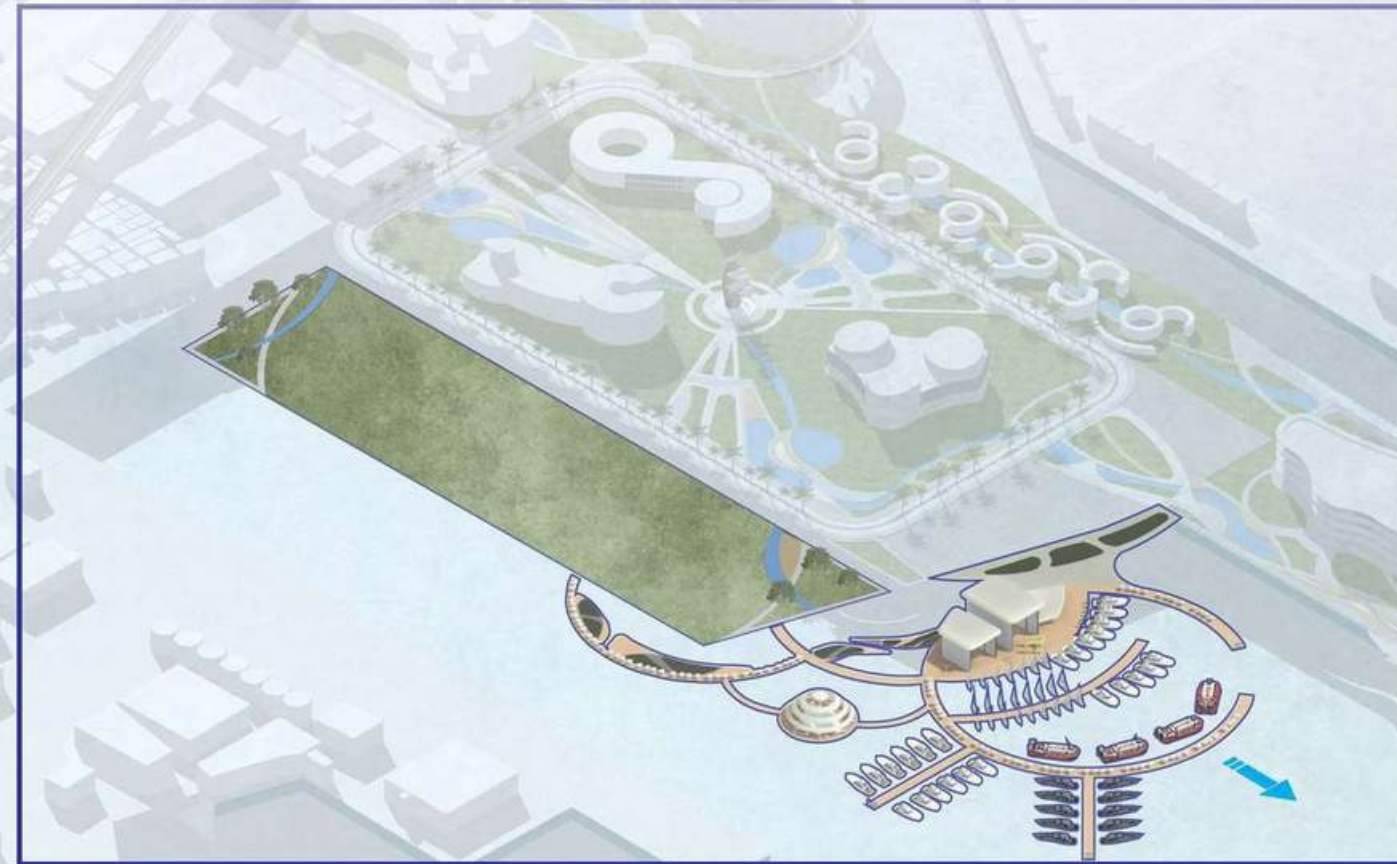


A sequence of interconnected circular platforms creates a seamless network for pedestrian movement across the waterfront. This geometry strengthens visual identity, ensures intuitive wayfinding, and establishes the project's signature architectural character.

MASS TRANSFORMING



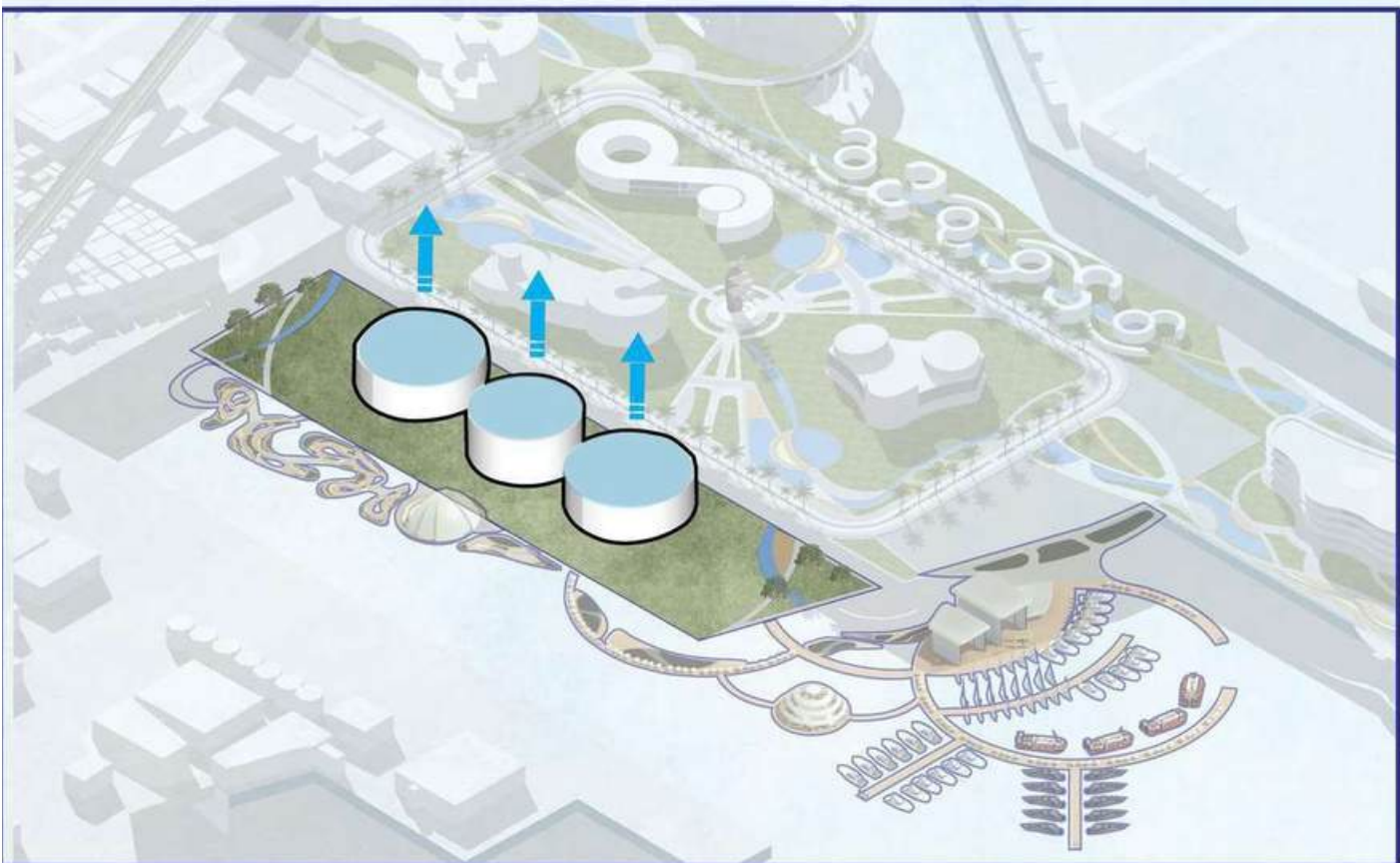
1 The initial massing is set up in a standard configuration, establishing the base layout



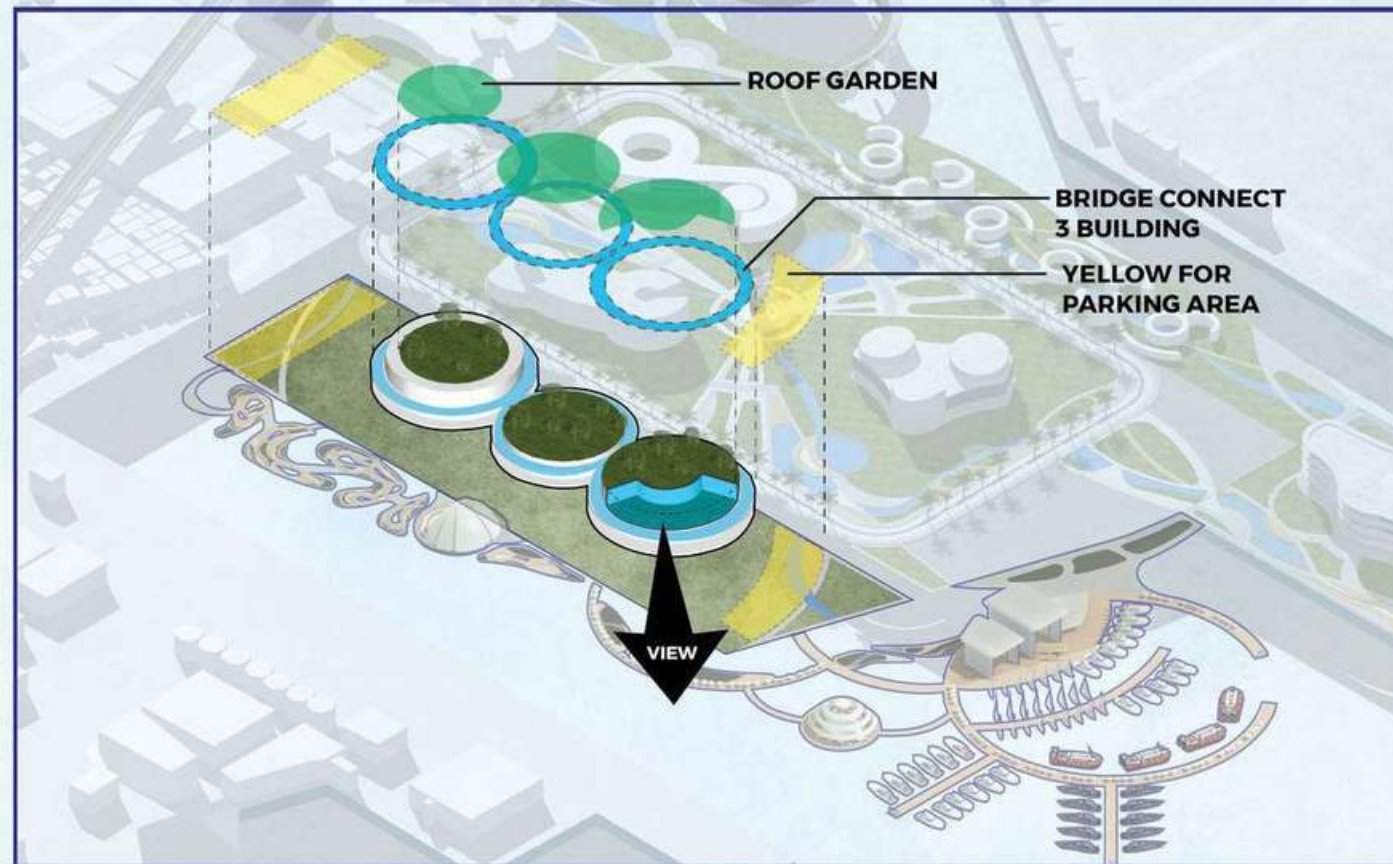
2 The massing is expanded to create a ship deck area for the harbor, accommodating maritime functions.



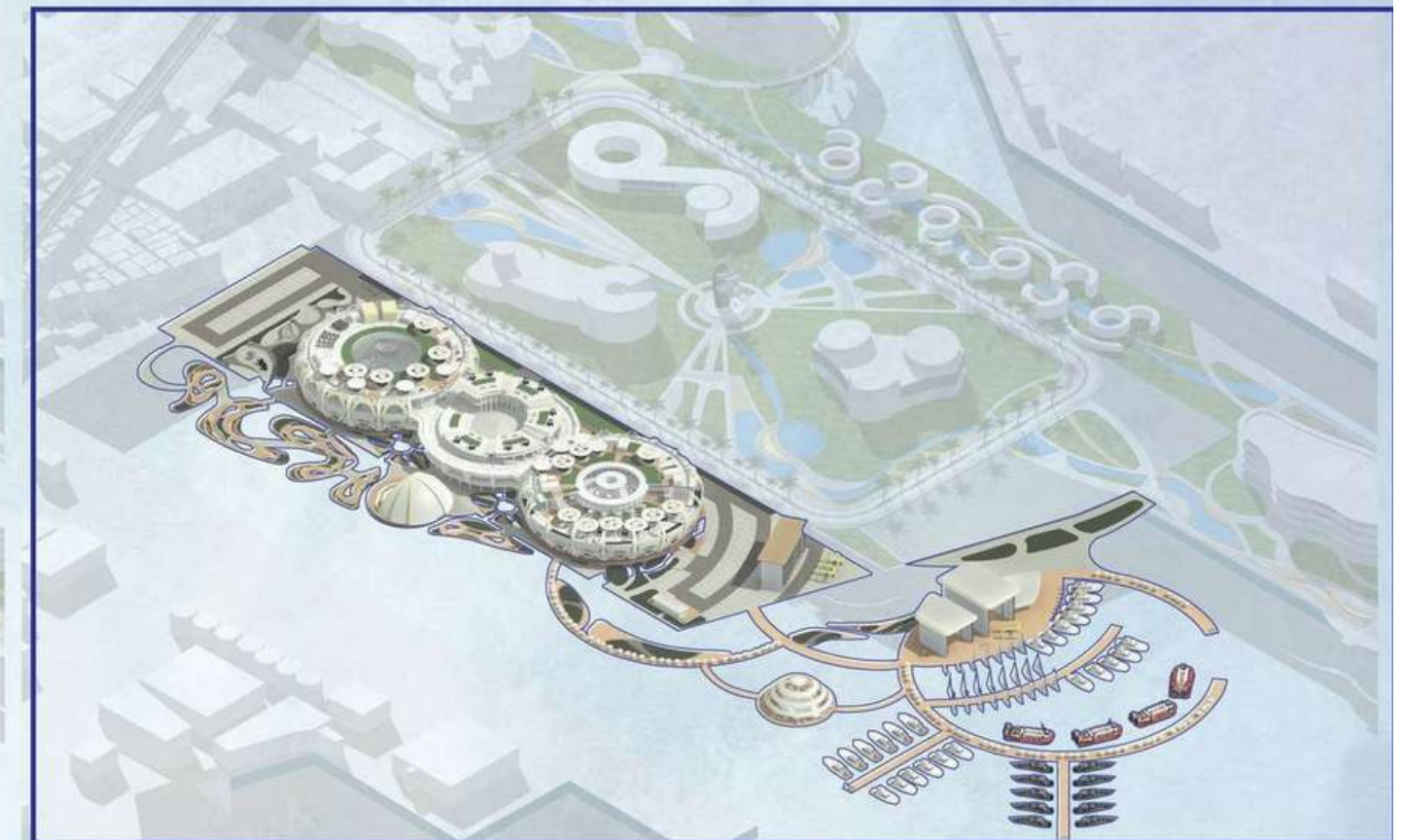
3 A promenade and amphitheater are integrated into the design, enhancing public spaces and outdoor activities.



4 Three distinct buildings are introduced to serve harbor-related functions and MICE (Meetings, Incentives, Conferences, and Exhibitions) purposes.



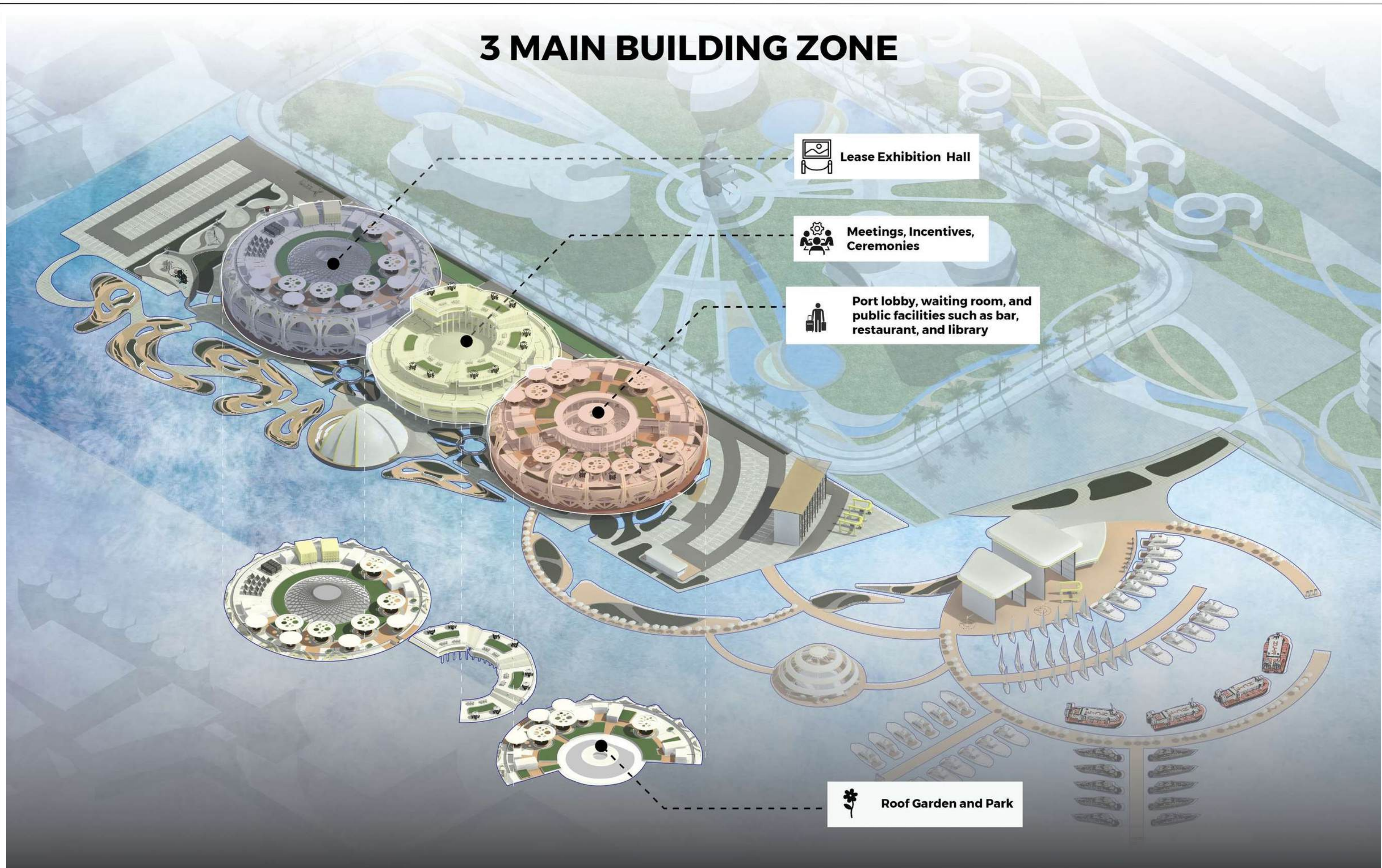
5 A connecting bridge is added to link the three building masses, with adjustments to the landscape and inclusion of a roof garden.



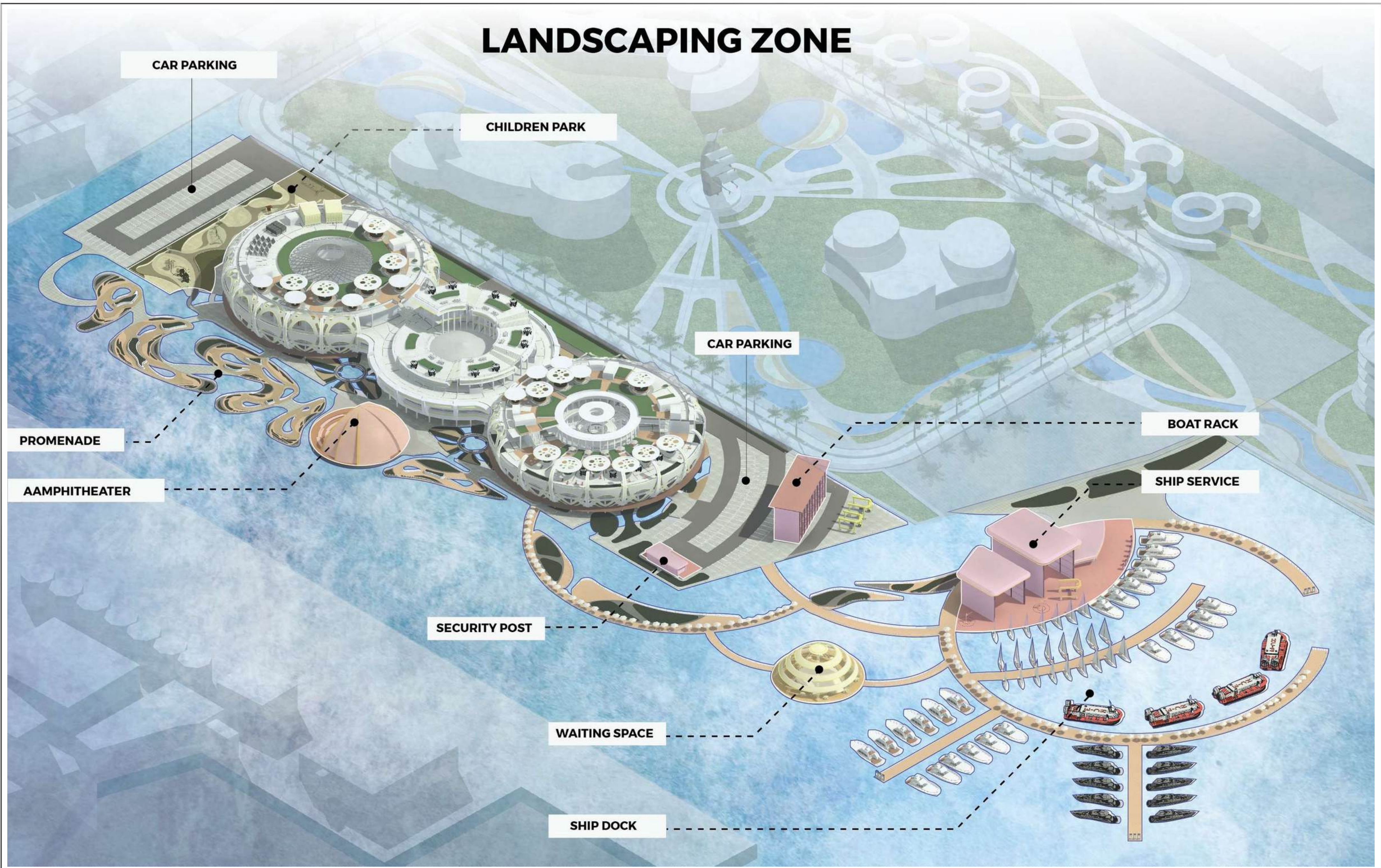
6 The final massing is completed, resulting in a cohesive and integrated architectural composition.

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3 MAIN BUILDING ZONE



LANDSCAPING ZONE



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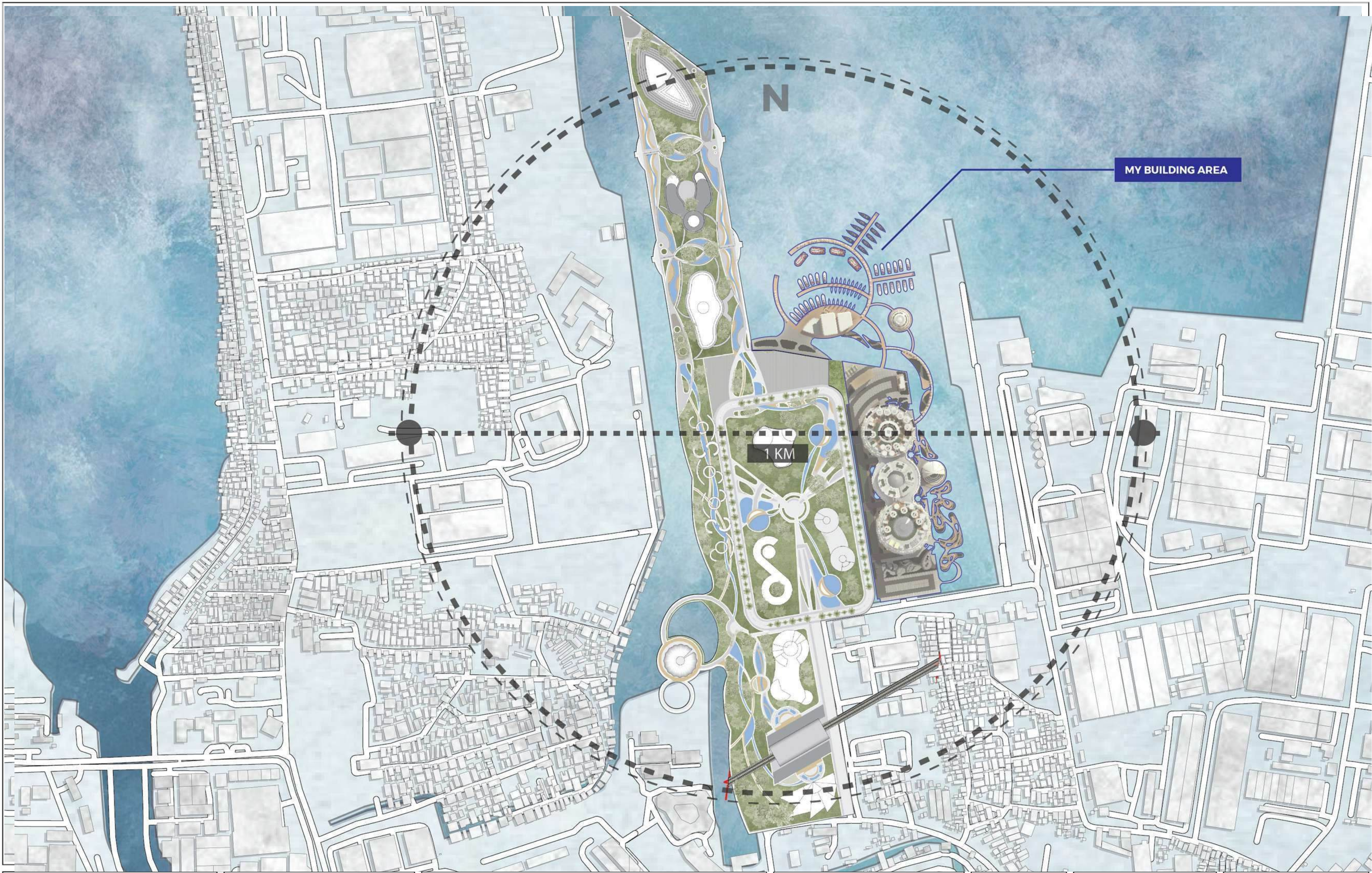
FIXED FLOOR PLAN AND ZONING

FULL FLOOR PLAN WITH ROOM NAME AND SIZE

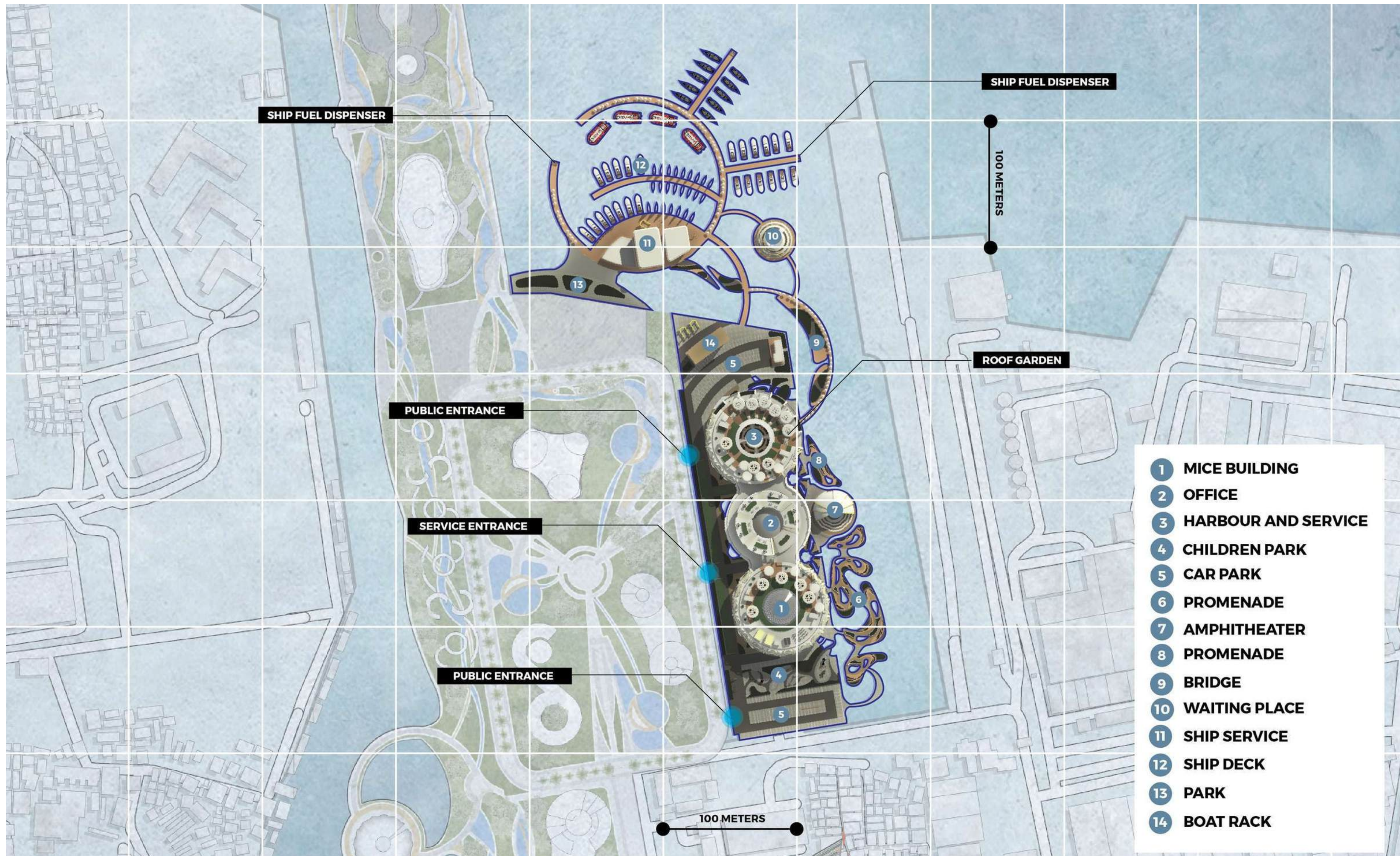
1ST SCHEMATIC FLOOR PLAN

SCALE 1:600

SQM

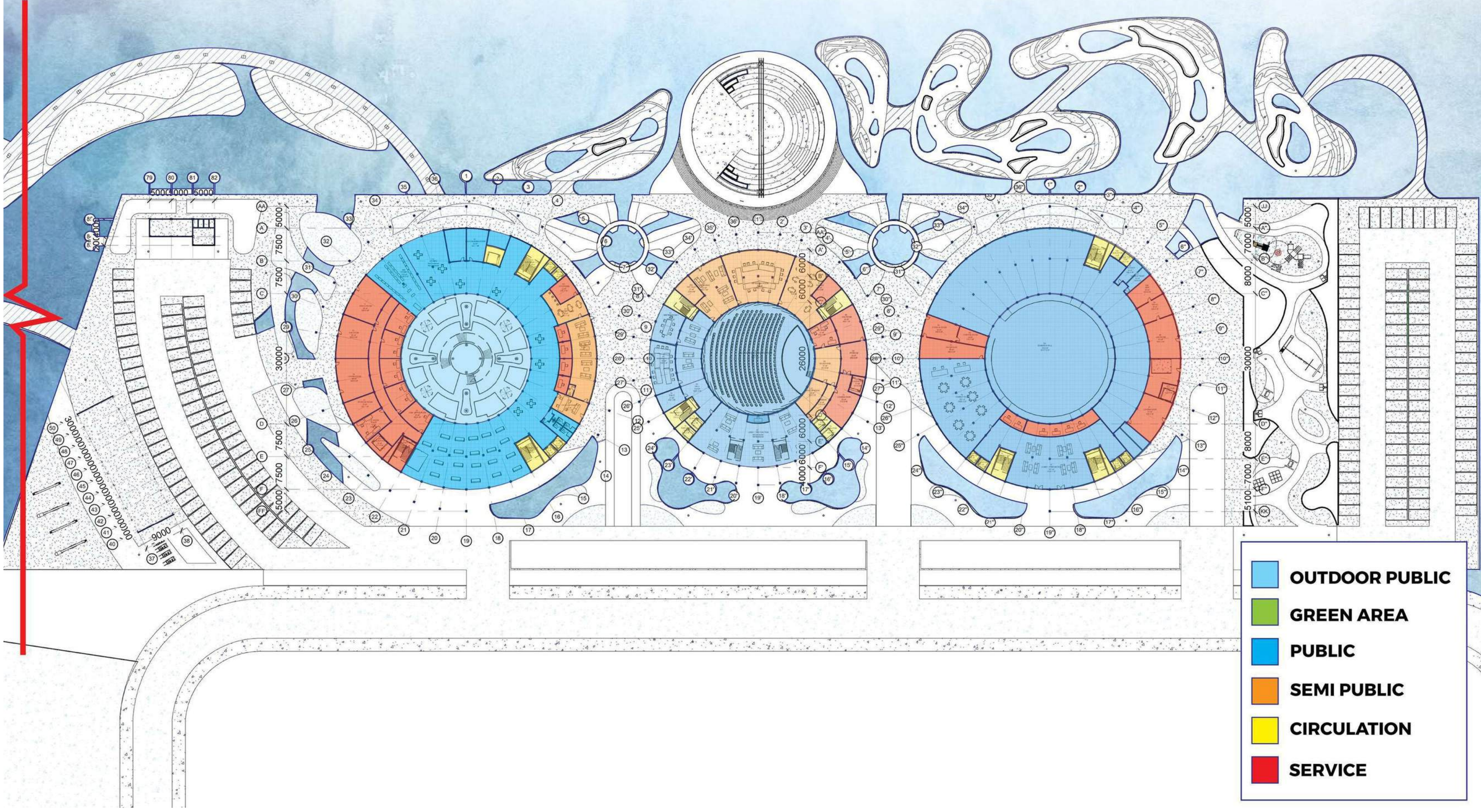


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- 1 MICE BUILDING
- 2 OFFICE
- 3 HARBOUR AND SERVICE
- 4 CHILDREN PARK
- 5 CAR PARK
- 6 PROMENADE
- 7 AMPHITHEATER
- 8 PROMENADE
- 9 BRIDGE
- 10 WAITING PLACE
- 11 SHIP SERVICE
- 12 SHIP DECK
- 13 PARK
- 14 BOAT RACK

1ST FLOOR PLAN SPACE ZONING



■	OUTDOOR PUBLIC
■	GREEN AREA
■	PUBLIC
■	SEMI PUBLIC
■	CIRCULATION
■	SERVICE



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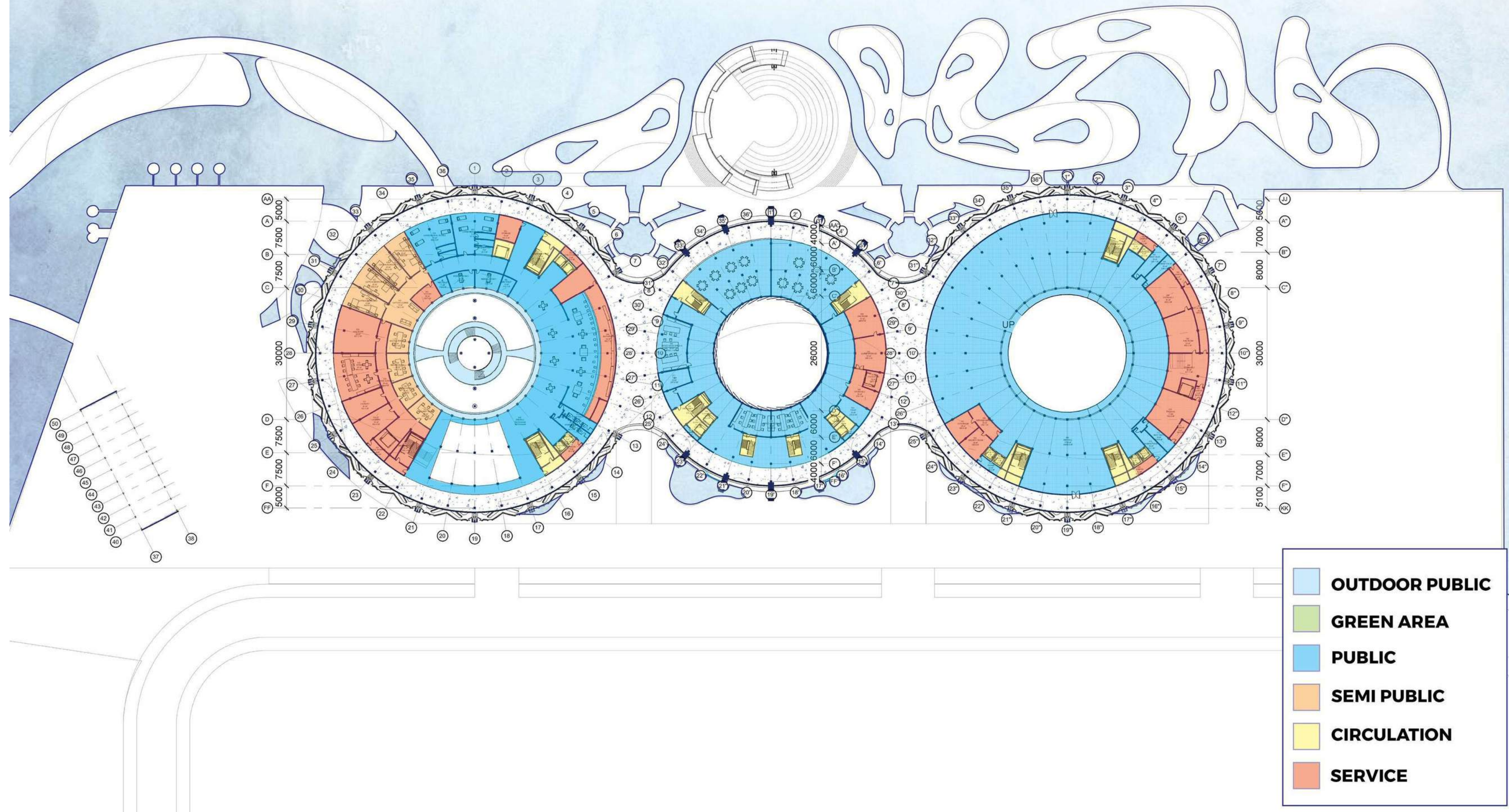
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2ND FLOOR PLAN SPACE ZONING





DESIGN RESPOND TO CLIMATE

340.000

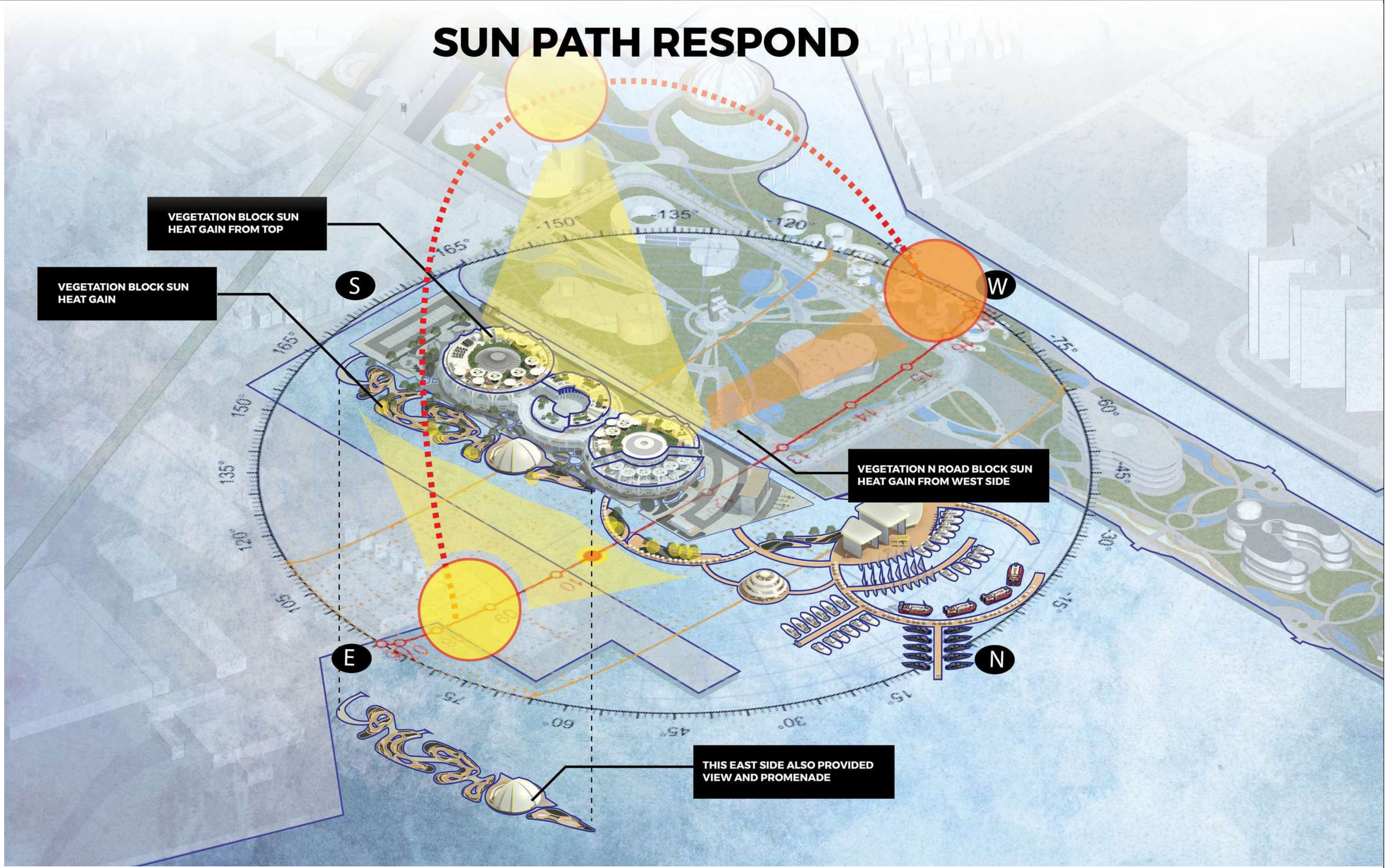
86.000

FULL FLOOR PLAN WITH ROOM NAME AND SIZE

1ST SCHEMATIC FLOOR PLAN

SCALE 1:600

SUN PATH RESPOND



VEGETATION BLOCK SUN HEAT GAIN FROM TOP

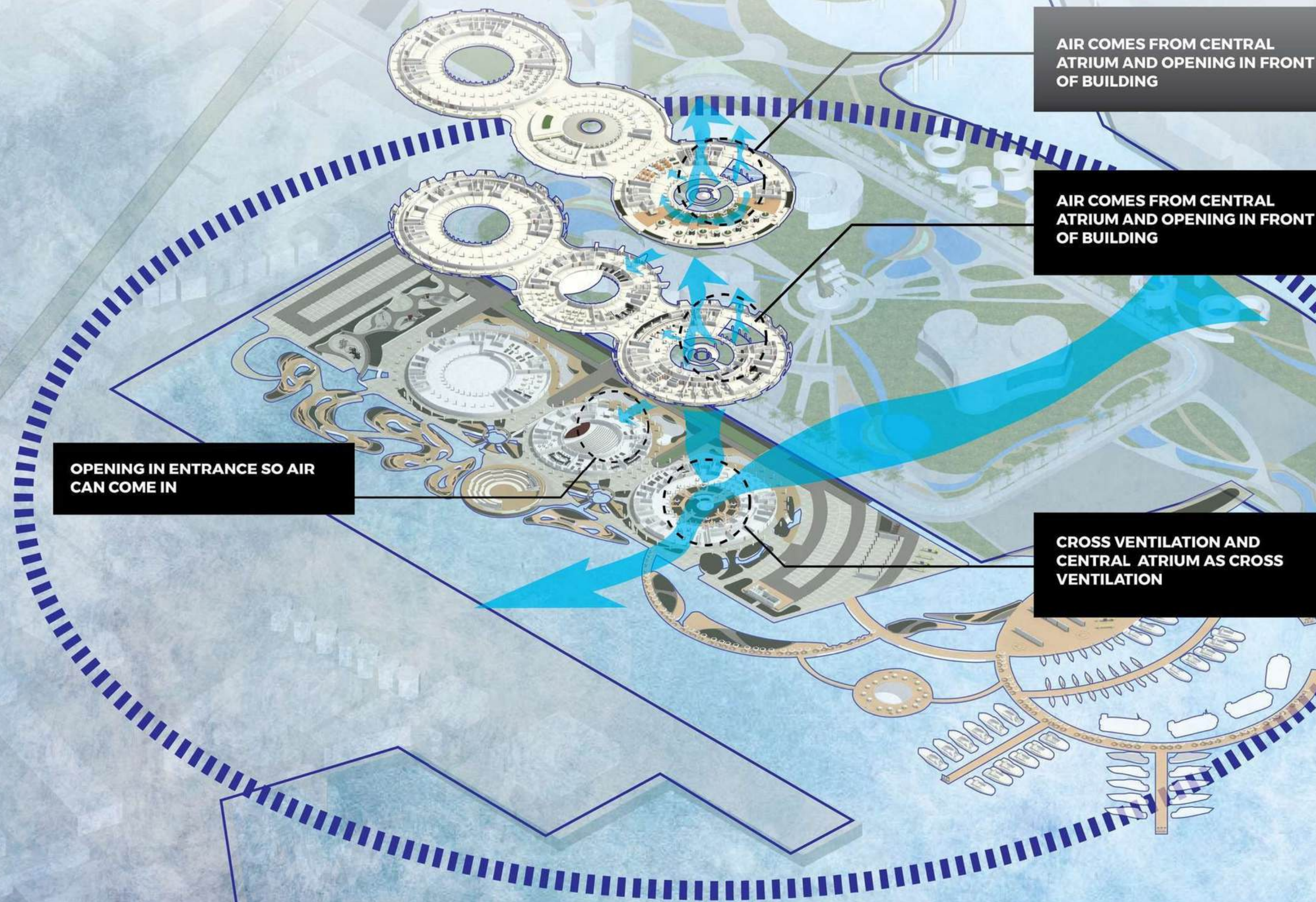
VEGETATION BLOCK SUN HEAT GAIN

VEGETATION N ROAD BLOCK SUN HEAT GAIN FROM WEST SIDE

THIS EAST SIDE ALSO PROVIDED VIEW AND PROMENADE

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WIND RESPOND



OPENING IN ENTRANCE SO AIR CAN COME IN

AIR COMES FROM CENTRAL ATRIUM AND OPENING IN FRONT OF BUILDING

AIR COMES FROM CENTRAL ATRIUM AND OPENING IN FRONT OF BUILDING

CROSS VENTILATION AND CENTRAL ATRIUM AS CROSS VENTILATION

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GREEN CONCEPT

340.000

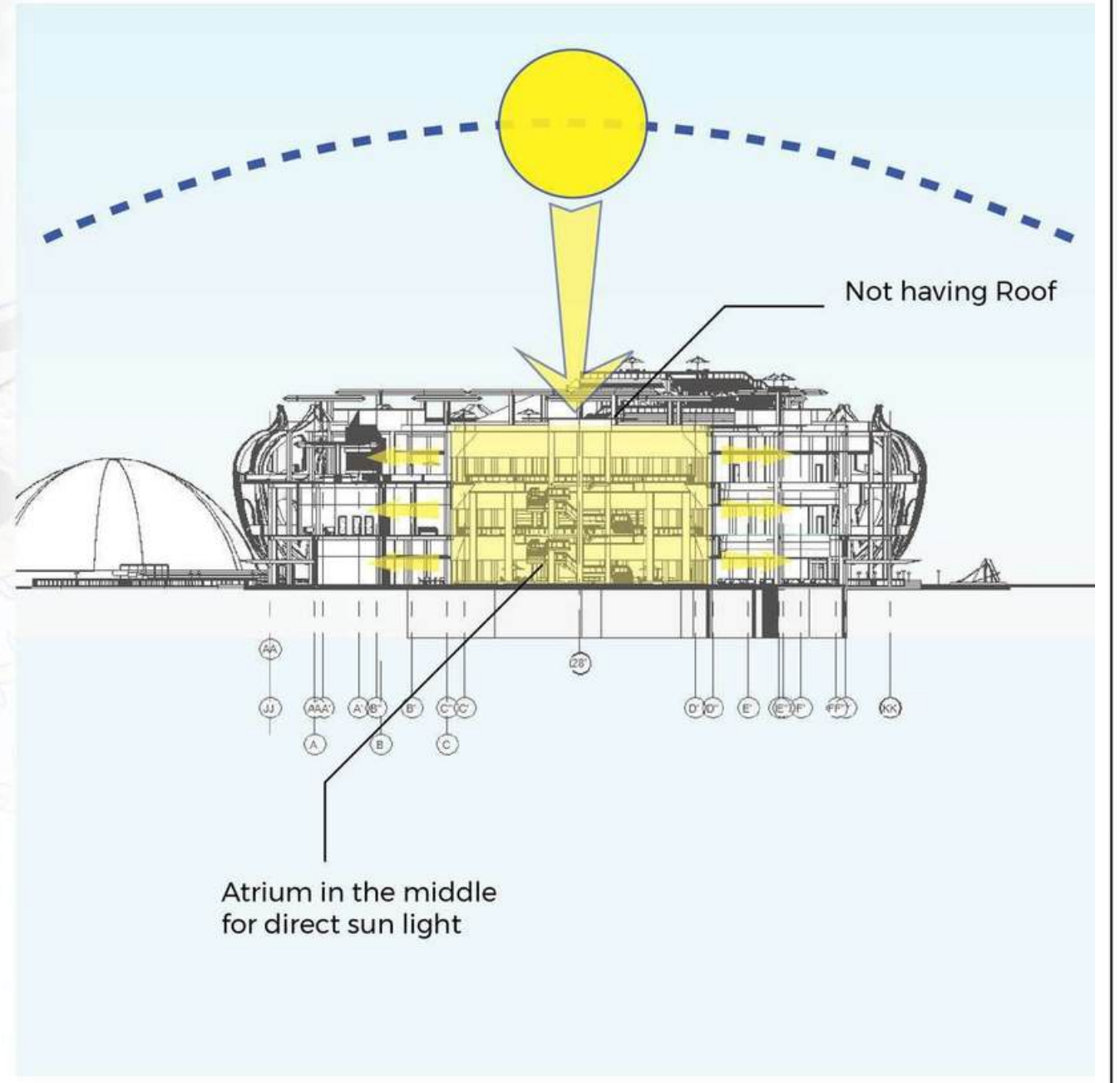
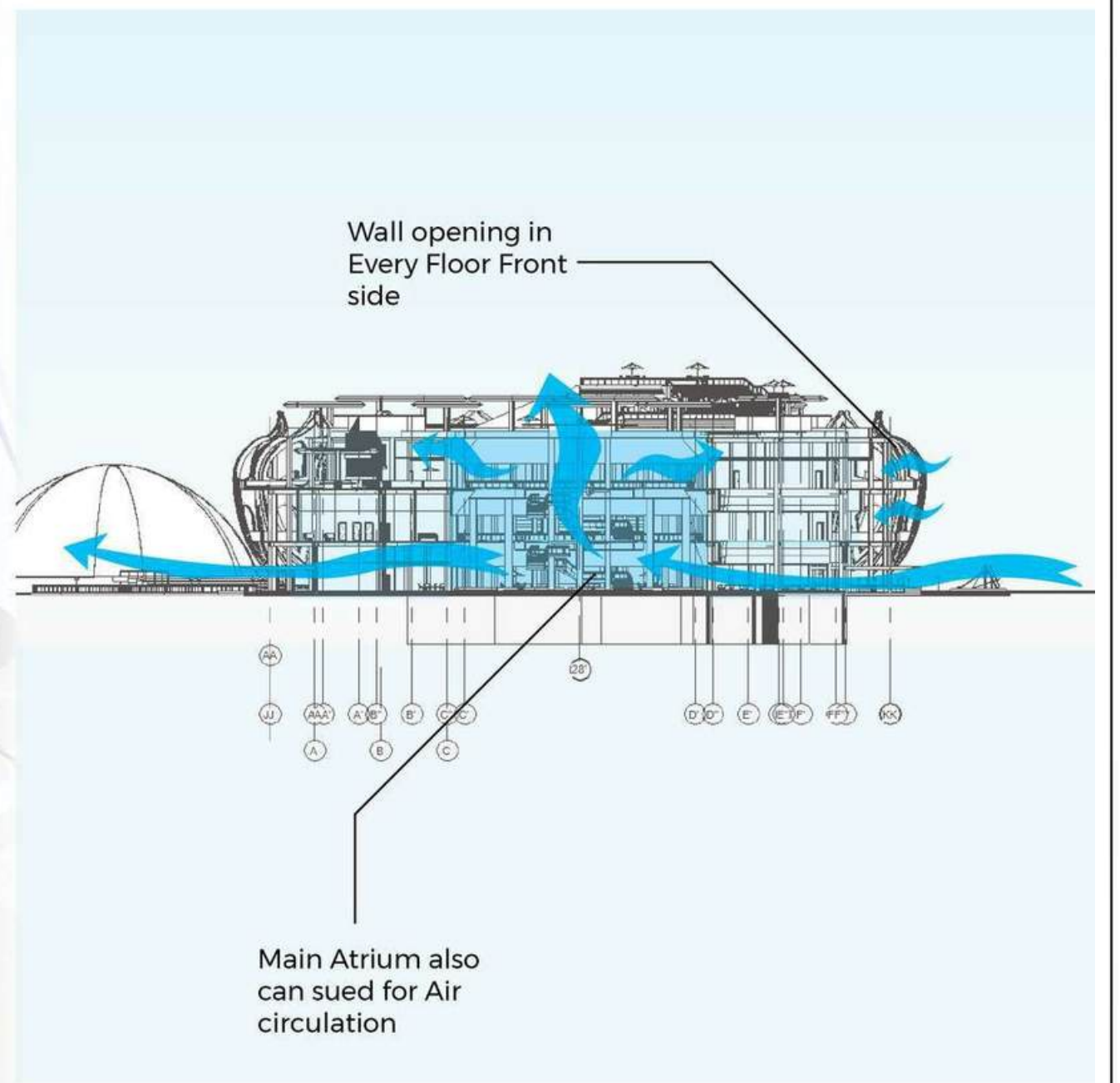
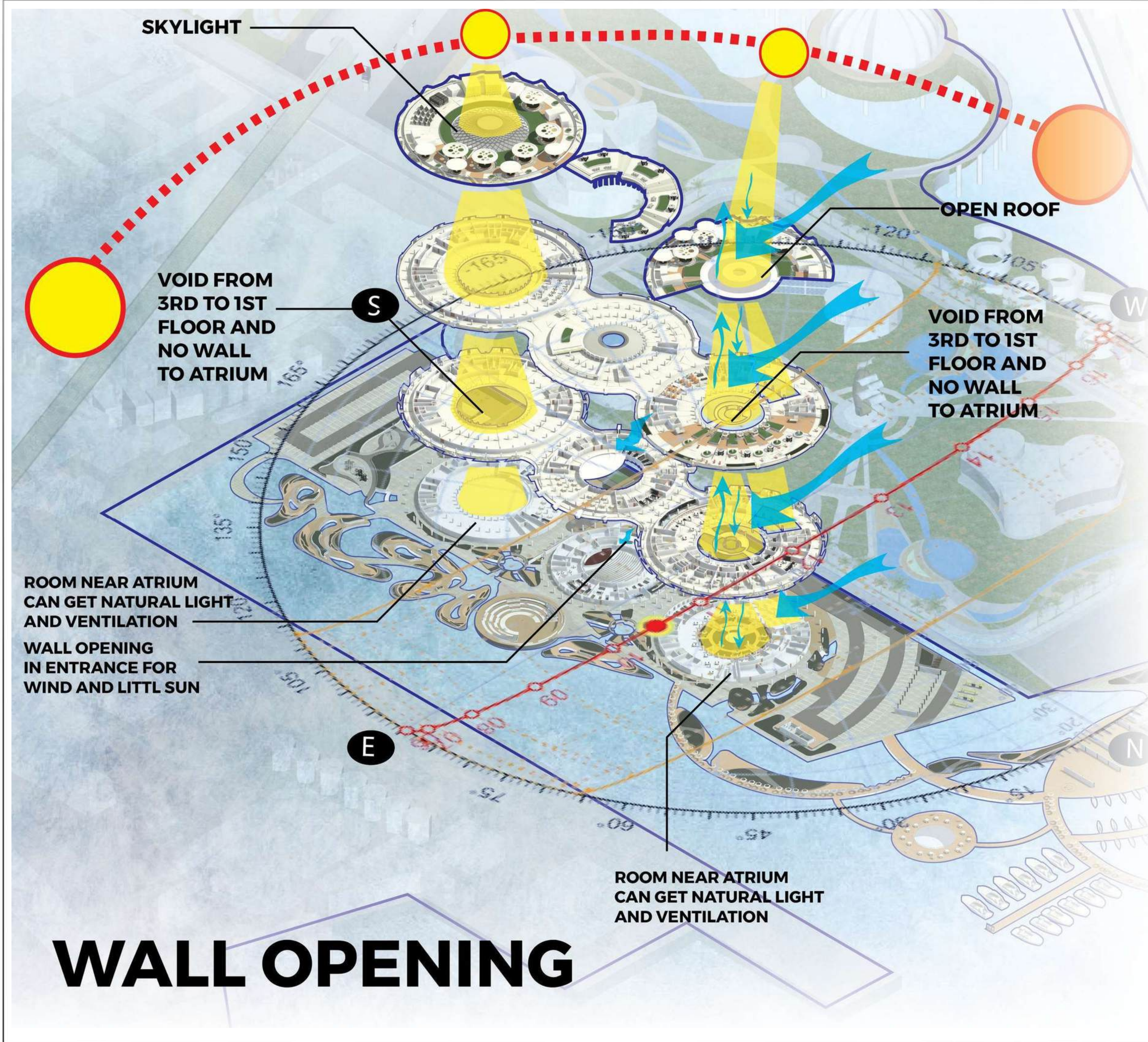
86.000

FULL FLOOR PLAN WITH ROOM NAME AND SIZE

1ST SCHEMATIC FLOOR PLAN

SCALE 1:600

SQM



WALL OPENING



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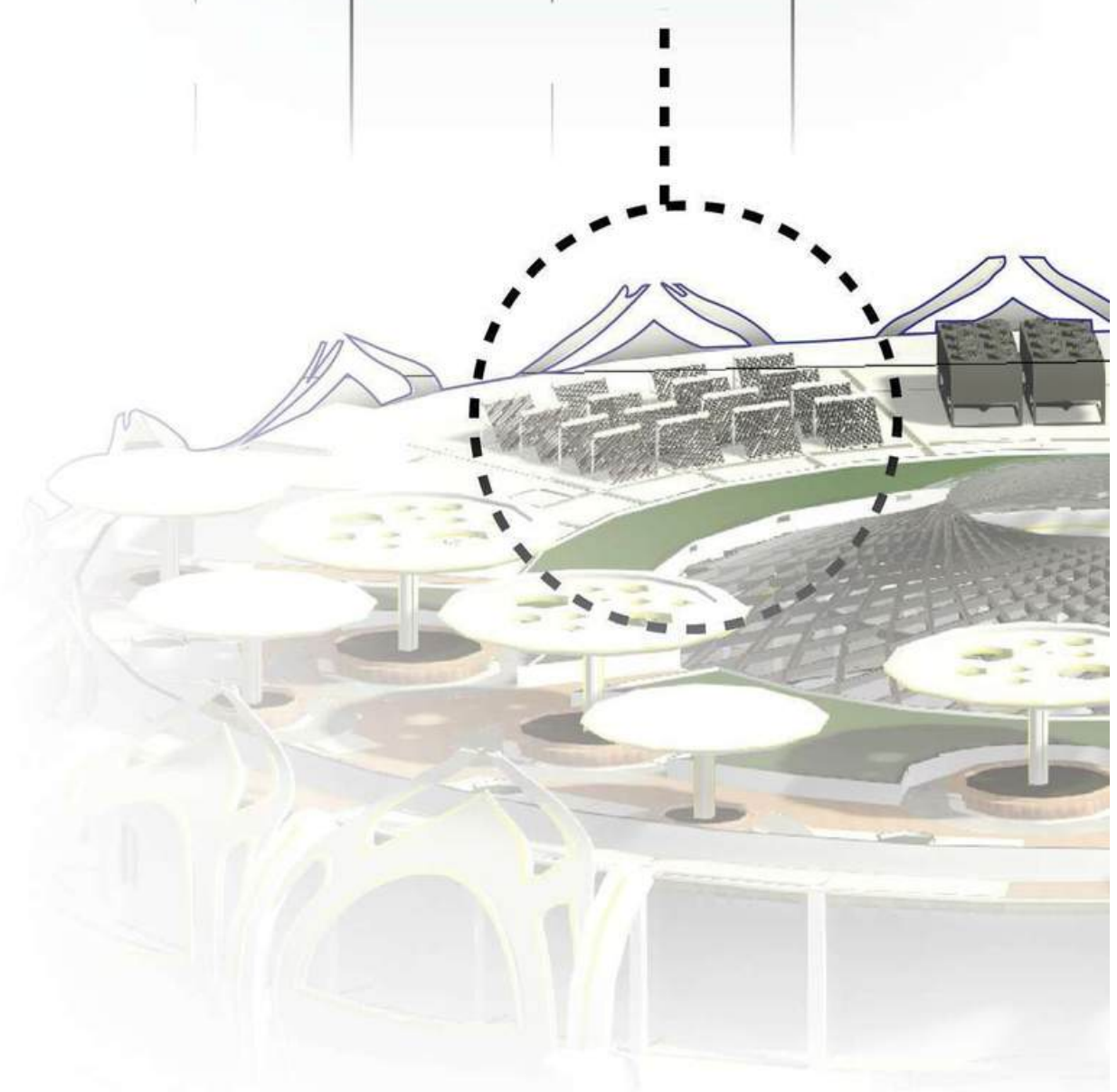
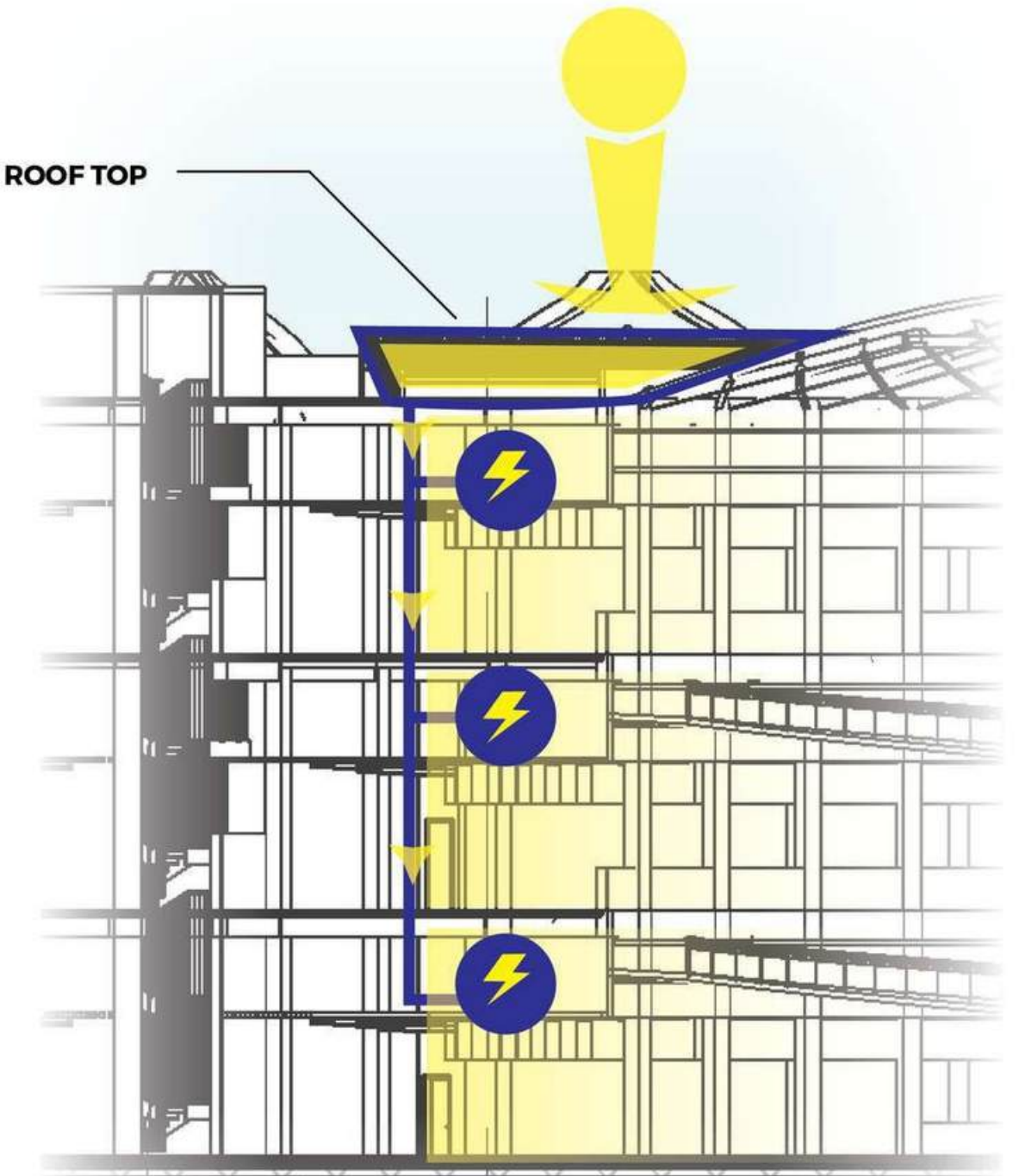
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Placed at the end of the rooftop so as not to interfere with the function of the roof garden in other areas, which in turn means the solar panels will function throughout the building

SOLAR PANEL

SOLAR PANEL IN ROOF TOP



SOLAR PANEL



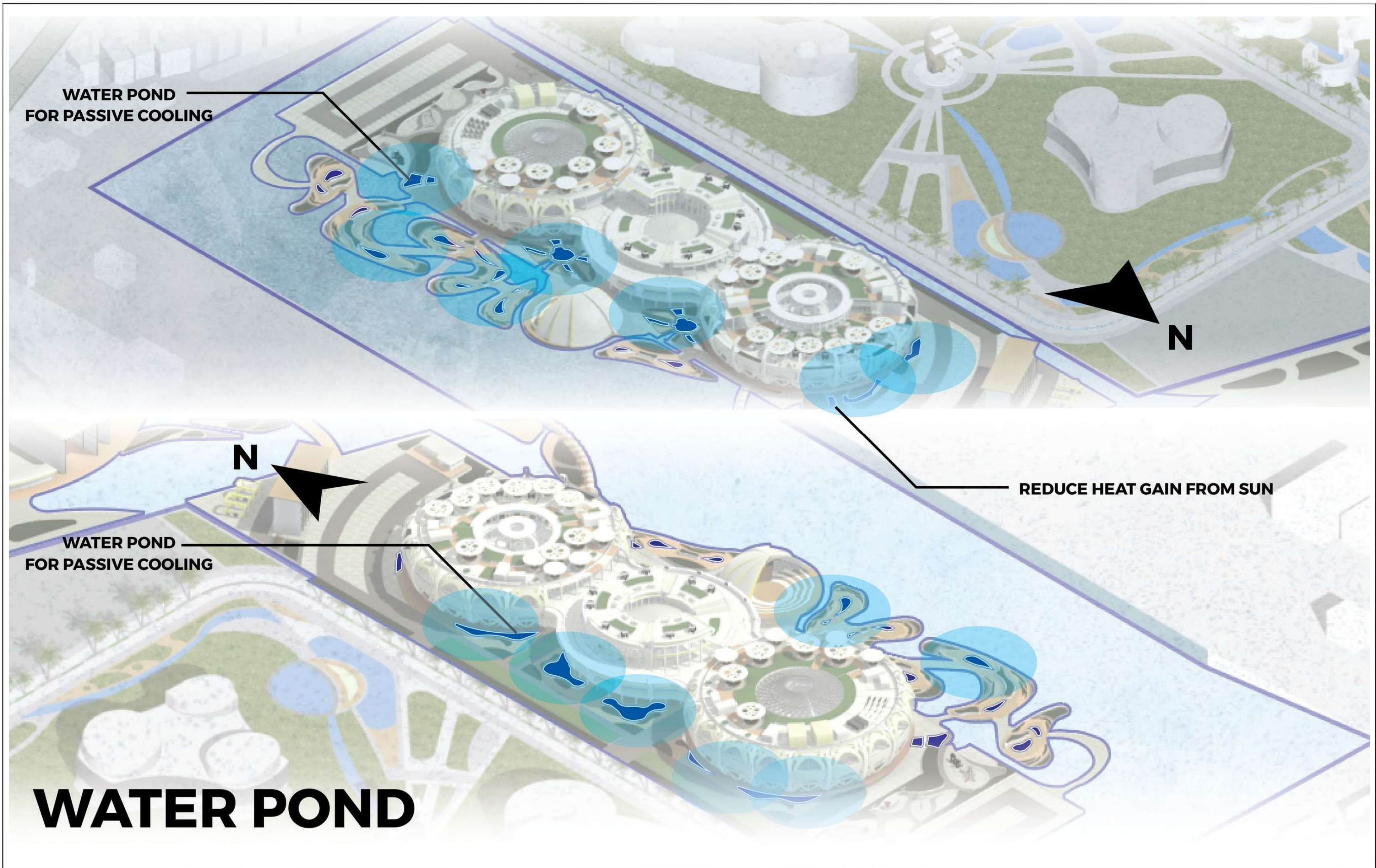
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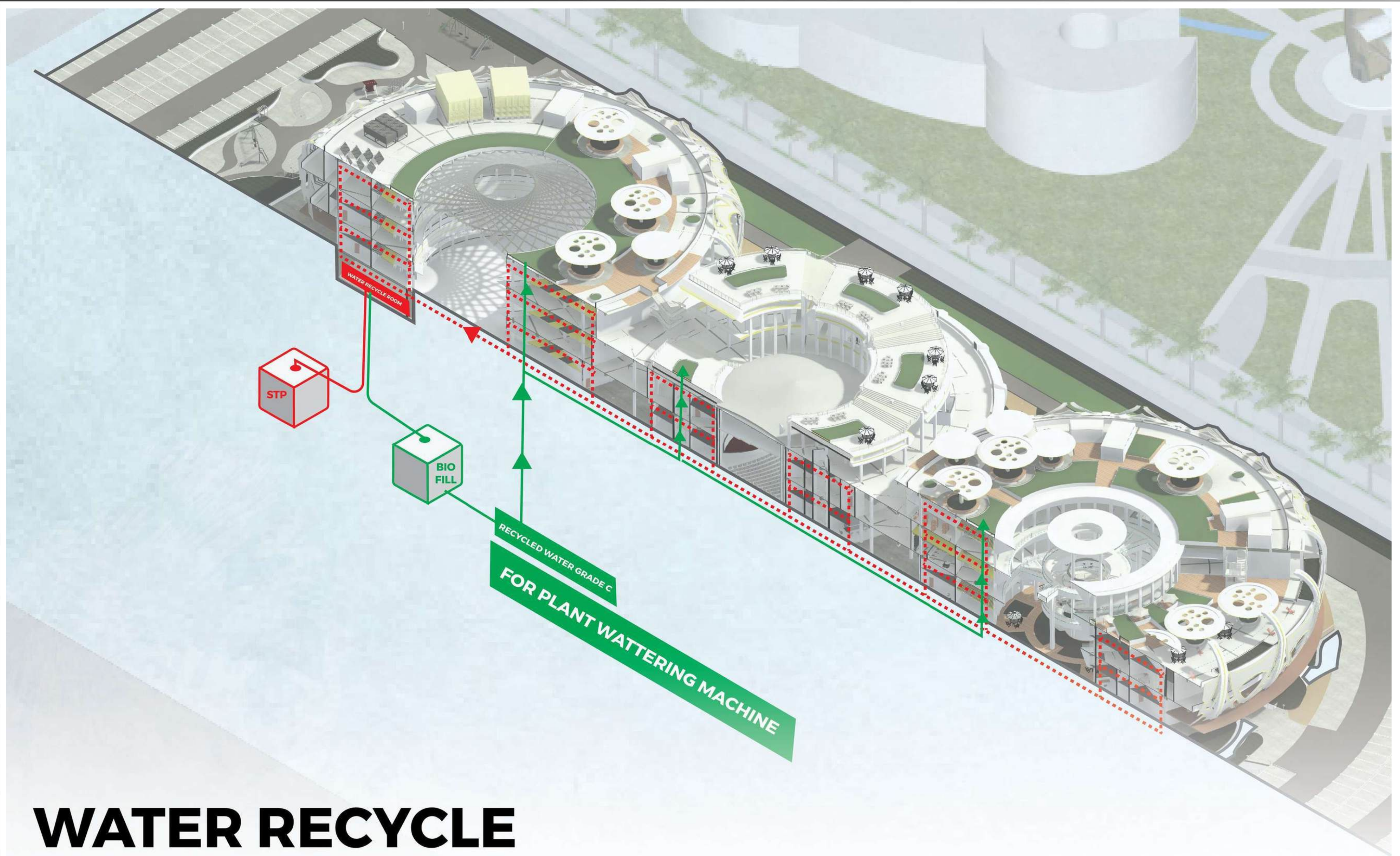
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WATER RECYCLE



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