



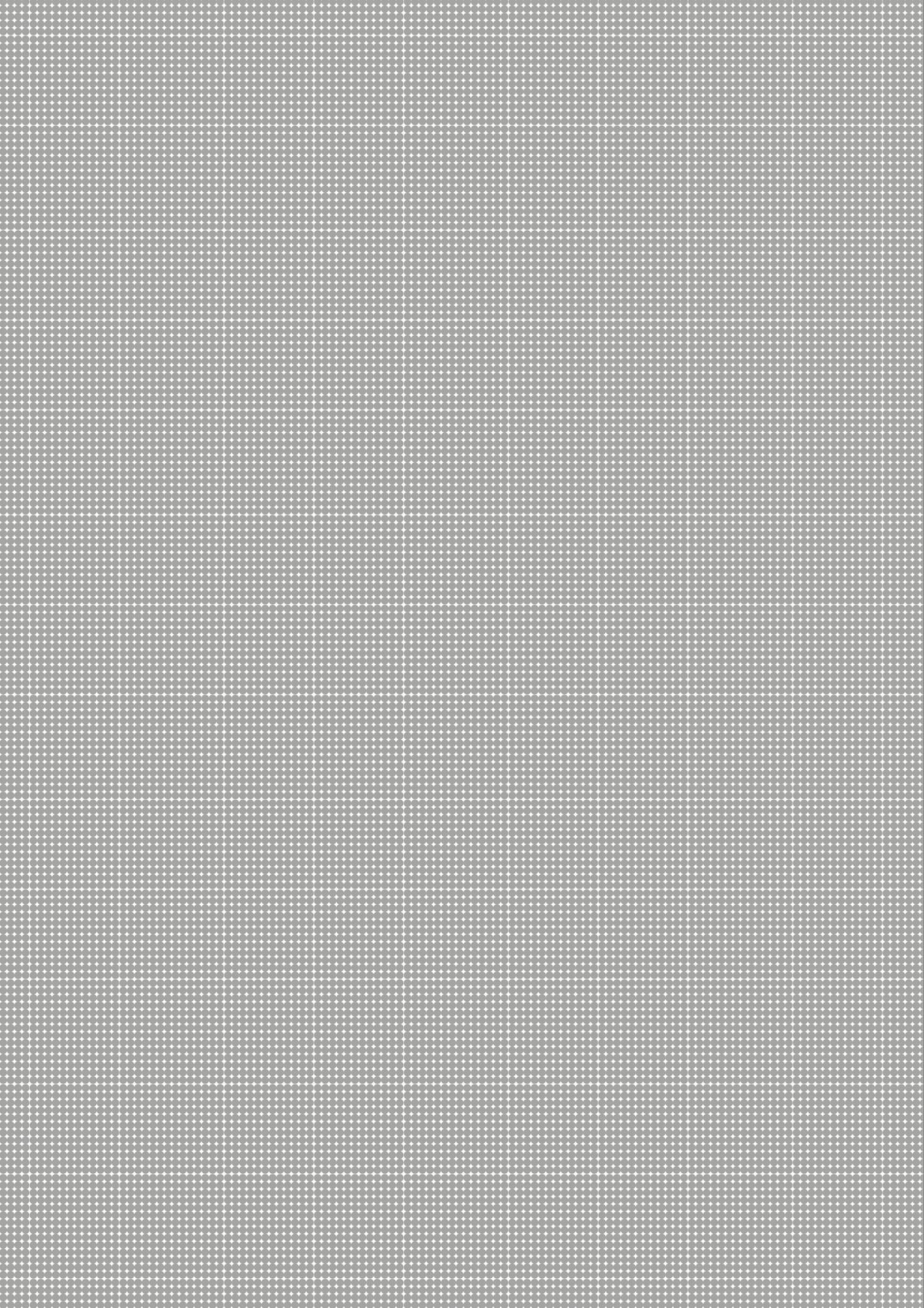
CREATING COMMONS

REINTERPRETING PLACEMAKING
REIMAGINING PORAMBOKE

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Graduation Thesis
MSc Urbanism
TU Delft



CREATING COMMONS

reinterpreting placemaking | reimagining poromboke

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Colophon

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Thank you all.

Abstract

Chennai, a city in the eastern coast of Tamil Nadu, India, has grown from a colonial outpost to a metropolitan today through a process of rapid urbanisation causing a loss of open spaces in the city and a general lack of public spaces. Chennai, geographically divided by the Cooum river into the North and South, also has characteristic differences in their living environments and their constituent demographics.

Although design of public spaces and associated theoretical concepts like placemaking, liveability and vitality are widely explored in the western context, these are not directly applicable to the Indian context. This calls for a more contextualised approach towards the design of public spaces that respond more organically to the local way of life. This project proposes to understand the local meaning of public spaces and their characteristic role in changing the identity of the forgotten parts of the city.

This project looks at two exemplary cases and the design of public places and the fabric around to respond better to the local context and eventually changing their identity. This project also proposes strategic interventions, their implementation over a timeline. Finally, it looks at the larger design impact and the level of transferability of the proposed design interventions and their role in transforming these forgotten parts of the city.

Keywords: Public place, Liveability, Placemaking, Communal spaces, Socio-spatial approach

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Project motivation

The main motivation for the project comes from the love for my home city. In this context, as a resident of the city I have always felt a serious lack of public spaces for any casual social gatherings. Today, in the city, this has merely come down to privatised malls. In addition to this, although I am from the southern part of the city, the North of Chennai and its urban has always fascinated me for its intricate nature and its intimate communities. The social structure is a big asset in these areas and this is very clearly visible when one simply drives through some of the interior residential streets with a lot of everyday life brimming and instigating a very vibrant environment. However, the spatial definition of streets themselves do not naturally allow for this. In this context, these different layers were the primary drive towards this project.

01

INTRODUCTION

Chapter overview:

This section of the report focuses on the problematisation of the research project, by introducing the problem field and the issues that need attention. An analysis of these issues set in context leads to the problem statement that also addresses the gap in the existing body of knowledge. This section also explores the potential windows of opportunity within which the design projects can operate.

Chapter Contents :

- 1.1 Introduction
- 1.2 Problem field
- 1.3 Problem statement
- 1.4 Problem framework
- 1.5 Window of operation
- 1.6 Window of opportunity

1.1 INTRODUCTION

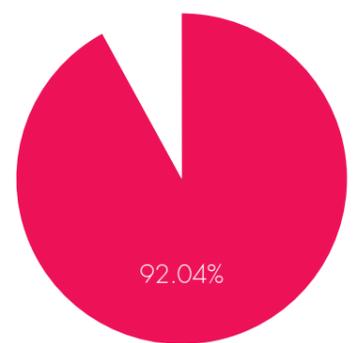
Chennai, one of the major cities in India, is a city located on the eastern coast of Tamil Nadu. It is historically known as Madras, and used to be an outpost of the British during the colonial era. It is the largest metropolitan region in southern India and according to the census of 2011, Chennai is the fourth-most populous urban agglomeration in India.

In the recent years, Chennai city has been developing in a sprawling pattern of growth, as the rapid population growth moves to the peripheries away from the inner city (Rajendran & Kaneda, 2014).

This has caused the city to lose 20 percent of its green cover over the last two decades (fig 1.2). This results in a city with only 0.8 square metres of open space per person against 9sqm per person as recommended by WHO (Town and country planning organisation, 2014).

Additionally, this rapid urbanisation moving away from the core has shifted the focus of development away from the city's dense urban core leading to some parts being left behind in the conversation of future directions of development and growth. This in combination with congestion as a result of lack of open spaces has lead to very poor environments in these forgotten parts of the city leaving them with a placeless character.

This project attempts to transform these areas of placelessness into places for the city as a whole rather than mere spaces in the city. This is attempted using a localised understanding of the tool of placemaking.



■ Urban use in Chennai city core
□ Other use

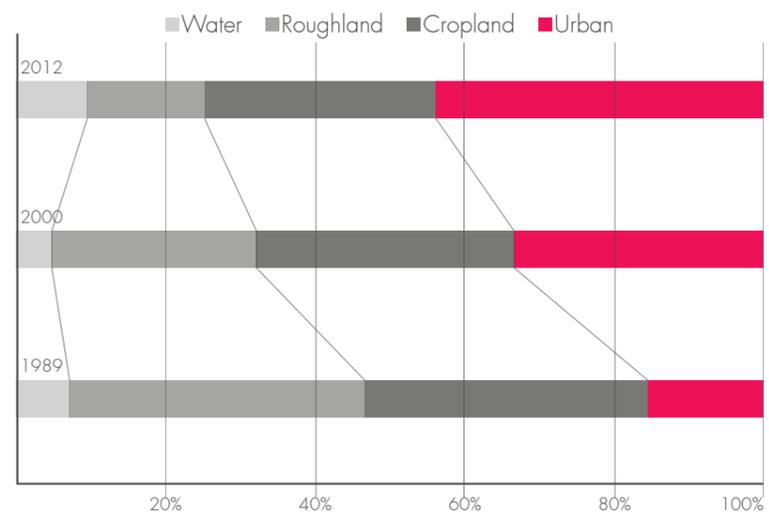
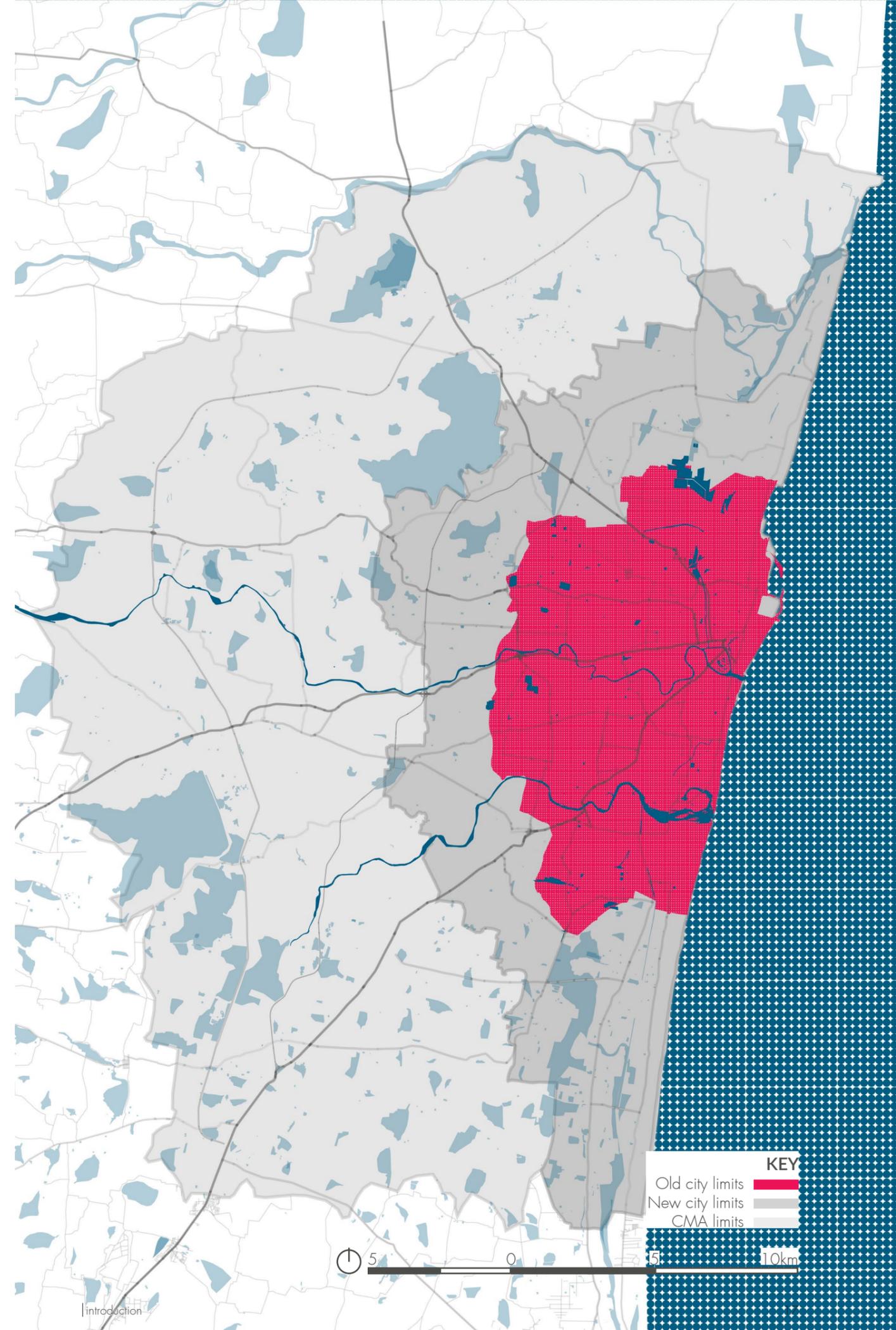


Fig 1.1: (left, top) Urban land use in Chennai city core
Source: NRSC, Government of India, 2019

Fig 1.2: (left, bottom) Urbanisation rate in Chennai (1989 - 2012)
Source: Rajendran and Kaneda, 2014

Fig 1.3: (right) Map of Chennai city showing the different administrative limits.
Source: Author, based on open source GIS data



KEY
Old city limits
New city limits
CMA limits

5 0 5 10km

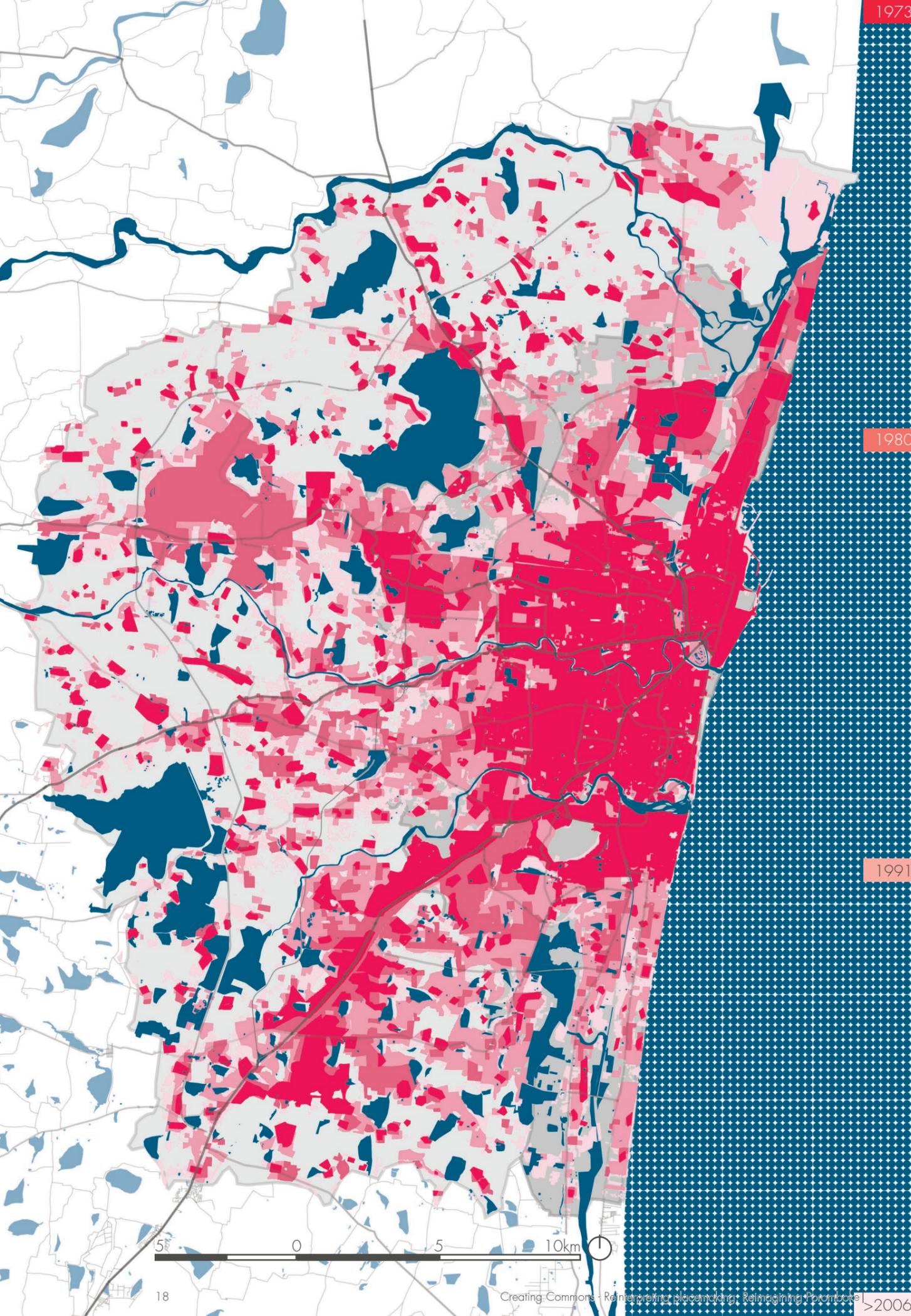


Fig 1.4: (left) Urbanisation timeline of CMA
 Source: Author, based on second master plan, CMDA

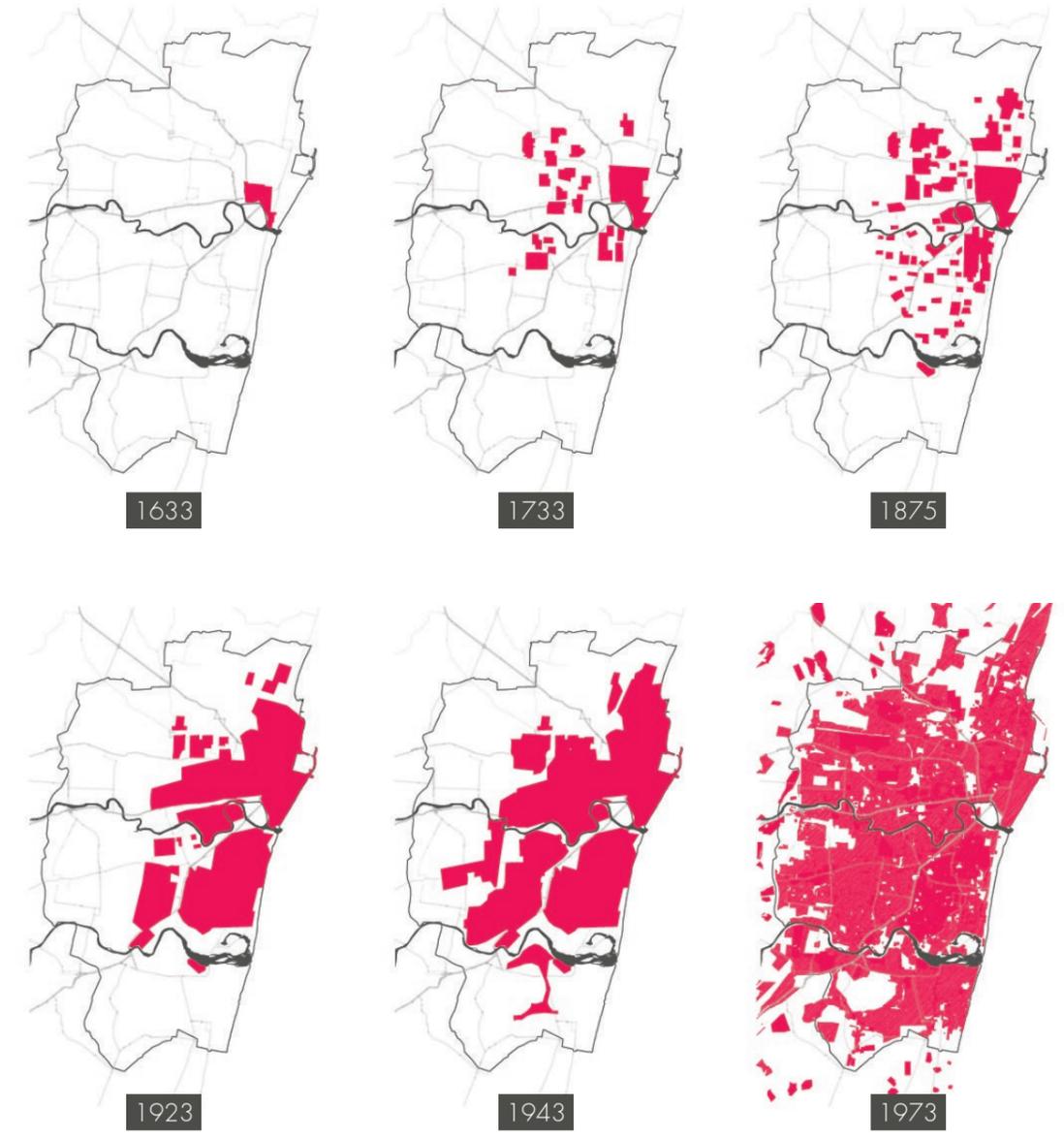
Fig 1.5: (right) Urbanisation rate in Chennai (1989 - 2012)
 Source: Author, based on structure of Chennai, second master plan, CMDA

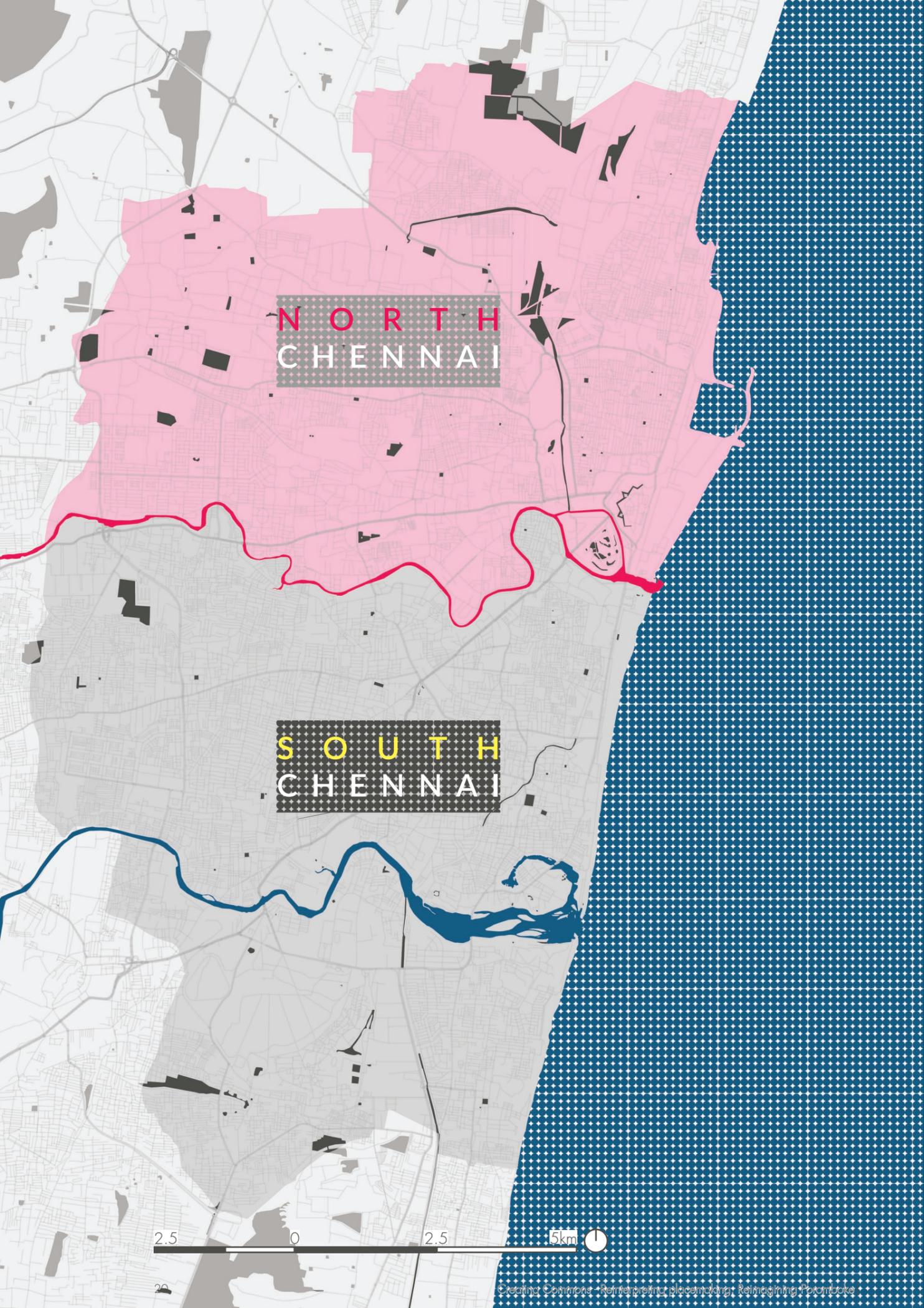
1.2 PROBLEM FIELD

RAPID URBANISATION

Chennai originated from a single point, the fort St. George, during the colonial era which became the nucleus of the growing colonial city and urban Chennai. Since then, it has followed a radial spatial growth. This is reflected in the city's morphology wherein it follows 5 corridors of development that all arise from the center.

Chennai is geographically divided by the Cooum river into North and South Chennai. Historically, the spatial development pattern of the city has always been towards the south, leaving the north out of the conversation of future directions of growth. This is largely because, the north had some of the strategically situated industries owing to the port. In addition to this, the north has some of the oldest parts of the city and is more dense and saturated with some of the most continuously built areas as opposed to the vast open unbuilt spaces that were available in the south. This has left North Chennai with a lack of social and economic opportunities. In combination with the larger phenomenon of rapid urbanisation and congestion of the center, this has left the north with poor standards of living.





1.3 PROBLEM STATEMENT

1.3.1 NORTH VS SOUTH

The geographical divide of the city by the Cooum river is not only physical but also seen in the living environments on the two sides. This is a result of the socio-economic differences, with the North having larger concentration of the economically weaker section of the society.

Additionally, crime is prevalent in larger proportions in these parts in comparison to the south. Spatially, these issues manifest as poor standards of liveability, urban vitality and poor access to public spaces and services.

Chennai city as a whole has a poor ratio of open space per person with just 0.8sqm per person as opposed to the prescribed WHO standard of 9sqm per person. This becomes further more pronounced in North Chennai. These factors have led to North Chennai being perceived as undesirable.

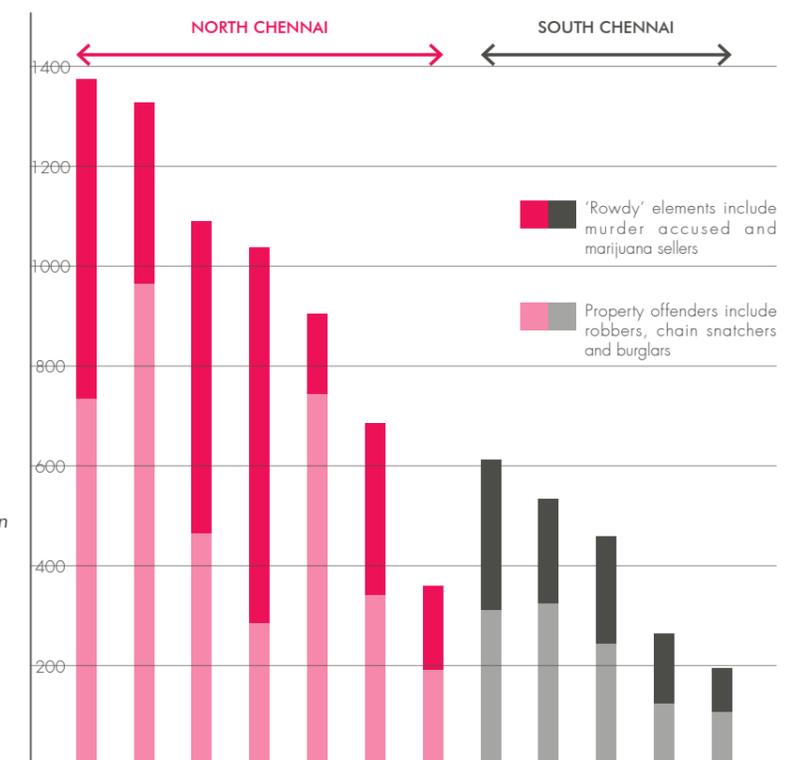
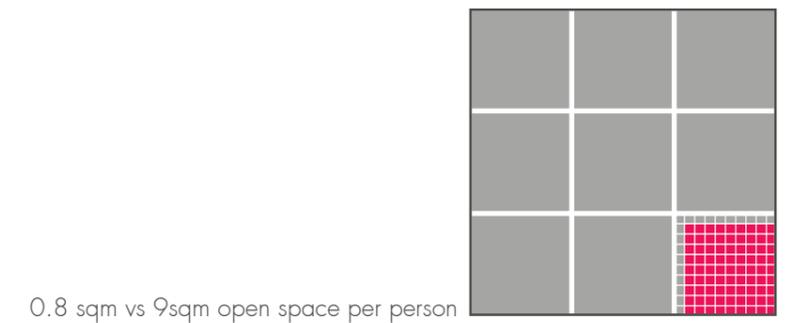


Fig 1.6: (left) North and South Chennai
Source: Author

Fig 1.7: (right, top) Open space per person
Source: Author, based on Town and country planning organisation, 2014

Fig 1.8: (right, bottom) Distribution of crime statistics between North and South Chennai
Source: retrieved from <https://www.thehindu.com>

PROBLEM STATEMENT

NORTH VS SOUTH - LIVING ENVIRONMENTS

Fig 1.9: (top) Tightly packed Mint street, George Town, North Chennai.
Source: Arun Christopher

Fig 1.10: (bottom) Morphology of George Town, North Chennai
Source: Author, based on open GIS data

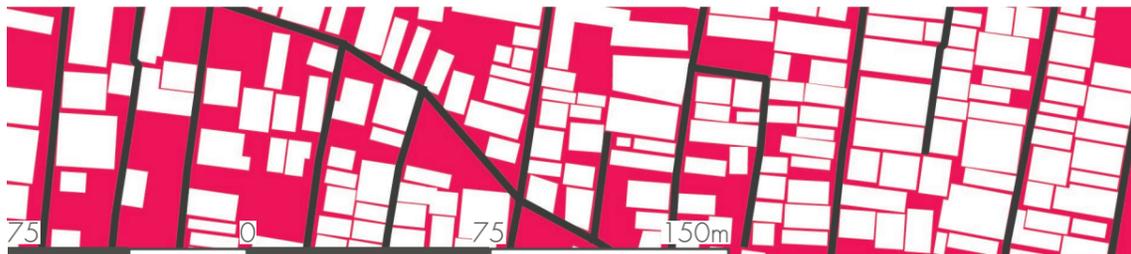
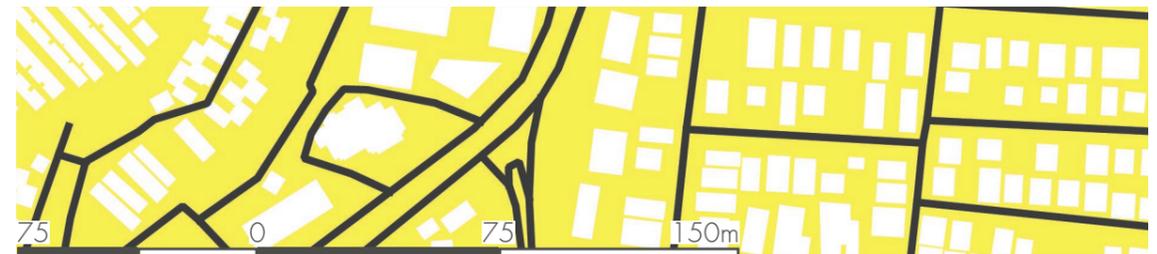


Fig 1.11: (top) A street in Theagaraya Nagar, South Chennai.
Source: Google street view

Fig 1.12: (bottom) Morphology of Theagaraya Nagar, South Chennai
Source: Author, based on open GIS data



PROBLEM STATEMENT

NORTH VS SOUTH - SOCIETY

This social and economic divide between North Chennai and South Chennai has become a talking point in the city among the local residents. However, it still has not become a talking point on the political front and no changes have been made as evidenced by the news paper articles shown in fig. 1.10. As a result of this, there has been a growing level of distrust and tension between the public and the governing bodies and structure.

Fig 1.13: (left) News paper articles giving a glimpse of challenges in North Chennai
Source: retrieved from <https://timesofindia.indiatimes.com>

Fig 1.14: (right) Distribution of economically weaker section in Chennai
Source: 2011 Indian census data

THE TIMES OF INDIA

North Chennai: New poll but being fought on old issues

TNN | Mar 30, 2019, 11:02 AM IST



CHENNAI: The late DMK founder and chief minister C N Annadurai used to say "North Shines and South Wanes" (Vadaku vazhgirathu, therku theigirathu) about the step-motherly treatment to the southern states. But in the DMK's own birthplace, voters rue that "South Chennai thrives while North Chennai wanes"

Poor infrastructure and lack of job opportunities for educated youth have left the North Chennai Lok Sabha constituency poorly off. But for Metrorail connectivity up to Washermenpet in the last leg of Phase I in February this year, the working class residents of North Chennai have been left behind.

North and South Madras: Understanding the needs of a city through its working population

The city of Chennai has the broad geographical division into North, South and Central Chennai. The Lok Sabha constituencies in Chennai also represent the broad geographical divide.

Chennai:

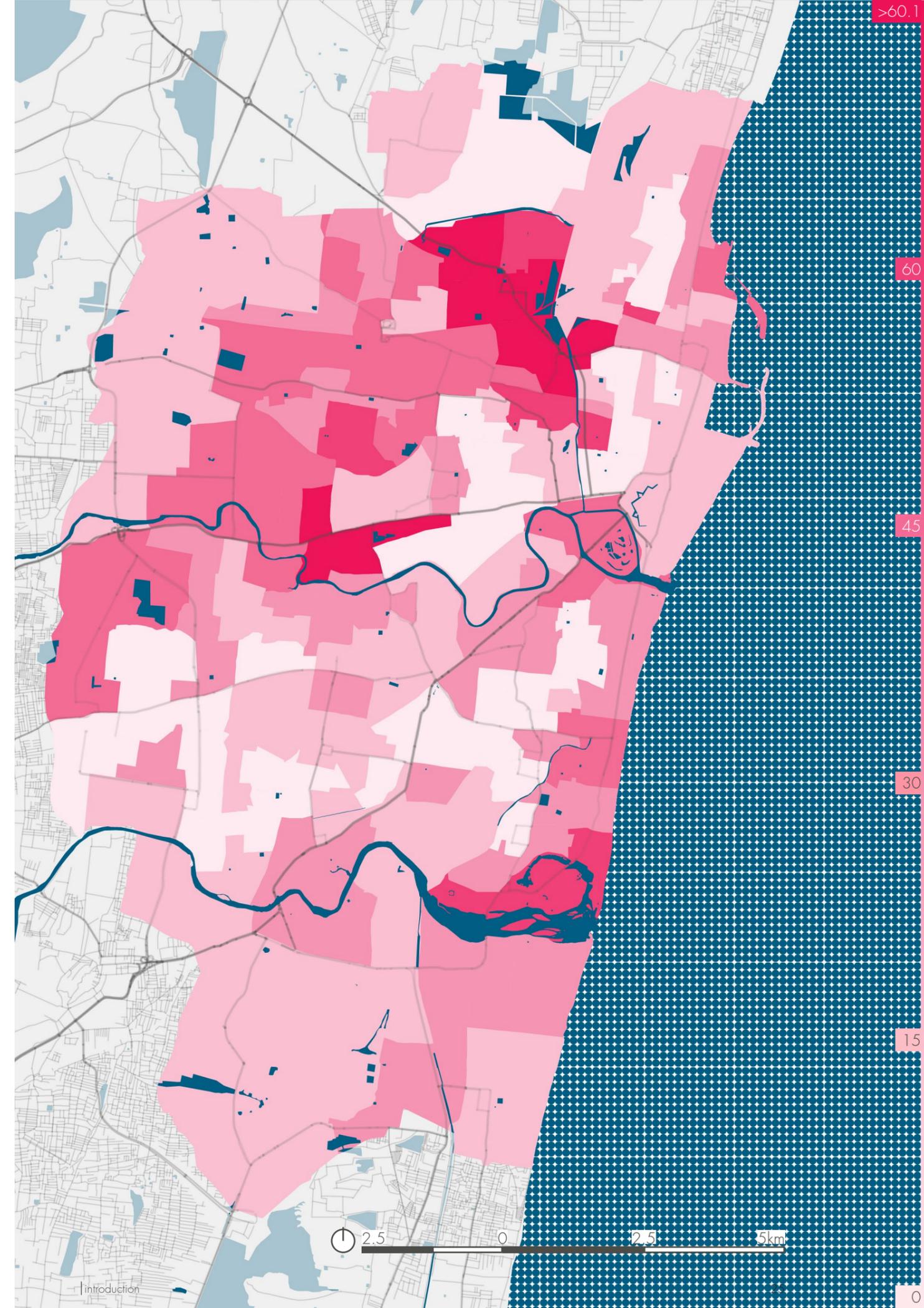
Though the geographical divide is based on size and population, it is also a class divide. North Chennai has long been a centre for industrial growth and the concentration of the working population. It is a white collar and blue collar divide.

CHENNAI

North Chennai is still off the brandwagon

"With the exception of a handful of colleges and industries like Ashok Leyland and the erstwhile B&C Mills, there isn't much," says former CMDA chief planner Anantharanjan Das.

One major factor not helping north Chennai is the lack of space, says N. K. Sundaram, former chairman of Builders' Association of India, Southern Centre. "The northern suburbs are crowded, expansion is exceedingly limited – whether it be a new hotel or apartments or shops. Even if a new outlet were to come up, what about the ambience or parking space?" he says.



PROBLEM STATEMENT

NORTH VS SOUTH - SOCIETY

The existing morphology of North Chennai owes its development to a massive amount of industrial establishments that were setup during the 1970s to 1990s. This led to a circle of economic development framed by small and medium scale industries that supported the larger industries. This in turn aspired a lot of working population. This was backed up by large scale housing development by the government in addition to worker housing by the factories. These conditions lead to a very high degree of social integration. This massive social capital which is a result of strong worker unions and closely knit social structure. This is the identity of the society in North Chennai. This becomes a problem for any development because until the solution solves everyone's problem nothing happens and this is the very reason no development has happened in the North.

In the North, the average size of houses are quite small which forces people to spend a lions share of their time on the streets making it a far more active place than streets in the South. Although the streets take up a lot more activity, the streets themselves do not enable or support this character or the local way of life.

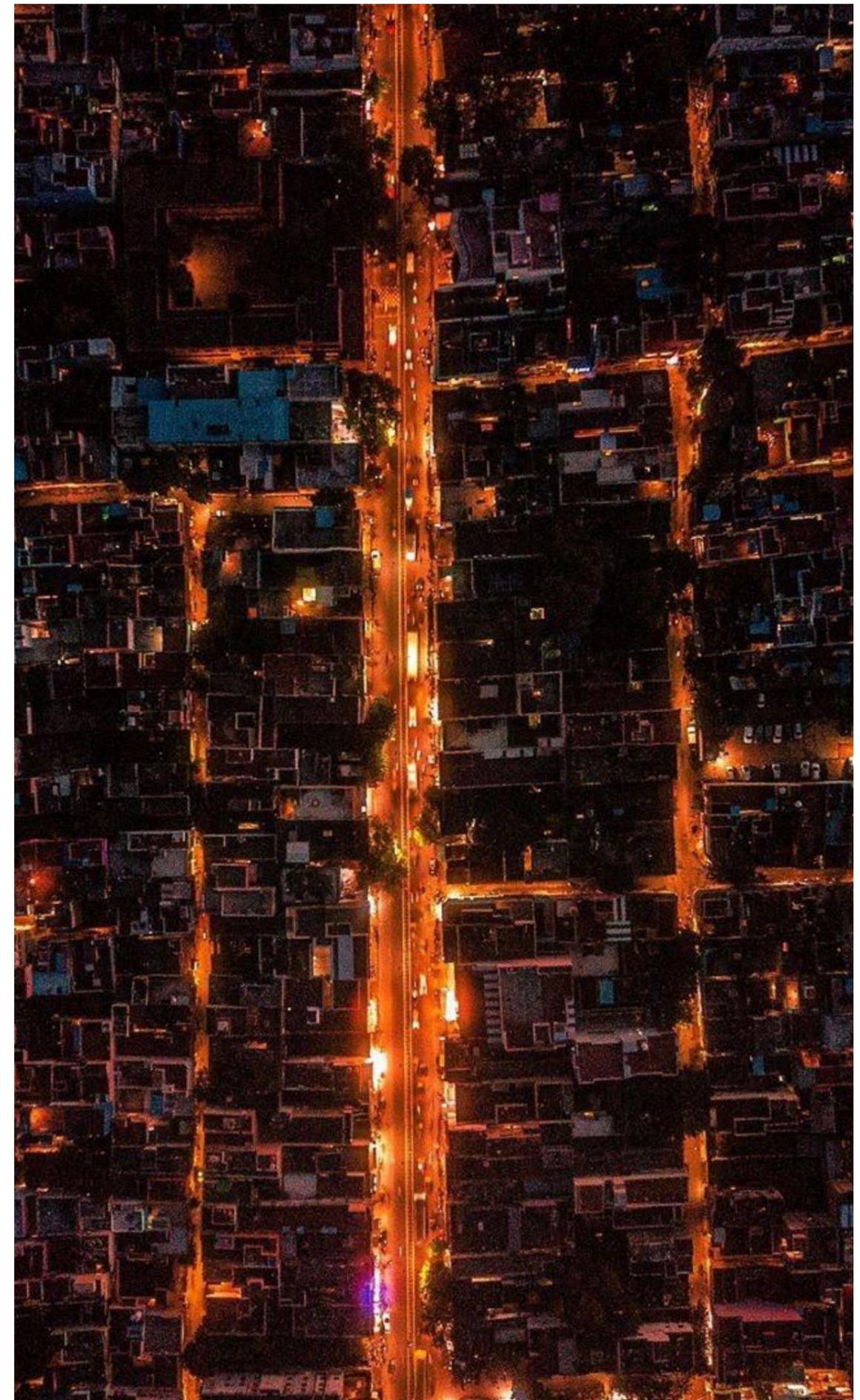
Although the existing fabric is very place oriented it is not quite so yet. It is a place for the local residents but not an inclusive place for the city. Active streets and the closely knit society make North Chennai a potential place for the city.

Fig 1.15: (left) Intricate fabric of North Chennai

Source: XAperture retrieved from <https://www.facebook.com/mycitychennai/>

Fig 1.16: (right) Streets of Royapuram

Source: Harish T retrieved from <https://www.facebook.com/mycitychennai/>

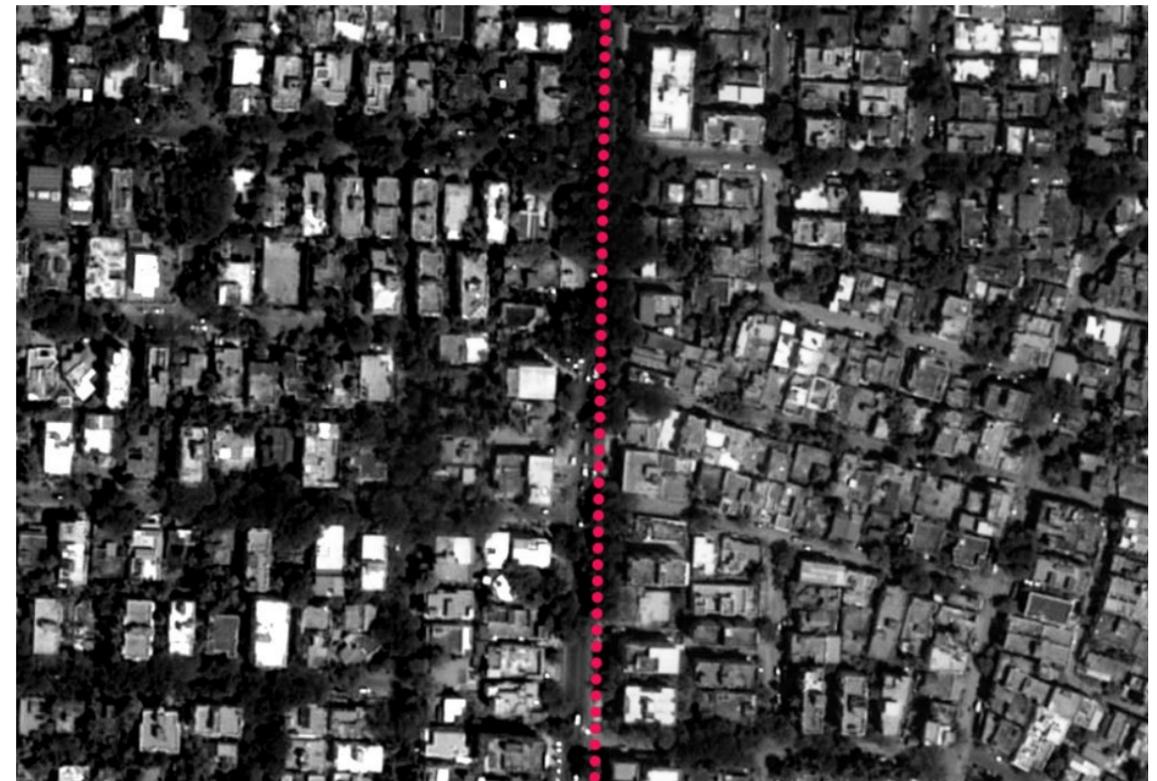
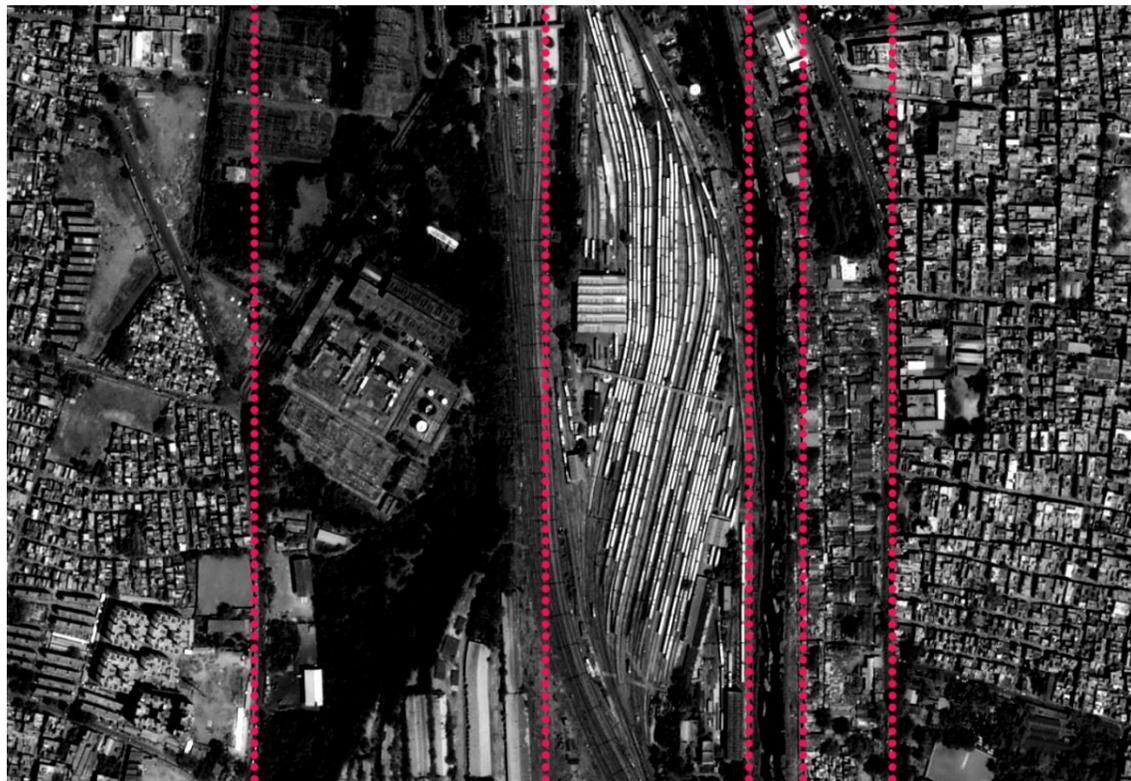


PROBLEM STATEMENT

1.3.2 MULTI-SCALAR FRAGMENTATION

The phenomenon of rapid urbanisation has led to fragmentation of the urban fabric across multiple scales. The physical divide between the North and the South is further magnified by the social differences leading to a large fragmentation at the city scale. Furthermore, the market driven growth fed by rapid urbanisation has led to an unprecedented growth that has taken an organic form of development at the local scale that forms morphological pockets that are quite different from one another. This has led to spatial fragmentation that can be observed within the city at the smaller scales. This further leads to the formation of clusters of patterns and typologies of certain characteristics, leading to perceived and physical borders and boundaries in the urban fabric.

Fig 1.17: (left) multi-scalar fragmentation throughout the urban fabric
Source: Bing maps



1.4 PROBLEM FRAMEWORK

One of the most significant challenges that Chennai city faces today is that of rapid urbanisation. The city struggles to cater to the needs of the ever growing urban population. This manifests itself as different urban issues in different scales of the city.

CITY SCALE

At the largest scale, the urban sprawl and development towards the south has left the North undesirable. This leaves the potential, of an entire portion of the city, untapped. In addition to this, the lack of significant public places and the placeless character of this portion of the city results in the lack of its contribution as a place or destination in the city.

LOCAL SCALE

The rapid urbanisation at the local scale leads to congestion and overcrowding with insufficient breathing spaces in the city. This leads to a lack of spaces that facilitate social and cultural processes and the expression of individual and collective identities.

PLACE VS SPACE

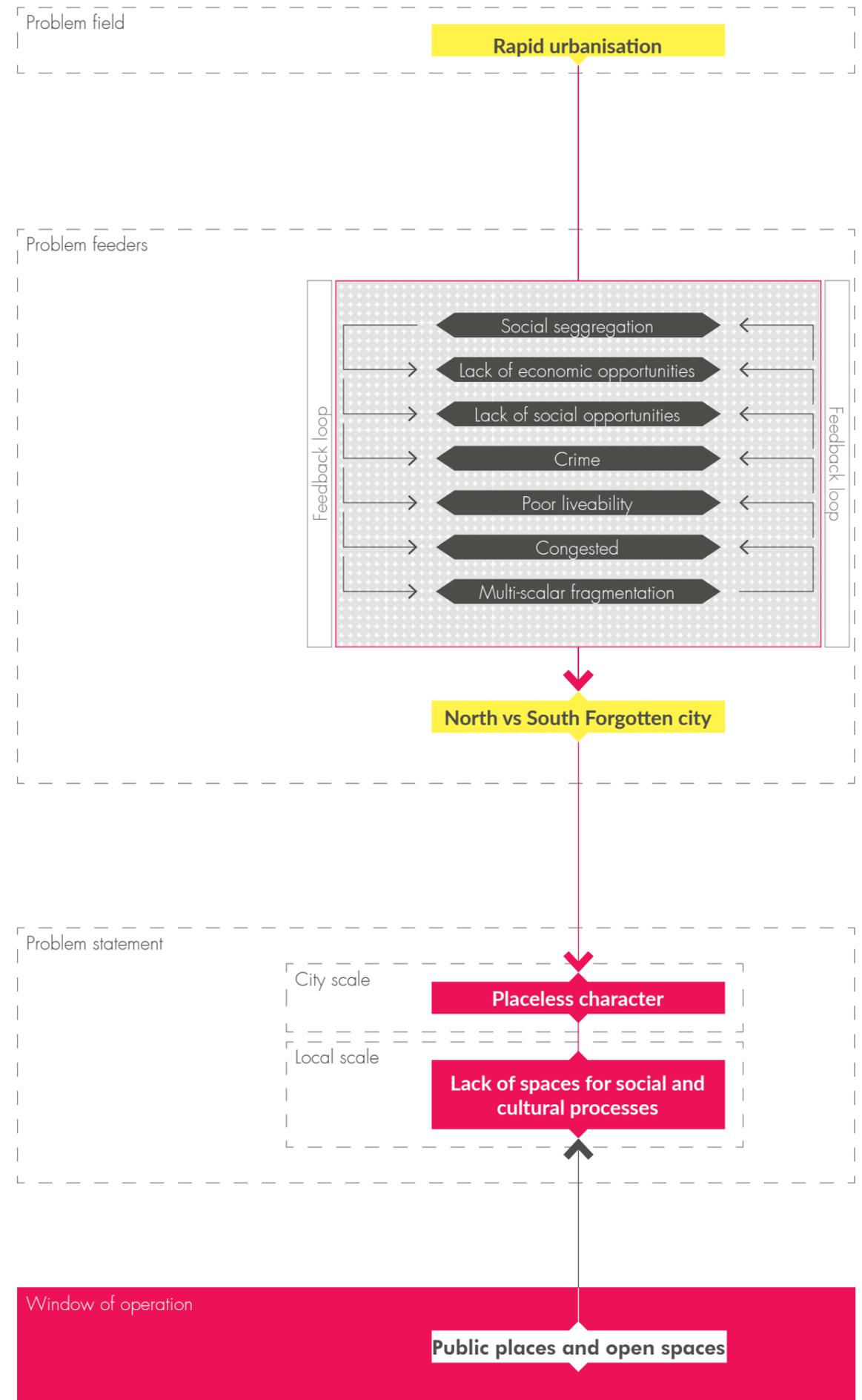
As shown in fig 1.17 the rapid urbanisation and the vicious loop of social segregation, lack of social and economic opportunities, poor liveability and crime, leads to fragmentation of the urban fabric at multiple scales resulting in North Chennai becoming a forgotten part of the city. This also eventually leads to the placeless character of the city making it just a space rather than a place.

Fig 1.18: (below) An aerial view of Mannady

Source: Uva Nesh

Fig 1.19: (right) Problem framework

Source: Author



1.5 WINDOW OF OPERATION

PUBLIC AND OPEN SPACES

As described earlier, the lack of public places and open spaces in the fabric of North Chennai leads to significant issues across the multiple scales of the city.

Public spaces often become the realm that facilitates the connection between the physical and social layers in a city. They become spaces of congregation and public activity and thus render spatial character to any environment making them valuable in their setting and associated public life.

In addition to this, these spaces can also offer to be significant breathing spaces that Chennai city utterly lacks. They prove to be a break out space from the predominantly built concrete fabric that Chennai has come to be with the rapid urbanisation.

Although, the entire answer to all forementioned problems may not lie in public spaces. Introduction of public spaces in a context appropriate manner could be the first step towards mitigating the associated issues.

1.6 WINDOWS OF OPPORTUNITY

HISTORY AND HERITAGE

On the contrary, North Chennai offers plenty of opportunities for revitalisation. Being the point of origin of the city, it has a significant historical value with rich architecture and culture. Most of these buildings being governmental institutional buildings today, they have a lot of potential to become and transform the immediate surrounding into a public place.

WATERFRONT POTENTIAL

Further, the river coom is one of most culturally significant rivers the cuts through the city. Today, the river and its banks are in a very dilapidated condition with most of its edges being inaccessible and appropriated by squatter settlements. The banks and flood plains of the Coom river offer an opportunity for much needed social spaces to be integrated with the dense urban fabric.

REVITALISATION

Through the process of urban transformation and placemaking, this portion of the city has the potential to become a place for the city rather than a space in the city. Not only does this facilitate liveable and vibrant environments at multiple scales, but also allows for the dissolution of the physical and perceived border within the city.



Fig 1.20: (left) A view of George town and its rich architectural heritage.
Source: SAPlanemad



Fig 1.21: (right) A panoramic view of the Coom river running through the city
Source: retrieved from <http://www.9india.com>

02

RESEARCH METHODOLOGY

Chapter overview:

This section of the report focuses on the formulation of the main research question, research aims and the theoretical bodies that the project entails. A conceptual framework elaborates the relationship between all the elements of the research and further elucidates the research methodology and approaches with the intended outcomes.

This chapter focuses on setting a framework or guideline along which the research project is taken forward.

Chapter Contents :

- 2.1 Research aim
- 2.2 Research question
- 2.3 Research questions and methods
- 2.4 Research question, methods and outcomes
- 2.5 Theoretical underpinnings
- 2.6 Conceptual framework
- 2.7 Implication of concepts to the project
- 2.8 Analytical framework
- 2.9 Intended goals and outcomes
- 2.10 Project timeline

2.1 RESEARCH AIM

The project aims to explore spatial interventions that enable the revitalisation of North Chennai through the creation of much needed context specific public places.

North Chennai has various and multiple socio economic challenges which are a result of neglect. Changing the outlook is a first step towards mitigating these challenges and for that it needs to become a place for the city.

Thus, the project aims to understand the following components in relation to one another.

1. North Chennai as the context and setting for urban revitalisation.

Public places are where “community comes alive, where bonds among neighbours are strengthened and where a sense of belonging is fostered” (Rutherford, 2014).

Likewise, communities and society play a significant role in shaping the environment and the urban fabric.

North Chennai, as previously mentioned, has a very strong social capital. In addition to this, this portion of the city faces other specific issues that are distinctively unique to it. This project attempts to understand the key challenges of the context and their implications on public space. This project also explores the relationship between the public realm and culture in the local context and the role of the same in the transformation and revitalisation of the urban fabric.

2. Placemaking as a means for multiscale socio-spatial integration.

Placemaking as a tool is one that originated predominantly with the works of American writers like Jane Jacobs and William H. Whyte. Although this tool has come into play in the design of public spaces, this does not take into consideration the local context and the associated social and cultural processes that very strongly relate to their places. This project looks to contextualise the tool of placemaking. Furthermore, the tool is used as a means for integration of different socio spatial fragments within the urban fabric through the creation of public places that facilitates spaces for the society and communities to come together.

3. Liveable and vital environments at the local scale

Liveability is the society’s qualitative perception of the space and environment.

A vital urban environment is one that comprises of a diverse society in a diverse and dense urban setting with multiple economic and entertainment opportunities.

Concepts of Liveability and vitality are widely explored in theoretical bodies in the western context. This project looks to explore the concepts and test their indicators in the local cultural context of North Chennai.

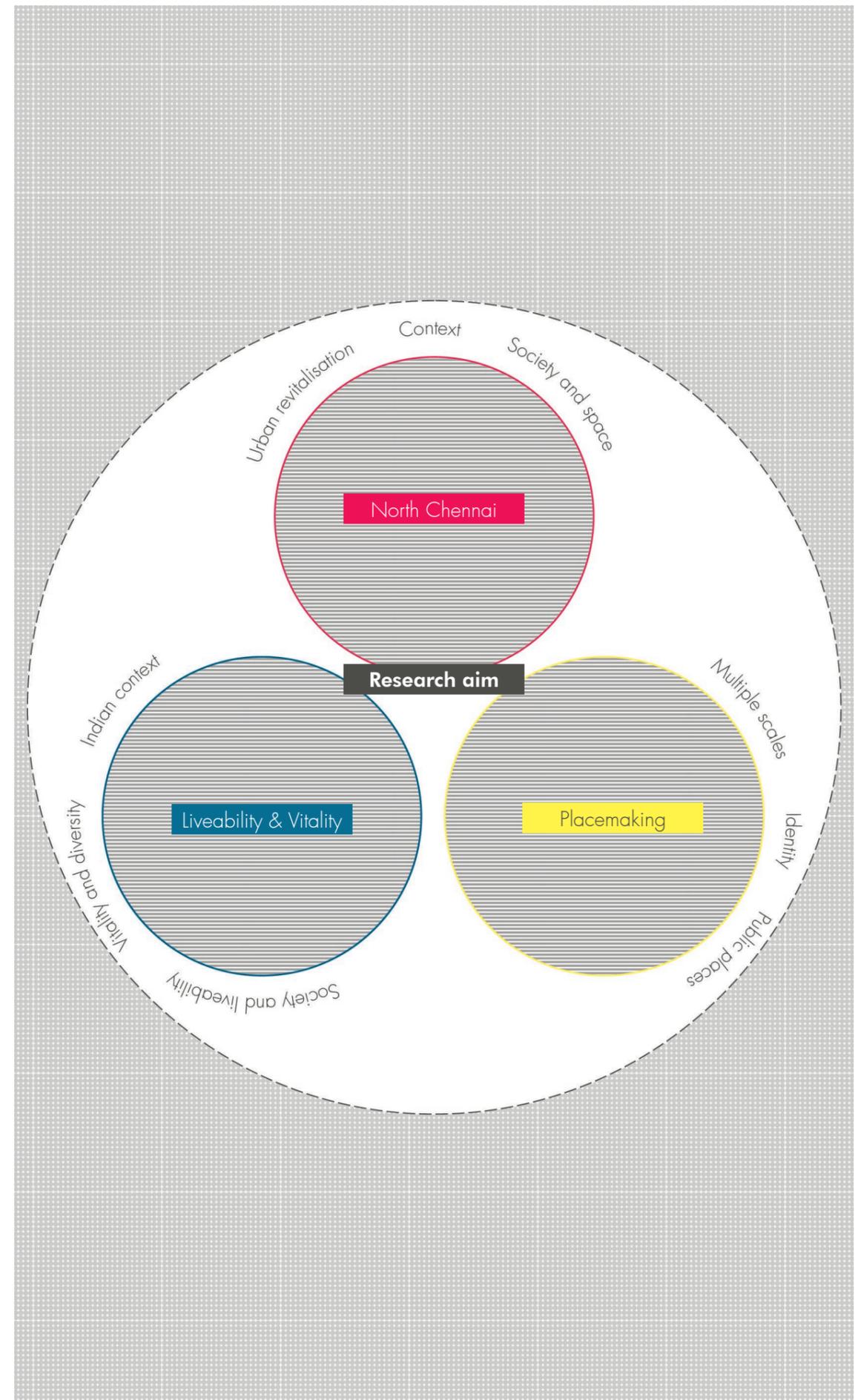
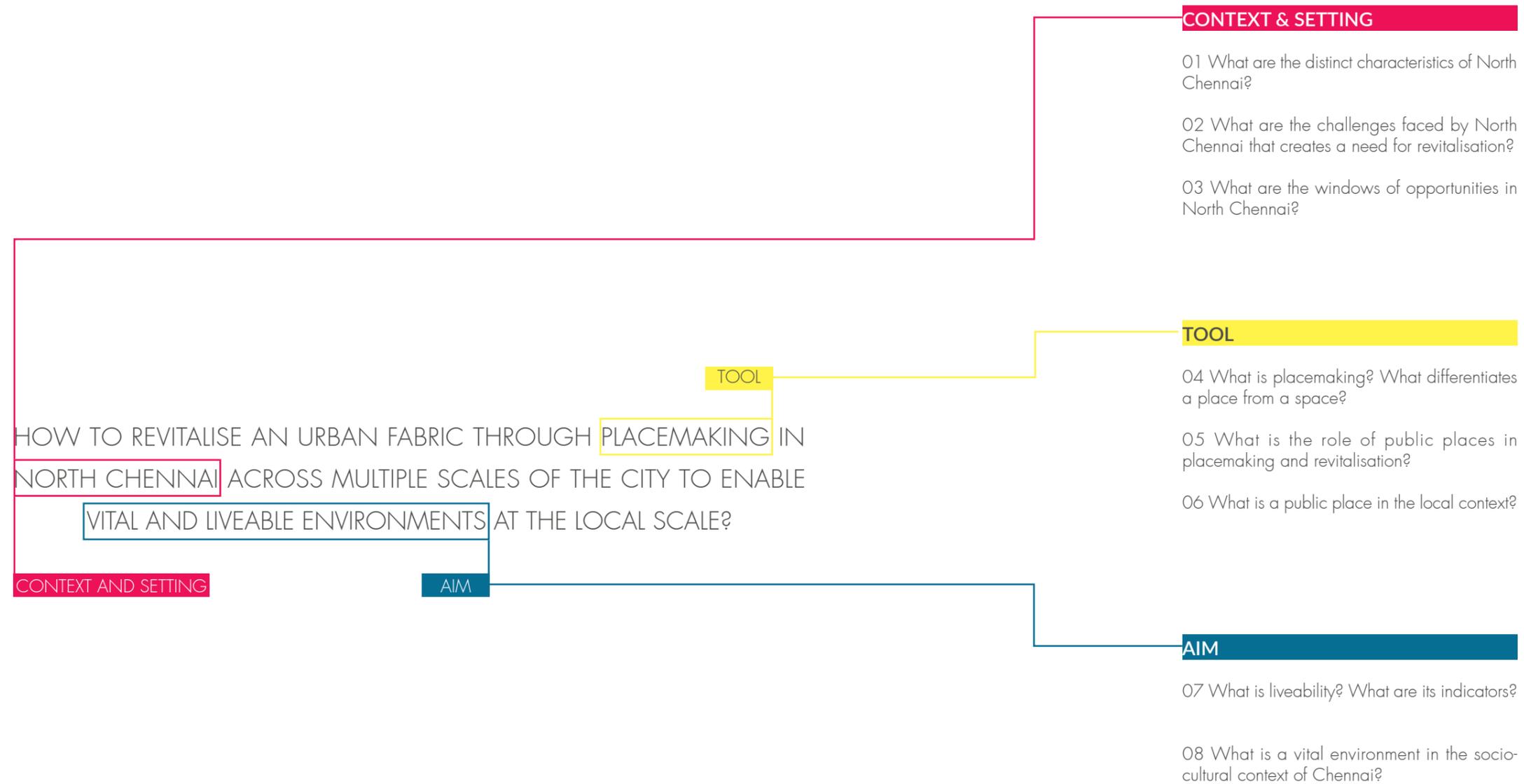


Fig 2.22: Research aim
Source: Author

2.2 RESEARCH QUESTION



2.3 RESEARCH QUESTIONS AND METHODS

MAIN RESEARCH QUESTION

How to revitalise an urban fabric through placemaking in North Chennai across multiple scales of the city to enable vital and liveable environments at the local scale?

SUB RESEARCH QUESTION		Documentary analysis	Literature review	Transcalar mapping	Fieldwork	Socio-spatial analysis	Case studies	Scenario building
CONTEXT & SETTING								
01	What are the distinct characteristics of North Chennai?	■		■	■			
02	What are the challenges faced by North Chennai that creates a need for revitalisation?	■		■	■	■		
03	What are the windows of opportunities in North Chennai?			■	■	■		■
TOOL								
04	What is placemaking? What differentiates a place from a space?		■					
05	What is the role of public places in placemaking and revitalisation?		■				■	
06	What is a public place in the local context?	■			■	■		■
AIM								
07	What is liveability? What are its indicators?		■		■			
08	What is a vital environment in the socio-cultural context of Chennai?		■		■			

DOCUMENTARY ANALYSIS

The primary goal of documentary analysis involves the study of various documents to collect quantitative data to inform the context of the research project. It would also involve the study of historical documents and records for the same.

Primary sources of data:

CMDA master plan II, CMDA master plan I, news paper articles, peer reviewed journal articles on Chennai.

LITERATURE REVIEW

Literature review will focus on the largely accepted theoretical understanding of the concepts that the project delves in to and to understand the relationship between them in order to develop the conceptual framework of the project. These include the concepts of "Place", placemaking, liveability and vitality. In addition to this, the process of literature review will aid in identifying knowledge gaps that the research project will address.

Primary sources of data:

Published books and articles from peer reviewed journals retrieved from web based scientific databases like researchgate and JSTOR and other published works accessed through Google scholar search engine.

TRANSCALAR MAPPING

This method will involve the mapping of the urban fabric of North Chennai in order to get a spatial understanding of the context across the multiple scales of the city, neighbourhood and the streets within and to understand the relationship between the different scales.

Primary sources of data:

Open source GIS data, OSM data, CMDA master plan II

FIELDWORK

This is a method of data gathering to gain first-hand contextual understanding of Chennai city and more specifically North Chennai. The focus of data gathering would revolve around both qualitative observations and quantitative data gathering through a series of interviews, workshops and documentation.

Primary sources of data:

On-site Interviews and surveys, design workshops focused on pattern development and on-site documentation

SPATIAL ANALYSIS

This is a method of analysis and its primary objective of this analysis will be to understand the implication of society on space, social production of space and the patterns of use of space in Chennai. This would then inform the resultant parcelation, fragmentation and patterns and typologies within the urban fabric.

Primary sources of data:

Open source GIS data, raw data gathered from fieldwork

CASE STUDIES

This method of analysis tries to promote an understanding of relationships between the different variables based on established practical examples.

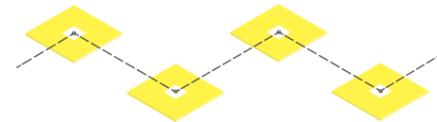
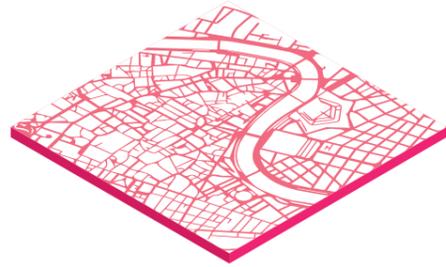
SCENARIO BUILDING

This is an inductive method of analysis to test multiple design scenarios based on stakeholder input, spatial analysis and indicators from literature to study the response of the space and society.

2.4 RESEARCH QUESTION, METHODS AND OUTCOMES

MAIN RESEARCH QUESTION

How to revitalise an urban fabric through **placemaking** in **North Chennai** across multiple scales of the city to enable **vital and liveable environments** at the local scale?



SUB RESEARCH QUESTION

CONTEXT & SETTING:

01 What are the distinct characteristics of North Chennai?

02 What are the challenges faced by North Chennai that creates a need for revitalisation?

03 What are the windows of opportunities in North Chennai?

TOOL:

04 What is placemaking? What differentiates a place from a space?

05 What is the role of public places in placemaking and revitalisation?

06 What is a public place in the local context?

AIM:

07 What is liveability? What are its indicators?

08 What is a vital environment in the socio-cultural context of Chennai?

METHODS

CONTEXT & SETTING:

Documentary analysis: of the history and evolution of North Chennai.

Transcalar mapping and fieldwork: to analyse the urban fabric to of North Chennai.

Documentary analysis: of news paper articles describing the challenges in North Chennai.

Transcalar mapping and Socio-spatial analysis: of the fragmentation of the urban fabric and socio-economic aspects of North Chennai across the multiple scales.

Fieldwork: Surveys and interviews of local residents and authorities from governing bodies

Transcalar mapping: to identify the potentials sites of intervention and the surrounding urban fabric.

Fieldwork and Socio-spatial analysis: to understand the use and appropriation of space in and around the potential sites.

Scenario building: to test design scenarios and the response of the potential sites

TOOL:

Literature review: focuses on the phenomenological definition of a place and what constitutes a place.

Literature review: focused on local design interventions and toolkits to implemet placemaking towards revitalisation

Case studies: of examples of revitalisation projects with a focus on public places.

Documentary analysis: to understand the notion of places as opposed to space in the local context by deconstructing linguistic roots.

Fieldwork and socio-spatial analysis: to understand local requirements and characteristics of local public places.

Scenario building: to test the different uses and characteristics of public places in the local context

AIM:

Literature review: focuses on the quantitative and empirical indicators of liveability.

Fieldwork: to understand the local requirements and opinions of what constitutes a liveable and vital environment.

INTENDED OUTCOMES

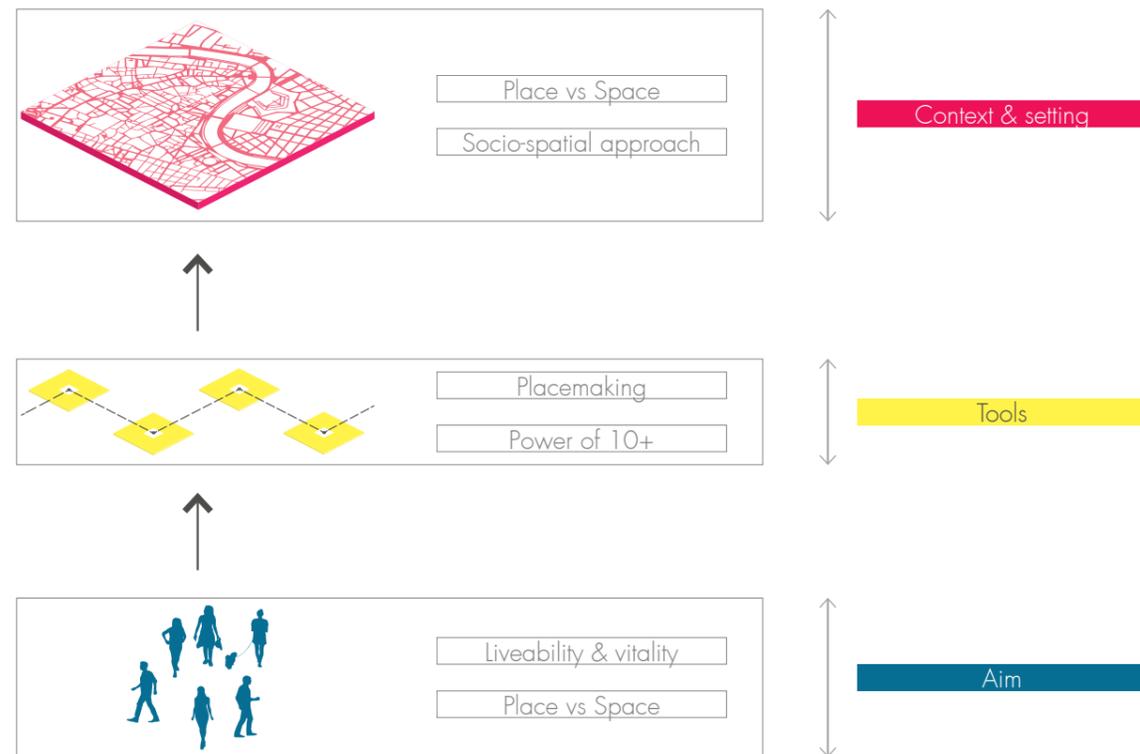
A catalogue of potentials for placemaking in North Chennai.
Identification of strategic points of interventions towards mitigating the challenges.

A set of localised design principles that aid in the creation of public places in North Chennai.

A set of empirical indicators and quantitative measures of liveability and vibrancy as input for design of environments.

2.5 THEORETICAL UNDERPINNINGS

(This section includes extracts from the paper : Place versus Space in the Context of Chennai.
 Author: Dhushyanth Ravichandrakumar Course: AR3U023 Theories of Urban planning and design)



PLACE VERSUS SPACE

Multiple disciplines including geography and psychology have long defined and differentiated between place and space. While space is a tangible and physical aspect of an urban fabric, place is a space that is perceived to have an attached meaning to the people who inhabit it. It is an abstract notion shaped by human behaviour and interactions with each other and the surrounding environment. As Yi Fu Tuan suggests, "place is security, space is freedom" (Tuan, 1977/2008, p. 3).

Tony Hiss comes to describe a bond that exists between a person and a specific setting or location (Hiss, 1990). This is suggestive of an emotional attachment to or investment in a place. Essentially places are an area of bounded space with an attached meaning to an individual or a group of residing individuals or the city as a whole.

Spaces are the geographical surfaces of the city that facilitate the dynamic connections and complex networks required for the functioning of the city. However, the concentration of significant spatial and social interactions in turn facilitates the making of a place. This makes them the geographical nexus of these linkages as opposed to the geographical surfaces. Both space and place are components of the lived world and require each other for definition. Space can be considered as that which allows movement. While place is its counterpart that allows for pauses; it is with these pauses that a location can be transformed from a space into place (Tuan, 1977/2008, p. 6).

Fig 2.23: (left above) Theoretical framework & underpinnings
 Source: Author

Fig 2.24: (right from top to bottom) Amsterdam's canals; Charles bridge, Prague; Nathan road in Hongkong
 Source: Author, Author, J_lam83 retrieved from pixabay.com



SIGNIFICANCE OF A PLACE OR A NETWORK OF PLACES

Certain cities and neighbourhoods around the world have unique characteristics that set them apart from each other. This could be owed to either a set of landmarks at the city scale or certain spatial characters of the built environment at the local scale. However, the built environment by itself cannot shape the identity or the character of a place. But, as Benfield suggests, it can either help or hurt, depending on whether it supports or diminishes “the genius of a place” (Benfield, 2014). The nuanced interaction between the built environment (constituting the physical spaces bound by four walls) and the open spaces (that shape up the public life in the city) is what contributes to the character of a place that sets it apart from another.

It is important for cities to have places that go beyond their function of living and working to become a place of expression of the city’s identity, a place that becomes part of an individual’s identity to strengthen the collective.

However, identity does not depend on a particular set of experiences or a specific place or location in the city but on an “on-going relationship with a physical setting that is shared with other people” (Bosselmann, 2008). This physical setting is the notion (or location) of a place that can evoke an emotion or have an associated emotional attachment that is a result of experiences in close relation to the tangible built environment. These experiences can be both positive and negative.

Public places play a significant role in providing a stage for the people to

Fig 2.25: (below) Flexible public places that allow for a multitude of functions catering to a diverse group of people.
Source: PPS

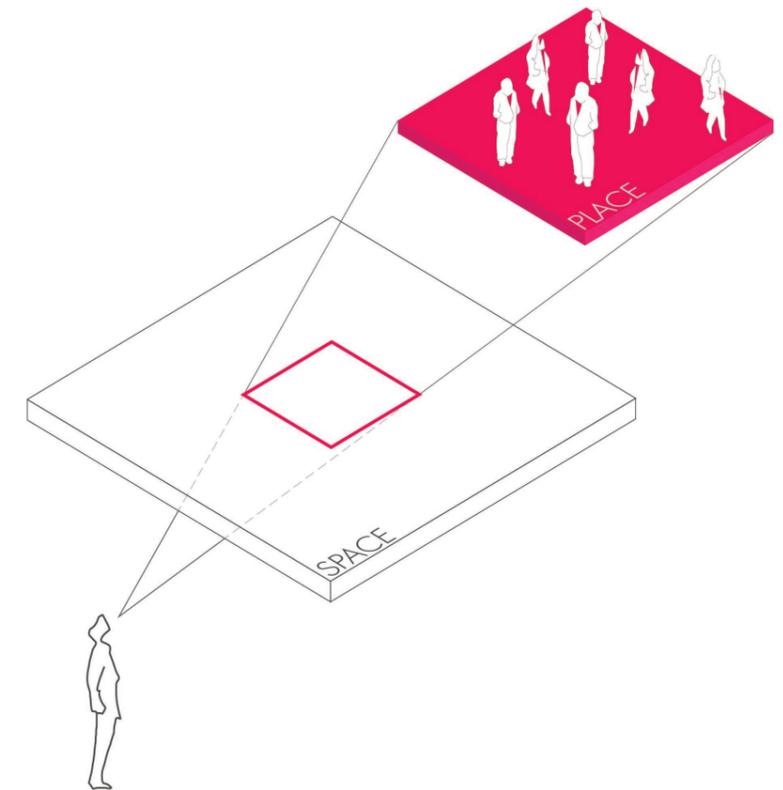


Fig 2.26: (above) Place vs Space.
Source: Graphic by author

express their identity, collectively and individually. They provide a platform for our public life and are key to building a sense of community and belonging. “Where people go and where people meet are at the core of what makes a city work” (Burden, 2014). This makes the public places or the public realm even more important in today’s urban fabric.

Cities are a social composition of multiple individuals and multiple groups of individuals with their own identity and distinct characteristics. This makes a compelling argument for places in the city to be flexible and open enough to accommodate for different expressions of identities.

The ability to express identity and foster a sense of belonging is just as important to the city as a whole, as it is in everyday life and it is public places that give leeway for this to take shape. “It is within these places that social life is constructed and our cities are becoming more resilient” (Ciovič, 2017). The next section this paper will explore the concepts of liveability and vitality which are very closely related to the notion of a sense of place.

PLACEMAKING AS A TOOL

As previously mentioned, places are urban spaces with attached emotional substance. The core of placemaking revolves around this.

‘Placemaking’ is an ideology and tool developed by Project for Public Spaces (PPS) that is based on and derives its principles from the works of authors like Jan Gehl, Jane Jacobs and William H. Whyte that encompasses the ideas that brought about a paradigm shift towards “designing cities for people” (Project for Public Spaces, 2007). It is a people centred approach that is “rooted in community based participation” (Rethink Urban, 2019).

Additionally, it defines certain key qualities of successful places - accessibility, sociability, activity and comfort. Just as much as this tool delves into planning and design of public places it also fosters management of shared use of spaces.

POWER OF 10+

Power of 10+ is a concept developed by PPS that enables and evaluates placemaking across multiple scales and specifically at the place scale or the human scale which focus on the experience of the place. The concept revolves around diversity and availability of multitude of choices for the users both in terms of activities within the place and places and destinations within the city. The figure below shows this diversity at play through the scales, the (leftmost) diagram shows availability of 10+ destinations within the city, (middle) which then have 10+ places within them, and finally 10+ activities within these places.

LIVEABILITY AND VITALITY

A liveable neighbourhood is an urban district where residents can live relatively free of intrusion (Appleyard, 1981). Previously, during the time of development and urban planning and policy lead by large infrastructure networks catering to private vehicles, the scope of concept of liveability largely revolved around proper traffic management among other things. Today, it has broadened beyond this and evolved to include aspects of human life integrated within the social and natural ecology, personal safety, comfort, availability of services and transit within walking distance (Bosselmann, 2008). Here, it is important to note that some of these aspects are objective and quantifiable whereas others are subjective and qualitative.

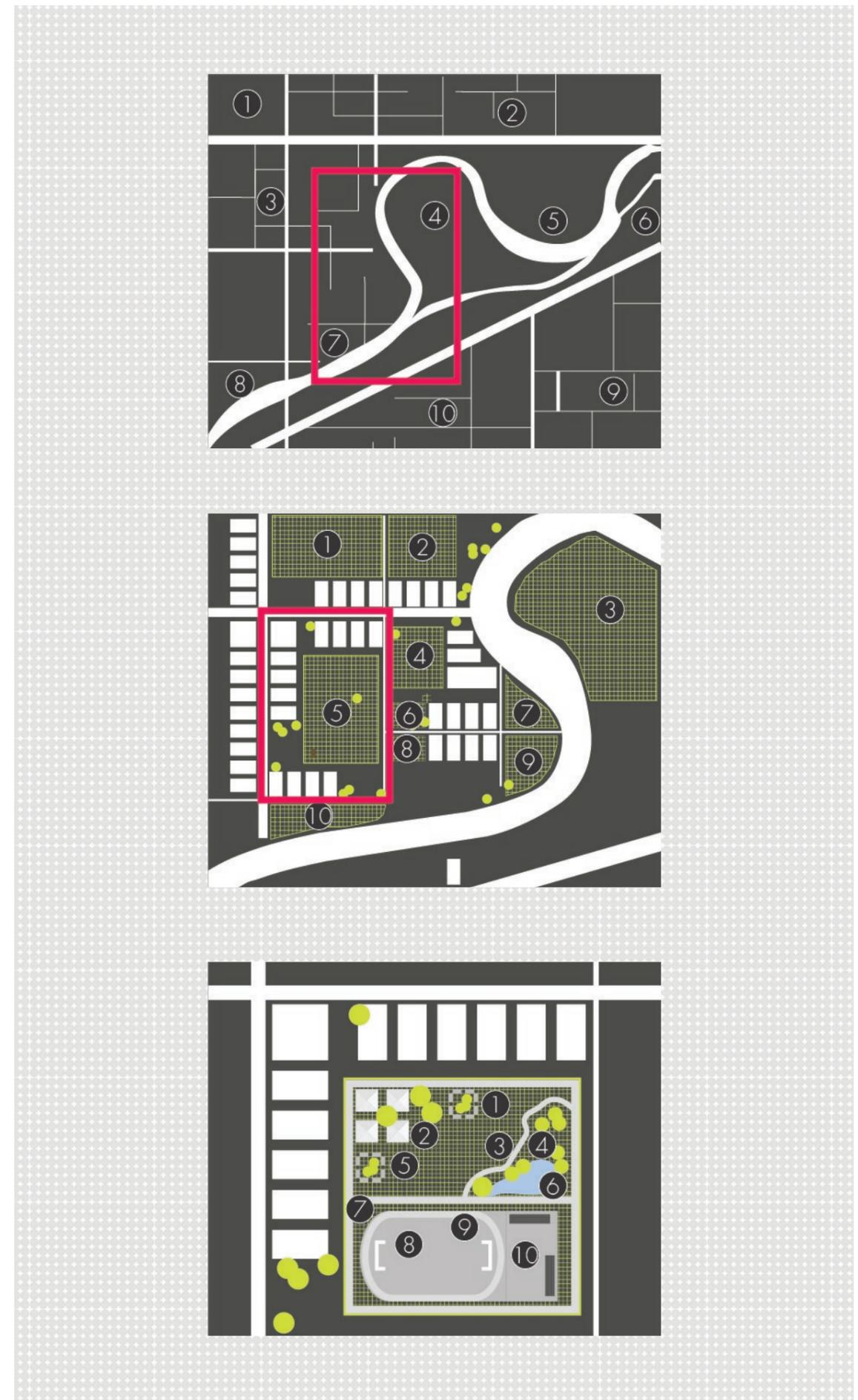
Considering this, liveability can be reinterpreted as a measure of an individual's perception of space through a process of inquiry rather than an evaluation of the space itself and is thus more subjective. It deals with the evaluation of environments entangled with peoples' preferences for a physical setting. These could come to include streets with well-managed traffic, walkable streets and comfortable outdoor places to walk to (Bosselmann, 2008).

A similar qualitative measure of an urban fabric is the concept of vitality. A vital urban environment is one where the benefits of a socially heterogeneous population in a dense environment with diverse economic and entertainment opportunities can be seen (Maas, 1984).

The notions of sense of place, urban vitality and liveability cannot be looked at individually and are very closely related to one another. The most important prerequisite for urban vitality is the presence of people and their engagement in activities of social and cultural processes in places that can accommodate them. To facilitate engagement with socio-cultural processes certain spatial qualities are necessary. These qualities can define liveable environments. This, relationship between vital spaces, presence of people and their perception of liveability becomes a prerequisite for fostering a sense of place in people. Thus, a liveable environment that enables and accommodates diverse groups of people and activities involving multiple processes and part of multiple networks fosters a sense of place in individuals, communities and the environment as a whole. In conclusion, a liveable environment is one of the qualities that can enable a vital environment which further leads to instilling a sense of place and vice versa.

It is important to note that liveability and vitality comprise of factors that are dependent on the local context. They are informed by social and cultural circumstances just as much as their measurable counterparts. Hence it becomes a necessity to contextualise them to arrive at more accurate indicators while designing the environments.

Fig 2.27: Power of 10+ showing destinations, places and activities across multiple scales.
Source: Author, based on PPS



THE SOCIO-SPATIAL APPROACH TO PLACE

As human beings, we tend to “embrace, contest or reject social changes” (Erdiaw-kwasie & Basson, 2017).

The urban form and the public realm is a framework that allows for social processes. As users of space, people bring about several spatial manifestation as a result of their actions in response to their needs in everyday life.

People in search of an expression of their identity, shape and reform their environment. This leads to the urban form and the built environment often being shaped by the response to social and cultural processes within the city or neighbourhood or community. Thus, it is important to take a socio-spatial approach where the mutual relationship between space and society is explored. In conclusion, when transforming existing spaces or designing new environments it is necessary to keep in mind the implications of the design and the process on this relationship.

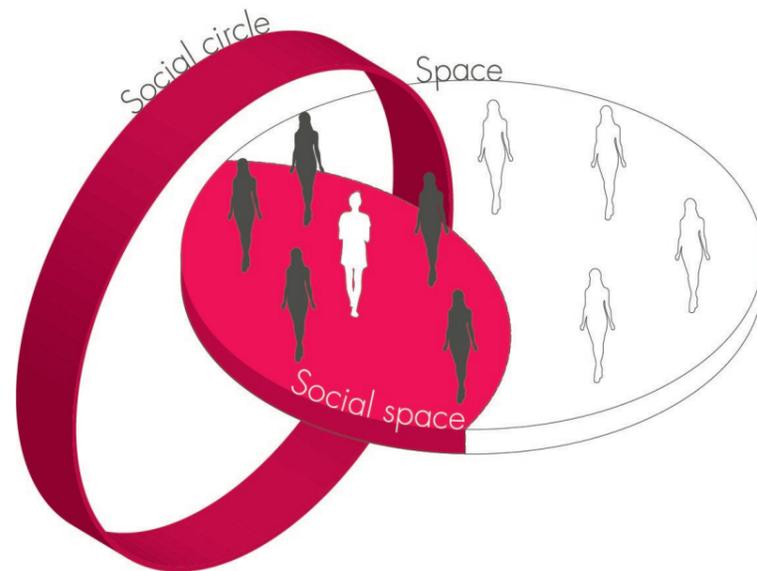


Fig 2.28: (top) Social production of space
Source: Author

Fig 2.29: (bottom) Public places propagate the individual and city’s social processes and thus enable a sense of place and vitality in liveable environments of the urban and public realm.
Source: R.Ragu

Fig 2.30: (right) Marina beach in Chennai
Source: ganibcci



2.6 CONCEPTUAL FRAMEWORK

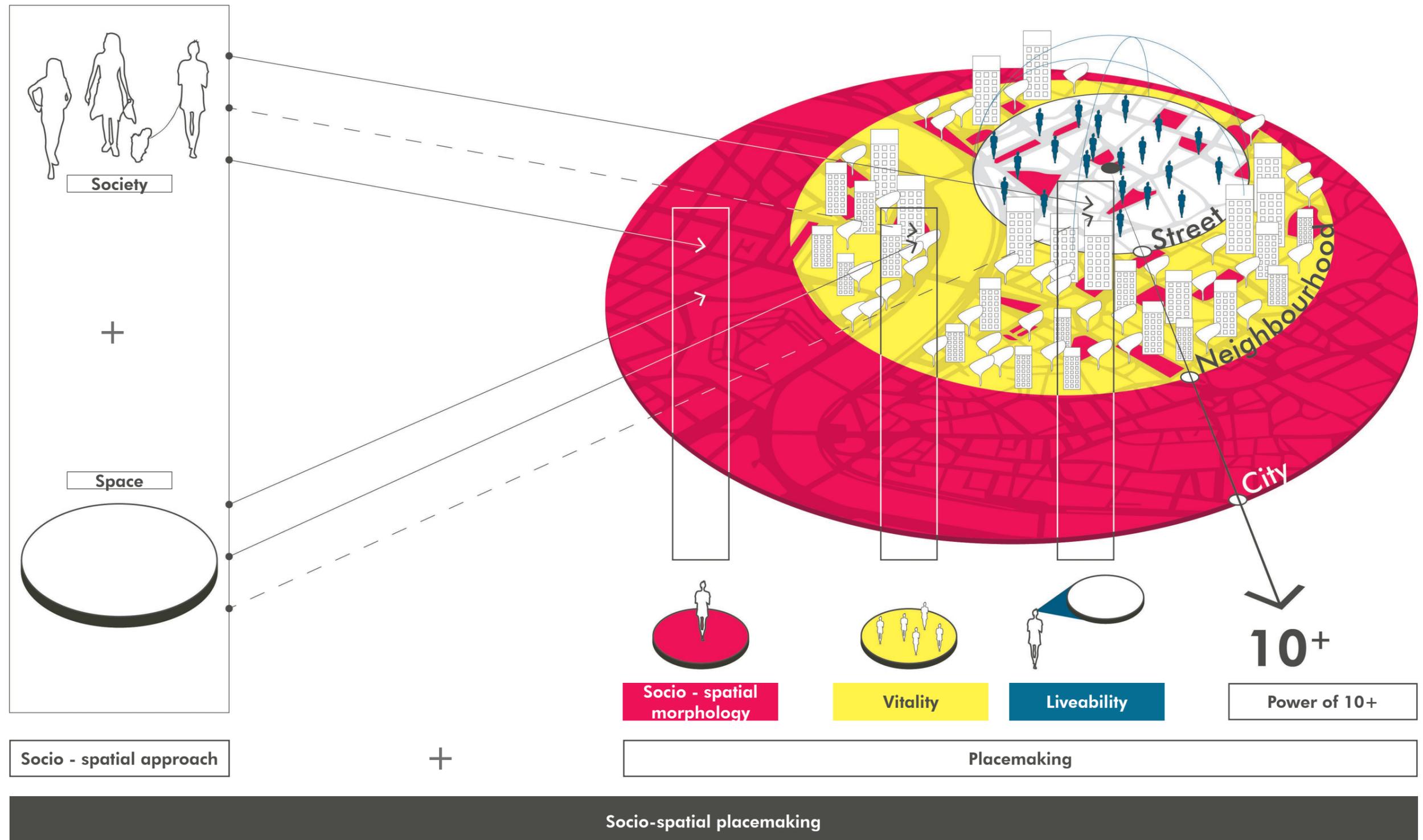
This conceptual framework shows the relationship between all the theoretical bodies that the project proposes to implement. The different concepts of liveability, vitality and morphology are understood through a socio-spatial perspective and across the scales using the tool of power of 10+.

A socio-spatial approach towards the analytical process of the existing fabric of North Chennai would be necessary to understand the spatial framework through the lens of society and associated components.

Fig 2.31: Conceptual framework
Source: Author

Secondly, it addresses interpreting vitality as a quantitative measure of the components of space at the intermediate scale and its implication on people. And finally understanding liveability as a qualitative measure of the spatial characters at the street scale through the lens of perception of the society.

These concepts together allow for a research framework that revolves around placemaking that is rooted to the context to bring out the overarching concept of "socio-spatial placemaking".



2.7 IMPLICATION OF CONCEPTS TO THE PROJECT

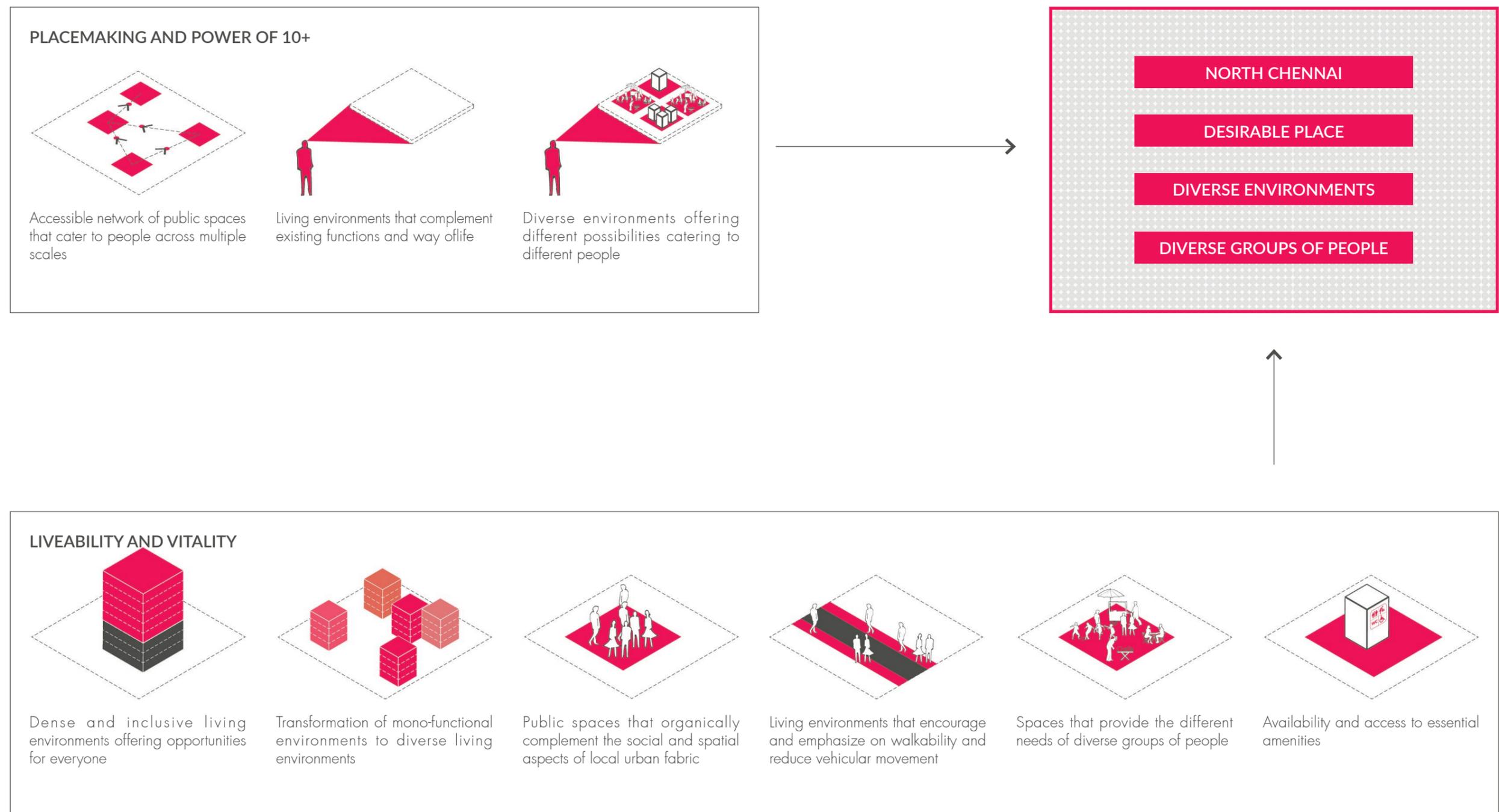
Although the project proposes these widely researched concepts, it is important to breakdown their implications across the multiple scales which then can be implemented as design tools or as indicators for evaluation of the design interventions.

Placemaking and power of 10+ as tools largely focus on creating diverse environments that are closely connected to the society and the way of life. These tools enable the creation of inclusive environments with multiple possibilities and opportunities. This means that they operate across the scales. At the city scale, the aim would be to activate and enable multiple neighbourhoods where at the local scale the aim would be to diversify neighbourhoods and enable multiple opportunities both for the local

residents and the target demography from the rest of the city.

On the other hand, liveability and vitality operate at a relatively smaller scale and predominantly focus on creating desirable environments that provide for the local needs.

Although these concepts operate at different scales and through the scales, their principles target a unified aim to make North Chennai a desirable place with diverse environments that cater to diverse groups of people.



2.8 ANALYTICAL FRAMEWORK

The analytical framework guides the analytical process of the project. It links the theoretical readings and the intended outcomes through the previously specified methodology.

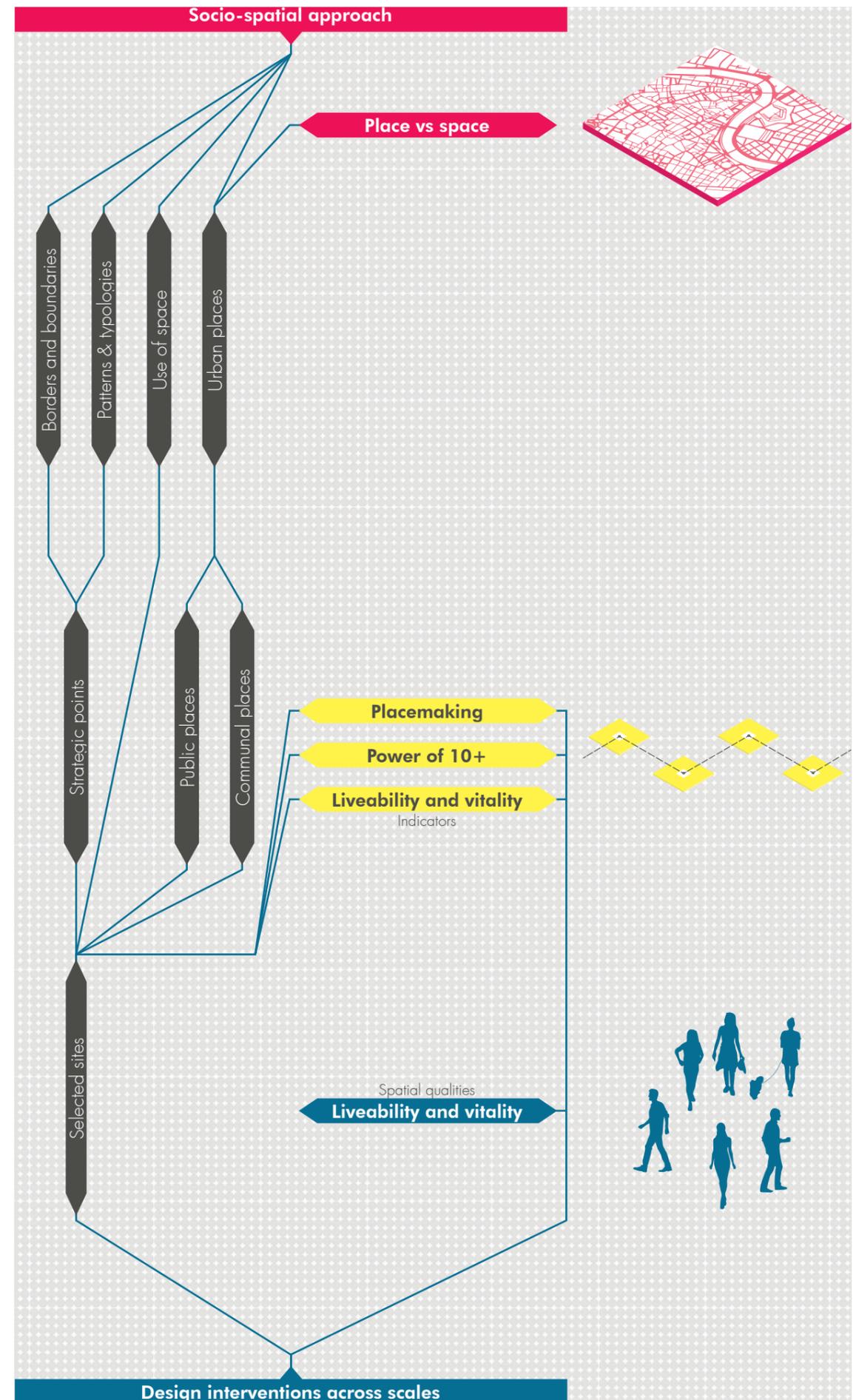
The analytical process of the project is framed to adopt the socio-spatial approach to understand the fabric of North Chennai and break it down to components and their associated characteristics based on borders and boundaries that are perceived, and use of space and their characteristics in the current context.

These can then be classified as public and communal places which gives a contextualised understanding and requirements of public space and public life in the setting that is being dealt with.

The socio-spatial approach aids in the selection of strategic points of interventions which then overlaid with the different uses of space and theoretical spatial indicators of liveability and vitality informs the selection of design sites that need immediate interventions.

And finally all the layers of information from the theoretical underpinnings, analytical process of the fabric of North Chennai and fieldwork inform the design process and the specific design interventions

Fig 2.32: Analytical framework
Source: Author



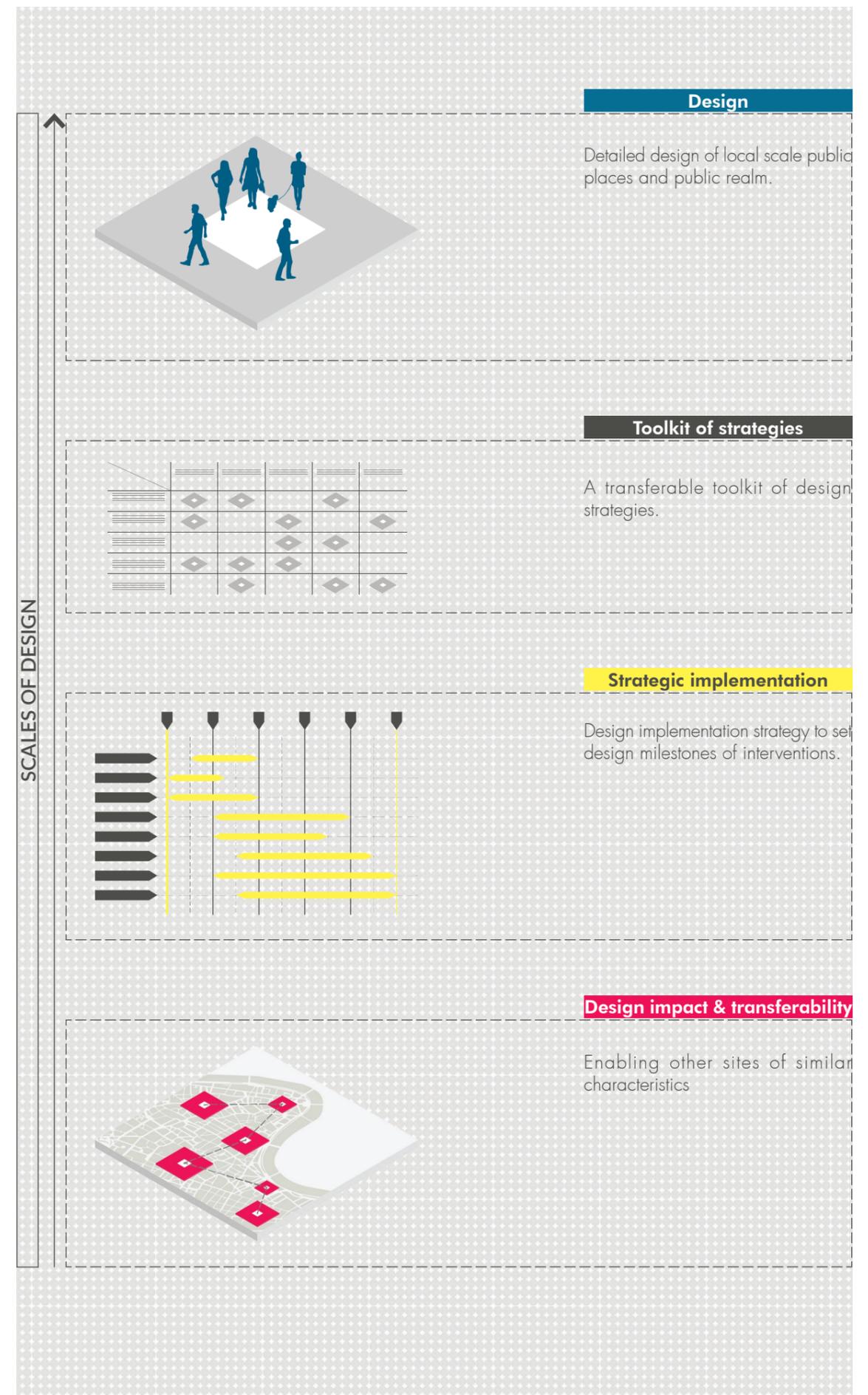
2.9 INTENDED GOALS AND OUTCOMES

As previously mentioned, the goal of the project is to make North Chennai a place for the city through the process of creating public places. Additionally, the project aims to revitalise living environments to transform them to more desirable environments with pleasing spatial characteristics that eventually help in establishing their own identities in the larger fabric of North Chennai and even Chennai city as a whole. The project also aims to understand what a public place truly means in the local context and hence aid in the design of such spaces throughout the city.

The intended outcomes of the project involve four components -

- Detailed design of local public places that closely respond to the local context of the site location with an aim to contribute to instilling a sense of place and eventually a more liveable and vital environment.
- A toolkit of strategies and indicators for a sense of place, liveability and vitality that is transferable. This toolkit can then be used to develop design interventions for different sites.
- A strategic approach towards the implementation of the design interventions in order to tackle the complexities that arise during the process. This would be depicted through a strategic timeline with specified milestones in the form of spatial interventions or policy changes to demonstrate how they contribute towards establishing places.
- A vision for North Chennai that re imagines the portion of the city as a place for the city. The intention of this would be to show the transferability and the design impact of the smaller scale design interventions to other similar sites of similar characteristics.

Fig 2.33: Intended goals and outcomes
Source: Author



2.10 PROJECT TIMELINE

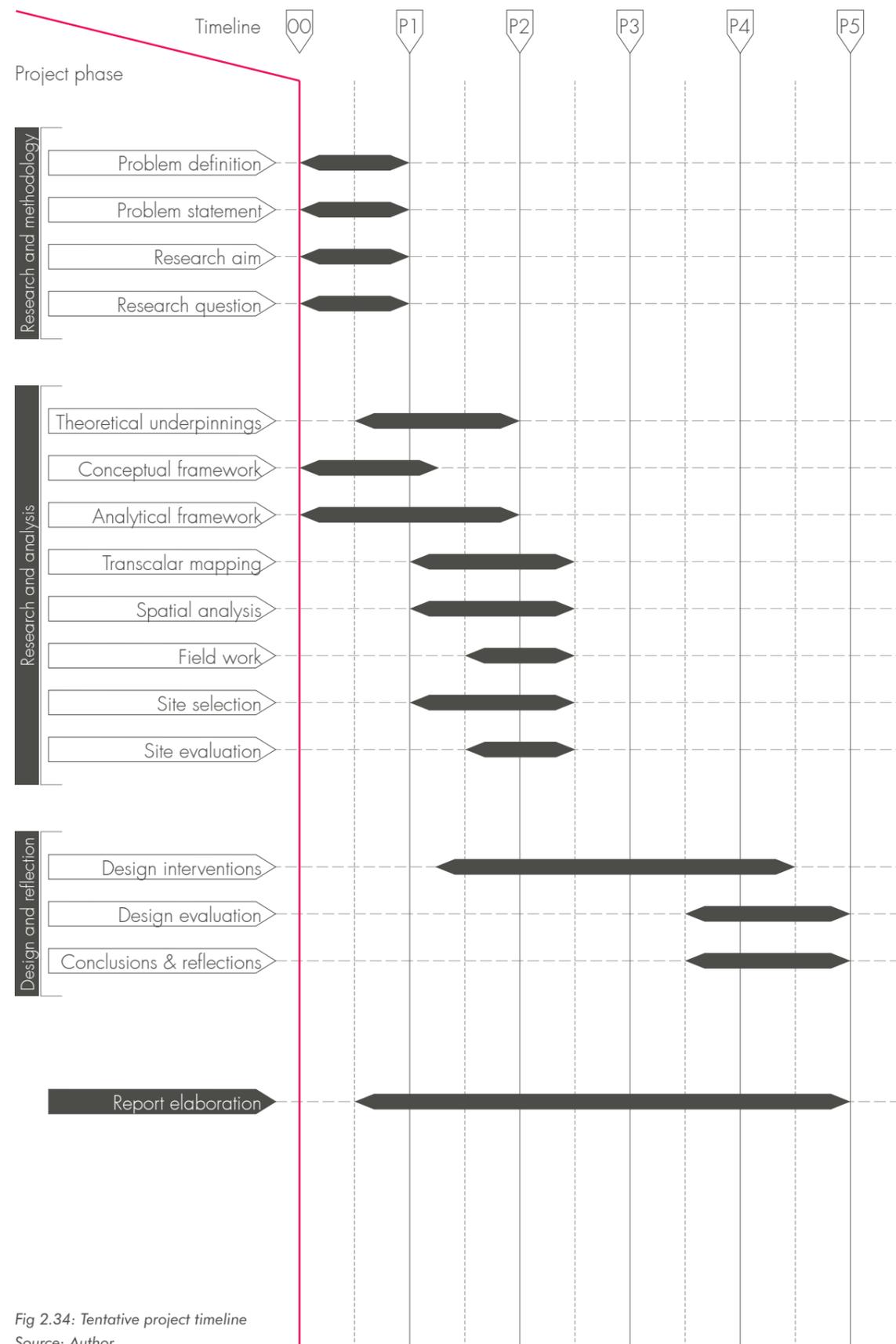


Fig 2.34: Tentative project timeline
Source: Author

03

CONTEXTUALISING PUBLIC PLACE

Chapter overview:

This section of the report focuses on the aspect of public place and looks to explore the local meaning of public place in close connection to the organic way of life in the local environments. This is done using a linguistic narrative and by taking a few case studies of existing public places and their uses and implication on local environments. Finally principles of design are laid down for the design process of public places in the city today.

This is then utilised during the design process.

Chapter Contents :

- 3.1 What is a public place in Chennai
- 3.2 The commons - "Poramboke"
- 3.3 Cases of Communal places
- 3.4 Local public places
- 3.5 A reinterpretation of Poramboke

3.1 WHAT IS A PUBLIC PLACE IN CHENNAI?

LINGUISTIC NARRATIVE

When exploring the notion of public places in the local context of Chennai, it is important to note that the notion by itself is foreign and evolved during the colonial era. To understand the local meaning of public place, understanding linguistic translations or definitions, is a first step.

The word "public place" translates to "Podhu Idam" in the local language, Tamil. Decoding the phrase, the word "Podhu" translates to general or common. This suggests the commonality of public places. This is also strongly suggestive of their generality and the ability of places to cater to a wide array of people for multiple uses. They are places that are a part of everyday life such as streets, thresholds and extensions of the built environment, that become places of social interaction and common use. Public spaces in the context of Tamil Nadu have a communal character to them. This character of commonality and generality of public places in the local context is further discussed in the form of illustrations and case studies in the following sections to come.

Furthermore, the word "Idam" loosely translates to place, space, site, position, location, locality, residence, room, etc. Likewise, another important discourse is the interchangeability of the word for both space and place in Tamil. This suggests that western ideas that differentiate place from a space were not prevalent in the local context but rather the two notions were one and the same.

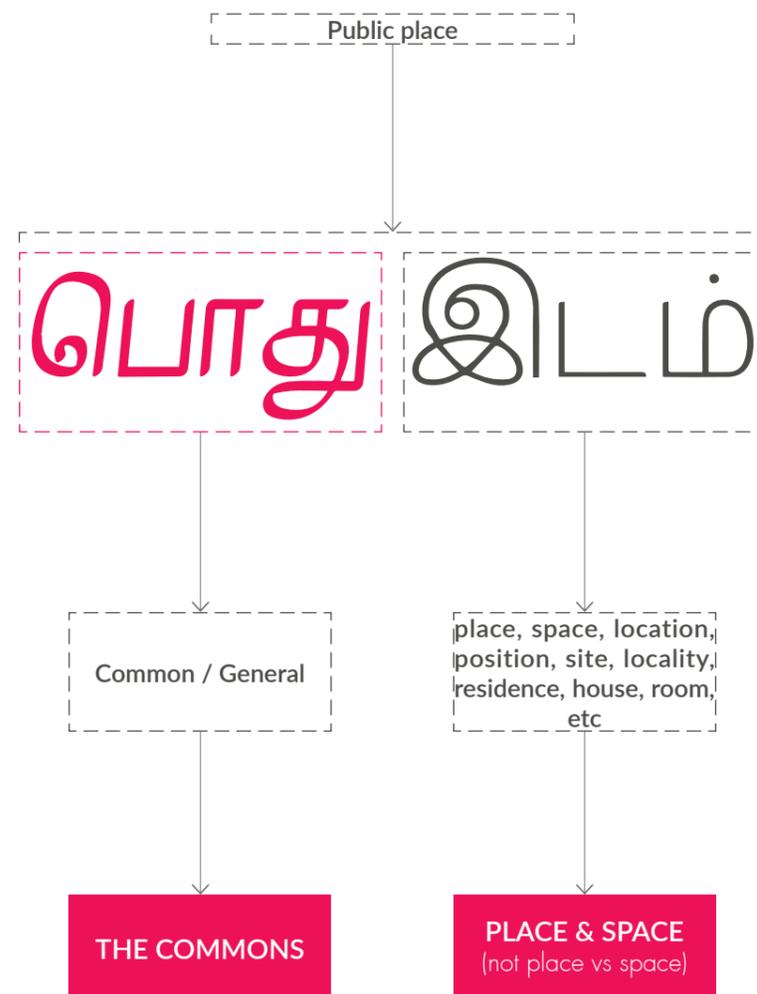


Fig 3.35: Decoding linguistic roots
Source: Author

3.2 THE COMMONS - "PORAMBOKE"

THE TRANSLATION

In the context of Chennai these communal spaces can be traced back to the roots of "Poramboke".

PORAMBOKE [n.]
/por-um-pokku/
1. places reserved for shared communal uses (water bodies, river banks, grazing lands...)
2. a pejorative intended to demean and devalue a person or place

Fig 3.36: Pallikaranai marsh - a Poramboke in the city today
Source: Seekanpaul Arumainathan



THE COMMONS - "PORAMBOKE"

EVOLUTION OF PORAMBOKE

"The whole area of a Tamil village dating to ancient Chola period and thereafter were divided into four classification : (1) Warapat, (2) Tirwapat, (3) Tarisu, (4) Poramboke" (Raja, 2013).

The term Poramboke was used to refer to parcels of land which were "reserved for shared communal uses" (Chandana, 2019) and they were a public good and not owned by anyone. Poramboke can essentially be deconstructed to two words - "Puram" meaning outside and "pokku" which refers to books of accounts. This suggests that these were strips of land that were exempted from taxation and beyond any ownership.

Poramboke are of different categories. Although, all Poramboke lands are uncultivable, with the exception of "Natham poramboke", none of the others that included lakes, rivers, other water bodies, tanks, hill, forest, grazing grounds, cattle pond, etc. were permissible for inhabitation (Raja, 2013). Of these, there were certain strips of land that were set aside for common use - public assemblies, fairs, temple festivals (thiruvizhas), cattle grazing, common people to set up trade, etc. These parcels of undocumented land were very closely connected to the livelihood of the common people.

Although, ownership did not belong to any specific individual the resources were used based on certain unspoken and undocumented rules that the people shared.

These sets of communal practices and rights were lost during the colonial era when the state authorised the privatisation of land for the sake of revenue generation. This led to all these common land becoming property of the colonial government. The authority of the state over these lands eventually meant the loss of these lands for the common use and thus these practices slowly lost prominence.

This stark contrast depicted in the translations and the different meanings associated with the same word shows a change in the lens and perspective towards communal spaces in the city. Today, the word "Poramboke" has come to refer to any piece of land, or anything for that matter, that is worthless. Historically the word was not one of abuse. The word has obtained a negative connotation with time.

Today's public places in the city should trace back to the roots of communal spaces and the true meaning of Poramboke and try to remove the negative connotation associated with the word. They should go beyond just being lung spaces or recreational spaces and become part of everyday life of the immediate users.

The following section looks into two examples of such communal spaces in the city, one historical and one contemporary - Mylapore settlement around the temple and the Marina beach. Additionally the section also explores the newly transformed case of Pandy bazaar.

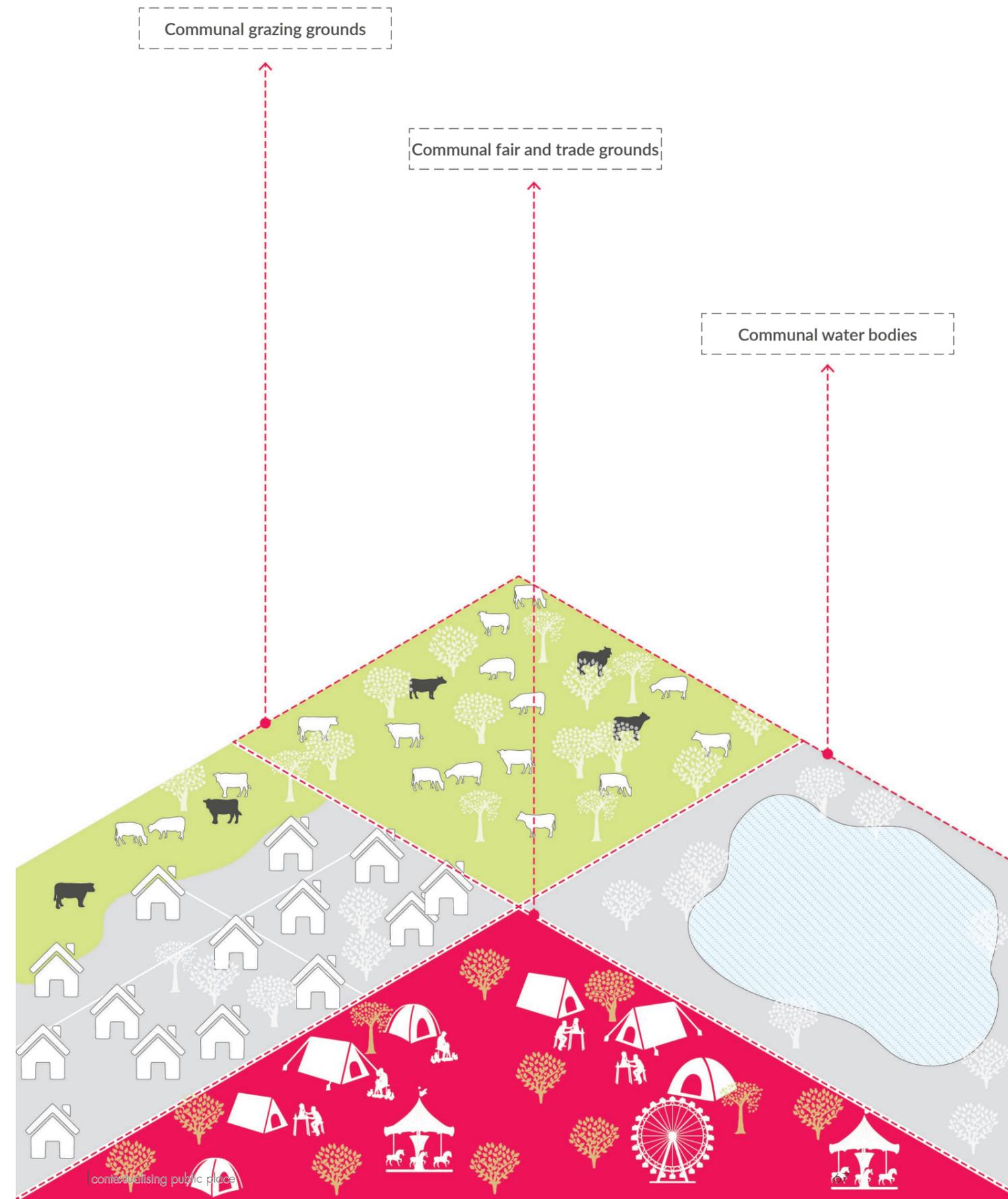
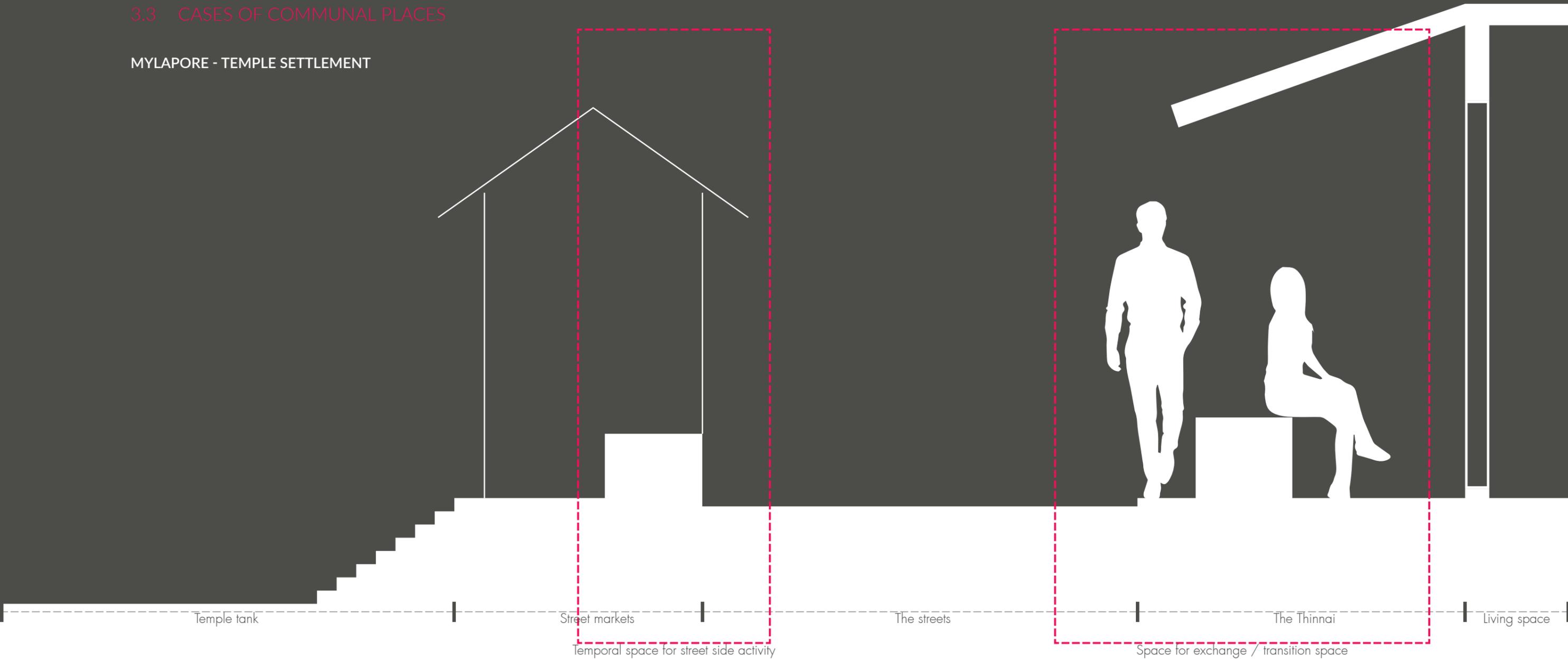


Fig 3.37: Poramboke lands as communal lands
Source: Author

3.3 CASES OF COMMUNAL PLACES

MYLAPORE - TEMPLE SETTLEMENT



Mylapore is one of the oldest temple settlements in Chennai that predates the colonial era. In the settlements and the agraharams (a traditional typology of housing near the temple) around the temple, the communal character of the public place is quite evident. The morphology of the settlement revolves around the temple and the tank, with all the streets planned in an orthogonal grid that terminates at the tank, which was the communal space that became a part of everyday life of the people living there. The streets around the temple and tank, traditionally called “mada veedhi” became the place of significance to commercial, social and religious activity. “Surrounding the temple and its tank, they delineated an orbit of social influence with the temple as nub” (Fernandes, 2014). Even today, the “mada” streets are endowed with commercial and retail activity associated to the temple and religious commodities in addition to the other retail activity that spill over to the adjacent streets.

Furthermore, the residential streets that form the urban fabric of the settlement also reflect the quality of the street as the public (communal in this case) space. The typology of the housing reflects this by giving room for a transition space between what is public and private. This is called the “Thinnai” and this becomes an extension of the lived space on to the street and vice versa. This is where the social processes occur.

Fig 3.38: Section depicting Mylapore agraharams and the street character
Source: Author

CASES OF COMMUNAL PLACES

THE MARINA BEACH

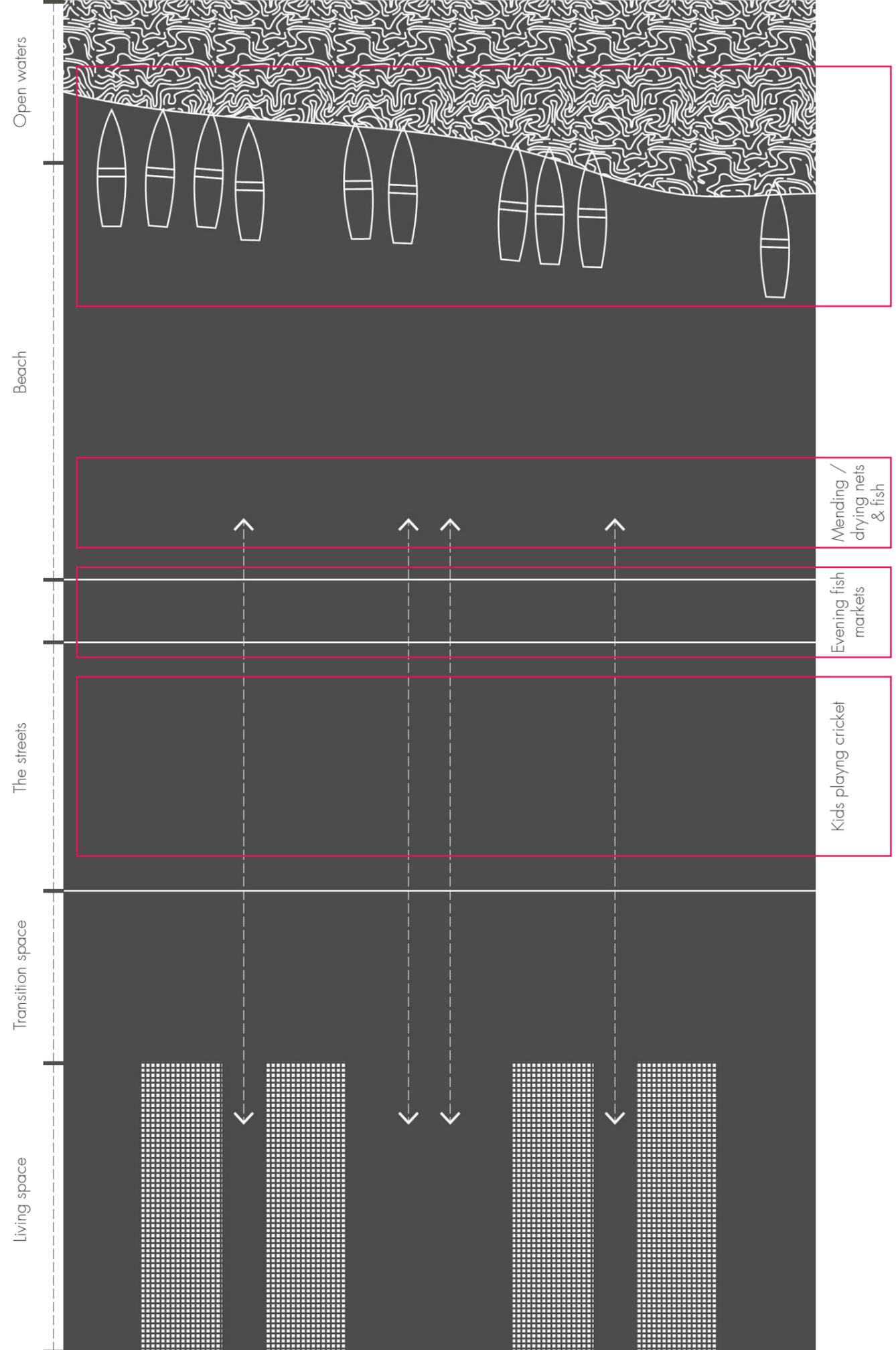
The second example elaborates the case of the Marina beach in Chennai. It was established as a public promenade in the colonial era as a display of their control and prominence over the region. Today, this is the most visible and popular public place in the city (Arabindoo, 2008). Here, rather than an intricate local communal space where the streets are the public space, it is a public destination of prominence to the entire city and the commonality of the place is noteworthy. The Marina beach is one of the very few accessible open spaces in the city, and thus people often flock to the space through the day and more so prominently in the evenings.

The Marina beach is so open, literally and figuratively, that it caters to a wide variety of people and accommodates multiple functions. This makes it a successful public place in the city, accommodating a hangout spot for a group of friends, a place of get-together for families, a place of romance for young couples, a place for walking dogs, a place for running enthusiasts, a place for football training, small scale commercial activities, etc. It is this multiplicity of the Marina that makes it so successful.

On the other hand, a few kilometres towards the south, are the "Kuppams" (settlements) of the local fishermen. Here, the communal character of the streets and the coast become evident once again as the beach becomes narrower. Although the beach is a public place, the stretch of the beach that corresponds to their Kuppams is made their own. Their built environment extends into the street and most of their daily life activities take place here, on sands of the beach.

The street also transforms into a fish market during certain times of the day. It also becomes a play space for the local kids. Further down the coast, they dry their fishing nets, their clothes and utensils. Away from the built space and closer to the shore, the space is utilised to park their catamarans. Here, although the space is deemed public by law, the communal nature of the space comes to be highlighted.

Fig 3.39: Stretch of Marina as a communal space
Source: Author



CASES OF COMMUNAL PLACES

PONDY BAZAAR

Pondy bazaar is one of the most popular shopping areas in the city. The market used to be specifically known for the street shopping experience with the pedestrian platforms lined with hawkers and their stalls, selling a variety of things from clothes to small accessories.

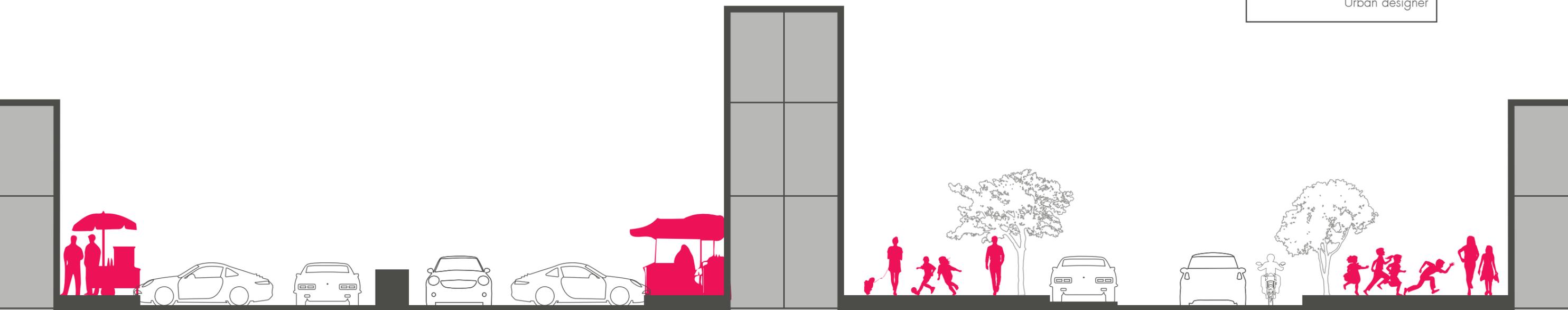
The transformation over the last few years have seen all the hawkers removed from the pedestrian platforms as they were seen as hindrances. Furthermore the recent transformation involved reducing the traffic movement, widening the pedestrian platforms to create a pedestrian plaza that focuses on enabling a safe and more walkable street.

This transformation involved activating the edges to improve vibrancy and safety, providing wide continuous footpaths as a social space, clusters of well shaded seaters, adequate lighting, limiting on street parking and thus making the space more pedestrian and less vehicular.

In spite of all these transformations, the plaza and the space has been received with mixed reviews. One of the key critical argument towards the space from the users is that removing the hawkers got rid of the life of the space.

Although the space has been designed keeping in mind the western ideas of creating a public place and placemaking the space fails to respond to the local context.

Fig 3.40: Before and after section of Pondy Bazaar
Source: Author



COMMENT BOX - pedestrian plaza, Pondy Bazaar

"Although it is nice to have such a nice pedestrian plaza right now it is just becoming a space for shop owners to conveniently park their vehicles"
- local resident of T.Nagar

"Going to Pondy Bazaar always brought a lot of excitement. This was more to do with the street vendors selling street food and small toys and accessories that I could pick up while shopping for the things I wanted"
- resident of Adyar

"Pondy Bazaar is a nice place to walk but not a place to shop. It is not easy to reach and there is a lot of congestion. They should have made it totally free of vehicles or made it easier to access"
- Resident of Velachery

"T.Nagar (Pondy Bazaar) is a step in the right direction towards realising the value of streets, designed for all, where the streets can be used by anybody"
- Tahaer Zoyab, Architect & Urban designer

The concept of a pedestrian plaza might be appropriate in the western context but not for ours because socialising with random people is not an integral aspect of our lifestyle. With neighbours and people we know is a different aspect. But T.Nagar (Pondy Bazaar) was never meant to be such a space for meeting our circle of people but a space for shopping. By removing the street vendors (removing the livelihood of people), they have created a huge space in the city. The users of Pondy Bazaar flocked to the space for the street side shops and the commercial activity not for walking down the street. It was an activity oriented space. By removing that, the essence of space has been removed.
- Udayrajan, Architect & Urban designer

3.4 LOCAL PUBLIC PLACES

PERCEPTION OF EXPERTS

"The open spaces that people have created, stewarded and tended are not recreational, but **CONNECTED TO THEIR CUSTOMARY LIVELIHOODS**. They take these public spaces and use them as their subsistence livelihood spaces like growing crops or grazing in the 'PORAMBOKU' lands. I'm not sure if all these are public spaces, but I'd call them commons."

"How they (marginalised) would want to put **PUBLIC RESOURCES INTO USE IS SOMETHING THAT IS NOT BEING RECOGNISED**. This is because we are talking about a context in which the capital and private property is being aggressively promoted and has full support of the state through policies and planning."

"Doing this, that is, **GIVING RECOGNITION TO THE PRIVACY AND RIGHTS OF THE ORIGINAL DWELLERS** so that they **DON'T HAVE TO CONTINUE DOING THIS IN OPPOSITION**, would serve as an incentive for urban designers in such times of unsustainable, urban growth models. Taking this route for your urban design would also serve as a way for the expansion of the public spaces and the consecutive shrinking of private property."

- Ar K Sudhir, Director of People's Architecture
Commonweal

"I think it makes sense to sometimes **BE UTOPIAN** about what could happen. For instance, having an anchor programme is one way to achieve your goal. In your case, it would be by **SHIFTING ATTENTION TO THE NORTH**. In my opinion, getting people to realise that this is a huge part of the city as well, is step one. Your approach to this needs to be something that **RAISES EYEBROWS OR IS EXTREME**, that helps shift their focus as well."

"The **GOVERNMENT'S APPROACH IS TO SIMPLY NOT ENGAGE** in such tasks as they're terrified of the local communities and don't want to do anything that might tick them off. But, in order to truly do justice to the idea of place-making, you need to engage. So, I would suggest you **EXTRACT SOME OF THE FACETS OF PLACE-MAKING** that you think are applicable and create a hybrid."

"We need to keep in mind that we are working with a **PUBLIC THAT HAS NO CONFIDENCE IN THE GOVERNMENT** or a private body indulging in infrastructure, development and the like. For that, maybe what you need to do is, come up with **SMALLER IDEAS** that won't be ridiculously aspirational and **PROVE THAT IT CAN WORK**. Start with places that are guaranteed to bring results to **GAIN THE TRUST** and then increase your scale and move onto more challenging contexts. This would help you build trust over time, through smart and varied sets of interventions."

- Ar Tahaer Zoyab, Design Executive Director and
Chief Collaborator, Triple O Studio, Chennai

"Srinivasa Puram into consideration, since it's along the coast, the beach in the area would be considered as a recreational space by someone from outside the area whereas for those living there, it is a **PART OF THEIR EVERYDAY LIFE, INTERTWINED WITH THEIR OCCUPATION**. This is a space that other people could also visit without being questioned. That is, it is **COMPLETELY COMMON** and **DEVOID OF OWNERSHIP** but has a **SENSE OF APPROPRIATION** by the locals."

"The entire system runs with a basic understanding of certain guidelines. The do's and don'ts are decided based on the greater good of the community and not of the individual."

"In order for you to create commons, you need to **UNDERSTAND THOROUGHLY THE WORKING OF THE COMMUNITY**, their lifestyle, occupation, their everyday routines and activities. You **CAN'T HAVE RULES THAT CURTAIL THEIR FUNCTIONS** nor can you create new ones that hinder their activities."

So, taking this into consideration, you need to **CREATE COMMONS THAT CHANGE ORGANICALLY AND PARALLELY WITH THEIR FUNCTIONS**. You must also remember that there are several users who are either directly or indirectly reliant on common spaces for their livelihoods and stopping their activities could damage said urban ecosystem."

- Ar Udhaya Rajan, Webe design lab, Chennai

3.5 A REINTERPRETATION OF PORAMBOKE

STREET AS PUBLIC PLACE

It is given that Chennai's density cannot accommodate large green spaces as mere breathing spaces and provide for spaces for the cultural and social process in the city.

The free market development that has constantly been in favour of privatisation of public land has seen the conversion of numerous Poramboke and agricultural land into built masses. Nonetheless, as explained in the previous sections of the report these spaces that express the social and cultural identity of the society are an utmost necessity.

In this context it is essential; as depicted in the previous exemplary cases of Mylapore temple street, fisher folk and larger public in the Marina beach, and in Pondy Bazaar; to envision the street as the new public realm that provides a stage for the society's cultural processes. The streets in Chennai organically go beyond the function of establishing connection between various points in the fabric.

This potential of streets need to be tapped to make them the newly imagined communal "Poramboke". In this sense, the streets can be further well designed to accommodate the local way of life and become far more vibrant and relevant than just a surface of commute.

Street as an extension of the public realm has extensively been researched by the pioneers of the field like Jane Jacobs and Jan Gehl. That being said, the local design interventions that are proposed should go beyond following the principles mentioned to understand the local requirements and respond to the context better. It becomes a pressing necessity to understand and respond to the local livelihood and way of life.

Fig 3.41: Communal market in Chennai
Source: Pat Chouly



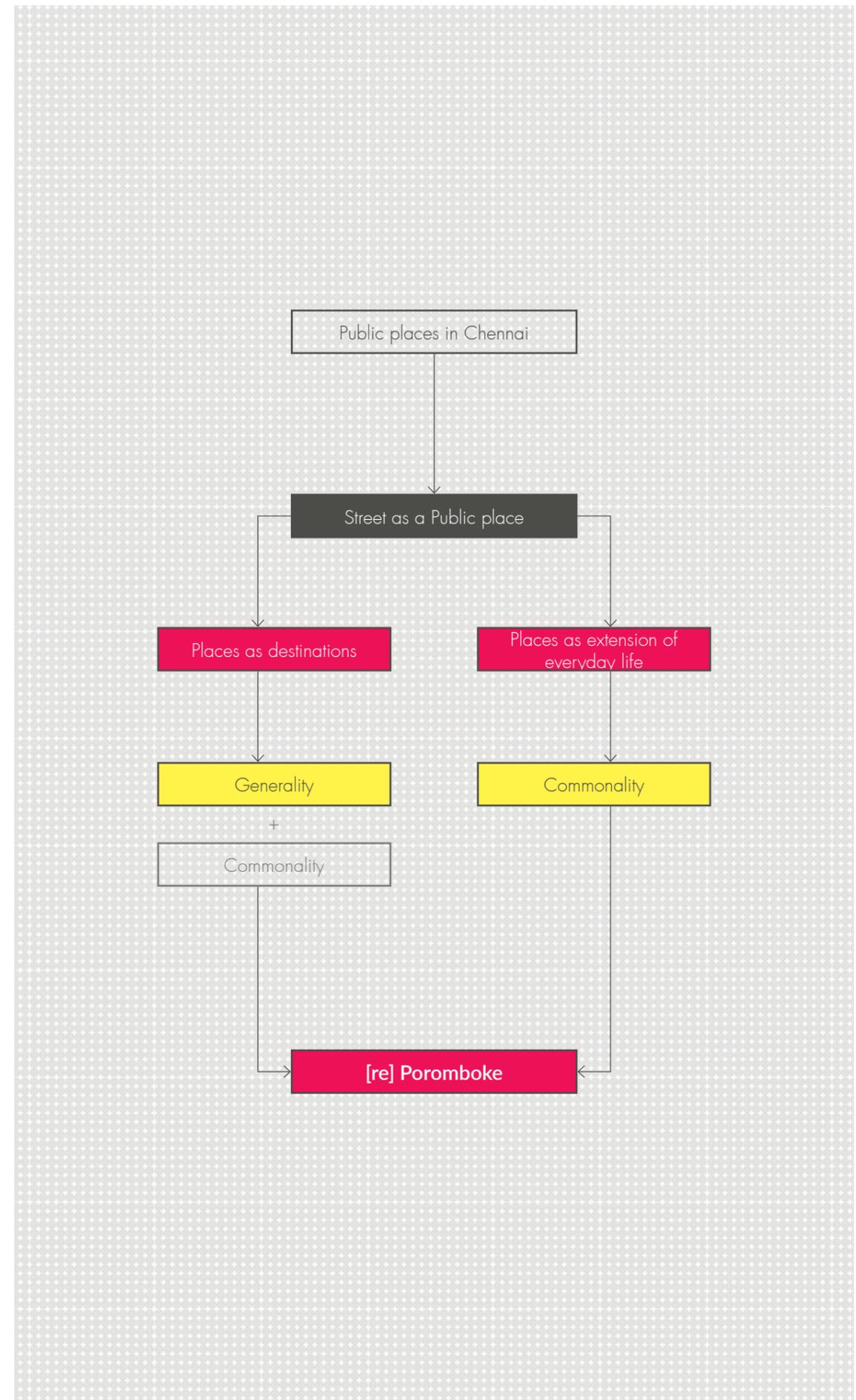
A REINTERPRETATION OF PORAMBOKE

ACROSS THE SCALES

The examples discussed in the previous sections essentially categorise public places in Chennai into two types based on scale and the functionality – **public places as destinations** and **public places as an extension of everyday life**.

When the public spaces are destinations they exhibit the character of generality, wherein they accommodate multiple functions and cater to a large group of people. Meanwhile, public spaces as an extension of the local public realm exhibit a character of commonality, wherein they cater to a specific community or group of people with similar needs or people engaging in similar activities. The design of public places in Chennai should take into account these aspects for better performance of the places themselves towards instilling a sense of place in the users and residents of the city.

Fig 3.42: Public places in Chennai
Source: Author



04

TRANSCALAR ANALYSIS

Chapter overview:

This section of the report focuses on the transcalar analysis of North Chennai. At the macro scale an analysis of the existing fabric and its infrastructure is then used to trickle down to the site selection process and which are then analysed at the micro scale. The analysis also incorporates fieldwork conducted at site that involved photo documentation and interviews.

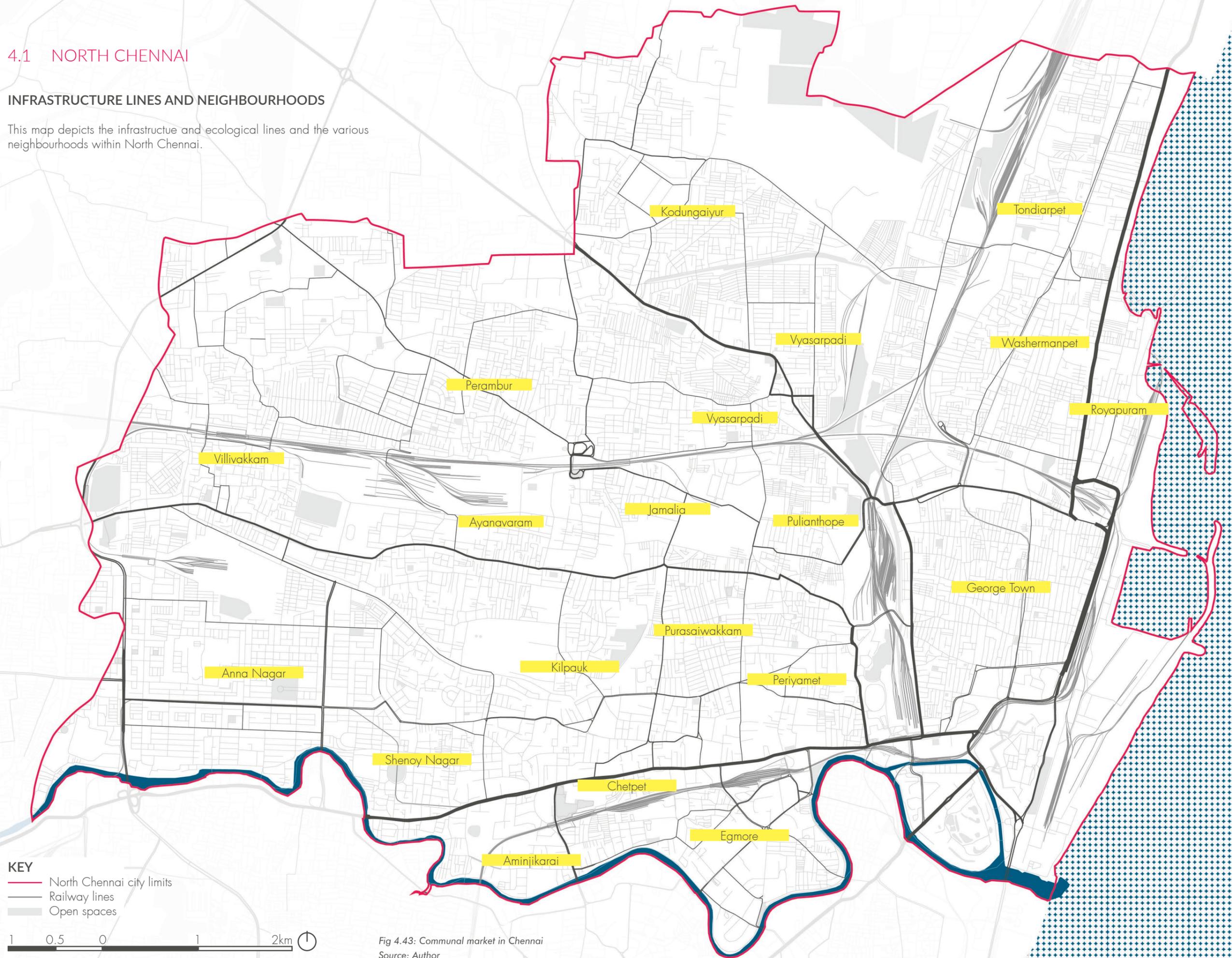
Chapter Contents :

- 4.1 North Chennai
- 4.2 Open spaces
- 4.3 Key locations and functions
- 4.4 Public transport and infrastructure lines
- 4.5 Strips of North Chennai
- 4.6 Border analysis
- 4.7 Selected sites

4.1 NORTH CHENNAI

INFRASTRUCTURE LINES AND NEIGHBOURHOODS

This map depicts the infrastructure and ecological lines and the various neighbourhoods within North Chennai.



KEY
— North Chennai city limits
— Railway lines
— Open spaces

1 0.5 0 1 2km

Fig 4.43: Communal market in Chennai
Source: Author

4.2 OPEN SPACES

FRAGMENTED OPEN SPACES IN NORTH CHENNAI

This map depicts all the open spaces and water bodies within the city. One of the most important aspect to note here is the fragmented nature of the open spaces in the city. This is also quite indicative of the pattern of privatisation of open spaces and their contention for survival. In the recent decades, multiple lakes and other water bodies have been filled up for providing land for further construction. These areas today are the most flood prone during the monsoons.



KEY
Water bodies and open spaces
Waterways

1 0.5 0 1 2km

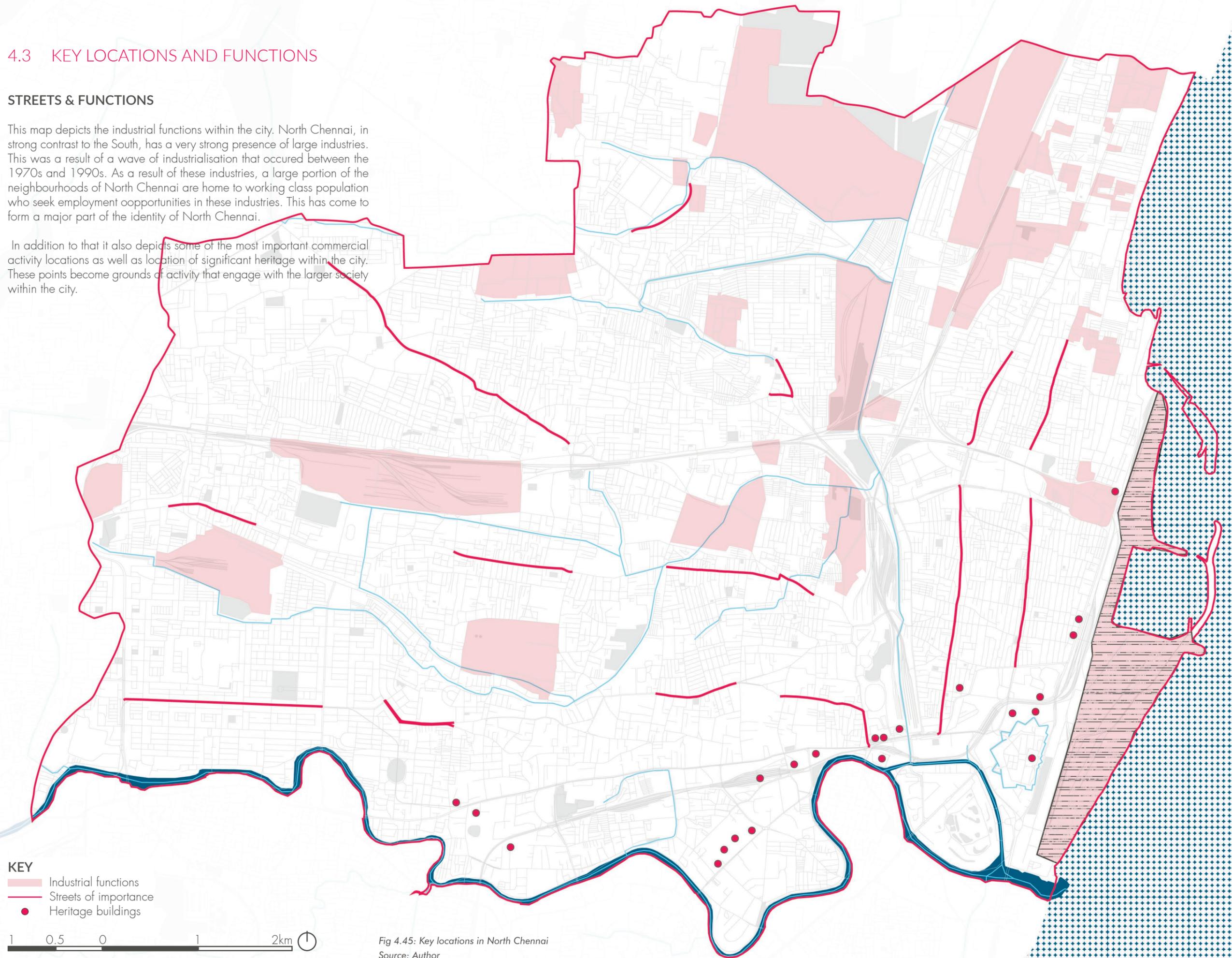
Fig 4.44: Open spaces in North Chennai
Source: Author

4.3 KEY LOCATIONS AND FUNCTIONS

STREETS & FUNCTIONS

This map depicts the industrial functions within the city. North Chennai, in strong contrast to the South, has a very strong presence of large industries. This was a result of a wave of industrialisation that occurred between the 1970s and 1990s. As a result of these industries, a large portion of the neighbourhoods of North Chennai are home to working class population who seek employment opportunities in these industries. This has come to form a major part of the identity of North Chennai.

In addition to that it also depicts some of the most important commercial activity locations as well as location of significant heritage within the city. These points become grounds of activity that engage with the larger society within the city.



KEY

- Industrial functions
- Streets of importance
- Heritage buildings



Fig 4.45: Key locations in North Chennai
Source: Author

4.4 PUBLIC TRANSPORT AND INFRASTRUCTURE LINES

ACCESSIBILITY

This map depicts the public transportation networks and accessibility of the areas in North Chennai by taking into consideration a buffer of 500m radius from railway nodes and 200m radius from bus stops. Although most of the areas are quite well connected, there are some areas where there is no available transport. It also important to note that although the connectivity to the centre is well established, connectivity across the city is quite poor.

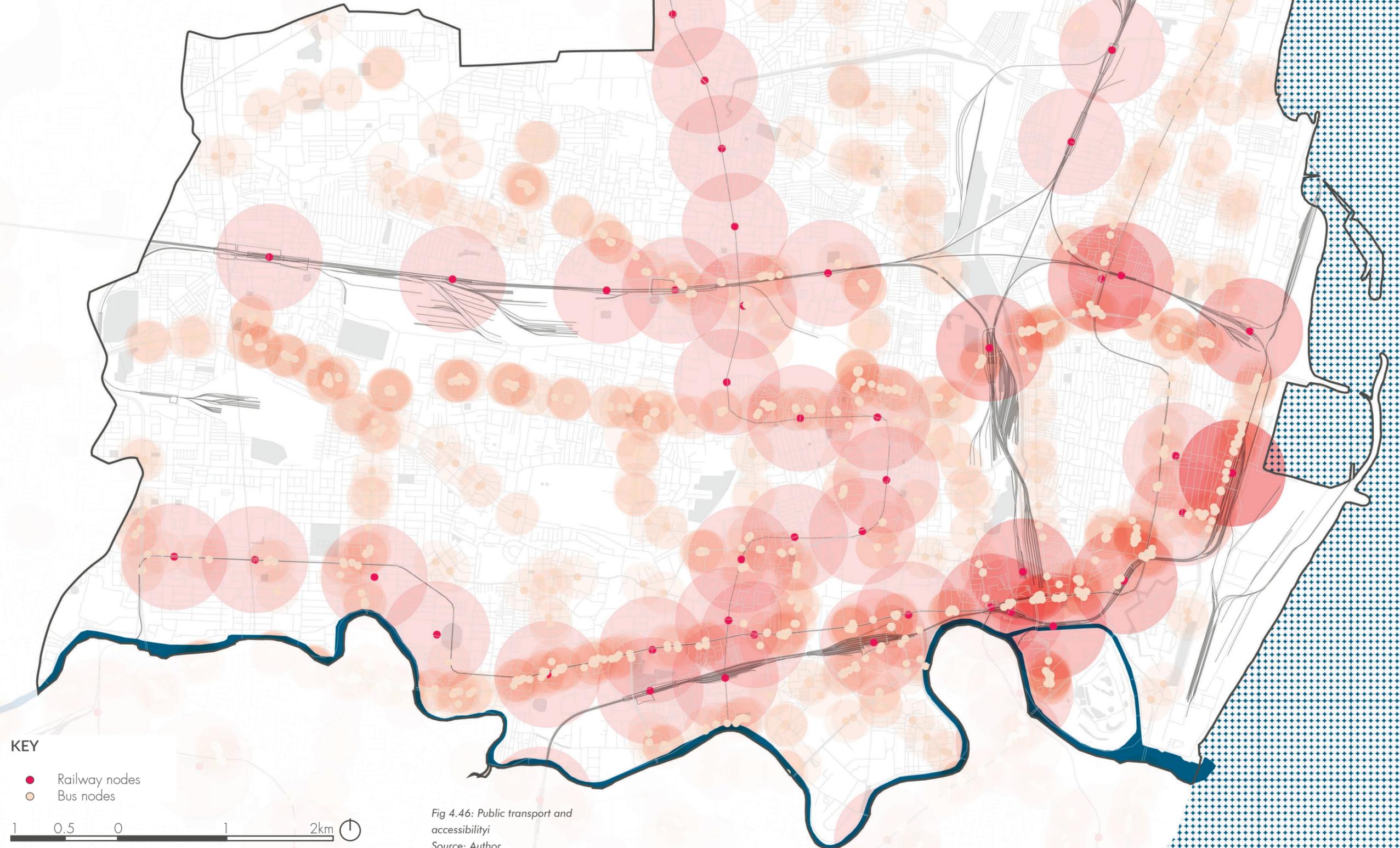


Fig 4.46: Public transport and accessibility
Source: Author

4.5 STRIPS OF NORTH CHENNAI

MORPHOLOGICAL STRIP READING OF NORTH CHENNAI

The fabric of North Chennai can largely be divided into 4 strips, of distinct characteristics, by the major infrastructural and ecological lines that run through North Chennai. This also leads to distinct urban environments within these strips. The 4 strips being -

- The Urban river strip between the Cooum river and the Poonamalle High road
- Strip 2 between the Poonamalle High road and Perambur High road
- Strip 3 between Perambur High road and the Grand Northern Trunk road
- Strip 4 between the Grand Northern Trunk road and Ennore High road which runs along the coast

The following section will explore the characteristics of each of these strips formed based on site visits, field interviews and socio-spatial morphological analysis.

Note: This form of analysis is used to simplify and aid in the process of selection of design sites. This does not go to say that these are the only characteristics present unanimously across all the locations within these strips.

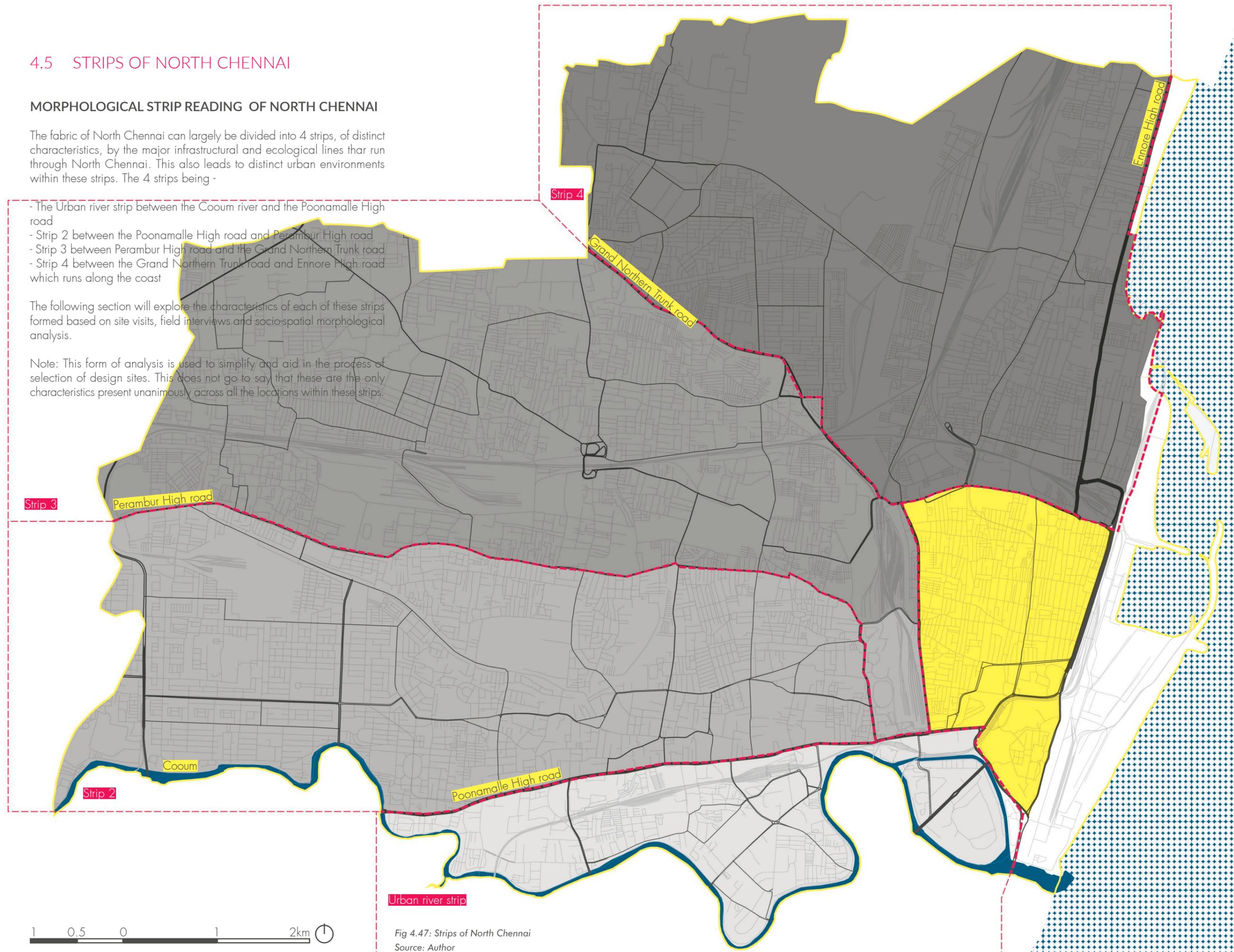
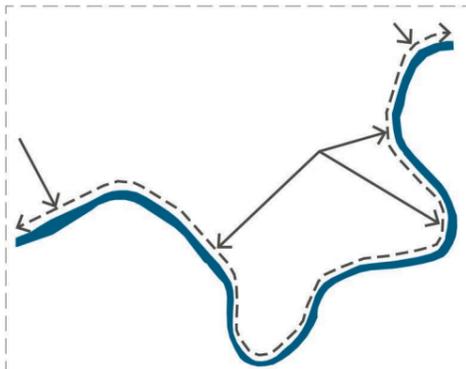


Fig 4.47: Strips of North Chennai
Source: Author

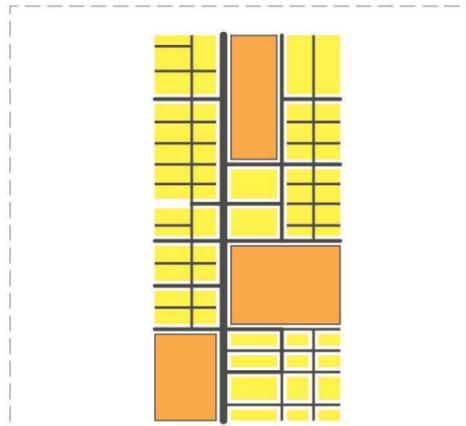
STRIPS OF NORTH CHENNAI - URBAN RIVER STRIP

This is the first strip between the Cooum and infrastructure corridor of Poonamallee High road. The key aspect of the strip is the presence of the Cooum river and the city scale institutional structures around which exist the residential neighbourhoods. Also, as seen in fig 4.44, there are a number of heritage structure that are present along this strip.



MORPHOLOGY

The morphology both at the local scale and at the scale of the arterial and sub arterial roads respond to the Cooum river. This creates the potential of creating a highly active river edge and spines that lead to the river edge.



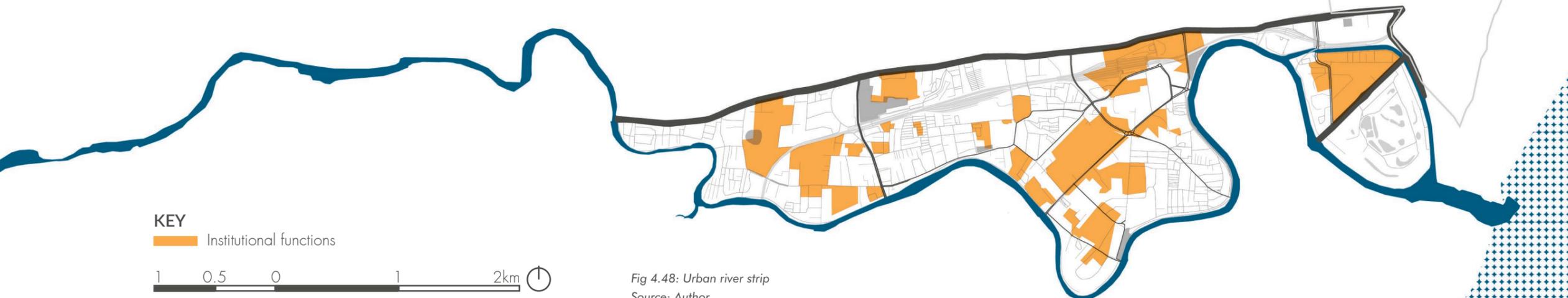
FUNCTIONALITY

The character of the environments in this strip is highly defined by the presence of large scale institutional buildings that juxtapose the residential neighbourhoods of multiple scales.

KEY
 Institutional functions



Fig 4.48: Urban river strip
 Source: Author



STRIPS OF NORTH CHENNAI - URBAN RIVER STRIP

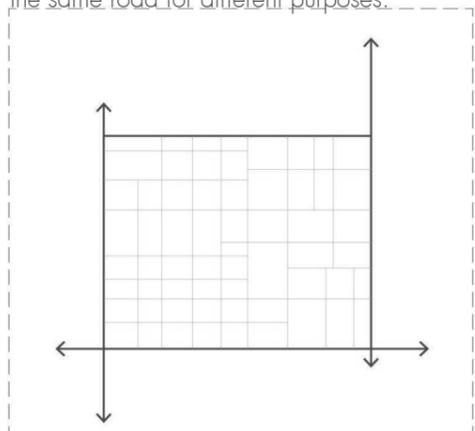
This image shows the current state of the Cooum and the environment around it in the urban river strip. Although the morphology strongly responds to the river, its current condition makes it inaccessible and unusable for the much needed public open spaces in the city.



Fig 4.49: The Cooum river and its inaccessible edges
Source: Author

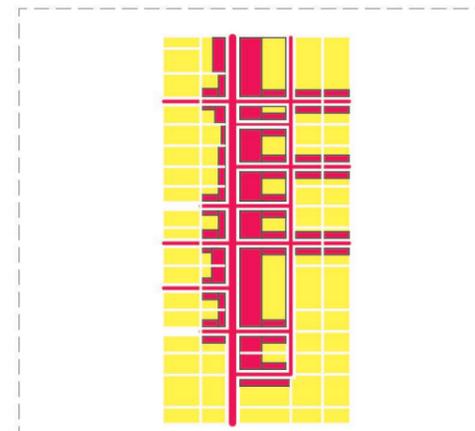
STRIPS OF NORTH CHENNAI - STRIP 2

This is the second strip between the infrastructure corridors of Poonamallee High road and Perambur High road. One of the most notable features of the strip is the definition of blocks by the arterial and sub arterial roads and the formation of commodity specific large scale commercial centers around which the residential neighbourhood is organised that frames a nuanced relationship between the two elements of these blocks. Due to the organic nature of these commercial functions, these roads face heavy traffic congestion that is a result of multiple users of the same function using the same road for different purposes.



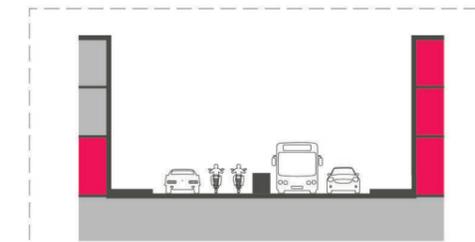
MORPHOLOGY

The morphology of the strip is strongly defined by a grid like network at both the local and the strip scale thereby forming defined blocks within the strip.



FUNCTIONALITY

One of the key characters of this strip is the formation of commodity specific large scale commercial centers from which local scale commercial activity bleeds on to the sub roads from the main roads.



STREET SECTION

The street character exhibits a large scale commercial activity along wide vehicular roads that are free of congestion.

KEY

- Large scale commercial
- Small scale commercial activity



Fig 4.50: Strip 2
Source: Author

STRIPS OF NORTH CHENNAI - STRIP 2

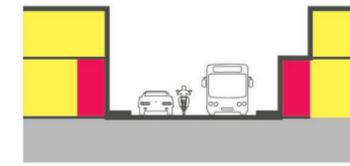
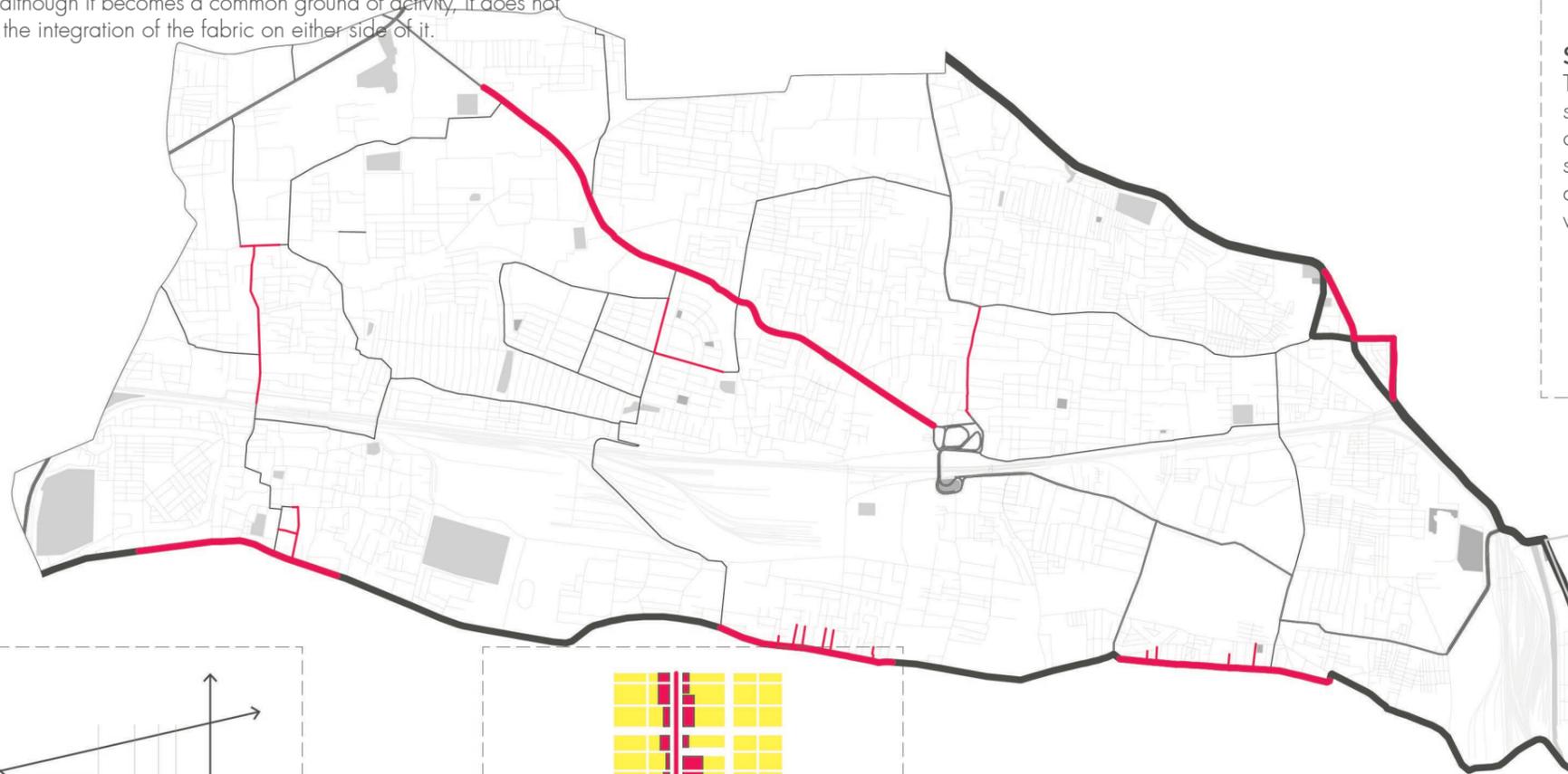
This image shows one of the streets that forms the commercial centre in strip 2. These roads become predominantly vehicular and are not conducive for pedestrian movement across them. And because of this, ironically, in contrast to the amount of activity that these commercial functions attract, these are not as vibrant as they can be.



Fig 4.51: Predominantly vehicular commercial streets of strip 2
Source: Author

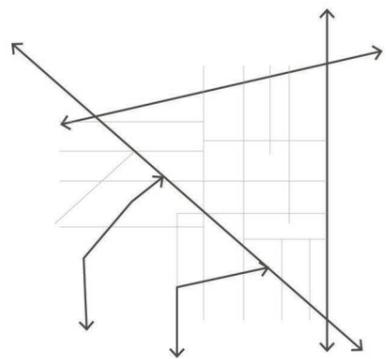
STRIPS OF NORTH CHENNAI - STRIP 3

This is the third strip between the infrastructure corridors of Perambur High road and Grand Northern Trunk road. One of the most notable features of the strip is the low rise and strongly concentrated commercial spine that runs for almost the entire length of the strip. This commercial spine is different in nature from that of strip 2, the difference being the nature of commercial activity. One other important aspect to note about the spine is that the activity does not bleed on to the roads that lead off from the spine. This is another key difference and because of the spatial definition of this road, although it becomes a common ground of activity, it does not do justice to the integration of the fabric on either side of it.



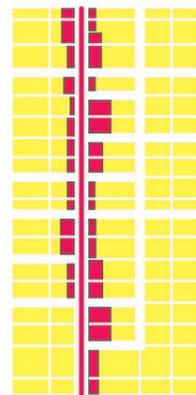
STREET SECTION

The street character of the commercial spine exhibits a local scale commercial center that caters to the immediate surroundings where congestion becomes a large problem to tackle because of the width of the road.



MORPHOLOGY

The morphology within this strip is defined by the strong grid like network at the local scale roads and the poorly defined arterial and sub arterial networks.



FUNCTIONALITY

The commercial spine is strongly defined by activity on both sides of this sub arterial road. But the important aspect to note here is that they are of small scale and do not bleed on to the local roads that lead off from the spine.

KEY

- Residential functions
- Commercial spine



Fig 4.52: Strip 3
Source: Author

STRIPS OF NORTH CHENNAI - STRIP 3

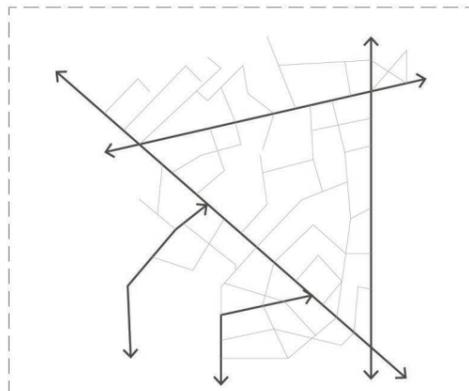
This image shows the commercial spine in strip 3. This street houses a number of diverse commercial activities that cater to the needs of the local neighbourhoods. It attracts a lot of users, however it is quite a narrow street that is used both by the users, shop owners and service vehicles. This leads to a lot of congestion similar to the sites in strip 2.



Fig 4.53: The commercial spine in Strip 3
Source: Google street view

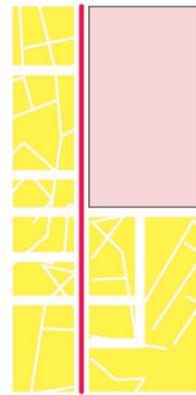
STRIPS OF NORTH CHENNAI - STRIP 4

This is the fourth strip between the infrastructure corridors of Grand Northern Trunk road and Ennore High road. It is predominantly industrial in nature of varied functions. This becomes the defining element of the rest demography which is largely the working class population. Thereby, this strip has a very strong juxtaposition of large industrial functions and small and intricate residential neighbourhoods which are organised around the large industries. This develops a strong relationship between these two elements more so because of their interdependent nature.



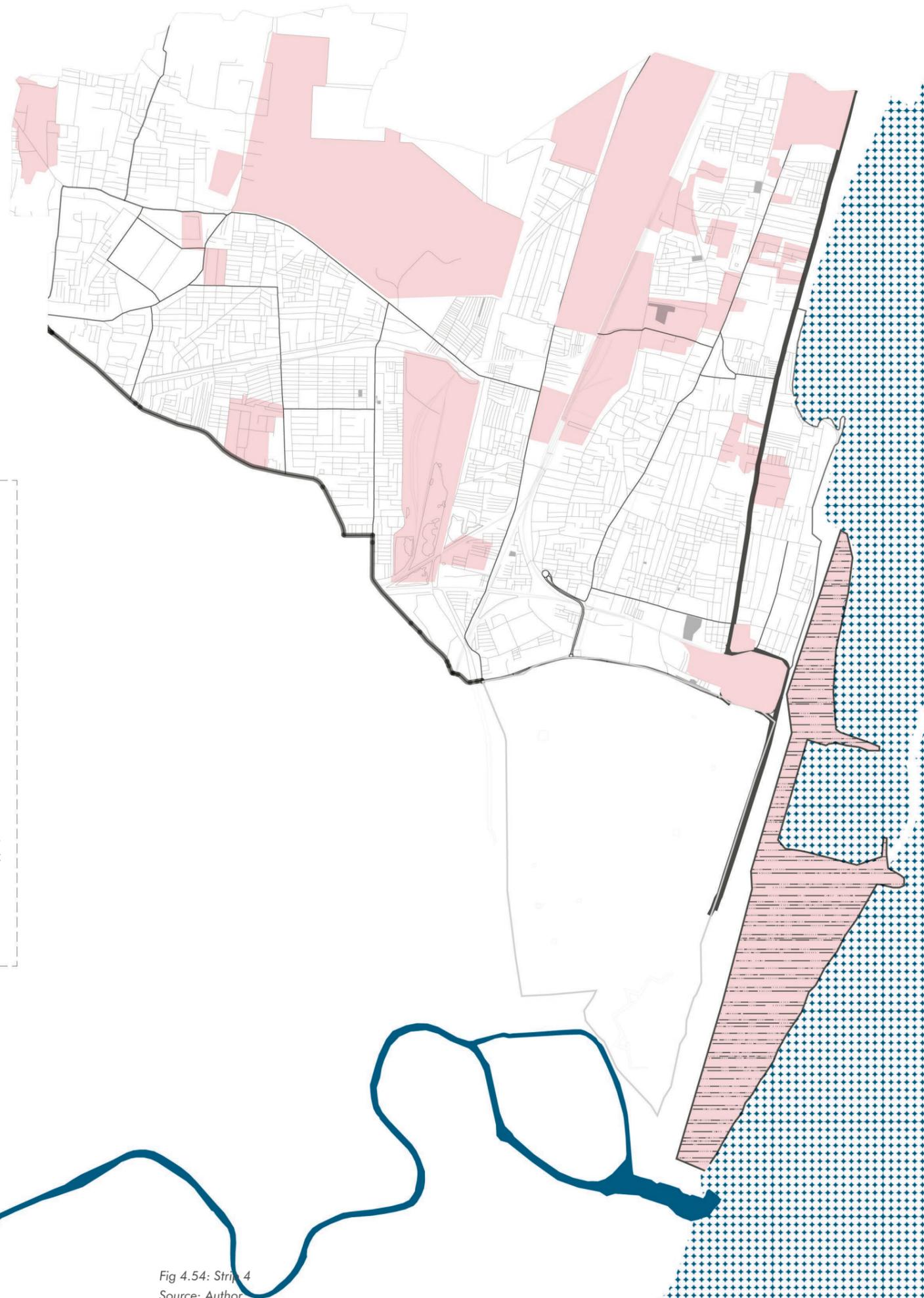
MORPHOLOGY

The most frequently occurring morphological character that can be noticed in this strip is the organic nature of the blocks that lack hierarchy in their structure.



FUNCTIONALITY

The structure within the strip is guided by the consistent friction between small inorganic blocks of residential character juxtaposed with the larger chunks of industrial land.



KEY
Industrial functions



Fig 4.54: Strip 4
Source: Author

STRIPS OF NORTH CHENNAI - STRIP 4

This image shows the residential and industrial environments in strip 4. Here, the residential fabric becomes the backyard of the larger industries and vice versa. Although there is a strong functional dependency between the two elements, there is no spatial relationship. A result of this is very poor and undesirable spatial qualities in these residential neighbourhoods as seen from this image.



Fig 4.55: Large industries versus small intricate housing
Source: Author

4.6 BORDER ANALYSIS

CROSS BORDER INFRASTRUCTURE

A cross border analysis of the physical infrastructure network across the trunk roads that frame the definition of the strips within the fabric shows that these roads are not any form of physical divide but places of constant exchange with all roads continuously traversing through the physical infrastructure line.

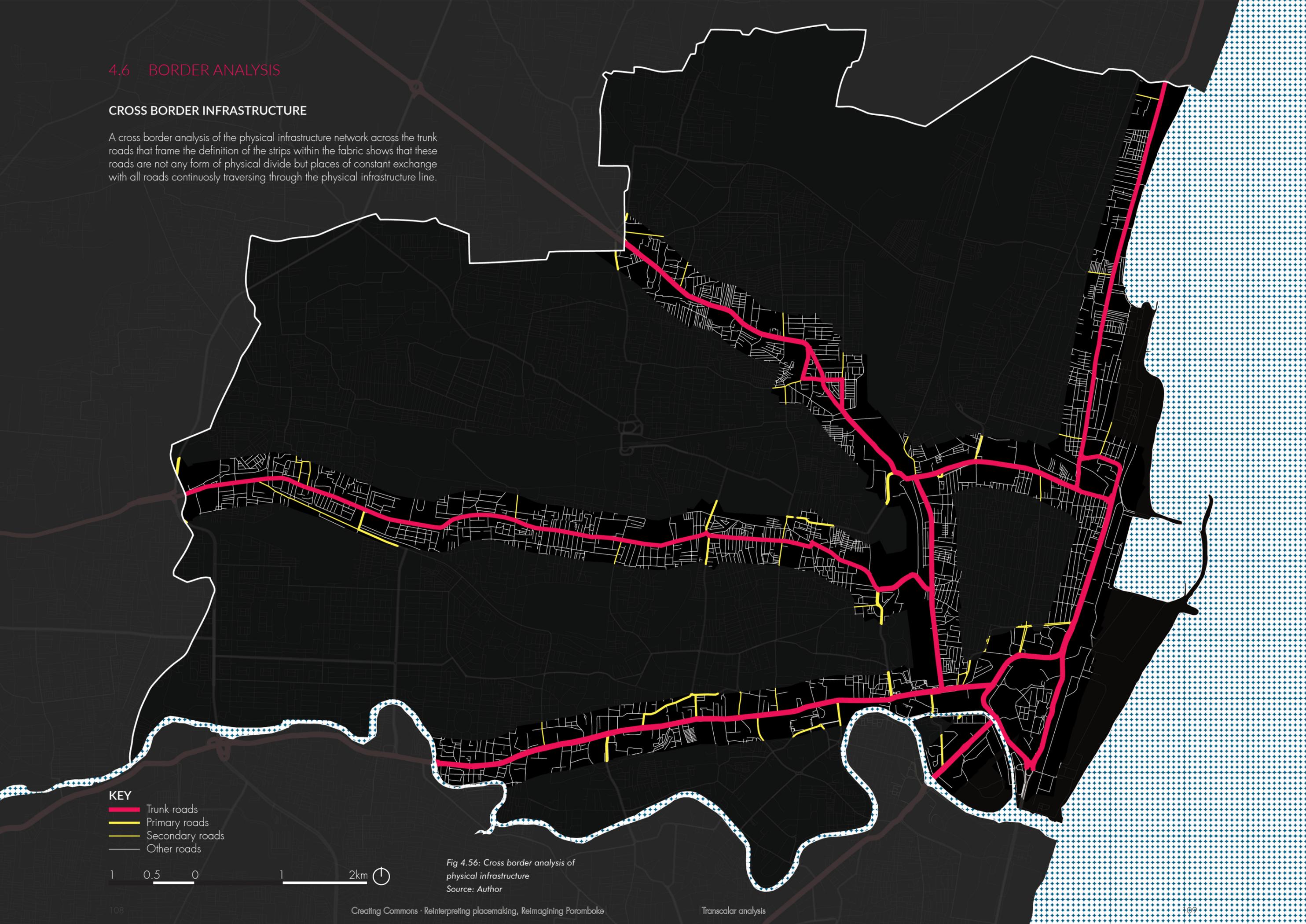


Fig 4.56: Cross border analysis of physical infrastructure
Source: Author

BORDER ANALYSIS

CROSS BORDER ACTIVITY

A cross border analysis of the activity and functions across these infrastructure lines shows that these are not any form of borders but common places of exchange of activity with either sides almost always being grounds of high activity with almost no monofunctional areas.

In conclusion, although these infrastructure lines are used as a medium of definition of the strips of distinct characteristics, these do not in any form become strong boundaries and do not frame any restrictions on exchange or movement.

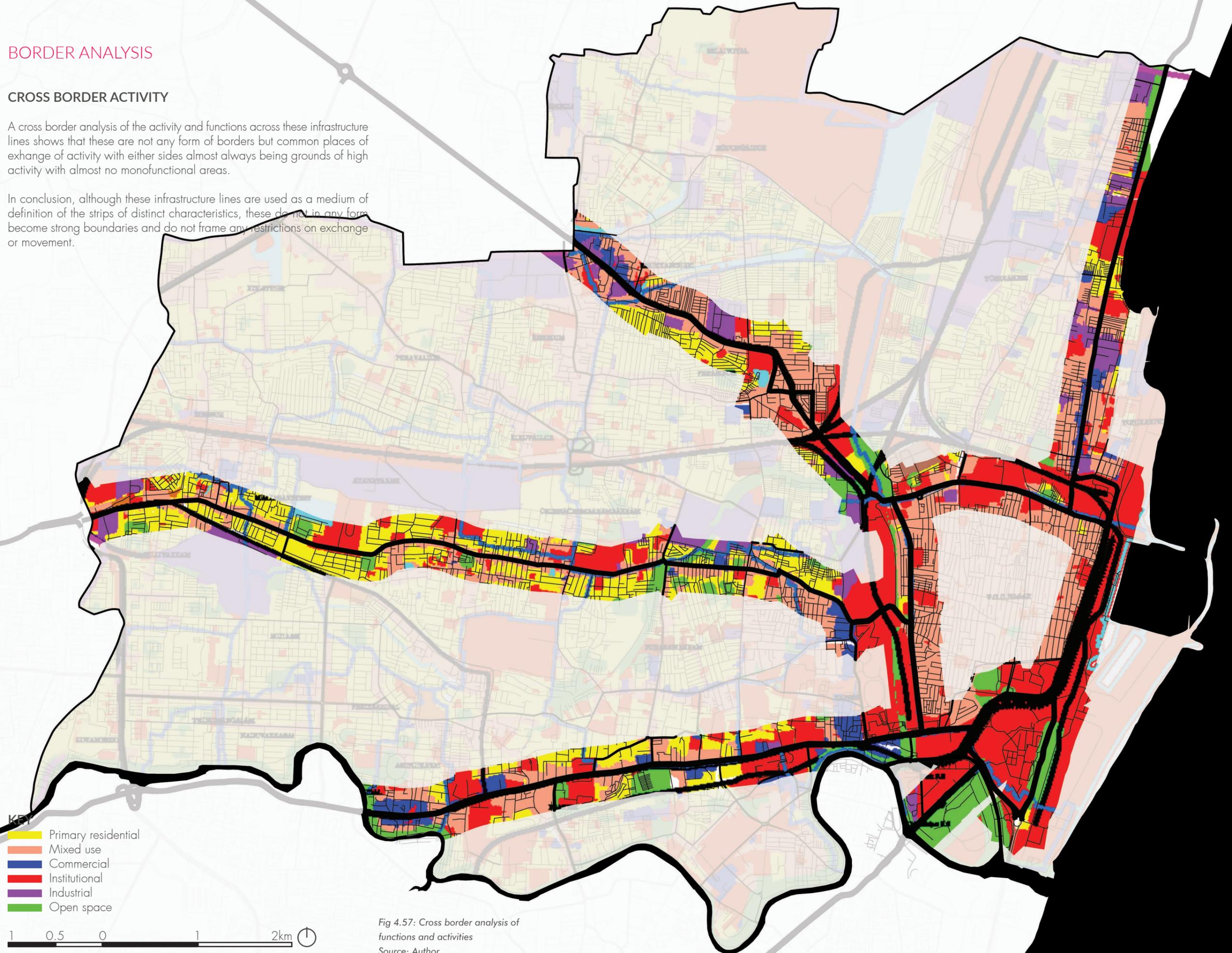


Fig 4.57: Cross border analysis of functions and activities
Source: Author

4.7 SELECTED SITES

SITE SELECTION CRITERIA

In order to select sites for further design explorations, the site selection is done keeping in mind the need for the exploration of the qualities of commonality and generality of places in Chennai. For this reason the chosen location are from two different strips of different characteristics but at the same time also have prominence of one quality over another.

The site selection process adopts a layered approach that considers the different layers of information from the transcalar analytical process to arrive at sites that are situated at the junction of all the mentioned layers. These layers being the fragmented open spaces, Key locations and functions in North Chennai, and lastly the public transport network that considers the accessibility of the different points.

The two different sites chosen are -

- Site 1: Vyasarpadi - prominence of commonality over generality and relationship between large industrial function and intricate residential environments
- Site 2 : Chennai Central - prominence of generality over commonality and relationship between commodity specific commercial areas and residential areas at the heart of a transit hub.

In the following chapter further analysis of these specific sites are carried out to inform the local design interventions.

KEY

Selected sites

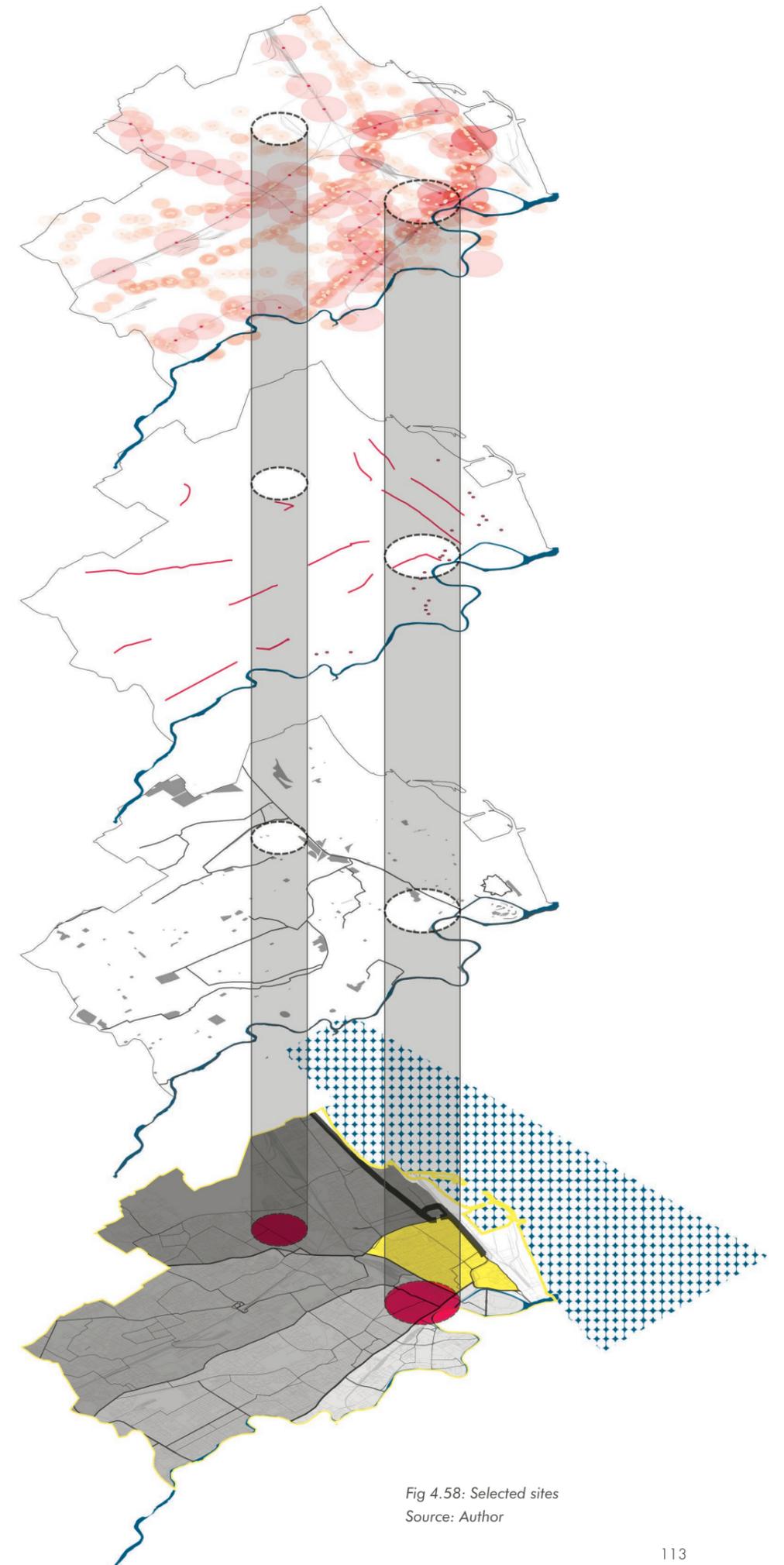


Fig 4.58: Selected sites
Source: Author

SELECTED SITES

SITE SELECTION CRITERIA

SITE 1 - VYASARPADI

Site selection

Site number one located in Vyasarpadi looks at the complex relationship between a housing board settlement and an industrial site at a close proximity. One of the key challenges would be to tackle the lack of sufficient local scale commercial activity.

SITE 1 - VYASARPADI

Potentials and challenges

- Facilitating local mixed use activity
- Facilitating a stronger buffer between industries and residential areas
- Street as a communal place

SITE 2 - CHENNAI CENTRAL & PARK

Site selection

The site near Chennai central and park is located in Periyamet. This site, being located in proximity to one of the crucial transit hubs in the city and some of the oldest heritage structures and in proximity to a commodity specific commercial street makes it a potential site of exploration. One of the key things to note here is that this was the location of one of the oldest markets - Moore market - in the city.

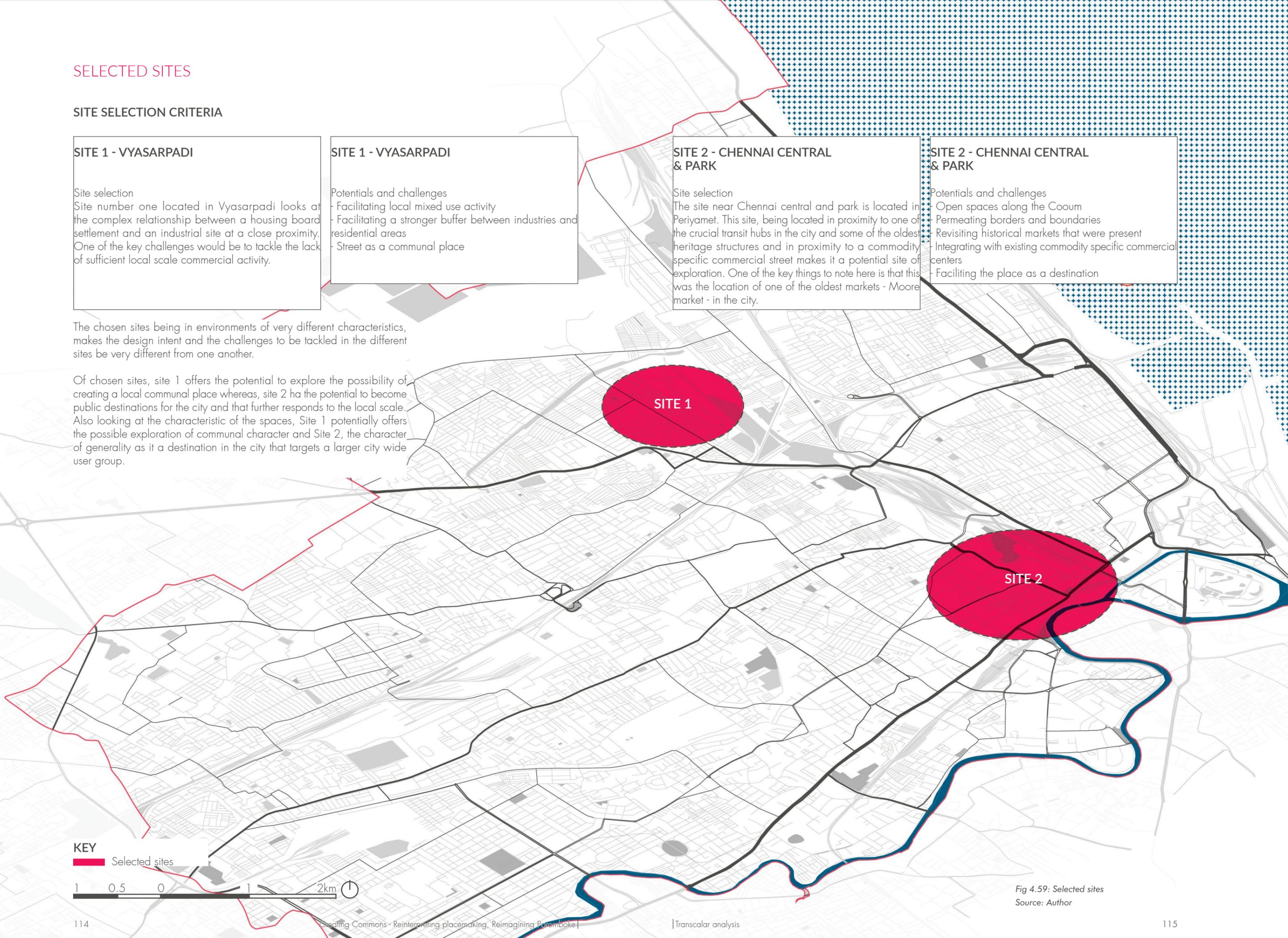
SITE 2 - CHENNAI CENTRAL & PARK

Potentials and challenges

- Open spaces along the Cooum
- Permeating borders and boundaries
- Revisiting historical markets that were present
- Integrating with existing commodity specific commercial centers
- Facilitating the place as a destination

The chosen sites being in environments of very different characteristics, makes the design intent and the challenges to be tackled in the different sites be very different from one another.

Of chosen sites, site 1 offers the potential to explore the possibility of creating a local communal place whereas, site 2 has the potential to become public destinations for the city and that further responds to the local scale. Also looking at the characteristic of the spaces, Site 1 potentially offers the possible exploration of communal character and Site 2, the character of generality as it a destination in the city that targets a larger city wide user group.



KEY

Selected sites

1 0.5 0 1 2km

Fig 4.59: Selected sites
Source: Author

05

DESIGN INTERVENTIONS

Chapter overview:

This section of the report elaborates on the challenges and potentials and finally the proposed design interventions in the chosen locations within the fabric of North Chennai. Firstly, the existing conditions, challenges and the target user groups are elaborated which guides the design principles. These are then defined as the specific design interventions in the different sites that are illustrated using a series of drawings.

Chapter Contents :

- 5.1 Site 1 - Vyasarpadi
- 5.2 Site 2 - Chennai Central



SITE 1 - VYASARPADI

5.1 SITE 1 - VYASARPADI

5.1.1 POTENTIALS AND CHALLENGES

LARGEST SLUM IN CHENNAI

Vyasarpadi is considered one of the largest slums in Chennai with a majority of its population being marginalised communities in typical working class neighbourhoods.

Furthermore, these neighbourhoods are typically monofunctional with a predominance of primarily residential areas and a strong presence of industrial functions where the people of these localities find work. This leaves these areas devoid of commercial functions that go beyond their basic needs. From talking to people, there was a strong need for more prominent and diverse local commercial activity.

BRAZIL OF TAMIL NADU

Although the people are from marginalised communities, the links and ties within the communities are very strong and determined to identify grassroot initiatives to set a platform for improvement. One such platform is football and SCSTEDS (Slum Children Sports Talent and Education Development Society) is one of the many community football academies that focuses on setting a platform for the people here and to pave way to a better future. Football has come to be an integral aspect of the community. Likewise, other sports that are taking shape are carrom and boxing.

In addition to this, music has become a very strong medium of expression in these parts. Gana music, predominantly from Vyasarpadi has a very strong presence among the communities in these parts .

LACK OF BASIC AMENITIES

With Vyasarpadi being home to a large percentage of working class population, it is very uncommon to find parts of this neighbourhood with good access to basic amenities like drinking water and public toilet facilities. One of the largest challenges that people in these parts face is having to deal with either malfunctioning infrastructure or worse, a lack of these basic infrastructure.



Fig 5.60: (left, top) Housing board colonies of Vyasarpadi
Source: Johanna Deeksha

Fig 5.61: (left, middle) SCSTEDS Football academy
Source: Akila Kannadasan

Fig 5.62: (left, bottom) Lack of drinkign water and basic amenities
Source: Manish Swarup

SITE 1 - VYASARPADI

5.1.2 EXISTING SITE CONDITIONS



Korukkupet Railway goods shed

Football ground

School

Mullai Nagar bus depot

Proposed social housing block

Newly constructed social housing block

Fire station

Public community hall

Slum settlements

Social housing block

Church

Temple

Sathiamurthy Nagar park & ground

Slum settlements

Located in the neighbourhood of Mahakavi Bharathi Nagar, it is dominated by the presence of housing board social housing blocks. This neighbourhood previously was known as the Tamil Nadu housing board colony for this reason.

The site is at very close proximity to the Korukkupet Railway goods shed that disconnects the neighbourhood from the water edge of the Buckingham canal. The presence of the goods shed also means service vehicles frequenting the roads and being parked in different parts of the neighbourhood which renders it a very poor spatial quality.

The 1st Main road that cuts through the neighbourhoods connects the Tondiarpet High road and the Grand Northern Trunk road. Being a secondary road, it is a 20m wide road on paper with a lot of encroachments on it. This is a result of a lot of everyday life activity spilling over on to the street which is an eventual result of insufficient space in their houses. As a consequence of the economic status of the residents, the houses here cater only to basic need of a roof over the head and thus the residents are forced to find room on the streets.

However, the streets do not naturally enable this. This spilling over of activity is always done as a means of survival that springs from their basic needs and is always done opposing the local governance. This road being very wide and taking up a lot of activity offers a huge potential for transformation as this is also the road that connects the neighbourhood to the Vyasarpadi market.

Design Intentions

To create a network of communal spaces that closely reflect the way of life at the local scale.

Target user groups

- Diverse age groups of local residents - socio-economically backward and marginalised working class population
- Other users of the city scale destination

Design principles

- Gaining trust of the locals with quick spatial interventions
- Spaces that organically work in parallel with the daily livelihood
- Providing for necessary public amenities
- Acknowledging the spatial use of the locals and

Fig 5.63: (left) Map of the existing fabric with some important indicators
Source: Author

SITE 1 - VYASARPADI

EXISTING SITE CONDITIONS

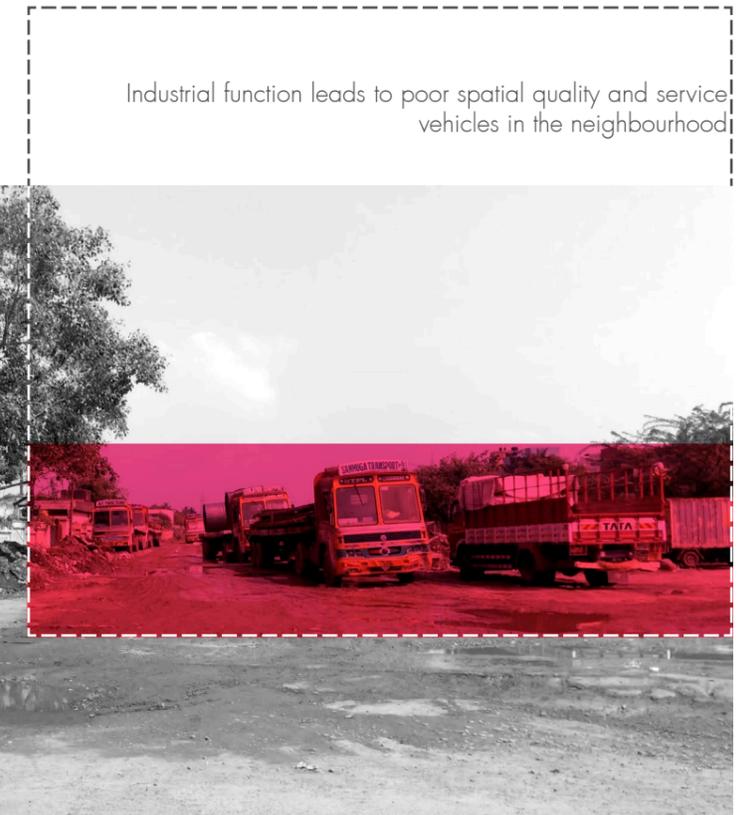
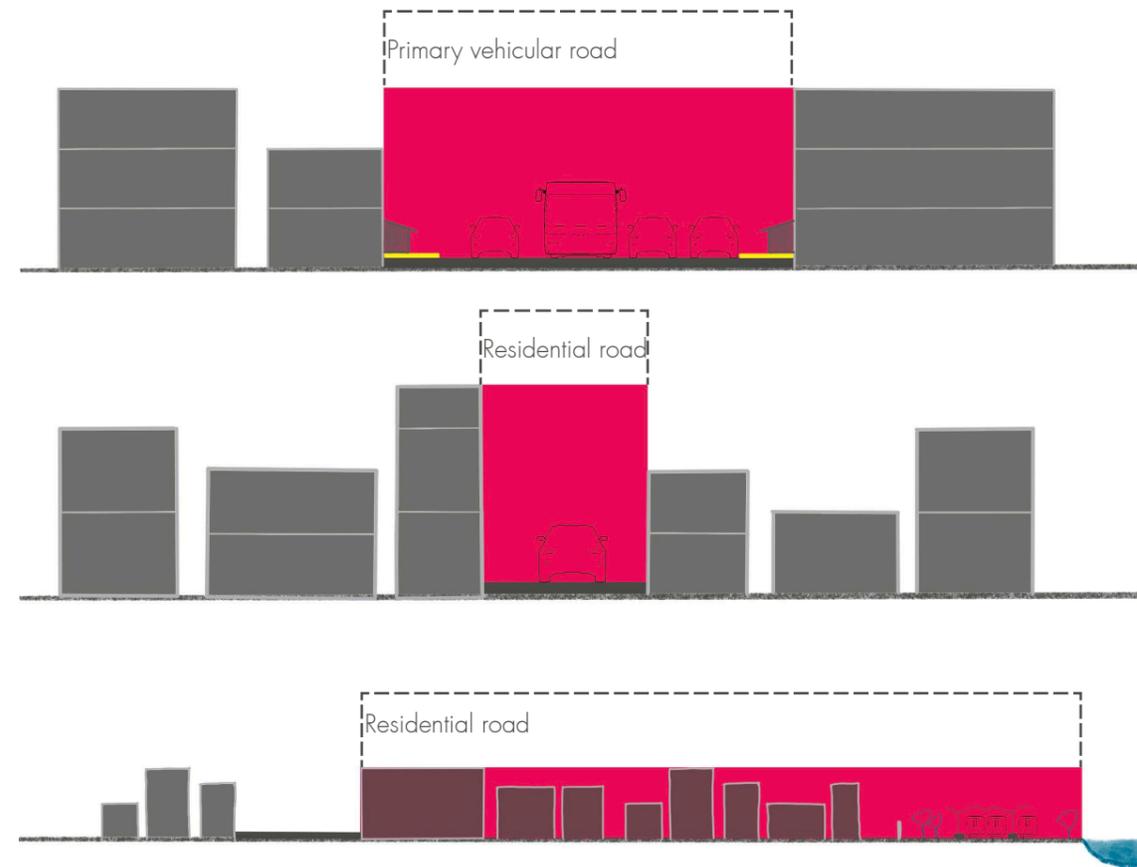
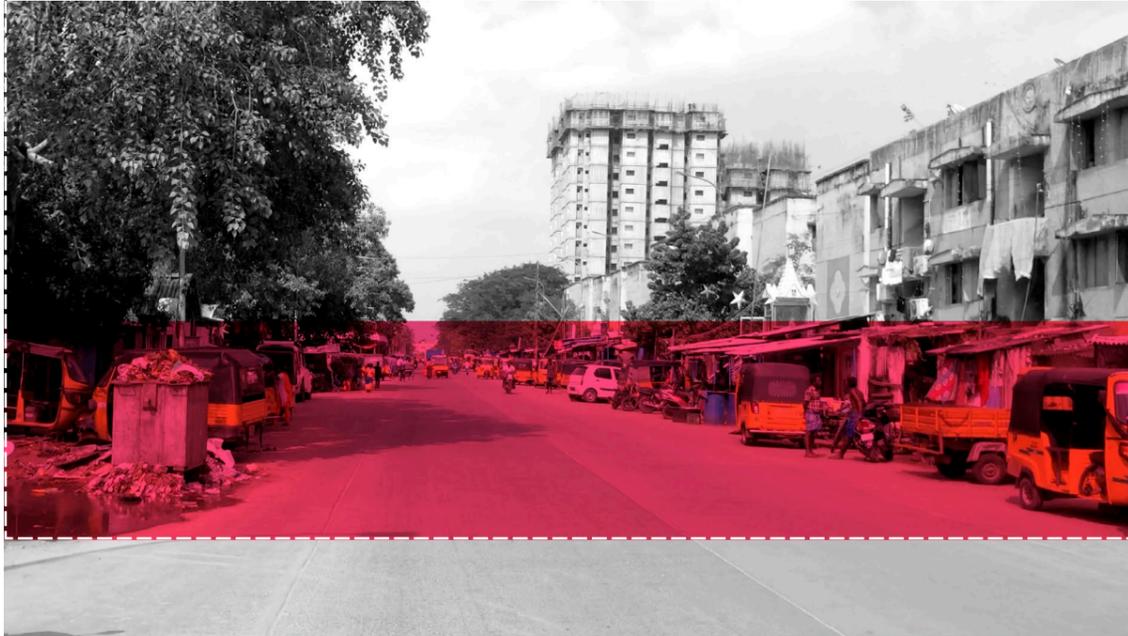


Fig 5.64: Diagrams and images indicating existing spatial conditions
Source: Author

SITE 1 - VYASARPADI

EXISTING SITE CONDITIONS

Primary road - largely vehicular roads with poor spatial quality that do not enable the everyday activity.



Appropriation of space - extension of livelihood spaces into the street



Appropriation of spaces - Existing religious functions spilling over during festivities



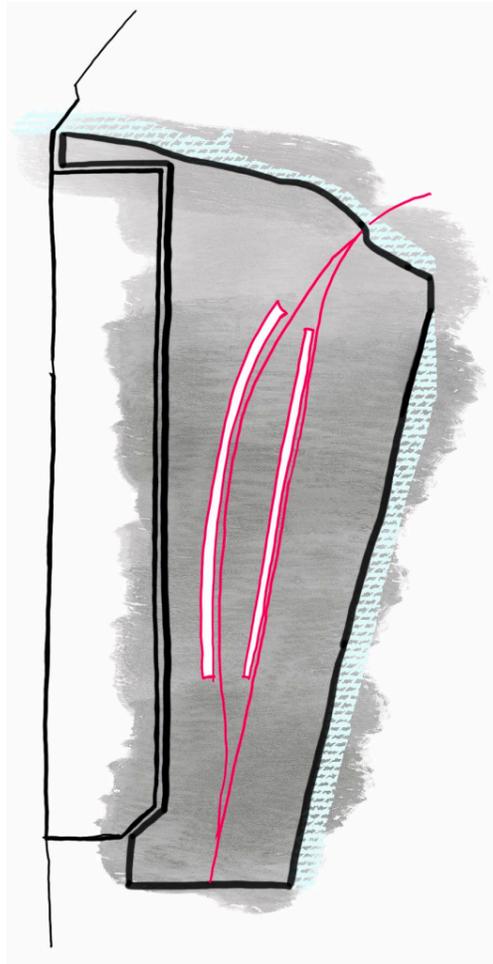
Appropriation of space - small living spaces leads to everyday activity spilling over to the streets



Fig 5.65: Images indicating existing spatial conditions
Source: Author

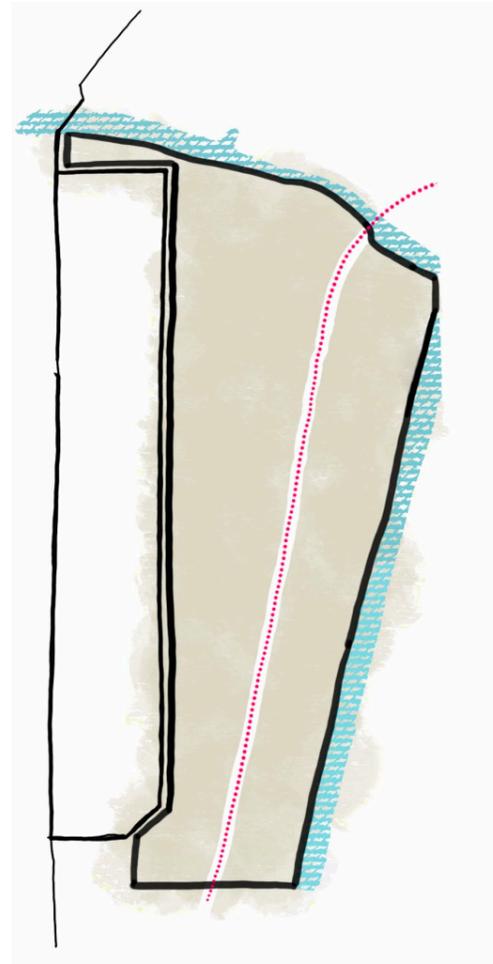
SITE 1 - VYASARPADI

5.1.3 DESIGN EVOLUTION - CITY SCALE PARK



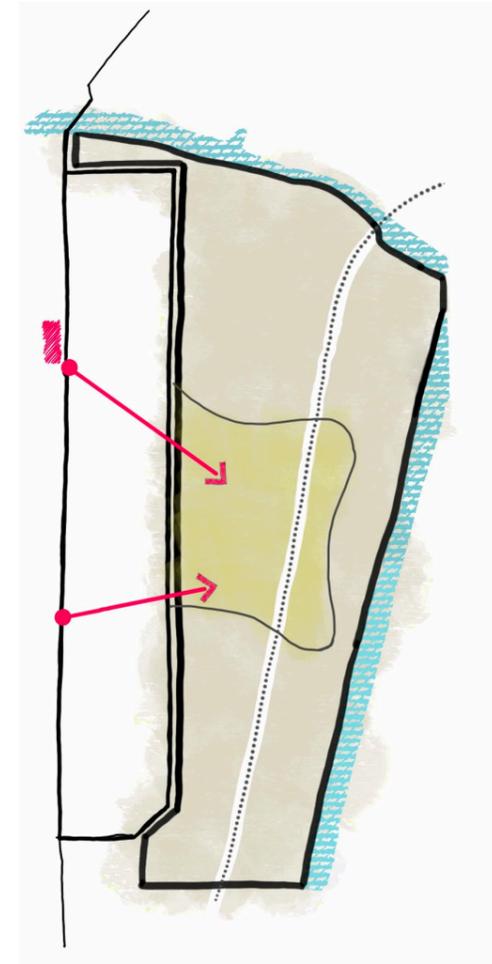
EXISTING INDUSTRIAL SPACE

The railway goods shed is a one of its kind space that occupies a large piece of land that abuts and sits on the flood plain of the Buckingham canal. Offers a large potential to be transformed into a city scale park. This means relocating the railway shed to an alternate location that is a larger facility just further North of city and elevating the railway line.



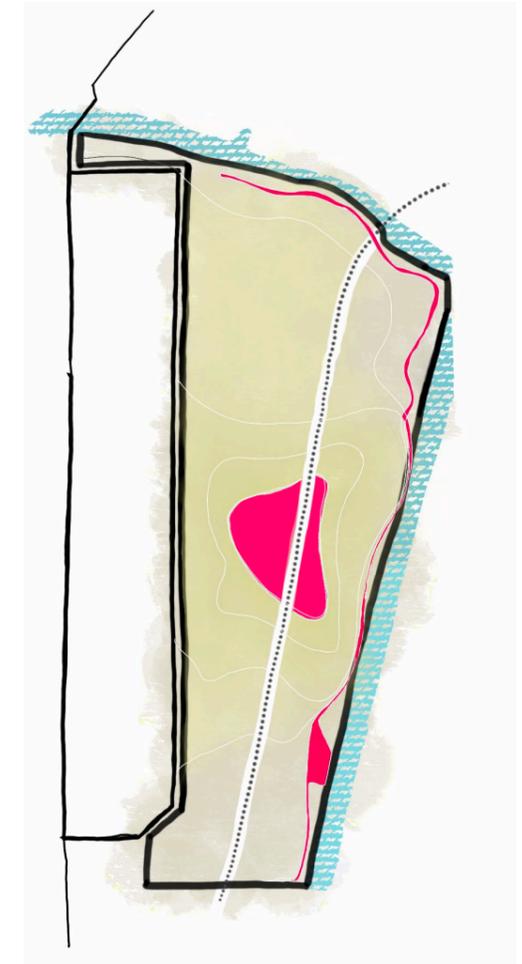
RELOCATING THE INDUSTRY

Being a space that is one of its kind in terms of its scale, it offers a big potential to be transformed into city scale green park as a lung space that the city is in dire need of.



COMMUNAL GREENS

Although the green space is a necessity at the city scale, the space needs better integration with the neighbourhood for it to take shape at the local scale. And hence, it is essential to create incremental communal green spaces that enable the local community to take an interest in the space.



ELEVATED DECK AND WATER EDGE

The elevated deck is created as a platform that enables visual connection to the wild green space and the water edge and at the same time as an intervention that converts the space into an area for inundation during the Monsoons. During the dry times of the year, the water edge is activated enabling access to the water body.

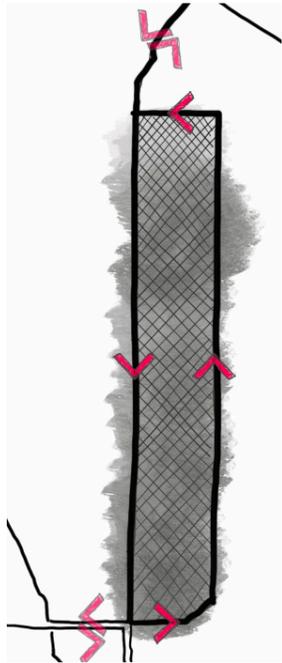
Fig 5.66: Design evolution of city scale park
Source: Author

SITE 1 - VYASARPADI

5.1.4 DESIGN EVOLUTION - BLOCK TRANSFORMATION

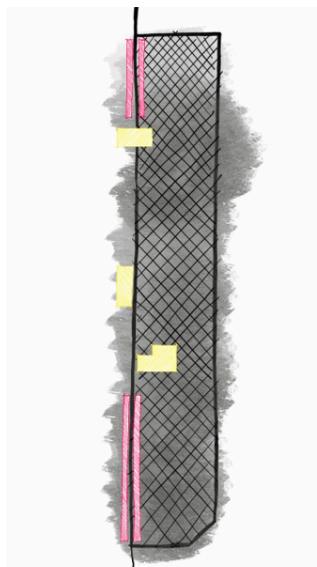
VEHICULAR FLOWS

Restructuring vehicular movement to make it more pedestrian friendly by reducing the road widths and redirecting traffic to transform the roads to take traffic just in one direction and eventually forming a loop.



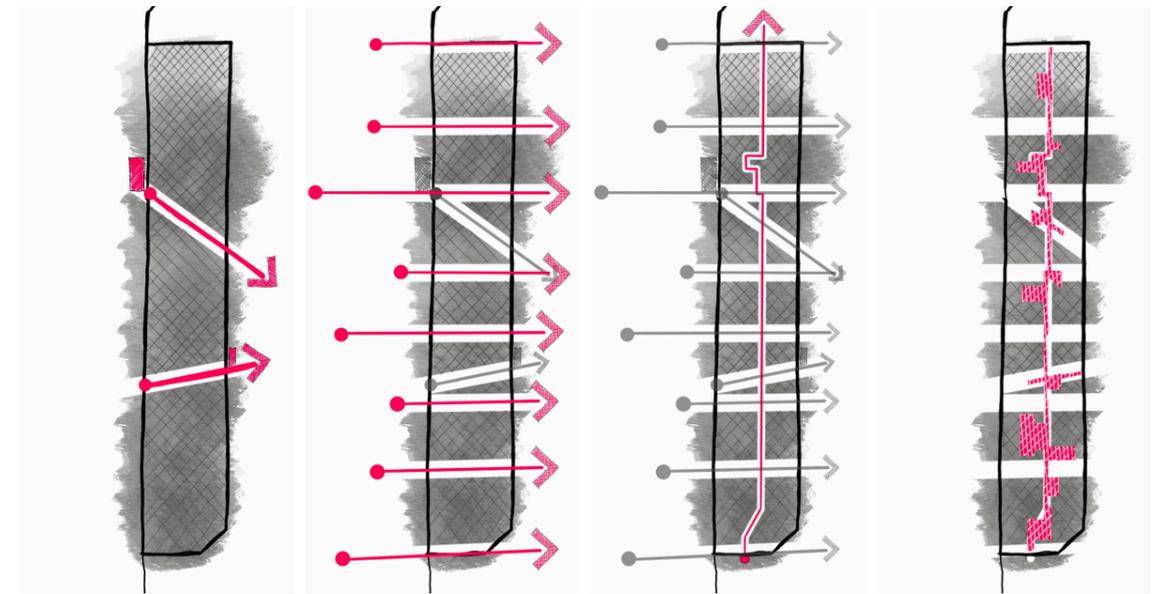
ACTIVATING THE LINE

Following the lines of the street as a communal space, the focus is to create functions and programmes that revolve around the main street. One of the key challenges of the site being lack of commercial centres, this is facilitated at the vehicular intersections. Additionally, communal spaces are enabled along this street.



PEDESTRIAN FLOWS

1. City scale - creating a pedestrian path targeting users from the city that enables connections to the city scale green space.
2. Neighbourhood scale - creating a pedestrian transect every 200m to enable short blocks and multiple route choices.
3. Block scale - creating a pedestrian spline that cuts through the entire block and hence enabling local scale communal spaces.
4. Communal spaces - spaces of positive encroachment - creating a series of communal spaces that lead off from the pedestrian spline creating a network of spaces that support local way of life and provide safe spaces away from traffic.



COOPERATIVE COMMUNAL BLOCKS

The transformation of the residential block has to undergo a cooperative communal process involving the different private owners and also acknowledge the possibility of blocks of different sizes and permutations and combinations

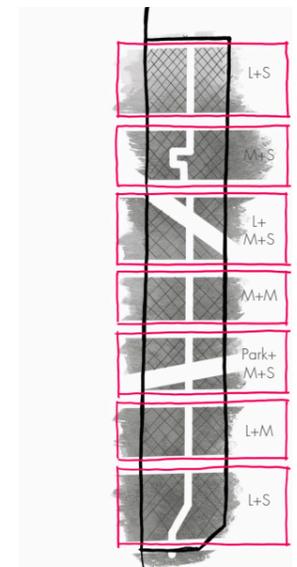


Fig 5.67: Design evolution and articulation of the urban block and fabric
Source: Author

SITE 1 - VYASARPADI

5.1.5 PROPOSED DESIGN

The proposed design plan shows the transformation of the industrial site to an ecological green space with an activated water edge that provides for local calm waterfront spaces. On the other hand, the transformation of the residential block to provide for local communal spaces along the pedestrian spine.

Other interventions here are the transformation of the existing slum settlement to a communal gathering spaces that supports the local activities like boxing and music and at the same time supports religious gatherings during the time of festivities. This transformation would follow the relocation of the existing slum settlement to a denser housing block that was recently constructed just across the road from this location thereby not posing an uprooting of their livelihood.

The school and the adjacent playground are integrated by a shared space that enables this as a continuous pedestrian and play space that caters both to the local community and the school. Meanwhile the existing fire station is transformed to exploit the possibilities of densification and yet retain the fire station at the ground level.

Other smaller interventions include the transformation of the road, that is narrowing it down to make it a one way traffic road to restrict vehicular movement. This narrowing down is done by providing for wide pedestrian pavements. These wide pavements in combination with the new interjection of commercial activity encourage pedestrian activity on the main roads. Additionally, the pavements and road are alternated to create a zig zag movement pattern in order to disallow a continuous thoroughfare for vehicles thereby further slowing down vehicular traffic.

Additionally, all the previously mentioned pedestrian flows, and pathways to support them, along with the spatial reconfiguration of the residential blocks allows for the creation of the communal spaces that take up a dynamic character.

Although the larger transformations are quite drastic, they are a result of a series of smaller interventions which are quick minimal incremental interventions from which the community can really benefit making this a viable design proposal.

The proposed design interventions are further detailed in a series of sectional diagrams and perspective illustrations that depict the spatial qualities.

- KEY**
- Bus stops
 - Pedestrian spine
 - Pedestrian transepts
 - Intimate communal space
 - Large blocks
 - Medium blocks
 - Small blocks

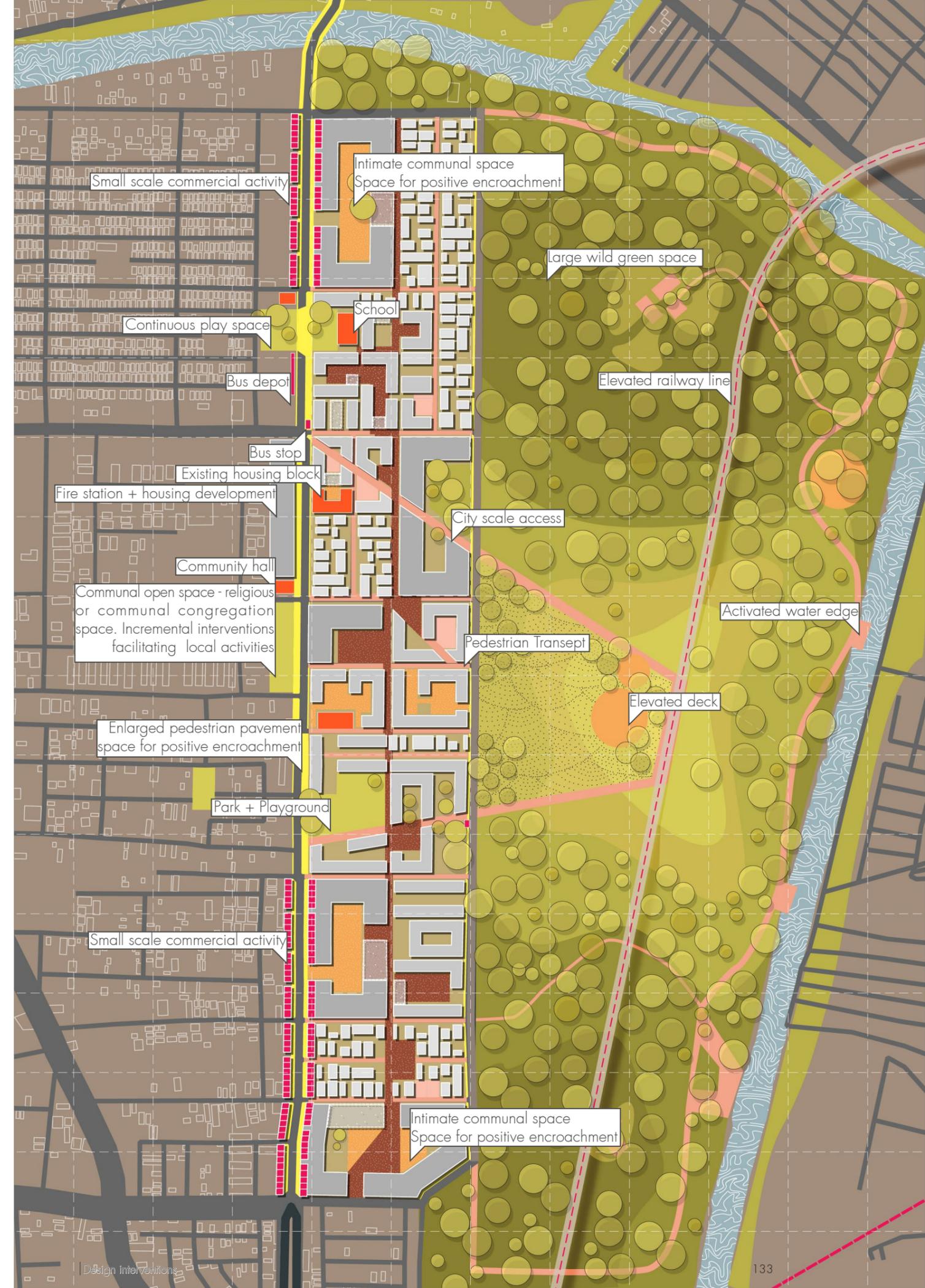


Fig 5.68: (right) Plan of the proposed design
Source: Author

SITE 1 - VYASARPADI

PROPOSED DESIGN

The focus of the proposed design encompasses the creation of communal spaces that are a result of spatial reconfiguration of the built fabric. This results in a multitude of spaces of different characteristics offering different possibilities.

The courtyards themselves become spaces that support everyday activities of the immediate residents. Whereas, the pedestrian spine offers possibility of safe movement away from the vehicular traffic and also weaves through a series of spaces that can cater to different user groups that can appropriate the spaces for their uses as they see fit.

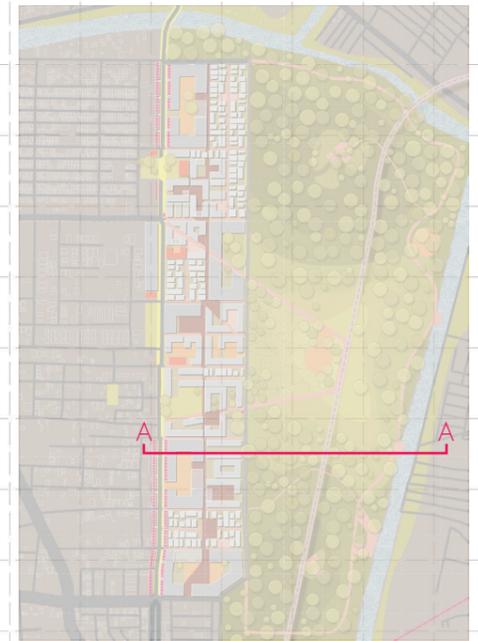
This creates a gradient of communal activity moving from the very active road to more calmer courtyards which are connected by an active pedestrian spine. And finally, transverse movement that takes the users across these spaces to the communal gardens by the green edge of the buffer space which is the city scale park interiors of which eventually has different spaces of unique qualities that are quite distinct from that of the urban block.

Fig 5.69: Conceptual diagram depicting the different communal spaces and activity that they enable
Source: Author



SITE 1 - VYASARPADI

5.1.6 DESIGN CROSS SECTIONS



Communal green spaces as incremental interventions for the community.

Large open city scale wild green spaces

Elevated railway line - transforming and relocating the industrial function

Elevated deck - Social spaces that enable visual connection with the green spaces and water edges

Activated water edge

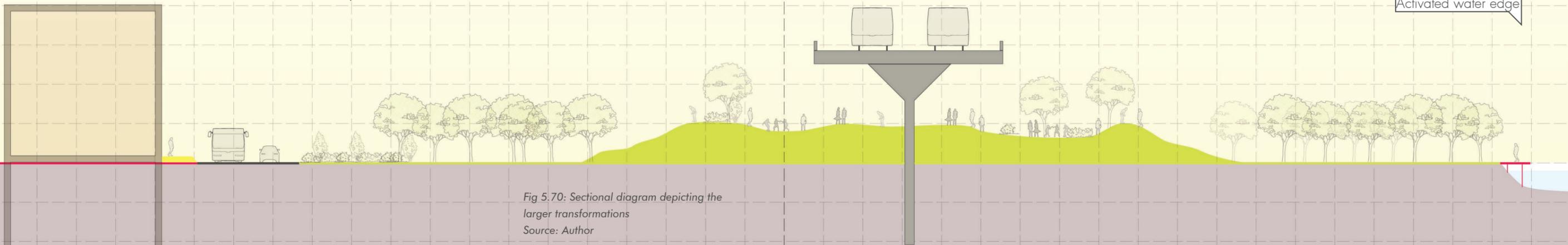
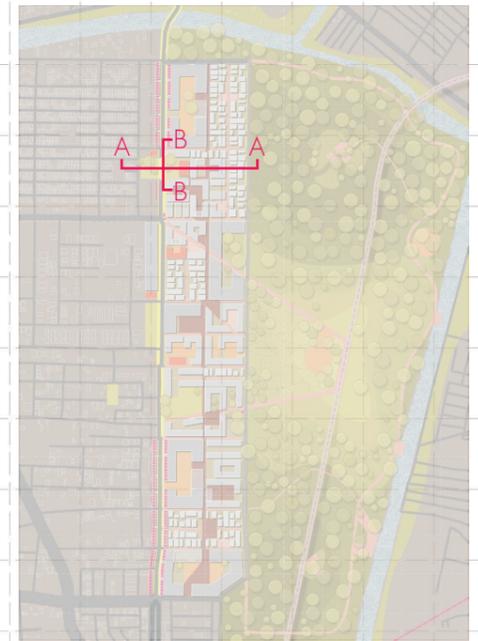


Fig 5.70: Sectional diagram depicting the larger transformations
Source: Author

SITE 1 - VYASARPADI
DESIGN CROSS SECTIONS



Continuous play spaces as extension of school and pedestrian pavements making them more accessible and communal.

Vehicular + Pedestrian Shared space allows for slower vehicular movement with increased pedestrian dominance

Wide pedestrian pavement facilitating social interactions

Vehicular + Pedestrian Shared space allows for slower vehicular movement with increased pedestrian dominance

Road - Asphalt

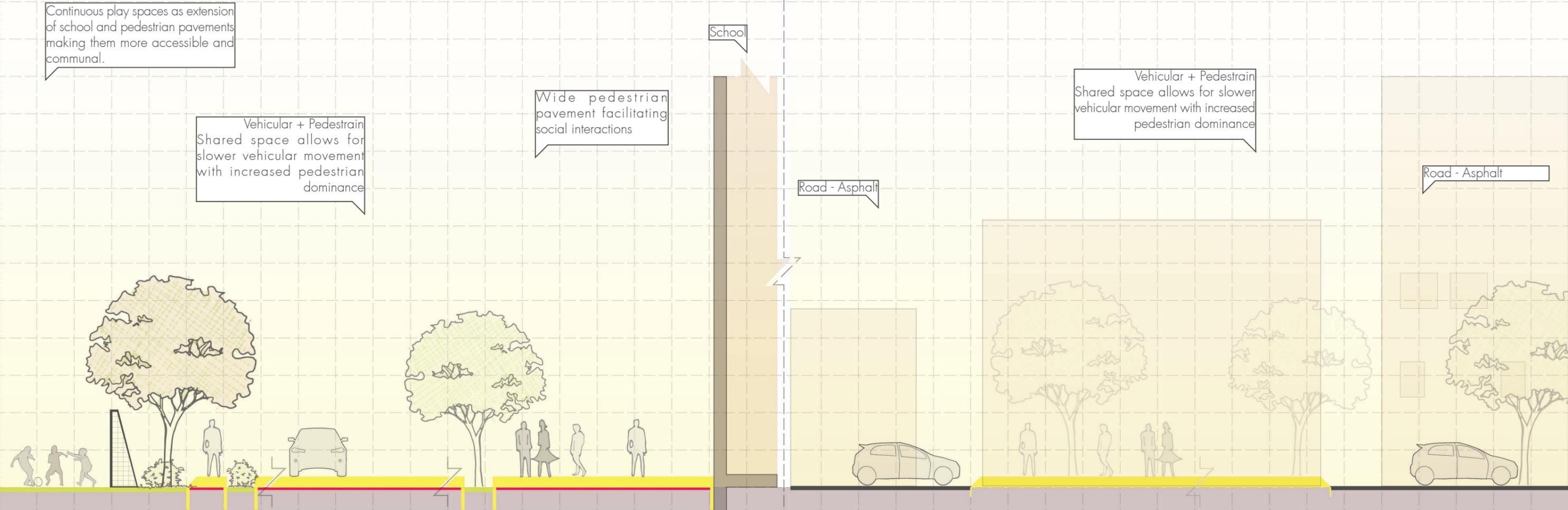


Fig 5.71: Sectional diagram of the shared space
Source: Author

SITE 1 - VYASARPADI

SPATIAL QUALITY - SHARED SPACES

SCHOOL

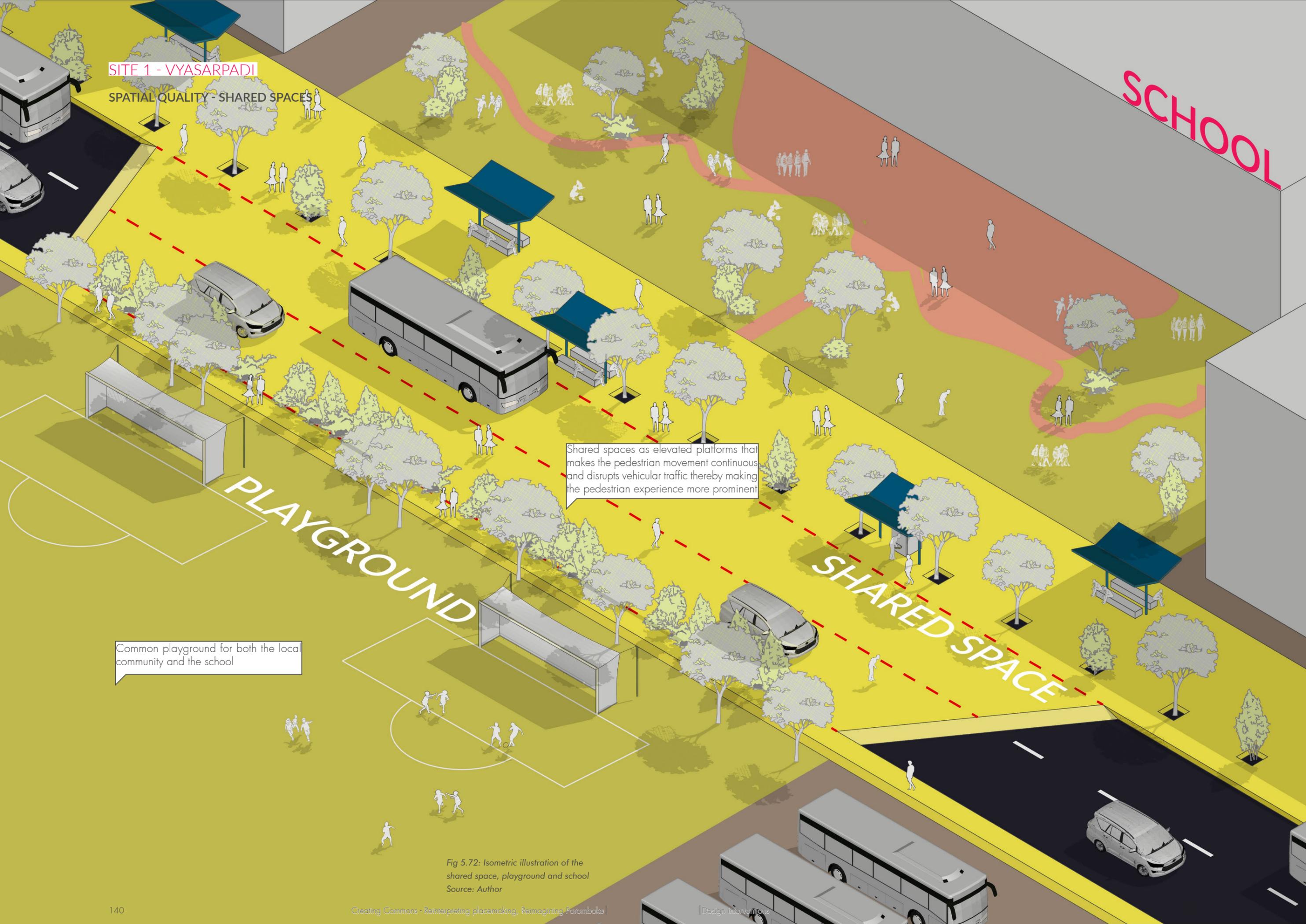
PLAYGROUND

SHARED SPACE

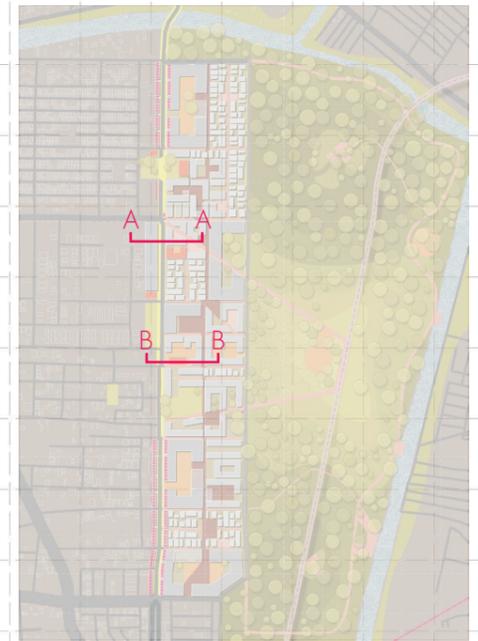
Shared spaces as elevated platforms that makes the pedestrian movement continuous and disrupts vehicular traffic thereby making the pedestrian experience more prominent

Common playground for both the local community and the school

Fig 5.72: Isometric illustration of the shared space, playground and school
Source: Author



SITE 1 - VYASARPADI
DESIGN CROSS SECTIONS



Fire station + housing development

Balconies overhanging on to streets
facilitating social exchange

Social amenities designed as
part of social spaces enabling
them as nodes of communal
social activity

Wide pedestrian pavement
facilitating social interactions

Narrowing down of the roads
and enabling wider pavements
- limiting vehicular traffic

Intimate communal spaces - spaces
for positive encroachment. dynamic
spaces for every livelihood
activities and play spaces

Continuous communal platform
Built volume extruded off the ground
to enable continuous communal
spaces.

City scale pedestrian access
pedestrian pathway of
city scale importance
connecting bus stop to green
space moves through the
neighbourhood.

Rainwater collection points
- permeable surfaces that
allow for water collection

Fig 5.73: Sectional diagrams of
transformation of fire station and the
dynamic interior courtyards
Source: Author

SITE 1 - VYASARPADI

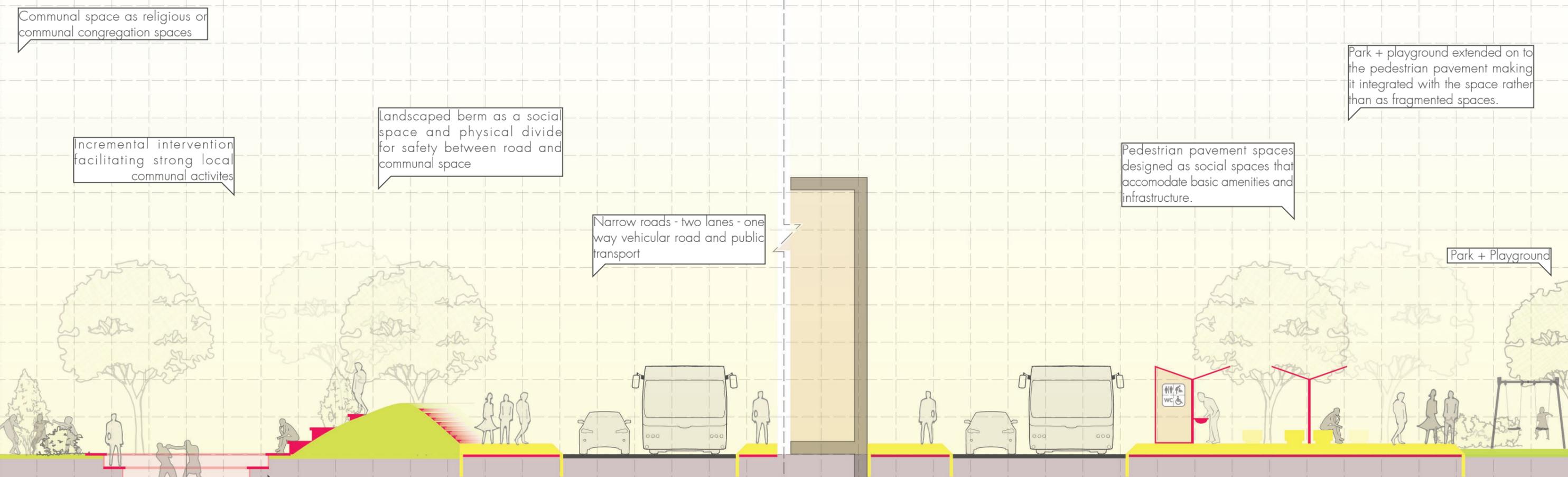
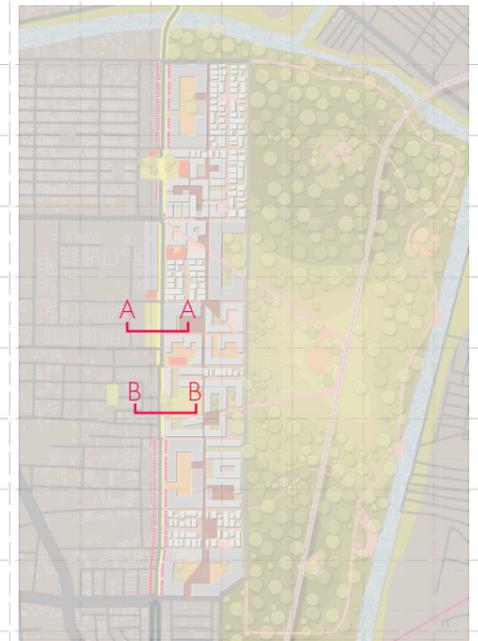
SPATIAL QUALITY - DYNAMIC COURTYARDS

Spaces taking up a dynamic temporal quality. They become spaces of everyday life, spaces for household work and gathering by the day.

These intimate courtyards become safe spaces of play by the evening, spaces for an evening gathering among the community with minimal incremental interventions

Fig 5.74: Perspective illustration of the dynamic nature of courtyards
Source: Author

SITE 1 - VYASARPADI
DESIGN CROSS SECTIONS



Communal space as religious or communal congregation spaces

Incremental intervention facilitating strong local communal activities

Landscaped berm as a social space and physical divide for safety between road and communal space

Narrow roads - two lanes - one way vehicular road and public transport

Pedestrian pavement spaces designed as social spaces that accommodate basic amenities and infrastructure.

Park + playground extended on to the pedestrian pavement making it integrated with the space rather than as fragmented spaces.

Park + Playground

Doubles up as a water square for water collection in the wet months.

Fig 5.75: Sectional diagram of the communal gathering space
Source: Author

Fig 5.76: Sectional diagram of amenities as social nodes and integration of park
Source: Author

SITE 1 - VYASARPADI

SPATIAL QUALITY - COMMUNAL SPACES AND PUBLIC AMENITIES



Communal gathering spaces enable religious gatherings of local activities like boxing and music and offer safe play spaces for kids

Fig 5.77: Perspective illustration of the communal gathering space
Source: Author

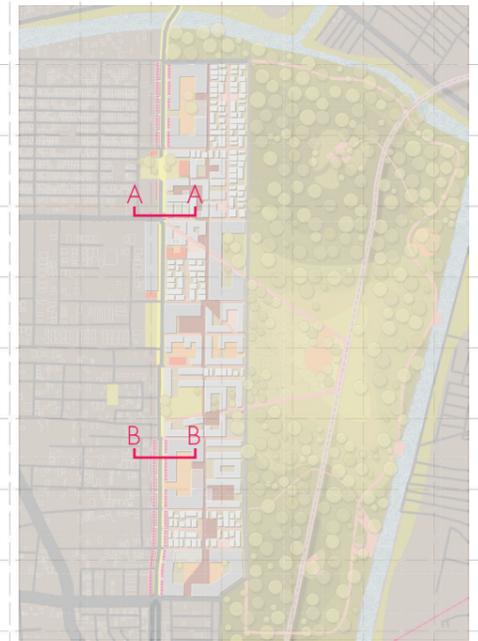


Public amenities are provided for as social nodes that further instigate social processes and opening up the park to the pedestrian areas

Fig 5.78: Perspective illustration of public amenities as social nodes and the park
Source: Author

SITE 1 - VYASARPADI

DESIGN CROSS SECTIONS



Incremental intervention facilitating strong local communal activities

Creating a separate lane for bus stops and hence not disrupting the traffic flow.

Bus stops as social nodes and infrastructure nodes

Activating the ground plane by introducing small scale commercial activity

Widening the roads allowing for a service lane for parking near the commercial activities

Allowing for encroachments that extends the commercial activity onto the pavements further activates the ground plane and social nodes

Allowing for balcony projections on to the pedestrian pavements as shading devices and spilling the commercial activity on to the streets.

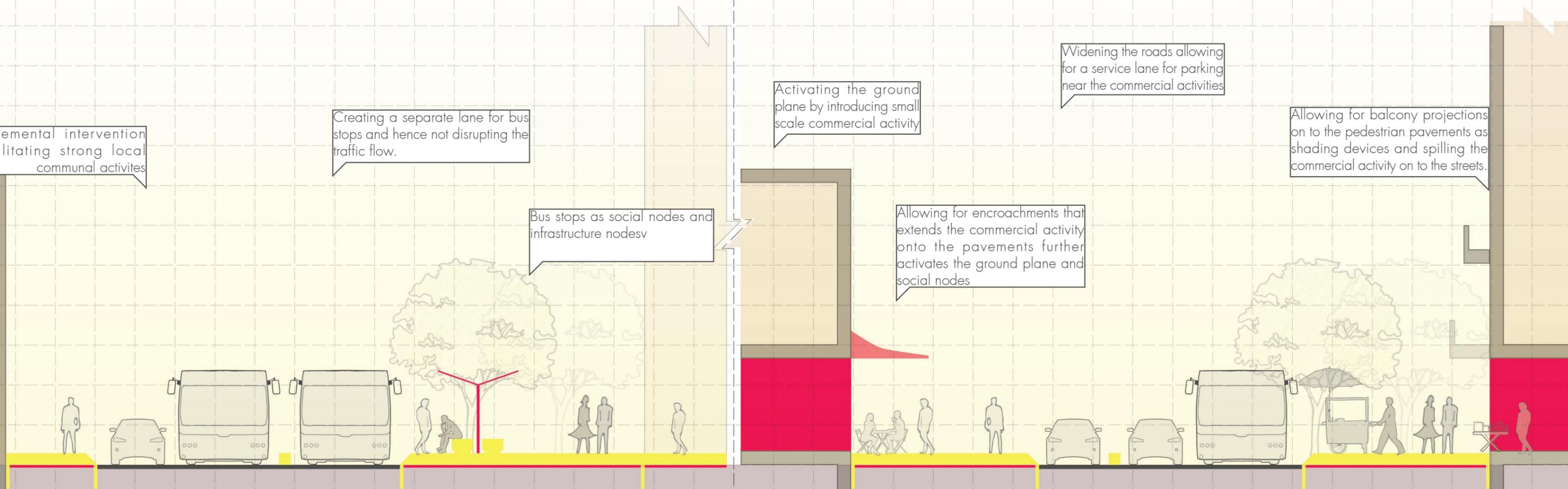


Fig 5.79: Sectional diagram of the bus stop and commercial activity
Source: Author

SITE 1 - VYASARPADI

SPATIAL QUALITY - ACTIVE GROUND PLANE

The proposed interventions for the design site achieve a balance between tapping the potentials that site offers and tackling the challenges the site faces. The potentials being the strong social capital and their everyday life spilling over to the streets which enable the vibrant nature; the large city scale green space and an active water edge. The challenges being a need for spaces that support the spilling over of the activities; lack of local commercial activity; highly prominent vehicular movement and almost non-existent pedestrian friendly movement.

In conclusion, the interventions proposed for the site revolve around creating a heavily pronounced character of commonality that targets the local residents and a subtle character of generality that targets the users of the city scale green space.



Fig 5.80: (right) Perspective illustration of commercial activity on the active road
Source: Author



SITE 2 - CHENNAI CENTRAL



5.2 SITE 2 - CHENNAI CENTRAL

5.2.1 POTENTIALS AND CHALLENGES

COMMODITY SPECIFIC COMMERCIAL AREAS

Chennai central and the neighbourhood of Vepery are known for their commercial areas that predominantly sell leather goods and construction material with the latter taking prominence. This being a city scale commercial function, users of the space come from the entire city and furthermore because this is located at the heart of the city, it leads to heavy traffic congestion.

Being located adjacent to a transit hub, this location has the potential to take up a lot more density and diverse functions. But while achieving this, the additional burden placed on traffic and the mobility networks need to be considered.

HERTIAGE STRUCTURES, FOOTBALL STADIUM AND COLONIAL PARK

The chosen site is home to multiple heritage structures like the Ripon building, Victoria memorial hall, the Chennai central terminal and the colonial My lady's garden.

All the city scale institutional functions offer a large potential in the transformation of the area into a city scale destination. As such in the city today, these structures are underappreciated with very restricted or almost no free access to the public. These buildings also can become the fulcrum of this area with a potential to house large public functions or simply act as magnets of public activity in favour of appreciation of these structures.

MOORE MARKET

The chosen site used to house the pre colonial Moore market that got burned down in a controversial fire. Since then, the shop owners have found their own means to set up shop in an organic fashion along the streets of the area. Although, the market today has lost its essence and significance, it offers a huge potential for revitalisation to further create an anchor function around the site to further increase footfall with a potential to become a destination.

Fig 5.81: (left, top) Commercial areas of Raja muthiah road
Source: Author

Fig 5.82: (left, middle) Ripon building
Source: Ashwin prasath

Fig 5.83: (left, bottom) Moore market
Source: Mahesh V

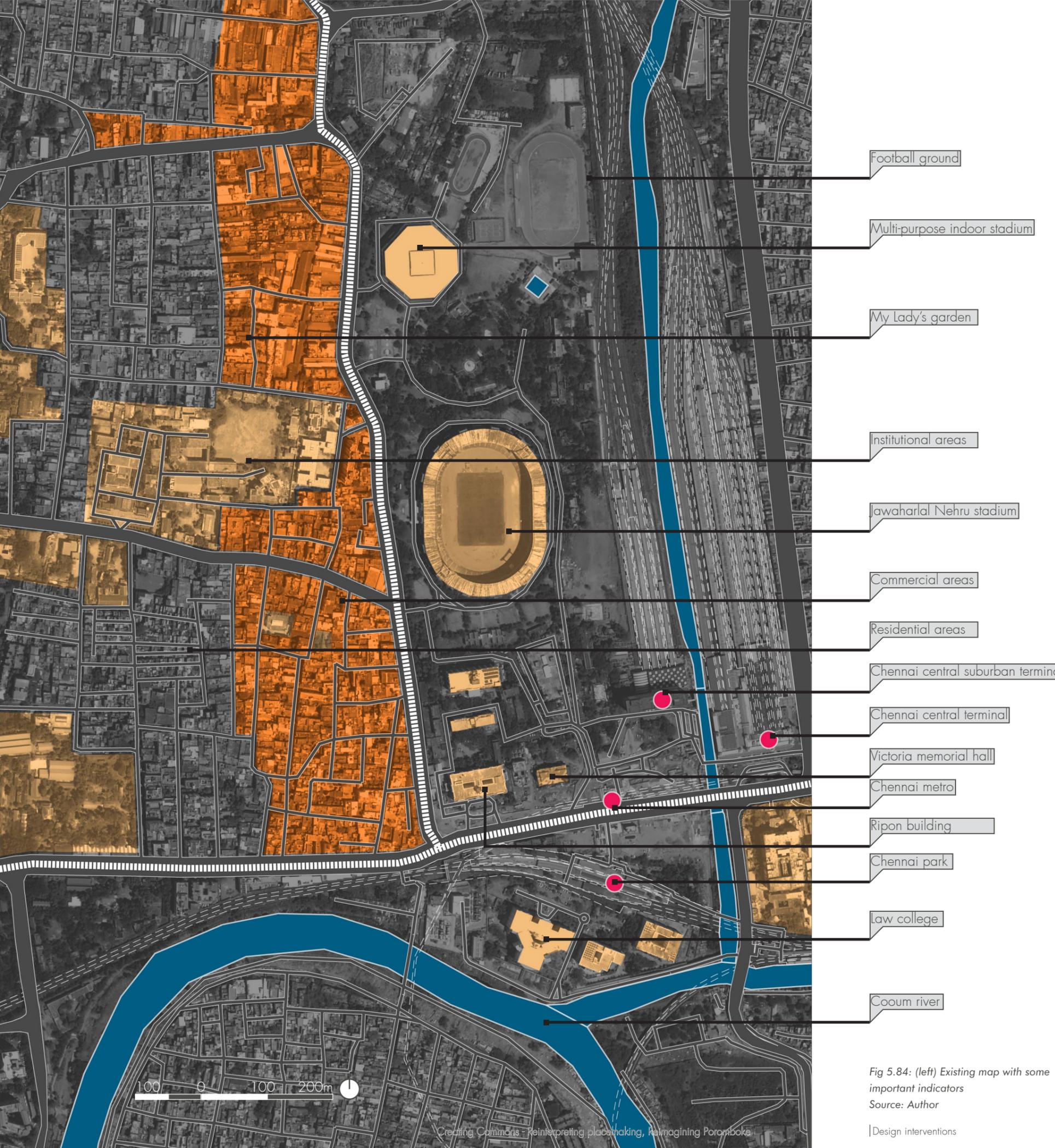
SITE 2 - CHENNAI CENTRAL

5.2.2 EXISTING SITE CONDITIONS

The chosen site located at the heart of the city and has 4 major railway terminals at a close proximity, one of which is the interstate railway hub. In addition to this, the commercial activity in the area leads to heavy traffic congestion in the primary road - Raja muthiah road. This is a result of the road being the only distributor road for the different functions along the road catering to different user groups. This located in the core of the city, is also one of the oldest neighbourhoods of the city with standard of liveability being very poor.

The key aspect to note here is the juxtaposition of a collage of large city institutional functions and a finer grain residential fabric. These two functions along with the large commercial functions exist as the backyard to one another. In the sense that they merely exist one next to another and not coexist in an integrated manner.

However, being home to large key institutions in the city, the site has high footfall and thus has a large untapped potential to transform the location to a city scale destination which would then have implications on the local living environments. Additionally, the reintroduction of the Moore market would definitely be a high point of attraction towards this site.



Design Intentions

To set up a city scale destination (market and park) and liveable neighbourhood at the local scale that closely responds to the larger space

Target user groups

- Local shop owners
- Local residents
- Users of the commercial areas
- Other users of the city scale destination

Design principles

- Gaining trust of the locals with quick spatial interventions
- Spaces that organically work in parallel with the local functions
- Providing for necessary public amenities

Fig 5.84: (left) Existing map with some important indicators
Source: Author

SITE 1 - VYASARPADI

EXISTING SITE CONDITIONS

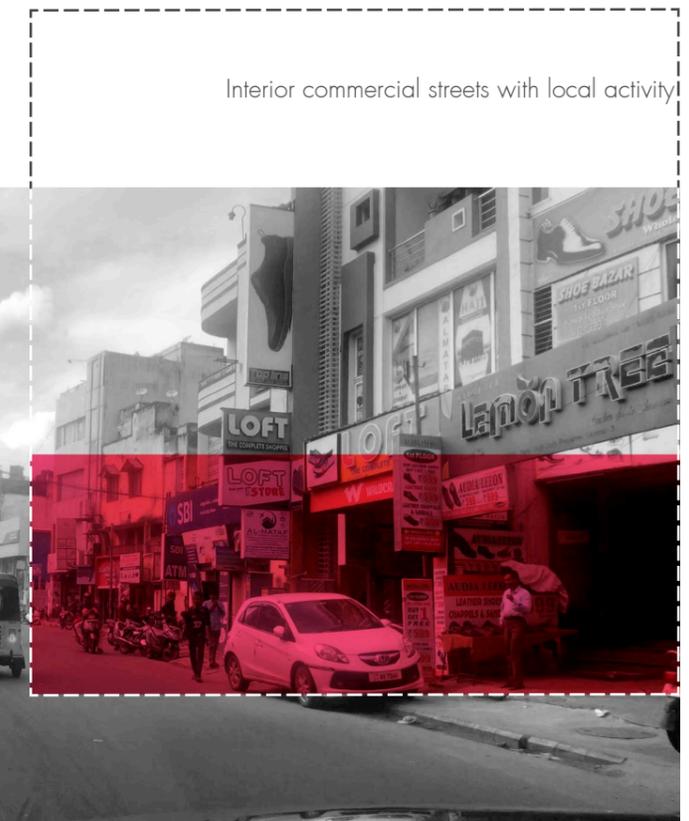
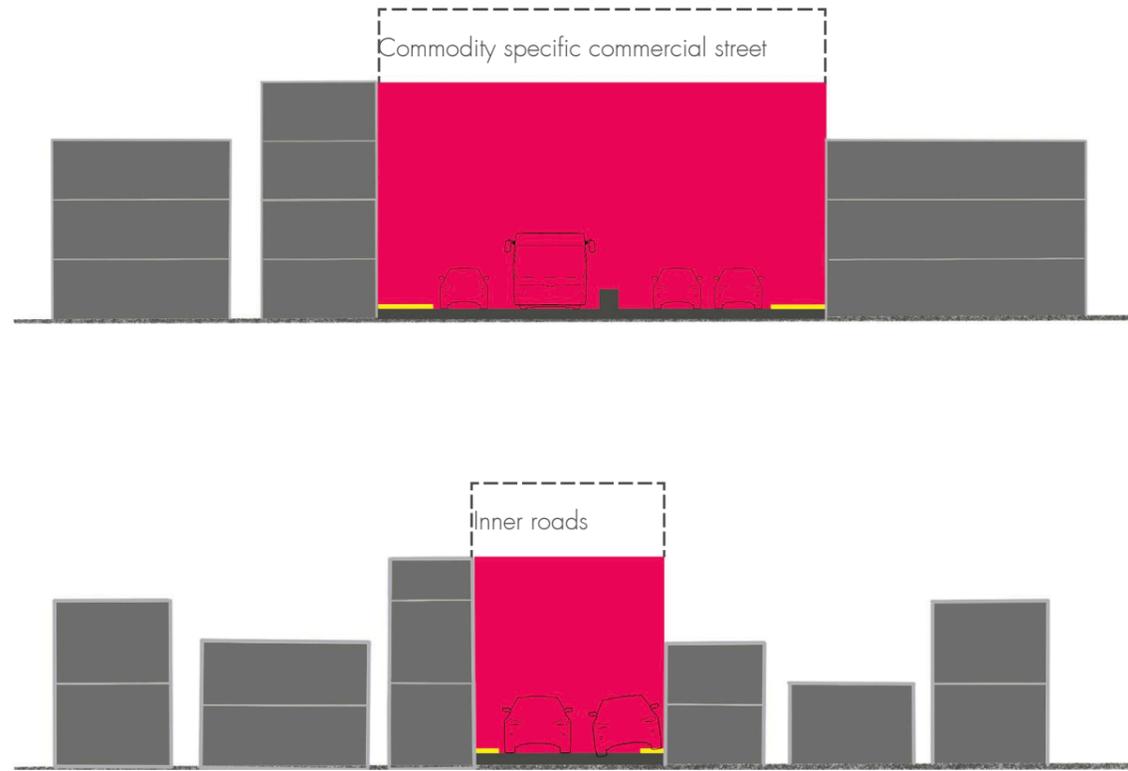


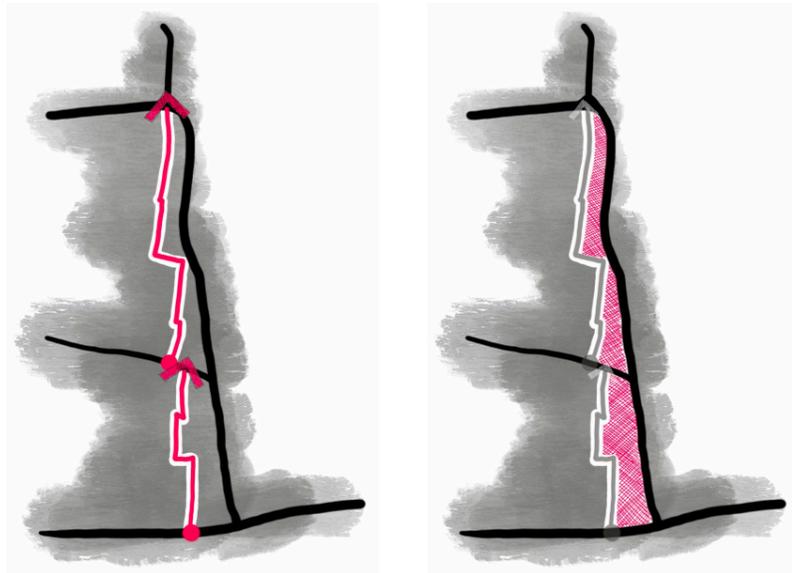
Fig 5.85: Diagrams and images indicating existing spatial conditions
Source: Author

SITE 2 - CHENNAI CENTRAL

5.2.4 DESIGN EVOLUTION - BLOCK TRANSFORMATION

SECONDARY SERVICE NETWORK & COMMERCIAL BLOCK

Creating a network of secondary service roads that supplement the existing commercial function and decongest the traffic on the main road. Redefining and transforming the commercial block to adopt the podium model in order to densify and diversify the monofunctional character of the space.



PEDESTRIAN NETWORK

A tertiary network of pedestrian pathways at the point of intersection between the two different zones of functions - commercial and residential. This serves as a point of dialogue between the two and changes the outlook of one serving as a backyard to the other.

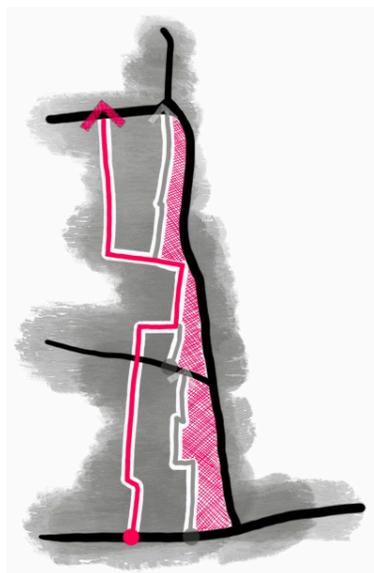
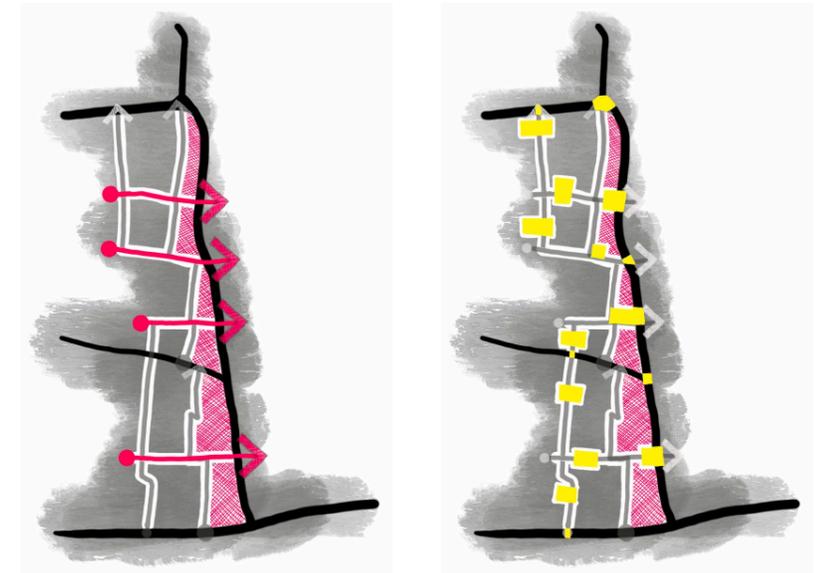


Fig 5.86: Design evolution and transformation of the urban block
Source: Author

PEDESTRIAN PATHWAYS AND OPEN SPACES

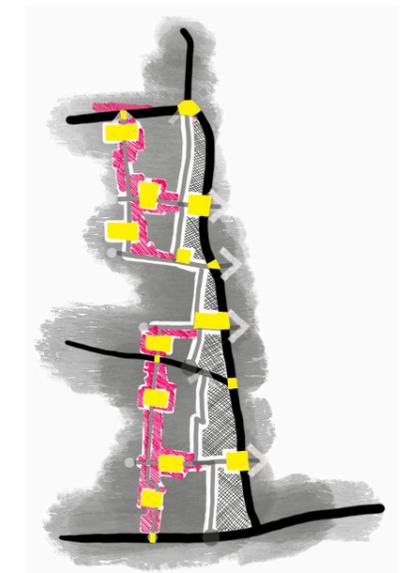
Secondary network of transverse pedestrian pathways to define short blocks and create pedestrian pathways that lead up to the main road.

Additionally, creating a series of open spaces along the grid of pedestrian pathways to facilitate dynamic spaces of appropriation that serve the purpose of the much needed lung spaces in these dense and tight neighbourhood. In addition to this, functionally, they serve as spaces of pop-up activity, or safe play spaces for kids or spaces for the local community for other purposes.



LOCAL COMMERCIAL FUNCTIONS

Activating the final grid of pedestrian pathways by enabling local commercial functions as an attempt to further increase the vibrancy of the environment and direct activity towards the common line of dialogue between the different functions.

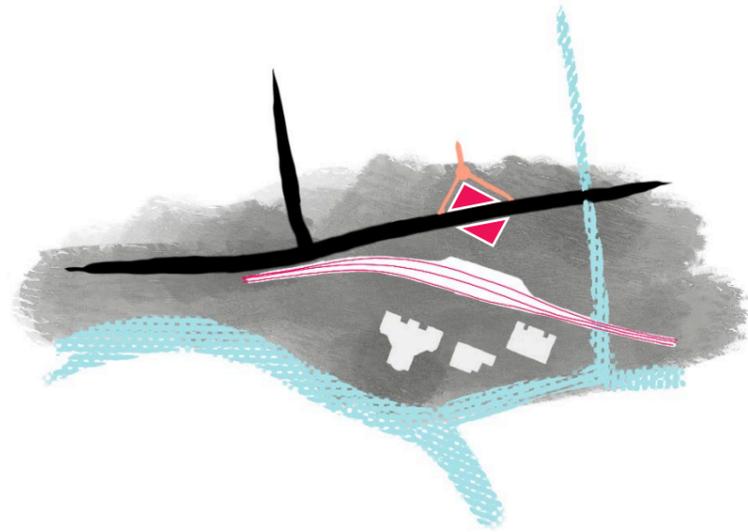


SITE 2 - CHENNAI CENTRAL

5.2.5 DESIGN EVOLUTION - MARKET

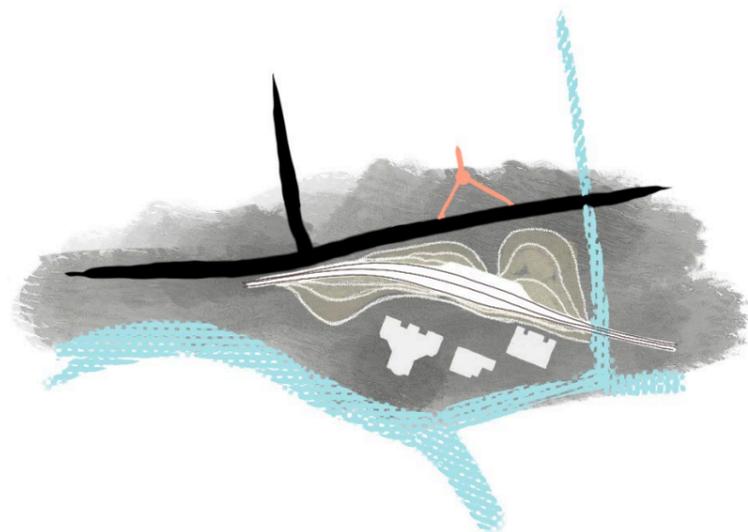
CROSSOVER PUBLIC INFRASTRUCTURE - SUNKEN SQUARE

Creating a sunken square as a point of pedestrian access to the communal market from the Victoria memorial hall and the gathering spaces around it.



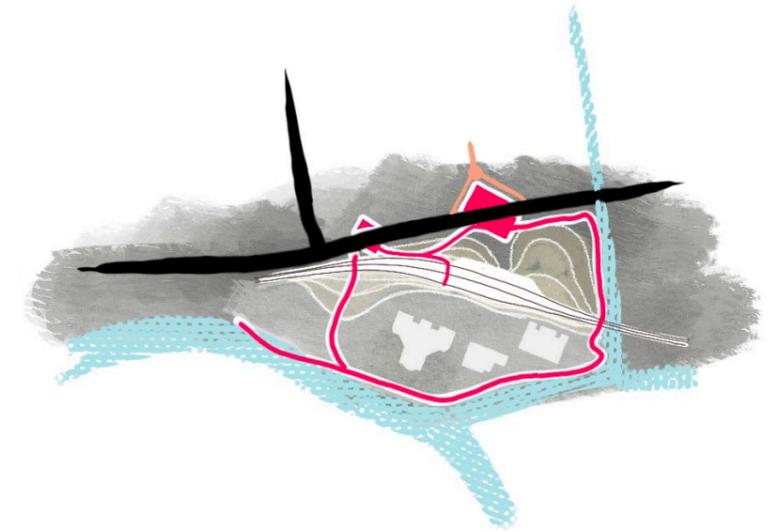
CROSSOVER RAILWAY LINE - LANDSCAPED BERMS

Landscaped berm to tunnelise and create an overpass over the railway line to provide access to the water edge and blend the two spaces into one. This additionally cuts off the sound of the railway line to a certain extent from the public place.



PEDESTRIAN PATHWAYS

Creating pathways that loop around the space - providing access to the market, water edge, train station, college campus, heritage site and gathering space.



GRADIENTS OF ACTIVITY.

Establishing the Moore market on one side and a quite landscaped water edge in order to create two distinct environments of different grades of activity. The market as a vibrant active space and the water edge as a calm quiet water edge.

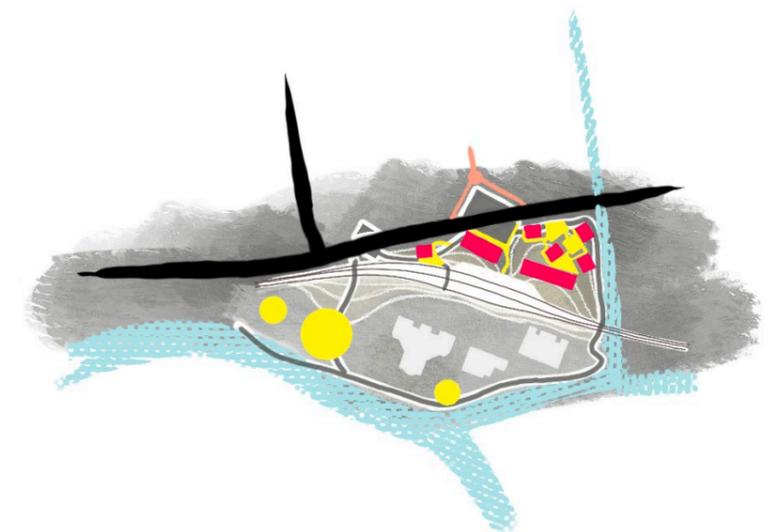


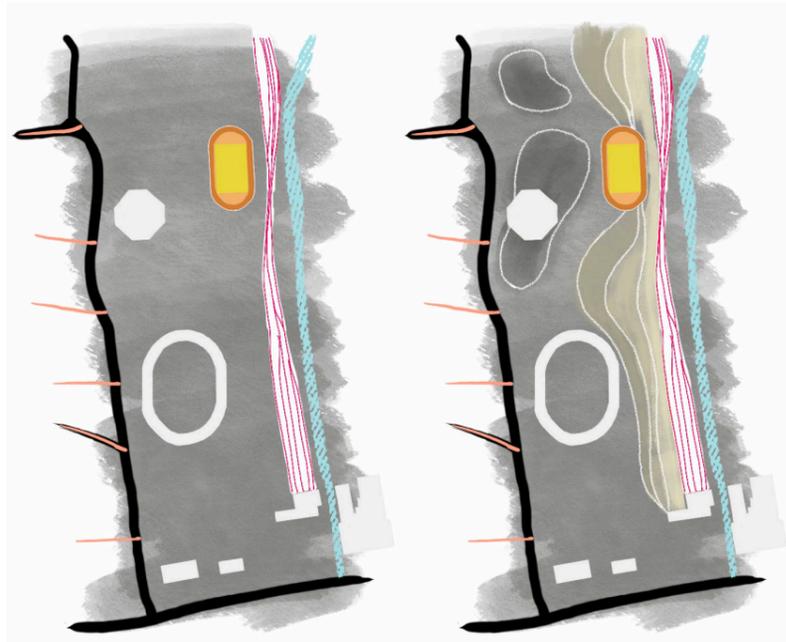
Fig 5.87: Design evolution the market
Source: Author

SITE 2 - CHENNAI CENTRAL

5.2.6 DESIGN EVOLUTION - CITY SCALE PARK

CROSSOVER RAILWAY LINE - LANDSCAPED BERMS

Landscaped berm to tunnelise and create an overpass over the railway line to provide access to the water edge and blend the two spaces into one. This additionally cuts off the sound of the railway line to a certain extent from the public place.



PATHS OF INTEGRATION

The pedestrian pathways from the built urban fabric are further extended into the park to better integrate the two spaces and create a seamless transition from the bustline active space into a calm quite large green space.



ACTIVE FUNCTIONS ALONG PATHWAYS

Creating alternate active and calm zones within the park to create diverse possibilities. Furthermore, sport functions that are closely related to the program of the stadium are introduced along the pathways to ensure the space is well utilised and not just during the times of large events.



FUNCTIONS ALONG THE EDGE

Small scale commercial activities are introduced along the edge of the park towards the built fabric. This draws activity towards the park as well as diversifies the commercial opportunities and thus the possibilities to the users within the area. This ensures people don't just come for the commercial function of the park but the space becomes well integrated with the intention to promote both functions.



Fig 5.88: Design evolution and articulation of the city scale park
Source: Author

SITE 2 - CHENNAI CENTRAL

5.2.7 PROPOSED DESIGN

The proposed design plan shows the transformation of the large green space into a more accessible city scale public place. While retaining some of the key functions like the football stadium and the indoor multipurpose stadium, other smaller support functions are relocated to just the other side of the road where further densification is proposed. This opens up room for other similar sport functions that can be accessed by the public. Also, the two side of the railway line are bridged to enable access to and activate the water edge while also cutting down the noise levels from the railway line.

The transformation of the urban block predominantly revolves around 3 aspects - creation of a network of pathways that instigate pedestrian activity, creating local commercial functions and open spaces along this to create an engaging dialogue between the two functions of commercial activity and residential neighbourhoods, and finally the densification and the diversification of the commercial functions.

The pedestrian network weaves together the entire fabric together into one cohesive environment. At the same time it also provides room for pop-up activity to take place. This encourages the appropriation of spaces by the locals and using the spaces as they see fit.

The commercial functions around the pedestrian network not only caters to the needs of the local residents but also activates the ground plane. And more so because this is situated at a point of common ground between the two functions, it opens up a place of dialogue where one supports the other.

Finally the use of podium model offer possibilities of further densification, room for more diverse commercial functions and also extends the public realm in to the built fabric. However, the commercial activity at the ground floor is retained to activate the ground plane along the main road and along the service road it is converted as a shared warehouse space that eases servicing of these areas and improves efficiency by bringing forth benefits of shared agglomerations.

Finally some of the smaller interventions include allowing for small hawkers and vendors to set up shop in "islands of appropriation" that offer further possibilities to target user while also allowing for the much needed on street parking spaces. This creates possibilities of integrating the two functions. By providing for these along the park, it draws the users of the commercial spaces towards the park and vice versa. Additionally, shared spaces are provided as raised platforms that disrupts vehicular movement and further emphasises pedestrian movement.

The proposed design interventions are further detailed in a series of sectional diagrams and perspective illustrations that depict the spatial qualities.

KEY

- Local scale commercial functions
- Pedestrian grids
- Spaces of pop-up activity
- New commercial blocks on podiums
- Public places on podiums
- Sunken square
- Moore market

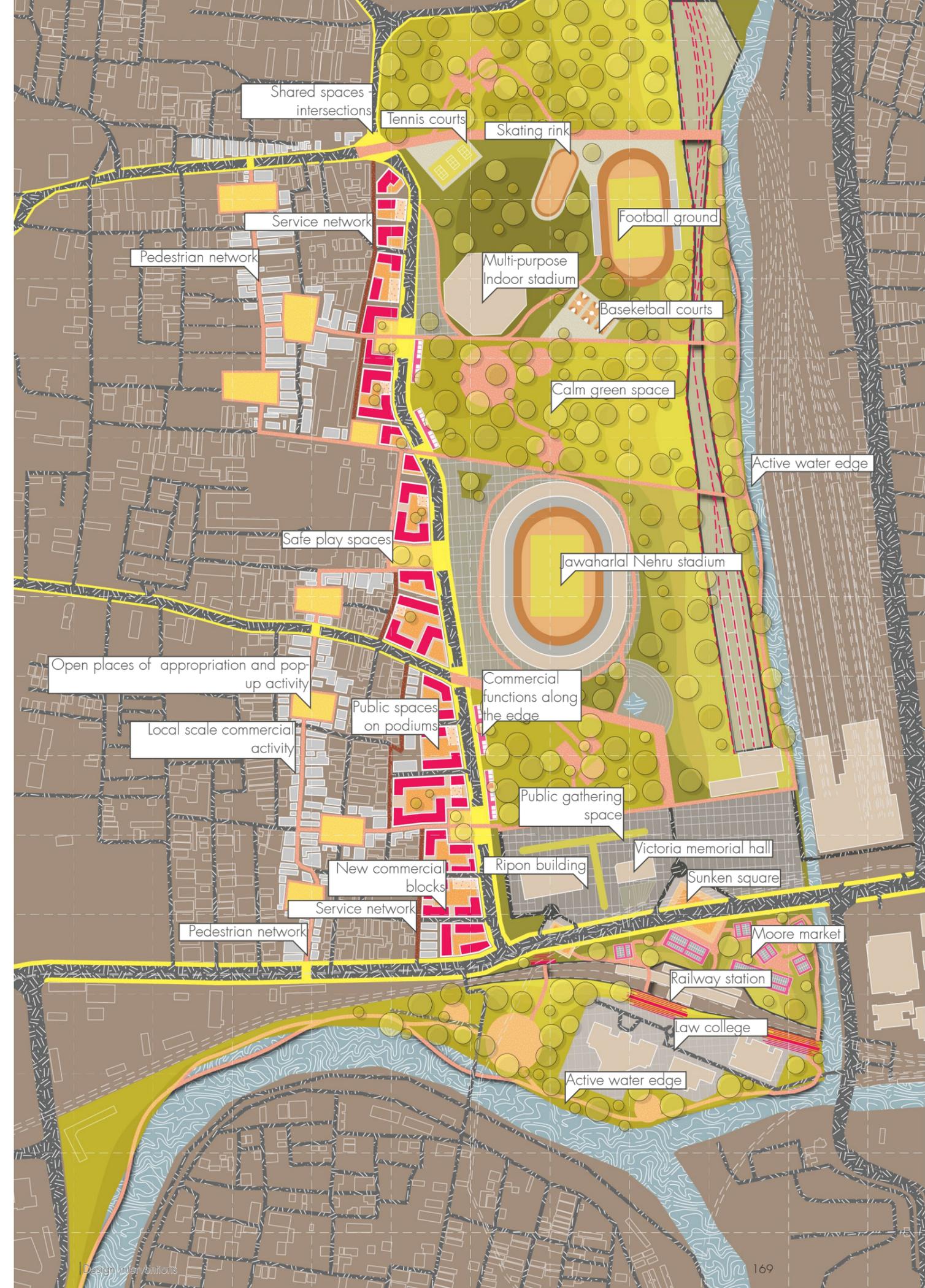


Fig 5.89: (right) Plan of the proposed design
Source: Author

SITE 2 - CHENNAI CENTRAL

PROPOSED DESIGN

The proposed design primarily revolves around the integration of the different functions that cater to a multitude of user groups across different scales. This creates diverse spaces of unique spatial characteristics offering different possibilities.

The pedestrian network creates a network of intimate spaces that become points of activity between two different functions that previously existed as a backyard to each other. This integrates the two different aspects of the sites. Furthermore, the open spaces along this network become dynamic spaces that take up different activities during different time of the day. They enable the local way of life by allowing for pop-up activity to take shape in these spaces.

On the other hand, The main road becomes a lot more vibrant and not so intimate as the pedestrian network. They offer possibilities of commercial activities of different scales ranging from street vendors to large commodity specific activity. Additionally the extension of the public realm on to the built fabric further makes the atmosphere more vibrant.

This further extends in to the calmer park space that also accommodate some sport functions and finally terminates at the calmer canal front. All these offer different possibilities to the different target users creating a truly inclusive environment that functions as a destination as well as catering to the local residents.

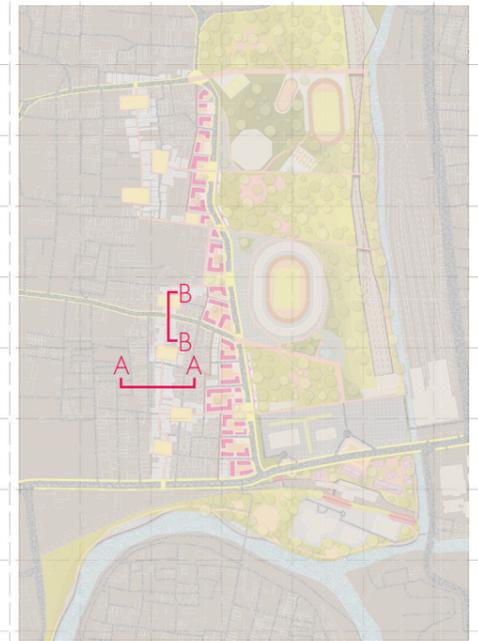
Fig 5.90: Conceptual diagram depicting the network of pedestrian path and open spaces and the densification and diversification of functions

Source: Author



SITE 2 - CHENNAI CENTRAL

5.2.8 DESIGN CROSS SECTIONS



Existing residential fabric

Pedestrian network with local scale commercial activity

Raised shared spaces that emphasize on pedestrian movement over vehicular traffic

Pedestrian network with local scale commercial activity



Fig 5.91: Sectional diagrams of the shared spaces to emphasize pedestrian movement
Source: Author

SITE 2 - CHENNAI CENTRAL

SPATIAL QUALITY - PEDESTRIAN NETWORK, COMMERCIAL ACTIVITY AND OPEN SPACES

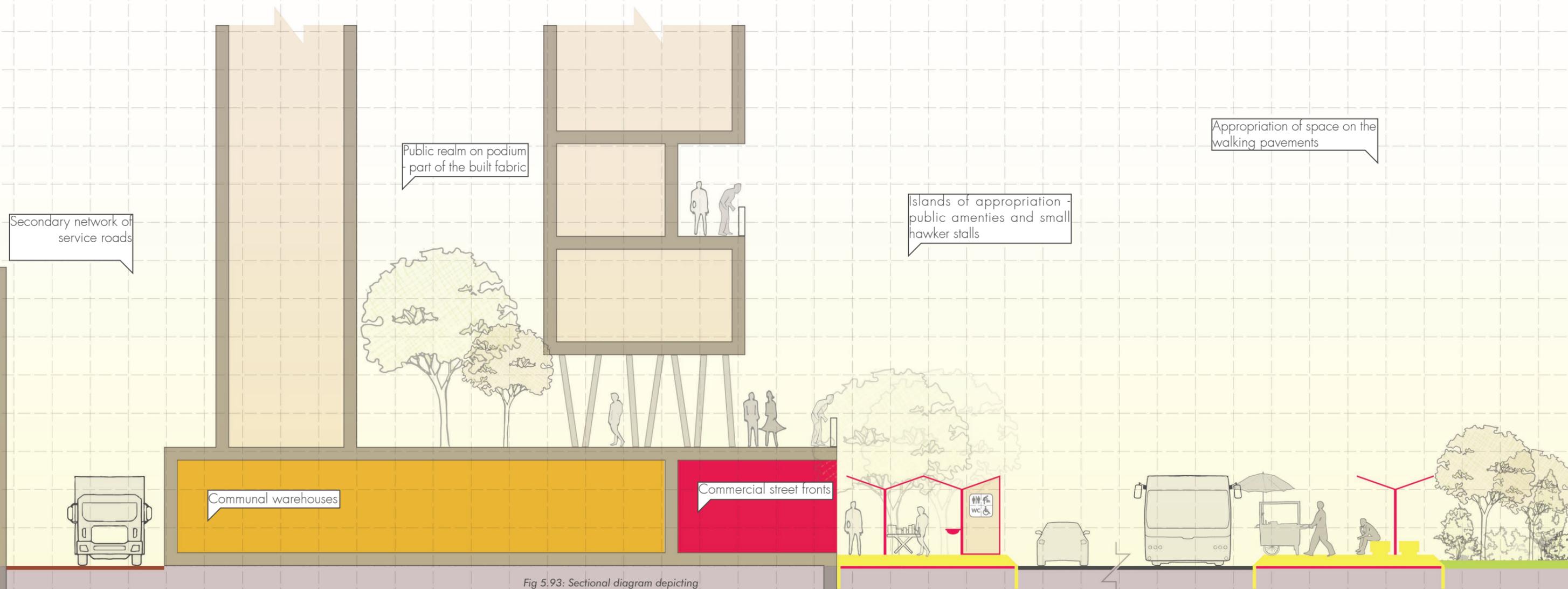
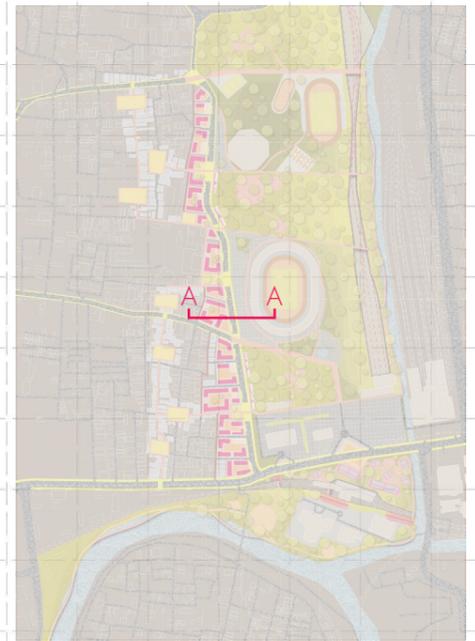
Intimate pedestrian paths and local commercial activity instigates a dialogue

Open spaces around commercial activity and residential spaces allow for pop up activity and dynamic use of space

Fig 5.92: Perspective illustrations of the intimate commercial streets and dynamic open spaces
Source: Author

SITE 2 - CHENNAI CENTRAL

DESIGN CROSS SECTIONS



Public realm on podium - part of the built fabric

Secondary network of service roads

Communal warehouses

Commercial street fronts

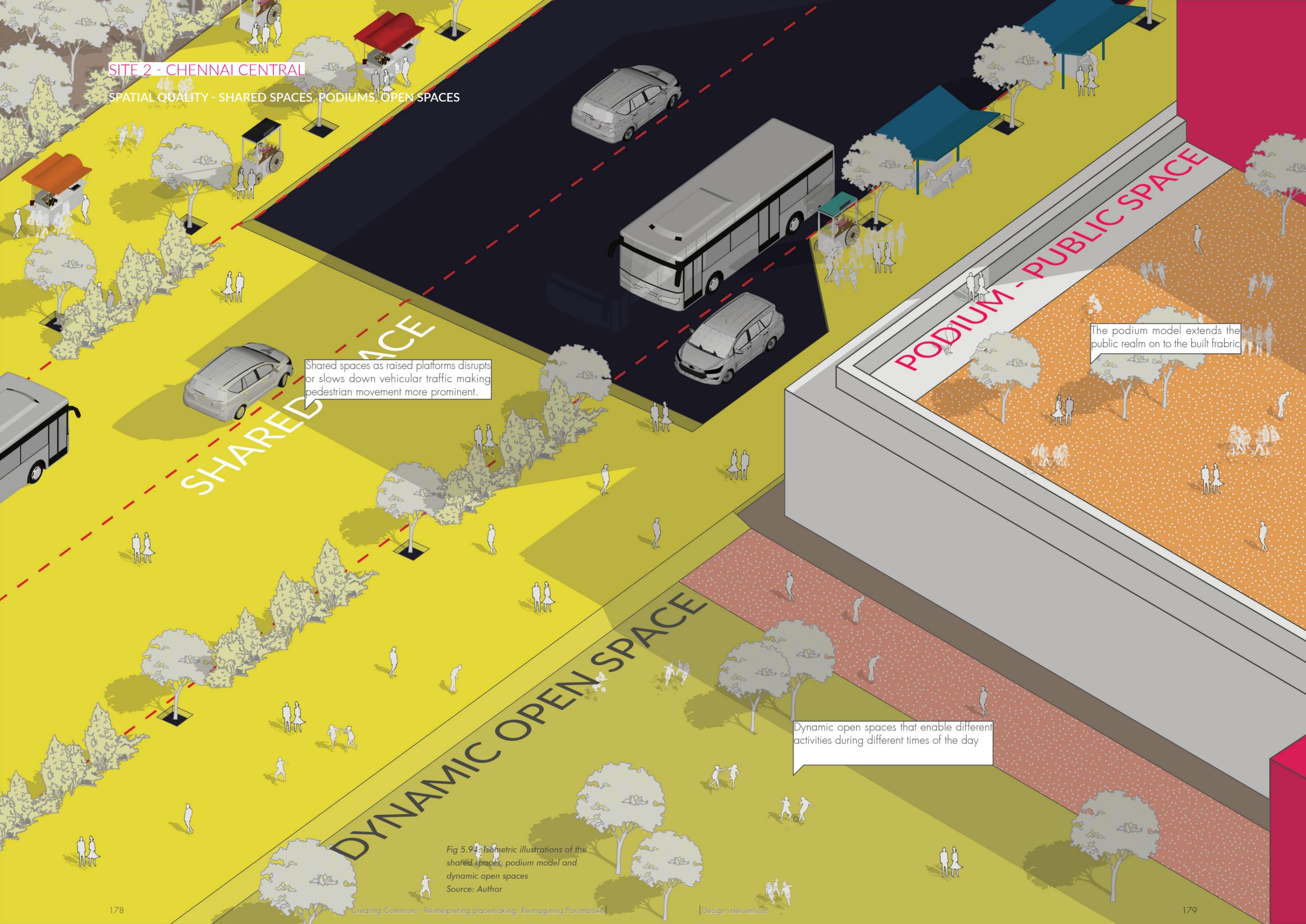
Islands of appropriation - public amenities and small hawker stalls

Appropriation of space on the walking pavements

Fig 5.93: Sectional diagram depicting podium model and islands of appropriation
Source: Author

SITE 2 - CHENNAI CENTRAL

SPATIAL QUALITY - SHARED SPACES, PODIUMS, OPEN SPACES



Shared spaces as raised platforms disrupts or slows down vehicular traffic making pedestrian movement more prominent.

The podium model extends the public realm on to the built fabric

Dynamic open spaces that enable different activities during different times of the day

Fig 5.94: Isometric illustrations of the shared spaces, podium model and dynamic open spaces
Source: Author

SITE 2 - CHENNAI CENTRAL
DESIGN CROSS SECTIONS

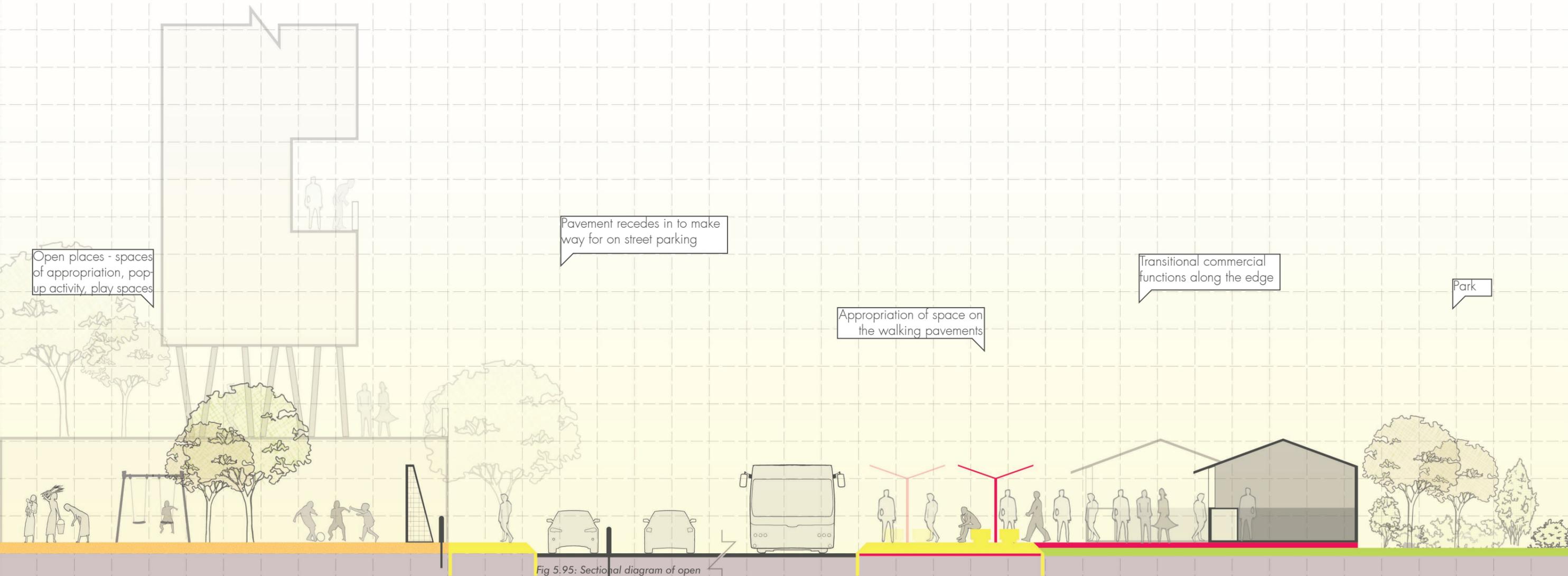
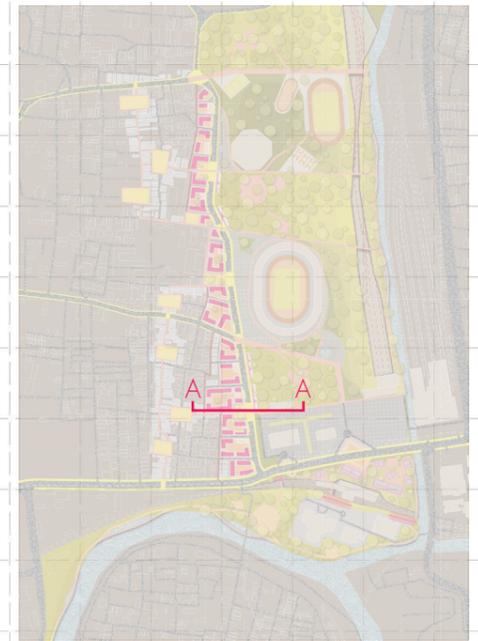


Fig 5.95: Sectional diagram of open spaces and small commercial activity along the park
Source: Author

SITE 2 - CHENNAI CENTRAL

DESIGN CROSS SECTIONS

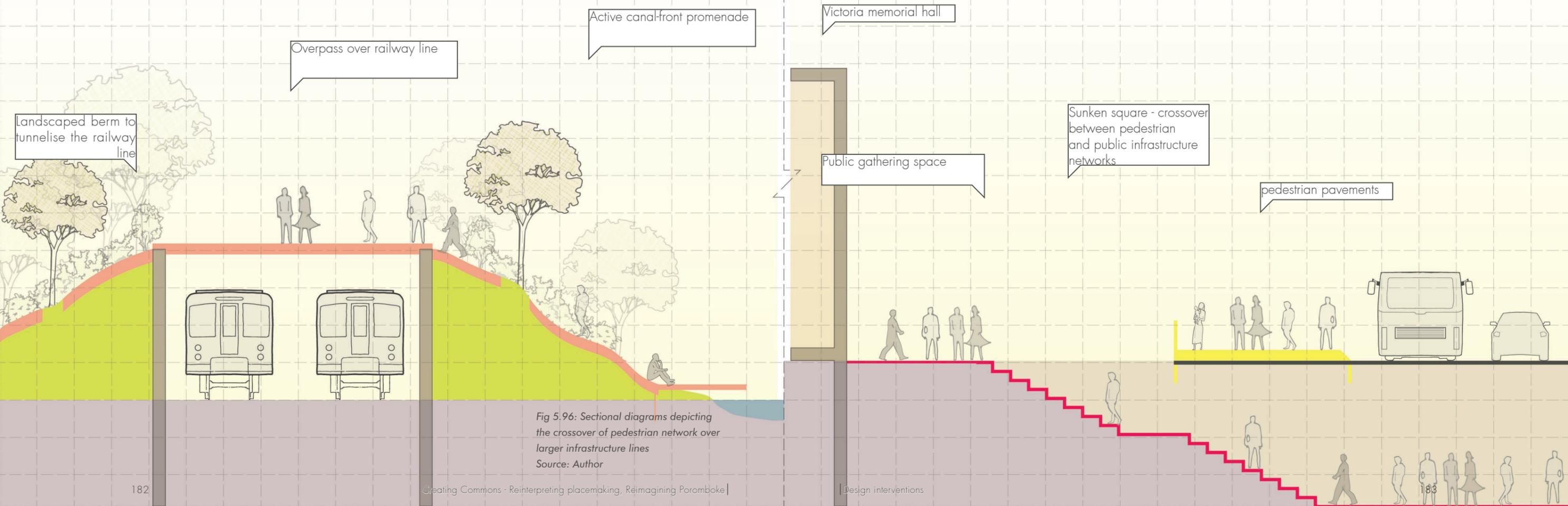
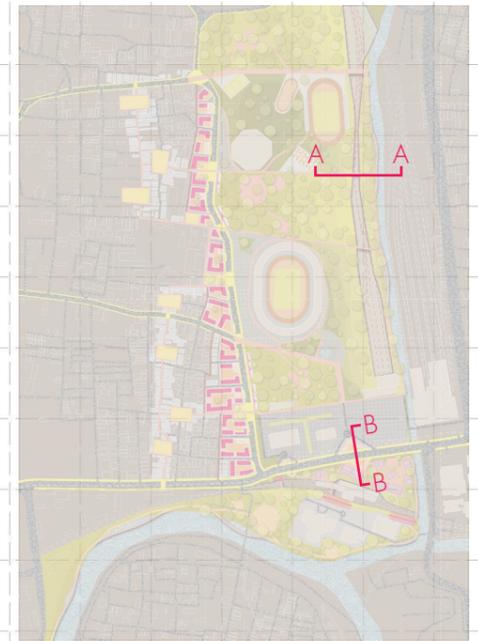


Fig 5.96: Sectional diagrams depicting the crossover of pedestrian network over larger infrastructure lines
Source: Author

SITE 2 - CHENNAI CENTRAL

DESIGN CROSS SECTIONS

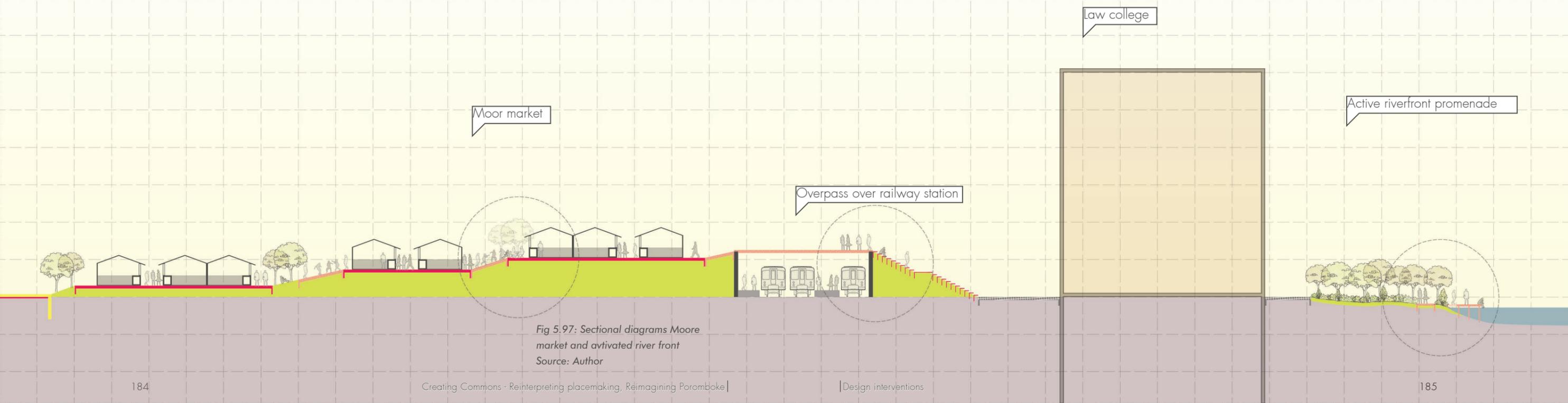
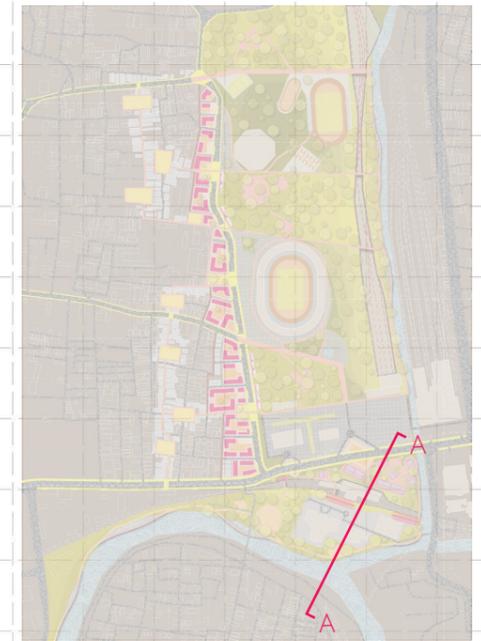
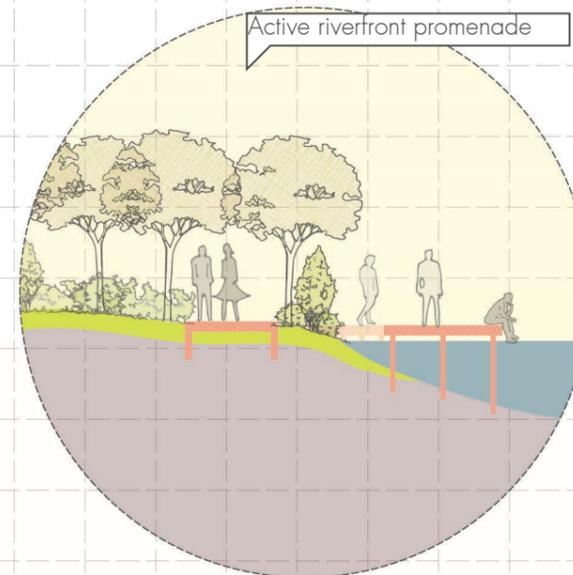
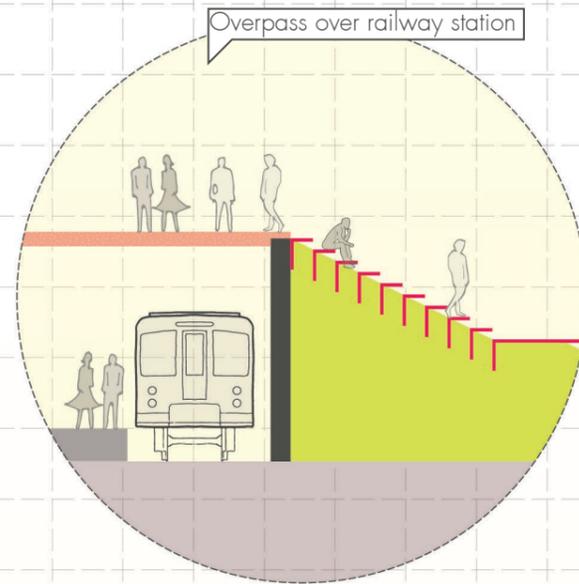
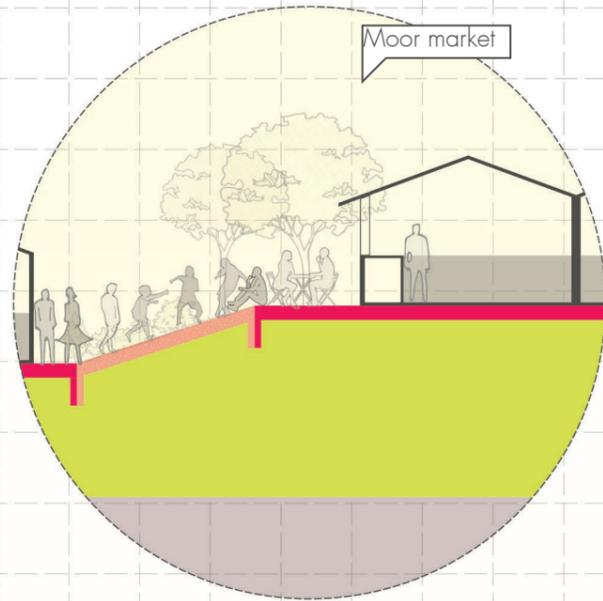


Fig 5.97: Sectional diagrams Moore market and activated river front
Source: Author

SITE 2 - CHENNAI CENTRAL

SPATIAL QUALITY - MOORE MARKET

Similar to site 1, the proposed interventions strive to achieve a balance between tapping the potentials that site offers and tackling the challenges the site faces. The predominant challenges that the site faced was a need for integration of the multiple fragmented functions to create a cohesive urban fabric that flows through as one. The potentials offered by the site was all the different functions present and the footfall that the site already experiences which would go a long way in the transformation of the space into a destination.

In conclusion, the interventions proposed for the Chennai Central site focuses on creating a heavily pronounced character of generality thereby making it a city scale destination that offers different possibilities targeting the wider array of user groups from the city. Additionally, a subtle character of commonality that targets the local residents.

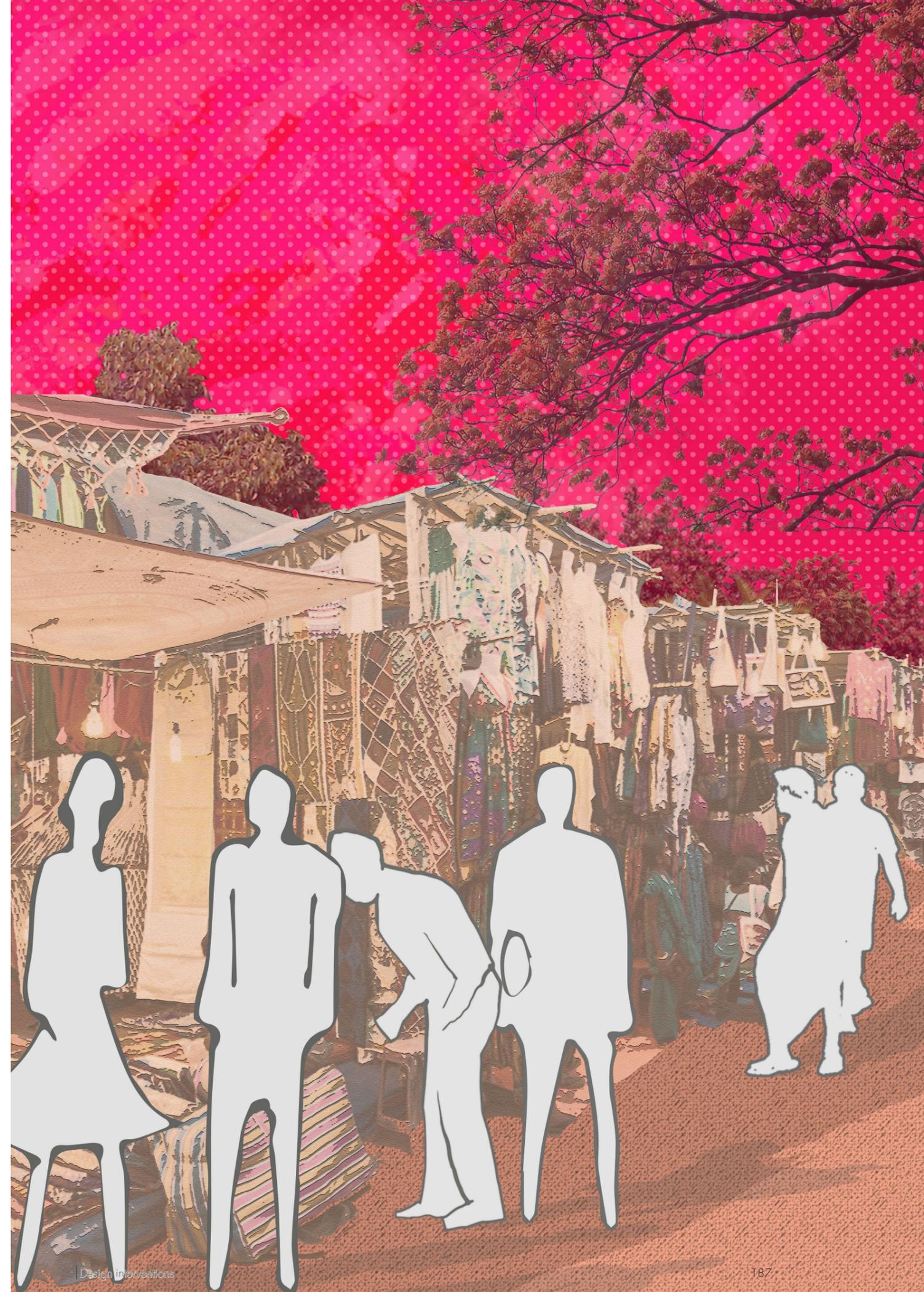


Fig 5.98: Perspective illustrations of the Moore market
Source: Author

06

DESIGN IMPLEMENTATION

Chapter overview:

This section of the report elaborates the implementation of the key design interventions proposed in the previous section. It delves into the key strategies that break down the proposals and a tentative timeline for the implementation of the same in both design sites.

Finally, it also elaborates on the transferability and design impact of the interventions at the larger scale.

Chapter Contents :

- 6.1 Design strategies
- 6.2 Design phasing and implementation
- 6.3 Design impact and transferability

6.1 DESIGN STRATEGIES

The design strategies focus on breaking down the design interventions into key actions that are further classified into actions that enable livability or vitality or power of 10+. Additionally, they are also classified based on the level of transferability - site specific, within the strip, other sites in the city.

SITE 1

BUILDING SCALE

At the smallest scale, the design strategies largely focus on the spatial organisation of the built volumes to facilitate the creation of communal spaces at the local scale. And allowing for densification of the environment but at the same time, contributing to a more liveable environment by introducing policy interventions that allow for projection that act as shading devices for the walking paths and creating a network of these communal spaces.

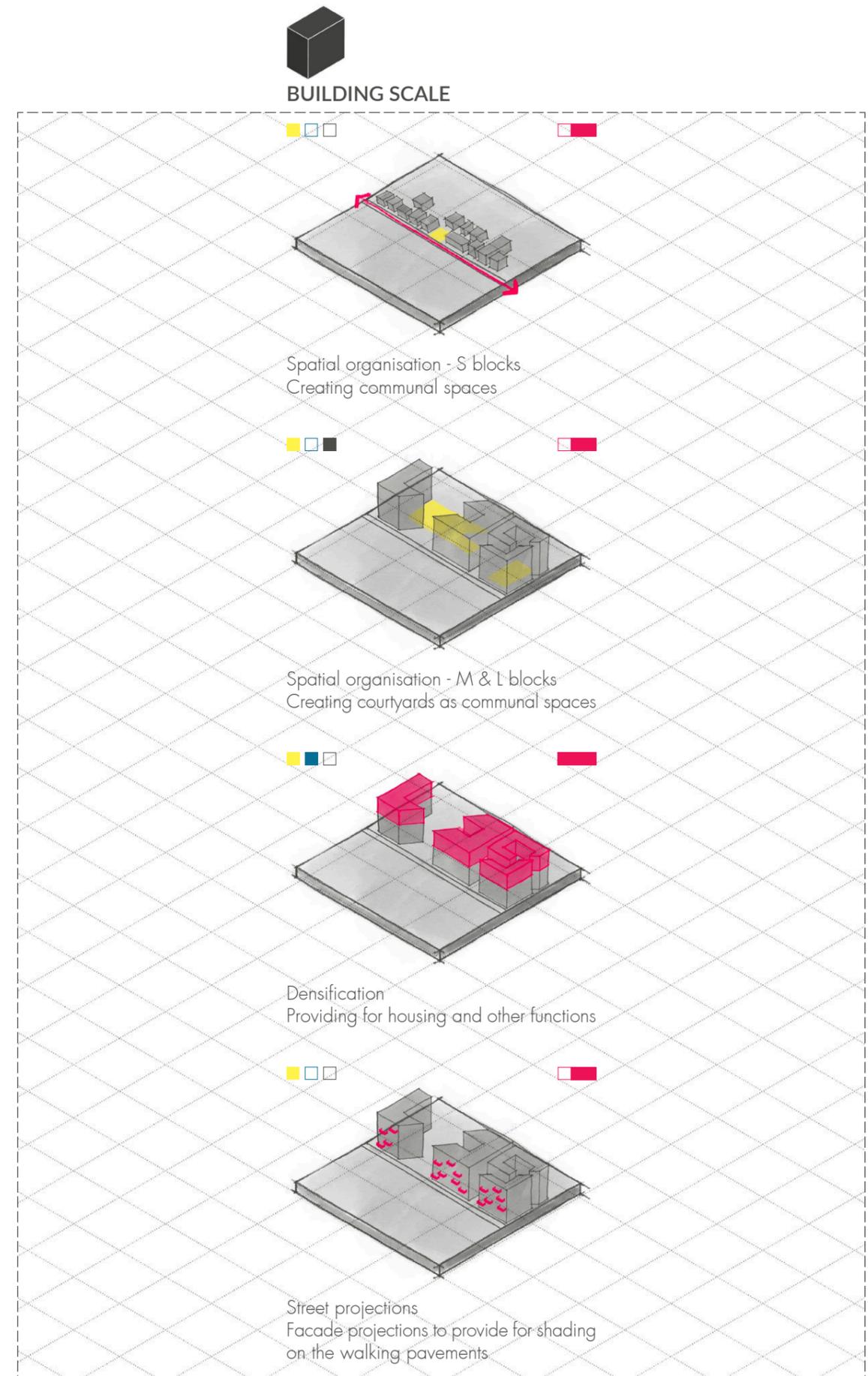
In conclusion, the larger focus is on creating communal spaces and at the same time, contribute towards a more walkable environment.

TRANSFERABILITY

All of these strategies at the building scale are transferable to other potential sites within the strip, whereas strategies of densification and diversification can be adopted in other sites even outside the strip.

- Site specific interventions
- Transferable to other sites within the strip
- Transferable to other sites in North Chennai
- Strategies for liveability
- Strategies for vitality
- Contributes to power of 10

Fig 6.99: Building scale strategies - Site 1
Source: Author



DESIGN STRATEGIES

SITE 1

STREET AND BLOCK SCALE

At the street and block scale, the strategic intervention focus on establishing a restructured mobility to further enhance the walkable character of the environment. By focusing on creating diverse opportunities for walking through and within the blocks, and enabling a more vibrant environment.

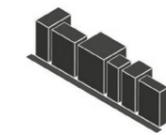
Additionally, an emphasis is placed on weaving together the fabric and the series of communal spaces created at the building scale. The larger goal at this scale targets providing for a liveable and vital environment but at the same time creating a place for the local people

TRANSFERABILITY

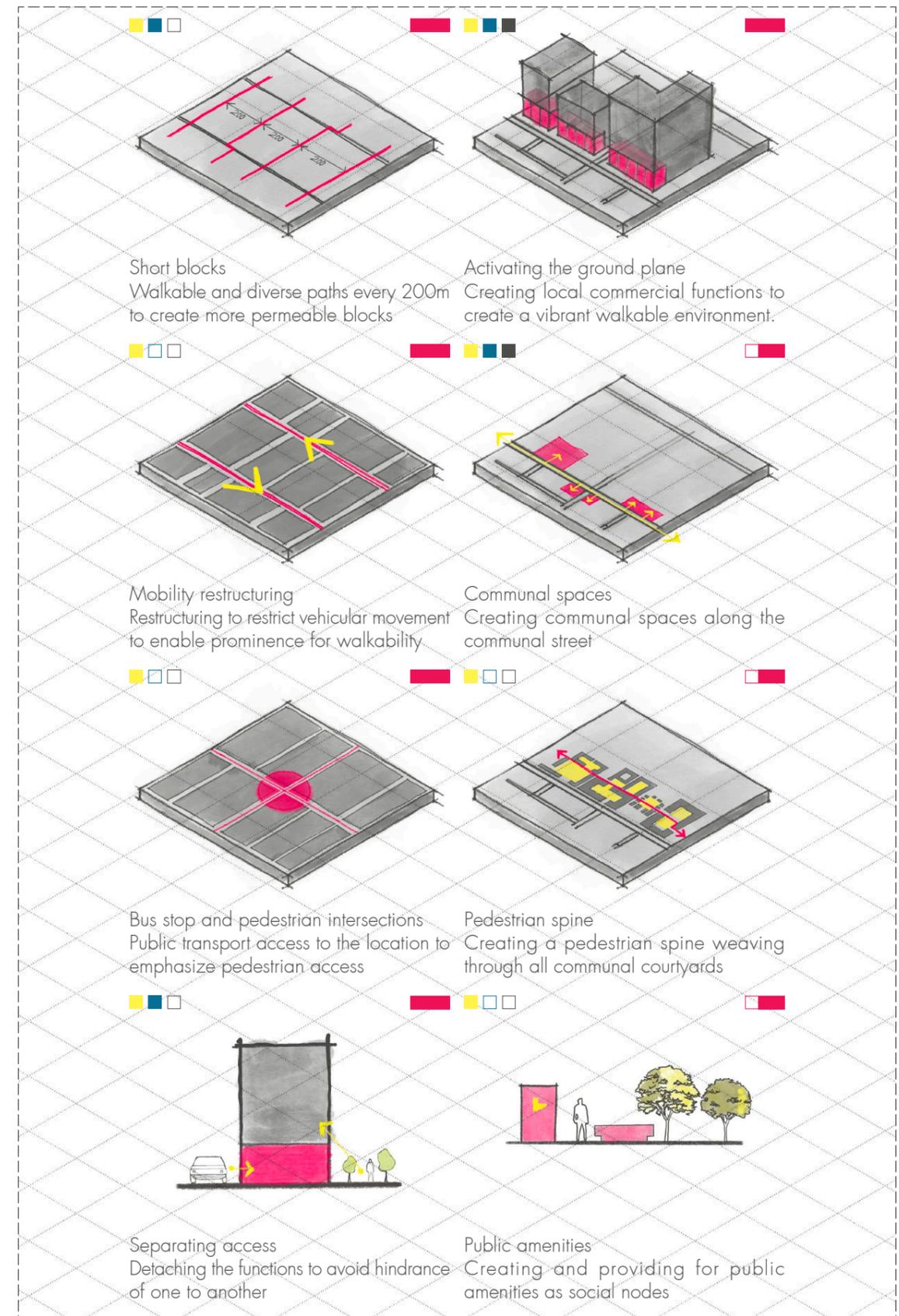
At this intermediate scale, since the focus is on walkability and block definition principles that further enhance mobility and walkability, these strategies can be transferred to sites both within the strip and other potential sites within the city.

- Site specific interventions
- Transferable to other sites within the strip
- Transferable to other sites in North Chennai
- Strategies for liveability
- Strategies for vitality
- Contributes to power of 10

Fig 6. 100: Street and block scale strategies
- Site 1
Source: Author



STREET AND BLOCK SCALE



DESIGN STRATEGIES

SITE 1

NEIGHBOURHOOD SCALE

At the largest scale the set of strategies focus on creating a green buffer between the industrial and residential functions and integrating the two with one another. The integration process is enabled through strategies that encourage the relevant use of space along the edges, for example, the creation of local communal green spaces. However, at the same time, it is also facilitated as a city scale destination.

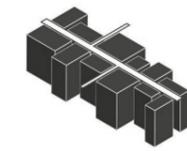
Thus the set of strategies constitute elements of placemaking across the scales and liveable and vital environments at the local scale.

TRANSFERABILITY

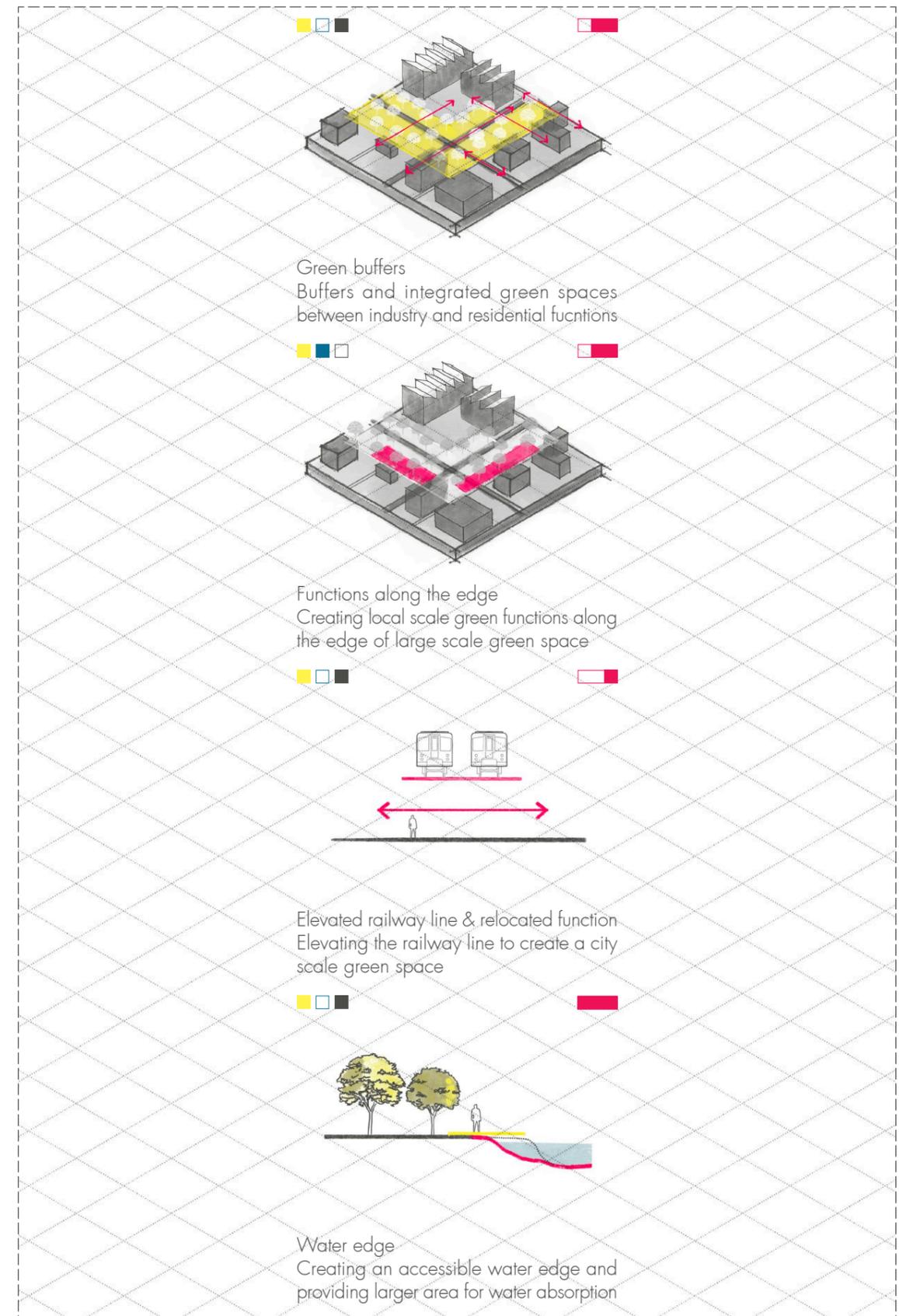
The set of strategies are very closely linked to the aspect of interaction between the two aspects of the urban fabric - large industrial functions and intricate residential neighbourhoods. Thus these strategies are viable in other potential sites within the strip and certain other industrial sites in the city in a limited sense.

- Site specific interventions
- Transferable to other sites within the strip
- Transferable to other sites in North Chennai
- Strategies for liveability
- Strategies for vitality
- Contributes to power of 10

Fig 6.101: Neighbourhood scale strategies
- Site 1
Source: Author



NEIGHBOURHOOD SCALE



DESIGN STRATEGIES

SITE 2

BUILDING SCALE

At the scale of the building, the design strategies largely focus on creation of the communal spaces - both open communal spaces extended into the podium and the communal warehouses that support the existing commercial functions.

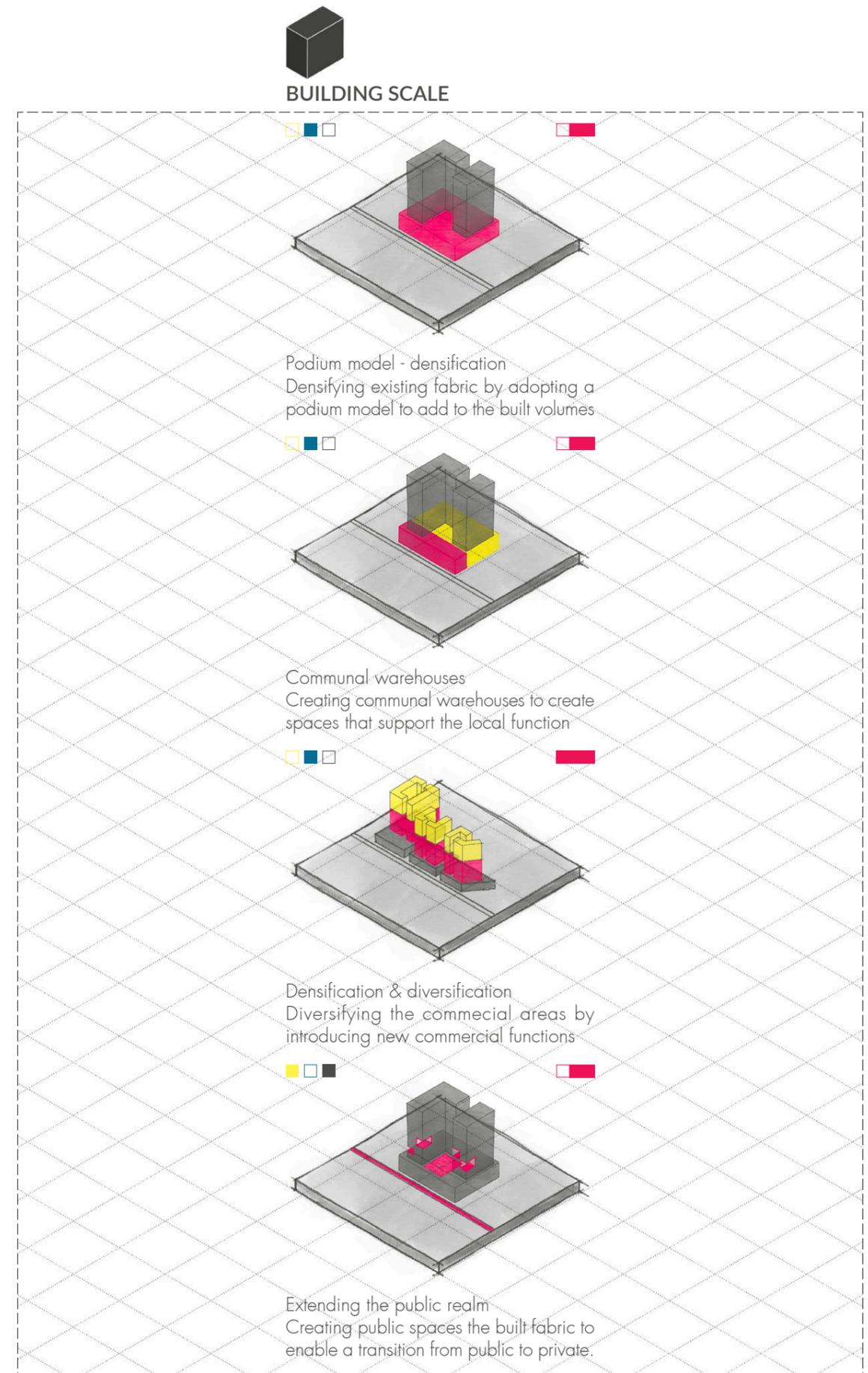
Furthermore, it also focuses on densification and diversification of the commodity specific commercial areas into more mixed use commercial areas by allowing for office spaces in the newer densities.

TRANSFERABILITY

All of these strategies at the building scale are transferable to other potential sites within the strip, whereas strategies of densification and diversification can be adopted in other sites even outside the strip.

- Site specific interventions
- Transferable to other sites within the strip
- Transferable to other sites in North Chennai
- Strategies for liveability
- Strategies for vitality
- Contributes to power of 10

Fig 6.102: Building scale strategies - Site 2
Source: Author



DESIGN STRATEGIES

SITE 2

STREET AND BLOCK SCALE

The design strategies at the intermediate scale focuses on establishing the secondary networks to create a more pedestrian friendly environment. Additionally, emphasis is placed on creation of dynamic open spaces that are open for appropriation and places of pop-up activity along the pedestrian networks.

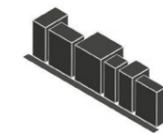
And finally an activated ground plane by providing local scale commercial functions and shared spaces that further emphasize on walkability enhance the possibilities and opportunities of pedestrian movement through and within the neighbourhood. The larger emphasis is on creating a more liveable and vital environment at the local scale.

TRANSFERABILITY

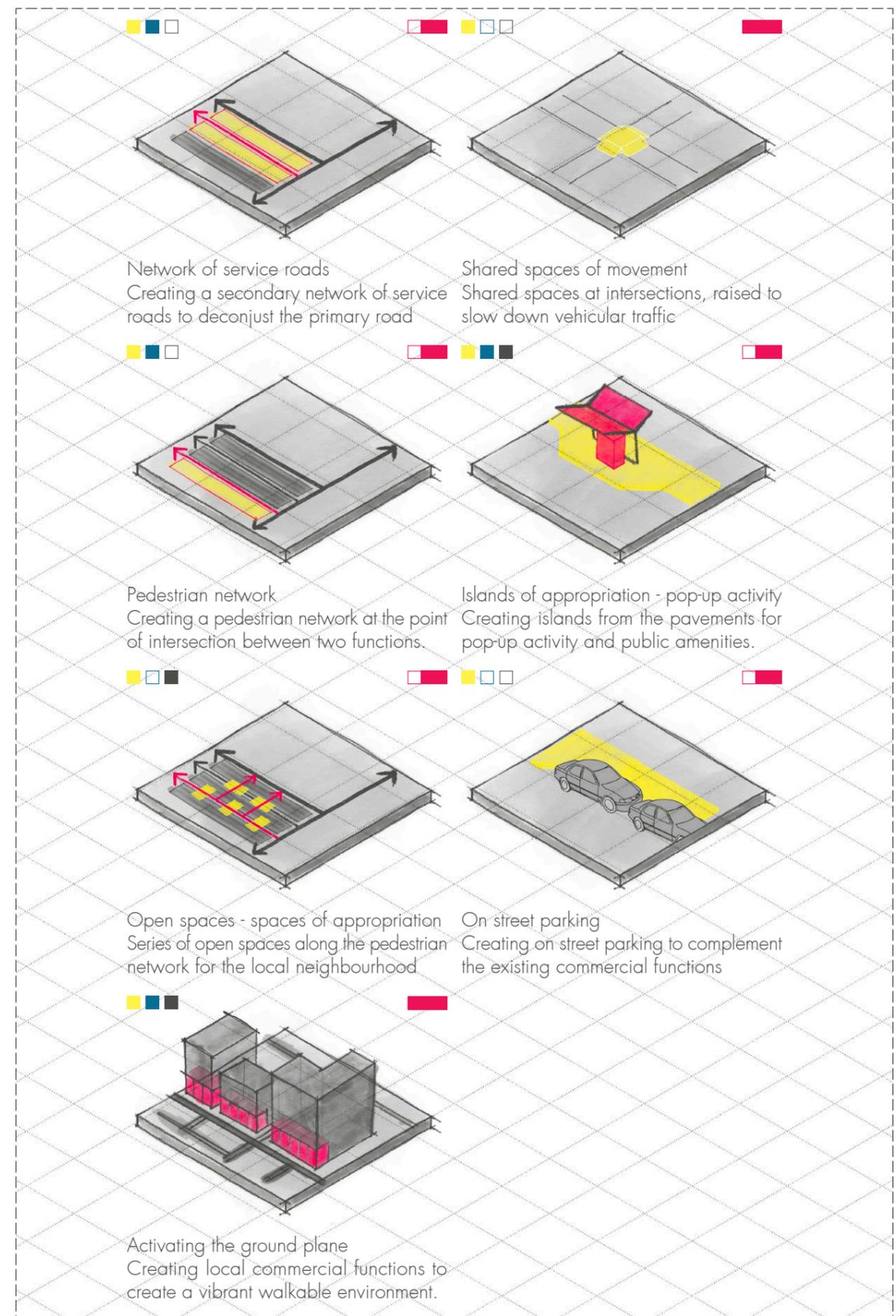
As a majority of the strategies focus on creating an environment that is favourable for walkability in close relationship to the commercial development, these interventions are viable at other potential sites within the strip.

- Site specific interventions
- Transferable to other sites within the strip
- Transferable to other sites in North Chennai
- Strategies for liveability
- Strategies for vitality
- Contributes to power of 10

Fig 6. 103: Street and block scale strategies
- Site 2
Source: Author



STREET AND BLOCK SCALE



DESIGN STRATEGIES

SITE 2

NEIGHBOURHOOD SCALE

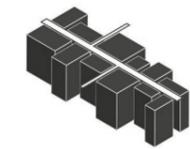
At the neighbourhood scale, the set of strategies focus on the transformation of the large green space into city scale park and the spatial transformations for setting up the active market and the clamer water edges. The emphasis here is on establishing these spaces as city scale destinations and eventually contributing towards a liveable environment. Additionally the focus is on the crossover between the pedestrian network and the large public infrastructure networks.

TRANSFERABILITY

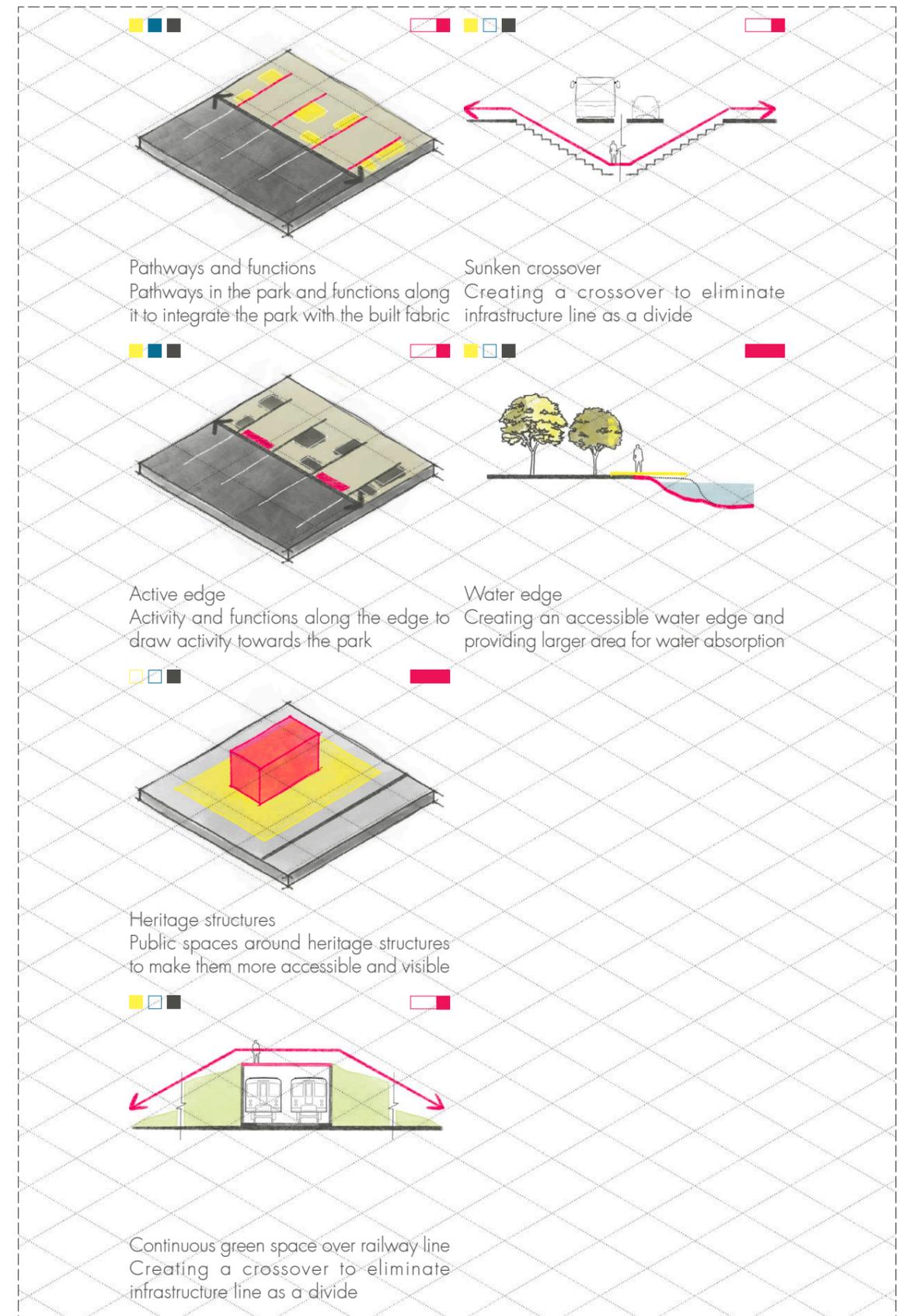
The strategies specified here are context specific in relation to establishing the city scale park and the Moore market. However, the strategic interventions that treat the crossover with the public infrastructure networks are applicable to other potential sites as well.

- Site specific interventions
- Transferable to other sites within the strip
- Transferable to other sites in North Chennai
- Strategies for liveability
- Strategies for vitality
- Contributes to power of 10

Fig 6.104: Neighbourhood scale strategies
- Site 2
Source: Author



NEIGHBOURHOOD SCALE



6.2 DESIGN PHASING AND IMPLEMENTATION

The design implementation of the chosen locations involve a set of both spatial interventions and policy changes. Although the policy changes are top down interventions, they are changes that support bottom up intentions that aid in the creation of the communal spaces. On the other hand, the creation of the city scale public spaces in both locations are preceded by top down approaches (spatial and policy changes) and eventually their integration with the local fabric and developing a relevance to the local community has a prominence of bottom up interventions.

SITE 1

As mentioned in the earlier sections, the key strategy here is to develop trust among the local community. And for this, the first set of interventions emphasize on providing proper housing for the slum dwellers in the location. The slums are cleared and they are provided accommodation in the newly constructed social housing block. This frees up the space for the creation of communal space. This would be a minimal incremental intervention that would really benefit the local community. This could go a long way in developing trust in the project. Similarly, creating the public amenities nodes and establishing the commercial functions can be step in the direction of building trust in the project as these were presented as immediate needs during the fieldwork.

Meanwhile, the larger industrial function can be quickly relocated to the already existing larger facility. While the elevated railway line is constructed, the existing railway line may need to be still operational for functionality. Paralelly, the water edge can be cleaned and activated and provided access to.

This would be followed by further minimal interventions that focus on improving the walkability of the location - transformation of the road, extending the park to make it more visible, shared spaces at intersections. The vehicular restructuring would be done by rerouting the traffic to make the main roads one way. The second stage of densification would focus on transforming the existing fire station and delapidated social housing blocks as these are state owned as opposed to the other privately owned sites.

The large green space can be made more relevant to the local community by encouraging the creation of communal gardens. Once the railway line is constructed, this can be followed by the implementation of the elevated deck and the planting of the landscape to create the ecological park.

On the longer run, the transformation of the entire block needs to be incentivised as these are privately owned. In order for the densification to take place certain guidelines need to be laid down as policies - courtyards, communal pedestrian spines, other pedestrian pathways.

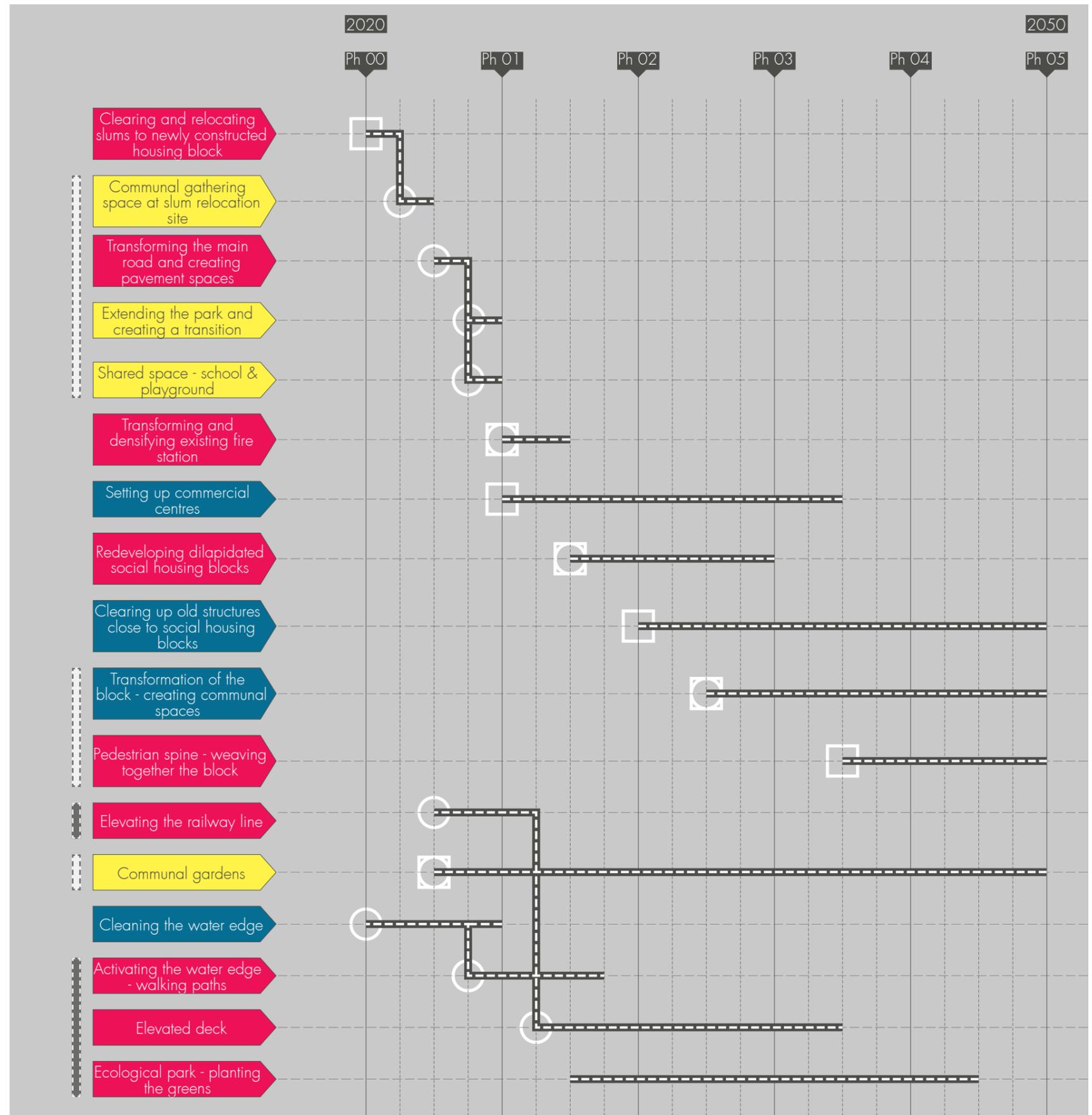


Fig 6.105: Phasing and strategic implementation - Site 1
Source: Author

- Top-down approach
- Bottom-up approach
- Top-down + bottom-up approach
- Contributes to creation of public spaces
- Contributes to creation of communal places
- Spatial interventions
- Policy change

6.3 DESIGN IMPACT AND TRANSFERABILITY

DESIGN COMPONENTS - SITE 1 (STRIP 4)

The design site 1 situated in strip 4 has different components addressing different aspects. These being - densification and spatial organisation to support the local way of life and the local target population; creating a pedestrian experience at the street level; providing for the much needed public amenities as social nodes; providing for local commercial activity and finally activating the waterfront.

These components are directly transferable to sites of similar spatial and functional characteristics within the strip. In addition to this, the target groups of the sites are of a similar demographics - working class population. These are identified on the fig. on the right.

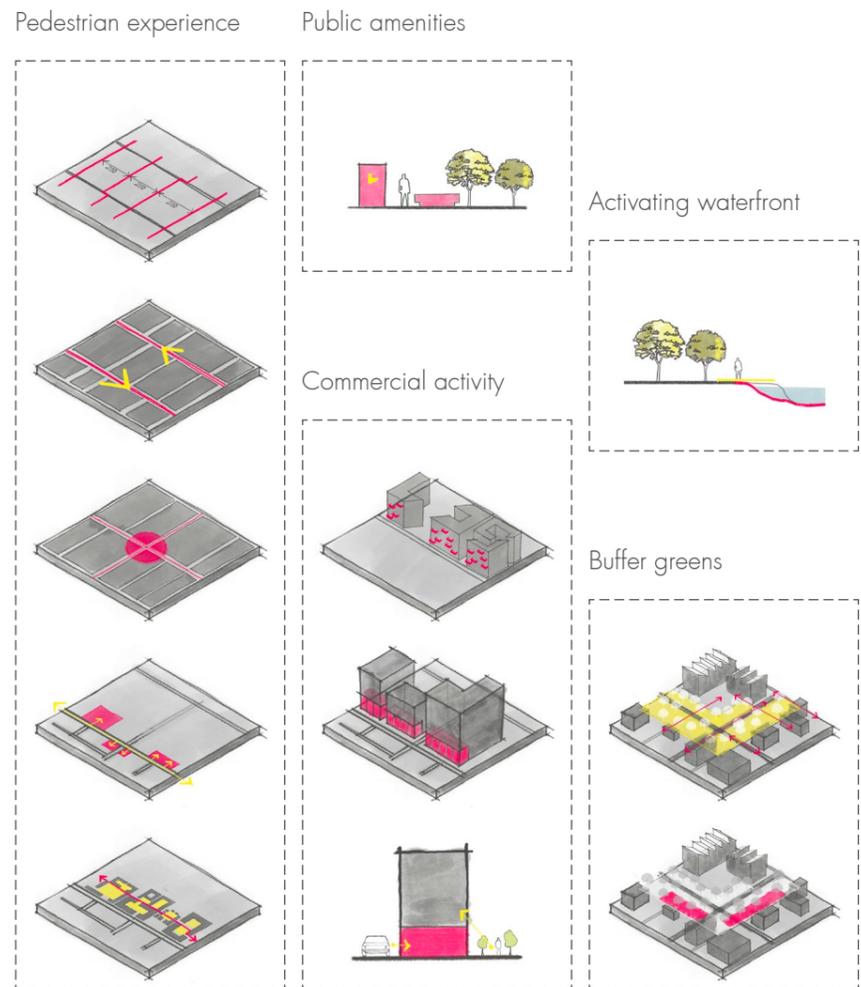
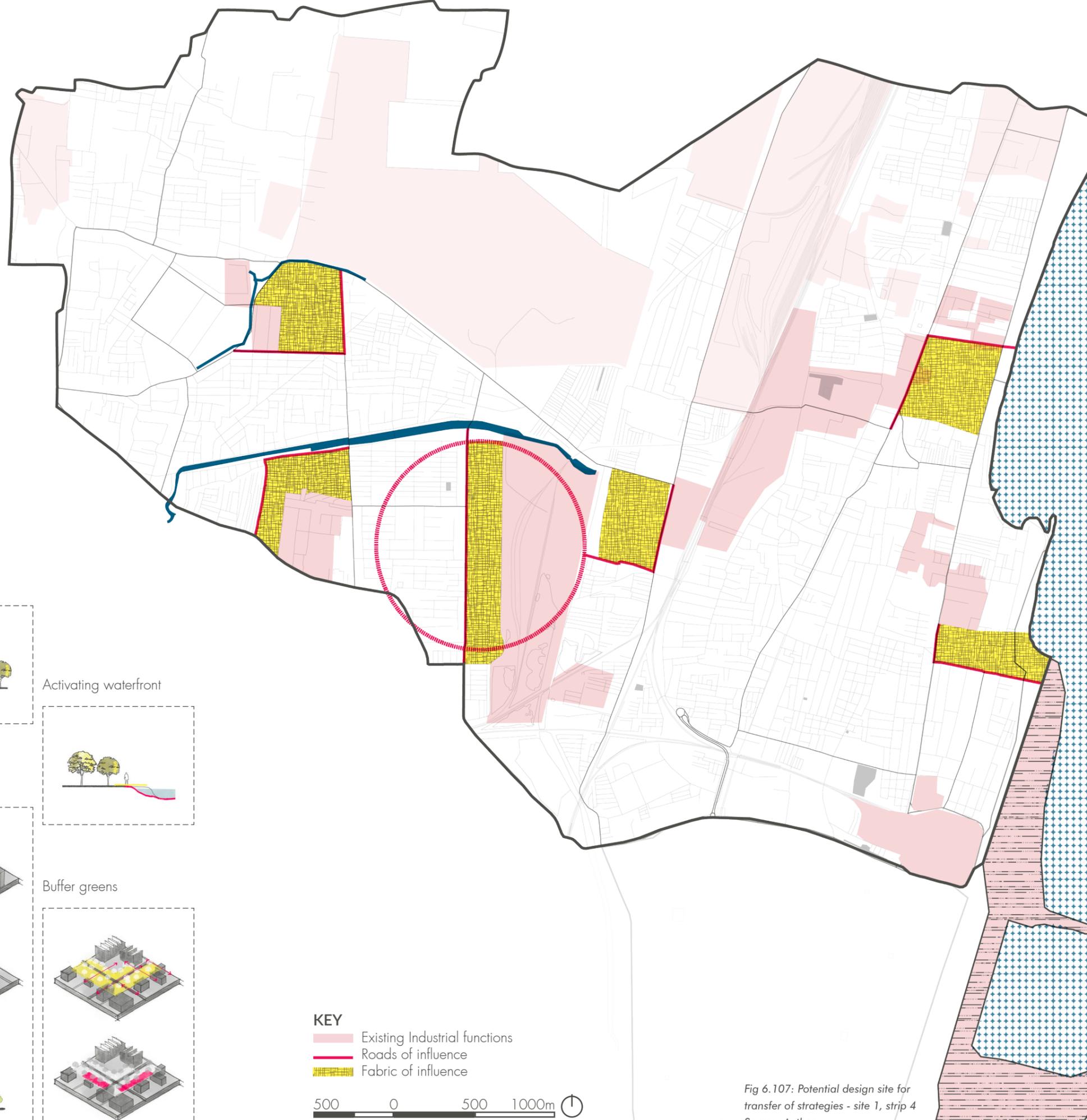


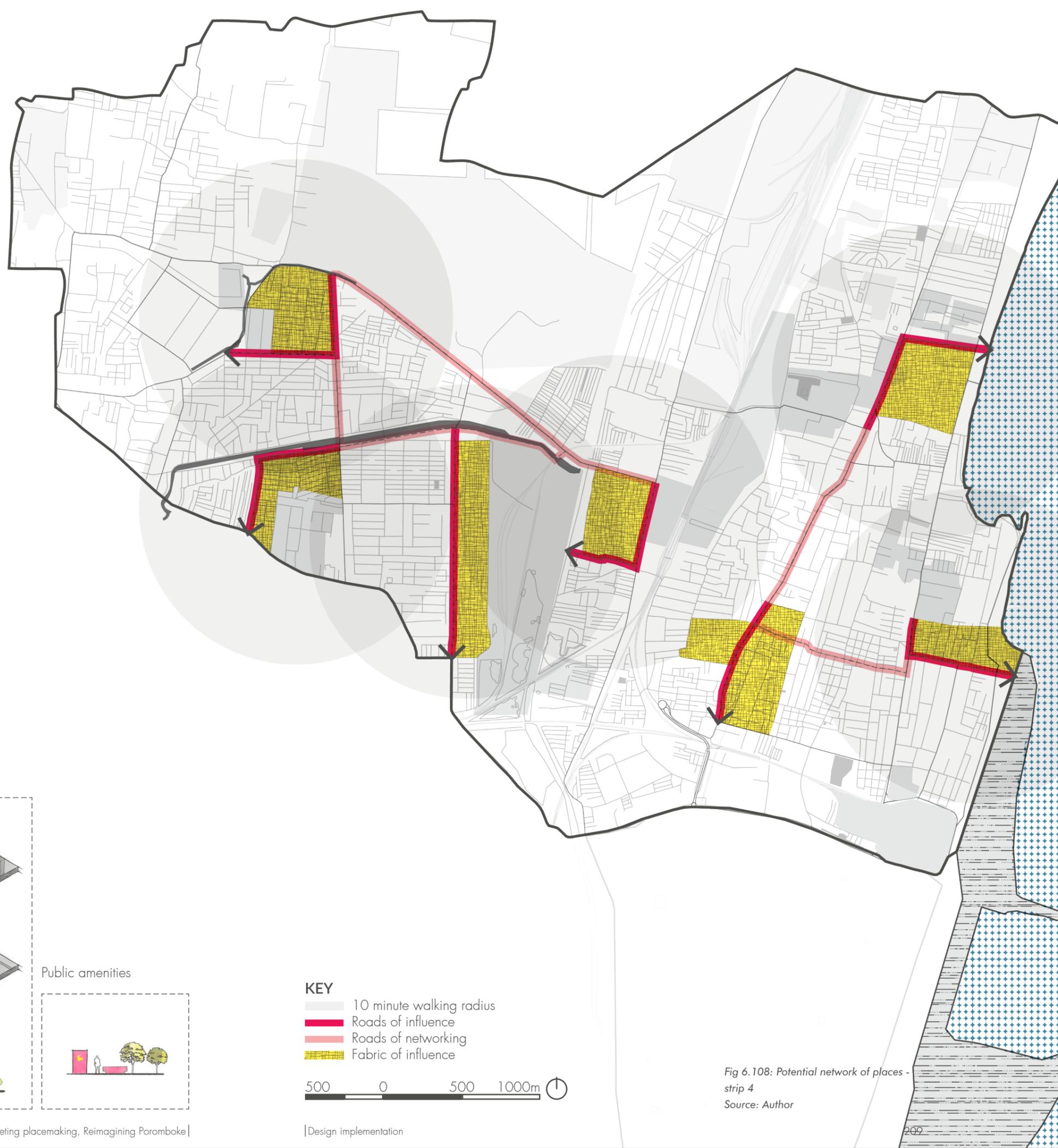
Fig 6.107: Potential design site for transfer of strategies - site 1, strip 4
Source: Author

DESIGN IMPACT AND TRANSFERABILITY

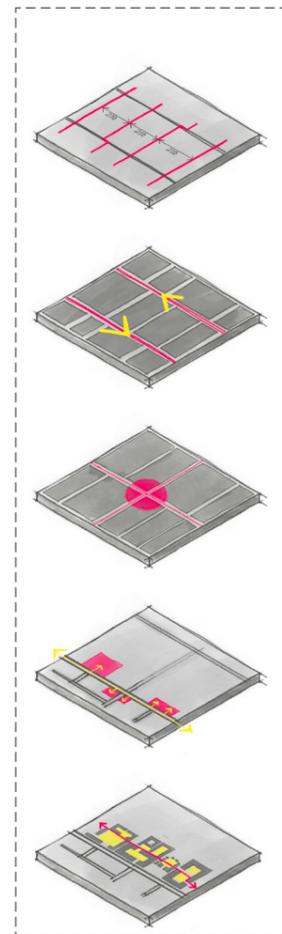
NETWORKING AND CREATING POTENTIALS - SITE 1 (STRIP 4)

Further, looking at a radius of 10 minute walking distance, other sites are activated in a similar manner. Although in these sites, the industrial aspects of the design are not applicable, other aspects of densification, spatial organisation, creation of a pedestrian experience, creating commercial activity and providing for public amenities are all applicable with additional context specific aspects that might be necessary from further analysis.

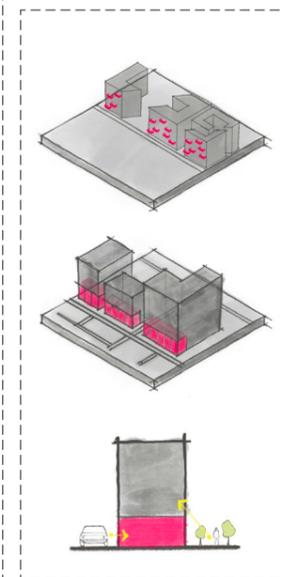
Finally, a network needs to be enabled to facilitate easy pedestrian movement between these sites for a more place oriented set of spaces.



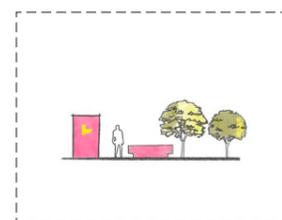
Pedestrian experience



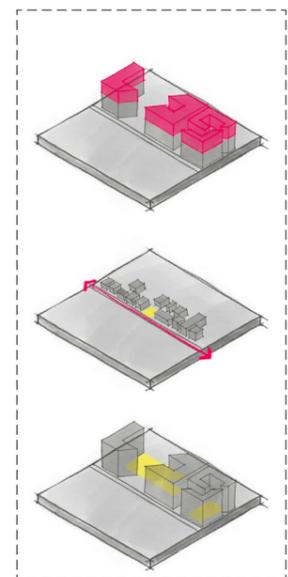
Commercial activity



Public amenities



Densification & spatial organisation



KEY

- 10 minute walking radius
- Roads of influence
- Roads of networking
- Fabric of influence



Fig 6.108: Potential network of places - strip 4
Source: Author

DESIGN IMPACT AND TRANSFERABILITY

DESIGN COMPONENTS - SITE 2 (STRIP 2)

The chosen design site 2 situated in strip 2 again has multiple components to the different sets of interventions. The different aspects deal with the densification of the built fabric; diversification of the current commodity specific commercial areas; creating a pedestrian experience at the street scale; providing for context specific public amenities that are needed in these areas to make them more place oriented; creating anchor functions and gathering spaces around heritage and historic structures; and finally activating the water front to provide for a variety of environments offering different opportunities.

These different group of interventions and design principles are applicable and transferable to other sites in the strip of similar spatial characteristics and functions. The network is enabled along existing network of predominantly vehicular infrastructure lines. In this case the focus is to place a prominence on pedestrian activity over vehicular movement.

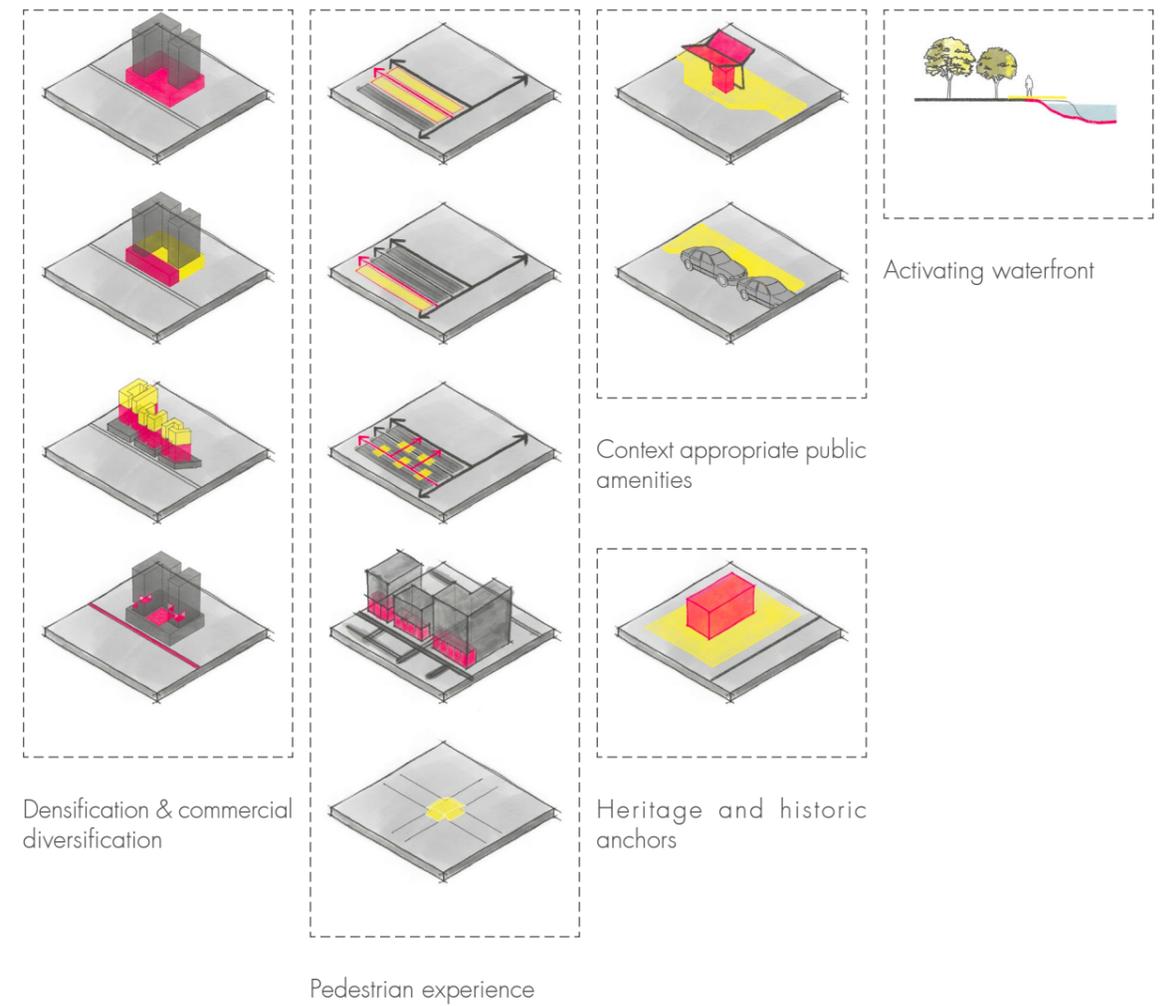


Fig 6 100. Potential design sites for transfer of strategies - site 2, strip 2
Source: Author

DESIGN IMPACT AND TRANSFERABILITY

NETWORKING AND CREATING POTENTIALS - SITE 2 (STRIP 2)

Taking a similar approach to that of site 1, looking at a radius of 10 minute walking distance, other sites are activated in a similar manner. Although in these sites, the diversification of commercial activity of the design are not applicable, other aspects of densification, introducing commercial functions, creation of a pedestrian experience and providing for public amenities are all applicable with additional context specific aspects that might be necessary from further analysis.

Lastly, a network is enabled to facilitate easy pedestrian movement between these sites. The network is enabled along the existing infrastructure network where the aspects of making these more pedestrian are applicable. In this case the focus is to place a prominence on pedestrian activity over vehicular movement.

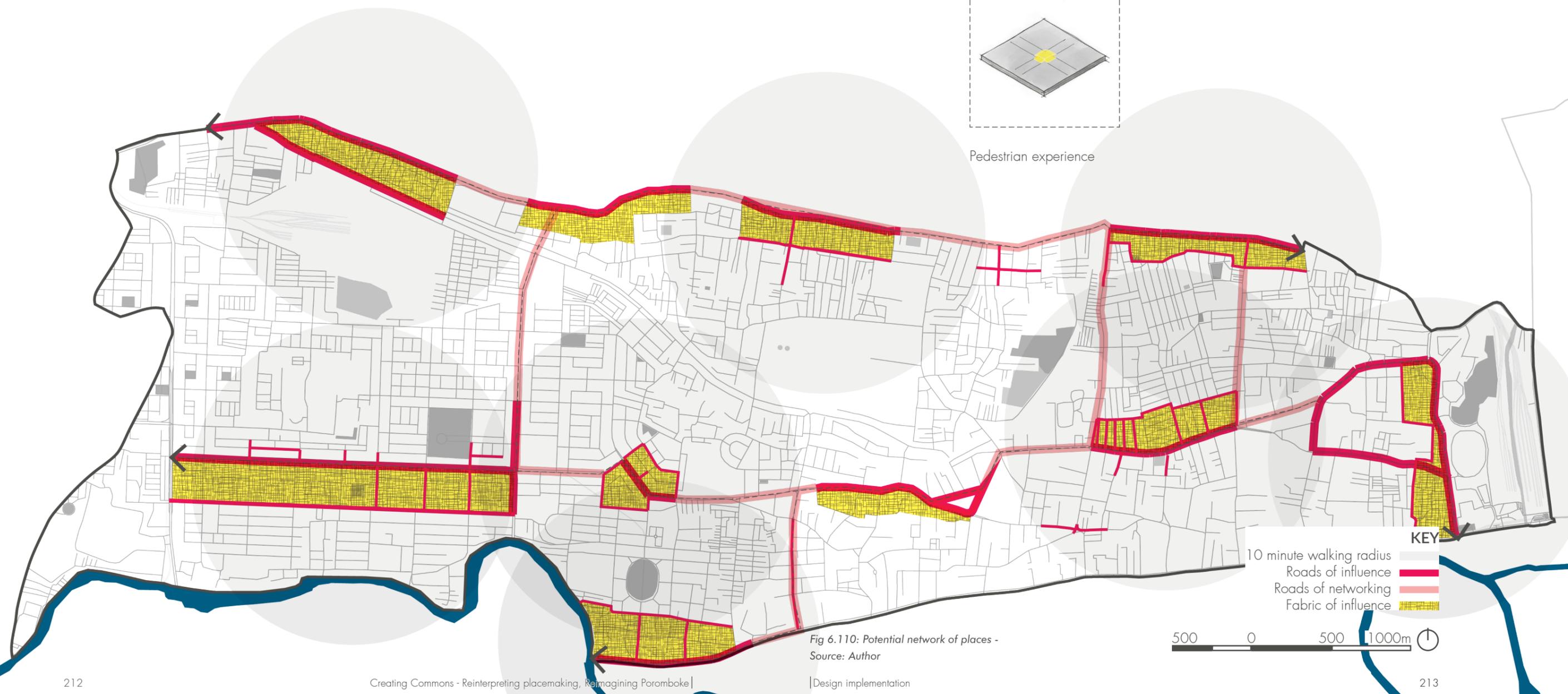
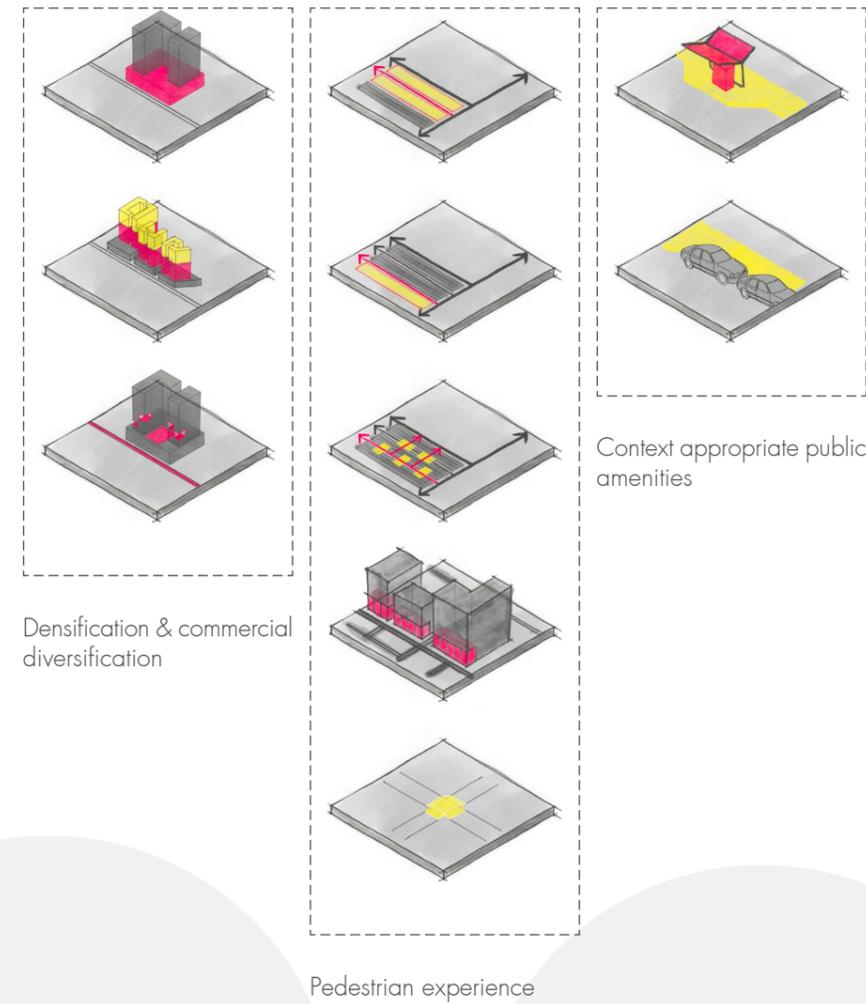


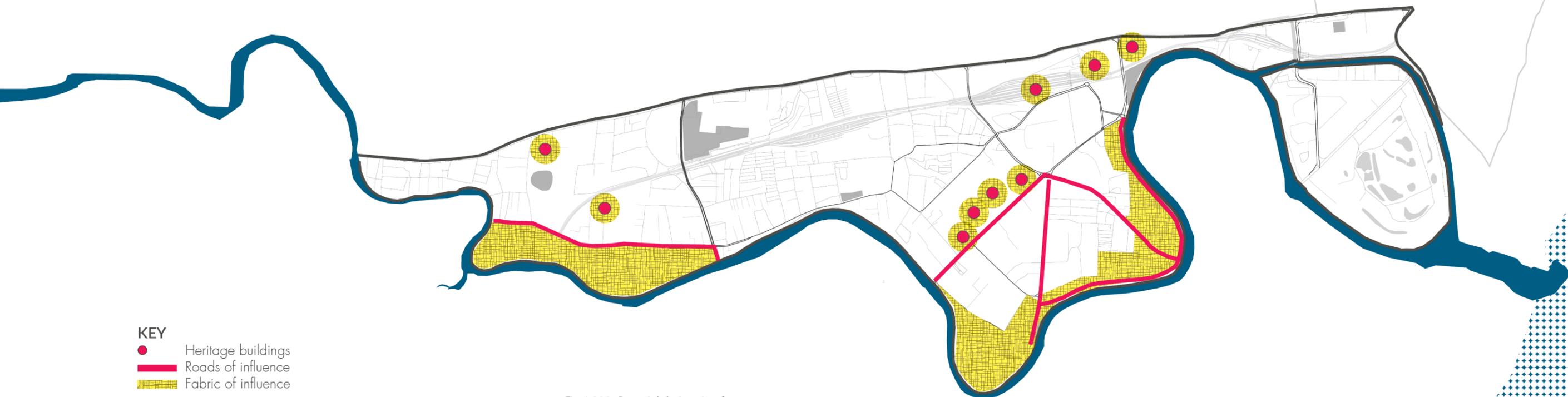
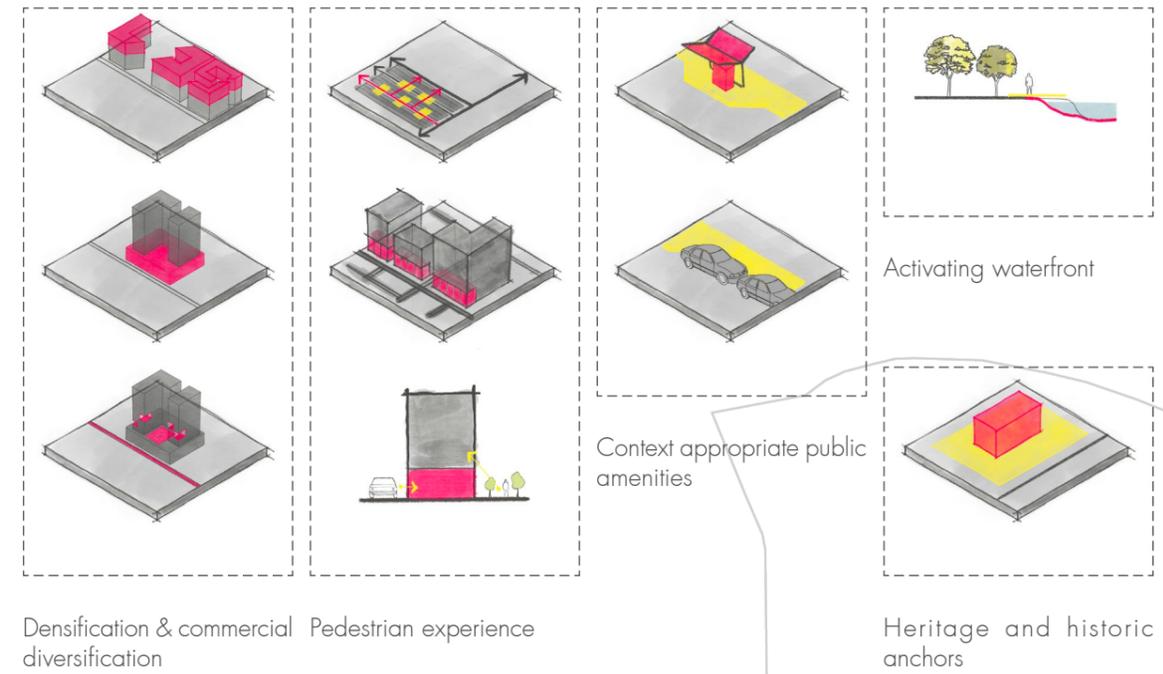
Fig 6.110: Potential network of places -
Source: Author

DESIGN IMPACT AND TRANSFERABILITY

TRANSFERABILITY (INTER-STRIP) - URBAN RIVER STRIP

Looking at the transferability of the proposed design interventions to sites situated in other strips, different components of the two designs are applicable to different sites based on their individual characteristics.

Taking the case of the urban river strip, the focus of design interventions would be on the morphology of the fabric and streets that run along and from the Coom river and the various historic and heritage sites. The principles used would be to interject these areas with local scale commercial activity and create anchor functions and gathering spaces around the heritage sites. In addition to this, strategic densification and creating a pedestrian experience becomes yet another common thread pulled towards creating these as places.



KEY

- Heritage buildings
- Roads of influence
- Fabric of influence



Fig 6.111: Potential design sites for transfer of strategies - Urban river strip
Source: Author

DESIGN IMPACT AND TRANSFERABILITY

TRANSFERABILITY (INTER-STRIP) - STRIP 3

Finally, the case of strip 3, the challenge to tackle would be the commercial strip that though becomes ground of activity, it also becomes a point of divide between the two sides. The focus of the design interventions would be to integrate the two sides and activate the fabric as a whole. The transformation of the fabric would predominantly involve interjecting with local scale commercial activity that penetrates into the fabric and activates the ground plane and finally integrate with the local park that is very widely used by the local residents making this very place oriented. Another case would be the area around the industrial site, ICF in Perambur where strategies similar to strip 4 are applicable where in the focus again would be to create communal spaces to support the local way of life.

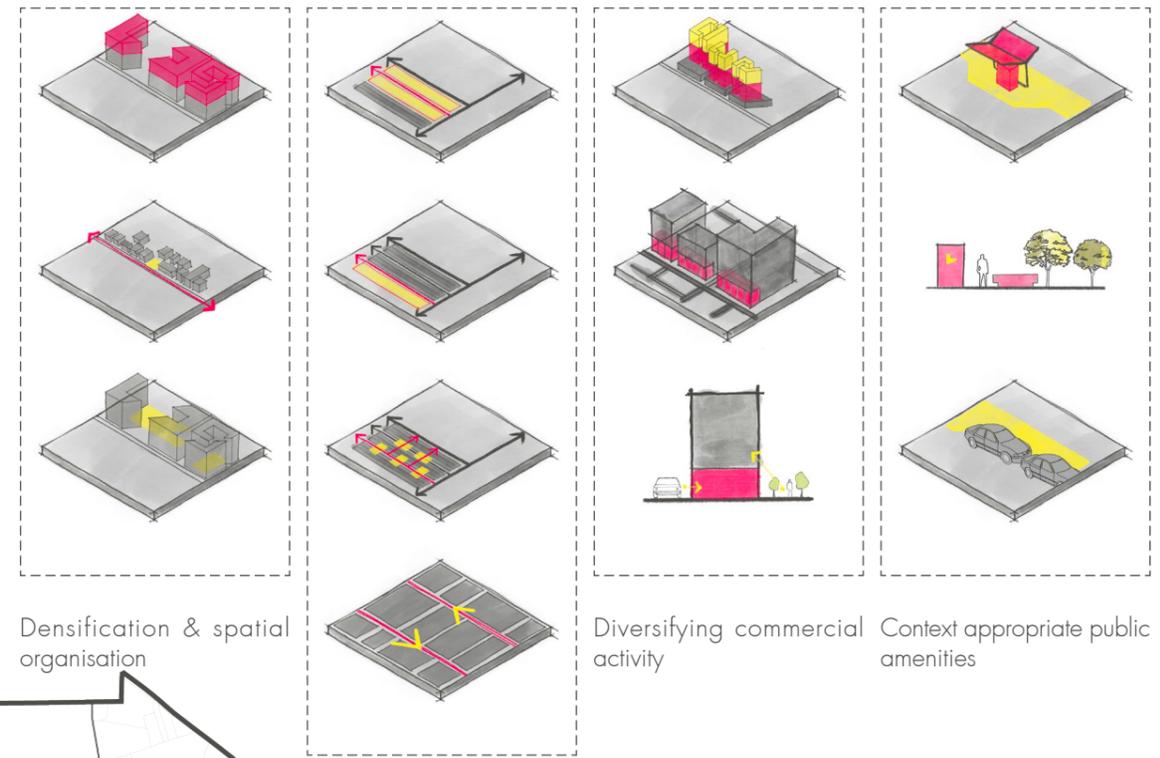


Fig 6.112: Potential design sites for transfer of strategies - strip 3
Source: Author

- KEY**
- Existing Industrial functions
 - Roads of influence
 - Fabric of influence



DESIGN IMPACT AND TRANSFERABILITY

The chosen design sites have both site specific elements and more generic elements of design. These generic elements of design can be transferred to other sites of similar characteristics within the respective strips and some sites in other parts of North Chennai. The fig here depicts the transfer of such generic strategies to other potential locations that were previously discussed.

INDUSTRIAL SITES

Other industrial sites that are similar in characteristics to site 1, Vyasarpadi are identified in strip 4. The other potential design sites within the strip are then networked to form a series of places

COMMERCIAL SITES

Sites that are commodity specific commercial areas are identified in strip 2 as previously discussed. In these locations, strategies are directly transferable from the main design site and in addition, other sites are identified for establishing a network of places.

HERITAGE SITES

Sites, in the urban river strip, that incorporate a heritage structure similar to that of location 2, Chennai central, can incorporate design strategies that focus on making these structures more accessible to the public.

WATERFRONT SITES

Potential sites of intervention that exhibit characteristics similar to that of the chosen sites that are at a close proximity to water structures are potential sites for implementing strategies that focus on interventions related to water structures and activating their fronts.

In addition to the mentioned strategies that can potentially be implemented in these sites, the specific design interventions need to have a emphasis on creation of communal spaces that support the local community. The design strategies can be used as a foundation to work on to arrive at the context specific design interventions after further analysis of the locations.

COMMONALITY VS GENERALITY

The nature of the designed space needs further analysis to get to specifics of the interventions. However, as previously mentioned, sites within the strip are very similar in nature. In that context, the other sites in strip 4 would need a prominence of the character of commonality over generality and vice versa for other similar sites as the designed site in strip 2.

Furthermore, generic strategies that address aspects like creation of mixed use functions and densification can be transferred to all of these sites.

KEY

-  Site 1
-  Site 2
-  Other potential design sites
-  Direct transfer of strategies from main sites
-  Transfer of industrial strategies
-  Transfer of commercial strategies
-  Transfer of water strategies
-  Transfer of strategies associated with heritage sites



Fig 6.113: Design impact of the project and potential network of places in North Chennai
Source: Author

07

CONCLUSION & REFLECTION

Chapter overview:

This section of the report concludes the project and looks back at the project through a reflective lens and elaborated on the possible limitations of both the approach of the project and the methodology adopted and finally consideration that the project assumes.

Chapter Contents :

- 7.1 Project conclusions
- 7.2 Reflection

7.1 PROJECT CONCLUSIONS

The graduation project Creating Commons seeks to understand the meaning of public place in the local context, by situating it in North Chennai, as an attempt to make it a place for the city rather than a space in the city. It is an attempt to tackle the placeless character of this portion of the city which has been a result of the larger phenomenon of rapid urbanization.

This rapid urbanisation fuelled by market driven development and a governance structure that has been in favour of privatisation of common/public goods and public property has led to a lack of open/public places in the city. In order to tackle the placelessness and lack of public places in the city, the project takes the approach of interjecting context appropriate public places as an integral element of the fabric of North Chennai.

7.1.1 METHODOLOGY

SOCIO-SPATIAL APPROACH

The project takes a socio-spatial approach towards the trans-scalar analysis of the fabric of North Chennai as the context and setting for urban revitalisation. It utilises the tool of Placemaking to facilitate the creation of places across multiple scales as an integral aspect of the fabric in order to enable liveable and vital environments at the local scale. Furthermore, the socio-spatial approach aids in establishing the key difference between place and space and delineating the influence of people and society on space.

CONTEXTUALISING PUBLIC SPACE AND TOOLS

Additionally, because the project takes a socio-spatial approach towards public places, it further brings to light the need for contextualising the tools and the very notion of public places to respond to the local needs and better integrate with the existing fabric. This helps in the creation of public spaces that organically complement the existing functioning of the environment.

7.1.2 SITE 1 VERSUS SITE 2 - A COMPARISON

Although from the first look the two proposed designs can be very different, the principles that are being applied are the same. These being to create spaces that cater to the local way of life to further enable these locations as inclusive places for the city. However, the differences arise from context specific aspects.

STRIP CHARACTERISTICS

Leading off from the trans-scalar analysis, the two sites are situated in two different strips that portray different characteristics. Naturally, this is seen even in the specific sites. Site 1 looks at the strong relationships and juxtaposition of large industrial functions and intricate residential neighbourhoods. However, site 2 looks at the commodity specific commercial streets and their role and relationship with residential functions around.

TARGET USER GROUPS

This aspect is by far the most different in the two cases. Site 1 strongly relates its interventions and proposals to the local residents who spend most of the day and activities on the streets. However there is also a smaller component of the design that attempts to instigate city scale flows targeting users of the city scale green space.

Whereas, the interventions of site 2 tackle a multitude of user groups - users of the city scale institutional functions, users of the anchor function (Moore market), users of the commercial function, owners of the commercial functions

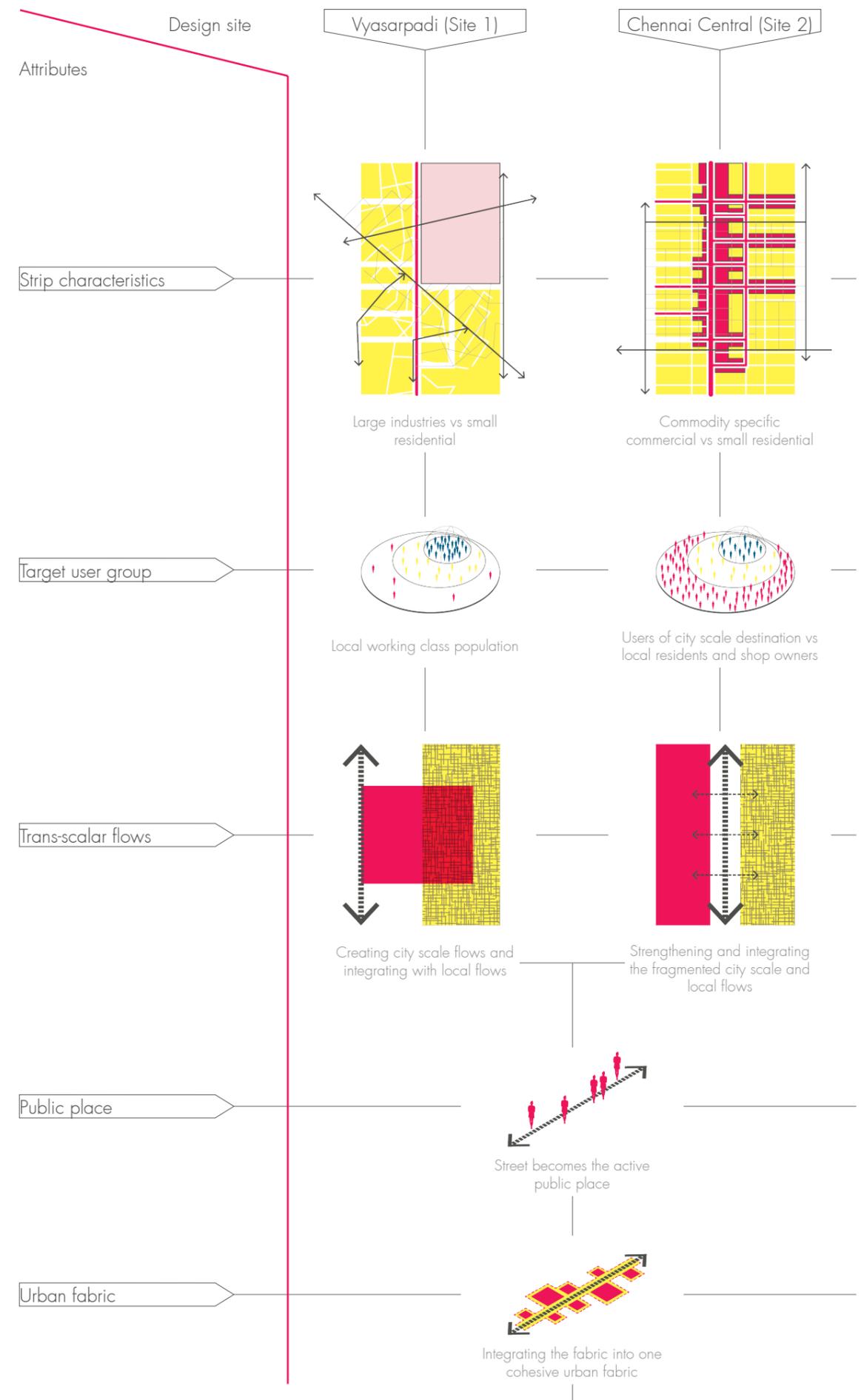


Fig 7.114: A comparison of Site 1 and 2
Source: Author

and finally the local residents. In this context, in site 2 the city scale users play a more prominent role in defining the design principles. However, it also has a more subdued component of local scale communal functions catering to the local residents.

TRANS-SCALAR FLOWS

Taking the case of site 1, the focus was to instigate trans-scalar flows, in a location where it was almost non-existent, as an attempt to make it an inclusive place for the city. Additionally, these flows and functions catering to this were all integrated into the urban fabric of the design.

Whereas, in the case of site 2, the focus was to integrate and create a cohesive and integrated set of flows (city scale and local scale) that previously existed in a very fragmented sense.

PUBLIC PLACE

Although the two sites differ in the previously mentioned aspects, one of the common threads that both sites pull at is transformation of the main street in question as the public place or as part of a network of public places. Additionally, this also encourages pedestrian movement while subduing vehicular movement.

URBAN FABRIC

Finally, in both cases, the design proposals revolved around creating a cohesive urban fabric that integrates all the different aspects of the spaces in question into one single environment.

7.1.3 COMMONALITY VS GENERALITY

The characteristic that the designed space emulates, whether it is a sense of commonality (in the case of communal places) or generality (in the case

Fig 7.115: A reinterpretation of Poramboke
Source: Author

of public places) really depends on the target group and the trans-scalar flows that the design interventions address and the context that the design is situated in.

The case of the two sites can be used in order to elaborate this. In the case of site 1, the target group are really dependent on the streets and the public realm. They play a bigger role than the city scale users of the green park. This indicates a strong sense of community and hence demands the character of commonality.

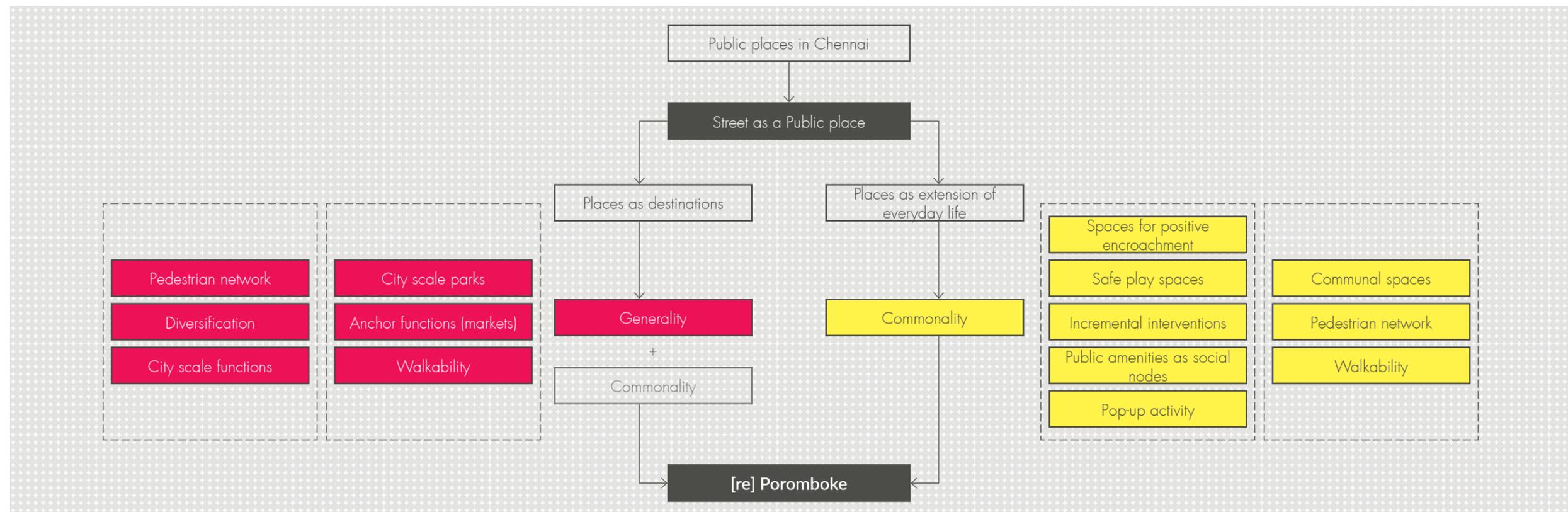
However, site 2 is one that is an established destination of the city due to the presence of the city scale institutional functions and the transit hub. In this case the wider user group a far more prominent role than the local residents. In addition to this, the local residents are not as heavily dependent on the public realm for their livelihood. Thus the character of generality is far more pronounced. Although commonality and communal spaces are also present at a more subdued level.

It is important to note that specifically in North Chennai, given the demographics and the tightly woven nature of the community, communal spaces play a significant role in the definition of design principles. Although, ideally there has to be a balance between the two to really make North Chennai a place for the city rather than a space in the city.

7.1.4 REINTERPRETATION OF "PORAMBOKE"

The project takes Poramboke from the local context as a point of departure for the contextualisation of public places in Chennai. Although the definition cannot be directly adapted to fit the present day scenario, the defining principles can be adapted and this has been the principles of the design as well.

The contemporary definition of "Poramboke" could be spaces that support and enable the local way of life and everyday activities. In addition to this,



the “Poramboke” of today needs to trace back to the notion of the street as the public space. And additionally they need to be of a dynamic character with an ability to cater to different user groups for different purposes. This primarily arises from the basic lack of spaces in Chennai and to take maximum advantage of the available spaces.

Finally, they can be of two different types - place as a destination or place as an extension of everyday life - based on their functionality and scale of operation. These respectively exhibit a quality of generality or commonality.

7.1.5 TRANSFERABILITY

Public spaces and common spaces are not an active part of the dialogue in the planning process of most of the Indian cities. Almost all of the Indian metropolitans, like Chennai, grew organically from being a colonial city. And they grew as a continuous response to the growing population and demands and the development process was market driven, focussed on meeting these demands and catering to the infrastructural needs. Thus, public or social spaces are almost non-existent in this scenario. Thus the project's approach towards revitalising the existing fabric by providing for spaces that enable the city's social and cultural processes can be adapted to be applied to other cities.

Although the project focuses on contextualising tools and public spaces, both in terms of the character and functionality, very specifically to the fabric of North Chennai, the generic strategies can be adapted to suit the setting of other sites. Furthermore, the socio-spatial approach towards the trans-scalar analysis to understand the context that then informs the more specific aspects of the design and creation of public spaces can be transferred to fit the socio-cultural environments of other cities.

7.1.6 PROJECT CONTRIBUTION TO THEORETICAL BODY

The project takes the socio-spatial approach towards understanding and contextualising public places and the tool of placemaking. In addition to following the general principles laid out by placemaking towards the design of public places, there are additional principles that play a role in the same when it comes to the context of North Chennai.

These principles entail multiple components ranging from governance to spatial qualities and characteristics. One of the most important of these is the need for an urban designer to realise and acknowledge the users' need for space and their relationship with the space. And finally, another aspect is to have a set of interventions across scales - a larger vision to change the identity of the place in question and set of smaller quick interventions that quickly change and build a level of trust with the local public, to take advantage of the social capital.

7.2 REFLECTION

7.2.1 SCIENTIFIC RELEVANCE

Chennai is a rapidly urbanising city with the population growing at an exponential rate leading to congestion and a lack of open spaces. This has further led to a case of extensive sprawl in the city's development in order to accommodate the population's needs. Urban sprawl has been well established in extensive theory to be unsustainable. This research aims to explore the possibility of urban regeneration and revitalisation of a forgotten part of the city as opposed to urban sprawl. It seeks to explore accommodating the city's needs for much needed social spaces through the process urban transformation.

Furthermore, concepts of liveability and vitality in an urban fabric and the notion of public spaces are quite established in the western context. This project explores ways to achieve vital and liveable environments in relation to the scale of the city and population and pace of development in the Indian context.

7.2.2 SOCIETAL RELEVANCE

It is important for cities to have places that go beyond their function of living and working to become a place of expression of the city's identity, a place that becomes part of an individual's identity. Public spaces that foster the city's social processes are almost non-existent in Chennai with the exception of the beaches.

Moreover, specifically in the urban setting of North Chennai, this issue becomes a lot more pronounced as these are environments of a majority of working class population with a lack of spaces in their private realm. And thus, these spaces become a necessity and an element of sustenance for the local people while at the same time providing for the much needed lung spaces for the city. Thus, the project focuses on transforming a forgotten part at the heart of the city into a place of expression of identity that reflects the city and the residents' social and cultural processes.

7.2.3 ETHICAL CONSIDERATIONS

North Chennai offers plenty of opportunities for revitalisation. However, it is also home to the highest number of the economically weaker section of the society in the city along some of the most vulnerable (to climate change) locations. Although the project focuses on creating socially relevant contextualised public spaces, this may result in the urban transformation of some of these vulnerable areas which may cause a temporary disruption to their livelihood.

Additionally, North Chennai also has a concentration of industries in its fabric. And this urban transformation that strives to achieve better liveable environments may also lead to the relocation or restructuring of these industries. This could in turn have an effect on the existing local demography as they are the source of livelihood for a majority of the working class communities in these localities.

Although, the resultant transformation is beneficial to all the stakeholders involved in the longer run, this may pose a short term challenge.

In addition to this, when it comes to public spaces in Chennai, it always comes along with a question of encroachment and squatters settling in. This is an aspect that is unavoidable. This entail two kinds of encroachments - one is people who need basic shelter and the other is people who need additional space. The project addresses both these issues with two components to the design.

Densification strategies provide for more housing for people who need basic shelter. Additionally, governance strategies that enable the appropriation of space for people who need additional space. The legalisation and allowing this to happen in a structured manner would go a long way in solving this issue.

7.2.4 LIMITATIONS

The structure and form of the urban fabric is tangled well with its society. As human beings, we tend to “embrace, contest or reject social changes” (Erdiaw-kwasie & Basson, 2017). This suggests that the urban fabric and its form are quite reflective of the city’s social and cultural processes.

It is important to note that Chennai and especially the North is a culmination of large number of diverse communities and ethnicities with their own identities. Although an understanding of all the existing communities is necessary for a comprehensive project, due to the timeline of this academic research this might be beyond reach.

Furthermore, the latest census data that is available is from 2011 making the available socio-economic data inaccurate and not up-to-date. Additionally, poor documentation of the existing fabric in terms of building typologies, function and footprint posed a big challenge for the trans-scalar analysis of the living environments. In order to tackle this, rigorous data collection through interviews and mapping was necessary during the field work. Also, this called for a generalised deconstruction of the fabric into a set of environments (strips) of certain common characteristics and this was factored into the site selection process – a site in each of the strips that enumerate the common characteristics of the specific strip. This leads to certain informed generalisations during the course of the project.

7.2.5 URBANISM MASTER TRACK AND CHOICE OF STUDIO

The Dutch approach to urban design and planning essentially informs the Urbanism programme which focuses on integrating urban design, spatial planning and landscape architecture. The structure of the Urbanism programme, over the course of the year, has delved into multiple scales and projects that deal with problems of various complexities. In this context, this project attempts to integrate the multiple scales of the urban fabric of North Chennai throughout the process of the research, analysis and the design.

The project, as mentioned previously, takes an urban-sociological and typo-morphological approach towards the analytical process which then informs the urban transformation through the design process. This approach in turn fits well with that of the studio, design of the urban fabric. In this context, this enriches this research project which focuses on understanding the complex relationship between the tangible public realm and intangible socio-cultural network in the dense urban settlements of North Chennai. Additionally, the studio’s focus on design and the methodology of scenario building and testing aided in understanding the contextual requirements of the public realm in North Chennai.

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Design of the urban fabric

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