SITE PLANNING
&
DESIGN HANDBOOK

DEPARTMENT OF TOWN & COUNTRY PLANNING
FACULTY OF ARCHITECTURE
UNIVERSITY OF MORATUWA

Edited by Lakshika Meetiyagoda

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SITE PLANNING AND DESIGN STUDIO | 2020–2024 BATCH
DEPARTMENT OF TOWN & COUNTRY PLANNING
FACULTY OF ARCHITECTURE | UNIVERSITY OF MORATUWA

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BSc (Hon) in Town & Country Planning
2020-2024 batch

CONTENTS

STUDIO OUTLINE

Urban design today addresses the sustainability challenges emerging from rapid urbanization. As cities in developing countries expand, issues such as sprawl, informal economies, and inadequate service delivery have become increasingly complex. In this context, the studio introduces site-level urban planning as a localized design approach that bridges analytical research and creative design.

The studio encouraged students to apply design thinking in solving real-world urban problems through spatial analysis, site evaluation, and development planning. It also emphasized the integration of physical, social, and environmental dimensions in shaping liveable neighbourhoods.

Throughout the semester, students were guided to:

- **Understand** the role of urban design and site planning within the planning hierarchy.
- **Analyse** site characteristics, opportunities, and constraints using data-driven methods.
- **Develop** conceptual and detailed design proposals grounded in sustainability and feasibility.
- **Communicate** their design intentions through maps, plans, diagrams, and visual presentations.

This process nurtured analytical and creative skills, preparing students to translate planning policy into implementable site-level design strategies.

STUDIO RATIONALE

Rapid urbanization has intensified the social and spatial complexities of cities, often resulting in **sprawling growth, informal settlements, and limited liveability**. Urban design responds to these issues by combining **creative vision and analytical methods** to shape sustainable urban environments.

This studio positions **site-level planning** as a medium for transforming planning principles into tangible spatial outcomes. Drawing from the works of Barnett, Lynch, and Lang, it emphasizes design as both an **artistic and scientific act**—linking form, function, and human experience.

How can site-based design interventions create sustainable and inclusive urban environments?

This core question was broken down into the following guiding questions:

- How can design help bridge planning and implementation?
- How do we design with people and their environment?
- What does context-sensitive design mean in practice?

STUDIO OUTCOMES

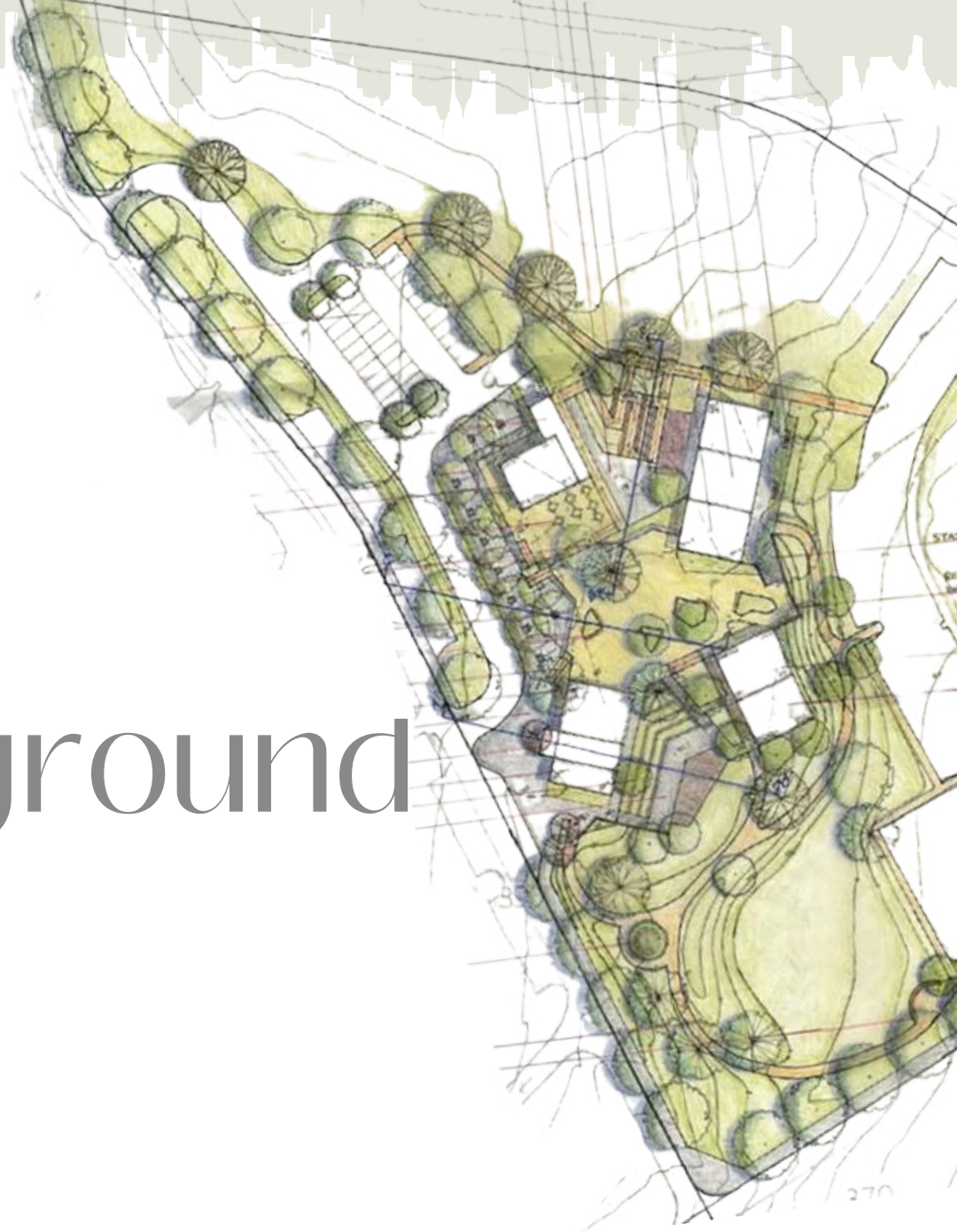
In this studio, **site planning was undertaken only with a guiding framework.** Where a **Development Guide Plan (DGP)** existed, students **derived the site plan from DGP directives**; where no local DGP was available, they **worked to the most relevant approved national/local guide plan**, and then produced the site plan.

The studio sought to:

- **Expose** students to the relationship **Guide Plan → Site Plan.**
- **Equip** them to **analyse complex site conditions** (demographic, physical, functional) within the guide plan framework.
- **Develop** detailed proposals **consistent with DGP policies and planning regulations.**
- **Engage** stakeholders/users to ground decisions in **participatory inputs.**
- **Communicate** ideas through maps, drawings, reports, and presentations.
- **Integrate** feasibility checks and an **implementation plan** into the final site plan.

STUDIO

Background



STUDIO SITE

The **Site Planning and Design Studio** focused on preparing **site-level plans** that respond to real urban contexts. Most students selected sites within the **Colombo Municipal Council (CMC) area**, addressing issues such as congestion, drainage, and mixed land uses.

When a Colombo site was unavailable, students chose **sites from their hometowns**, representing a range of **urban and semi-urban conditions** across Sri Lanka. Each site followed the framework of an existing **Development Guide Plan (DGP)** or a relevant **national or local guide plan**, ensuring consistency between planning policy and design response.

This decentralized approach encouraged **context-sensitive planning** while maintaining a **unified design process** across diverse locations.

STUDIO TRAJECTORY

The **Site Planning and Design Studio (2025)** followed a **six-stage trajectory** that mirrored the real process of professional site planning. Each phase combined analysis, design exploration, and participatory engagement with tutors and local stakeholders to strengthen contextual understanding.

Stage	Description	Time Frame
Stage 1 – Site Selection & Programming:	Define project objectives, context, and purpose.	Week 01 & 02
Stage 2 – Site Analysis:	Assess physical, social, and environmental conditions.	Week 03 & 04
Stage 3 – Conceptual Design:	Develop functional and spatial design alternatives.	Week 05
Stage 4 – Detailed Design:	Refine layouts and material considerations.	Week 06
Stage 5 – Assessments:	Evaluate feasibility, regulation, and socio-environmental impacts.	Week 07
Stage 6 – Implementation Planning:	Formulate phasing, stakeholder roles, and communication strategies.	Week 08

Through this iterative and participatory process, students learned to **translate planning vision into actionable design outcomes** relevant to diverse urban contexts.

STUDIO STRUCTURE

The **Site Planning and Design Studio (2025)** was structured as a collaborative and participatory learning process. It combined analytical research, conceptual design, and stakeholder engagement, enabling students to experience the complete site-planning workflow.

- **Investigation:** Site selection, contextual analysis, and early identification of user needs through field visits and discussions with local experts and communities.
- **Design Development:** Students translated findings into conceptual and detailed design proposals with continuous feedback from tutors and supervisors.
- **Evaluation:** Proposals were reviewed by lecturers and peers for feasibility, planning compliance, and community relevance.
- **Implementation:** Students refined strategies into final site plans with supervision guidance, aligning proposals to the Development Guide Plan and stakeholder expectations.

The studio maintained a **multi-layered engagement structure**, where tutors and supervisors provided iterative feedback, while students actively engaged with professionals, residents, and field contexts, ensuring each design outcome was informed, feasible, and context-responsive.

STUDIO

Pedagogy

STUDIO ‘HOW’ OF CO-PRODUCTION

The **Site Planning and Design Studio (2025)** operated through an **individually supervised learning process**, where each student was guided by a dedicated supervisor throughout all stages of the project. The approach emphasized independent inquiry, reflective practice, and context-based design exploration.

Students individually carried out **site investigations, data analysis, and field engagement** with local communities, professionals, and authorities to understand ground realities. Supervisors provided continuous guidance through **desk critiques, review sessions, and progress discussions**, helping students refine proposals and align them with planning frameworks and development guidelines.

This method encouraged a balance between **autonomy and mentorship**, enabling students to integrate field experience with analytical and design skills while developing **responsible, context-sensitive, and implementable planning solutions**.

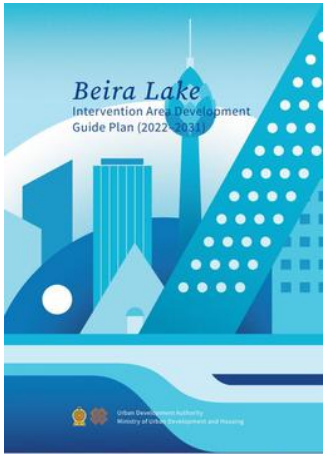
STUDIO TOOLS

The **Site Planning and Design Studio (2025)** employed a blend of **digital, analytical, and manual tools** to support site analysis, design exploration, and presentation. These tools enabled students to translate real-world observations into visual, spatial, and analytical representations.

GIS platforms were used for spatial analysis and mapping, while **2D CAD applications** supported drafting and plan preparation. **3D modelling and rendering tools** assisted in visualizing form, scale, and material context. Alongside these digital methods, **hand sketching and diagramming** were encouraged for conceptual thinking and rapid design development.

Fieldwork was documented through **photographs, videos, and audio recordings**, complemented by **reflective journals and visual logs** that captured evolving ideas. Together, these tools strengthened students' capacity to **analyse, visualize, and communicate** context-sensitive planning and design outcomes.

STUDIO FRAMING DEVICES



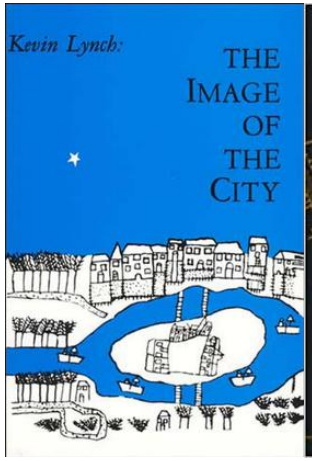
The **Site Planning and Design Studio (2025)** adopted a structured set of framing devices that guided students in translating planning analysis into design application. These frameworks ensured that every site proposal aligned with the objectives of the **Development Guide Plan (DGP)** and complied with relevant **urban design and planning regulations**.

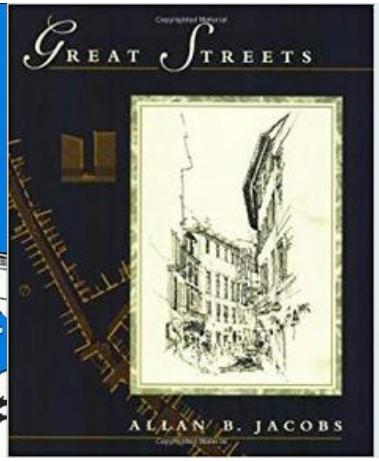
The studio was organized around progressive stages such as **site analysis**, **concept formulation**, **design detailing**, and **evaluation**. This structure provided a clear pathway for integrating spatial policy, environmental context, and user needs. Supervisors supported students in interpreting planning frameworks, testing alternative design strategies, and refining outputs through feedback and review sessions. Together, these framing devices enabled students to move from **analytical research to implementable site-level designs**, reinforcing the essential link between **planning policy and spatial development practice**.

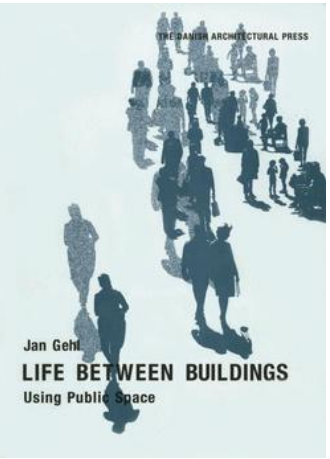
STUDIO EVALUATION & FEEDBACK

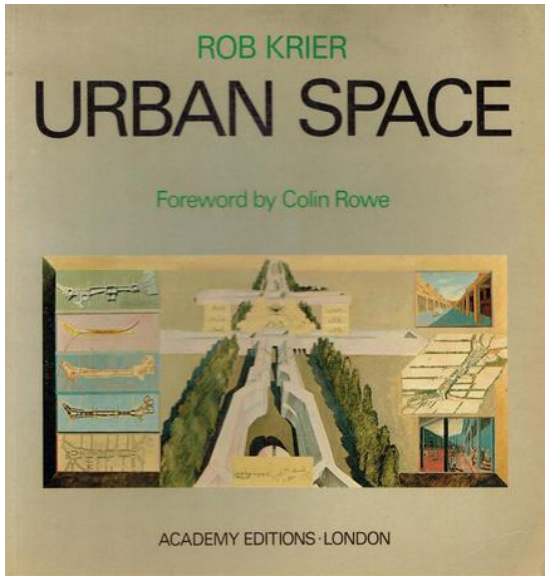
The Site Planning and Design Studio (2025) adopted a two-stage evaluation process that combined continuous supervision with formal review sessions. Each student was guided by an individual supervisor who assessed progress through regular discussions and feedback on design development. In the first stage, students presented their initial site analysis, concept, and preliminary layouts to a review panel. Constructive comments from supervisors and reviewers helped them refine their design direction. The final stage focused on complete site-planning proposals communicated through drawings, models, three-dimensional visualizations, and short video presentations. A formal evaluation panel reviewed these final outputs, considering both design quality and clarity of communication. Supervisors provided additional marks based on continuous effort, engagement, and consistency throughout the studio. This process ensured that assessment reflected both **design outcomes and learning progression.**

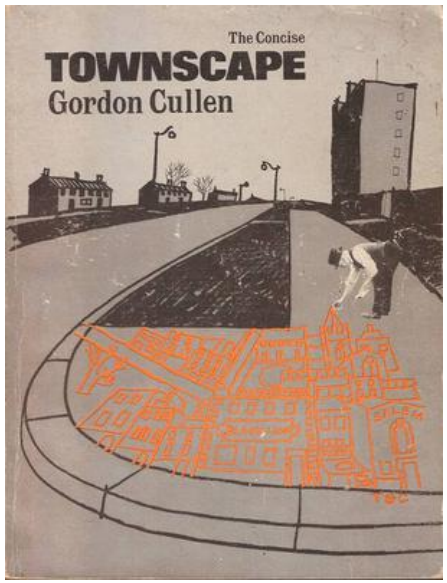
STUDIO LITERATURE RESOURCES











Each studio exercise was supported by one key book reference and a set of selected readings that provided both theoretical context and design direction. These readings helped students understand spatial perception, human behaviour, and design composition within urban settings. In addition, students were encouraged to summarize and share their learning through short presentation formats.

Compulsory Readings

The Image of the City – Kevin Lynch
How to Study Public Life (2013) – Gehl, J. & Svarre, B.
Life Between Buildings: Using Public Space (2011) – Gehl, J.
The Concise Townscape – Gordon Cullen
Urban Space – Rob Krier
Great Streets – Allan Jacobs
Streets for All (2000) – English Heritage
Urban Design: A Typology of Procedures and Products (2005) – Lang, J.T.
How Designers Think: The Design Process Demystified (2006) – Lawson, B.
Graphics for Urban Design (2007) – Meeda, B., Parkyn, N. & Walton, D.S.
Urban Design: Ornament and Decoration (1999) – Moughtin, C., Oc, T. & Tiesdell, S.
Urban Design Compendium (2000) – Yeang, L.D.

STUDIO

Work

STUDIO OUTPUTS

The **Site Planning and Design Studio (2025)** guided students through a series of structured design briefs and analytical exercises that progressively developed their ability to integrate planning principles with design interpretation. The studio emphasized analytical rigor, conceptual clarity, and effective visual communication.

The studio outcomes were based on four guiding criteria:

Visualizing and Communicating

Students built their ability to translate spatial ideas into visual outputs such as maps, diagrams, models, and three - dimensional renderings. The focus was on clarity, composition, and effective presentation of site-level proposals.

Constructing and Specifying

Students developed their capacity to prepare technically sound and context-sensitive designs. They articulated zoning concepts, land-use structures, and circulation systems aligned with planning standards and local regulations.

Planning and Organizing

Students demonstrated logical sequencing of site activities, infrastructure layouts, and urban elements derived from the Development Guide Plan. The emphasis was on strategic coordination between policy intent and spatial implementation.

Reasoning and Synthesis

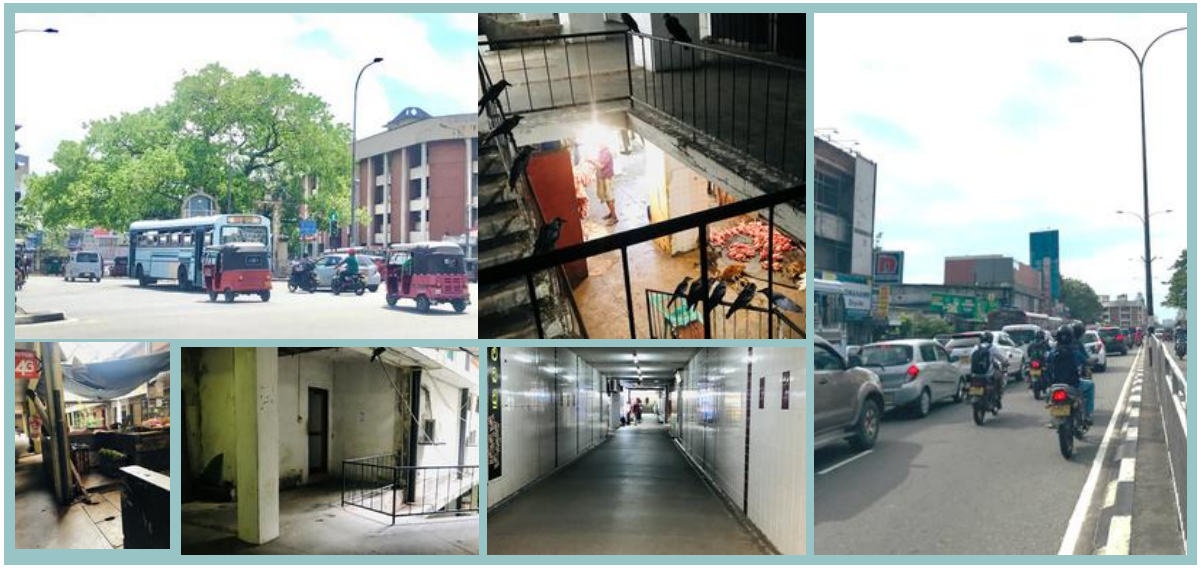
Students justified their design decisions through planning rationale, data interpretation, and policy analysis, ensuring that every proposal reflected a balance between analytical reasoning and creative judgment.

Each student prepared an individual design portfolio and participated in a final presentation and review process. The following student projects represent a synthesis of analytical, design, and communication skills developed throughout the studio.

Borella Junction Development: Pedestrian Prioritized Urban Core Regeneration

Abeysiriwardhana N.S.

The primary objective of this redesign exercise is to eliminate the blight and congested appearance of Borella Junction by enhancing pedestrian integration in and around the area. This will be achieved by shifting from a vehicular-centric design to a pedestrian-prioritized approach, while still optimizing vehicular circulation, to transform Borella Junction into an engaging public space.

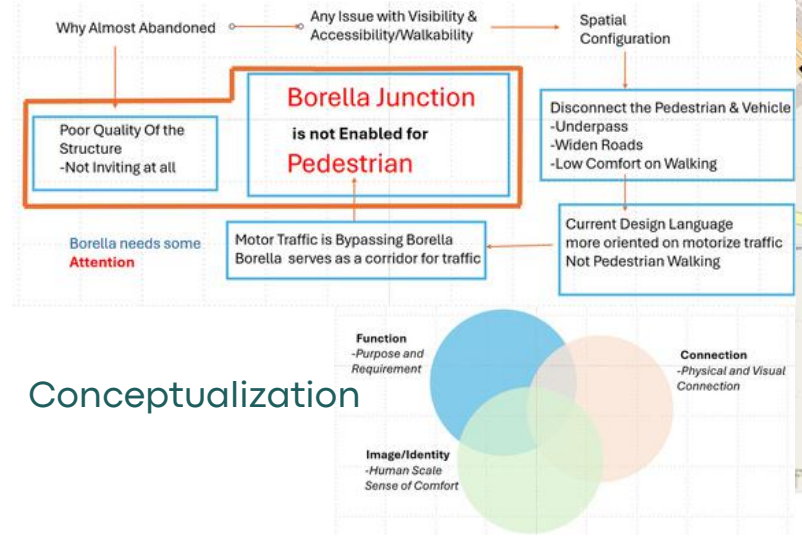


Design Problem

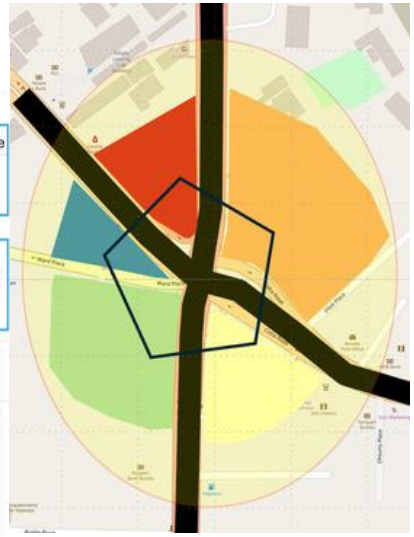
Borella Junction is a key intersection in the busiest corridor of the Western region and an important urban node within the Colombo Municipal Council area. The current design prioritizes vehicular flow, primarily serving traffic that bypasses Borella without engaging with its urban services.

Although nearly 50,000 daily commuters sustain the vibrancy of the area, pedestrian needs are largely ignored. Poor pedestrian crossings, a dark and unsafe underpass, and abandoned buildings near the junction further diminish its appeal. As a result, Borella Junction becomes lifeless after peak traffic hours and transforms into a place to accommodate antisocial activities. Immediate regeneration for Borella Junction is required while valuing the transit population to make a vibrant urban environment.

Decompose the current Issue



Conceptualization



Design Approach

Harmony between vehicles and pedestrians is key to revitalizing Borella Junction. The primary objective of this development project is the regeneration of the urban core. Function, connectedness and image/identity form the foundation of the design evolution, emphasizing a pedestrian-prioritized urban core.

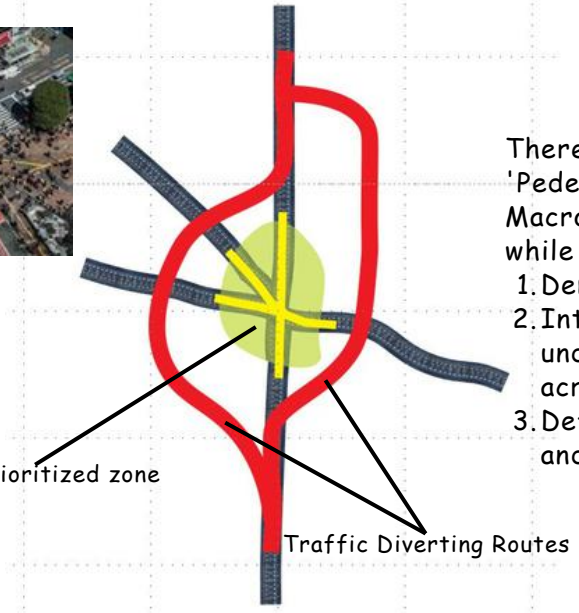
The Borella urban core extends from the intersection of five arterial roads, forming distinct wedges. A simple geometry derived from these five wedges needs to connect them, enabling seamless pedestrian movement and ensuring visual connectivity. This approach aims to replace the vehicle-oriented design with a human-scale framework, fostering public interaction and creating a more engaging urban environment.

Borella Junction Development: Pedestrian Prioritized Urban Core Regeneration

Abeysiriwardhana N.S.

Ground Level Diagonal Crossing in the Junction

Traffic Diverting Road

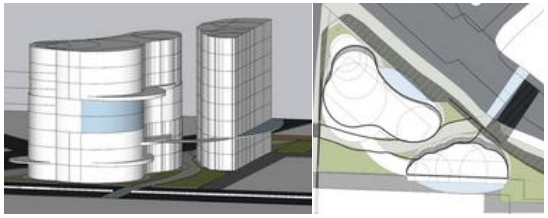


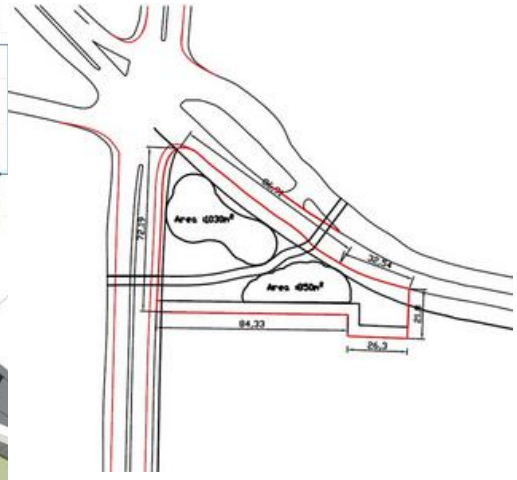
Strategies

There are both micro- and macro-level actionable strategies to achieve a 'Pedestrian-Prioritized Urban Core Regeneration.'

Macro-level strategies include facilitating effective pedestrian movement while ensuring a safe environment within Borella Junction, such as:

1. Demarcating a Pedestrian-Prioritized Zone.
2. Introducing ground-level pedestrian crossings to replace the current underpass, along with diagonal crossings to enhance public integration across all wedges.
3. Defining vehicular traffic diversion routes to streamline bypass traffic and support regional vehicular flow.





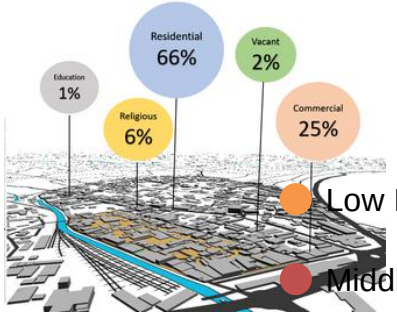
Micro-level actionable strategies focus on enhancing the experience of Borella Junction as a public place.

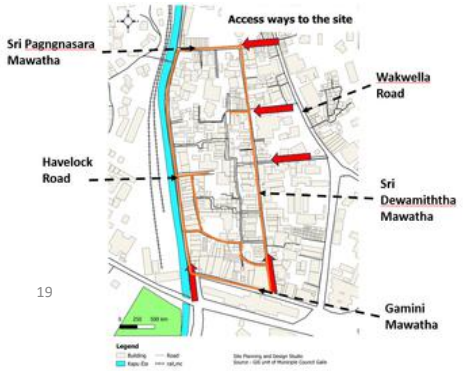
1. Reclaiming one lane for the pedestrian realm on both sides of Baseline Road to create a shaded, pedestrian-friendly environment.
   Selecting one wedge as a pilot project to serve as a model for developing other wedges, leveraging higher pedestrian flow. The chosen wedge includes the existing CMC supermarket and adjacent lands.
   Key interventions within the selected wedge:
2. Organizing the site with a pedestrian realm by providing dedicated pedestrian pathways.
3. Proposing mixed-use developments to attract more pedestrians and offer diverse services, creating an engaging public space.
4. Incorporating biophilic design principles into building designs to scale down the built environment to human proportions, enhancing interaction and creating a comfortable space to spend time.
   With these strategies, Borella Junction can unlock its potential to thrive as a vibrant, living urban core.

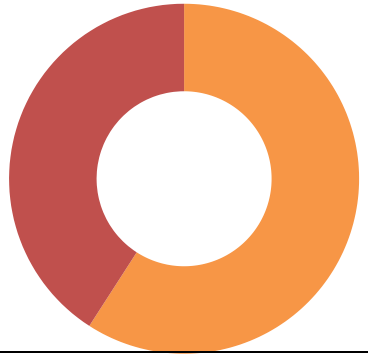
CHINA GARDEN GALLE
Living with Heritage – Homestay Focus Development

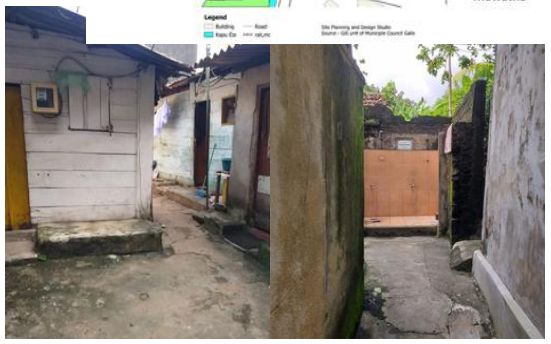
Chathurya H.K.K.

China Garden, Galle is a historic urban residential area located within the Galle city core, adjacent to the iconic Galle Fort. Known for its colonial heritage, the site showcases a blend of historic architecture and a dense residential fabric, predominantly housing low-income residents. Despite its prime location in the Central Business District (CBD), the area remains underutilized, with inadequate infrastructure, limited recreational spaces, and a lack of economic activity. The site presents a unique opportunity for heritage conservation and urban revitalization, promoting sustainable development while preserving its architectural and historical value.









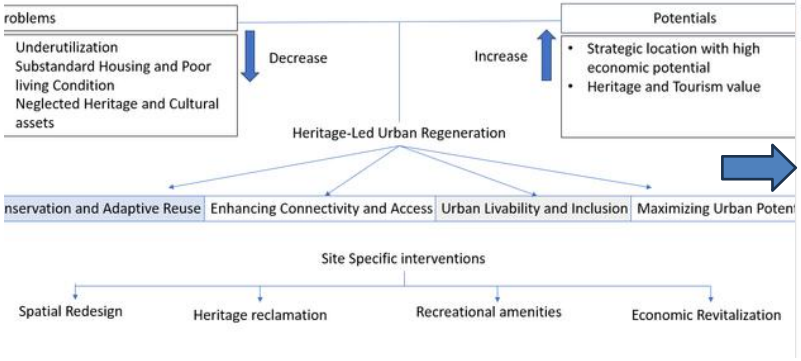
Design Problem

Underutilization: Despite its designation as a site with economic and tourism potential, only 25% of activities generate income. High commercial land values (over 10M LKR per perch) highlight the untapped potential for economic use, with most land allocated to non-commercial purposes.

Substandard Housing and Infrastructure: The site faces limited vehicle access, narrow and poorly maintained roads, and inadequate housing conditions, with many residents relying on shared sanitary facilities and lacking spaces for play or gathering.

Neglected Heritage Assets: Dilapidated colonial structures risk losing their architectural and cultural significance, with unique historic features obscured by modern alterations and signage.

Design Approach



Principles

1. Minimum Intervention
2. Respect for Authenticity
3. Reversibility
4. Compatibility
5. Functionality and Adaptability
6. Respect for the Surrounding Context
7. Retention of Heritage Value
8. Incremental Change
9. Sustainability
10. Community Involvement

Conservation Surgery

Applying to the site

1. Analyze the Site in Detail
2. Found the linkages,used & unused buildings, existing conditions etc
3. Apply Selective Interventions
4. Conserve and adaptive re-use
5. Integrate Contemporary Features
6. Engage Stakeholders
7. Enhance Public Realm

Living with Heritage – Homestay Focus

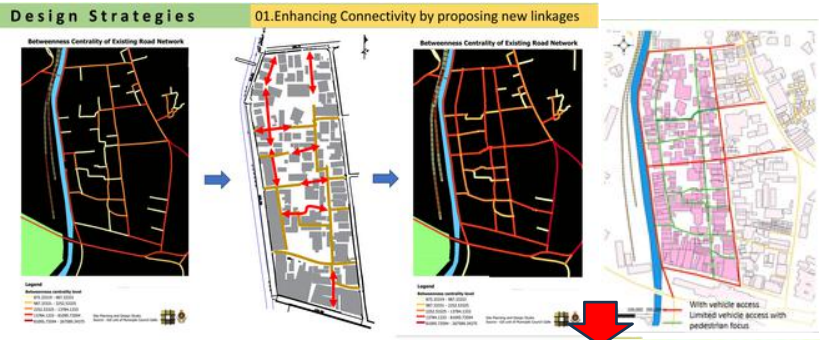
- Commercial Area
- Residential +Homestay
- Recreation/Open Spaces
- Heritage Arcade
- Service Area
- Groove hub and harmony courtyard
- Conservatory Area
- Parking

CHINA GARDEN GALLE

Living with Heritage – Homestay Focus Development

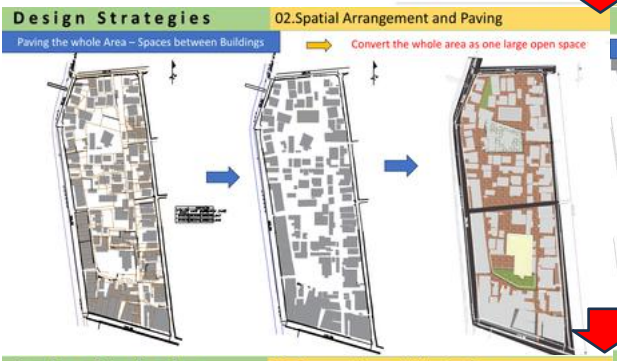
Chathurya H.K.K.

Strategies



Enhance Connectivity by proposing new linkages

By addressing the connectivity issue of the size, proposed new linkages and matched the dead ends. It enhanced the overall connectivity of the site. By analyzing betweenness centrality, the final road design was proposed indicating the vehicle access roads and limited vehicle access roads



Spatial Arrangement and paving

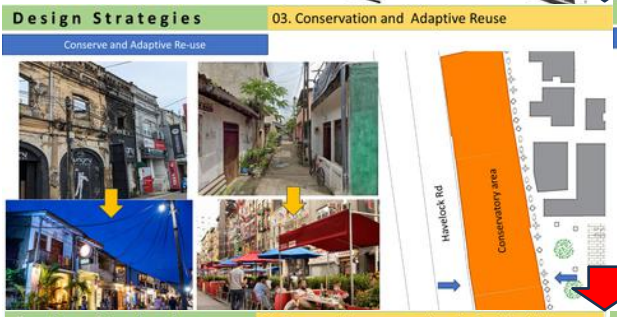
1Demolishing and Conservation

First identified the buildings that need to demolish and conserve in order to implement the strategies.

2. Paving the area between the buildings

In order to open up more spaces, and addressing the space issue, demolishing the all boundary walls and paving the all area between buildings.

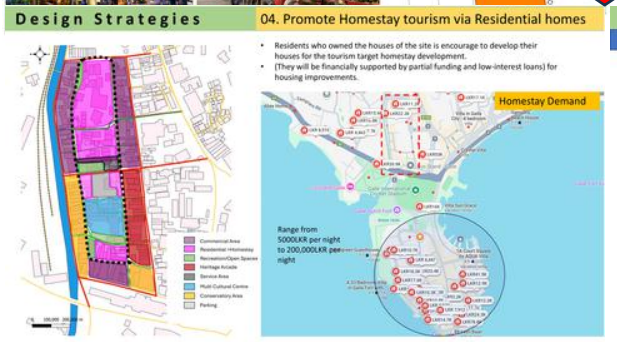
3. Providing shading and seating arrangements

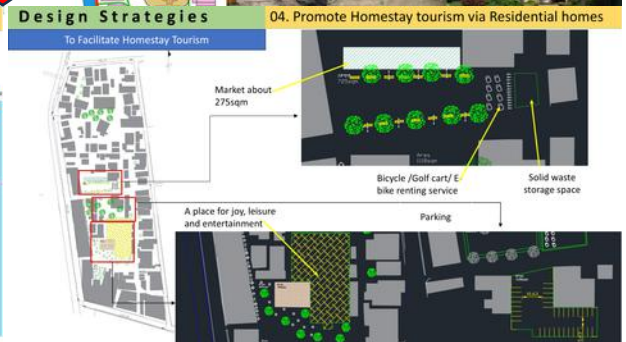


Conserve and adaptive reuse

The old buildings in the site will conserve as food and beverage related activities like restaurants, bars etc. all the shops will need to provide dual frontage access from site side and road side.

Old house will renovate as a groove hub providing vibrant and happening activities targeting the tourism.





Promote homestay tourism via residential homes.

With the advantage of huge homestay demand in galle fort, Residents who owned the houses of the site is encourage to develop their houses for the tourism target homestay development.

(They will be financially supported by partial funding and low-interest loans) for housing improvements

Final Design

Mannar City Gateway: Beautifying the City Core

Coonghe G.A.B.

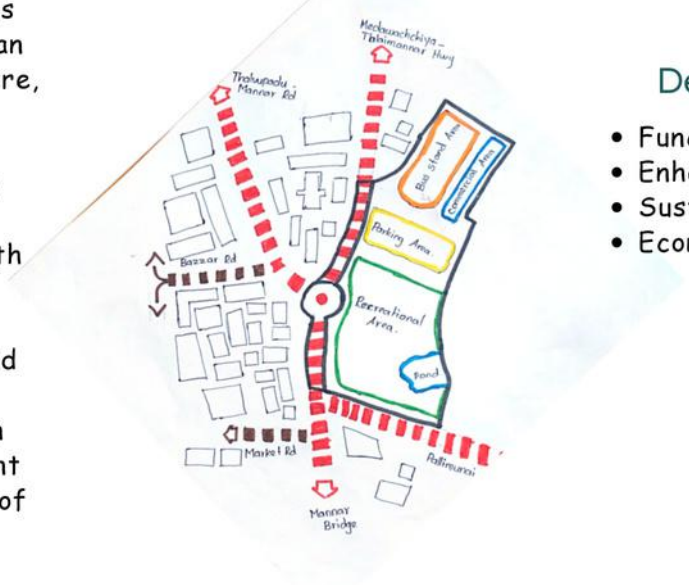
Mannar Town, part of Mannar Island in Sri Lanka, is currently one of the most dynamic communities that is undergoing an urban development project entailing much-needed changes to its infrastructure, public spaces, and economic opportunities. The Y-Junction and Roundabout Development Project improves connections, fosters community interaction, and provides an attractive, functional urban environment for both residents and visitors alike.

The place is very important, with high traffic and commerce, but it suffers from poor planning, a lack of organized infrastructure, and poor facilities both for the residents and the visitors. The roundabout, which should be the focal point, is underutilized and lacks aesthetic appeal, while the surrounding commercial places fail to meet modern standards. Also, poor greening and no decent lighting reduce safety, connectivity, and livability, making the space inadequate for including into the urban fabric of the town.

Design Problem

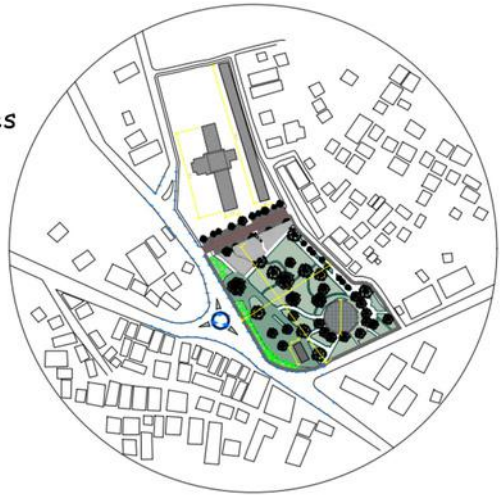
- Unattractive Entrance
- Dilapidated Urban Core
- Poorly Designed Roundabou
- Lack of parking facilities

The Y-junction area within Mannar Town would thus be envisaged as one of dynamism and function-urban space. Main designing interventions would, therefore, incorporate the redesigning of bus stand and commercial complex for which accessibility, economic, and environmental viability would form a proposal regarding well-managed vehicle parks for which parking issues had to be seen, civic plaza with added greens as an important public place, and leisure use and community congregations. A tower that houses the roundabout as a centerpiece should at least be supported with appealing road illumination; hence providing night safety. Thus, an integrating, viable and sustainable, new environment which would signify identity and the expectations of the townspeople are part of their hope for an integral Mannar town.



Design Approach

- Functional Redesign
- Enhanced Accessibility
- Sustainable Urban Features
- Economic Integration



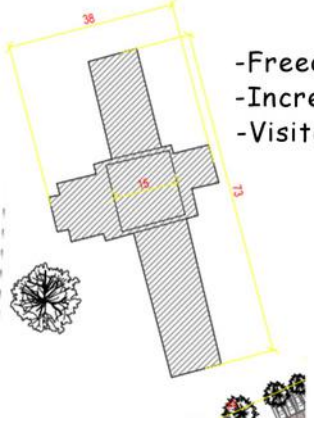
Mannar City Gateway: Beautifying the City Core

Coonghe G.A.B.

Strategies

Detail Layout Plan of the proposal

1. Redeveloping Bus stand

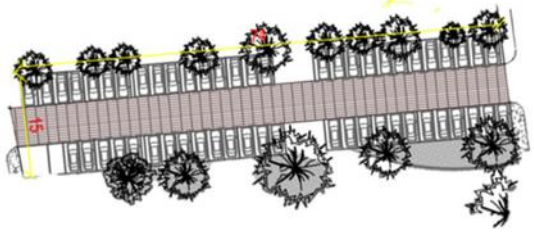


-Freedom for passengers
-Increased visibility
-Visitors will use the public square

2. Commercial complex

-All shops are included under one roof
-Shifting the textiles fair

3. Implementing vehicle Park



Total parking slots are 54 and the users are tourists & visitors

4. Civic Plaza with Greenery

5. Clock Tower with Lighting Road

INTEGRATED TRANSPORT DEVELOPMENT @ Moratuwa Railway Station and Bus Terminal Area

Eriyagolla E.R.I.

This proposal is a visionary project aimed at modernizing the area into a multi-functional urban hub. The project is designed to enhance connectivity, boost local commerce, and provide economic opportunities while leveraging the strategic location of the railway and bus terminals.

Design Problem

- Mismanaged vehicle and pedestrian flow leading to congestion and higher travel times, especially around the Moratuwa Railway Junction.
- Unplanned structures accessibility. There is a high demand for residential and commercial development due to population growth, increasing land values, and nearby higher education institutions.
- constructions and deteriorating pedestrian market limit obstruct visibility

Design Approach

The 3V Approach—Node Value, Place Value, and Market Value—provides a comprehensive framework for understanding this context

Node Value:

- Emphasizes the connectivity and movement dynamics of the site.

Place Value:

- Focuses on the urban character, walkability, and accessibility of the area.

Market Value:

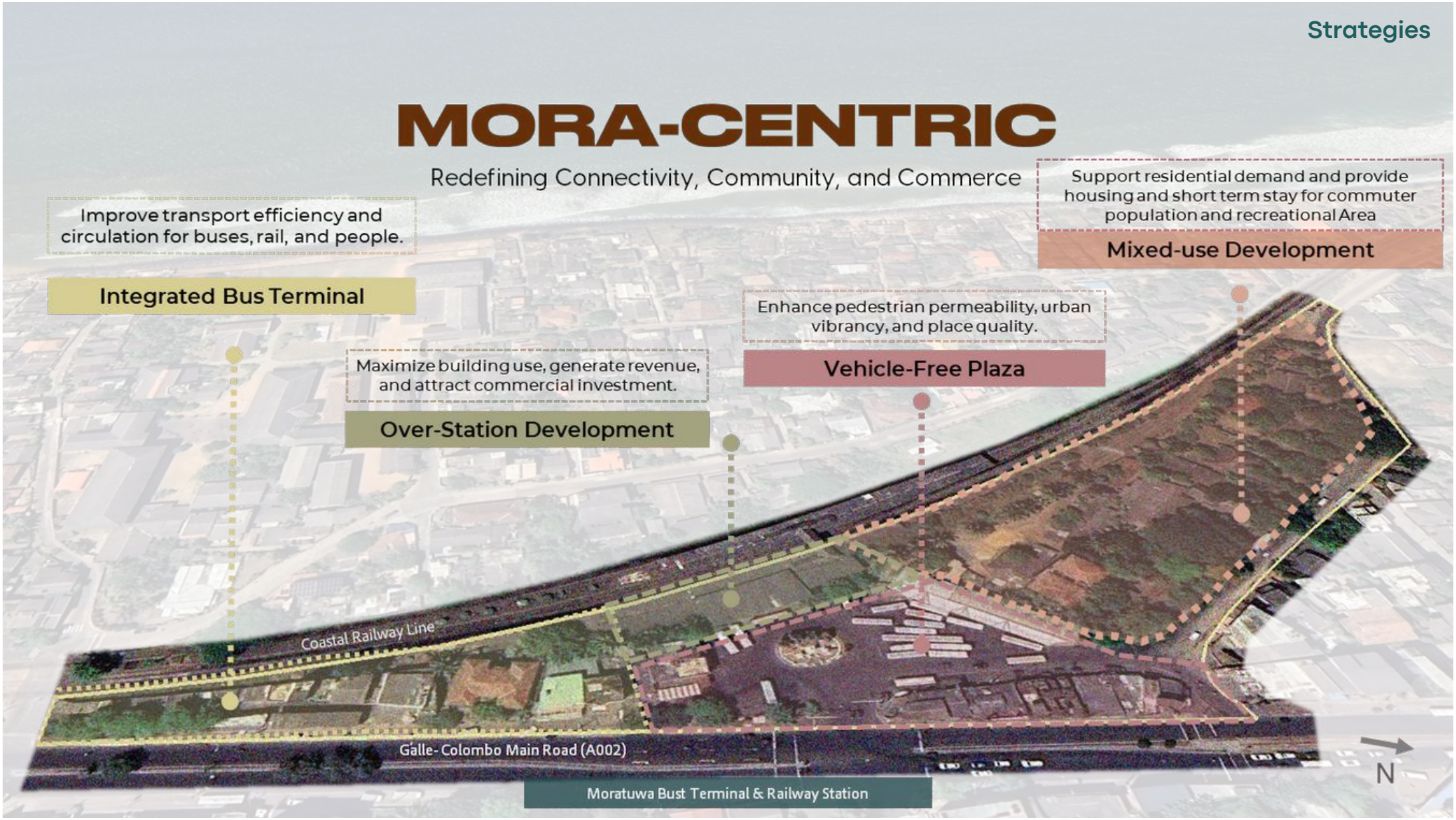
- Considers the economic and developmental potential of the site.

What is the need of a Design Intervention ?

Integration of Bus Terminal and Railway in a More Organized Way	Creating a More Convenient Environment for Pedestrians and Commuters	Maximizing the Use of Underutilized Land with Upcoming Developments

INTEGRATED TRANSPORT DEVELOPMENT @ Moratuwa Railway Station and Bus Terminal Area

Eriyagolla E.R.I.



INTEGRATED TRANSPORT DEVELOPMENT @ Moratuwa Railway Station and Bus Terminal Area

Eriyagolla E.R.I.

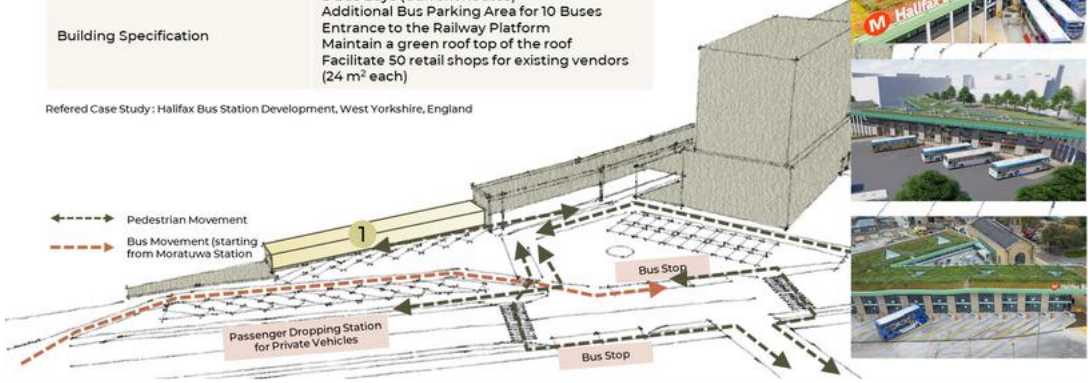
1 Integrated Bus Terminal

Improve transport efficiency and circulation for buses, rail, and people.

Building Line from center of the Galle Road	16.76 m
Total Land Area	4558.43 m²
Developable Land Area	3213 m²
Building Specification	8 Bus Bays (Current Routes) Additional Bus Parking Area for 10 Buses Entrance to the Railway Platform Maintain a green roof top of the roof Facilitate 50 retail shops for existing vendors (24 m² each)

Source: Google Images

Refered Case Study : Halifax Bus Station Development, West Yorkshire, England



2 Over-Station Development

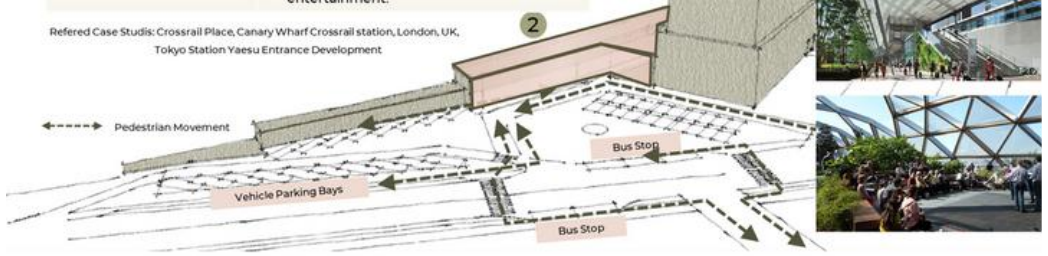
Maximize building use, generate revenue, and attract commercial investment.

Building Footprint Area	1575 m²
Proposed Number of Floors	3 (Existing 1 Floor)
Permissible FAR and (Access Road > 15m)	UL (*Unlimited)
Building Specification	• **Ground Floor**: Dedicated to railway operations, workshops, storerooms, public amenities, and restrooms. • **First Floor**: Modern retail spaces, showrooms for furniture manufacturers, and a pedestrian deck. • **Roof Level**: A roof garden for leisure and entertainment.

* No Vehicles allowed to enter the station road except emergency vehicles, Handicapped commuter vehicles

Source: Google Images

Refered Case Studis: Crossrail Place, Canary Wharf Crossrail station, London, UK,
Tokyo Station Yaesu Entrance Development



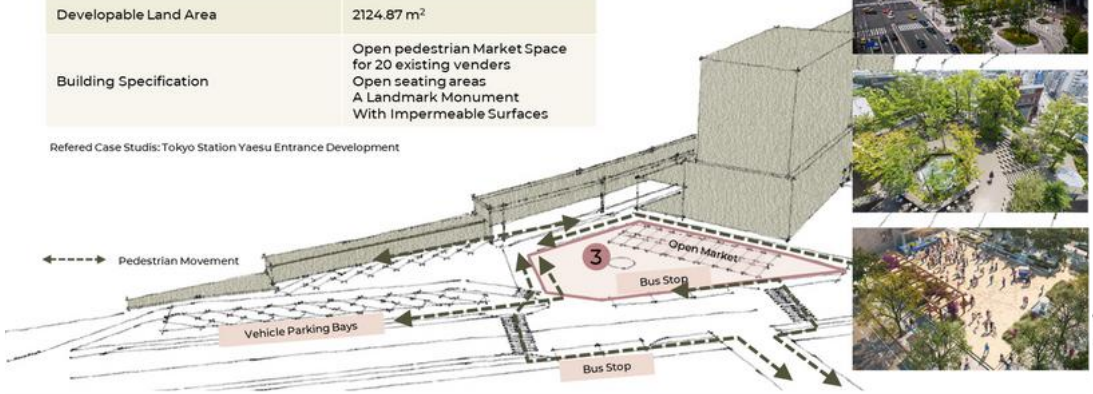
3 Vehicle-Free Plaza

Enhance pedestrian permeability, urban vibrancy, and place quality.

Building Line from center of the proposed Marine Drive Extension Road, Galle Road	30.6 m, 16.76m
Total Land Area	2876 m²
Developable Land Area	2124.87 m²
Building Specification	Open pedestrian Market Space for 20 existing venders Open seating areas A Landmark Monument With Impermeable Surfaces

Source: Google Images

Refered Case Studis: Tokyo Station Yaesu Entrance Development

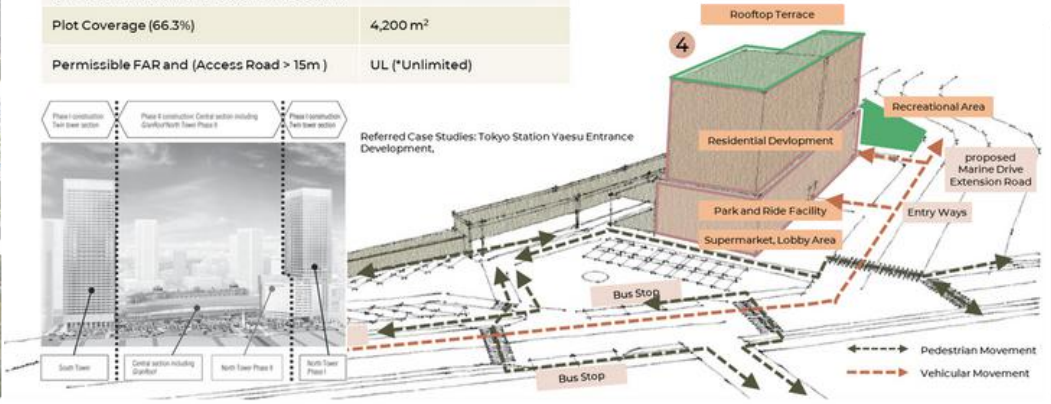


4 Mixed-use Development

Support residential demand and provide housing and park & ride for commuting population

Building Line from center of the proposed Marine Drive Extension Road	30.6 m
Total Land Area, and Developable Land Area (37% area withing the given building line by UDA)	10, 110 m² 6, 334.4 m²
Plot Coverage (66.3%)	4,200 m²
Permissible FAR and (Access Road > 15m)	UL (*Unlimited)

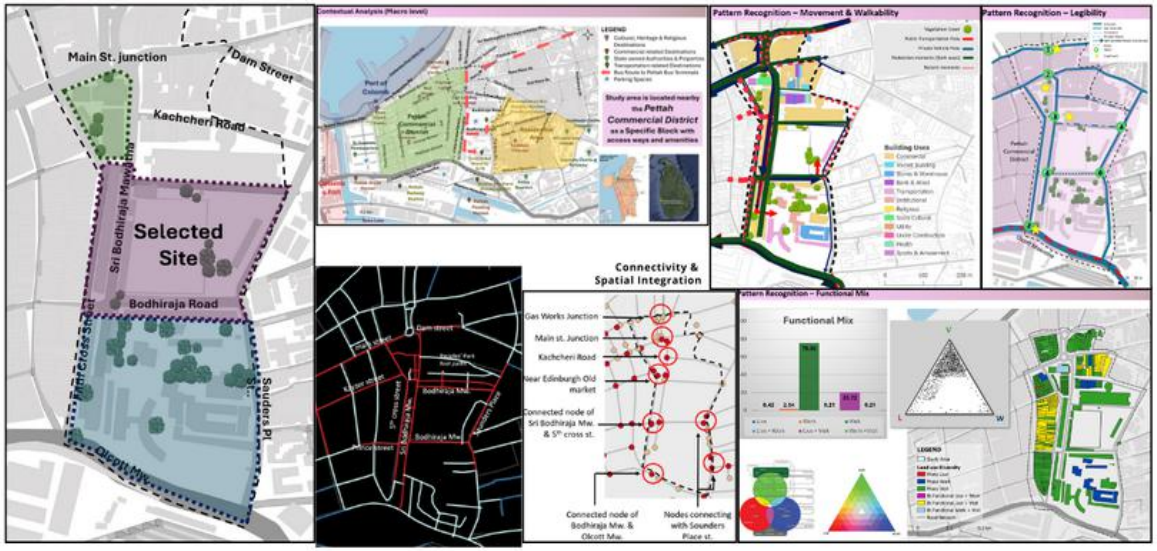
Referred Case Studies: Tokyo Station Yaesu Entrance Development,



SITE PLANNING INTERVENTIONS - PETTAH, COLOMBO

Gunarathne W.D.M.M.

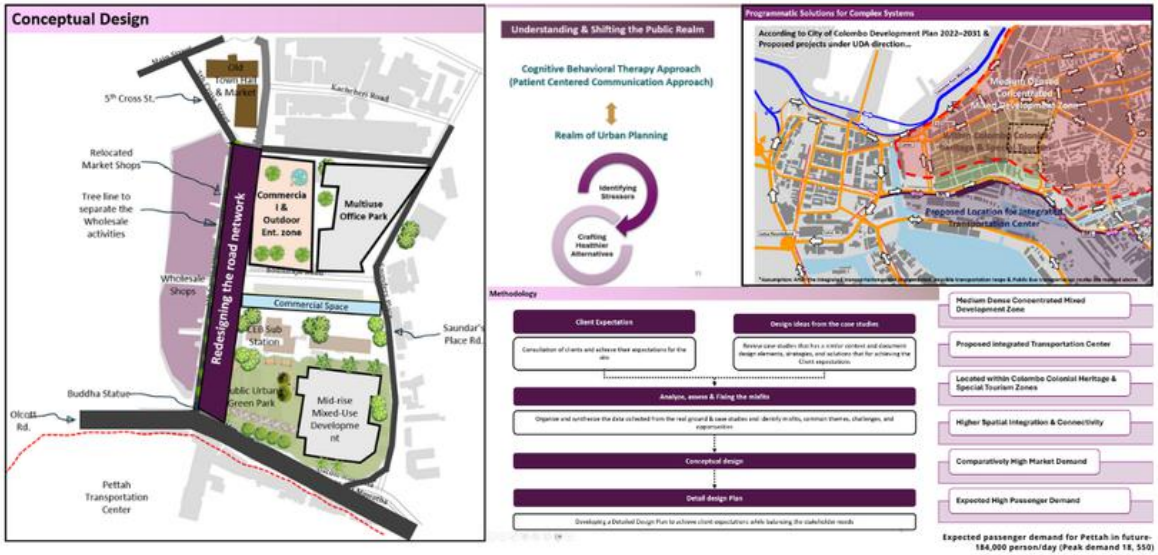
The study area is located within the Pettah Commercial District, Colombo, known for its diverse characteristics, including a grid-pattern road network, bustling commercial streets, and significant cultural and heritage value. It serves as a regional transportation hub with three bus terminals and the Pettah Railway Station, attracting approximately 52,000 passengers daily.The selected site, Gunasinghepura Bus Stand and its nearby area, spans 9.93 acres of land. Planning and design interventions are proposed for this site, aligning with future development projects to enhance its functionality and character.



Design Problem

- Conjested Mono Function of Commercial Uses
- Less conveinience, safety & comfort for pedestrians
- Underutilization of space
- Limited Mixed Use functionality
- Less Walkability & Conflicting pattern of movements

Planning intervention is needed to fix the identified design problems, utilize the land area with identified potentials to facilitate future oriented proposed projects and client expectations



Design Approach

Pettah is expected to develop with integrated transportation facilities, tourism industry related developments providing high commercial experience for commuter population. As the selected site fallen within the Medium Densed Concentrated mixed development zone, future expected development should consider these aspects.

Conceptual design has derived with understanding & shifting the pubic realm inspiring for **Cognitive Behavioral Approach**.

SITE PLANNING INTERVENTIONS - PETTAH, COLOMBO

Gunarathne W.D.M.M.

Design Solution

.The first project component focuses on redesigning the road network, starting from Old Edinburgh Market, covering a total length of 330m. The proposal targets pedestrianizing the initial 180m segment of Sri Bodhiraja Mawatha by relocating the public market and allocating sufficient space for 5th Cross Street's wholesale activities. A green boundary and street-side boutiques will separate the pedestrian street from the commercial area, enhancing functionality and aesthetics.

To address traffic congestion, low visual integrity, and poor pedestrian safety, the proposed intervention focuses on pedestrianizing the street network. This transformation aims to create accessible, sustainable, safe, and economically vibrant spaces while preserving historical value in the commercial core.

The second project component involves developing a mid-rise mixed-use office park on a 5.34-acre land plot. Two buildings are proposed within the developable area, with designated uses for each floor. Relevant design interventions are planned to optimize functionality and enhance the architectural character of the two main buildings.

The third project component proposes an outdoor social, commercial, and recreational area featuring commercial spaces constructed from cargo containers. This approach offers an affordable, sustainable, durable, and adaptable solution while establishing a unique character to stand out in the competitive market. These design interventions aim to create a vibrant and distinctive space for community and commerce.

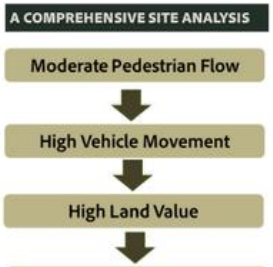
In conclusion, the diagnostic analysis evaluates the urban form of the space. The accompanying graphs illustrate the current state, the business-as-usual scenario, and the desired future scenario achieved through the proposed projects.

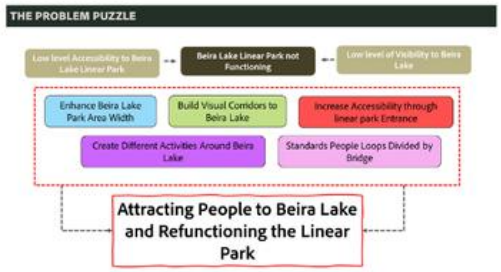
BEIRA LAKE CONNECT TO CITY

Revitalizing Beira Lake: Enhancing Urban Connectivity and Public Engagement

Gurubevila G.P.P.

This project aims to revitalize Beira Lake by improving accessibility, visibility, and urban connectivity. Through strategic design interventions, it seeks to transform the lakefront into a vibrant public space, fostering community engagement, sustainable development, and cultural enrichment while seamlessly integrating the lake with its surrounding urban fabric.





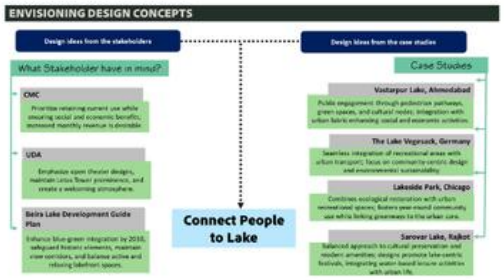
Design Problem

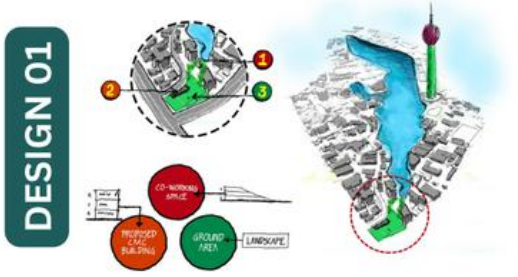
The Beira Lake surroundings face multiple challenges, including underserved settlements, inappropriate buildings causing visual disturbances, underutilized lands, and on-street parking issues. Most critically, the Beira Lake Linear Park suffers from low functionality due to poor accessibility and visibility, limiting its potential as an active public space.

Site-Specific Challenges Identified:

- High vehicle flow, low pedestrian movement
- High land value & irregular urban blocks
- Dominant office cluster with limited public spaces
- Beira Lake size reduced from 1.61 km² to 0.65 km² due to urbanization

Main Design Challenge: Reactivating the Linear Park & Enhancing Lake Connectivity





Design Approach

The design approach focuses on revitalizing Beira Lake's connection to the city by enhancing accessibility, visibility, and urban integration. Through stakeholder engagement, case study analysis, and conceptual brainstorming, two distinct design solutions were developed to address the site's challenges and opportunities.

Vision: "Lake Connect to City" - Aims to transform Beira Lake into a dynamic public realm with physical and visual accessibility, promoting urban vibrancy, environmental value, and community engagement.

Key Objectives:

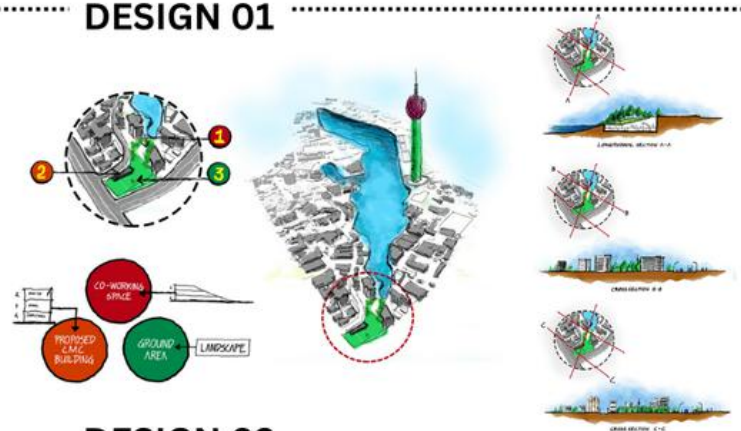
- Enhance public access and usability of Beira Lake.
- Improve connectivity between the lake, city, and surrounding spaces.
- Activate underutilized areas for economic, cultural, and recreational purposes.
- Address visibility challenges to establish the lake as a focal urban element.

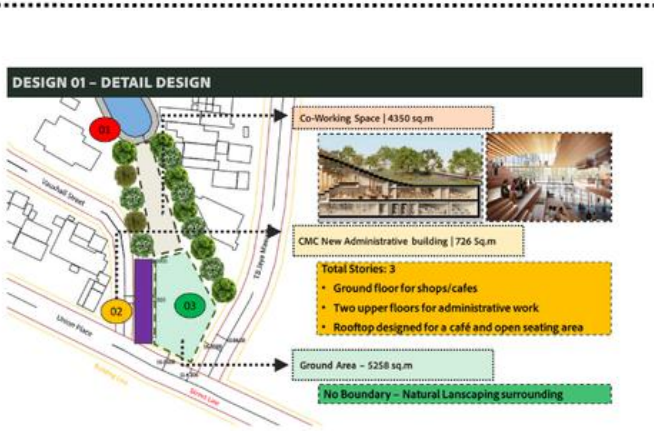
BEIRA LAKE CONNECT TO CITY

Revitalizing Beira Lake: Enhancing Urban Connectivity and Public Engagement

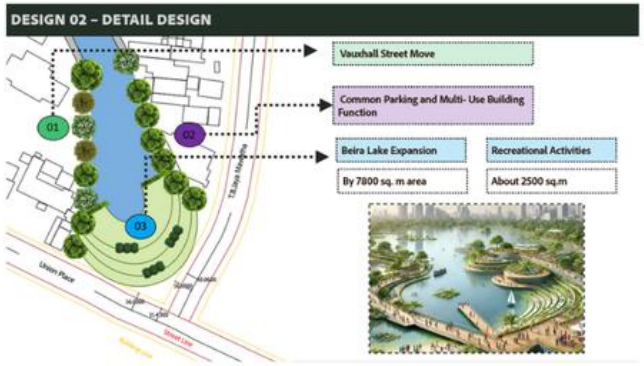
Gurubevila G.P.P.

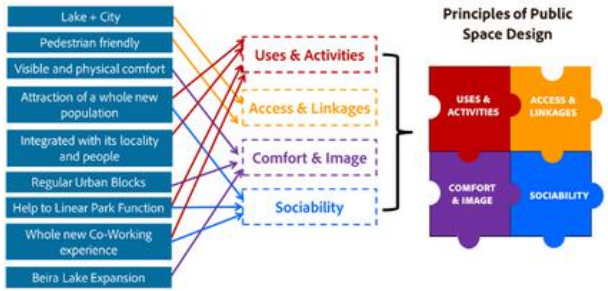
DESIGN 01





DESIGN 02





Design Solution

Design Concept 01:

- Co-Working & Open Spaces – A mixed-use hub integrating workspaces, commercial activities, and leisure areas to attract a diverse user base.
- New CMC Administrative Building – Relocating the municipal offices into a purpose-built structure with integrated retail and rooftop recreational areas.
- Enhanced Hyde Park Ground – Revitalizing the existing open space with natural landscaping, making it more pedestrian-friendly and visually appealing.
- Linear Park Enhancement – Strengthening the connection between the lake, park, and city, promoting walkability and interaction.

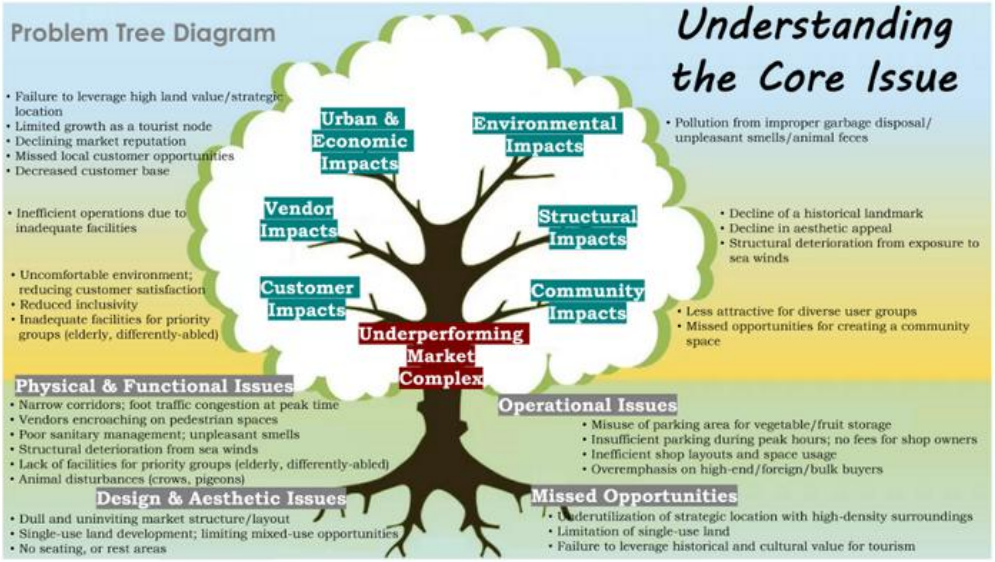
Design Concept 02:

- Lake Expansion & Connectivity – Extending Beira Lake into the site to establish stronger interaction between the water and urban surroundings.
- Street & Land Reconfiguration – Relocating Vauxhall Street to accommodate new waterfront spaces, improving pedestrian accessibility.
- Integrated Common Parking & Multi-Use Spaces – Introducing shared public parking to reduce on-street congestion and promote sustainable transport.
- Relocation of CMC Building – Moving the municipal office to an adjacent plot, making space for improved public interaction with the lakefront.

Eco-Centric Urban Node in Kollupitiya

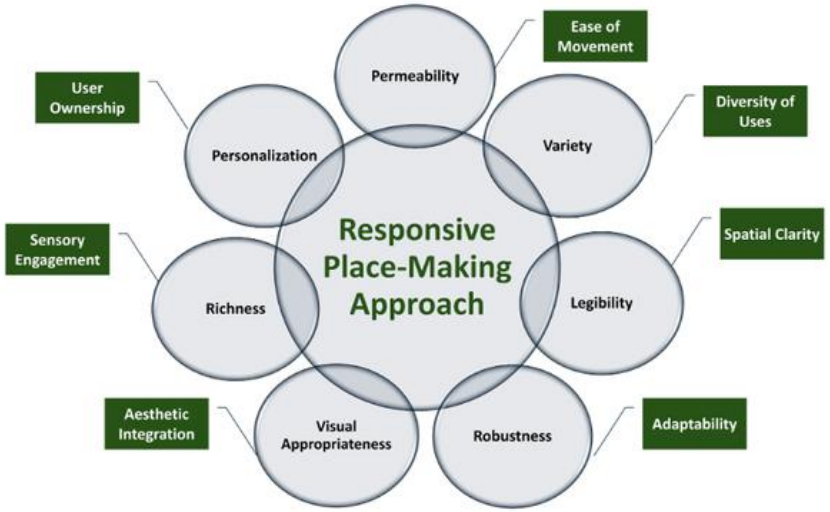
Hettiarachchi H.N.A.

The eco-centric urban node in Kollupitiya aims to create a vibrant urban hub that integrates sustainable design, community well-being, and environmental harmony. This initiative focuses on developing multifunctional green buildings, enhancing public spaces with parks and boulevards, and promoting walkability to redefine urban living in the Kollupitiya area.



Design Problem

The design problem focuses on revitalizing the underperforming public market in Kollupitiya. Key issues include inadequate facilities, poor customer satisfaction, lack of inclusivity, and inefficient operations. The market's narrow corridors and single-use land development limit its functionality and attractiveness, while environmental concerns like pollution and structural deterioration further reduce its appeal. The area underutilizes its strategic location, failing to meet the needs of vendors, customers, and the community. The solution requires a sustainable, accessible, and multi-functional urban design to address these challenges and create a vibrant urban space.

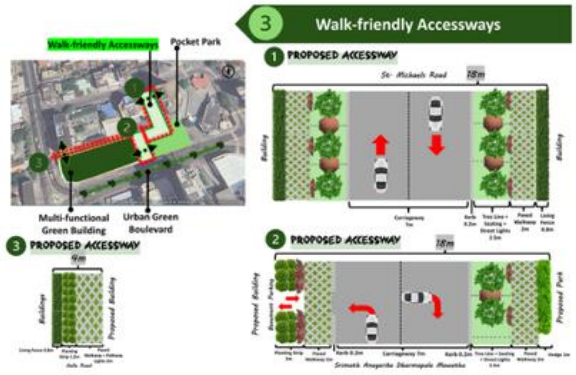


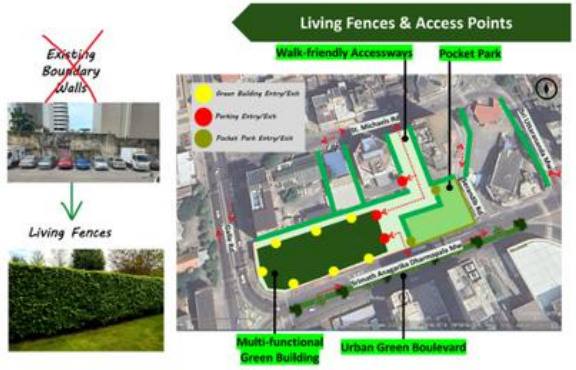
Design Approach

The design approach focuses on a "Responsive Place-Making Approach," aiming to create an inclusive and adaptable urban space. It emphasizes ease of movement and spatial clarity to ensure accessibility and navigation. Aesthetic integration and sensory engagement enhance user experience and foster a sense of ownership. The design prioritizes diversity of uses, promoting multifunctionality and community engagement. This approach combines physical, visual, and social elements to create a vibrant, user-centered urban environment that balances practicality with aesthetics.

Eco-Centric Urban Node in Kollupitiya

Hettiarachchi H.N.A.





Strategies

The proposed design aims to integrate sustainability, community engagement, and urban livability by addressing identified issues with innovative solutions.

The multi-functional green building combines various facilities, such as markets, healthcare, customer care, recreational spaces, parking, and green infrastructure, ensuring efficient use of space and promoting sustainability. It acts as a community hub, encouraging social interaction and eco-friendly practices.

A community-oriented pocket park is introduced to provide a peaceful, welcoming space for relaxation and interaction, with features like shaded seating, play areas, and seasonal pop-up stalls.

To enhance mobility, walk-friendly accessways are designed with greenery, wide pathways, and proper lighting to ensure safety and comfort for all users. These paths enhance connectivity while promoting walkability and accessibility.

Transforming Srimath Anagarika Dharmapala Mawatha into an urban green boulevard turns a key street into a vibrant, tree-lined corridor. This not only enhances aesthetic appeal but also improves air quality, blending greenery with urban infrastructure.

Finally, living fences are proposed to replace conventional boundaries. These green features maintain functionality while creating a more open and welcoming environment, promoting harmony between urban spaces and nature.

Together, these elements redefine Kollupitiya as a dynamic and sustainable urban hub.

Municipal Slaughterhouse – Dematagoda

Jayasinghe P.D.S.W.K.

The Municipal Slaughterhouse land is located in the Colombo Municipal Council boundary within Colombo District. Spanning 6.68 acres, it is bordered by major roads and landmarks such as the Baseline Road, the Baseline Railway Station, and Sri Nigrodharama Mawatha. Currently, the land is used for slaughtering animals, waste disposal, and some commercial activities. However, the site is underutilized, with significant potential for better land use and integration into the city's urban fabric. Its central location and accessibility make it a strategic site for development

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Design Problem

1. Use untapped Economic potentials of the site
2. Find effective solution for problems of the site
3. Strategically integrating peoples while optimizing the use of the site

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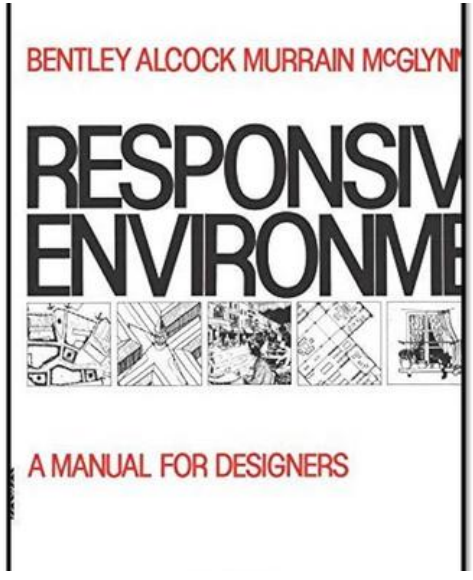


Design Approach - Responsive Environment

Design Principal

Robustness – Attract people for place

Multifunctional Urban Space

Visual appropriateness – Effective use of urban space

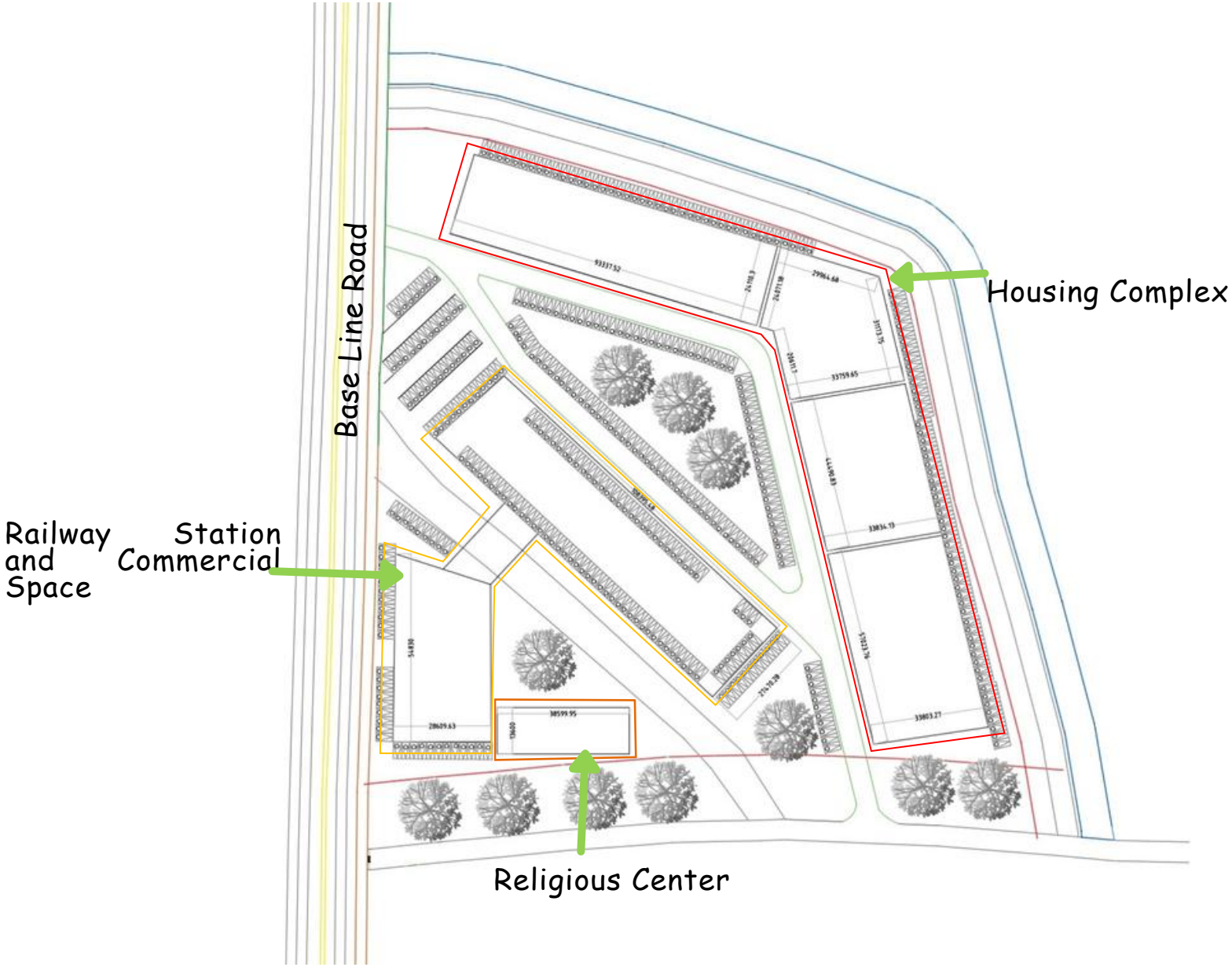
Accessibility and Interconnectivity

Personalization

Municipal Slaughterhouse – Dematagoda

Jayasinghe P.D.S.W.K.

Design Layout



Municipal Slaughterhouse – Dematagoda

3D Model of the proposal

Jayasinghe P.D.S.W.K.

Municipal Slaughterhouse – Dematagoda

3D Model of the proposal

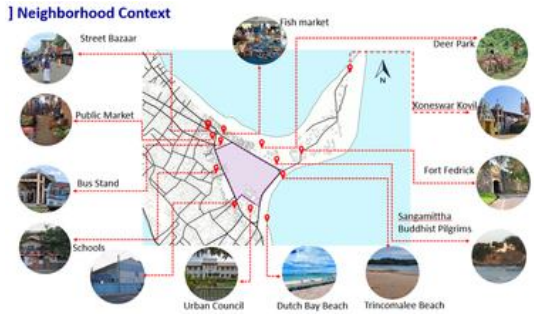
Jayasinghe P.D.S.W.K.

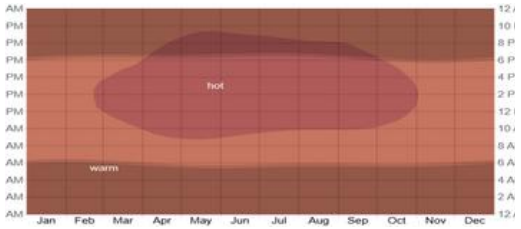
MC. HEYZER GREEN – A PLACE FOR ALL

"A good city is like a good party — people stay longer than really necessary because they are enjoying themselves." — Jan Gehl

Jeyaprakash K.

MC. Heyzer Green is a vibrant, inclusive urban space offering diverse activities for people of all ages and abilities. Featuring a mixed-use complex, green park, and sports hub, it fosters recreation and community connection. Its lush greenery and climate-sensitive design mitigate heat, ensuring thermal comfort while promoting health, leisure, and sustainability.





Underutilized space

Non-maintained and dilapidated buildings

Design Problem

Mc Heyzer ground is a 35-acre site owned by the Trincomalee Urban Council, located in the city center. Surrounded by important landmarks such as cultural and historic sites, recreational areas, educational and administrative institutions, and transport hubs, the site has immense potential. However, despite its strategic location and vibrant surroundings, it remains underutilized due to several challenges. These include neglected and dilapidated buildings, inadequate stormwater management,and a lack of shading and seating facilities. Additionally, Trincomalee's hot weather conditions further discourage people from visiting or passing through the site. Addressing these challenges and enhancing thermal comfort is essential to activate the site for public use, transforming it into a socially inclusive and vibrant urban space.

Design Approach

The planning approach for Mc.Heyzer Green revolves around "The Green Revolution Through Mixed Use and Infill Development," which aims to transform urban spaces into greener, more sustainable environments. This concept integrates accommodation, commercial, and recreational spaces, promoting walkability, and repurposing underutilized areas to optimize existing infrastructure. Following Jan Gehl's "Cities for People" principles, the design ensures **safety, comfort, and delight** by emphasizing protection, sensory experiences, and opportunities for social interaction. The conceptual site plan features a mixed-use complex, a green park, and a sports hub. These elements collectively enhance connectivity, thermal comfort, and community well-being while fostering a resilient urban space.

MC. HEYZER GREEN – A PLACE FOR ALL

"A good city is like a good party — people stay longer than really necessary because they are enjoying themselves." — Jan Gehl

Jeyaprakash K.

Mixed-use building complex				
Ground Floor (15,050 m²)	**1st Floor (15,050 m²)**	**2nd Floor (11,850 m²)**	**3rd Floor (8,650 m²)**	**Top Floor (7,050 m²)**
Public Open space	Commercial shops	Sea food station	Hotels	Roof top garden
Cafeterias	Showrooms	Restaurants	Event Hall	View point
Open office space	Green garden	Service zone	Green garden	Rainwater harvesting tanks
		Green garden		Solar panels

Strategies

The proposed **mixed-use building complex** is designed with sustainability and functionality in mind. The step-height structure enhances green coverage and mitigates heat through a tiered design that improves wind circulation, and reducing ambient temperatures, creating a comfortable environment for users. Surrounding the building, open spaces will offer vendor stalls, a children's play area, and walking paths, creating a welcoming atmosphere.

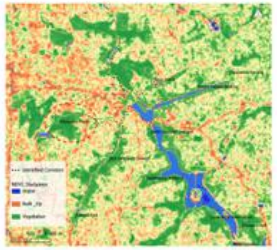
The **green park** is designed to be a vibrant space for relaxation, cultural appreciation, and community engagement. Key features include a **water park**, offering cooling effects to help combat high temperatures. A **pebble mosaic garden** adorned with cultural art and statues will preserve and showcase the area's heritage. An **agro-tech park** integrates urban farming and sustainable practices, including providing to the deer park. **Walking and cycling paths** will encourage healthy lifestyles while reducing reliance on motorized transport. An **amphitheater and promenade** will host events, exhibitions, and carnivals, fostering cultural activities and community engagement. Strategically distributed green spaces will enhance climate resilience by reducing the urban heat island effect, improving air quality, and promoting biodiversity within the urban core.

The **sports hub** is another key component, offering a stadium with an athletic track for local and regional events, which can serve as an economic driver. A **fitness park** will cater to people of all ages, encouraging physical activity, while an **indoor sports complex** will host activities such as badminton, basketball, and cricket practice, ensuring year-round usability. Together, these facilities create inclusivity for both recreational users and professional athletes.

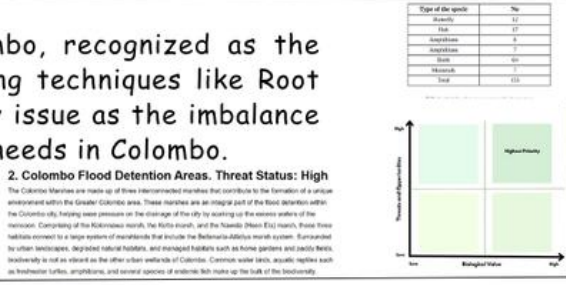
A DESIGN FOR PEOPLE AND FOR NATURE
A DESIGN FOR BALANCE

Kangara K.M.S.N.

This site planning proposal for Rajagiriya Marsh adopts the 5-step site planning process to create a design that harmonizes development and conservation, striving for balance between people and nature. My reflection with the design is that if water retention and wildlife habitats had been considered during the early stages of construction processes, major hazards could have been avoided.

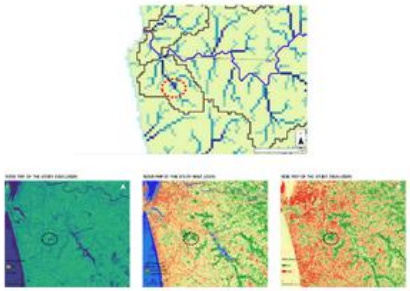


I began by selecting a site in Colombo, recognized as the world's only living wetland capital. Using techniques like Root Cause Analysis, I identified the primary issue as the imbalance between development and conservation needs in Colombo.
With that Identified selected Rajagiriya Marsh.

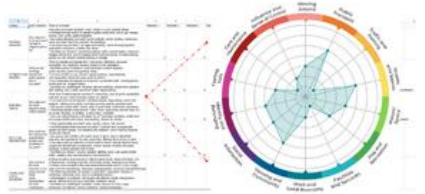


The Begining

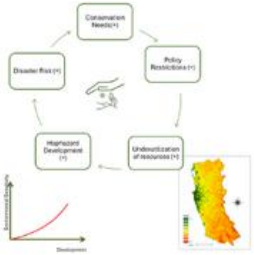
This stage focused on site analysis and understanding. Mainly, utilized satellite data and imagery to gain an overview of the site. Additionally, adopted a bottom-up approach for a more detailed understanding, incorporating the Place Standard Tool to capture local insights. As part of the process, land value analysis to assess the site's position in the real estate market.

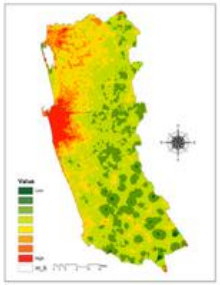


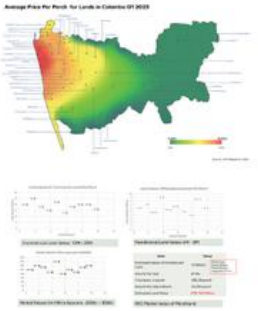
The Setting



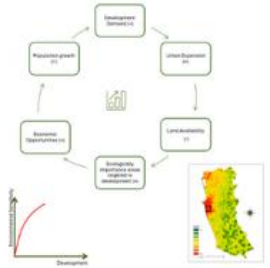
- The identified conflict stems from a spatial misfit—while there is high development demand around the site, the area remains conserved, raising questions about its highest and best use.

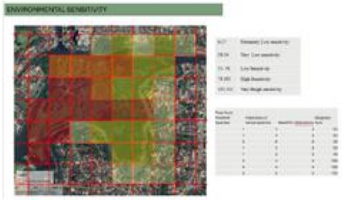



Development Potential Map



The Conflict





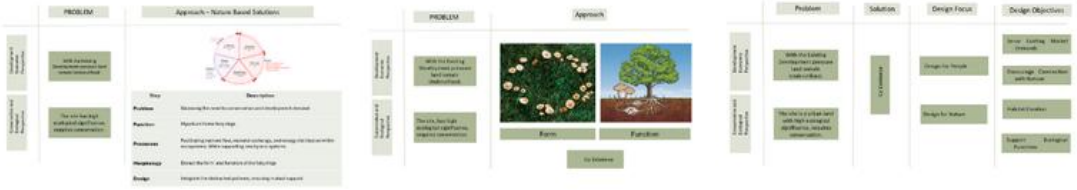
- Conversely, despite being labeled as conserved, the marsh is losing its primary environmental services due to invasive species, challenging its conservation status.

A DESIGN FOR PEOPLE AND FOR NATURE
A DESIGN FOR BALANCE

Kangara K.M.S.N.

This site planning proposal for Rajagiriya Marsh adopts the 5-step site planning process to create a design that harmonizes development and conservation, striving for balance between people and nature. My reflection with the design is that if water retention and wildlife habitats had been considered during the early stages of construction processes, major hazards could have been avoided.

The Concept

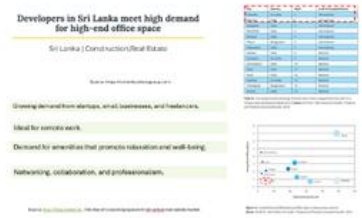


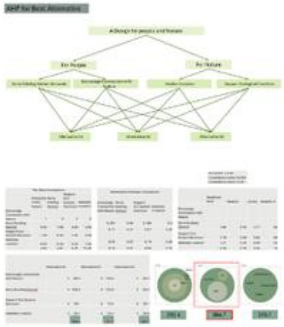
To address this, I adopted nature-based solutions. Drawing inspiration from fairy rings, which are mycelium structures that support and benefit surrounding ecosystems, I mimicked their form and function. This approach enhances human-nature interactions within the design.

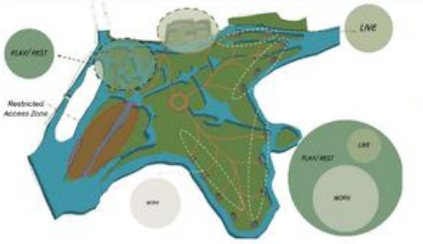
Accodianly, the Design focus is Design for People and Design for Nature

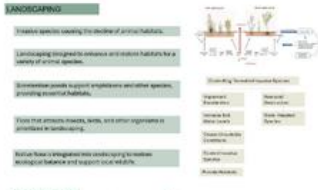
The Resolution

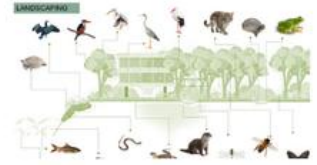
- UDA proposed plans and two alternative design concepts, evaluated using the AHP technique, with the highest-weight alternative selected.

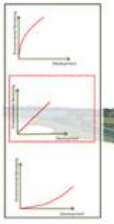












Design for People and For Nature.
Design for Balance...

Samudragama Fishing Village & Coastal Plaza

Kishokkumar K.

Samudragama Fishing Village & Coastal Plaza, located in the Back Bay and it is a vibrant place with fishing communities. It has a fish market, open seaside plaza to enjoy sea views, street vendors, and parking facilities, enhancing economic activity and community interaction by the coast.

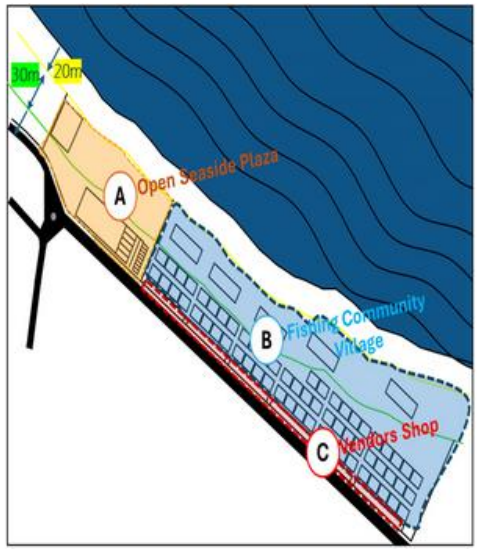
Design Problem






Back Bay in Trinco town faces many challenges that affect its community and environment. Access to the waterfront from the town is blocked, limiting its connection and potential use. Not only neglected public areas create visual pollution and do not match the urban and tourist value of the region but also poor living conditions in fishing communities and lack of proper facilities hinder their quality of life and also the fish market infrastructure is inadequate, causing hygiene and comfort issues. Additionally, untreated wastewater is released into the coastal waters, polluting the environment. Despite the potential for dry fish production, these issues slow economic and social development.

Design Approach



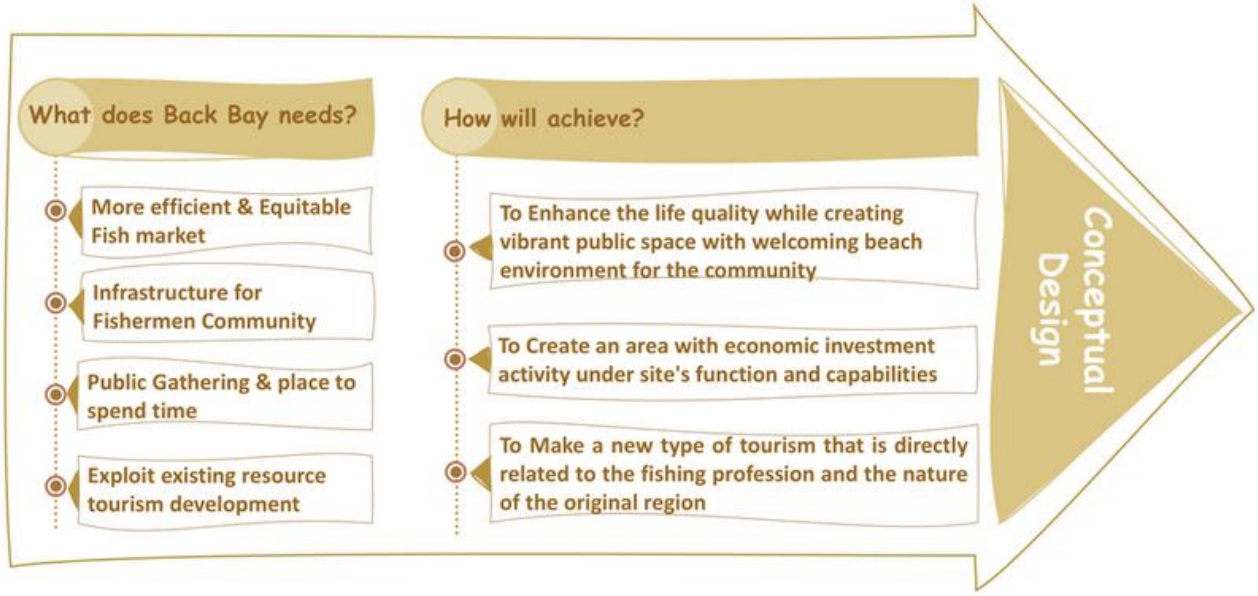


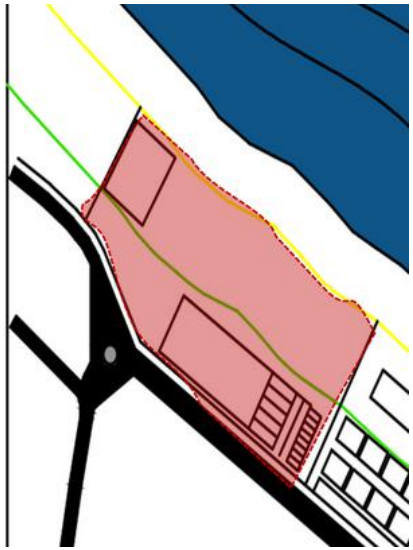

The design for Back Bay focuses on creating a lively and inclusive space for the community. Also it includes an open seaside plaza, a fish market, also community village. There will also be shops for vendors and parking spaces, following UDA rules. Mainly, the aim is to support the fishing community while encouraging public participation and engagement. Inspired by Hong Kong's Victoria Harbour, the plan promotes better livelihoods, social inclusivity, and long-term care for the area. This design hopes to make Back Bay vibrant, welcoming, and sustainable for everyone in the upcoming years.

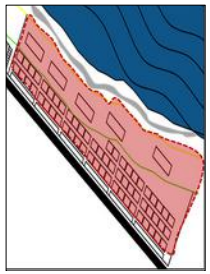
Samudragama Fishing Village & Coastal Plaza

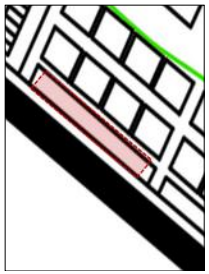
Kishokkumar K.

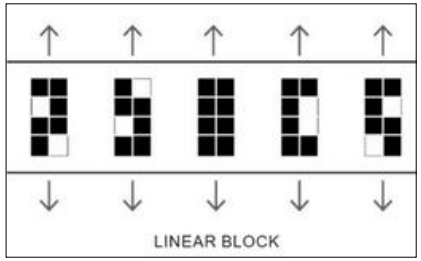
Strategies

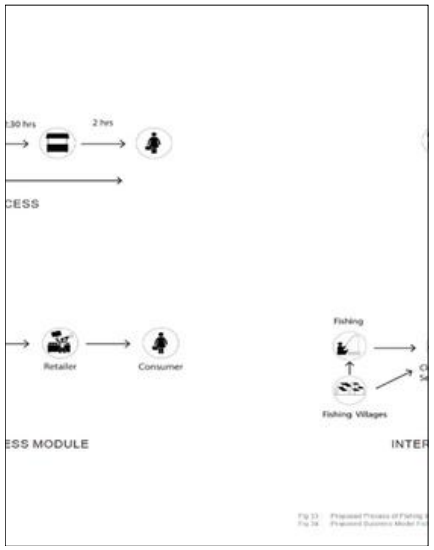












1. A vibrant Public Space:
The design emphasizes open and lively areas for the public, such as a seaside plaza and fish market. These spaces encourage social interaction, boost local business, and make the area welcoming. For example, the seaside plaza can host community events, while the fish market supports local fishermen by providing a direct way to sell their catch.

2. Improved life quality of Fishing Community:
The inclusion of a fishing community village highlights the focus on local livelihoods. This space is designed to preserve and support the traditional fishing culture, offering better facilities for fishermen and their families. By providing dedicated spaces for their work and daily life, the design strengthens their role in the area's economy and heritage.

3. Sustainability and Inclusivity:
Inspired by Hong Kong's Victoria Harbour, the design promotes social inclusivity and long-term care. For example, the layout includes vendor shops to support small businesses, and parking is planned based on UDA regulations to maintain order and accessibility and also based on the coastal regulations, the design elements were created. This approach ensures the area remains functional and inviting for all, balancing community needs with environmental care.

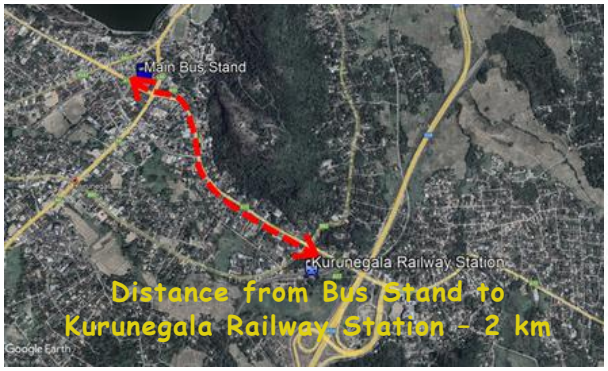
Gettuwana
Central Gateway Hub

Nasriya H.P.

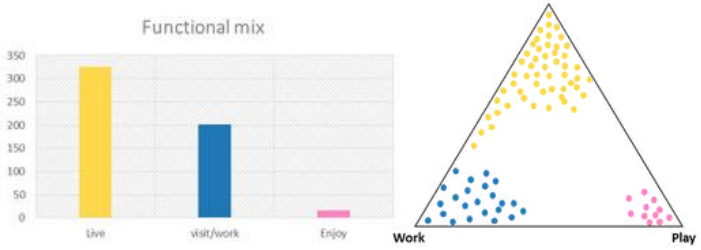
The project focuses on transforming the underutilized Kurunegala railway station area into a dynamic, integrated, and sustainable urban hub. It aims to address urban planning challenges, enhance multimodal transport connectivity, and introduce green spaces. The plan incorporates stakeholder input, demand assessments, and sustainable design principles to create a vibrant and functional community center.

- 58% of the total land area (3.9 acres) remains vacant

Total land area	**6.7 acres**
Total area of Quarters buildings	0.36 acres
Total area for other buildings and utilized spaces	2.46 acres
Total vacant area	**3.9 acres**



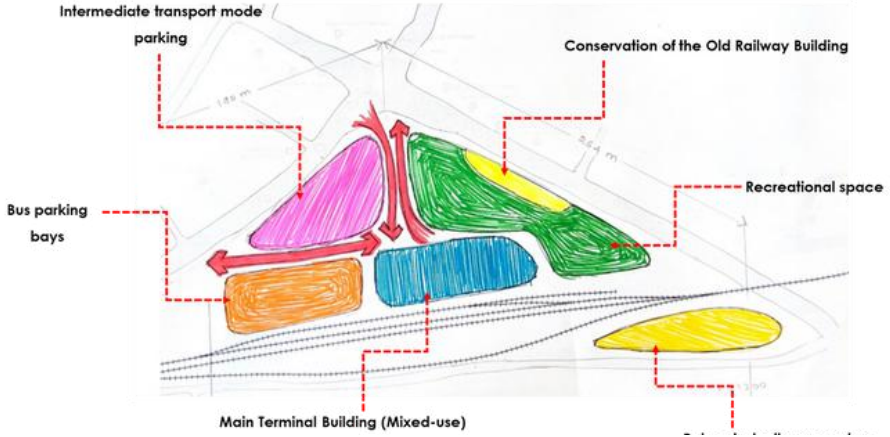
Functional Mix of selected Site's Neighbourhood



Design Problem

- Inefficient Urban Space Utilization
- Poor Infrastructure Management
- Limited functionality due to a lack of diverse activities
- Lack of integration between two main modes of transportations

CONCEPT PLAN



Design Approach

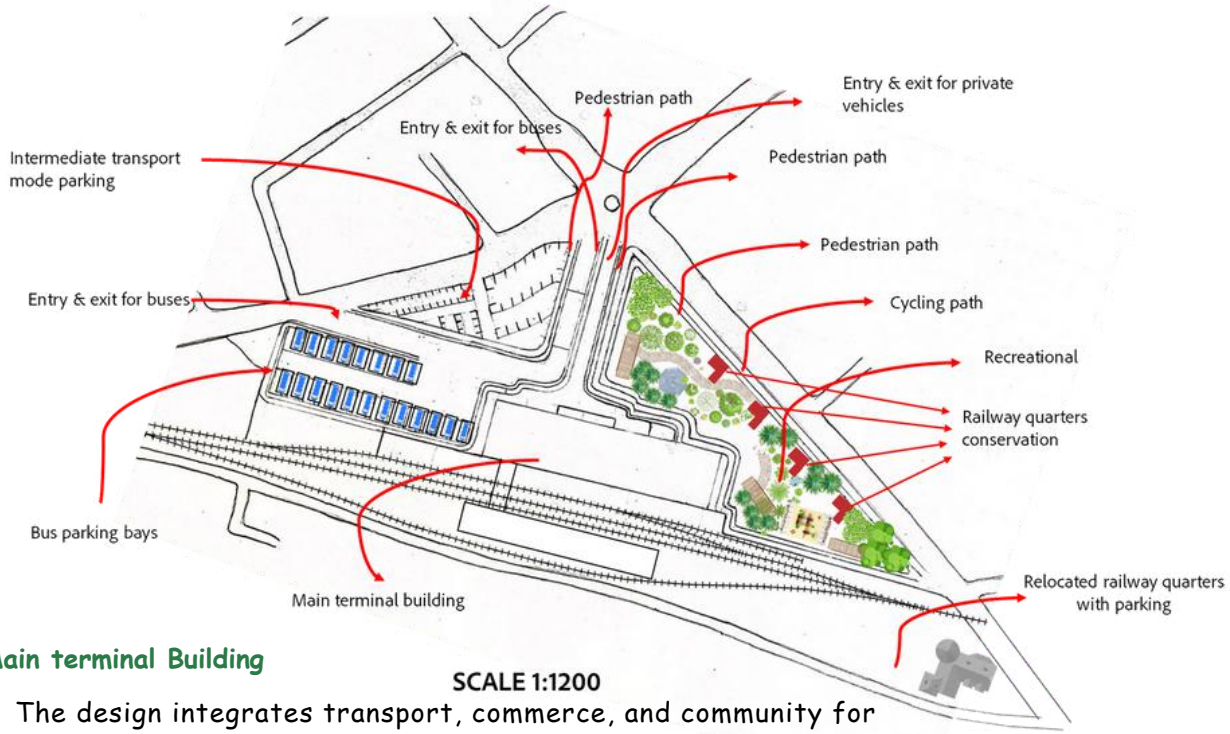
To overcome the challenges, a transformative design approach was envisioned. By combining modern functionalities, recreational spaces, and the preservation of historical elements, the design achieves a balanced solution that enhances connectivity, sustainability, and community interaction, aligning with ongoing development projects.

- Aims to transform the site into an integrated multimodal transport hub.
- Incorporates green building principles and sustainable urban design practices.
- Focuses on functional zoning, including transportation facilities, commercial zones, and public spaces.

Gettuwana
Central Gateway Hub

Nasriya H.P.

DESIGN LAYOUT



SCALE 1:1200

Main terminal Building

- The design integrates transport, commerce, and community for a multi-functional hub.
- It enhances infrastructure with energy and water-efficient systems and sustainable planning.
- Transport modes are seamlessly connected with diverse activities for convenience.
- It fosters community engagement with economic, cultural, and social opportunities.

Conservation of the old railway building

- Civic hall
- Art gallery and cultural hall
- Restaurants & cafe

Strategies

Bus parking Bays

- Proposed bus bays address the lack of integration between the bus stand and railway station.
- Serve local routes for city and nearby area travel.
- Function as "touch-and-go" stops for regional routes to minimize delays.
- Enhance connectivity between road and rail transport.
- Transform the hub into a seamless multimodal transit center.
- Improve passenger convenience and reduce travel time.
- Promote public transportation use and address regional transport gaps.

Intermediate transport mode parking

- Intermediate transport modes like three-wheelers and taxis connect passengers to their final destinations.
- Dedicated parking ensures smooth transitions between transport modes.
- Reduces congestion and improves traffic flow.
- Enhances convenience, accessibility, and overall efficiency of the hub.

Recreational space

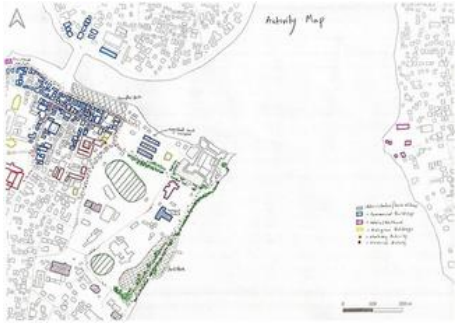
- The Urban Square transforms underutilized space into a vibrant green recreational area.
- It improves infrastructure planning with accessible and functional public spaces.
- It introduces diverse activities, making the area dynamic and engaging for the community.

Relocate the railway quarters as 3 storey building

Revitalizing Dutch Fort, Batticaloa

Navarathnarajan N.

The Dutch Fort revitalization project in Batticaloa addresses its isolation within the Central Business District despite historic significance. The proposal includes enhancing connectivity, restoring the fort's heritage, and introducing features like a pedestrian-friendly road, tourist information center, open-air theater, and interactive spaces. These interventions aim to attract visitors and generate income.



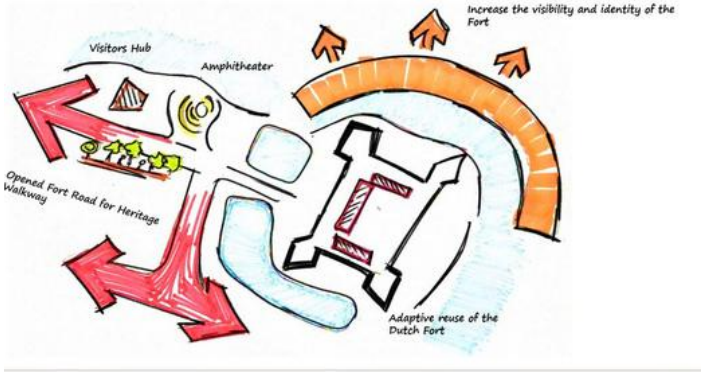
Batticaloa Dutch Fort, faces numerous challenges that limit its functionality and connectivity within the urban fabric. Once a vibrant administrative and transportation hub, the fort now suffers from underutilization, poor maintenance, and a lack of engaging amenities.

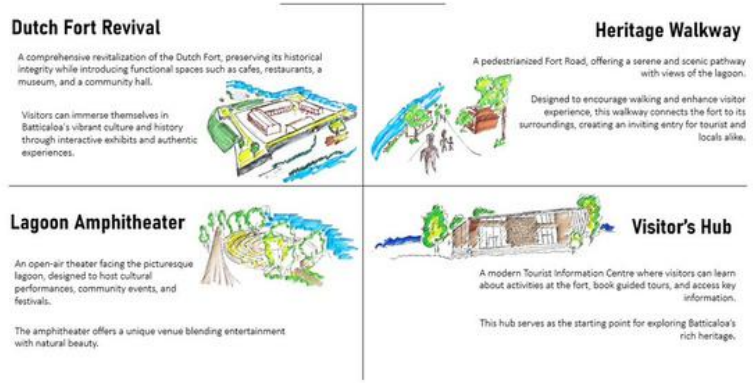
Design Problem

- Isolation and poor connectivity
- Reduced functionality following the relocation of administrative offices. Inadequate public
- engagement and amenities for visitors. Absence of vibrant
- spaces to attract tourists and locals. Poor maintenance, leading
- to a decline in aesthetic and historical value.

Design Approach

To address the challenges faced by the Batticaloa Dutch Fort, an adaptive reuse approach was adopted to revitalize the site whilepreservingitshistorical and cultural significance. This approach integrates contemporary functionalities into the historic structure, enhancing its connectivity, functionality, and attractiveness.





- Adaptive Reuse of the Fort
- Pedestrian-Friendly Fort Road
- Tourist Information Centre.
- Open-Air Theater

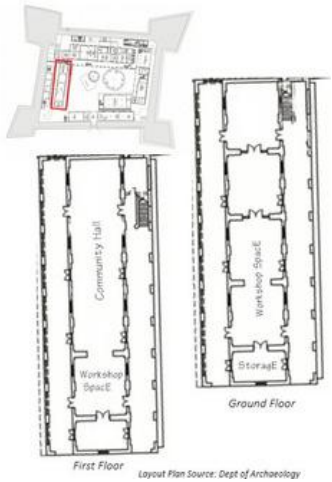
Revitalizing Dutch Fort, Baticaloa

Navarathnarajan N.

Detailed Layout Plan of the Proposal

1.**Heritage Walkway** The Heritage Walkway enhances connectivity and engagement around the Batticaloa Dutch Fort. Designed as a pedestrian-friendly pathway, it offers scenic views and informative displays about the fort's history and culture.

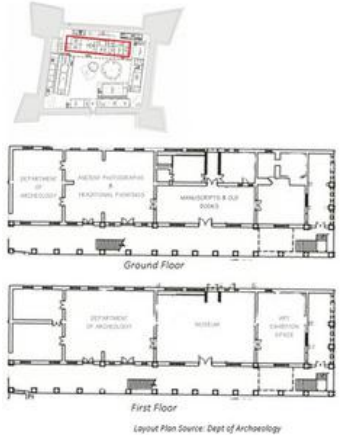
2. Dutch Fort Buildings Adaptive Reuse



2.1. Community Hall

Main hall (100–150 capacity)

- Breakout rooms
- Lobby
- Storage.
- Spaces for workshops and community events



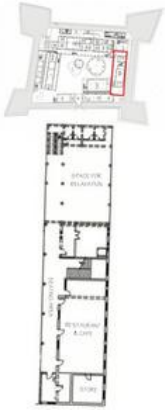
2.2. Art & Culture Centre

Department of Archaeology

- Gallery for Ancient Photographs and Traditional Paintings
- Space for Manuscripts and Old Books
- Exhibition Space for Tools for Traditional Trades

Museum.

- Exhibition Space for Traditional Trades



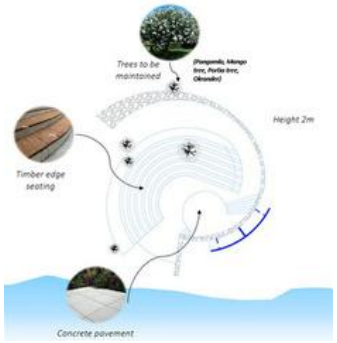
Strategies

2.1.3. Restaurant & Cafe

- Comfortable seating with heritage-inspired décor.
- Shaded seating spaces.
- Restaurants that gives Culinary Experience of Batticaloa.
- Small food courts

3. Lagoon Amphitheater

A lagoon-facing stage constructed with natural stone or wood to blend with the environment
The space will support workshops and community activities
Tiered seating will accommodate up to 150 people.



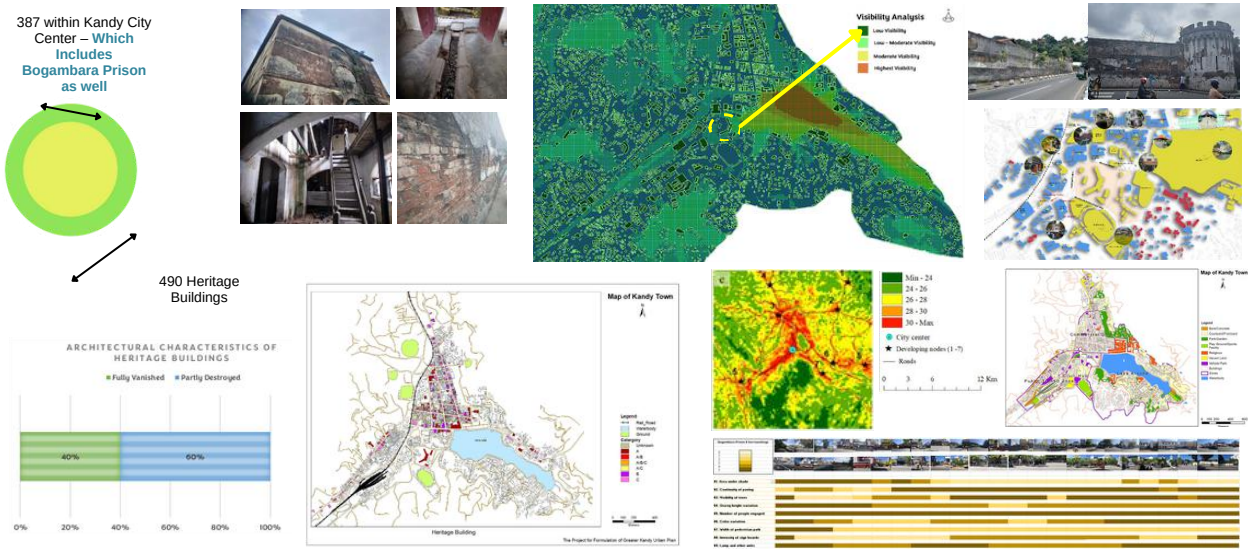
4. Tourist Hub

- Shaded outdoor seating areas Souvenir Shop
- Booking Counter for the amphitheater for events
- Reception Area

Bogambara
Multi-Functional Heritage Nexus Square

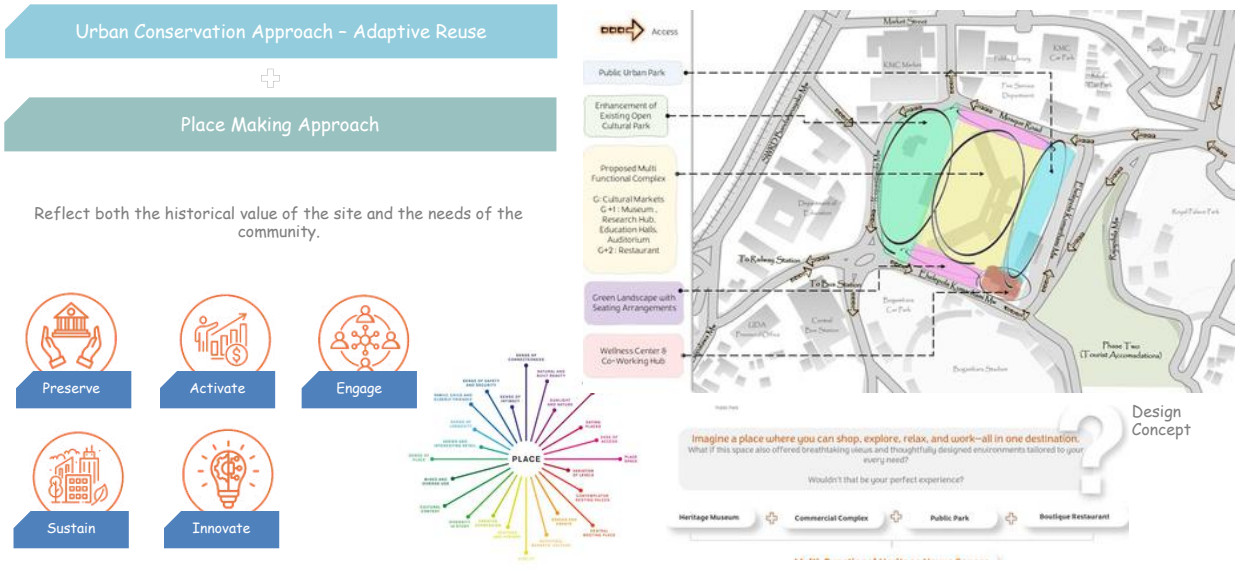
Nivedha A.

The adaptive reuse project reimagines Kandy's historic Bogambara prison into a Multi-Functional Heritage Nexus Square that seamlessly blends 138+ years of legacy with modern functionality. It features public open spaces, wellness centers, cultural hubs, commercial areas, educational purpose halls, museum, and breathtaking views, offering a unique destination for shopping, relaxation, work, educate and community connection, fostering growth and sustainability.



Design Problem

The Bogambara prison site, despite its prime location and historical significance, is underutilized, failing to benefit the community and city of Kandy. The 138+ year-old buildings are structurally deteriorated, raising safety concerns and limiting potential for adaptive reuse. Heritage loss is significant, with 79% of Kandy's world heritage buildings, including those on-site, losing architectural features and remaining inactive due to poor maintenance. The lack of green spaces exacerbates the urban heat island effect, reducing comfort for visitors. Additionally, low visibility, limited accessibility, and poor streetscape design hinder its potential as a vibrant hub for tourism, community engagement, and economic activity.

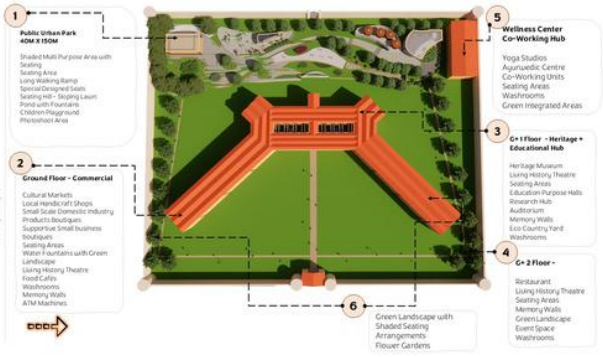


Design Approach

The design approach integrates Adaptive Reuse and Placemaking, reflecting the site's historical value while addressing community needs. Adaptive reuse ensures the preservation of the Bogambara site's architectural and cultural heritage, repurposing structures to meet modern demands sustainably. Placemaking focuses on creating vibrant, multifunctional spaces that foster community interaction and a sense of belonging. Guided by principles of preservation, activation, engagement, sustainability, and innovation, the concept prioritizes historical preservation, Kandyan value enhancement, green integration, and urban cooling. It envisions multifunctional open spaces, sustainable design, neighborhood integration, & technological advancements to boost tourism, create jobs, generate income, & enrich community & visitor experiences.

Bogambara
Multi-Functional Heritage Nexus Square

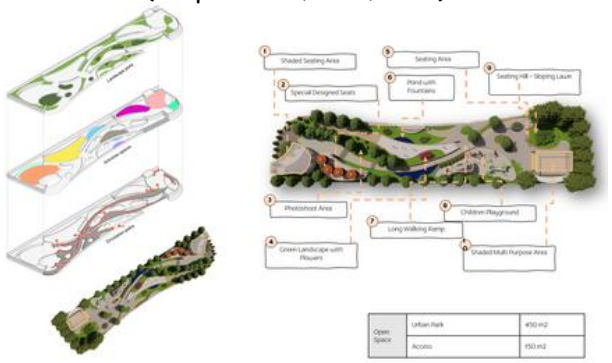
Nivedha A.



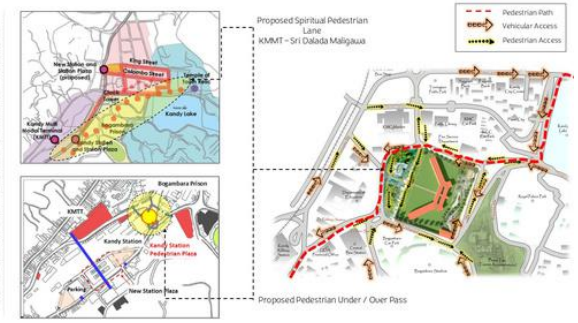
Design Layout

1st Floor of the Multi-Functional Complex (Proposed G , G+1 , G+2)

Design Strategies - Neighborhood Integration



Proposed Public Urban Park / Open Space



Proposed Pedestrian Access to the Proposed Bogambara Multi-Functional Nexus Square

Proposed Wellness & Co-Working Units

Strategies

The development employs a comprehensive strategy to transform the Bogambara prison into a vibrant, multifunctional destination that integrates heritage, community, and sustainability. By prioritizing adaptive reuse and historical preservation, the project retains the site's 138+ years of cultural and architectural legacy while reimagining it for modern uses. Features like memory walls, a heritage museum, and living history theatres ensure the preservation and celebration of its historical significance.

The design emphasizes multifunctional and inclusive spaces through a public urban park with shaded seating, walking ramps, fountains, a children's playground, and photoshoot areas, creating an inviting environment for all. The multifunctional complex integrates commercial, cultural, and educational spaces, supporting local businesses, enhancing tourism, and driving economic growth.

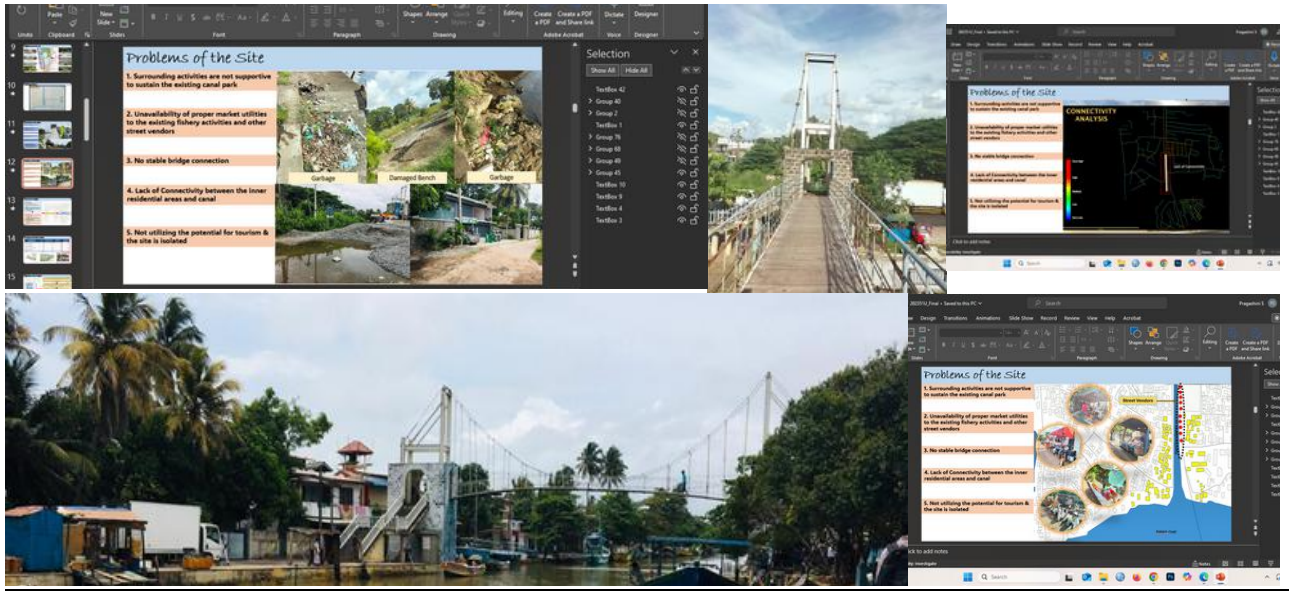
Green integration and urban cooling are achieved through extensive green landscapes, flower gardens, shaded seating areas, and eco-courtyards, addressing the urban heat island effect while promoting ecological balance. Sustainable elements, such as energy-efficient systems and water features, reinforce environmental sustainability.

To foster community and tourism engagement, spaces like cultural markets, a living history theatre, and spiritual pedestrian lanes celebrate heritage while attracting visitors. Enhanced connectivity and accessibility through pedestrian underpasses/overpasses and integrated vehicle-pedestrian access ensure seamless neighborhood integration, prioritizing safety and convenience.

Canal Front Leisure and Marketplace Revitalization

Pragashini S.

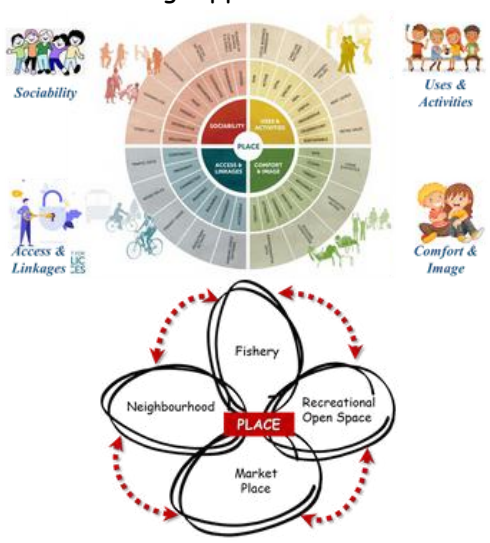
The project focuses on transforming the Hamilton Canal in Wattala into a vibrant destination and proper market for street vendors. The plan integrates leisure park, green areas, and a dynamic marketplace to promote community interaction, economic activity, and eco-tourism while preserving the canal's scenic waterfront and environmental significance.

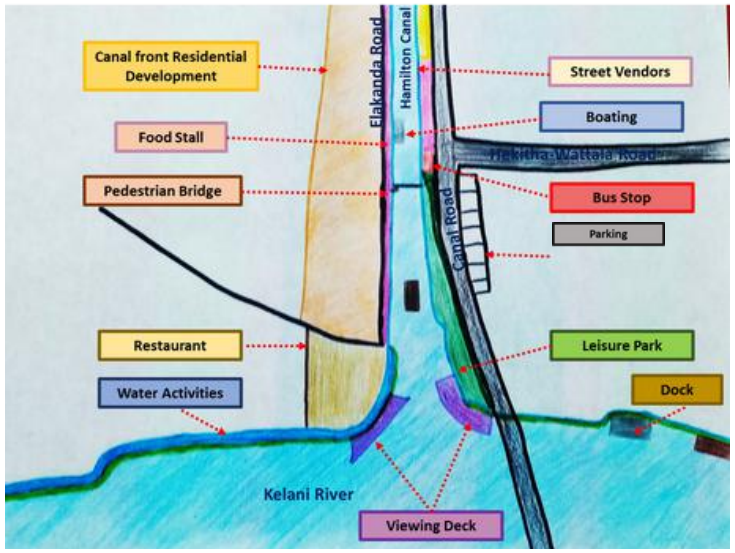


Design Problem

The Hamilton Canal area in Wattala faces several design challenges that hinder its potential as a vibrant community hub. The surrounding activities fail to support and sustain the existing canal park, leaving it underutilized. The absence of proper market utilities for fishery activities and street vendors limits economic opportunities for local communities. Additionally, the lack of stable bridge connections and poor connectivity between inner residential areas and the canal restricts accessibility. Despite its scenic appeal, the site's isolation and underdeveloped tourism potential further exacerbate its stagnation. Addressing these issues is crucial for creating a dynamic, inclusive, and sustainable waterfront destination.

Place Making Approach





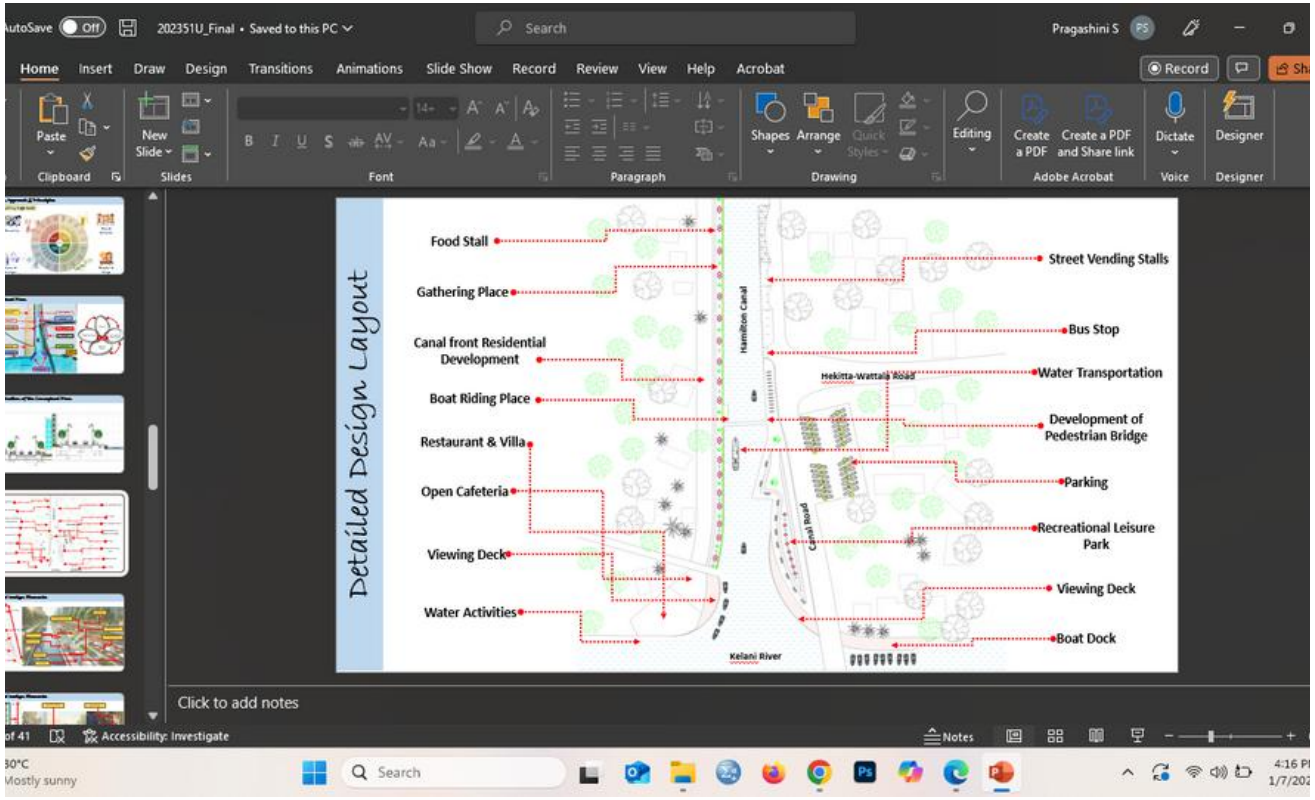
Design Approach

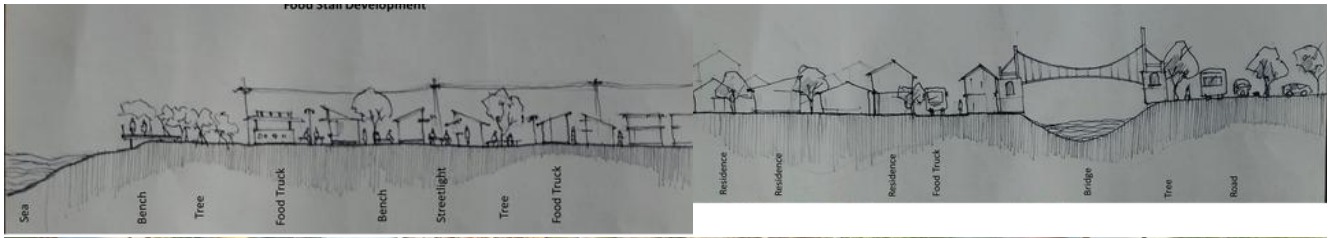
The design approach for the Hamilton Canal revitalization adopts a placemaking strategy, integrating fishery, recreational open spaces, a marketplace, and the neighborhood into a cohesive and vibrant environment. This approach emphasizes creating spaces that celebrate local identity, foster community engagement, and enhance connectivity. Dedicated areas for fishery activities ensure proper facilities for livelihoods, while recreational open spaces and food stalls promote leisure and social interaction. A well-structured marketplace provides opportunities for street vendors, enhancing economic vitality. Improved links between the canal and nearby neighborhoods ensure accessibility and inclusivity, transforming the site into a lively destination that balances functionality, culture, and aesthetics.

Canal Front Leisure and Marketplace Revitalization

Pragashini S.

Detailed Design Layout





Strategies

The proposed layout plan for the Hamilton Canal revitalization addresses key site challenges while promoting economic growth, social interaction, and tourism. Key elements of the plan include food stalls, strategically placed to attract visitors and provide job opportunities for locals. A designated gathering place allows for relaxation and community engagement, fostering social connections. Residential development along the canal front enhances the area's livability, while a boat riding area adds a recreational water attraction. Redeveloping the existing restaurant and villa creates a refined space for dining and accommodation.

An open cafeteria introduces a new experience for visitors, offering casual dining options. A viewing deck provides scenic vistas of the canal, promoting enjoyment of the natural environment. Water activities and a dedicated boat deck encourage tourism, allowing for organized boat storage and recreational use. The recreational leisure park offers green space for relaxation and play, enhancing the overall atmosphere.

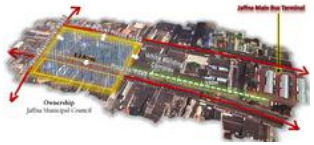
To ensure accessibility, parking spaces and a redeveloped pedestrian bridge facilitate movement within the site. Water transportation to Negombo further improves connectivity, while a bus stop enhances public transportation options. Finally, dedicated street vending stalls consolidate vendors into one designated marketplace, promoting local commerce and creating a dynamic space for both visitors and residents.

The proposed revitalization of Hamilton Canal integrates diverse elements to enhance community engagement, promote tourism, improve accessibility, and create sustainable economic opportunities for locals and visitors.

Wish Full-Filling Market Development

Priyanka J.Y.

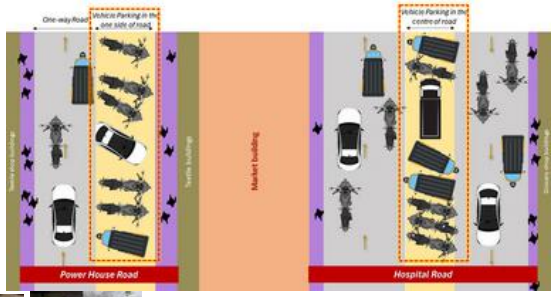
The Jaffna market will evolve into a vibrant, inclusive hub that showcases local culture and enhances product demand. With open spaces, cultural elements, and modern amenities, it will serve as a "Wish-Fulfilling Palmyra Tree," providing comprehensive benefits by addressing community needs, empowering workers, attracting tourists, and fostering economic and educational growth.



Design Problem

Power house Road

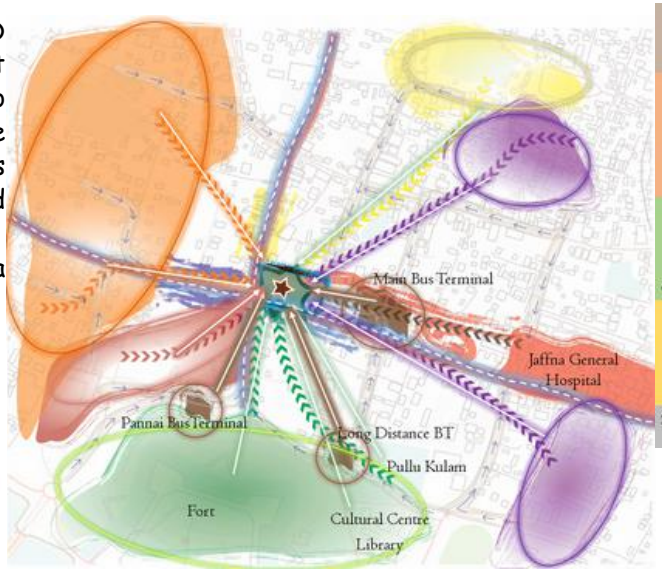
Hospital Road

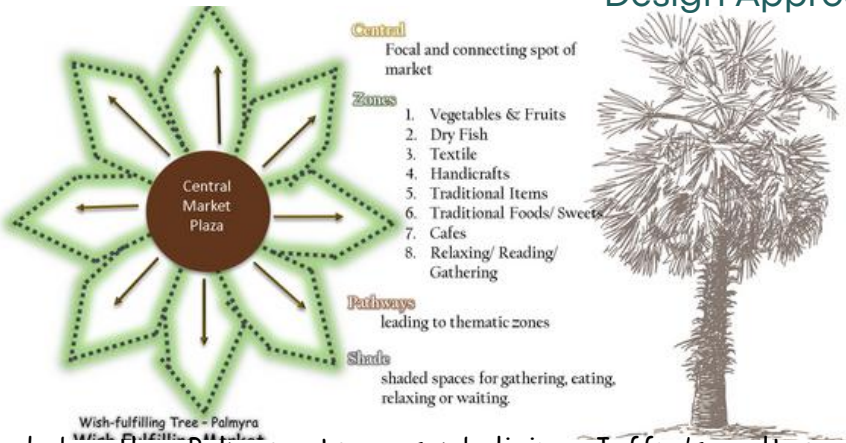


- The public market attracts fewer people.
- The current Jaffna market lacks diversity in shops, fails to meet community needs
- The infrastructure in the market and its surroundings is poor.
- The area is not pedestrian-friendly.
- There is congestion due to parking, loading, and unloading in the center & one side of the street.
- Market-related activities are scattered and separated.

Design Approach

The Jaffna CBD market concept is designed to meet the diverse needs of its community and surrounding areas within a 1km radius.





Conceptualization: Inspired by the Palmyra tree, symbolizing Jaffna's culture, trade, prosperity, and inclusivity.

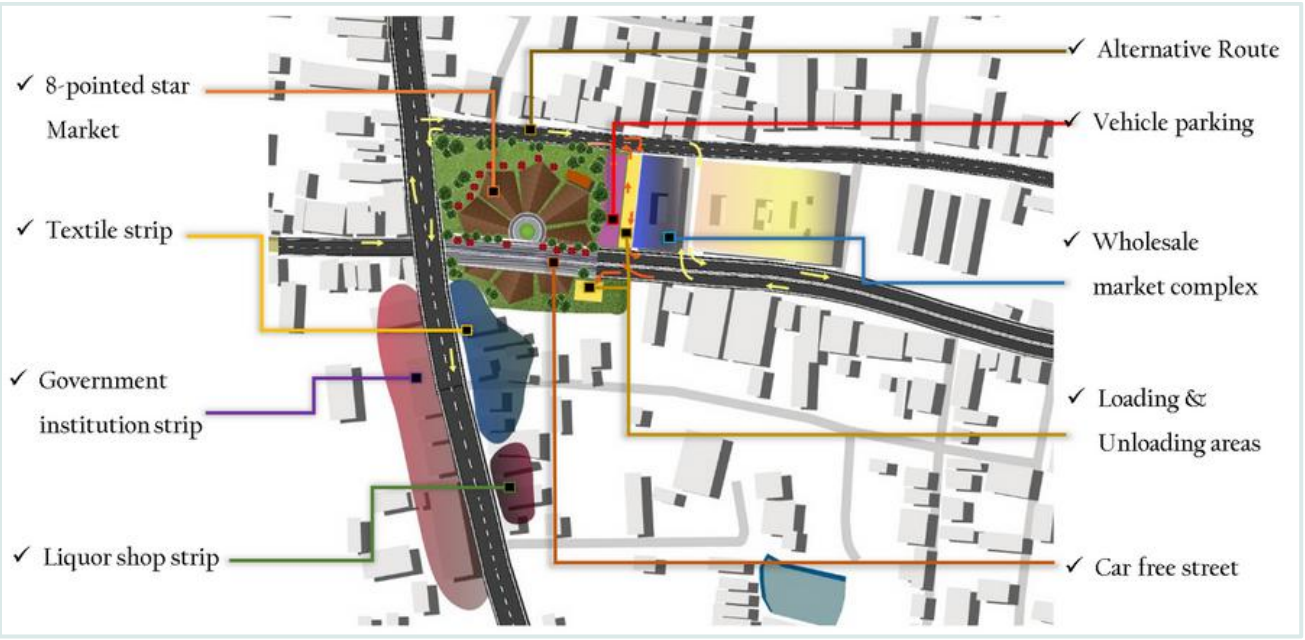
Design for Market: Central monument, zoned areas, pathways, and shaded spaces form a functional, welcoming market.

202353D

Wish Full-Filling Market Development

Priyanka J.Y.

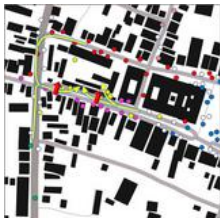
Strategies



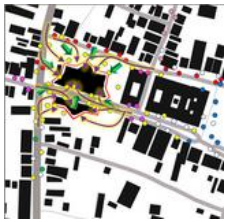
Before

After

Before



After



- **8-Pointed Star based Market Design & Organization**

The Jaffna Open Public Market will serve as a vibrant, inclusive hub by allocating a wide variety of shops, a creating a comprehensive marketplace that reflects Jaffna's unique identity.

Total floor Area for Market 1.48 Acre (64,468.8sqft)	Space Allocation 65%	Shops Space 41,904.72sqft
Total Shops (Approximately)	Average Shop Size 150sqft	279 shops

- **Wholesale Market Complex Proposal**

Providing spaces for wholesale groceries with loading & unloading areas

- **Market Center Monument**

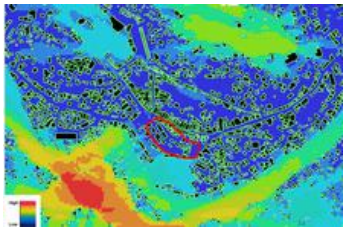
A tree-inspired monument at the center will serve as a visually striking gathering spot, fostering social interaction, enhancing the market's appeal, and celebrating Jaffna's

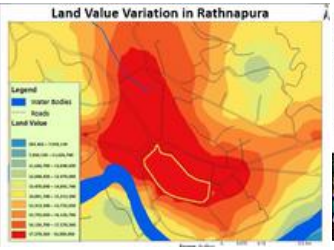
- Proposing Vehicle Parking
- Providing Loading & Unloading Areas
- Creating Vehicle Free Street
- Providing Alternative Routes
- Providing Open Spaces around the Market

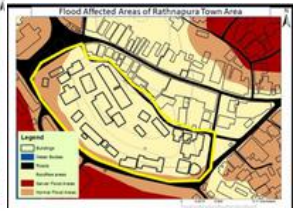
“GEM AND TOURISM HUB”DEVELOPMENT PROJECT OF RATHNAPURA

Rathnayaka H.K.R.A.

The "Gem and Tourism Hub" Development Project of Rathnapura focuses on transforming the historic Dutch Fort site into a vibrant cultural and economic center. By preserving its heritage while integrating modern facilities, the project aims to enhance tourism, support the gem trade, and create a dynamic space that connects history with contemporary development. The selected site is located at Rathnapura town center and this site is geographically bounded by Rathnapura Main Street, frank Hettiarachchi street and Zavia Mawatha.. The existing uses of this site are Police station, Municipal council. Library, Gem & Jewelry Authority The Rathnapura Police Station Relocation is the is a key contextual change which enable this site for urban regeneration and revitalization.







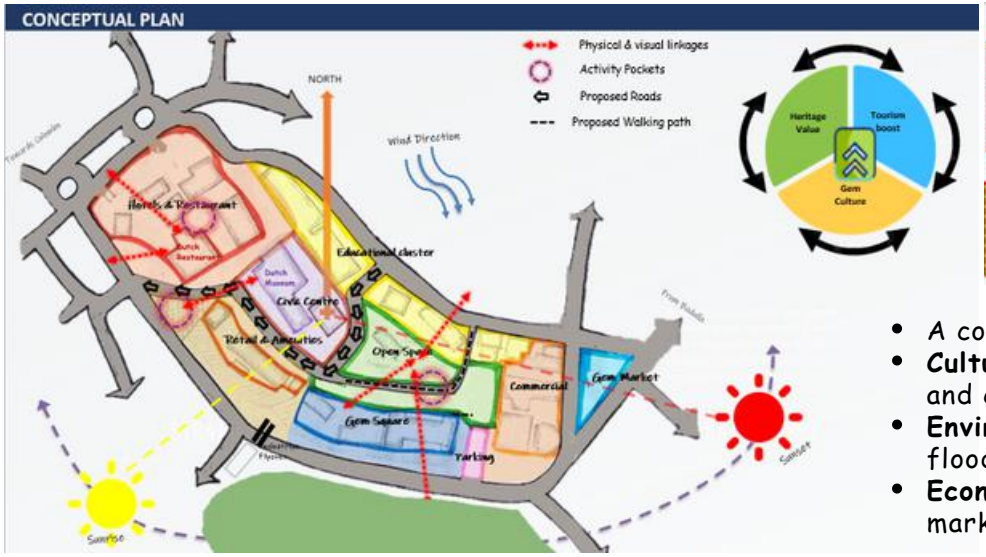
Design Problem

Design need of the site is identified through Problems & Potentials Identification. The main issue that identified is . “Loss of identity and underutilization of the Rathnapura Dutch Fort”

Addressing Problems

- Lack of Recognition of Dutch Fort as a Landmark.
- Limited Attraction to Frank Hettiarachchi Street.
- Traffic Congestion.
- Less visibility.
- Low Permeability within the Site.

Main Potentials -. This site is free from flood.. High Land value. As well as both end of this site connected with the popular Rathnapura clock tower gem market and popular Ambagahayata and Savia Mawatha street gem markets.



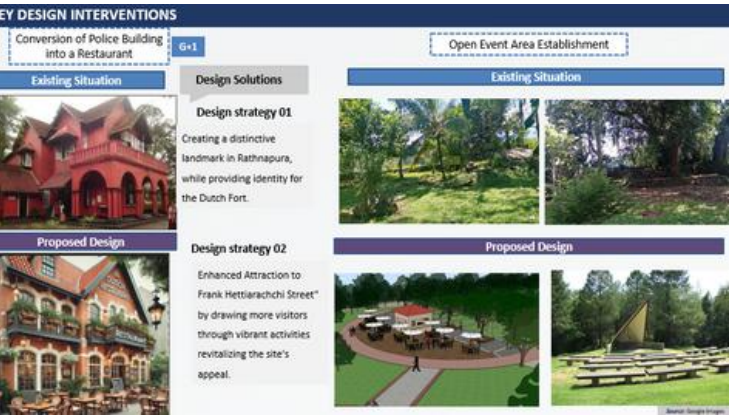
Design Approach

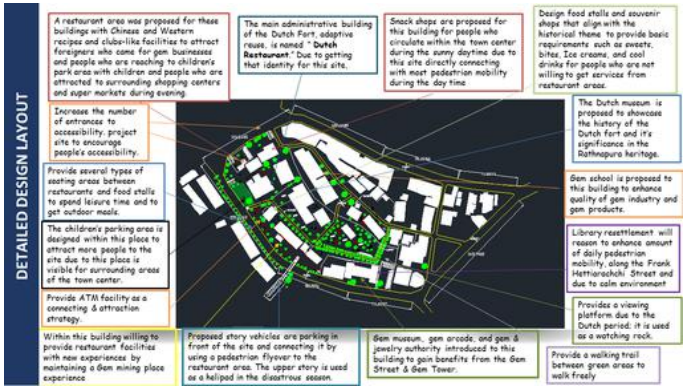
The primary client for this project is the **Urban Development Authority**, with the overarching goal of creating a project that balances **cultural preservation**, **economic growth**, and **environmental sustainability**. The design aims to address local needs while integrating modern urban solutions for both residents and visitors.

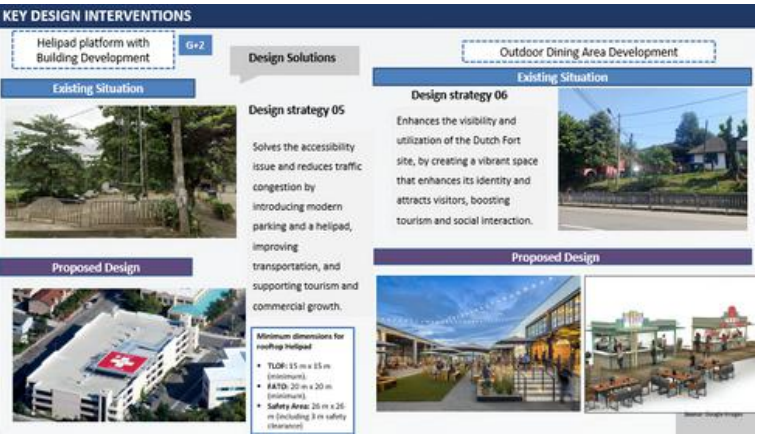
- A context-sensitive approach was adopted,
- **Cultural Heritage Elements**: Preservation of the Dutch Fort, promotion of cultural events, and celebration of local traditions.
- **Environmental Aspects**: Preserving greenery, using sustainable materials, and implementing flood management strategies.
- **Economic Aspects**: Boosting local businesses, enhancing tourism potential, and ensuring market integration.

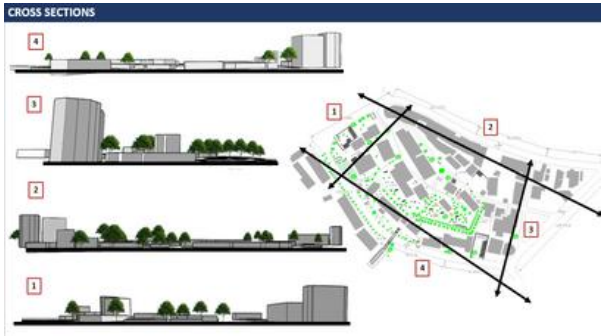
"GEM AND TOURISM HUB"DEVELOPMENT PROJECT OF RATHNAPURA

Rathnayaka H.K.R.A.









Strategies

1Conversion of Police Building into a Restaurant
This police building is centrally located, making it an ideal spot for adaptive reuse. Its architectural value and historical identity can attract both locals and tourists. This design solution expects to regain the Dutch character of this slide, as this restaurant is named a "Dutch Restaurant."

2. Establishment of an Open Event Area
Rathnapura lacks a dedicated space for community gatherings and events. Establishing an open event area can support local cultural festivals, photo shooting spots, gem auctions, small-scale art performances, and social functions.

3. Transformation of the Gem and Jewelry Authority building into a Gem school.
Rathnapura is renowned for its gem industry, but educational and training facilities for geology are limited. Therefore, Converting this building into a gem school enhances the quality of the gem industry and products while meeting international standards.

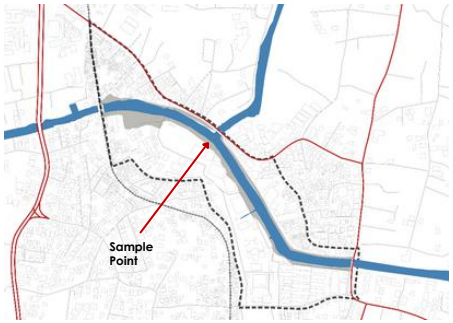
4. Development of a Viewing Platform
This site is located in the second-highest place of Rathnapura. This place in British times is called "watching rock", which they use for security purposes. From this design, people will come to get this experience and it will help to enhance the identity of this site and to increase the tourist attraction.

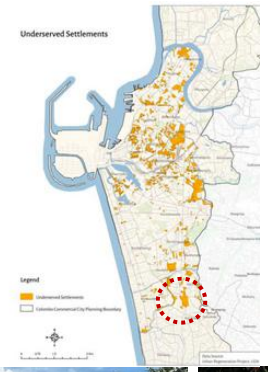
5. Helipad Platform with Building Development
Propose a three-story building outside of this site. In there, the First floor is allocated for parking purposes and the upper floor is keep open for use as a helipad in disastrous situations. In other time it can use as a gem community gathering space.

Kirulapone Infinity Canal Corridor Development

Rixsan S.

The Kirulapone Canal Corridor Development project focuses on transforming the canal and its surroundings into a dynamic people-oriented place by integrating with Open University through the proposal of wellness zone, knowledge driven zone, adventure zone and cultural zone, not only encourage to people to move around the canal also to draw the people to stay around the canal with various experiences.





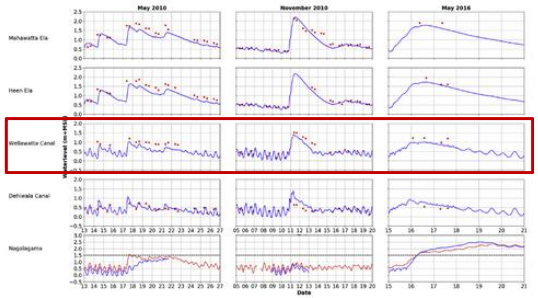


Table 2. Metrics of WQI 2015 in Kirulapone canal (location: 6°53'16.05"N 79°52'56.13"E)

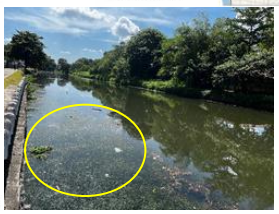
Water Quality Parameters	Sn	Wn	Vi	Qi	WIQi
pH	8.5	0.026	6.48	76.24	1.96
EC	0.7	0.312	0.21	30.00	9.36
DO	3.0	0.073	5.01	167.00	12.16
Ammonia	1.0	0.218	0.08	8.00	1.75
Nitrate	5.0	0.044	0.11	2.20	0.10
Phosphate	0.7	0.312	0.10	14.29	4.46
COD	15.0	0.015	28.00	186.67	2.72
TDS	0.5	0.437	0.10	20.00	8.74

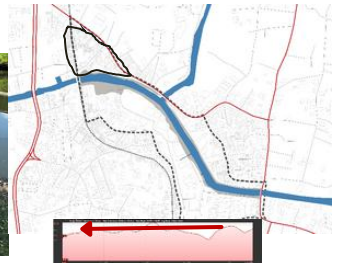
Sn: Standard Value; Wn: Unit Weight; Vi: Mean Value; Qi: Quality Rating; WIQi: Water Quality Index

Table 3. Metrics of WQI 2020 in Kirulapone canal (location: 6°53'16.05"N 79°52'56.13"E)

Water Quality Parameters	Sn	Wn	Vi	Qi	WIQi
pH	8.5	0.026	6.41	75.41	1.94
EC	0.7	0.312	0.30	42.86	13.38
DO	3.0	0.073	4.21	140.33	10.22
Ammonia	1.0	0.218	1.73	173.00	37.80
Nitrate	5.0	0.044	0.44	8.80	0.39
Phosphate	0.7	0.312	0.55	78.57	24.53
COD	15.0	0.015	26.08	173.87	2.53
TDS	0.5	0.437	0.20	40.00	17.48

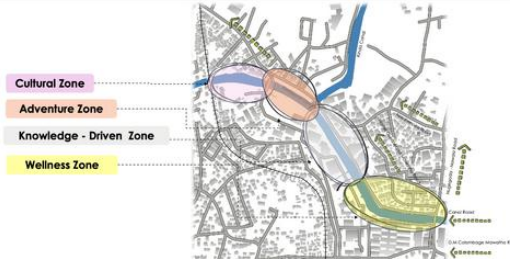
Sn: Standard Value; Wn: Unit Weight; Vi: Mean Value; Qi: Quality Rating; WIQi: Water Quality Index

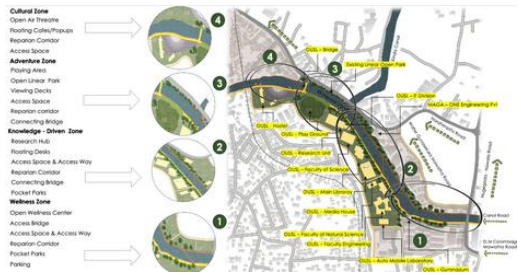


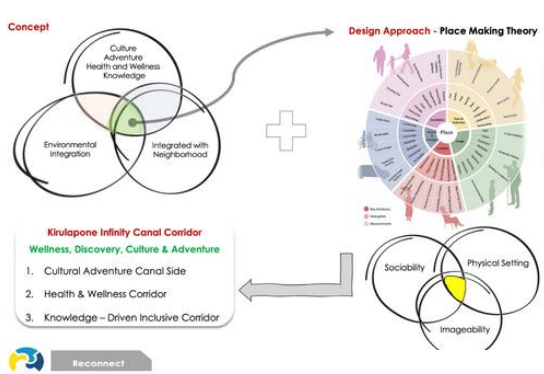


Design Problem

The Kirulapone Canal faces severe pollution due to inadequate maintenance, leading to waste accumulation and water quality degradation, impacting both the ecosystem and surrounding communities. Frequent flood exposure exacerbates the surrounding area's vulnerabilities, as the canal's reduced capacity struggles to mitigate to flood exposure, threatening surrounding residents during heavy monsoon seasons. Additionally, land encroachment around the canal banks by underserved settlements has disrupted its natural flow and accessibility around the canal. These issues collectively hinder the canal's functionality, contribute to environmental degradation, and emphasize the need for strategic development meanwhile developing the canal banks as people – vibrant infinity corridor.







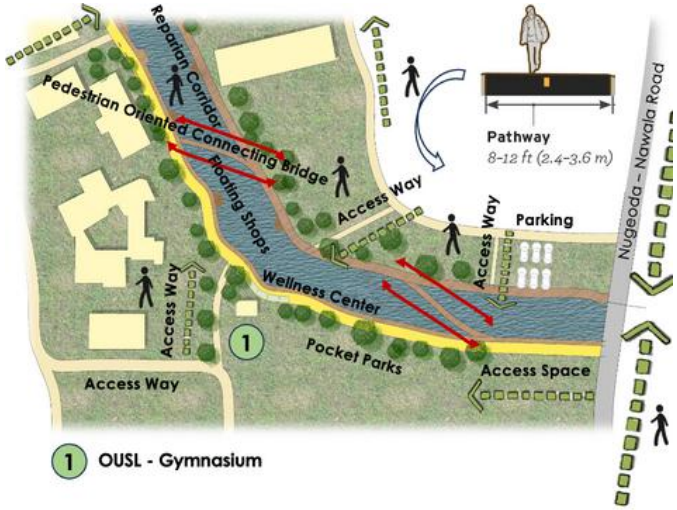
Design Approach

The design approach integrates placemaking theory to transform Canal Corridor into a vibrant, meaningful space. The corridor's unique identity is shaped by addressing existing issues while fostering people-oriented functions and collaboration. Key elements include a linear wellness center linked to the Open University gymnasium, a research hub connecting the university's faculties, and an adventure zone featuring water-based activities. Cultural regeneration is emphasized through open-air theatres and floating cafes. These interventions create a multifunctional, experience-rich corridor, encouraging ecological restoration, connectivity to public with canal banks rather than following the usual adventure waterfronts. while enhancing the sense of place along with these design principles such as Reconnect, Redefine, Revitalize and Resilient.

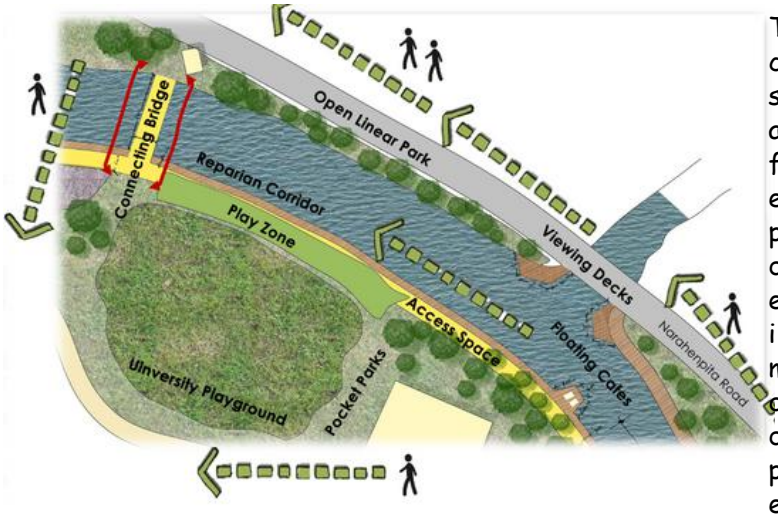
Kirulapone Infinity Canal Corridor Development

Rixsan S.

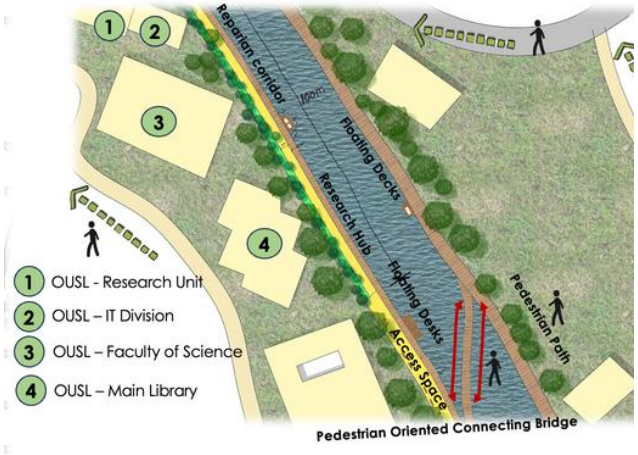
Design Strategies - Wellness Zone



Design Strategies - Adventure Zone



Design Strategies - Knowledge Driven Zone



Design Strategies - Cultural Zone

Greater Colombo Waste Water Treatment Plant Project(On going)

Strategies

To mitigate flood-related challenges, a riparian corridor along with native plants has been proposed, serving as a natural buffer to manage water overflow and reduce flood risks. This corridor will also function as walking and cycling paths along the canal, ensuring both environmental benefits and improved public access. The proposed canal corridor development will address pollution and illegal land encroachment along the canal banks through increased public engagement and active movement. As more people use the space, the prevalence of illegal dumping and other polluting activities will naturally decline. This transformation will discourage pollution, promote cleanliness, and restore the canal's ecological balance. The recent implementation of the Greater Colombo Wastewater Management Project within the study area boundary provides an effective solution for wastewater treatment. This complements the corridor development by enhancing water quality and environmental health.

Furthermore, the canal corridor development will attract more population and visitors, directly benefiting the local economy. It will provide a valuable platform for surrounding commercial activities and young entrepreneurs, creating new employment opportunities. The increase in activity and development will also drive a significant rise in land values in surrounding neighborhoods, surpassing the usual growth trends and fostering sustainable urban regeneration. Rather than focusing solely on forming strategies to address the problems, developing a multifunctional corridor that simultaneously incorporates strategies to mitigate these issues is both sensible and viable.

The Underpass Retail Walkway
Orugodawatta Junction

Sankavi K.

The Underpass Retail Walkway at Orugodawatta Junction is a multifunctional pedestrian underpass designed to enhance safe accessibility across the junction while integrating retail spaces that promote social interaction and economic activity, catering to the needs of both pedestrians and the surrounding community. It aims to resolve vehicle-pedestrian conflicts effectively and support future urban development.

ORUGODAWATTA JUNCTION

Design Problem

MAJOR PROBLEM

Vehicle and Pedestrian Conflict

WHY IS IT A MAJOR PROBLEM?

1. Diverse land uses funneling traffic to this single Junction.
2. Well integrated space for both Vehicle and Pedestrians

HOW SERIOUS THIS ISSUE IS?

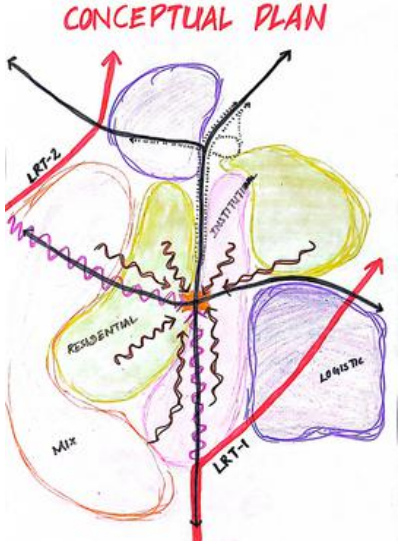
The current cycling time (291 sec) is relatively higher than standard (120 sec). Therefore **171 sec delay** occurs in this junction.

(Cycling Time: Total time it takes to complete one full cycle of all traffic signal phases)

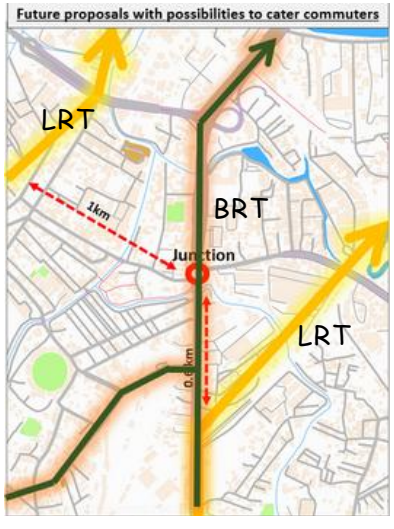
Consequences of the Delay:

1. long waiting time for Pedestrians (56sec - 1min 52sec) and Vehicles (around 100m queue)
2. Unsafe movements of pedestrians and Vehicles.

Design Approach



- The underpass will cater to surrounding residents, with an anticipated increase in users due to two housing projects proposed by the UDA nearby.
- Key destinations like Orion City, the VTA, DPJ Tower, and the Automobile Training Engineering Institute are within proximity, enhancing the underpass's utility.
- The junction's strategic location near two proposed LRT lines and a BRT corridor positions the underpass as an ideal transit hub.

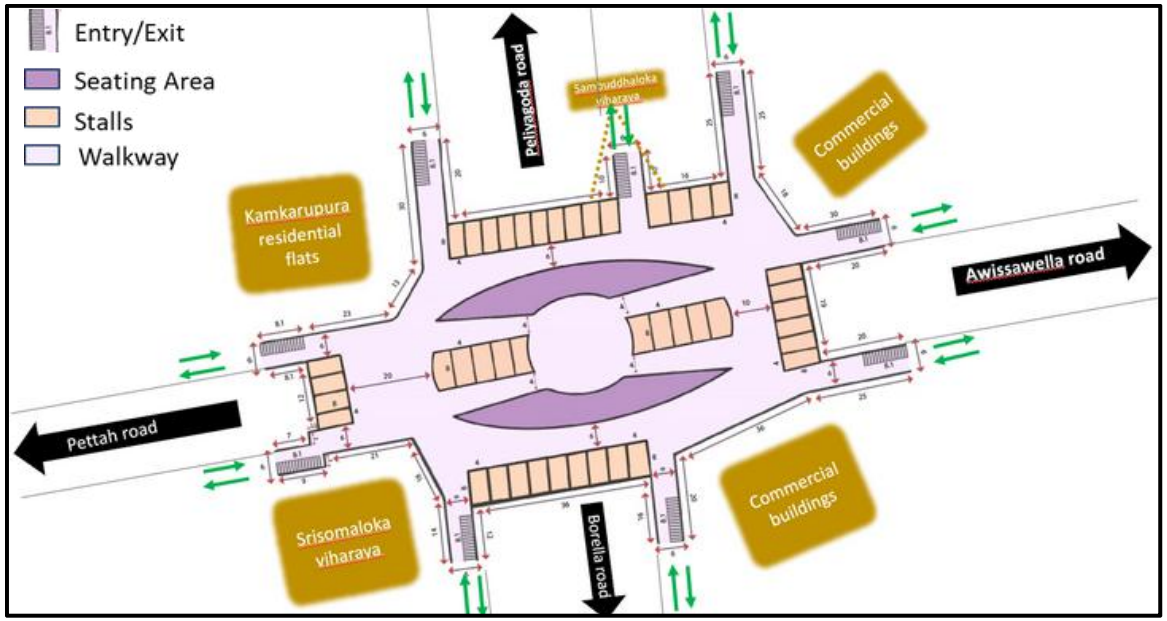


The Underpass Retail Walkway
Orugodawatta Junction

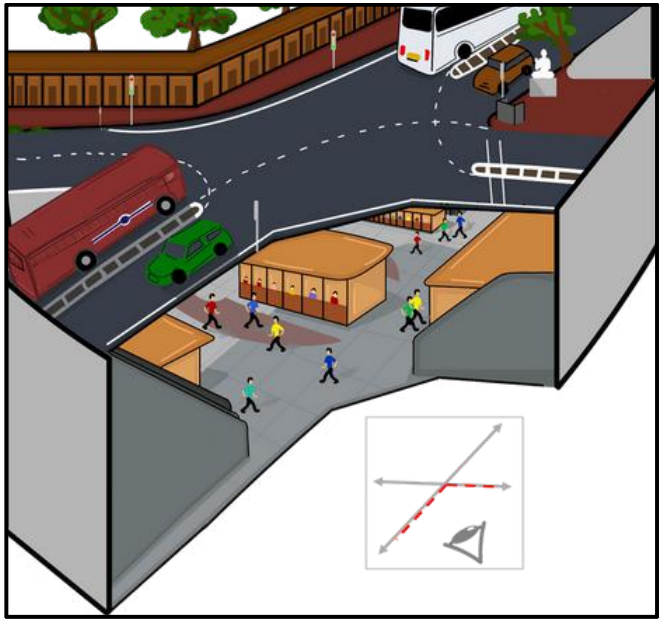
Sankavi K.

Strategies

LAYOUT PLAN



CROSS SECTION (3D)



ALLOCATION OF COMMERCIAL SPACE-INSIDE OF THE UNDERPASS

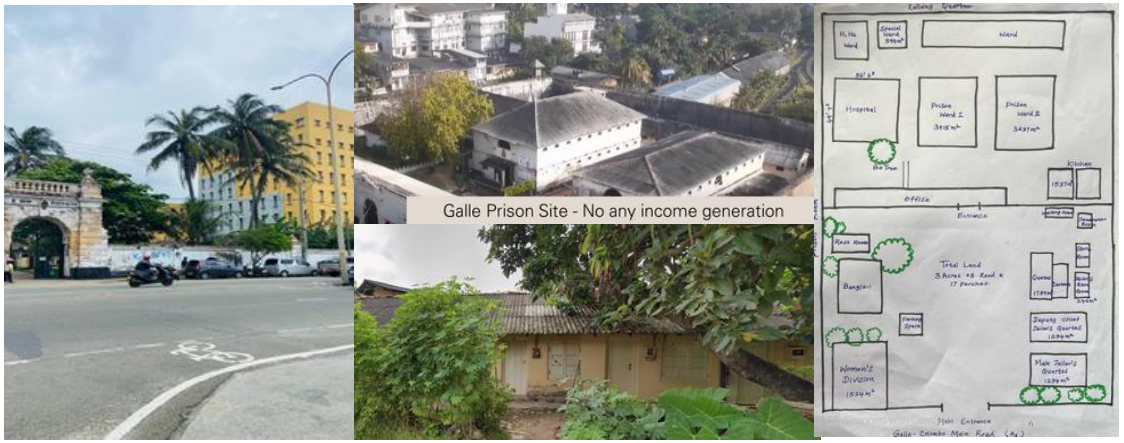
Types of shops	Target Groups	No. of shops demand
Grocery store	(Local residents+pedestrians passing through)*0.35	8
Mobile and Accessories Shop	(Local residents+pedestrians passing through+working individuals)*0.1	3
Computer sales & Repairs	(Local residents+school students+working individuals)*0.15	6
Stationary & Office Supplies	(School students+working individuals)*0.35	6
Café and Restaurants	(Pedestrians passing through+working individuals+school students)*0.35	7
Pharmarcy	(Local residents+Pedestrians passing through)*0.05	1
Banks & ATMs	(Working individuals+ Local residents+Pedestrians passing through)*0.07	2
Market	(Local residents+pedestrians passing through)*0.3	7
Clothing/Apparel	(Local residents+pedestrians passing through)*0.09	2
Sports Goods	(school students)*0.09	1

RETAIL SHOPS-WALKWAYS-SEATINGS (INSIDE OF THE UNDERPASS)

Prison Square and Railway Quarters Area Development, Galle City

Senevirathne G.D.K.

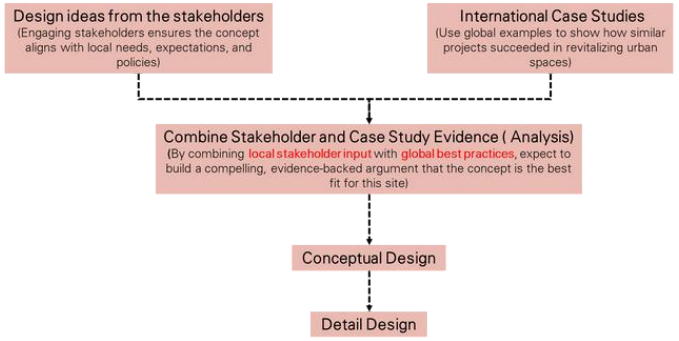
The Galle Prison Square and Railway Quarters area, located in the heart of Galle, Sri Lanka, is a historically and strategically significant urban site. The area is closely tied to the city's colonial and post-colonial heritage and is situated near prominent landmarks such as the Galle Town Hall and Daramapala Park. The Galle Prison, a key component of this zone, occupies a building protected under the Sri Lankan Antiquities Ordinance due to its historical and architectural value. The structure reflects the distinct colonial-era design, blending local and European architectural influences.

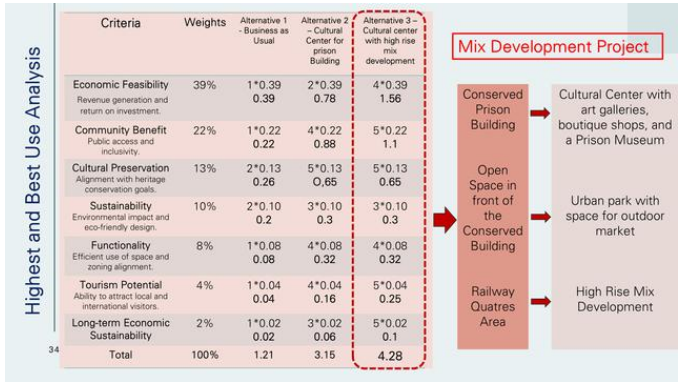


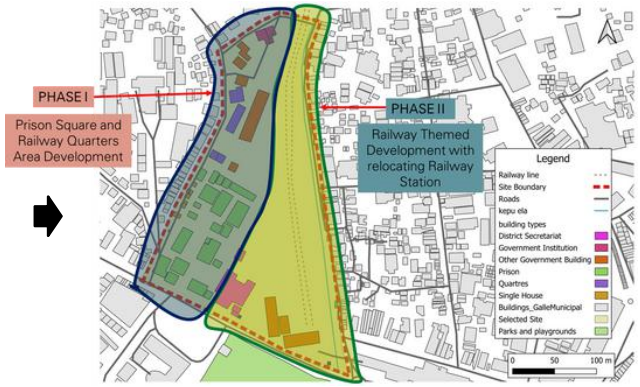
Design Problem

1Underutilized land with low productivity—failing to achieve highest and best use potential
2The presence of incompatible land uses that disrupt spatial and operational linkages
3A lack of sufficient and appropriate infrastructure and space within prisons to meet the current and Future Demand

Design Approach - Responsive Environment

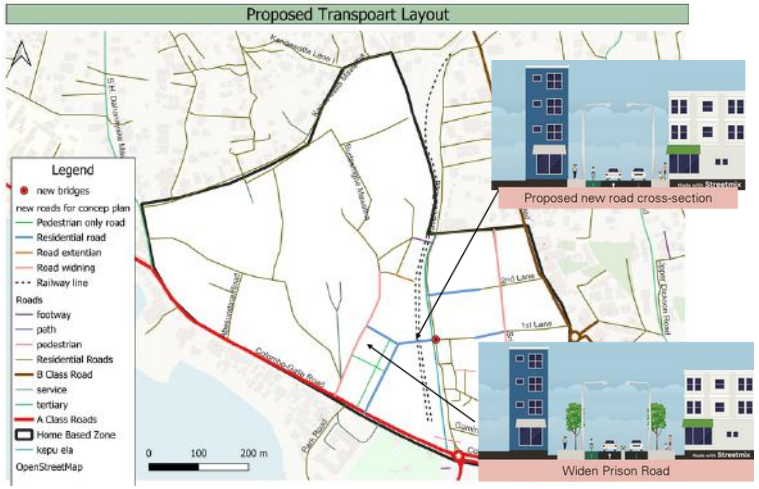






Prison Square and Railway Quarters Area Development, Galle City

Senevirathne G.D.K.

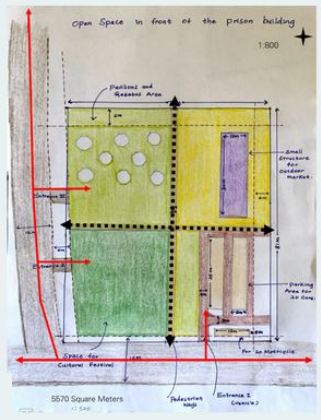


Design Layout

Prison Square and Railway Quarters Area Development, Galle City

Senevirathne G.D.K.

Open Space in Front of the Prison Building



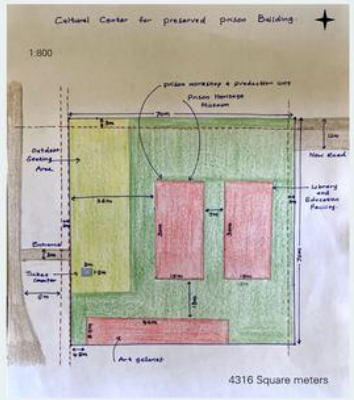
Pavilions and Gazebos area

Structure for outdoor markets

Space for events and rest

No of Building	Total Floor area (Square Meter)
1	300

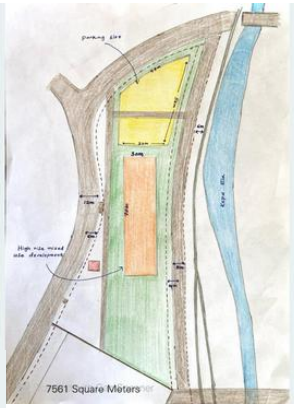
Cultural Center for Preserved Prison Building



The holistic approach to sustainable development in the adaptive reuse

No of Building	Total Floor area (Square meters)
4	2178

High-Rise Mixed-Use Development



- Ground Floor Area: 2100 m²
- Number of Floors: 8
- 4 floors for apartments
- 4 floors for other users

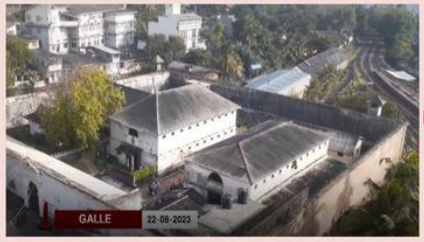
Floor	Usage	Area	Details
Basement	Parking	2100	Parking
1st Floor	Commercial+ Shopping Complex	2100	Commercial (800m²), Shopping Mall (1300m²)
2nd Floor	Shopping Complex	2100	Retail (1500m²) , Cafeteria (600m²)
3rd Floor	Entertainment	2100	Film hall (800 m²), Gaming arcade (400 m²), Play area (400 m²), Lounge (500 m²).
4th Floor	Healthcare & Other Services	2100	Clinic (1000 m²), Fitness center (600 m²), Daycare (500 m²).
5th-8th	Apartments	2100	28 units per floor × 4 floors = 112 units.

No of Building	Total Floor area (Square Meter)
1	16,825

Open Space in front of the Conserved Building → Urban park with space for outdoor market

- Solution to Underutilized Land in a Strategic Location
- Serving a Wide Range of People
- Addressing the Lack of Green Space
- Reducing Air and Noise Pollution
- Landmark Creation

Old Prison Building → Cultural Center with art gall boutique shops, and a Pri Museum



This design does more than conserve a historic site; it **revitalizes the area**, solves pressing urban challenges, and creates a sustainable and functional space that will shape the city's identity for years to come.

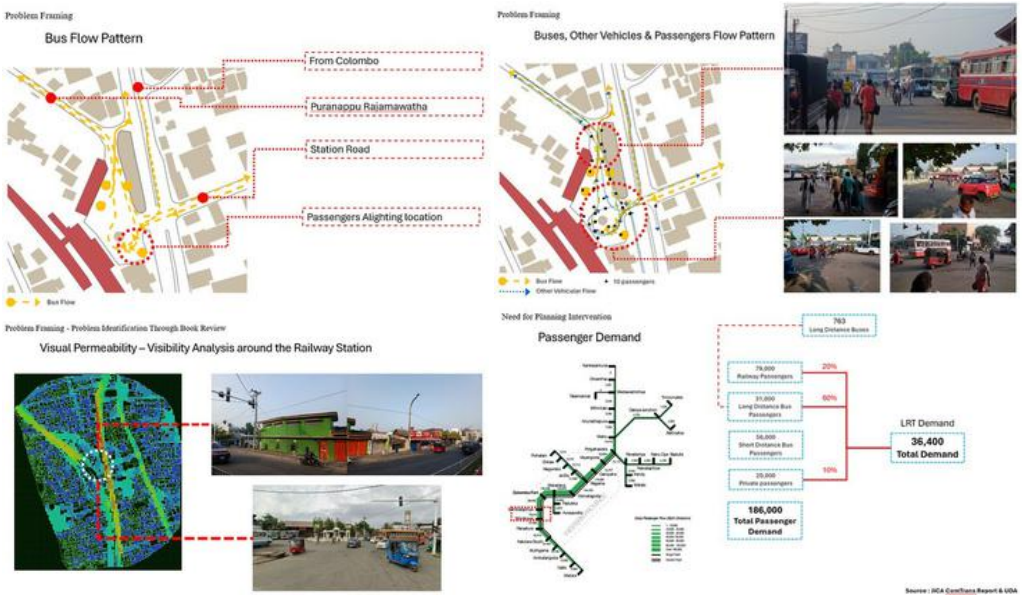
Railway Quatres Area → High Rise Mix Development

- The solution to Limited Development Opportunities for Higher Market Demand
- Improving Accessibility and Walkability
- Improving Site Identity
- Boosting the Tourism Sector
- Generating Higher Revenue

Multimodal Transport Center Integrated with TOD Concept for Moratuwa

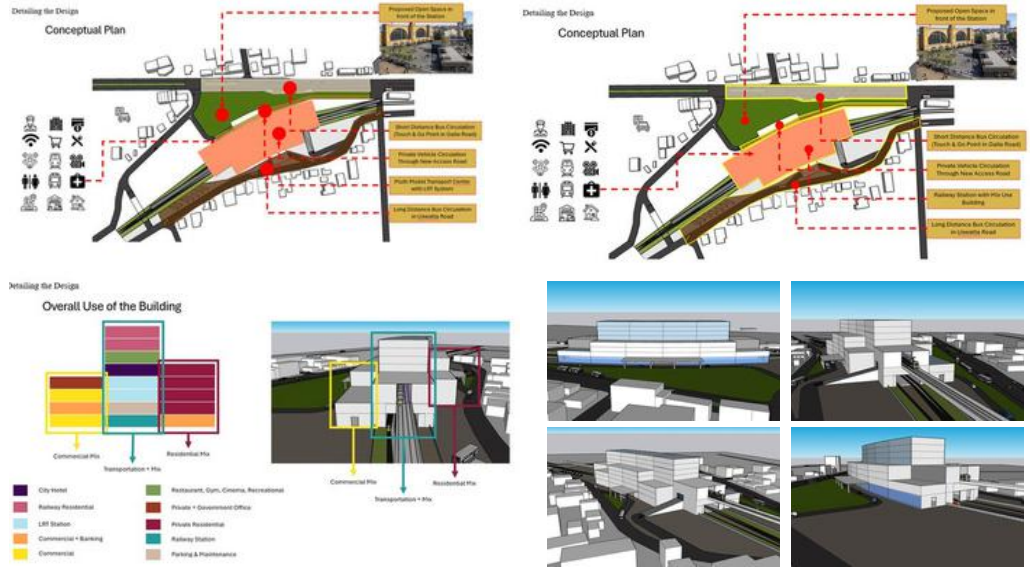
Silva H.G.D.

This proposal transforms the Moratuwa Railway Station and Bus Stand into a Multimodal Transport Center based on the Transit-Oriented Development (TOD) concept. It supports future Light Rail Transit (LRT) integration, enhancing connectivity between rail, bus, and private transport. The plan promotes convenience, safety, and sustainability while reducing congestion and fostering economic growth through mixed-use development.



Design Problem

The railway land in Moratuwa includes underutilized spaces with potential for greater social and economic benefits. However, the current bus stand is overcrowded, mainly serving Moratuwa-Colombo buses, with passengers alighting near the Buddha statue. Vehicles from multiple directions create conflicts with pedestrians, especially during peak hours, while poor visibility caused by the old commercial block and Buddha statue adds to the chaos. The Western Province Megapolis Transport Plan proposes a Light Rail Transit (LRT) station at Moratuwa Railway Station. With its introduction, long-distance buses are expected to terminate at the station, and approximately 36,400 passengers are projected to shift to LRT services. Managing this passenger demand and improving bus flow creates the urgent need for a planning intervention.

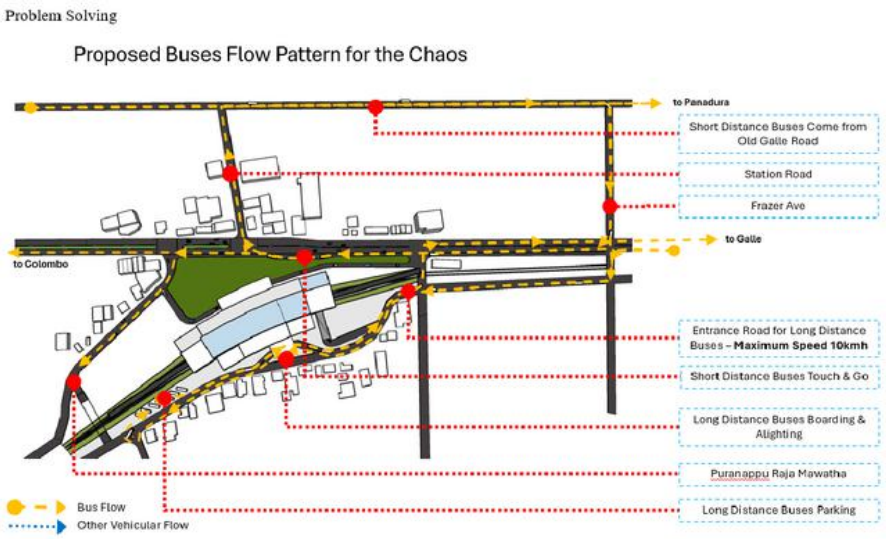


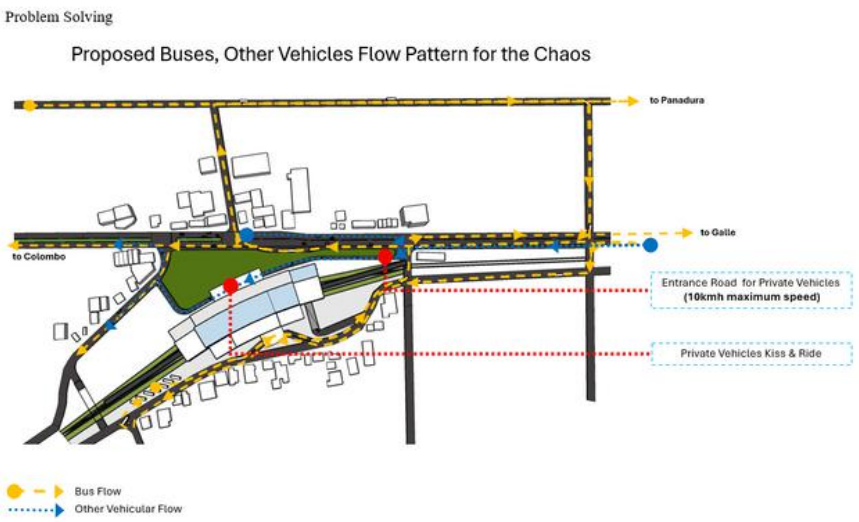
Design Approach

The proposed development in Moratuwa envisions a transformative, Transit-Oriented Development (TOD) to support future passenger demand with the introduction of a Light Rail Transit (LRT) system. This multi-functional urban hub will integrate transportation facilities with commercial, residential, and recreational spaces. Key features include a modern LRT station, upgraded railway station, and designated areas for short- and long-distance buses. The building will also offer amenities such as restaurants, a gym, cinema, offices, residential quarters, a city hotel, and commercial and banking services. Essential facilities like parking, a medical unit, and a police unit will enhance safety and convenience. Designed for accessibility and efficiency, this development will cater to both daily commuters and long-distance travelers, creating a vibrant and connected urban environment.

Multimodal Transport Center Integrated with TOD Concept for Moratuwa

Silva H.G.D.





Strategies

To address existing traffic conflicts within the bus stand, the proposal introduces a new vehicular circulation plan to streamline movement and improve safety. Long-distance buses will utilize an expanded Uswatta Road, while private vehicles will access the transport center through a proposed one-way route with a controlled speed limit of 10 km/h. Short-distance buses will operate along a dedicated lane on Galle Road, using a touch-and-go system to minimize congestion. At the heart of the development, an open public space will provide a welcoming and vibrant gathering area, enhancing connectivity and promoting social interaction. Together, these strategies aim to redefine Moratuwa's transport infrastructure, making it more efficient, sustainable, and passenger-friendly.

Social Impacts

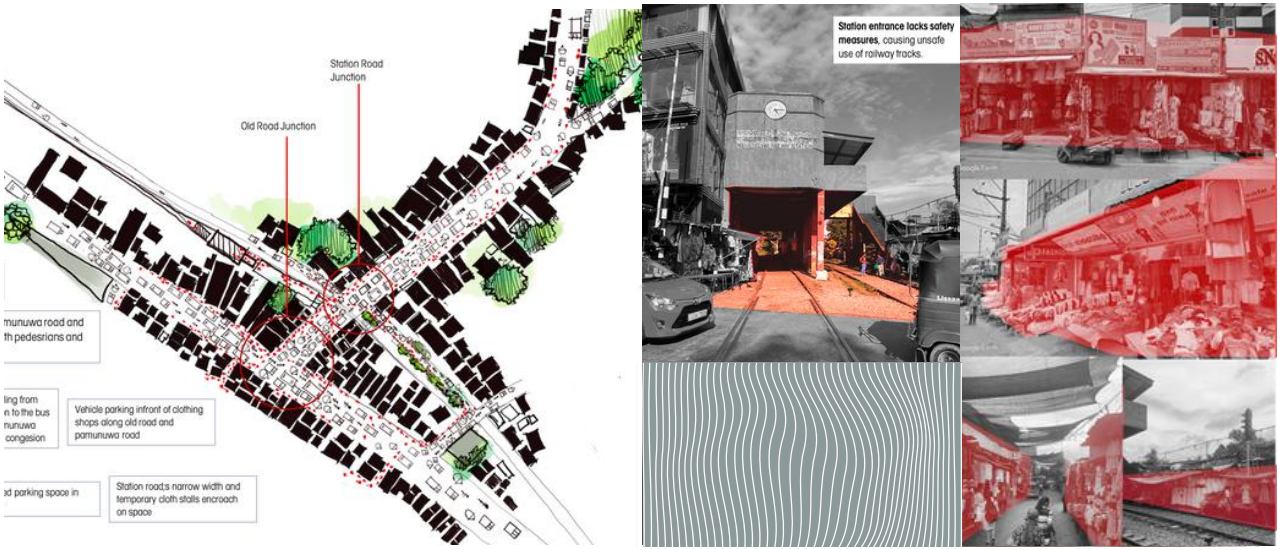
The proposed development aims to improve pedestrian safety and resolve conflicts between vehicles and pedestrians, creating a secure and accessible environment. By utilizing underdeveloped lands, the project maximizes social and economic benefits while transforming the area into a vibrant urban hub. The integration of commercial, traffic congestion, and promote social interaction. The introduction of the Light Rail Transit (LRT) system is also expected to ease road congestion by reducing vehicle trips to Colombo. This development will increase surrounding land values, attract investments, and stimulate new opportunities for growth. With improved economic diversity and green spaces, the proposal fosters sustainability by lowering fuel consumption and reducing pollution. By offering a multi-functional and future-ready transit center, it addresses current urban challenges while promoting long-term growth and social well-being in Moratuwa.

residential, and recreational facilities will enhance convenience, reduce

Elevated Bazaar **Station**

Subash W.S.

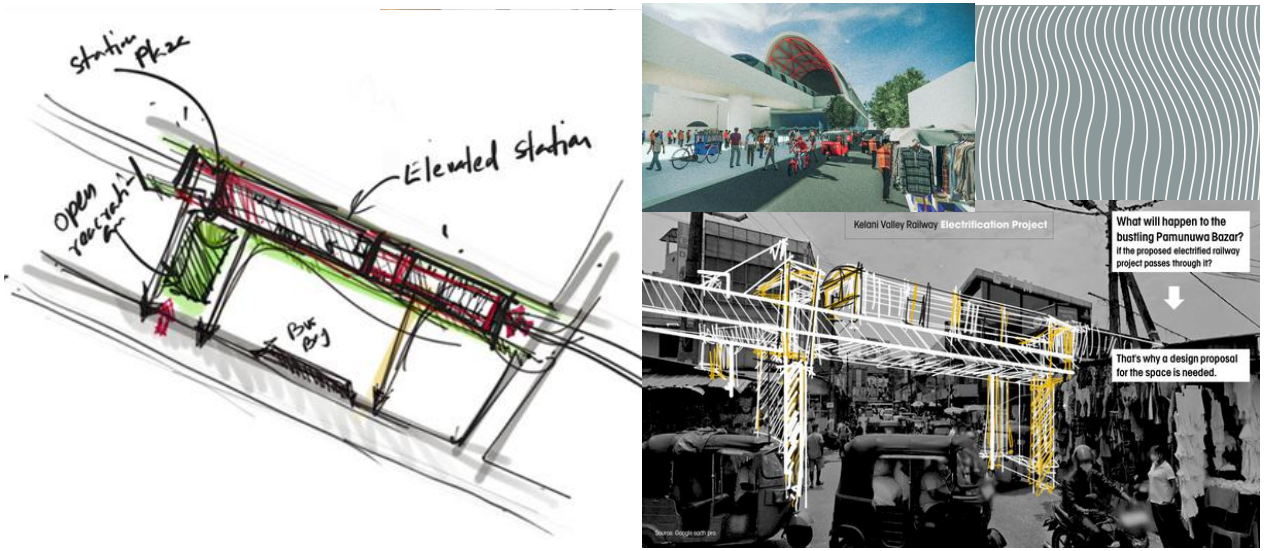
The design project focuses on an elevated bazaar-style station located in the heart of Maharagama city, approximately 15 km from Colombo in Sri Lanka's Western Province. It focuses on conserving the vibrant bazaar identity while addressing traffic and connectivity issues and integrating future developments, such as the Kelani Valley Elevated Railway, to enhance urban life and sustainable growth.



Design Problem

The Pamunuwa Bazaar area faces significant traffic congestion due to critical issues at the station junction and old road junction. Key factor contributing to these problems include heavy vehicle movement along Station Road, particularly during school hours.

Furthermore, the Maharagama station entrance lacks adequate safety measures, and there is no proper access road leading to the station, exacerbating traffic congestion. Another pressing issue is the absence of a direct pedestrian connection between the station and the Old Road bus stop. Although an alleyway exists linking the two, it is currently obstructed by a wall, preventing its use.



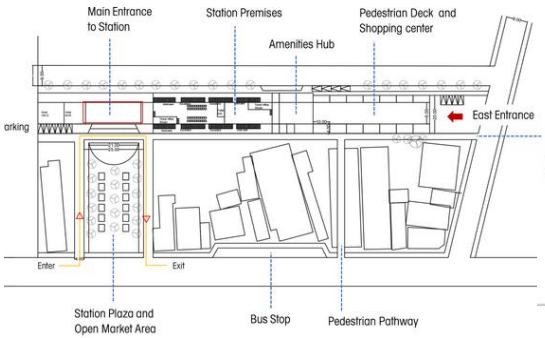
Design Approach

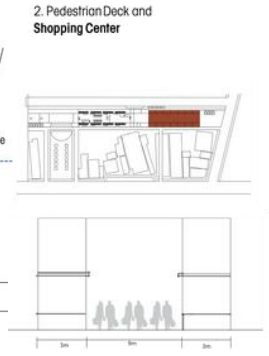
The project adopts a **Conservation Surgery** Approach to safeguard the Pamunuwa Bazaar's unique identity and activities amid urbanization and development pressures. It addresses the impact of the proposed **Kelani Valley Elevated Railway Project** while resolving existing issues in the area.

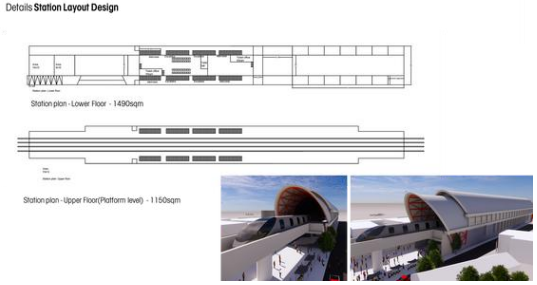
The design emphasizes preserving the bazaar's cultural and economic significance, ensuring its vibrant character remains intact. By integrating sustainable solutions, the proposal supports the bazaar's role as a vital urban space, balancing heritage conservation with future urban development.

Elevated Bazaar **Station**

Subash W.S.



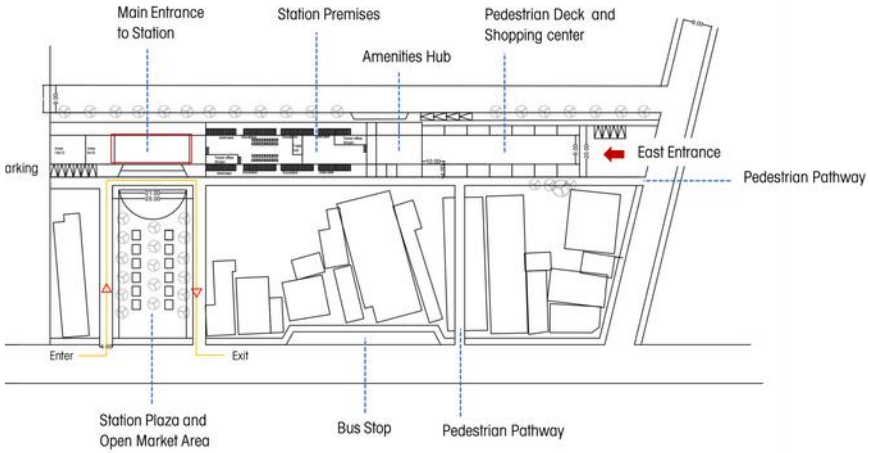




Strategies

The design strategies focus on integrating the proposed elevated station project at Maharagama with the surrounding urban fabric, particularly the Pamunuwa Bazaar area. The design includes two station entrances: a main entrance, featuring a station plaza and a green open market, and an east entrance located at Pamunuwa Road side.

The east entrance guides passengers through a wide pedestrian deck and a modern bazaar-style shopping center, designed to enhance the commercial vibrancy of the area. Adjacent to the shopping center is an amenities hub that offers essential services such as eateries, restrooms, and ATMs. The station premises are well-equipped with modern ticket bays, escalators, elevators, and staircases, ensuring smooth accessibility and seamless connectivity for passengers.



Green-Architectural site-Mount Mary Railway Quarters

Thashmila S.A.C.

The Mount Mary site, located within the Colombo Municipal Council boundaries, spans a significant area adjacent to the Baseline Road, a key urban artery connecting Kiribathgoda to Narahenpita. Known for its unique blend of historical significance and natural beauty, the site features Dutch-style railway quarters surrounded by a lush canopy of vegetation, which gives it a distinct identity along the Borella-Dematagoda stretch.

CMC Population Density = 555,031/37
= 15,000 per km2

MMY Population Density = 240/0.0445
= 5,393 per km2

FAR = Floor Area/Land Extend
=16 450/44 515 = 0.37

Proposed FAR = 3.50

NEED = x9 More FAR

The Mount Mary site includes a space originally intended to function as a children's park. However, over time, this area has become neglected and is now largely abandoned

Design Problem

MMY site has become underutilized, with several areas showing visible signs of neglect (roofs, fences). Further detract from the site's visual appeal and functionality.

Potentials-The unique setting can enhance community engagement while preserving its distinct identity.

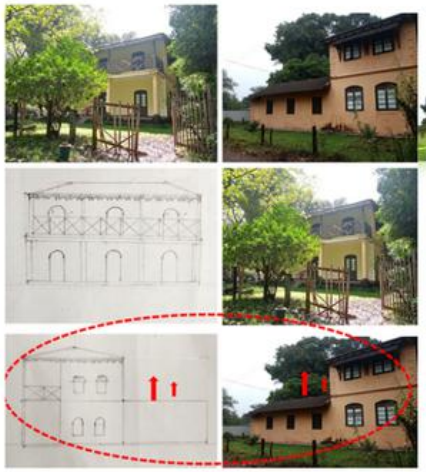
Design Concept

1. Conserve the Unique Architectural Character

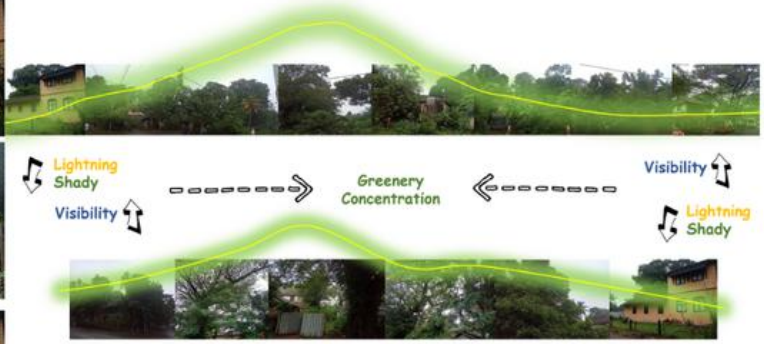
2. Increase the Floor Area Ratio

3. Preserve the Vegetation Cover

Optimizing land use through vertical structures. These structures increase floor area while preserving the primary Dutch-style building, ensuring a balance between heritage conservation and modern functionality.



Design Approach



vegetation concentration-based approach

Green-Architectural site-Mount Mary Railway Quarters

Thashmila S.A.C.

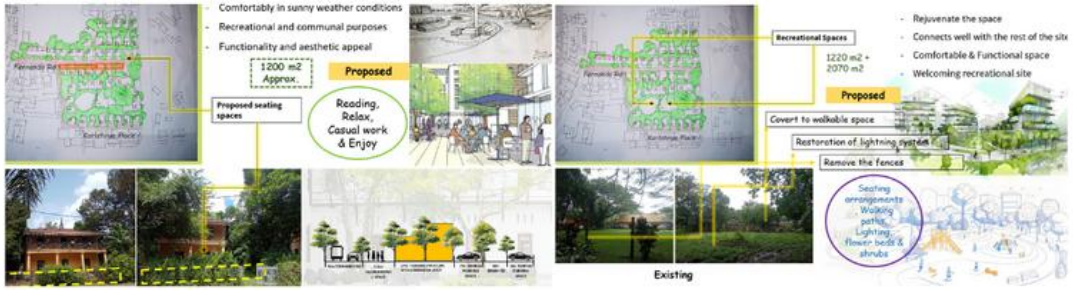
Strategies

1. Decide the Overall Form to the Site

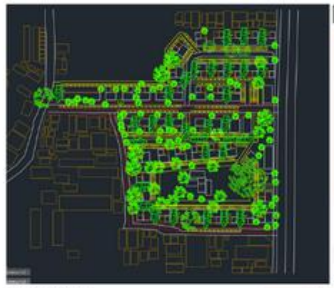
Focuses on analyzing and utilizing areas with dense vegetation to inform site planning and design. This approach ensures that development respects and integrates existing natural features, aiming to preserve ecological balance while enhancing aesthetic and functional value. This particularly relevant for heritage sites, where greenery contributes to identity and ambiance.

2. Renovate the Conservative Building Blocks & Construct Verticle Structures

3. Restoration of Existing Recreational spaces & enhance the functionality of the space



4. Decide the use & Parking Arrangment



Assuming for Residential use

Verical block -Type	No. of Units for one	No. of Blocks	Total units	Parking for one unit	Total Parking
2 Story (Field Houses)	4	6	24 12	1 1	24 12
New Structured	2	3	6	1	6
3 Story	6	15	90	1	90
New Structured	6	2	12	1	12
4 Story	8	17	136	1	136
5 Story	10	8	80	1	80
Conservative Blocks	1	12	12	2	24

Visitor Parking = 52 Total Parking for Residential= 370 +52 = 422

Assuming for Commercial/Office use

Source- City of Colombo D Plan (2022-2033)

VEHICLE PARKING REQUIREMENT

(SHEDULE VIII)

(SCHEDULE VI)

Total Parking Allocation = 422 + 140 = 562 Approx.

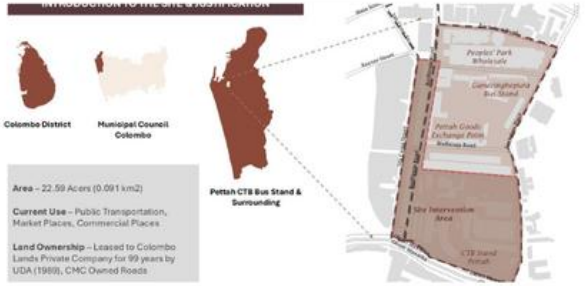
Use	Units	Parking allocation for one	For one unit	Parki
Restaurants	10	1 for 50 m2		5
Rest houses	10	1 for 150 m2		2
Clubs	2	1 for 50 m2		5
Clothing centers	2	1 for 100 m2		3
Gymnasium	1	1 for 100 m2		3
Educational Institutes	1	One space for one class & 2 for drop off palces		2 2 & 4
Relocate-Vehicle reparing center	1			
Office	81	1 for 150 m2		2
Auditorium	1	one for 20 m2		

Pettah with a Sense of Belonging, Green, and Comfort

SITE PLAN - PETTAH COLOMBO

Wanigasinghe W.W.L.N.U.

Pettah, basically the CTB Stand area and surrounding area can mentioned as a core area of heart of the Colombo which act as the main transit-oriented area integrating bus transportation & railway transportation attracts 150 000 people daily where as Famous Pettah Street Markets attract more than 30 000 people daily. Also, there are number of significant and attractive colonial period heritage buildings which attracts both local & foreign visitors. The area right in front to the CTB Stand will develop as the main transportation center of Colombo in the future.



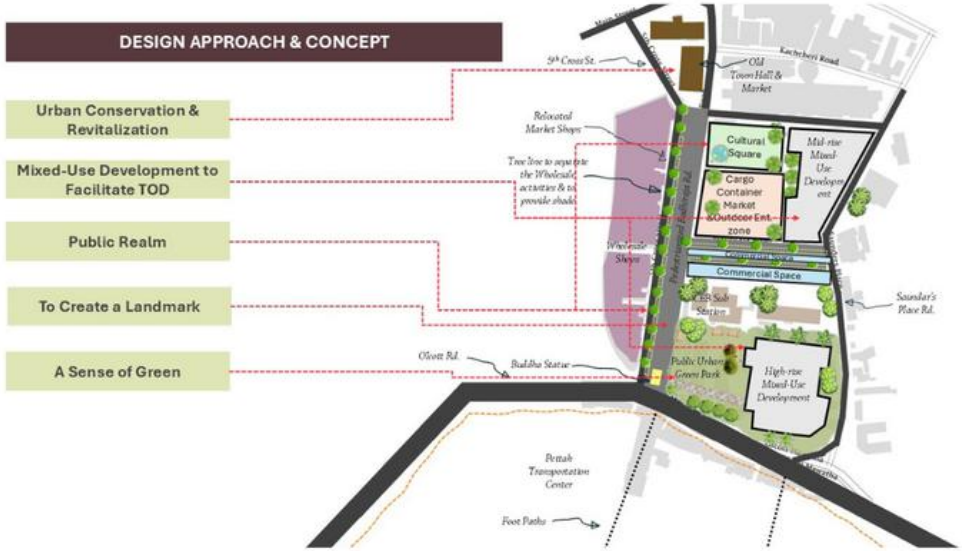
Design Problem

Design need of the site was identified through problem & potential identification with different level analysis mainly area level, street level & building level Moreover the possible major future changes near the site area was also considered as the main base of the design idea.

Addressing Problems

- Visible conflict between vehicular movements & pedestrians
- Lack of open spaces, resting areas, & greenery
- Wayfinding difficulties & accessibility issues due to unorganized & illegal street vending & markets

Main Potentials - High levels of possible walkability due to small block size and availability of intersections, High commercial activity concentration, High Land Value



Design Approach

Main identified clients of the project are Urban Development Authority, Colombo Municipal Council, & Colombo Lands Private Company. The clients main objective was to have revenue generating project while facilitating the general public as well.

Main Design Approach

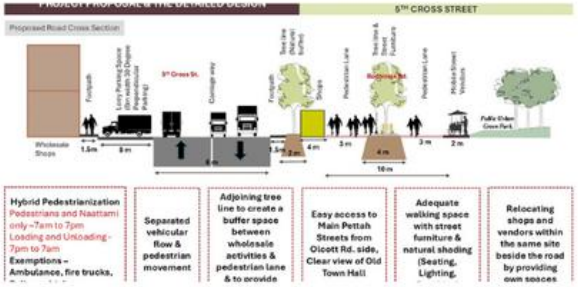
Hybrid design approach combining Everyday Urbanism, Integrated Planning Approach, & TOD Approach were combined to come up with design strategies.

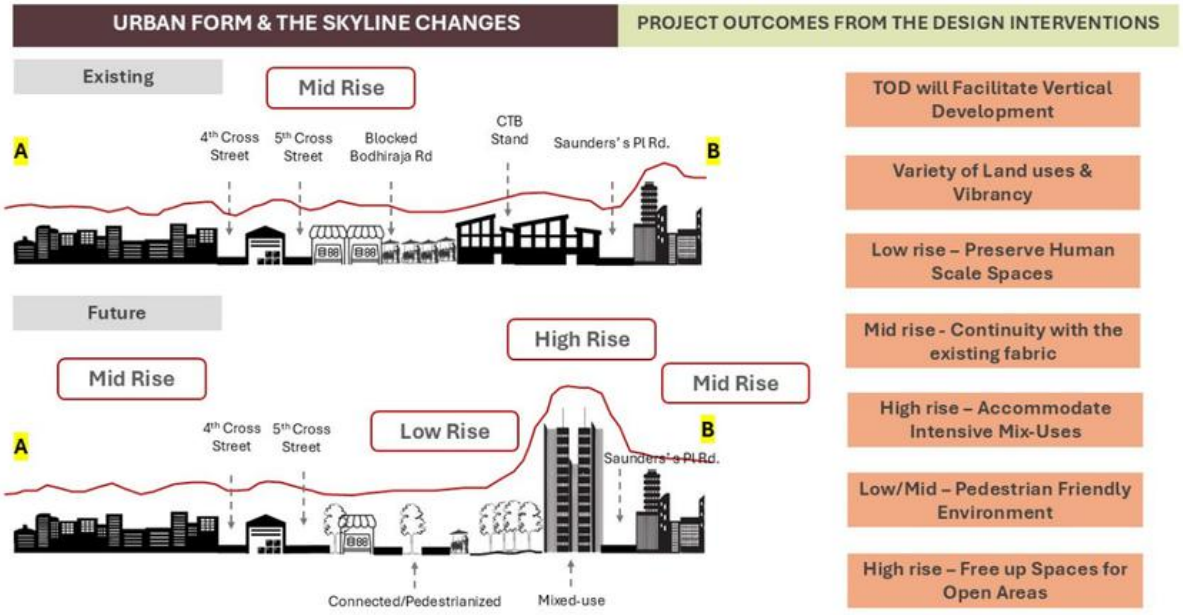
- Support for daily routings of the area
- Celebrate the informal, the ordinary, the human-scale
- Functional & rich in identity and meaning & connect Place of work to place of residents while making cities more inclusive, resilient, and full of life
- User-driven, people centered approach of urban life
- All stakeholder involvement & to meet the current and future requirements
- To create a dense, diverse and accessible urban fabric around transit

Pettah with a Sense of Belonging, Green, and Comfort

SITE PLAN - PETTAH COLOMBO

Wanigasinghe W.W.L.N.U.





Strategies

High-rise Mixed-use Development with Public Urban Green Park

The main identified project is a High-rise Mixed-use Development to facilitate future increased population, and consumers, and to develop the area as a transit-oriented area while encouraging compact high-rise developments yet prioritizing public amenities well through the public park. The park will act as a connecter of all income levels to the development. This will provide steady income-generating activities as well.

Pedestrianizing of Bodhiraja Road & Rearrangement of 5th Cross Street

Pedestrianizing of Bodhiraja Road will facilitate the pedestrian safety and will increase the attraction of visitors to Pettah as well. The rearrangement of 5th Cross street and pedestrianizing of Bodhiraja road will connect Olcott road with Bodhraja road and can achieve clear view of an attractive colonial building and to the Bodhiraja Temple.

Project Outcomes

- The project will increase the visibility from Bodhiraja road towards Olcott road. Thus increase the legibility, permeability, wayfinding.
- Project will create a high dense development reducing sprawl while allocating more lands for public green amenities.
- The static urban form will change to a vibrant urban form with a mix of low, medium, and high rise form.

Integrated Eco-Recreational Hub: Sustainable Redevelopment of Crow Island Beach Park

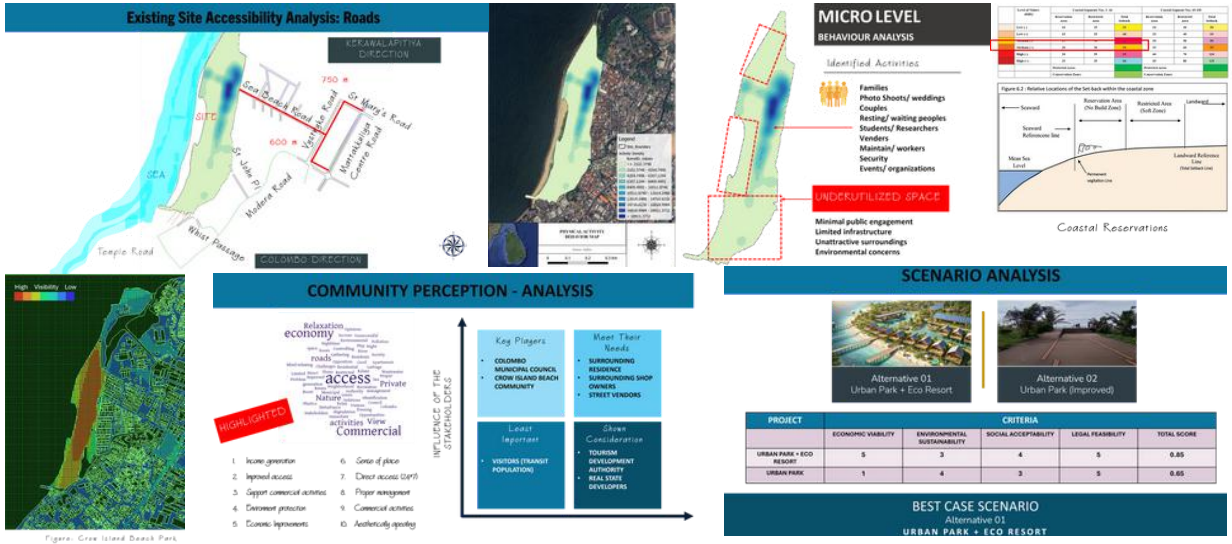
Wijekumara H.M.L.

This project aims to sustainably redevelop the Crow Island Beach Park in Mattakkuliya, with the aim of transforming it into an integrated eco-recreation centre. By addressing existing issues of under-utilisation, environmental degradation and social disconnection, the design proposes an economically viable and environmentally sensitive solution.

Design Problem

Crow Island Beach Park is significantly underutilized due to minimal public engagement, limited infrastructure, and a poorly maintained environment. Environmental degradation, ineffective waste management, and plastic pollution threaten the site's coastal wetland ecosystem. Accessibility issues, including poor transport connectivity and inadequate pedestrian and parking infrastructure, hamper visitor comfort. Additionally, a lack of inclusive amenities and community-focused spaces leads to social disconnection, preventing the park from meeting the needs of its diverse user groups. These challenges collectively require a holistic and sustainable redevelopment approach to realize the park's potential as a vibrant and ecologically balanced urban space.

Design Approach

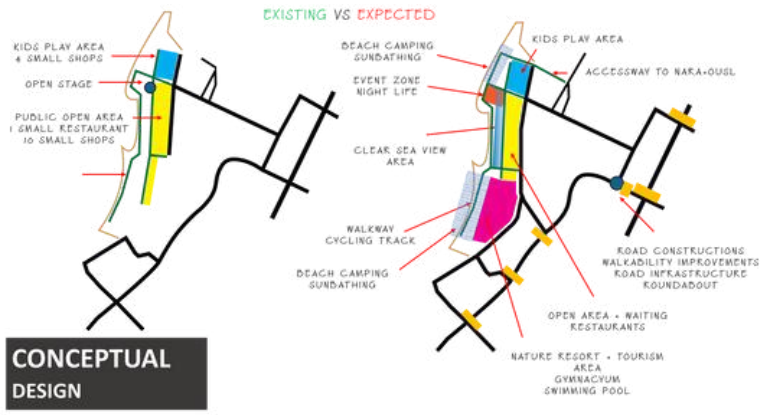


The design approach for Crow Island Beach Park emphasizes a thorough and informed process to address site issues. A comprehensive analysis of population, land use, activities and stakeholder needs informs the design. Two proposed scenarios – Urban Park + Eco Resort and Enhanced Urban Park – were evaluated for economic, environmental and social viability, with the former being selected as the preferred option. Sustainability and inclusion remain at the heart of the design, integrating green technologies and creating safe and accessible spaces that meet the diverse needs of the community. This approach ensures a balanced and sustainable redevelopment that aligns with the aspirations of all stakeholders.

Integrated Eco-Recreational Hub: Sustainable Redevelopment of Crow Island Beach Park

Wijekumara H.M.L.

Strategies



The Crow Island Beach Park design strategies aim to transform the site into a vibrant and sustainable urban destination. Key initiatives include optimizing land use through mixed zoning and eco-resort elements, improving infrastructure for better connectivity and convenience, and enhancing the environment with urban forests and zero plastic targets. Community-centric spaces, such as event areas, recreational facilities, and children's parks, aim to foster social engagement. By integrating aesthetic and functional design aligned with urban principles, the proposal ensures ecological, economic, and social integration, meeting the needs of the environment and diverse user groups.

1. Land Use Optimization:

Implementing mixed-use zoning for recreational, residential and commercial activities.

Introducing eco-resort elements to enhance tourism and generate revenue.

2. Infrastructure Improvements:

Construction of cycling and walking paths, parking areas and rest areas.

Upgrading public transport facilities, such as bus stops and road networks.

3. Environmental Improvements:

Establishment of urban forest areas and green walls to restore environmental balance.

Setting zero plastic targets and implementing efficient waste management systems.

4. Community-Centric Development:

Creating public spaces, outdoor stages and event areas to foster social activities.

Inclusion of facilities such as children's parks, gymnasiums, swimming pools and restaurants to meet the diverse needs of users.

5. Aesthetic and Functional Design:

Enhance the "city image" by applying Kevin Lynch's urban design principles.

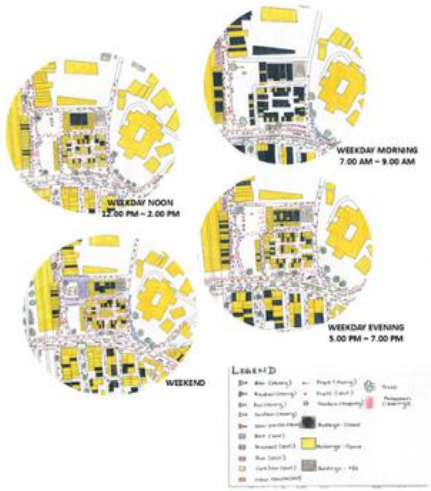
Design visually appealing and functional landscapes with clear wayfinding and landmarks.

THE PATHLOOM OF RAGAMA

PUBLIC MARKET & OPEN SPACE DEVELOPMENT

Ruwanima E.M.K.

Known for its medical significance with the Colombo North Teaching Hospital, reputed private hospitals, and as a key railway junction and economic hub, Ragama attracts a high commuter population. This proposal reorganizes the centrally located public market connecting major destinations to serve as a path loom (linking pathways), integrating open space to enhance connectivity and functionality, creating a unique, vibrant, and accessible environment for all.



Activity Mapping Illustrating the Pedestrian & Vehicle Movements

Abstract Intensity of Pedestrian Movement

Disorganized Layout and Infrastructure of the Market

Vehicle Dominating Streets which Directly Attracts Pedestrians to the Town Center

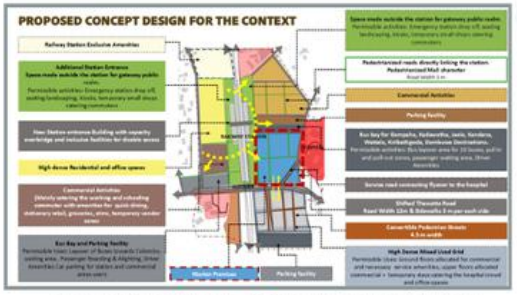
Design Problem

The Ragama railway station, handling around 30,000 daily passengers, and proximity to A1 and A3 roads with 14 bus routes make Ragama a key transit hub. Around 10,000 hospital users from Gampaha, Kurunegala, Puttalam, and Colombo visit daily. A significant percentage of all these pedestrians use the public market premises (the core of local commerce) as a pathway connecting the station, hospital, and bus stand, as revealed through activity mapping. Users include patients, visitors, commuters making impulse purchases, shortcut users, and shoppers etc.

Given the pedestrian intensity of the town, the streets are still vehicle-dominated and the market's disorganized layout and poor infrastructure hinder accessibility, efficiency, and pedestrians' user experience, requiring urgent improvements.

Place Making Tool | Source: Project for Public Spaces

International Public Market Case Studies



Proposed Concept Plan for the Ragama Town Center

International Case Studies Referred which Possess Unique Identities

Design Approach

The primary goal is to facilitate pedestrian movement while optimizing public space. Since simply redesigning the public market will not serve the purpose, the entire town center was conceptualized in which the public market's use remained the same while optimizing it with a placemaking approach to redefine the layout integrating quality open space.

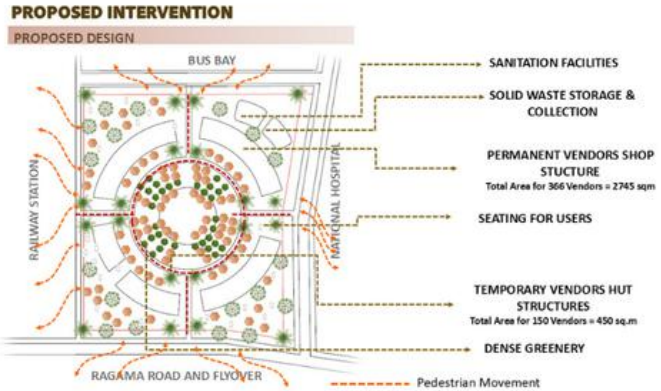
The public market site design follows placemaking principles; sociability, uses and activities, access and linkages, comfort, and image. While the market is functioning for a certain level, improvements were needed to make it more sociable, comfortable, accessible and visually appealing. Drawing inspiration from landmarks like Line City, Dubai's Palm Jumeirah, and Marina Bay Sands, the plan took one step ahead to give Ragama a unique identity through this attempt.

THE PATHLOOM OF RAGAMA

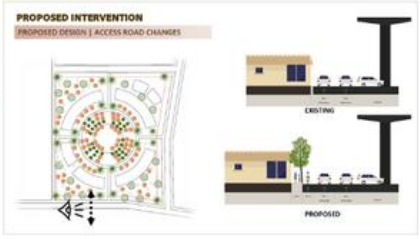
PUBLIC MARKET & OPEN SPACE DEVELOPMENT

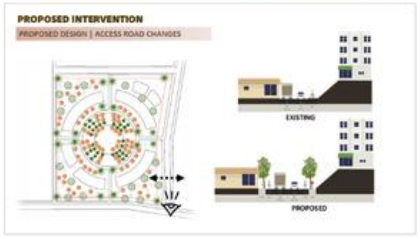
Ruwanima E.M.K.

Envisioned Public Market & Open Space
Image of Ragama



Proposed Layout





Strategies

As mentioned, a concept plan was proposed for Ragama town center to enhance pedestrian movement, with a focus on in detail redesigning the public market, the town's core. After regulatory checks and applying the placemaking approach, inspired by international case studies, a new layout was designed for the existing market premises to align with Ragama's health city identity. The plan includes allocating 160 permanent shops for existing vendors and adding 266 more, along with space for 100 existing temporary vendors and 50 new temporary vendors in flexible structures. The design promotes dense greenery, seating, resting areas, and a multi-use open space for events and brand promotions, creating an income-generating, multifunctional open area. Street widening and pedestrianization were also proposed. Moreover, the infrastructure requirements as per the regulations such as the parking requirements, waste water management, solid waste management, water supply, sanitary facility requirements are calculated.

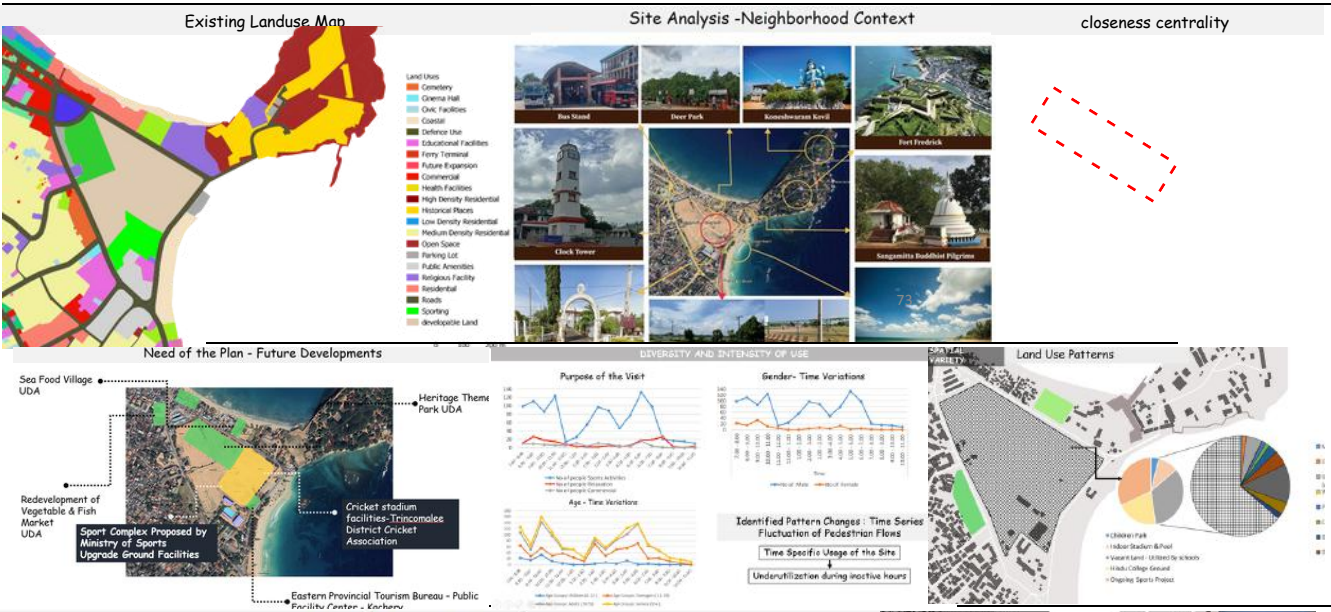
Expected outcomes include creating a pedestrian-friendly, legible, attractive, and responsive space that adds a unique identity to the town. The design offers physical and visual comfort, economic benefits through efficient space, and convenient navigation between key pedestrian magnets.
Funding will generate from pre-leases, CSR-driven public-private partnerships with hospitals and companies, and a bank loan. Revenue will be generated through leases, rentals, event rentals, and CSR collaborations, positioning the market area as a hub supporting Ragama's health city vision.

Moving one step ahead, the project aims to support the plan to promote Ragama as a health city by integrating sustainable design and applying for LEED certification to provide the city a brand identity through this market intervention.

Dynamic Ever Active Oasis - Trincomalee

Aska M.F.F.

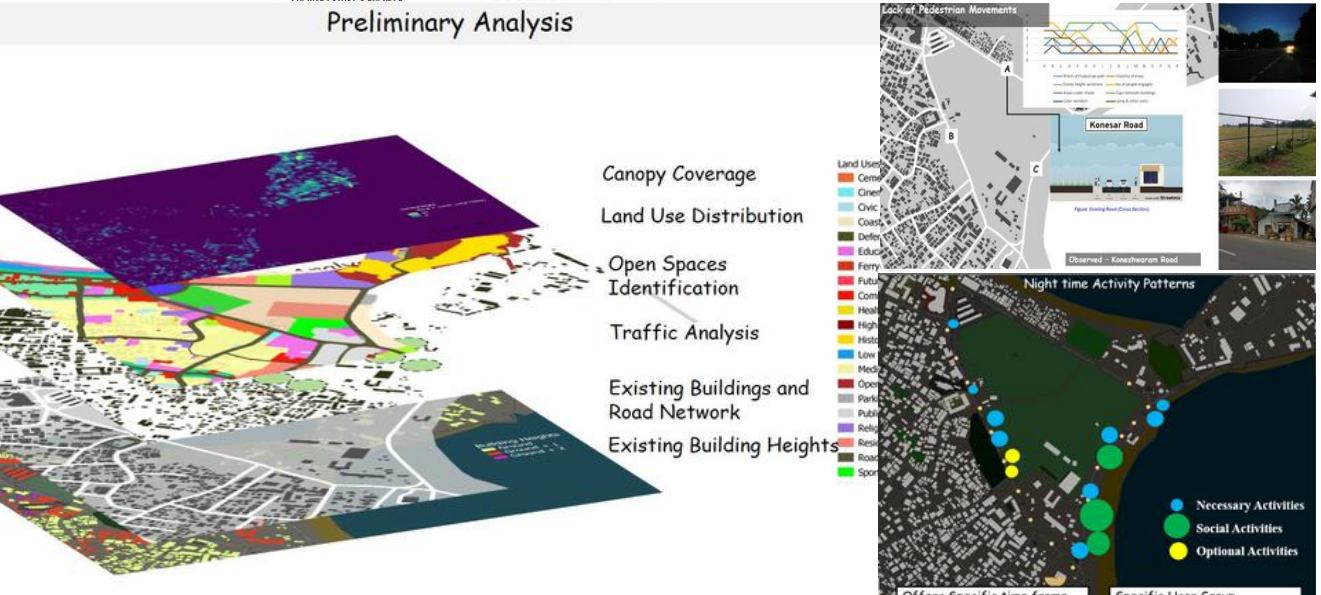
Trincomalee, on Sri Lanka's eastern coast, boasts a world-class harbor, rich heritage, and pristine beaches. Its locational advantage and proximity to key maritime routes enhance its strategic value. Trincomalee Town and Gravets DSD blend urban-rural dynamics with socio-economic activities, unlocking immense potential for sustainable growth, tourism, and cultural preservation amid its natural and historical wealth.



Design Problem

Trincomalee's strategic location and iconic historical identity highlight its immense potential, but key challenges limit its functionality. Koneswaram Road suffers from poor connectivity and low accessibility, while the "Large Maidan," a significant open space, lacks a conducive pedestrian environment, reducing walkability. Streetscape and canopy coverage analyses reveal limited shade, leading to high land surface temperatures that impact pedestrian comfort. Time utilization show pedestrian engagement declines significantly during inactive hours, with the area dominated by primary users after peak hours, resulting in underutilization. These findings emphasize the need for strategic interventions to improve connectivity, enhance walkability, and create a more inclusive, thermally comfortable environment, unlocking the area's full potential while preserving its historical and cultural significance.

Preliminary Analysis

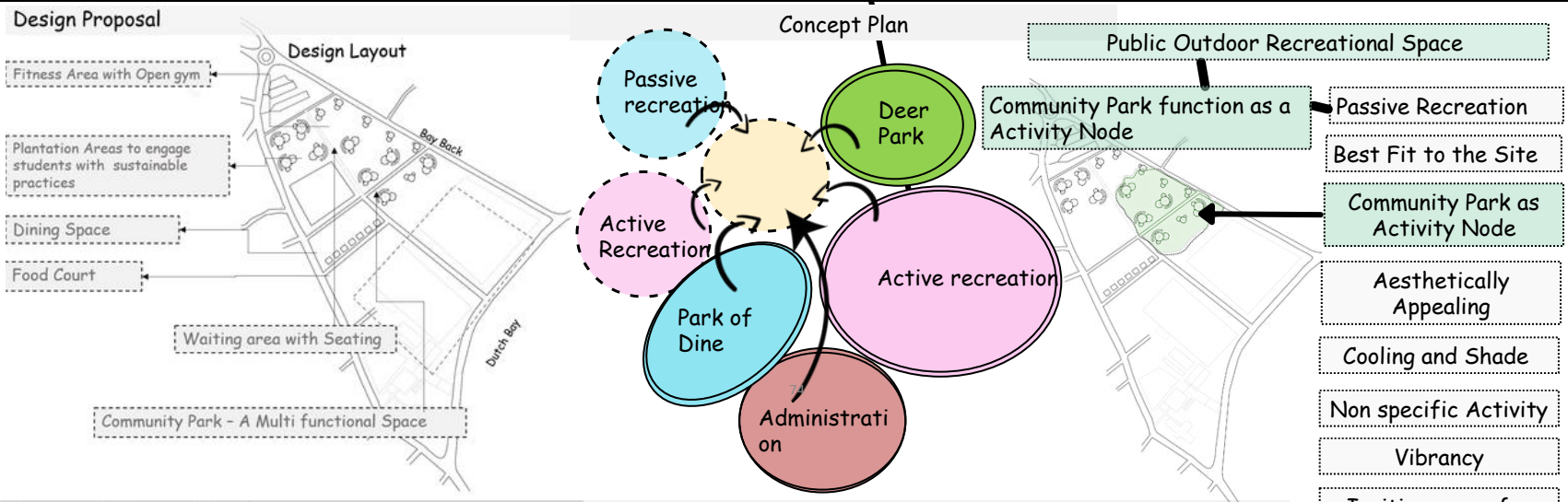


Design Approach

The design approach envisions a dynamic, ever-active environment that strengthens Trincomalee's urban fabric while promoting its iconic identity through culinary tourism. Guided by urban design principles of inclusivity, connectivity, and legibility, the plan enhances spatial variety and permeability by addressing insufficient pedestrian access points, poorly connected pathways, and inadequate vehicular amenities. Strategies include creating shaded pedestrian-friendly corridors, bicycle-compatible pathways, and visually engaging way-finding systems to improve accessibility and circulation. Enhancing landmarks' prominence strengthens legibility. Addressing segmented activity zones and incorporating shaded seating and comfort features improve microclimatic conditions, fostering a vibrant and cohesive public realm that balances functionality of the area.

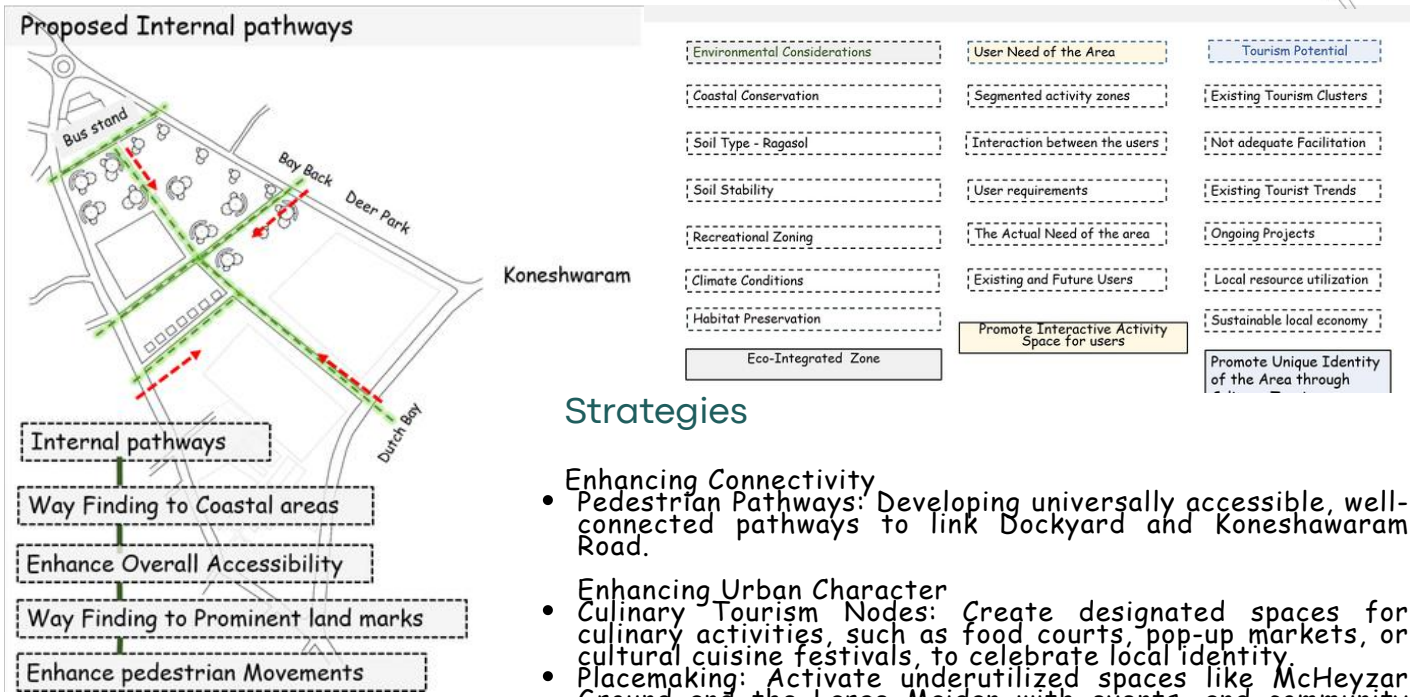
Dynamic Ever Active Oasis - Trincomalee

Aska M.F.F.



Strategies

- To develop strategic interventions for the site, SWOT matrix was created to identify possible interventions, ensuring a comprehensive understanding of the site's potential. Using the Highest and Best Use (HBU) method, interventions were prioritized to maximize functionality and align with the site's urban context.
- The analysis resulted in three distinct zoning proposals: an Activity Zone, focusing on vibrant public interaction; a Park of Dine, emphasizing culinary tourism; and a Community Park, promoting social inclusivity and passive recreation.



Strategies

Enhancing Connectivity

- Pedestrian Pathways: Developing universally accessible, well-connected pathways to link Dockyard and Koneshawaram Road.

Enhancing Urban Character

- Culinary Tourism Nodes: Create designated spaces for culinary activities, such as food courts, pop-up markets, or cultural cuisine festivals, to celebrate local identity.
- Placemaking: Activate underutilized spaces like McHeyzar Ground and the Large Maidan with events, and community programming

Creating a Public Realm

- Segmentation Activation: Redesign segmented zones into multifunctional spaces that encourage social interaction and support diverse activities.
- Green Infrastructure: Increase tree cover and urban landscaping to reduce heat, improve microclimatic conditions, and enhance pedestrian comfort.

POST

Studio

NEXT STEPS

The **Site Planning and Design Studio (2025)** marks the first publication in a continuing series of design studio books within the Department of Town and Country Planning at the University of Moratuwa. This studio served as a foundation for students to strengthen their analytical and design skills through real-world site planning applications.

Moving forward, the studio series will continue as part of the Level 4 curriculum, where students will explore emerging themes of **Urban Informatics and Planning**. Each subsequent batch will expand on this foundation by integrating digital tools, data-driven analysis, and advanced spatial design techniques to address contemporary urban challenges.

Through this evolving studio framework, the department aims to build a progressive learning culture that links theory, practice, and innovation in spatial planning and design.

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