BLUE PARK'ING' WITH COASTAL PUBLIC REALM

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"Reviving the forgotten coast, one blue breath at a time."

THE INDIAN EXPRESS

Kerala
Fort Kochi losing its old-world charm

The shacks and stalls lining the walkway at Fort Kochi Beach, besides the waste generated, are contributing to the historical place losing its charm

UPDATED ON:
11 SEP 2023, 7:19 AM

PROBLEM IDENTIFICATION

MANY WALKWAYS IN KOCHI NOW IN PARKING STRIPS

Kochi: With limited parking available in Kochi-both in residential complexes and private homes-many residents are forced to park their cars on roadsides adjacent to their homes. This growing trend is leading to multiple issues, ranging fromtraffic congestion to pedestrian safety concerns.

No designated walkway — pedestrians are forced to walk on the road due to parked vehicles occupying all available space.

Beachfront stretch identified for improvement — opportunity to introduce landscape design, seating, and small stalls to enhance the public realm.

Proposed Blue Path
Integrated pedestrian pathway with permeable paving and defined parking — encourages walkability and efficient water management through blue infrastructure.

AIM

To revive and redefine the forgotten coastal edges through sustainable urban design, by integrating ,blue infrastructure with parking systems, enhancing walkability, water management, and **public realm experiences along the coast.

OBJECTIVES

1. To transform existing coastal parking zones into multifunctional spaces that merge **water-sensitive design and community recreation

2. To enhance the pedestrian experience along the coast by creating safe, shaded, and accessible walkways linked with landscape and water features.

3. To implement blue infrastructure strategies such as rainwater harvesting, surface runoff collection, and permeable paving within parking areas.

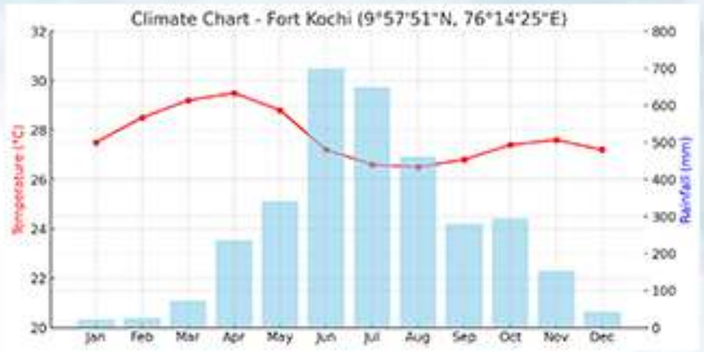
4. To reduce vehicular dominance and promote sustainable mobility in coastal neighborhoods through design interventions.

5. To strengthen the visual and physical connection between the urban fabric and the waterfront**, celebrating the site's *ecological and cultural identity.

Justification for Proposal

Fort Kochi's coastal charm is deteriorating due to unregulated shacks, waste accumulation, and encroachment on public walkways. Additionally, the lack of designated parking has turned pedestrian paths into unsafe parking zones, disrupting movement and heritage aesthetics. The proposal, "Reviving the forgotten coast, one blue breath at a time," aims to restore the area's historic identity through sustainable design, improved waste management, organized parking solutions, and revitalized public spaces that reconnect people with the coastal environment.

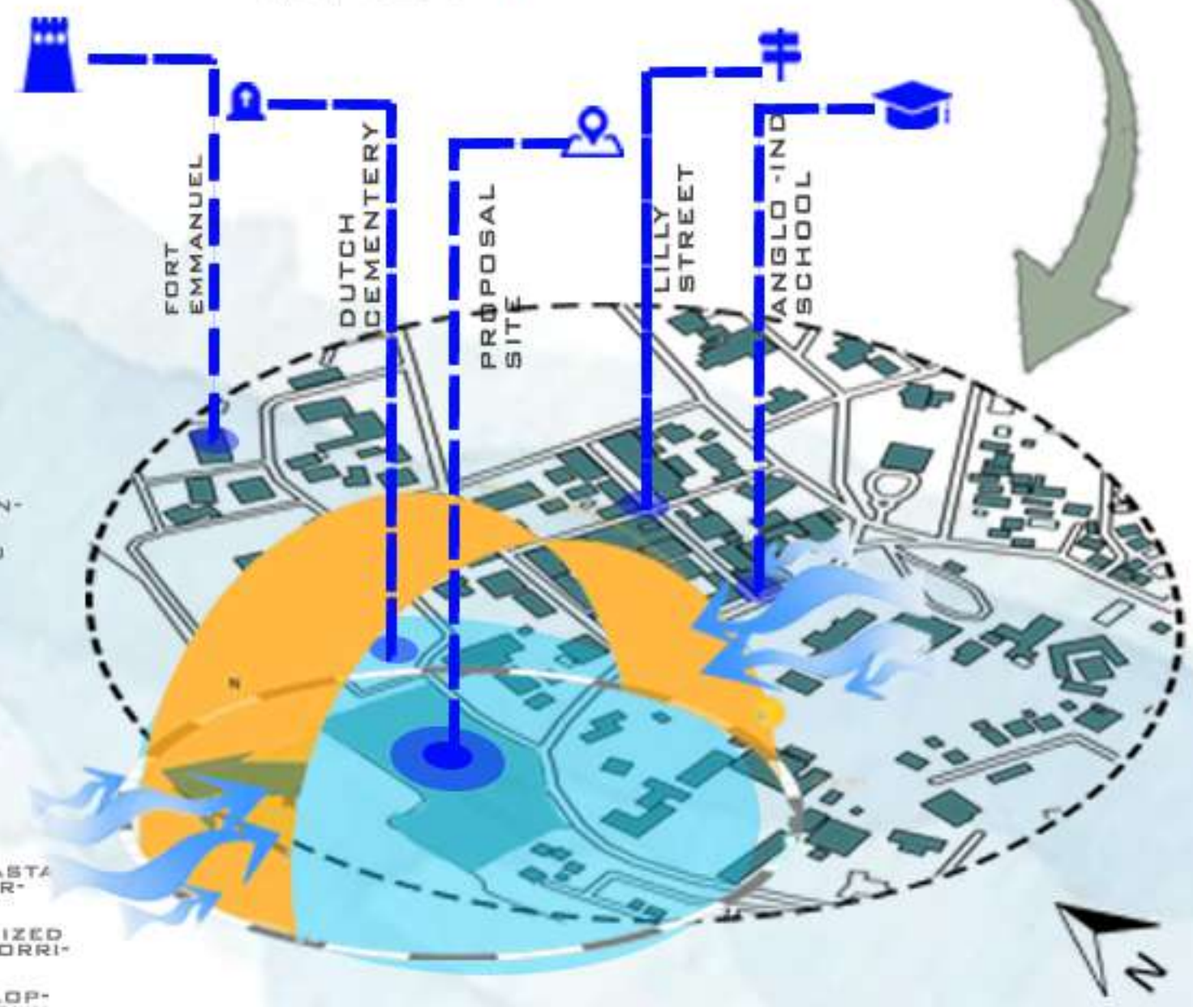
SITE ANALYSIS:



THE BLUE BARS REPRESENT MONTHLY RAINFALL (MM).

THE RED LINE REPRESENTS AVERAGE TEMPERATURE (°C).

IT SHOWS A HOT, HUMID COASTAL CLIMATE WITH PEAK RAINFALL FROM JUNE TO AUGUST (MONSOON) AND MILD, STABLE TEMPERATURES YEAR-ROUND AROUND 27–29 °C.

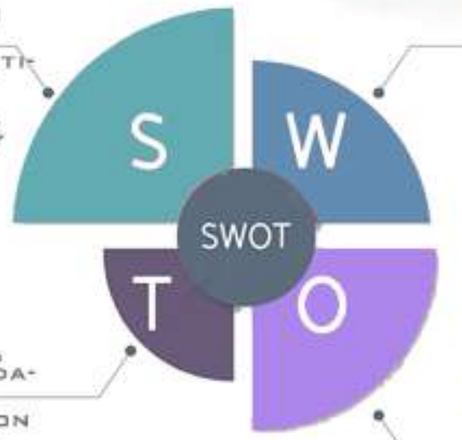


STRENGTHS:

PRIME HERITAGE AND TOURIST LOCATION WITH COASTAL ACCESS.

STRONG CULTURAL IDENTITY AND ARCHITECTURAL CHARACTER.

EXISTING ROAD AND PEDESTRIAN CONNECTIVITY TO MAJOR LANDMARKS.



WEAKNESS:

POOR WASTE MANAGEMENT AND VISUAL CLUTTER FROM INFORMAL STALLS.

LIMITED PARKING LEADING TO ENCROACHMENT ON WALKWAYS.

COASTAL EROSION AND LACK OF MAINTENANCE REDUCING PUBLIC APPEAL.

THREATS:

RISING SEA LEVELS AND ENVIRONMENTAL DEGRADATION.

OVER-COMMERCIALIZATION THREATENING HERITAGE VALUE.

INCREASED TRAFFIC AND POLLUTION IMPACTING WALKABILITY AND AESTHETICS.

OPPORTUNITIES:

SCOPE FOR SUSTAINABLE COASTA REVITALIZATION AND ECO-TOURISM.

POTENTIAL TO CREATE ORGANIZED PUBLIC SPACES AND GREEN CORRIDORS.

HERITAGE-SENSITIVE REDEVELOPMENT TO BOOST LOCAL ECONOMY.

CONCEPT:

BLUE PARKING:

What is Blue Park'ing"Blue Park'ing" is a hybrid concept combining:Blue Infrastructure (elements related to water — drainage, rainwater harvestcoastal buffers, permeable pavements, bioswales, etc.), and

Parking & Public Space Design (vehicular and pedestrian integration with landscape and water management).

Stormwater Collection System

1. INFILTRATION- BIOLOGICAL METHOD

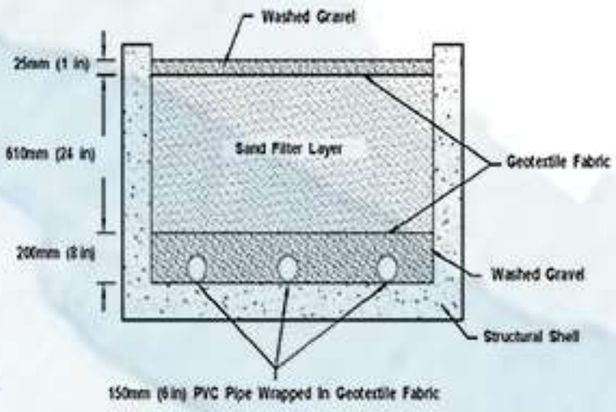
The stormwater collection system captures and filters surface runoff from paved and landscape areas. Water is directed through kerb inlets into a settling or recharge well, allowing sediments to settle before infiltration.

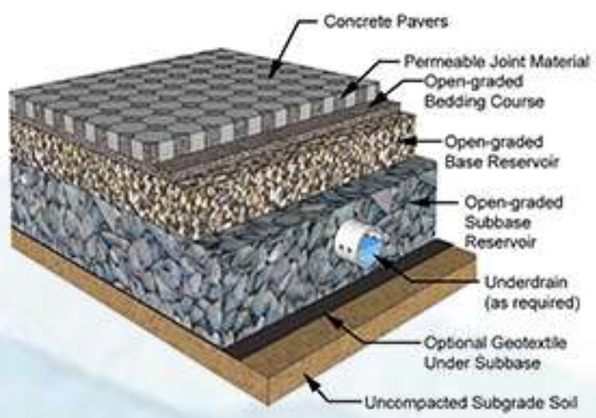
It then passes through a bioretention or sand-gravel filter bed, where layers of sand, gravel, and geotextile fabric remove pollutants and enable gradual percolation.
Vegetation enhances biological treatment and supports infiltration into the subsoil, recharging groundwater. The PVC underdrain carries excess water to storage or an overflow outlet. This system reduces flooding, controls runoff, improves water quality, and sustains the urban water cycle.

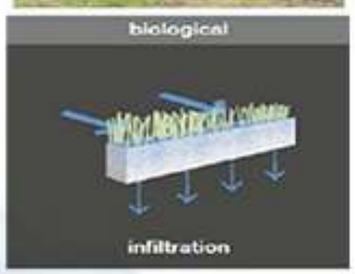
2. PERMEABLE PAVEMENTS

Permeable pavements allow rainwater to pass through their porous surface into underlying layers, reducing surface runoff and promoting groundwater recharge. The system consists of pervious surface materials (such as porous concrete, pavers, or gravel), a base layer of washed aggregates, and a filter or geotextile layer that stores and slowly infiltrates water into the soil.

As stormwater infiltrates, sediments and pollutants are filtered, improving water quality. Excess water is conveyed through underdrain pipes to recharge wells or drainage lines. This sustainable drainage method minimizes flooding, controls erosion, and supports natural hydrological balance in urban landscapes.





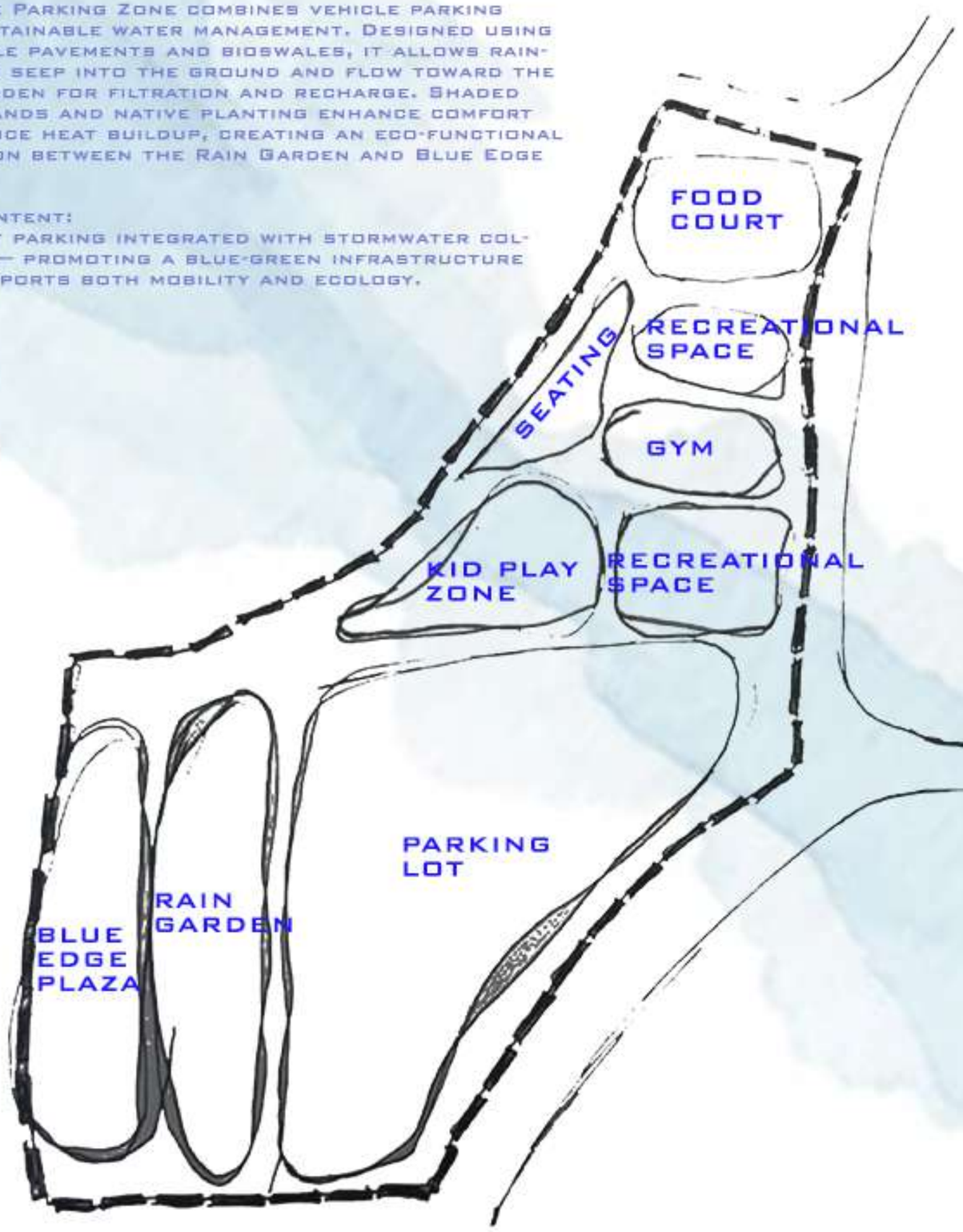


infiltration: The vertical movement of stormwater runoff through soil, recharging groundwater.

Blue Parking Zone – Zoning Concept

The Blue Parking Zone combines vehicle parking with sustainable water management. Designed using permeable pavements and bioswales, it allows rainwater to seep into the ground and flow toward the Rain Garden for filtration and recharge. Shaded tree islands and native planting enhance comfort and reduce heat buildup, creating an eco-functional transition between the Rain Garden and Blue Edge Plaza.

Zoning Intent:
Efficient parking integrated with stormwater collection — promoting a blue-green infrastructure that supports both mobility and ecology.



MATERIALS USED:

Architectural Features of Blue Parking

Permeable Pavements: Allow rainwater infiltration, reducing surface runoff.

Swales & Rain Gardens: Direct and filter storm water, enhancing groundwater recharge.

Green Buffers & Tree Islands: Offer natural shade and improve microclimate.

Efficient Circulation: Clear entry–exit flow with pedestrian-safe pathways.

Modular Layout: Flexible parking bays adaptable for events or temporary markets.

Benefits to Neighbourhood

Reduces street flooding and improves local drainage during monsoons.

Serves as shared community parking, easing roadside congestion.

Provides EV charging and solar-powered lighting, promoting sustainability.

Acts as a public green pocket, adding shade and reducing heat.

Supports local activity—cafés, kiosks, and weekend markets—creating a community-friendly urban node

FOOD COURT

Food court & cafe-style seating over looking the water , enhancing user comfort and visual engagement .

OPEN GYM

Outdoor exercise area equipped with simple gym setups & open lawn to encourage healthy living and community interaction.

RECREATIONAL SPACE

TREE-SHADED BENCHES AND RESTING POCKETS FOR RELAXATION

PARKING AREA

COMPACT VEHICULAR ENTRY AND ORGANISED PARKING BAY TO ENSURE SMOOTH VISITOR FLOW & ACCESS

KIDS PLAY ZONE

Safe and engaging play zone with colourful equipment , climbing nets , and soft flooring

RAIN GARDEN

Central interactive splash and reflective pool zone , adding aesthetic and climatic balance to the landscape with sound and cooling affect

BLUE EDGE PLAZA

Recreational walkway with pavements interface connecting the site to the water edge,offering visual continuty and leisure opportunities


KOKOBEACH

Q & A :

1. Why is parking congestion a major issue in Fort Kochi's residential zones?

The absence of organized parking infrastructure has resulted in unregulated on-street parking within residential areas. This reduces effective road width, disrupts traffic flow, and forces pedestrians to share carriageways with vehicles, compromising safety and quality of life.

2. How does the Blue Parking proposal address parking congestion?

The design introduces dedicated Blue Parking zones along the coastal edge, relocating vehicular load away from residential streets. By consolidating parking into organized, clearly defined areas, residential zones are decongested and pedestrian movement is restored, improving safety and accessibility.

3. How does the design respond to water management challenges?

Blue Parking integrates stormwater collection and holding systems beneath permeable parking surfaces. Rainwater is captured, stored, and filtered before controlled release, reducing surface runoff, mitigating flood risks, and improving coastal resilience against sea level rise.

4. How does Blue Parking transform the coastal edge into a public realm?

The proposal reclaims the coastline by integrating pedestrian promenades, shaded walkways, seating edges, and pause points alongside parking infrastructure. Parking is designed to function as an adaptable surface that supports public use during low-demand periods, reconnecting people with the sea.

5. . What is the core design intent of Blue Parking?

The core intent is to reimagine parking as blue infrastructure—an active urban system that manages vehicles, water, and public life simultaneously. By merging mobility, resilience, and social space, Blue Parking transforms a vehicular necessity into a catalyst for sustainable coastal living.