

バングラデシュ国
首都圏開発庁 (RAJUK)

バングラデシュ国
MRT 沿線の公共交通指向型開発のための
政策策定支援プロジェクト

ファイナルレポート
別添資料

2026 年 6 月

独立行政法人
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- 3: Official TOD Guideline
- 4: Presentation Material for the 7th JCC
- 5: Environmental and Social Considerations Survey Report (Surveyed by the local subcontractor, BETS Consulting Services Ltd.)

Uttara Center TOD Concept Plan



TRANSIT ORIENTED DEVELOPMENT
MRT STATION, DHAKA

UTTARA CENTER STATION

BDP.

CONCEPT MASTERPLAN

SEPTEMBER 2022

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UTTARA CENTER

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CONTEXT ANALYSIS

i. Dhaka Metropolitan Region

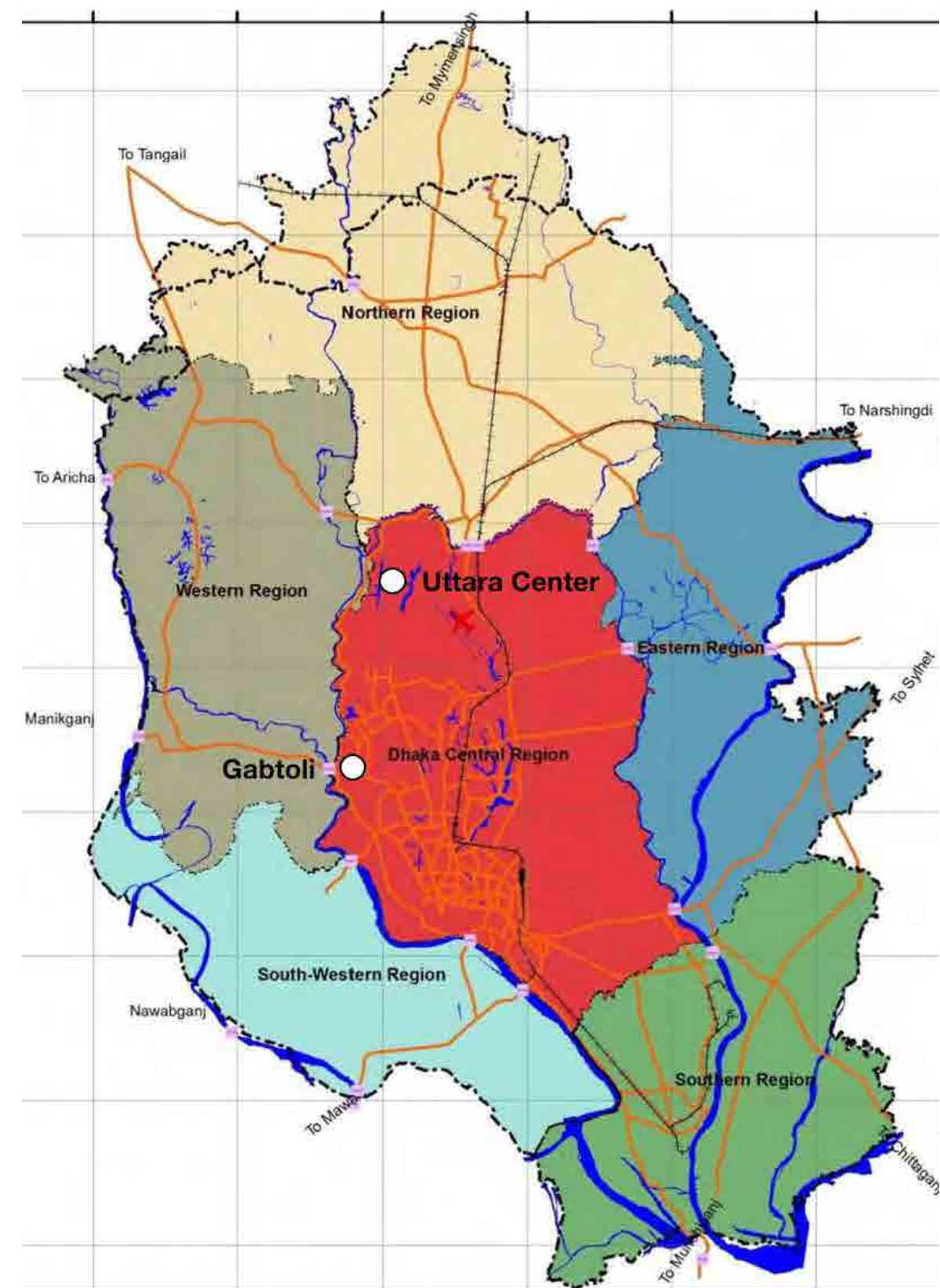
A. DHAKA CITY CONTEXT

As an overview of the the larger Urban Context for the project, the various aspects related to the Dhaka City Region have been understood.

Dhaka Core City comes under the Dhaka Central Region, part of a larger Dhaka Metropolitan Region.

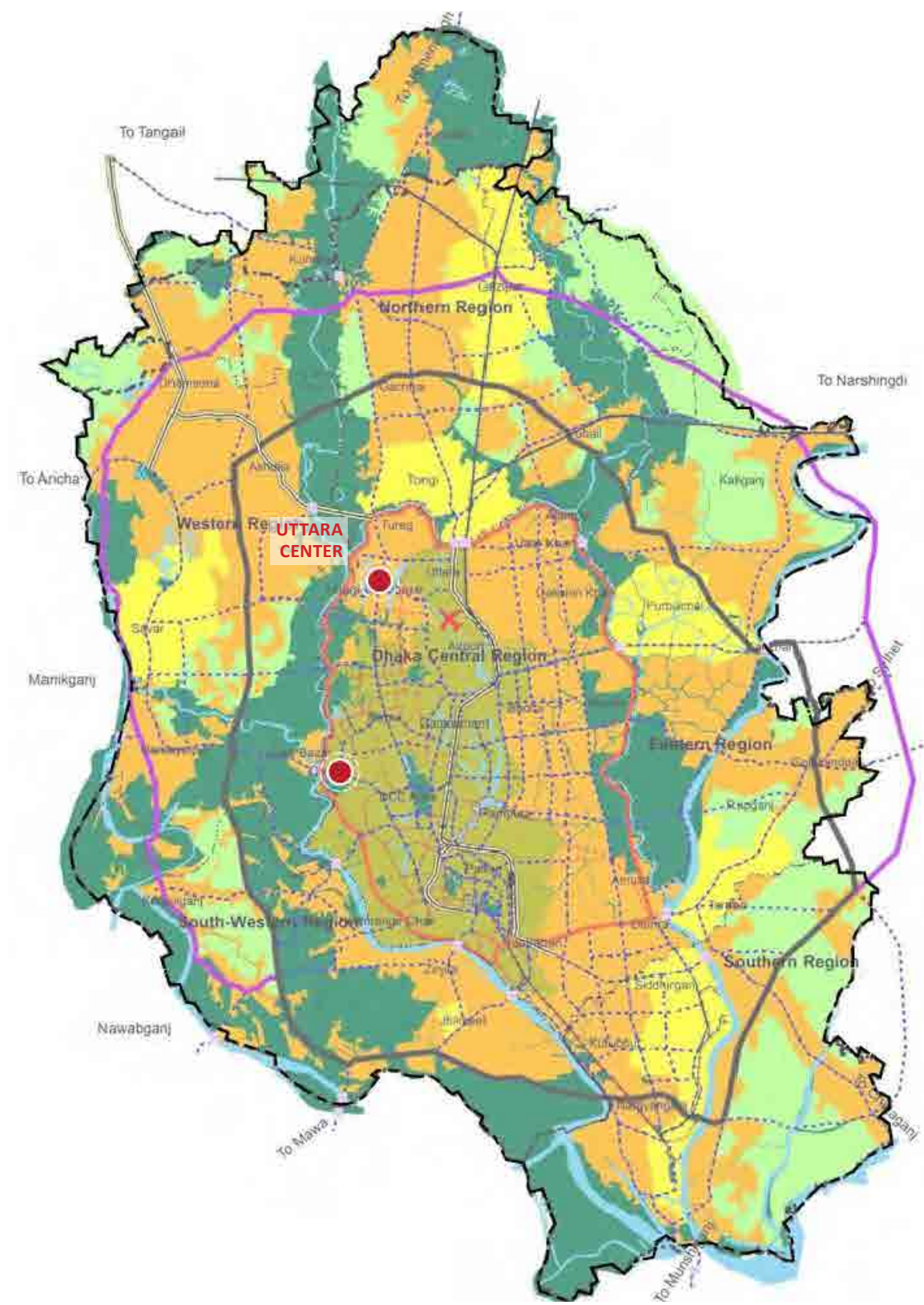
Uttara Center lies in the Northern part of Dhaka City. It forms part of Uttara phase 3, a newly urbanizing area of Dhaka.

The adjacent MRT map shows proposed overall MRT Network for Dhaka City Region. Uttara Center lies on MRT line 6.



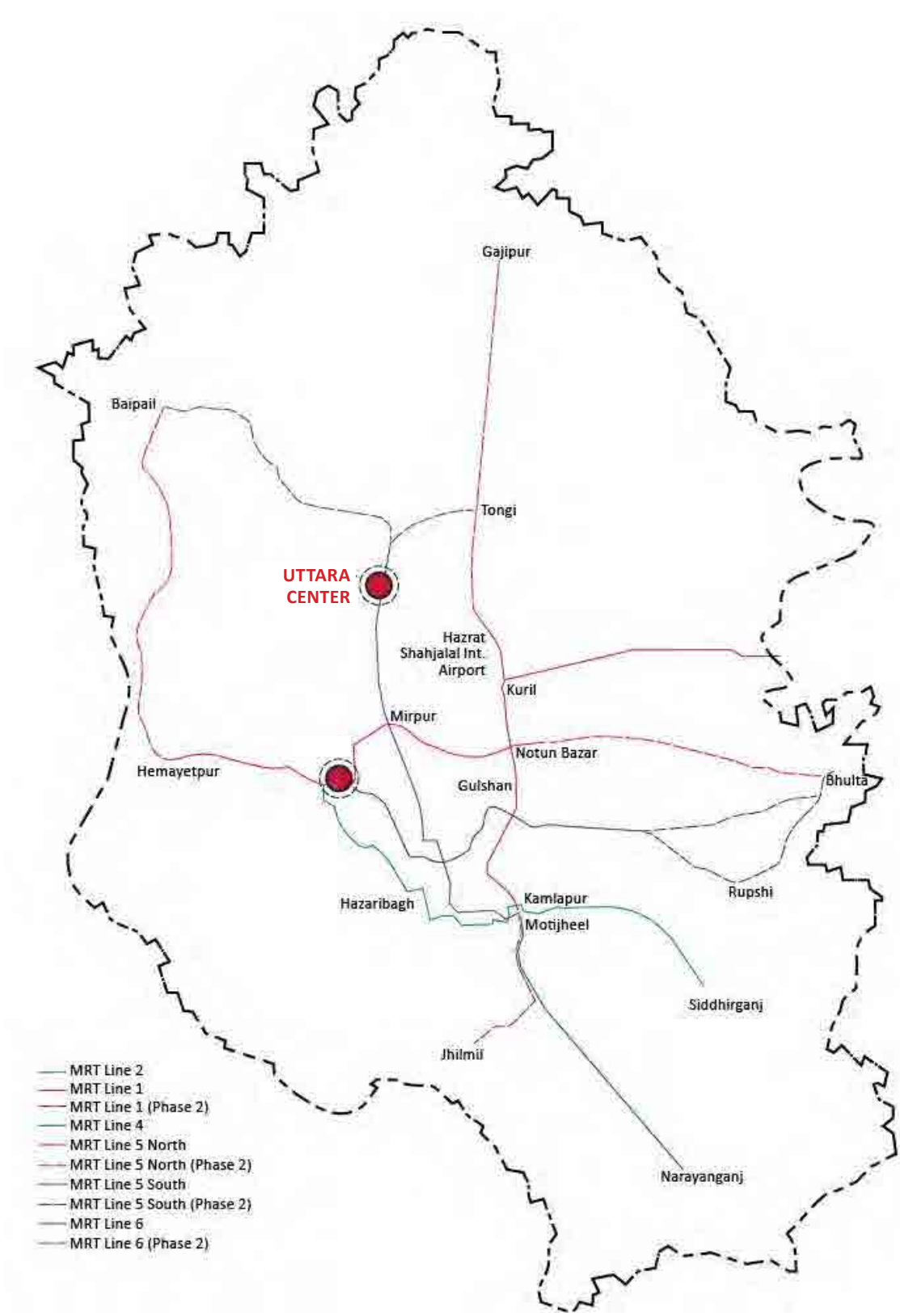
Source: Dhaka Structure Plan 2016 - 2035

ii. Strategic Landuse Zoning for RAJUK Area



Source: Dhaka Structure Plan 2016 - 2035

iii. Dhaka MRT Network



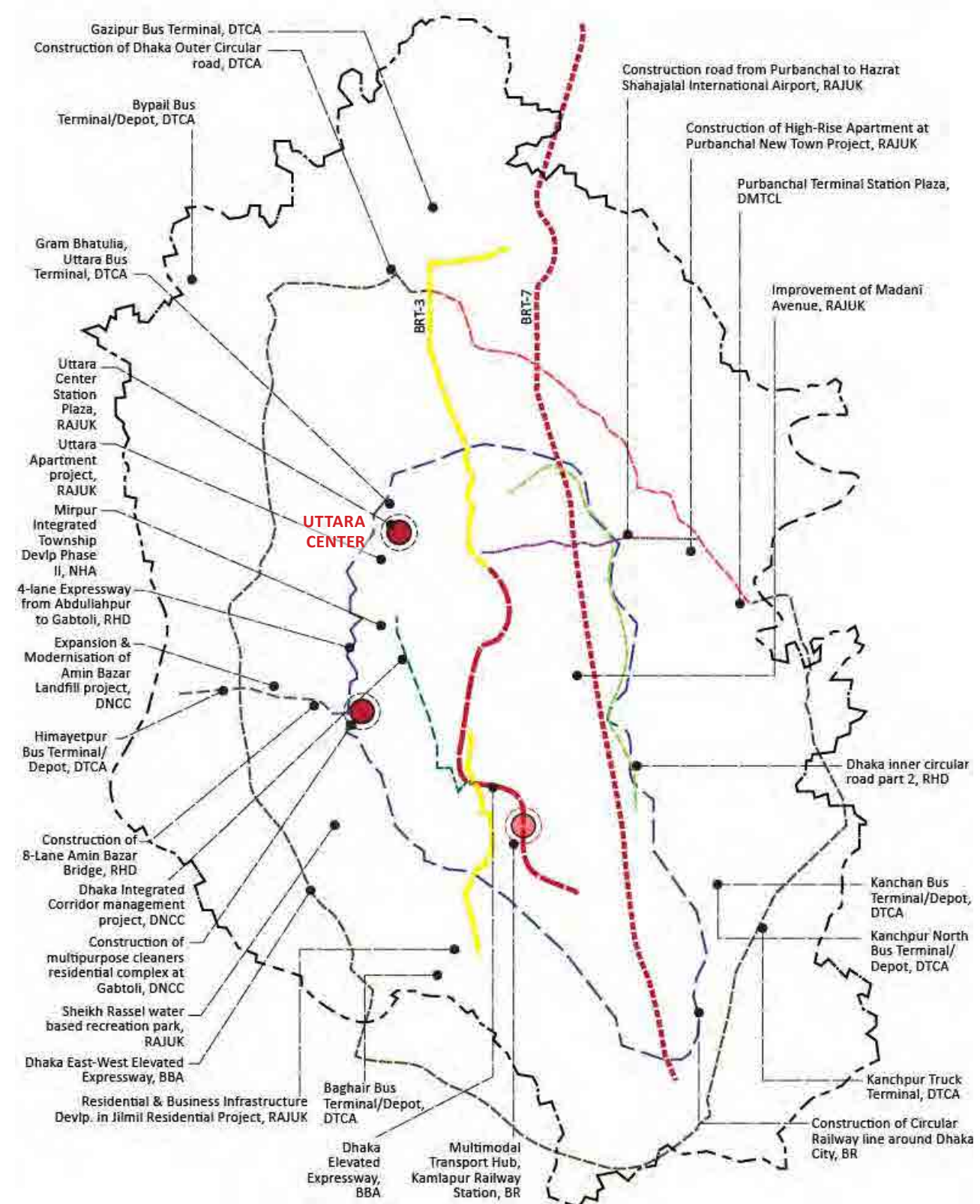
Source: Dhaka Metro

iv. Major City Level Projects in Dhaka

The adjacent map shows the various City level infrastructure projects proposed in the Dhaka City Region.

These need to be taken into cognizance, along with the ongoing planning for the Dhaka Metro Network.

We will give specific attention to the proposed Inner Circular Road and Circular Railway projects, to be integrated with the TOD Masterplanning work.



Source: NK GIS Database

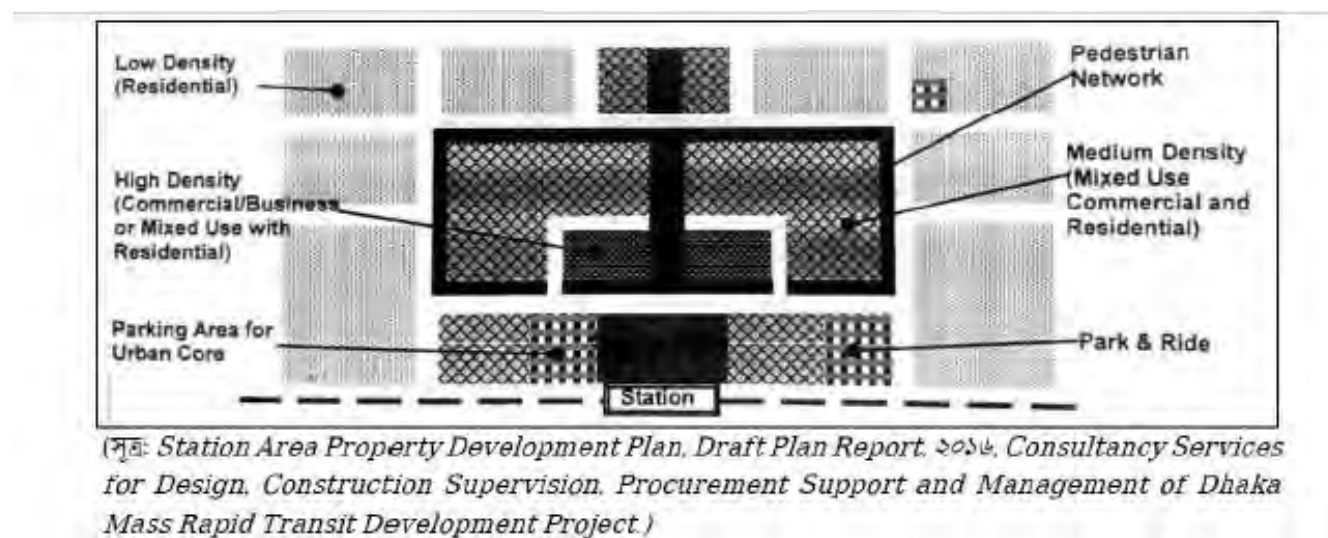
v. Dhaka TOD Policy - Existing Norms

DAP 2016 – 2035 identifies the goals of TOD as follows:

As TOD will be the transit point for the public, in that case, maximum utilization by mixed land use should be ensured for the transit station.

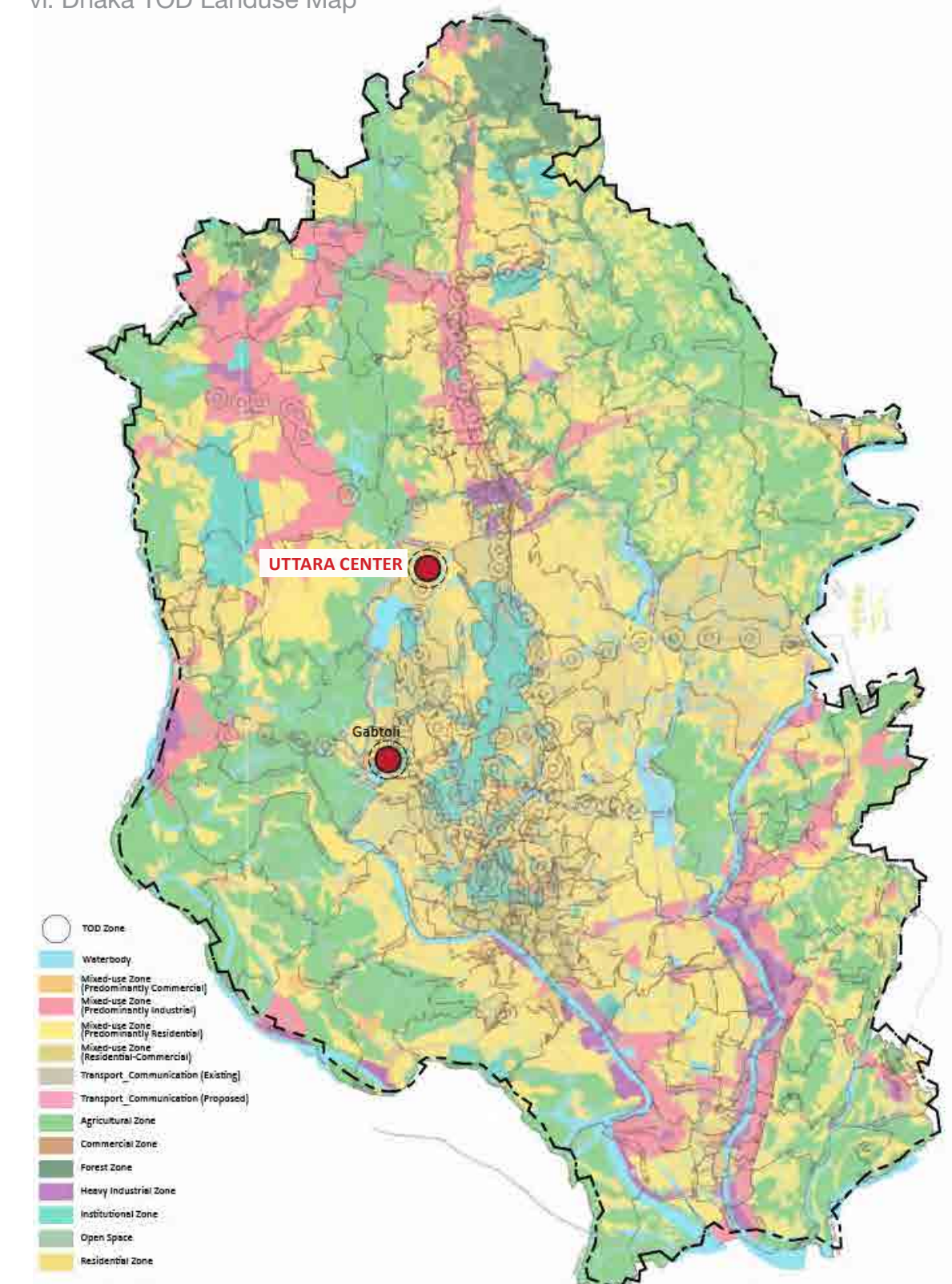
- Attract more people with more activities and high housing density
- Attract more pedestrian movement
- Transport more passengers
- Encourage more people for walking and cycling

The adjacent map shows the proposed TOD Landuse map for the Dhaka City region. The 500 m radius (TOD Zone) from the MRT hub for Gabtoli is shown as Mixed Use Zone (predominantly Commercial), the TOD zone for Uttara Center is shown as Mixed Use Zone (predominantly Residential).



Source: Dhaka DAP 2016 - 2035

vi. Dhaka TOD Landuse Map



Source: Dhaka Structure Plan 2016 - 2035

vii. Major City Landmarks

The adjacent map shows the major landmarks and activity hubs in the Dhaka Central City region.

There is a major concentration of historic and cultural landmarks in the Southern part of the City – Motijheel, Kamalapur and Old Dhaka area.



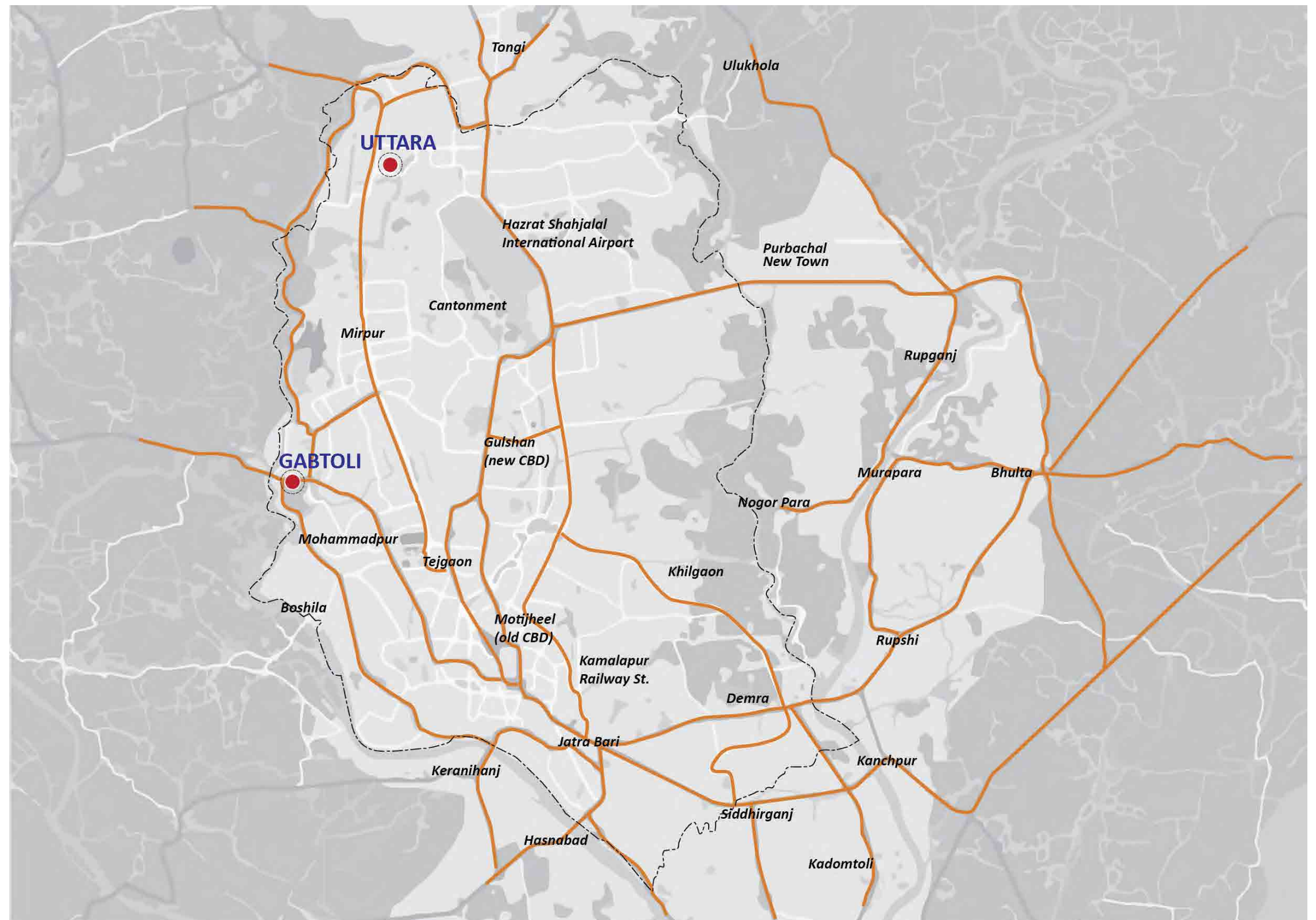
Source: BDP

viii. Road Network

The adjacent map shows the major road network of the Dhaka City region.

The road network has a strong North – South emphasis, with most major roads converging towards Motijheel / Kamalapur area.

East – West road connectivity is weak.



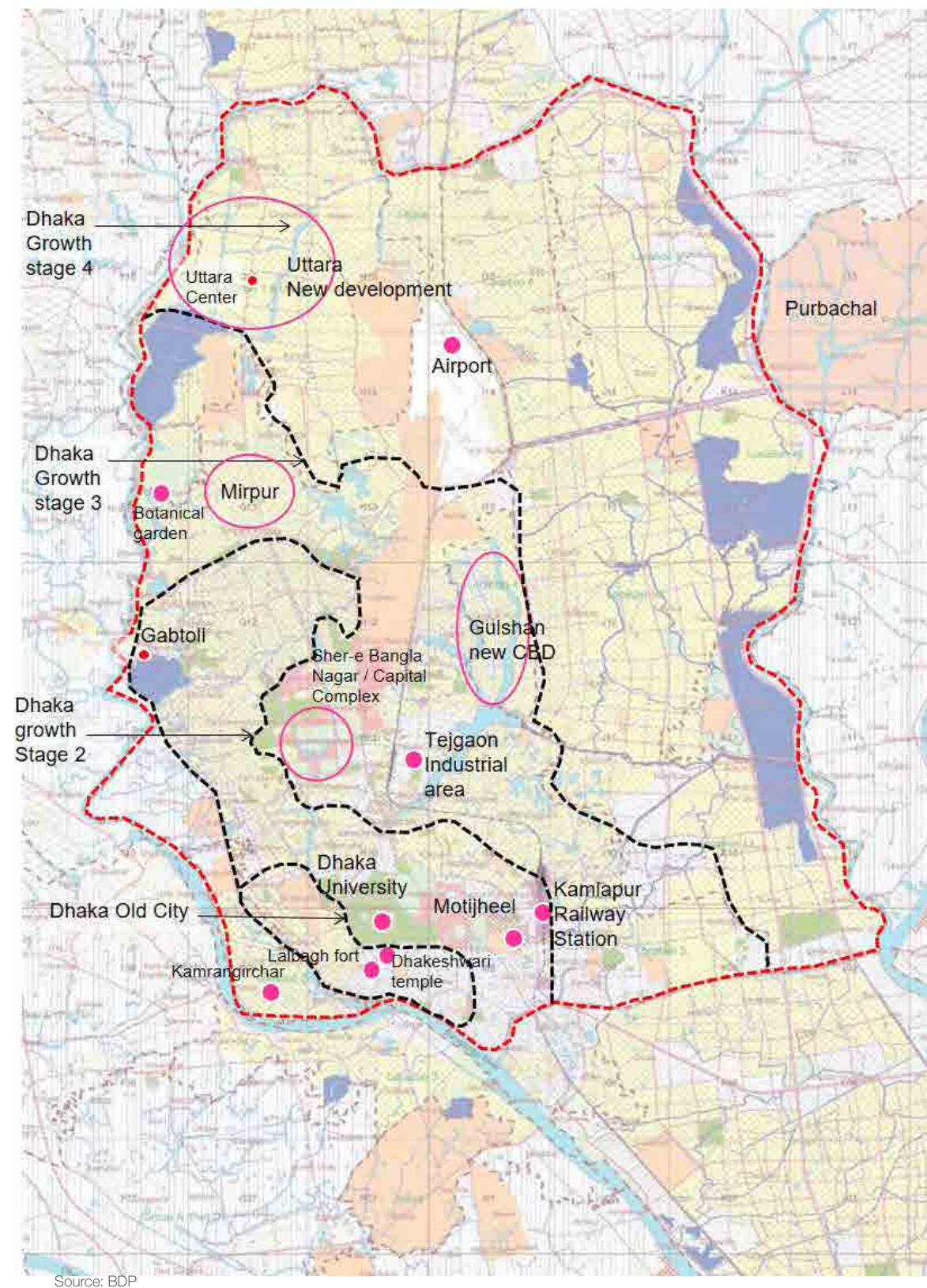
Source: BDP

ix. Growth Trends of the City

Old part of the City and the old CBD area (Motijheel) are concentrated in the South part of the City.

The growth pattern of Dhaka City shows a pattern of growing from the origins in South, outwards towards North.

Newly developing areas of the areas of the city like Uttara and Purbachal are in the North / North East fringes, indicating the current growth trend towards North and North East of the city region.





B. UTTARA CENTER - SITE CONTEXT

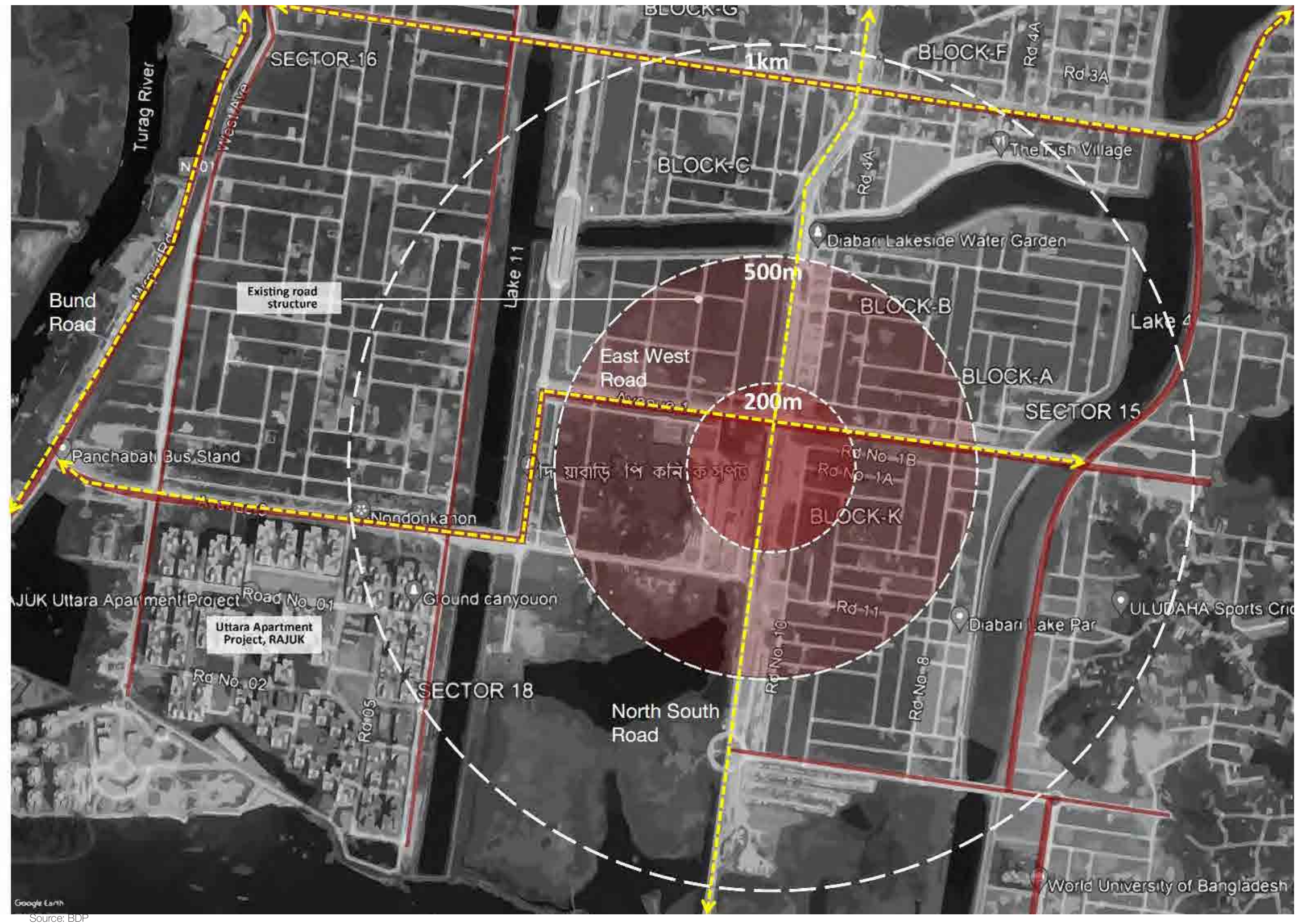
i. Existing Site Features

- The proposed Uttara Center metro station is set amidst a newly developing residential area of Uttara Phase 3.
- There are residential sectors to the East of the Metro station and a Commercial Sector to the North West of the Metro station.
- There is RAJUK housing to the south west of the site.
- There are water channels bounding the site context of Uttara Center.



ii. Existing Infrastructure

- There is existing road infrastructure in terms of the planning and development of Uttara phase 3.
- The major North South Arterial Road passing through the site is aligned with the proposed elevated Metro Corridor of Line 6.
- The major East West Road cutting across the site provided the connection to the Bund Road to the West.



iii. Proposed Infrastructure

The upcoming Elevated Metro Corridor is major new infrastructure project.

Also, Inner Circular Road and Inner Circular Railway are proposed to the West of the site context.



Source: BDP

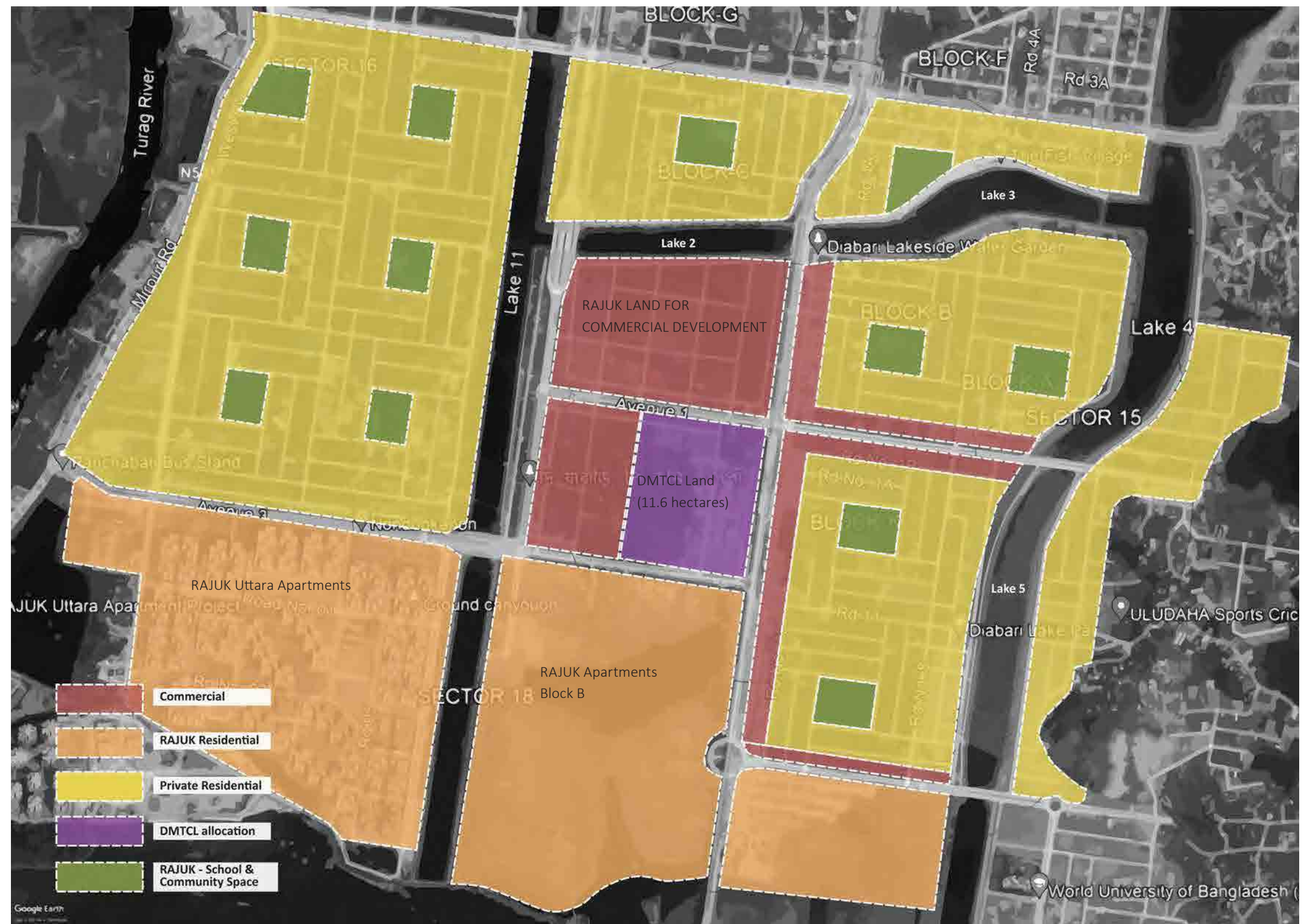
iv. Ownership

The adjacent map shows pattern of land ownership in the site context.

Majority of land is of residential use and is of private ownership.

There are land parcels under RAJUK ownership and yet to be developed.

Also shown is a land parcel to the west of the Uttara Center metro station, that is allocated to DMTCL (11.6 hectares).



Source: BDP

v. Constraints

The water channels and wetlands in the site context need to be sensitively dealt with. The vulnerability of the site to water logging would be a major constraint.

A large part of the site already has a road grid layout of partially formed roads. These need to be integrated.

A large part of the land in the site context has private ownership. This limits the possibility for new TOD development.



Source: BDP

vi. Opportunities

The site being, a greenfield site, has great opportunity for a unique TOD development

The water channels around the site offer immense potential for waterfront development and canalscape development.

The upcoming metro corridor will boost the real estate potential of the land in the site.

The interface with the wetland areas near site can become a model for water sensitive design.



Source: BDP

Photographs of the Existing Site Situation



1. Upcoming
Uttara Center Station



2. DMTCL Land
West of the Station



3. DMTCL Land
West of the Station



4. Metro Viaduct at Road Junction



5. Canal to the North of Uttara Center



6. Metro Corridor, looking South towards Uttara Center



7. Metro Corridor, looking North towards Uttara North



2

**CASE
STUDIES**

2.A SCALE COMPARISON EXAMPLES

The examples chosen for the scale comparison, show various scenarios for CBD type development, greenfield urban development and commercial mixed use development, which have useful inferences as part of the ideation for possible development in the Uttara Center TOD area.



Comparison example	Development type	Inferences
1. Uttara Sector 4, Dhaka	CBD	- Anchor office buildings / institutions may be planned, to provide major anchors for a CBD type development. - Commercial value of major road frontage to be maximised.
2. Gulshan 1, Dhaka		
3. Motijheel, Dhaka		
4. New Town (Narkel Bagan area), Kolkata	Greenfield urban development	- Landmark monument can be useful to create a city level destination. - Uses such as Convention Center, University may be considered in the development mix.
5. CBD, Salt lake City, Kolkata	CBD	A large city level green space can form an anchor for the CBD / Mixed use development of the TOD.
6. Sector 17 Chandigarh	CBD	A distinct plaza / public space can lend a strong identity to the development
7. Connaught Place CBD, New Delhi	CBD	Clear clusters of office / commercial buildings can define the urban blocks for development.
8. Liverpool One UK	Commercial mixed use	Retail oriented mixed use development like in this example may be considered for the DMTCL land for monetization.

A.i Uttara Sector 4, Dhaka

Offices, Commercial mixed use on to the highway;
Residential in inner streets.

Commercial mixed use on Main Road
(Dhaka Mymensingh highway)



A.ii Gulshan 1, Dhaka

Offices, Commercial mixed use

Commercial Hub, Gulshan 1



A.iii. Motijheel, Dhaka

Offices, Commercial mixed use, Institutional.

*Prominent offices & institutions,
Example: Bangladesh Bank head office*



A.iv. New Town (Narkel Bagan area), Kolkata

Convention Center,
University, Commercial,
Landmark Monument



A.v. CBD, Salt Lake City, Kolkata

Offices, Retail, Public spaces, Central Park



A.vi. Sector 17, Chandigarh (CBD)

Offices, Commercial, Retail, Hotels



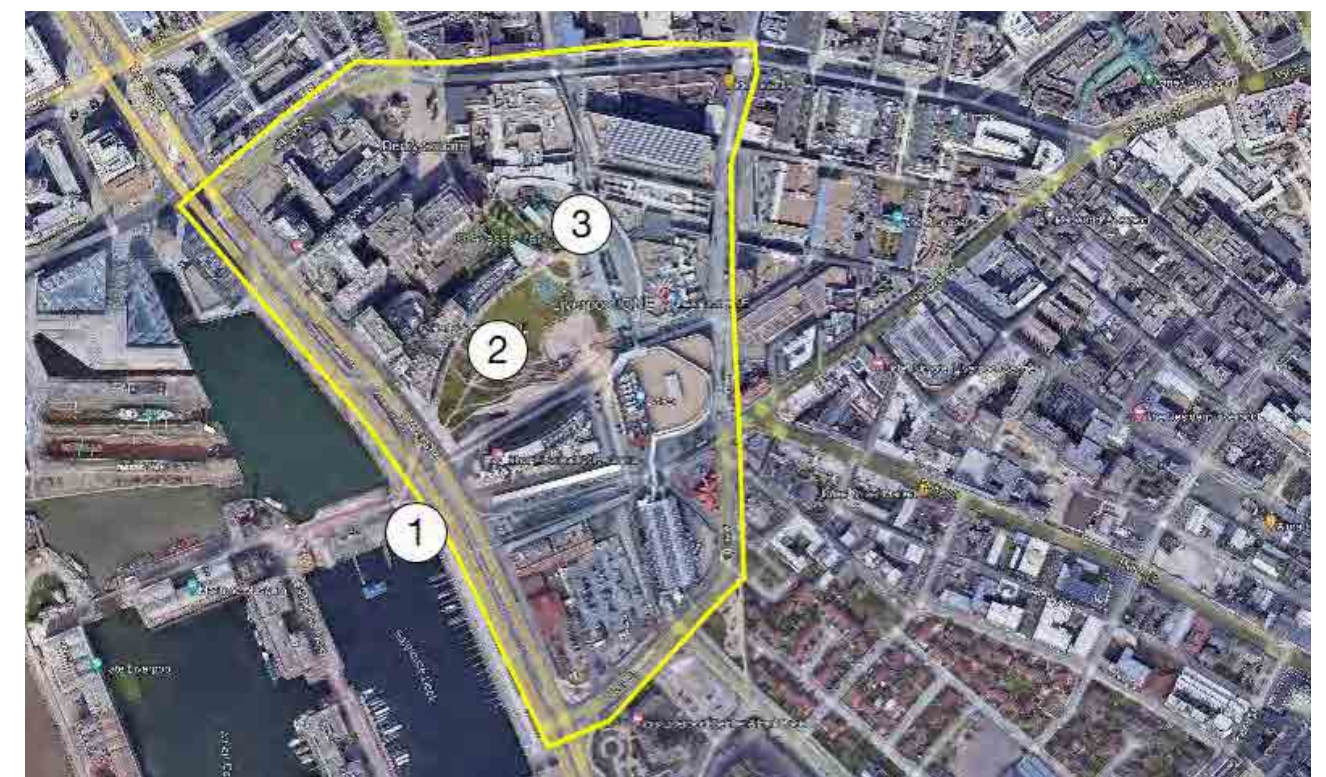
A.vii. Connaught Place CBD – KG Marg,
Barakhamba Road, New Delhi

Offices, Commercial, Retail, Hotels



A.viii. Liverpool One, Liverpool, UK

42 acres area; New elements include 148,500 sq m (1.6m sq ft) of retail space, bars, restaurants, a bus station, BBC studios and a remodelled park bordered by a hotel, 600 apartments and new multi-screen cinema.



2.B TOD CASE STUDIES FROM INDIA

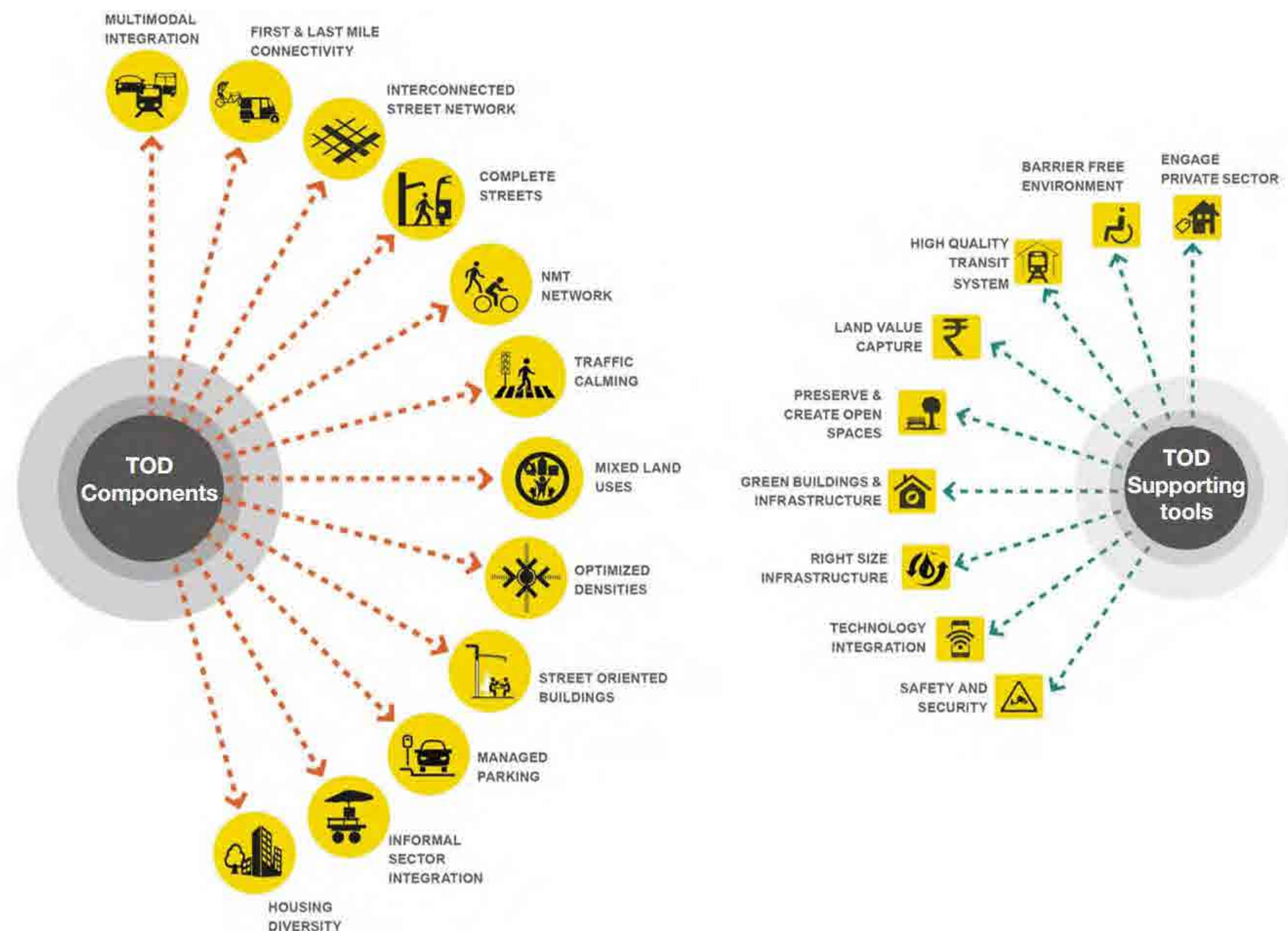
As requested by project stakeholders during the preliminary Consultation Sessions, TOD Case Examples from India were studied. These case studies are particularly relevant since Bangladesh and India have several similar development challenges as well as opportunities in terms of Urbanization and Transport Infrastructure development. The following sequence of case studies goes from the macro scale of TOD Policy in India with the National TOD Policy to City level TOD Norms with the example of the City of Delhi and further down to examples of Station area level TOD and Multi Modal Interchange.

B.i. TOD Norms – National TOD Policy ratified in 2017

The Indian Ministry of Urban Development (MoUD) in May 2017 adopted the National Transit Oriented Development policy with the intention of providing a guiding vision framework to states and cities that are adopting Transit Oriented Development (TOD) as an urban growth strategy.

The policy intends to guide Transit oriented urban development across the country with respect to the following major transit infrastructure plans:

1. Metro Rail, BRTS and other public transport projects being developed in cities
2. Redevelopment of more than 8000 Railway stations across the country
3. New High Speed Railway projects that are being planned in various regions of the country



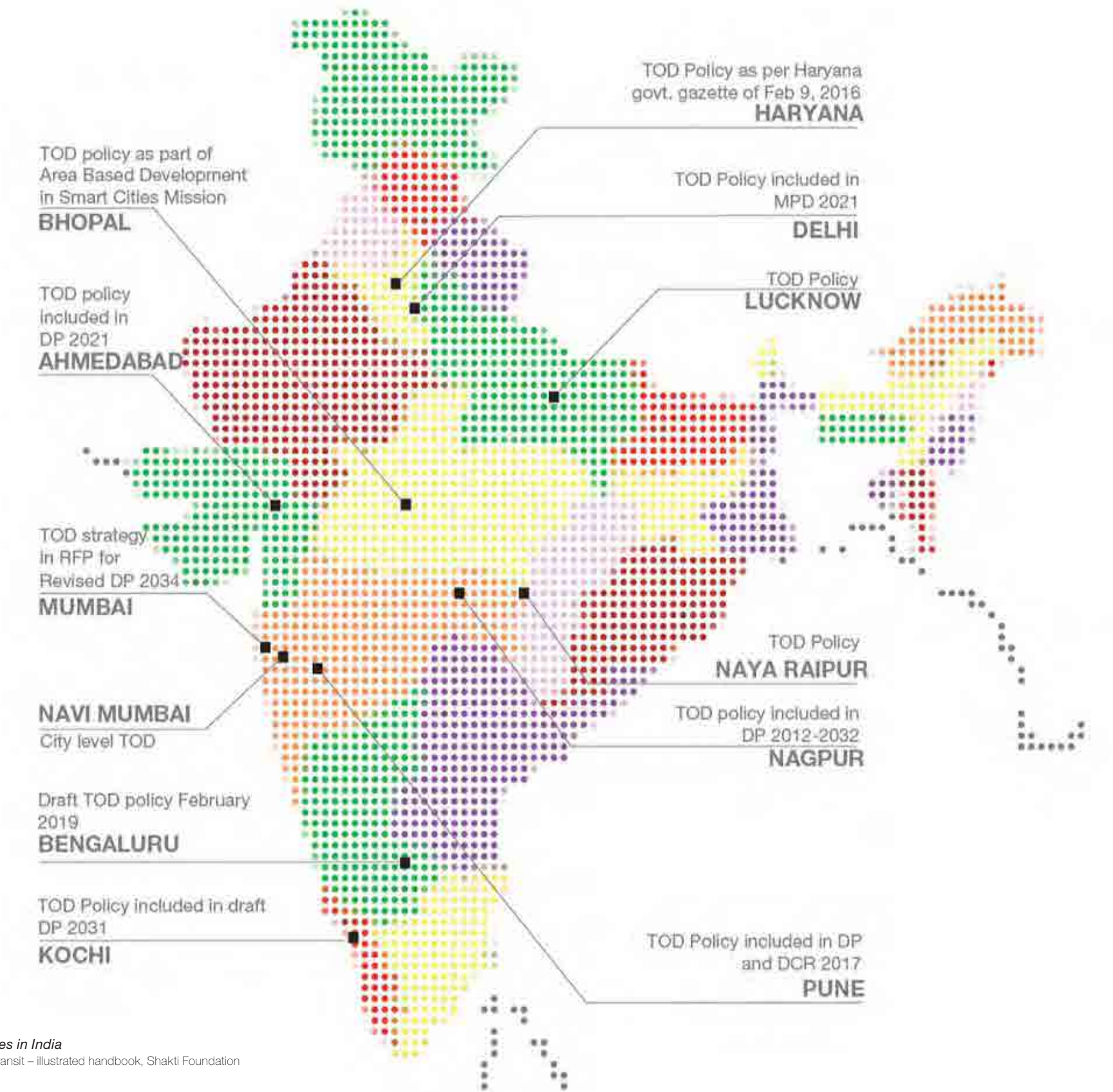
TOD Vision framework recommended by the National TOD Policy
Source: National TOD Policy & TOD Guidance document - NIUA

Ongoing TOD Initiatives in India

Delhi, Ahmedabad and Naya Raipur were the first cities and Haryana was the first state to make TOD part of their urban development Policies and Masterplans.

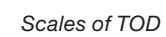
In recent years, various other cities across the country have followed suit in adopting TOD policies, spurred by Urban level mass transit projects like Metro Rail & BRT and Smart City Initiatives.

The adjacent illustration summarizes the various ongoing TOD initiatives across the country.

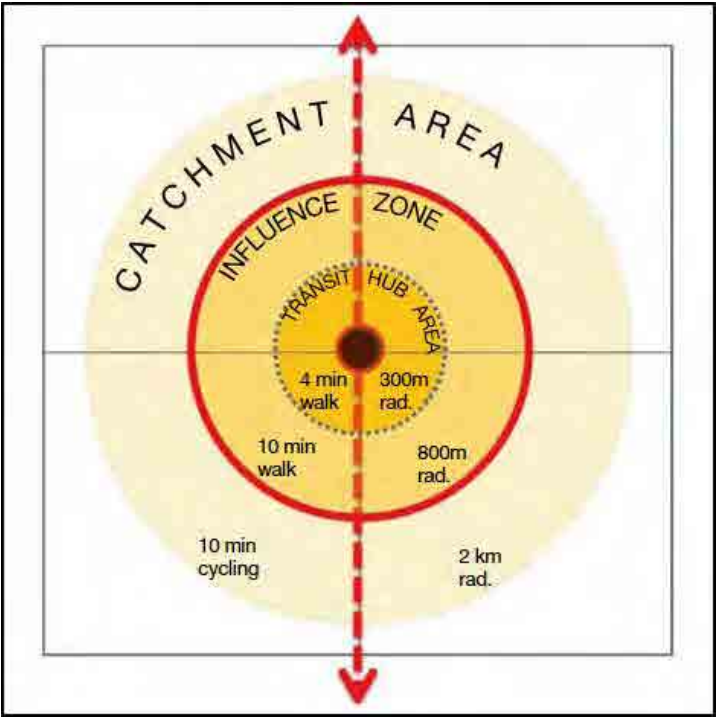


Various TOD Initiatives in India
Image Source: LAP for Transit – illustrated handbook, Shakti Foundation

Delhi's TOD Plan defines project boundaries under three types; A. Redevelopment / Infill, B. Greenfield, and C. Retrofit.

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TOD Planning Regulations in Delhi Masterplan



	A. TRANSIT HUB AREA – 300m radius	B. INFLUENCE ZONE – 800m radius	C. CATCHMENT AREA – 2 km radius
1. FAR	3 to 5		< 3
2. MIX OF USES	Min 30% Residential, 10% Commercial, 10% Community facilities, 15 % Social housing, Remaining uses as per TOD Masterplan		As per non TOD city norms
3. GROUND COVERAGE	Maximum 40%		
4. MINIMUM SIZE OF DEVELOPMENT PARCEL	1 Hectare With atleast 50% of parcel area within 300m radius zone and 100% within 800m radius zone		NA
5. PUBLIC SPACE FACILITIES	Transit hub plaza, multi – modal interchange, bicycle rental, cycle / auto rickshaw stand, feeder bus stops, taxi dropoff, public toilets, informal vendors	Pedestrian, Bicycle and Informal Intermediate Paratransit (IPT) network for the Influence zone and Catchment area as per TOD Masterplan to ensure ease of access to and from Transit Hub	
6. PARKING (ECS per 100 sq.m built up area)	≤ 1.33	1.33	As per non TOD city norms

TOD Planning Regulations in Delhi Masterplan
Source: TOD – Delhi Masterplan 2021; Delhi TOD Policy Gazette – notified Dec 2019

TOD Norms in Delhi - MRTS Multi Modal Interchange Checklist

Walking Distance from Transit hub	Facility / Amenity and preferred location
Within 50m	Bus Stops; Vendor Zones; Cycle-Rental Station. • Locate Within station premises and/or Multi-Functional Zone (MFZ) within Road R/Ws, as per UTTIPEC Street Design Guidelines. • Provide cycle rental stands also at nearby important destinations, like schools, civic buildings, large offices, Malls, etc. and provide informational Signage at both end locations.
Within 100m	High occupancy Feeder Stop/ stand. • Within Multi-Functional Zone (MFZ) within Road R/Ws, as per UTTIPEC Street Design Guidelines.
Within 150m	Cycle-Rickshaw Stand; Cycle Parking stand; IPT/ Auto-rickshaw Stand. • Within Multi-Functional Zone (MFZ) within Road R/Ws, as per UTTIPEC Street Design Guidelines.
Beyond 150m	Private Car/ Taxi "Drop-off" location; Public Toilets. • Within Multi-Functional Zone (MFZ) within Road R/Ws, as per UTTIPEC Street Design Guidelines.
Within 300m	Enhanced Lighting. • Lighting of Bus stops, underside of Metro Stations and elevated walkways = 30 Lux. • Lighting of commercial streets, busy public spaces and important street crossings = 20 Lux. • Lighting of all other streets and public areas = 10 Lux. • For footpaths, yellow light is recommended to allow visibility of tactile pavers. Signage/ Way-finding information, Maps. • At Station Exists, display map of 500m influence zone around stations showing road network with names, major landmarks and destinations and location of all the above facilities within and outside station premises. • Roads within 500m influence zone to have Street name signage as per UTTIPEC guidelines. • All bus stops must display the route numbers and route description with list of major stops.
Beyond 300m (preferably)	Validated Car Parking facility (park & ride). • Private car parking facility may be provided only at Terminal Stations and major interchange stations.
Within 500m	Interchange between any two Rapid Transit Modes (e.g. Railway, Metro, RRTS, etc.) • Distance to be measured from centre of Station platforms.

MRTS Multi Modal Interchange Checklist

TOD Norms in Delhi - Parking Requirements

Mode	Parking space dimensions (in metres)	ECS (Equivalent Car Space)	% of total number of space allocated within 300m of MRTS Stations
Cars / Taxis	2.5 x 5	1	5%
2 Wheelers	1.5 x 2.5	0.25	10%
Auto Rickshaws	2.5 x 2.5	0.5	25%
Cycle Rickshaws	1.5 x 2.5	0.25	40%
Cycles	0.5 x 2	0.1	10%
Vans / RTVs / any Metro Feeder Services etc	12 x 3	3.5	10%

Indicative proportion of parking spaces to be provided at / near MRTS Stations

B.iii. East Delhi Hub - Karkardooma

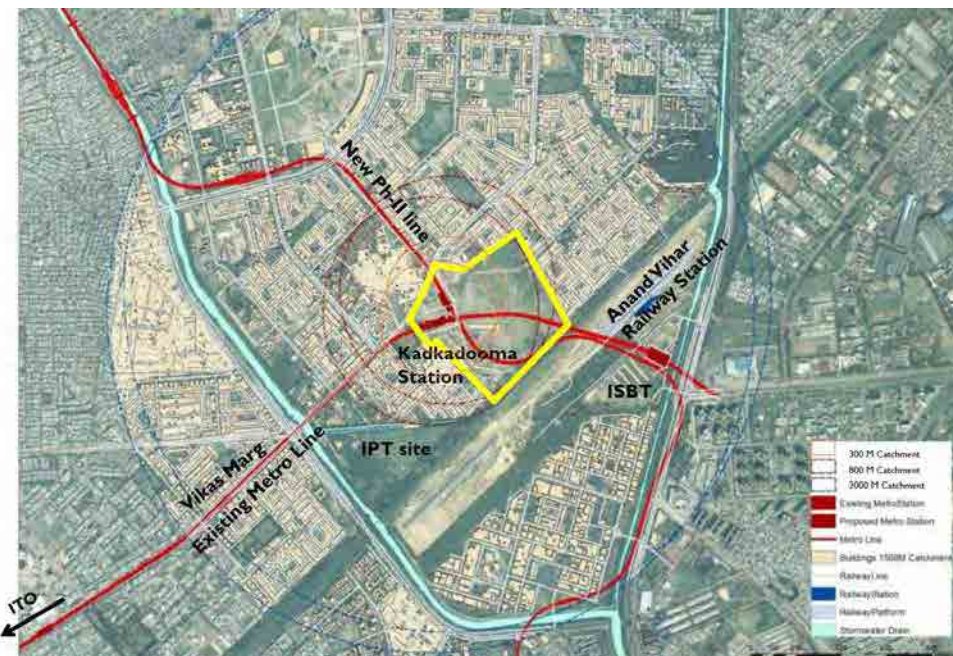
The Karkarduma TOD is the first of its kind pilot project being proposed by Delhi Development Authority (DDA).

The TOD Masterplanning for this site was started in 2013.

The project is currently getting implemented with NBCC (National Buildings Construction Corporation) as the executing agency for the project.

The 30 hectare land parcel for this project is owned by DDA.

Plan below shows the urban context for the TOD Masterplan. 300m, 800m, 2000m catchment zones around the Metro stations are defined.



Source: www.oasisdesigns.org

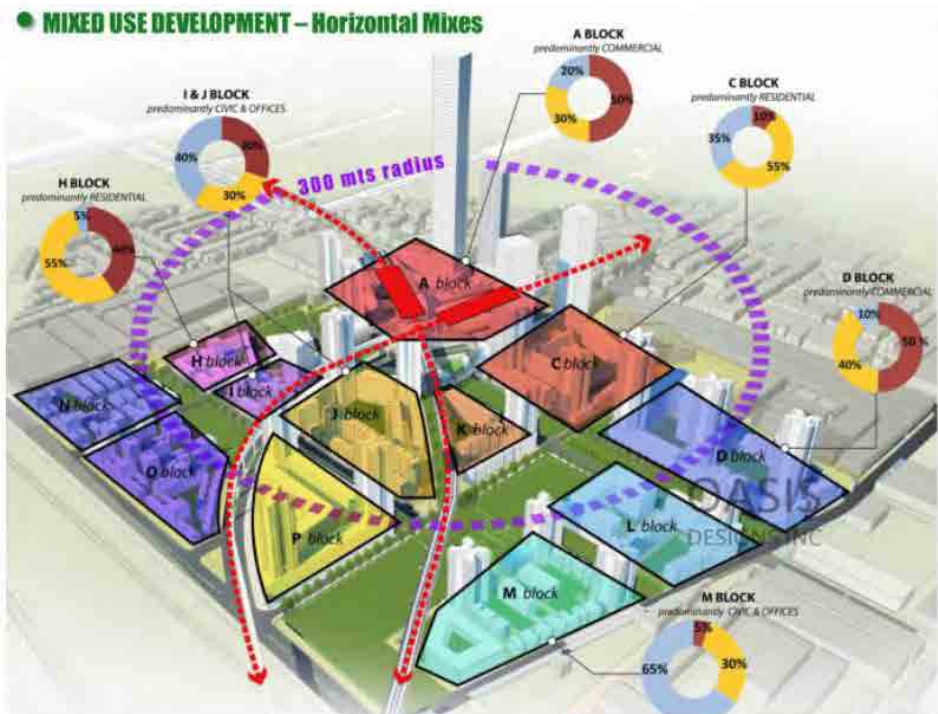


3D view of TOD Masterplan at Karkardooma

Source: www.oasisdesigns.org

A diverse range of uses – Commercial, Residential, Civic and Offices area proposed as part of the TOD Masterplan for East Delhi Hub, Karkardooma.

Network of green spaces and public spaces is proposed to integrate the overall Masterplan.



Source: www.oasisdesigns.org



SITE DETAIL	
Area of the Site	30 hac.
Gross FAR	1.9
Total Built up area	57 hac.
Land Area Distribution	
Area under Mixed use pocket	16.6 hac.
Area under Open space	6.1 hac.
Area under Roads	5.3 hac.
Area under Pathways	2.0 hac.

B.iv. Multi Modal Integration, Chattarpur Metro Station, Delhi

- Chattarpur Metro station currently has 20,000 + daily footfall of Metro users.
- This pilot project aims to enable convenient, modern, safe and universally accessible, barrier free environment for people to connect to different modes of transport like city buses, feeder buses, NMT and IPT.



Source: www.oasisdesigns.org

Elevated Walkway - ‘Sky-walk’

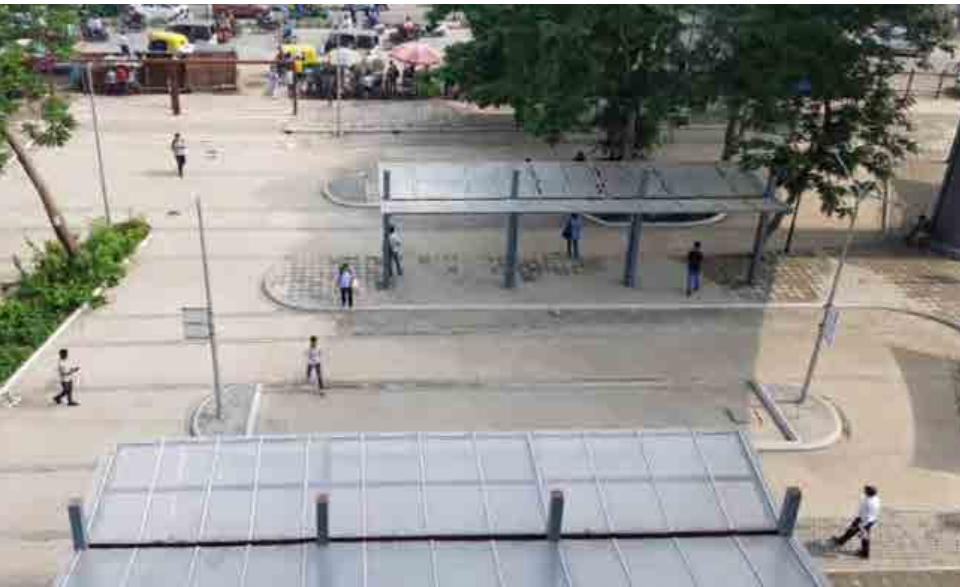
The design of the interface of the Metro station in terms of passenger flows has been conceived in vertical planning of activities and spaces. As part of this, the Station Area Plan for the Chattarpur Metro Station has proposed a ‘Sky-walk’. This is an elevated walkway at a height of 7.4m with respect to the ground level. This skywalk would offer seamless connectivity for Metro users for various activities in and around the Station area.



Source: www.oasisdesigns.org

Planning for Multi Modal Interchange

Space planned for IPT Transport modes- auto rickshaws, feeder buses etc



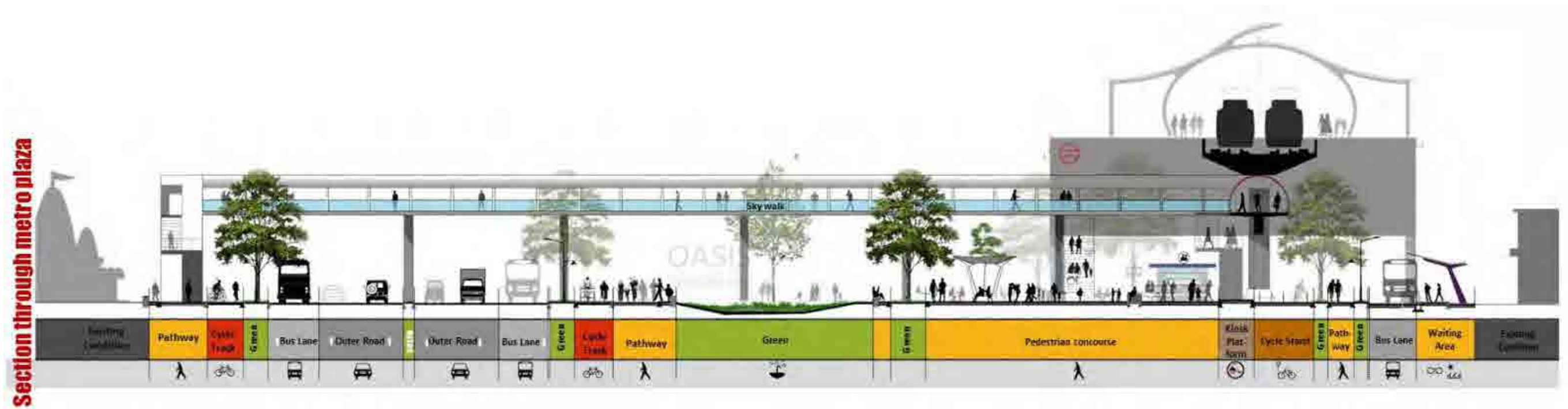
Source: www.oasisdesigns.org



Planning for Multi Modal Interchange

Spatial allocation for various para – transit / IPT modes, such that convenience to public transport users is maximised, and efficiency of all modes is improved.

Well designed public plazas, parks, shopping areas near the transit hub, creates vibrant spaces, encouraging people to use them as hangout spaces.



B.v. Nehru Place Metro Station, Delhi

Nehru Place Metro Station serves the busy Nehru Place business district.

The Station Area plan here includes station plaza, Restaurants & Food Courts under the Metro Viaduct and multi modal exchange facilities such as auto rickshaw waiting area and private vehicle parking.



1. Metro Station



2. Parking Area



3. Auto-rickshaw Waiting Area



3. Auto-rickshaw Waiting Area

The Station area planning of the Nehru Place Metro Station is a good example of Commercial utilization of the space under the Metro Viaduct itself and next to it.

Also, this is a unique example of TOD in Delhi which is driven by 'Food & Beverage' oriented Commercial Development.



4. Landscaped Station Plaza



5. Restaurants and Food Courts under the Metro Viaduct



5. Restaurants and Food Courts under the Metro Viaduct

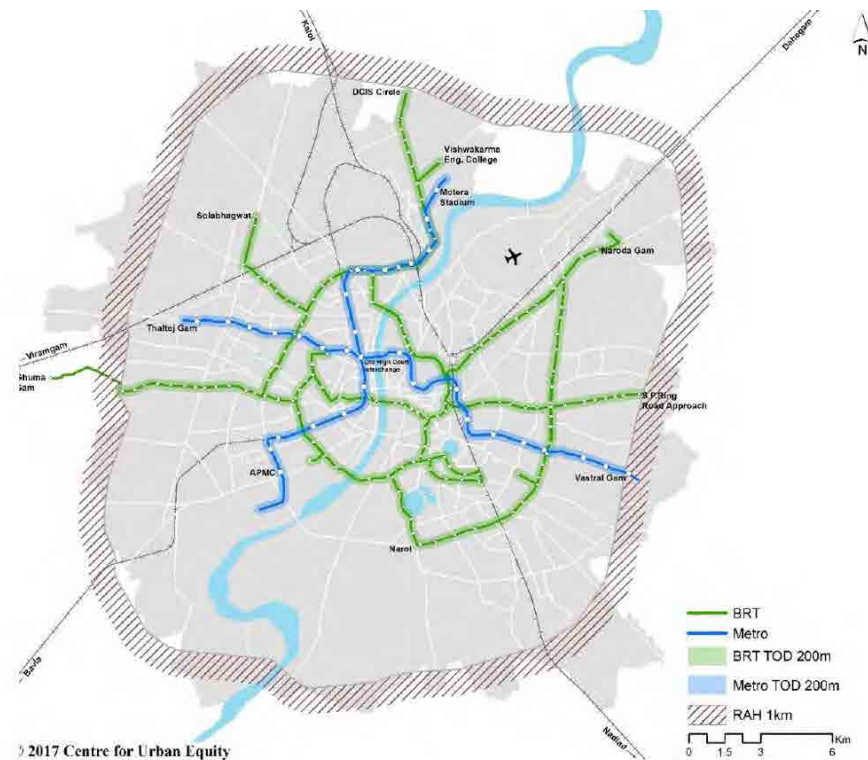


5. Restaurants and Food Courts under the Metro Viaduct

B.vi. TOD along BRT in Ahmedabad

TOD is proposed in Ahmedabad, 200m on either side of existing BRT network and future MRT network. AUDA (Ahmedabad Urban Development Authority) has taken up TOD along the BRT Corridor. Transit Oriented Zone (TOZ) along BRT will encourage pedestrian friendly environment and mixed use development. TOD strategy includes incentivizing Redeveloping the TOD Influence Zone (200m on either side of BRT) by increasing FAR from 1.8 to 4.0.

At the same time, additional land is identified to be taken into public ROW to add new streets and increase green cover.



Case Study Summary

Case study example	Useful takeaways
1. TOD Norms – National TOD Policy ratified in 2017	TOD Components and TOD Supporting Tools are useful pointers in setting out a comprehensive framework for Transit Oriented Development.
2. TOD Norms in Delhi	• Planning and Development Regulations in terms of FAR and mix of uses. • Parking norms and distribution of parking between various transport modes. • Checklist for planning and design of Multi Modal Interchange.
3. East Delhi Hub - Karkardooma	• Iconic tower as an anchoring landmark for TOD area. • Built up quantum for a 30 hectare land parcel, defined by a Global FAR of 1.9. • Landscaped areas, parks and public spaces are an essential aspect of placemaking for a TOD Masterplan.
4. Multi Modal Integration, Chattarpur Metro Station, Delhi	• Elevated walkway / skywalk in the space under the Elevated Metro viaduct. • Station area planning with dedicated areas for IPT – Auto Rickshaws, feeder buses etc. • Landscaped public spaces for convenient multi modal interchange for users.
5. Nehru Place Metro Station, Delhi	• Utilization of volume under the Metro viaduct and platforms for Commercial mixed uses. • Possibility of creating F&B related mixed use destination. • Landscape station plaza is important in creating a distinct identity for the TOD area.
6. TOD along BRT in Ahmedabad	• ‘Corridor model’ of Transit Oriented Development. • FAR incentive in TOD Corridor as a tool for catalysing urban redevelopment.

3

**TOD MASTERPLAN
PRINCIPLES & APPROACH**

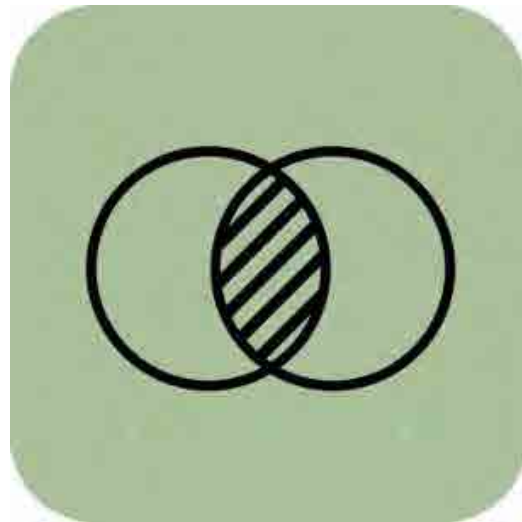
3.i Masterplan Boundary

The adjacent plan shows the Site boundary and Potential area for Transit Oriented Development that has been delineated keeping in mind :

- 500 – 1000 m radius from Metro Station
- Developable land available to the West of the Metro station, for potential Transit Oriented Mixed Use development.
- Possibility to integrate Canal edges bounding the site



3.ii. Design Principles



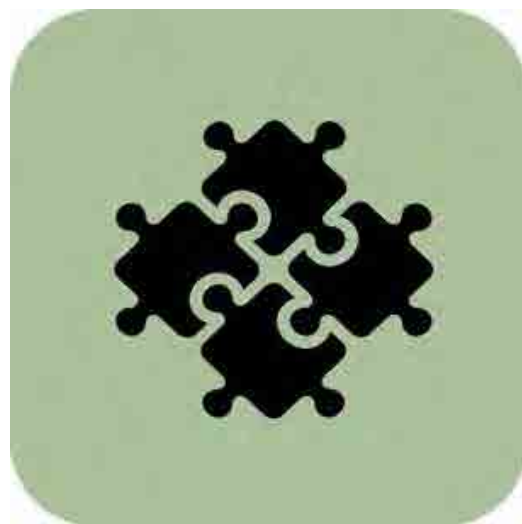
1. Synchronize with the larger urban context



Utrecht Station, Netherlands



Elevated plaza bridging across Metro viaduct – Pathumwan Skywalk, Bangkok



2. Connect the Station with the neighbourhood, both East and West of the transit corridor



Barcelona Sants, Spain



Utilize space under the viaduct



3. Integrate with Existing Canals & Blue – Green Network of the site context



Avon riverfront, New Zealand (BDP Project)



Barcelona Sants, Spain



4. Enhance 'Walking & Cycling', Public Space Experience



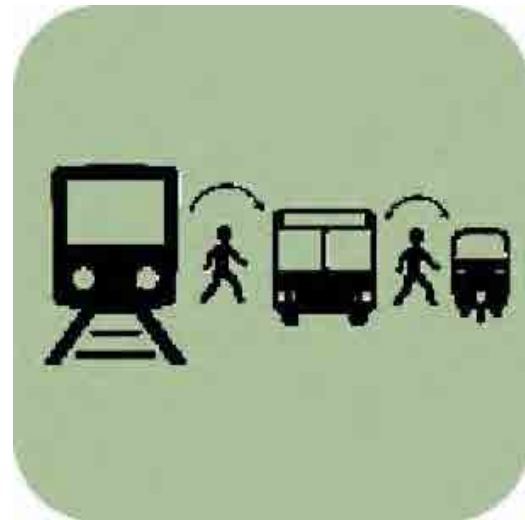
Separate walking / cycling from vehicular movement



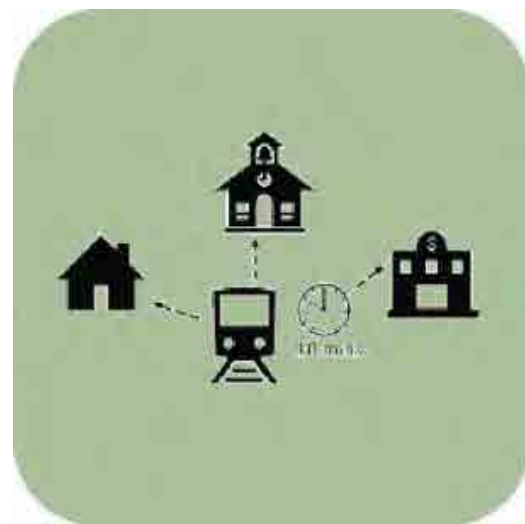
Safe crossing



Dedicated space for children / families



5. Multi Modal Transport Integration



6. Create Vibrant TOD Mixed Use Development as a new hub for Uttara / Northern Dhaka



Design for easy interchange to a variety of public and private transportation modes
(Source: Multi Modal Interchange at Chattarpur Metro Station, Delhi)



Design for High Density mixed use environment around the transport hub
(Source: TOD Masterplan for Taizhou Yintai City, Zhejiang, China – BDP Project)

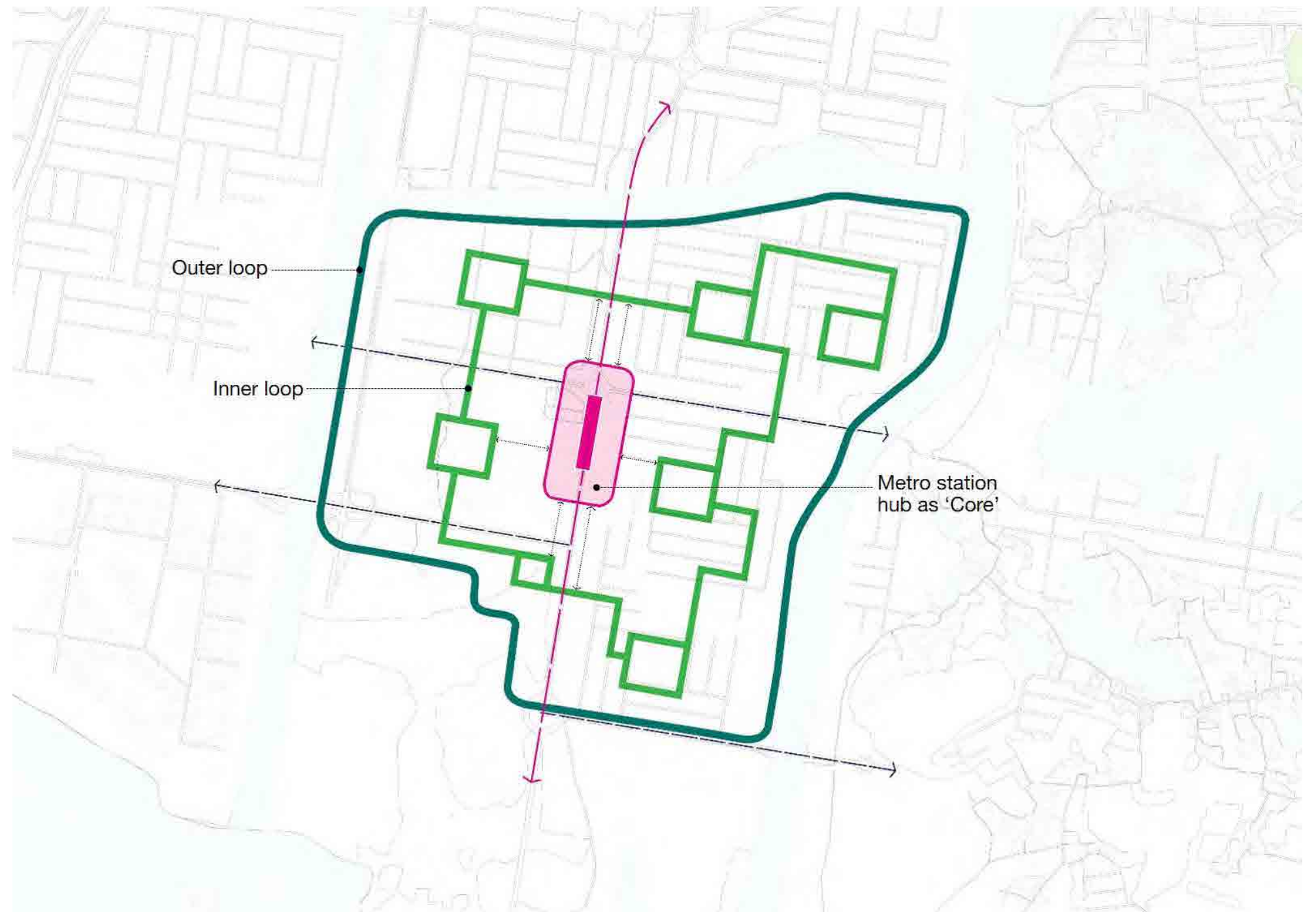
As a way to test out distinct Conceptual Approaches and ideas, and to engage the project stakeholders in an active discussion, it was decided to work out two possible conceptual approaches for the TOD Masterplan for Uttara Center.

The Masterplan Approach 1 is based on the idea of 'Outer Loop and Inner Loop' while the Masterplan Approach 2 is based on the idea of the 'Meandering Spine'.

3.iii. Masterplan Structure Approach 1

Outer Loop and Inner Loop

- This approach is based on the idea of having the Metro Station + mixed uses as the Core of the TOD Masterplan.
- Around this core, the TOD Masterplan is organized in terms of an inner loop and outer loop.



Concept Diagram

Outer Loop and Inner Loop - Precedents

This assortment of images shows precedents to enable visualization of the afore mentioned Concept intent of 'Outer Loop and Inner Loop'.



Station integrated with mixed use development - *Miami Central Station, USA*



Outer loop for canal front nature experience - *Avon Riverfront, New Zealand*



Inner loop as pedestrian oriented environment with active mixed use development around - *Musheireb Downtown Development, Doha*



Outer Loop and Inner Loop - Structure Plan

This plan shows the emerging Structure Plan for the Concept Approach of 'Outer Loop and Inner Loop'. The plan also shows an indicative demarcation of various mixed use zones for Transit Oriented Development around the Uttara Center Metro Station. The proposed TOD intervention is concentrated to the West of the North - South Metro Corridor.

CBD type development is proposed to the North side of the Metro Station, while Retail oriented mixed use development is proposed in the Central parcel adjacent to the Station. The Structure plan also suggests a gradual transition towards Residential development at the Southern end of the site, via an intermediate Residential mixed use zone. Also, a Wetland park is proposed in the Southern parcel, building on the existing low lying landscape feature in the site.

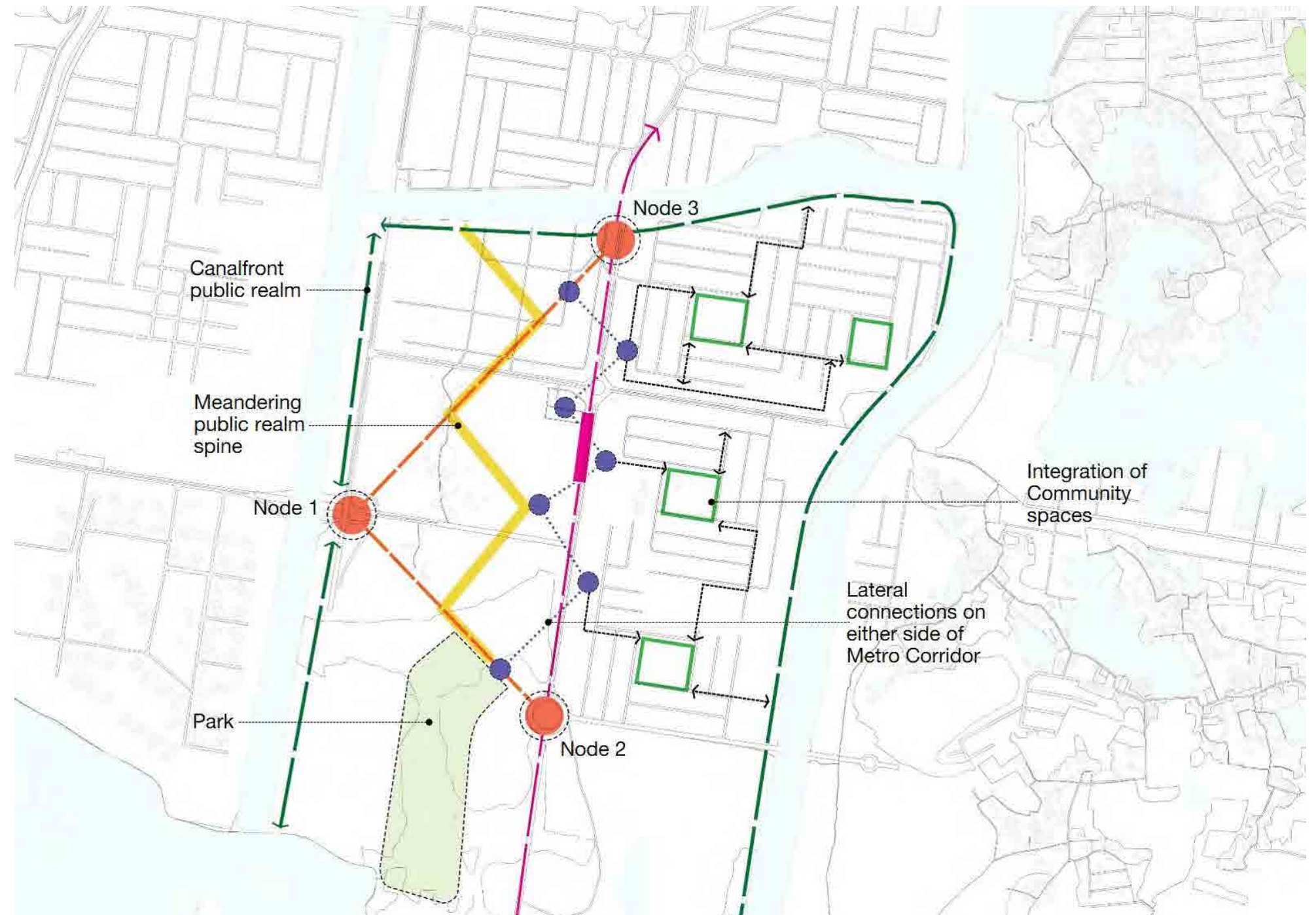
A contiguous Canalfront public realm around the site forms the Outer loop, while the Inner loop is a sequence of public spaces and landscaped areas helping to integrate with the area to the east of the Metro corridor.



3.iv. Masterplan Structure Approach 2

Meandering Spine

- This approach starts from creating strong connections between the 3 major nodes of the site.
- A meandering North – South public realm spine anchors the TOD development. Meandering spine also nullifies rigidity of the existing grid.
- Lateral connections are formed on either side of the Metro corridor to weave the TOD development together.



Concept Diagram

Meandering Spine - Precedents

This assortment of images shows precedents to enable visualization of the afore mentioned Concept intent of ‘Meandering Spine’.



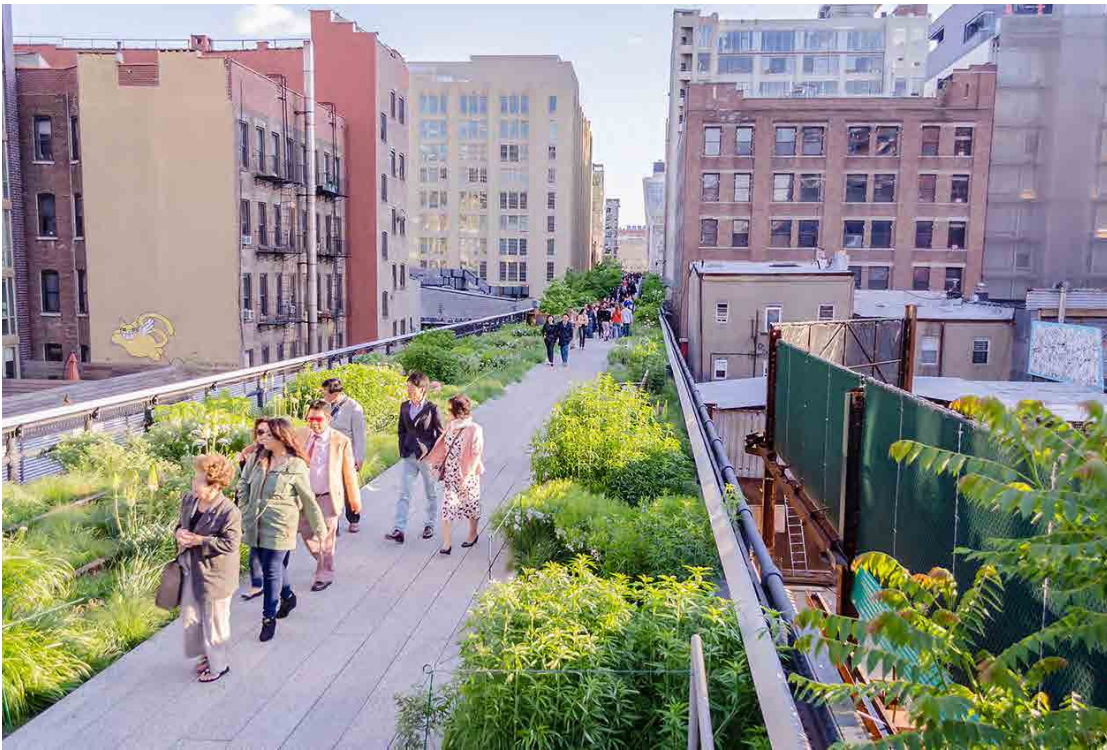
Downtown development around meandering green space - *Greenway, Boston*



Elevated public spaces and connections – *Highline, New York*



Linear public realm / green spine to anchor the development - *Linear Grand Canal Park, Mexico City*



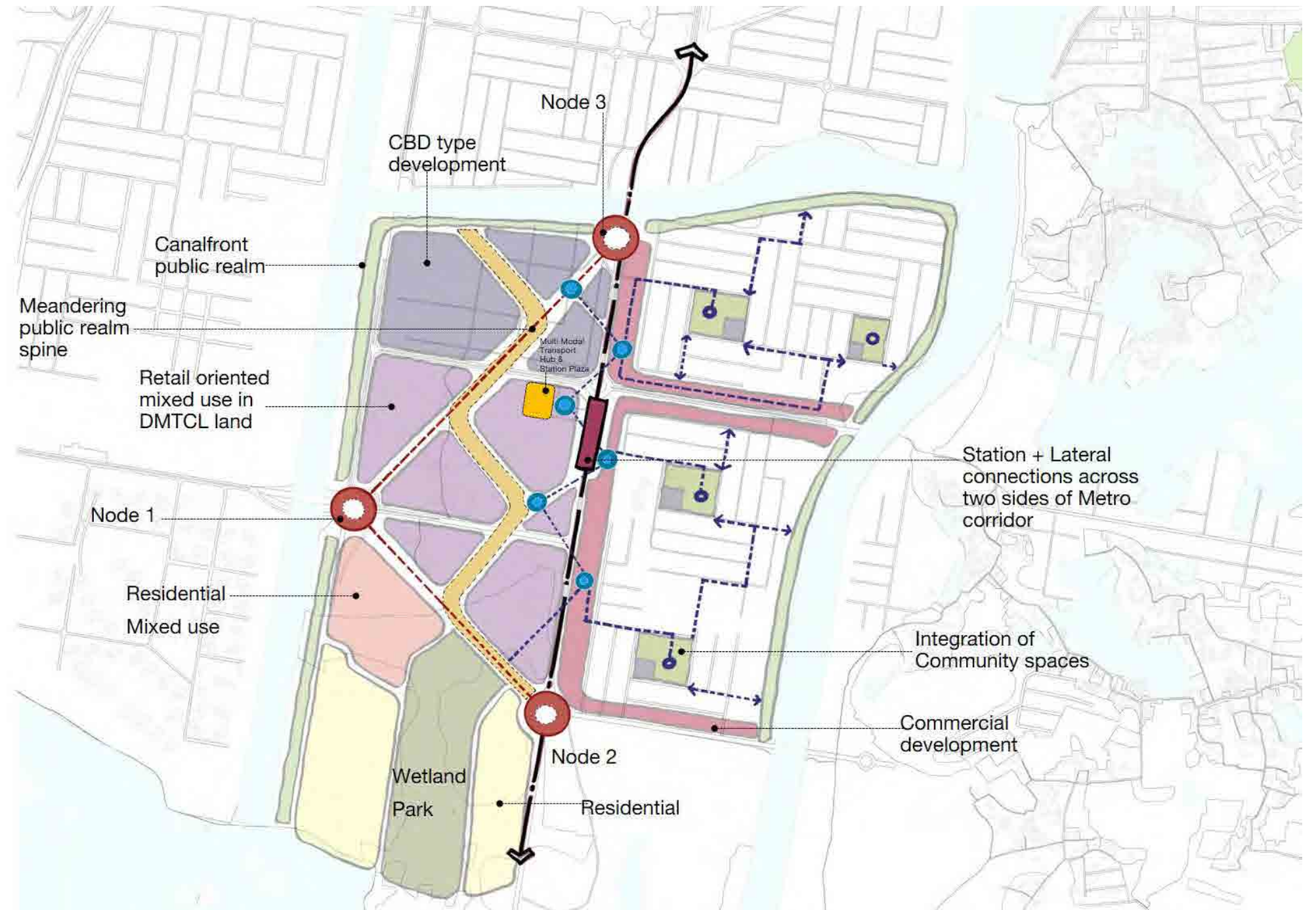
Elevated public spaces and connections – *Highline, New York*

Meandering Spine - Structure Plan

This plan shows the emerging Structure Plan for the Concept Approach of 'Meandering Spine'. The plan also shows an indicative demarcation of various mixed use zones for Transit Oriented Development around the Uttara Center Metro Station. The proposed TOD intervention is concentrated to the West of the North - South Metro Corridor.

Like in the Approach 1 (Outer Loop and Inner Loop), CBD type development is proposed to the North side of the Metro Station, while Retail oriented mixed use development is proposed in the Central parcel adjacent to the Station. The Structure plan also suggests a gradual transition towards Residential development at the Southern end of the site, via an intermediate Residential mixed use zone. Also, a Wetland park is proposed in the Southern parcel, building on the existing low lying landscape feature in the site.

Three major nodes (Node 1, Node 2, Node 3) are emphasised, and these nodes inturn become the anchors to define the Meandering spine. The Meandering spine then forms a linear North - South public realm which the hold the development together. As offshoots of the meandering spine, zig zag crossovers are formed across the Metro corridor, which integrate the Eastern side of the site.



3.v. Masterplan Structure Approach preferred by project stakeholders

On 19th May 2022, a Vision Workshop was organized with the JICA project team and various project stakeholders as the participants. During this workshop, the two Masterplan Structure Approaches were presented to the project stakeholders.

In the conclusion to the workshop, the project stakeholders conveyed their preference for the Masterplan Structure Approach 1, i.e. 'Outer Loop and Inner Loop'.

It was therefore decided to take up the further development of the TOD Masterplan for Uttara Center, based on this Structure Plan.



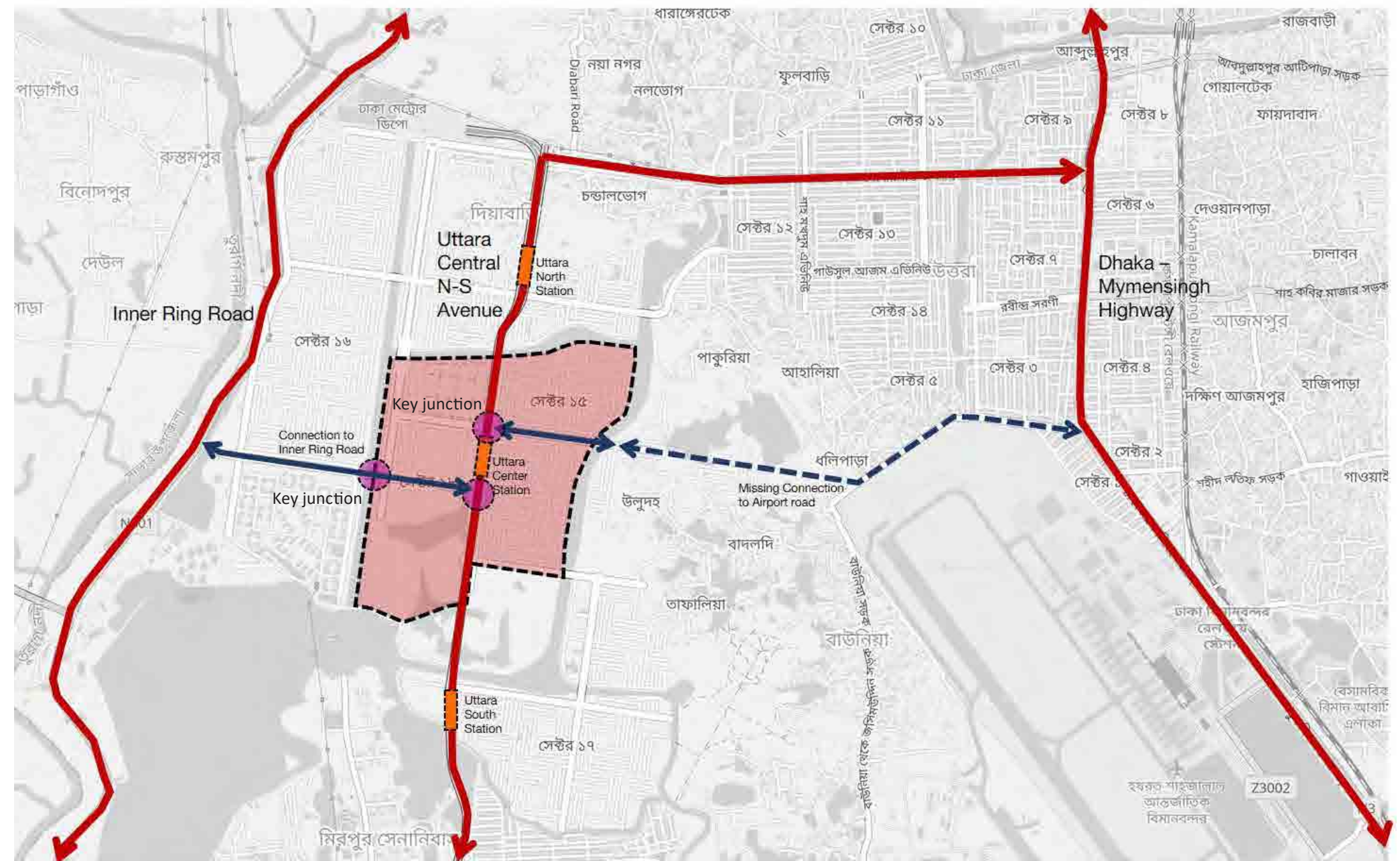
4

TOD MASTERPLAN STRATEGIES

4.i. Uttara Center – Larger Area Context

Before getting into the details of the Masterplan Strategies for the Uttara Center site, a macro scale overview of the larger site context has been considered. This plan shows the major roads in around the site context to be taken into cognizance. The North South Road aligned with the Metro Corridor is the major vehicular spine for the site. Then, there is a major East - West road going west from the TOD site towards the future Inner Ring Road and Circular Railway line.

The plan also shows that the major road going East from the TOD site ends abruptly. Here, there may be an opportunity at the macro scale to create a new road connection further east towards the Airport Road.



4.ii. Uttara Center TOD Site

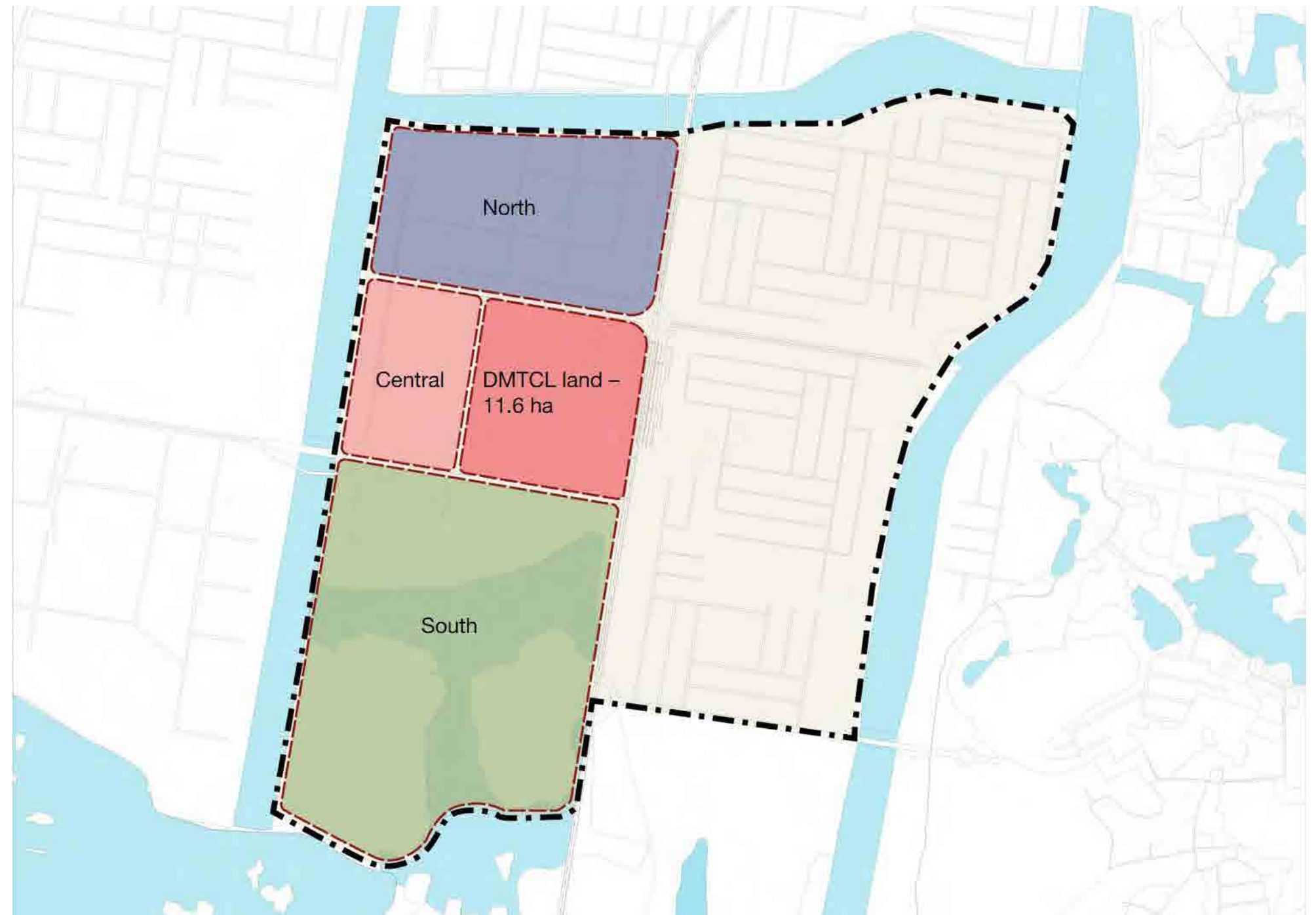
This plan shows the TOD site boundary defined for the Uttara Center Station area. The extent of the TOD site as indicated covers an area of about 1.8 sq.km or about 181 hectares.



4.iii. 3 major development parcels – North, Centre, South

Then, the 3 major emerging development parcels for the Uttara Center TOD area defined:

- North parcel
- Central parcel including DMTCL land of 11.6 hectares
- South parcel



4.iv. 3 focal open spaces – North, Centre, South

Then we form three focal open spaces to form the nucleus of the development in the three development parcels:

- North plaza
- Central plaza
- Wetland Park in the South



4.v. Core, Inner Loop and Outer Loop

Then, the Masterplan area is begun to be tied up by means of an integrated public space network in the form of 'Core, Inner Loop and Outer Loop'.

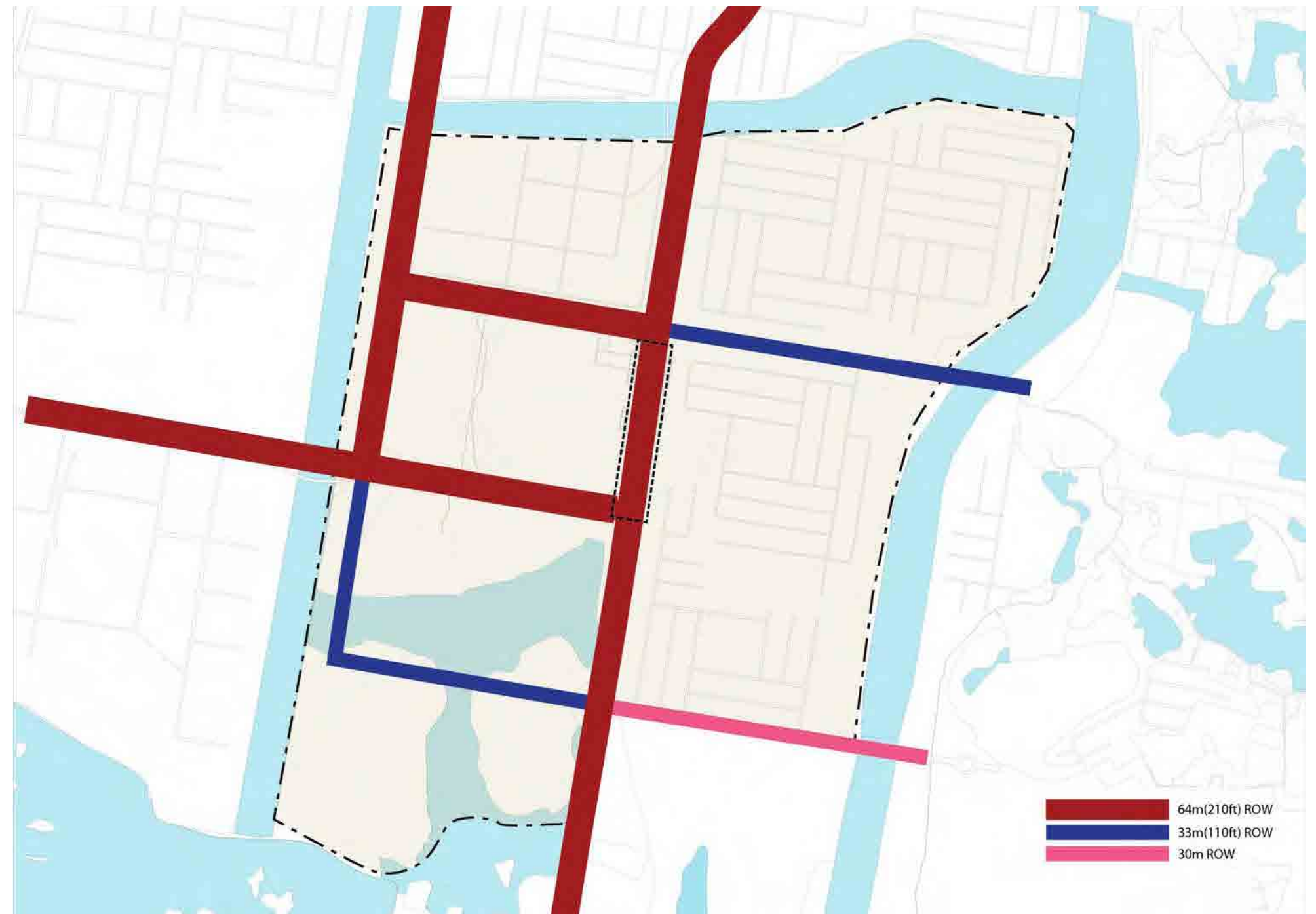


4.vi Road Connections & Hierarchy

Current RAJUK plan

The current road network (shown in the adjacent plan) as planned by RAJUK has been examined. Following are some issues that have come up in this assessment:

- There is a lack of legible hierarchy in the current plan for Road Network.
- There is also a lack of contiguity of the Road Network.
- The major Road spine of the area, i.e, the Central North South Road aligned with the Metro Corridor doesn't come across as the main North – South spine. This road needs to read as the prominent road for the Uttara Center TOD area.

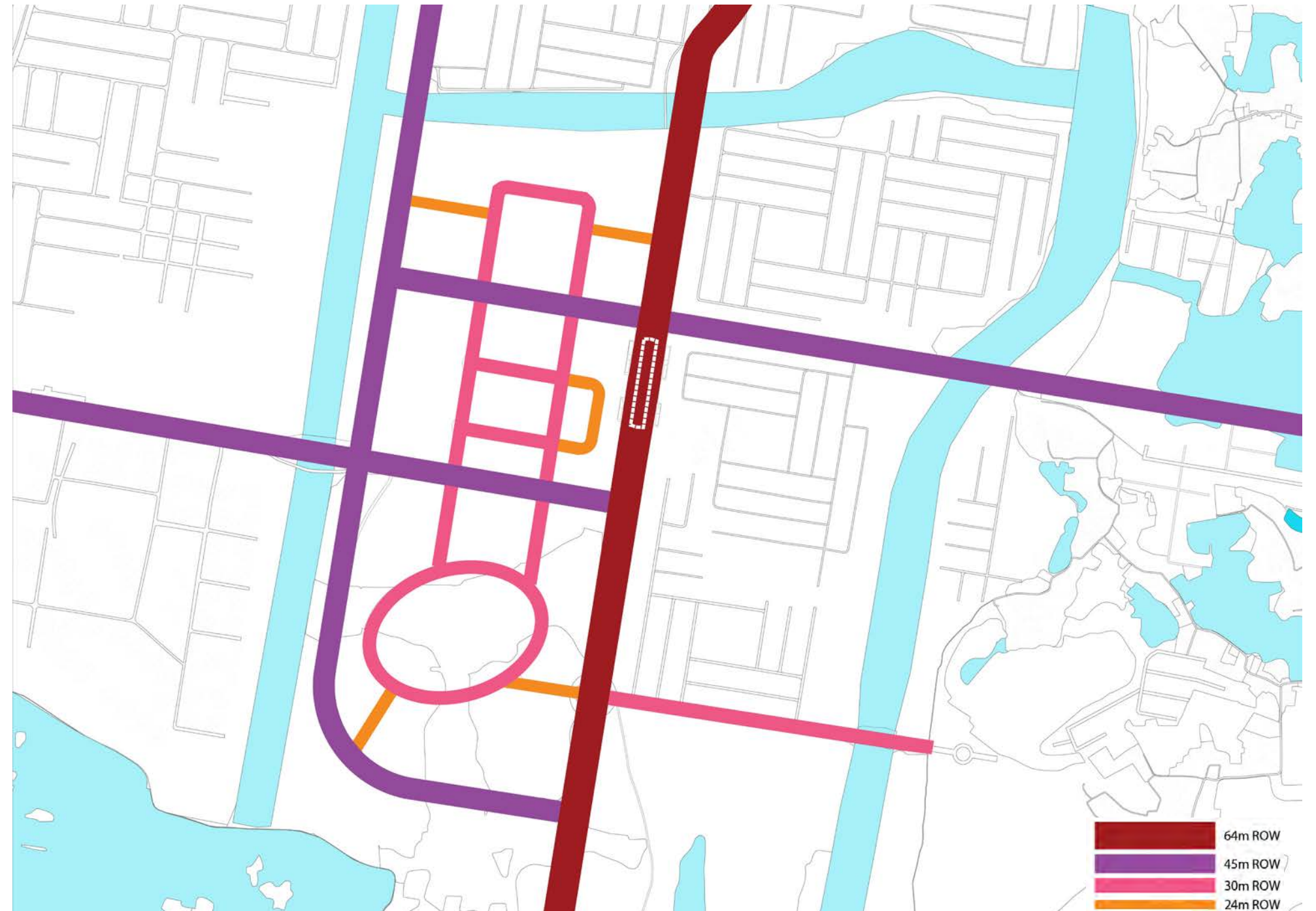


4.vi Road Connections & Hierarchy

Our Proposal

The adjacent plan shows our proposed Road Network, keeping in mind our TOD Masterplan approach and design principles, and also with cognizance of the major existing roads of the area to be integrated with.

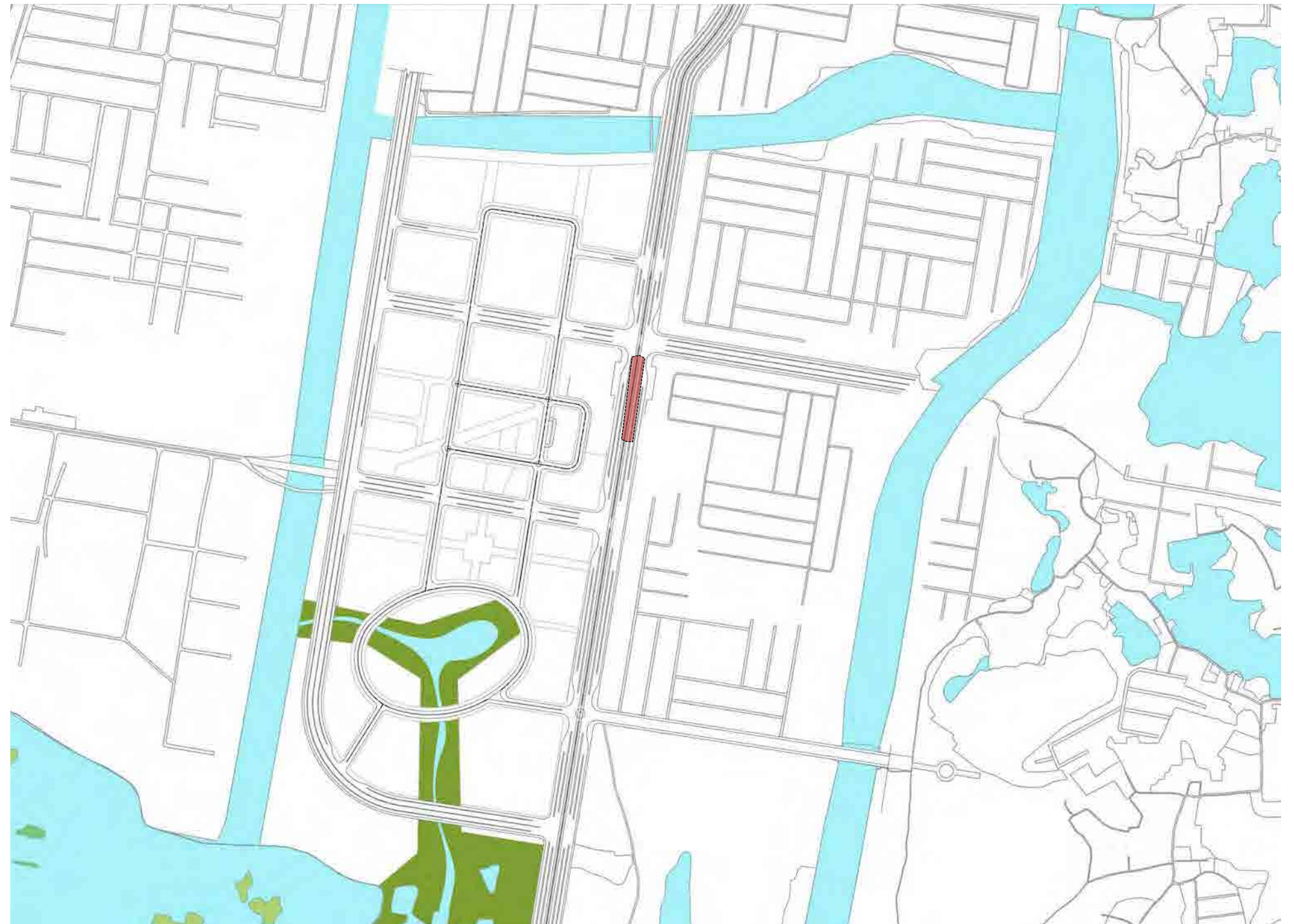
- With this proposed road network, we achieve a more legible hierarchy.
- This is a more contiguous Road Network – Internal (within the Masterplan) and making connections beyond
- Central North South Metro Corridor emphasised as the main North – South spine, and clearly reads as the prominent Road of the TOD area.



4.vii. Open Space Structuring

A. Wetland park – a unique landscape asset of the site

We feel there is immense potential in utilizing the low lying land in the Southern parcel and it's interface with the lake to the South, to create a unique 'destination' public space for people of Uttara and beyond – the 'Uttara Wetland Park'.



4.vii. Open Space Structuring

B. Central Plaza, North Plaza and North - South Connections

From the Wetland Park in the South, a strong North South green spine is formed punctuated by a Central Plaza and a focal open space in the North.



4.vii. Open Space Structuring

C. Diagonal East West Vista leading to the Station Plaza / Uttara Center Metro Station

A strong public realm spine is formed to create a transverse diagonal connection from the prominent junction at the South West, upto the Station and culminating with a Station forecourt or Station plaza. This urban design gesture will create an impressive vista towards the station and offer convenient access, orientation to users of the Metro Station and TOD area.



4.vii. Open Space Structuring

D. Pocket Greens

Pocket Green Spaces are then distributed in the Masterplan area to form a tertiary level open space structure



4.vii. Open Space Structuring

E. Outer Loop Canal Promenade

The overall open space structure of the Masterplan is then tied together by the Outer loop promenade interface with the Canals around the site.



4.viii. Development Plots

Development Plots are then defined based on the afore mentioned Road Network and Open Space Structure for the Masterplan.



4.ix. Emerging Built Form

Based on the plots defined, suggestive built form is created as appropriate to the various plots of the Masterplan in terms of building use, character and scale. The built forms of the various plots then come together to bring about the overall urban form of the emerging TOD Masterplan for Uttara Center.



4.x. Nodes & Landmarks

The Urban Design structure for the Masterplan is composed by creating strong Nodes and Landmarks. The nodes and landmarks will create strong placemaking markers which will lend identity and sense of place to the TOD neighbourhood.



4.xi. Gateway Buildings & Urban Anchors

The Urban Design composition is further articulated by forming Gateway Buildings and Urban Anchors



5

**EMERGING
TOD MASTERPLAN**

5.A Uttara Center – Illustrative TOD Masterplan



5.B. 3D Aerial Views of the TOD Masterplan Proposal



Aerial view of the overall TOD Masterplan area



Aerial view of the Station Quarter

5.C Character areas of the Masterplan

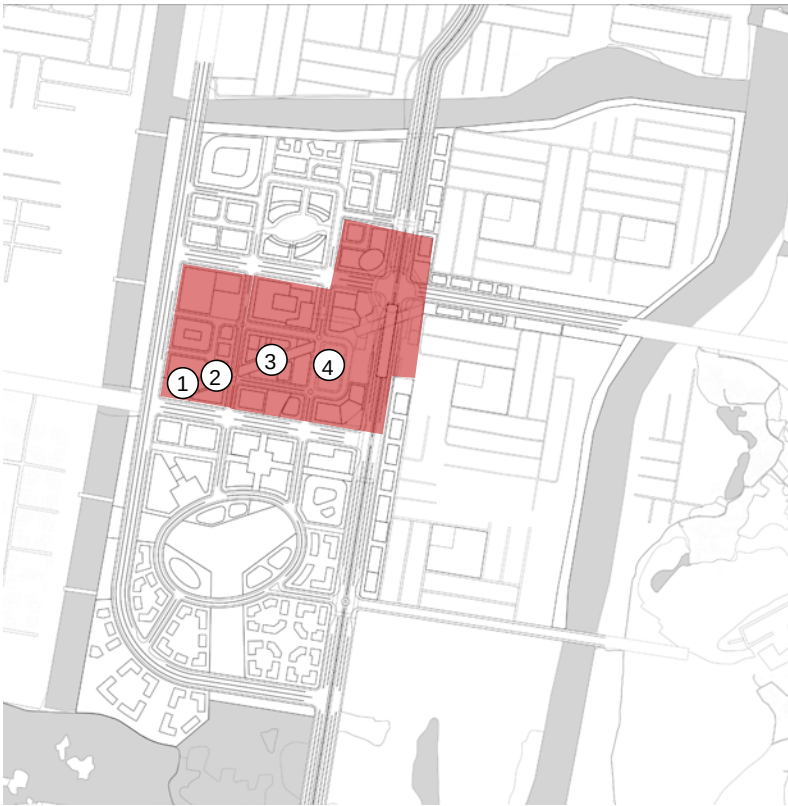
i. TOD Core Area



1. Gateway buildings



2. Vista towards the station



4. Station plaza
(Source: Paya Lebar Quarter (Station area TOD) Singapore)



3. Vista towards the station

5.C Character areas of the Masterplan

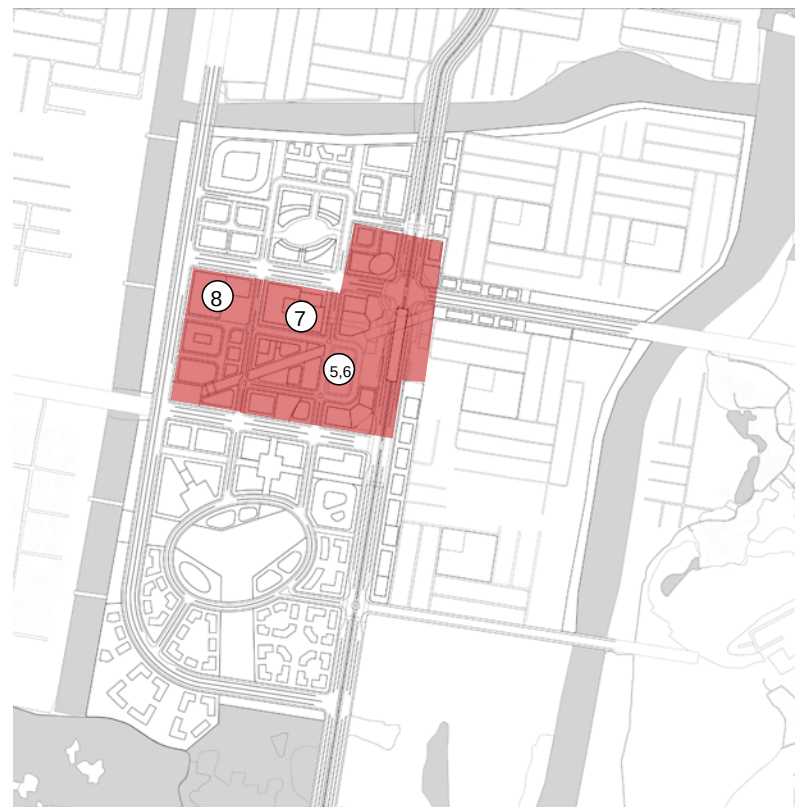
i. TOD Core Area



5. Activities in Station plaza



6. Activities in Station plaza



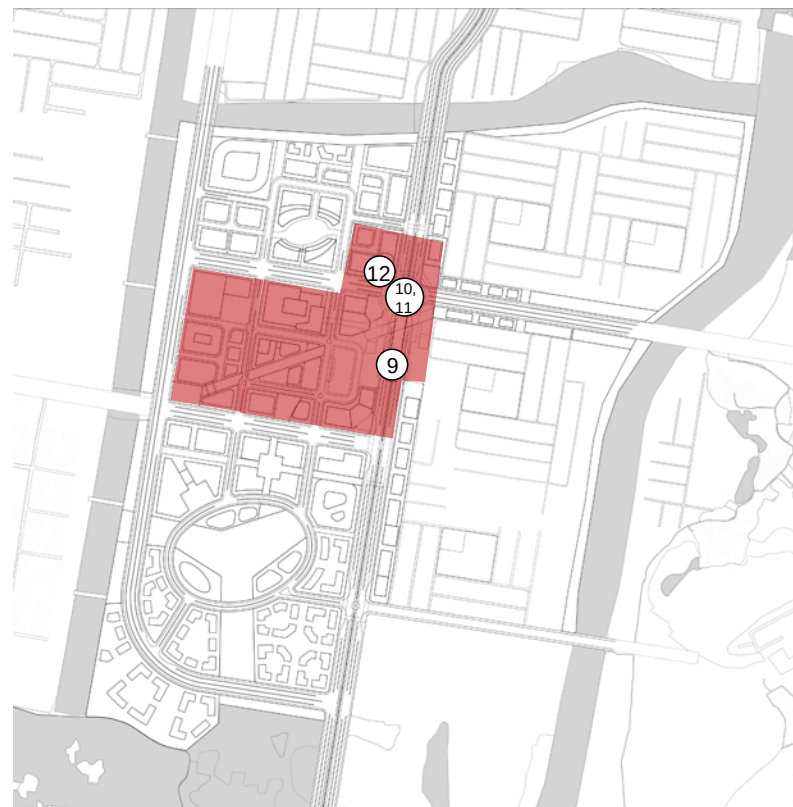
8. Hotel & Convention Center
(Source: Paya Lebar Quarter (Station area TOD) Singapore)



7. Landmark Retail mixed use development

5.C Character areas of the Masterplan

i. TOD Core Area



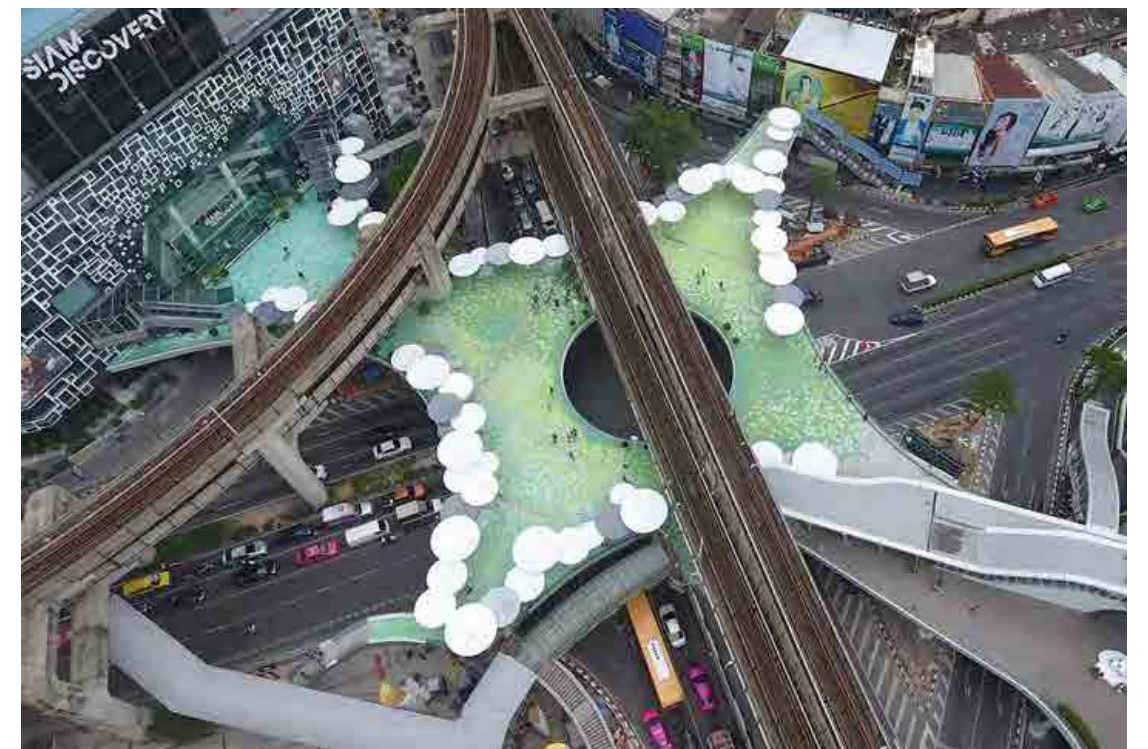
9. Elevated Walkways along Metro corridor (*Bangkok Skywalks*)



10. Landmark elevated walkway ring (*Ring of Jiaozi, China*)



12. Elevated plaza tying up buildings



11. Elevated plaza tying up buildings (*Pathumwan Skywalk, Bangkok*)

5.C Character areas of the Masterplan

ii. Business Park / Business District



13. Office buildings clustered around landscape public spaces



14. Commercial + Residential Mix



16. Canalfront promenade



15. Stepped terraced built form

5.C Character areas of the Masterplan

iii. Wetland Park & Institutional area



17. Wetland Park (Jurong Lake Gardens, Singapore)



18. Wetland Park (Bishan Park, Singapore)



20. Landmark Institutional / Cultural buildings



19. Landmark Institutional / Cultural buildings

5.C Character areas of the Masterplan

iv. Residential Development



21. Green Terraced Residential buildings



22. Green Terraced Residential buildings



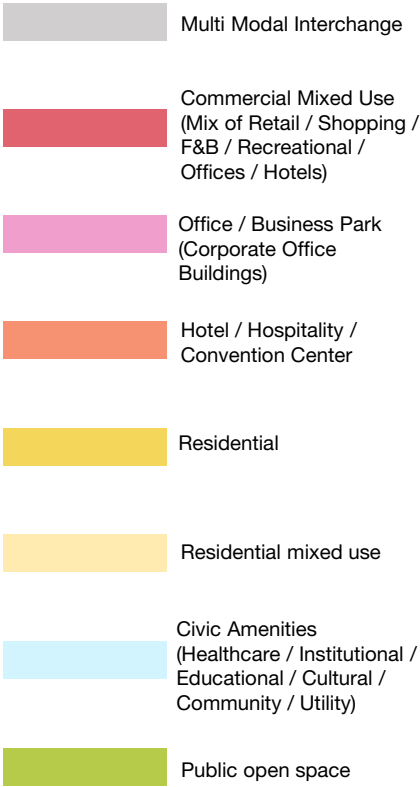
24. Public realm interface with water



23. Public realm interface with water

5.D. Masterplan Layers

i. Landuse Plan



Land use	Land area (in sq.m)	Percentage
Office / Business Park	50173	6%
Commercial Mixed Use	162005	18%
Hospitality / Convention	61461	7%
Civic Amenities	63276	7%
Residential	150635	17%
Residential mixed use	41181	5%
Public open spaces	189220	21%
Roads	176254	20%
Total	894205	100%

Land extent of
TOD Intervention (894,205 sq.m)



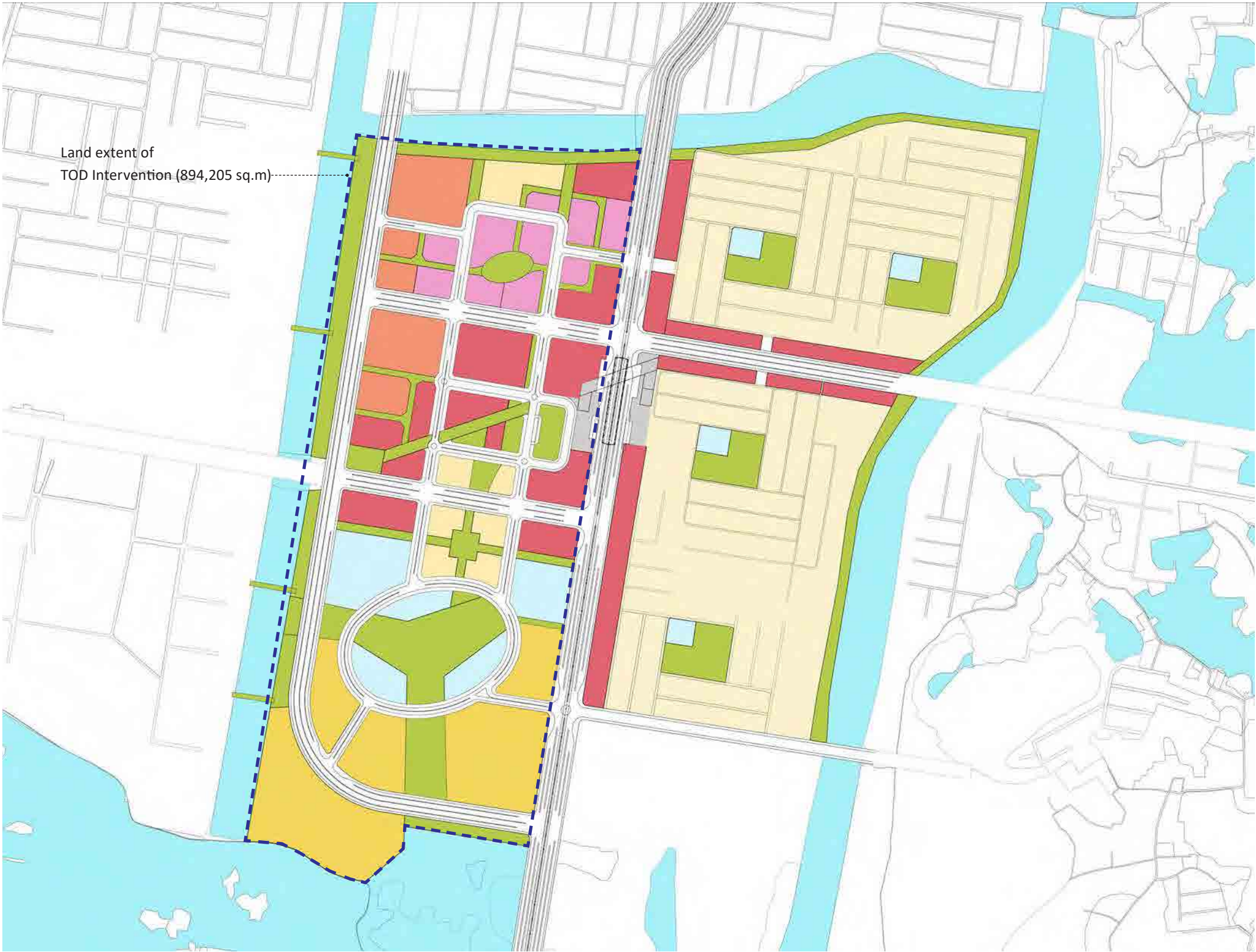
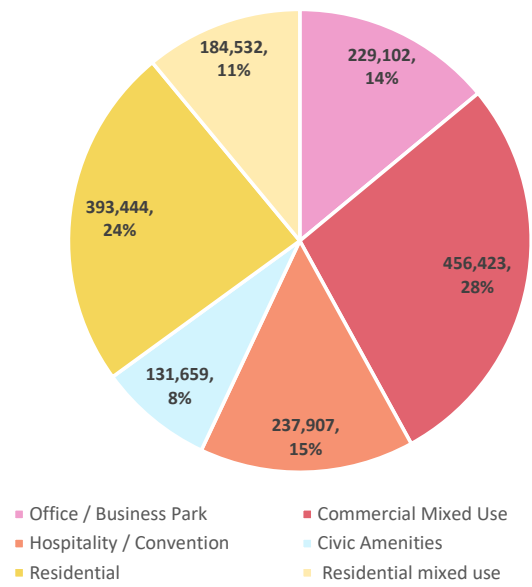
ii. Emerging Development Programme

Total Gross floor area (Built up area) achieved in the proposed Masterplan: **1,633,067 sq.m**

Total Land area / Site area for intervention: **about 894,205 sq.m or 89.4 hectares**

Therefore, Global FAR achieved in the Masterplan is ‘1.83’

Pie chart showing breakdown of Total Gross Floor Area (Built up area) in sq.m achieved for different landuses in the Masterplan:



iii. Built Area Schedule

Plot no	Plot area (in sq.m)	Plot use	Gross floor area in sq.m		FAR	No of units	Remarks
1	116,000	Commercial mixed use	1a	74988	3.91	NA	
		Commercial mixed use	1b	20850	2.68	NA	
		Commercial mixed use	1c	14700	2.92	NA	
		Commercial + Resi mix	Commercial	5512	6.13	NA	
			Residential	24804		310	80 sq.m gross floor area per resi. Unit
		Commercial + Resi mix	Commercial	2756	3.90	NA	
			Residential	16536		207	80 sq.m gross floor area per resi. Unit
		Commercial mixed use	1f	63460	5.77	NA	
Commercial mixed use	1g	63000	4.85	NA			
		Subtotal		286,606	2.47		
2	19,983	Hotel & Convention Center	Convention Center	22,846	1.74	NA	
			Hotel	12,000		NA	
3	8,639	Hotel		62,029	7.18	NA	
4	5,421	Commercial mixed use		7,920	1.46	NA	
5	6,683	Commercial mixed use		48,124	7.20	NA	
6	4,290	Commercial mixed use		25,675	5.98	NA	
7	4,889	Hotel		24,000	4.91	NA	
8	4,889	Office / Business park		24,000	4.91	NA	
9	4,483	Hotel		21,648	4.83	NA	
10	4,483	Office / Business park		21,648	4.83	NA	
11	23,467	Hotel		95,384	4.06	NA	
12	12,357	Commercial + Resi mix	Commercial	22,064	3.89	NA	
			Residential	26,060		326	80 sq.m gross floor area per resi. Unit
13	2,635	Office / Business park		9,632	3.66	NA	
14	9,316	Commercial mixed use		31,668	3.40	NA	
15	5,944	Office / Business park		24,000	4.04	NA	
16	5,988	Office / Business park		29,968	5.00	NA	
17	10,872	Commercial mixed use		41,880	3.85	NA	
18	2,934	Office / Business park		15,450	5.27	NA	
19	5,500	Office / Business park		23,100	4.20	NA	
20	4,900	Office / Business park		23,152	4.72	NA	
21	4,900	Office / Business park		23,152	4.72	NA	
22	8,000	Office / Business park		35,000	4.38	NA	
23	11,129	Commercial mixed use		23,658	2.13	NA	
24	4,622	Commercial + Resi mix	Commercial	3,200	4.85	NA	
			Residential	19,200		240	80 sq.m gross floor area per resi. Unit
25	4,622	Commercial + Resi mix	Commercial	3,200	4.85	NA	
			Residential	19,200		240	80 sq.m gross floor area per resi. Unit
26	8,178	Commercial mixed use		40,500	4.95	NA	
27	14,882	Education		55,698	3.74	NA	
28	15,089	Residential		50,200	3.33	628	80 sq.m gross floor area per resi. Unit
29	22,958	Hospital		65,000	2.83	NA	
30	4,848	Commercial + Resi mix	Commercial	3,000	4.33	NA	
			Residential	18,000		225	80 sq.m gross floor area per resi. Unit
31	4,848	Commercial + Resi mix	Commercial	3,000	4.33	NA	
			Residential	18,000		225	80 sq.m gross floor area per resi. Unit
32	6,831	Community facilities		3,534	0.52	NA	
33	9,496	Community facilities		3,343	0.35	NA	
34	9,109	Community facilities		4,084	0.45	NA	
35	43,356	Residential		139,920	3.23	1749	80 sq.m gross floor area per resi. Unit
36	18,384	Residential		52,290	2.84	451	116 sq.m (1250 sq.ft) gross floor area per resi. Unit
37	15,496	Residential		51,090	3.30	440	116 sq.m (1250 sq.ft) gross floor area per resi. Unit
38	58,310	Residential		99,944	1.71	769	130 sq.m (1400 sq.ft) gross floor area per resi. Unit
		Total	1,633,067				

Note:

1. The above mentioned Gross floor areas are Built up area for each plot in the Masterplan, i.e including circulation areas, common areas and utilities

2. The above mentioned Gross floor Areas are not inclusive of building areas for parking (basement parking / multi level parking / stilt parking)

3. Saleable areas for commercial and office buildings are to be assessed and determined based on the above derived gross floor areas



iii. Built Area Schedule

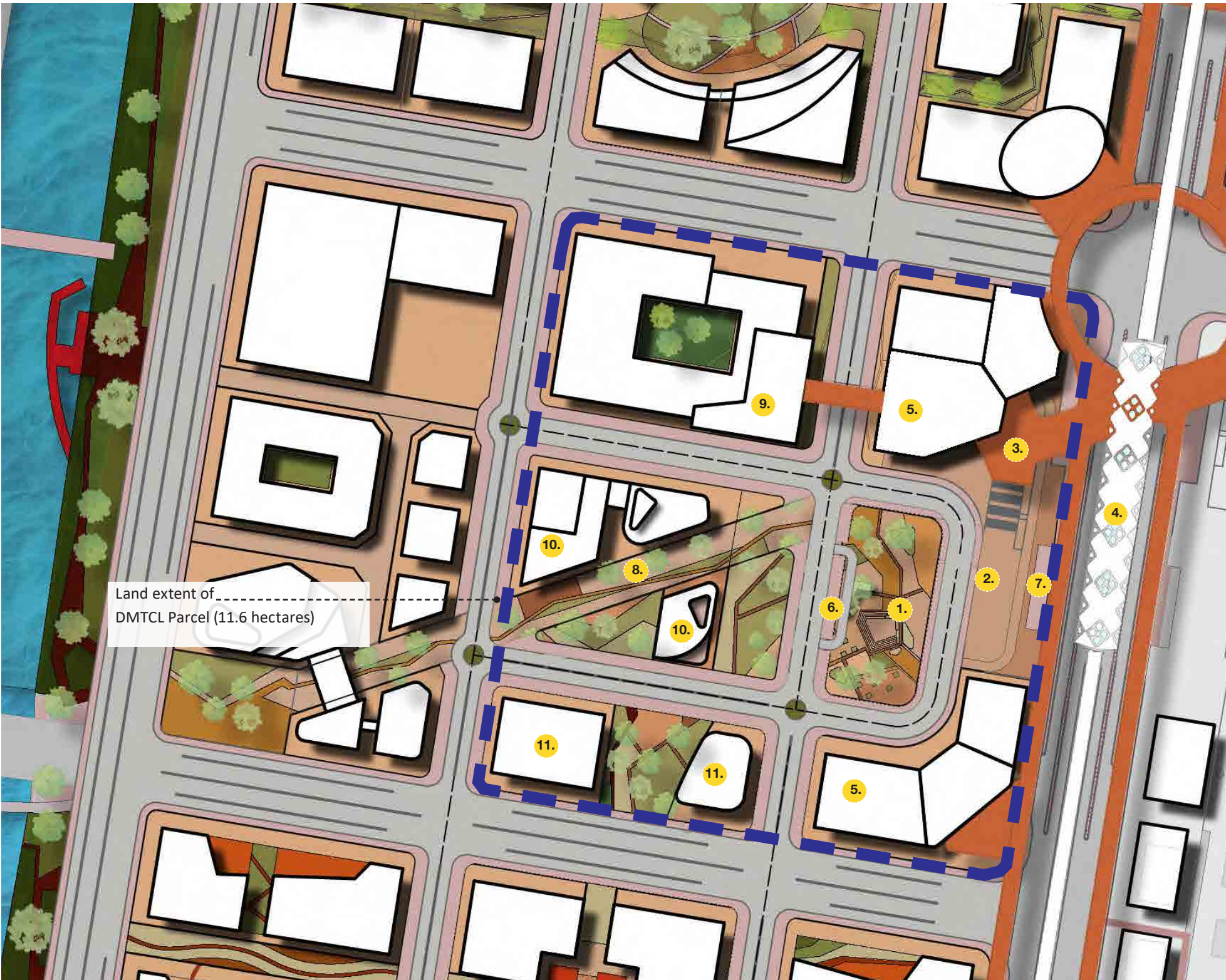
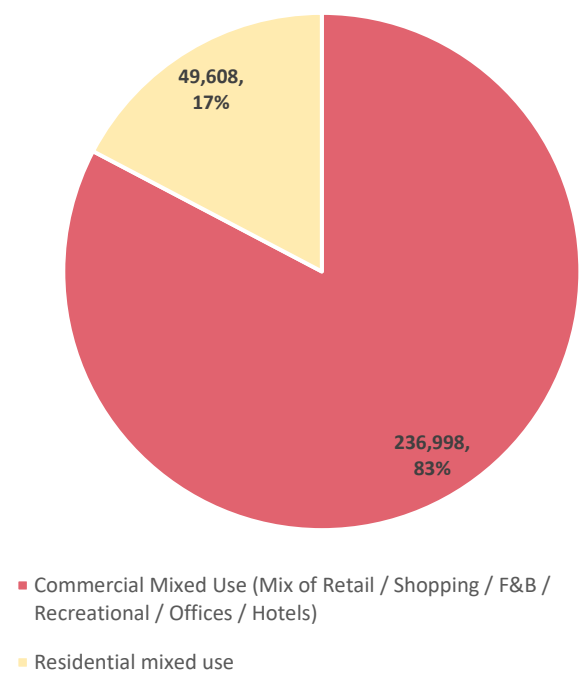
5.4.3.2 DMTCL Parcel

Total Land area / Site area allocated to DMTCL: **11.6 hectares**

Total GFA achieved in the DMTCL parcel: **286,606 sq.m**

Global FAR achieved for the DMTCL parcel is around ‘2.47’

Pie chart showing breakdown of Total Gross Floor Area (Built up area) in sq.m achieved for different landuses for the DMTCL Parcel:



1.

Station Plaza
2.

Station Forecourt / Drop-off & Pickup
3.

Elevated Walkway
4.

Metro Station
5.

MMTH (Multi Modal Transit Hub) & Commercial Mixed use
6.

Lay-by for taxis / cabs
7.

Lay-by for feeder buses
8.

Landscaped Street / Vista
9.

Landmark Retail & Mixed use building
10.

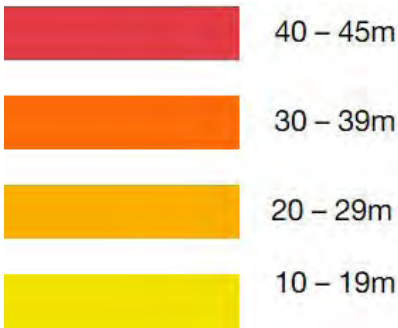
Commercial Mixed use building
11.

Residential Mixed use building

iv. Building Heights

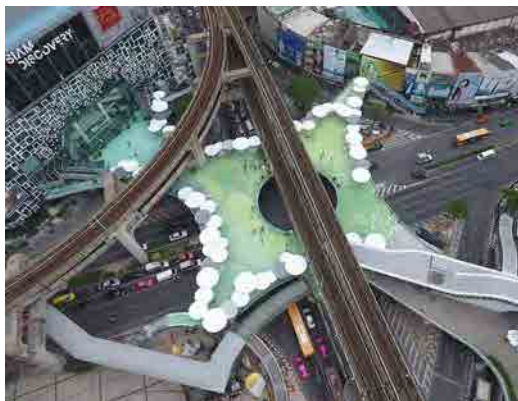
This Plan shows the range of building heights for the development based on the emerging Urban form and Urban Design three dimensional composition for the TOD Masterplan.

The height limit of 45m as required by the Airport / Aviation Regulations has been taken into cognizance, and this sets the upper limit for the maximum possible building height in the Masterplan. With this limit, a gradation of building heights is created with a mix of highrise, midrise and lowrise buildings. This lends variety and richness to the built form and skyline of the envisaged development in the Masterplan.



v. Elevated Walkways and Connections

This Plan shows the system of elevated walkways and connections that is proposed in the TOD Masterplan. This would direct pedestrian connections to buildings from the Metro Station at the Elevated Concourse level, i.e, +7.5m with respect to the ground level.



-  Elevated Walkway at +7.5m lvl
-  Building datum at +7.5m lvl



vi. Parking Strategy

With the larger TOD objective to discourage personal vehicle usage, optimize parking demand and promote sustainable mobility opportunities, the Masterplan proposes the following parking strategy as illustrated in the adjacent plan. A **Core area** is demarcated around the Metro Station (about 300 - 500 m range). In this core area, parking will not be provided for every plot, but only in identified common parking areas. Outside this core area, parking each individual plot would be allowed.

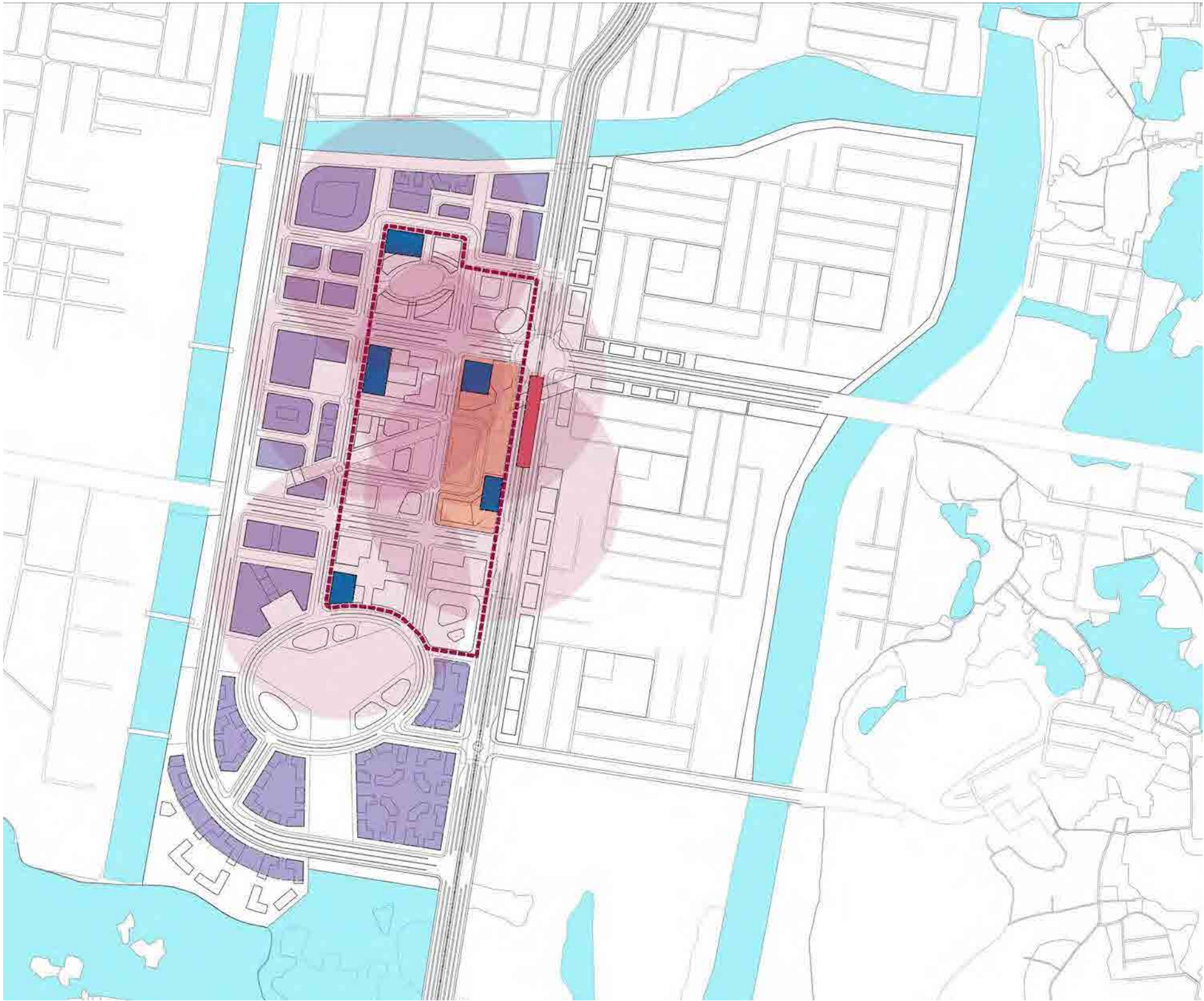
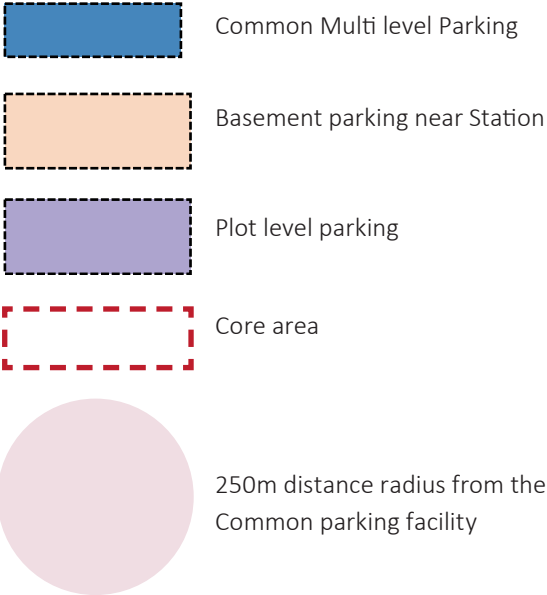
Overall about **12250** ECS (Equivalent Car Space) parking units are being provided for the whole Masterplan, i.e, an **overall 0.75 ECS per 100 sq.m BUA**.

Basement parking near Station – 2700 ECS parking units
Multi level car parking areas – 2300 ECS parking units

i.e 5000 ECS parking units serving the Core area

Plot level parking in outer plots – 7250 ECS parking units(0.75 ECS per 100 sq.m BUA for each of the outer plots)

It is to be noted that, ECS parking units would comprise cars, two wheelers and any other vehicle types, as required by various plots of the Masterplan.

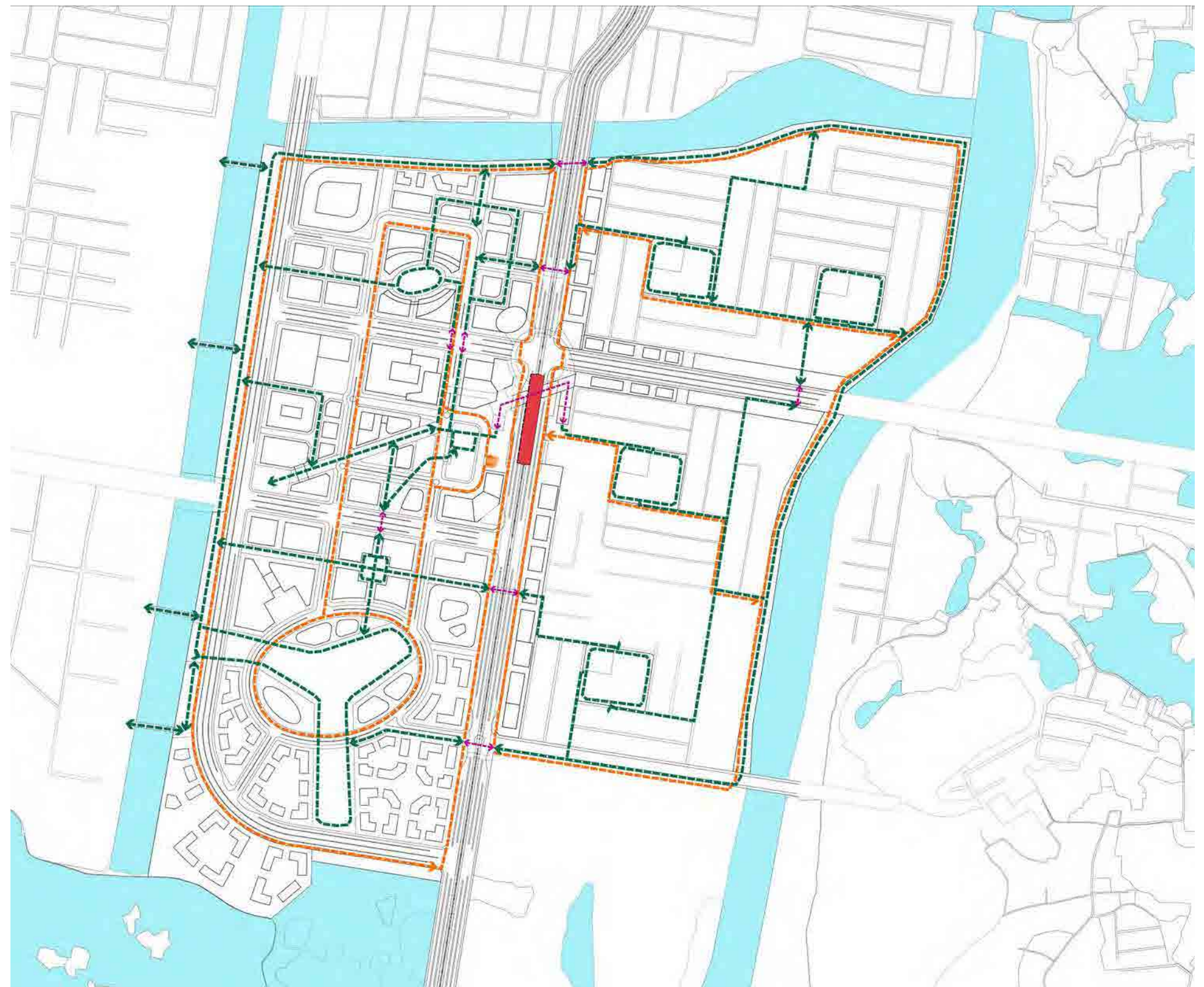


vii. Walking & Cycling Network

As shown in the adjacent plan, the Masterplan proposes an extensive network of pathways for pedestrians and cycling. This would enhance people's experience in the TOD Neighbourhood and make it convenient for them to engage in the various activities and spaces provided for in the Masterplan.



-  Pedestrian movement network
-  Bicycle movement network
-  Elevated Crossover

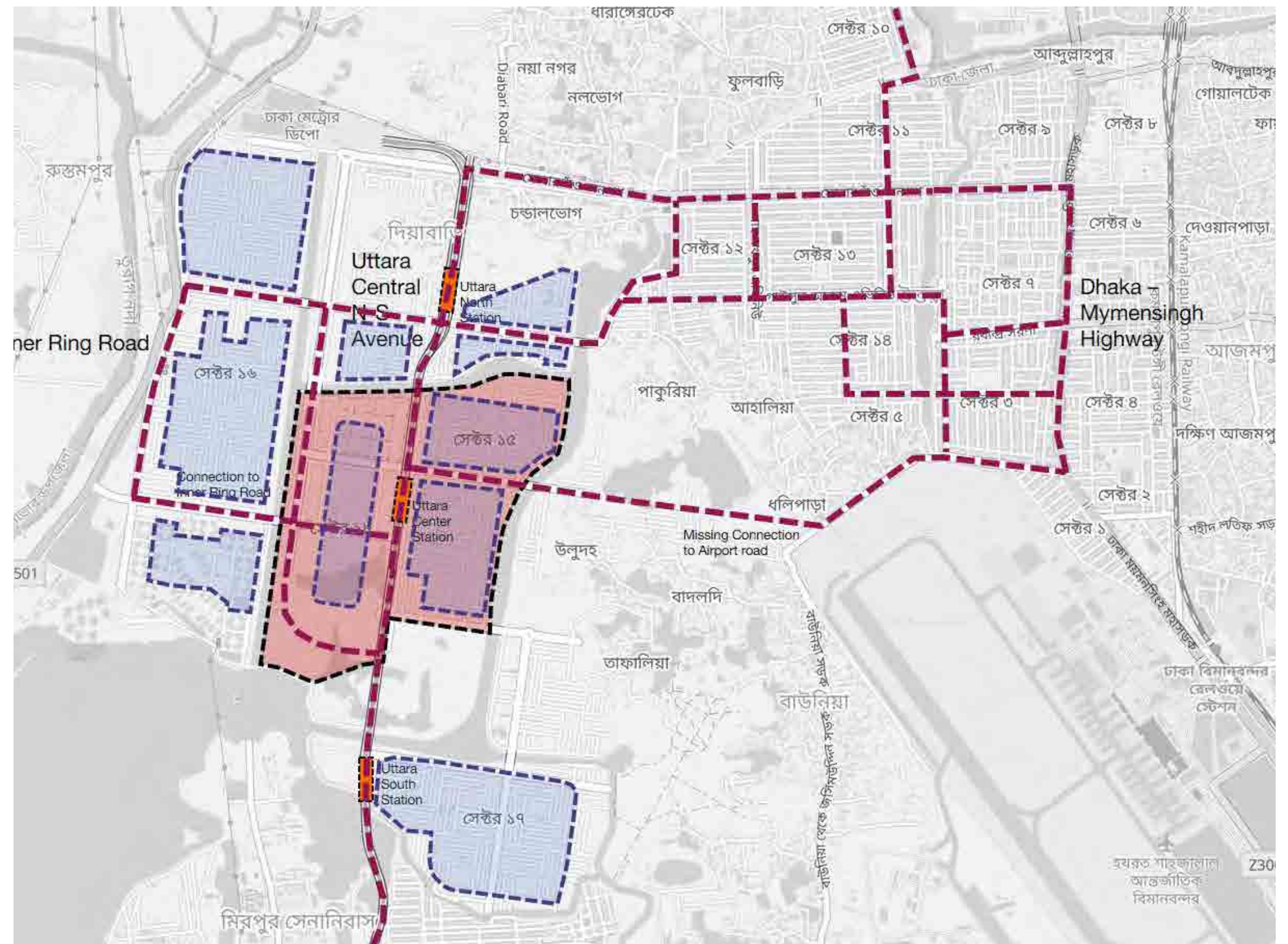
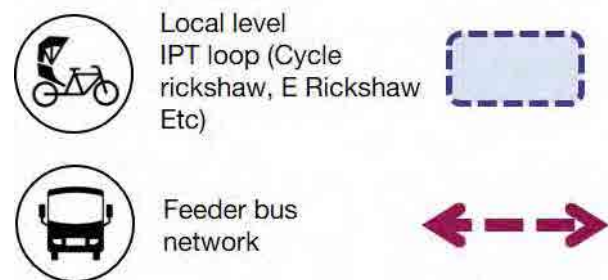


viii. Multi Modal Interchange

Macro Scale

The adjacent plan shows the Macro Scale strategy for Multi Modal Integration.

- The Uttara Center TOD Neighbourhood will be well connected with the surrounding areas of the City by means of a Macro scale Feeder bus network.
- In tandem with the macro scale feeder bus network, it is suggested to have local level IPT (Intermediate Para Transit) loops with local transport modes such as Cycle Rickshaw, E Rickshaw etc, which will offer last mile connectivity to people.



viii. Multi Modal Interchange

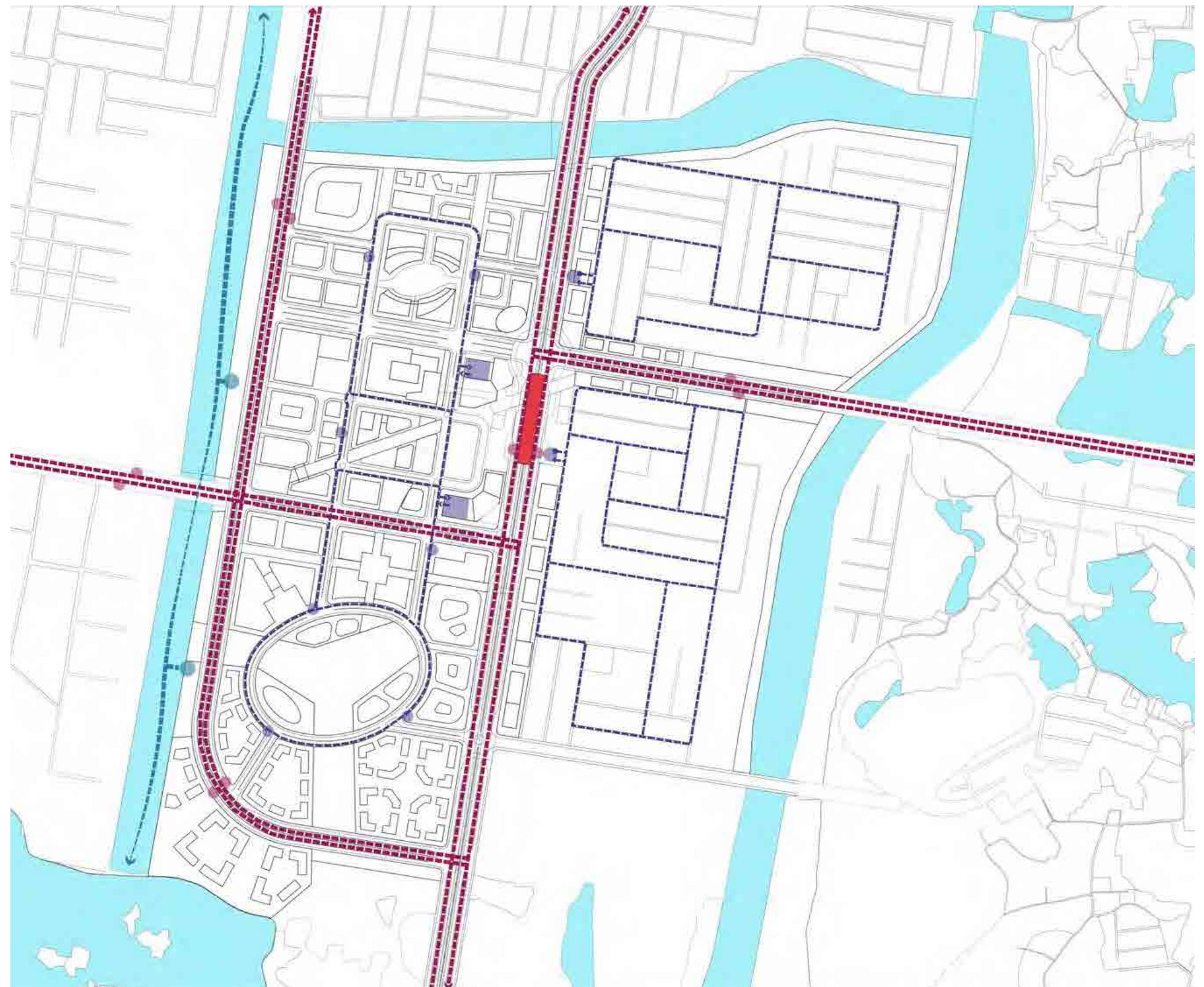
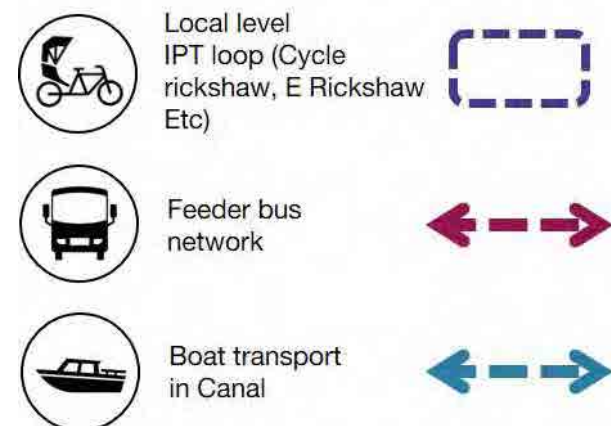
Area Level

This plan shows further detail of the strategy explained for the Macro scale.

The feeder bus system will connectivity for Metro users from the Uttara Center station, to travel to and from surrounding areas beyond the Uttara Center TOD Neighbourhood.

Within the TOD Neighbourhood, people can use the Intra-Area IPT loops which help people reach their respective destinations within the area.

Also, the idea of Boat transport in the canals around Uttara Center, has been integrated, offering people the additional transport modal choice in the TOD Neighbourhood.



viii. Multi Modal Interchange

Area Level

This plan shows the design intent of the Masterplan in providing for the necessary spaces and facilities for Multi Modal Interchange as part of the Station area planning for the Uttara Center Metro Station.

For users of the Metro Station and the TOD Neighbourhoods, the Multi Modal Interchange hub would provide for transition across various transport modes, while also offering people landscaped public spaces as part of the Station Plaza.

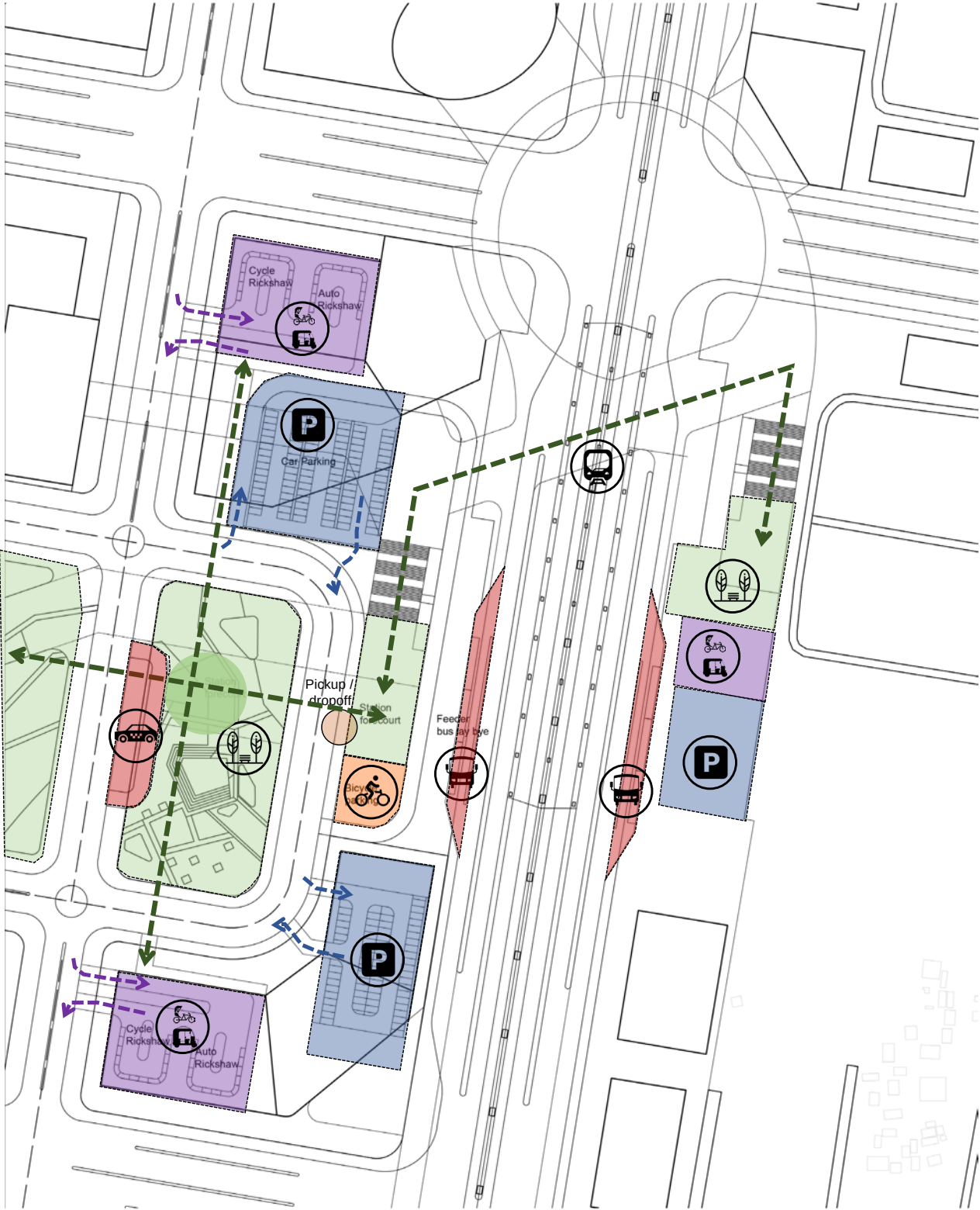
-  IPT (Cycle rickshaw, E Rickshaw, Auto Rickshaw) Waiting area
-  Car Parking (Park and Ride facility)
-  Bicycle Stand
-  Landscaped public spaces
-  Lay by for Feeder buses
-  Lay by for Taxis / Cabs



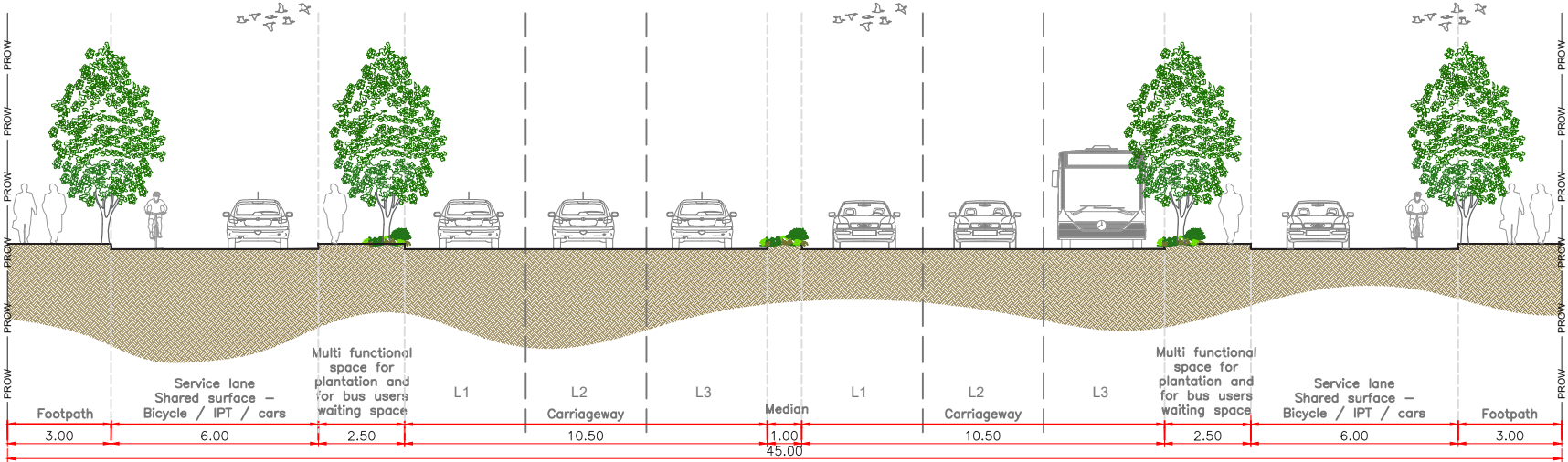
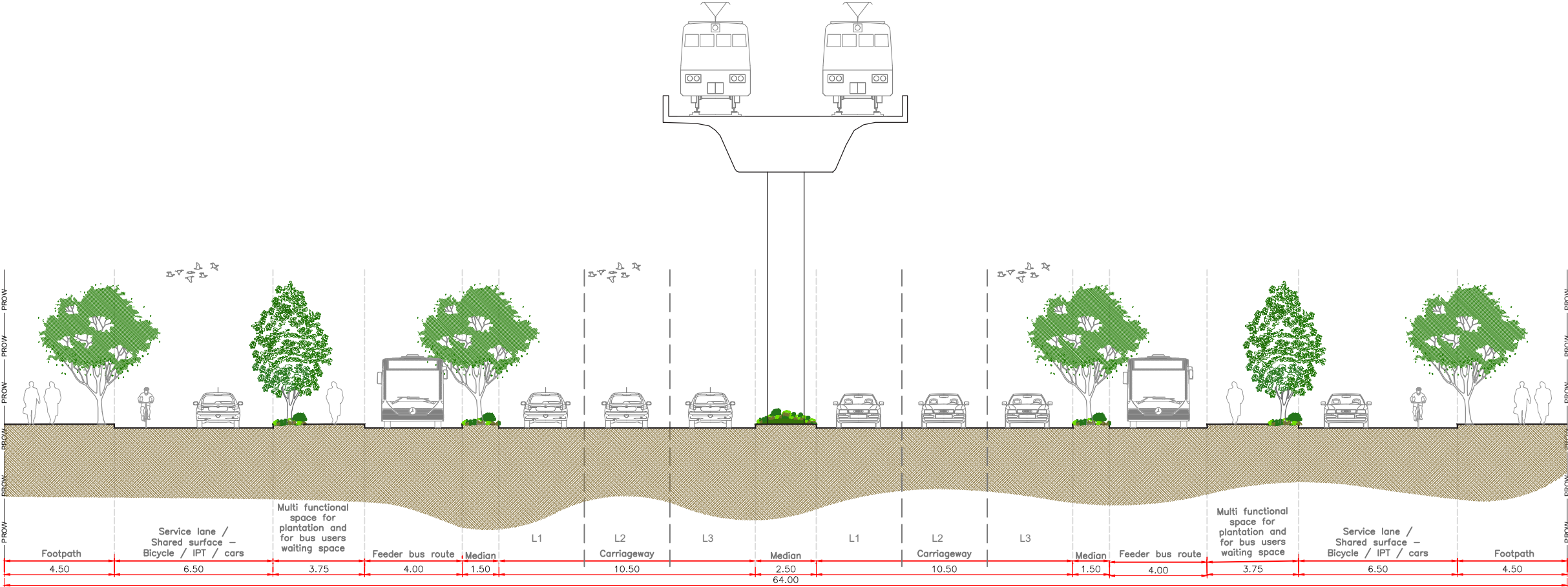
Planned spaces for various transport modes around Metro station



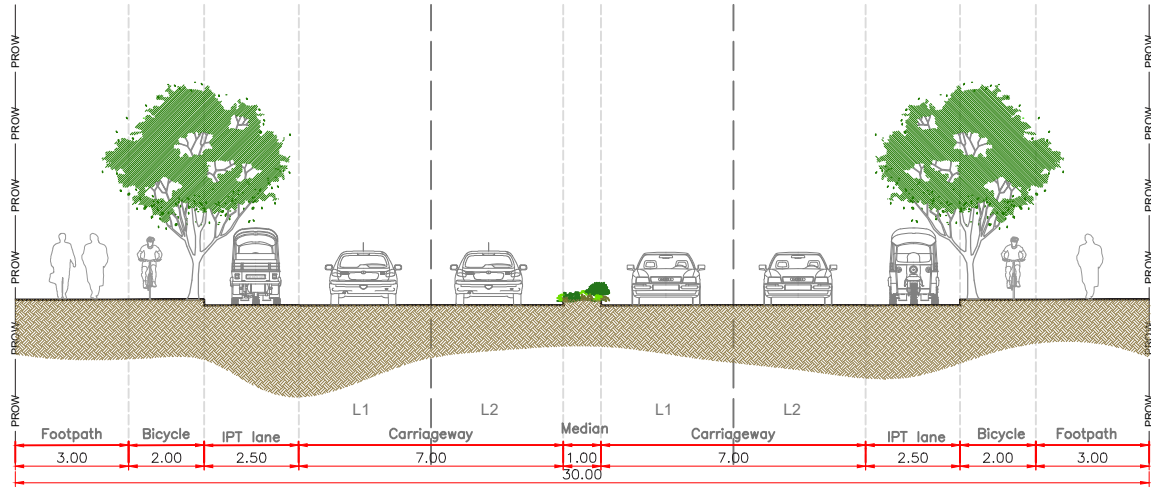
Landscape public spaces



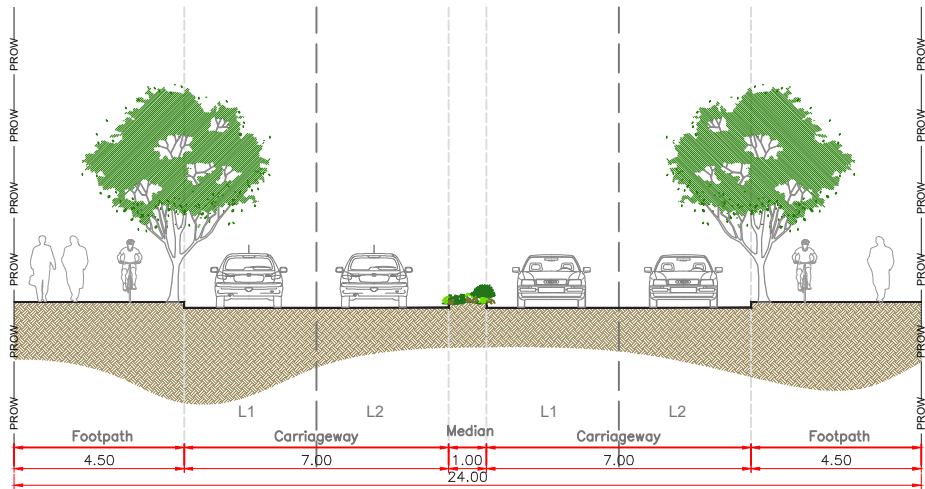
ix. Road Sections



ix. Road Sections



Road Section- 30m RoW



Road Section- 24m RoW

OVERVIEW



- Synchronised with the larger urban structure
- Multi Modal Integration
- Utilization of landscape assets of the Site
- Vibrant TOD mixed use development as a new hub for Uttara / Northern Dhaka
- Enhanced 'Walking & Cycling', public space experience
- Maximised land value

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BDP.

Gabtoli TOD Concept Plan



TRANSIT ORIENTED DEVELOPMENT
MRT STATION, DHAKA

GABTOLI

BDP.

CONCEPT MASTERPLAN

AUGUST 2023

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- v. Overview of the TOD Masterplan Proposal



GABTOLI

1

CONTEXT ANALYSIS

A. DHAKA CITY CONTEXT

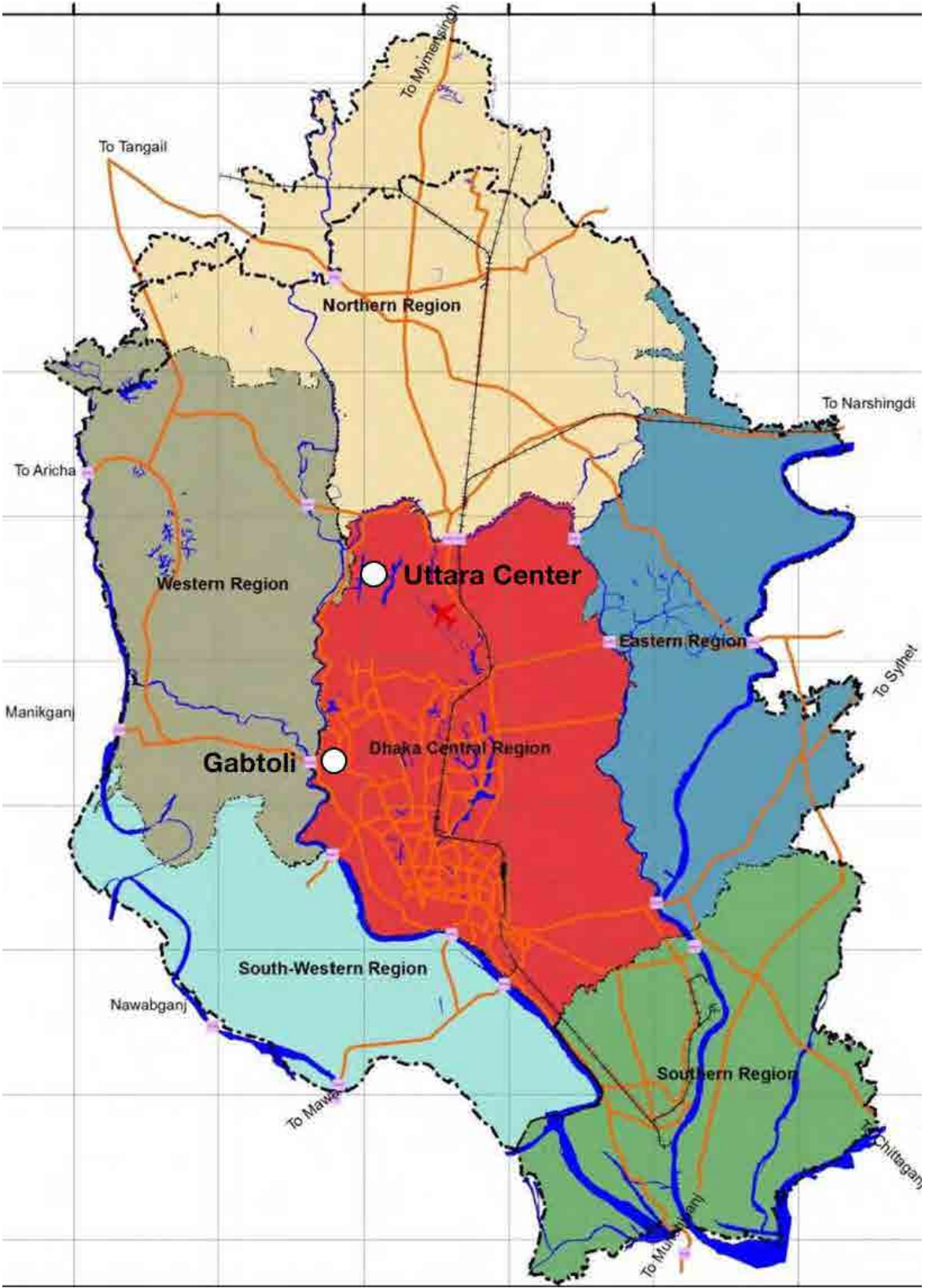
As an overview of the the larger Urban Context for the project, the various aspects related to the Dhaka City Region have been understood.

Dhaka Core City comes under the Dhaka Central Region, part of a larger Dhaka Metropolitan Region.

Gabtoli lies in the Western part of Dhaka City. It forms part of Uttara phase 3, a newly urbanizing area of Dhaka.

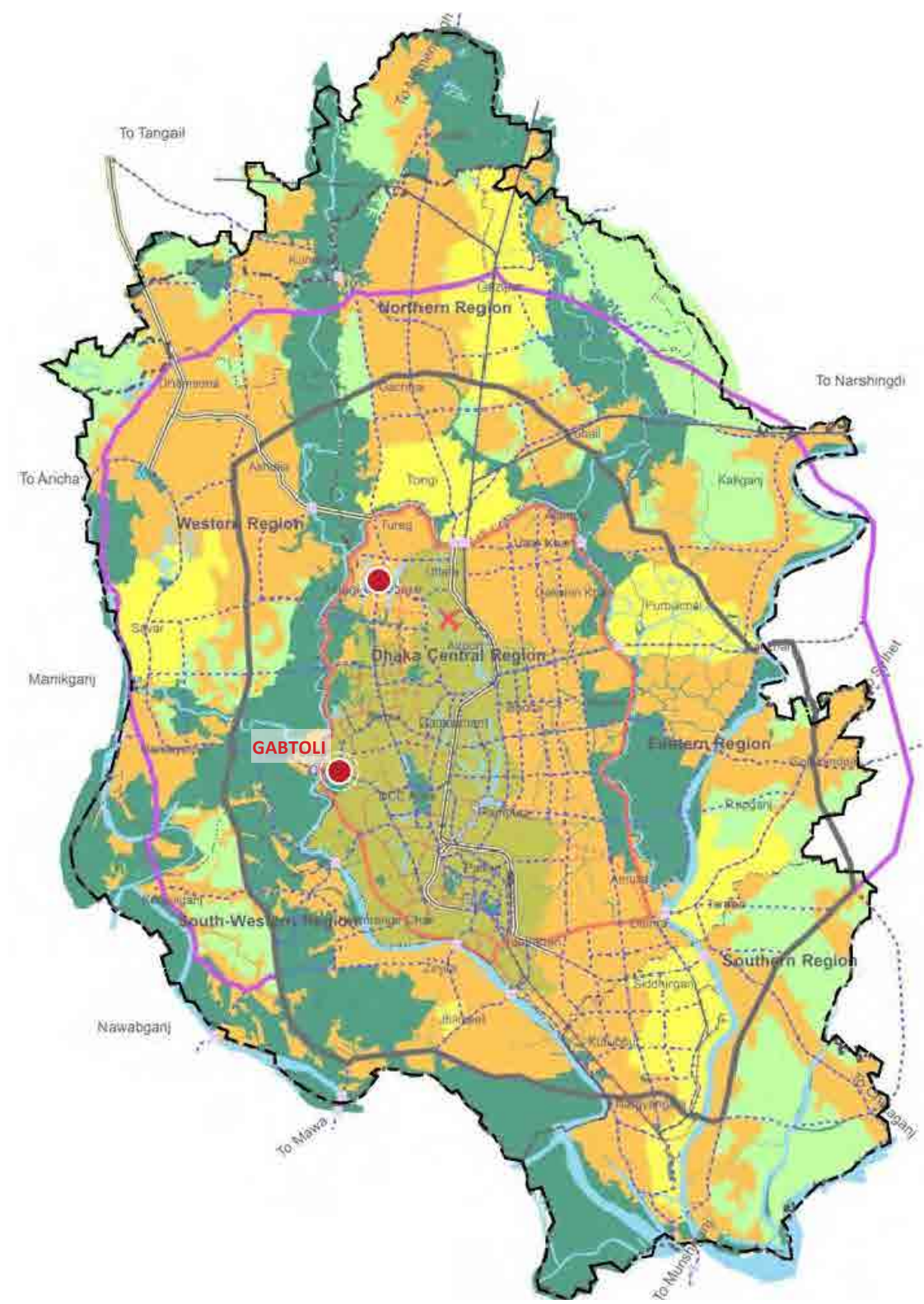
The adjacent MRT map shows proposed overall MRT Network for Dhaka City Region. Gabtoli emerges as a straegic node in the Dhaka MRT map. Gabtoli would have three MRT stations - Line 5 North, Line 5 South and Line 2.

i. Dhaka Metropolitan Region



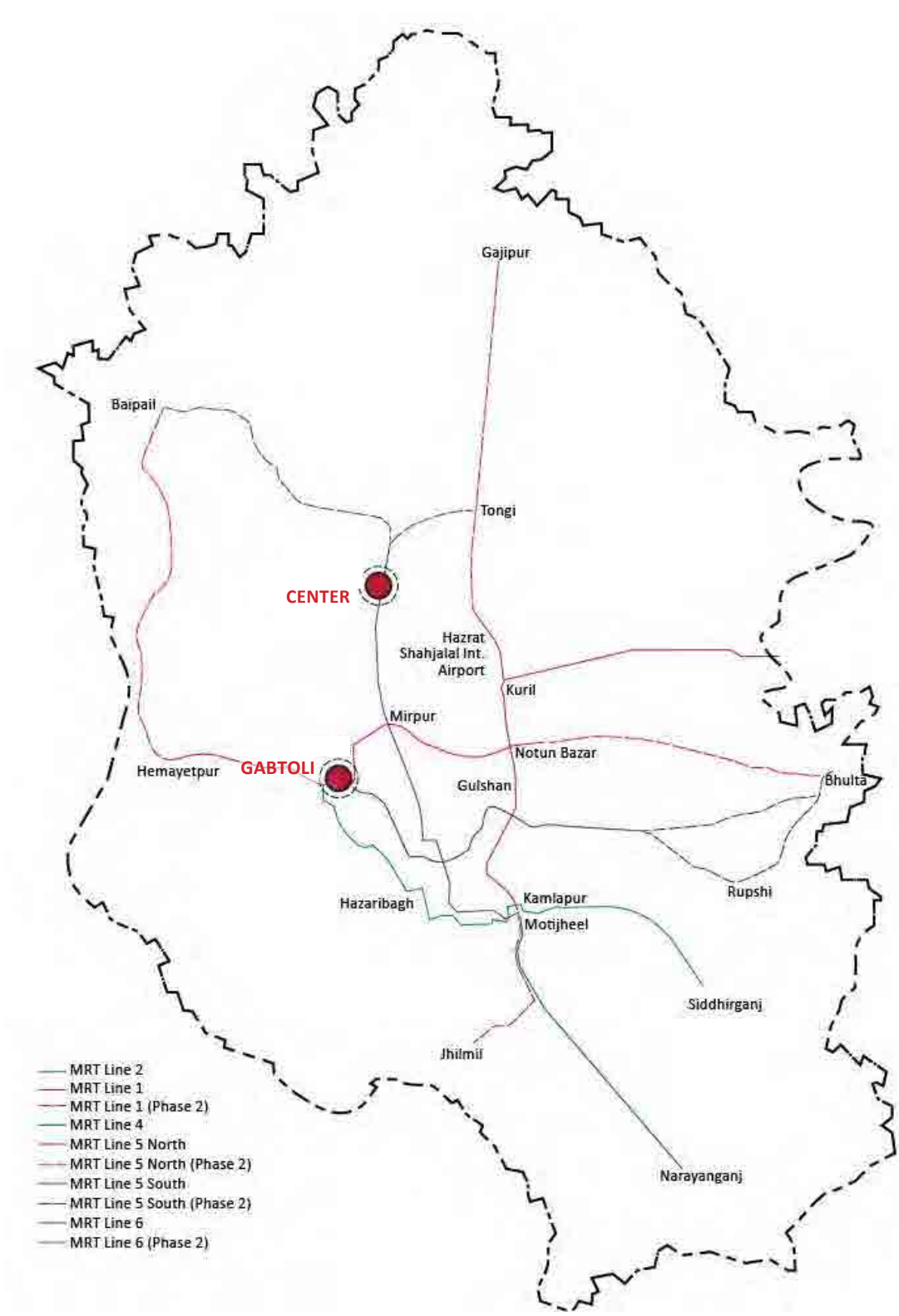
Source: Dhaka Structure Plan 2016 - 2035

ii. Strategic Landuse Zoning for RAJUK Area



Source: Dhaka Structure Plan 2016 - 2035

iii. Dhaka MRT Network



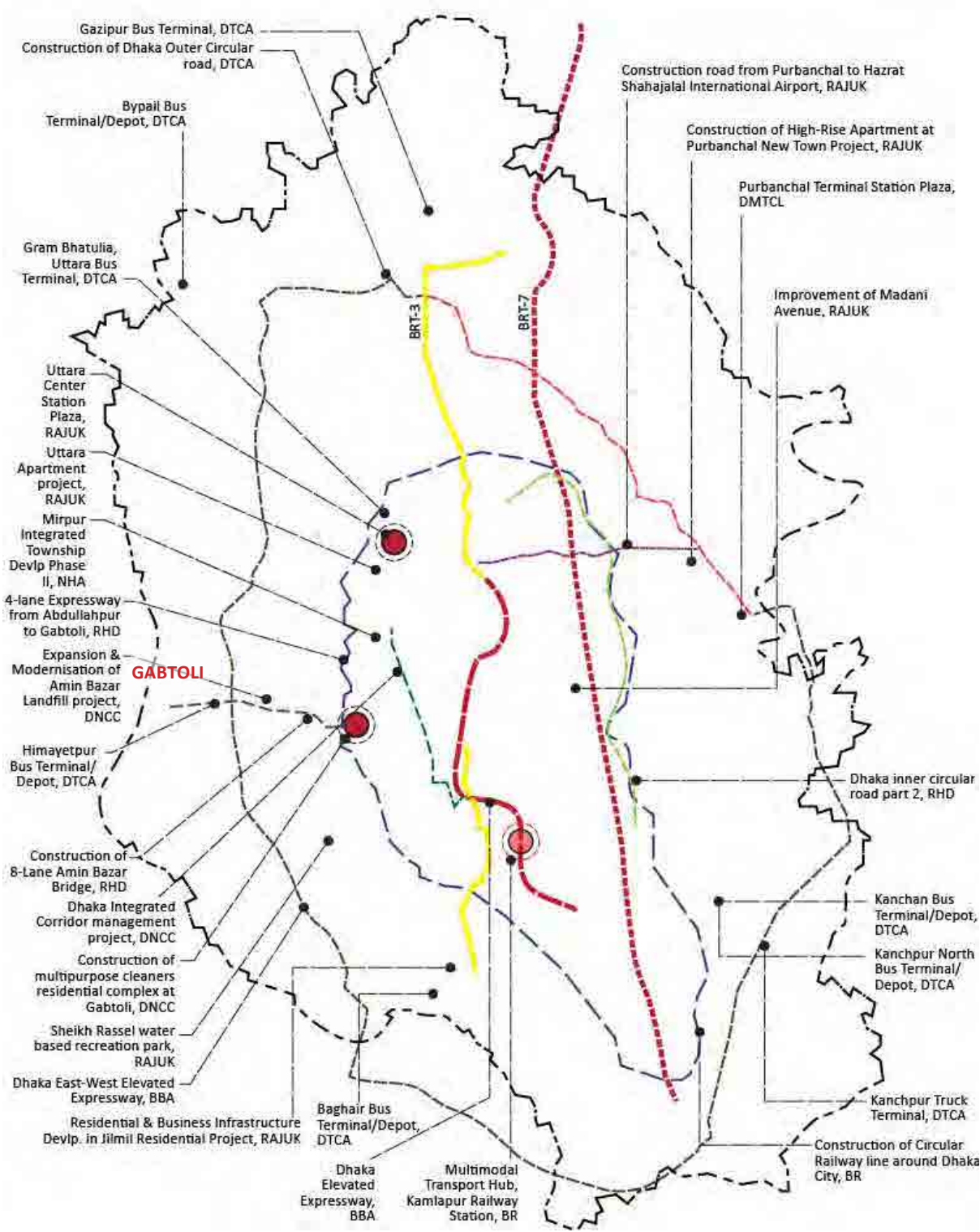
Source: Dhaka Metro

iv. Major City Level Projects in Dhaka

The adjacent map shows the various City level infrastructure projects proposed in the Dhaka City Region.

These need to be taken into cognizance, along with the ongoing planning for the Dhaka Metro Network.

We will give specific attention to the proposed Inner Circular Road and Circular Railway projects, to be integrated with the TOD Masterplanning work.



Source: NK GIS Database

vi. Dhaka TOD Landuse Map

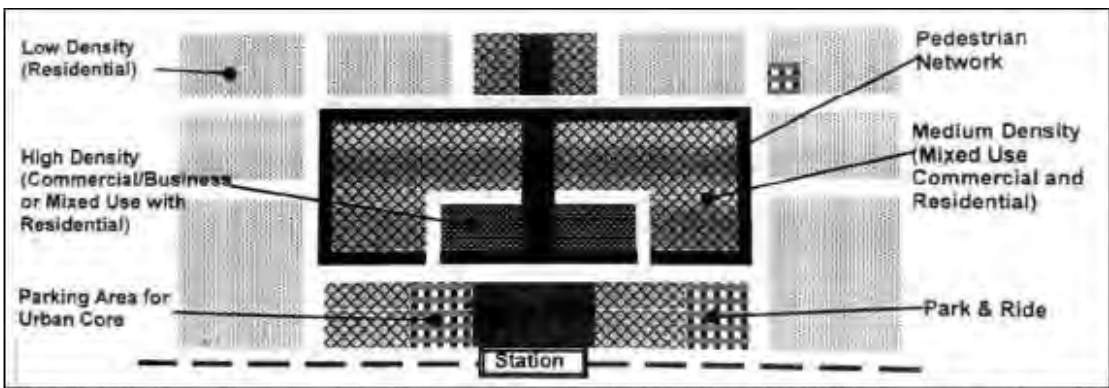
v. Dhaka TOD Policy - Existing Norms

DAP 2016 – 2035 identifies the goals of TOD as follows:

As TOD will be the transit point for the public, in that case, maximum utilization by mixed land use should be ensured for the transit station.

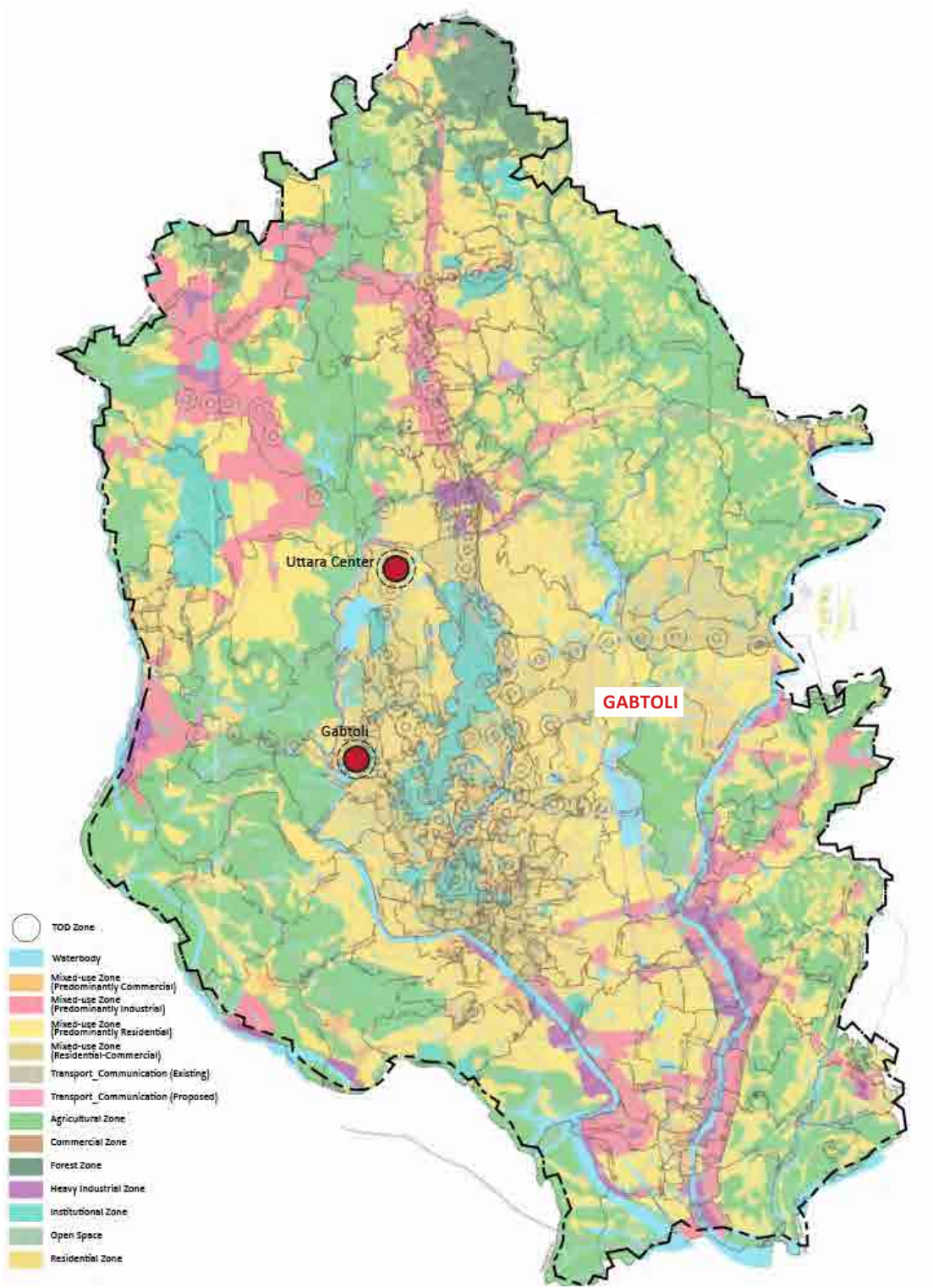
- Attract more people with more activities and high housing density
- Attract more pedestrian movement
- Transport more passengers
- Encourage more people for walking and cycling

The adjacent map shows the proposed TOD Landuse map for the Dhaka City region. The 500 m radius (TOD Zone) from the MRT hub for Gabtoli is shown as Mixed Use Zone (predominantly Commercial), the TOD zone for Uttara Center is shown as Mixed Use Zone (predominantly Residential).



(সূত্র: Station Area Property Development Plan, Draft Plan Report, ২০১৬, Consultancy Services for Design, Construction Supervision, Procurement Support and Management of Dhaka Mass Rapid Transit Development Project.)

Source: Dhaka DAP 2016 - 2035



Source: Dhaka Structure Plan 2016 - 2035

vii. Major City Landmarks

The adjacent map shows the major landmarks and activity hubs in the Dhaka Central City region.

There is a major concentration of historic and cultural landmarks in the Southern part of the City – Motijheel, Kamalapur and Old Dhaka area.

Motijheel has traditionally been the CBD of Dhaka. However, in recent decades, Gulshan has emerged as a strong alternate business district for Dhaka.

Gabtoli is an important gateway for Dhaka at the Western frontier of the City.



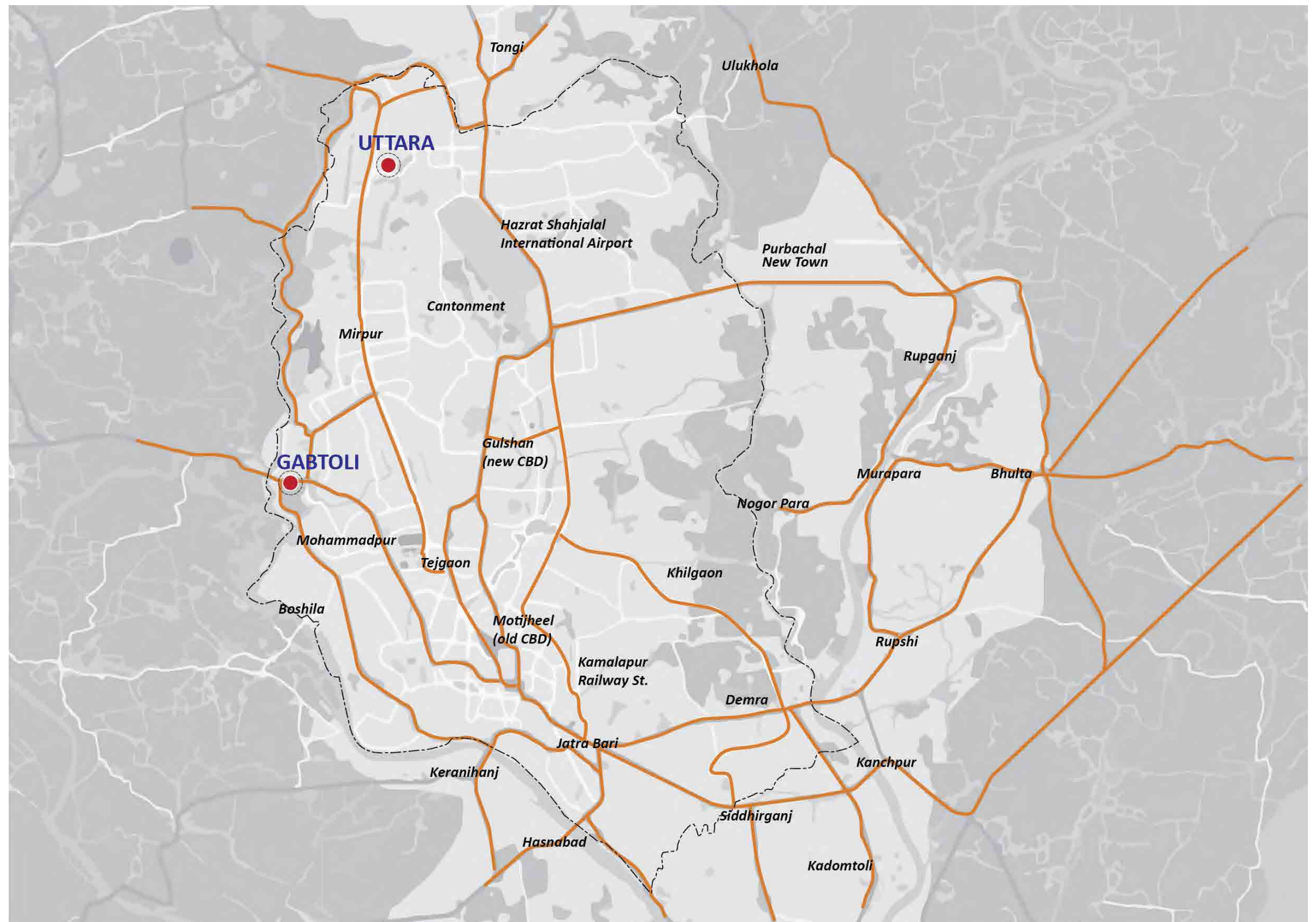
Source: BDP

viii. Road Network

The adjacent map shows the major road network of the Dhaka City region.

The road network has a strong North – South emphasis, with most major roads converging towards Motijheel / Kamalapur area.

East – West road connectivity is weak.



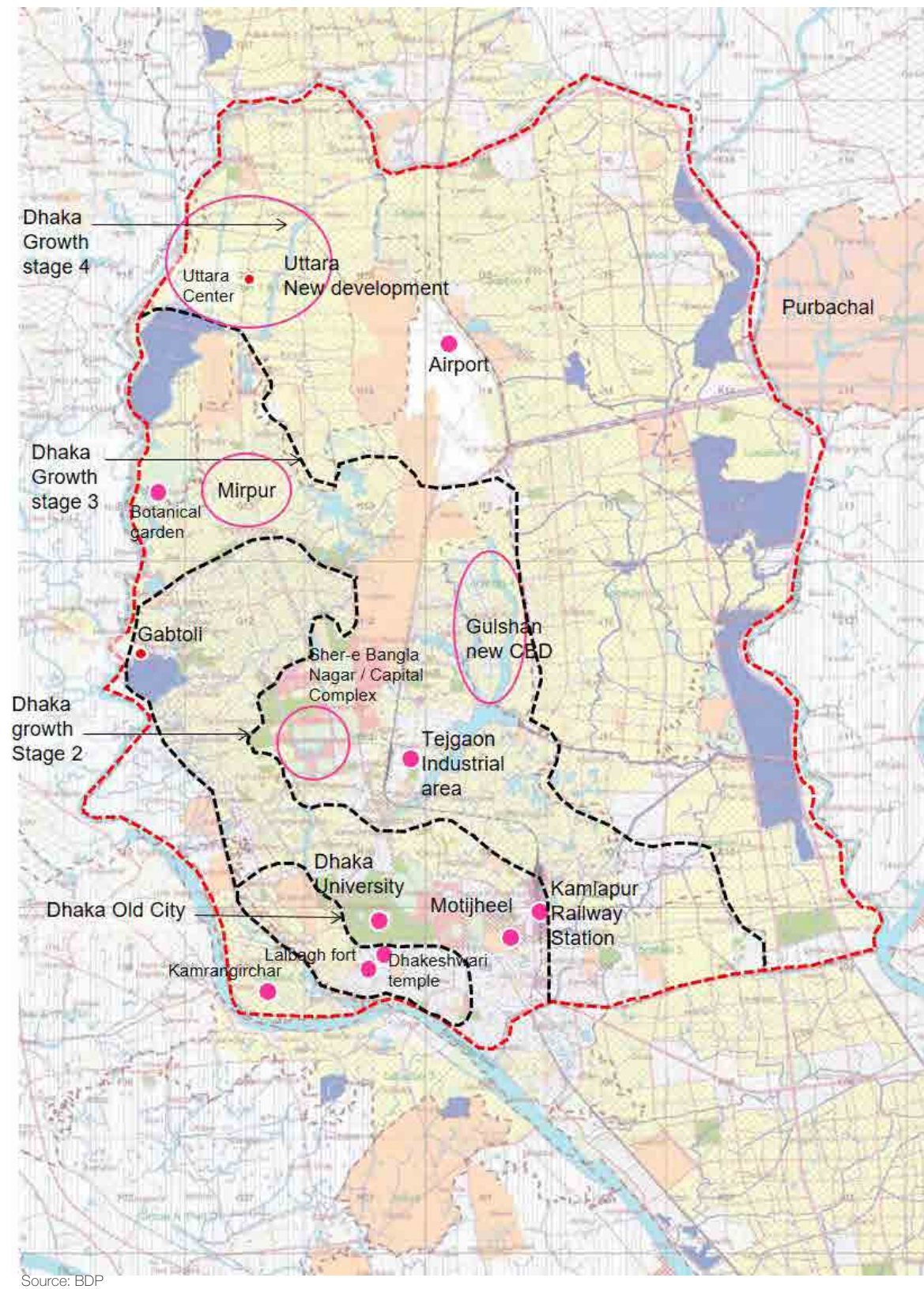
Source: BDP

ix. Growth Trends of the City

Old part of the City and the old CBD area (Motijheel) are concentrated in the South part of the City.

The growth pattern of Dhaka City shows a pattern of growing from the origins in South, outwards towards North.

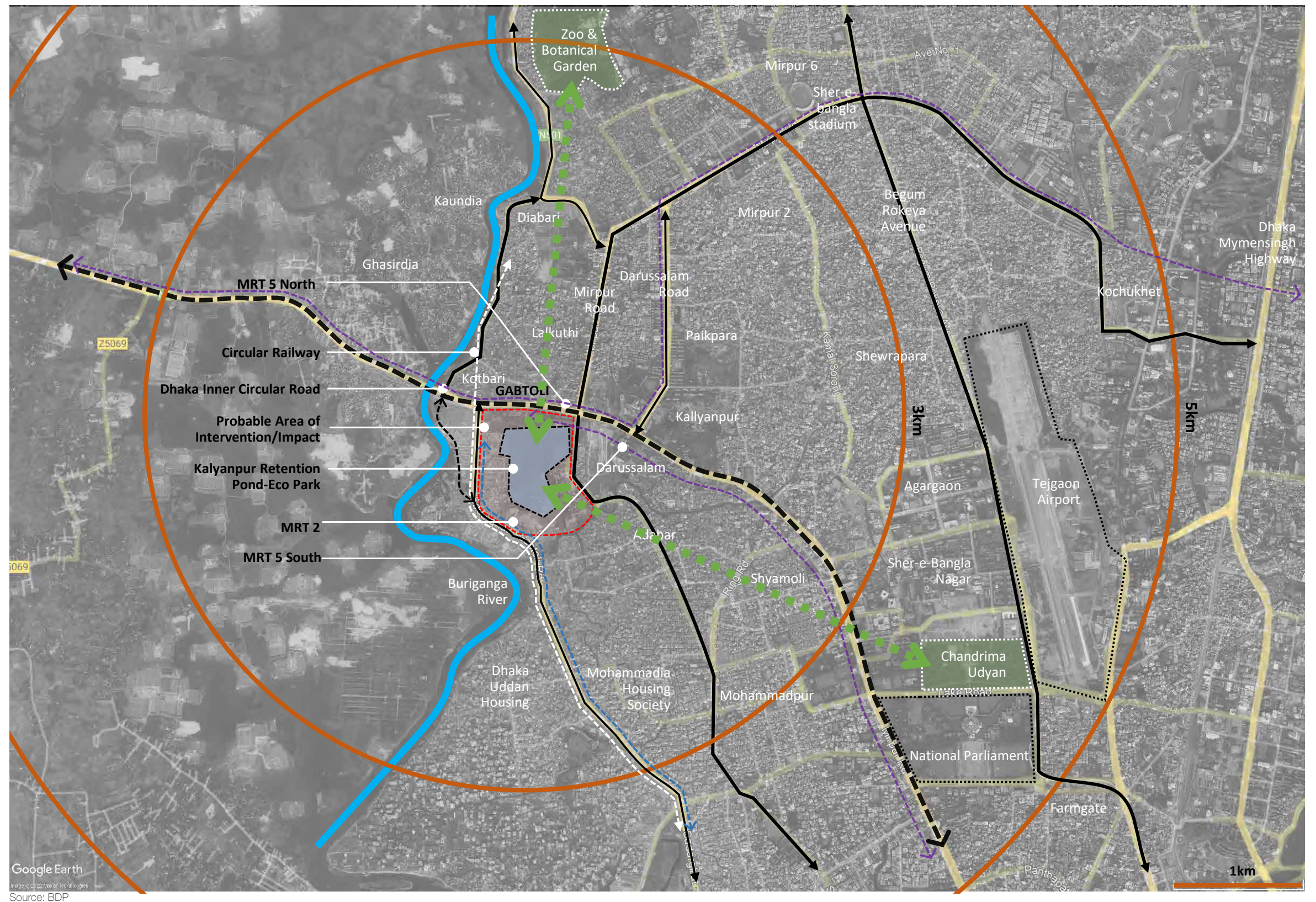
Newly developing areas of the areas of the city like Uttara and Purbachal are in the North / North East fringes, indicating the current growth trend towards North and North East of the city region.





B. INTERMEDIATE MACRO SCALE - 5KM RADIUS

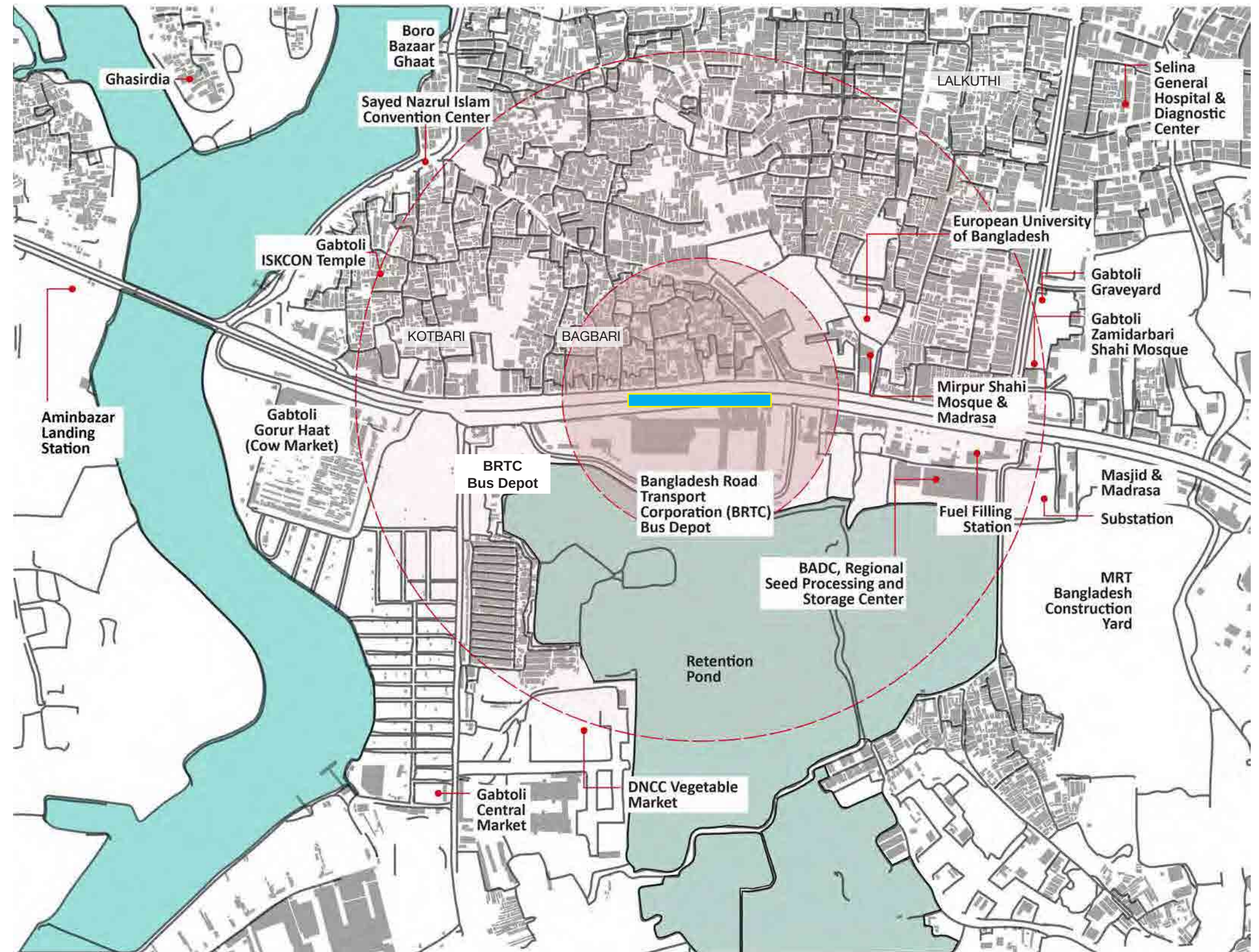
- The Gabtoli TOD precinct is strategically positioned at the confluence of major City level transport infrastructure proposals - MRT Line 5 North, Line 5 South, Line 2, Inner Circular Road and Circular Railway.
- Also, there is a proposal to enhance the Kallyanpur Retention Pond as a major City level recreational space to form the 'Kallyanpur Ecopark'.
- We recognise that the Kallyanpur Ecopark would become a new City level Blue Green space for a 5km radius of Gabtoli.
- It is important to anticipate this City level positioning while going about TOD Masterplan conceptualization for Gabtoli.



C. GABTOLI SITE CONTEXT

i. Existing Site Features

- Dhaka Core City comes under the Dhaka Central Region, part of a larger Dhaka Metropolitan Region.
- Gabtoli lies at the Western edge of the Dhaka Central Region. Also, a major ecological conservation area is part of the Gabtoli site context.



Source: BDP

C. GABTOLI SITE CONTEXT

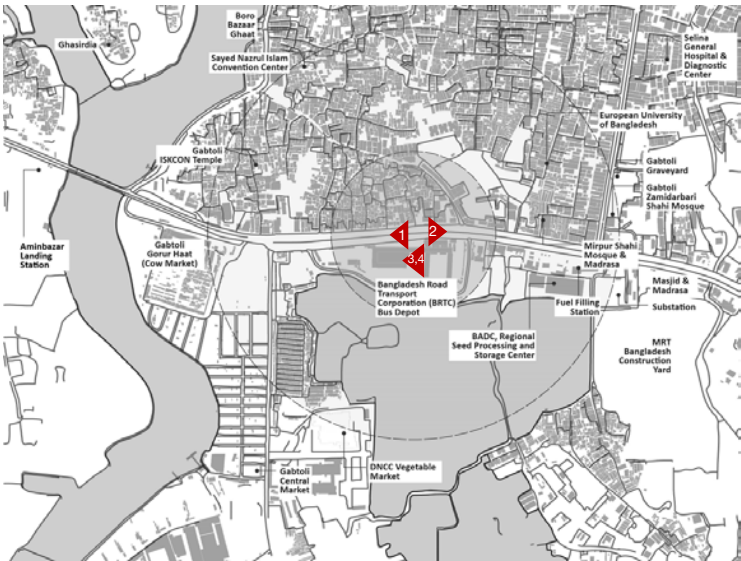
ii. Site Photographs of the Existing Situation



1. Highway outside bus terminus



2. Highway outside bus terminus



3. Bus terminus building with booking counters



4. Drive area outside the bus terminus building

C. GABTOLI SITE CONTEXT

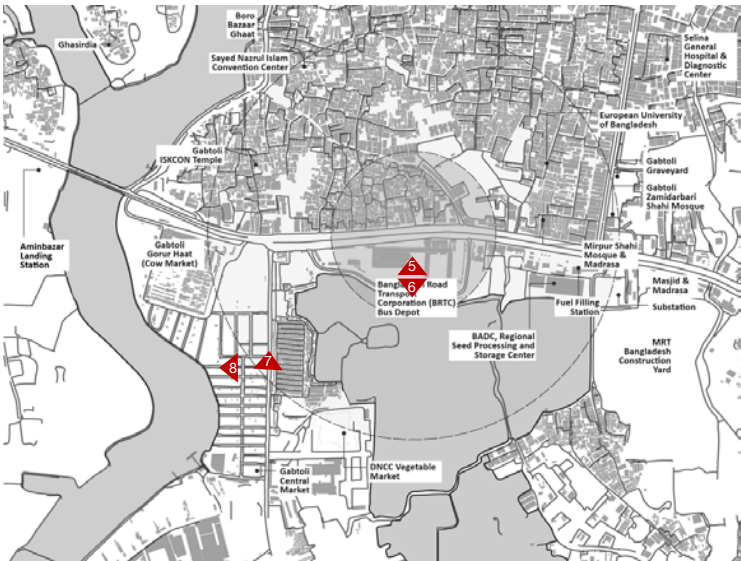
ii. Site Photographs of the Existing Situation



5. Bus parking in the bus terminus land



6. Bus parking in the bus terminus land



7. Sadarghat - Gabtoli Road



8. Construction material stocking area

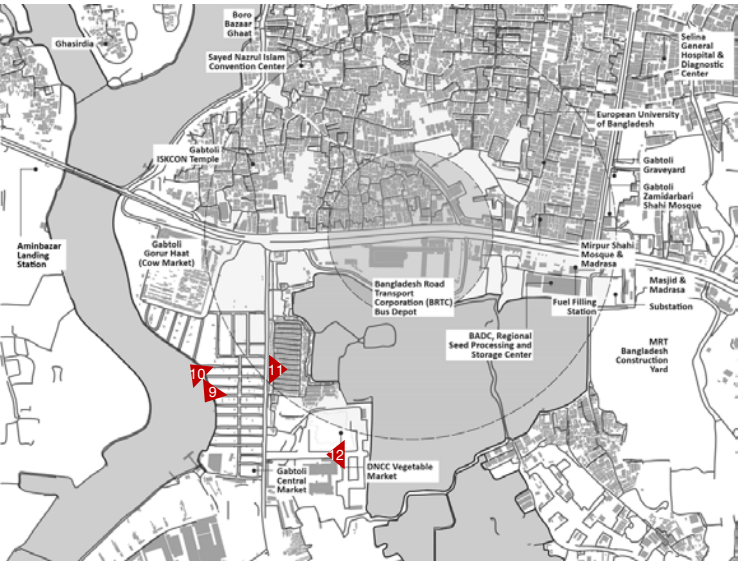
ii. Site Photographs of the Existing Situation



9. Buriganga river edge



10. Buriganga river edge



11. Sweeper housing building under construction



12. Garbage trucks parked in DNCC Market area

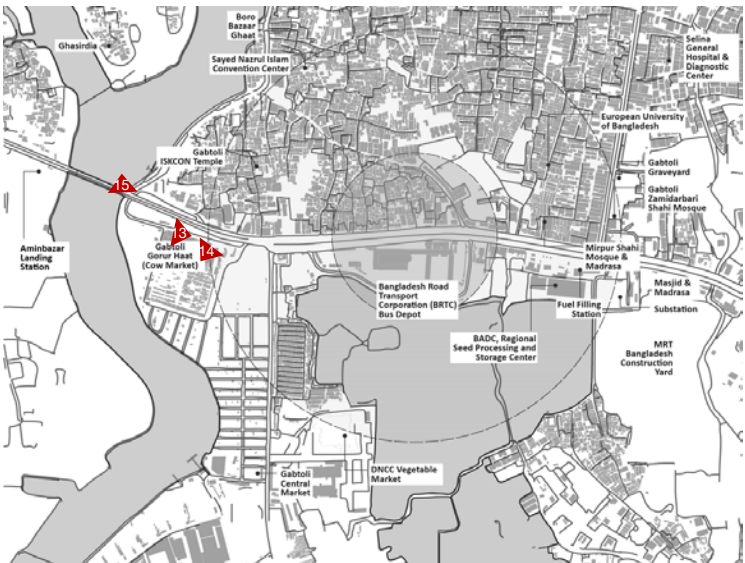
ii. Site Photographs of the Existing Situation



13. Gorur haat (Cattle market)



14. Gorur haat (Cattle market)



15. View of river to the North of the bridge

ii. Site Photographs of the Existing Situation



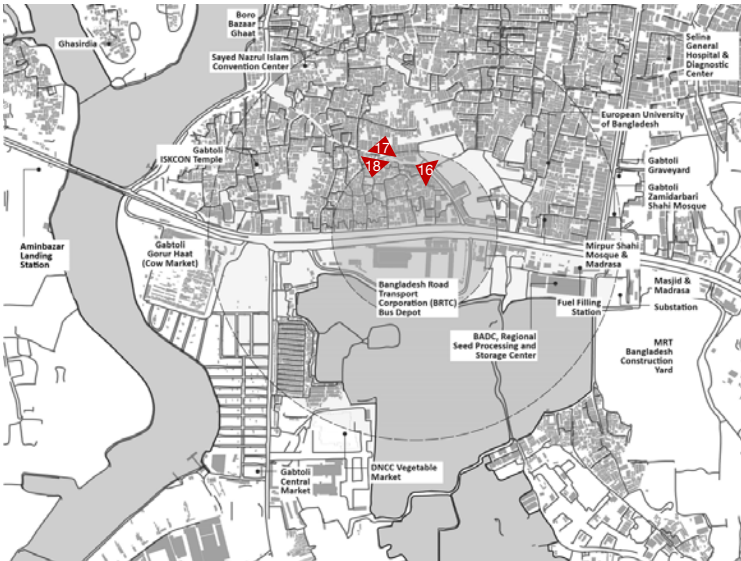
16. Internal street in Kotbari area



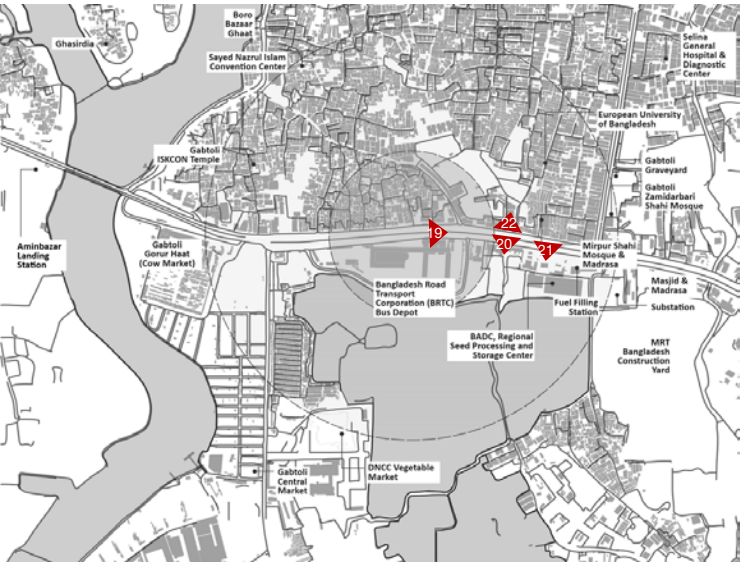
17. Internal street in Kotbari area



18. Internal street in Kotbari area



ii. Site Photographs of the Existing Situation



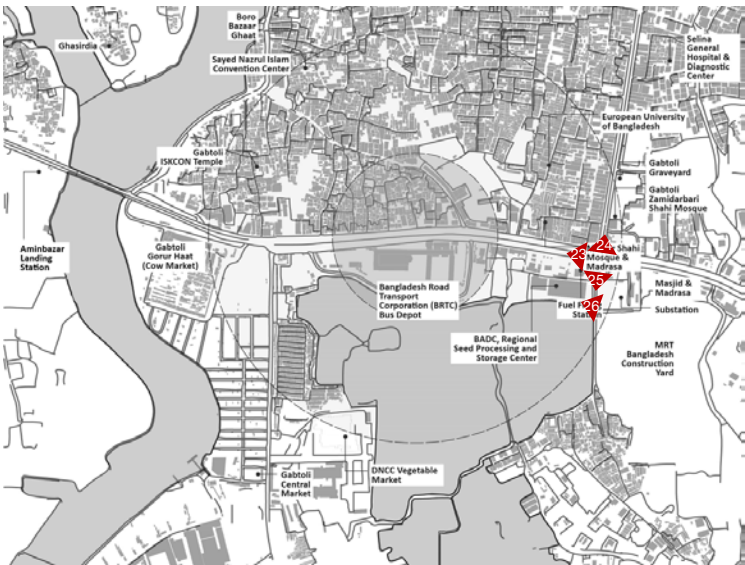
ii. Site Photographs of the Existing Situation



23. Mirpur Road junction



24. Mirpur Road junction



25. Kallyanpur Electric sub-station



26. BADC Seed processing and storage center

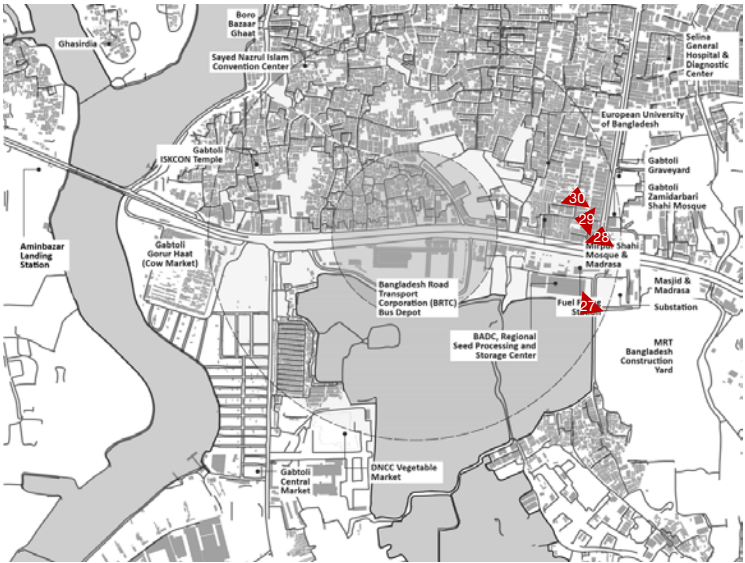
ii. Site Photographs of the Existing Situation



27. Kallyanpur Wetland area



28. Mirpur Road



29. Internal street



30. Internal street

ii. Site Photographs of the Existing Situation



31. European University of Bangladesh



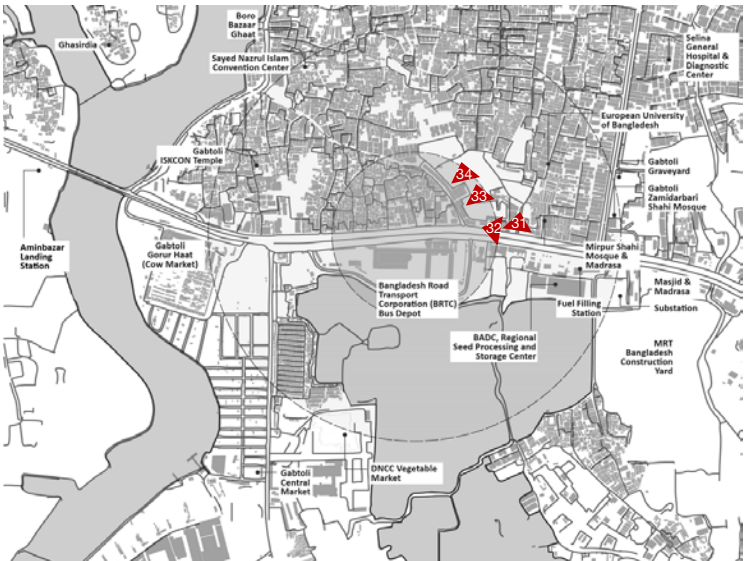
32. Bus company office



33. Vacant land being used as bus depot



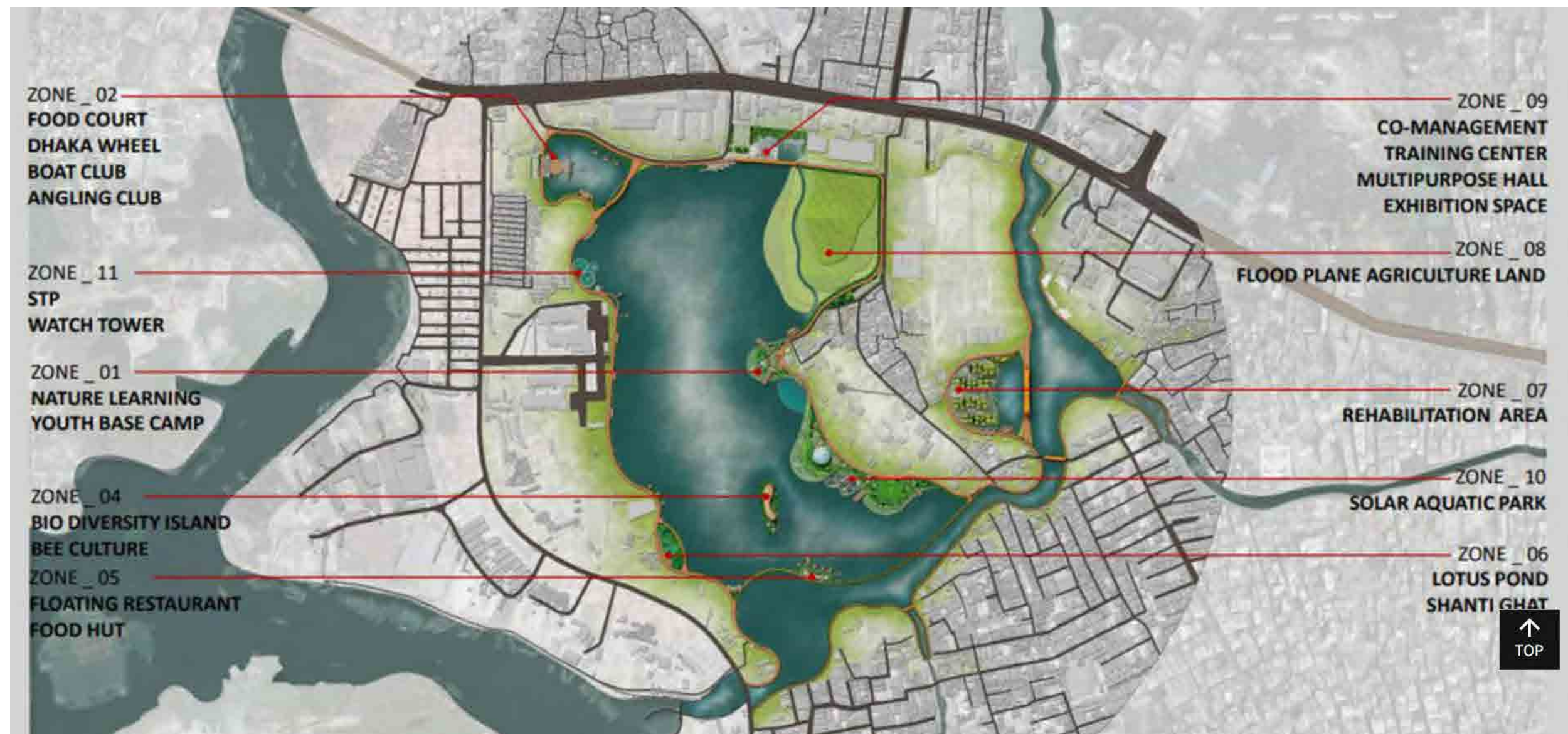
34. Vacant land



iii. Kallyanpur Ecopark proposal

The 'Kallyanpur Ecopark' project is proposed by DNCC (Dhaka North City Corporation) as a major City level recreational space.

The adjacent image shows the proposed Zoning plan for the Kallyanpur Ecopark. This Ecopark idea will be integrated with the TOD Masterplan for Gabtoli.



Source: <https://www.tbsnews.net/bangladesh/infrastructure/kallyanpur-eco-park-planned-free-canals-303118>

iii. Kallyanpur Ecopark proposal

The ‘Kallyanpur Ecopark’ project is proposed by DNCC (Dhaka North City Corporation) as a major City level recreational space.

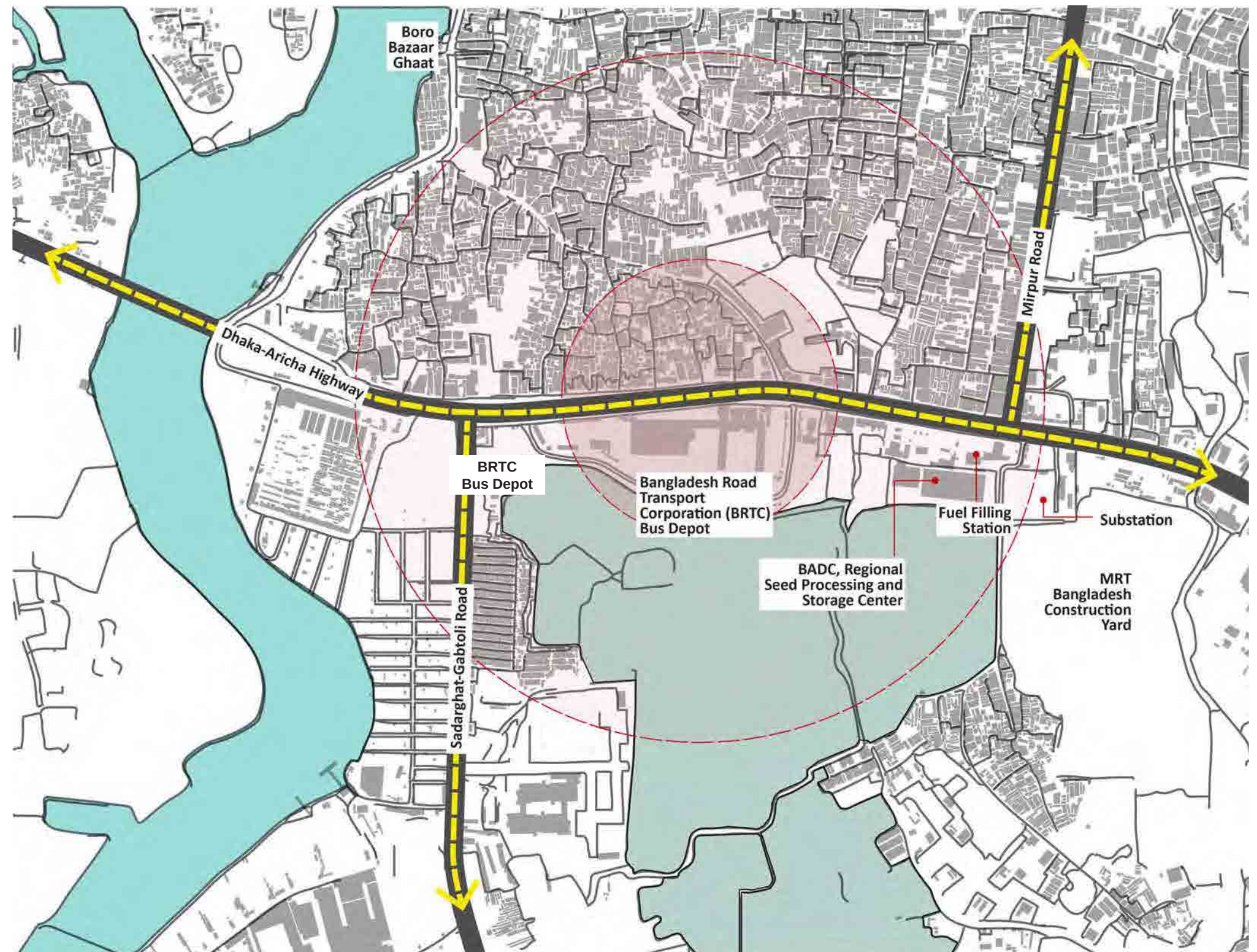
The adjacent image shows the proposed Zoning plan for the Kallyanpur Ecopark. This Ecopark idea will be integrated with the TOD Masterplan for Gabtoli.



Note: Information shared unofficially by DNCC. For JICA TOD team's internal reference.

iv. Existing Infrastructure

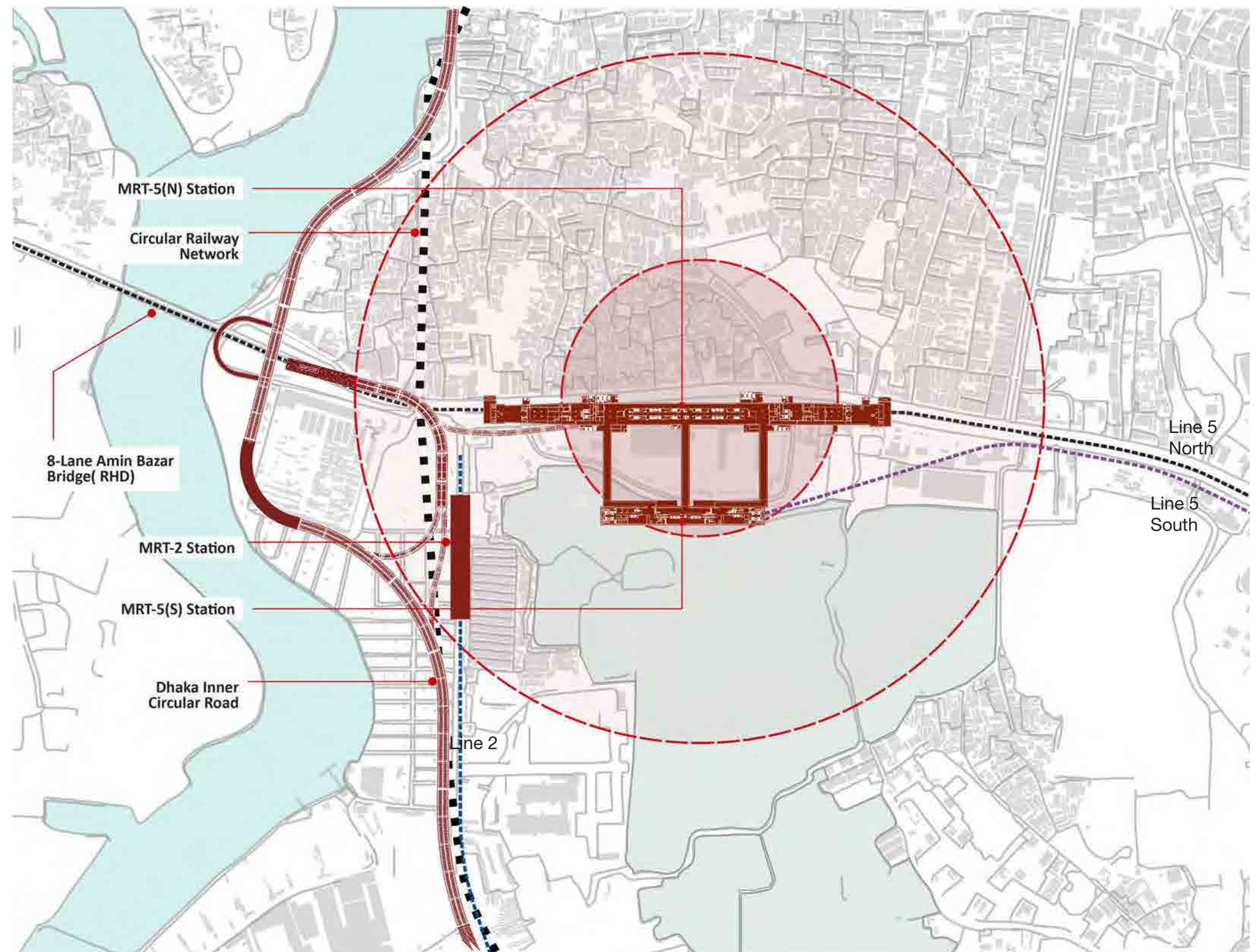
- The Dhaka - Aricha highway is the major road arterial serving the area.
- Mirpur Road provides the connection towards Mirpur in the North, and Sadarghat - Gabtoli Road provides the connection to the South.



v. Proposed Infrastructure

Following are the new Infrastructure interventions proposed in the Gabtoli area, which need to be integrated in the Gabtoli TOD Masterplan:

- Metro Line 5 North
- Metro Line 5 South
- Metro Line 2
- Inner Circular Road
- Circular Railway Line



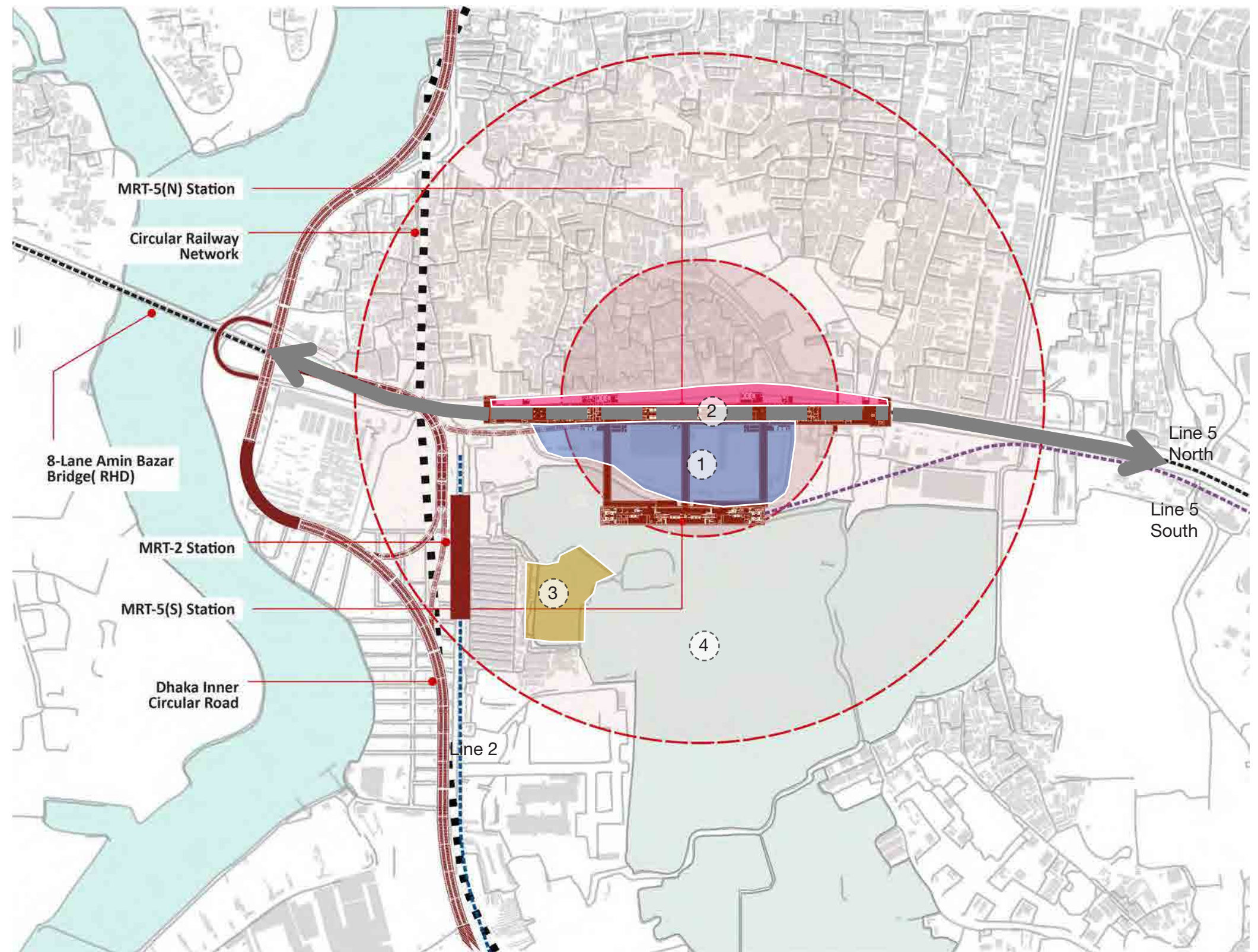
Note:

1. Alignment of Inner Circular Road and Circular Railway line area as per alignment shared by NK team in consultation with concerned government departments in Dhaka
2. Entrance of Highway: Location(position) needs to be reconsidered due to potential interference with Metro facilities.

v. Proposed Infrastructure

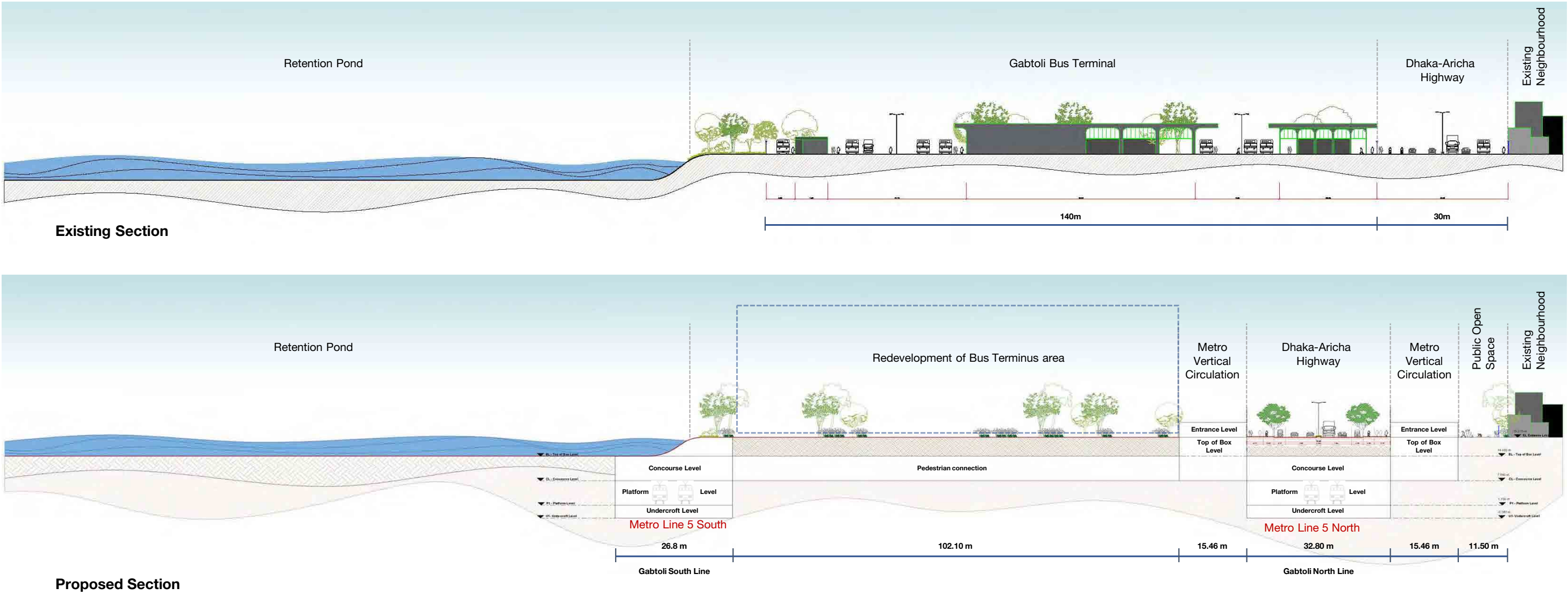
Following are the major urban transformations that need to be planned for in response to the proposed infrastructure interventions:

- Bus terminus redevelopment ①
- Road re-alignment in front of bus terminus ②
- Proposed sweeper housing ③
- Proposed 'Kallyanpur Ecopark' ④



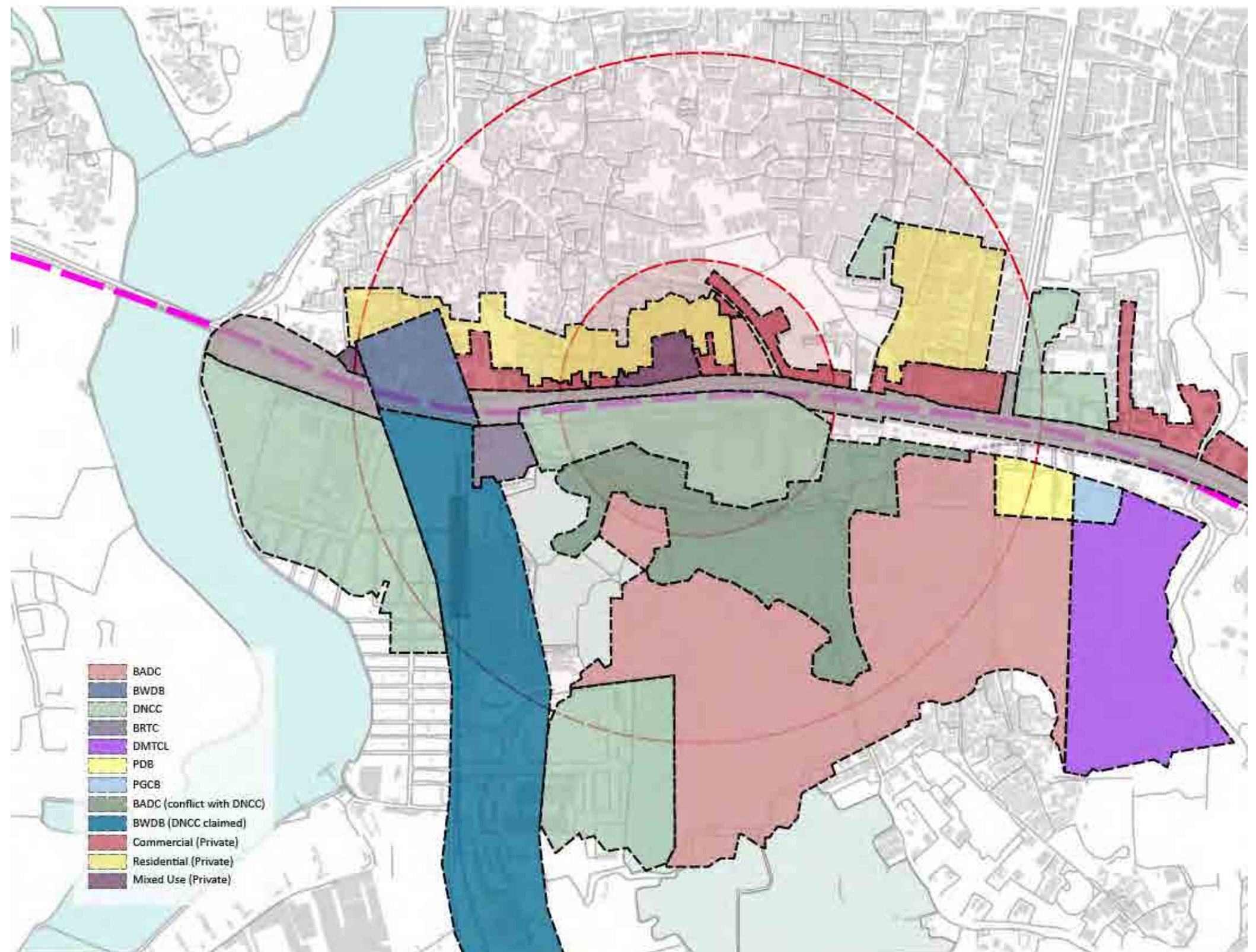
vi. Site Section

Following drawings show Cross Sections of the Dhaka - Aricha highway (Road in front of the existing Gabtoli bus depot) in terms of the Existing situation and of the transformed scenario when the underground Line 5 North and Line 5 South stations come up and the Dhaka Aricha highway itself gets realigned in co-ordination with the Line 5 North Station.



vii. Land ownership mapping

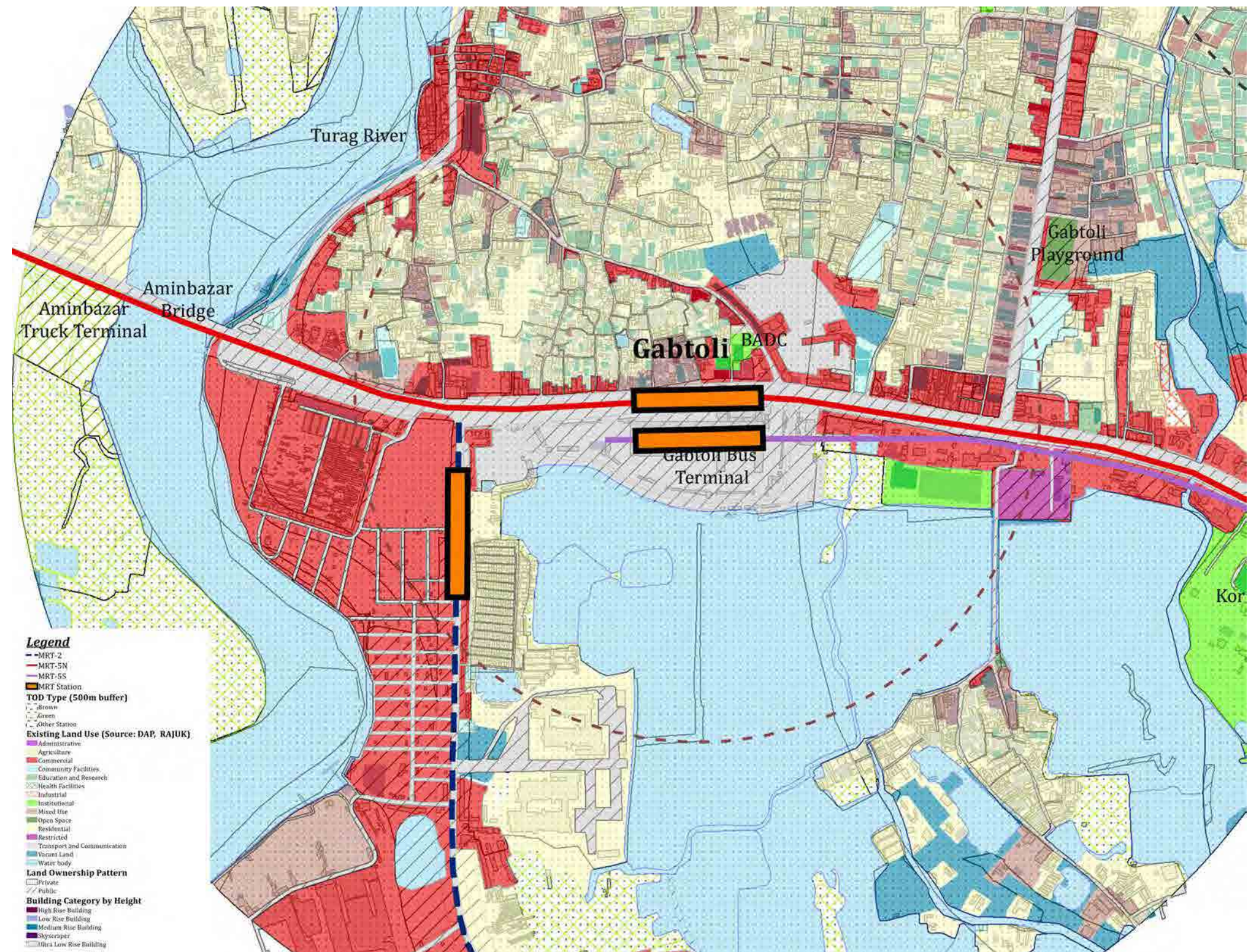
- To the South of the Metro Corridor (Line 5), land is owned by various government department. So, it is all 'Public land', and would be simple to include in the TOD plan.
- To the North of the Metro Corridor, it is a dense mixed use neighbourhood, mostly privately owned land and buildings. This would be more complex in terms of TOD intervention.



Source: NK GIS Database

viii. Landuse mapping

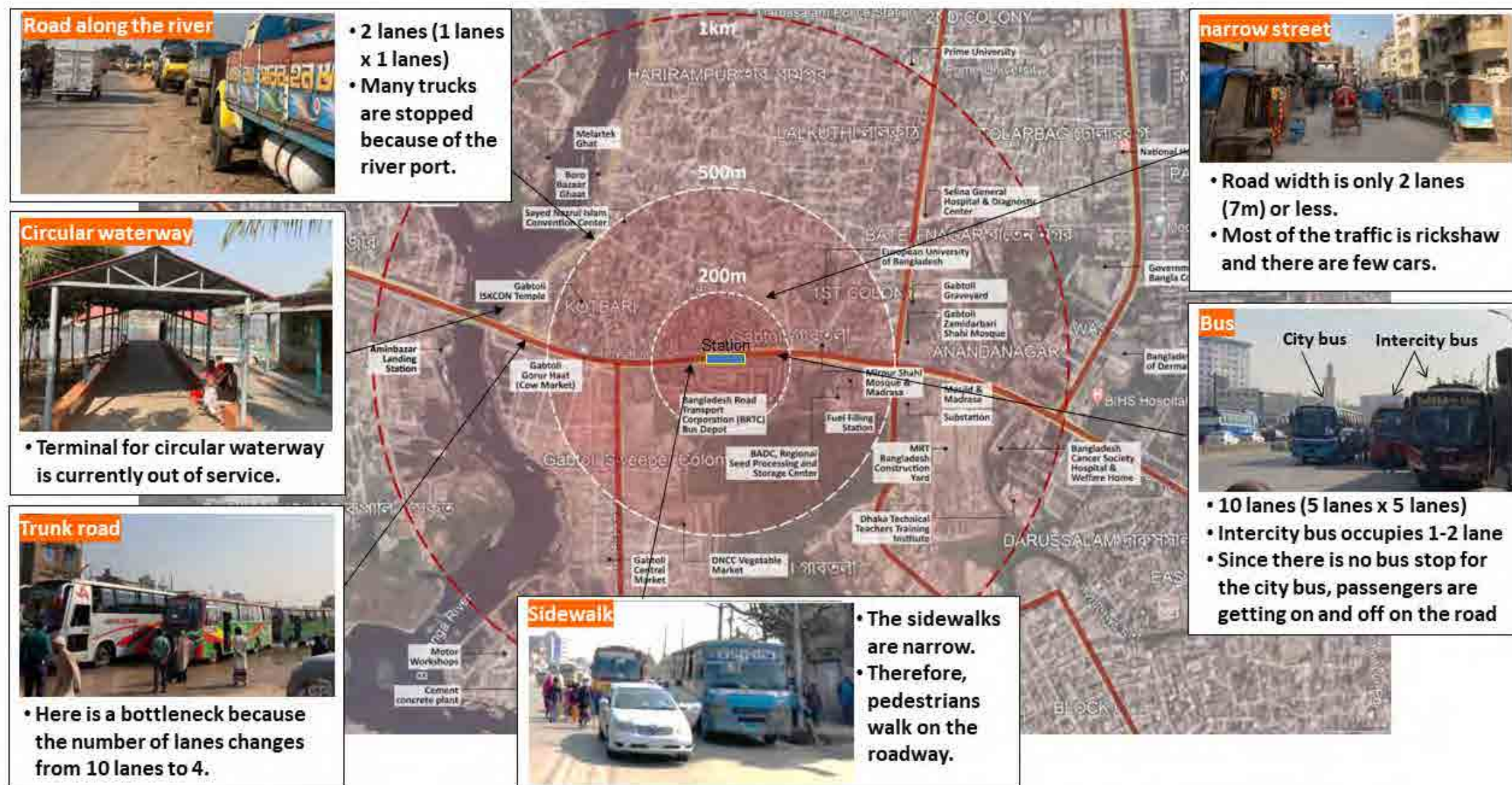
- The adjacent plan shows the existing landuse situation of the Gabtoli area.
- Dense mixed use neighbourhood existing to the North of the Metro Corridor
- Commercial development along the Dhaka Aricha Road



Source: DAP, RAJUK

ix. Major Issues & Constraints

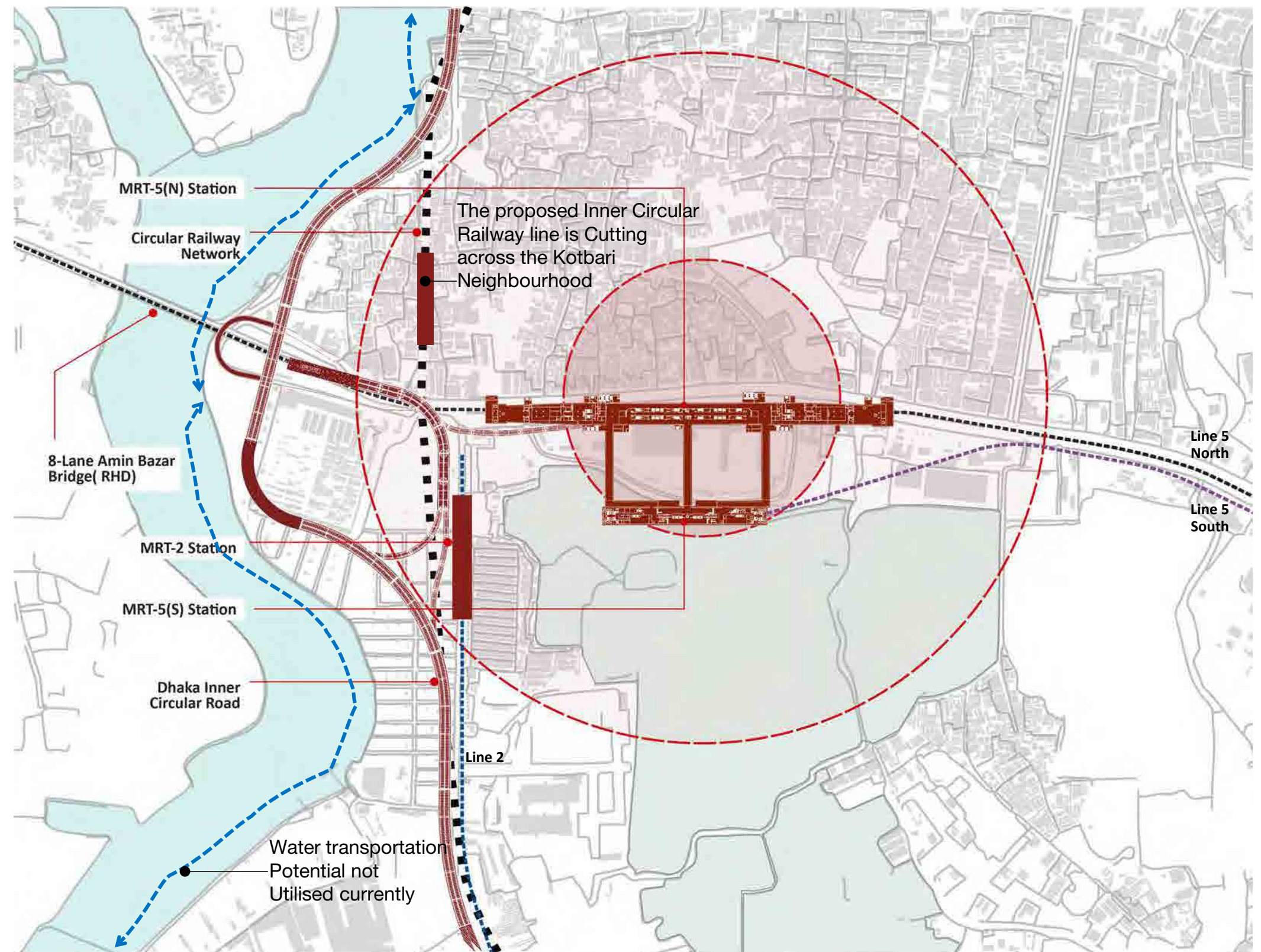
1. TRANSPORTATION RELATED ISSUES



ix. Major Issues & Constraints

2. CO-ORDINATION AND INTEGRATION OF TRANSPORT INFRASTRUCTURE

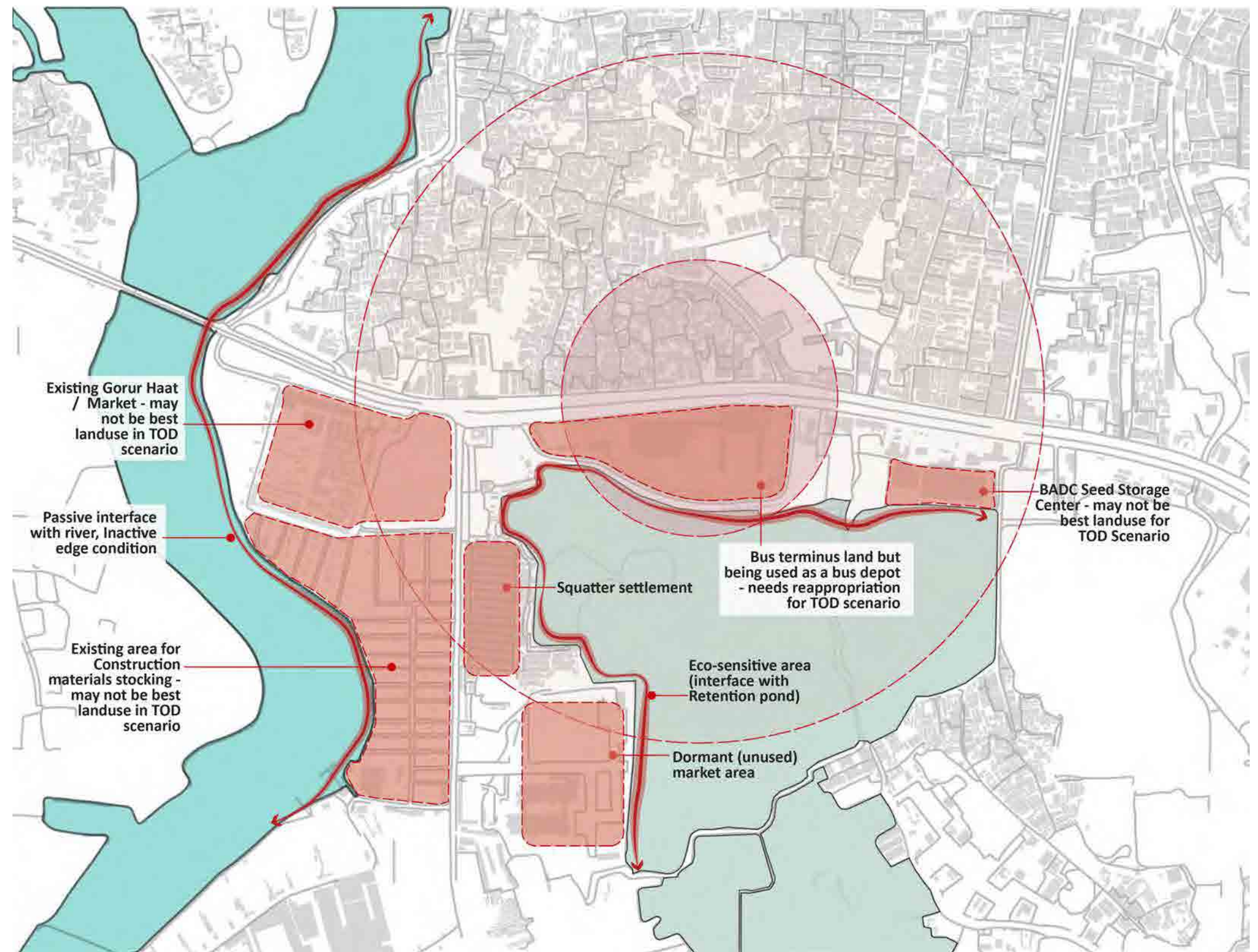
- Currently, there is a lack of planning for urban integration of the transport infrastructure – MRT line 5 North, line 5 South, line 2, Inner circular railway, Inner Circular road.
- Inner Circular Railway is cutting across the dense Kotbari area. There is no detailed information available for the feasibility of this and how it will be implemented.
- There is potential for Water transportation in the Buriganga river, which is not utilised currently as a planned system.



ix. Major Issues & Constraints

3. SOUTH OF THE METRO CORRIDOR

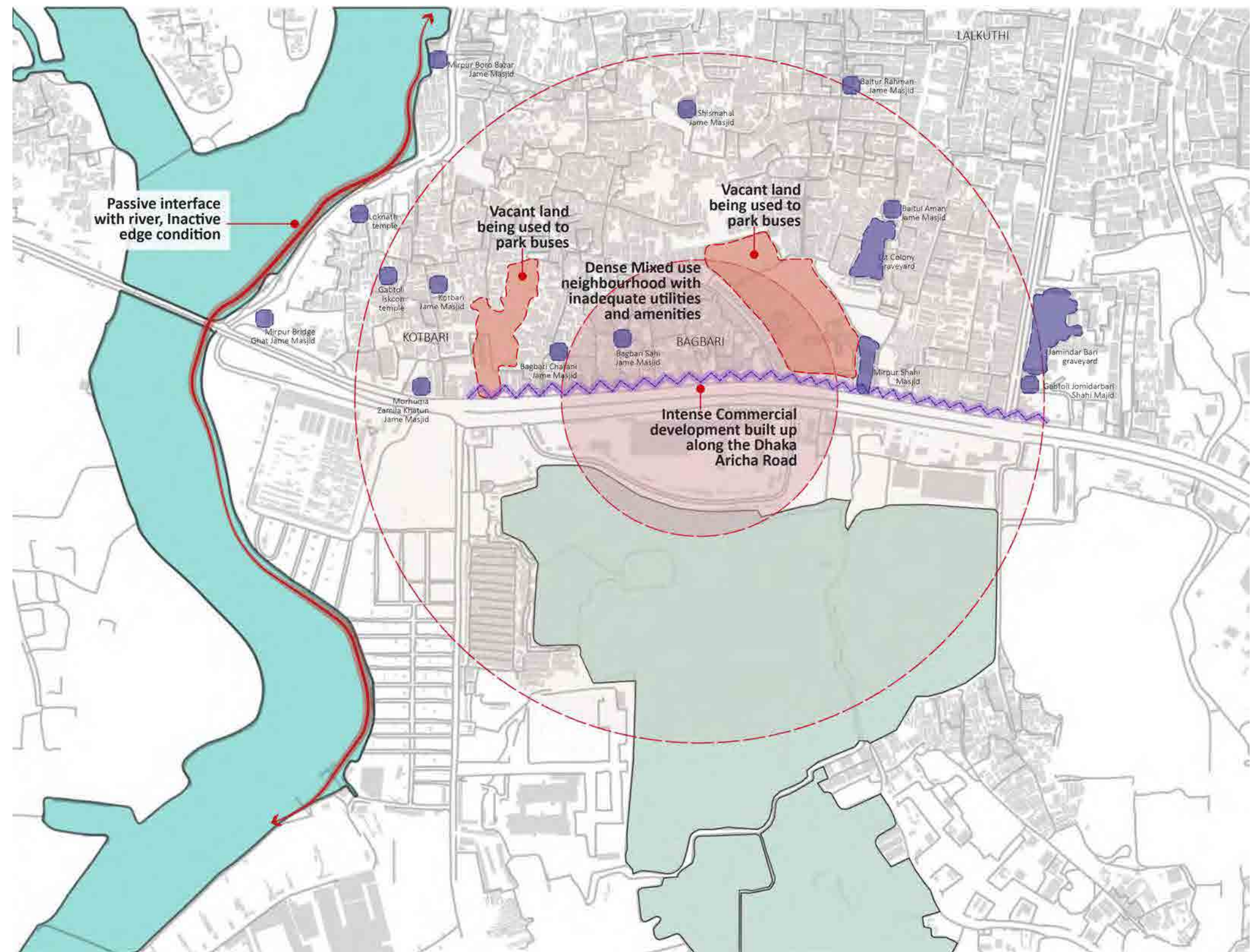
- It is observed that the following areas may not be best landuse in a TOD scenario
– Existing Gorur Haat, Existing area for Construction material stocking and BADC seed storage center.
- Bus terminus land needs reappropriation for TOD scenario.
- River front edge is passive and inactive. There is an unused market area which needs activation.
- There are some squatter settlements on site.
- There is a major retention pond to the South which is an eco sensitive area.
-



ix. Major Issues & Constraints

4. NORTH OF THE METRO CORRIDOR

- River front edge is passive and inactive. There is an unused market area which needs activation.
- The Kotbari and Bagbari areas are dense existing mixed use neighbourhoods, with inadequate utilities and amenities.
- There is intense commercial development built up along the Dhaka Aricha Road.
- There are two vacant land parcels which are currently being used to park buses.
- There are existing community religious spaces – mosques, graveyards and temples.



5. REAL ESTATE POTENTIAL

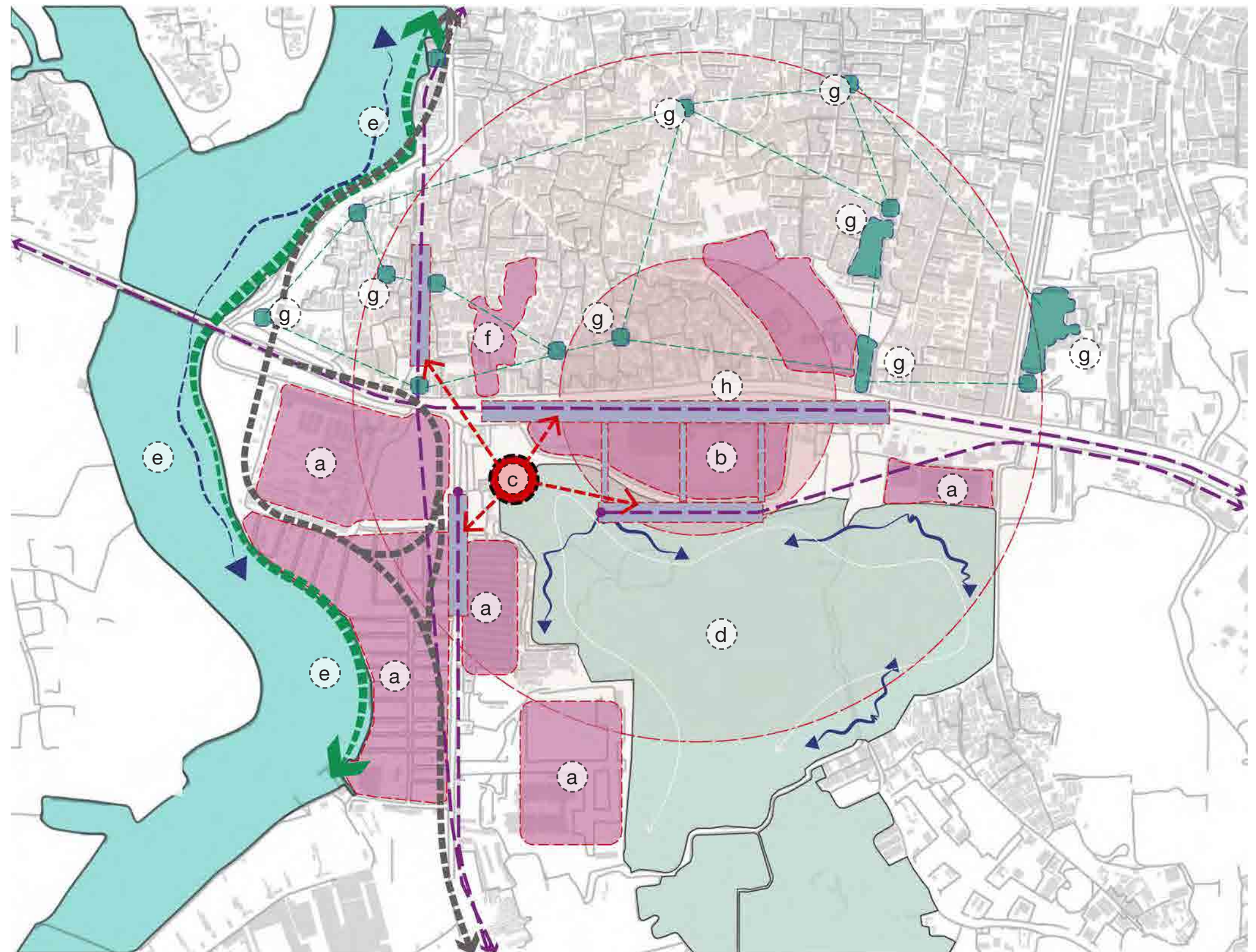
- The area will become a transportation hub connecting Gulshan, Motijheel, and the suburbs through the MRT development.
- This will increase land values around the station and create momentum for development.

- Without a master plan, an action plan, and certain regulatory inducements, individual land developments proceed without site and street order, and the area as a whole will be subject to unplanned land use.

- Survey on Land, Existing Infrastructure, Land Owners/Users(Activities) etc.
- To formulate
 - Zoning Plan
 - Masterplan
 - Action Plan (Mid-term / Long-term)

x. Opportunities

- a** Land to the South of the Dhaka Aricha Road are largely government owned. Hence, they could be opened up for TOD interventions.
- b** Inter city bus transport activity will be moved out to Himayatpur. Hence this area can be redeveloped and have vertical mixed use along with Transport hubs.
- c** TOD Node or Hub or Plaza can be formed to tie together the various transport modes – Line 5 N, 5 S, 2 and Circular Railway.
- d** Existing waterbody in the South can be developed as a large recreational space.
- e** Riverfront development can be created. Water transportation in the river can be rejuvenated.
- f** In the North of the Dhaka Aricha road, available vacant land can be utilised for TOD intervention.
- g** Existing community spaces in the North part can be revitalized and can be used as anchors to upgrade the neighbourhood in terms of public realm, utilities and amenities.
- h** Utilize additional space formed by road realignment, to create a new multi purpose interface – landscaped public spaces, sunken courts for crossover and layby for buses, rickshaws etc.



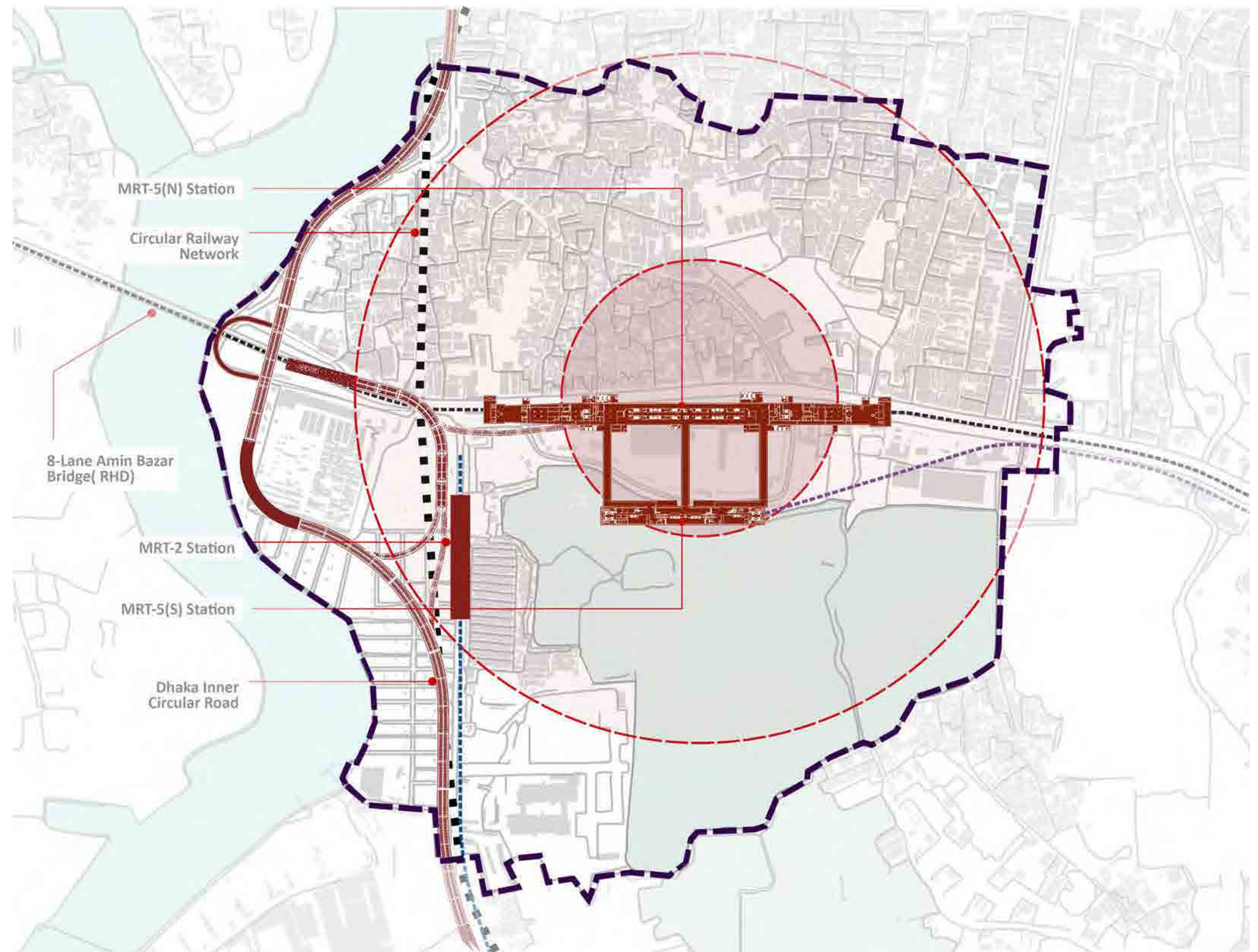
2

**BRIEF FOR GABTOLI
TOD MASTERPLAN**

i. TOD Masterplan Boundary

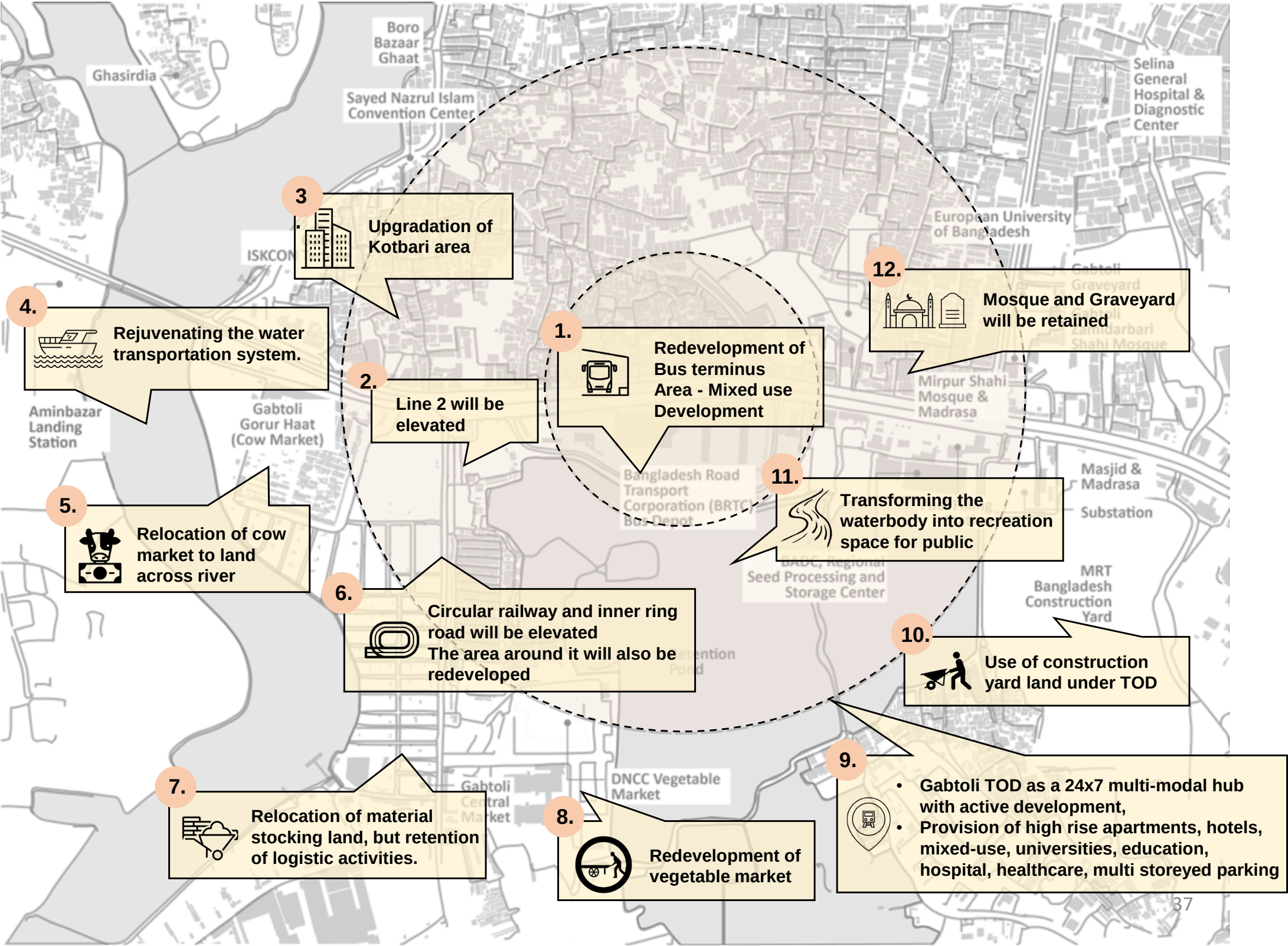
Based on our analysis of the project context and reading of Issues and opportunities for the Gabtoli TOD site, we have defined the TOD Masterplan Boundary for Gabtoli based on the following considerations:

- 500m radius from Gabtoli Line 5 North Metro Station.
- Developable land available to the South and South West of the Station.
- Existing road network of Neighbourhoods to the North of the Station (Kotbari, Bagbari).
- Natural features – Buriganga River and Kalyanpur retention pond.

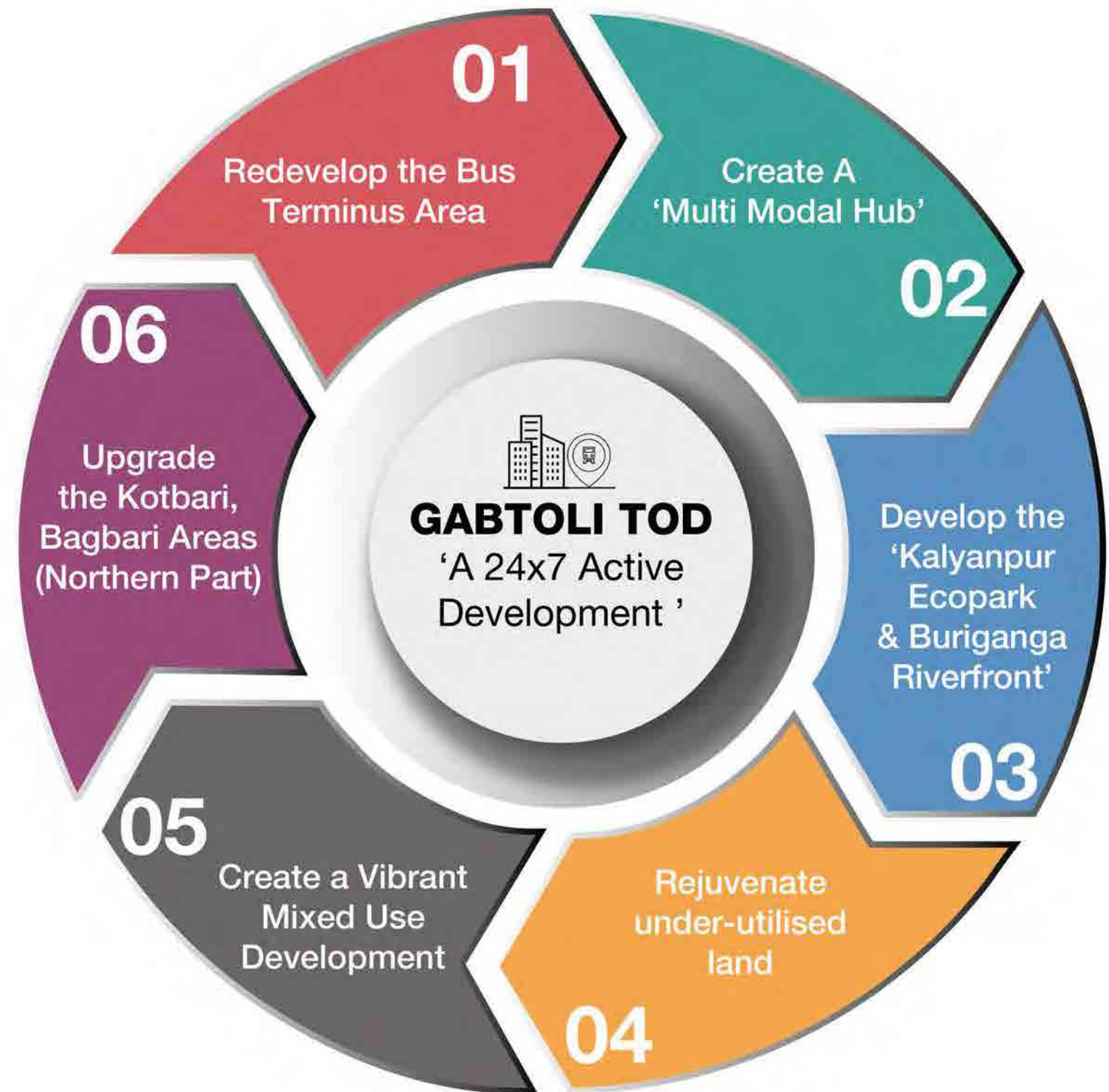


ii. Development Potential

The adjacent annotations summarize the ideas and suggestions that had emerged during the course of discussion with RAJUK on 1st March 2022. This collage of possible interventions lays the base for a framework of ‘Development Potential’ for the Gabtoli TOD area.



TOD Intent



iii. Emerging Brief for Gabtoli TOD

Gabtoli TOD Framework		
	TOD Intent	Possible Developments
01	REDEVELOP THE BUS TERMINUS AREA	Maximize the Commercial value of the bus terminus area with a Vertical Mixed Use development
02	CREATE A 'MULTI MODAL HUB'	Station Plaza Multi Modal Interchange and Multi Storeyed Parking Crossovers and Connections Integrate Line 5 North, 5 South, Line 2, Circular Railway, Water transport and Intra City bus
03	DEVELOP THE 'KALYANPUR ECO PARK' AND 'BURIGANGA RIVER FRONT'	Kalyanpur Hydro Eco park proposal Contiguous promenade along Buriganga River Riverfront Development
04	REJUVENATE 'UNDER- UTILISED LAND'	Redevelop Gorur Haat area, Material Stocking area, Squatter Settlement area, Vegetable market area, BADC Seed storage area
05	CREATE A VIBRANT MIXED USE DEVELOPMENT	Augment Affordable Housing in the TOD area Mix of High rise apartments, Hotels, Education facilities, Healthcare, Logistics
06	UPGRADE THE KOTBARI, BAGBARI AREAS (NORTHERN PART)	Improve quality of public realm, Increase of FAR Easy connections to transport hubs Enhance utilities and amenities

iv. Development Scenarios / Directions for Gabtoli TOD

SCENARIO 1: REDEVELOPMENT OF SOUTH PART AND RETROFITTING OF NORTH PART

REDEVELOPMENT OF SOUTH PART:

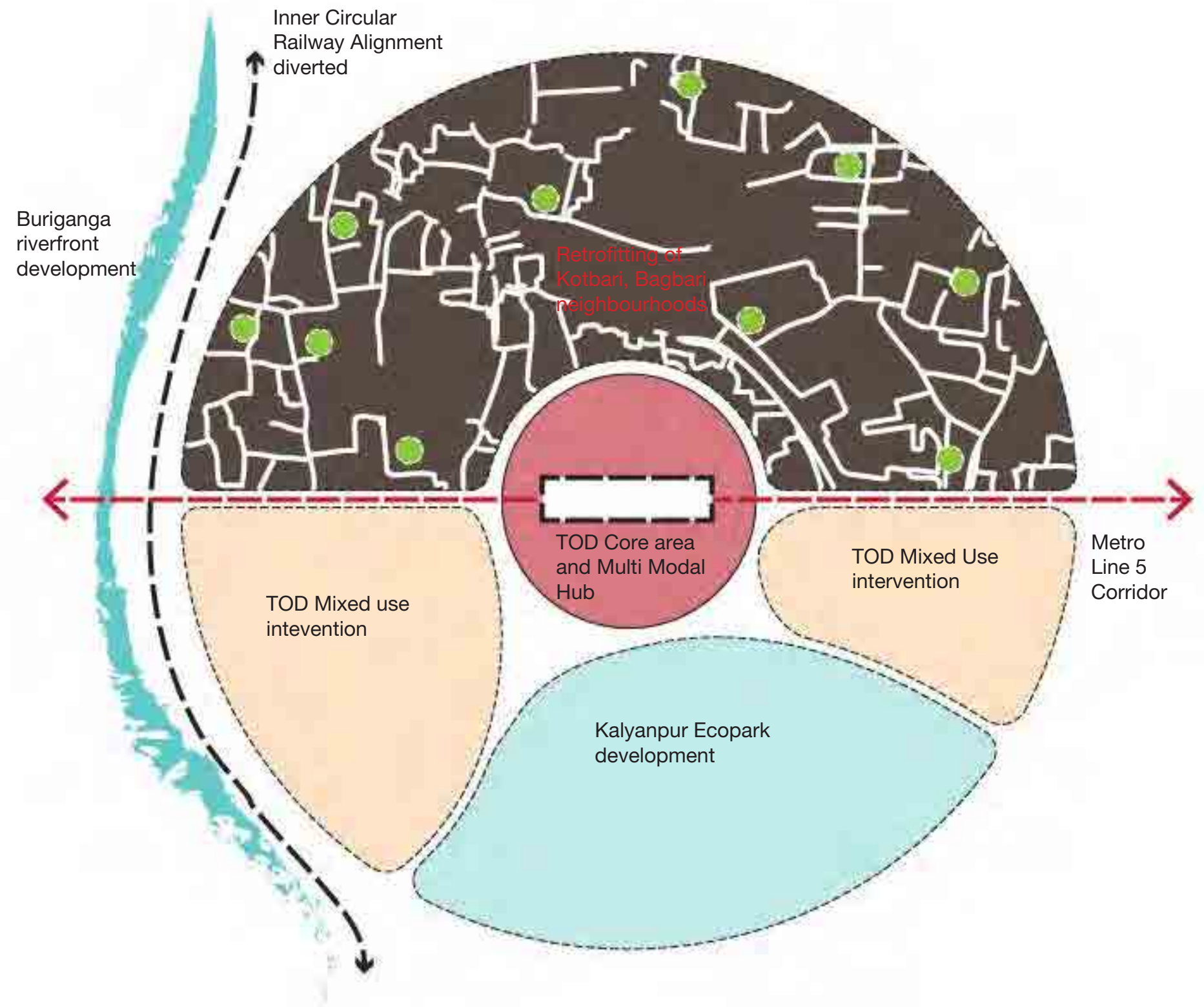
Under-utilised land parcels such as Bus terminus area, Gorur Haat area, Construction material stocking area, Vegetable market area, Squatter settlement, BADC seed storage area – will get redeveloped as per TOD Masterplanning.

RETROFITTING OF NORTH PART (KOTBARI, BAGBARI AREAS):

- Minimum disturbance to the existing settlement.
- Strategic interventions in terms of street improvement, public spaces, social amenities.
- Alternate alignment suggested for Circular Railway, such as not to disturb the existing settlement.

Following are some key considerations for Retrofitting of Neighbourhoods, as understood from various relevant reference documents such as UTTIPEC TOD Norms India, NIUA TOD Guidance document India, TOD Standards World Bank:

- Address issues such as lack of pedestrian movement network, lack of adequate physical and social infrastructure.
- Incentivise amalgamation of plots and augmentation of built space. Give additional FAR to private landowners for foregoing land to public realm.
- Improve street quality in terms of green cover, lighting, underground utilities upgradation, paving etc. Widening of critical streets may be taken up.
- Improve access to local services – grocery shops, pharmacy / healthcare, primary school etc. Improve access to parks and playgrounds. Improve Water management, waste water treatment, solid waste management.
- Augment & Incentivize affordable housing and create a variety of housing types / options. Upgradation of aging building stock to be planned for.
- Preserve local businesses, economic activities, local products etc. Minimize displacement of current residents.

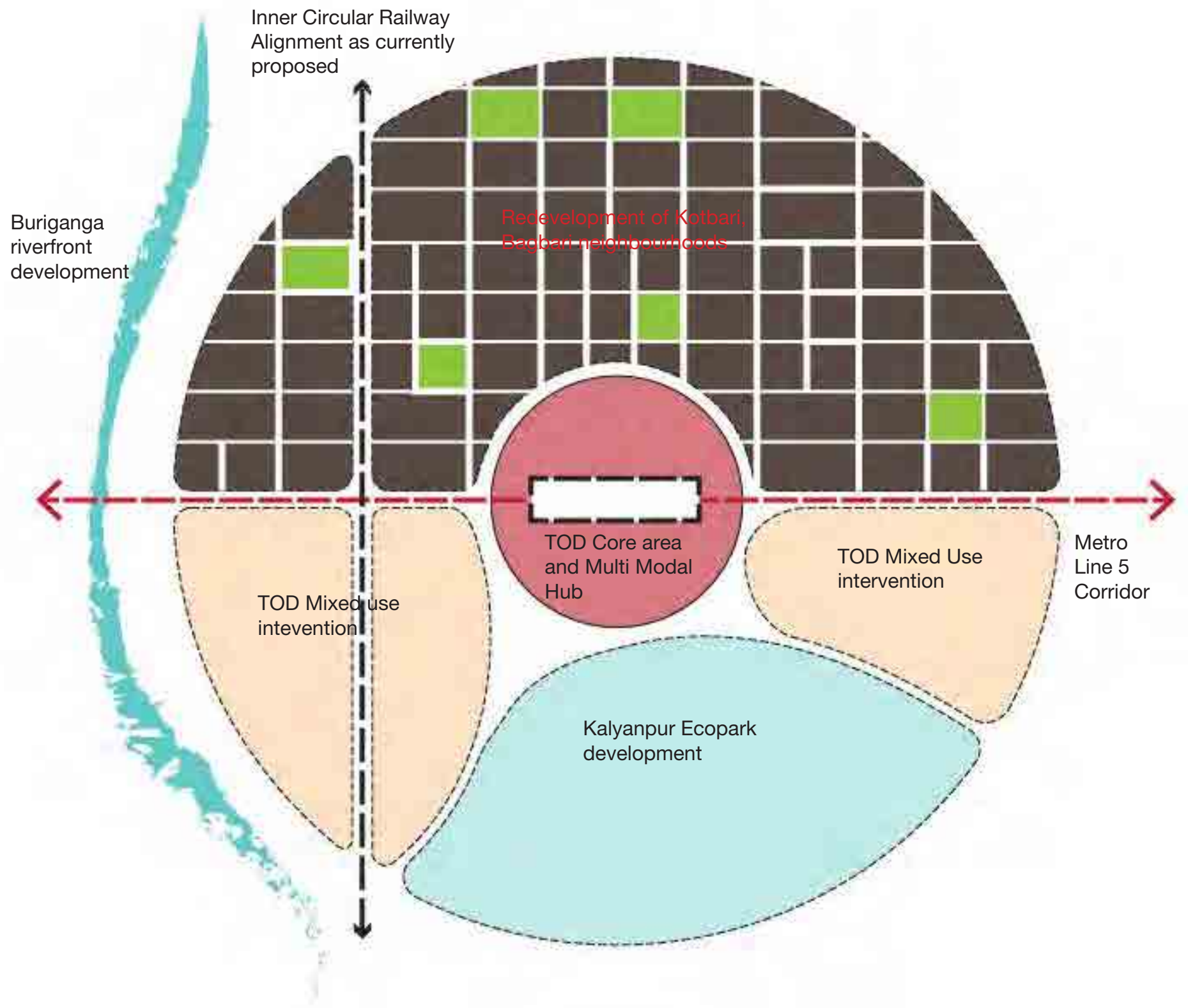


iv. Development Scenarios / Directions for Gabtoli TOD

SCENARIO 2: REDEVELOPMENT OF BOTH SOUTH PART AND NORTH PART

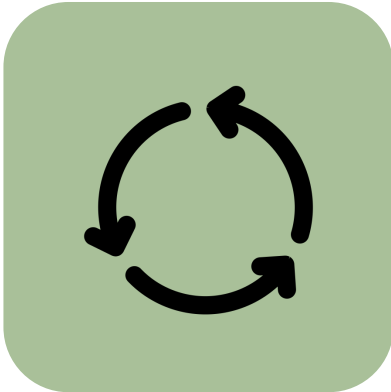
REDEVELOPMENT OF SOUTH PART:
Under-utilised land parcels such as Bus terminus area, Gorur Haat area, Construction material stocking area, Vegetable market area, Squatter settlement, BADC seed storage area – will get redeveloped as per TOD Masterplanning.

- REDEVELOPMENT OF NORTH PART (KOTBARI, BAGBARI AREAS):
- Complete redevelopment with restructuring of the road structure, plots, define new public space structure etc.
 - Circular railway cutting across the settlement.
 - More strong physical connection to TOD on the south side of the Gabtoli main road.
 - Complete land reconstitution, FAR augmentation and infrastructure redevelopment. Complete urban restructuring in terms of scale of urban blocks , plots, landuse, open space structure and building form & typologies.
 - Road network would be redeveloped while connecting to existing road network.



3 MASTERPLAN STRUCTURE ALTERNATIVES

i. Design Principles



There are a few under-utilised land parcels such as the Bus terminus area, Gorur haat, Construction material stocking area, Unused vegetable market, BADC seed storage area etc. These need to appropriately utilised and rejuvenated in terms of ‘Value Capture’ in a TOD Scenario

1. Rejuvenate Under-utilised land

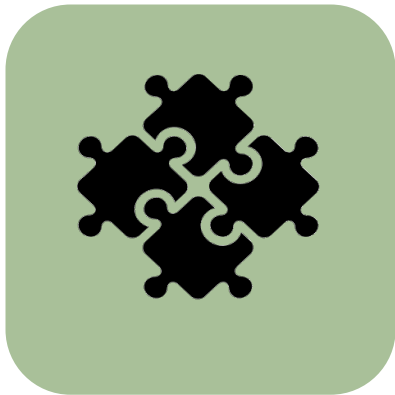


The existing neighbourhoods to the North of the Metro Corridor – Kotbari, Bagbari, Boro Bazar, Lalkuthi need to be upgraded and adapted to a TOD Scenario. Quality of public realm in these neighbourhoods needs to be improved, quantum of built space needs to be augmented and Utilities & Amenities need to be enhanced.

2. Upgrade Existing Neighbourhoods



i. Design Principles

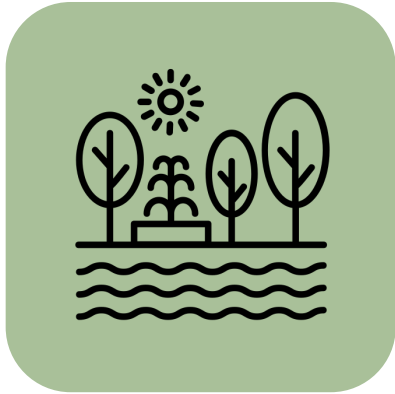


The TOD influence area in Gabtoli consists of various fragmented parts. As part of a holistic TOD Masterplan, these fragmented parts need to bound together as an integrated development vision.

3. Bring together the fragmented parts



Reference: TOD Masterplan for Taizhou Yintai City, Zhejiang, China – BDP Project
Design for High Density mixed use environment around the transport hub



The Gabtoli TOD Site has remarkable natural landscape assets, comprising the Buriganga Riverfront and also the Kallyanpur Retention pond. These ‘Blue Green’ assets will be integrated and enhanced as part of a comprehensive TOD Masterplan

4. Integrate with Landscape Assets of the Site



Avon riverfront, New Zealand (BDP Project)



Ref: Jurong Lake Gardens, Singapore



Ref: Bishan Park, Singapore

i. Design Principles

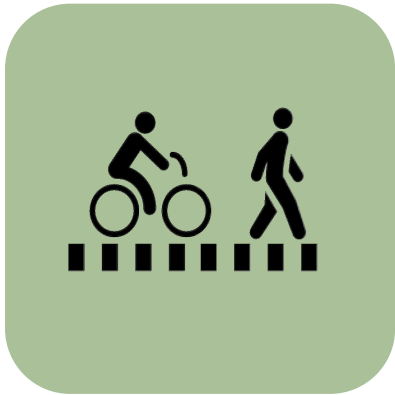


For a strategic Transit hub such as Gabtoli, it is very important to plan for a robust ‘Multi Modal Hub’ which will facilitate seamless exchange between the various transport modes.

5. Create a ‘Multi Modal Hub’



Reference: Multi Modal Interchange at Chattarpur Metro Station, Delhi
Design for easy interchange to a variety of public and private transportation modes



Another key design principle is to plan and design for a smooth, pleasant experience in the TOD area for pedestrians and cyclists with respect to the Transit hubs and public spaces in the TOD Masterplan.

6. Enhance ‘Walking & Cycling’, Public Space Experience



Separate walking / cycling from vehicular movement



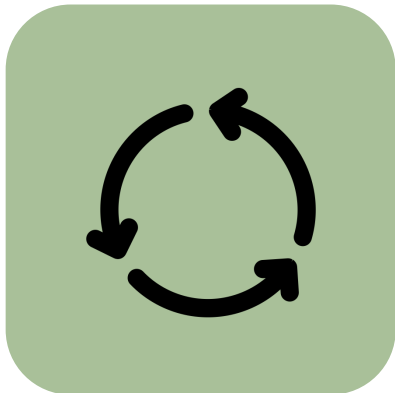
Amenities for Cyclists – Mexico City



Pedestrian oriented TOD – Curitiba, Brazil

i. Design Principles

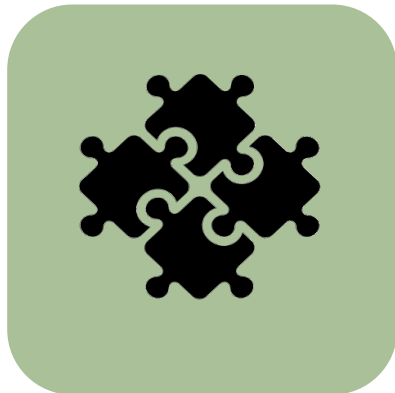
Following is a summary of the six design principles that forms the direction in approaching our TOD Masterplan framework proposal for Gabtoli:



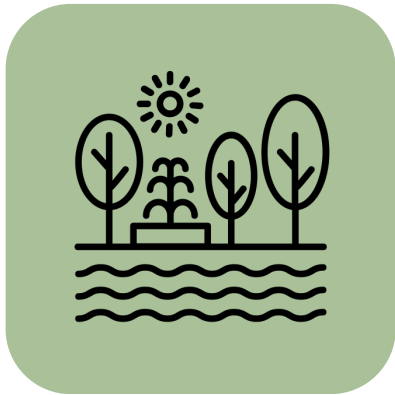
1. Rejuvenate Under-utilised land



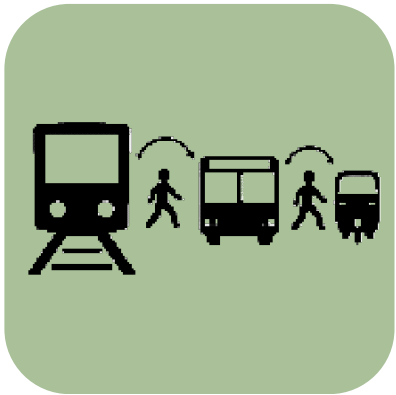
2. Upgrade Existing Neighbourhoods



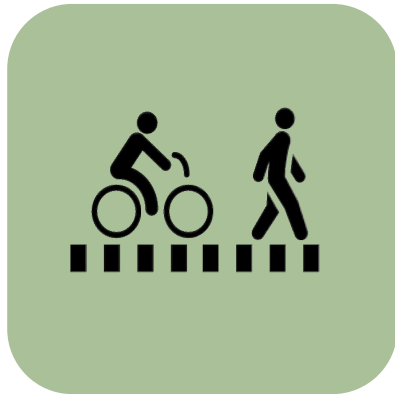
3. Bring together the fragmented parts



4. Integrate with Landscape Assets of the Site



5. Create a 'Multi Modal Hub'

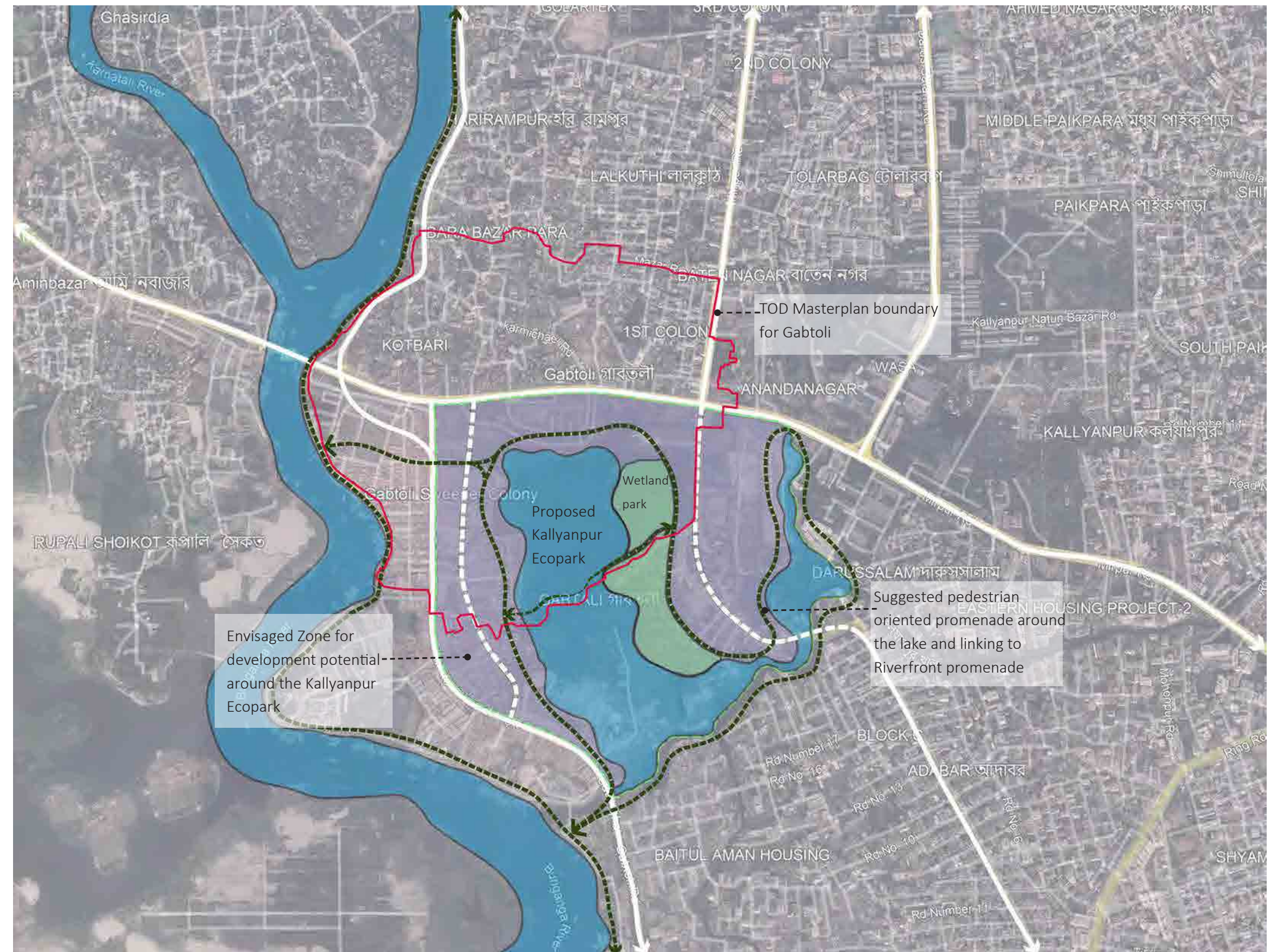


6. Enhance 'Walking & Cycling', Public Space Experience

ii. Intermediate Macro Scale

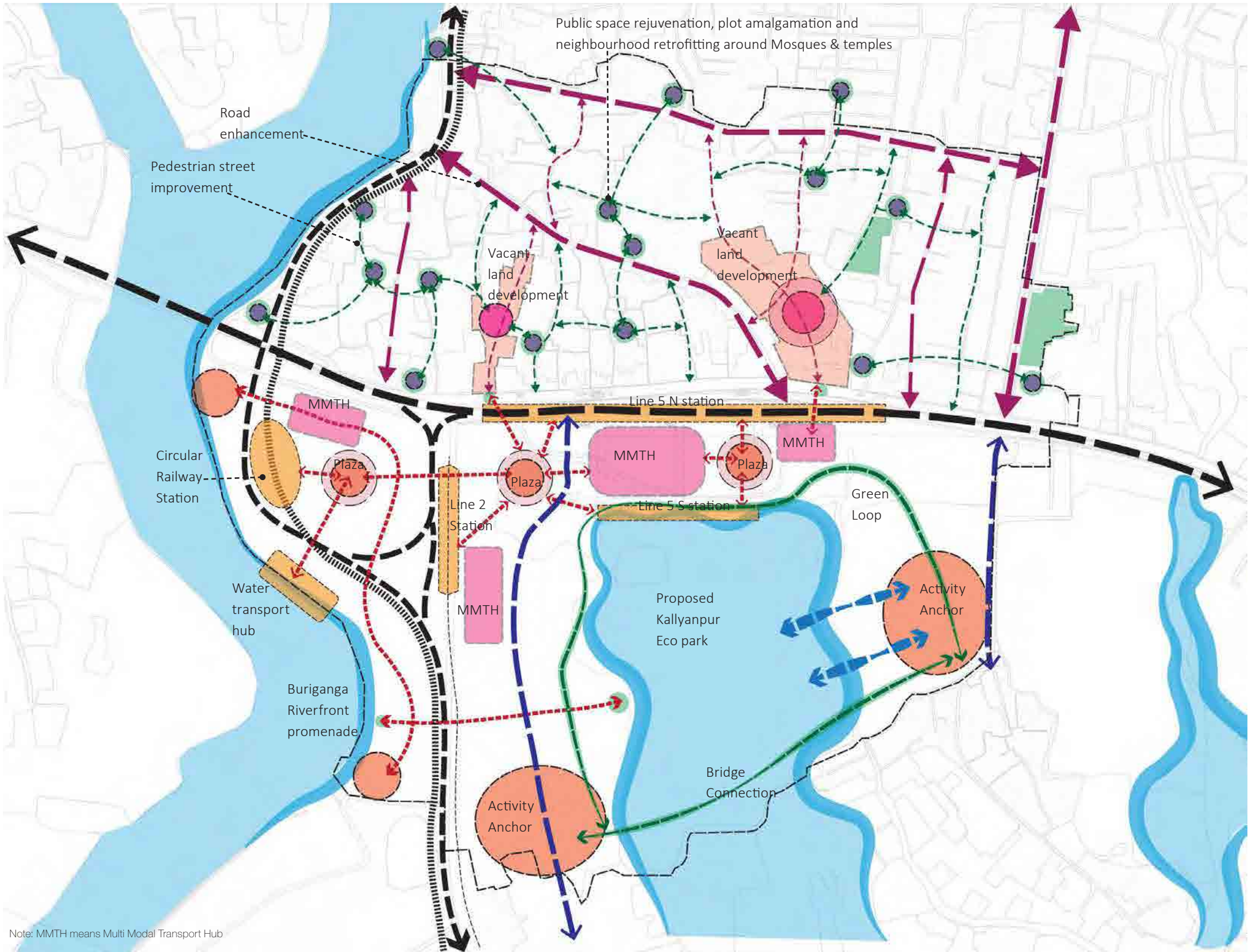
The adjacent plan shows a Design Strategy at an Intermediate Macro scale, to lay the context for taking a deep dive for TOD Masterplan Concepts for the Gabtoli TOD Site.

- We envisage that the proposed Kallyanpur Eco park development will become a major city level magnet for activities and development.
- Therefore, at this intermediate macro scale, we have defined a possible zone for mixed use urban development around the Kallyanpur Eco park.
- Also, we have suggested a contiguous 'pedestrian oriented promenade' around the lake which would also link to the Riverfront promenade.



iii. Masterplan Structure Scenario 1

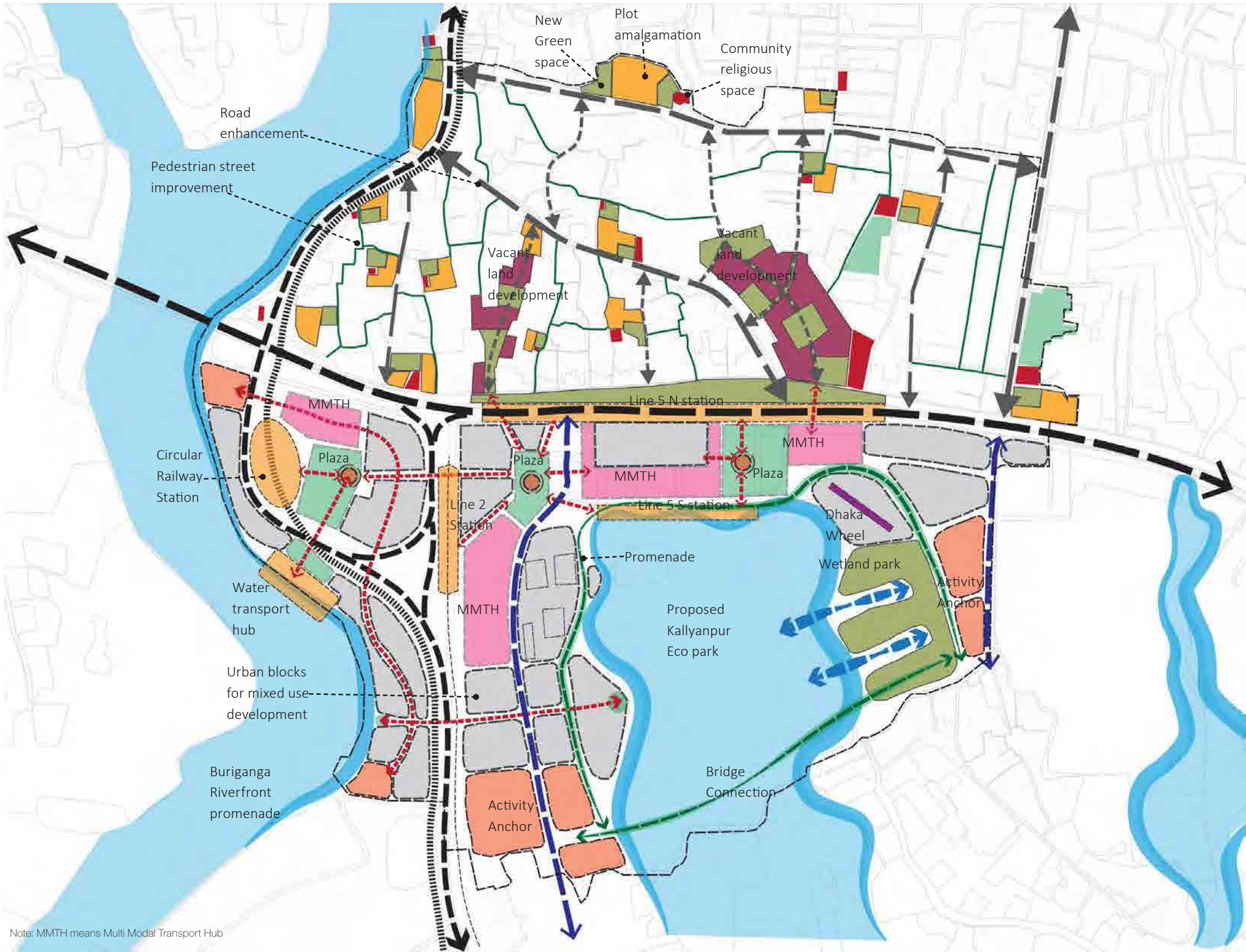
SCENARIO 1:
REDEVELOPMENT OF SOUTH PART AND
RETROFITTING OF NORTH PART



CONCEPT DIAGRAM

iii. Masterplan Structure Scenario 1

SCENARIO 1:
REDEVELOPMENT OF SOUTH PART AND
RETROFITTING OF NORTH PART

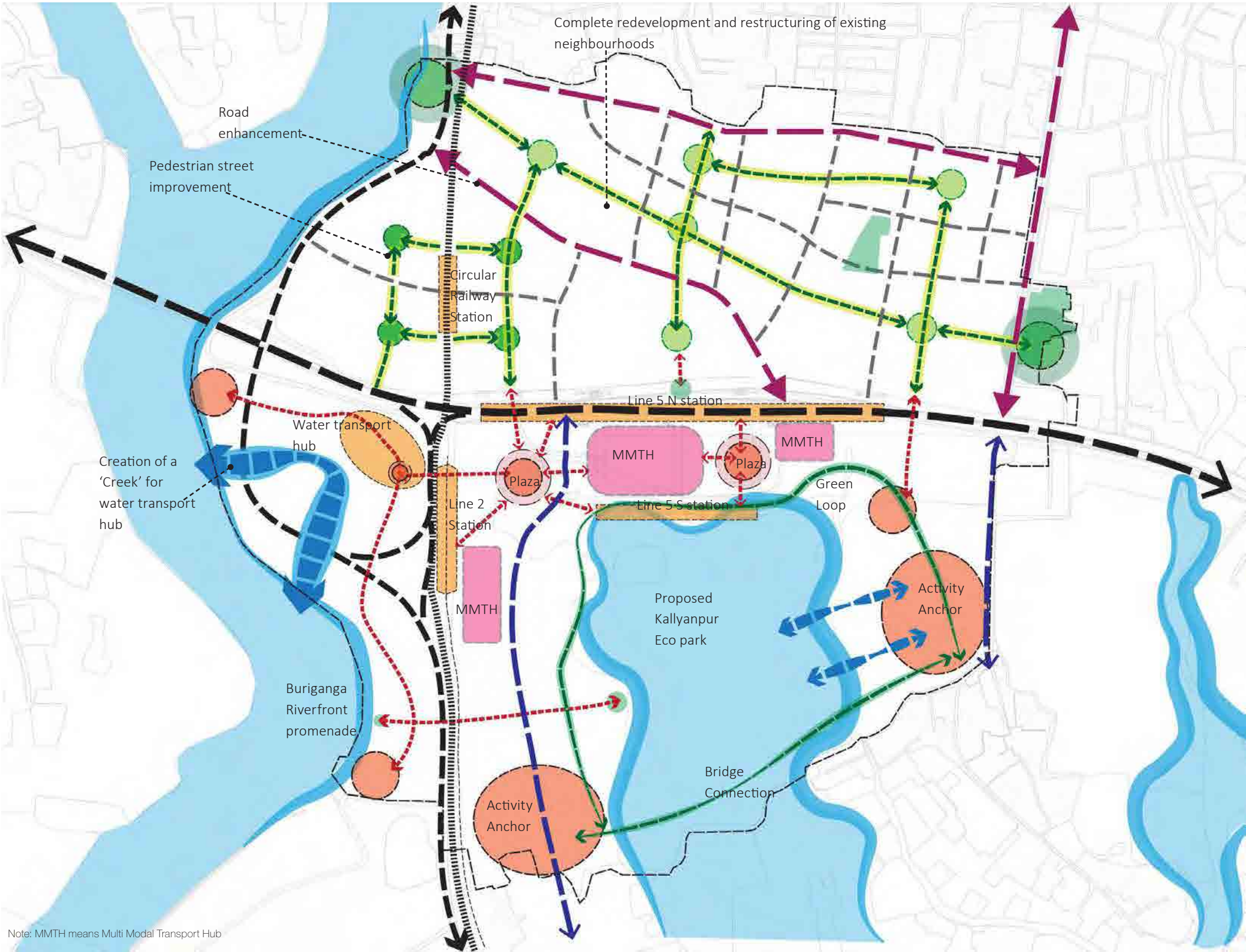


STRUCTURE PLAN

Note: MMTH means Multi Modal Transport Hub

iv. Masterplan Structure Scenario 2

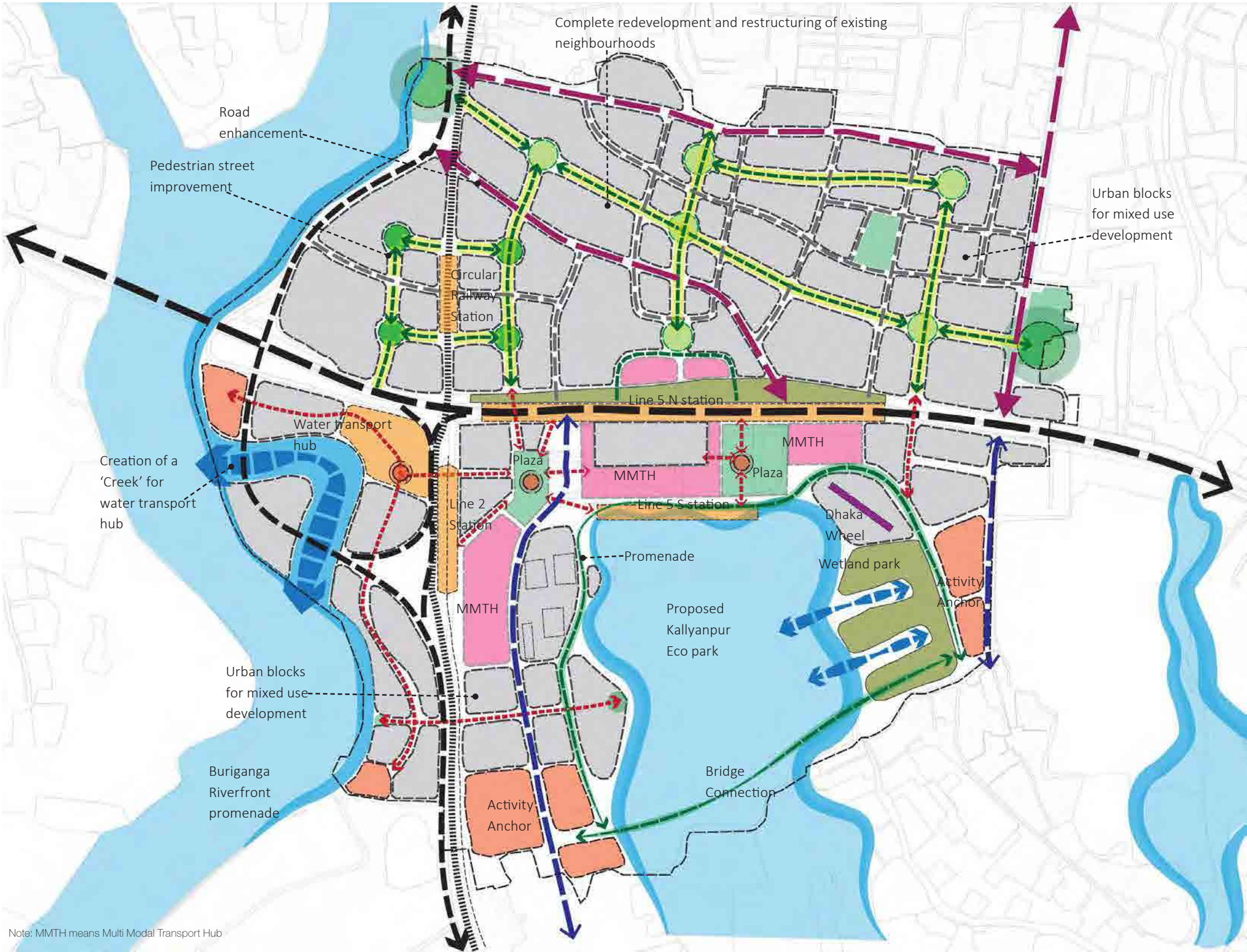
SCENARIO 2:
REDEVELOPMENT OF BOTH SOUTH PART
AND NORTH PART



CONCEPT DIAGRAM

iv. Masterplan Structure Scenario 2

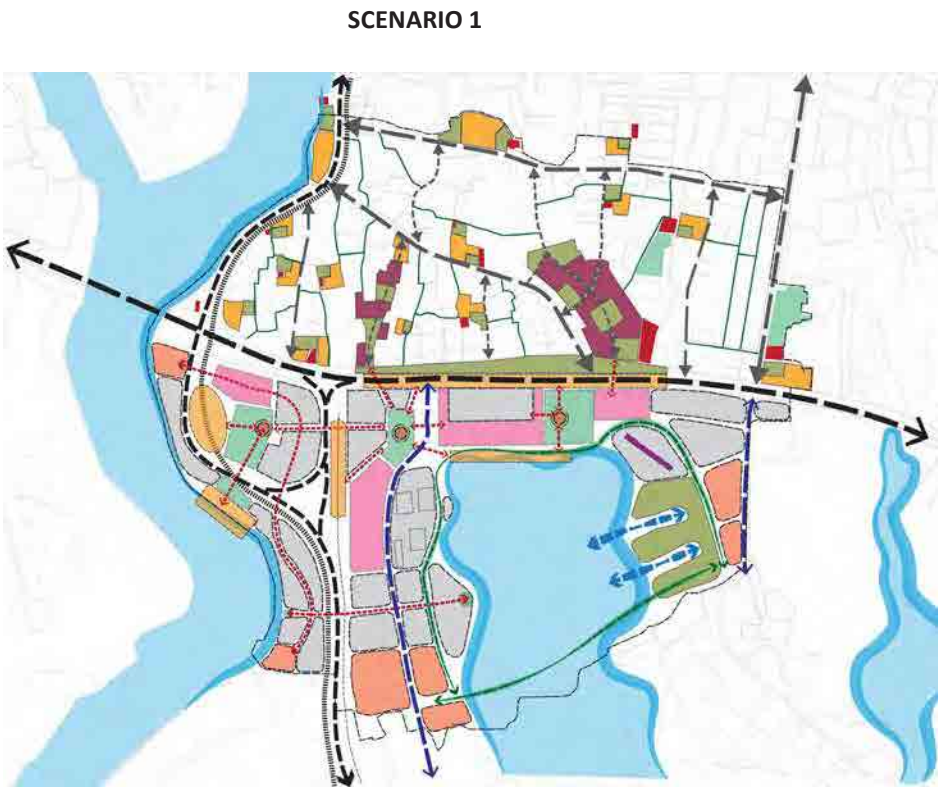
SCENARIO 2:
REDEVELOPMENT OF BOTH SOUTH PART
AND NORTH PART



STRUCTURE PLAN

Note: MMTH means Multi Modal Transport Hub

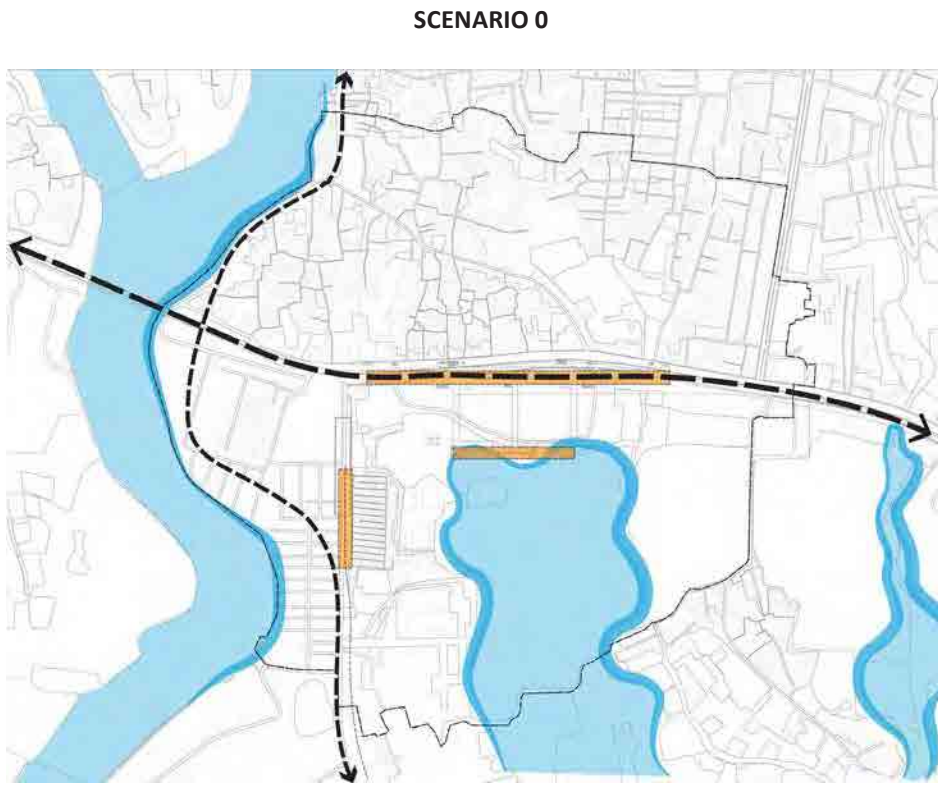
v. Comparison



REDEVELOPMENT OF SOUTH PART
AND RETROFITTING OF NORTH PART



REDEVELOPMENT OF BOTH SOUTH PART
AND NORTH PART



NO INTERVENTION

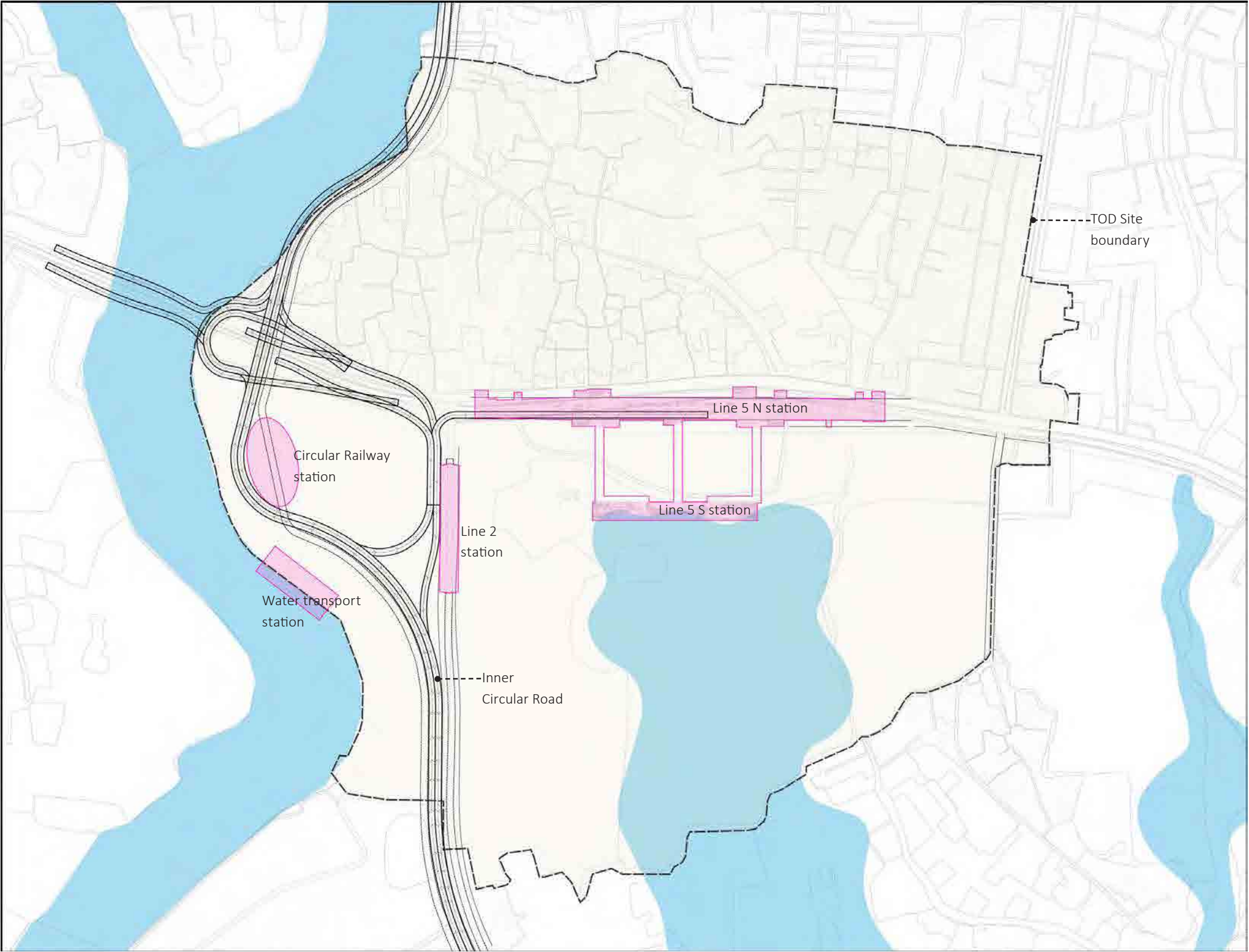
4

**TOD
MASTERPLAN
STRATEGIES**

i. Buildup of the Concept Masterplan framework

A. GABTOLI TOD SITE

- The adjacent plan shows the TOD site boundary defined for the Gabtoli TOD Masterplan. The extent of the TOD Site as indicated covers an area of about 106.76 hectares or 1.07 sq.km
- Also indicated, are the various transport related infrastructure proposed in the Gabtoli area - MRT Line 5 North station, MRT Line 5 South station, MRT Line 2 station, Circular Railway Station, Water transport station and the Inner Circular Road.

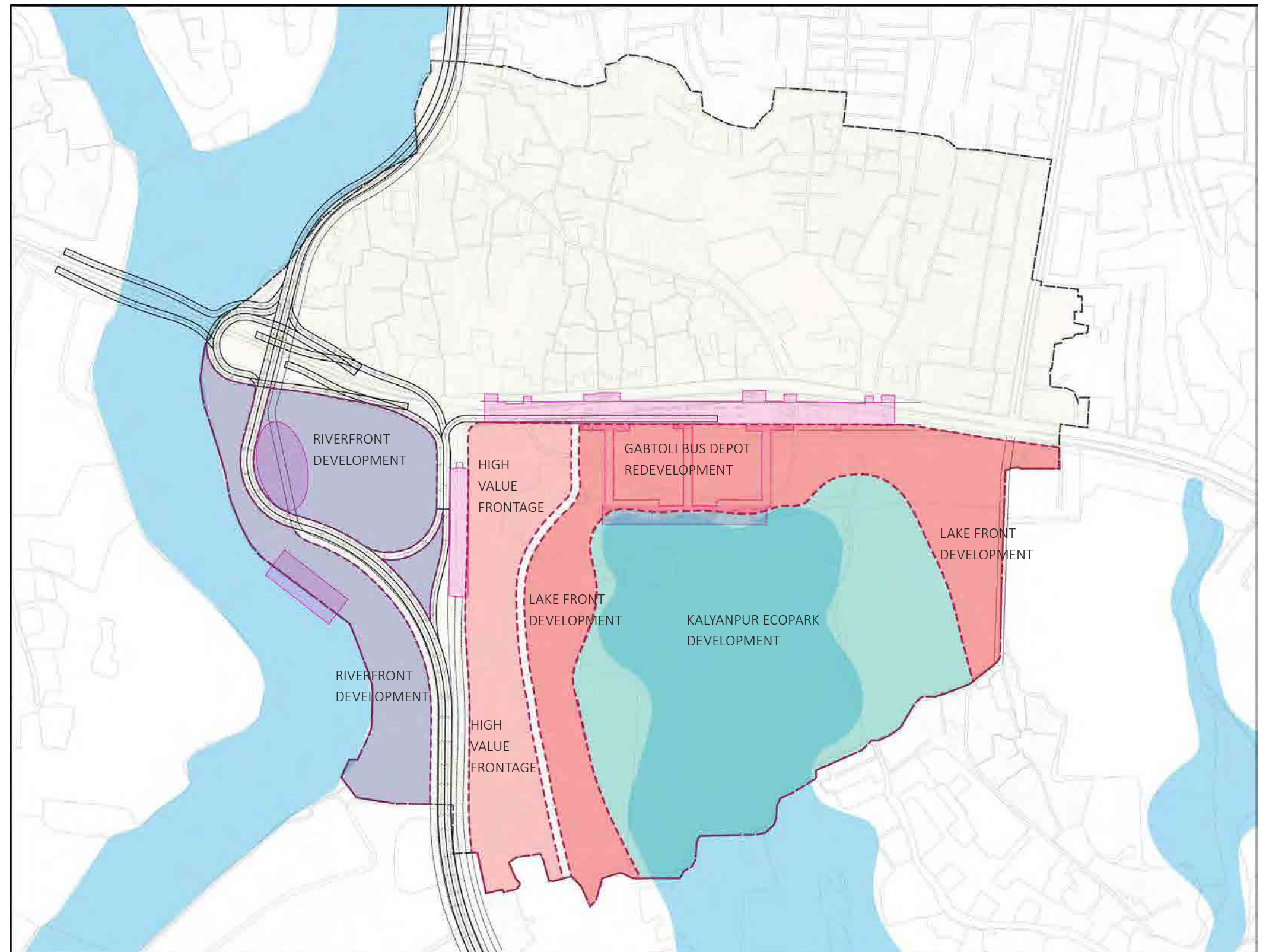


i. Buildup of the Concept Masterplan framework

B. ZONING FOR REDEVELOPMENT

Following is the broad zoning for urban redevelopment in the South Part of the TOD area:

- Kalyanpur Ecopark development - Lake rejuvenation, Wetland park, Lake promenade and recreational activities development.
- Gabtoli Bus Depot Redevelopment - Zone for Urban redevelopment in place of existing bus depot.
- Zone for Lakefront development on either side of Kalyanpur Ecopark.
- Zone for HighValue Development Frontage along Line 2 Elevated Metro Corridor / Inner Circular Road.
- Zone River front development with frontage of Buriganga River and promenade.

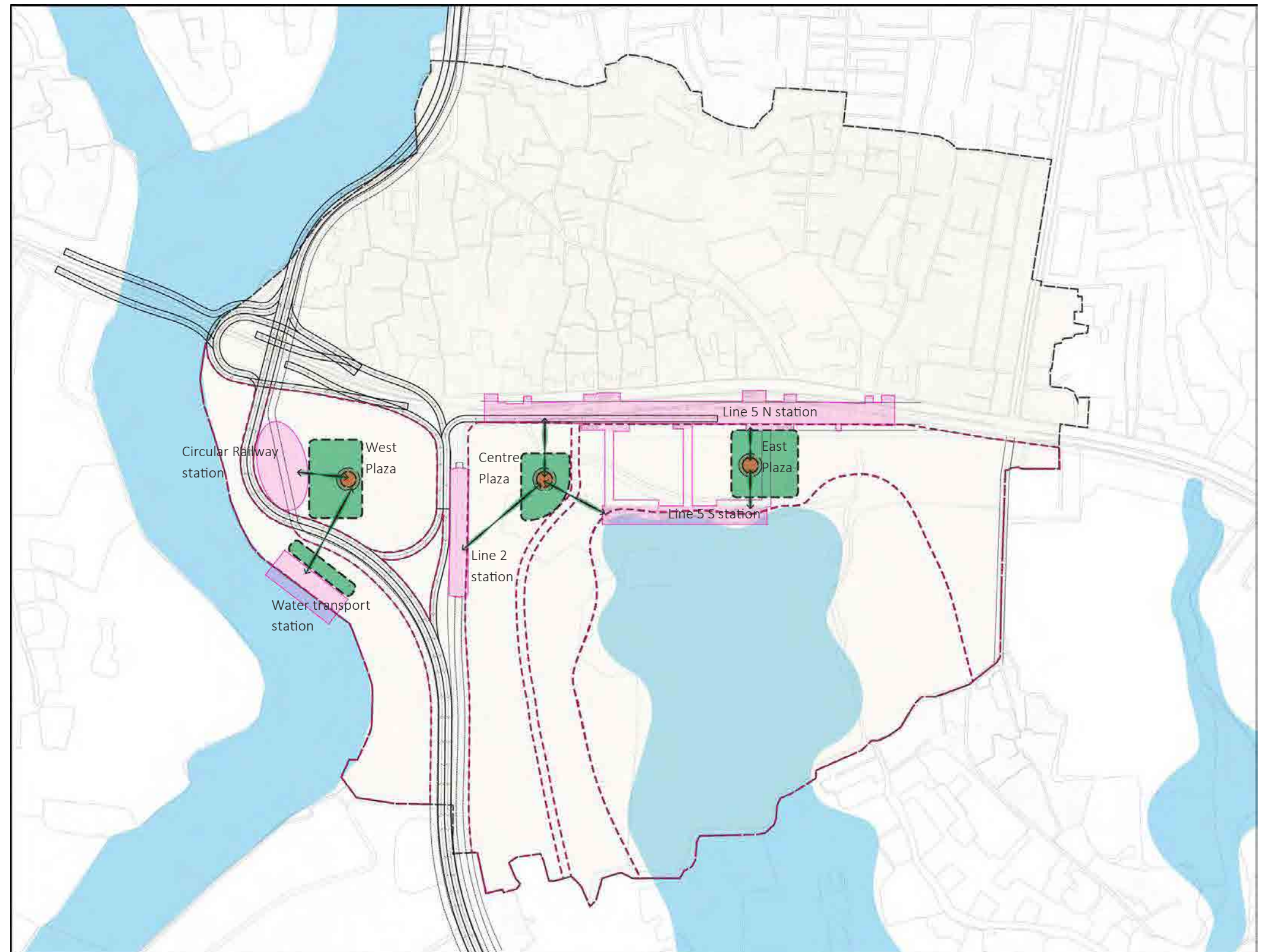


i. Buildup of the Concept Masterplan framework

C. CREATING PLAZAS FOR MULTI MODAL INTERCHANGE

Then, plazas are created in convenient proximity to the various Transit hubs in the TOD area:

- East plaza for Line 5 N and Line 5 S stations.
- Centre plaza for Line 5 N, Line 5 S and Line 2 stations.
- West plaza for the future Circular Railway station and Water transport station.

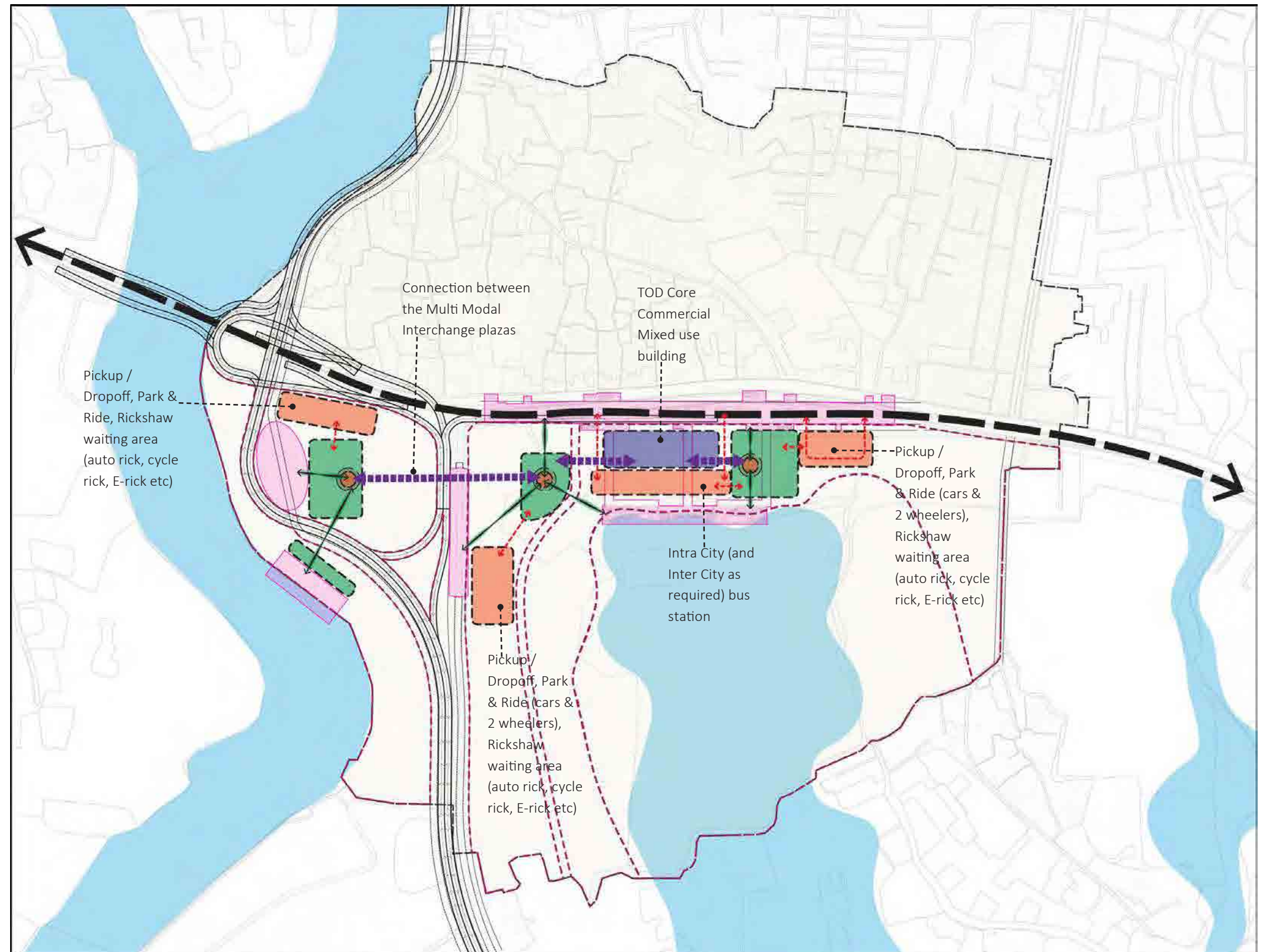


i. Buildup of the Concept Masterplan framework

D. CREATING MULTI MODAL TRANSPORT HUBS (MMTH)

Then, plazas are created in convenient proximity to the various Transit hubs in the TOD area:

- East plaza for Line 5 N and Line 5 S stations.
- Centre plaza for Line 5 N, Line 5 S and Line 2 stations.
- West plaza for the future Circular Railway station and Water transport station.



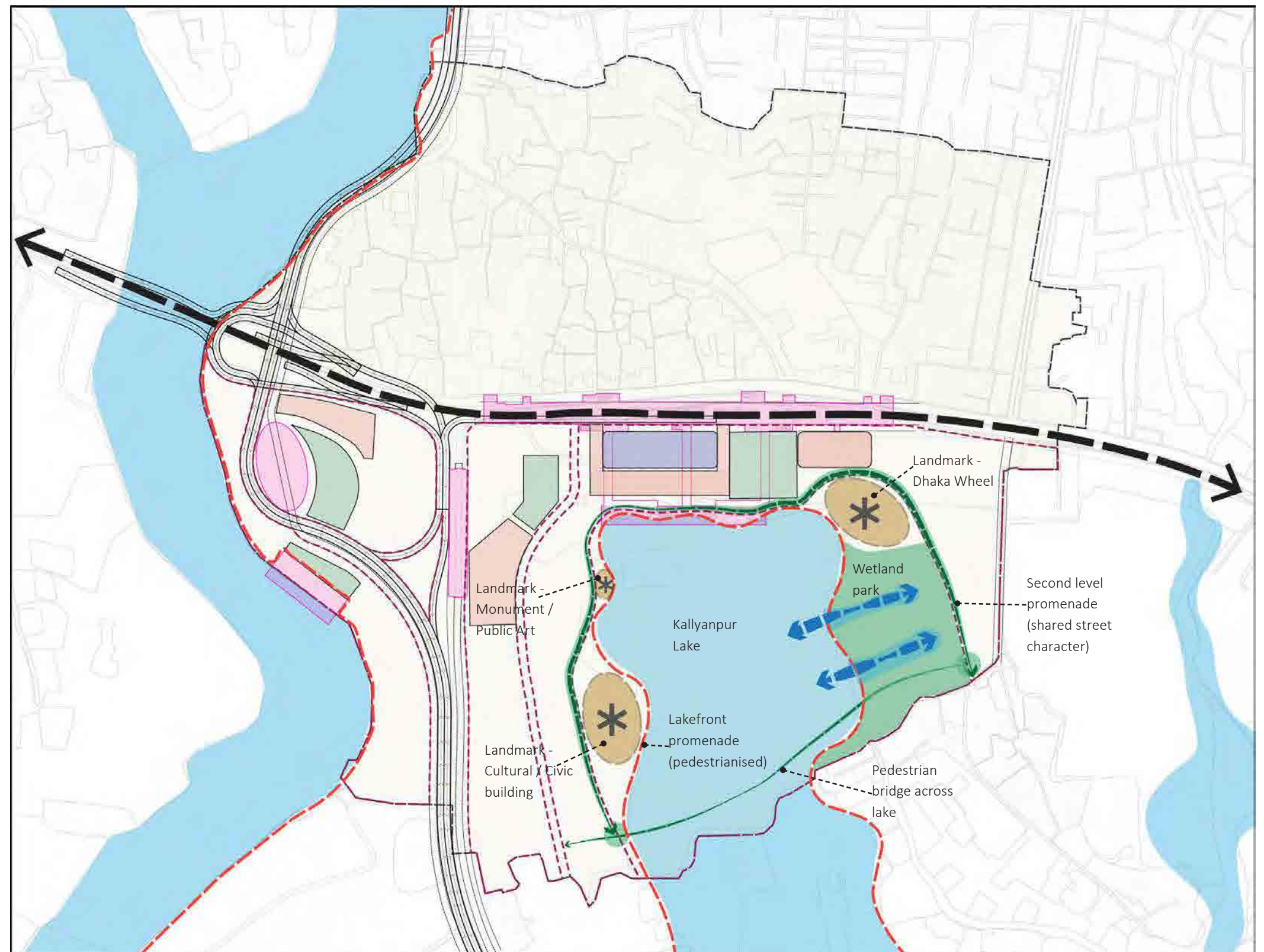
i. Buildup of the Concept Masterplan framework

E. ACTIVATING THE KALLYANPUR ECOPARK

The Kallyanpur Ecopark is a major 'Blue-Green' space and forms the heart of the Gabtoli TOD Masterplan.

The following urban design gestures are taken up to activate the Kallyanpur Ecopark:

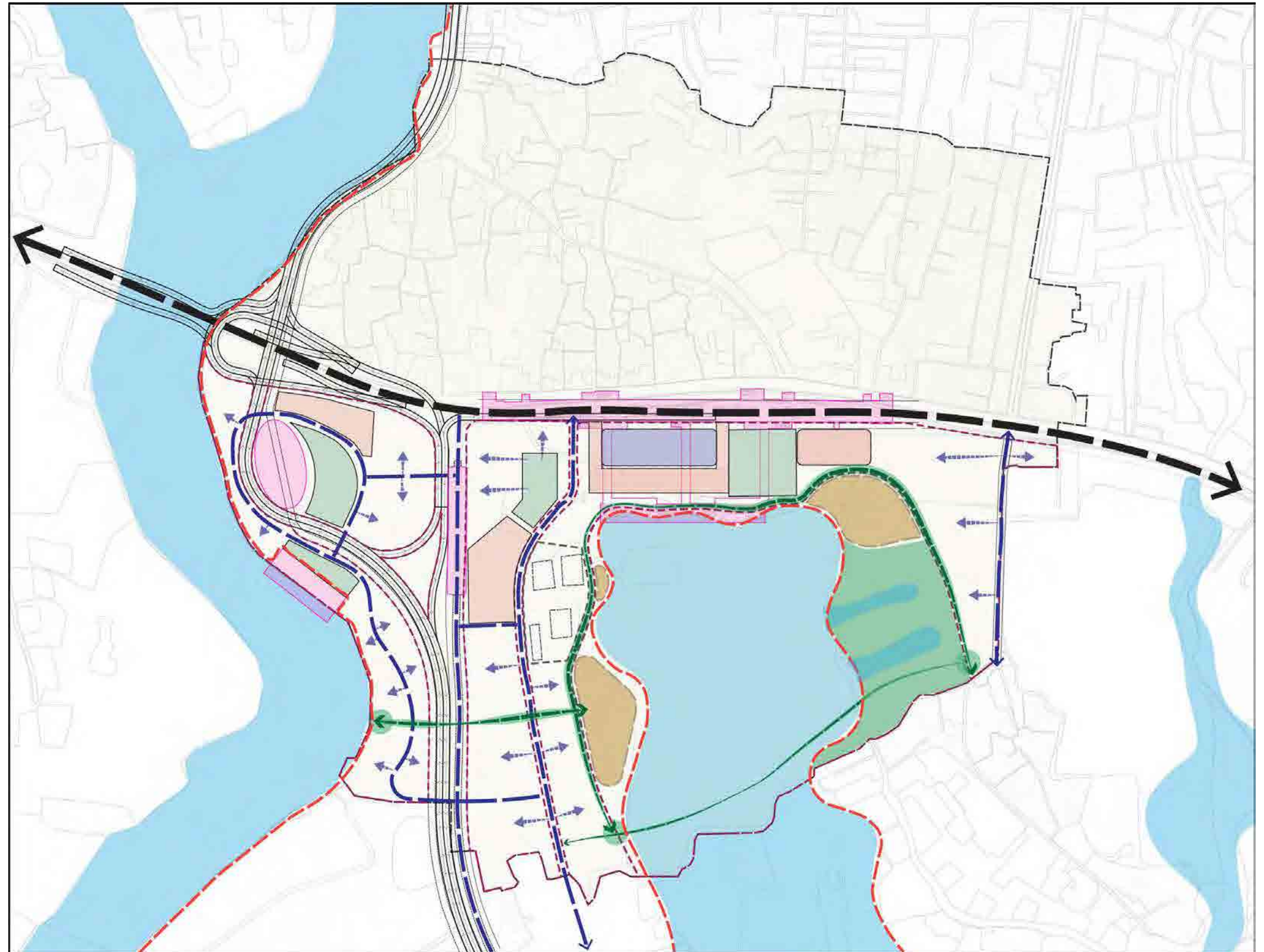
- A pedestrianised lakefront promenade is formed all around the Kallyanpur lake.
- Along the lakefront promenade, landmarks (as annotated in the adjacent plan) are created to punctuate the overall lake frontage.
- A wetland park is created in the Eastern part, to form an 'urban sponge' and also to connect to the Marsh / Wetland character of the place.
- A second level promenade is then formed with a shared (pedestrian + light vehicular) street character. This promenade will formed the lake facing edge for mixed use urban development as per the TOD Masterplan.



i. Buildup of the Concept Masterplan framework

F. ROAD STRUCTURE TO FORM DEVELOPMENT SPINE

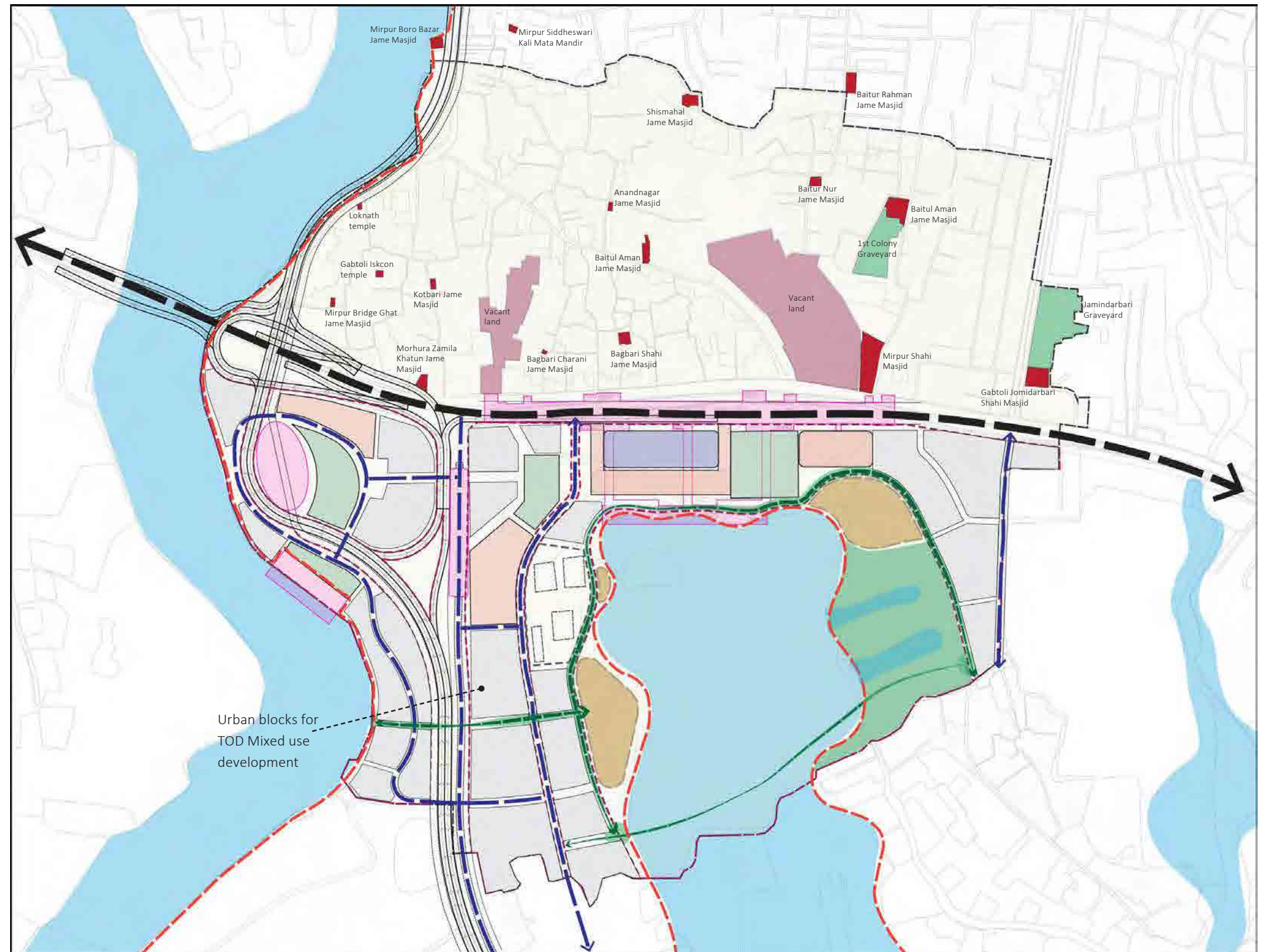
- Further, a broad structure for Road network to serve the TOD area, is defined.
- This Road network for the TOD area forms the Spine to anchor the Mixed use development brought about by the TOD Masterplan.



i. Buildup of the Concept Masterplan framework

G. RETROFITTING OF NORTH PART - EXISTING COMMUNITY SPACES AS ANCHORS

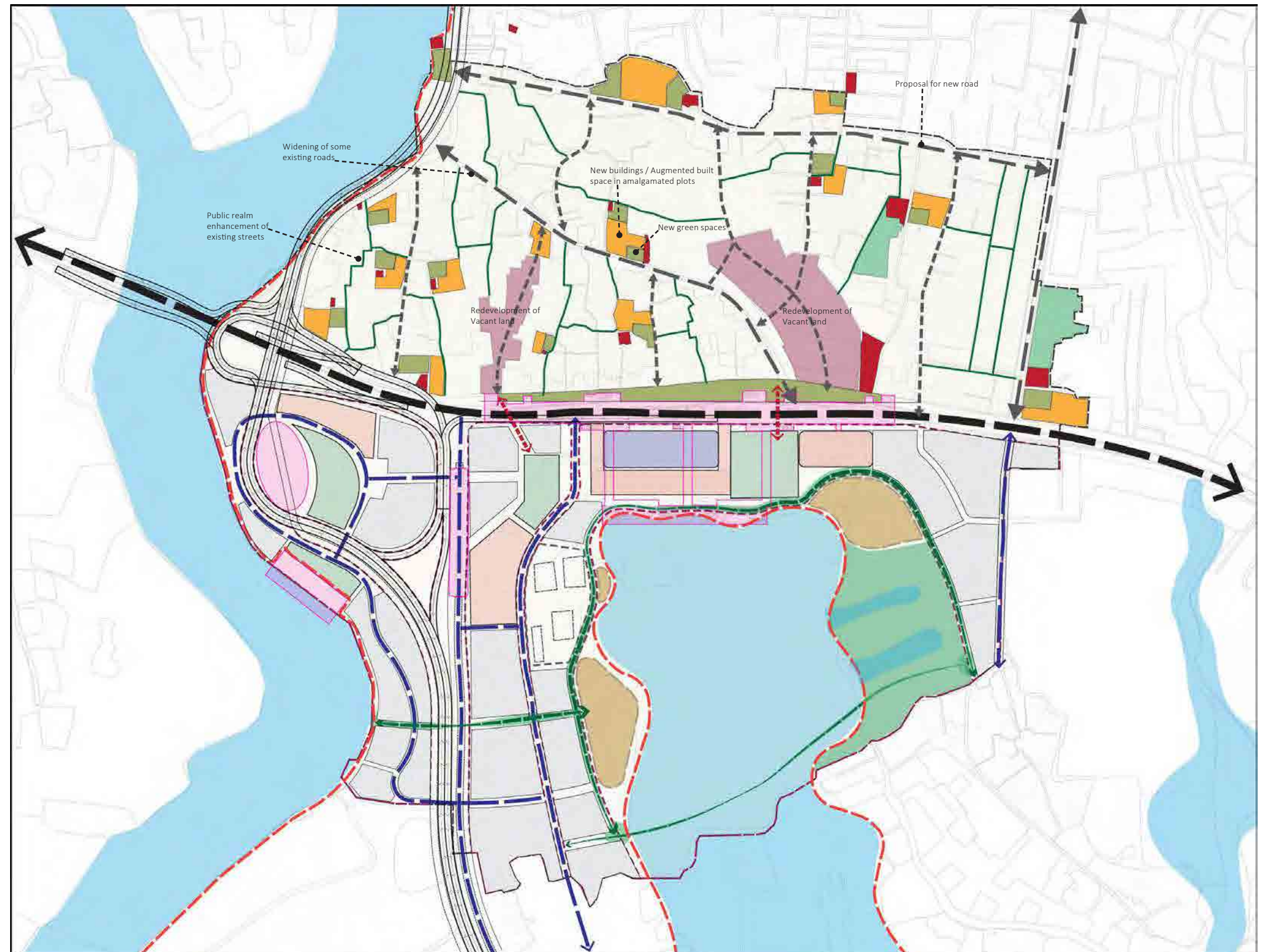
- In the South part, Urban blocks are defined for mixed use TOD development.
- As an initiation to the process of Retrofitting for the North part (Kotbari, Bagbari areas), the existing community spaces (Mosques, temples, graveyards etc) are mapped and identified as anchors for the Retrofitting process.



i. Buildup of the Concept Masterplan framework

H. RETROFITTING OF NORTH PART - STREET ENHANCEMENT, NEW GREEN SPACES AND PLOT AMALGAMATION

- Using the identified Community spaces as the starting point, small clusters of plot amalgamation are taken up around the community spaces. The intent here is to create new community green spaces near the existing community spaces like mosques, temples etc.
- Further, to be able to achieve the new green spaces, new augmented built space will be developed in the amalgamated plots to compensate for the existing buildings removed while creating the green space and also to provide for additional built space for the TOD scenario.
- Streets in Kotbari, Bagbari neighbourhoods will be enhanced in terms of paving, landscaping, pedestrian amenities with the intent to provide for ease of pedestrian access to the Line 5 North stations and the other transport hubs planned for in the Gabtoli TOD Masterplan.
- Also, some existing roads will be widened and some new roads will be created with the intent to improve the capacity of the existing neighbourhoods to deal with vehicular traffic ingress and egress.



5

**EMERGING
TOD
MASTERPLAN**

i. Illustrative TOD Masterplan

- | | |
|---|---|
| 1. Entry Points Metro Station (Gabtoli Centre) | 16. Water Transport Hub |
| 2. Bus Transit Hub | 17. Circular Railway Station |
| 3. Multi-modal Transit Hub (MMTH) & Commercial Mixed use | 18. Offices, Retail and Hotels around Public Plaza |
| 4. Public Plaza connecting MMTH with Kallyanpur Lake Ecopark | 19. Public park along Buriganga Riverfront |
| 5. BRTC Depot | 20. Amalgamated plots around existing community buildings to induce new green spaces and Mixed Use development on North side of the station |
| 6. Landmark Commercial Mixed Use Buildings | 21. Enhancement of existing roads and network of pedestrian connections of new green spaces to transit hubs. |
| 7. Line 2 Station | 22. Vibrant Mixed use Development on vacant land in the north |
| 8. Public Plaza | 23. Landmark Commercial and Business park |
| 9. Pickup Dropoff, Multi Level Parking & Commercial Mixed use Block | 24. Landmark Hotel / Convention Centre |
| 10. High Income Group Housing | 25. Wetland Park |
| 11. Hotel and Convention Centre around Ecopark | 26. Pedestrian crossover bridge |
| 12. Offices and Business Park | 27. Road linking to Amin Bazar Bridge to the West |
| 13. Hospital / Healthcare | 28. Road linking to National Parliament Building to the East |
| 14. Pedestrian Promenade around Kallyanpur Lake Ecopark | 29. Road linking to Mirpur on North |
| 15. Buriganga Riverfront Promenade | |



ii. 3D Aerial Views of the TOD Masterplan Proposal



Aerial view of the overall TOD Masterplan area

ii. 3D Aerial Views of the TOD Masterplan Proposal



Aerial view of Line 4 Metro station area from Buriganga River

ii. 3D Aerial Views of the TOD Masterplan Proposal



Aerial view of the TOD Core from Wetland Park

iii. Character Areas of the Masterplan

a. Commercial Frontage & TOD core



1. Street with Retail shops



2. Landmark Retail mixed use development over Bus Terminus



3. Retail mixed use development on both sides of the road



4. Commercial mixed use around Metro Station entrance

iii. Character Areas of the Masterplan

b. Integration of Public Plaza with Transit Hubs



5. Activities in Station plaza



6. Activities in Station plaza



7. Vista towards the station



8. Station plaza

iii. Character Areas of the Masterplan

c. Wetland Park & Riverside development



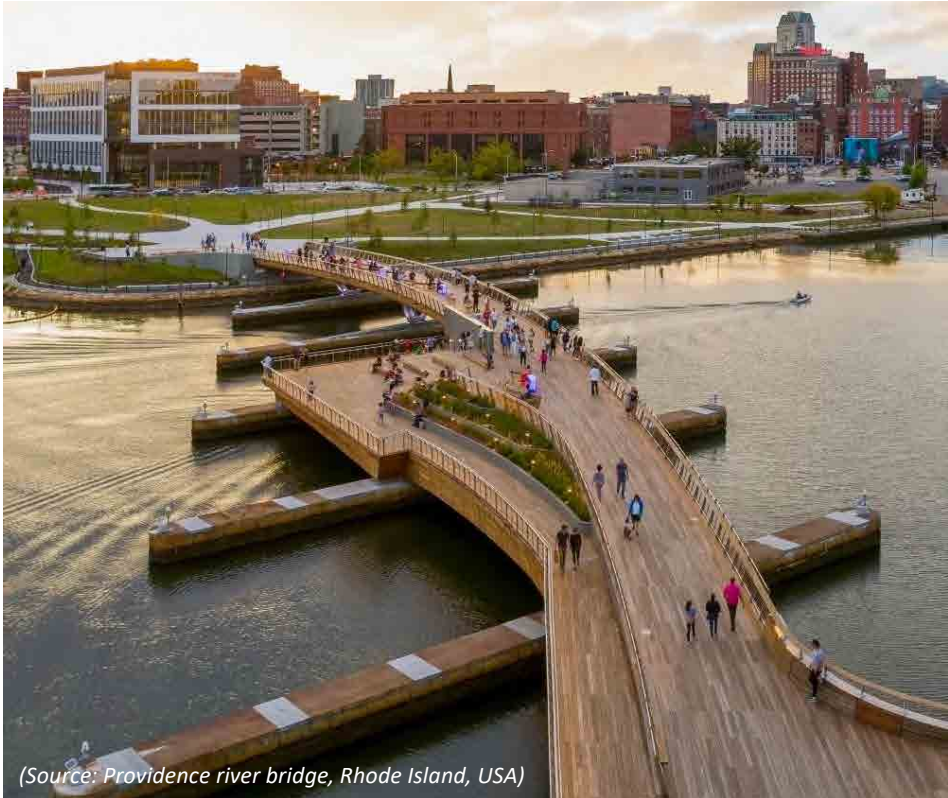
9. Public realm interface with water



10. Activities near Wetland Park



11. Landmark convention building



12. Pedestrian bridge across lake

iii. Character Areas of the Masterplan

d. Wetland Park & Riverside development



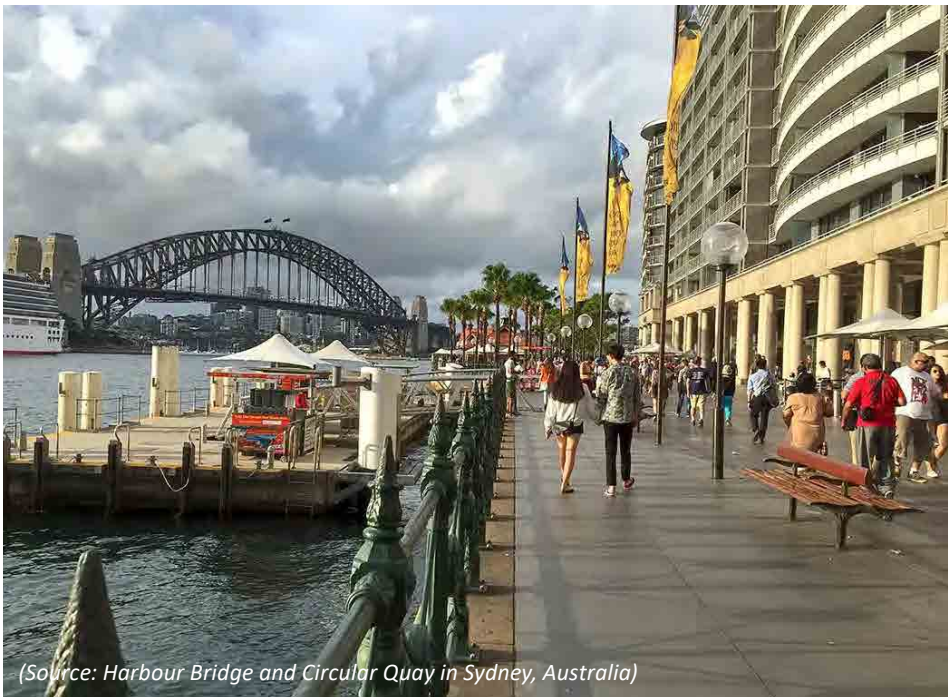
13. Linear green park along the river



14. Landmark commercial residential mixed use building



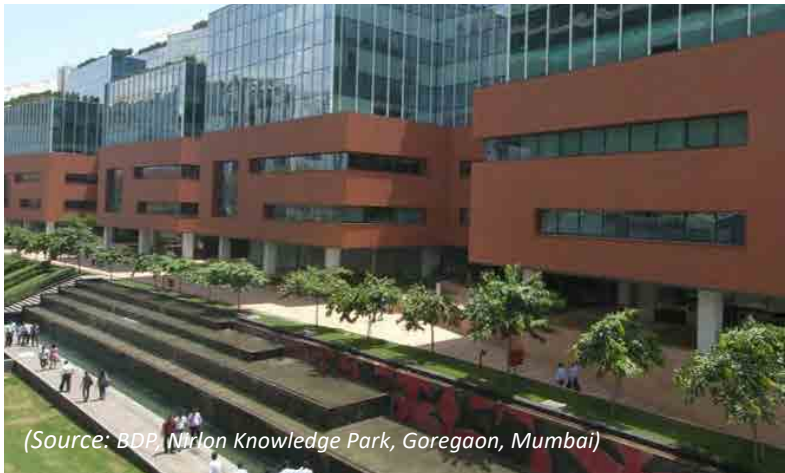
15. Water transit hub



16. Activities along waterfront

iii. Character Areas of the Masterplan

e. Business district along Main Road



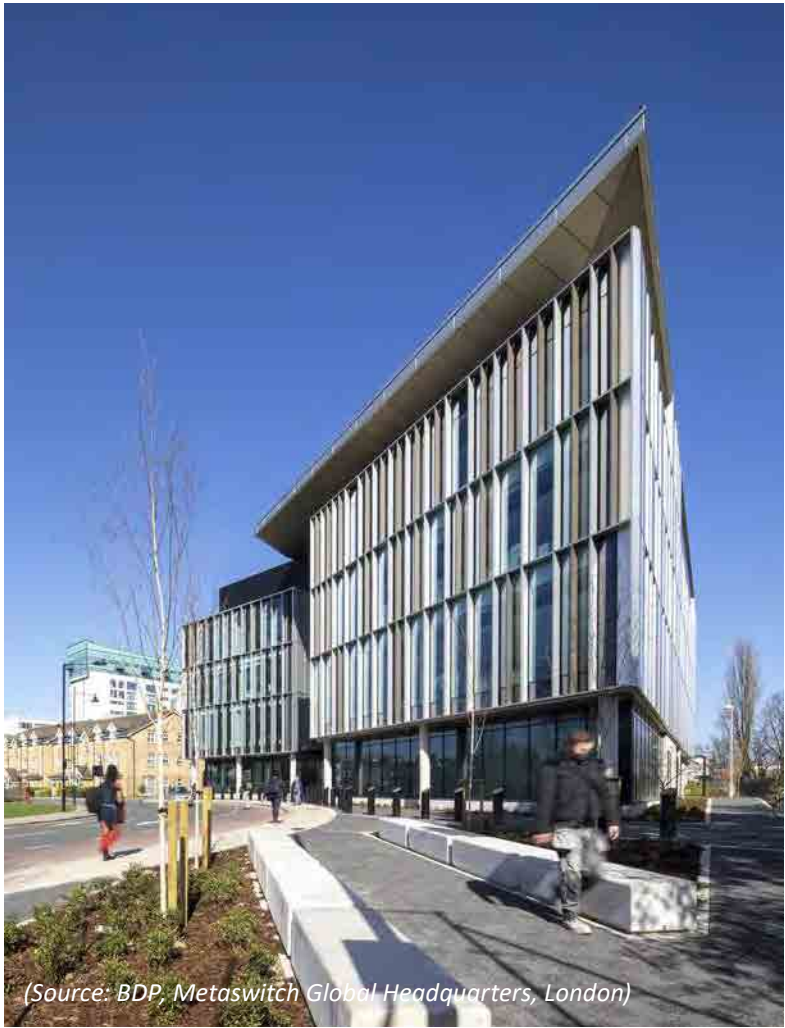
(Source: BDP, Nirvan Knowledge Park, Goregaon, Mumbai)

17. Office buildings clustered around landscape public spaces



(Source: Shenyue TaiRan Building, Shenzhen, CHINA)

19. Stepped green terraced built form



(Source: BDP, Metaswitch Global Headquarters, London)

18. Landmark Corporate Building

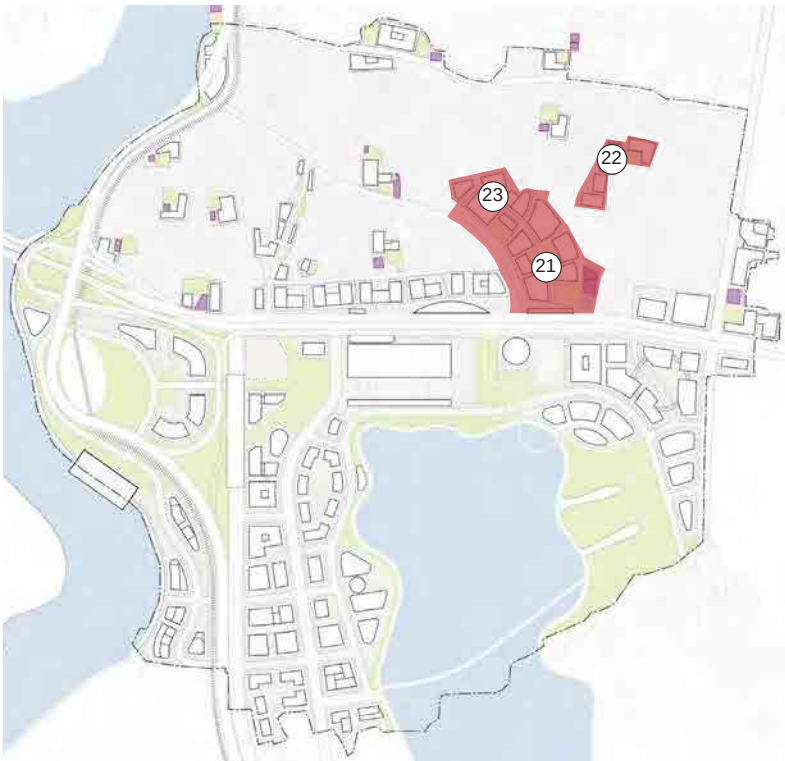


(Source: Paya Lebar Quarter (Station area TOD) Singapore)

20. Higher office towers along the road

iii. Character Areas of the Masterplan

f. Retroftting of vacant & amalgamated plots in North Zone



21. Office and commercial development on vacant parcels



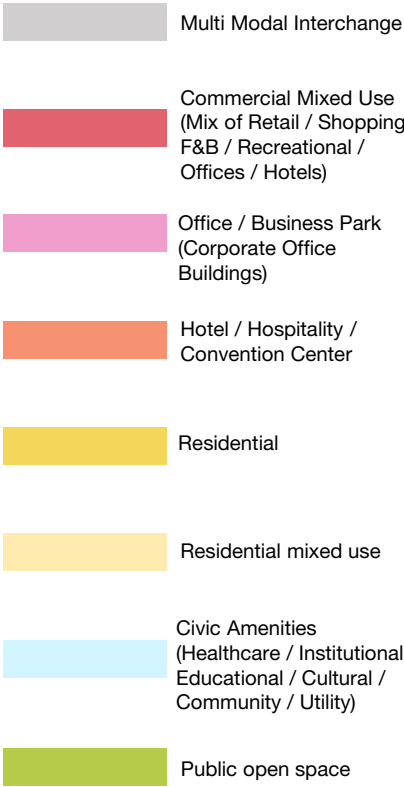
22. Residential development with shared green spaces on amalgamated plots



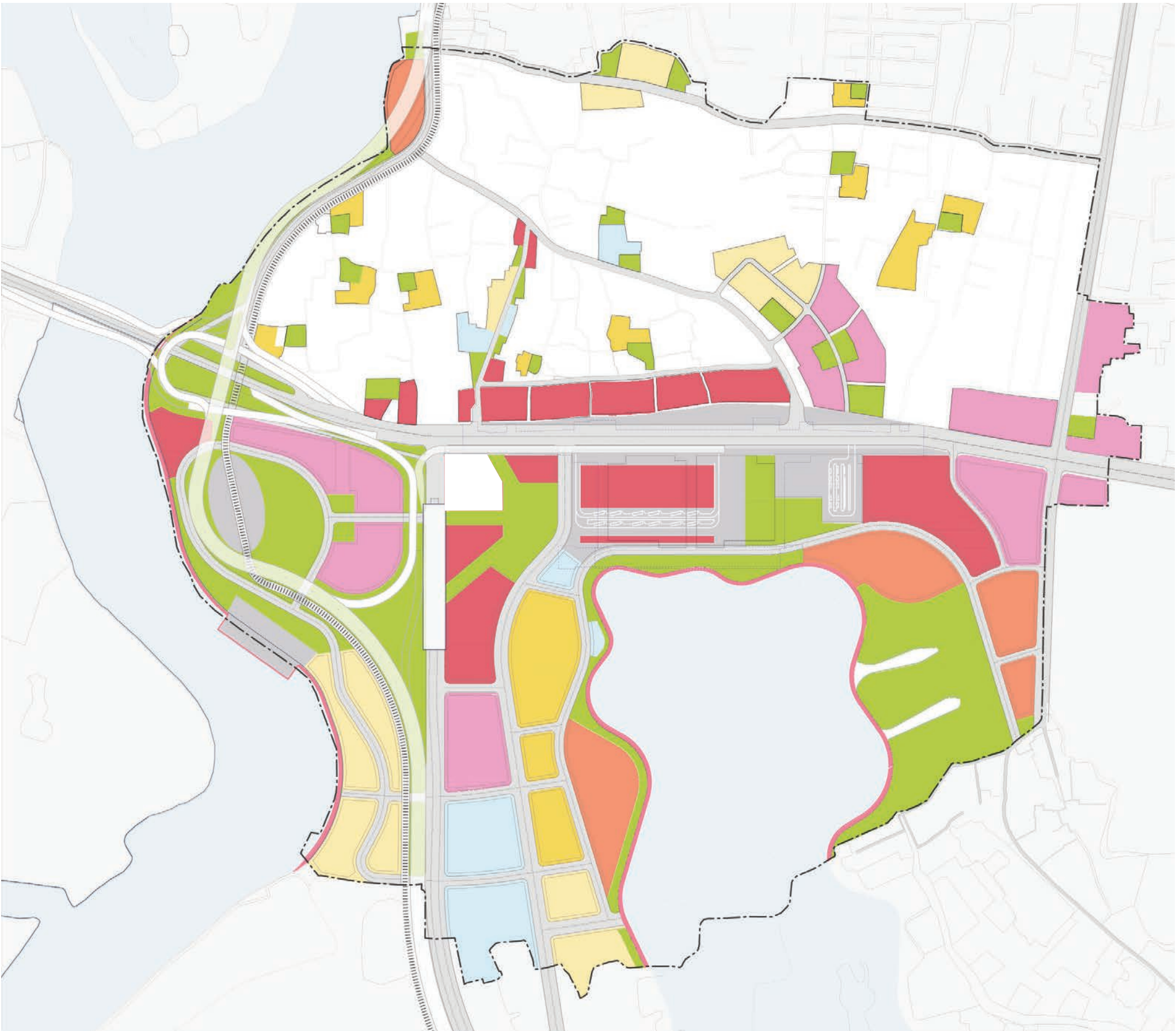
23. Mixed use development with vibrant streets and plaza

iv. Masterplan Layers

A. LANDUSE PLAN



Landuse	Land Area (in sqm.)	Ratio
Commercial Mixed Use	77577	12%
Office / Business park	67093	10%
Residential	35434	6%
Residential Mixed Use	43822	7%
Hospitality / Convention	37693	6%
Civic Amenities	26734	4%
Roads	169809	26%
Transit Hub	45462	7%
Parks / Open spaces	140172	22%
TOTAL	643796	100%
Total area from CAD	655079	
Cad Adjustments	11283	



iv. Masterplan Layers

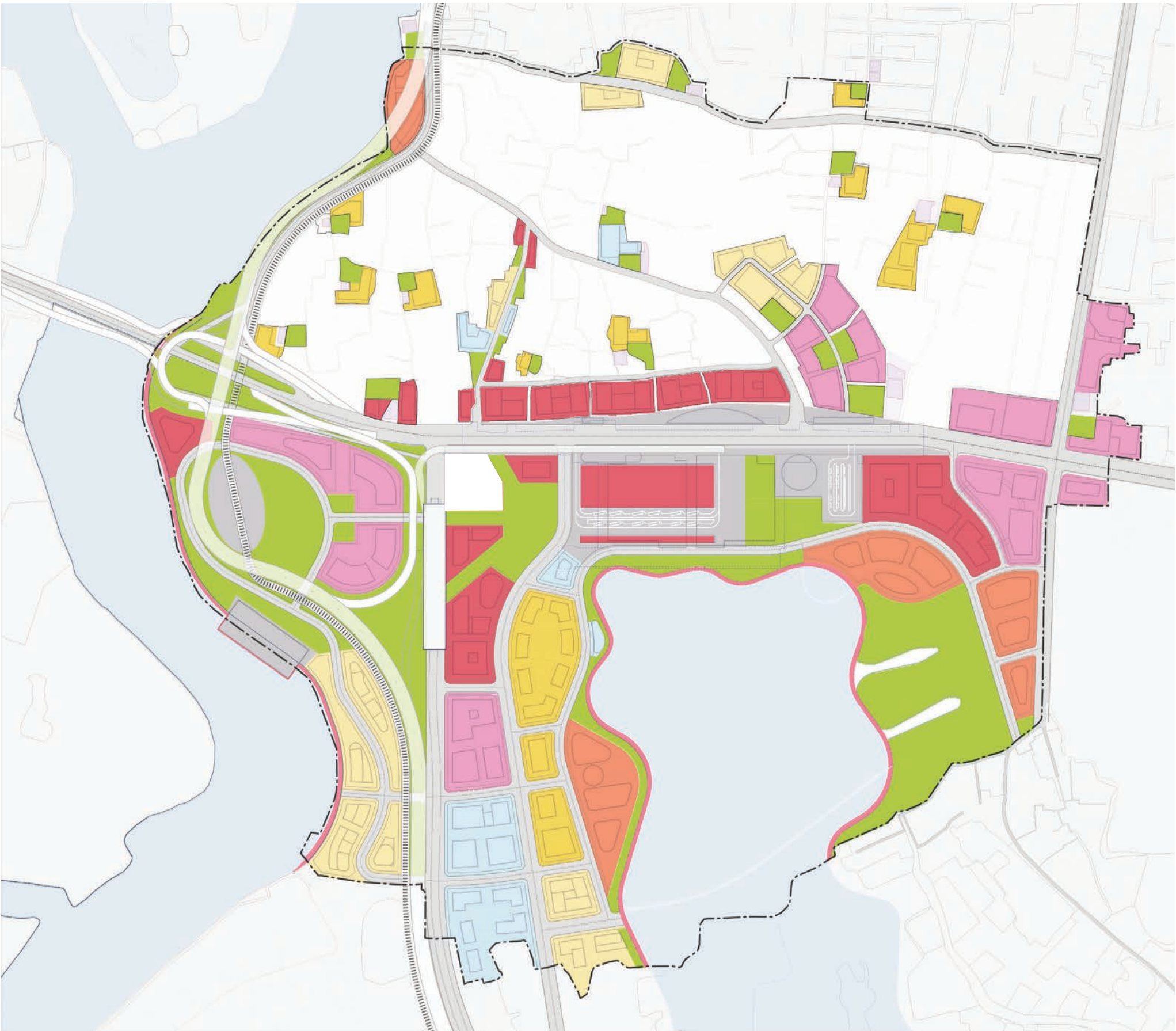
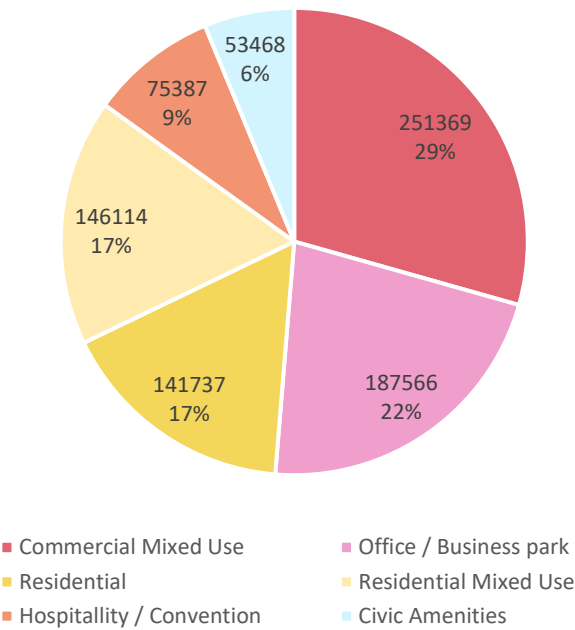
B. EMERGING DEVELOPMENT PROGRAMME

Total Gross floor area (Built up area) achieved in the proposed Masterplan: **877,091 sq.m**

Total Land area / Site area for intervention: **about 655,079 sq.m or 65.5 hectares**

Therefore, Global FAR achieved in the Masterplan is '1.33'

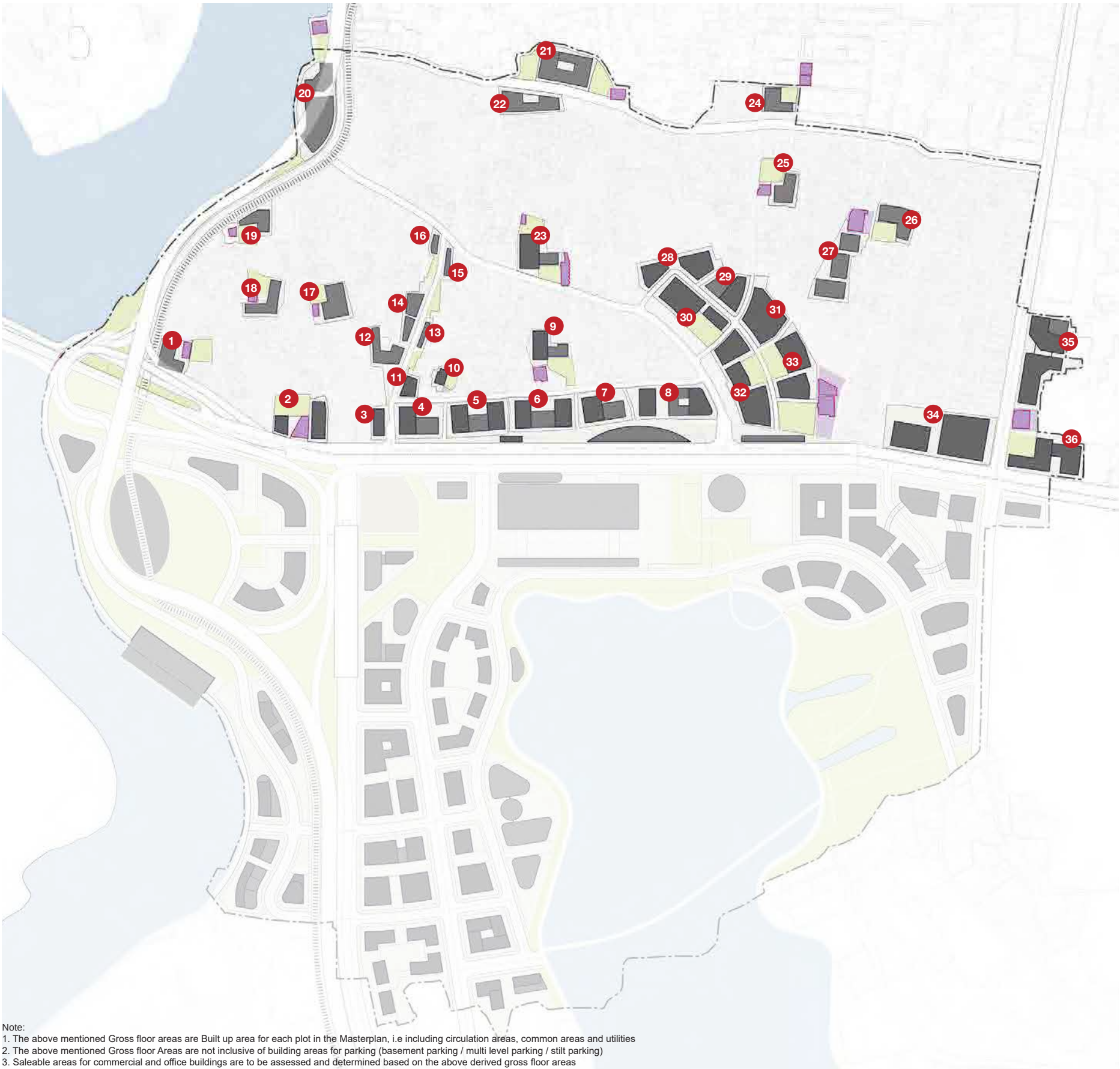
Pie chart showing breakdown of Total Gross Floor Area (Built up area) in sq.m achieved for different landuses in the Masterplan:



iv. Masterplan Layers

C. BUILT AREA SCHEDULE : STATION NORTH

Plot no	Plot area (in sq.m)	Plot use	Gross floor area in sq.m		FAR	No of units	Remarks
1	1,428	Residential		6020	4.22	75	80 sq.m gross floor area per resi. Unit
2	1,951	Commercial Mixed Use		4280	2.19		
3	776	Commercial Mixed Use		1700	2.19		
4	2,540	Commercial Mixed Use	Lower	2440	2.28		
			Upper	3350			
5	3,205	Commercial Mixed Use	Lower	3640	2.80		
			Upper	5340			
6	3,435	Commercial Mixed Use	Lower	3760	2.61		
			Upper	5200			
7	2,543	Commercial Mixed Use	Lower	2480	2.39		
			Upper	3600			
8	4,122	Commercial Mixed Use	Lower	4470	2.73		
			Upper	6800			
9	1,563	Residential		6650	4.25	83	80 sq.m gross floor area per resi. Unit
10	443	Residential		1498	3.38	19	80 sq.m gross floor area per resi. Unit
11	648	Commercial Mixed Use		1800	2.78		
12	1,600	Civic Amenities		3360	2.10		
13	466	Civic Amenities		480	1.03		
14	1,639	Commercial + Resi mix	Commercial	740	2.94	51	80 sq.m gross floor area per resi. Unit
			Residential	4,080			
15	527	Commercial Mixed Use		1110	2.11		
16	403	Commercial Mixed Use		960	2.38		
17	1,592	Residential		6240	3.92	78	80 sq.m gross floor area per resi. Unit
18	1,436	Residential		5495	3.83	69	80 sq.m gross floor area per resi. Unit
19	1,062	Residential		4270	4.02	53	80 sq.m gross floor area per resi. Unit
20	4,626	Hotel & Convention Center		9740	2.11		
21	2,972	Commercial + Resi mix	Commercial	1,945	3.03	88	80 sq.m gross floor area per resi. Unit
			Residential	7,050			
22	2,202	Commercial + Resi mix	Commercial	2,390	3.13	56	80 sq.m gross floor area per resi. Unit
			Residential	4,500			
23	1,945	Civic Amenities		3900	2.00		
24	874	Residential		3630	4.15	28	130 sq.m (1400 sq.ft) gross floor area per resi. Unit
25	1,176	Residential		4400	3.74	55	80 sq.m gross floor area per resi. Unit
26	1,480	Residential		5310	3.59	66	80 sq.m gross floor area per resi. Unit
27	3,550	Residential		14160	3.99	109	130 sq.m (1400 sq.ft) gross floor area per resi. Unit
28	2,948	Commercial + Resi mix	Commercial	3,120	3.05	45	130 sq.m (1400 sq.ft) gross floor area per resi. Unit
			Residential	5,880			
29	1,984	Commercial + Resi mix	Commercial	2,390	3.12	29	130 sq.m (1400 sq.ft) gross floor area per resi. Unit
			Residential	3,800			
30	2,779	Commercial + Resi mix	Commercial	3,050	3.04	42	130 sq.m (1400 sq.ft) gross floor area per resi. Unit
			Residential	5,400			
31	2917	Office / Business park		8000	2.74		
32	4463	Office / Business park		12000	2.69		
33	3336	Office / Business park		7780	2.33		
34	7629	Office / Business park	Lower	8000	2.65		
			Upper	12180			
35	5533	Office / Business park	Lower	5820	2.56		
			Upper	8370			
36	3551	Office / Business park		8800	2.48		
Total				241378	2.83		



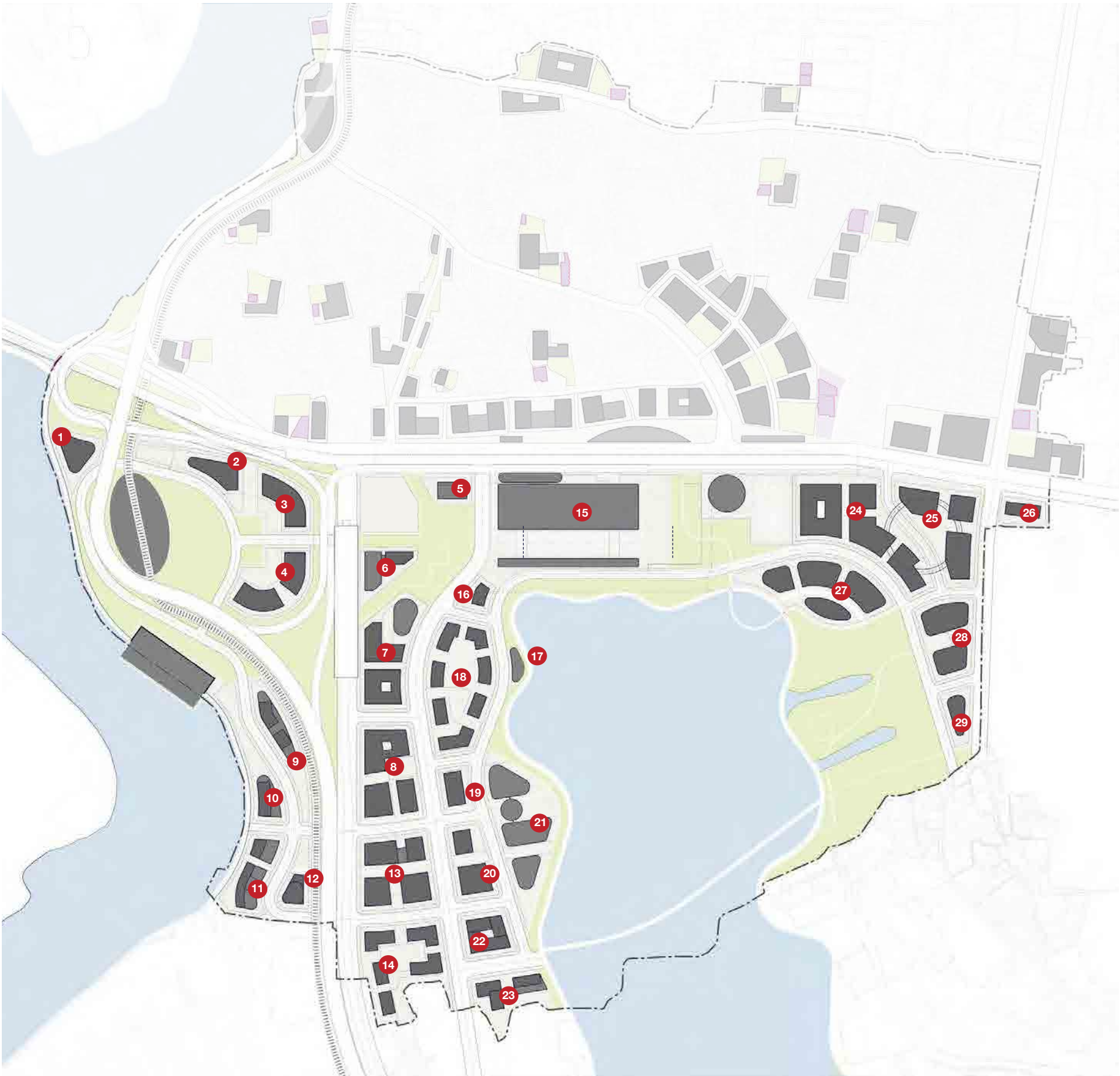
Note:
1. The above mentioned Gross floor areas are Built up area for each plot in the Masterplan, i.e including circulation areas, common areas and utilities
2. The above mentioned Gross floor Areas are not inclusive of building areas for parking (basement parking / multi level parking / stilt parking)
3. Saleable areas for commercial and office buildings are to be assessed and determined based on the above derived gross floor areas

iv. Masterplan Layers

C. BUILT AREA SCHEDULE : STATION SOUTH

Plot no	Plot area (in sq.m)	Plot use	Gross floor area in sq.m		FAR	No of units	Remarks
1	3,973	Commercial mixed use		12400	3.12		
2	5,614	Office / Business park		16660	2.97		
3	5,026	Office / Business park		16605	3.30		
4	7,224	Office / Business park		22275	3.08		
5	2,095	Commercial mixed use		6390	3.05		
6	9,752	Commercial mixed use	Existing Truck Depot to be given commercial landuse in future phases	32850	3.37		
7	9,126	Commercial mixed use	Metro Station drop-off and parking on ground and commercial on upper floors	32560	3.57		
8	9,589	Office / Business park		29155	3.04		
9	5,554	Commercial + Resi mix	Commercial	3,070	3.34	194	80 sq.m gross floor area per resi. Unit
			Residential	15,500			
10	5,621	Commercial + Resi mix	Commercial	2,180	3.08	189	80 sq.m gross floor area per resi. Unit
			Residential	15,120			
11	5,584	Commercial + Resi mix	Commercial	4,130	3.28	32	130 sq.m (1400 sq.ft) gross floor area per resi. Unit
			Residential	14,160			
12	2,960	Commercial + Resi mix	Commercial	1,400	3.23	102	80 sq.m gross floor area per resi. Unit
			Residential	8,175			
13	9,364			19,075	2.04		
14	10,869			23,275	2.14		
15	17,913	Commercial mixed use	Bus terminal on lower level commercial hub on upper floors	22340	4.48		
				58,000			
16	1,790			3330	1.86		
17	699			1440	2.06		
18	13,095	Residential		53325	4.07	410	130 sq.m (1400 sq.ft) gross floor area per resi. Unit
19	2,573	Residential		10200	3.96		
20	5,162	Residential		21720	4.21		
21	11,868	Hotel & Convention Center		27150	2.29		
22	3,928	Commercial + Resi mix	Commercial	3350	3.21	116	80 sq.m gross floor area per resi. Unit
			Residential	9250			
			Commercial	3000			
23	5650	Commercial + Resi mix	Residential	17880	3.70	138	130 sq.m (1400 sq.ft) gross floor area per resi. Unit
24	14,567	Commercial mixed use		48510	3.33		
25	9891.7	Office / Business park		30400	3.07		
26	2318.24	Office / Business park		6985	3.01		
27	11,713	Hotel & Convention Center		24129	2.06		
28	6,822	Hotel & Convention Center		14404.25	2.11		
29	2,664	Hotel & Convention Center		5320	2.00		
Total	203,008			635713.25	3.13		

Note:
1. The above mentioned Gross floor areas are Built up area for each plot in the Masterplan, i.e including circulation areas, common areas and utilities
2. The above mentioned Gross floor Areas are not inclusive of building areas for parking (basement parking / multi level parking / stilt parking)
3. Saleable areas for commercial and office buildings are to be assessed and determined based on the above derived gross floor areas

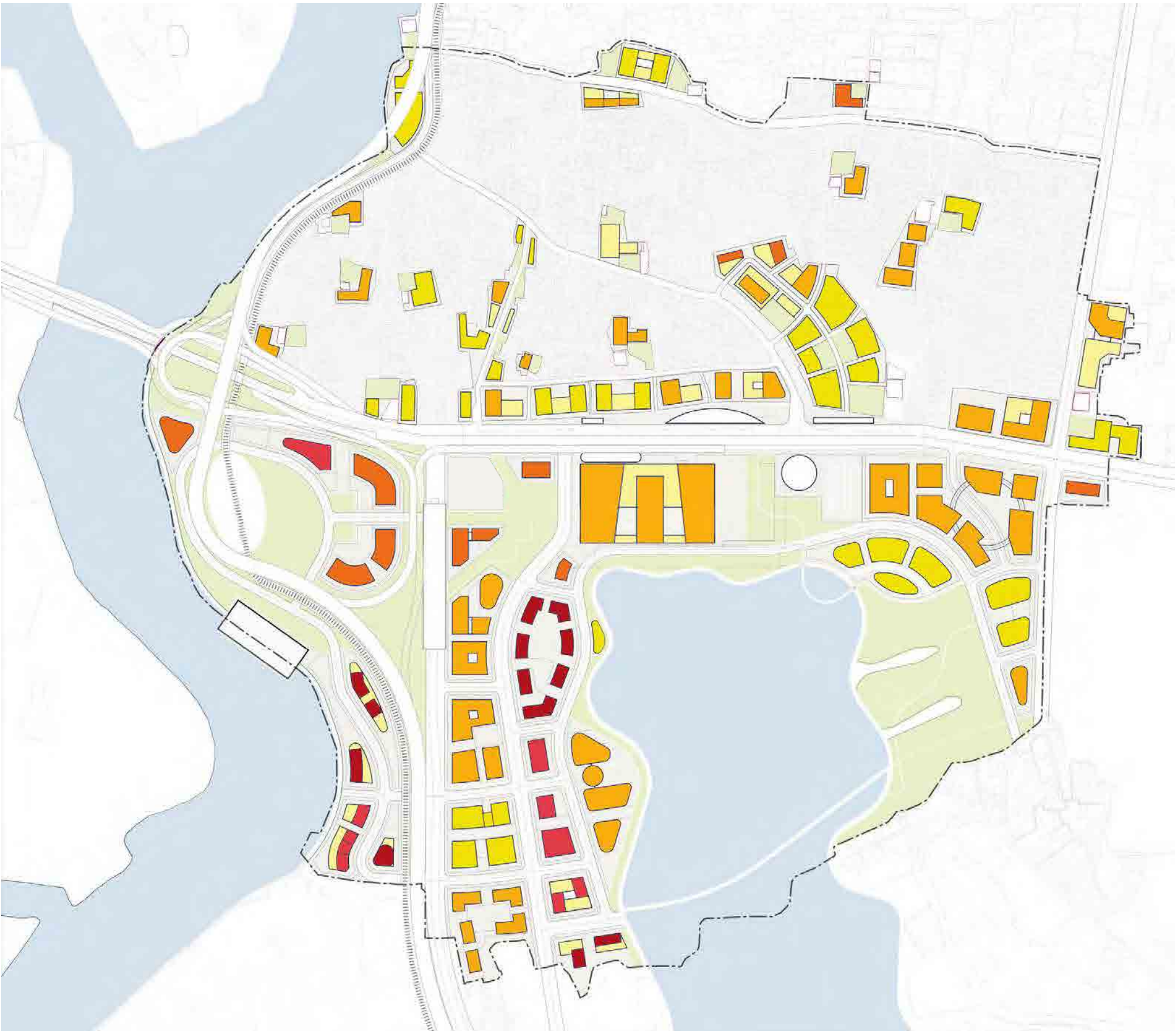
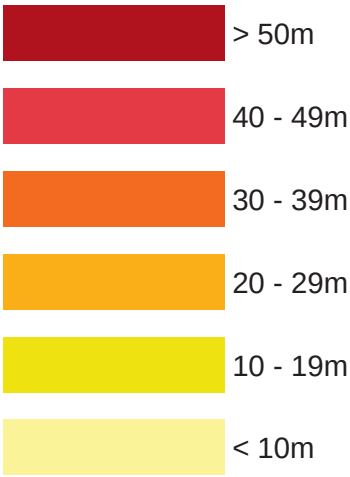


iv. Masterplan Layers

D. BUILDING HEIGHTS

This Plan shows the range of building heights for the development based on the emerging Urban form and Urban Design three dimensional composition for the TOD Masterplan.

A gradation of building heights is created with a mix of highrise, midrise and lowrise buildings, where North side to the station being lower as compared to the South side. This lends variety and richness to the built form and skyline of the envisaged development in the Masterplan.



iv. Masterplan Layers

E. PARKING STRATEGY

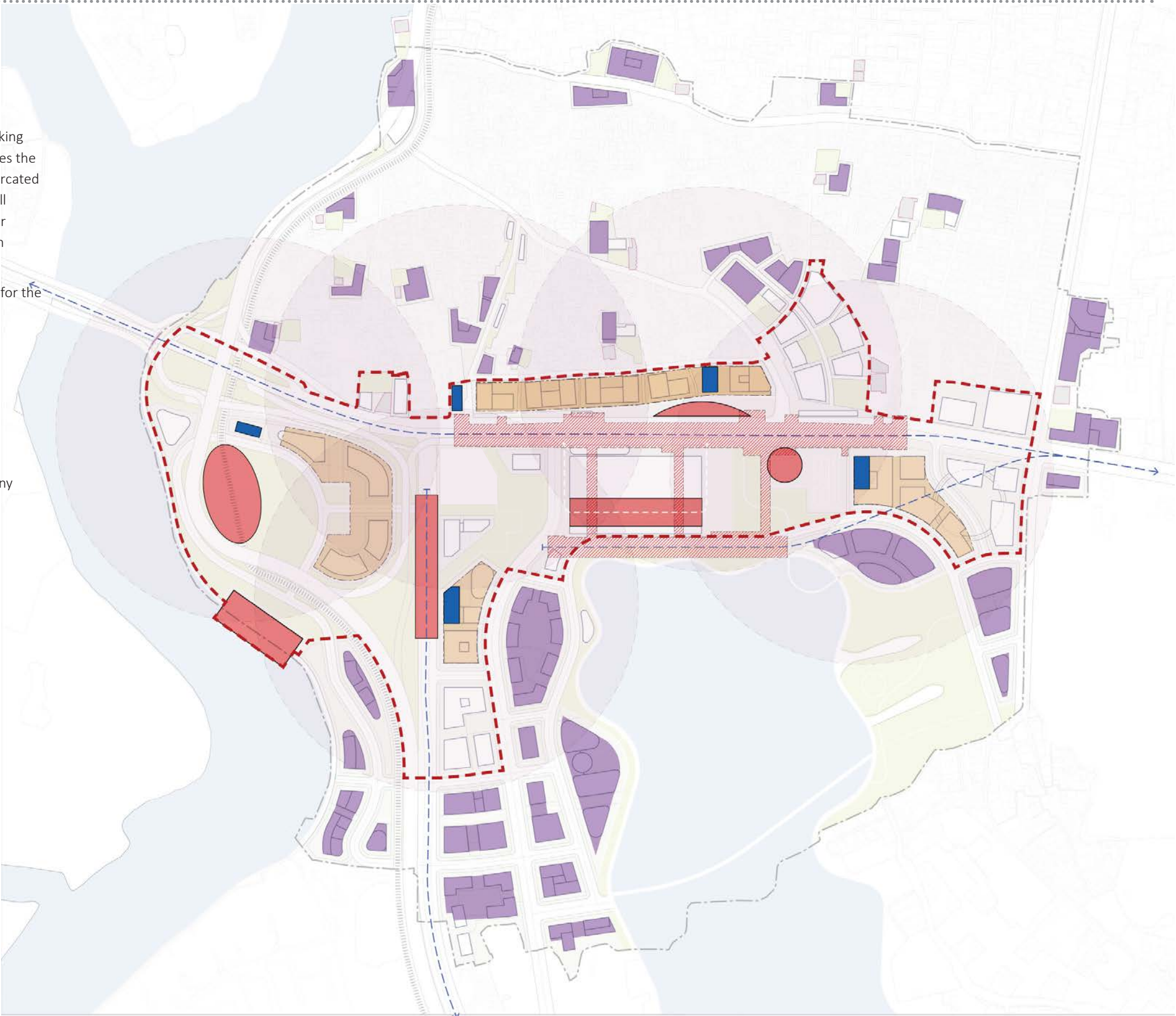
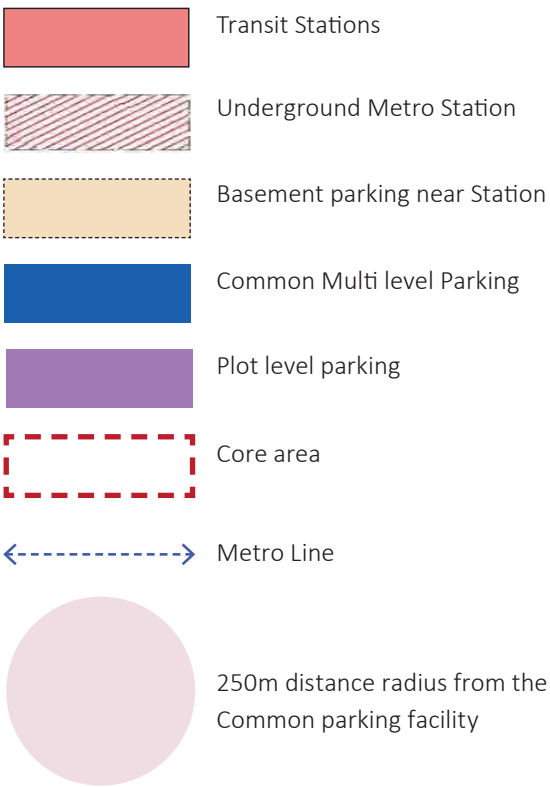
With the larger TOD objective to discourage personal vehicle usage, optimize parking demand and promote sustainable mobility opportunities, the Masterplan proposes the following parking strategy as illustrated in the adjacent plan. A **Core area** is demarcated around the Metro Station (about 300 - 500 m range). In this core area, parking will not be provided for every plot, but only in identified common parking areas either in basement or common Multi level parkings. Outside this core area, parking each individual plot would be allowed.

Overall about **11400** ECS (Equivalent Car Space) parking units are being provided for the whole Masterplan.

Basement parking near Station – 3250 ECS parking units
Multi level car parking areas – 750 ECS parking units
i.e 4000 ECS parking units serving the Core area

Plot level parking in outer plots – 7400 ECS parking units

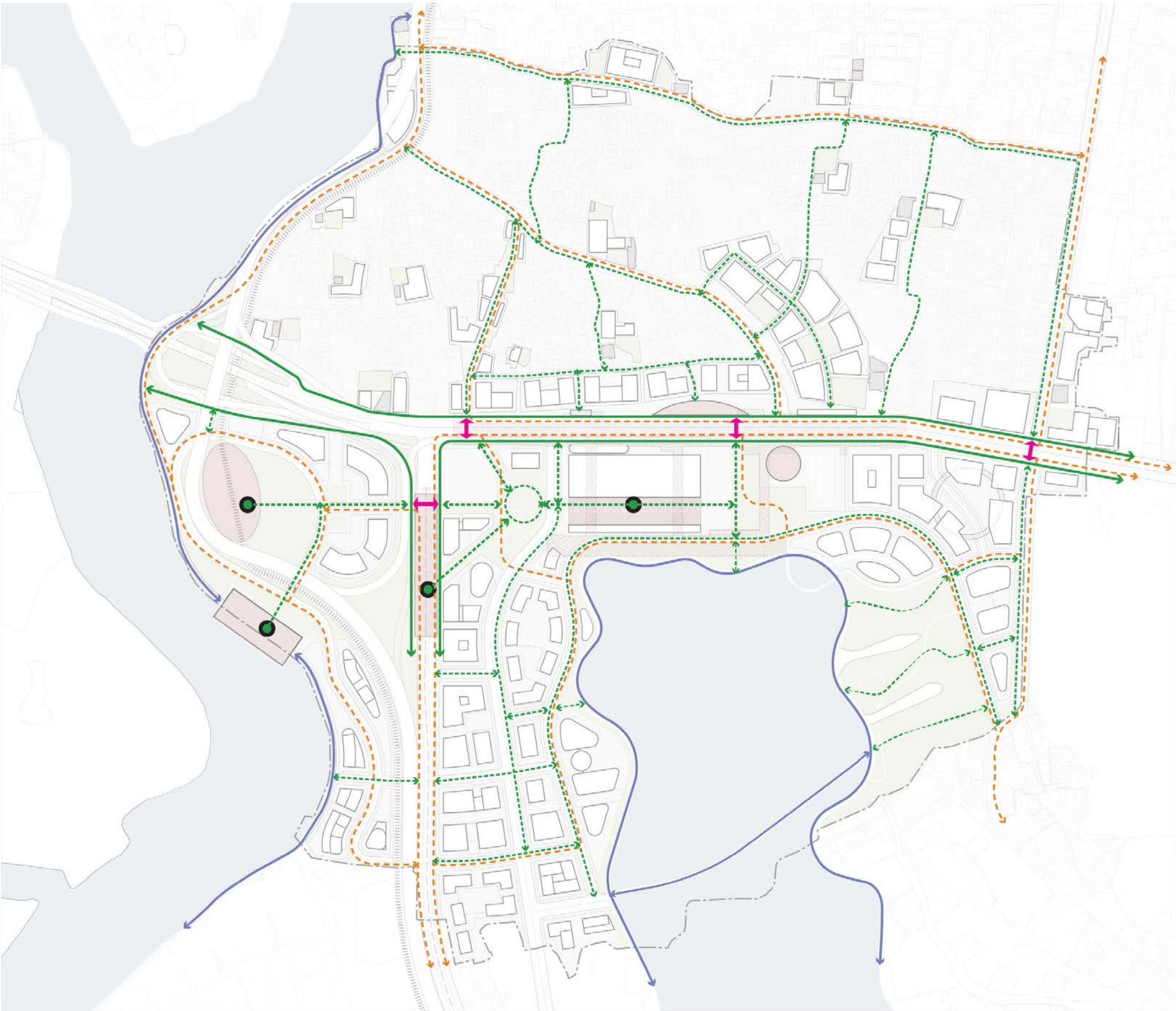
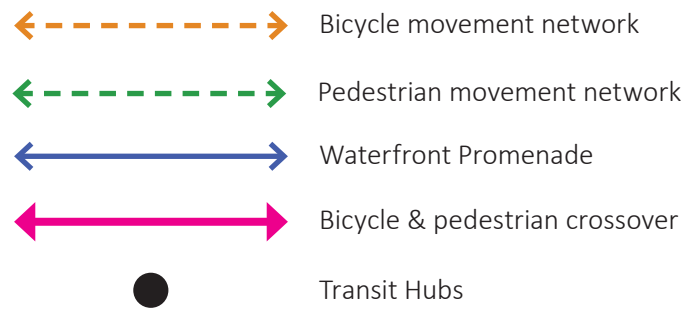
It is to be noted that, ECS parking units would comprise cars, two wheelers and any other vehicle types, as required by various plots of the Masterplan.



iv. Masterplan Layers

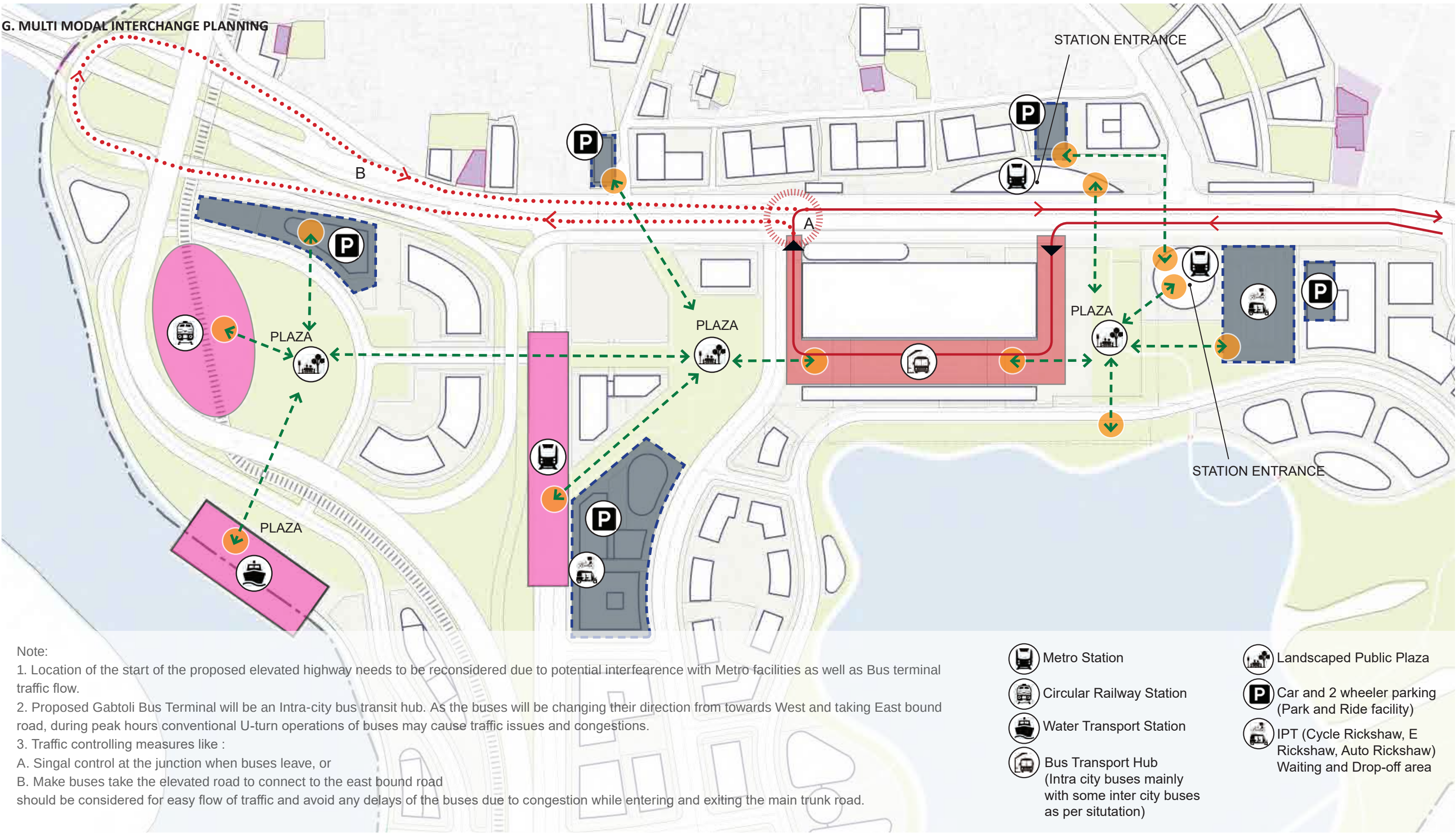
F. WALKING & CYCLING NETWORK

As shown in the adjacent plan, the Masterplan proposes an extensive network of pathways for pedestrians and cycling. This would enhance people’s experience in the TOD Neighbourhood and make it convenient for them to engage in the various activities and spaces provided for in the Masterplan.



iv. Masterplan Layers

G. MULTI MODAL INTERCHANGE PLANNING



OVERVIEW



v. OVERVIEW - Gabtoli TOD Masterplan

The following points summarize the major objectives achieved by the proposed Uttara Center TOD Masterplan. This Masterplan proposal is envisaged to be a pilot Concept, which can be scaled up and become part of the overall TOD Vision and Norms for the City of Dhaka.

- Synchronised with the larger urban structure
- Multi Modal Integration
- Utilization of landscape assets of the Site
- Vibrant TOD mixed use development as a new hub for Gabtoli, Dhaka
- Enhanced 'Walking & Cycling', public space experience
- Maximised land value capture around Transit hub

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