

Improving Public Spaces in Chennai

Pedestrian Facilities and Pedestrianisation

3 September 2013

Mr Nandakumar
Executive Engineer
Corporation of Chennai





- The Hon'ble Tamil Nadu Chief Minister's vision is to develop Chennai City as a world class city with infrastructure of international standards.
- The Worshipful Mayor and our Principal Secretary / Commissioner of Corporation of Chennai are guiding us to path breaking schemes for infrastructure developments in Chennai City.
- Chennai City is the biggest and important urban agglomeration in Tamil Nadu. This City portrays both historical and modern contemporary Indian culture.
- Now the limits of Corporation of Chennai has increased from 174 Sq.km area sq km to 426 Sq.km. and has around 36,000 number of roads. (Interior roads, slum roads and Bus Route Roads)



- All the arterial roads / major roads wherein the public transportation operates are being maintained by Bus Route Road (BRR) department of Chennai Corporation.
- Under BRR control we have 448 roads measuring to a length of 358 kms.
- Until now it was a normal practice followed to ensure that the width of the footpaths never exceeds 5m (5 feet) even in 100 feet wide roads.
- Footpaths are not only paramount for pedestrian safety but also ensures smooth traffic.
- Now with increased traffic flow these 5 feet footpath in many roads due to obstruction like BSNL, Electricity boxes and other encroachments forces people are forced to walk on roads leading to accidents.



- Corporation of Chennai has taken up a major step forward to widen footpaths from 1.5m to 3m by reclaiming space from road to make footpaths pedestrian friendly and to regulate traffic.
- Under the grants obtained from Tamil Nadu Road Infrastructure fund (TURIF), Corporation of Chennai has taken up 71 major roads to a length 48.60km at an estimated cost of Rs. 42.5 crores for converting the existing 5 feet footpath to 10 feet footpath with all facilities like street furniture, toilets, etc.
- Initially, Granite kerb with 3 line dressed granite top slab was proposed. Due to shortage of supply and higher cost now it is decided to do the footpath with Granite kerb with Cement concrete top.

The following presented to Govt of Tamil Nadu

To request funding, start project and
coordination.

Required Components Needed on Chennai Roads



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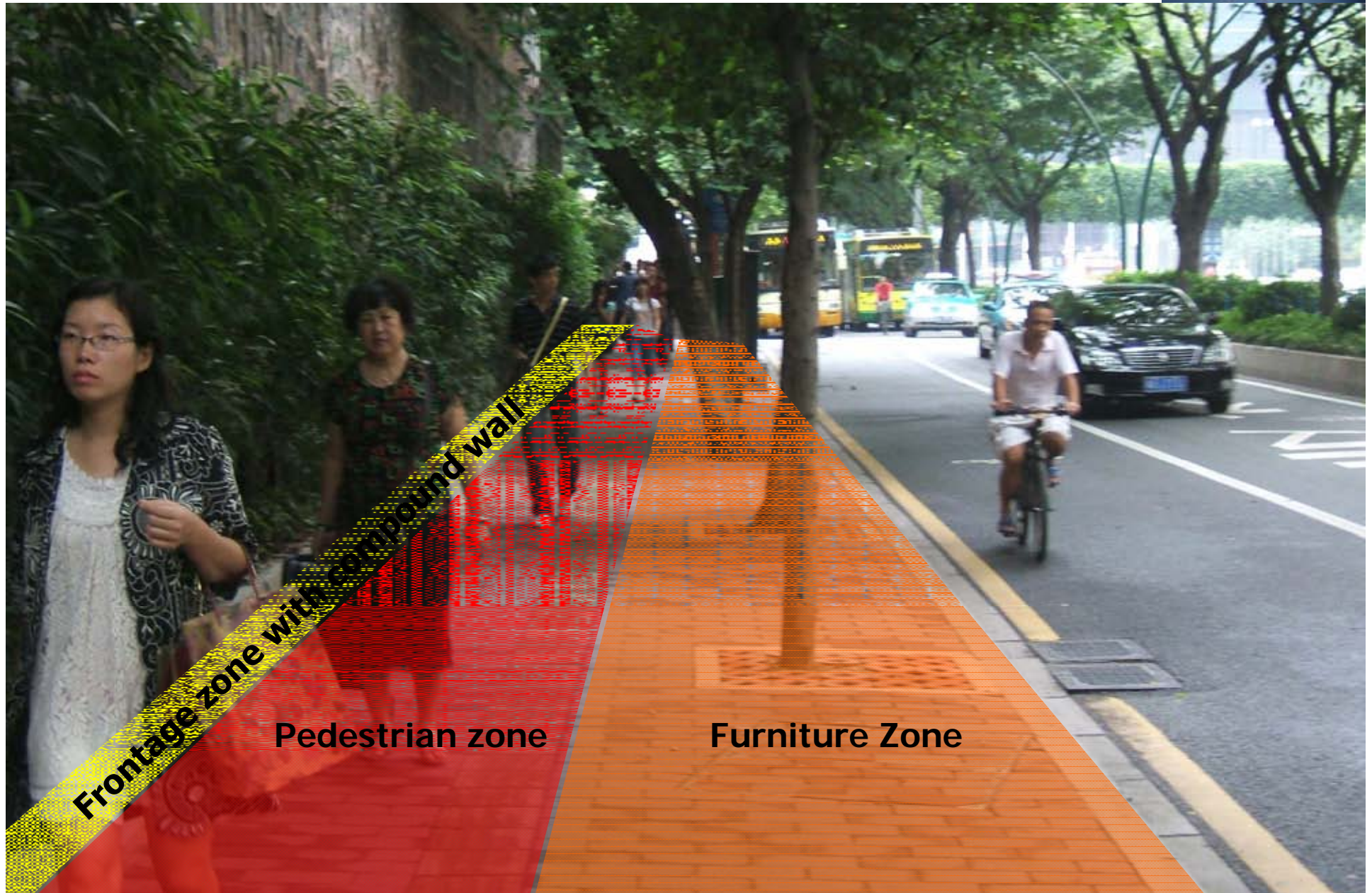




Frontage
zone with
street-side
activities

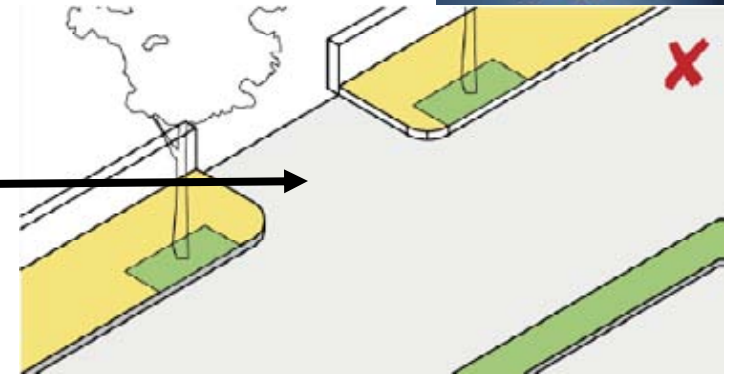
Pedestrian zone

Furniture Zone

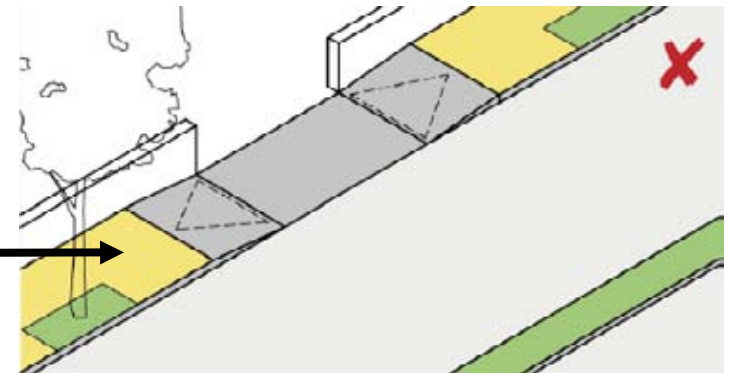




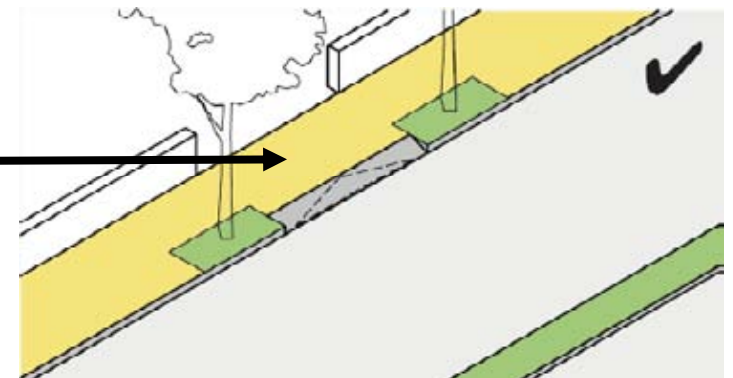
1. Ending the footpath with abrupt curbs is not acceptable



2. Lowering the entire footpath to the level of the carriageway is unacceptable as property entrances may become waterlogged



3. Vehicle ramps should be provided in the 'furniture zone' and not in the 'pedestrian zone'





Continuous and unobstructed



Elevation over carriageway (e.g. +150 mm) and adequate cross slope for storm water runoff.



150mm rise

Elevation low enough for pedestrians to step onto and off easily



No breaks /obstructions at
property entrances and side
streets





Continuous shade through tree cover



Surmountable gratings over tree pits to increase effective width of footpath

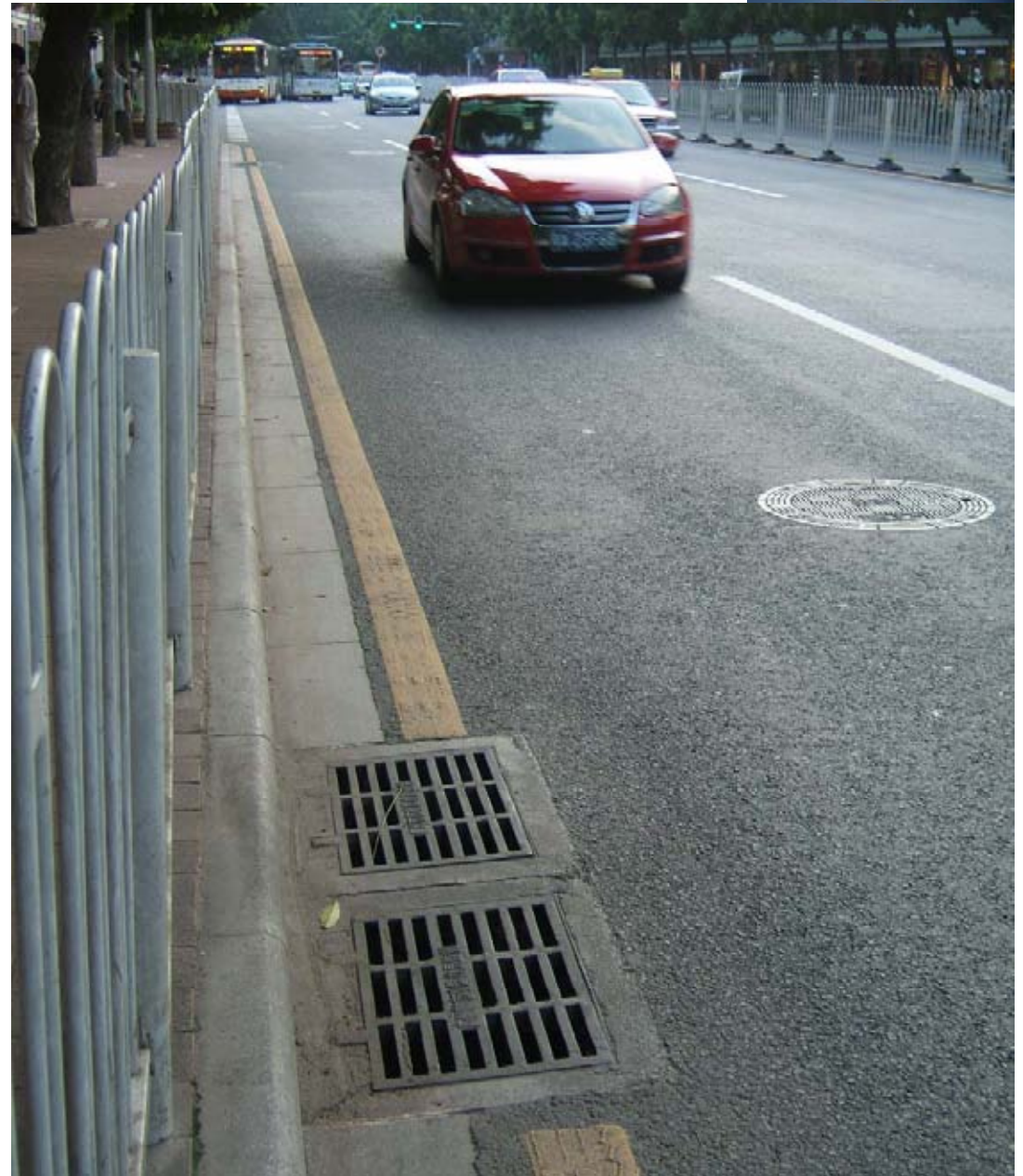


This design lets water fall into a catch pit in the buffer and then into pipes under the footpath. The level of the drain is below that of the footpath.



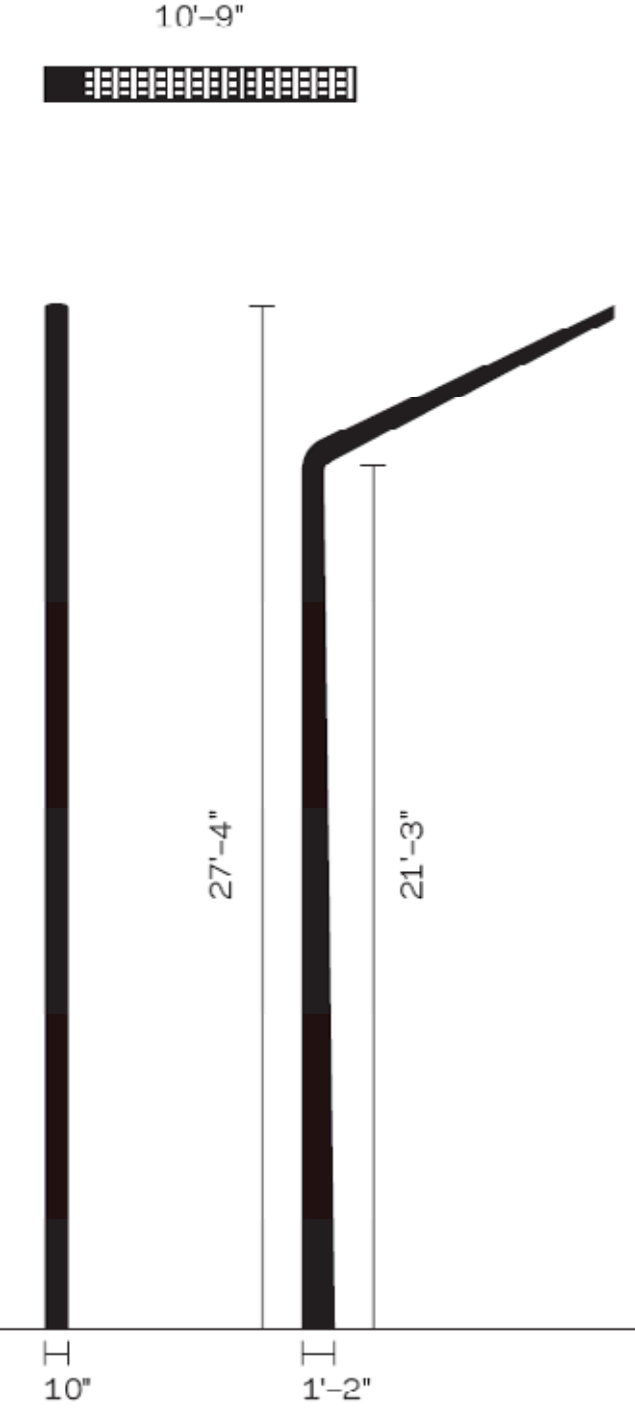
This design lets water fall into a catch pit through grating in the kerb gutter.

Proper sloping in carriageway design is essential for this to work.

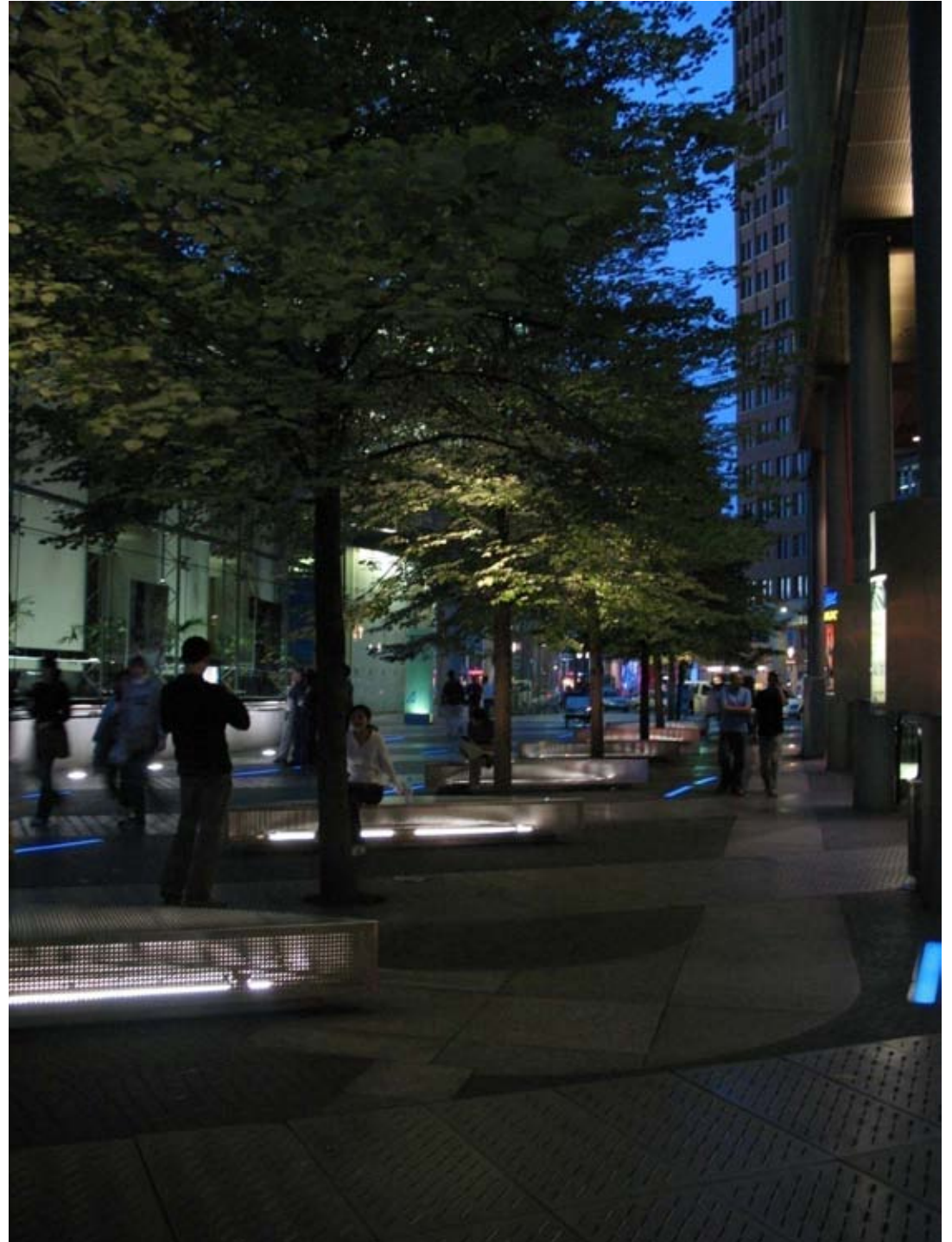




5) Street lighting



5) Street lighting



Bollards



Pedestrian Safety barriers



Garbage receptacles



Kiosks



Kiosks



Kiosks



Public toilets



Public toilets







Old Electricity Junction Box



New Junction Box



New Junction Box



Pedestrians now on the Sidewalk - Safer walking experience



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21/09/2013 04:27



Corporation of Chennai is enlisting CREDAI and others to maintain the new roads

MoU already in place and pilots have started

71 Bus Route Roads (BRR) is showing good progress

Mayor announced 383 BRR to be upgraded along similar lines




Corporation of Chennai is tendering 750 modern,
modular public toilets for start

Construction of 108 bus stops with information
systems started

CoC has floated EOI for cycle sharing

Metro Rail very keen on cycle sharing and feeder






மயிலாப்பூர் Mylapore

மயிலாப்பூர் குளம் / ராமகிருஷ்ண மூட்ட சாலை
Mylapore Tank / Ramakrishna Mutt Road

← ராயப்பேட்டை
Royapettah

மந்தவெளி
Mandaveli →

புறப்படும் இடம்




கிடைசுகள்

பெயர்	நேரம்
25C	மயிலாப்பூர், கிழக்கு, மந்தவெளி
41	மயிலாப்பூர், கிழக்கு, மந்தவெளி
25C	மயிலாப்பூர், கிழக்கு, மந்தவெளி
5B	மயிலாப்பூர், கிழக்கு, மந்தவெளி


செய்திகள்


பெயர்	நேரம்
41	மயிலாப்பூர், கிழக்கு, மந்தவெளி
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5B	மயிலாப்பூர், கிழக்கு, மந்தவெளி

Chennai Metro Rail Line Transit Diagram




வெள்ளம் ஓடு





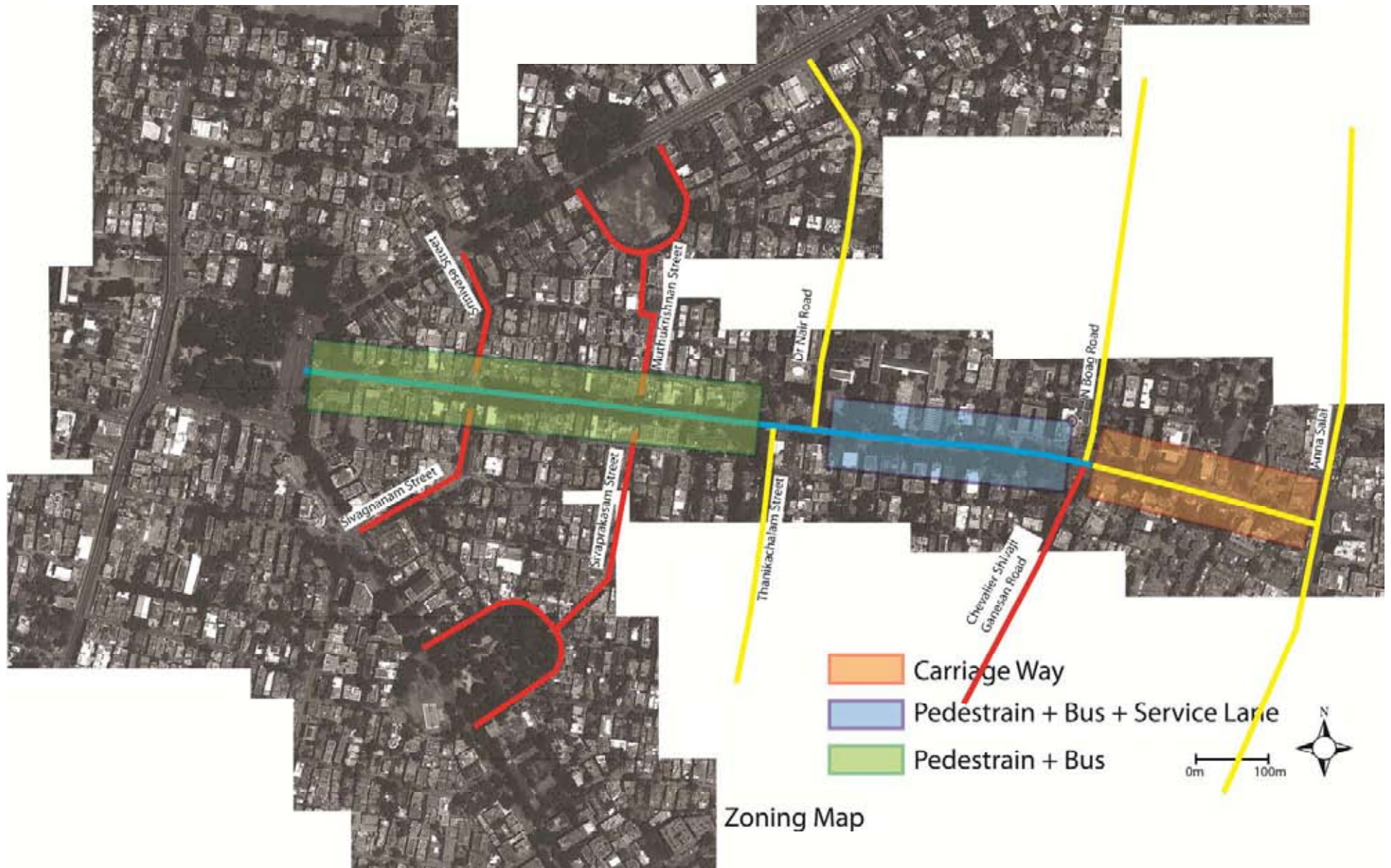
மயிலாப்பூர் Mylapore



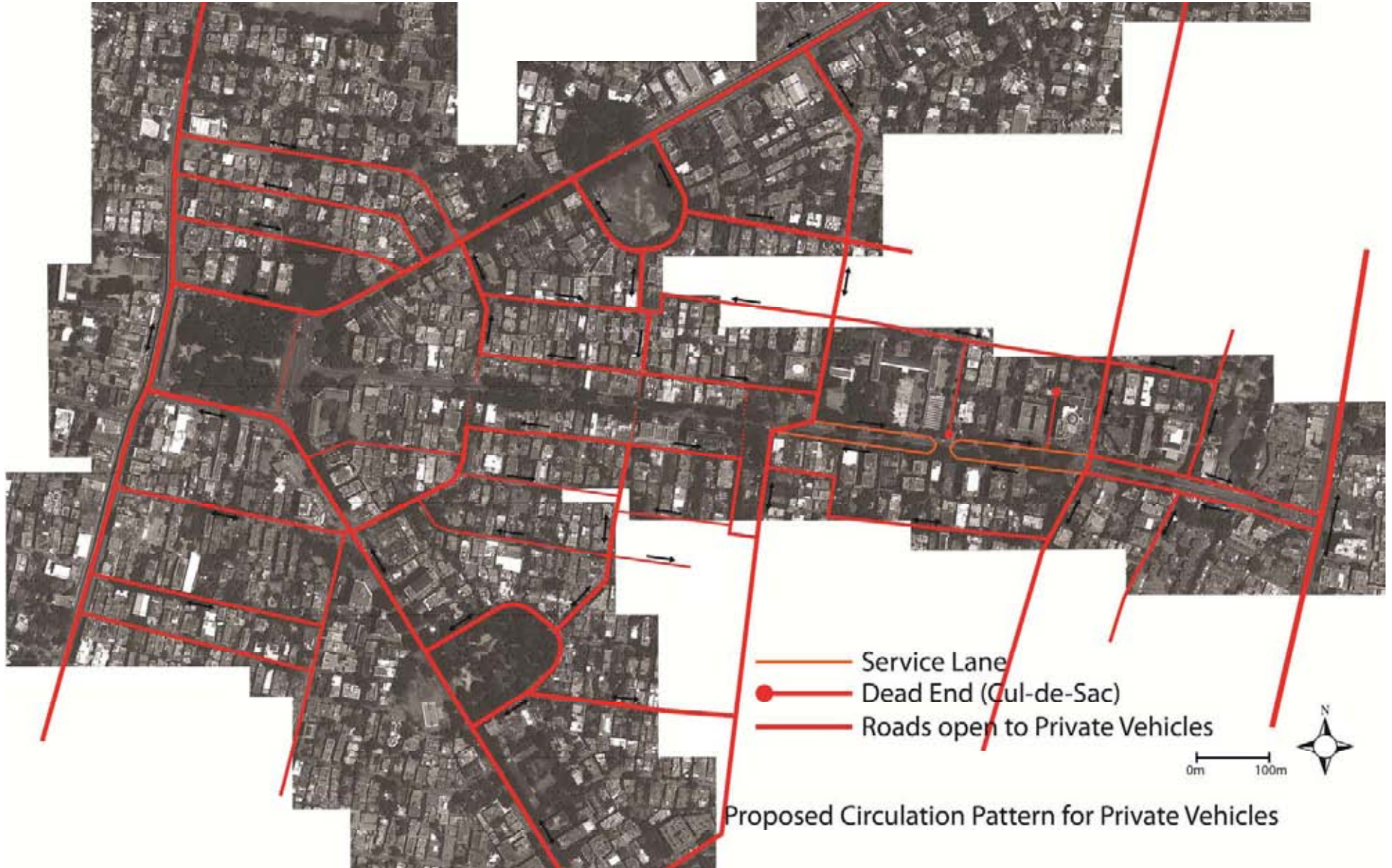
Pedestrianisation Projects

T Nagar and Mylapore

Proposed Changes - Streets for people not machines



New Traffic Circulation



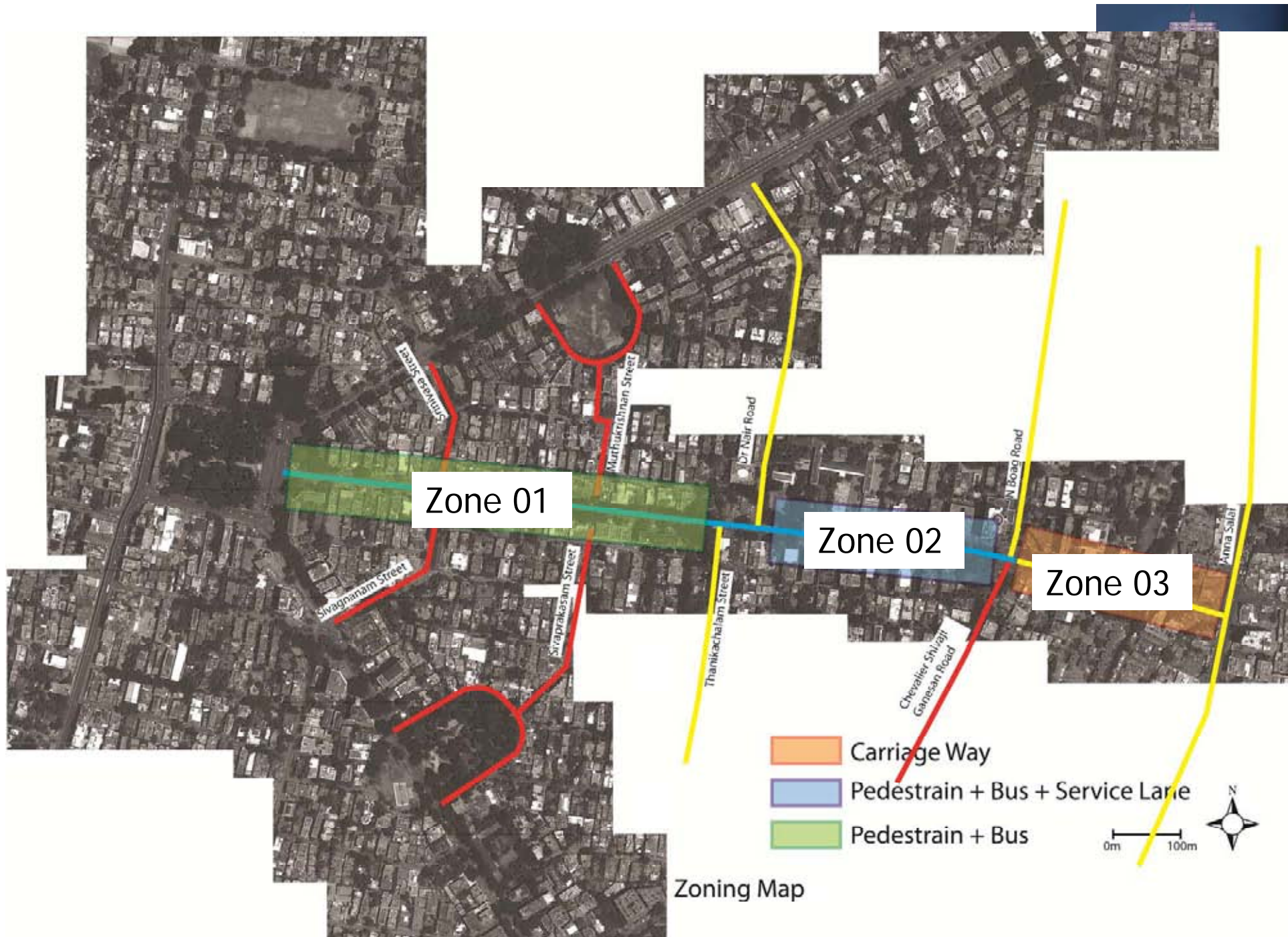
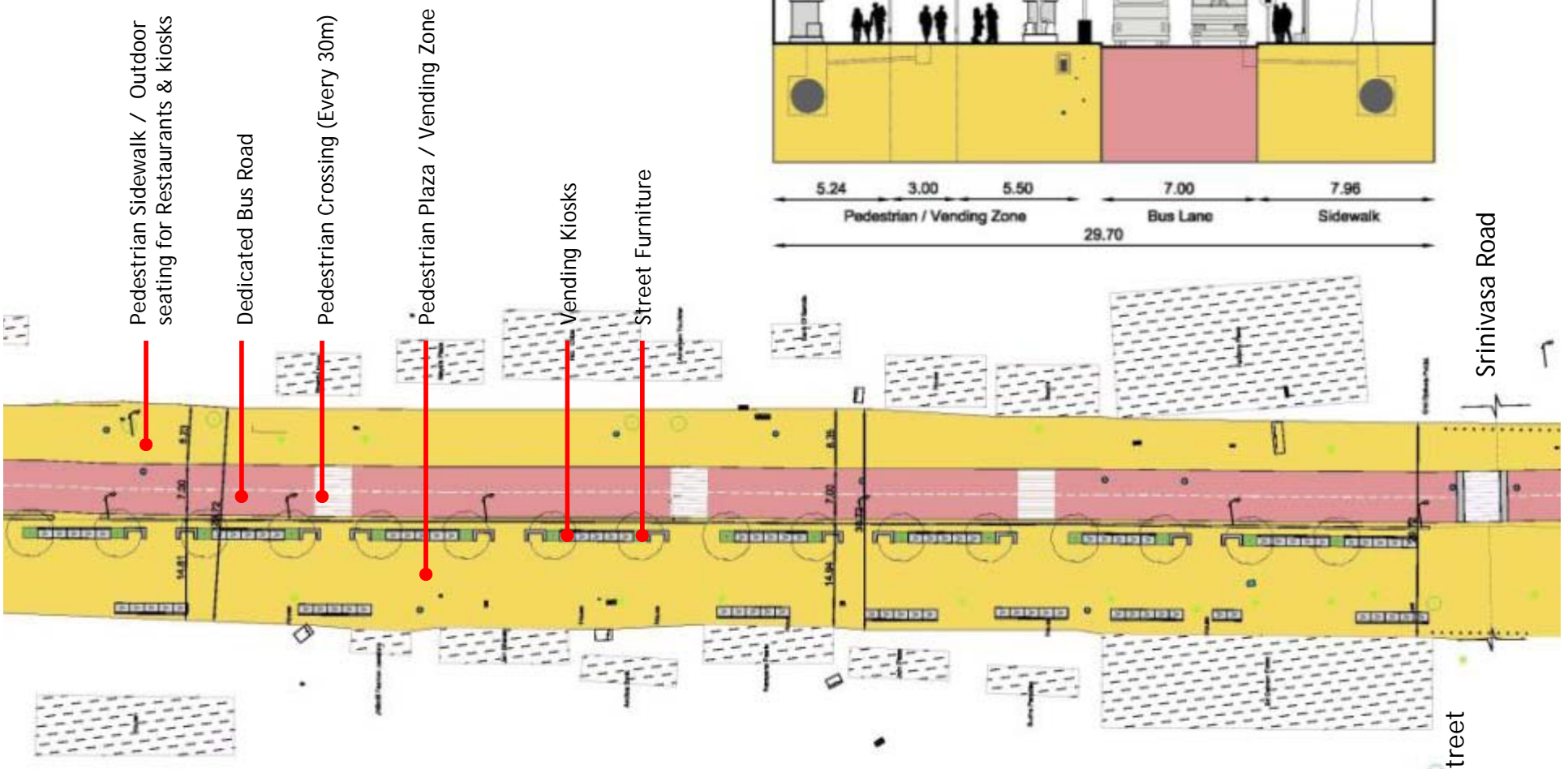


Diagram illustrating the cross-section of a road layout, showing the following zones and dimensions:

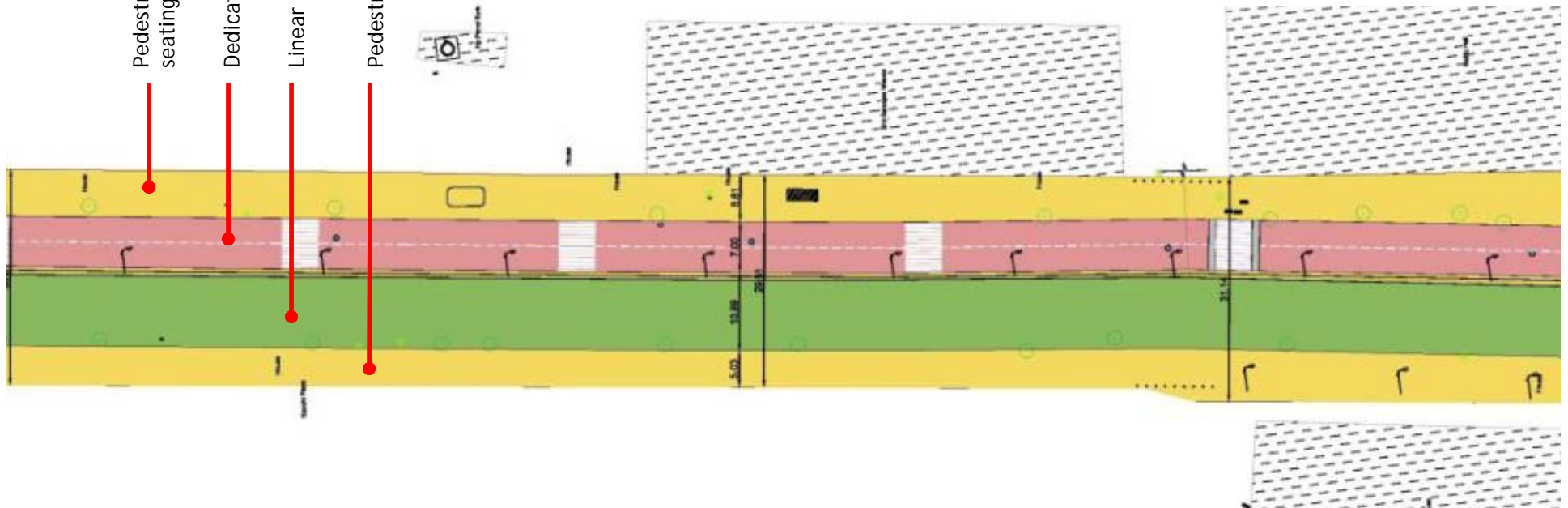
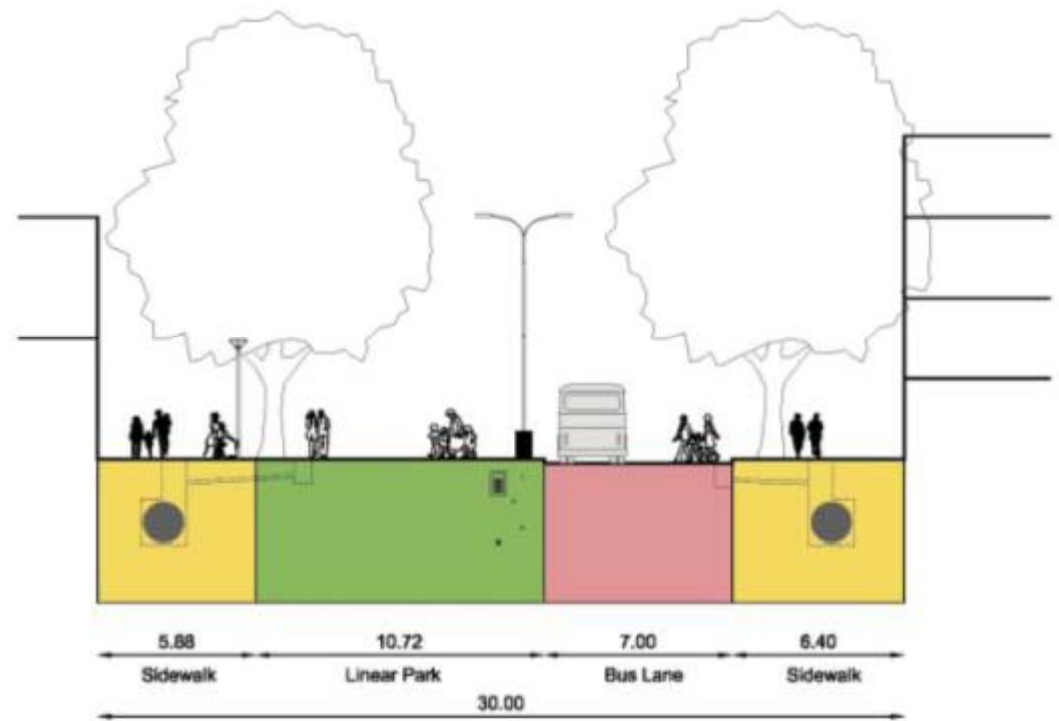
- Pedestrian / Vending Zone:** 5.24m (includes trees and streetlights)
- Bus Lane:** 7.00m (includes bus and streetlight)
- Sidewalk:** 7.96m (includes tree and streetlight)
- Total Width:** 29.70m

-



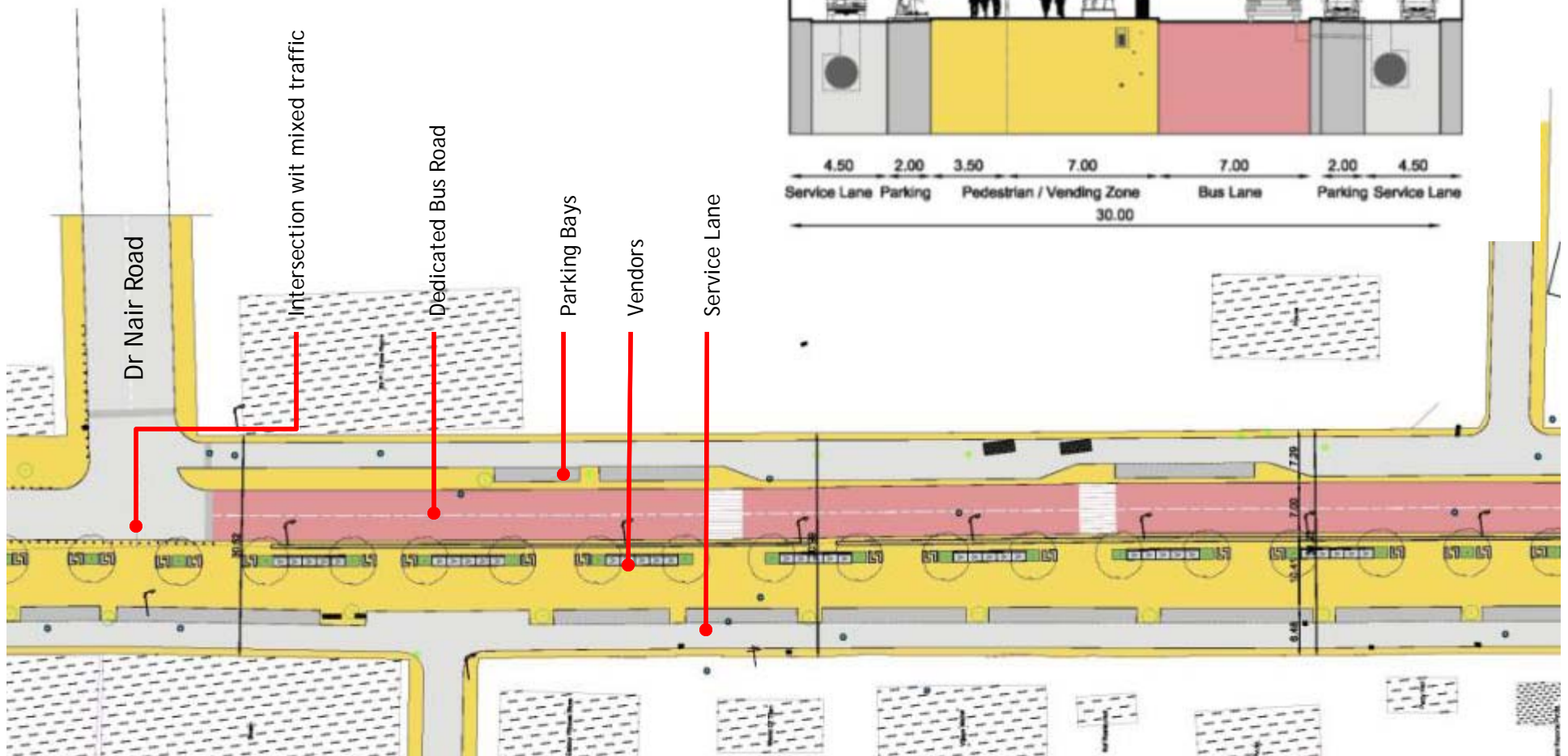
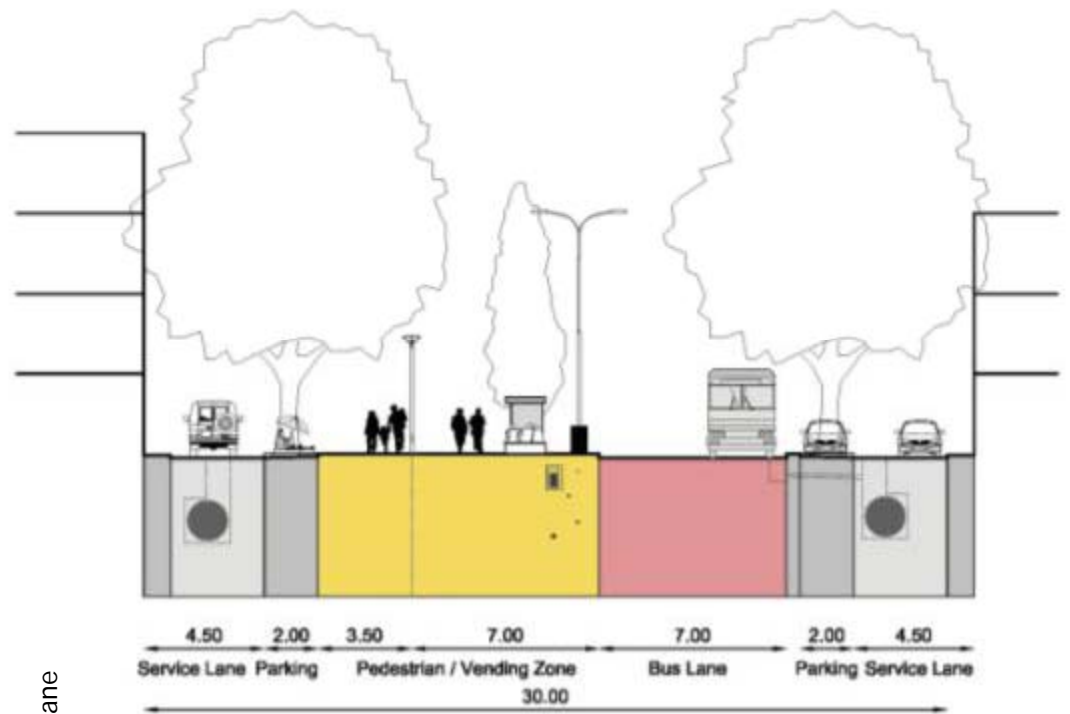
Zone 01 - Srinivasa Road to Dr Nair Road (Linear Park)

- 3600 SqM Linear Park (360m)
- Play area for children
- Access via public transport



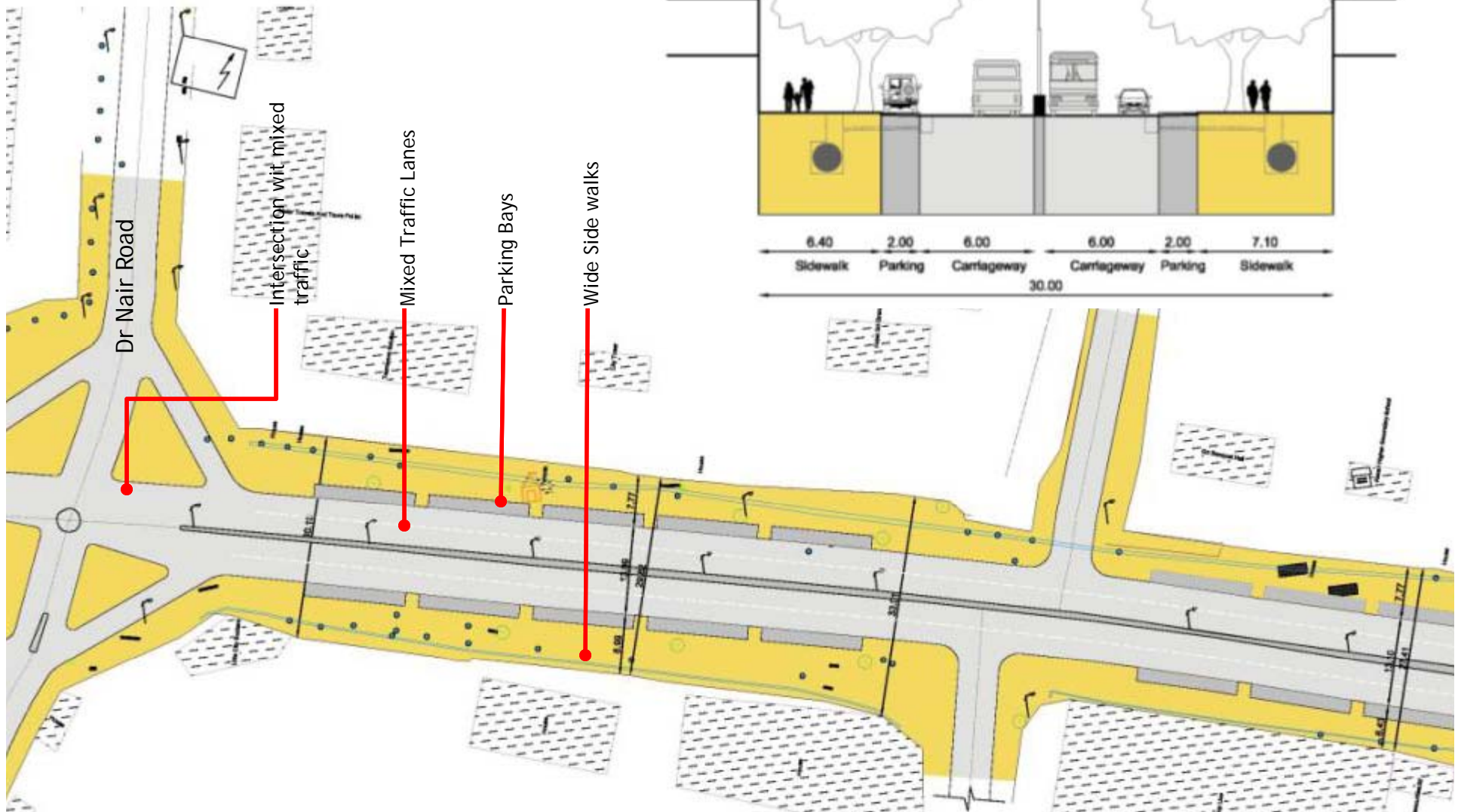
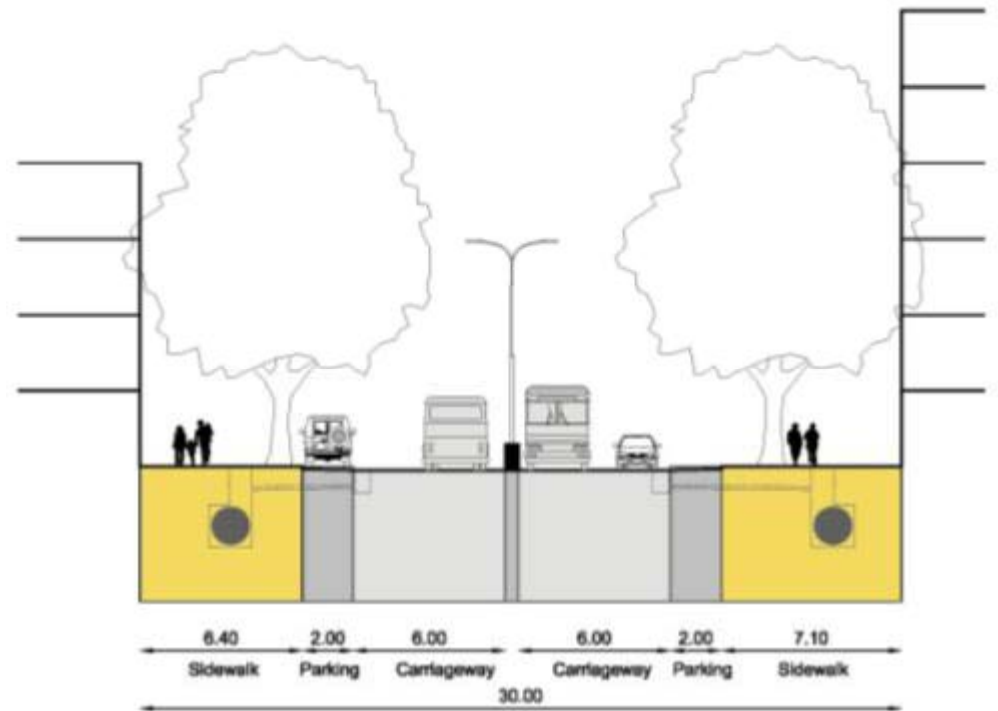
Zone 02 - Dr Nair Road to North Boag Road

- Service lanes to access properties (350m)
- Short term parking facility for up to 85 PCU
- Vending Zone (60 Stalls)
- Dedicated bus road and pedestrian zone

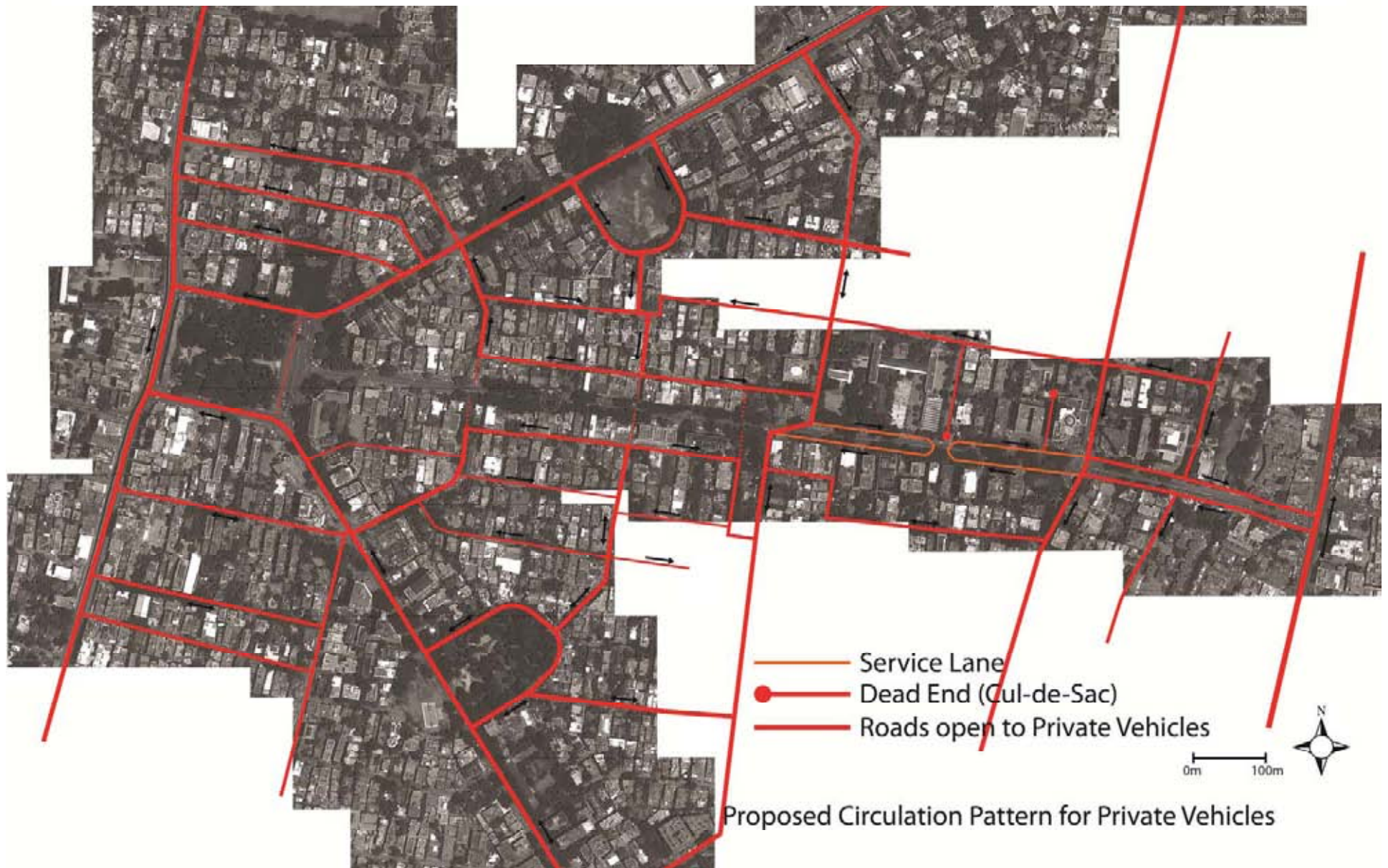


Zone 03 - N.Boag Road to Anna Salai

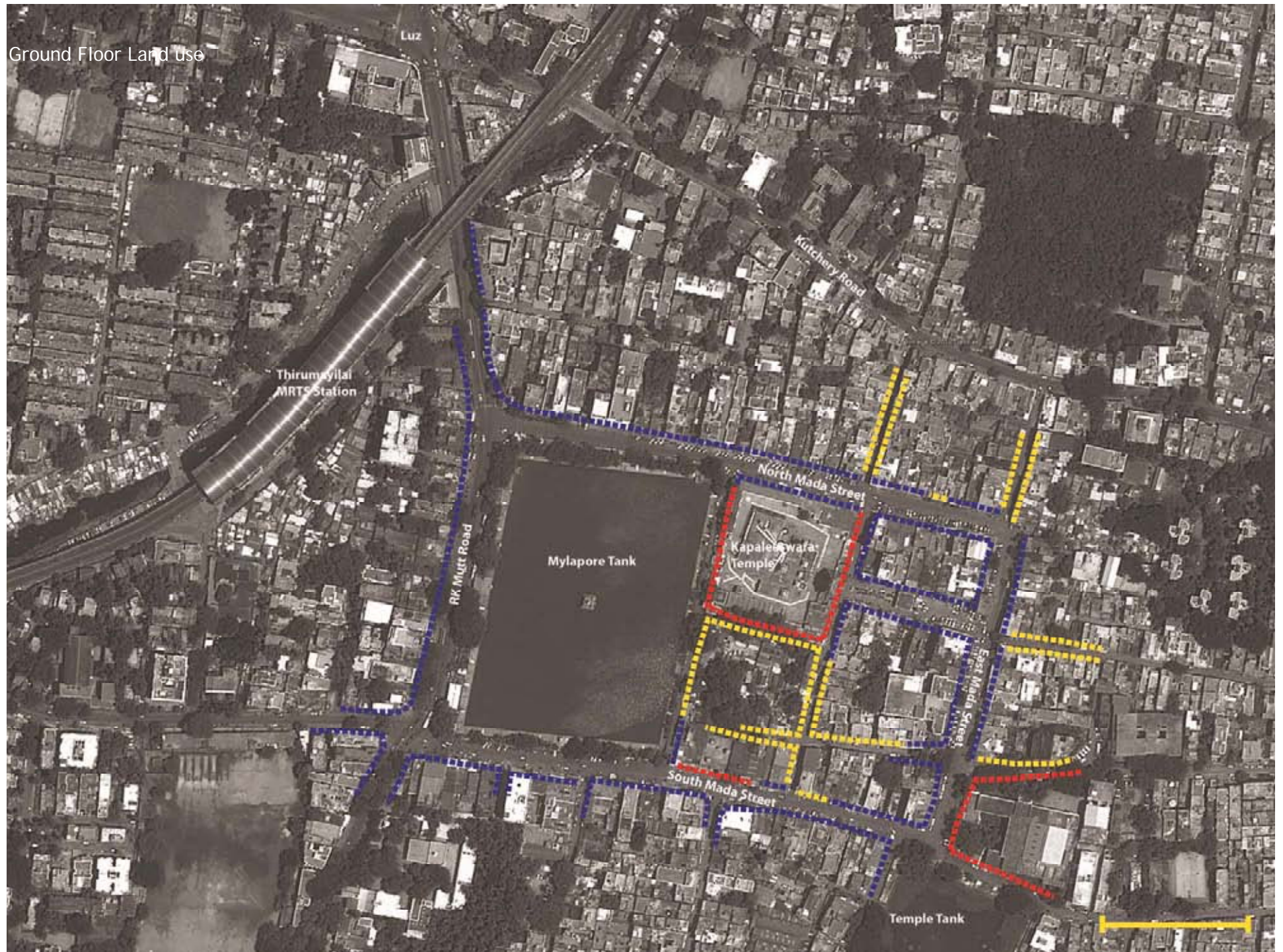
- 4 lane carriageway mixed traffic
- On street parking (Short Term) 40 PCU
- Wide footpaths for pedestrian comfort and safety



Side Streets



Ground Floor Land Use



Existing Condition



Possible solution- Relocation of bus stops (200m)





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Corporation of Chennai



Existing Condition



Existing Condition



Possible Solution - Closing of road to vehicular traffic, complete pedestrian realm, No Parking Zone



Existing Condition



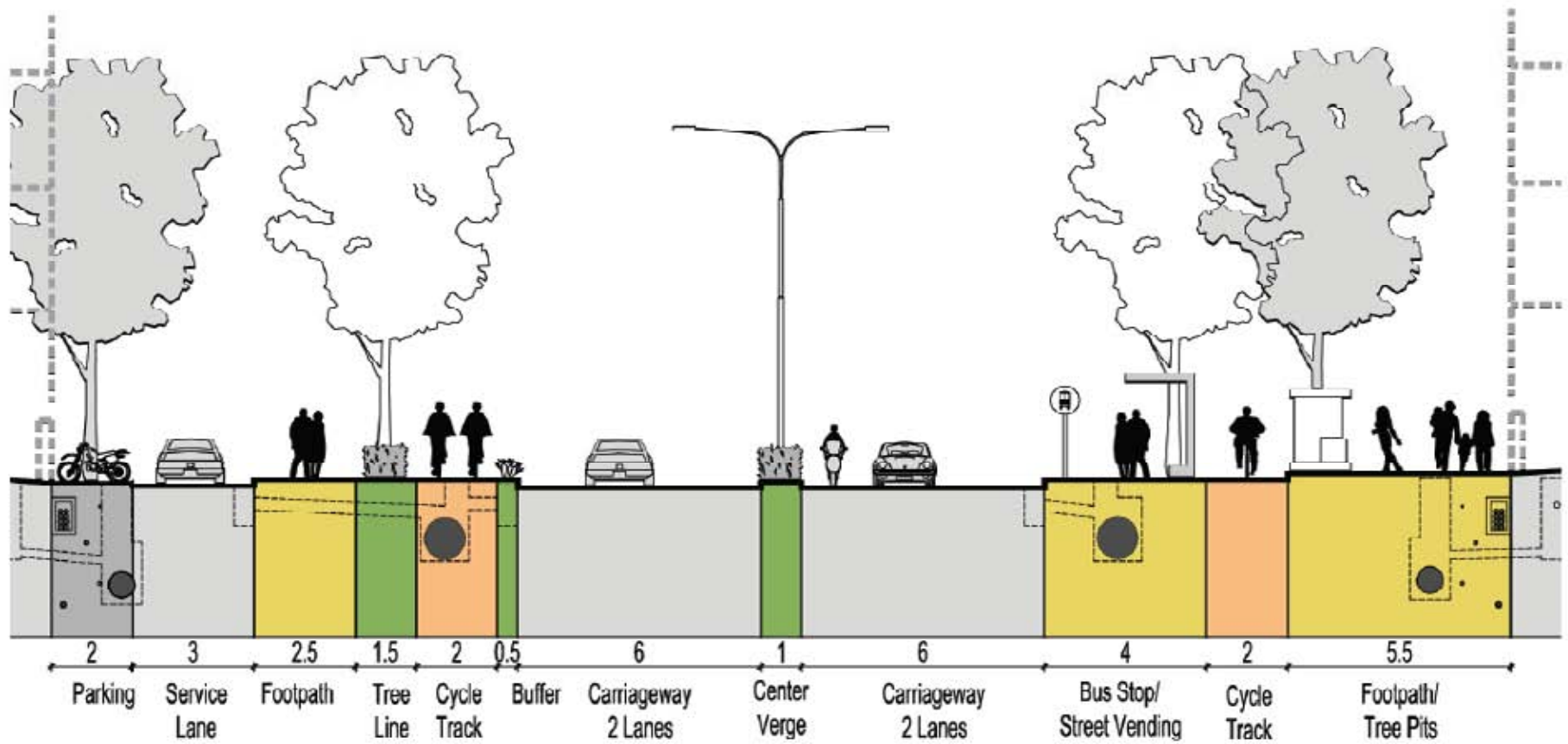
Possible Solution - Restricted access



Thank You

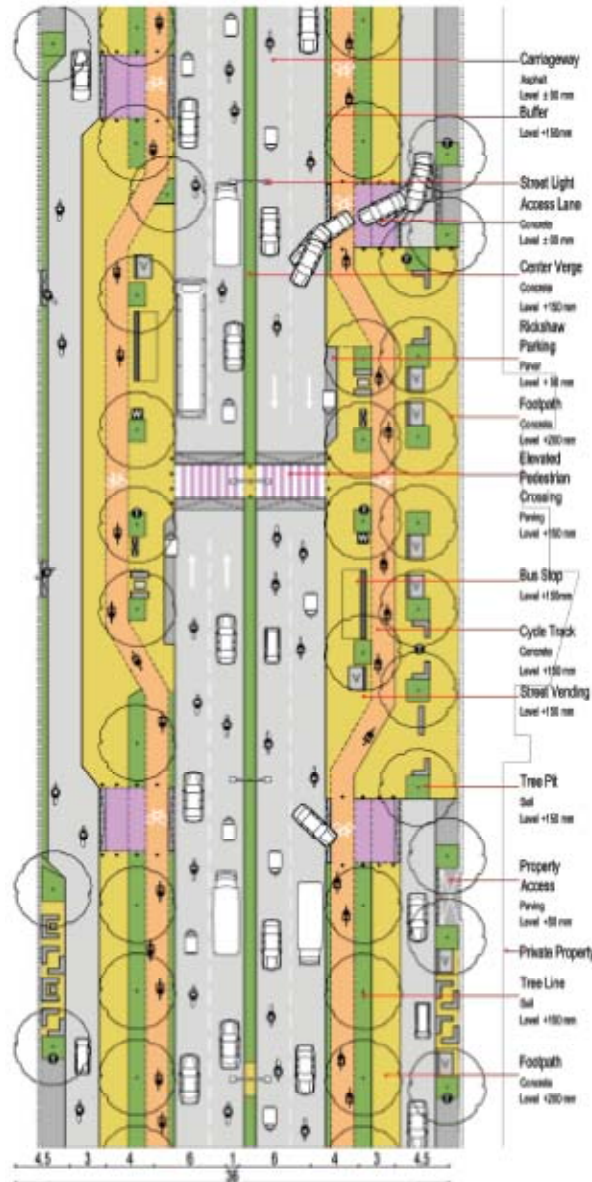


Visualization using Street Design Manual



3 Street templates

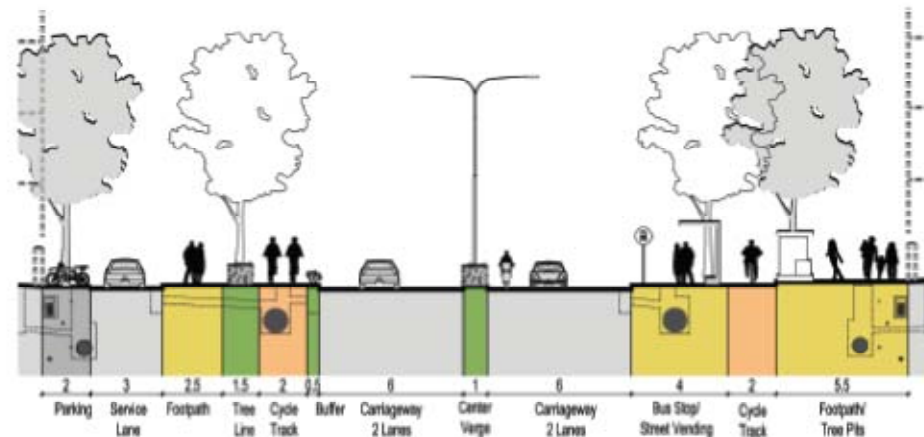
36c



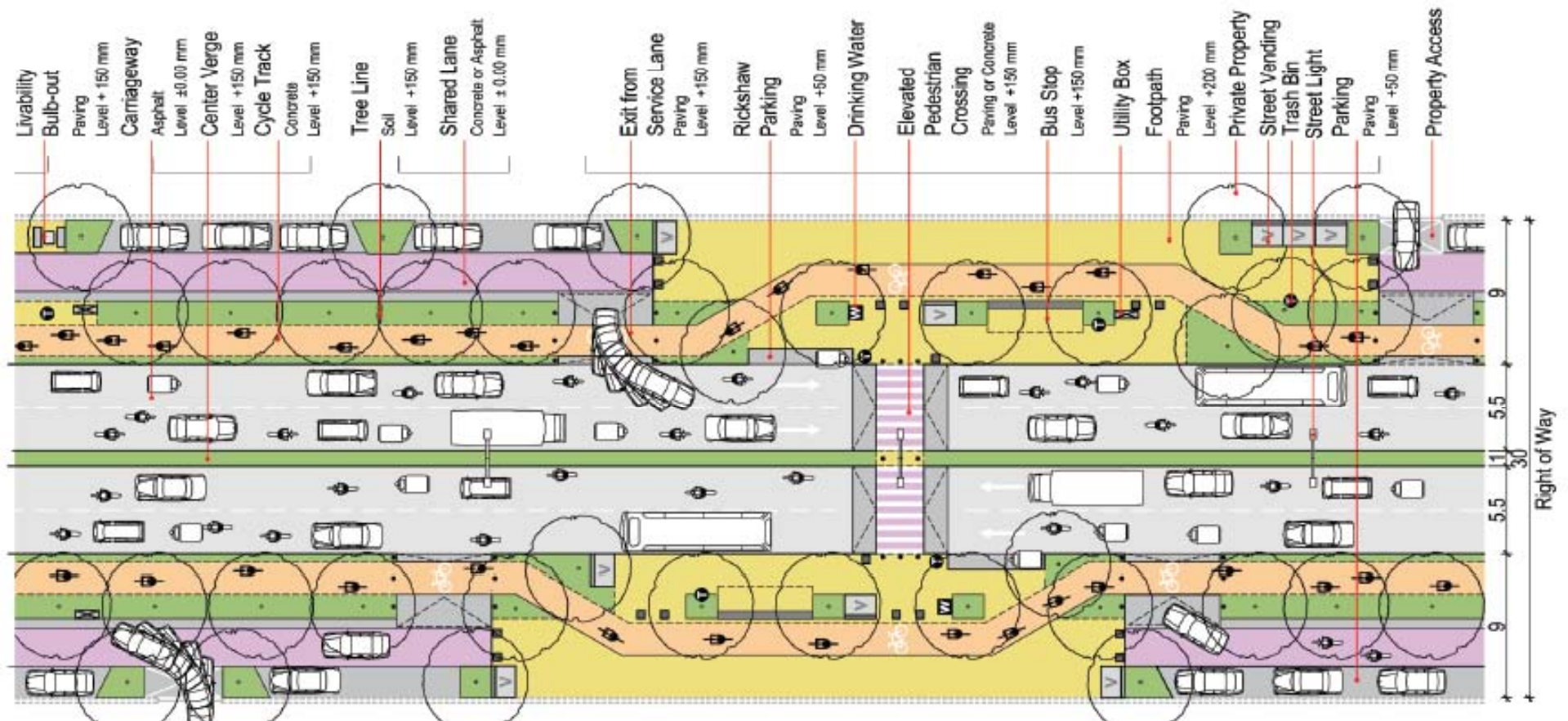
Large streets with service lanes

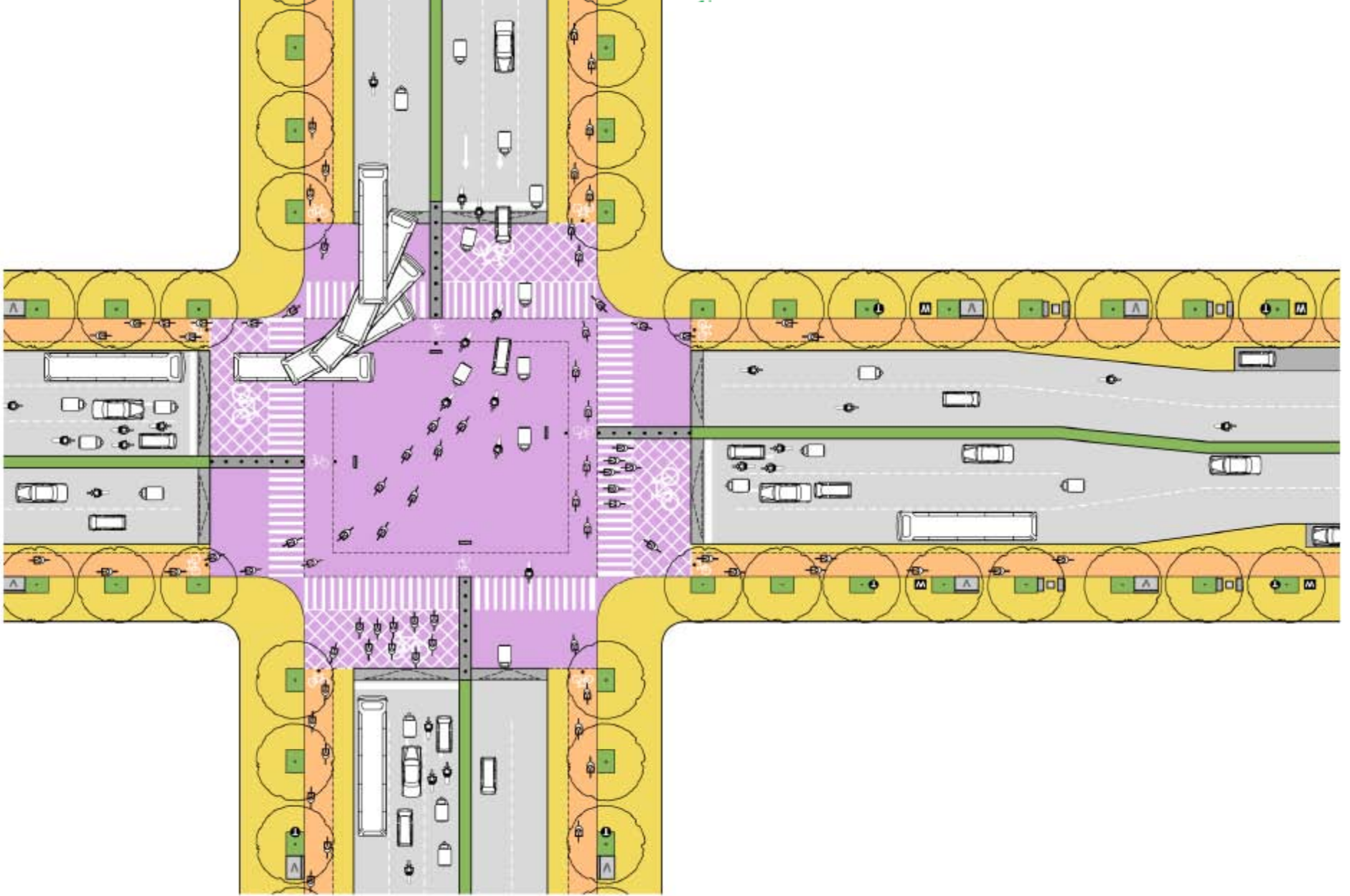
Pedestrian mobility and access	Footpath	Shared space	
Cyclist mobility	Median track	Side track	Mixed traffic
Parking and property access	Service lane	No service lane	
Private vehicle mobility	Divided carriageway	Undivided carriageway	No carriageway

Note Depending on adjacent land uses, the footpath can be placed at the edge of the right-of-way. Such an arrangement may be desirable if there are active retail storefronts abutting the street (see Section 2.12).



Large streets with service lanes







Case example 1

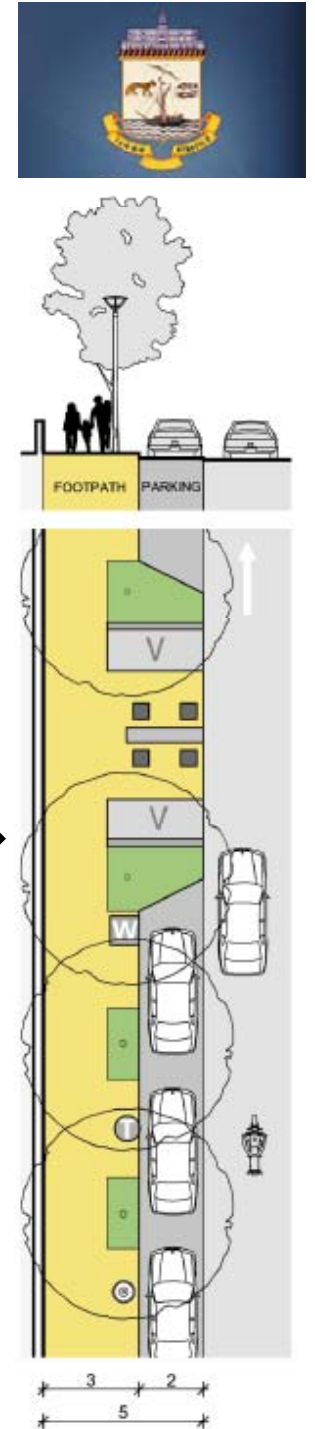
Footpath
Carriageway
Landscaping
On-street parking
Street furniture/ amenities





Footpath
Carriageway
Landscaping
On-street parking
Street furniture/ amenities

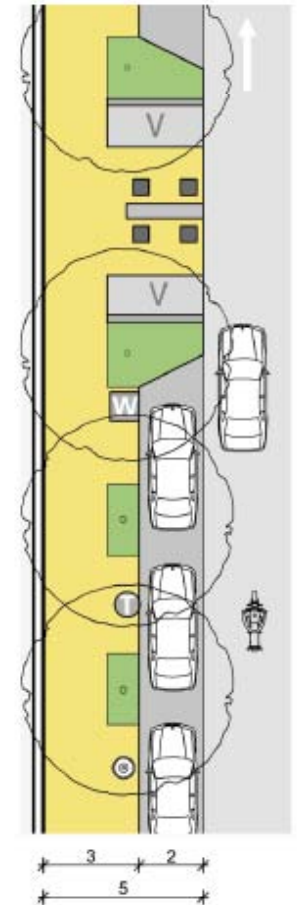
Design template
from the manual





Footpath
Carriageway
Landscaping
On-street parking
Street furniture/ amenities

← Proposal as per template



Annanagar- Shanthi Colony Road



Annanagar- Shanthi Colony Road



Annanagar 2nd Avenue



Annanagar 2nd Avenue





Taylors Road



Taylors Road

Pallikaranai Marsh and Wetland Projects

FOCUS AREA 1 - DUMP YARD

DESIGN GOAL

TO TRANSFORM THE DUMPYARD INTO
A BEAUTIFUL PRODUCTIVE AND CULTURAL
DESTINATION

TO USE THE DUMPYARD AS A LARGE
PEDESTRANISED PUBLIC SPACE

TO ALLOW FOR WATER TO FLOW THROUGH
THE LANDFILL



FOCUS AREA 1 - DUMPYARD

- Native grass
- Deck / View point
- Recreational
- Garbage incinerator
- Public place
- Forest
- Amphitheatre
- Intrepretation centre



section along proposed public space above dumpyard

FOCUS AREA 1 - DUMPYARD

Dumpyard transformed to a landscape of bridges and canal interspersed with public spaces

A unique landscape in chennai



MOAD

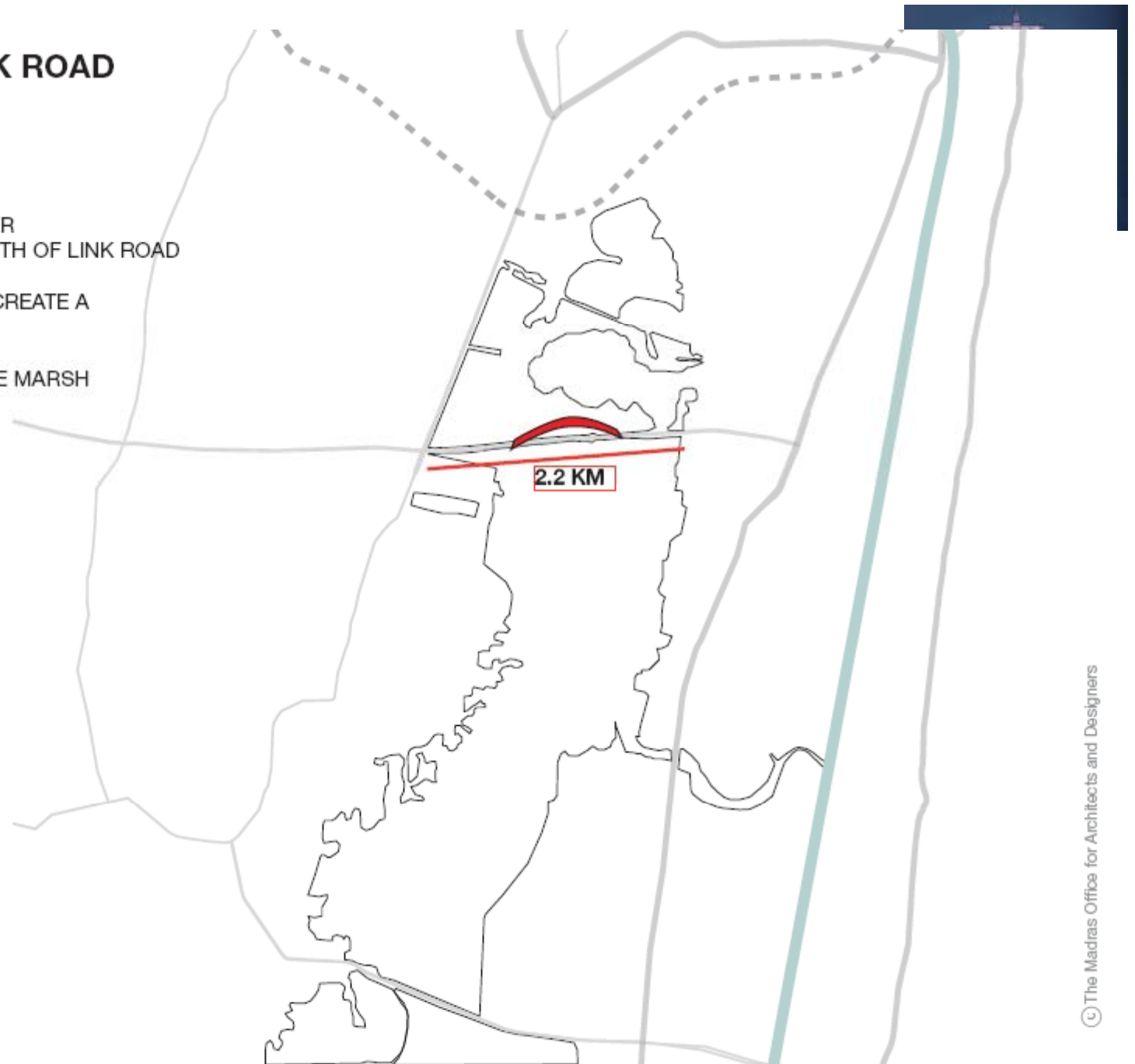
FOCUS AREA 3 - LINK ROAD

DESIGN GOAL

TO ALLOW FREE FLOW OF WATER
BETWEEN THE NORTH AND SOUTH OF LINK ROAD

TO USE THE OPPORTUNITY TO CREATE A
PEDESTRIAN PUBLIC SPACE

A SPACE FOR ALL TO ENJOY THE MARSH
LANDSCAPE



FOCUS AREA 3

Pedestrian Bridge - Public space - Bird watch



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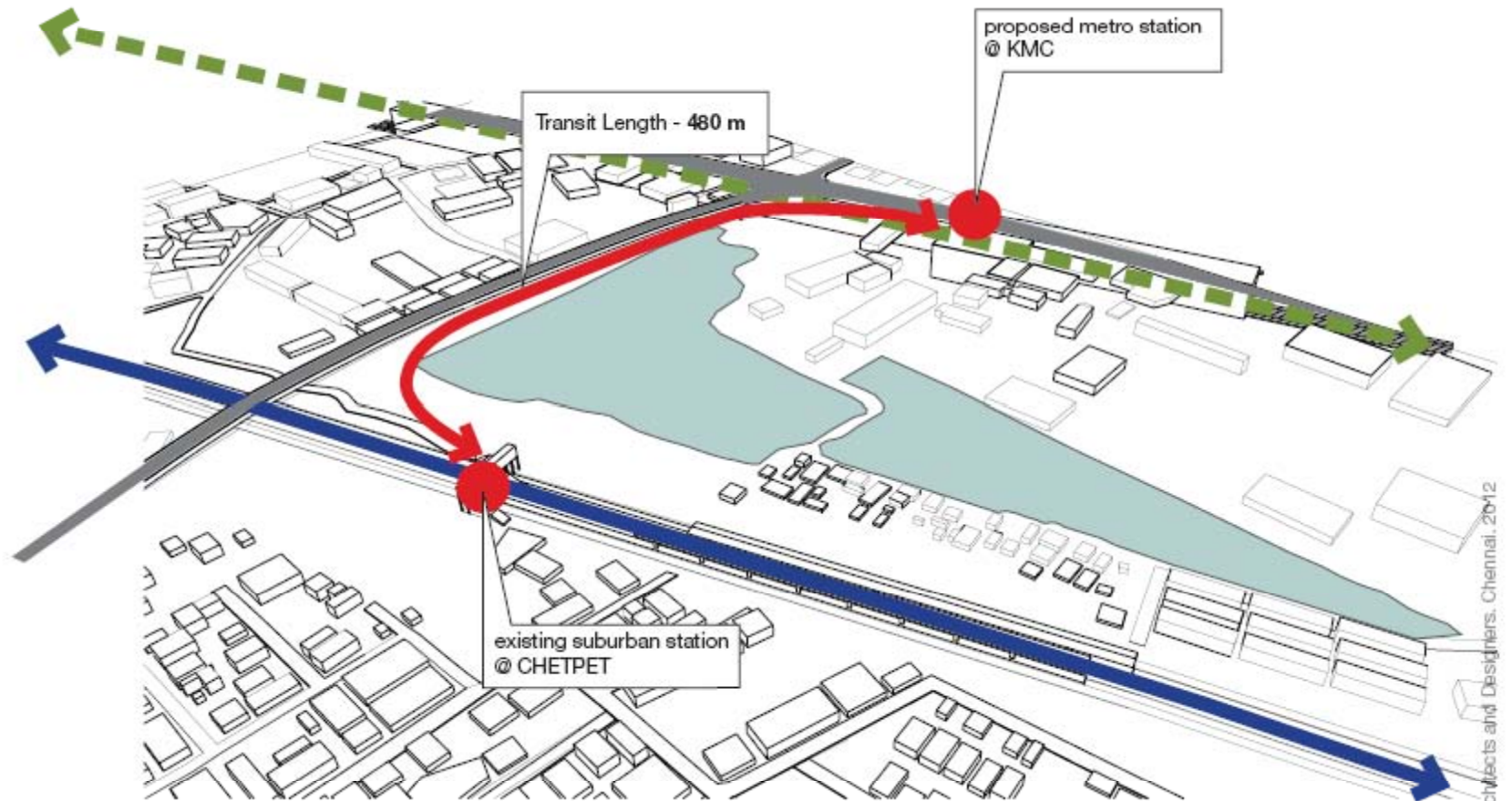
MOAD

BEFORE



MOAD

TRANSIT AS PUBLIC SPACE



AFTER



MOAD



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MOAD

What Corporation and other agencies are doing

Metro Rail, Highways, etc.

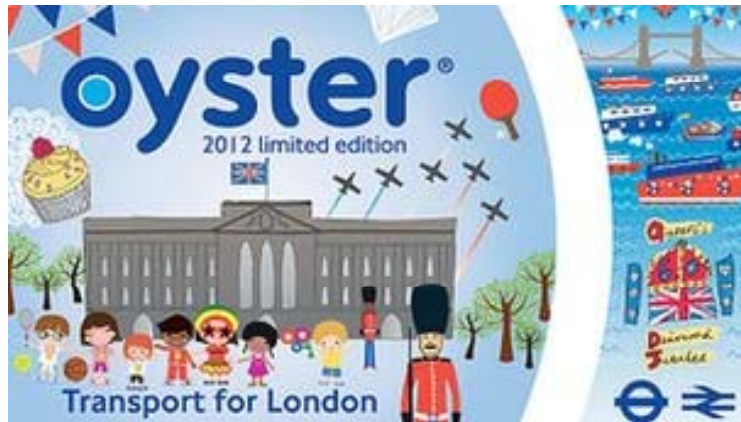


VISION 2023: Public Transport in Chennai

GOAL

- » **70% by Public Transport** (of all motorized trips)
- » A healthier city with low pollution
- » A safer city with no traffic related deaths
- » A happier city

Integration: Smart Card Common Ticketing



LONDON

HONG KONG

SAO PAULO

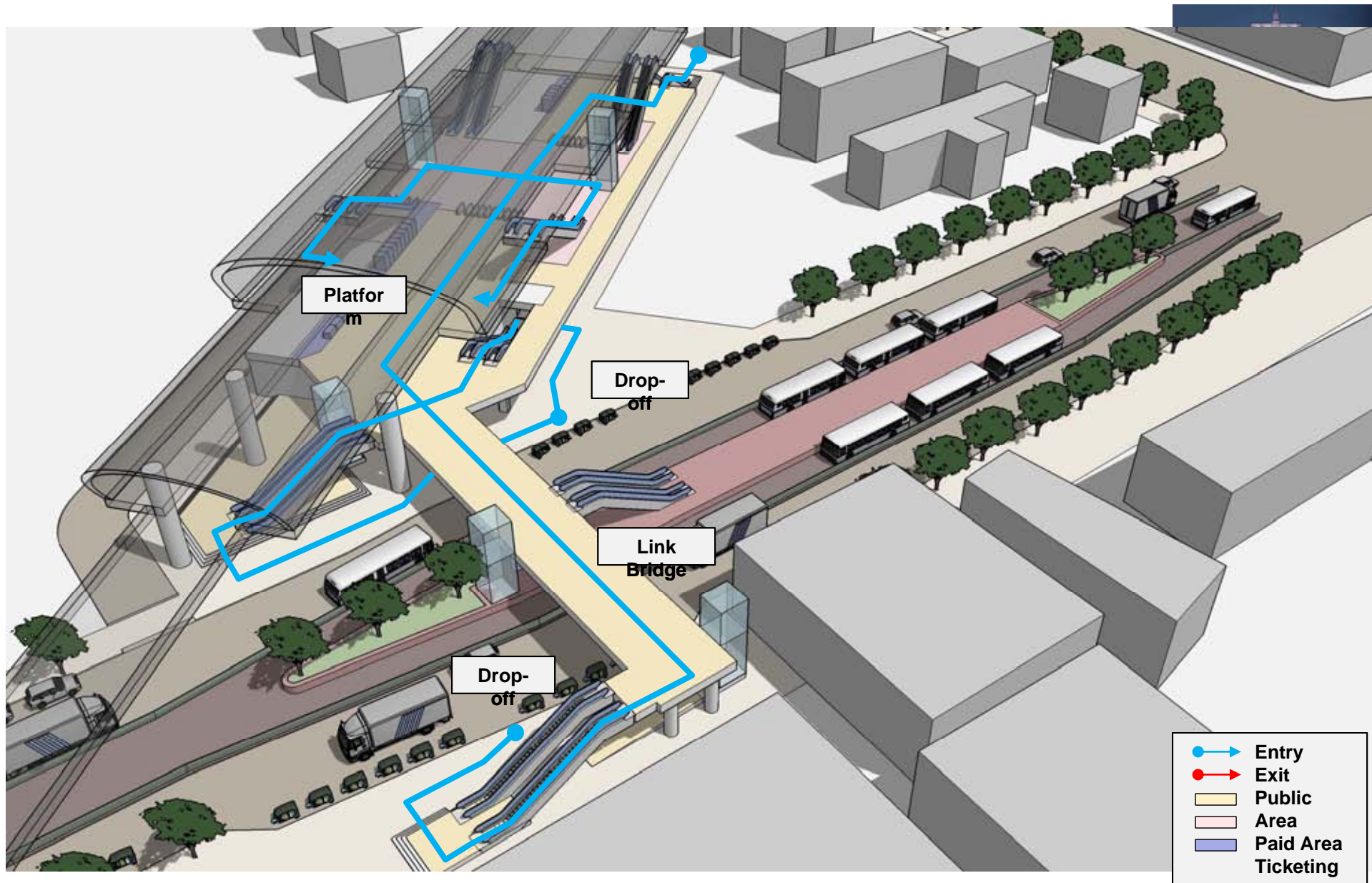


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Example – Mono/Metro & BRTS connectivity



Well design auto/share auto connectivity. Safe pedestrian facilities



Street furniture - toilets, seating area, trees