

PUBLISHED IN 2013  
POLITECNICO DI MILANO.

# THE EAST *possibilities.*

SANTIAGO RESTREPO  
TUTOR: CORINNA MORANDI

MASTER IN ARCHITECTURE  
SCUOLA DI ARCHITETTURA E SOCIETÀ

## ACKNOWLEDGMENTS

*Corinna Morandi, This document would have never been possible without your assistance, guidance, and, overall, patience. Its creation was long, but, I have learned much about good urban practices. It was an honor to have done it under your guidance.*

*To Lina Scavuzzo, Federico Jappelli, Silvia Nessi, Carlo Molteni, Cristinana Mattioli and all the students of TPDW (Town Planning Design Workshop) of the Politecnico di Milano. Thank you for your valued collaboration.*

*Finally, but not least, thank you, Juanita Devis for your support during all those nights.*

## BACKGROUND

The East is defined as the peripheral area between the outskirts of the city of Milan and a Network of smaller urban conglomerations. This area, rich in diversity presents a contemporary challenge to the field of Town Planning.

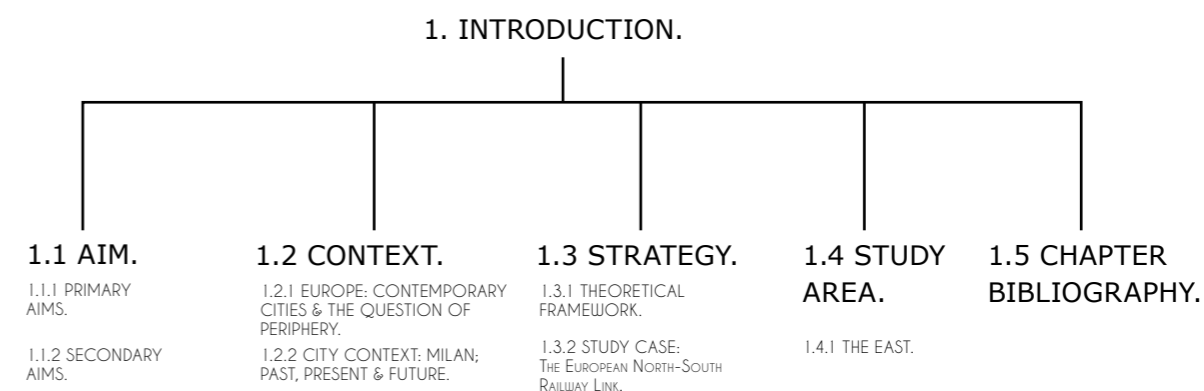
## INDEX.

ACKNOWLEDGMENTS	2	3.3 MILAN'S EAST PERIPHERY.	51
<b>1. INTRODUCTION</b>	<b>7</b>	3.3.1 Introduction.	51
1.1 AIM.	7	3.3.2 Neighborhoods.	53
1.1.1 Primary aims.	7	3.3.3 The public space.	58
1.1.2 Secondary aims.	8	3.3.4 Cascine & agriculture.	84
1.2 CONTEXT.	8	3.3.5 Activities & space.	93
1.2.1 Europe: contemporary cities & the question of periphery.	8	3.3.6 Mobility.	134
1.2.2 City context: milan; past, present & future.	10	<b>4. CONCLUSION</b>	<b>175</b>
1.3 STRATEGY.	13	4.1 THE SPACE AFTER THE PGT PROVISIONS ARE COMPLETE.	176
1.3.1 Theoretical framework.	13	<b>5. PROPOSITION</b>	<b>188</b>
1.3.2 Study case: THE EUROPEAN NORTH-SOUTH RAILWAY LINK.	17	5.1 INTRODUCTION.	189
1.4 STUDY AREA	20	5.1.1 Aim of the work.	189
1.5 CHAPTER BIBLIOGRAPHY.	23	5.1.2 Organization of the work.	189
<b>2. RULES</b>	<b>24</b>	5.1.3 Guidelines step by step.	191
2.1 INTRODUCTION.	25	5.2 GUIDELINES.	191
2.2 THE NEW PGT OF MILAN.	26	5.2.1 Guidelines map.	237
2.4 GUIDE.	30	5.3 PILOT CASE DEVELOPMENT.	245
2.5 STRATEGICAL PROVISIONS.	36	5.3.1 Masterplan of greco - bicocca.	245
2.6 CHAPTER BIBLIOGRAPHY	41		
<b>3. CURRENT SITUATION.</b>	<b>42</b>		
3.1 INTRODUCTION.	43		
3.1.1 Organization of the work.	43		
3.2 LOMBARDY'S EAST.	44		
3.2.1 Introduction.	44		
3.2.2 Space.	45		
3.2.3 Mobility & activities.	48		



i[1]

# 1. INTRODUCTION



## 1.1 AIM. 1.1.1 PRIMARY AIMS.

**Creating and ensuring livable streets and active use of the public space by connecting key elements on the sector and re-thinking existing conditions.**

This project contemplates a necessary transformation to be applied on a specific location over the city of Milan, the east side, it's primary intention is to achieve a continuous use of the public space, by connecting important buildings, along with parks, piazzas, and

open spaces with all the infrastructure network existent on the area, thus creating a permeable path that will permit interactions and combinations which in turn can become a revitalizing force.

**Preserving key infrastructure, vital for the present and future conditions of the city, and reinforcing them where is deemed necessary.**

The particularities of this area are highly dependant on infrastructure networks, that regard not only the city of Milan but also a larger system in the European network. Knowing this, we intend to preserve this hierarchy unobstructed, and reinforce it where deemed possible.

As most Italian cities, Milan is rich in history, and this is clear just from looking at its morphology: every building is telling a story that takes us back to a specific period of time and reminds us of its costumes and ideologies.

The following document will give us an insight of one sector of the city: The eastern perimeter. In here, we will be able to see how rich the urban tissue really is, and what are the challenges that this modern metropolis faces. This document will analyze and decompose the east, then, it will tell us about the urban reality and rules of the new development plan and, finally, it

will provide a series of recommendations that hopefully will be useful for its future development. This is, however, an academic work, so it contemplates the possibility of changes that cannot be predicted in a city as vivid as this. It is intended to, at least, provide a better understanding for an area that is characterized by its diversity.

**THIS CHAPTER IS DIVIDED IN:**

- 1.1 AIM.**
- 1.2 CONTEXT.**
- 1.3 STRATEGY.**
- 1.4 STUDY AREA.**
- 1.5 CHAPTER BIBLIOGRAPHY.**

### 1.1.2 SECOND-ARY AIMS.

**Are a set of strategies of interventions applied locally with the objective to reinforce primary aims, and with the objective of improving mobility, walkability and security on the sector.**

All aims will be discussed on later chapters, as well as the solutions proposed for achieving them. Moreover, they will be introduced each time we start a chapter, expecting by this a better understanding of the document and its reaches.

## 1.2 CONTEXT.

### 1.2.1 EUROPE: CONTEMPORARY CITIES & THE QUESTION OF PERIPHERY.

**We are then faced with the necessity of re-thinking this periphery, and, ask ourselves, what could be an adequate up to date model that can be adaptable with the sprawling periphery.**

When the question arises about the European town or city of the future, there are two competing developments running in opposite directions: the old and the new.

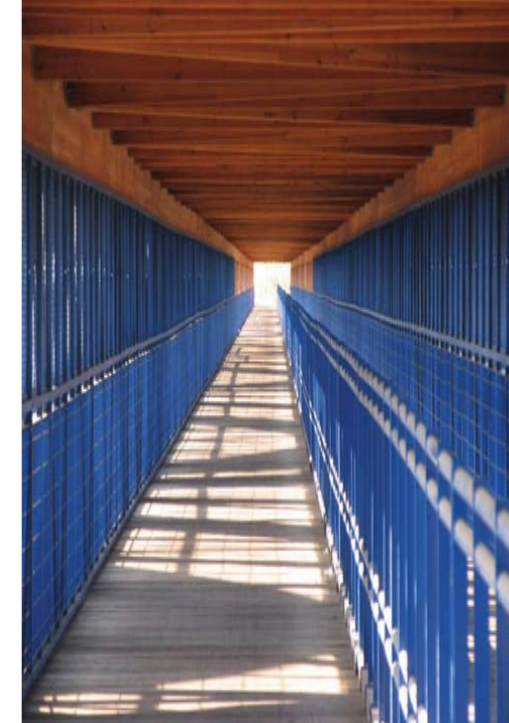
The old refers to the model that still believes in the continuity of the 19th century European town, and, on the basis of Walter Benjamin's arcade project, 'passengewerk' <sup>c[1]</sup>, wants to revive the livability of Cerda's block grid. This model has still retained validity as we use still town with this configuration, powerful and adaptable to integrate still the massive social transformation of today's technological and communications revolution.

<sup>c[2]</sup>

However successful, this model proves to be incapable of continuity especially on the periphery of all mayor European and world cities. The American development of this historical model led to the village life of the quarter ending in the new urbanism. It is however, an undeniable reality the fact that today's majority of Europeans no longer live in the old towns but spend their daily lives in the new agglomerations, out there. Where the petrol stations, and sopping centers, farming land and rubbish depots, industrial parks and residential areas mix painlessly.

Where no urban forms can be perceived or named anymore. They have to be identified, re-evaluated and defined.

The central issue for the urban development in Europe is how this apparent irreconcilable divides between the ideology of the old and the reality of the new town or city can be overcome. It



i[2].



i[3].



i[4].



i[5].



<sup>c[1]</sup> BENJAMIN, W. P12.  
<sup>c[2]</sup> OSWALD, Franz BACCINI. P12.

<sup>i[2]</sup> SOTTILE, G. P12  
<sup>i[3]</sup> GELSO M. R. P12  
<sup>i[4]</sup> MERTA, V. P12  
<sup>i[5]</sup> TRISCHI, W. P12  
<sup>i[7]</sup> WANG, J. P12  
<sup>i[6]</sup> BIANCHI, L. P12

## 1.2.2 CITY CONTEXT: MILAN; PAST, PRESENT & FUTURE.

is impossible to have contemporary cities with strong borders, the 'edge town', to the surrounding countryside. It would be equally false to give up values of the old town in favor of the artificially enthusiastic sentimentality of the periphery altogether.

The old, truly restraining walls of the towns fell in the 19th century, the emotional attachment to these urban borders, between the town and the countryside, the so called edge of the town, endured, as the town is seen as the opposite of countryside.

In practice, though, the difference gradually disappeared with the overflow of the new town into mixed agglomerations.

### URBAN GROWTH.

Milan's reach extended as the city progressed, making it one of the main urban settlements in Europe, also, previous low-dense areas surrounding the city became more dependable to the city core. The city grew from its original limits (given historically by the "Spanish walls", to cover, with its metropolitan region, most of Lombardy (Italy's most populated region).

Despite the fact that Italy's population growth has been stagnating, Milan continues growing. This has much to do with the enlargement of the EU (and, subsequent removal of barriers for internal immigration).

Milan added 634,000 foreign residents in just 6 years. (2000-2008). With large numbers from EU former eastern European countries, North Africa and South America. Over the period, 80% of urban growth has been due to international immigration, the key for this lies in the region economy, the strongest in Italy and perhaps all of Southern Europe. <sup>c[3]</sup>

### ECONOMY.

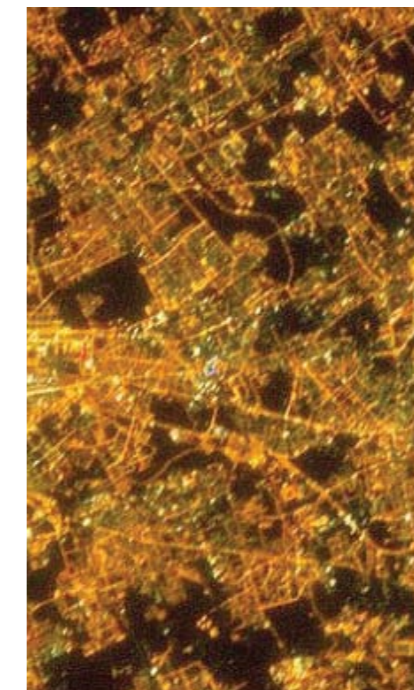
Milan was, in the late 12th century, a wealthy and industrious city, as the production of amours and wool, led the Lombard town to become rich. During the Renaissance, along with Venice, Rome and Florence, in the making of luxury goods, textiles, hats and fabrics, and the city cultivated such as reputation that the English word 'millinery', referring to women's hats in the 19th century, came from the word 'Milan'.

Towards the late 19th and early 20th centuries, it became a major European industrial centre for the automotive industry, chemicals, textiles, tools, heavy machinery and book and music publishing, with companies opening up. The political unification of Italy cemented Milan's commercial dominance over



northern Italy, and led to a flurry of railway construction that made it the rail hub of northern Italy. Rapid industrialization put Milan at the center of Italy's leading industrial region.

Meanwhile, as Milanese banks dominated Italy's financial sphere, the city became the country's leading financial center. Economic growth brought a rapid expansion in the city's area and population during the late nineteenth



and early twentieth centuries. Today the city has re-invented itself into a service-oriented economy, leading the world in topics such as fashion and design.

### PRESENT & FUTURE.

In the early 21st century, Milan underwent a series of massive redevelopments, with the moving of its exhibition centers to a much larger site in the satellite town of Rho, and the construction of a new financial district in *Por-*



<sup>i[8]</sup>.

*ta Nuova.*

Despite the decline in Milan's manufacturing production, the city has found alternative and successful sources of revenue, including publishing, finance, banking, food processing, information technology, logistics, transport and tourism.

In 2010 came the official announcement of Milan hosting the Expo of 2015. <sup>c[4]</sup>

## Urban Growth.

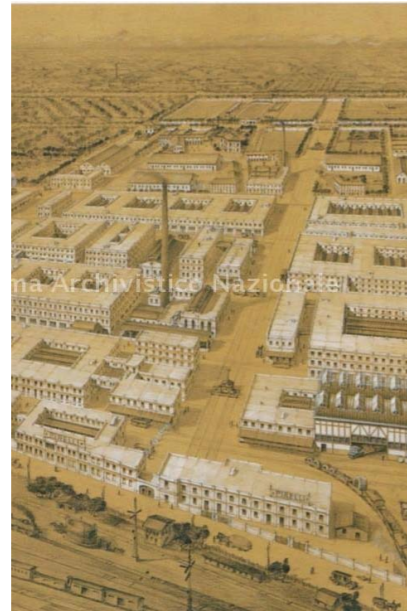


[9].



i[12].

## Economy.



[10].



i[13].



## Present & Future.



[11].



i[14].



i[15] FORCIONE R. P12  
i[16] COMUNE DI MILANO. P12

# 1.3 STRATEGY.

## 1.3.1 THEORETICAL FRAMEWORK.

**After knowing that the city needs have changed, we are left with the fact that traditional analysis provided in urbanism lacks the necessary tools for an adequate understanding.**

Meaning that before starting to deal with specific characteristics that our study case must adopt, we must think about an analytical strategy. However, we are not going to create a new analytical strategy but to adopt a model that, based on the proximity and similarity of the case can be regarded as the most accurate:

### **NETSTADT METHOD.**

The German term *Netstadt* is used in the form of an abbreviated metaphor or the urban system defined before, more comparable to ecosystems than to a hierarchical structure.

### **ANALYSIS BASED ON TWO MAIN CONCEPTS:**

It suggests an analysis based on two main concepts: those regarding space and those regarding human interaction.

#### Regarding Human Interaction.

- Identification.
- Diversity.
- Flexibility.
- Degree of self-sufficiency.
- Resource efficiency.

Identification: Refers to identifying characteristics of an urban system, communicated by various media. These characteristics create orientation and order within space and time, and are therefore essential for urban existence.

**Diversity:** describes the different ways a certain function in an urban system can be performed, like different ways people can be fed and transported, a house built or a consumer product manufactured.

**Flexibility:** describes the system's ability to handle external and internal change in two ways: whether it changes (evolves, potential innovation), or it doesn't (homeostasis, buffer capacity).

**Degree of Self-sufficiency:** describes the relationship between available regional resources that the region requires to meet its needs.

**Resource Efficiency:** denotes the relationship between the quantity of a resource utilized and the quantity that is available.

#### Regarding Space:

Based on previous research, we will be evaluating the presence of three main elements:

- Nodes.
- Connections.

- Borders.
- Density.

**Nodes:**  
As locations marked by a high density of people, goods and information.

**Connections:**  
Represents the flows of people, goods and information between the nodes.

**Borders:**  
Are the spatial, temporal or organizational demarcations of the network, they are also called the perimeter or the scale of the network.

**Density:** is the determinant value for Nodes, Borders are measured according to physical-spatial divisor elements, and other criteria such as political, economic and topography.

The resulting system, based from these elements is open, the nodes inside are linked outside the system, this means that the system allows interchange of goods, people and information outside its

borders.

**SELECTION OF SCALE:**

We choose scale depending on the Limits or Scale organization that structures the urban system, there are 4 scales that where chosen:

-Regarding Scale.

-Neighborhood.

-Community.

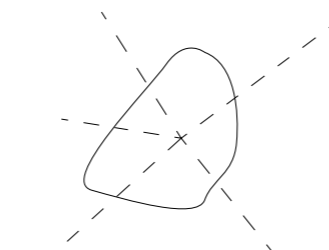
-Region.

-Extra-Region.

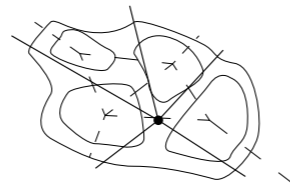
**Neighborhood:**  
This scale is the one that determines the possibility of identification with their community.

**Community:**  
This level is the first tier of collective organization for social needs (education, construction and social tasks).

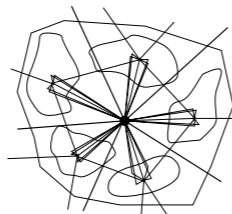
**Region:**  
Composed of several communities requiring a central coordination of educational, social, resource management and transportation. It is able to carry these out as a politi-



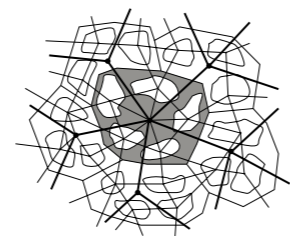
Neighborhood.



Community.



Region.



Extra-Region.

cal or economically independent unit.

**Extra-region:** The biggest scale, this one reveals the true possible reaches of an strategical project, as well as its complexity when dealing with large scale projections.

Each of the scales can be described as a Network with nodes, however, limits are given depending of the scale:

-Regarding Limits

In Neighborhood they are given by the relation of houses and neighborhood services.

In Community by the relationship of Neighborhoods and communal services.

In Region and Extra-Region by the political borders, plus other considerations such as economic or cultural links.

There is a hierarchy on the nodes, which differentiate our model from Christaller's method. Nodes enable to perceive the location of organizational units.

**MORPHOLOGY TOOLS:**

Morphological analysis lets us define patterns into the space, permitting us to hint and to read the space, they are later assessed regarding urban quality of the space and will be the base to future design recommendations and guidelines.

We will use 6 parameters to analyze the space:

-Regarding Hierarchy.

-Waters.

-Forest.

-Settlement.

-Agriculture.

-Infrastructure.

-Fallow land.

**Waters:** Accumulation of water in and over the surface including springs, pools, puddles, brooks, rivers, currents, lakes).

**Forest:** Natural, ecological systems of trees growing close together, this is distinguished by a high density of trees and plants on the surface of the ground.

**Settlement:** The concept of settlement is used to designate the territory that humans occupy and shape with their buildings and the facilities for their activities.

**Agriculture:** Economic utilization of land, for vegetable and animal products. Horticulture is also taken in account under this category.

**Infrastructure:** They are differentiated between physical, administrative and institutional infrastructure, added to streets, water installations, telecommunication, airport, and electrical power).

**Fallow Land:** They designate corridors, buildings, and space that is no longer used or is in reserve; This is a particular problem of European cities as a consequence of radical changes in technology, logistics and the industrial field.

**OTHER IMPORTANT CONSIDERATIONS.**

Importance of Infrastructure in Settlements: \_

An attractive, well-connected



public rail transport system is the backbone of any settlement development in which the development of transformation of the building stock has priority over the further consumption of valuable cultural landscapes.

In the aim of creating livable cities, a well-developed public transport is the key factor for achieving this. The integrated development of public transport, transformation of the building stock and the development of the existing reserves are challenging tasks that cannot be resolved by simply expanding the cities.

Contemporary European cities have become part of a system well beyond its hinterland, demanding goods and services from far away regions, this, in practice, needs the constant development of cheaper and faster means of connections.

**-Spatial Strategies:**

They are defined as guidelines for the implementation of an integrated spatial solution that, one approved, may take

many years or even decades to realize.

An overview and focal points are necessary elements of a nascent strategy, and problems, understood as difficult unsolved tasks, are the central starting point. Difficult situations must be identified by the fact that the unforeseeable must be part of the calculations.

**-Time:**

A masterplan is concerned with the details of an operation, while strategies bring more flexibility into constantly changing situations and take existing uncertainties into consideration. The approach to limited means and resources, along with risks and surprises play a central role. The use of strategies imply that, even with the best planning, reality can never be fully controlled, so, the availability of reserve is a central precondition for being able to solve a difficult task.

**Central tasks:**

In order to be able to develop

strategies, a clear idea of the main tasks must be taken in consideration, this since concentration of the essentials is key, as flexibility is needed when confronting the unknown, what is essential and what is not plays a central role.

Strategic thinking is not a new planning theory but an expansion of the approaches already available.

**-Critical Route:**

As defined by the essentials of a strategical plan, depending of the scale, this deals with different regional and/or political entities. And not always is easy to find the political willingness and resources for a strategical plan.

**-Necessity:**

All strategical plans start with a strong necessity of spatial change, due to economic forces or population changes, in our case study, this is more probable in concentrations of population and need for connections.

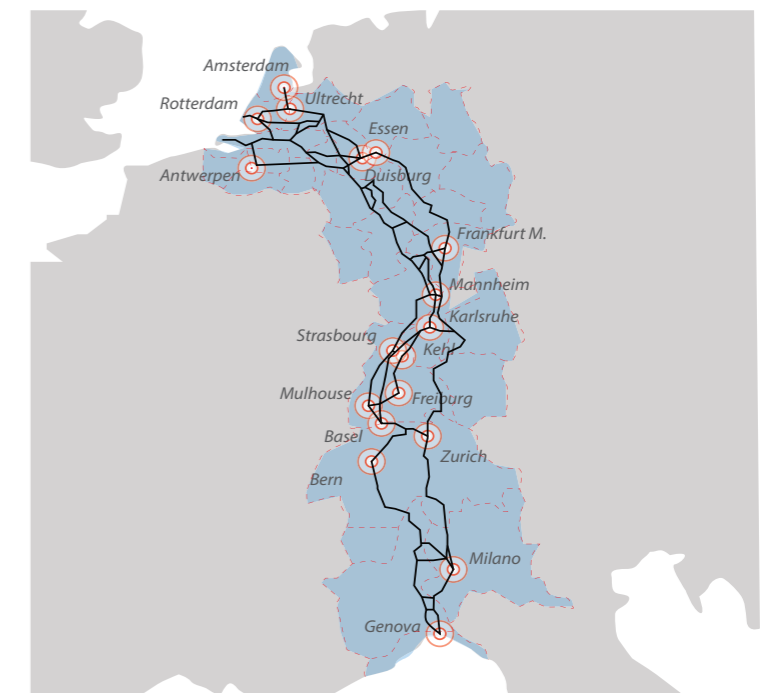
### 1.3.2 STUDY CASE: THE EUROPEAN NORTH-SOUTH RAILWAY LINK.

**DESCRIPTION.**

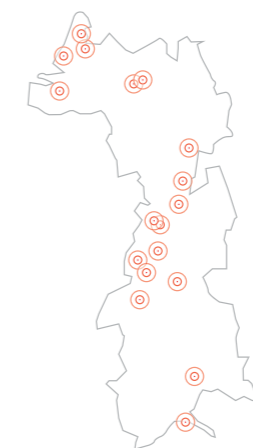
*Realizing a national and continental high quality transport infrastructure needs a clear strategy, spatial and transport development are two sides of the same coin.*  
Bernd Scholl.

*The European North-south Railway link from Rotterdam to Genova is one of the most important railway connections in Europe. The 1200Km transport route has grown over the centuries and today connects the largest North sea ports with Germany, Switzerland, northern Italy and the Mediterranean. The main goal of the Railway link is to attract cross-border railway transport and to transfer trans-alpine goods traffic from road to rail. The core of this system is the level rails through the Alpine Base Tunnels, which will increase train speed and volume.*

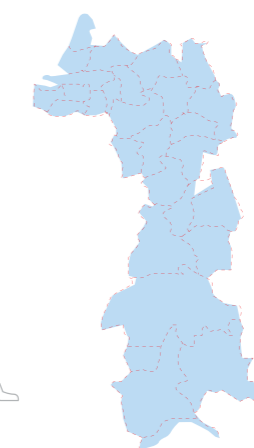
*Major investments in railway-related infrastructures of more than 40 billion euros will be undertaken along the axis in Switzerland alone, the con-*



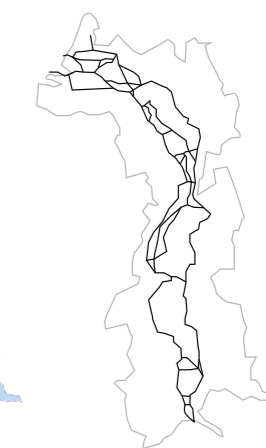
**-Nodes.**



**-Connections.**



**-Borders.**



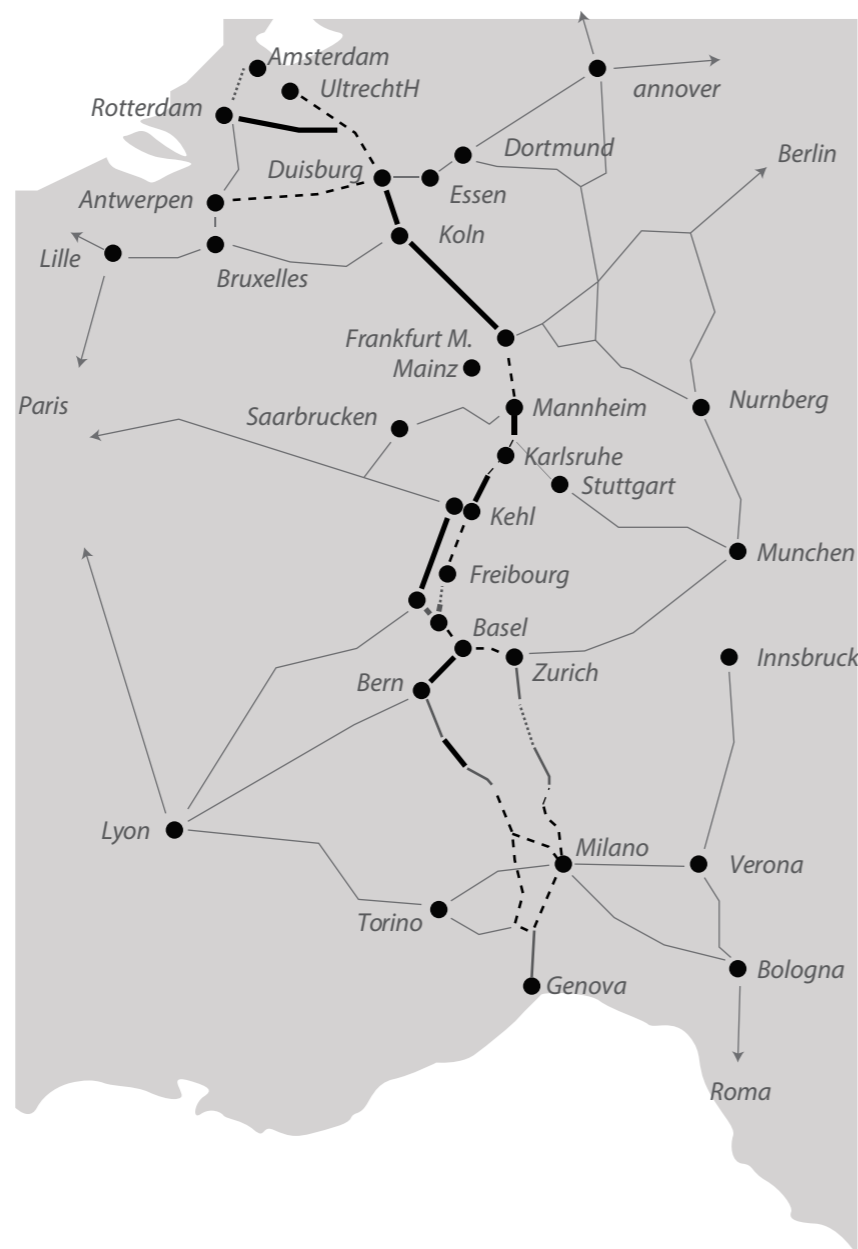
struction of tunnel routes will require investments of about 15 billion euros.

The opening of the first Alpine Base Tunnel, Lotschberg, in 2007 and the planned opening of the Gottard in 2016/17 constitutes a quantum leap in railway development, and not only in the alpine area. Tunnel construction, including its approach routes, should bring with its favorable connections for cross-border goods and passenger transport in the Central European North-South Corridor.

Two additional tunnels in the alpine EU area, namely the Brenner Base Tunnel in France, are also planned as component of the Trans-european Transport Network (TEN). The Mont Cenis Tunnel between Lyon and Turin is still in a planning stage and construction of the approximately 50km Brenner Base Tunnel started in early 2011.

**COSTS:**

The investment for the railway-related infrastructure of



the entire North-South Link requires major resources, the approximately 40 billion Euros mentioned above. These resources are not available in the individual countries or in the EU budget. It is becoming apparent that countless bottlenecks will exist because not enough capacity will be available for all desired rail transport. There is a risk that regional transport, important for public transportation, will be displaced through increasing goods transport. Without an attractive public passenger service, the desired goal of settlement development as redevelopment will be endangered.

**SWITZERLAND AS EXAMPLE:**

Switzerland is a good example of the use of a strategy in its network of cities and places. The decentralization pattern of settlement in the country, a reflection of its federal structure, demands an efficient public transport system, mainly in the area of rail transport. This is the strategic backbone of its spatial devel-

opment, because through its secure, efficient and well-conducted operation, mobility is ensured by the highly specialized workplaces in Switzerland and bordering countries now in the future. Competitiveness and prosperity are closely related to this transportation system.

## 1.4 STUDY AREA

### 1.4.1 THE EAST.

#### WHY THE EAST?

Milan is interesting since each cardinal point means a specific set of particularities that can be studied and isolated. We can see that the city is continuous to the north, along the main axis of mobility, and is interrupted in the south by the presence of a large agricultural park. The east is a combination of this two parameters, being the perfect area of investigation when we intend to deal with diverse and often conflicting elements. It is also the place where most of the arriving population concentrates (see charts).

#### TWO-SCALE APPROACH.

Knowing that the East is only a generic-cardinal definition, we will here define our area limits, where we will work. We have decided to use two scales, one regional and the other one a peripheral scale. They are defined as

-Observation Perimeter.

-Project Perimeter.

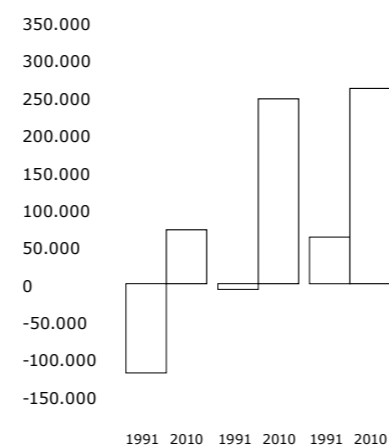
#### Observation Perimeter:

The first step addresses the project perimeter as a network component in a larger urban system, in order to characterize the nature of the system's interactions with the outside world.

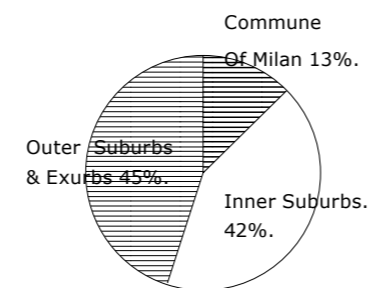
#### Project Perimeter:

Is the key component of the document, defined by special characteristics that define borders, and that will be expanded in further detail. Final work will include spatial recommendations for the area plus a strategical plan for its development.

**Milan Metropolitan Region: Population Growth by Sector. 2001-2010.**



**Population Location.**





## 1.5 CHAPTER BIBLIOGRAPHY.

### BOOKS CONSULTATED:

METROBOSCO, BIOMILANO, Six ideas for a bio-diverse metropolis  
Six transitional states between the city, nature and agriculture  
Six energy sources for a new model of urban economics, Stefano Boeri. Milano, 2011.

PHILADELPHIA URBAN VOIDS, Jhonnatan Alderson, Architects, Wayne, PA 19087-0661  
Architectural Contest for re-designing Philadelphia's City Center. Client: Van Alen Institute of New York.

BIRMINGHAM, Big City Plan, City Center Masterplan, City Centre Development Directorate Birmingham City Council  
September 2010, 1 Lancaster Circus Birmingham B4 7DJ.

TOWN CENTRE LINK, Knight Architects, built in 2011 as part of the London 2012 Olympics Development Plan, London, UK.

CROSS-WIND BRIDGE, tiago barros, jorge pereira, as part of a competition for a new cycling bridge in Lisbon, Portugal.

PHILADELPHIA URBAN VOIDS, Ecosistema urbano, Architects, Belinda Tato, Jose Luis Vallejo, Constantino Hurtado, Elena Prieto.

Architectural Contest for re-designing Philadelphia's City Center. Client: Van Alen Institute of New York.

HISTORICAL DEVELOPMENT OF BICOCCA, PHOTOS AND HISTORY.

PROGETTO BICOCCA, Un contributo per Milano Policentrica, 1995 Triennale di Milano, Book.

### IMAGES SOURCE:

i[1] BORSATTO, M.  
BORSATTO, Maurizio. "Via Cavriana - Cavalcavia Buccari - Milano". Selected for Google Earth. @Panoramio. No Date.

i[2] SOTTILE, G.  
SOTTILE, Giovanni. "ATM Segrate". Selected for Google Earth. @Panoramio. No Date.

i[3] GELSO M. R.  
GELSO Maria Rita. "Laghetto redecesio". Selected for Google Earth. @Panoramio. Feb 1, 2011.

i[4] MERTA V.  
MERTA Verja. "deposit". Selected for Google Earth. @Panoramio. No Date.

i[5] TRISCHI W.  
TRISCHI Ward. "Linate Airport". Selected for Google Earth. @Panoramio. No Date.

i[6] BIANCHI, L.  
BIANCHI, Lucca. "Zingari Milano". Selected for Google Earth. @Panoramio. 2003.

i[7] WANG, J.  
WANG, Jia. "Zingari Milano". Selected for Google Earth. @Panoramio. 2008.

i[8] NASA  
NASA, Night Satellite Photo, taken along other cities such as Tokio, Barcelona, Paris, Ny, London, etc. No direct source found, although present in several blogs. (spazio urbano blogspot, plataforma Urbama). 2011.

<http://www.plataformaurbana.cl/newspazio.blogspot.com/>.

i[9] i[12] i[13] STORIA DI MILANO.  
STORIA DI MILANO, Photo taken from the historical archive.

[http://www.milanofree.it/milano/storia/storia\\_di\\_milano.html](http://www.milanofree.it/milano/storia/storia_di_milano.html).

i[10] FONDAZIONE PIRELLI.  
PIRELLI FOUNDATION, Historical Archive, Document found on the Preservation Archive of the History of Pirelli.

<http://www.fondazionepirelli.org/>

i[11]. WENDELL C.  
WENDEL Cox. "Milano". Published for the article: The evolving Form of Milan, September 11, 2011.

<http://www.newgeography.com/content/002441-the-evolving-urban-form-milan>.

i[14] i[16]. EXPO 2015 COMUNE DI MILANO.  
EXPO 2015 COMUNE DI MILANO. "Vista dal alto Expo di Milano".

<http://www.expo2015.org/il-tema/masterplan>.

i[15]. FORCIONE R.  
FORCIONE ROSSELLA. "Milano Fashion Week". Published for the article: "Milano Fashion Week, the beginning" , September 09, 2013.

<http://www.acupofme.com/2013/02/milano-fashion-week-beginning.html>.

i[16] COMUNE DI MILANO.  
For Expo 2015. @comune di Milan

c[1] BENJAMIN, Walter. The Arcades Project, Ed. Rolf Tiedemann. Trans. Howard Eiland and Kevin McLaughlin, (New York: Belknap Press, 2002.

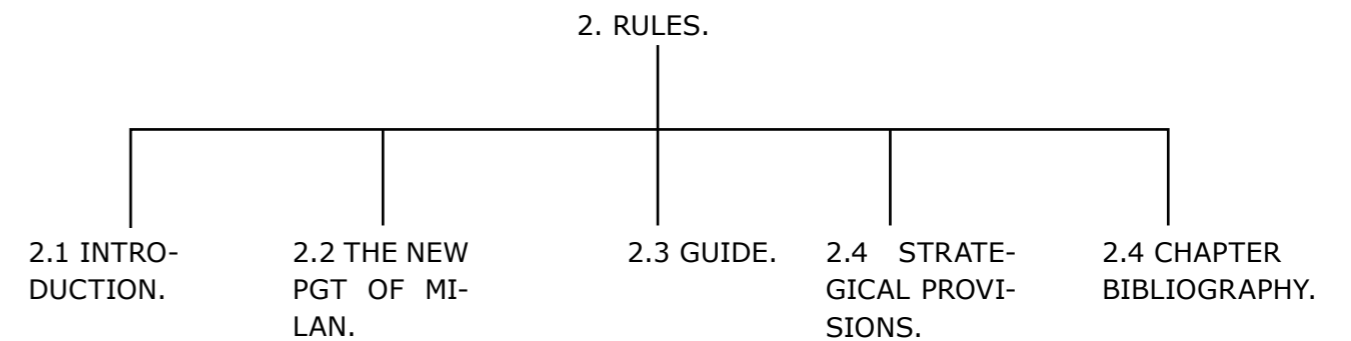
c[2] OSWALD, Franz BACCINI, Peter. Netzstadt : designing the urban, Ed. Basel ; Boston : Birkhäuser, 2003.

## 2. RULES

BASED ON THE REGULATORY PLAN (PGT) OF THE CITY OF MILAN.

APPROVED MAY 22, 2012

## 2 RULES.



### 2.1 INTRODUCTION.

*"The city is a complex unitary organism, a living corpse subject to continuous evolution, that constitutes life, and in constant relationship with individual and collective human action, that are happening there."*

Giuseppe De Finetti.

This chapter is designed as an introduction to the new regulatory plan, the PGT of the city of Milan, analyzing the main ideas behind it, plus a small guide to better understand the new urban rules that will be applied and finally, maps showing which types of provisions are envisioned.

**THIS CHAPTER, IS DIVIDED BY THE FOLLOWING THEMES:**

- 2.1 INTRODUCTION.**
- 2.2 THE NEW PGT OF MILAN.**
- 2.3 GUIDE.**
- 2.4 STRATEGICAL PROVISIONS.**
- 2.5 CHAPTER BIBLIOGRAPHY.D DESCRIPTION.**

## 2.2 THE NEW PGT OF MILAN.

### 2.2.1 THE PLAN.

Contemplates a diverse, non-homogeneous city, characterized by differences between typologies, morphology and life, that are in relationship with the differences found on each particular piece of territory.

The new plan of the city of Milan is an experiment, one that will define the future character of the city, providing a new set of rules that Milan will adopt.

#### DOCUMENTS OF THE PGT.

-One that regards deliberations, known as *allegati*, plus another one of supporting documents.

-One, the *Documento di Piano*, that has all the strategical issues + an analytical support for its conception.

-One, known as *Piano delle Regole*, with all the rules and applications to the city.

-One regarding services, *Piano dei Servizi*, that deals with provision, specification and strategy to follow for present and future displacement of services.

-One chapter devoted to hydrology, geology and seismic considerations.

-One dedicated for legal documentation. <sup>c[1]</sup>

#### LAND CONCEPTION.

-Division in 5 areas.

According to studies, the region has 5 distinguishable sectors, each one with different morphological shape and way of living:

-*Foglia della Brianza.*

Located at the northern part, this is an area directly related with the northern connections (a virtual corridor that stretches all the way to northern Europe). This engulfs important cities that have a significant weight on economy, industry and tourism.

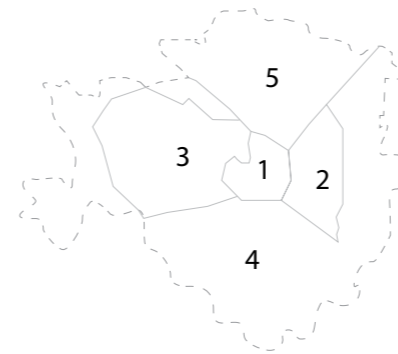
-*Città lineare Est Milano.*

This is a recollection of different cities all over the east of Lombardy, industrially, and important in terms of infrastructure, as well as rich in landscape and natural resources.

-*Parco Sud.*

Located at the south, this zone is important mainly for its agricultural and landscape element vital for providing food to other denser areas, such as Milan and also, on a broader scale, to the country and the European scene.

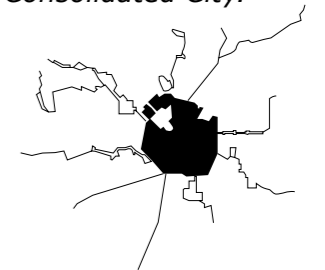
5 Areas.



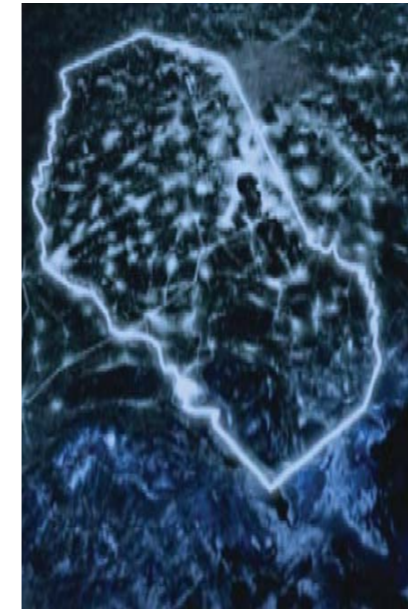
1. Consolidated City.



1. Consolidated City.



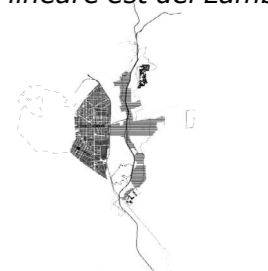
2 Città lineare est del Lambro.



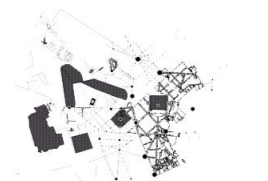
3. Foglia della Brianza.



[1] 2 Città lineare est del Lambro.



3. Foglia della Brianza.

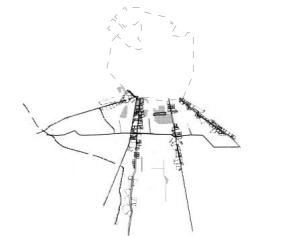


4. Parco Sud.

4. Parco Sud.



5. Città trasversale Nord.



5. Città trasversale Nord.



-Città trasversale Nord Milano.

This is a recollection of different cities— over the north of Lombardy, with an industrial strength as well as rich in landscape and natural resources.

-Consolidated City.

Delimited by the Spanish walls (1546-1560), this place has a superimposition of buildings that range from when the city was established as a roman settlement (*Mediolanum*), to contemporary structures.

The main core of Milan Metropolitan Area, this is an area that concentrates the highest number of services, and also, the most dense. This is an undeniable centrality. <sup>c[2]</sup>

## 2.2.2 MAIN IDEAS BEHIND THE MILANESE PGT.

### CONTEMPLATES A DIVERSE, NON-HOMOGENEOUS CITY:

Characterized by differences between typologies, morphology and life, that are in relationship with the differences found on each particular piece of territory.

-Civil Integration.

-A multicentric city.

-Infrastructure Oriented to a Monocentric City.

-Civil Integration: Life is not only formed by material goods, but also dependant of social behavior, of agregative conditions of culture and educational offerings, development of a metropolis doesn't only brings knowledge and entrepreneurship but also those of negative effects such as violence. Taking this in consideration, the consolidation of urban tissue (services,

legal framework) in favor of civil integration, and, at the same time, diminish of conflictivity.

-A multicentric city. The metropolitan area around Milan is characterized by big and small urbanized areas, each having a strong identity.

Inside this densely populated environment (around 3.5 million people), there is a strong, complex interrelationship: every day, people move to and from each one of this poles, seeking to arrive to their jobs, education facilities, other services, tourism, etc.

Infrastructure Oriented to a Monocentric City. From the historical development to several urban plans taken from the city, all have had in common the fact that they were oriented towards a monocentric city; last plan had provisions for decentralization, when they translated services to the periphery and along main axis of infrastructure.

While a large part of the citizens of this vast area use it on a multicentric way (meaning intricate dependence relationships between smaller cities and Milan), the city is designed with its infrastructure servicing the latter. The new Plan adopts measures for reinforcing several centers with a strong identity.

### APPROACH TO PERIPHERY.

The traditional urban planning method has concentrated services along the central zone while disregarding its borders in a sort of a back-yard mentality. Consequently, It seems that the periphery of most cities tends to correlate with the most problematic areas.

The PGT identifies this problem as a generator of lack of identity. The urban periphery is key in the plan.

### OTHER IMPORTANT CONSIDERATIONS:

-Limits become invisible: This situation is a reflection of the sprawl of the city, to the point where the only visible limits

are dotted lines on an institutional map.

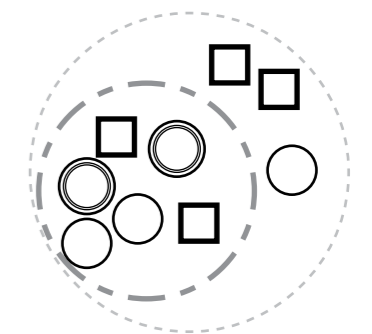
-Re-think infrastructure relationships: According to the PGT, the organization of the infrastructure of Milan must be re-thought, by providing a direct service to urbanized land at the periphery of the city, and changing the hierarchical system.

-Process of de-centralization: In a broader scale, the fact that the city is no longer the obligatory point of crossing when moving through the alpine valleys and the south is a witness of this process of infrastructural de-centralization

-Civil Integration.







-A multicentric city.

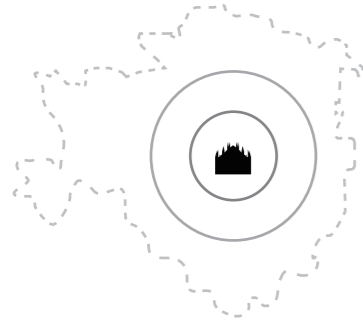


Service's Coverage.  
Service's Coverage Extension.

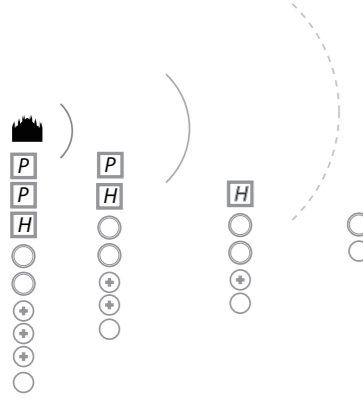
# 2.3 GUIDE.

that the city is oriented  
To a Monocentric City.

-  City Center.
-  Second Ring.
-  First Ring.
-  City Limits.



Process of de-centralization.



Re-think infrastructure relationships:



●● Cities Infrastructure Network.

**The PGT comes with new urbanistic rules, so, this document has designed a small guide that can help clarifying which are going to be those rules and, how and when to apply them.**

**GLOSSARY. c[3]**

**-A.T.U. Area di trasformazione Urbana.** These are special areas designed by the city for development, they follow a different urban regulation that is specified on the PGT. Including maximum buildable area and percentages of urban green and social housing, some A.T.U.s have a vocation, plus guidelines from the municipality.

**-A.T.P. Area di Trasformazione Periurbana.** Areas of landscape and agricultural production emphasis. They are briefly mentioned on the PGT, being covered by the *Norme di Attuazione of the Piano Territoriale di Coordinamento del Parco Regionale Parco Agricolo Sud Milano* plan.

**-S.I.p.** Superficie Lorda Complessiva di Pavimento. Gross Floor Surface, measured in sq m. It is composed by the sum of surfaces that are the sum of all floors, in sq m. They include balconies, terraces, and covered surfaces.

Elevators, Stairs and other vertical linings are part of the S.I.p. So are underground and semi-underground floors.

**-S.I.p. massima.** Maximum area that can be built, after complying with urban cessions.

**-U.t.** Indice di utilizzazione territoriale. Buildable rights: gives the right of edificability that can be transferred to any other buildable territory in Milan, calculated in sq m.

**T.U.C. Tessuto Urbano Consolidato.** It's a designated Area, where most of the urban rules we are seeing apply.

**-S.t.** Superficie Territoriale. It's the surface in sq. m, of the intervention; it comprehends all areas destined for construction, but leaves public areas (cemeteries, urban parks), infrastructure (roads, highways, service roads) and areas ceded by the lot due to acquiring buildable rights.

**-Rc.** Raporto di Copertura. Roof Coverable Index It's the percentage occupied by the cover of a building permitted on a given area.

**-Services:** There are two categories of services:

Localized services (including urban green, mobility infrastructure and services to the individual) and Services to localize.

**-U.t. unico.** Buildable rights for social housing, urban green and street mobility, they can be

transferred throughout the city.

**-Buildable rights (U.t.):** 0.35sq m/mq. This means that for every sq m., 0.35 sq. m can be transferred to any other buildable territory in Milan. If the area is superior, the UT will be equivalent.

In areas of social housing, cession of the lot of more than 70% gives UT construction rights to the owner.

**HOW TO CALCULATE: c[4]**

Rules change depending on the soil where they are located. If they are part of an A.T.U. Or an A.T.P. The rules will be directly given (see A.T.U. Section), if they are part of the consolidated tissue of the city, the following rules should be followed.

If part of the consolidated tissue of the city:

New Constructions, or Building Substitution:



Follow next chart, possibility to build 1sqm/sqm depends of the lot size and services provided (urban incentives and social housing).

Parking:

1 Every 400m for new residences.

1 Every 50m for new tertiary functions.

1 Every 100sq m of commercial buildings.

Parallel street parking alongside the residences must be provided by the builders at the rate of:

1 parking for each housing unit for residences.

1 parking each 50sq m of commercial functions.

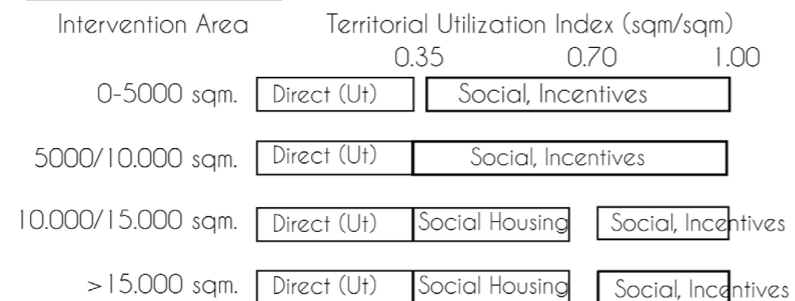
Parking Cell: 12,50 sq m, excluding maneuverability space.

Social Housing:

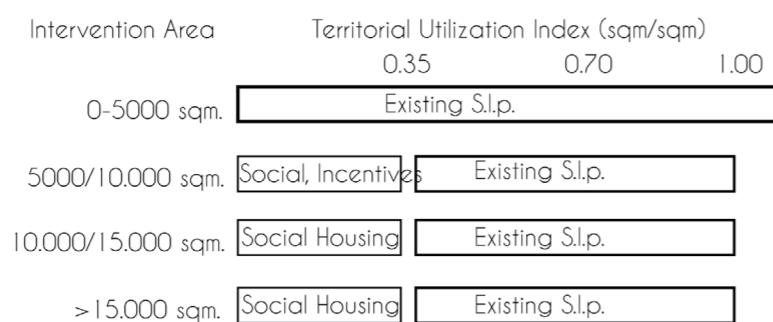
It is considered as social

**Building in The Consolidated Tissue of the City.**

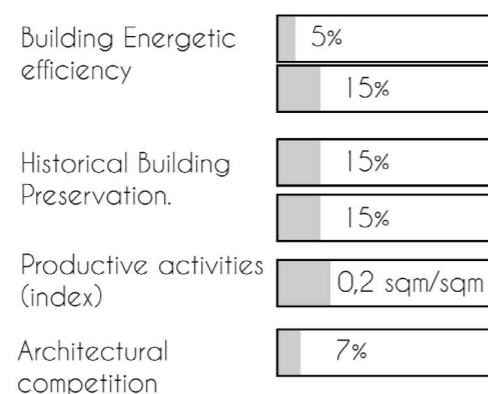
New Constructions.



Building Substitution, Renovation and New Construction on Urban Areas.



Incentives.



housing, all residences provided at an inferior market value, defined by the municipality of Milan.

They have a Ut. (Buildable Rights) of 0.35 sq m/ sq m. That are articulated as following:

-20 maximum sq m/ sq m of social housing, with the possibility of transferring this to other parts of the city or on-site co-housing.

-0.10 maximum sq m/ sq m that can be student residences, co-housing, or rent-controlled.

-0.05 minimum sq m/ sq m. with rent-controlled units.

Sustainable Architecture:

Buildings with sustainable levels that are above the minimum requirements can be rewarded with up to 5% increase of the S.I.p. (Gross Floor Surface), or up to 15% if it is a renovation or restoration (in case of restoration, transferability of those rights is mandatory).

**MORPHOLOGICAL CONSIDERATIONS:**

-Urban Continuity and Coherence

The plan also identifies areas with reconcilable features, and recommends to continue with these features as a strategy to harmonize the space, they have 5 types of this spaces:

- Curtain Compact Tissues.
- Open Courtyard Tissues.
- Garden City Tissues.
- Rural Typology.
- Urban unit system.

-In Curtain Compact Tissues, construction must arrive to the maximum height of the smallest adjacent building.

-In Open Courtyard Tissues, the height of buildings must be equal or smaller to that of the adjacent building.

-In Garden City Tissues: buildings must be morphologically and typologically similar, pre-

serving alignment, height, and typology.

-In Rural Typology: Pre-existing buildings can be used with the maintenance of the original characteristics of the building.

-A.R.U.

*Ambiti di rinnovamento urbano:* Are areas on which the design of urban spaces is incomplete, *Indicazioni morfologiche* is provided for checking the location of this Areas.

The rules on this special sites are as following:

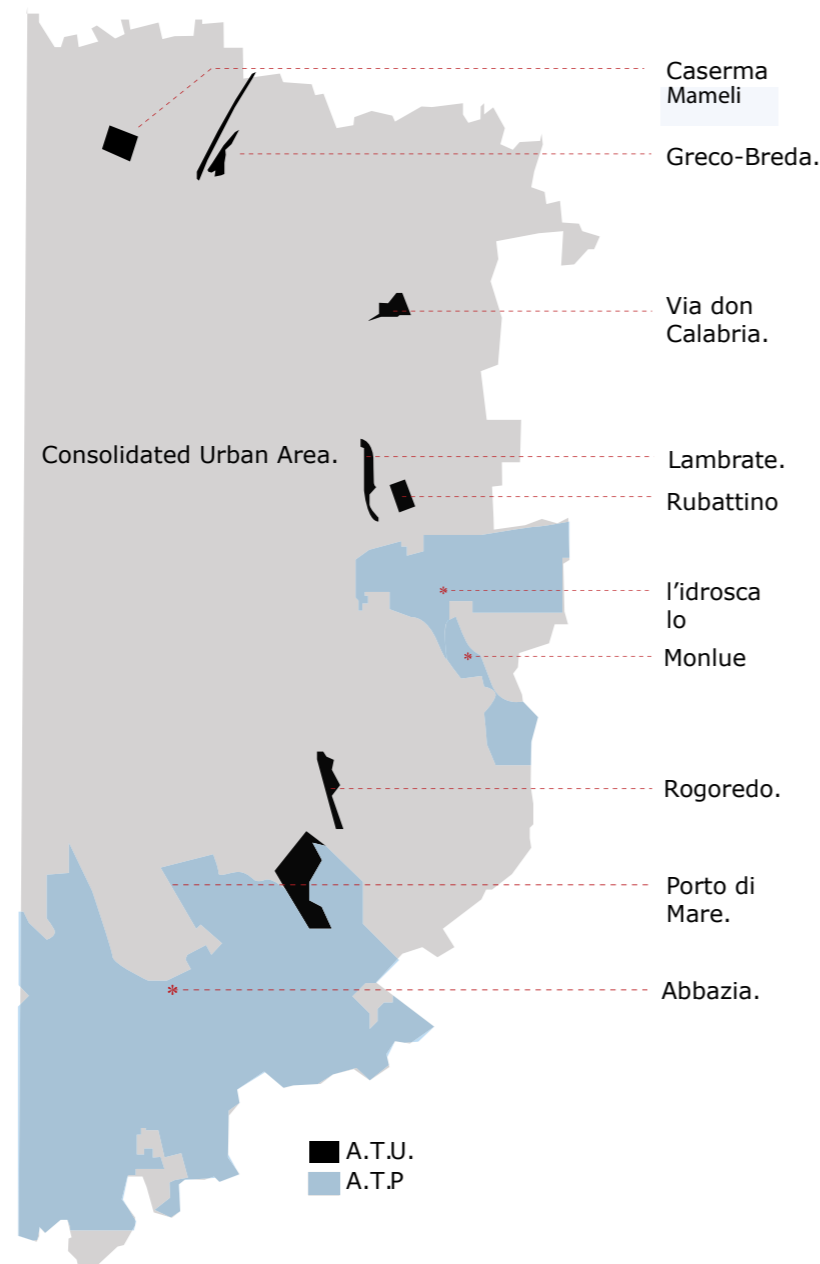
-Alignment of at least 50% of the facade with the adjacent public space, if, on the contrary, this buildings are part of an existing Curtain Compact Tissue, then the maximum height of them is the minimum height of the adjacent building.

-Rc. (Roof Coverable Area) is less or equal to 60%.

**A.T.U. AND A.T.P. c[6]**

**-A.T.P.**  
*Area di Trasformazione Peri-urbana.* Areas with landscape and agricultural production emphasis. They are briefly mentioned on the PGT, being covered by the Norme di Attuazione del Piano Territoriale di Coordinamento del Parco Regionale Parco Agricolo Sud Milano plan.

**-A.T.U.**  
*Area di Trasformazione Urbana.* Areas of opportunity that have been chosen by the city as key for development. They reinforce the urban coherence in the city.



**A.T.U. URBAN RULES. c[5]**

<u>Caserma Mameli.</u>	Total Area: 105.998 sq m.	
Maximum buildable Area:	-	
Spaces and services of public interest:	-	
Spaces for parks (permeable):	30%	
Vocation:	-	
<u>Greco-Breda.</u>	Total Area: 72.166 sq m.	
Maximum buildable Area:	-	
Spaces and services of public interest:	-	
Spaces for parks (permeable):	30%	
Vocation:	-	
<u>Via Don Calabria.</u>	Total Area: 72.456 sq m.	
Maximum buildable Area:	47.096 sq m.	
Spaces and services of public interest:	-	
Spaces for parks (permeable):	50%	
Vocation:	-	
<u>Lambrate.</u>	Total Area: 70.716 sq m.	
Maximum buildable Area:	-	
Spaces and services of public interest:	-	
Spaces for parks (permeable):	35%	
Vocation:	university.	
<u>Caserma Rubattino.</u>	Total Area: 81.881 sq m.	
Maximum buildable Area:	57.316 sq m.	
Spaces and services of public interest:	50%	
Spaces for parks (permeable):	30%	
Vocation:	-	
<u>Rogoredo.</u>	Total Area: 21.079 sq m.	
Maximum buildable Area:	-	
Spaces and services of public interest:	-	
Spaces for parks (permeable):	30%	
Vocation:	administrative.	
<u>Porto di Mare.</u>	Total Area: 490.000 sq m.	
Maximum buildable Area:	127.719 sq m.	
Spaces and services of public interest:	50%	
Spaces for parks (permeable):	50%	
Vocation:	-	

## 2.4 STRATEGICAL PROVISIONS.

### 2.5.1 PGT PROVISIONS.

Together with Urban Rules and an understanding of the PGT, this document provides the following maps, showing, on a larger scale, what are the provisions in Public Space and Mobility, and how this projections intend to change the city's periphery.

We will see maps, with the project area, showing all challenges inside, regarding:

#### NEW PUBLIC SPACE PROJECTED BY THE PGT.

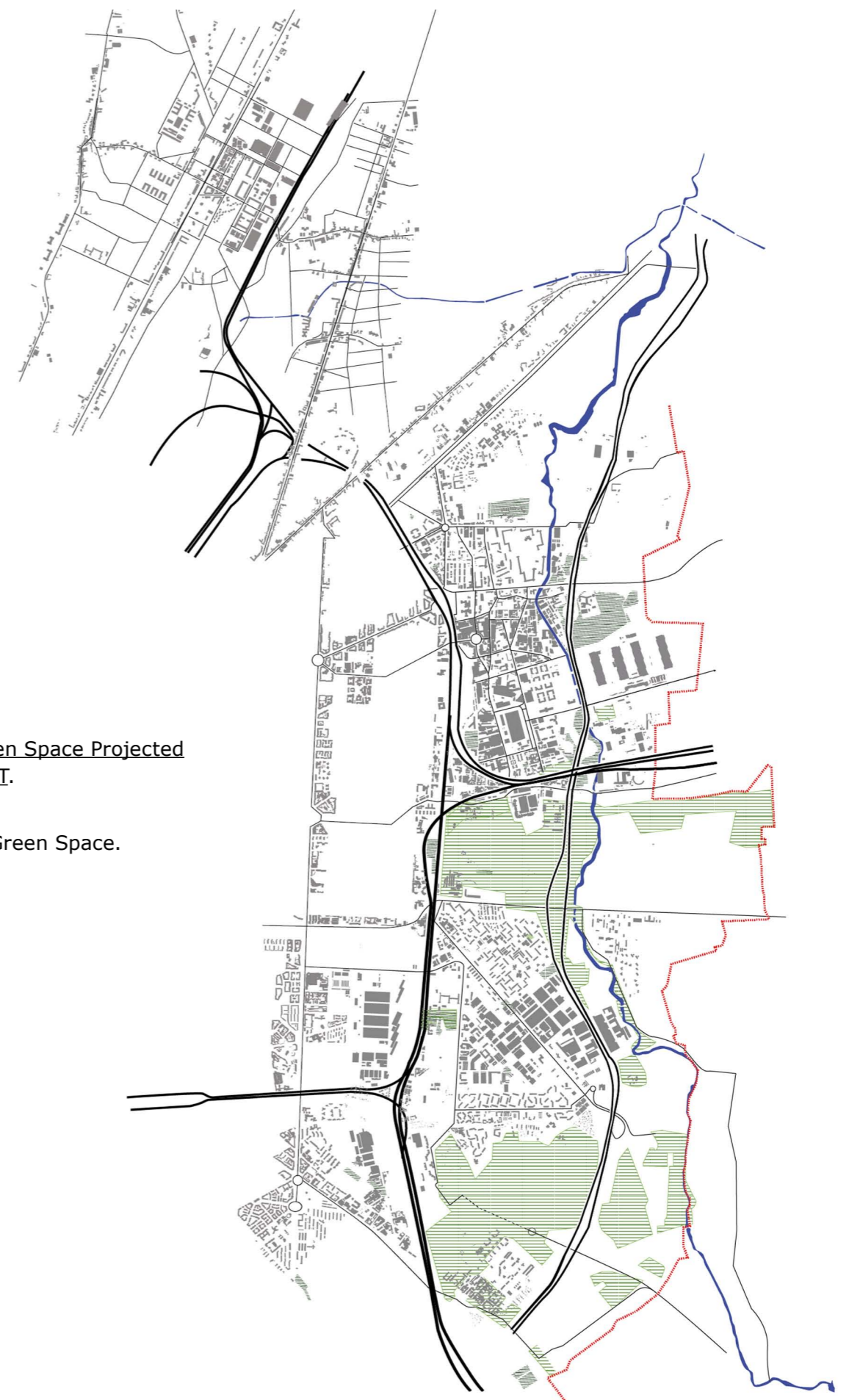
-New Green Space Projected By the PGT..

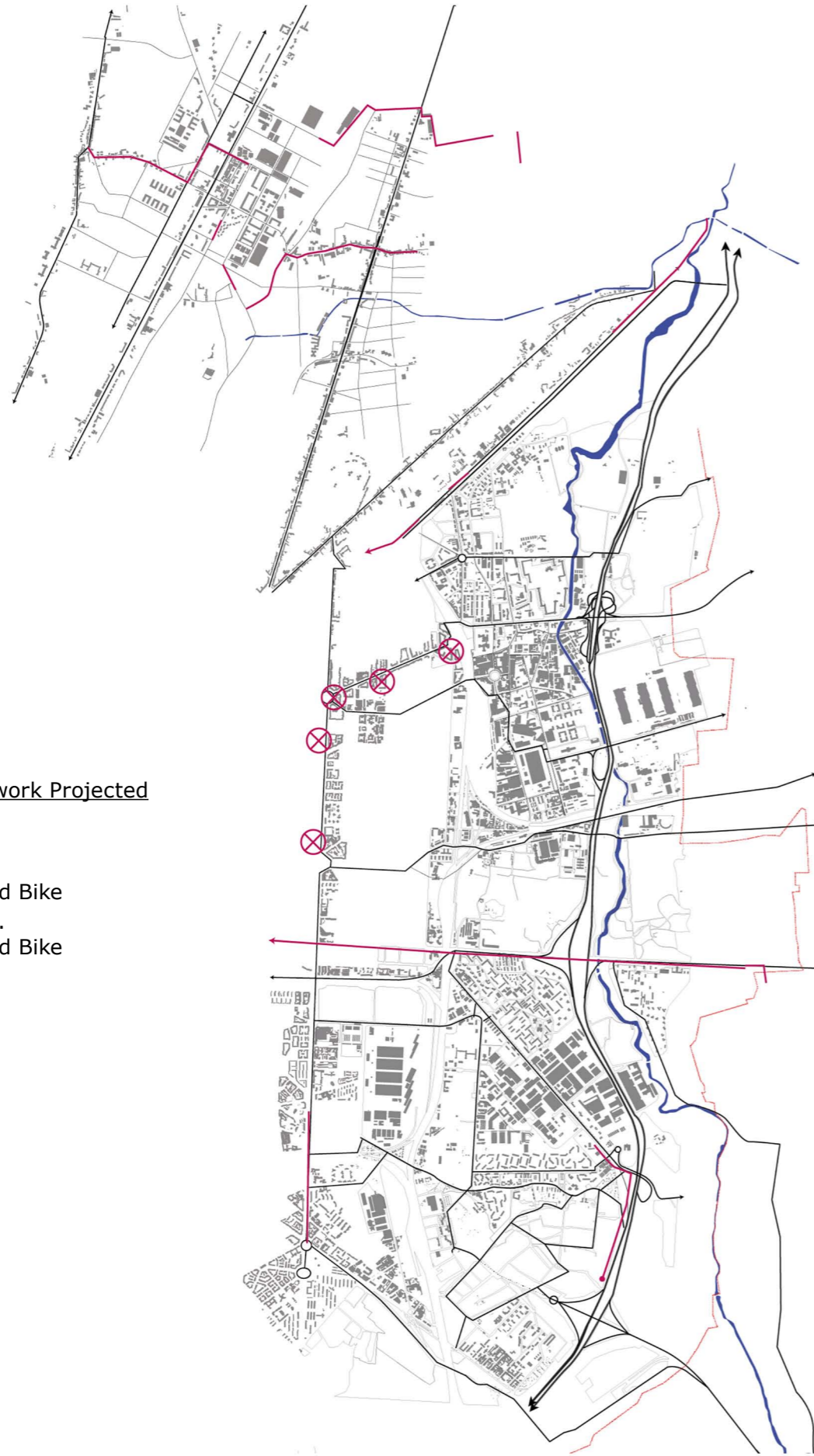
#### NEW MOBILITY PROJECTED BY THE PGT:

-New Bike Network Projected By the PGT.



-New Public Transport Network Projected By the PGT.

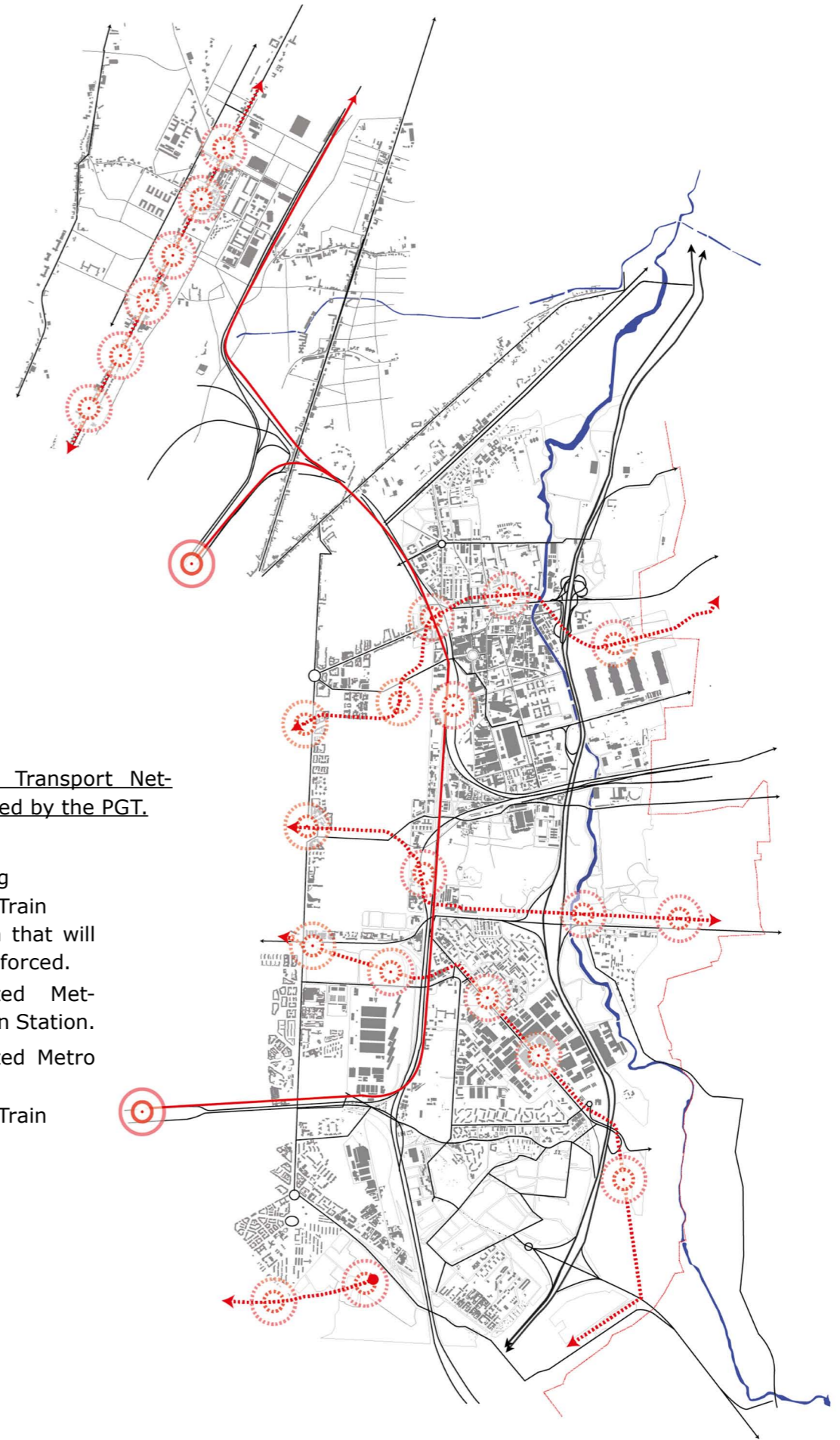
-New Road Network Projected By the PGT.









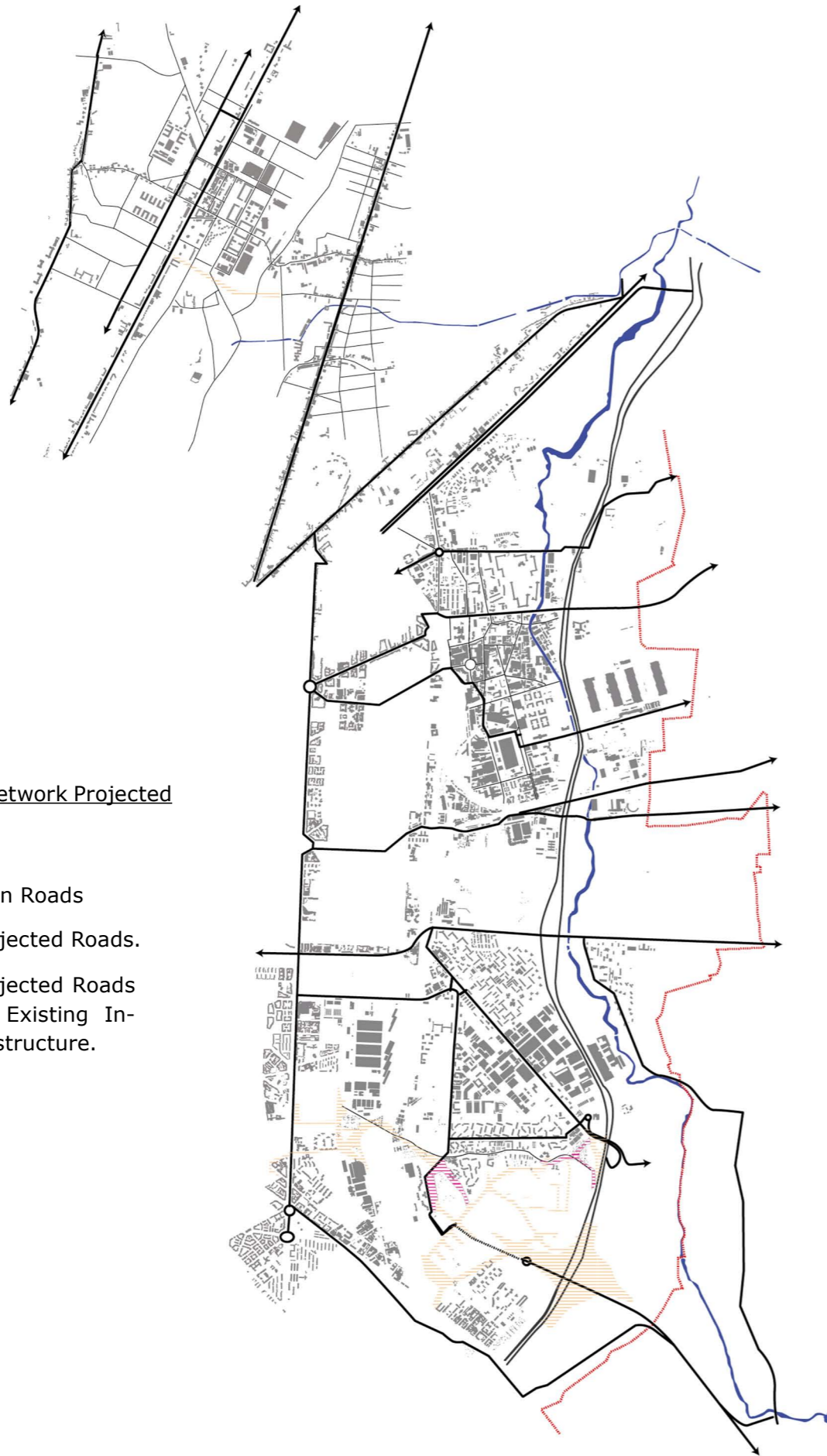
-New Bike Network Projected by the PGT.

-  Projected Bike Stations.
-  Projected Bike Lines.



-New Public Transport Network Projected by the PGT.

-  Existing Metro/Train Station that will be reinforced.
-  Projected Metro/Train Station.
-  Projected Metro Line.
-  Metro/Train Line.



-New Road Network Projected by the PGT.

- ← Main Roads
- Projected Roads.
- Projected Roads on Existing Infrastructure.

## 2.5 CHAPTER BIBLIOGRAPHY

### FOOTNOTES:

c[1], c[2] DOCUMENTO DI PIANO. PGT MILANO, commissioned under lombard law 12 on March 11, 2005.

<https://www.comune.milano.it/portale/wps/portal/PGT>.

c[3] PIANO DEI SERVIZI, PGT MILANO, PDR Norme di Attuazione, pag. 12/62.

c[4] PIANO DEI SERVIZI, PGT MILANO, PDR Norme di Attuazione.

c[5] PIANO DELLE REGOLE, PGT MILANO, norme di attuazione.

c[6] PGT MILANO, Allegato 3. Gli Ambiti di Trasformazione, pag. 3/48.

### NOTES: THE PGT IS DIVID-ED IN:

#### 1. (GENERAL DOCUMENT).

Documento di Piano:  
- DdP - Relazione Generale e Norme di Attuazione

- DdP - Allegati nn. 1, 2, 3 e 4

- DdP - Tav. D01 - Ambiti di Trasformazione

- DdP - Tav. D02 - Carta di sensibilità del paesaggio

#### 2. (RULES).

- Piano delle Regole.

- PdR - Norme di Attuazione

- PdR - Allegati nn. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 e 13

- PdR - Tav. R01 (Da 1A a 4C) - Ambiti territoriali omogenei e fattibilità geologica

- PdR - Tav. R02 (Da 1A a 4C) - Indicazioni morfologiche

- PdR - Tav. R03 (Da 1 a 8) - Nuclei di antica formazione - Analisi dei valori storico-morfologici.

- PdR - Tav. R04 (Da 1 a 8) - Nuclei di antica formazione - Tipologie di intervento

- PdR - Tav. R05 (Da 1A a 4C) - Vincoli amministrativi e per la difesa del suolo

- PdR - Tav. R06 (Da 1A a 4C) - Vincoli di tutela e salvaguardia

- PdR - Tav. R07 (2C - 3B) - Rischi, rumori e radar per la navigazione aerea

- PdR - Tav. R08 (Da 1B a 4C) - Ostacoli e pericoli per la navigazione aerea

- PdR - Tav. R09 (Da 1A a 4C) - Reticolo idrografico e fasce di rispetto.

#### 3. (SERVICES).

- Piano dei Servizi

- PdS - Relazione Generale, Catalogo della ricognizione dell'offerta dei servizi e Norme di Attuazione.

- PdS - Allegati nn. 1, 2, 3, 4, 5, 6, 7, 8, 9 e 10.

- PdS - Tav. S01 (Da 1A a 4C) - I servizi pubblici di interesse pubblico e generale esistenti.

- PdS - Tav. S02 (Da 1A a 4C) - Il sistema del verde urbano, delle infrastrutture per la mobilità e dell'edilizia residenziale semplice.

- PdS - Tav. S03 (Da 1A a 4C) - Accessibilità alle reti di trasporto.

- Componente geologica, idrogeologica e sismica.

- Tav. G01 (Da 1 a 4) - Carta litologica - litologia superficiale, idrografia, geomorfologia.

- Tav. G02 (Da 1 a 4) - Carta idrogeologica.

- idrogeologia, piezometria, aree di salvaguardia pozzi pubblici.

- Tav. G03 - Pericolosità sismica locale - aree a pericolosità sismica locale - Primo livello di approfondimento.

- Tav. G04 (Da 1A a 4C) - Carta dei vincoli

- vincoli di difesa del suolo.

- Tav. G05 (Da 1A a 4C) - Carta di sintesi - elementi litologici, idrogeologici, vincoli.

- Tav. G06 (Da 1A a 4C) - Carta di fattibilità geologica - Classificazione del territorio comunale.

### IMAGE SOURCE:

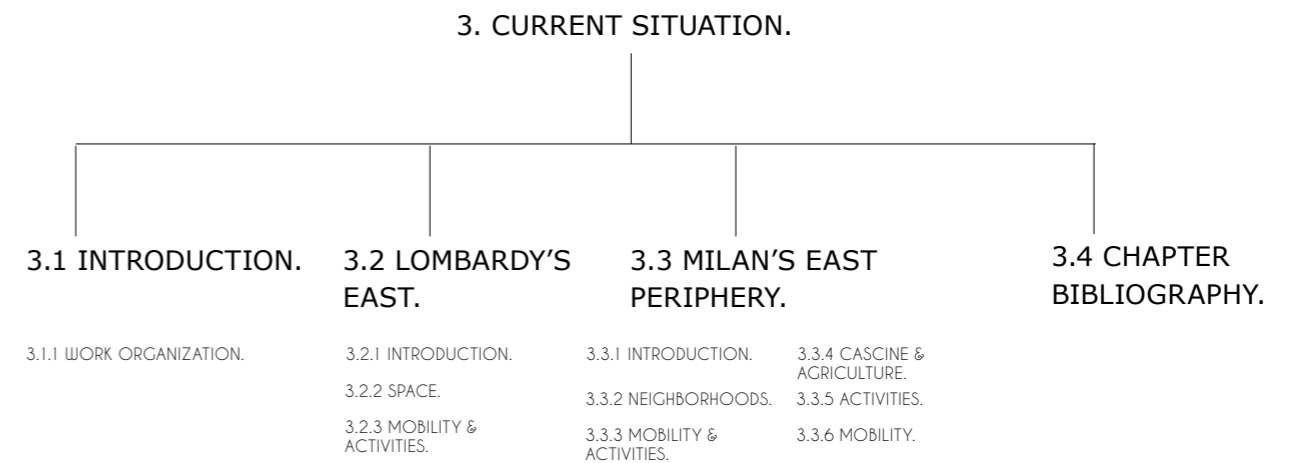
i[1] i[2] i[3] i[4] i[5] PGT DOCUMENTO DI PIANO, POMODORO, PAOLO. : METROGRAMMA SRL, Commissioned by the Comune di Milano. 2007-In process.

[www.comune.milano.it](http://www.comune.milano.it)  
[www.milanoperscelta.it](http://www.milanoperscelta.it)  
[www.abitare.it](http://www.abitare.it)

# 3. CURRENT SITUATION.

RECOLLECTION OF DATA ABOUT THE SITUATION ON THE OBSERVATION AND PROJECT PERIMETER.

# 3. CURRENT SITUATION.



## 3.1 INTRODUCTION.

### 3.1.1 ORGANIZATION OF THE WORK.

**This chapter's intention is to provide an insight of all characteristics that fall into the Project's and Observation perimeter.** Regards the Project Perimeter.

**3.4 CHAPTER BIBLIOGRAPHY.**

#### 3.1 INTRODUCTION:

#### 3.2 LOMBARDY'S EAST:

Regards the observation perimeter.

#### 3.3 MILAN'S EAST PERIPHERY:

## 3.2 LOMBARDY'S EAST.

### 3.2.1 INTRODUCTION.

**The east of Lombardy (Italy's most populated region), is a complex agglomeration of cities, that grew because of several factors.**

The region was a mandatory crossing point for all inter-alpine commercial routes during the Roman Empire. *Mediolanum* the main settlement, takes its name from the Latin 'middle-earth' meaning the center, a strategic node.

Also, this region developed

along the River *Po*, that irrigates what is now known as *Pianura Padana*, making the entire area rich in soil and productive in agricultural terms. The east economy developed because of its agriculture and industrial base.

The east, with around 2000 inhabitants per sq m. is one of the densest in Europe. The east is also an international attractive point, and this becomes obvious when we look at its existing infrastructure

(There are 2 international Airports), a thick network of highways and fast-speed and regional trains, making it a key region in Italy and one of importance to the world.

#### **THIS CHAPTER IS DIVIDED IN:**

- 3.2.1 Introduction.
- 3.2.2 Space.
- 3.2.3 Mobility & Activities.
- 3.3.4 Cascine & agriculture.
- 3.3.5 Activities.
- 3.3.6 Mobility.

### 3.2.2 SPACE.

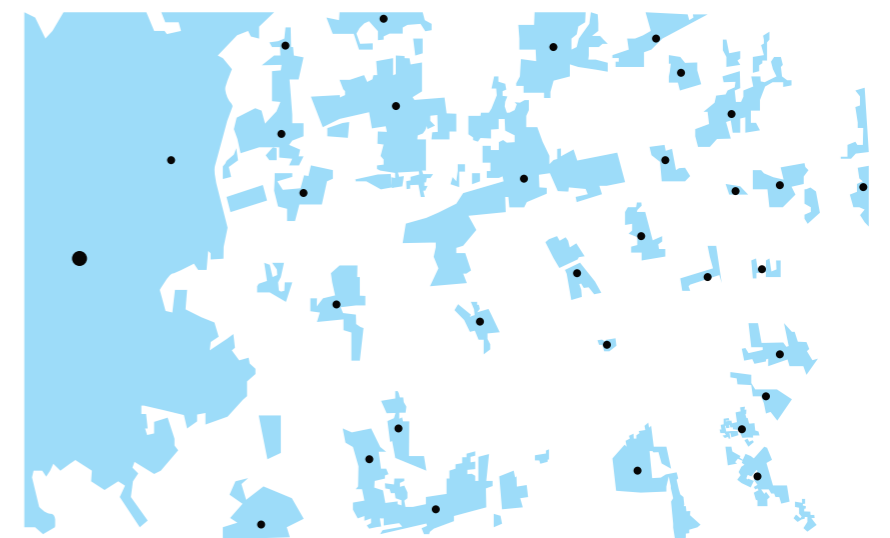
#### **REGION**

Lombardy is a strong political and economical entity and defines itself as a network of towns, within a clear topological elements such as the Alps and the river *Po*, creating a system known as *pianura padana*. This has a concealed intention of hinting a link between centers that were previously in possession of a strong degree of autonomy (political and economical).

We will present special characteristics in the observation perimeter, organized as:

- Settlements.
- Agriculture.
- Fallow Land.
- Forest.
- Waters.

Settlements: They are urban conglomerations. In this region, they are easy to locate, as they are concentrated, and differentiate themselves from other types of space configuration since they are concentration of houses and services. This is the densest region in Italy with about 2000 inhabitants/sq km.

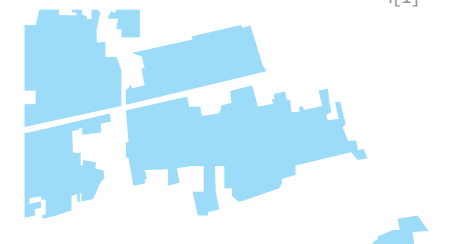


#### Settlements.

- Milano.*
- Novegro-Tezzarego-San Felice.*
- Redecesio.*
- Lavanderie.*
- Cascina Cassinella.*
- Cascina Metalino.*
- Vimodrone.*
- Cascina Gaggiolo.*
- Segrate.*
- Rugacesio.*
- San Bovio-San Felice.*
- Rucino Rodano.*
- Mezzate.*
- Bettola-Zeloformagno.*
- Peschiera Borromeo.*
- Vigliano-Bettolino.*



i[1]





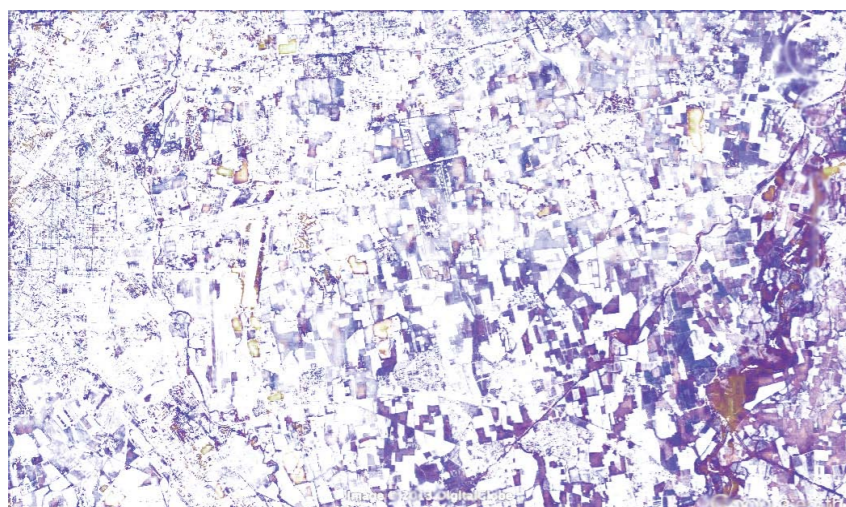
i[2]

Agriculture.



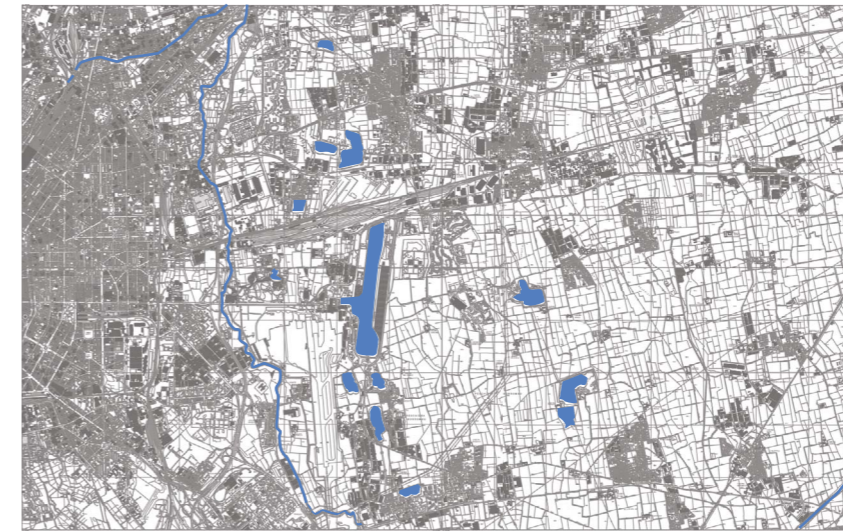
Fallow Land.

Train Deposits,  
Military areas, contaminated  
Post-industrial soil, and  
Unused warehouses.



Forest:

Density increases on the  
southeast, and decreases as  
it moves west. Mainly along  
water corps and agricultural  
land. There are comparatively  
few continuous forest on Mi-  
lan.



Waters.

- Naviglio Martesana.*
- Lambro River.*
- Segrate Pond.*
- Laghetto di Redecesio.*
- Hidroscalo.*
- Lakes in Mezzate.*
- Lakes near Vigliano-Bettolino.*
- Muzza River.*

Agriculture:

Lombardy's development re-  
lies significantly in Agricul-  
ture, being the leader in agr-  
icultural production in the  
country. Main products in-  
clude rice, wheat, corn, sugar  
beets, and fodder crops for  
beef and dairy cattle. The key  
for such rich land is based  
on irrigation and large rivers  
such as the *Po*.

Fallow Land:

This region's industrial past  
left a strong footprint on  
the territory: large industrial  
complexes, huge train depos-  
its and military installations  
are now inside dense residen-  
tial areas, they can become  
limits. They are, also, large  
areas of opportunity and po-  
ssibilities for urban change,  
as discussed later on Milan's  
PGT.

Forest:

Lombardy was, during the  
time of the first roman settle-  
ments, a forest that covered  
most of northern Italy. Unfor-  
tunately, intensive agriculture  
during a large period of time  
combined with dense popula-  
tion has reduced them to few  
localized protected parks.



i[3]



i[8]



i[13]



i[4]



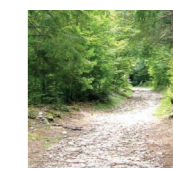
i[5]



i[9]



i[10]



i[14]



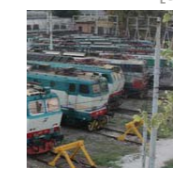
i[15]



i[6]



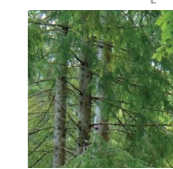
i[7]



i[11]



i[12]



i[16]



i[17]

i[2] GOOGLE EARTH. P12

i[3] GOOGLE EARTH. P167

i[4] MONIAUX, D. P167

i[5] CHRISTINS, Y. P167

i[6] HERBECK, J. P167

i[7] MURDOCK, L. P167

i[8], 1[9] AYDIN. R. P167

i[10] AIX, C. P167

i[11] CORELLI, M. P167

i[12] BORRINI, A. P167

i[13] ROMANO, S. P167

i[14] i[15] i[16] ROCCO, S. P167

i[17] GOOGLE EARTH. P167



### 3.2.3 MOBILITY & ACTIVITIES.

#### Waters:

They are the key for the agricultural richness in this region. Various types can be found, from the large artificial lake that is the *Idroscalo*, to smaller natural lakes and other types of waters that are used for different purposes such as irrigation, leisure and industrial use.

#### MOBILITY.

##### PUBLIC TRANSPORT NETWORK.



##### ROAD NETWORK.

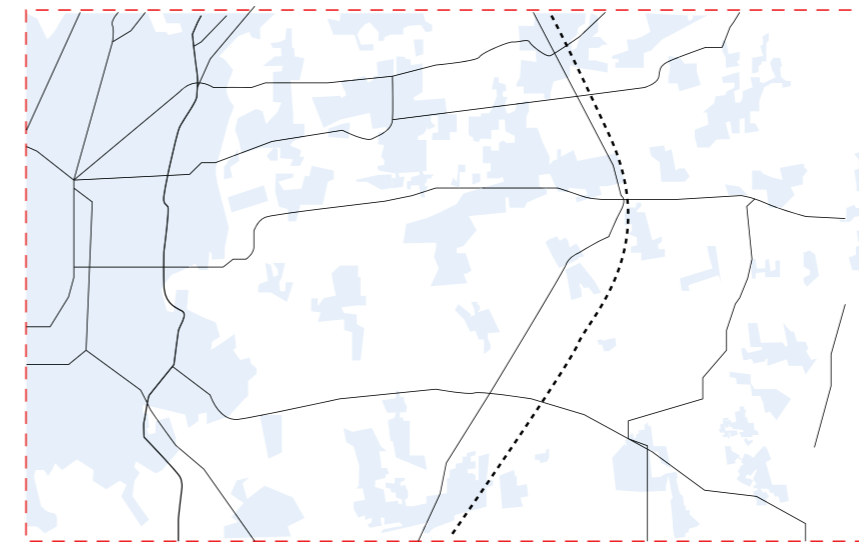


[18]



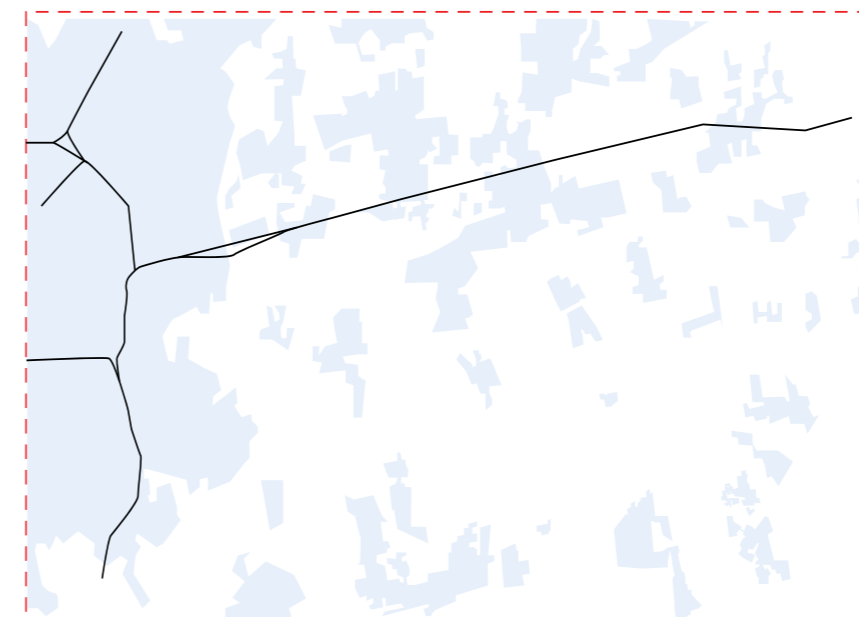
[19]

[18] GOOGLE EARTH. P167  
[19] GOOGLE EARTH. P167



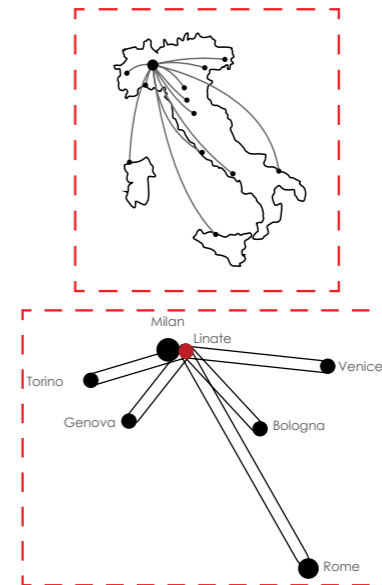
— Tangenziale Est.  
- - - Main Roads.  
· · · New Tangenziale (*tangenziale Est Esterna*)  
Settlements.

A51-52 (Tangenziale est),  
SP 14, 121, 103, 160, 15b, 39,  
415.



#### TRAIN NETWORK.

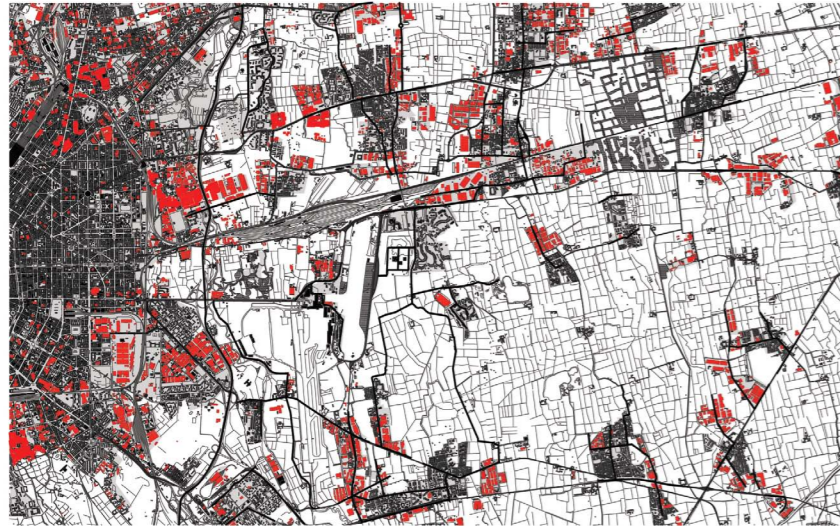
— Rail Connections.  
Settlements.



High speed train to Venice, Florence, Switzerland, and regional trains to Bergamo, Lodi, Crema, Brescia, Piacenza and the lakes.

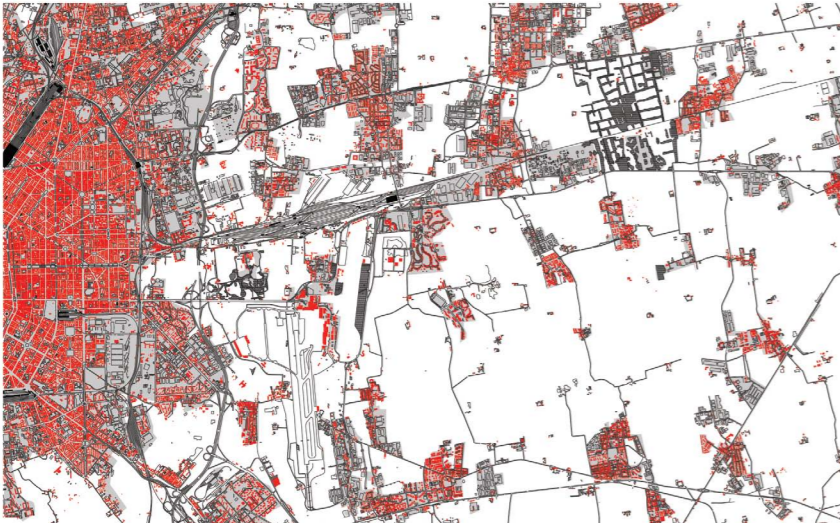
Plus connections with the European railway system. Milan has regular trains to Several European capitals.

## BUSINESS, INDUSTRY AND WAREHOUSES.



Located on the periphery, and opposite to residential concentrations, this means that every day, Milanese people has to use the road and public transport Network to reach their places of work.

## RESIDENCES.



The same is true for residences. Each time, after work, the Milanese must use the Road Network to return to their homes. We can see a large concentration of residences at the west (close to the city center), and along some scattered settlements on Infrastructure Networks.

# 3.3 MILAN'S EAST PERIPHERY.

## 3.3.1 INTRODUCTION.

### IMPORTANCE:

**This is an historically important area, one that has shaped the past, present and future of Milan. The east is closely related with an industrial and agricultural past, large infrastructure projects and traditional neighborhoods.**

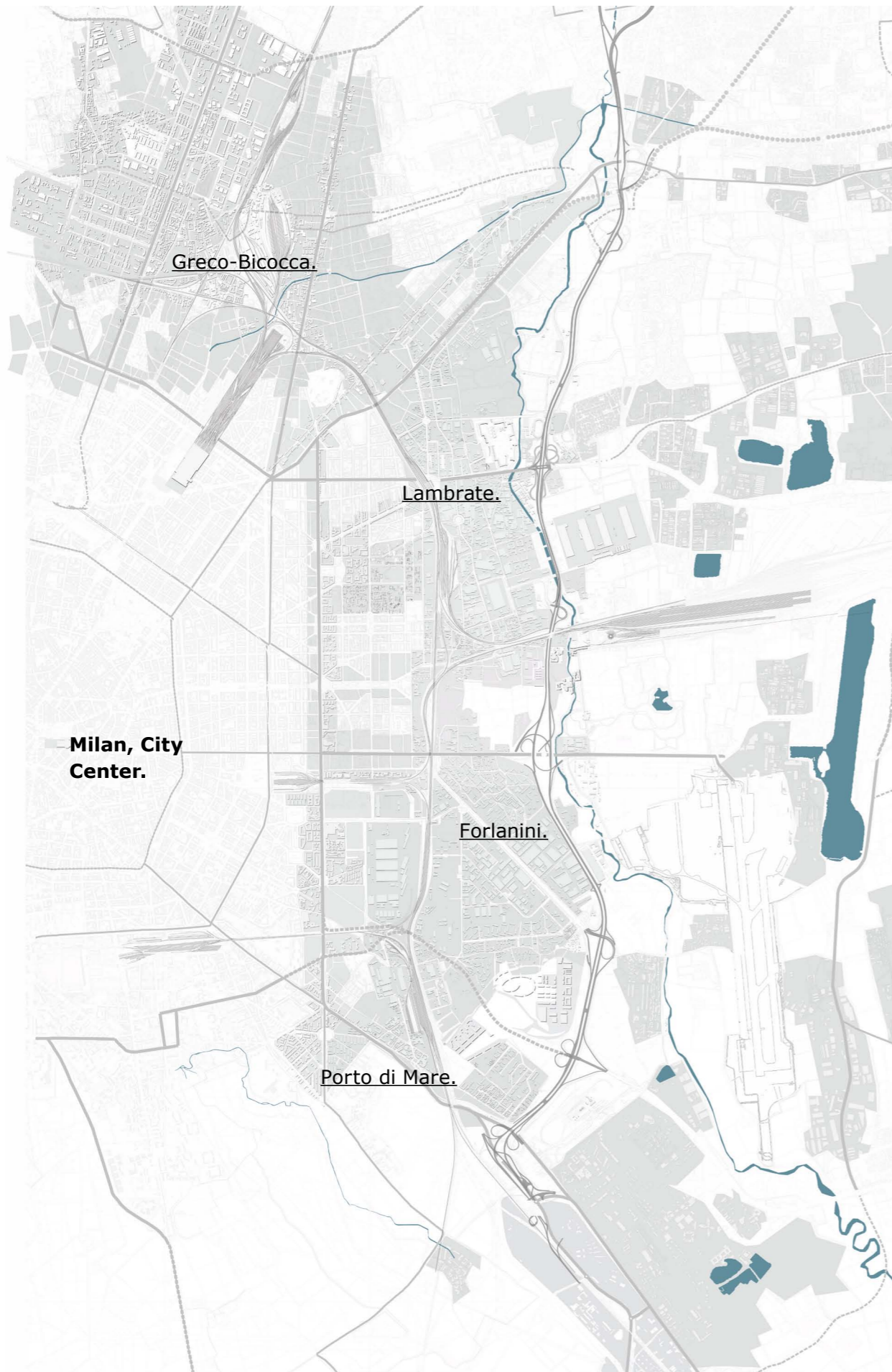
This area comprises several characterized separate neighborhoods, being the most important *Greco - Bicocca*, *Lambrate*, *Forlanini* and *Porto di Mare*, each one with a story to tell and add to a diverse city as Milan is. There are three systems that dominate the space: One that is concentrated in the northern area of Milan, (around *Greco Bicocca*), The other that runs along the river *Lambro* (between the train infrastructure and the *Tangenziale Est*). And finally another that is concentrated in *Parco Sud*, with its agricultural character.

The east is also important for being the exit point to the east. All the industrial installations in *Bergamo*, plus two international airports (*Orio al Serio* and *Linate*), it's also the exit point for high-speed trains going to Venice.

*Tangenziale Est* is part of a ring highway system that surrounds the city and diverts heavy traffic outside the urban, dense center that the city has become. Milan is the most important center in Northern Italy and, perhaps, Southern Europe.

### THIS CHAPTER IS DIVIDED IN:

- 3.3.1 Introduction.
- 3.3.2 Neighborhoods.
- 3.3.3 The Public Space.
- 3.3.4 Cascine & Agriculture.
- 3.3.5 Activities & Space.
- 3.3.6 Mobility.



### 3.3.2 NEIGHBORHOODS.

#### FOCUS:

This document focuses on a specific area on the East, knowing that is the perfect spot that combines pieces of possible urban environments. The area is divided into districts, each one with a specific characteristic.

- Greco-Bicocca.
- Lambrate.
- Forlanini.
- Porto di Mare.

#### NEIGHBORHOOD HISTORY:

##### Greco-Bicocca.

This neighborhood is differentiated because part of it was the result of an historical development along infrastructure axis, and, part, as a planned project.

*Greco* appeared from a number of smaller settlements that were established along the road that leads to the North.

*Bicocca* was created around *Pirelli's* factory, on the pe-

riphery of Milan in 1920s, and most of the houses nearby belonged to workers. Not surprisingly, the main urban facilities and infrastructure were centered around the factory and based on mobility.

*Progetto Bicocca* 1985-1995. Made by *Gregotti e Associati*, this was the biggest urbanistic intervention after the war, with a massive re-qualification of the space. Here, old industrial establishments were demolished or re-used in housing, commerce and other.

This project was conceived as a re-development of old and unused industrial spaces, and as a solution for the necessity of creating a new development pole besides the center of Milan. Inserted on a highly fertile productive land, and nearby the Highway Torino-Venezia. The architect's intention was to create an insertion between densely populated existing areas, such as *Greco* and *Precotto*, and preserving the memory of the old industrial function, that undoubtedly had left a mark.

From its conception, *Bicocca* was perhaps one of the most ambitious projects ever made on the city (700.000 sq. mt.) with the intention of create a city dedicated to research and development with the creation a new university campus, labs, research institutes, support institutions for entrepreneurship, new housing, commercial centers, etc.

The project was financed by large corporations that would headquarter on-site, and public resources.

At the center, there is a large university complex that is attended by around 30.000 students plus research installations, The university becomes, the most important complex of buildings in terms of all the research facilities that provide Milan with advances in technology. Faculties are easily accessible through a series of straight plazas that interconnect campus-buildings.

*Bicocca* was one of the spaces with less green space in the context of Milan. With the intervention of *Gregotti*, pub-

lic space was increased by 144000 new sq. m. of Green space, Sport Installations, and big plazas.

It was, for many years, the biggest urbanistic intervention after the war, with a massive re-qualification of the space. Here, old industrial establishments were demolished or re-used into housing, commerce and other.

It was also created on a macro scale, meaning that it made massive housing projects, plus huge buildings that host different activities, this led to the creation of extensive infrastructure: roads, light, installations and new provisions such as tram lines, and parking, plus the extension of the Metro line.

### Lambrate.

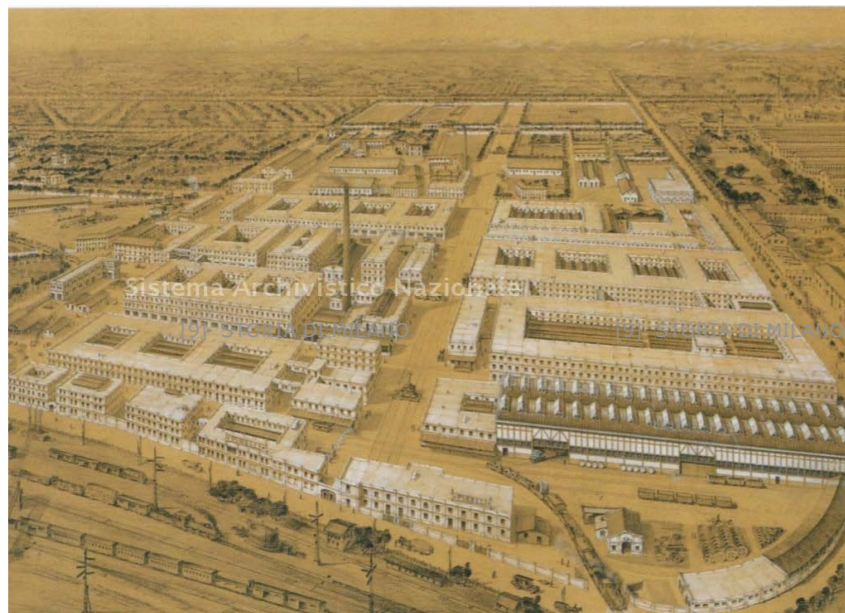
This is a district 'quartiere' of Milan. It owes its name to the *Lambro* river that crosses the area. *Lambrate* houses one the major railway station of north-eastern Milan, *Stazione di Milano Lambrate*. The district is also well known



i[20]



i[21]



i[22]



i[24]

for *Parco Lambro*, a large urban park established in 1934. The famous *Lambretta* motor scooter was manufactured in *Lambrate*, and named after this district.

It originated as a Roman *vicus*. The Romans conquered the area in 222 BC, after a long siege of Milan (then *Mediolanum*), where Romans fought against the local *Insubres* and *Boii* as well as their ally *Hannibal*. *Pliny the Elder* mentions *mansio ad Lambrus (Lambrate)* in his *Naturalis historia* as a supply station.

It is also likely that *Lambrate* served as a river port for *Mediolanum*. The Romans largely developed the area, both for agriculture and for navigation on the *Po* River basin. Finds of the old Roman settlement of *Lambrate*, including a marble sarcophagus, have been revealed in 1905 and are now exposed at the *Sforza* Castle museum.

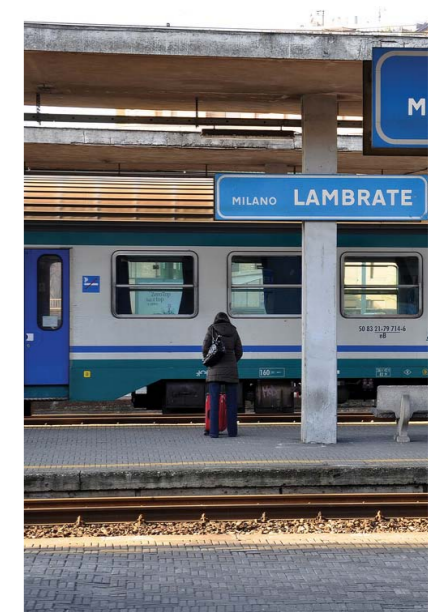
The small chapel in the centre of *Lambrate* was supposedly one of the first places of Christian worship in the area.

In the 8th and 9th Century, two monasteries of the Order of Saint Benedict were built. In 1162, when Milan was demolished by *Frederick I Barbarossa*, *Lambrate* was proclaimed an 'imperial borgo'. many Milanese refugees found a new home here.

During the Spanish rule (in the 16th Century), a war factory called "*Polveriera*" was built, which played a major role in the development of the area. The Spanish transformed *Lambrate* into a *feif*, a condition that lasted until Lombardy fell under the Napoleonic Empire, when it became a free comune. A few decades later, it was annexed to Milan by the French viceroy.

In 1816, during the Austrian rule, *Lambrate* was again an autonomous comune, to be annexed to Milan once again in 1923. In the first half of the 20th Century, the *Martini* corporation was based in *Lambrate*.

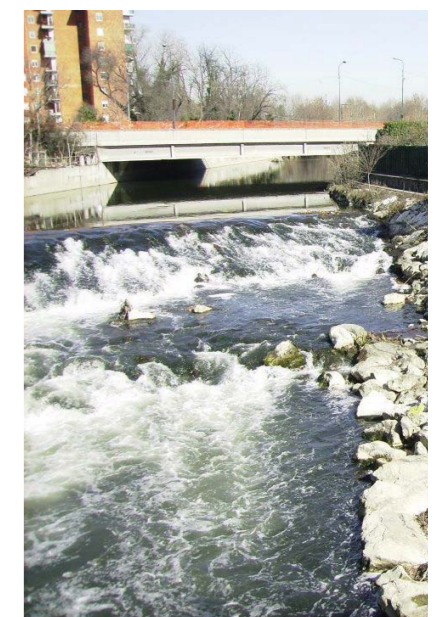
After World War II, the *Innocenti* machine factory began



i[25]



i[26]



i[27]

producing the famous motorcycle *Lambretta*, that owes its name to *Lambrate*.

Nowadays this is a sector closely related with nearby universities and research facilities, industries, offices and commercial activities. Via Ventura becomes an off-fair attraction during the famous *Settimana del Mobile*.

Forlanini.

This is a district, located east of the city centre.

The northern boundary of the district is eponymous *Viale Forlanini*, which is the main avenue connecting Milan to the *Linate* Airport. The other boundaries of the *Forlanini* district are the Milan belt railway and the *Tangenziale Est*.



i[28]



i[29]



i[30]



i[31]



i[32]



i[33]

Porto di Mare.

Is a location in Milan, between *Corvetto* District and the city limits.

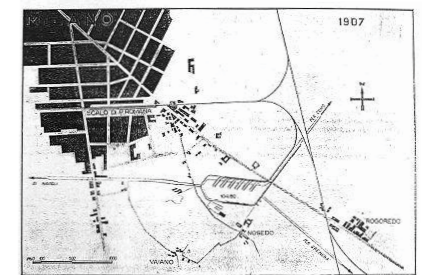
According with a 1917 project, this zone was to become the water port that should substitute *Porta Ticinese's* one. However, work was never made.

During the first decade of the past century, there was talk about closing the system of *Navigli* (channels through Milan).

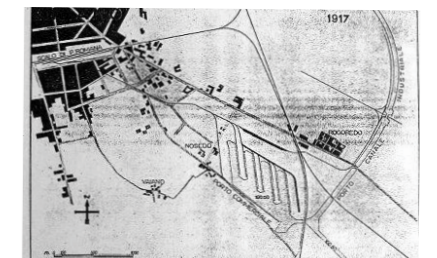
The city's growing needs had made them obsolete. Milan needed a true water port, where to stock and move merchandise through, all the way to *Naviglio Pavese*, on the gates of the river *Po*. The proposal was to make it in *Rogoredo*, which was the natural convergence point of waters in Milan. Construction started in 1917, and was abandoned in 1922. Water naturally filled construction sites and became a natural paradise for fishermen and, during summer, for swimmers.

The project re-started after WWII in accordance with the regulatory plan of 1953, but work was never initiated. In September 2000, a new metro station was baptized with the name *Porto di Mare* (sea port), as a remembrance of something that almost was, but never truly existed.

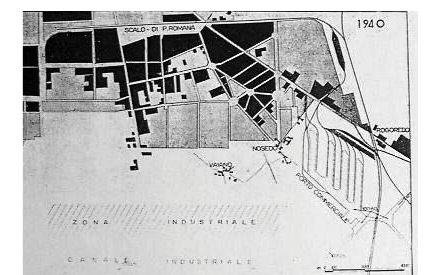
*Porto di Mare* is now the area for *Europan* (an EU-funded competition) to define what will be its future, although, since it is the end of the consolidated tissue, and limits with *Parco Sud*, this area is closely related with agriculture, and a virtual gate between rural and urban.



i[34]



i[35]



i[36]



i[37]

### 3.3.3 THE PUBLIC SPACE.

#### INTRODUCTION:

**The entire area is rich in public space.**

Comprising large parks like *Parco Nord* and *Parco Sud*, and several minor, but large leisure installations, that range from centers of sport (tennis, soccer, basket, etc). To others based on contemplation, picnic, landscape. A large number of plazas are also spread all over. Following, we show compilation and analysis of the public space in the North and North-East of Milan.

Two components will be analyzed:

-Morphology of the space  
-Activities inside the space.

-Morphology of the space:

- Large Parks.
- Small Parks.
- Sports Facilities.
- Plazas.

-Activities inside the space:

- Equipment.
- Activities.



i[38]



i[39]



i[40]



i[41]



i[42]

i[38] RADICI P167  
i[39] BICOCCA P167

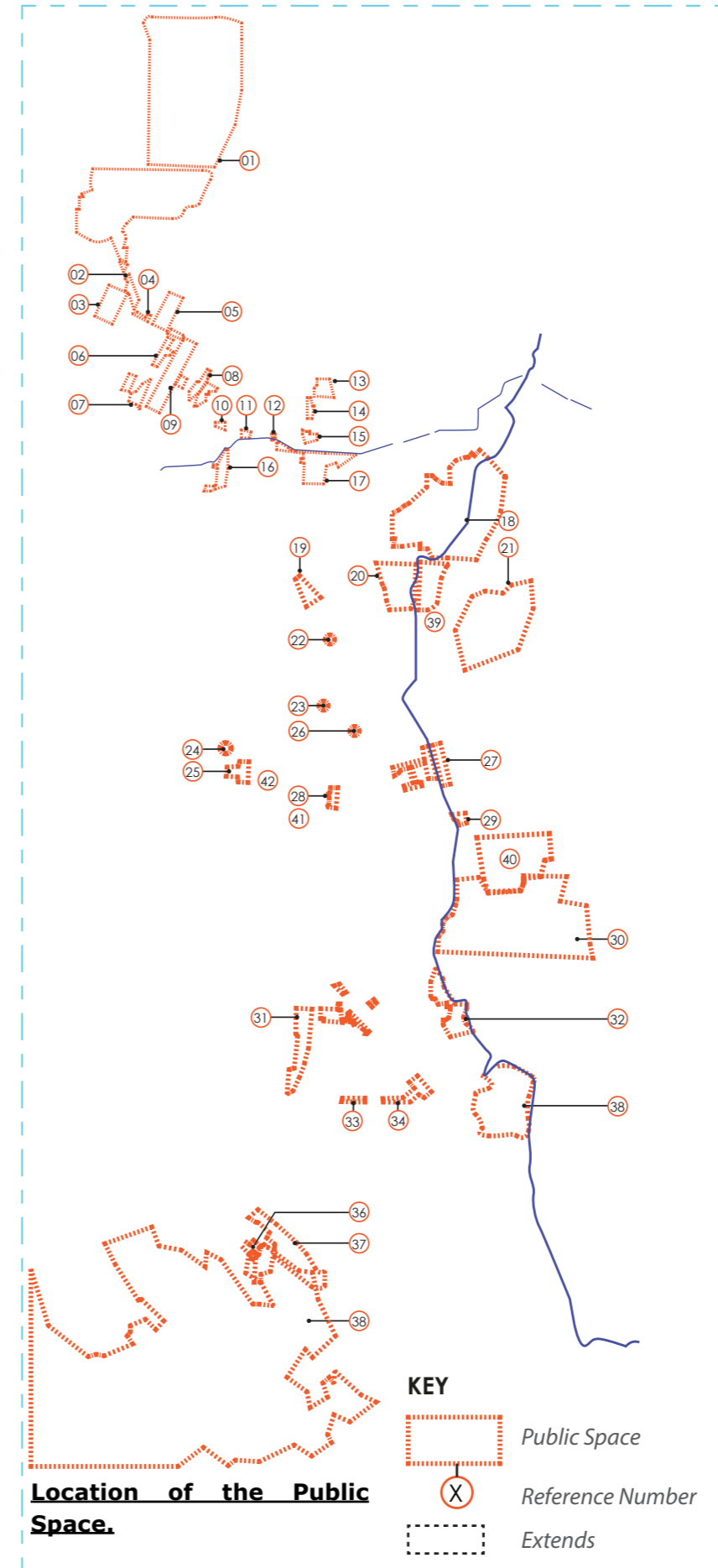
i[40] SILVIA P167  
i[41] FAI. P167

i[42] SILVIA P167

-Equipment.	-Activities.
-Garden.	-Dog Walking.
-Bike Path.	-Jogging.
-Soccer Field.	-Yoga/Frisbee.
-Tennis Field.	-Biking.
-Mill.	-Fishing.
-Cascina.	-Kids Playing.
-Agriculture.	-Food.
-Pool.	-Other Sports.
-Gym.	-Martial Arts.
-Kiosk.	-Religious Activities.
-Landmark	-Concerts/Events.
-Church	-Vigilance.
-Skate Park.	-Babies.
-Bathroom.	-Reading.
-Communal Services.	-Birds Observation.
-Baseball Field.	-Sun Observation.
-Fruits.	-Horse Riding.
-Accommodations.	-Dinning.
-Workshop.	-Studying

Current Location of Public Spaces.

- Public Spaces.
- Water.



**Key:**

**Large Parks.**

- 01 Parco Nord.
- 18 Parco Lambro.
- 30 Parco Forlanini (Part of Parco Agricolo Sud).
- 35 38 Parco Agricolo Sud.

**Small Parks.**

- 02 Green Space near Viale Berbera.
- 03 Manifatture Milano.
- 06 L'Esplanade.
- 07 The Hill.
- 10 11 12 Public Parks along Greco-Pirelli Station.
- 13 14 15 Public Parks along Viale Monza.
- 16 Space in Scuola Elementare Statale F. Crispi.
- 17 Naviglio Martesana.
- 20 Quartiere Feltre.
- 21 Lambrate Cemetery.
- 25 Città Studi.
- 27 Parco Rubattino.
- 29 Parco Cesi.
- 31 33 34 Green Spaces in Mecenate.
- 32 Monluè.
- 37 Parco Cassins.

**Sports Facilities.**

- 04 05 Propatria Milano (S.R.L.).
- 19 Centro Sportivo Cambini. Fossati, public pool.
- 36 Tennis Club Milanese Libertas.
- 39 Circolo A.N.S.P.I. Centro Giovanile Cardinale Schuster.
- 41 Milanospport-Centro sportivo saini.
- 42 Via Carlo Valvassori Peroni, Milanospport.

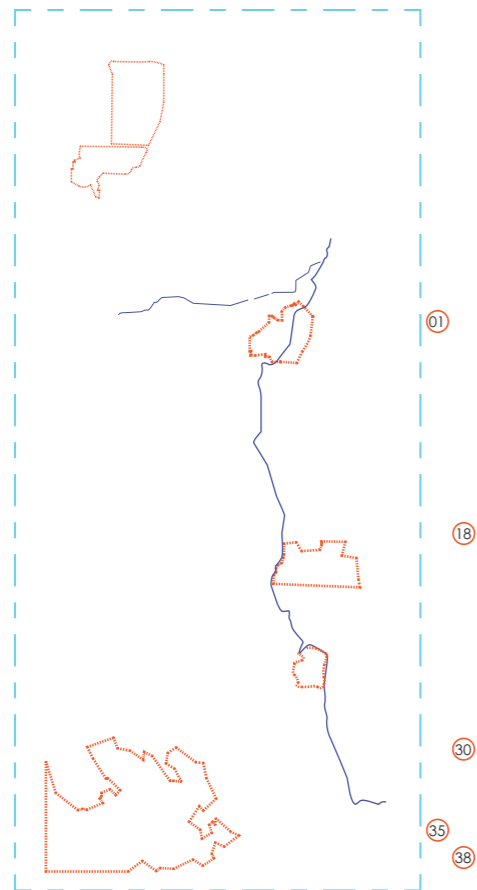
**Plazas.**

- 08 Greco Station Plaza.
- 09 Plazas inside University and Buisness facilities.
- 22 Piazza Udine.
- 23 Stazione di Lambrate.
- 24 Piola.
- 26 Rimembranze di Lambrate.

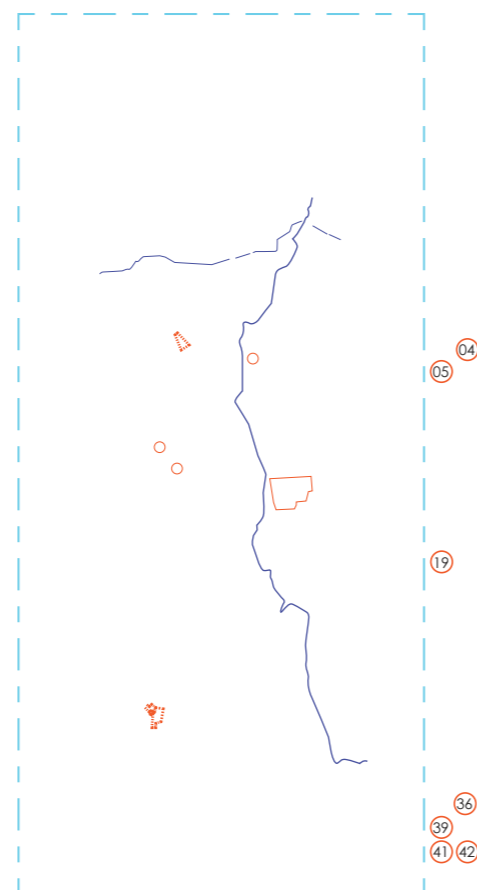
**KEY**

- Public Space
- Reference Number
- Extends

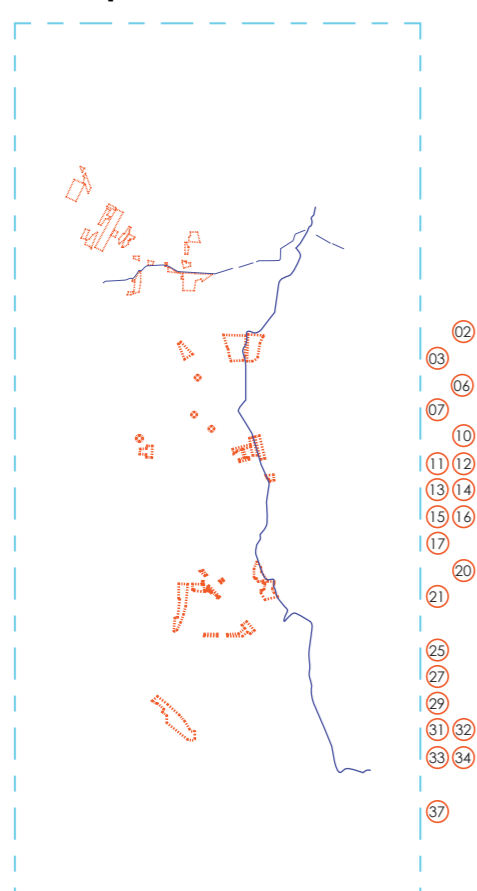
**Large parks.**



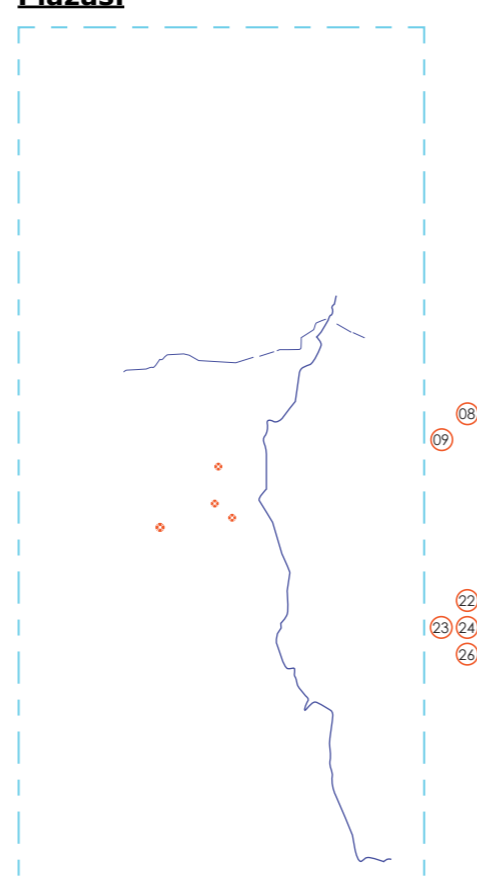
**Sport's Facilities.**



**Small parks.**

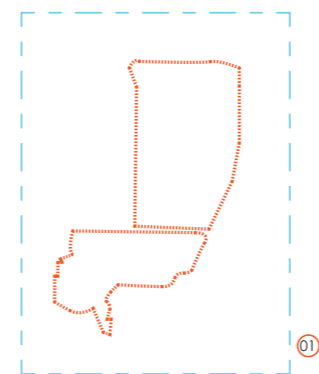


**Plazas.**

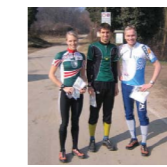
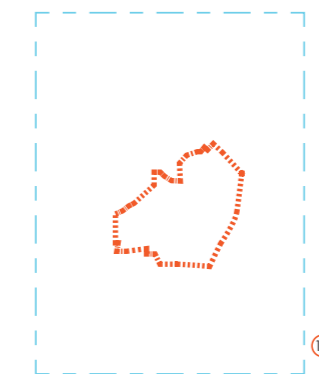


**Large parks.**

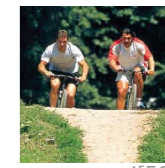
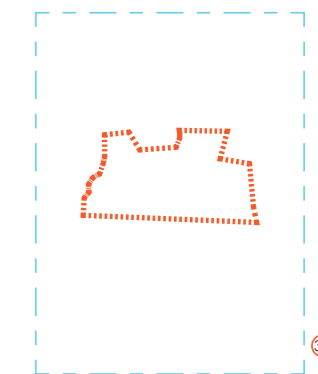
Parco Nord.



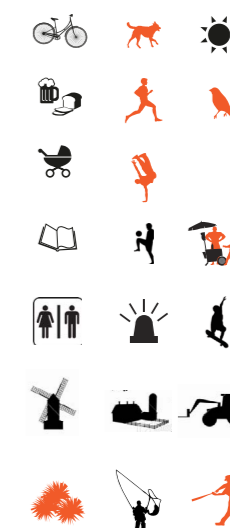
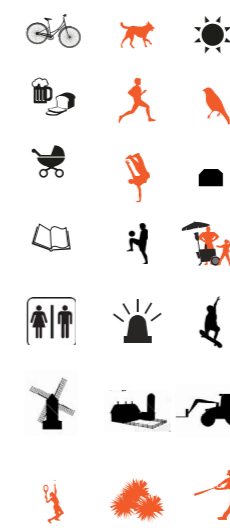
Parco Lambro.



Parco Forlanini.



**Activities/Equipments.**

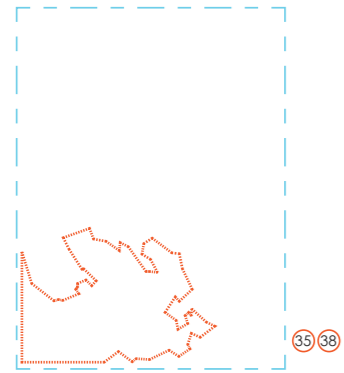


i[43] COLOMBI, D. P167 i[48] i[49] i[50] i[51] i[52] BACCOCOLI F. P167  
 i[44] FERRUCI, G.P167 i[53] BYRNE G. P167  
 i[45] i[46] VITALI i[54] i[55] i[56] i[57] BOLZANI L. P167



**Small parks.**

Parco Agricolo Sud.



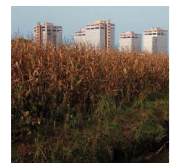
i[58]



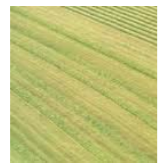
i[59]



i[60]

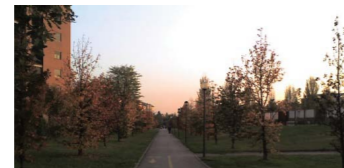
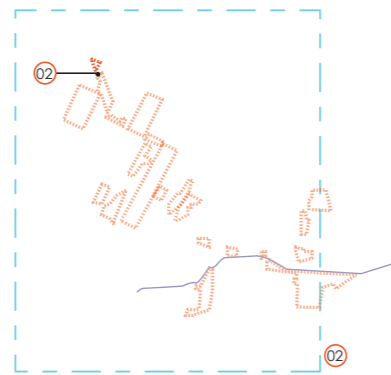


i[61]

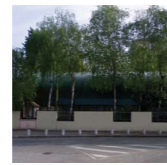


i[62]

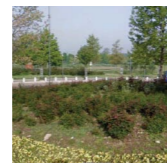
Green Space Near Via Berbera.



i[63]

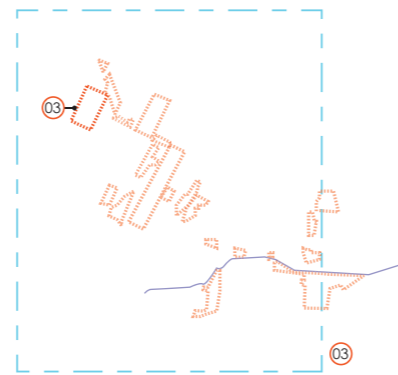


i[64]



i[65]

Manifatture Milano.



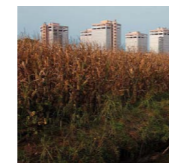
i[66]



i[67]



i[68]

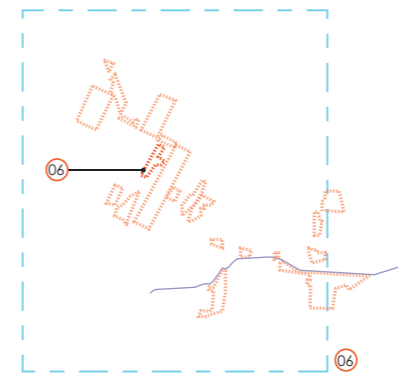


i[69]

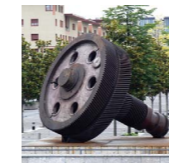


i[70]

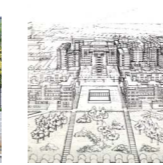
L'esplanade.



i[71]



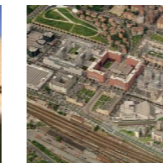
i[72]



i[73]

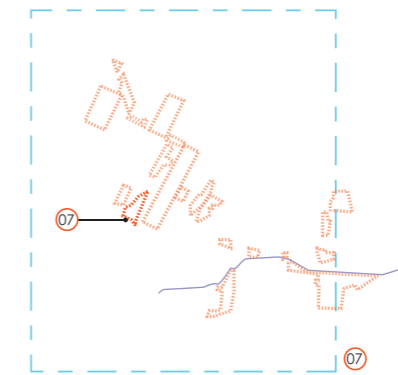


i[74]



i[75]

The Hill.



i[76]



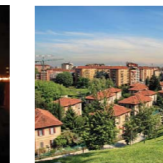
i[77]



i[78]

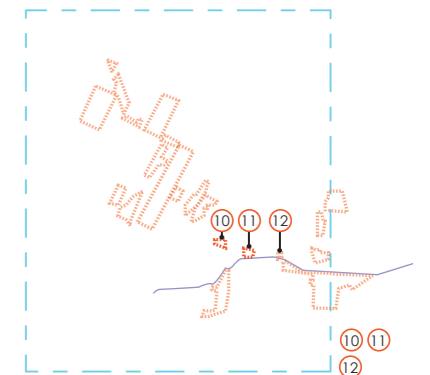


i[79]



i[80]

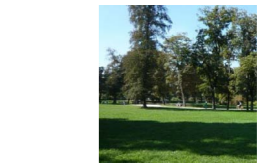
Green parks Near Greco-Biccoca F.S.



i[81]



i[82]

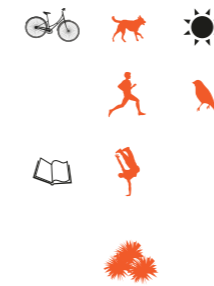


i[83]

Activities/Equipment.



Activities/Equipment.



-i[58] SKRICCIOLO P167  
-i[59] FELICE A. P167

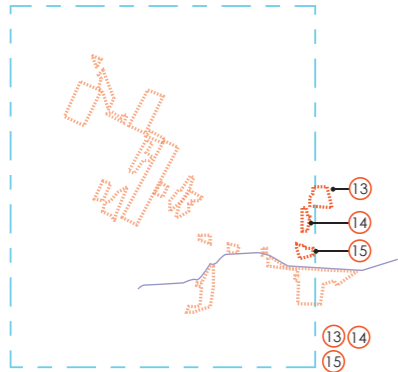
-i[60] i[61] i[62] ASSOCIAZIONE  
BORGO CHIARAVALLE. P167

i[63] i[64] i[65] GOOGLE EARTH. P167  
i[66] i[67] i[68] i[69] MANIFATTURE MILANO. P167  
i[70] GOOGLE EARTH. P167

i[71] i[74] i[75] PROGETTO BICOCCA. P167  
i[77] i[78] i[79] i[80]. P167

i[81] GOOGLE EARTH.  
i[82] i[83] GOOGLE STREET VIEW.

Green Spaces at Viale Monza.



i[84]



i[85]

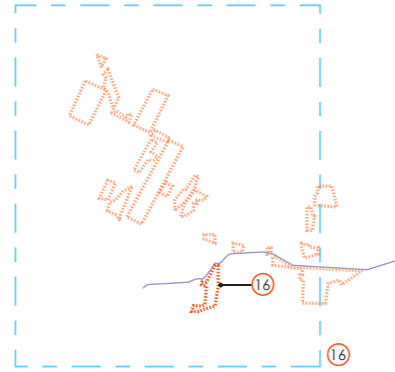


i[86]

Activities/Equipment.



Space in Scuola Elementare Statale F. Crispi.



i[87]



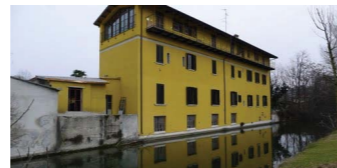
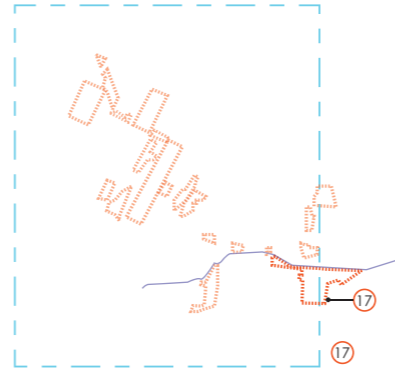
i[88]



i[89]



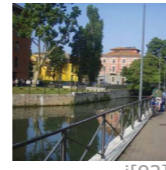
Naviglio Martesana.



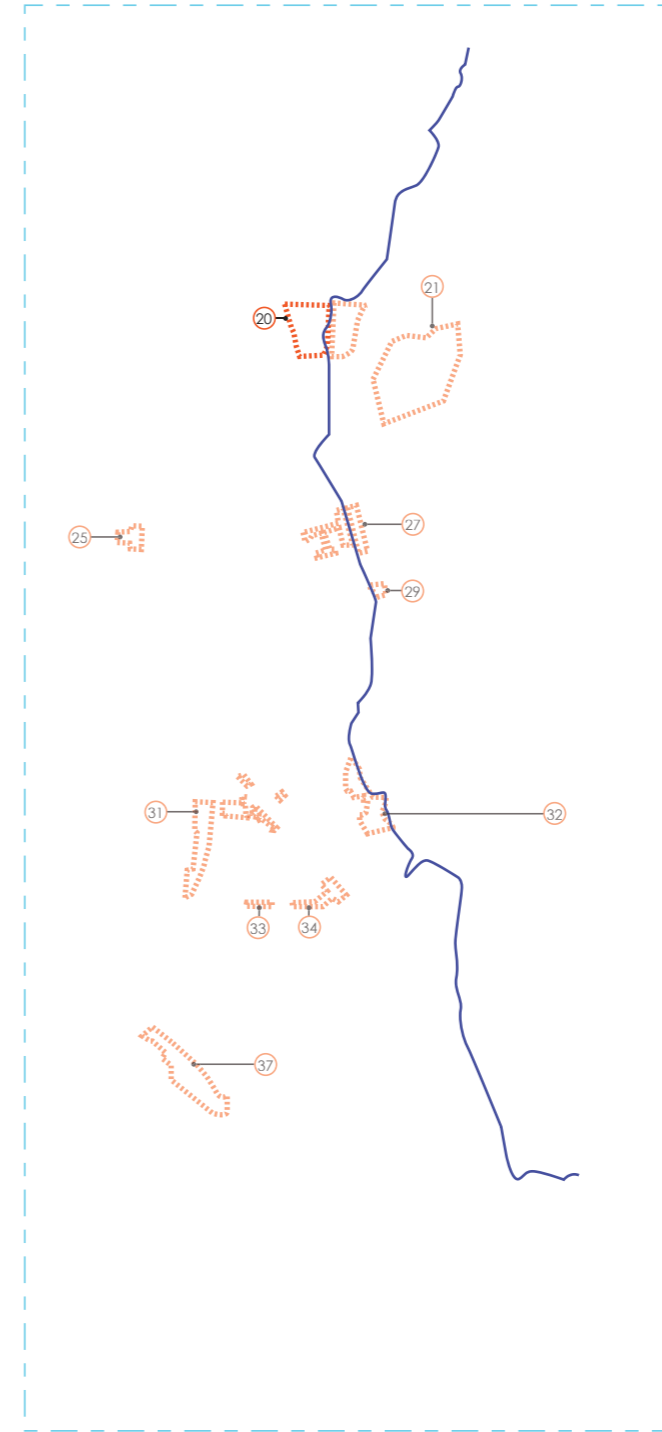
i[90]



i[91]

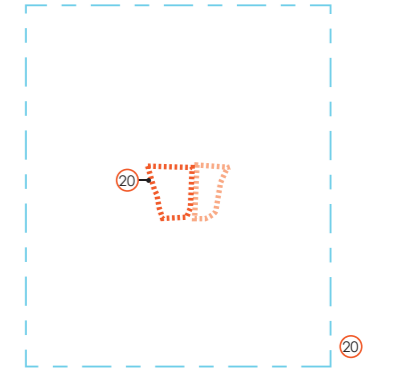


i[92]



i[94] LORENZOLI G.  
i[95] i[96] MOGNETTI M.

Quartiere Feltre.



i[94]



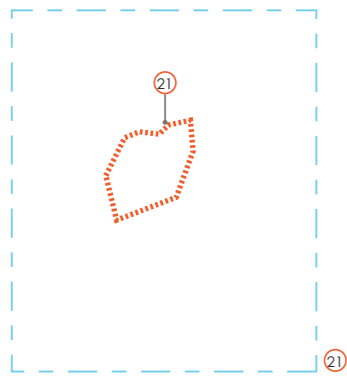
i[95]



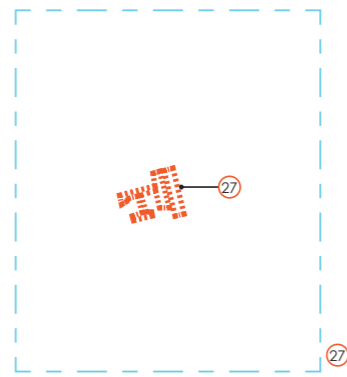
i[96]



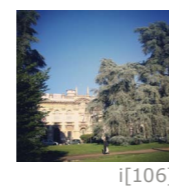
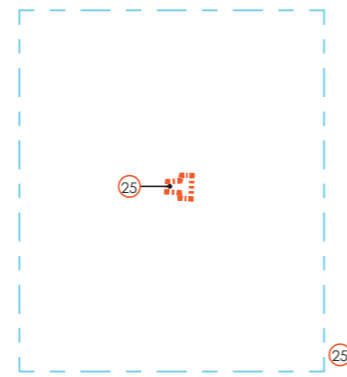
Lambrate Cemetery.



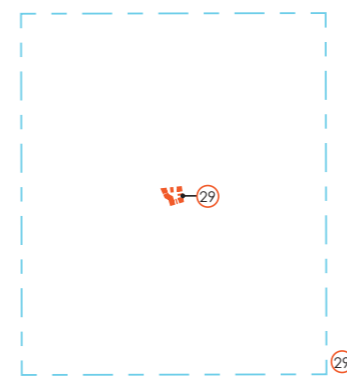
Rubattino Park.



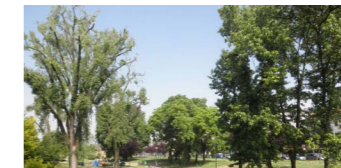
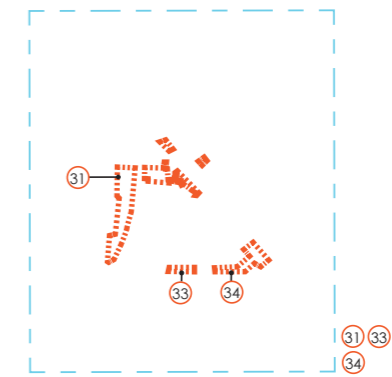
Piazza Leonardo Da Vinci.



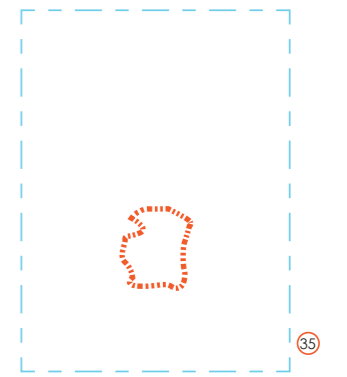
Cessi Park.



Green Spaces near Viale Mecenate.



Parco Monluè.



Activities/Equipment.

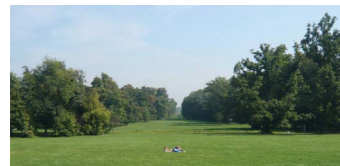
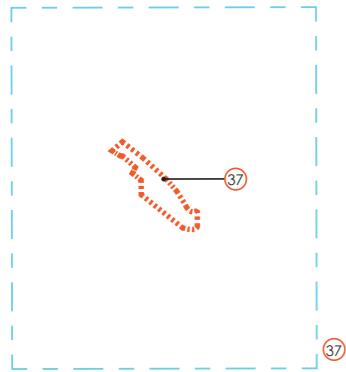


Activities/Equipment.

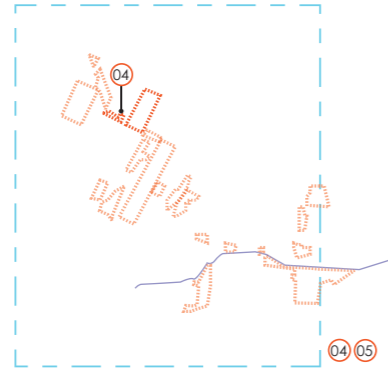


**Sport's facilities.**

Parco Cassinis.



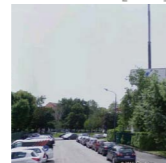
Propatria Milano (S.R.L.).



i[117]

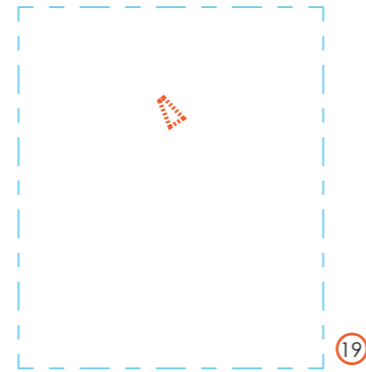


i[118]



i[119]

Centro Sportivo Cambini Fossati.



i[120]

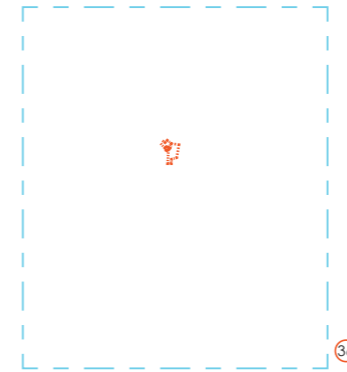


i[121]



i[122]

Tennis Club Milanese Libertas.



i[123]

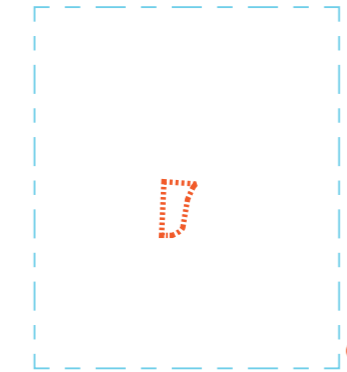


i[124]



i[125]

Circolo A.N.S.P.I. Centro Giovanile Cardinale Schuster.



i[126]

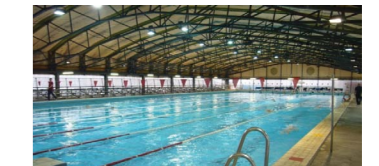
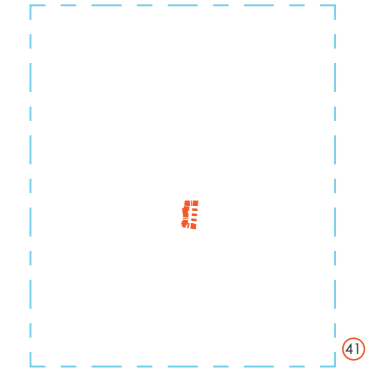


i[127]



i[128]

Centro Sportivo Saini, Milanospport.



i[129]

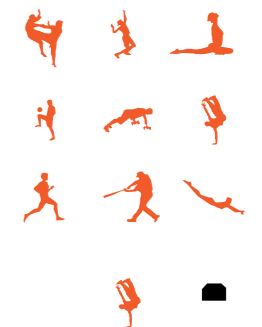


i[130]

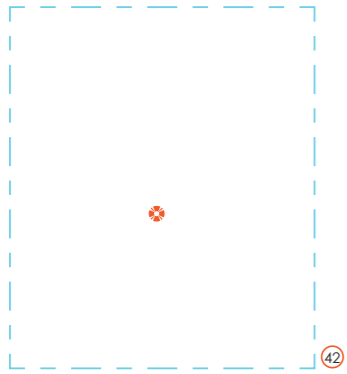
Activities/Equipment.



Activities/Equipment.



Via Carlo Valvassori Peroni, Milanospport.



i[131]



i[132]

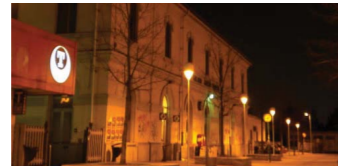
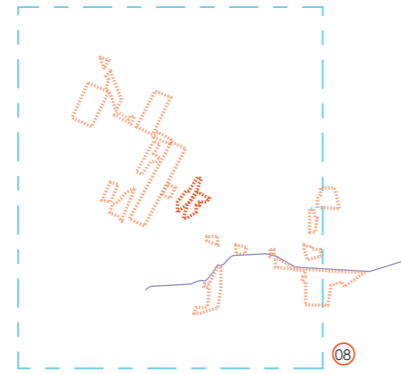


i[133]

Activities/Equipment.



**Plazas.**  
Greco-Pirelli Station Plaza.

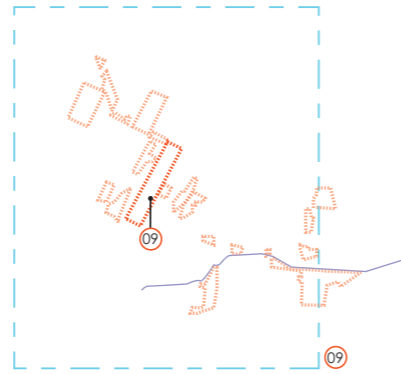


i[133]



i[134]

Plazas inside University And Business facilities.



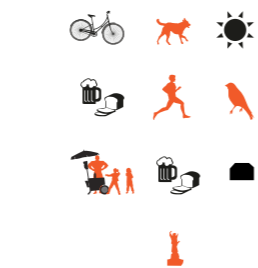
i[134]



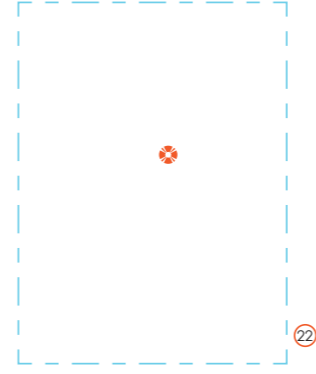
i[135]



i[136]



Piazzale Udine.

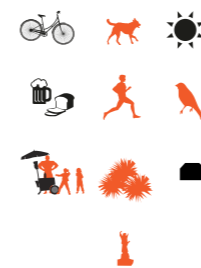


i[137]

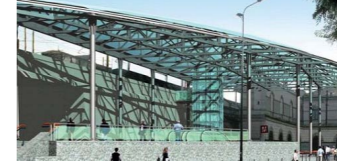
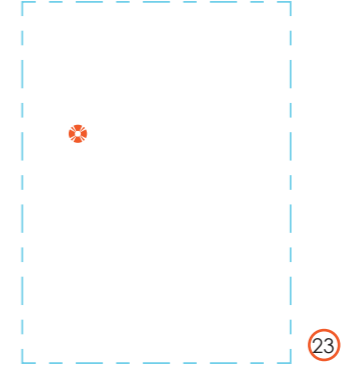


i[138]

Activities/Equipment.



Stazione di Lambrate.



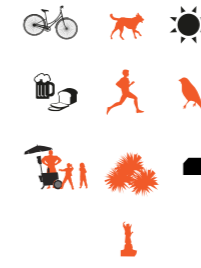
i[139]



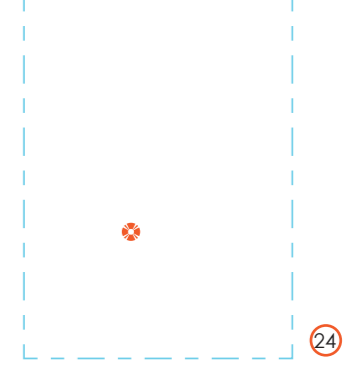
i[140]



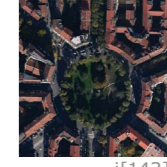
i[141]



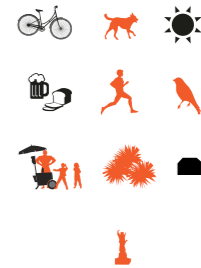
Piazza Piola.



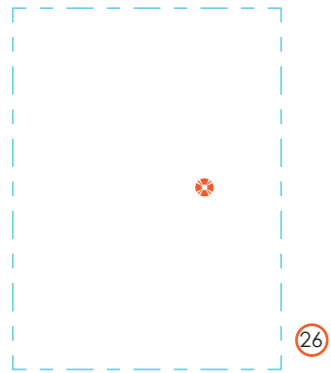
i[142]



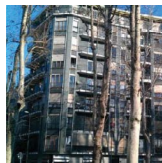
i[143]



Rimembranze di Lambrate.



i[146]

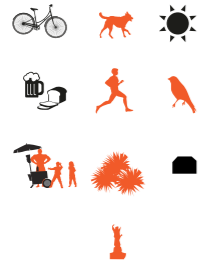


i[147]



i[148]

Activities/Equipment.



**Description, Main Activities, Potentialities and Weaknesses in:**

**LARGE PARKS:**

Parco Nord.

Description.  
The park extends through the communes of *Bresso, Milan, Cusano Milanino, Cormano, Cinisello Balsamo* and *Sesto San Giovanni*. The park extends by roughly 650 Hec. With extensive areas of reserve and forest. This is one of the main reserve spaces in Lombardy and important because of its proximity with densely populated areas.

Main Activities.  
Mainly of landscape characteristics, this park has main components, one, reserve areas comprising real forest of more than 25Y old, and lakes. Other with several installations are made for research proposes. And finally there are series of bike paths that cross it, making it accessible for the enjoyment of the public.

Potentialities.  
This park can become one of the main leisure posts for Milanese and other nearby inhabitants.

Weaknesses.  
The park lacks equipment for resting and realizing activities that are not walking or sitting on grass.

Parco Lambro.

Description.  
This is one of the biggest in Milan, and, for years was the most extensive but lost land due construction of the *Tangenziale Est* and the cemetery of Lambrate. It confines with the municipality of *Segrate* and has, as a main characteristic, the river *Lambro*, that completely transects it. It also hosts *Cascina San Gregorio Vecchio*, that still preserves its original function. And an important number of other *cascine*, traditional Lombard farms.

Main Activities.  
This is a recreational, and landscape park with a number of recreational facilities, and *Associazione Exodus*, an institution for the recovery of drug-addicts. An ex-library, now a site for disabled people.

Agricultural cultivations are also present on the park, and constitute a landscape attractor for the visitors.

The park is always open and has specialized areas for jogging, dogs (this ones restricted to two), skating "*Lam-brooklyn*" and soccer fields.

Main Activities.  
A strong attractive point for all kind of users, this park provides the much-needed space for relaxation and isolation from the thick urban environment that is the city. On a broader specter, this park is one of the main axis of a potential vertical system stretching south all along the

river *Lambro*, as is envisioned by the PGT.

Weaknesses.  
The park itself it's big and well organized, also, security is strong, considering its size. So, main weakness are not in itself but on what surrounds it, since, with some interventions on the river and on nearby spaces, could become part of a larger, logical system of parks and public spaces.

The *Cascine* are under-utilized, and, taking in consideration that the theme of the Expo 2015 is agriculture, they present a potential space for developing agricultural and educative tasks.

Parco Forlanini.

Description.  
The park was inaugurated in 1970, after years of work, it was dislocated from the original *Parco Lambro*, on its western part, it is crossed by a line of trees, and, on the east, *Laghetto Salesina*, a small corpse of water; it preserved some landscape elements such as some casine and *Mulinino Codovero*, a Mill.

On 2002 was inaugurated the *Bosco dei Faggi*, a forest in remembrance of the *Linate* air disaster of 2001. There is a project to amplify the park, up to 3 times and a half what it is today.

Main Activities.  
The park its equipped with a large number of amenities, that are landscaped (forest, hills, water), paths (jogging,

bicycles, walking) and installations (*cascine*, some institutions, the Mill and other buildings of historical importance.

It is important to notice that the park has a center for the recollection of cats and dogs. A communal hound.

#### Potentialities

This park will be amplified, meaning that the overall importance, on the urban context, will also be enlarged, being at the periphery, it can become a true forest, that marks the limit of Milan's Growth, or, become an agricultural park, like the *Parco Agricolo Sud* on the south.

#### Weaknesses.

Despite its size, this park is underused, this is because it is still located far from heavily dense populated areas, and, surrounded by a string of heavy infrastructure elements such as the *tangenziale* and the train tracks, it is difficult to access by the common citizen of Milan and other surrounding municipalities. When this park will become bigger, we expect that there is time for thinking also about its current permeability.

#### Parco Agricolo Sud.

##### Description.

This is a huge park that is composed of a series of ring green territories that surround the southern part of the city of Milan, creating a true border where it cannot grow anymore. It is crossed both by the river *Adda* and *Lambro*.

#### Main Activities.

The park is equipped with a large number of amenities, that are landscaped (forest, hills, water courses), paths (jogging, bicycles, walking) and installations (*cascine*, some institutions, the Mill and other edification of historical importance, plus a series of historical monuments such as *Chiaravalle*, *Mirazole*, and *Vibodrone*).

It is also important for its artificial lakes, the *Idroscalo* (old water airport converted into a water park), and Wooden reserve areas. (*Cusago*, *Riazolo*, *Corbetta*, *Carengione*).

#### Potentialities

This park is essential, not only for Milan's green character, historical background and city needs, but also because it is pointing to a "greener" future. It is the main mega park at hand.

#### Weaknesses.

Despite its size, this is not a widely accessed park, this means that it still needs better city connections, and a clear relationship with the city (better and more bike paths).

### SMALL PARKS:

#### Green Space Near Via Berbera.

##### Description

Located South of *Parco Nord*, this space is provided with large unoccupied green spaces, and restricts access to public by having positioned a fence. There are sports facilities and some flower arrangements decorate the place where large trees are located around it.

##### Main Activities.

There are sport installations, some of which are covered, here there are provisions for soccer, and tennis. Besides this, the only possible activity is contemplation upon the green space.

##### Potentialities.

Although used for sports, this space is largely unused, and could be open and accessible to the public, becoming a gate of entrance to the *Parco Nord*.

##### Weaknesses.

Abandonment and low use of the space.

#### Manifatture Milano.

##### Description

Old manufacturing plant, this will be transformed to create a residential project. We added the project to public spaces since it is intended to be permeable and public on the first floor. Planting of trees and creation of a reflecting pool are also part of the conception of public space to the

city.

##### Main Activities.

*Manifatture Milano* will be a residential area, so activities will rotate around it. The public fountain located at the center can also attract nearby pass-goers.

##### Potentialities.

As a private project, the fact of its permeability permits interaction of external users, that can create a new attractor point here.

##### Weaknesses.

There are no commercial provisions and since it is not yet constructed, it is remain to be seen the real effects over the livability on this sector.

#### L'Explanade.

##### Description

Created as a park, this green space is located underneath a residential project, following a slope that isolates the buildings on top with the street level.

##### Main Activities.

Although it is possible to sit on the border of the green areas, and on the stairs, most of the activities that are happening are reduced to passing and contemplating.

##### Potentialities.

Located near the University, offices and residences, this green space, provided with urban equipment, can become an asset and be used.

##### Weaknesses

It has no propose different than contemplation and landscape, it needs users and people on it.

#### The Hill.

##### Description

The hill was an artificial park made by *Gregotti* at the moment of realizing his project, it has privileged views from the city of Milan and *Bicocca*. It is an important landmark because of its height and also an attractor of people.

##### Main Activities.

Jogging, sort activities, contemplation and skate-boarding.

##### Potentialities.

This can become a landmark for the city of Milan and a place to overlook the city.

##### Weaknesses

Difficult to integrate, in part because of difficult typologies nearby, big avenues and the size of nearby constructions make it seem far for walking (discouraging).

#### Green parks Near Greco-Bicocca F.S.

##### Description

Located in the middle of the grid, this "spare" space remains as a green bastion between residential and commercial facilities.

##### Main Activities.

Currently its unaccessible because of the presence of a fence, So there are no visible activities happening inside.

#### Potentialities.

This place can become a much-needed park for use of the people in the location.

#### Weaknesses

It can be a private lot, making it unavailable for development for the *Comune di Milano*, unless bought.

#### Green Spaces at Viale Monza.

##### Description

Although not conceived as a park, these spaces provide a potential new zone for using it as offset public space that can connect to *Bicocca*, on the other side of the train track.

They are different spaces, that range from private gardens to a large lot that hosts a kindergarten.

##### Main Activities.

Cultivation, storage, and a collection of small private lots used for diverse activities. Also the kindergarten uses this space for the enjoyment of small kids. Other areas near the train tracks are abandoned or have any defined use.

##### Potentialities.

Developing the currently abandoned areas, can create a suitable space, that can become a buffer to the connection over the train tracks.

##### Weaknesses

Being mostly private, it is unclear how would any future development over the edge of the train (public) affect the

lots.  
Space in Scuola Elementare Statale F. Crispi.

**Description**  
Big lot nearby Railway Yard This place enjoys a privileged location surrounded by all types of vegetation and between creeks, and the future development of the railway yard.

**Main Activities.**  
State School Facility.

**Potentialities.**  
can be used as a landscape enhancer, if views are open.

**Weaknesses**  
Being private, can't be open to the public (also because it hosts children).

Naviglio Martesana.

**Description**  
Naviglio Martesana is a beautiful space in Greco, that extends as far as *Cascina Gobba* and, eventually, to the Parco San Maurizio in Monza. This channel has breathtaking sceneries, and mixed uses on his course.

**Main Activities.**  
There are several activities taking place near the channel, that range from roads, bike paths, at some points, but also industries and junkyards towards the Tangenziale Est.

**Potentialities.**  
Can be integrated to Parco San Maurizio, protecting both deltas of the channel, and also creating a strong green

network towards Monza.  
**Weaknesses**  
Abandonment and misuse at several points, and industries and garbage present, also, large peripheral infrastructure (energy towers and Industry).

Lambrate Cemetery.

**Description.**  
This is a large-permeable, mixed project that acts a green park and residential complex near Parco Lambro.

**Main Activities.**  
Garden, Architectural-relevant buildings, landscape, tombs.

**Potentialities.**  
Can be incorporated to a larger sports-related system that circumscribes the city, also, this cemetery complements the system with different approaches to public space, this time one based on respect, contemplation, silence and introverted activities.

**Weaknesses.**  
It is not a strong attractor, since cemeteries remind us of our mortality and are, therefore, avoided by many. Restricted access to certain hours.

Rubattino Park.

**Description**  
A special place that crosses under the Tangenziale Est (Highway) and connects the neighborhood.

**Main Activities.**

Buildings, landscape, tombs.  
**Potentialities.**  
Can be incorporated to a larger sports-related system that circumscribes the city, also, this cemetery complements the system with different approaches to public space, this time one based on respect, contemplation, silence and introverted activities.

**Weaknesses.**  
During the night can be dangerous, and there is presence of damage to property.

Parco Cesi.

**Description**  
This small park is surrounded by office buildings and light industrial installations. It is underused and currently acts more as a green void space rather than a real park.

**Main Activities.**  
Some occasional walker or biker passes by, and sometimes it is used for walking a dog, but it is, for the most time, an unused space.

**Potentialities.**  
If provided with urban furniture, this could be a resting place for workers to eat their lunch and as a place of resting, picnic, dog-walking and, perhaps, could also host some sport facilities.

**Weaknesses.**  
Lack of furniture, and lack of facilities to support leisure activities.

Green Spaces near Via Me-

enate.

**Description**  
A series of large and medium sized parks that have a variety of equipment and are used in a variety of ways ranging from predominantly sports, passing through recreational green areas, and as outdoor eating and leisure places, to others, that, like Cesi, are only green, void spaces.

**Main Activities.**  
Eating, outdoor sports, and dog walking.

**Potentialities.**  
They can become an extension that attracts visitors from the other side of the rails, a much more dense and consolidated sector.

**Weaknesses.**  
They are physically only connected to Feltre and not to the other sides of the tracks, losing potential users.

Parco Monluè.

**Description.**  
Taking its name from *Monlové* (hill of wolves), this is a rare example of a Lombard *grangia*.

**Main Activities.**  
It is equipped with Mills, a monastic complex, and large prairies.

It is important to notice that the park has a center for the recollection of cats and dogs.

**Potentialities.**  
According with municipal

plans, this area is to be furnished with new paths, and new forests to density the green character of this beautiful space.

**Weaknesses.**  
Not clear entry points, and a clear connection with *Forlanini* park (nearby) could be made, re-enforcing the idea of a green system along river *Lambro*.

Parco Cassins.

**Description**  
Known before as the *Parco dei Fiori*, park of the flowers, was part traditionally of the *Chi-aravalle* Abbey.

**Main Activities.**  
There are sport outdoor activities, people with dogs, picnics, and walkers.

**Potentialities.**  
Due the fact that this park is close to ATU *Porto di Mare*, and that this area will be developed in the future, this park will be increasingly more important as surrounding areas are densified.

**Weaknesses.**  
It lacks organization, fencing, and control (some areas present illegal dumping), and also enough furniture to make this a real park. It can be dangerous at certain hours, so, more security couldn't hurt.

**SPORT'S FACILITIES:**

Propatria Milano (S.R.L.).

**Description**  
This is a traditional Sport Society that came to *Bicocca*, from Porta Romana, on august, 1885, with the mission of forming and supporting health and sportive activities, it hosts tournaments, and trainings with several different sports.

**Main Activities.**  
Tennis, Basketball, Football, Triathlon and athletics are the main activities that are realized inside its facilities. They provide its users with training till.

**Potentialities.**  
Since this is not a lonely activity (sports) but is to be found repetitively in *Bicocca* and surroundings, well connected, sport activities can be potentialized (an example can be a running field).

**Weaknesses**  
It is isolated from the context and reachable only by car and has relatively few users.

Centro Sportivo Cambini Fos-sati, public pool.

**Description**  
Following with MILANOSPORT, This public pool is part of a larger system of public installations that guarantees Milanese population with enough leisure installations. It includes a gym, pool, a recreational center, soccer courts.

**Main Activities.**  
Gym, Pool, a recreational center and soccer/basketball courts.



Potentialities.

Can be incorporated to a larger sports-related system that circumscribes the city.

Weaknesses.

It is a random building that can be discovered only by vicinity or acquaintance of other members, could be more visible, and the mayorship of Milan could promote more the great idea that is MILANOSPORT.

#### Tennis Club Milanese Libertas.

Description

This is a tennis court complex, created particularly for this port.

Main Activities.

Center for sports, it has a pool, soccer fields, tennis, an athletic field, volleyball, Roller blade fields, gyms and other sport facilities.

Potentialities.

As other similar spaces, this is already part of an organized network (Milanosport), and, due its location, can be integrated as a sport-related in a broader public space network.

Weaknesses.

Not clear entry points, and a clear connection with *Forlanini* park (nearby) could be made, re-enforcing the idea of a green system along river Lambro.

#### Circolo A.N.S.P.I. Centro Giovanile Cardinale Schuster. Sports Center

Description

This is a sport center managed by the church, and provides the citizens with sport facilities, it has soccer, baseball, basketball, volley and a gym.

Main Activities.

Sports, and a small church.

Potentialities.

Its location, alongside the river, nearby Lambro park and other sport-related facilities has the potential of creating a N-S sport system.

Weaknesses.

It is not fully open, but requires the compliance of certain specific rules, this means that this is not a public space but a semi public one, it, however, reinforces the overall leisure arrangement.

#### Milanosport Centro sportivo Saini.

Description

This is another park that is part of the system of Milanosport. Located near *Parco Forlanini*, during summer, large number of young people subscribes for after-school lessons.

Main Activities.

Center for sports, it has a pool, soccer fields, tennis, an athletic field, volleyball, Roller blade fields, gyms and other sport facilities.

Potentialities.

As other similar spaces, this is already part of an organized network (Milanosport), and, due its location, can be integrated as a sport-related in a broader public space network.

Weaknesses.

Not clear entry points, and a clear connection with *Forlanini* park (nearby) could be made, re-enforcing the idea of a green system along river *Lambro*.

#### Via Carlo Valvassori Peroni, Milanosport.

Description

Main Activities.

Sports, martial arts room, yoga, tennis, and gym.

Potentialities.

Its location, alongside the river, nearby *Parco Lambro* and other sport-related facilities has the potential of creating a vertical sport system.

Weaknesses.

It is not fully open, but requires the compliance of certain specific rules, this means that this is not a public space but a semi public one, it, however, reinforces the overall leisure arrangement.

#### **PLAZAS:**

##### Greco Station Plaza.

Description

The *Grecco-Pirelli* station is the public transport gate that connects the sector with the rest of the city, trough the regional trains.

Main Activities.

Seasonal markets and a meeting point.

Potentialities.

This station is well used, although some benches and a better sun orientation can create a more liveable space, like the one existing in *Lambrate* Station with similar conditions.

Weaknesses

The station has no connections with *Greco* (despite its name) and can only access *Bicocca*.

#### Plazas inside University and Business facilities.

Description

*Bicocca's* project created a series of internal spaces that repeat. Inside, there are monumental public plazas, each comprising urban furniture, shadowing elements and other elements made to enrich the public character of the plaza.

Main Activities.

Resting, contemplation, eating and mobility are the main activities, all plazas are provided with elements that can be used for sitting and resting and large hard surfaces for a conscious clear mobility.

Potentialities.

Here, lies a key element to understanding *Bicocca*: made to create a pleasurable environment, this plazas can become into main livable spaces,

if provided with more casual, and defined public spaces.

Weaknesses

There are no clear limits between private and public space, circulation zones, being unobstructed, end becoming dull, several levels present on the plazas make mobility uncomfortable for pedestrians.

#### Piazza Leonardo Da Vinci.

Description

This is a green space closely associated with the *Politecnico di Milano*, and *Università degli Studi*, being part of *Città Studi*, literally, city of studies. It rotates around student life and university activities.

Main Activities.

Garden, Landscape, Eating, Outdoor Sports, Picnic, outdoor studying, major and minor events.

Potentialities.

This is a place which relies in its adaptability and relation with its surrounding buildings, recent experiments of taking out traffic have proven successful for reinforcing a green space.

Weaknesses.

It requires intensive care, and vigilance, since users can lead to sporadic vandalism.

### Equipments

21 Lambrate Cementery.

18 Parco Lambro.

19 Centro Sportivo bambini Fossati, public pool.

27 Parco Rubattino.

Parco Forlanini (Part of Parco Agricolo Sud).

40 Milanosport-Centro sportivo saini.

32 Monluè.

35 Parco Agricolo Sud.

37 Parco Cassins.

29 Parco Cesi.

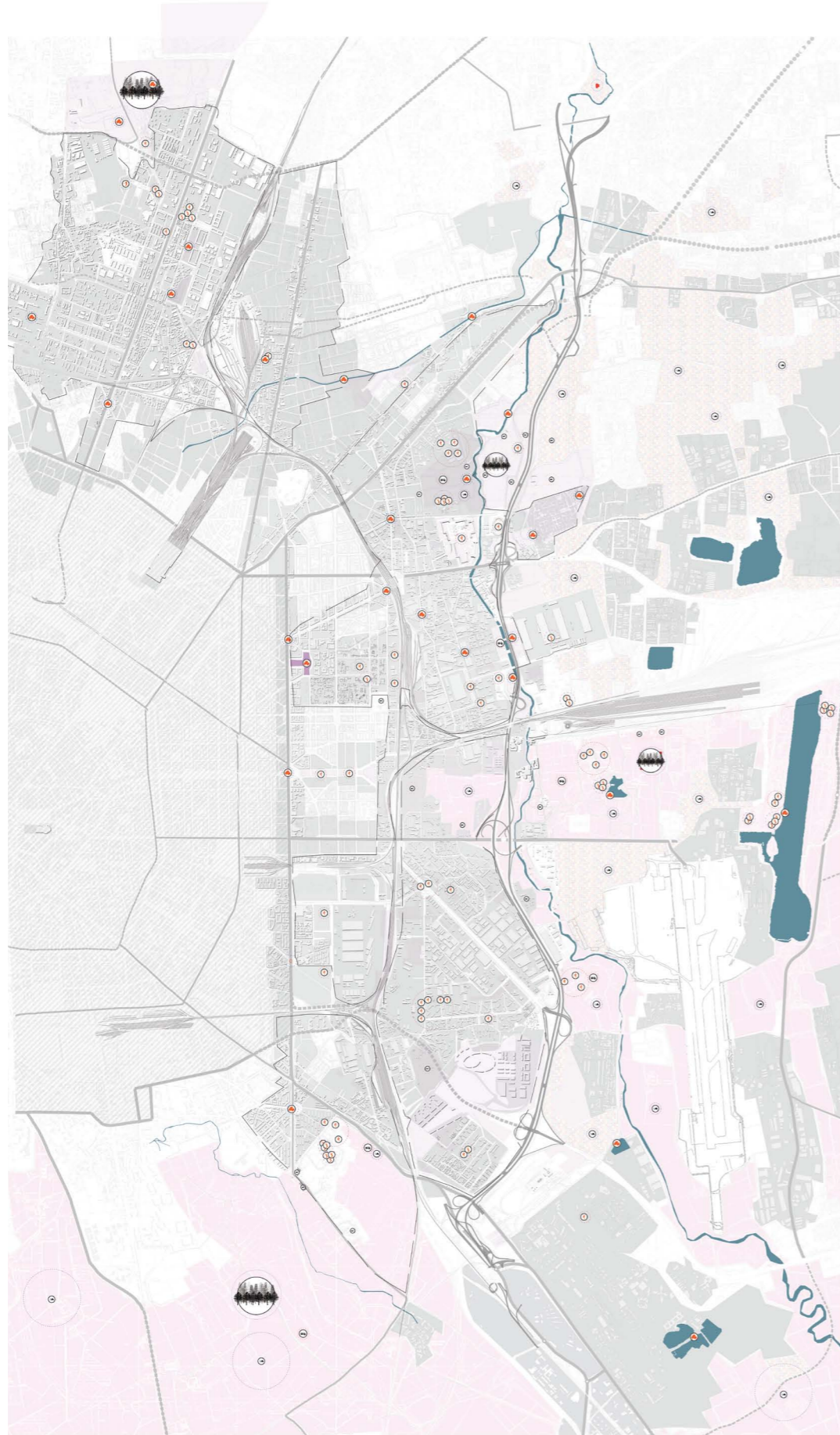
38 Parco Agricolo Sud.

Garden  
Bike Path  
Soccer  
Tennis  
Mill  
Cascina  
Agriculture  
Kiosks  
Pool  
Gym  
Landmark

### Main Activities

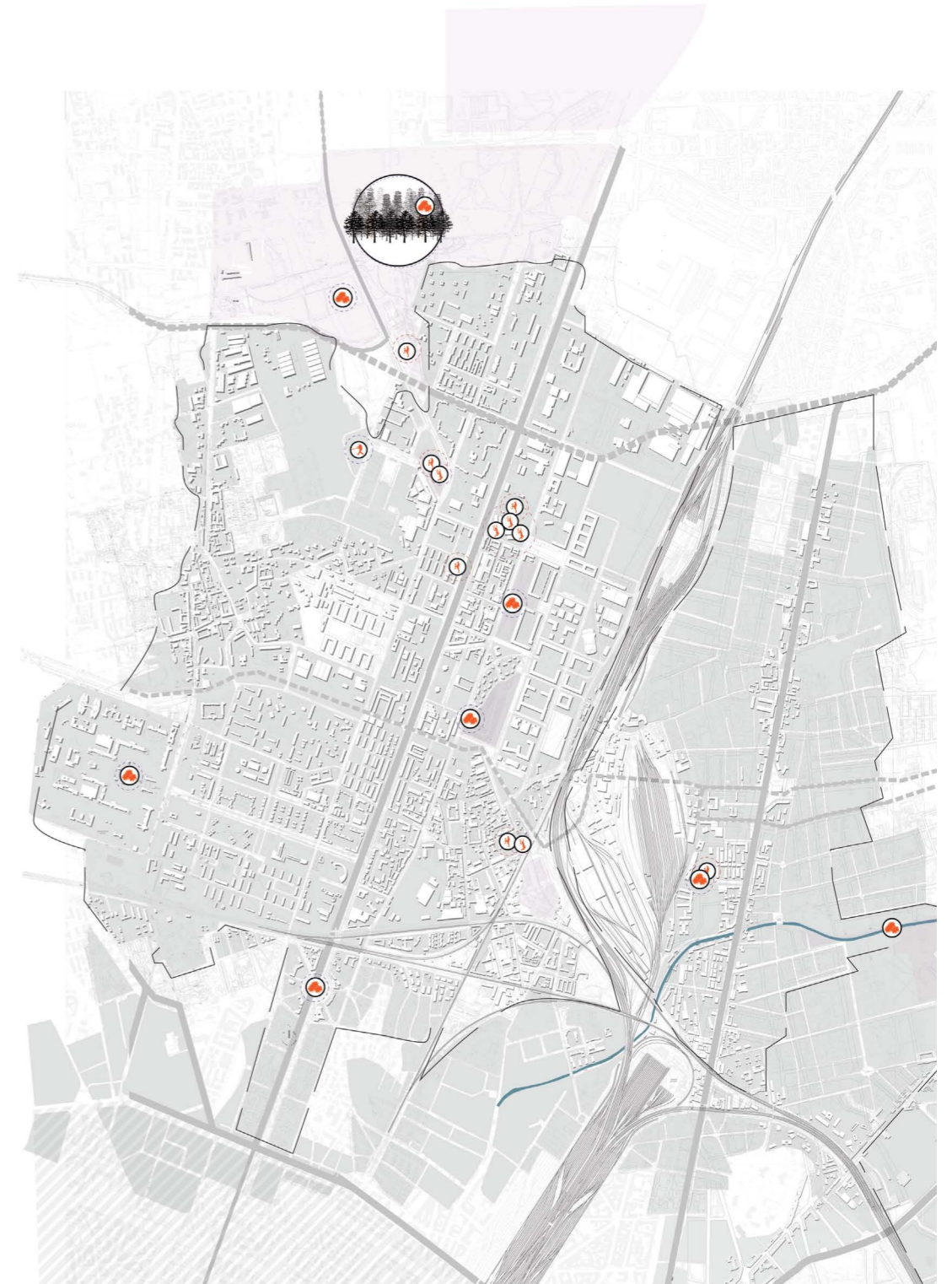
Dog walking  
Jogging  
Yoga/Frisbee  
Biking  
Picnic  
Kids playing  
Reading  
Sun bathing  
Birds Observa-  
Agriculture  
Food  
Playing Sports  
Marital Arts  
Religious Activities  
Concerts/Events

ACTIVITY MAP.



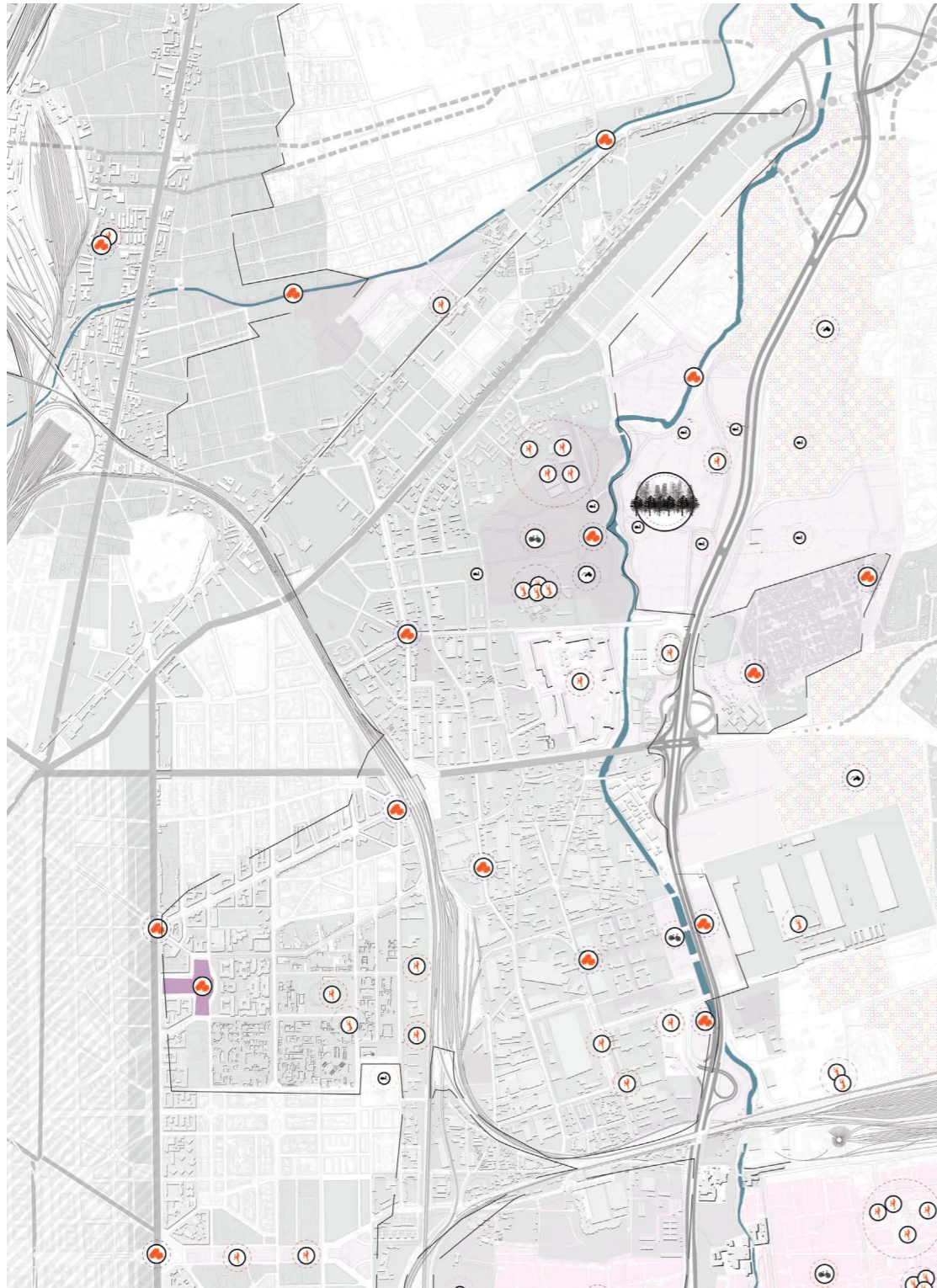
GRECO - BICOCCA.

Concentrates Most Activities at the center, being activities close to each other.



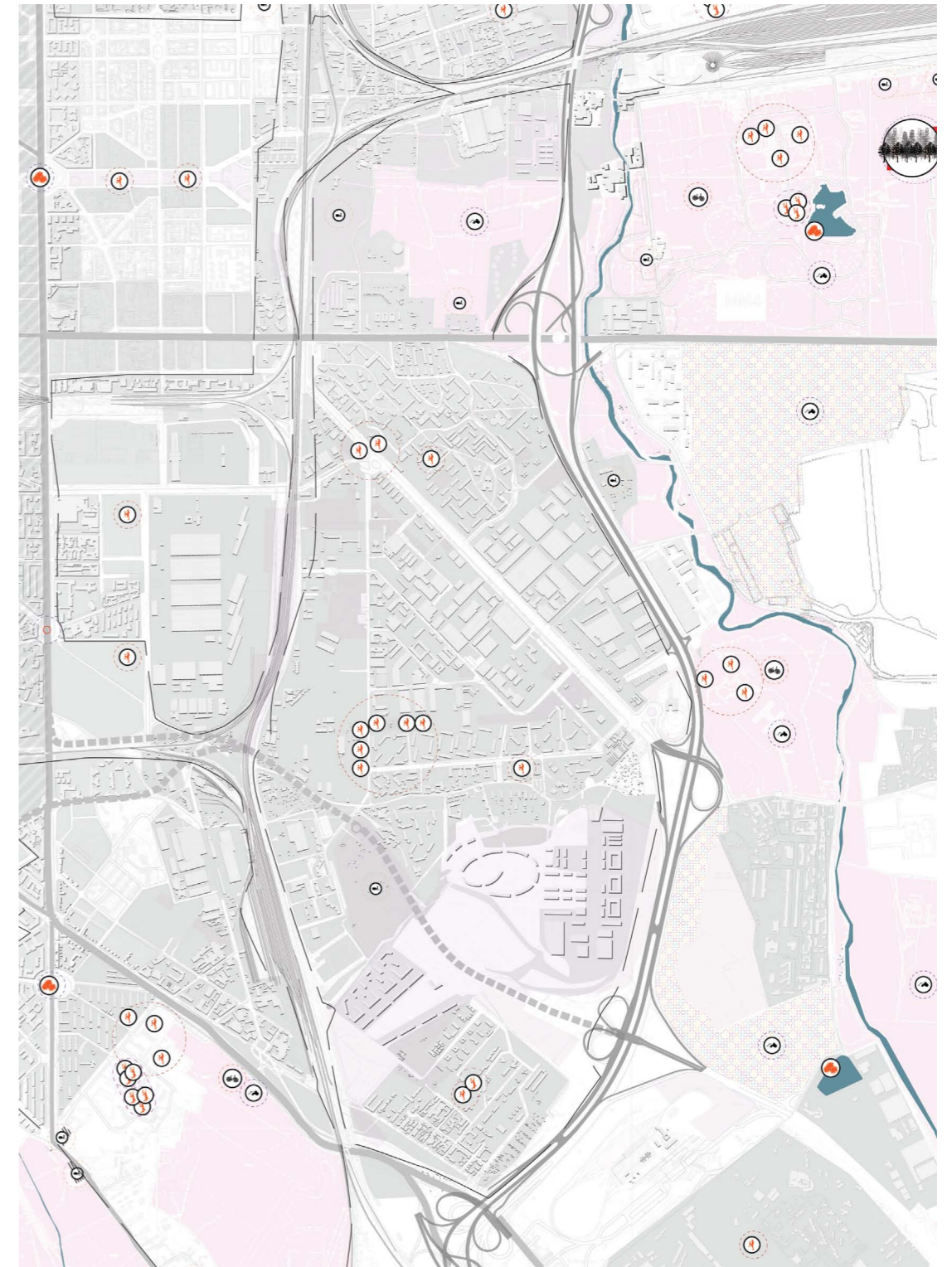
CITTÀ STUDI -  
LAMBRATE.

Activities can be found all  
along the Island Perimeter.



MECENATE- FORLANINI.

Are on very specific points of  
the territory, like the south-  
west and, near *Forlanini* Park.



## PORTO DI MARE- ROGOREDO.

Located mostly in *ATU Porto di Mare*.



### 3.3.4 CASCINE & AGRICULTURE.

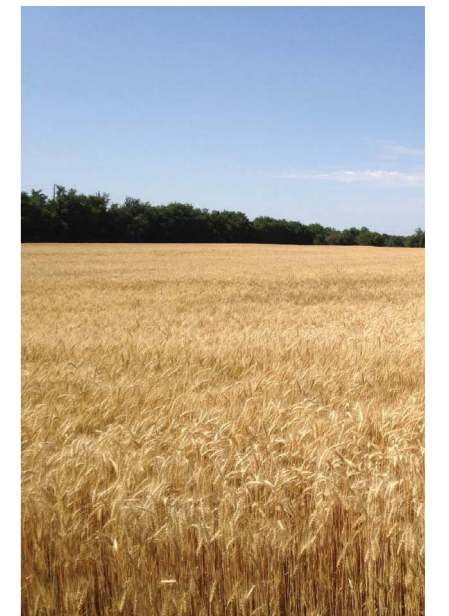
#### INTRODUCTION:

Parallel to the public space, there is another system that, although it's not public, it complements the public space.

This because agricultural fields are nice to see, and characterize the area as a green, wide space, contrary to the urban conglomeration that is Milan. The *Cascine* Network is what remains of an old Network of traditional farms, and it is used in a variety of ways.



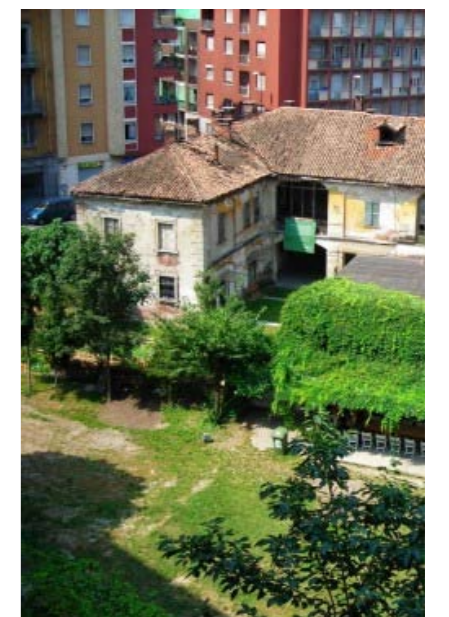
i[149]



i[150]



i[151]



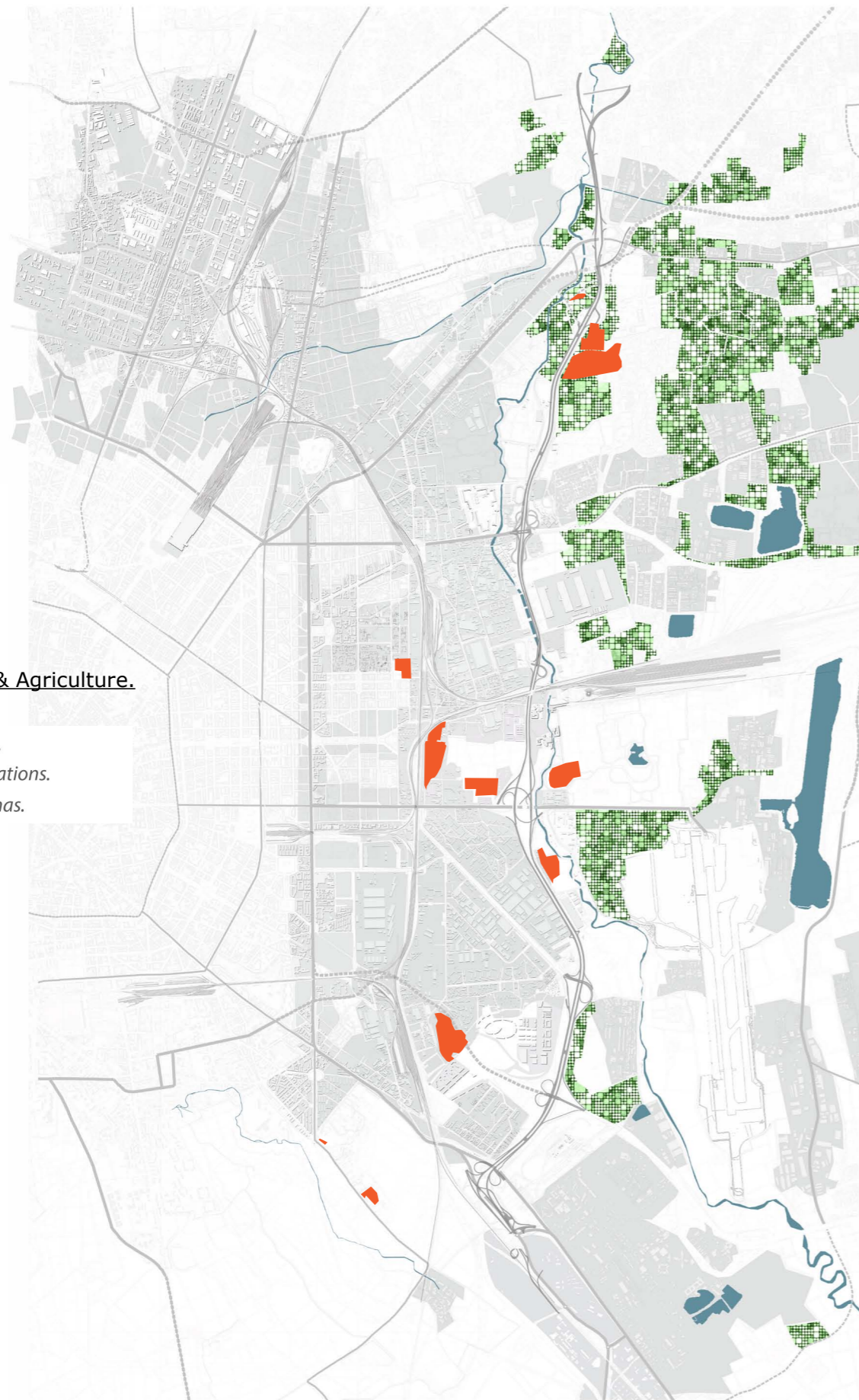
i[152]



i[153]



i[154]



**Cascine & Agriculture.**

- Water.
- Cultivations.
- Cascinas.

**Current Cascine Network.**

- |  |  |    |
|--|--|----|
| 01 Cascina Molino San Gregorio<br>(communal Services, Market)        | Cascina Molino Torrete.<br>(Communal Services,<br>Citizen attention) | 07 |
| 02 Cascina Turro<br>Residenza Cascina Melghera                       | Cascina Biblioteca.<br>(Communal Services)                           | 08 |
|  | Cascina San Gregorio Vecchio.<br>(Agriculture)                       | 09 |
|  | Cascina Ovi.<br>(Restaurant, Winery).                                | 10 |
| 03 Cascina Rosa<br>(Communal services, Health)                       | Cascina Case Nuove.<br>(Restaurant, Winery).                         | 11 |
| Cascina Cavriana.<br>(Agriculture, Market)                           | Cascina Villa Landa.<br>(Agriculture).                               | 12 |
| 04 Cascina Sant'Ambroggio.<br>(Agriculture, Market)                  | Cascina Casanova.<br>(Agriculture, Tourism).                         | 13 |
|  | Cascina Monluè<br>(Agriculture, Tourism).                            | 14 |
|  | Cascina Merezzate.<br>(Agriculture).                                 | 15 |
| 05 Cascina San Giacomo<br>(Communal Service,<br>Immigrant Reception) | Cascina Grande di<br>Chiaravalle<br>(Agriculture)                    | 16 |
| 06 Cascina Nosedo<br>(Water Depuration)                              |  |    |

**CASCINE**

A *cascina* is a farm, comprising all the buildings that compose it. In Milan, a ring of historical cascine are still in existence in different degrees of conservation and each one hosting also different functions. We flowingly make a list and introduction to this rich, complex system.

*Cascina Molino San Gregorio.*  
(Communal Services, Market).

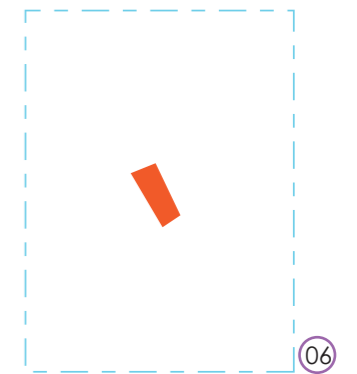
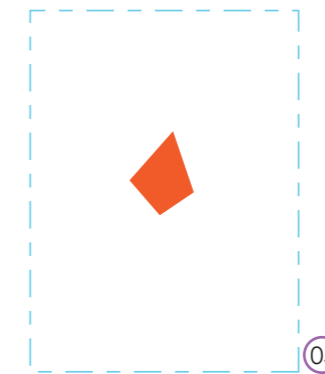
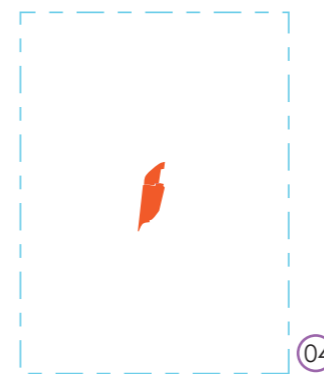
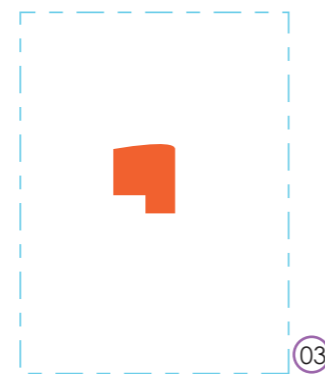
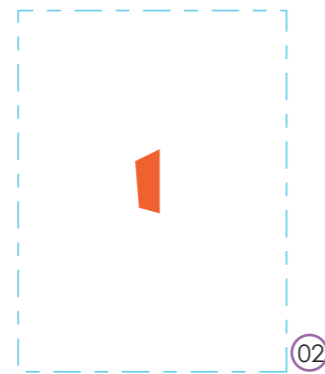
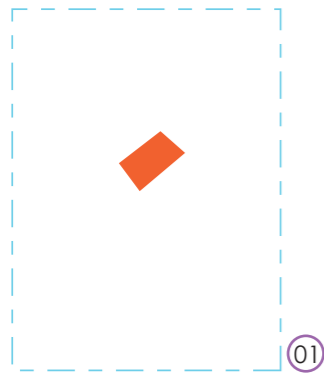
*Cascina Turro.*  
(Student residences for the Vita-Salute San Raffaele university).

*Cascina Rosa.*  
(Communal Services, Health, Agriculture).

*Cascina Sant'Ambrogio.*  
(Agriculture, Market).

*Cascina San Giacomo.*  
(Communal Service, Immigrant Reception).

*Cascina Nosedo*  
(Water Depuration).



i[155]



i[157]



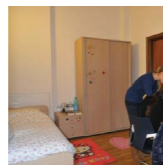
i[159]



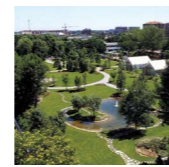
i[161]



i[156]



i[158]



i[160]



i[162]

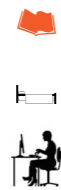


i[163]



i[164]

Activities/Equipment.



This space is currently runned by 3 societies, all non-profit, *Fontanile Cooperativa Sociale*, *Viridalia Cooperativa Sociale* and *Centro Ambrosiano di Solidarietà* and have as an objective to create a community that will use this space, to preserve it, and to characterize it.

Serving the mentioned university, this residence provides students with clean, affordable and close accommodation. They are all single rooms with private bathrooms.

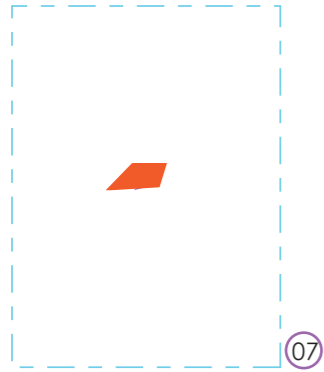
This space is a health-related institution that makes research, and also agriculture, they also make scientific publications and seminars. Their location, in a quiet cascina provides the perfect place for research.

This *Cascina* has an open market, and agriculture. It still uses traditional methods for cultivating the ground.

This one is an immigration center, and it makes regular thematic dinners and a children's care center.

This *Cascina* has a practical function and that is to serve as a place for the depuration of water.

*Cascina Biblioteca.*  
(Communal Services,  
Attention to  
discapitated people).

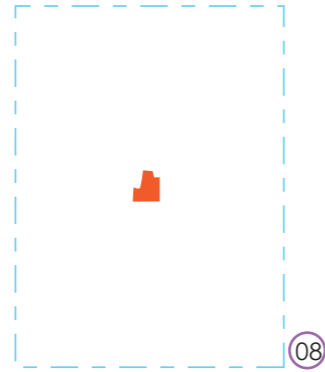


i[165]



i[166]

*Residenza Cascina Melghera.*  
(Student residences for the  
Vita-Salute San Raffaele uni-  
versity).

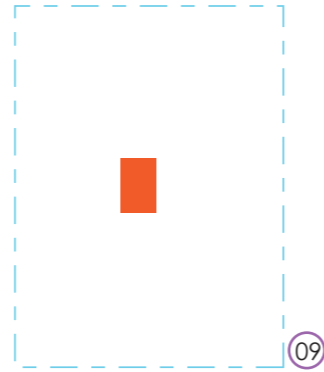


i[167]



i[168]

*Cascina San Gregorio Vec-  
chio.*  
(Communal Services, Health,  
Agriculture).

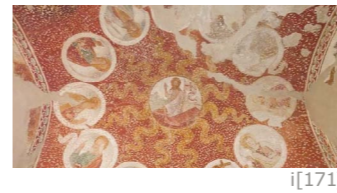
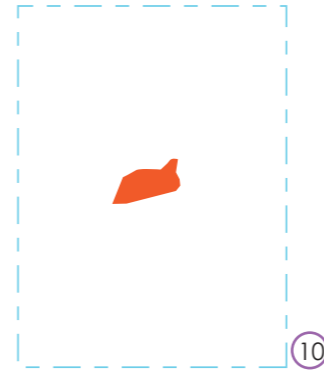


i[169]

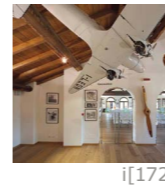


i[170]

*Cascina Ovi.*  
(Restaurant)

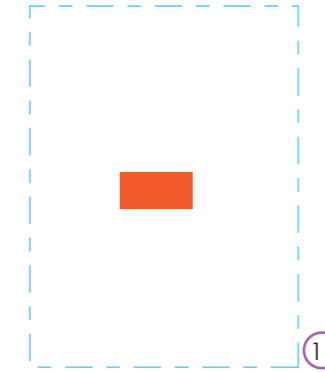


i[171]



i[172]

*Cascina Case Nuove.*  
(Restaurant, Winery).

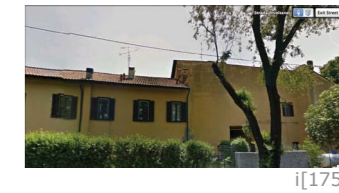
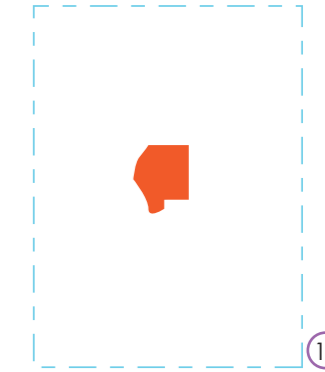


i[173]



i[174]

*Cascina Villa Landa.*  
(Agriculture).



i[175]

Activities/Equipment.



This space is currently runned by 3 societies, all non-profit, *Fontanile Cooperativa Sociale*, *Viridalia Cooperativa Sociale* and *Centro Ambrosiano di Solidarietà* and have as an objective to create a community that will use this space, to preserve it, and to characterize it.

Has accommodation, study rooms, a library, classrooms, offices and a small agricultural garden. This is a very active community that has regular seminars, outdoor activities, conferences, expositions, amongst many others.

Old building (was built around the 1600's), is a traditional, agriculture cascina. Now part of Parco Lambro. It is however, separated by the tangenziale est from it, so it acts independently. It is strictly agricultural, preserving its original function.

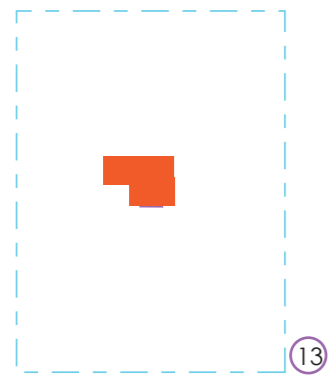
From the original limits, all that remains is the house, now re-modeled to host a restaurant and, winery, library, and a museum. It still preserves old frescoes.

This *cascina* has a restaurant, plus agricultural services, also has some accommodation for youth.

From the original limits, all that remains is the house, now re-modeled to host a restaurant and, winery, library, and a museum. It still preserves old frescoes.



Cascina Casanova.  
(Agriculture).



13

Cascina Monluè.  
(Agriculture,  
Tourism).

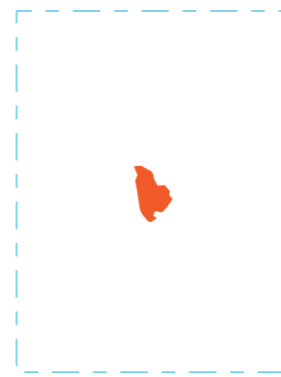


14



i[176]

Cascina Merezzate.  
(Agriculture).

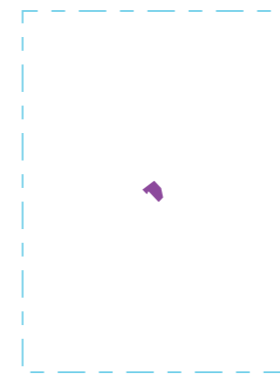


15



i[178]

Cascina Grande di  
Chiaravalle.  
(Agriculture).



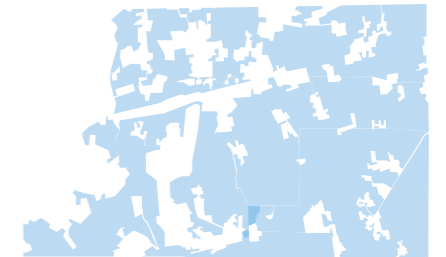
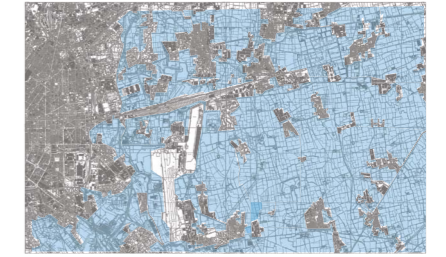
16



i[180]

## AGRICULTURE.

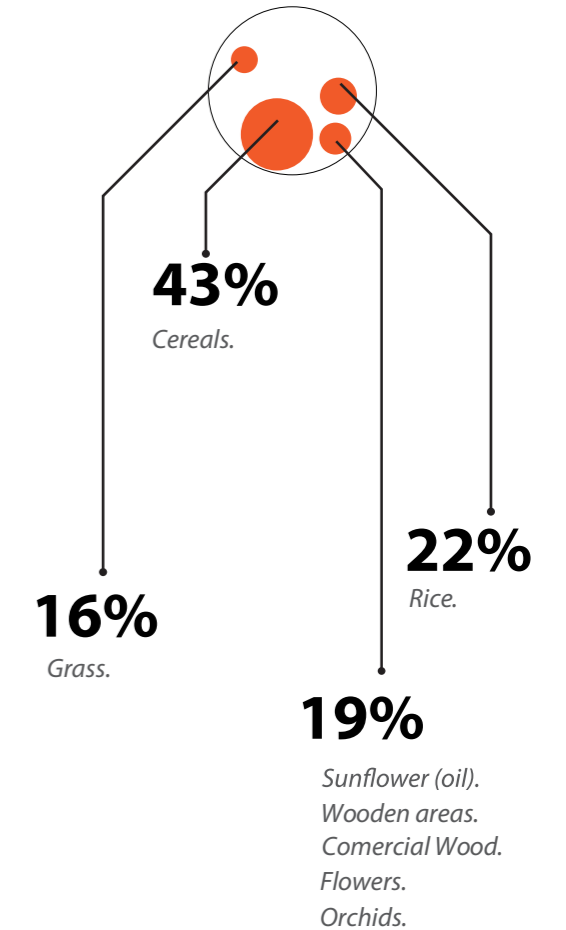
So far we have only seen agriculture at the small scale (cascine and relatively small agricultural fields), The east, however, is linked with a combination between the large agricultural complex that constitutes Parco Agricolo Sud (one of the most intensive cultivation areas of Italy, and the heavily populated and sprawled north (to the extent that we can speak of a continuous metropolis from Torino extending all the way to Venice and the northern Lombard lakes.



Parco Agricolo Sud:

Production:

**46300 He**



## Activities/Equipment.



This is another *cascina* that has preserved its original function as an agricultural farm. It is linked to Parco Lambro, as are the other nearby *cascine*.

The biggest and possibly most important of them all, this is what remains of an old *burgo* that, after the war and infrastructure projects (*Tangenziale Est.*) became isolated. Now it is used for festivities, concerts,

This *cascina* still preserves traditional agriculture functions, plus some agricultural area that belongs it for cultivation.

Equipped with barns, and agricultural fields, plus an information office for the parco agricolo sud system.

### 3.3.5 ACTIVITIES & SPACE.

Although it would be hard to measure all activities happening on the sector, we identified, based on the following 5 themes, what is happening inside. Activities and Space are combined on this analysis.

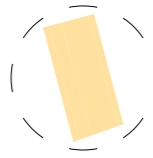
Large Commercial/Industrial/Business



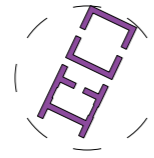
Spatial Configuration.

- Along main axis.
- Off-Main axis.
- On Nodes.
- On Clusters.
- On Commercial Centers.

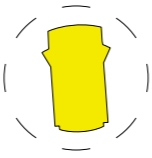
-Institutional.



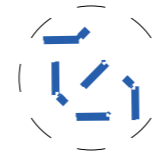
Study/Research.



Culture.



-Residential & Neighborhood Facilities.

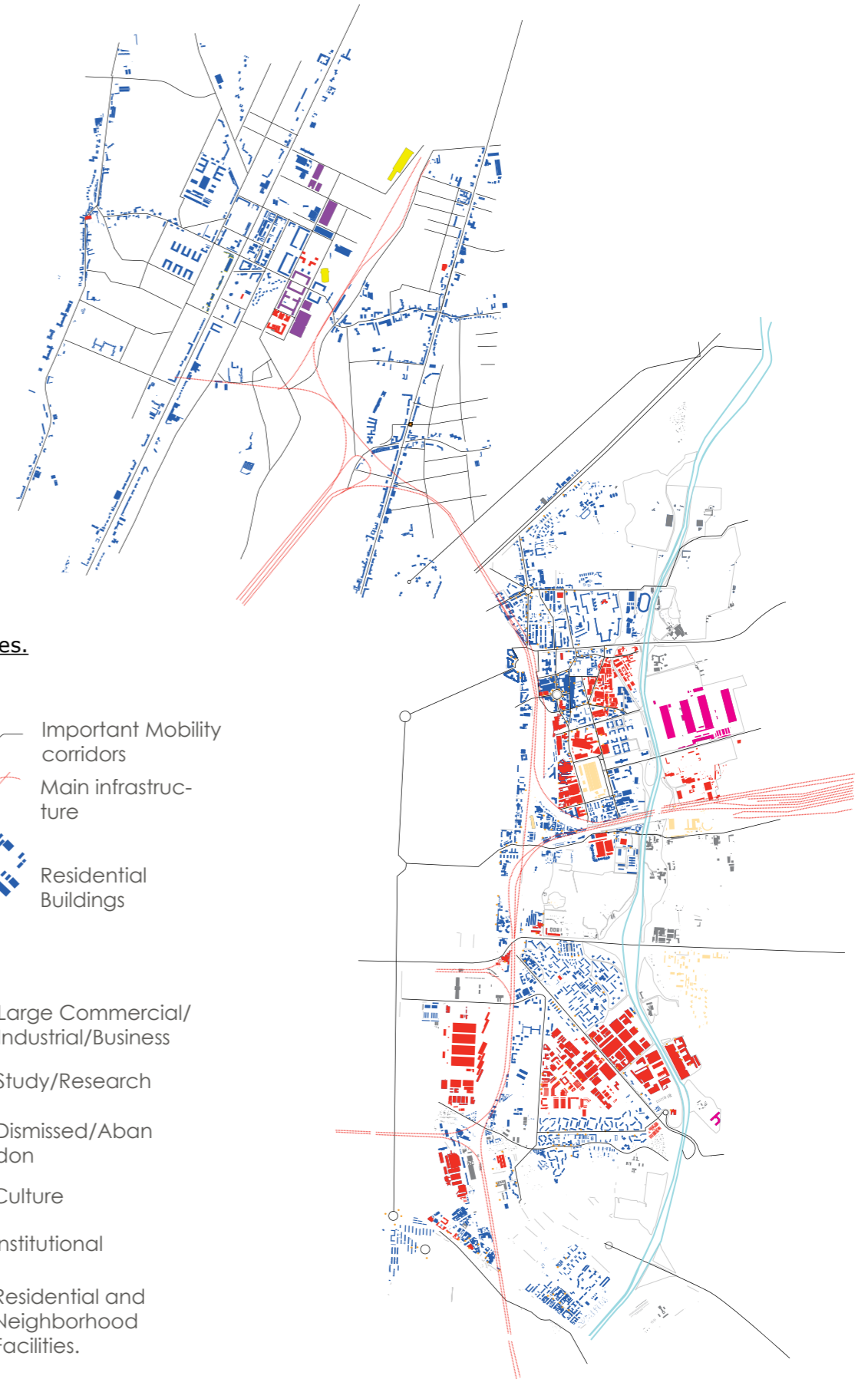


Spatial Configuration.

- Towers.
- Semi-Closed Buildings.
- Linear Buildings.
- Closed Buildings.

Density.

- High Density.
- Medium Density.



-Activities.

- Important Mobility corridors
- Main infrastructure
- Residential Buildings

**KEY**

- Large Commercial/Industrial/Business
- Study/Research
- Dismissed/Abandon
- Culture
- Institutional
- Residential and Neighborhood Facilities.

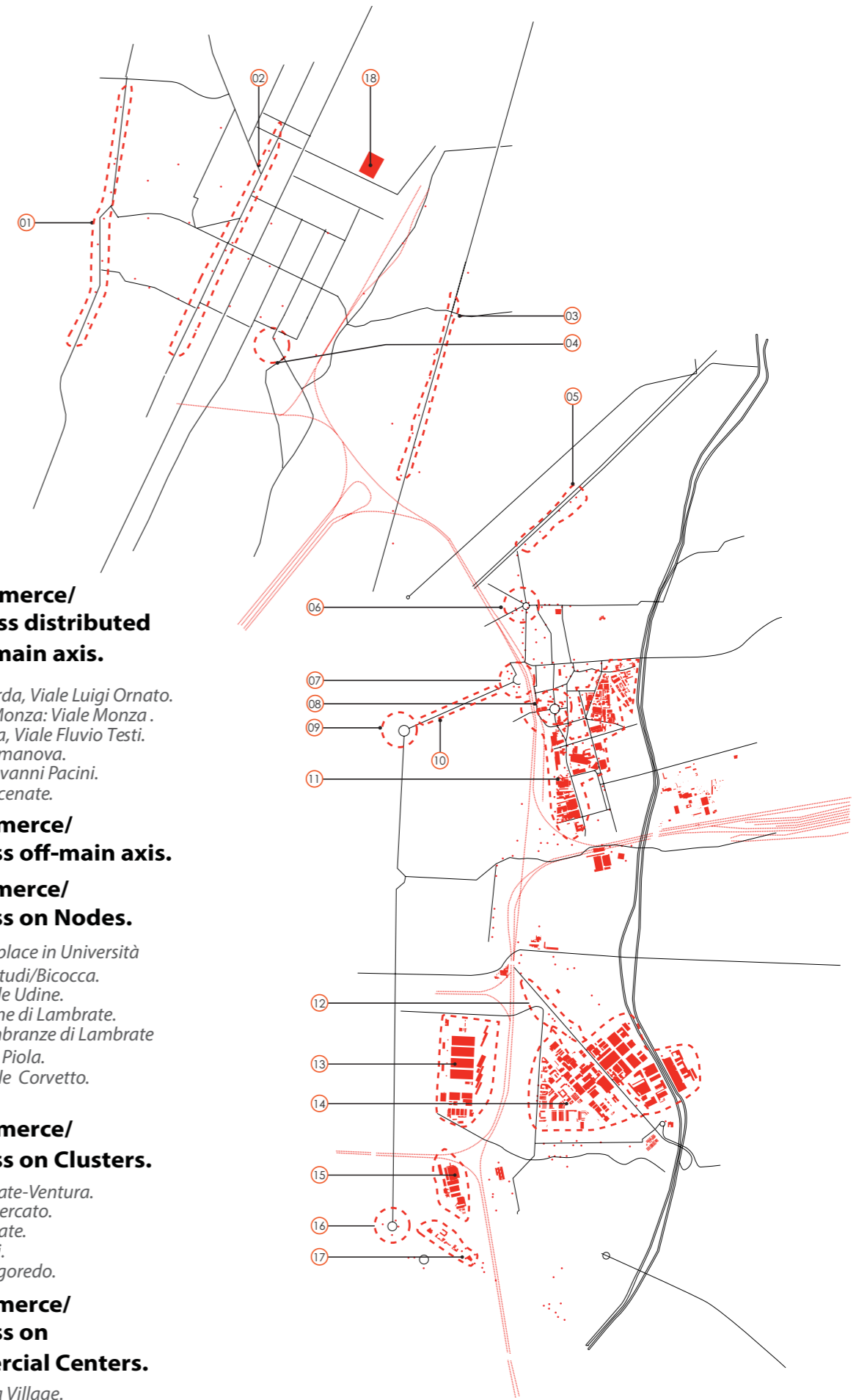
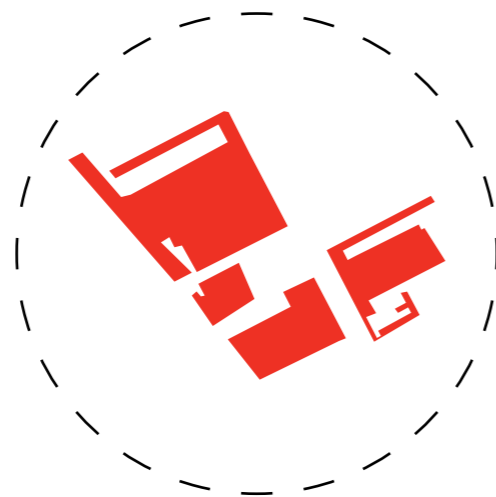
## -LARGE COMMERCIAL/INDUSTRIAL/BUSINESS.

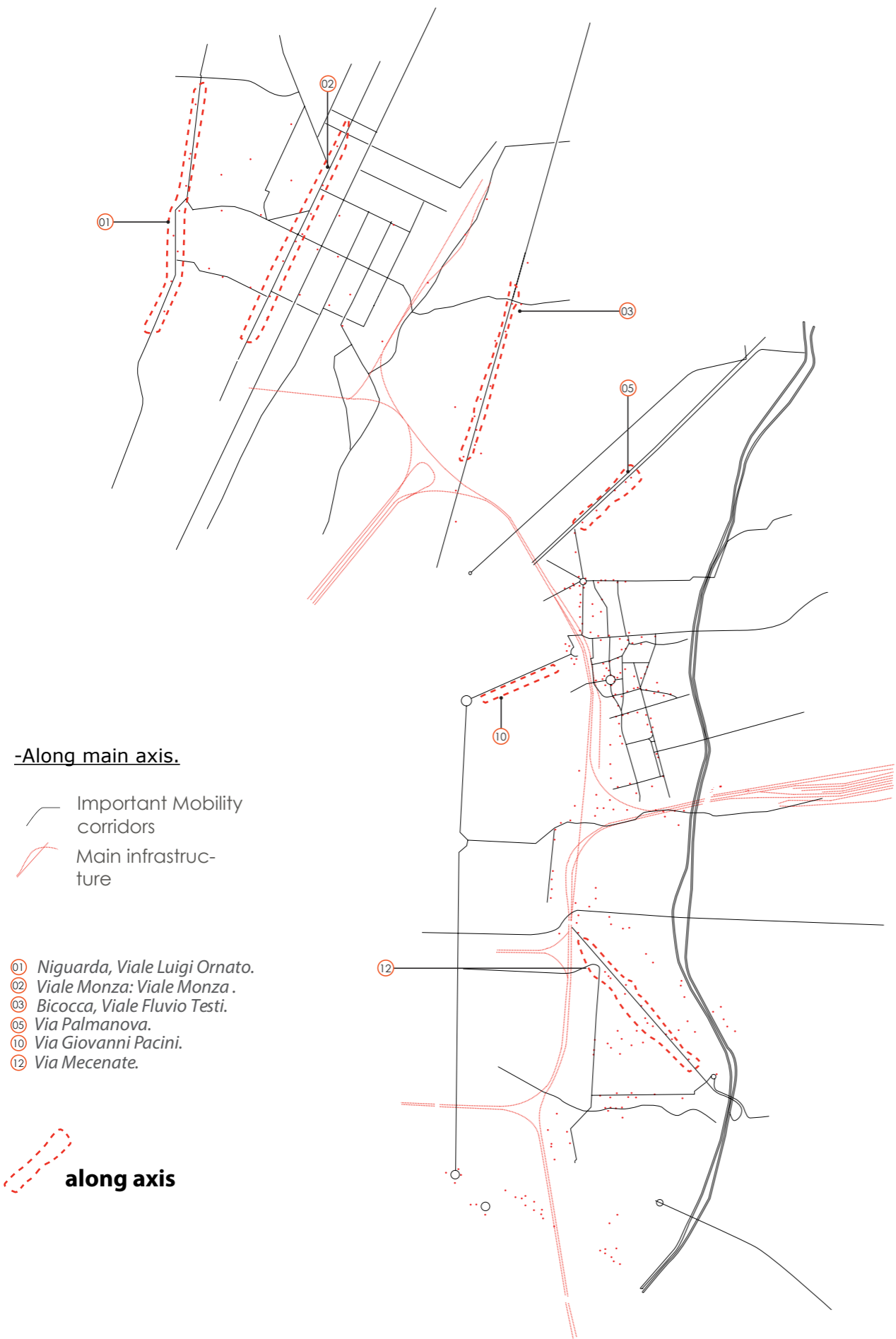
Milan history is closely tied with the industrial development, making it the first city in terms of national economical importance. This particular area of the city is a reminder of this and still concentrated a large industrial and commercial complex seen above.

### SPATIAL CONFIGURATION.

It is normal to find Large Commercial/Industrial/Business, Concentrate on clusters, and along big infrastructure corridors. Finally, some, off-axis big commercial buildings exist, although they are rare.

- Along main axis.
- Off-Main axis.
- On Nodes.
- On Clusters.
- On Commercial Centers.





**ALONG MAIN AXIS.**

Along important roads (corresponding with the road hierarchy), they are scattered but enough to be considered a system.

- Via Palmanova.
- Viale Giovanni Pacini.
- Via Mecenate.

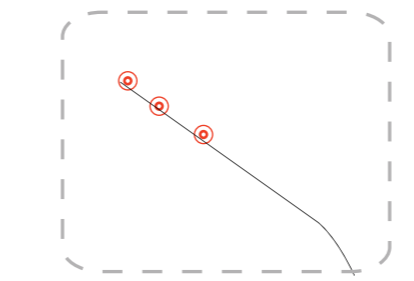
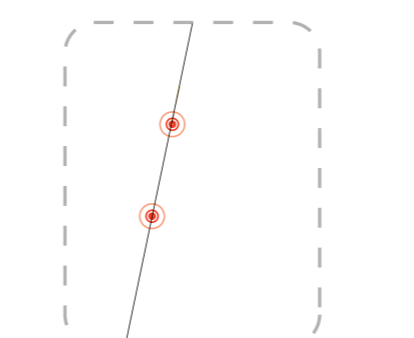
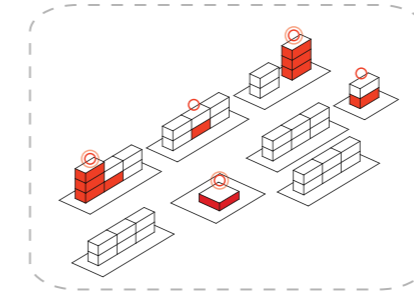
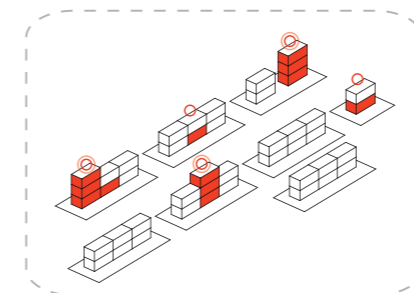
- Niguarda, Viale Luigi Ornato.
- Bicocca, Viale Fluvio Testi.

6 of this configurations where found:

- Niguarda, Viale Luigi Ornato.
- Bicocca, Viale Fluvio Testi.
- Viale Monza.

Niguarda's main avenue, hosts commercial activities that include Restaurants, Clothes, Hardware, etc.

At the center of Bicocca, this important avenue offers proximity shops, restaurants and clothing stores.



i[181]



i[182]



i[183]



i[184]



i[185]



i[186]



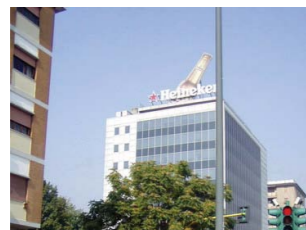
i[187]



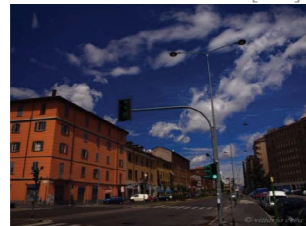
i[188]

- Viale Monza.

Like the other two, this busy street has proximity commerce, pet shops, restaurants and clothing stores.



i[189]



i[190]



i[191]



i[192]

- Via Palmanova.

This is another commercial corridor that offers proximity shops like restaurants, groceries and a Hotel.



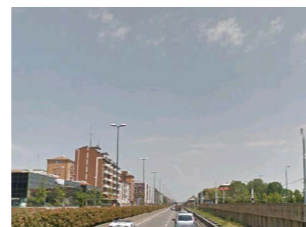
i[193]



i[194]



i[195]



i[196]

- Viale Giovanni Pacini.

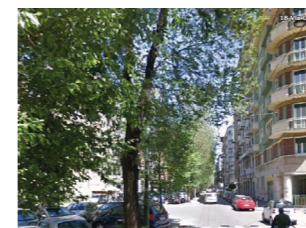
Long, and important, it concentrates restaurants, groceries, drug-stores, hair saloons, and proximity shops.



i[197]



i[198]



i[199]

- Via Mecenate.

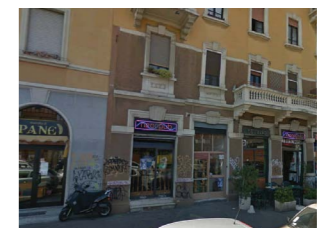
This busy street has proximity commerce, industry and offices.



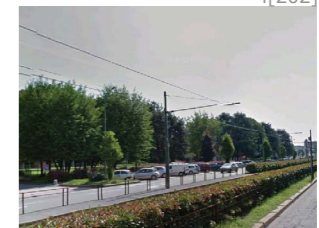
i[200]



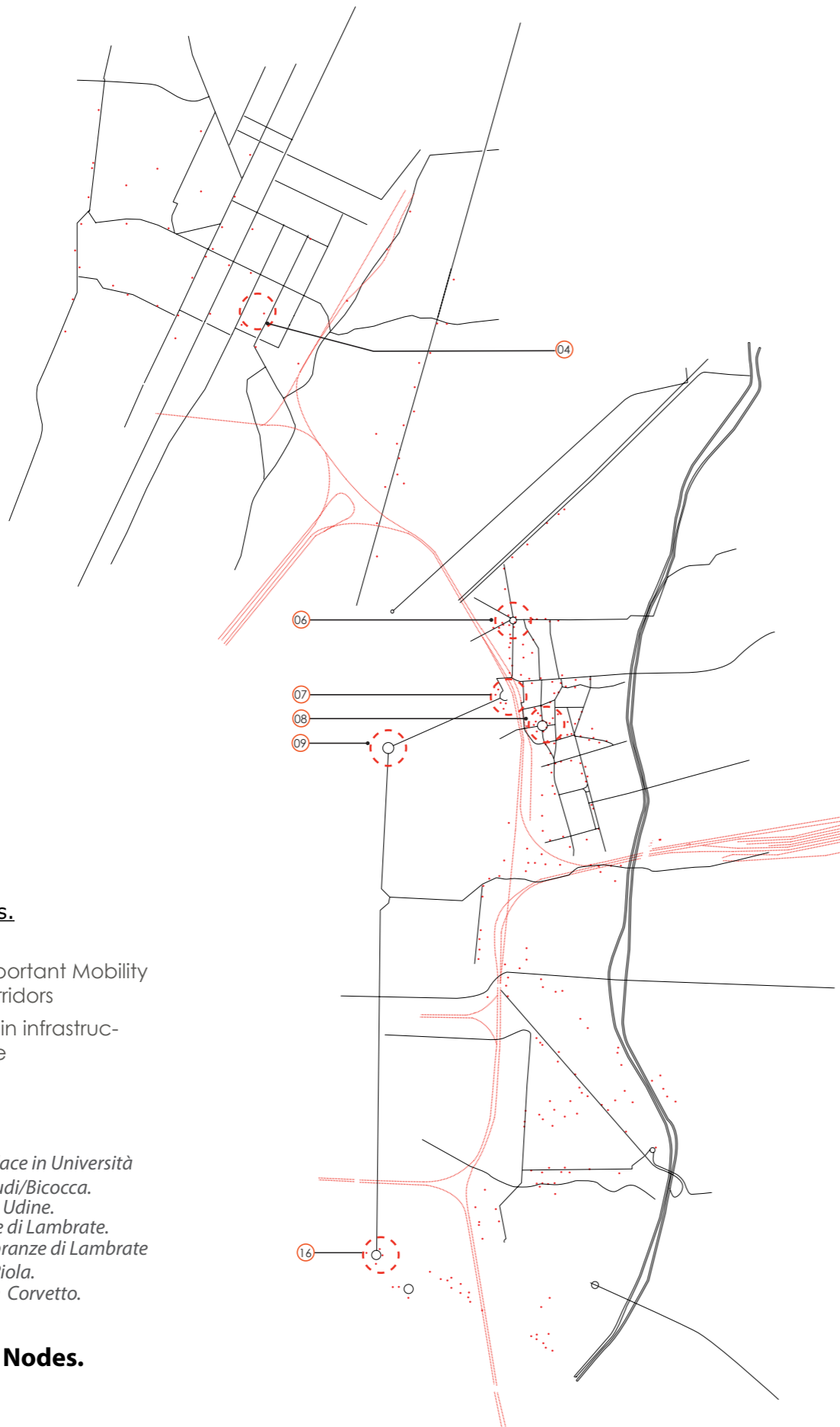
i[201]



i[202]



i[203]



**-On Nodes.**

- Important Mobility corridors
- Main infrastructure

**Key:**

- 04 Public place in Università Degli Studi/Bicocca.
- 06 Piazzale Udine.
- 07 Stazione di Lambrate.
- 08 Rimembranze di Lambrate
- 09 Piazza Piola.
- 16 Piazzale Corvetto.

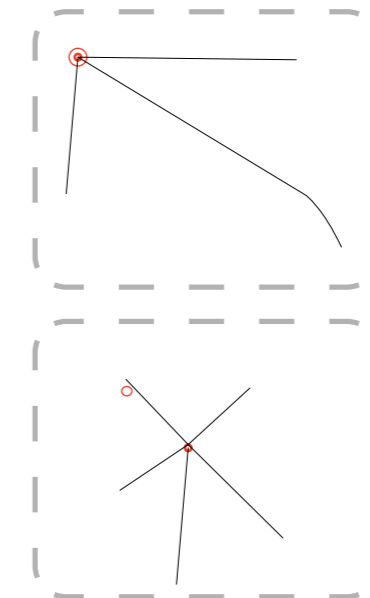
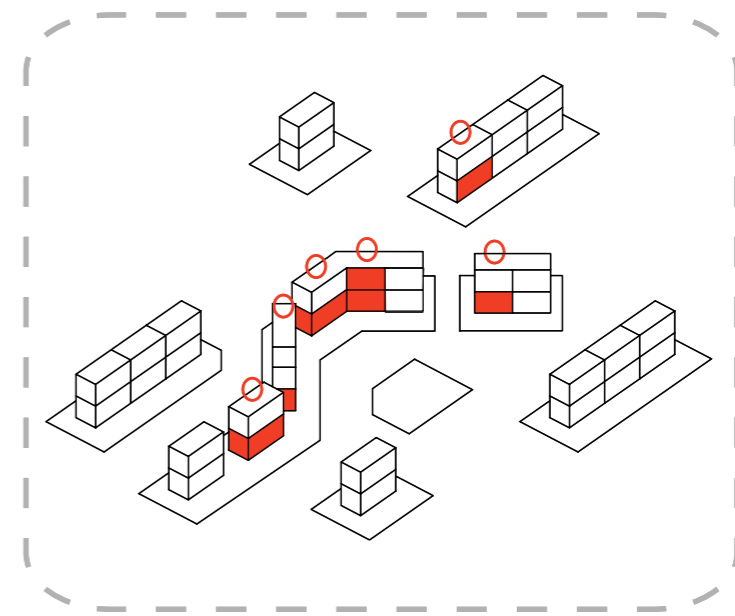
**On Nodes.**

**ON NODES.**

Usually around a Plaza, or a public transport node, they concentrate all kind of services.

6 of this configurations where found:

- Greco Station Plaza.
- Piazzale Udine.
- Stazione di Lambrate.
- Piazza Piola.
- Rimembranze di Lambrate.



**NOTE:**  
(For details on this, go to [Public Space / plazas](#) on this document).

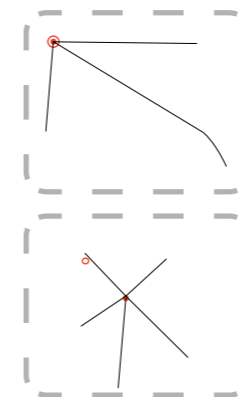
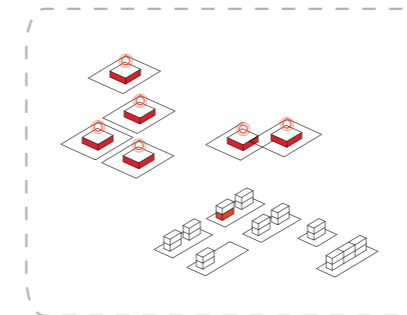


**ON CLUSTERS.**

Concentration of big commercial and industrial typologies, they are almost always close to each other, forming clusters with common activities.

5 of this configurations where found:

- Lambrate-Ventura.
- Ortomercato.
- Mecenate.
- Toffetti.
- Rogoredo.
- Bicocca.



- Lambrate-Ventura.

Large commercial activities, and industry, perhaps the largest. Important activities include metallurgy factories, industrial chemical products, electronics, and a broad variety of other services.

Relation with Mobility:



Tangenziale Est.

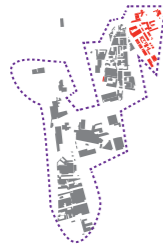


Train.



Activities by sector:

Pharmaceutical.



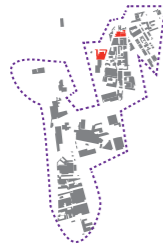
Textil.



Management.



Metalurgy.



Air Transport.



Supermarkets.



Construction



Music.



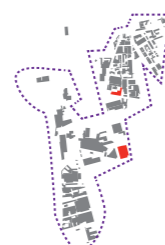
Logistics.



Health



Computers/Electronics.



Publicity/Graphic Arts.



Important Companies.

- Gruppo Bracco.  
Pharmaceutical.

- Bombielli Costruzioni Metalliche. Construction.

- Sanofi Italia.  
Pharmaceutical.



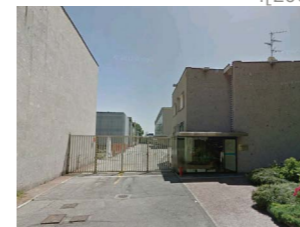
i[206]



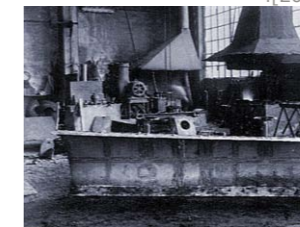
i[208]



i[210]



i[207]



i[209]



i[211]

Founded in 1927, this company quickly became a multinational in the health sector; it is one of the leading companies on image-diagnosis and operates in 90 countries. It grossed 1.111 million € only in 2011.

Founded in 1889, this company known when it handled projects of the importance of *Stazione centrale's* main metallic arc-structure, then, working alongside famous architect *Giò Ponti*. Now, the company has evolved into producing also snow and airport equipment.

Another large Pharmaceutical company, Extended internationally. Produces a wide arrange of pharmaceutical drugs.

i[206] i[207] BRACCO P170

i[208] i[209] BOMBIELLI COSTRUZIONI METALLICHE. P170

i[210] i[211] SANOFI ITALIA. P170



Christina Ros.  
Cosmetics.



i[212]



i[213]

This is a producer of cosmetic products. Extended internationally.

- *Ortomercato.*

Big Scale Food Market, groceries, fish, meat, and other food-related products.

The biggest in Italy, and a place to find everything you need related to food.

Activities by sector:



i[214]



i[215]

Market.



This 438 thousand sq m complex is composed by a seemingly infinite series of fruit, fish, meat, and other food stands.

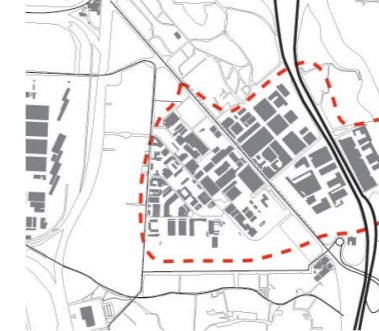
- *Mecenate.*

Concentrates industrial and commercial activities such as chemicals, logistics, Industrial design, health and pharmaceutical.

Relation with Mobility:

Activities by sector:

*Tangenziale Est.*



Health.



Appliances.



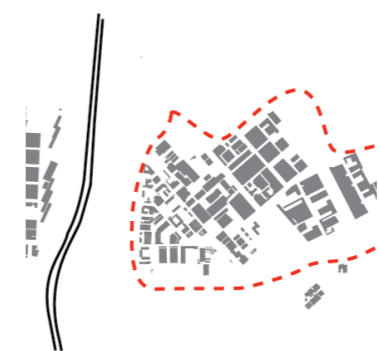
Pharmaceutical.



Publicity/Graphic.



Train.



Important Companies.

- RAI Centro di Produzione  
RAI di Milano.  
TV & Entertainment.

TV & Entertainment.



Convention Center.



Industrial Design.



Chemical.



Logistics/Transport.



Storage.



Leather.



i[216]



i[217]

RAI (*Radiotelevisione Italiana*)  
Is the main communication network in Italy, and, as all communication media, closely related with the country's inhabitants. This studio is one of two in Milan, and it is equipped with large filming sets and all necessary logistical support.

- UPS Italia.  
Logistics.



i[218]



i[219]

Being close to the airport has some advantages, and that is probably why UPS (*United Parcel System*) chose to be located here. They manage all logistical transfer of goods and merchandise off most of northern Italy.

- Toffeti.

Large commercial activities, and industry. Important activities include metallurgy factories, industrial chemical products, electronics, and a broad variety of other services.

Relation with Mobility:



i[220]

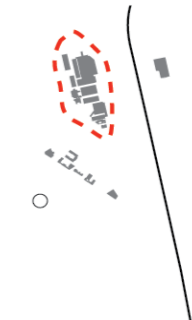


i[221]

Tangenziale Est.



Train.



Activities by sector:

- Rogoredo.

The smallest of all, this is more a linear island, with services along Viale Cassinis.

Relation with Mobility:

It has companies dedicated to transport, insurance, and food packaging.

Appliances.



Publicity/Graphic.



Industrial Design.



Transport.



i[222]

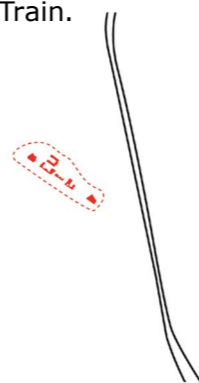


i[223]

Tangenziale Est.



Train.



Important Companies.

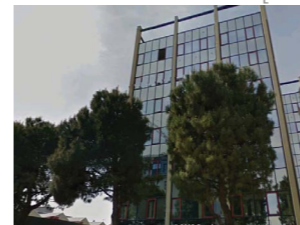
- *Alsa Fratelli Pezzali.*  
Food.

- *Industrial Cleaning and Sanitation S.A.S.*  
Industrial Cleaning.

- *Cosfer Spa.*  
Train Manufacturer.



i[224]



i[225]



i[226]



i[227]



i[228]



i[229]



This is a food packager industry that is also in the fields of textile production.

Company dedicated to cleaning at industrial scale. using a variety of chemical products as well as top-of-the-edge technology.

This company specializes in train infrastructure and the manufacturing of trains, working for *Trenitalia* and several other railway companies in Europe.



**-Main Business.**

-  Important Mobility corridors
-  Main infrastructure

**Key:  
Main Business.**

- 01 Banca Immobiliare S.A.S.
- 02 Piazza della Trivulziana (Offices).
- 03 Bureau Veritas Italia (Offices, Bank).
- 04 Offices, Real-Estate Services.
- 05 Office Building.
- 06 Deutch Bank Regional HQ.
- 07 Hotel Concorde (Offices and Hotel).

**Important Business.**

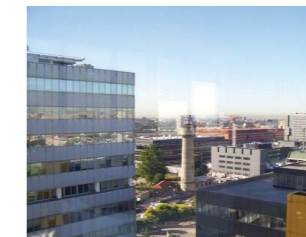
- Banca Immobiliare.  
Banking.

- Veritas Italia.  
Offices, Banking.

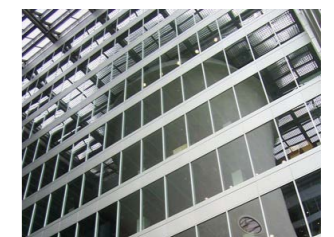
- Pirelli HQ.  
Offices, Banking.



i[230]



i[231]



i[232]

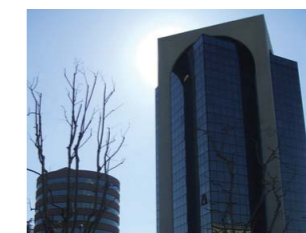
- Piazza della Trivulziana.  
Offices.

- Piazza del Calendario.  
Offices, Banking.

- Deutch Bank Regional HQ.  
Offices, Banking.



i[233]



i[234]



i[235]

i[230] BANCA IMMOBILIARE. P170  
i[231] GOOGLE EARTH. P170

i[232] i[233] i[234] PROGETTO BI-COCCA. P170

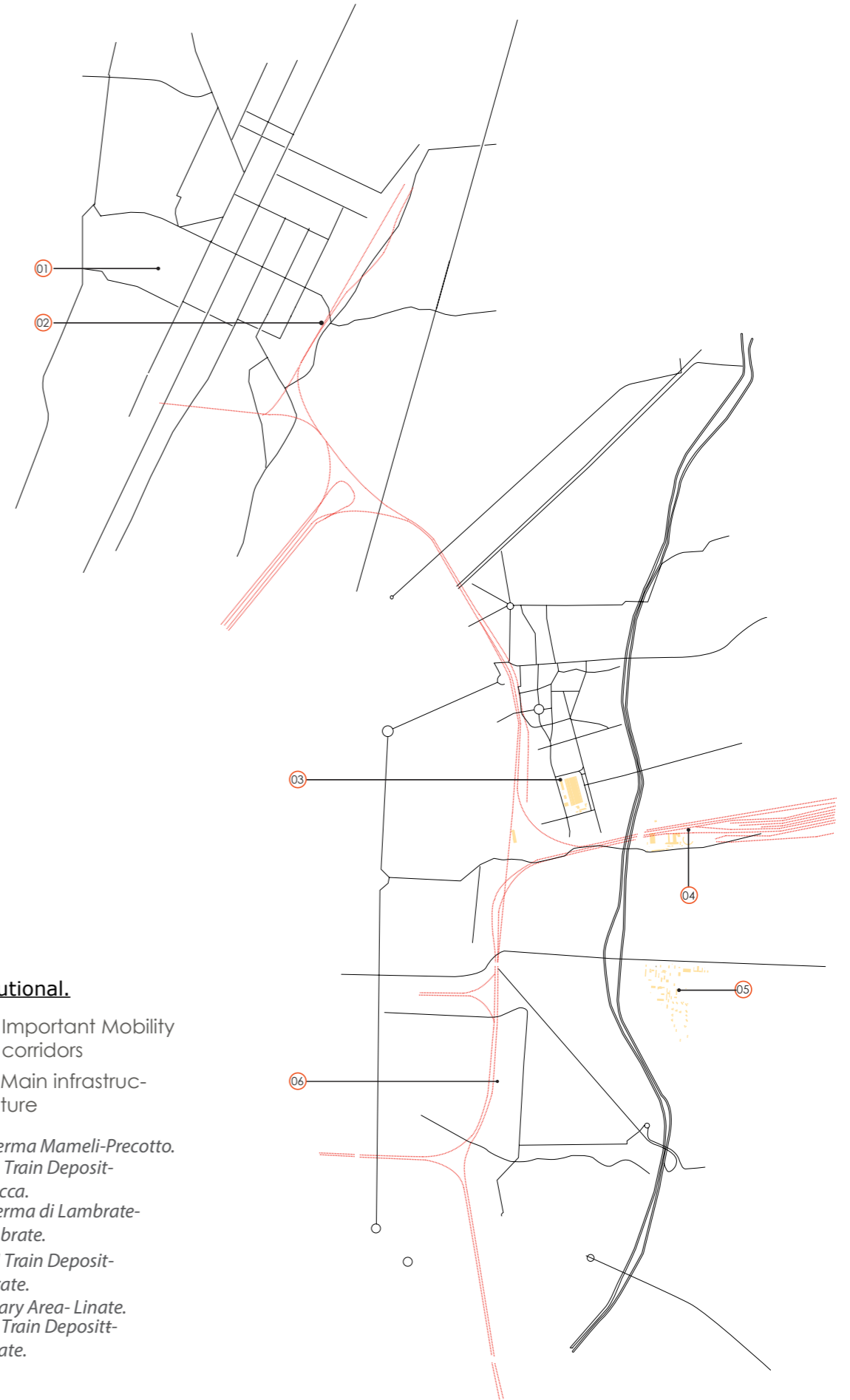
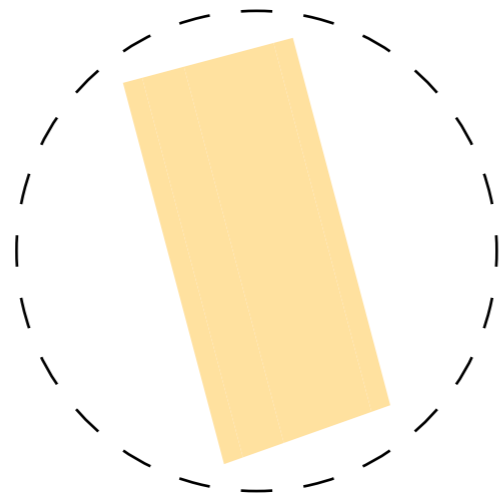
i[235] GOOGLE STREET VIEW. P170

## -INSTITUTIONAL.

Institutional activities are strategically located all around the study area. They are related with two institutions: the military and ATM (*Azienda di Trasporto Milanese*).

## SPATIAL CONFIGURATION.

While the military areas are concentrated, ATM installations are huge, and present a limit inside the consolidated tissue of the city.



Institutional Buildings.

- Caserma Mameli-Precotto.  
Military Area.



i[236]



i[237]

- ATM Train Deposit-Bicocca.  
Train Deposit.



i[238]

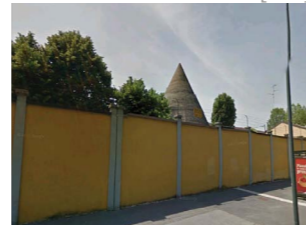


i[239]

- Caserma di Lambrate.  
Military Area.



i[240]

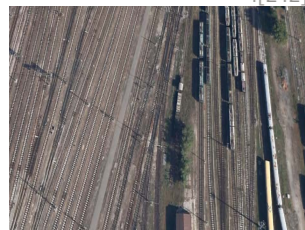


i[241]

- ATM Train Deposit-Segrate.  
Train Deposit.



i[242]



i[243]

- Military Area- Linate.  
Military Area.



i[244]

- ATM Train Deposit- Segrate.  
Train Deposit.



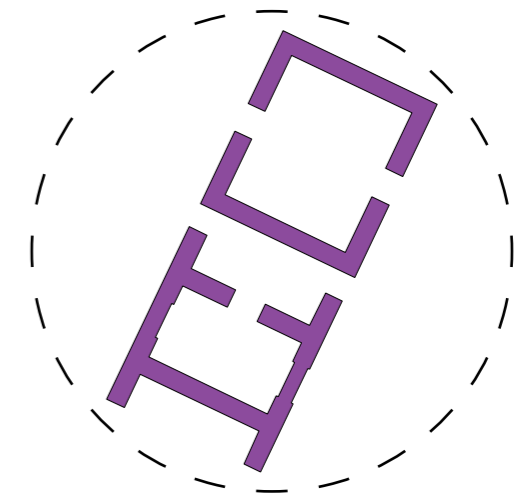
i[245]

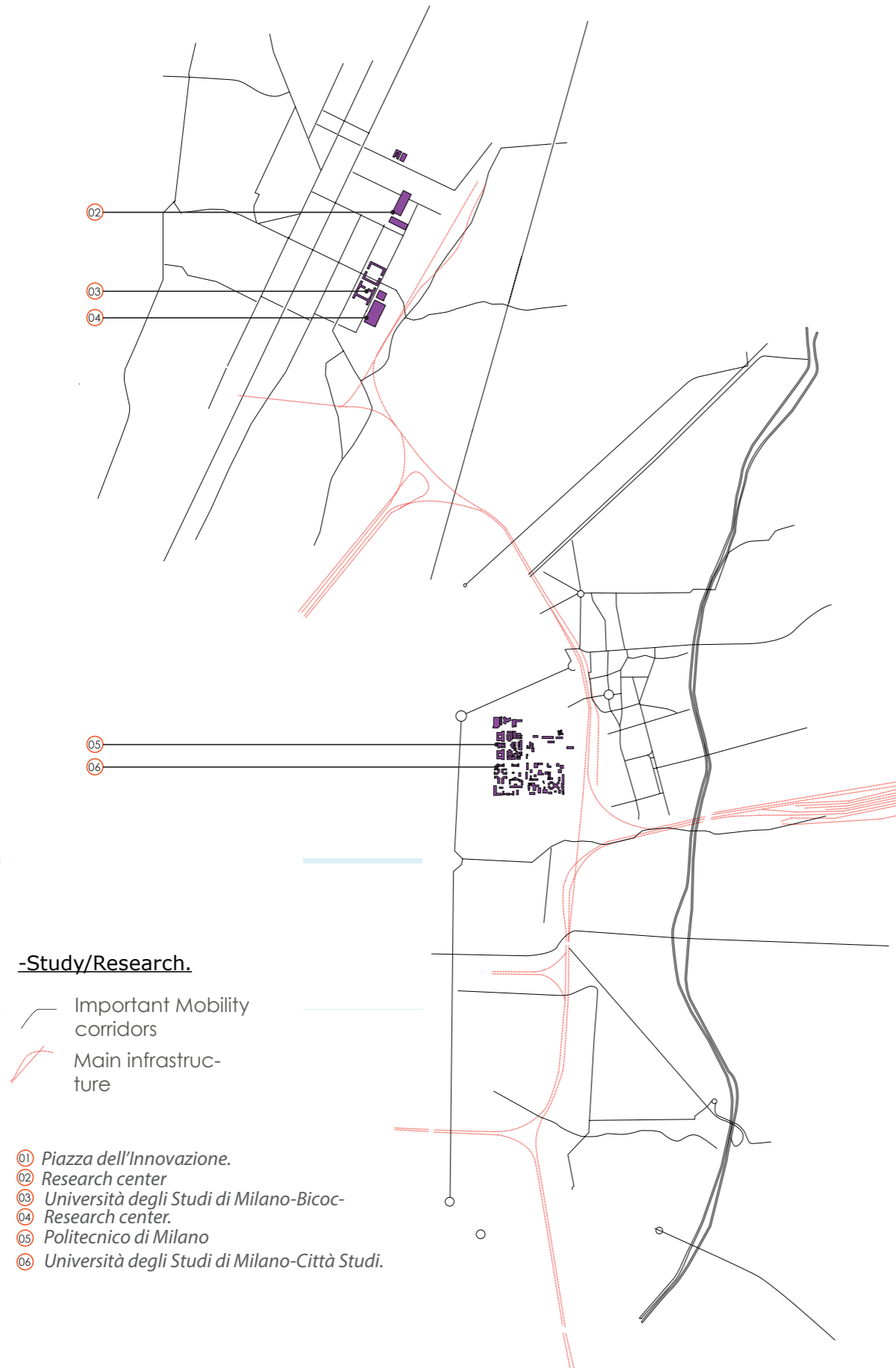
**-STUDY/RESEARCH.**

They are large Universities and Research laboratories.

**SPATIAL CONFIGURATION.**

Spatially located in two main areas: Città Studi and Bicocca.





Study/Research Buildings.

- Piazza della Innovazione. Research.



i[246]

- Università degli Studi di Milano-Bicocca. University.



i[247]

- Research Center.



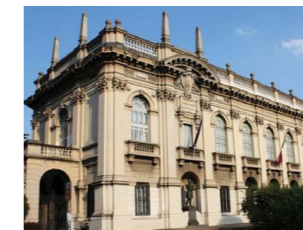
i[248]

- Università degli Studi di Milano-Città Studi. University.



i[249]

- Politecnico di Milano-Città Studi. University.



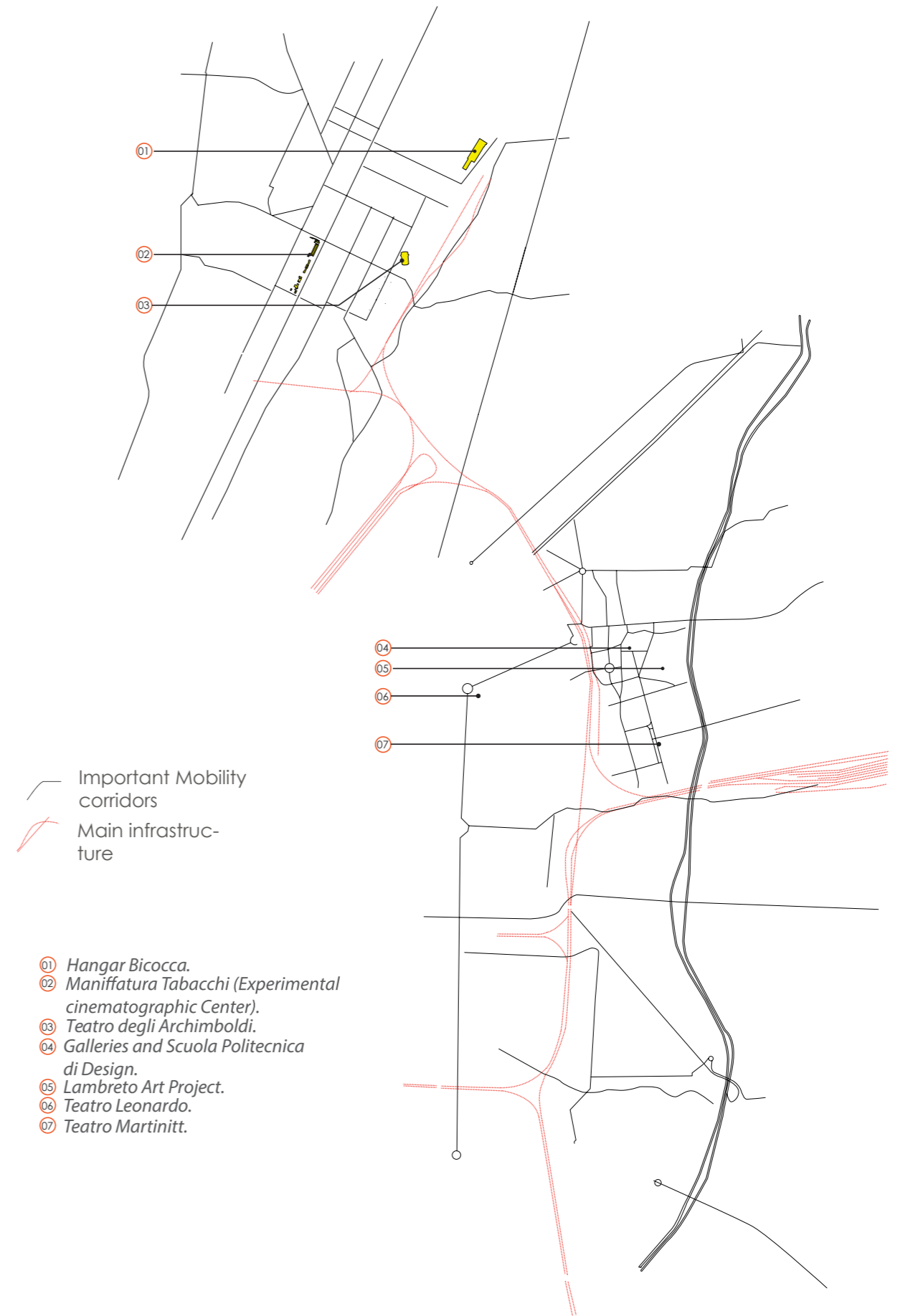
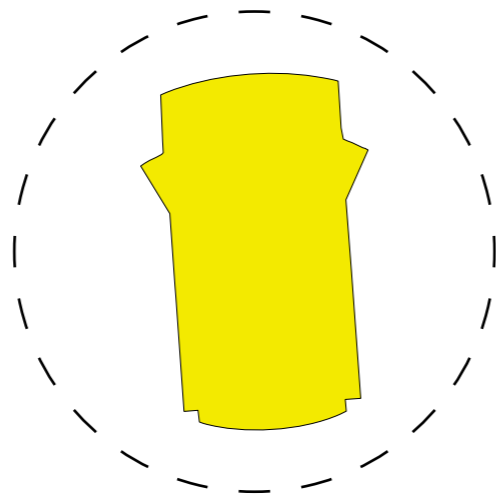
i[250]

## **-CULTURE.**

This are cultural buildings that include art galleries, theaters, a cinematographic center, and churches.

### **SPATIAL CONFIGURATION.**

Spatially located in two main areas: Città Studi and Bicocca.





Cultural Buildings.

- Hangar Bicocca.  
Museum/Galleries.



i[251]



i[252]

- Teatro degli Archimboldi.  
Theater.



i[257]



i[258]

- Manifattura Tabacchi.  
Cinematographic Center

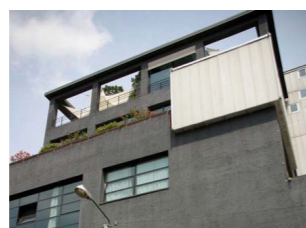


i[253]



i[254]

- Galleries and Scuola Politecnica di Design.  
Arts School.



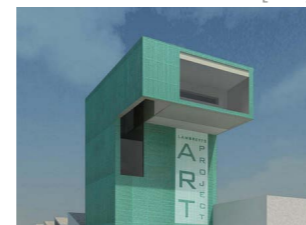
i[259]

i[253] i[254] MANIFATTURE MILANO P171  
i[257] i[258] TEATRO DEGLI ARCHIM-  
BOLDI P171  
i[255] i[256] LAMBRETTO ART PROJECT. P171

- Lambretto Art Project.  
Art Galleries.



i[255]



i[256]

- Teatro Martinitt.  
Theater.



i[260]



i[261]

i[260] i[261] TEATRO MAR-  
TINITT. P171

**-RESIDENCES & NEIGHBORHOOD FACILITIES**

The core of the system, they are installations where people reside, they use all services seen above and depend of infrastructure for work, mobility and leisure, We show where they are located.

**SPATIAL CONFIGURATION.**

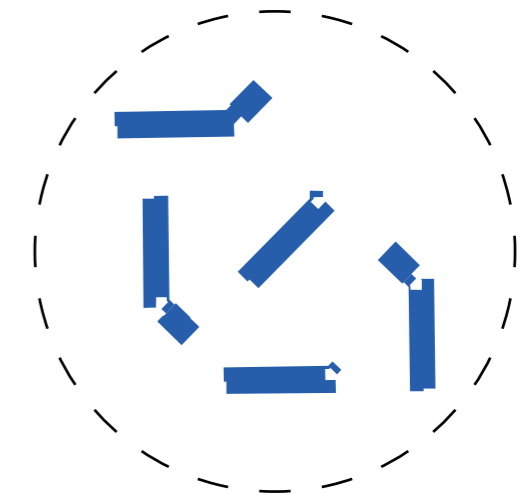
Residential spatial configuration is as following:

- Towers.
- Semi Closed Buildings.
- Closed Buildings.
- Linear Buildings.




**DENSITY.**

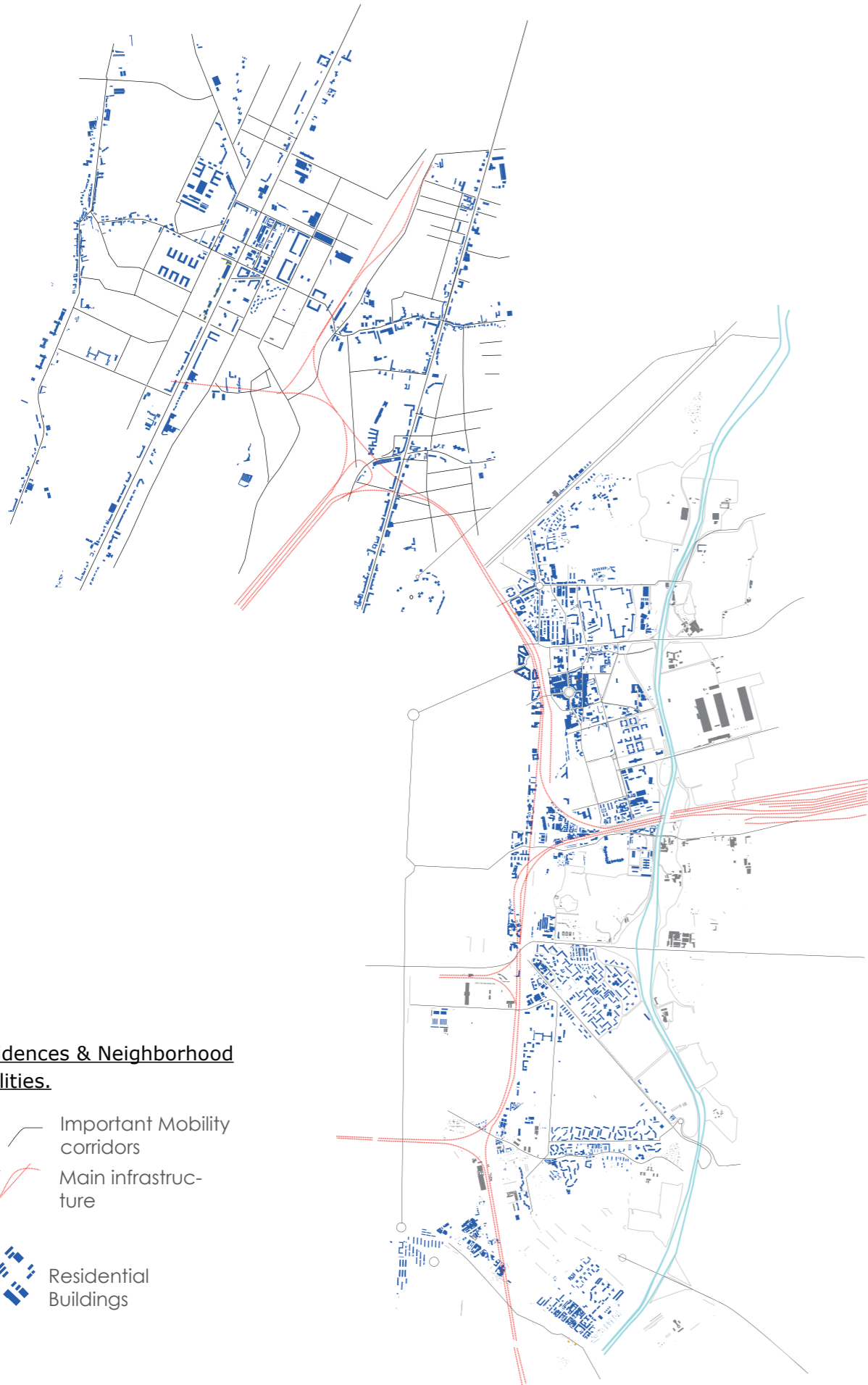
Density is important in Residences, it is defined as:

- High Density.
- Medium Density.



**Residences & Neighborhood Facilities.**

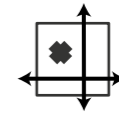
-  Important Mobility corridors
-  Main infrastructure
-  Residential Buildings



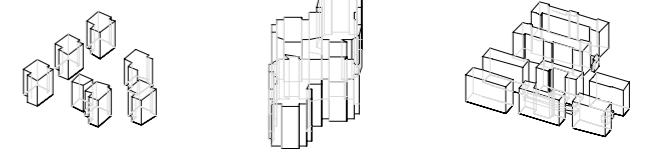
**-SPATIAL CONFIGURATION.**

Towers.

-Permeability



-Shape

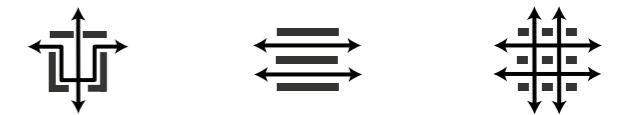


-Plant

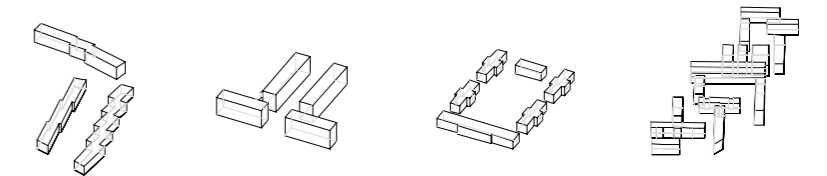


Semi-Closed Buildings.

-Permeability



-Shape



-Plant



Linear Buildings.

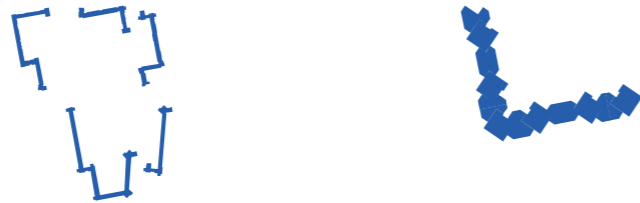
-Permeability



-Shape



-Plant

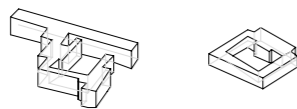


Closed Buildings.

-Permeability



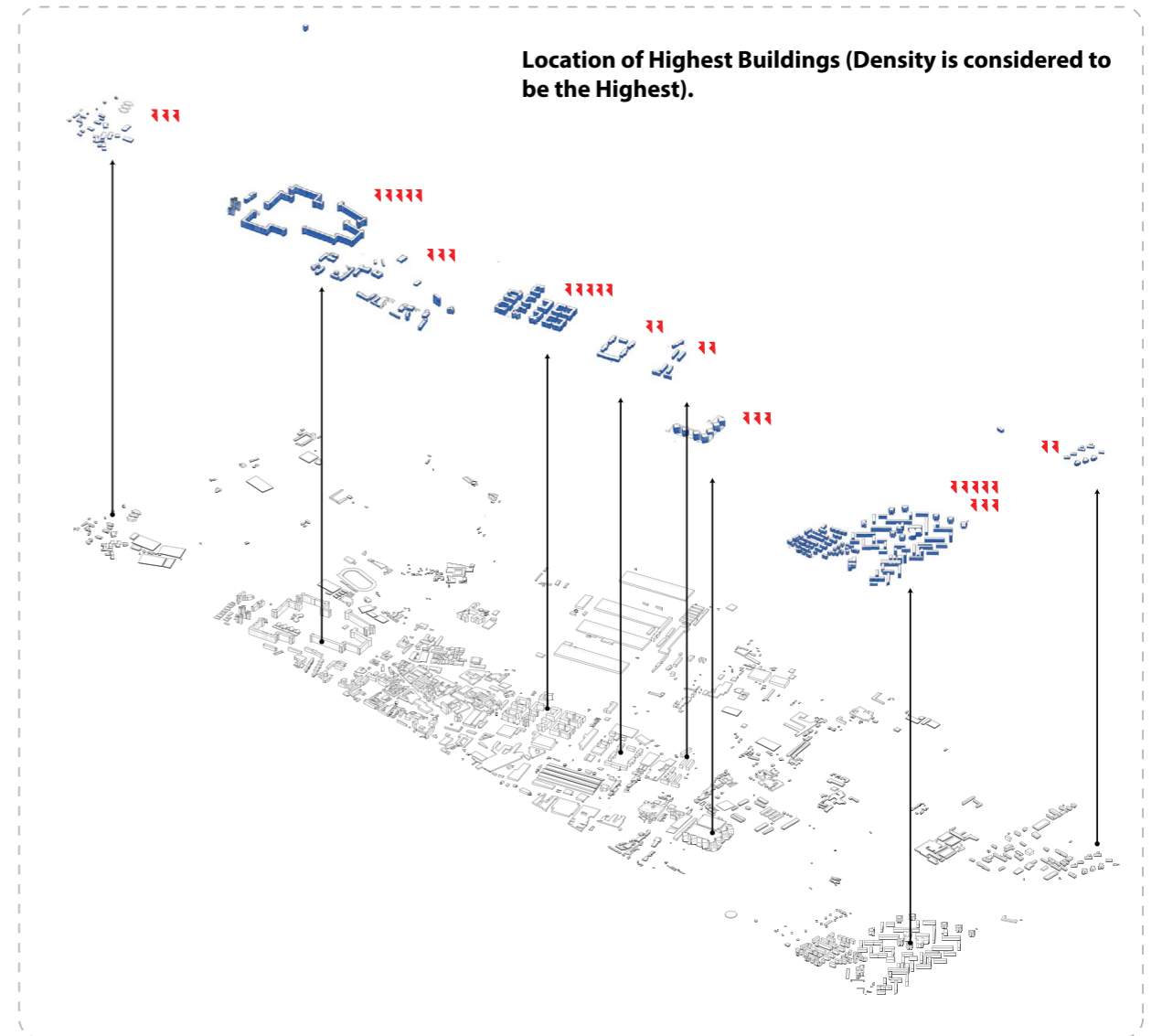
-Shape

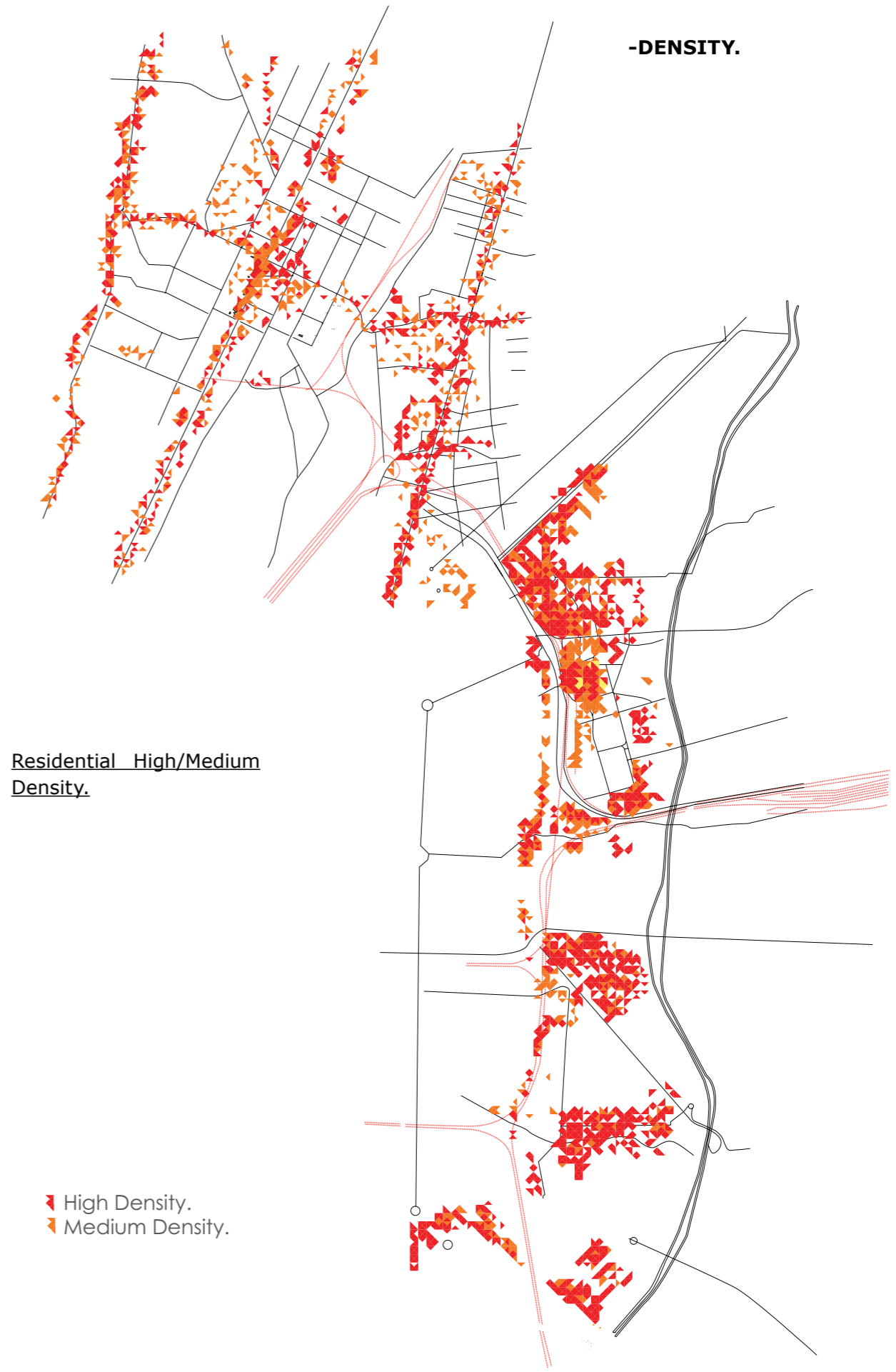
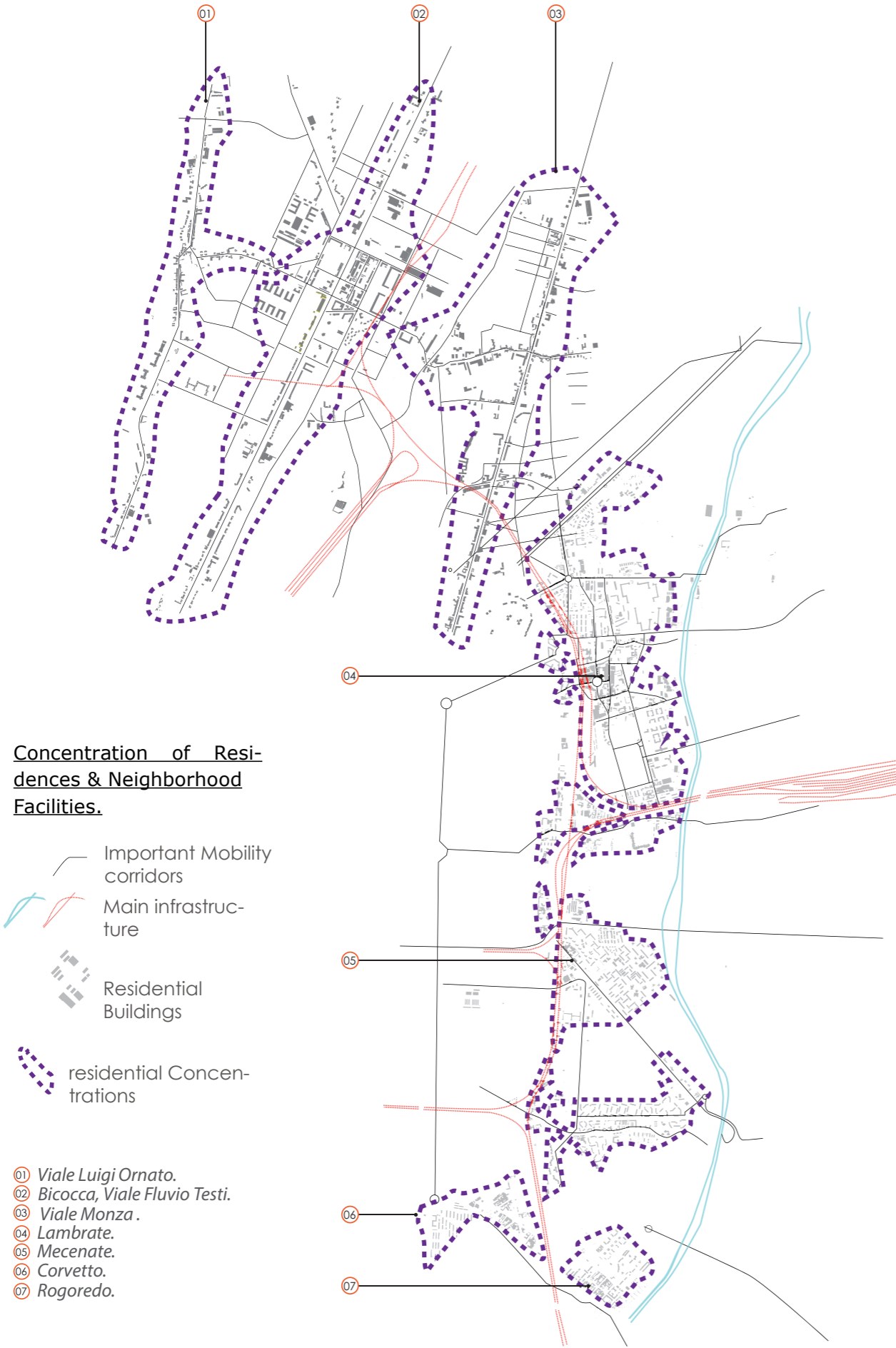


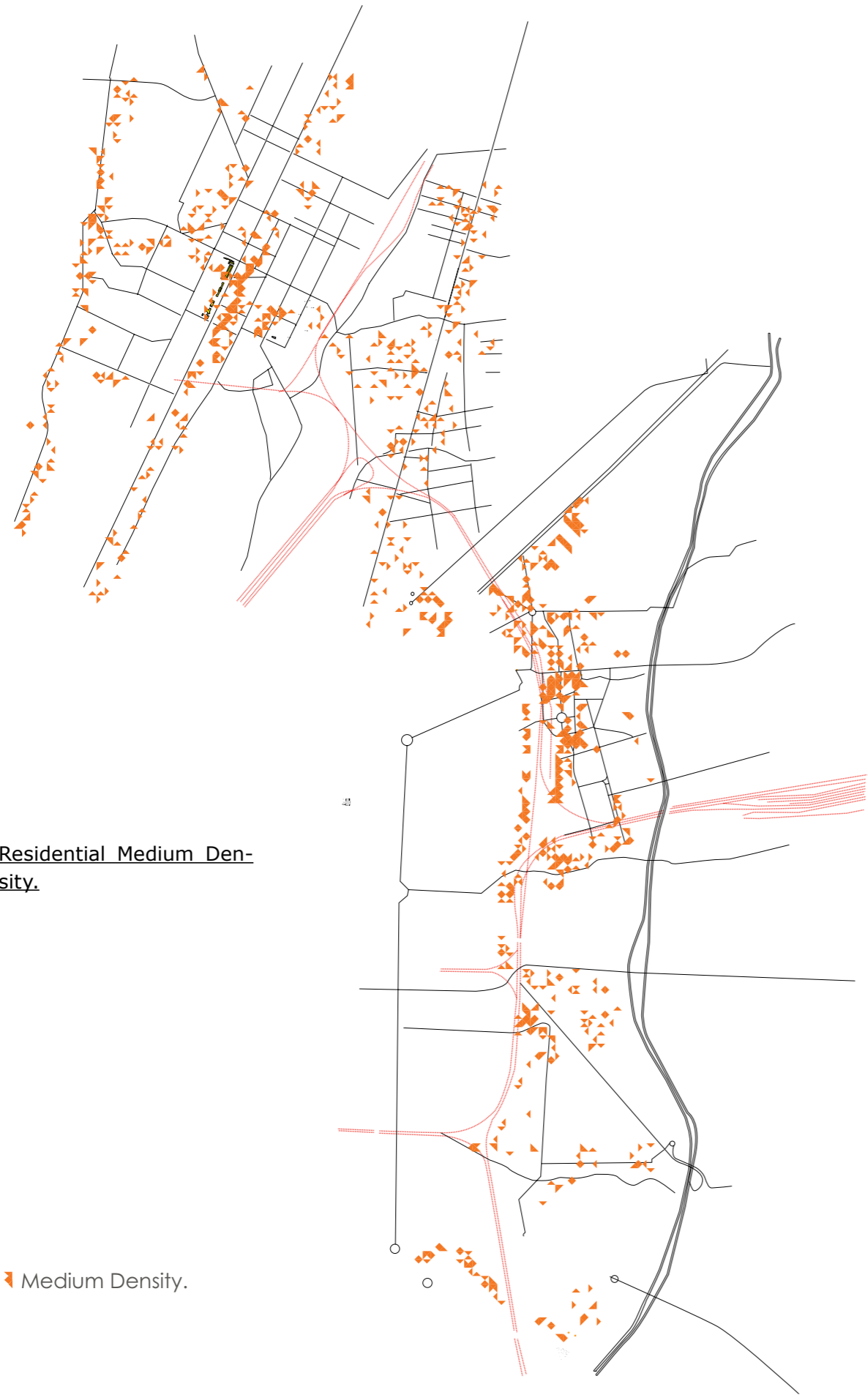
-Plant



**-SPATIAL CONFIGURATION & DENSITY.**

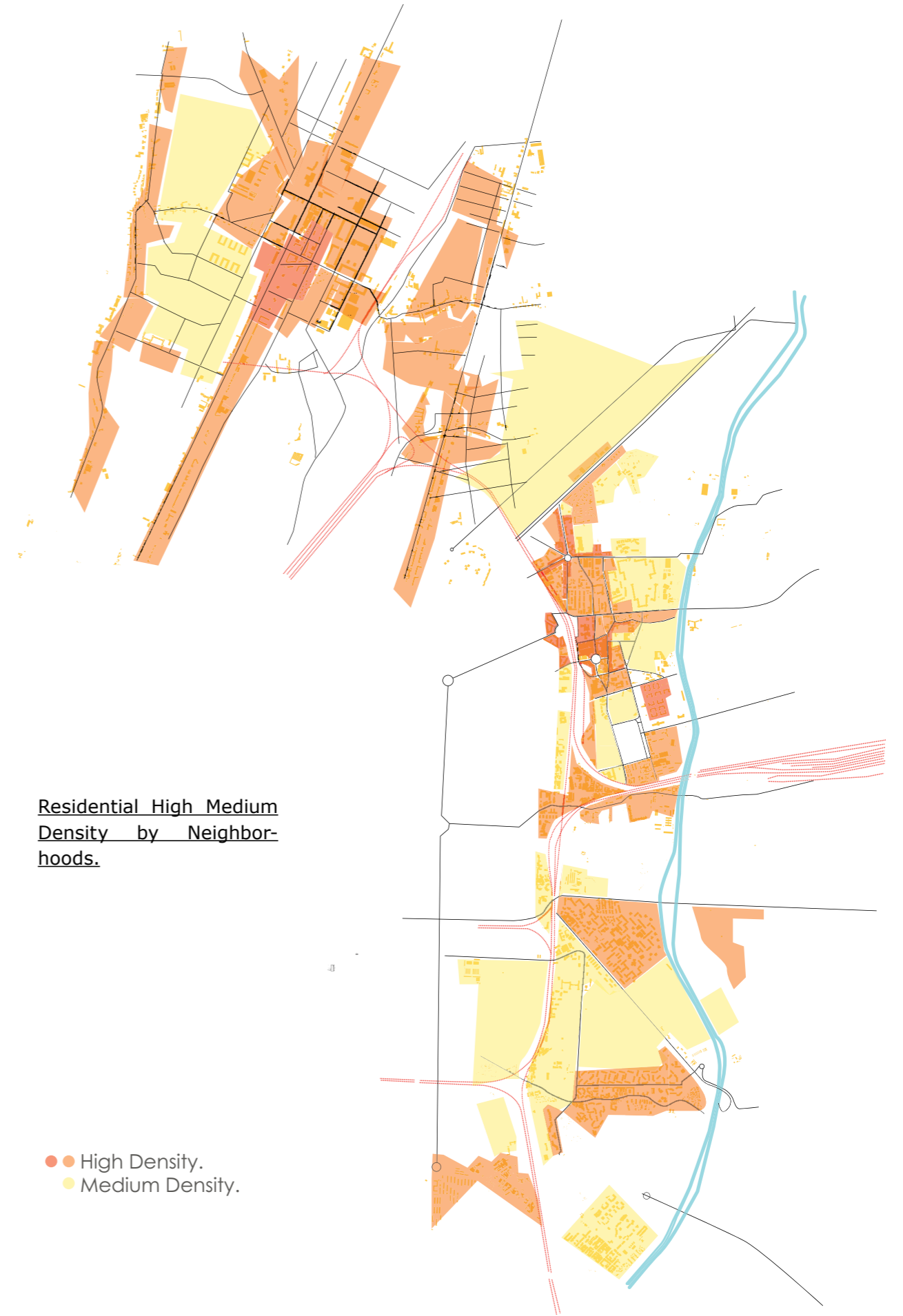






Residential Medium Density.

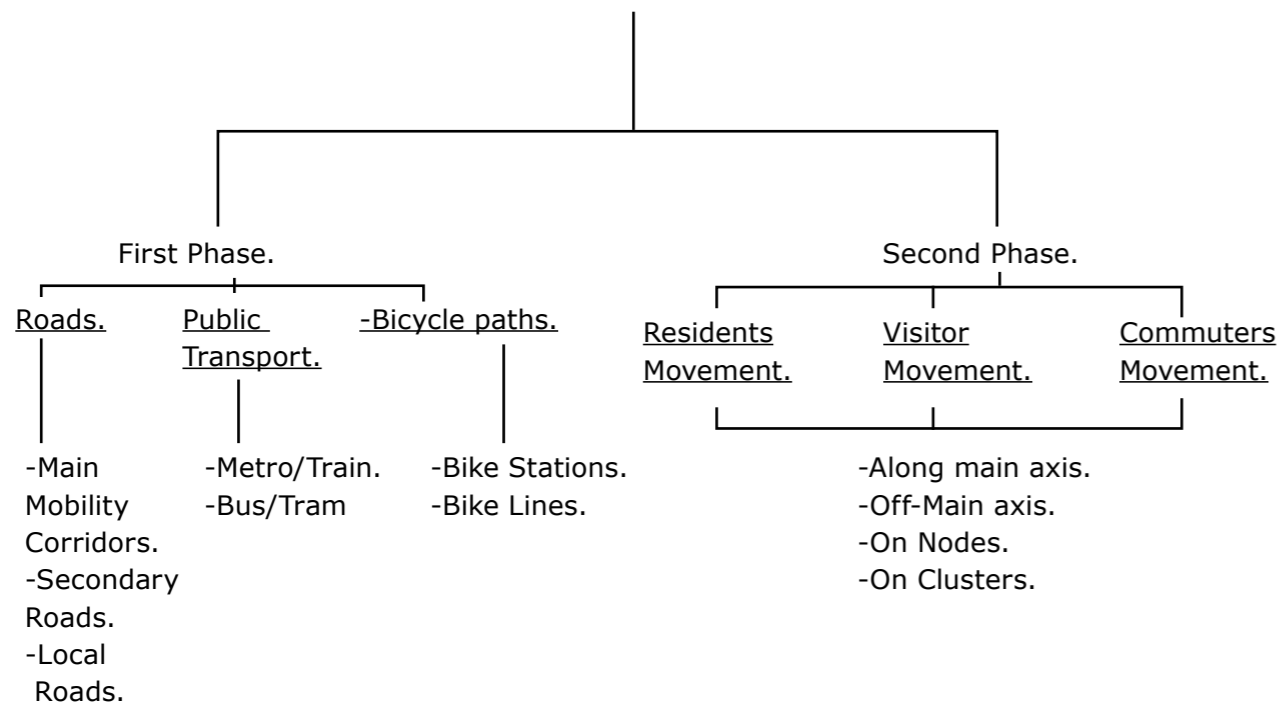
▴ Medium Density.



Residential High Medium Density by Neighborhoods.

● High Density.  
● Medium Density.

### 3.3.6 MOBILITY.



#### INTRODUCTION.

Our aim at this point is to see which mobility corridors are more used and which are not, so that we can use this information in our project phase.

Mobility has two main phases of analysis:

#### First Phase.

The first phase is the creation of a map showing the current network of roads, public transport and bicycle paths.

- Roads.
- Public Transport.
- Bicycle paths.

#### Second Phase.

The second phase is the analysis resultant of all the elements that we have seen so far. It has to do with people going to and from work, to and from the parks, the airport, theatre, church, gallery, etc. It is hard to measure how this mobility is happening, but, this is an approximation of this invisible dance that happens every day in our study area.

Made following a:

Source/Destination analysis.

Residences: Source.

All other activities: Destination.

Considering three types of movement:

-Residents Movement

(Movements happening inside the study area)

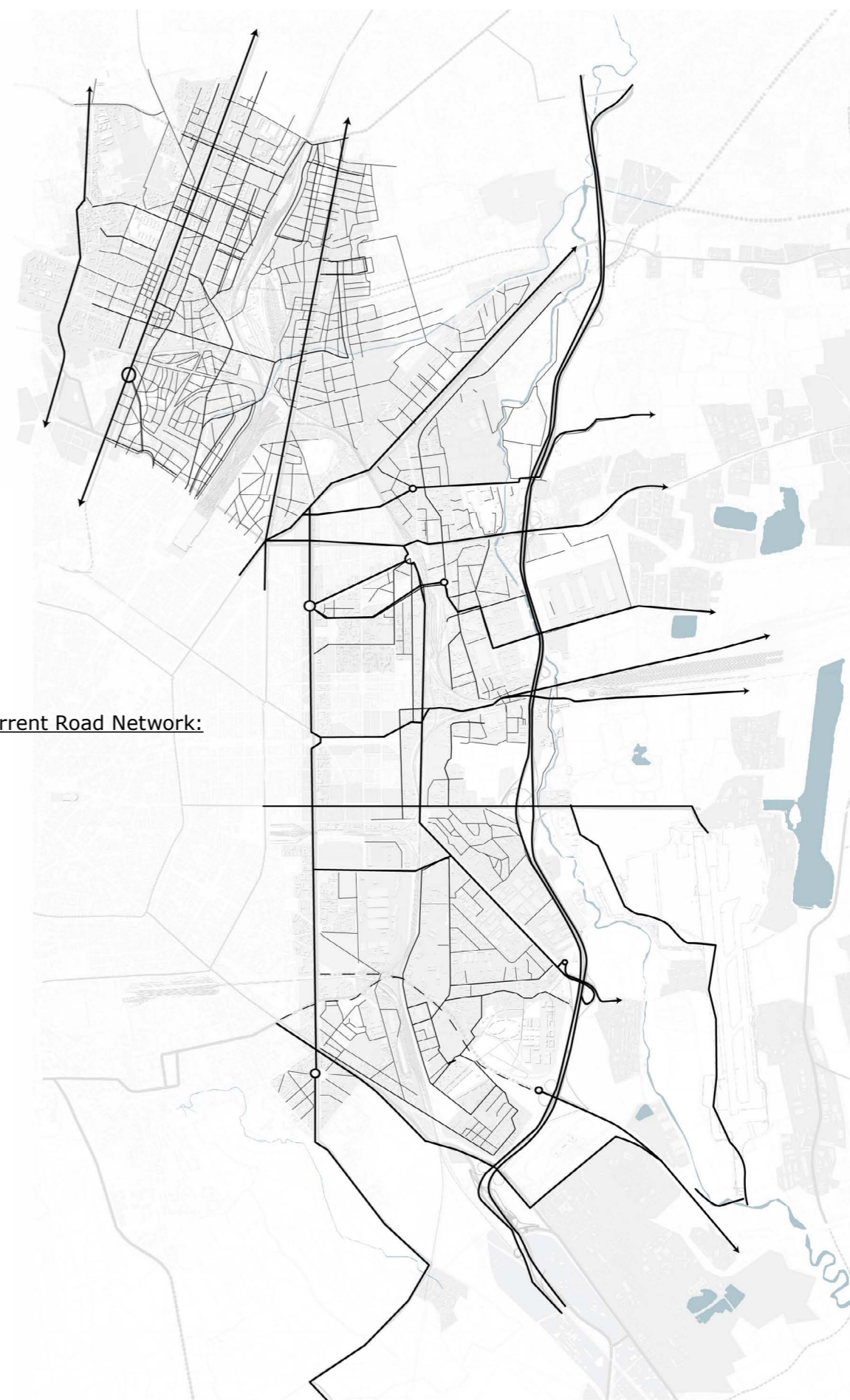
-Visitors Movement

(Movement from people coming outside the study area)

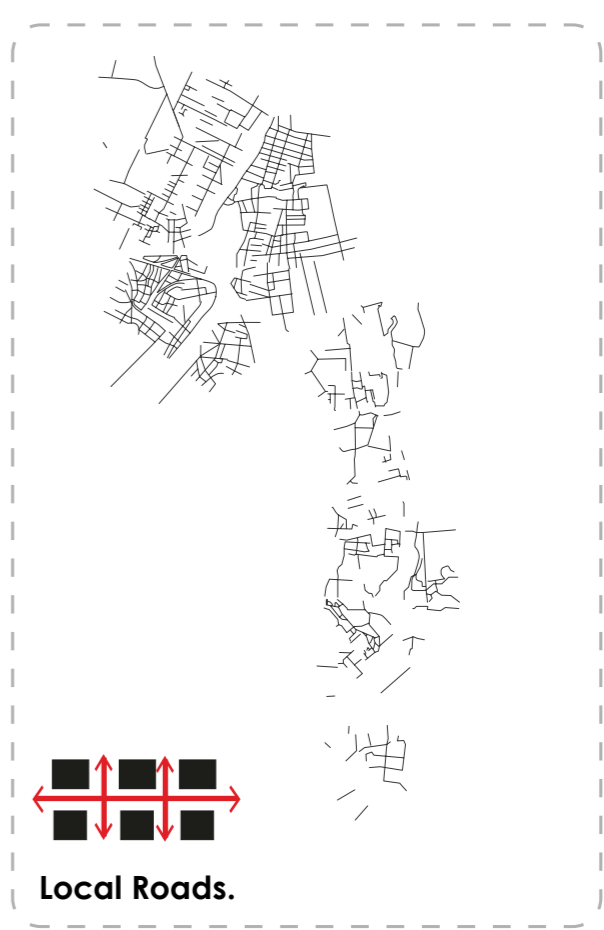
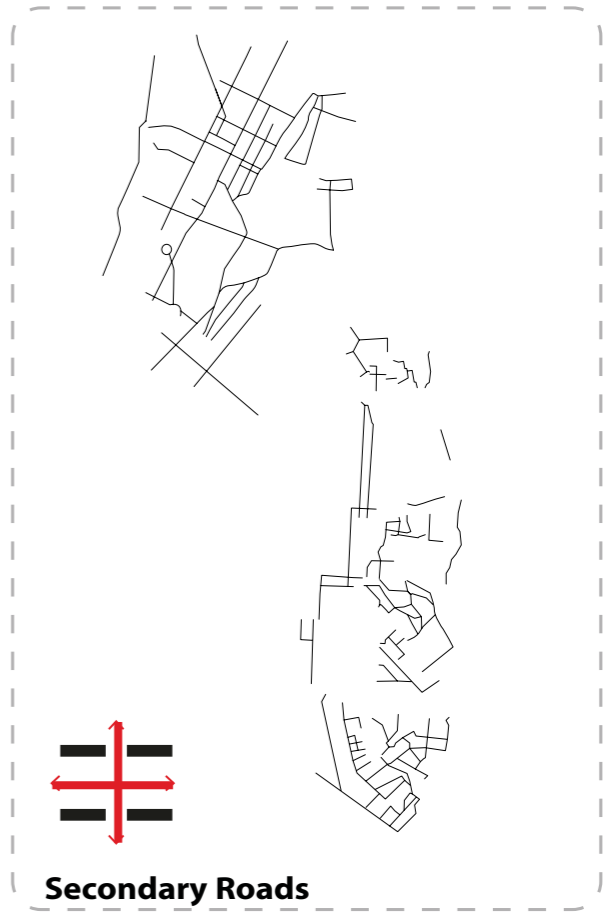
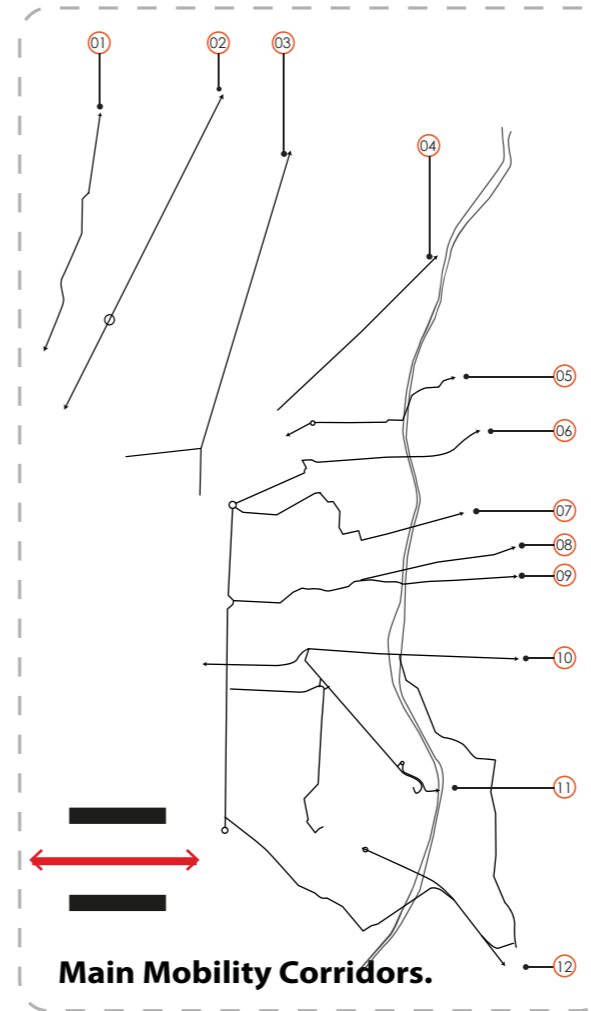
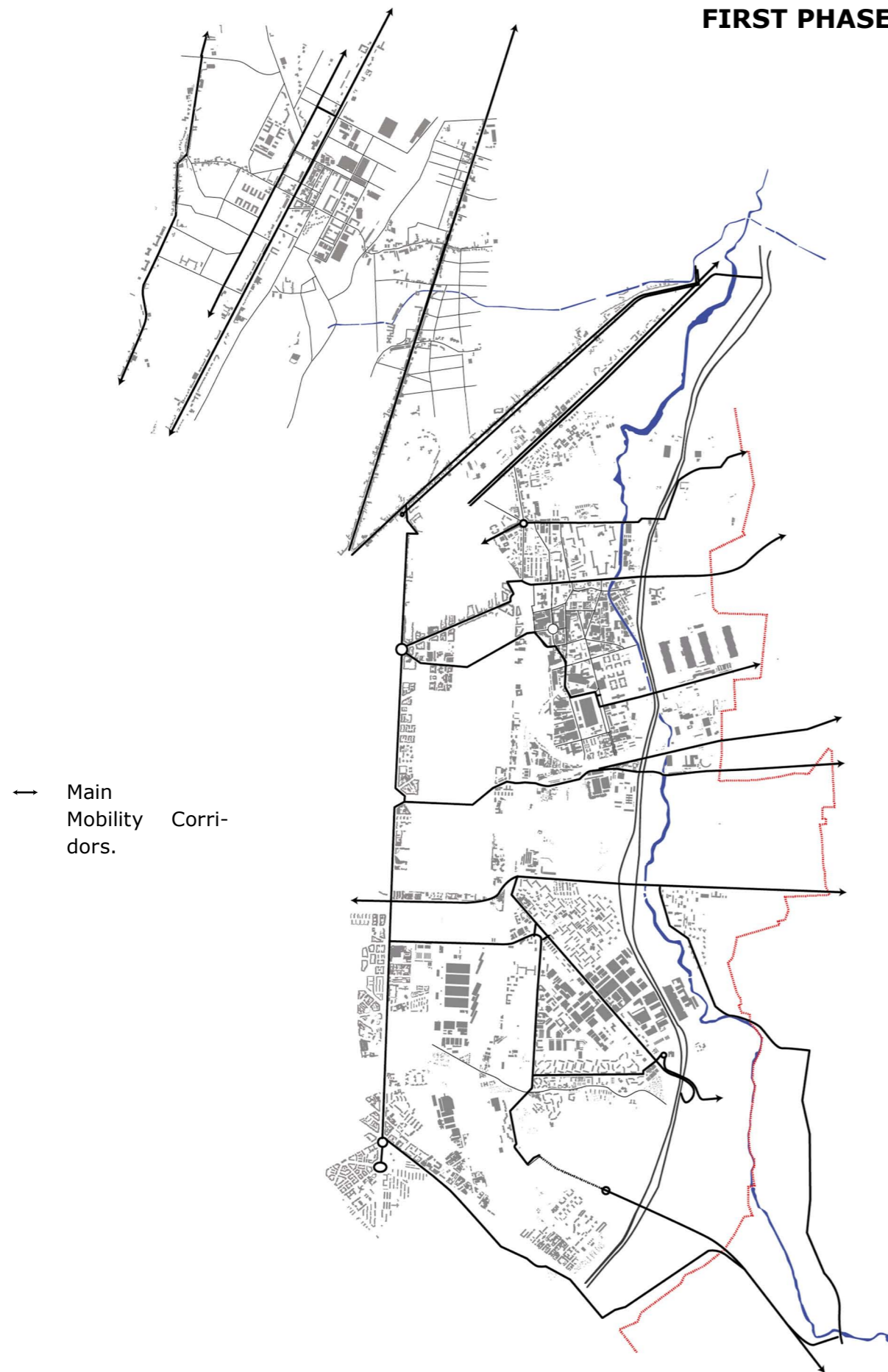
-Commuters Movement

(People passing through the study area.)

Current Road Network:



**FIRST PHASE.**

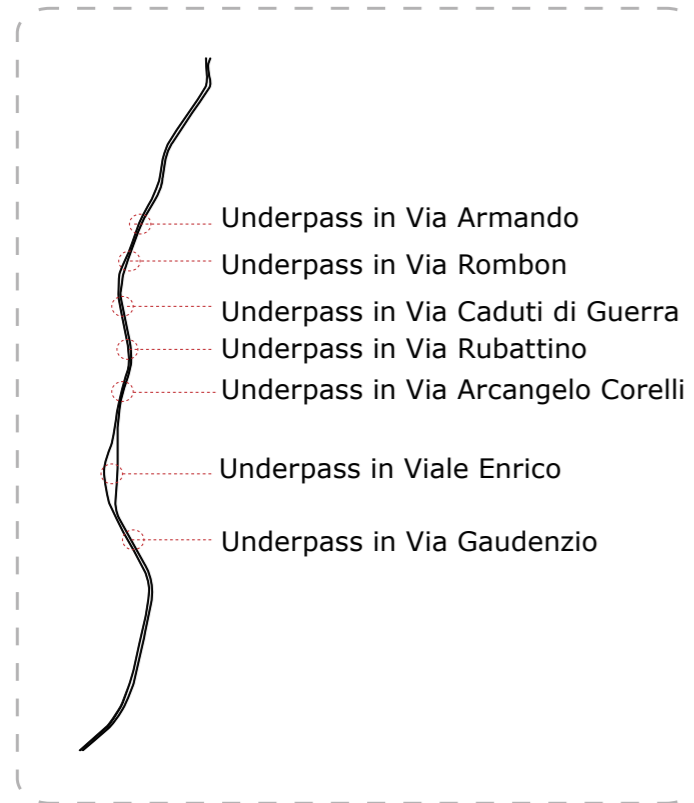


**Key:**  
**Main Mobility Corridors**  
 (Arterial and Distributory Roads).

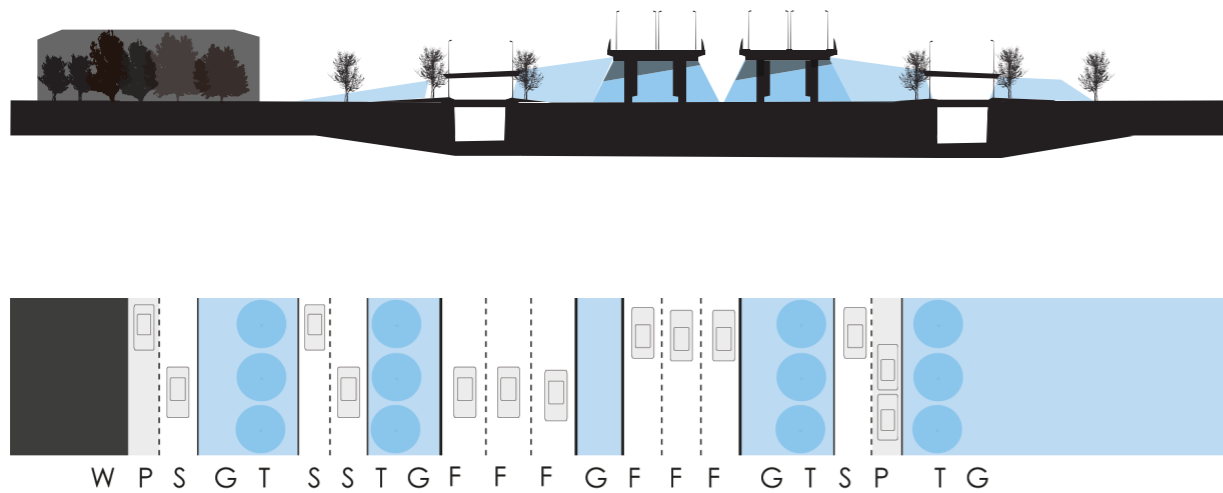
- 01 Tangenziale Est.
- 02 Viale Luigi Ornato.
- 03 Viale Fluvio Testi.
- 04 Viale Monza.
- 05 Via Palmanova.
- 06 Via Feltre.
- 07 Via Rombon.
- 08 via Raffaele Rubattino.
- 09 Viale Lazio.
- 10 Via Arcangelo Corelli.
- 11 Viale Enrico Forlanini.
- 12 Viale Mecenate.
- 13 Via della Liberazione.

**MAIN MOBILITY CORRIDORS.**

- Tangenziale Est.







Important Peripheral Road that diverts heavy traffic outside the City core.

Priorities:  
 Guarantee a stable, safe and fast flow of cars. No public transport and Very few Pedestrian Crossings..



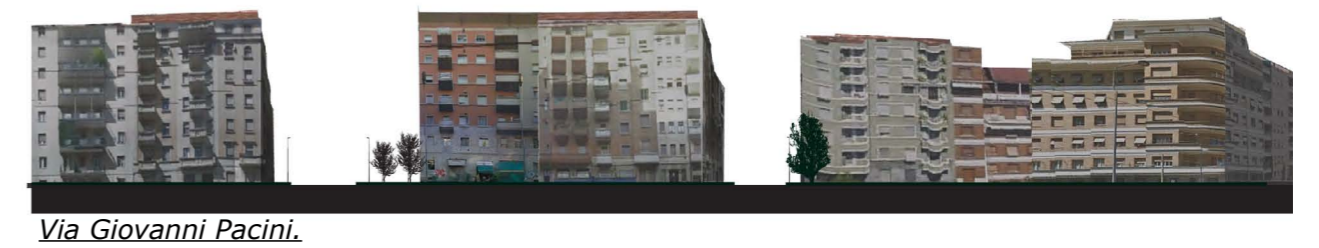
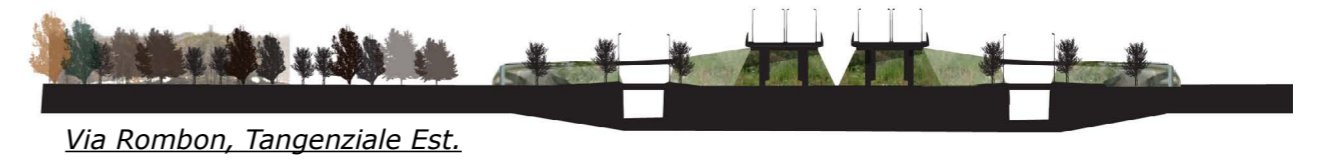
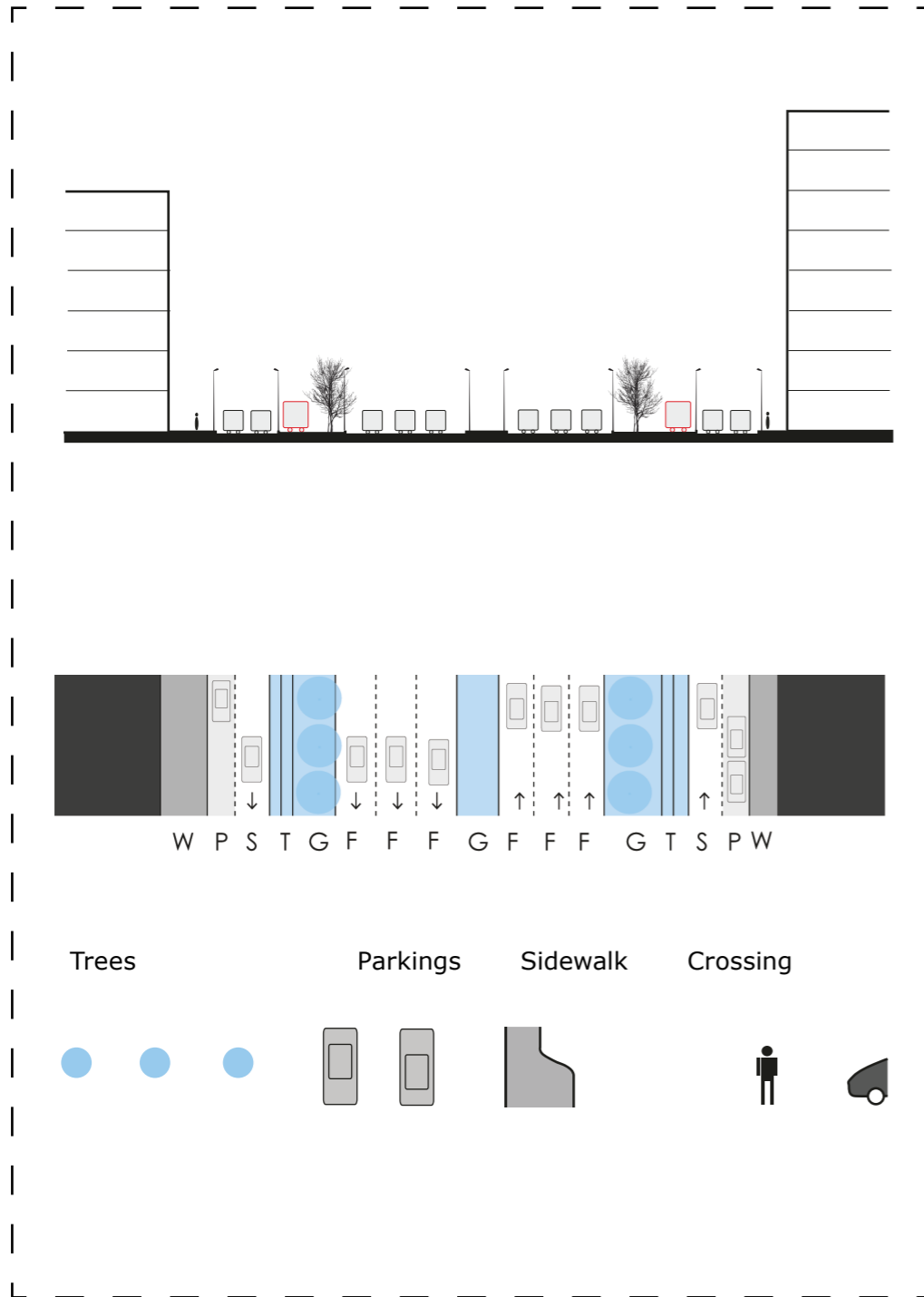
- Viale Fluvio Testi.
- Viale Monza.
- Viale Luigi Ornato.
- Via Palmanova.
- Via della Liberazione.
- Viale Mecenate.
- Viale Enrico Forlanini.
- Via Arcangelo Corelli.
- Viale Lazio.
- Via Raffaele Rubattino.
- Via Rombon.
- Via Feltre.

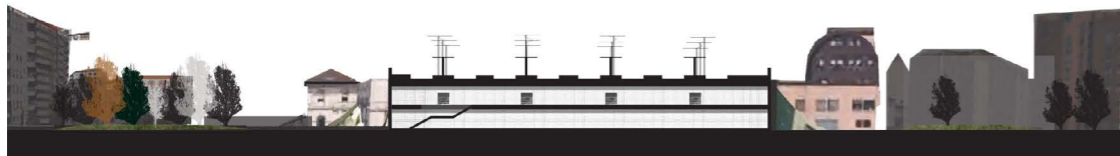
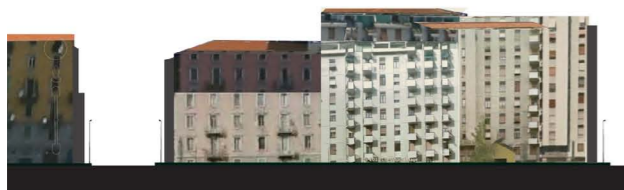


They connect the city with the Outside they need unobstructed space, are car-priority designed and use fast-lanes and slower lanes for maneuverability.

Priorities:  
 Guarantee a stable, safe and fast flow of cars and public transport through them, and safe crossings for pedestrians.







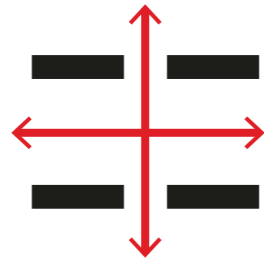
*Stazione di Lambrate*



*Via Fabio Massimo, Porto di mare*

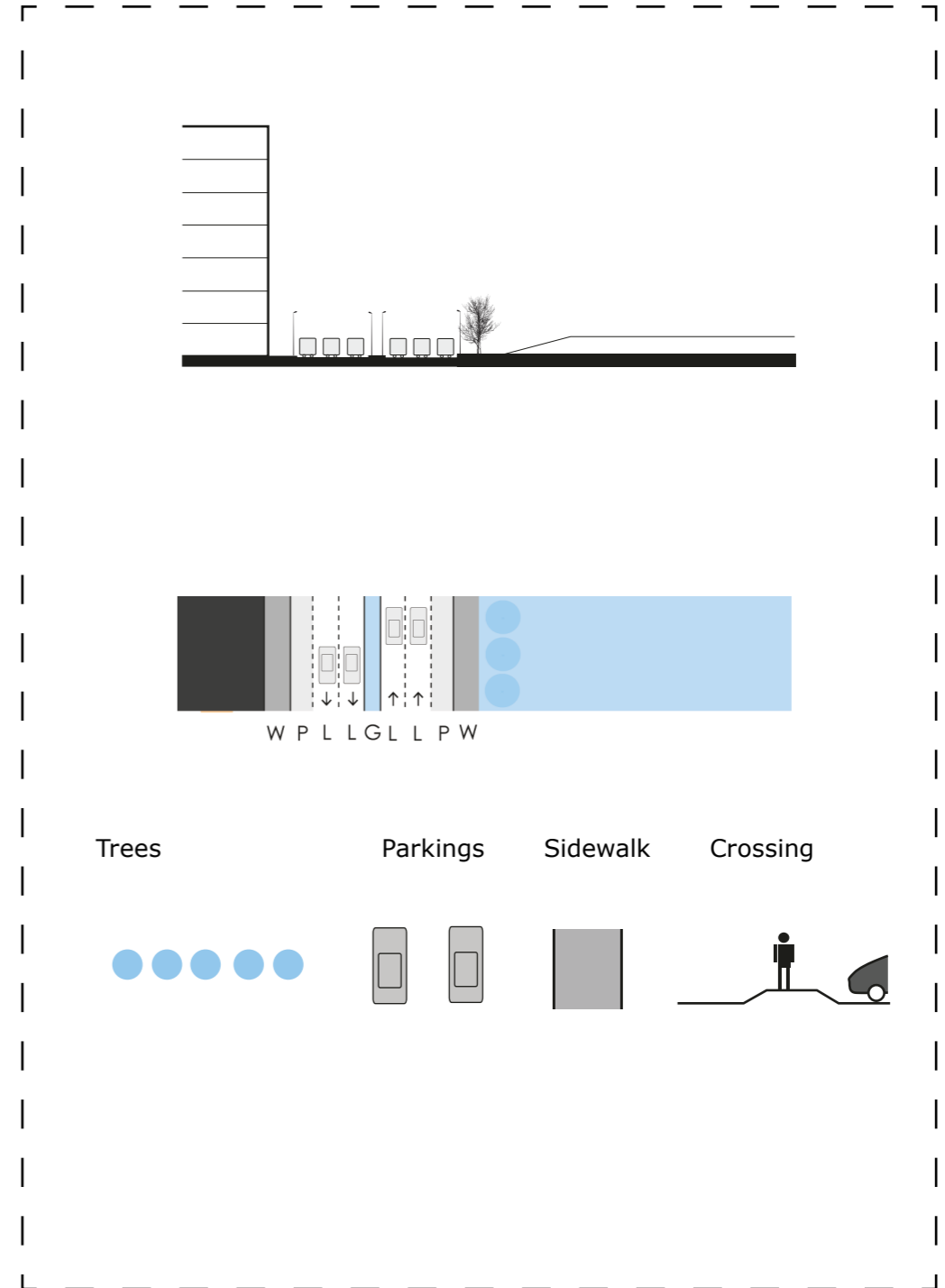


## SECONDARY ROADS.



They connect the city with itself, on an inter-urban scale, they are the most important after the Main Roads and must guarantee a steady flow of traffic, but also safety to pedestrians.

**Priorities.**  
Guarantee a stable, safe flow of cars and public transport through them, and safe crossings for pedestrians.

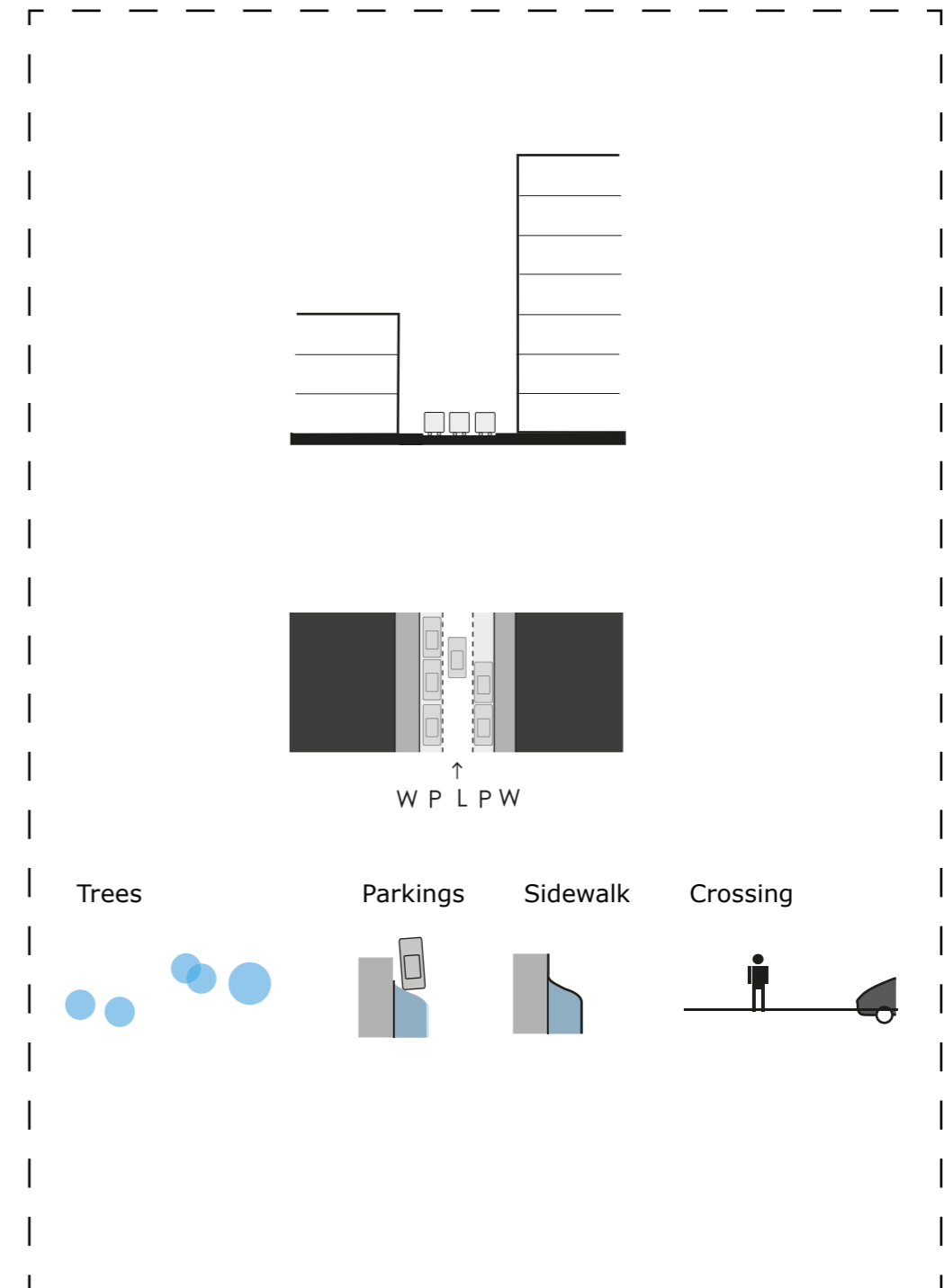


**LOCAL ROADS.**







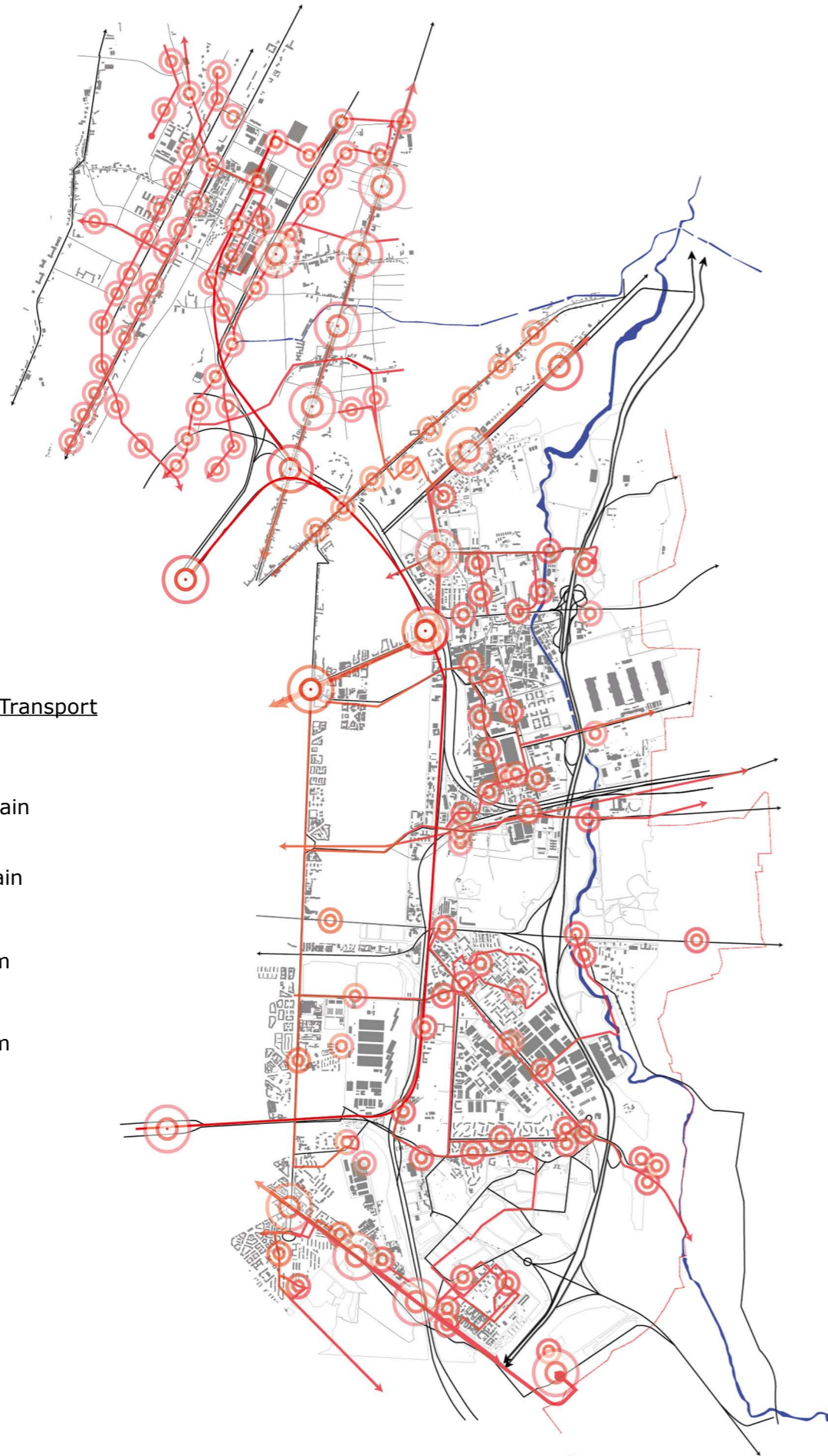
They connect neighborhoods, and are the playground of kids, and the crossing points of residents using the public space, as well as bikes.

Priorities.  
Guarantee a safe crossing for pedestrians, and permit slow car circulation.

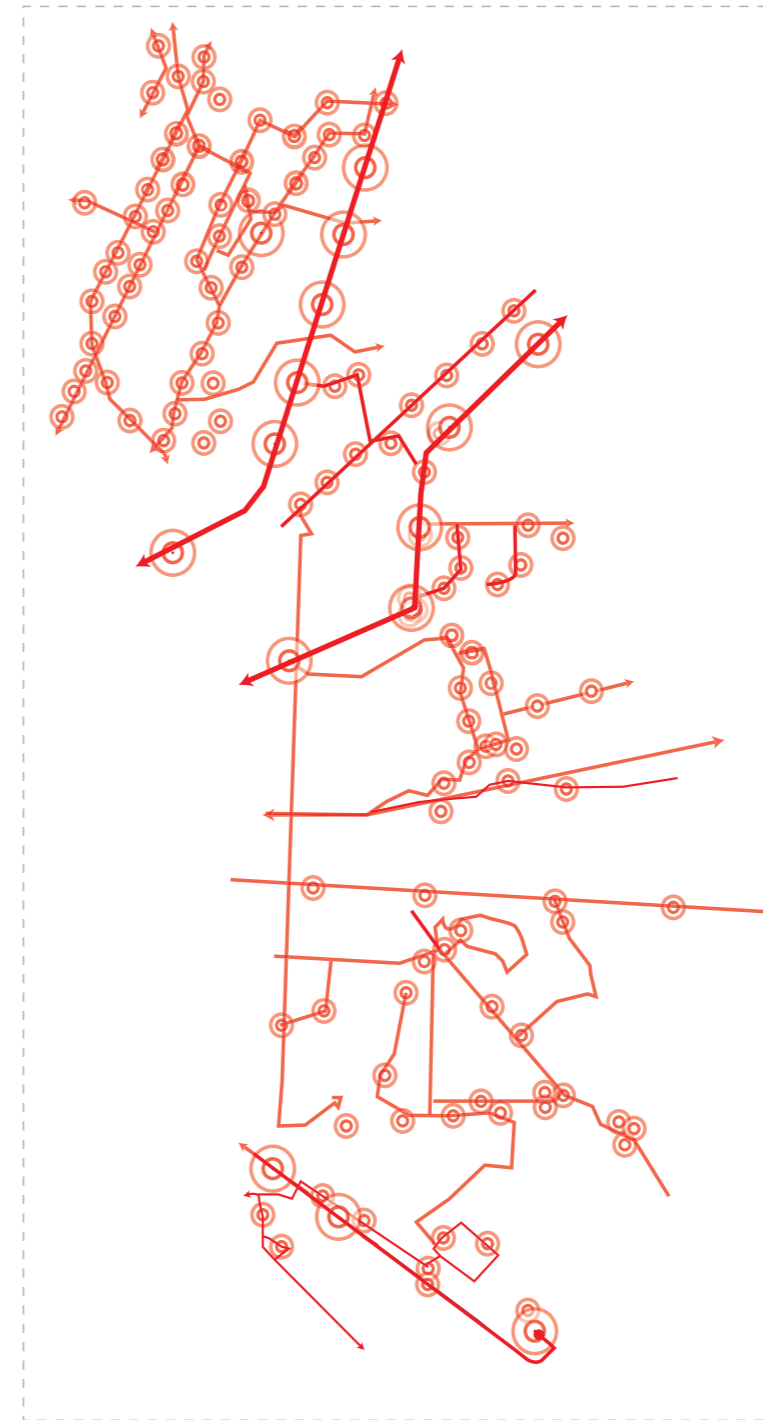


**Current Public Transport Network:**

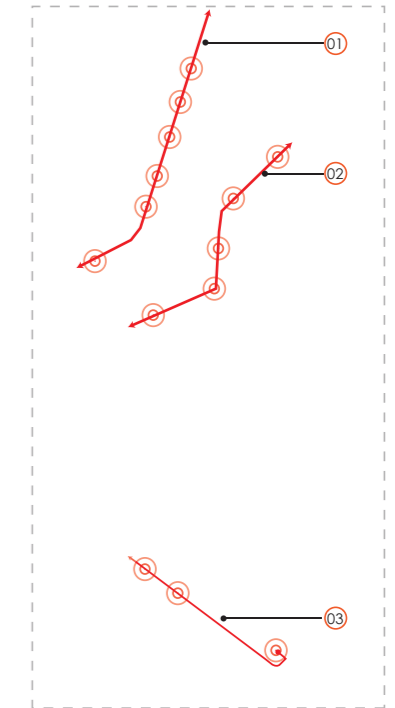
-  Metro/Train Station.
-  Metro/Train Line.
-  Bus/Tram Station.
-  Bus/Tram Line.



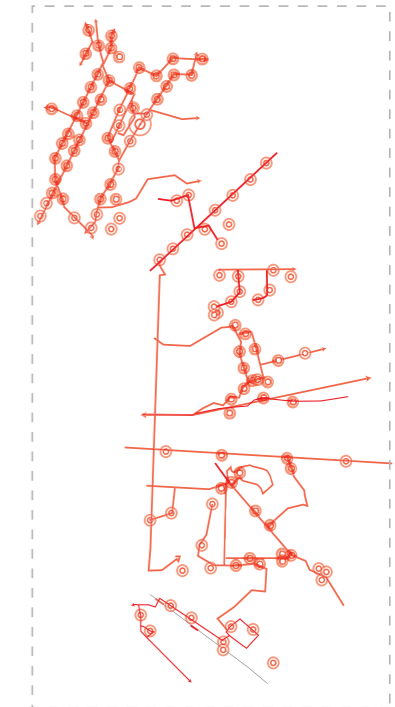
**Metro/Train + Bus/Tram.**




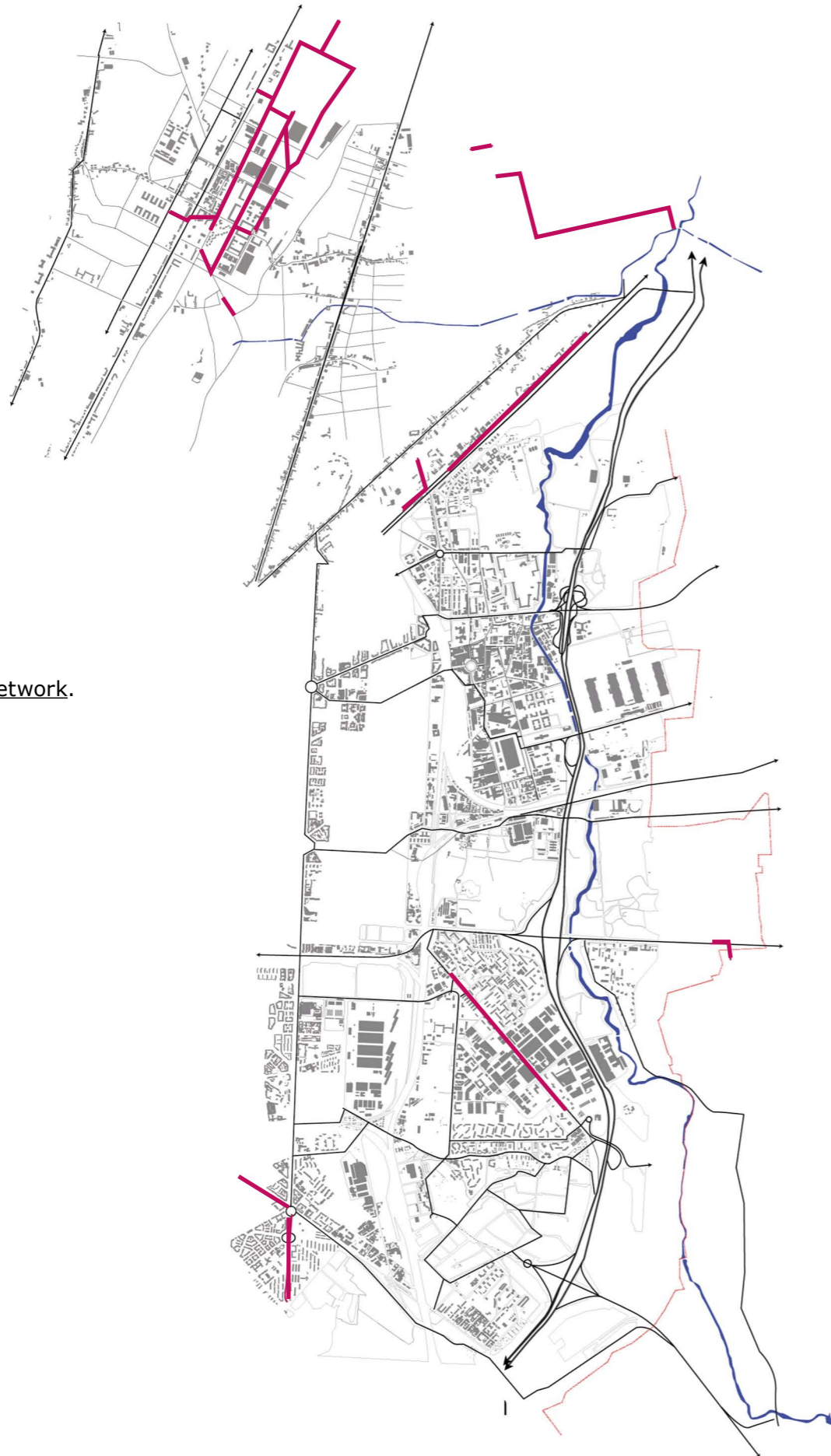
**Metro/Train.**



**Bus/Tram.**



-  01 Metro Red Line.
-  02 Metro Green Line.
-  03 Metro Yellow Line.



Current Bike Network.

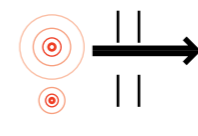
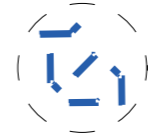
Bike Lines.





**SECOND PHASE.**

Source. Destination.

**-RESIDENTS MOVEMENT**

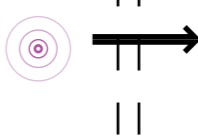
Residential & Neighborhood Facilities.







-  Large Commercial/Industrial/Business
-  Institutional.
-  Culture.
-  Study/Research.

**-VISITORS MOVEMENT**

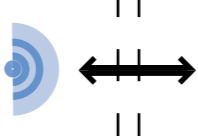
Main Mobility Corridors.



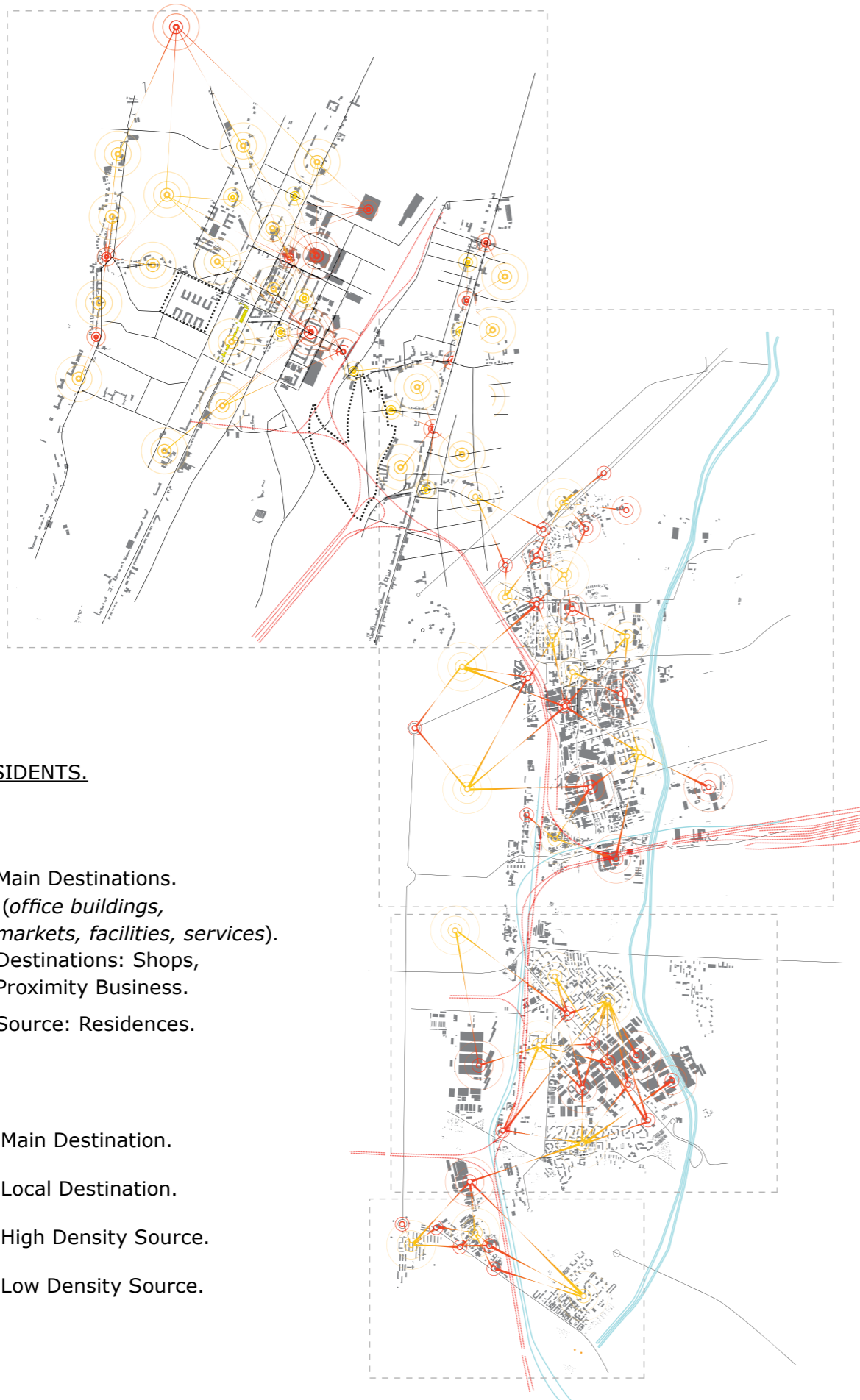
-  Large Commercial/Industrial/Business
-  Institutional.
-  Culture.
-  Study/Research.

**-COMMUTERS MOVEMENT**

Main Mobility Corridors.



Main Mobility Corridors.



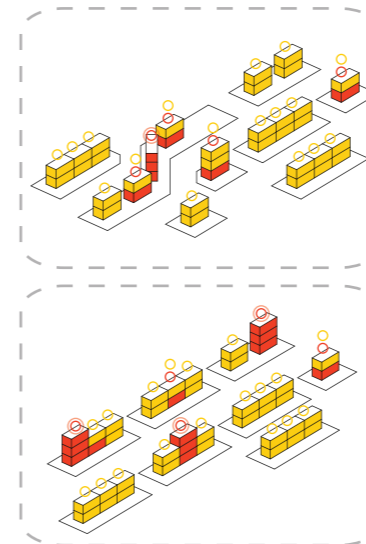
**RESIDENTS.**

- Main Destinations.  
(office buildings, markets, facilities, services).
  - Destinations: Shops, Proximity Business.
  - Source: Residences.
- 
- Main Destination.
  - Local Destination.
  - High Density Source.
  - Low Density Source.

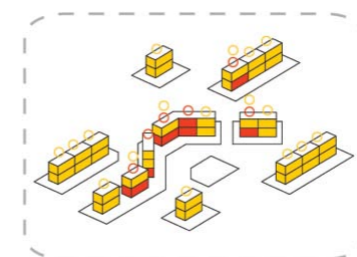
**Types of Configurations:**

- Along Main Axis.
- Off-Axis.
- On Nodes.
- On Clusters.

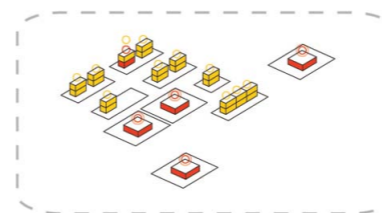
Along Main Axis.



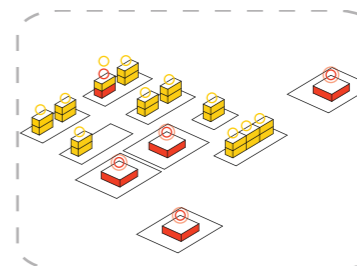
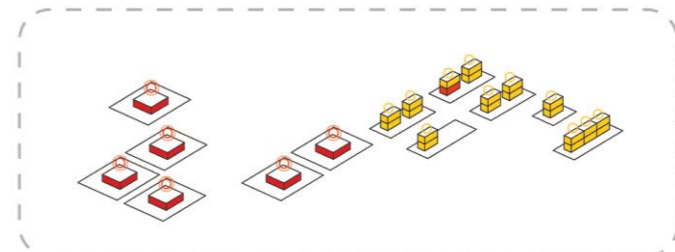
On Nodes.



Off-Axis



On Clusters.





Residents in *Niguarda, Bicocca* and *Viale Monza*.



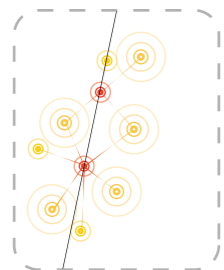
Residents in *Lambrate, Città-Studi*.



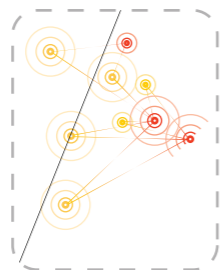
On Nodes.



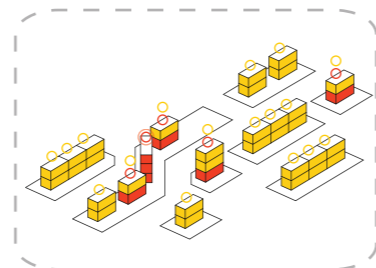
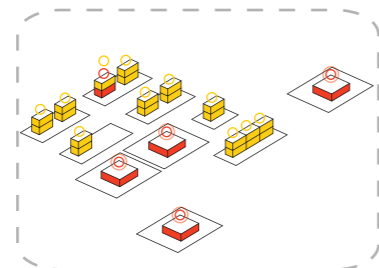
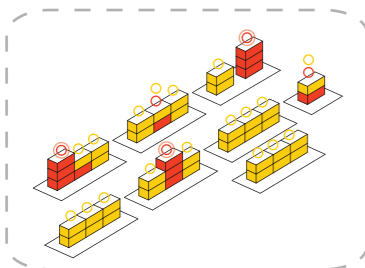
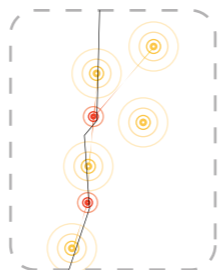
Along Main Axis - Niguarda.



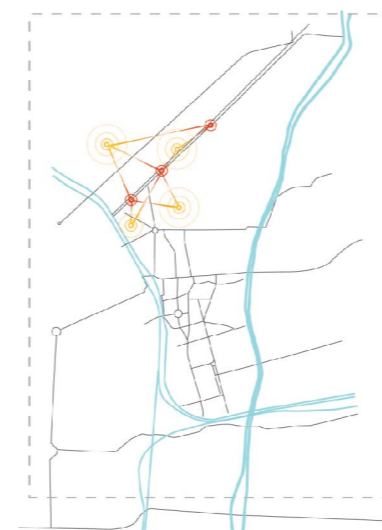
On Cluster - Bicocca.



Along Main Axis - Viale Monza.



Along Main Axis.



Off-Axis

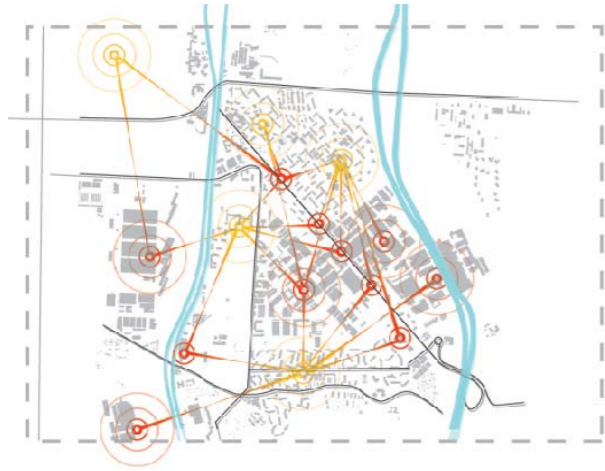


On Clusters.



Residents in *Mecenate* and *Forlanini*.

Residents in *Rogoredo* and *Porto di Mare*.



On Nodes.

On Nodes.



Along Main Axis.

Off-Axis

On Clusters.

Along Main Axis.



Off-Axis

On Clusters.

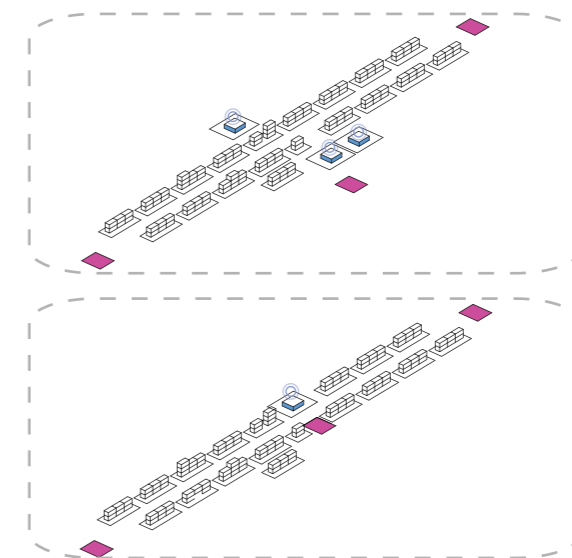




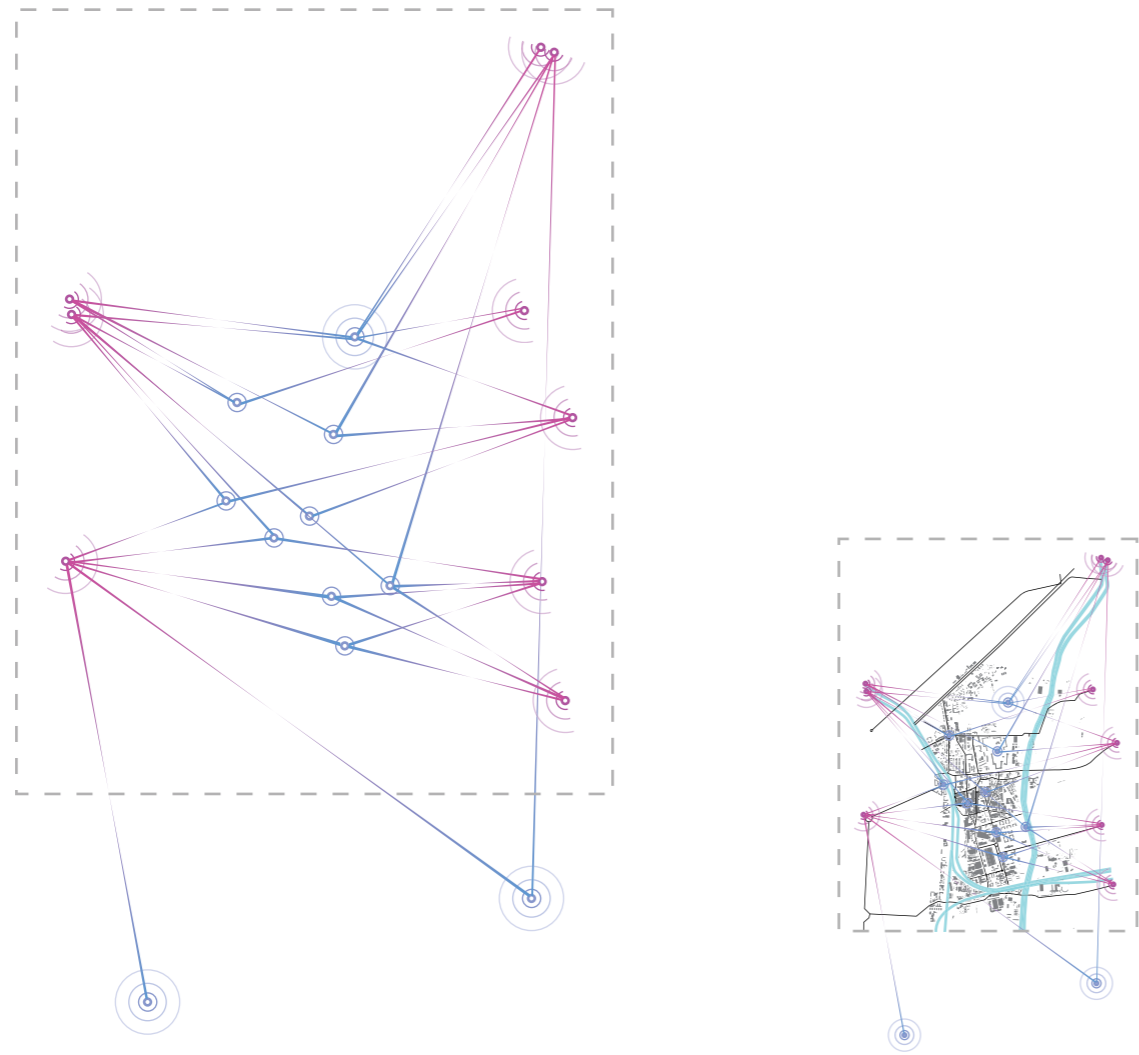
**VISITORS.**

-  Source.
-  Destination.

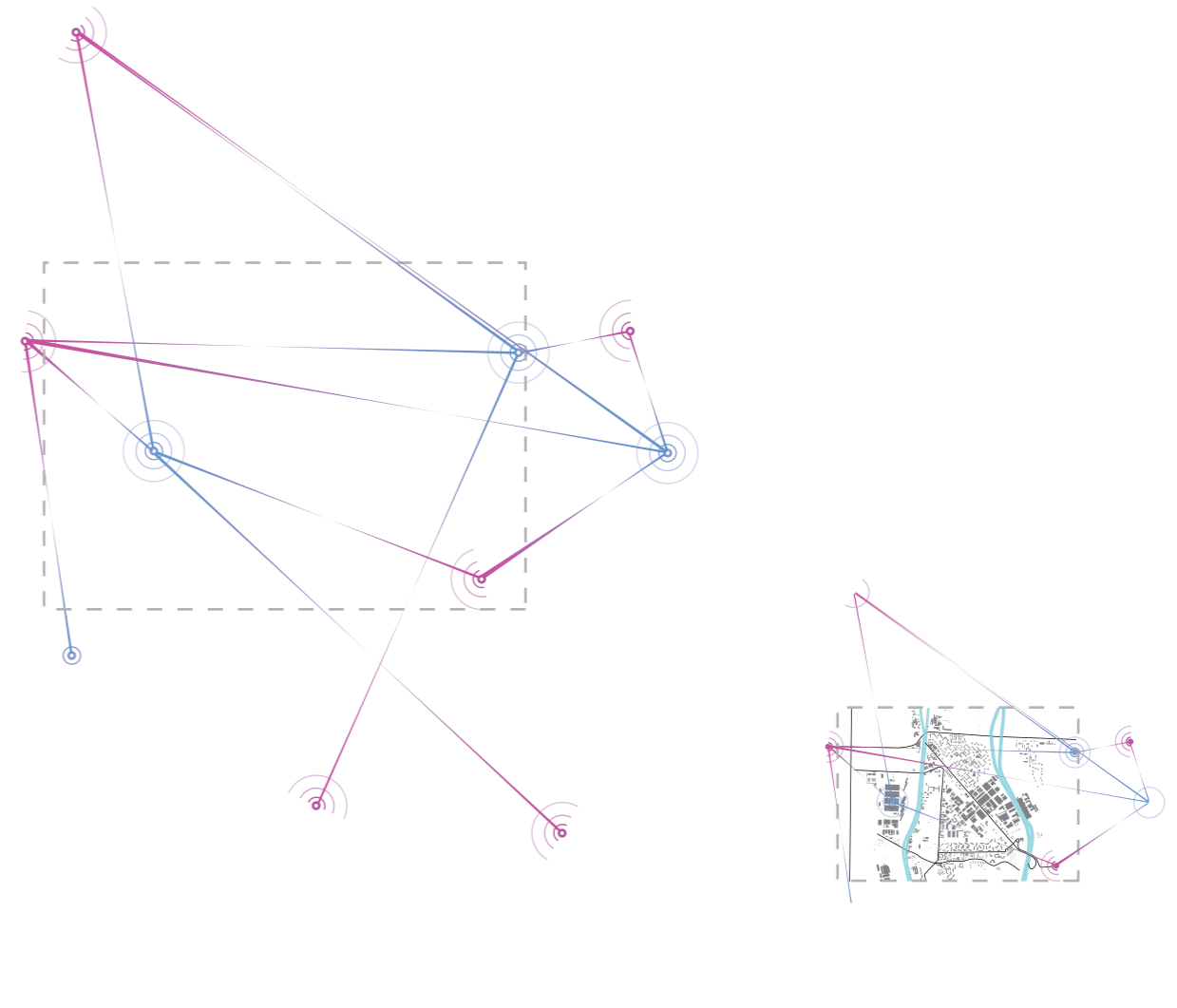
Visitors in *Niguarda, Bicocca and Viale Monza*.



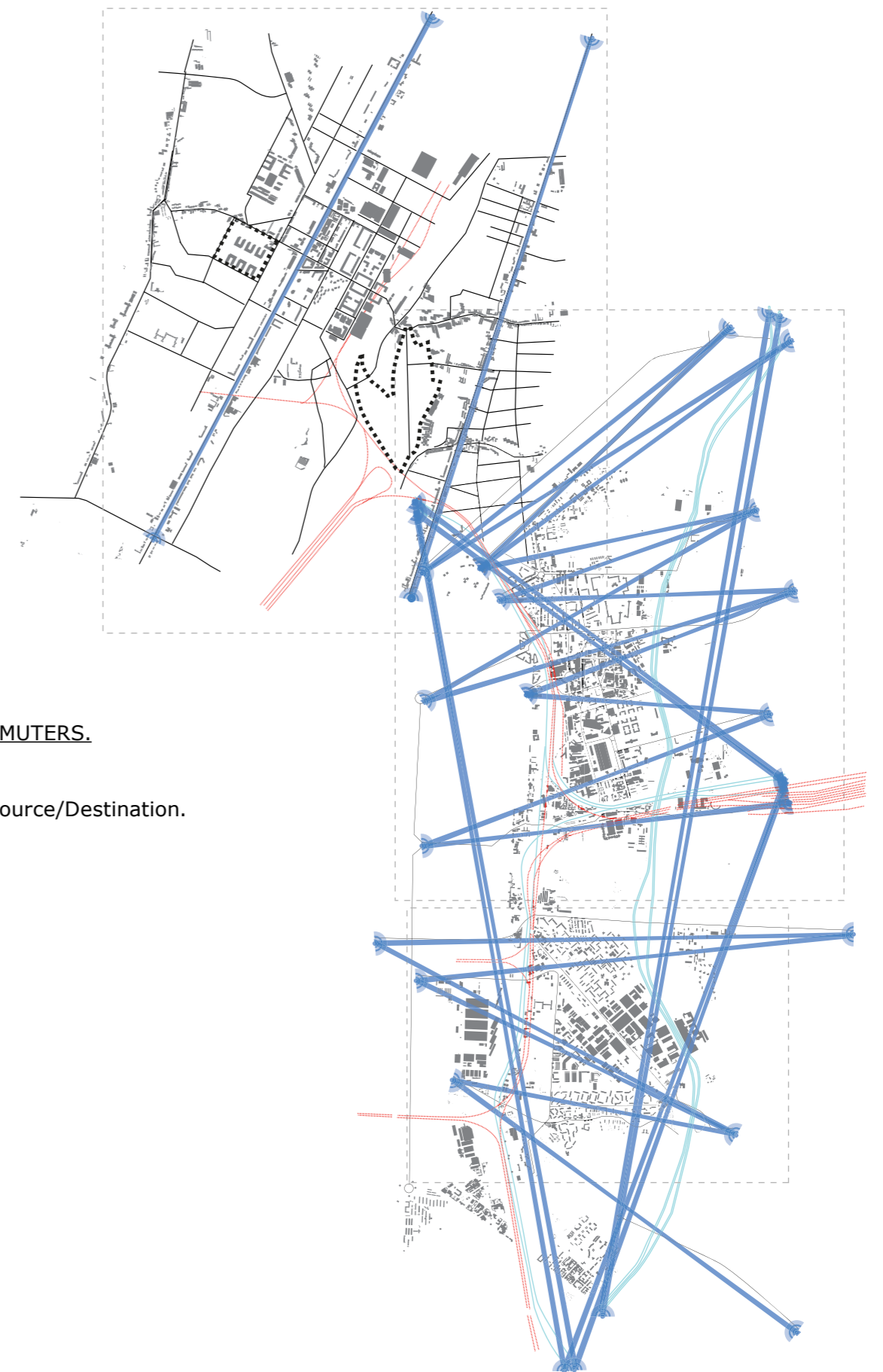
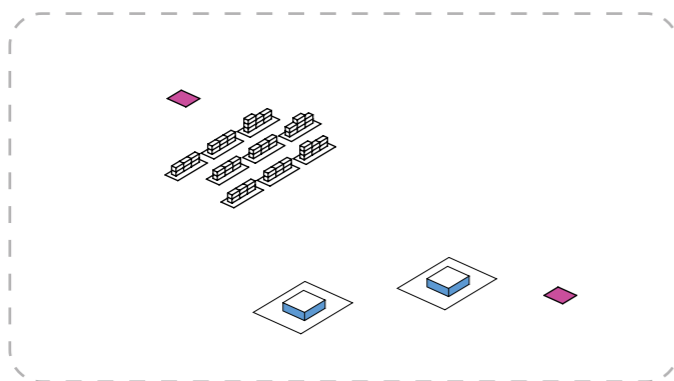
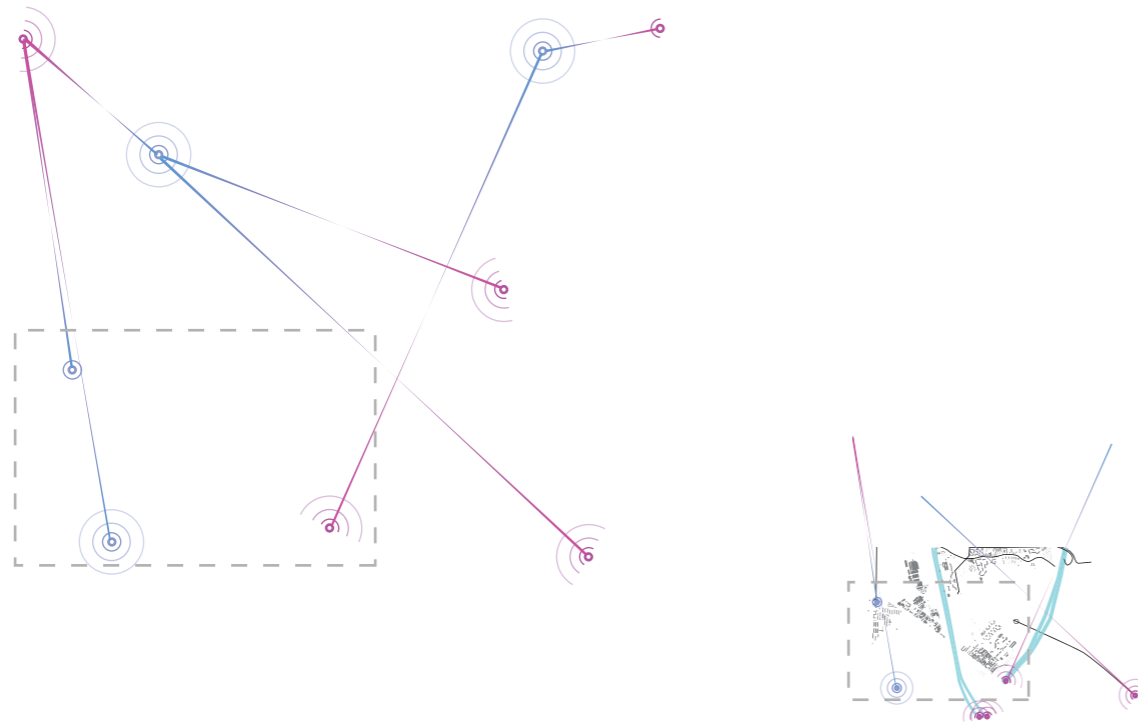
Visitors in *Lambrate, Città-Studi*.




Visitors in *Mecenate and Forlanini*.



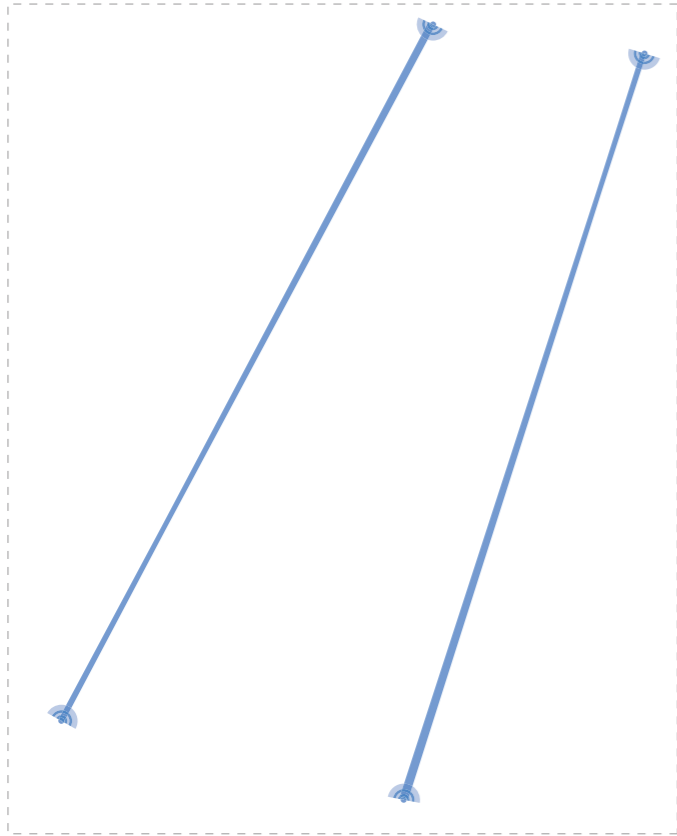
Visitors in Rogoredo and Porto di Mare.



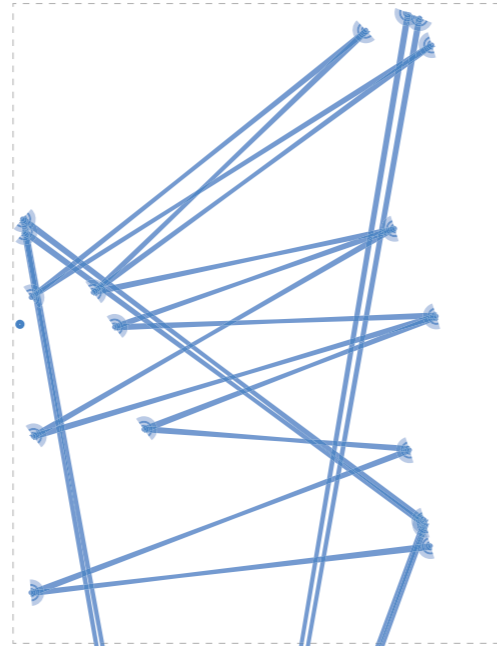
**COMMUTERS.**

 Source/Destination.

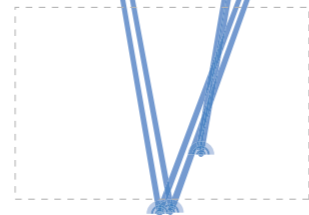
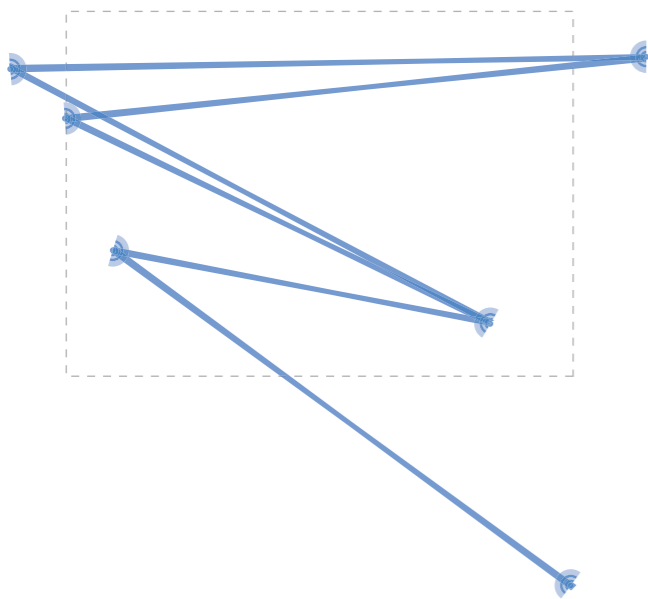
Commuters in *Niguarda, Bicocca and Viale Monza*.



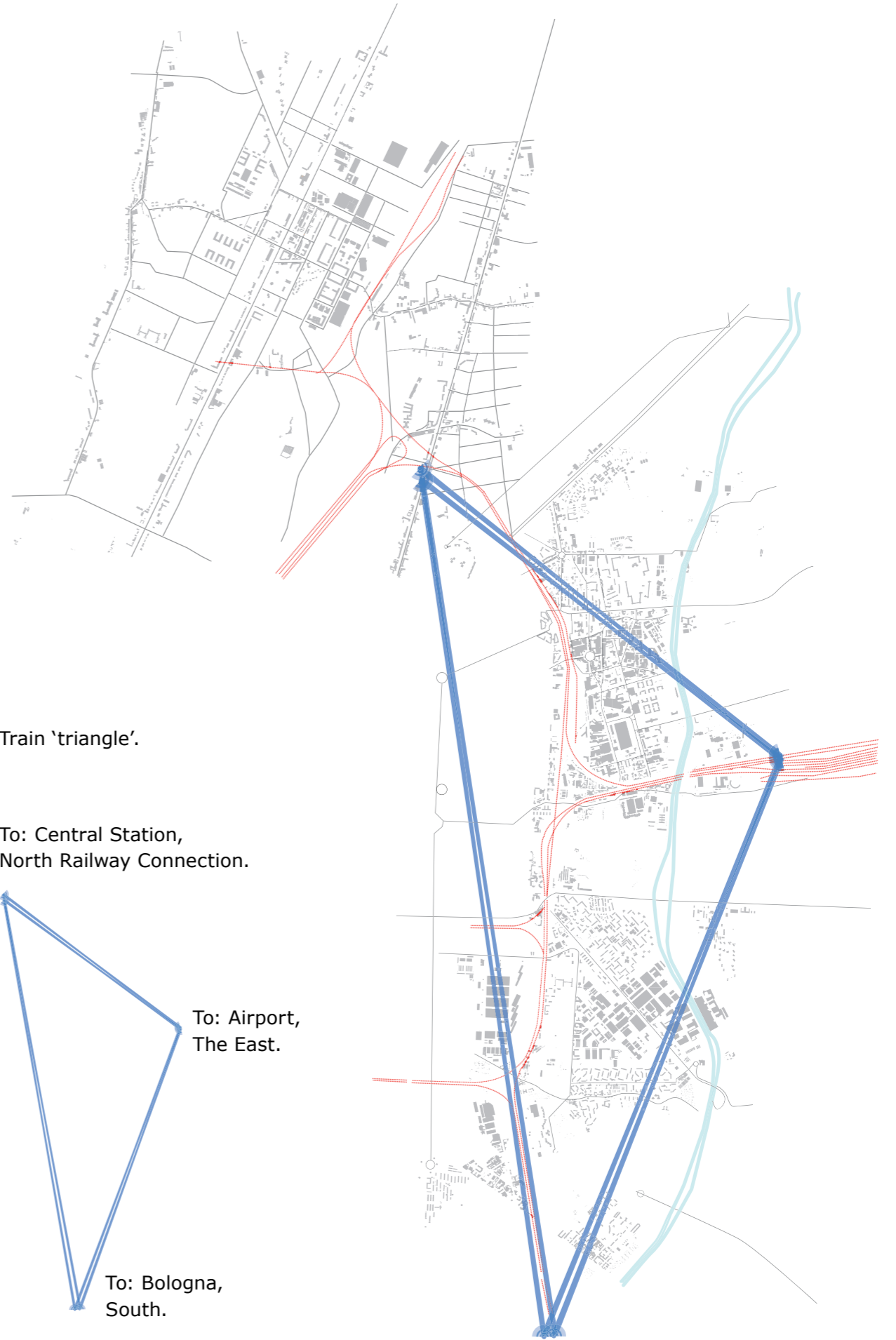
Commuters in *Lambrate, Città-Studi*.



Commuters in *Mecenate and Forlanini*.



Commuters in *Rogoredo and Porto di Mare*



Train 'triangle'.

To: Central Station,  
North Railway Connection.

To: Airport,  
The East.

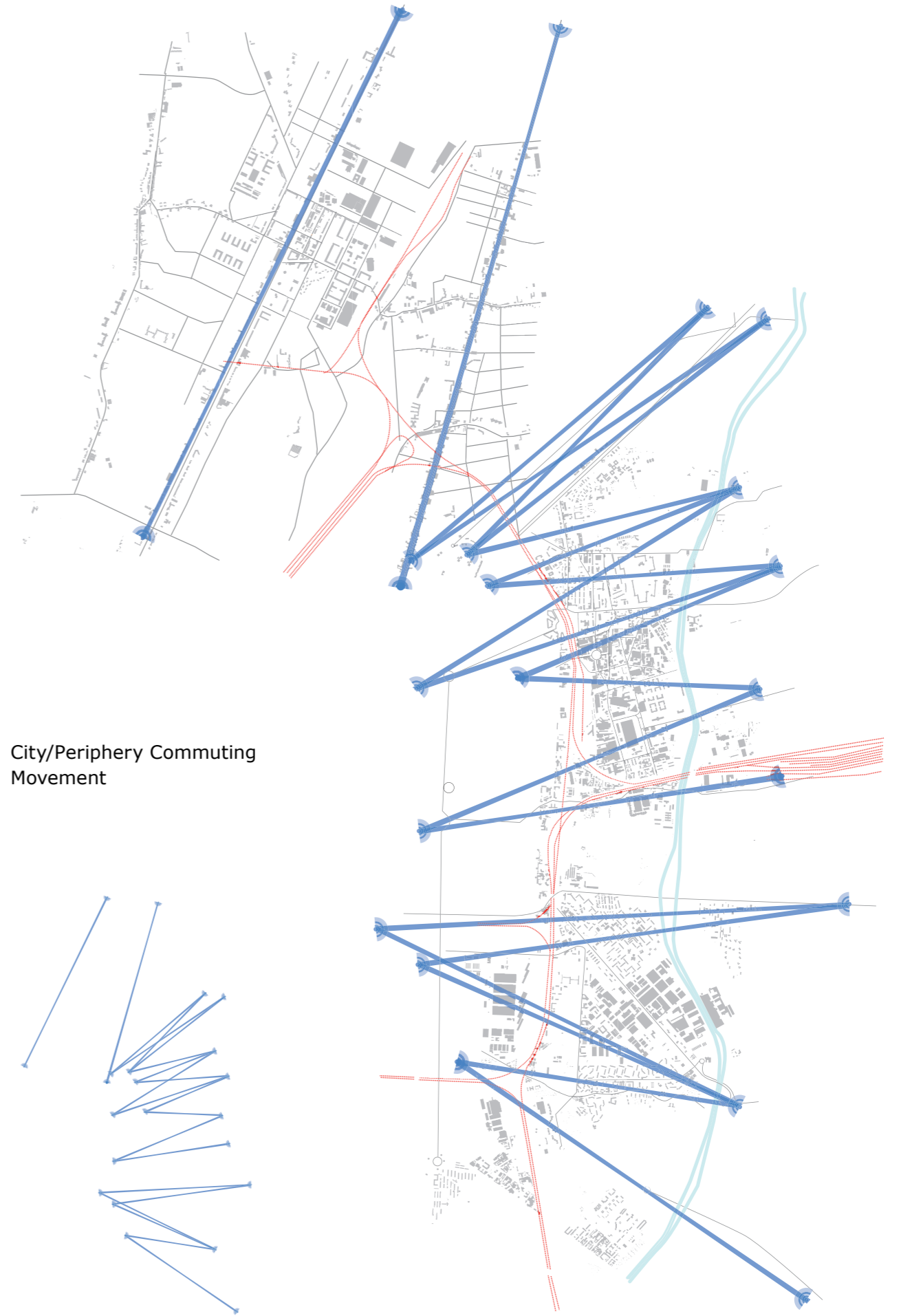
To: Bologna,  
South.



Tangenziale Est  
'Line'.

North

South



City/Periphery Commuting  
Movement

# 3.4 CHAPTER BIBLIOGRAPHY.

## BOOKS CONSULTED:

MILAN. THE GREAT TRANSFORMATION, Corina Morandi, Marsilio, Venezia, 2007.

STREET DESIGN, Federico Jappeli, Maggioli editore, Milano 2012.

METROBOSCO, BIOMILANO, Six ideas for a bio-diverse metropolis  
Six transitional states between the city, nature and agriculture  
Six energy sources for a new model of urban economics, Stefano Boeri. Milano, 2011.

PHILADELPHIA URBAN VOIDS, Jhonnatan Alderson, Architects, Wayne, PA 19087-0661  
Architectural Contest for re-designing Philadelphia's City Center. Client: Van Alen Institute of New York.

BIRMINGHAM, Big City Plan, City Center Masterplan, City Centre Development Directorate Birmingham City Council  
September 2010, 1 Lancaster Circus Birmingham B4 7DJ.

TOWN CENTRE LINK, Knight Architects, built in 2011 as part of the London 2012 Olympics Development Plan, London, UK.

CROSS-WIND BRIDGE, tiago barros, jorge pereira, as part of a competition for a new cycling bridge in Lisbon, Portugal.

PHILADELPHIA URBAN VOIDS, Ecosistema urbano, Architects, Belinda Tato, Jose Luis Vallejo, Constantino Hurtado, Elena Prieto.

Architectural Contest for re-designing Philadelphia's City Center. Client: Van Alen Institute of New York.

HISTORICAL DEVELOPMENT OF BICOCCA, PHOTOS AND HISTORY.

PROGETTO BICOCCA, Un contributo per Milano Policentrica, 1995 Triennale di Milano, Book.

CASCINE.

Olivieri D., *Dizionario di toponomastica lombarda, Milano 1961, Pogliano Milanese.*

*Pregnana Milanese, 1975*

*HISTORY OF MILAN.*

*Historical Italian Magazine, anno LXXVI, fasc.II, 1984; A.S.M. cart. 1852, Circondario I di Milano, Mandamento XVI*

HISTORICAL DEVELOPMENT OF BICOCCA, PHOTOS AND HISTORY.

## IMAGE SOURCE:

LOMBARDY'S EAST.

3.2.2 SPACE.

-Settlements:

i[1] GOOGLE EARTH. Satellite Image, Snapshot taken at 45°29' 4.12 N. 9° 20' 18.17" E. Elev. 120m. ©Digital Globe.

-Agriculture:

i[2] GOOGLE EARTH. Satellite Image, Snapshot taken at 9°22'04.11 N. 9°20' 18.17" E. Elev. 17.24 km. ©Digital Globe.

i[3] GOOGLE EARTH. Satellite Image, Snapshot taken at 45°28' 21.86" N. 9°23'42.23" E. 17 km. ©Digital Globe.

i[4] MONIAUX, D. "Triticum aestivum". Auvers-Sur-Oise, 2013 © Moniaux.

i[5] CHRISTINS, Y. For Green Greece Go webpage, Title Unknown, 2012 ©Green Greece Go.

i[6] HERBECK, J (James). For Webpage UK/AG Grand Crops Extension, "Proper Seeding Techniques", 2011 ©UKY

i[7] MURDOCK, L. For Webpage UKAG UK/AG Grand Crops Extension, "Modern non folliage seeds", 2011 ©UKY

-Fallow Land.

i[8] i[9] AYDIN. R. For Panoramio, "Milano ITALYIA" 2013 ©Panoramio.

i[10] AIX, C. (Camila), For Panoramio,

"E63.284", Selected for Google Earth. No date. ©Panoramio.

i[11] CORELLI, M. (Matteo). For Panoramio. "Train". Selected for Google Earth. No date. ©Panoramio.

i[12] BORRINI, A. (Alessandro). For Panoramio "Sotto la Tang. Est. Lambrate-Mi". No date. ©Panoramio.

-Forest.

i[13] ROMANO, S. (Silvana). For webpage "Città nel verde, centro di forestazione urbana" February 2011 ©Romano.

i[14] i[15] i[16] ROCCO, S. For webpage "passeggiate". No date. ©S Rocco.

i[18] GOOGLE EARTH. Satellite Image, Snapshot taken at 43° 20' 17.03 N 9° 30' 45.14" E. Elev. 2.4 Km. ©Digital Globe.

i[19] GOOGLE EARTH. Satellite Image, Snapshot taken at 45° 27' 31.78 N 9° 18' 54.04" E. Elev. 2.4 Km. ©Digital Globe.

LOMBARDY'S EAST.

3.3.2 NEIGHBORHOODS.

-Greco-Bicocca.

i[20] Images taken from: PROGETTO BICOCCA, Un contributo per Milano Policentrica, 1995 Triennale di Milano, Book. (scanned document). ©policentrica.

i[21] GALISTO, D. (Gallisto), For Flickr. "Stazione di milano Greco Pirelli" January 27, 2008. ©Dennis Gallisto.

i[22] SISTEMA ARCHIVISTICO NAZIONALE. "Greco-Pirelli" 1873 ©Pirelli.

i[23] PUBLICITY POSTER, Pirelli, 1947, Mix technique, Collage and colors, 35 x 25 cm. Milano, Pirelli's Historical Archive.

i[24] LABÒ S. (Savino) "Vista viale Zara, 1929", tempera su tavola, 110 x 90 cm. For Pirelli foundation, Historical Archive, Document fund for the Preservation of the

History of Pirelli. 1899-1976 Milano Milano, ©AEDES.

i[25] MELOCCHI, L. (Lorenzo) For blog lambrate on air. "Suicidio alla Stazione". June 2010, ©Melocchi.

i[27] BRAMFAB. Image from blogspot vivere in Città" March 2008 ©Bramfab.

i[28] FAI, (Fondo Ambiente Italiano) For webpage Fondoambiente "Milano Verde". Fondo Ambiente Italiano. ©FAI

i[29] PROVINCIA DI MILANO, No date. ©Provincia di Milano.

i[30] BOLIS E (Eleonora). For Milanox. "Parco Foorlanini". ©Bolis.

i[31] SILVESTRE S. (Stefano) For Innovation. "Grave errore non riconfigurare Malpensa e linate". ©Innovation.

i[32] ROMANO. (Cinzia) For Creative Commons "Viale Forlanini alla altezza della via Cavriana" February 2012. ©Romano

i[33] TRUNFIO A. For webpage Rischio Calcolato "Tangenziale Est. June 3, 2013. ©Triunfo

i[34] i[35] i[36] LOOS (Van) for Storia di Milano "Milano Città acquatica e il suo Porto di Mare". ©Loon.

3.3.2 NEIGHBORHOODS.

i[38] RADICI, L. For AmiciCani "Parco Lambro" April 2010 ©Radici.

i[39] BICOCCA, Images taken from: PROGETTO BICOCCA, Un contributo per Milano Policentrica, 1995 Triennale di Milano, Book. (scanned document). ©policentrica.

i[40] SILVIA For Viaggi Verdi "Via Lattea" September 27, 2012. ©ViaggiVerdi.

i[41] FAI, (Fondo Ambiente Italiano) For webpage Fondoambiente "Milano Verde". Fondo Ambiente Italiano. ©FAI

i[42] SILVIA For ViaggiVerdi "Via Lattea" September 27, 2012 ©ViaggiVerdi.

-large parks.

i[43] COLOMBI, D (Daniele). For Milanomi-

lano, June 9, 2013 ©Milanomilano.

i[44] FERRUCI, G. For Parco Nord July 03, 2013. ©Parco Nord.

i[45] i[46] VITALI, For Legambiente "Parco Nord" January 2013 ©Milanomilano.

i[48] i[49] i[50] i[51] i[52] BACOCOLI F. For Comune di Milano, July 18, 2011. ©Comune di Milano.

i[53] BYRNE G. (Gonçalo), for comune di Milano "il nuovo Parco Forlanini"

i[54] BOLZANI L. (Loredana), for Green Milano, February 3, 2009.

-i[58] SKRICCIOLO, for Panoramio, "Parco Agricolo Sud".

-i[59] FELICE A. (Arianna), for Segrate Felice blogspot. No date, ©Ariannafelice.

-i[60] i[61] i[62] ASSOCIAZIONE BORGO CHIARAVALLE. for Associazione Borgo Chiaravalle. No date, 2007 © Associazione Borgo Chiaravalle.

-Small parks

i[63] i[64] i[65] GOOGLE EARTH. Satellite Image, Snapshot taken at 45°22'04.11 N. 9°20' 18.17" E. Elev. 17.24 km. ©Digital Globe.

i[66] i[67] i[68] i[69] MANIFATTURE MILANO, images taken from project webpage 2011 ©Manifatture Milano.

i[70] GOOGLE EARTH. Satellite Image, Snapshot taken at 45°30'22" N 9°22'04.11 E. Elev. 17.24 km. ©Digital Globe.

i[71] i[74] i[75] Images taken from: PROGETTO BICOCCA, Un contributo per Milano Policentrica, 1995 Triennale di Milano, Book. (scanned document). ©policentrica.

i[72] GHEZZI M. (Morris), Milano, università Bicocca. April 04, 2011.

i[76] GOOGLE EARTH. Satellite Image, Snapshot taken at 45°30'42.14 N. 9°12'29.02" E. Elev. 17.24 km. ©Digital Globe.

i[77] i[78] i[79] i[80] Images taken from: PROGETTO BICOCCA, Un contributo per

Milano Policentrica, 1995 Triennale di Milano, Book. (scanned document). ©policentrica.

i[81] GOOGLE EARTH. Satellite Image, Snapshot taken at 45°30'35.66 N. 9°13'20.46" E. Elev. 10 km. ©Digital Globe.

i[82] i[83] GOOGLE STREET VIEW: Snapshot taken at 45°30'42.90 N. 9°13'00.28" E. Elev. 10 km. ©Digital Globe.

I[84] GOOGLE EARTH. Satellite Image, Snapshot taken at 45°30'42.90 N. 9°13'00.28" E. Elev. 10 km. ©Digital Globe.

i[85] GOOGLE STREET VIEW: Snapshot taken at 45°17'45.90 N. 9°13'24.36" E. Elev. 10 km. ©Digital Globe.

I[86] AXO. For Panoramio, "Cascina Fornasetta".

i[87] i[88] GOOGLE EARTH. Satellite Image, Snapshot taken at 45°30'10.81 N. 13°48'63" E. Elev. 20 km. ©Digital Globe.

i[89] i[90] GAETANO C. For vivere la Città blogspot. ©Gaetano.

i[91] PELOSI LOPEZ, For Navigli di Milano, NO DATE, January 2011. ©Pelosi Lopez.

i[92] DALTO A. (Angela). For Panoramio . No name. 2013 ©Panoramio.

i[93] CAMINITI M. (Mario) For Panoramio . "Milan". 2013 ©Panoramio.

i[94] LORENZOLI G. (Giorgio). For Corriere della Sera. ©Panoramio.

i[95] i[96] MOGNETTI M. (Mattia). For tuttomilano May 2009.

i[97] i[98] i[99] i[100] i[101] COMUNE DI MILANO Taken from Comune di Milano webpage. No date ©Comune di Milano.

i[102] i[103] i[104] COMUNE DI MILANO, Competition for Rubattino Park, Programma di Riquilificazione Urbana. ©Comune di Milano.

i[105] YI Q. (Quan) Piazza Leonardo da Vinci. for progetto mini piazze urbane. ©progetto mini piazze urbane.



i[107] GUIGLIO. For 02 Blog it. April 2006 ©2Blog

i[108] i[109] i[110] GOOGLE STREET VIEW: Snapshot taken at 45°15'12.90 N. 9°13'15.05" E. Elev. 3 km. ©Digital Globe.

i[111] GOOGLE STREET VIEW: Snapshot taken at 45°17'32.17 N. 9°13'24.45" E. Elev. 5 km. ©Digital Globe.

i[112] i[113] GOOGLE EARTH. Satellite Image, Snapshot taken at 45°29'07.05 N. 9°12'12" E. Elev. 20 km. ©Digital Globe.

i[114] i[115] i[116] COMUNE DI MILANO: Images taken from Parco Monluè.

-Plazas.

i[117] i[118] i[119] PRO PATRIA MILANO S.R.L. Photos taken from Pro Patria Milano Webpage, 2008. ©Pro Patria Milano.

i[120] i[121] i[122] CENTRO SPORTIVO CAMBINI FOSSATI. Photos taken from Centro Sportivo Fossati Milanospoort. ©Centro Sportivo Cambini Fossati.

i[123] i[124] i[125] TENNIS CLUB MILANESE LIBERTAS. Photos taken from Tennis Club Milanese Libertas. Tennis Club Milanese Libertas.

i[126] i[127] i[128] CIRCULO GIOVANILE CARDINALE SCHUSTER. Photos taken from Giovanile Cardinale Schuster.

i[129] i[130] CENTRO SPORTIVO SAINI. MILANOSPORT. Photos taken from Centro Sportivo Saini.

i[131] i[132] 1[133] VIA CARLO VALVASSORI PERONI, Milanospoort. Photos taken Via Carlo Valvassori Peroni, Milanospoort.

-Plazas

i[134] i[135] GOOGLE IMAGES: Anomimus images under a free licence: Creative Commons Attribution-ShareAlike License.

i[136] i[137] i[178] Images taken from: PROGETTO BICOCCA, Un contributo per Milano Policentrica, 1995 Triennale di Milano, Book. (scanned document). ©poli-centrica.

i[139] i[140] MATTIA, Photos for Milanomia webpage, June 26 2011.

i[141] i[142] i[143] GOOGLE STREET VIEW: Snapshot taken at 45°10'30.22 N. 9°07'06.45" E. Elev. 5 km. ©Digital Globe.

i[144] GOOGLE EARTH. Satellite Image, Snapshot taken at 45°29'4.12 N. 9°20'18.17" E. Elev. 120m. ©Digital Globe.

i[145] Satellite Image, Snapshot taken at 45°27'31.78 N 9°18'54.04" E. Elev. 2.4 Km. ©Digital Globe.

i[146] i[147] 1[148] BOARI J. For Comune di Milano Webpage, "Milano, lambrate da sistemare" July 12, 2010.

3.3.4 CASCINE & AGRICULTURE.

i[149] GOOGLE EARTH. Satellite Image, Snapshot taken at 9°22'04.11 N. 9°20'18.17" E. Elev. 17.24 km. ©Digital Globe.

i[150] GOOGLE EARTH. Satellite Image, Snapshot taken at 45°28'21.86" N. 9°23'42.23" E. 17 km. ©Digital Globe.

i[151] GOOGLE EARTH. Satellite Image, Snapshot taken at 43°20'17.03 N 9°30'45.14" E. Elev. 2.4 Km. ©Digital Globe.

i[152] FELKER I. For webpage cultura e culture. "cascine a milano". March 16, 2008 ©Felker.

i[153] GOOGLE EARTH. Satellite Image, Snapshot taken at 45°28'21.86" N. 9°23'42.23" E. 17 km. ©Digital Globe.

i[154] MENTELOCALE, For Mentelocale webpage "le cascine di Milano". ©Mentelocale.

i[155] i[156] MOLINO SAN GREGORIO. For Webpage of cascina San Gregorio ©Cascina San Gregorio.

i[157] i[158] RESIDENZA CASCINA MELGHERA. For webpage Residenza Cascina Melghera ©CascinaMelghera

i[159] i[160] CASCINA ROSA. For Cascina Rosa. ©CascinaRosa.

i[161] i[162] CASCINA AGRITURISMO SANT'AMBROGIO. For cascina Agriturismo Sant' Ambrogio.

i[163] CASCINA SAN GIACOMO. For Cascine di Milano webpage. ©CascinediMilano.

i[164] GOOGLE IMAGES. Satellite Image, Snapshot taken at 45°28'21.86" N. 9°23'42.23" E. 17 km. ©Digital Globe.

i[165] i[166] CASCINA BIBLIOTECA. For Cascina Biblioteca. ©cascinedimilano.

i[167] i[168] RESIDENZA CASCINA MELGHERA. For Residenza Cascina Melghera Webpage. ©cascinamelghera.

i[169] i[170] CASCINA SAN GIORGIO VECCHIO. For cascina San Giorgio Vecchio. ©cascinasangiorgiovecchio.

i[171] i[172] RISTORANTE OVI For Cascina Ristorante Ovi. ©cascinaristoranteovi

i[173] i[174] CASCINA VILLA LANDA For Associazione cascine milano. ©cascinavillalanda.

i[175] i[176] CASCINA MONLUÈ. For cascina Monluè. ©Monluè

i[178] i[179] CASCINA MEREZZATE. For webpage cascine di Milano. ©Merezate.

i[180] CASCINA GRANDE DI CHIARAVALLE. For Cascina Grande di Chiaravalle. ©Chiaravalle.

3.3.5 ACTIVITIES.

-Large commercial/Industrial/Business Network.

i[181] GOOGLE STREET VIEW: Snapshot taken at 45°27'12.34 N. 9°10'36.45" E. ©Digital Globe.

i[182] GOOGLE STREET VIEW: Snapshot taken at 45°26'12.00 N. 9°20'16.15" E. ©Digital Globe.

i[183] GOOGLE STREET VIEW: Snapshot taken at 45°27'12.40 N. 9°19'12.08" E. ©Digital Globe.

i[184] GOOGLE STREET VIEW: Snapshot

taken at 45°27'07.20 N. 9°19'32.18" E. ©Digital Globe.

i[185] GOOGLE STREET VIEW: Snapshot taken at 45°26'35.05 N. 9°19'24.03" E. ©Digital Globe.

i[186] GOOGLE STREET VIEW: Snapshot taken at 45°26'18.35 N. 9°19'29.12" E. ©Digital Globe.

i[187] GOOGLE STREET VIEW: Snapshot taken at 45°26'16.25 N. 9°19'05.22" E. ©Digital Globe.

i[188] GOOGLE STREET VIEW: Snapshot taken at 45°26'16.25 N. 9°19'05.23" E. ©Digital Globe.

i[189] GOOGLE STREET VIEW: Snapshot taken at 45°13'36.40 N. 9°19'58.14" E. ©Digital Globe.

i[190] GOOGLE STREET VIEW: Snapshot taken at 45°35'16.06 N. 9°18'68.37" E. ©Digital Globe.

i[191] GOOGLE STREET VIEW: Snapshot taken at 45°25'36.16 N. 9°28'18.17" E. ©Digital Globe.

i[192] GOOGLE STREET VIEW: Snapshot taken at 45°25'05.56 N. 9°28'12.57" E. ©Digital Globe.

i[193] GOOGLE STREET VIEW: Snapshot taken at 45°25'05.56 N. 9°28'12.57" E. ©Digital Globe.

i[194] GOOGLE STREET VIEW: Snapshot taken at 45°26'16.25 N. 9°19'05.23" E. ©Digital Globe.

i[195] GOOGLE STREET VIEW: Snapshot taken at 45°26'16.25 N. 9°19'05.22" E. ©Digital Globe.

i[196] GOOGLE STREET VIEW: Snapshot taken at 45°27'12.40 N. 9°19'12.08" E. ©Digital Globe.

i[197] GOOGLE STREET VIEW: Snapshot taken at 45°25'36.16 N. 9°28'18.17" E. ©Digital Globe.

i[198] GOOGLE STREET VIEW: Snapshot taken at 45°27'12.40 N. 9°19'12.08" E. ©Digital Globe.

i[199] GOOGLE STREET VIEW: Snapshot taken at 45°26'35.05 N. 9°19'24.03" E.

©Digital Globe.

i[200] GOOGLE STREET VIEW: Snapshot taken at 45°25'36.16 N. 9°28'18.17" E. ©Digital Globe.

i[201] GOOGLE STREET VIEW: Snapshot taken at 45°35'16.06 N. 9°18'68.37" E. ©Digital Globe.

i[202] GOOGLE STREET VIEW: Snapshot taken at 45°26'12.00 N. 9°20'16.15" E. . ©Digital Globe.

i[203] GOOGLE STREET VIEW: Snapshot taken at 45°27'12.40 N. 9°19'12.08" E. ©Digital Globe.

i[204] i[205] GOOGLE EARTH. Satellite Image, Snapshot taken at 45°30'10.81 N. 13°48'63" E. Elev. 20 km. ©Digital Globe.

i[206] i[207] BRACCO For Bracco Webpage, 2012. ©Bracco.

i[208] i[209] BOMBIELLI COSTRUZIONI METALLICHE. For Bombielli Costruzioni Metalliche. ©Bombielli.

i[2010] i[2011] SANOFI ITALIA. For Sanofi webpage. ©Sanofi.

i[212] i[213] CHRISTINA ROS. For Christina Ros Cosmetics webpage. ©Christina Ros.

i[214] i[215] PREDEVAL R. (Roberto). For Survive Milano webpage. ©Survive Milano.

i[216] i[217] ROA C. For Gollum webpage. "centro produzione RAI Milano". ©Roa.

i[218] i[219] UPS Italia. For UPS Italia webpage. ©UPS group.

i[220] i[221] GOOGLE EARTH. Satellite Image, Snapshot taken at 43°20'17.03 N 9°30'45.14" E. Elev. 2.4 Km. ©Digital Globe.

i[222] i[223] GOOGLE EARTH. Satellite Image, Snapshot taken at 45°28'21.86" N. 9°23'42.23" E. 17 km. ©Digital Globe.

i[224] i[225] ALSA FRATELLI PEZZALI. For Alsa Fratelli Pezzalli Webpage. ©Alsa Fratelli Pezzali.

i[226] i[227] INDUSTRIAL CLEANING. For industrial cleaning Milano S.A.S. Webpage. ©industrial cleaning Milano.

i[228] i[229] COSFER Spa. For Cosfer Spa. Webpage. ©Cosfer

i[230] BANCA IMMOBILIARE. For Banca Immobiliare webpage. ©BancaImmobiliare.

i[231] GOOGLE EARTH. Satellite Image, Snapshot taken at 45°27'31.78 N 9°18'54.04" E. Elev. 2.4 Km. ©Digital Globe.

i[232] i[233] i[234] Images taken from: PROGETTO BICOCCA, un contributo per Milano Policentrica, 1995 Triennale di Milano, Book. (Scanned document). ©poli-centrica.

i[235] GOOGLE STREET VIEW: Snapshot taken at 45°26'16.25 N. 9°19'05.23" E. ©Digital Globe.

-Institutional.

i[236] GOOGLE EARTH. Satellite Image, Snapshot taken at 45°30'42.90 N. 9°13'00.28" E. Elev. 20 km. ©Digital Globe.

i[237] GOOGLE STREET VIEW: Snapshot taken at 45°25'36.16 N. 9°28'18.17" E. ©Digital Globe.

i[238] GOOGLE EARTH. Satellite Image, Snapshot taken at 45°29'4.12 N. 9°20'18.17" E. Elev. 120m. ©Digital Globe.

i[239] GOOGLE EARTH. Satellite Image, Snapshot taken at 45°30'42.90 N. 9°13'00.28" E. Elev. 20 km. ©Digital Globe.

i[240] GOOGLE EARTH. Satellite Image, Snapshot taken at 45°30'10.81 N. 13°48'63" E. Elev. 20 km. ©Digital Globe.

i[141] GOOGLE STREET VIEW: Snapshot taken at 45°26'12.00 N. 9°20'16.15" E. . ©Digital Globe.

i[242] GOOGLE EARTH. Satellite Image, Snapshot taken at 45°30'42.90 N. 9°13'00.28" E. Elev. 20 km. ©Digital Globe.

i[143] GOOGLE EARTH.  
Satellite Image, Snapshot taken at 45°28' 21.86" N. 9°23'42.23" E. 17 km. ©Digital Globe.

i[144] GOOGLE STREET VIEW: Snapshot taken at 45°26'35.05 N. 9°19'24.03" E. ©Digital Globe.

i[245] GOOGLE EARTH.  
Satellite Image, Snapshot taken at 45°30'10.81 N. 13°48'63" E. Elev. 20 km. ©Digital Globe.

-Study/Research.

i[246] Images taken from: PROGETTO BICOCCA, un contributo per Milano Policentrica, 1995 Triennale di Milano, Book. (Scanned document). ©policentrica.

i[147] GOOGLE STREET VIEW: Snapshot taken at 45°26'16.25 N. 9°19'05.22" E. ©Digital Globe.

i[248] Images taken from: PROGETTO BICOCCA, un contributo per Milano Policentrica, 1995 Triennale di Milano, Book. (Scanned document). ©policentrica.

i[249] ROSS, H. For Life Outside, "Politecnico di Milano", 2012 ©Green Greece Go.

i[250] Images taken from: PROGETTO BICOCCA, un contributo per Milano Policentrica, 1995 Triennale di Milano, Book. (Scanned document). ©policentrica.

-Culture

i[251] i[252] HANGAR BICOCCA, For Hangar Bicocca webpage. 2012 ©hangarbicocca.

i[253] i[254] TEATRO DEGLI ARCHIMBOLDI. For Teatro degli Archimboldi webpage. ©teatro degli archimboldi.

i[255] i[256] MANIFATTURE MILANO, images taken from project webpage 2011 ©Manifatture Milano.

i[257] SCUOLA POLITECNICA DI DESIGN. For scuola politecnica di design, webpage. 2009. ©Scuola Politecnica di Design.

i[258] i[259] LAMBRETTO ART PROJECT. For Lambretto art Project webpage. ©Lambretto Art Project.

i[260] i[261] TEATRO MARTINITT. For

Teatro Martinitt. ©Martinitt.

i[262] GOOGLE EARTH.  
Satellite Image, Snapshot taken at 45°30'42.90 N. 9°13'00.28" E. Elev. 20 km. ©Digital Globe.

i[239] GOOGLE EARTH.  
Satellite Image, Snapshot taken at 45°30'42.90 N. 9°13'00.28" E. Elev. 20 km. ©Digital Globe.

3.3.6 MOBILITY.

i[265] GOOGLE STREET VIEW: Snapshot taken at 45°26'16.25 N. 9°19'05.22" E. ©Digital Globe.

i[266] GOOGLE STREET VIEW: Snapshot taken at 45°27'12.40 N. 9°19'12.08" E. ©Digital Globe.

i[267] GOOGLE EARTH.  
Satellite Image, Snapshot taken at 45°30'10.81 N. 13°48'63" E. Elev. 20 km. ©Digital Globe.

i[268] GOOGLE EARTH.  
Satellite Image, Snapshot taken at 45°30'42.90 N. 9°13'00.28" E. Elev. 20 km. ©Digital Globe.

## 4. CONCLUSION

BEFORE MAKING A PROPOSAL, WE CONCLUDE THE RESEARCH PHASE WITH A SYNTHETIC CONCLUSION.

## 4. CONCLUSION

### 4.1 THE SPACE AFTER THE PGT PROVISIONS ARE COMPLETE.

**As seen before, the PGT foresees new provisions in the public space and mobility, this is how the system would look after they are completed.**

We will see maps showing:

-The Public Space:

Public Space, Current + PGT Provisions.

-Mobility:

Current Bicycle Network + PGT Provisions.

Current Public Transport + PGT Provisions.

Current Road Network + PGT Provisions.

-Activities:

Current Activities on the Project Area.

Current Public Spaces + PGT Provisions.

**Diagnosis:**

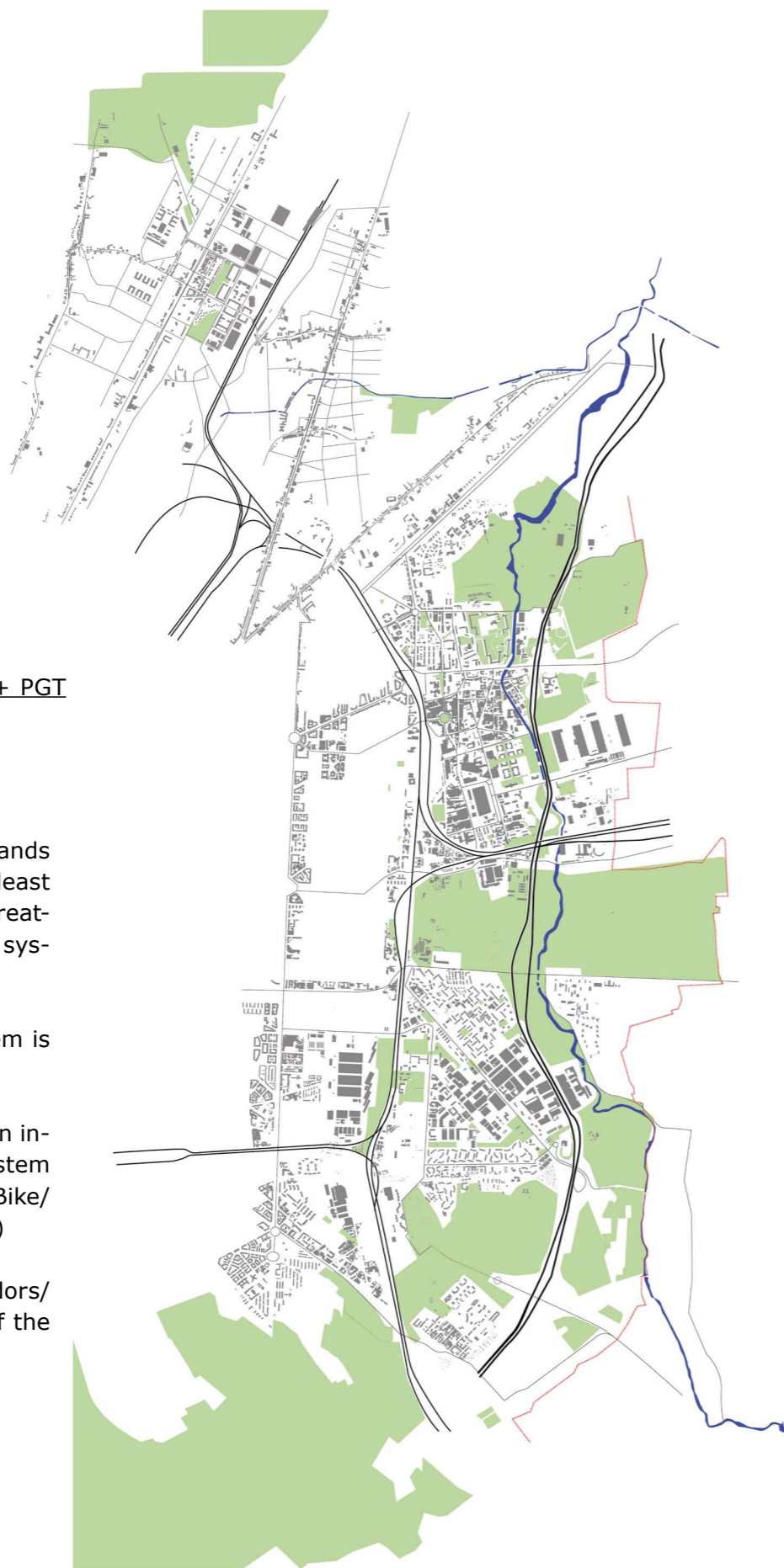
The green System expands considerably and, at least seen on a map, starts creating a Green Peripheral system.

-Green Peripheral System is Configured.

-Possibility of creating an integrated Peripheral system of Parks (if joined with Bike/ Slow Mobility strategies)

-Main Mobility Corridors/ Train are still dividers of the Green System.

- Green Spaces.
- Water.



Current Bicycle - PGT Provisions.

**Diagnosis:**



Despite considerably expanding the bike network, it is designed in a chaotic way. We can see, for example, that bike stations are located where there are no bike paths, and that there is no peripheral connection between bike paths.

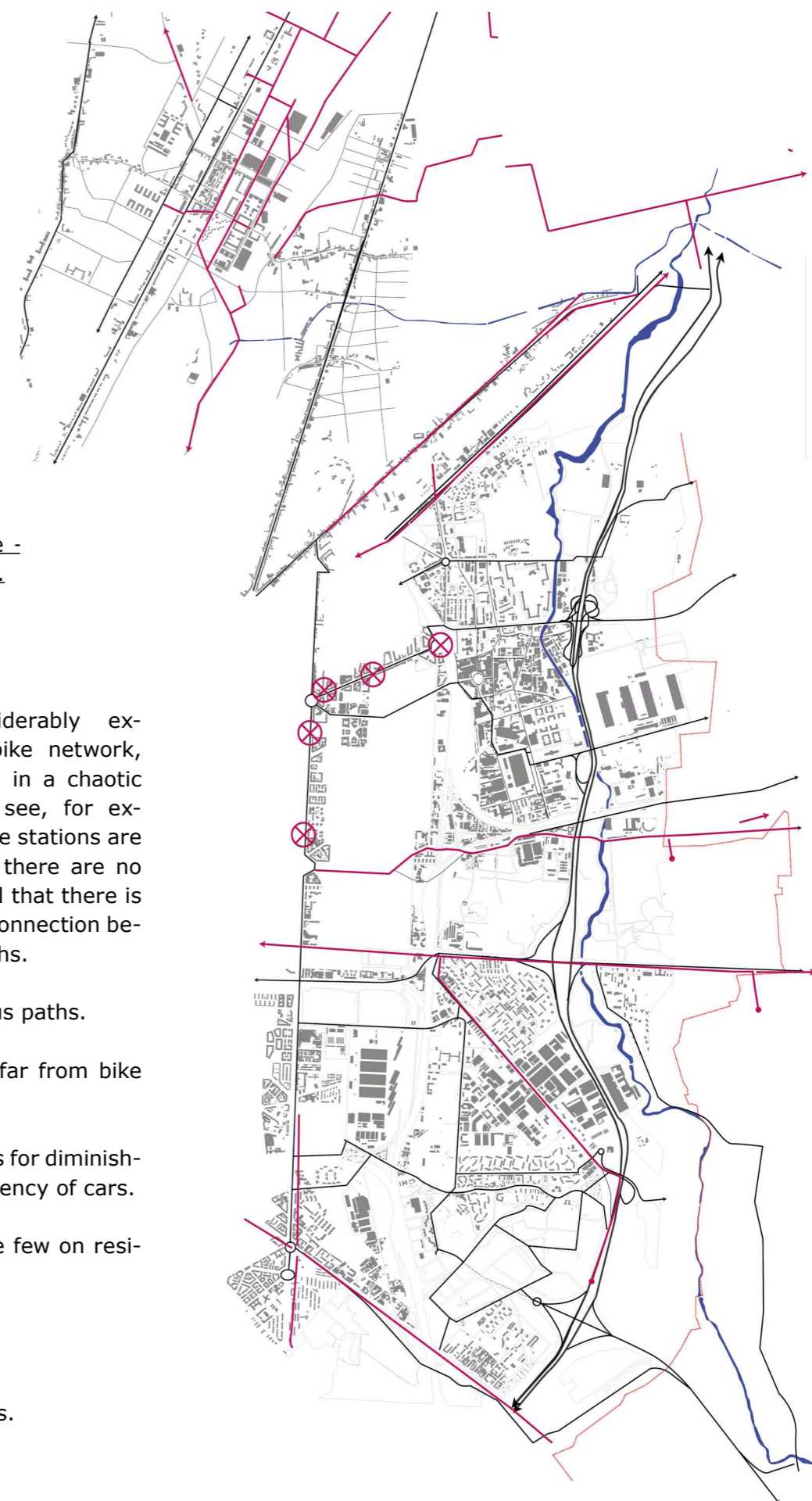
-Non continuous paths.

-Bike stations far from bike paths.

-Few bike paths for diminishing the dependency of cars.

-Bike paths are few on residential areas.

-  Bike Stations.
-  Bike Lines.



Current Public Transport+ Network + PGT Provisions.

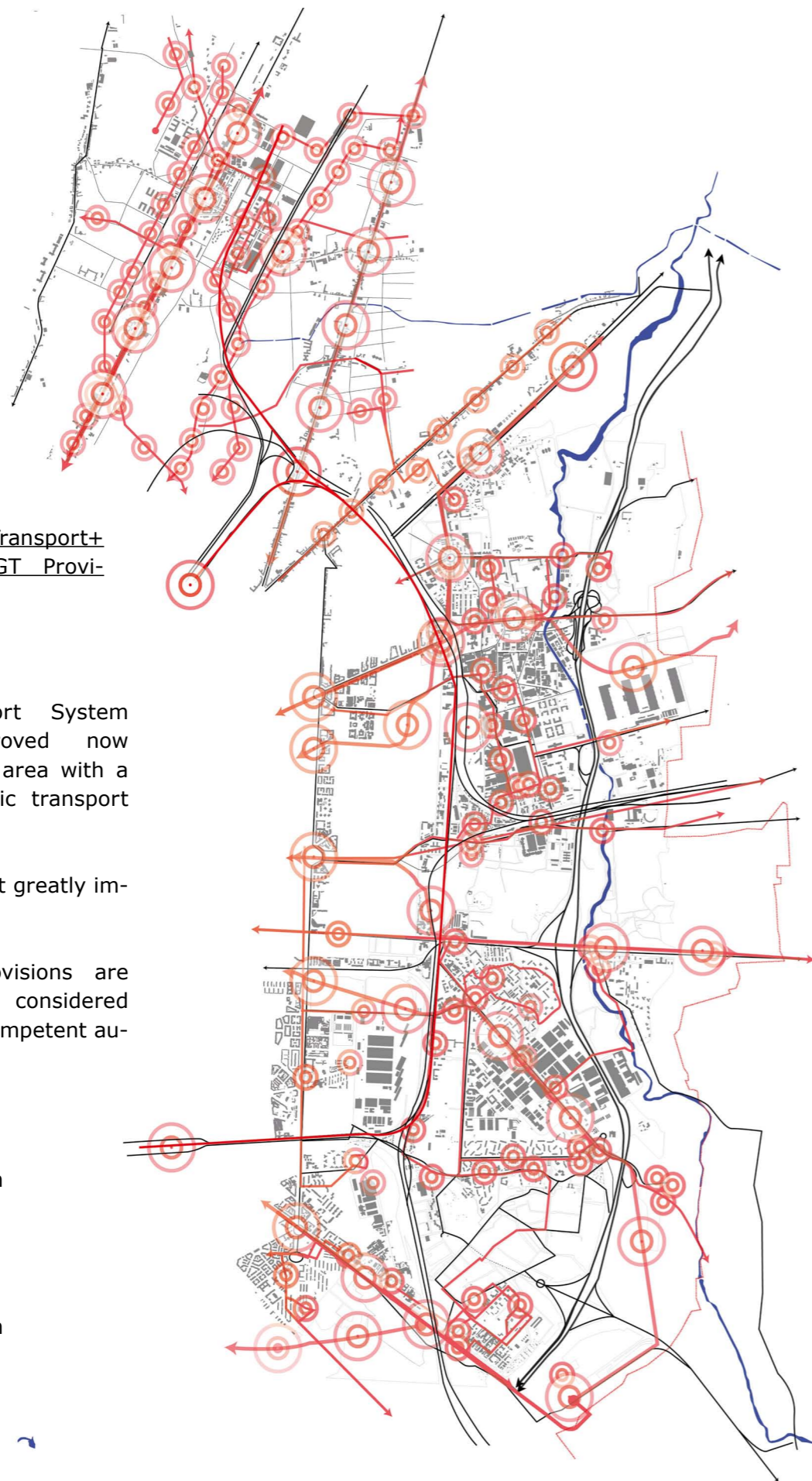
**Diagnosis:**

Public Transport System greatly improved now reaching every area with a variety of public transport possibilities.

-Public transport greatly improved.

-No more provisions are needed, unless considered necessary by competent authorities.

- ⊙ Metro/Train Station
- ⊙ Bus/Tram Station.
- Metro/Train Line.
- Bus/Tam Line.



Current Road Network + PGT Provisions.

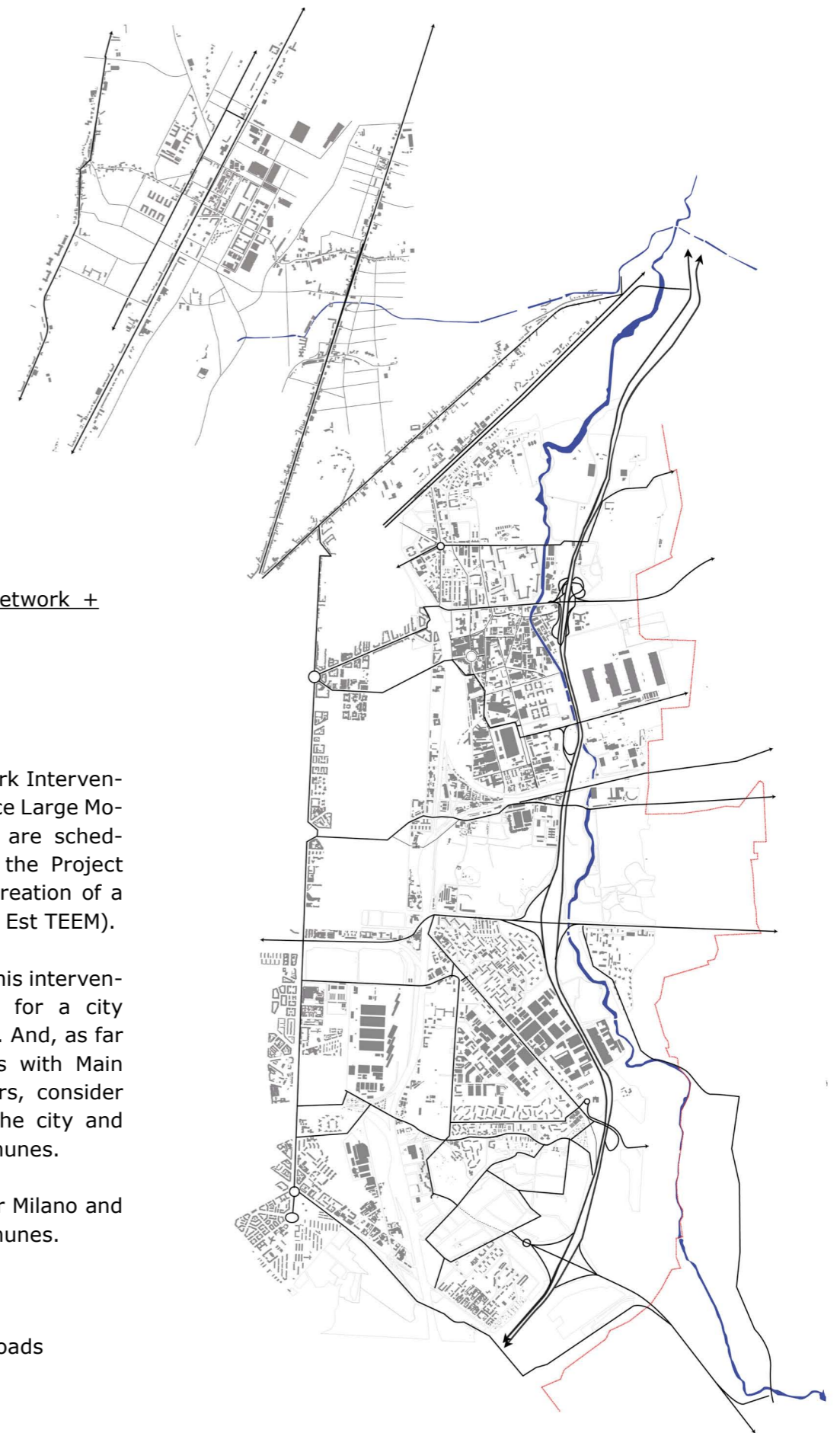
**Diagnosis:**

The Road Network Intervention is small, since Large Mobility Provisions are scheduled outside of the Project area (with the creation of a new Tangenziale Est TEEM).

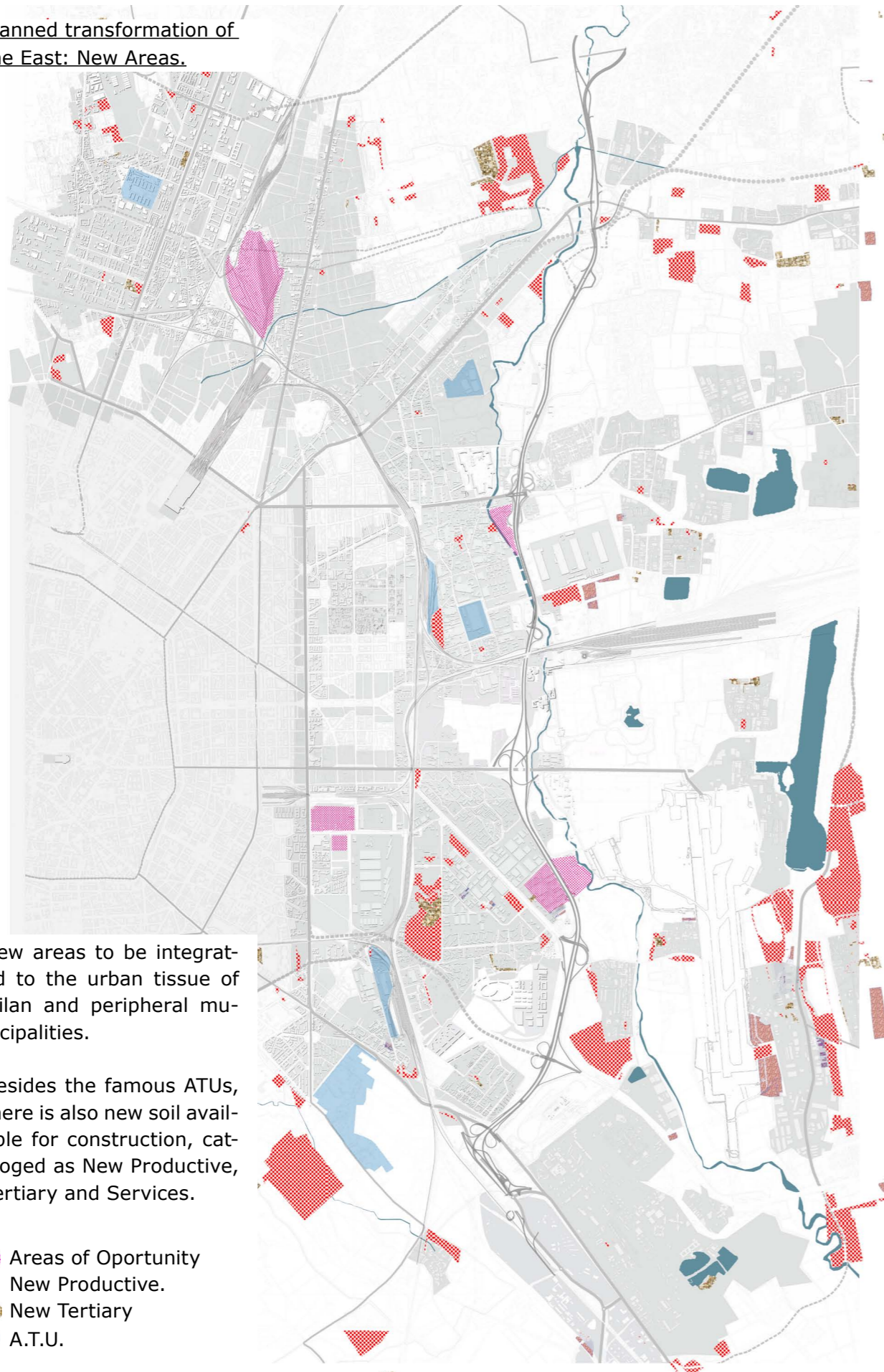
We considered this interventions necessary for a city the size of Milan. And, as far as what regards with Main Mobility Corridors, consider them vital for the city and peripheral communes.

-Vital System for Milano and peripheral communes.

→ Main Roads



Planned transformation of the East: New Areas.



New areas to be integrated to the urban tissue of Milan and peripheral municipalities.

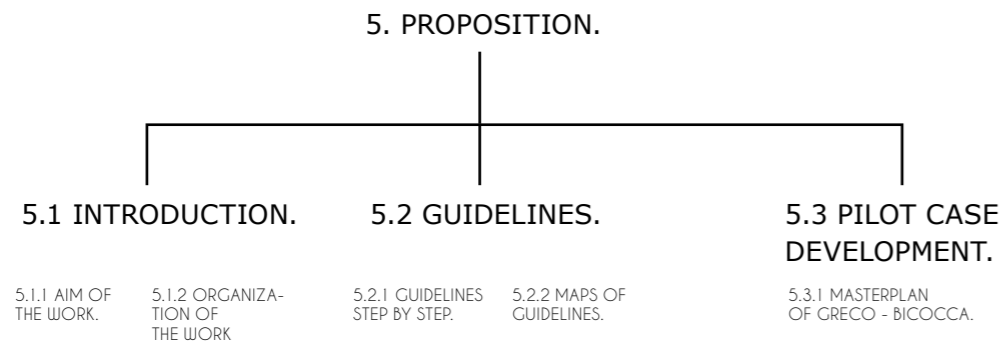
Besides the famous ATUs, there is also new soil available for construction, cataloged as New Productive, Tertiary and Services.

- Areas of Opportunity
- New Productive.
- New Tertiary
- A.T.U.

## 5. PROPOSITION

RECOMMENDATIONS OF DEVELOPMENTS FOR MILAN'S EAST BASED ON INVESTIGATION & ANALYSIS SEEN BEFORE.

# 5. PROPOSITION



## 5.1 INTRODUCTION.

### 5.1.1 AIM OF THE WORK.

We intend to implement two main issues:

#### PERIPHERAL SLOW MOBILITY NETWORK.

Provide a series of Guidelines for the project area, that can be applied in a flexible way, but that, if followed, will create a peripheral Slow mobility network around a series of parks, agricultural fields, *Cascine* and public spaces.

#### PRESERVE FUNCTIONALITY OF PRODUCTIVE AREAS AND THE MAIN MOBILITY CORRIDORS.

Realizing the importance that our project area represents, we have resolved to leave unobstructed the main

mobility corridors and keep, as an asset to be protected, productive areas, represented by Large Commercial/Industrial/Business areas.

### 5.1.2 ORGANIZATION OF THE WORK.

#### ON THE SPACE:

By this main components:

Island: This is a perimeter designed as the area where the guidelines are to be applied.

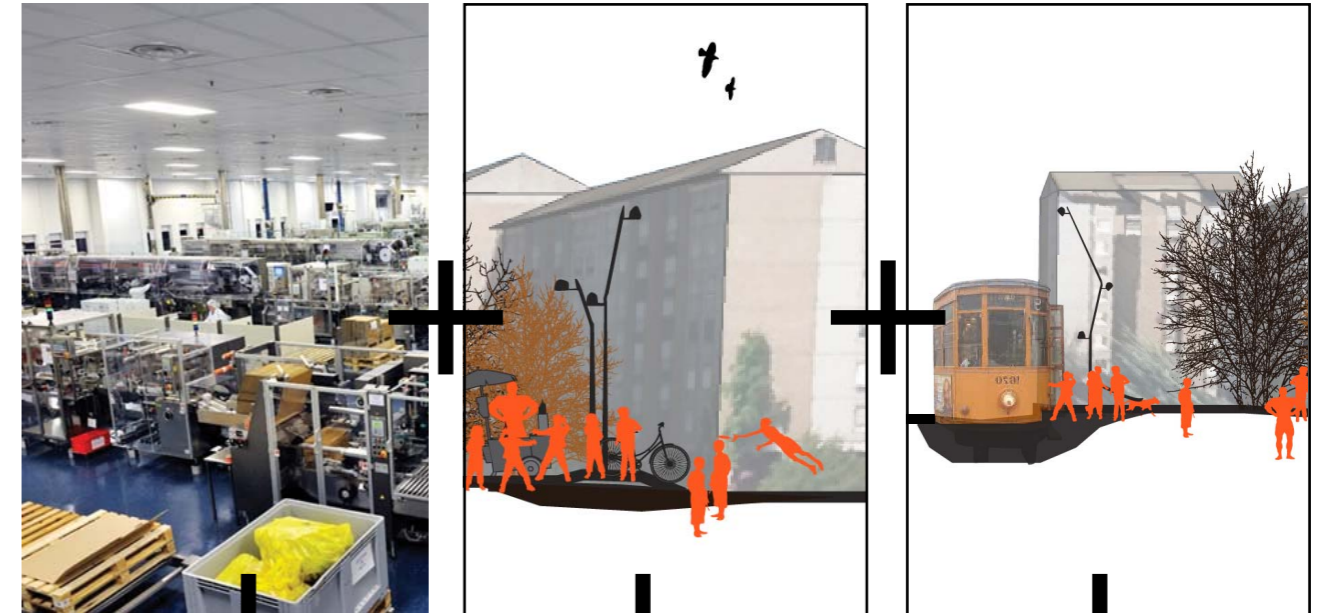
Slow Mobility Zones: areas where mobility will be reduced to priorities pedestrian and bike mobility, improving the use of the public space.

ATU & Areas of Opportunity: Areas taken from the PGT and Town Planning Design Workshop of the *Politecnico di Milano*, that reinforce the Public Space, activities and connections of the East, as well as bringing new residents to make use of these installations.

Public Spaces: Defined during the Current Situation phase.

Cascine & Agriculture network: Defined during the current situation phase.

Fast Mobility Zone and Industrial/Commercial & Business: With an inverse strategy to the Slow Mobility Zones, these will be productive areas with high dependency on a fast connection to main mo-



bility corridors.

Car Network: Here the configuration of the roads is to be evaluated and re-designed.

Car Mobility System: As noted during the conclusion phase, there are no public transport reinforcement recommendations in the guidelines.

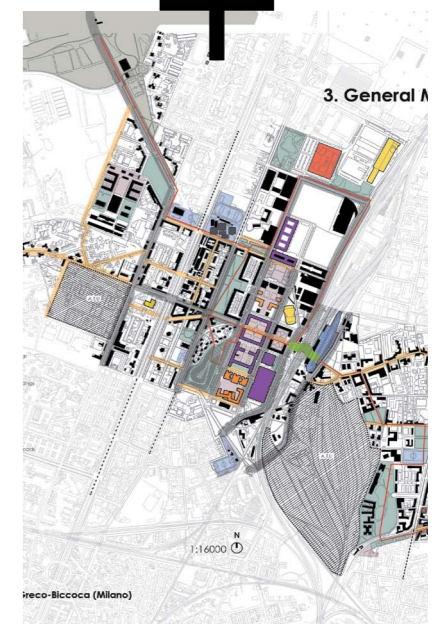
We limit ourselves to place the extended network of public transport (current + PGT

provisions).

Bike/Pedestrian Network: Bikes and pedestrian paths are the key in the guidelines for the connection of all the green and slow peripheral system.

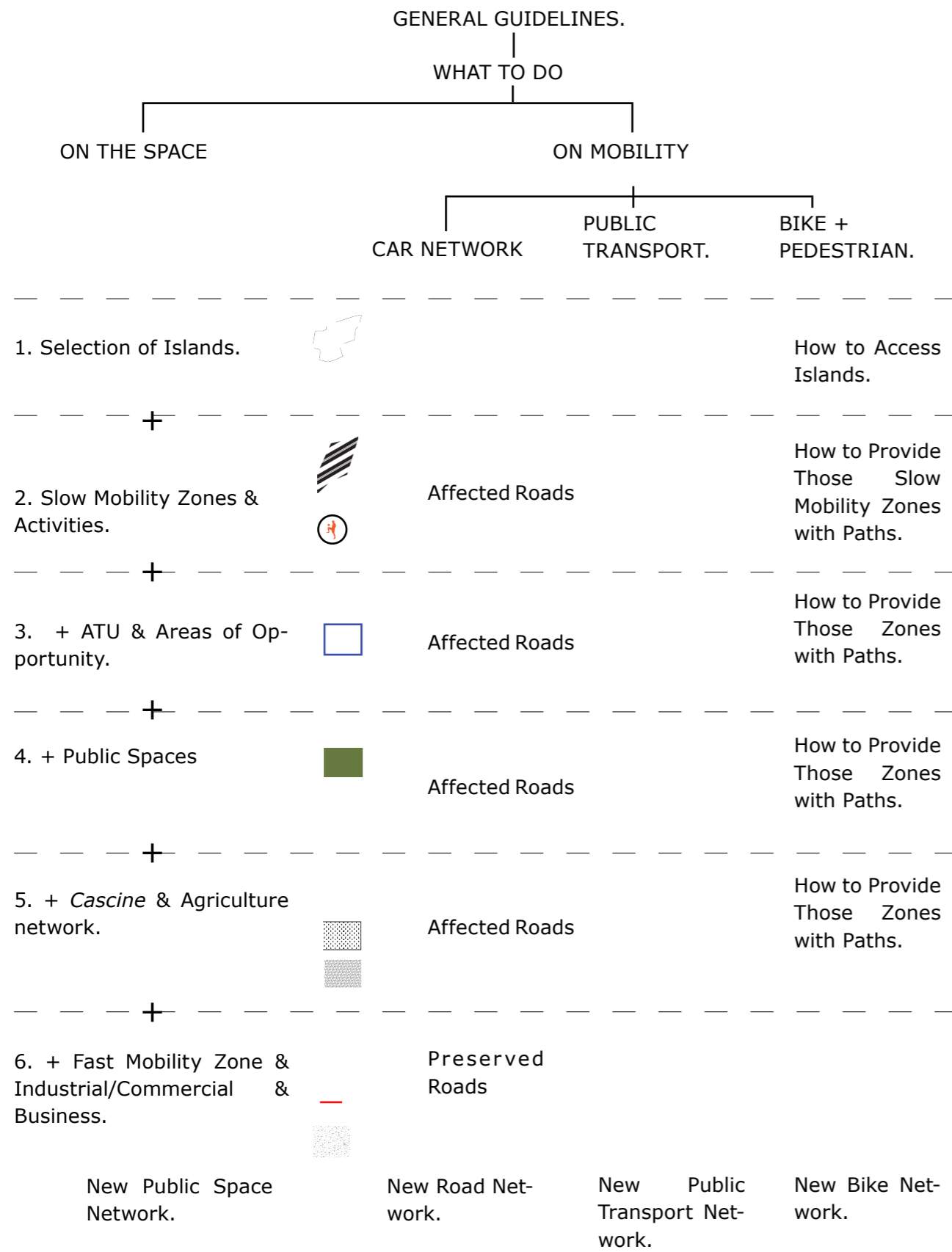
#### PILOT CASE:

An example is given of implementation of the guidelines. We have decided to present the creation of a masterplan in *Greco Bicocca*.



# 5.2 GUIDELINES.

## 5.2.1 GUIDELINES STEP BY STEP.



### SELECTION OF ISLANDS.

#### Why Islands?

As an outcome of the study, it is clear that there are 4 sectors with a different identity strong enough to be developed independently. This is important because:

PGT idea of City.

-As seen in the PGT idea of city, should be reinforcing local identities. The island idea serves this propose.

Size of the study area.

-As the study area is so big, each island provides us with the opportunity of developing a Masterplan for each. Facilitating the implementation of the guidelines.

Not Limits.

-These islands, however, are not made with specific limits, since they simply help us to develop our guidelines. This is a key issue, since the system will grow in time,

connecting all islands with a common peripheral network and completing the system.

#### Which are this islands?

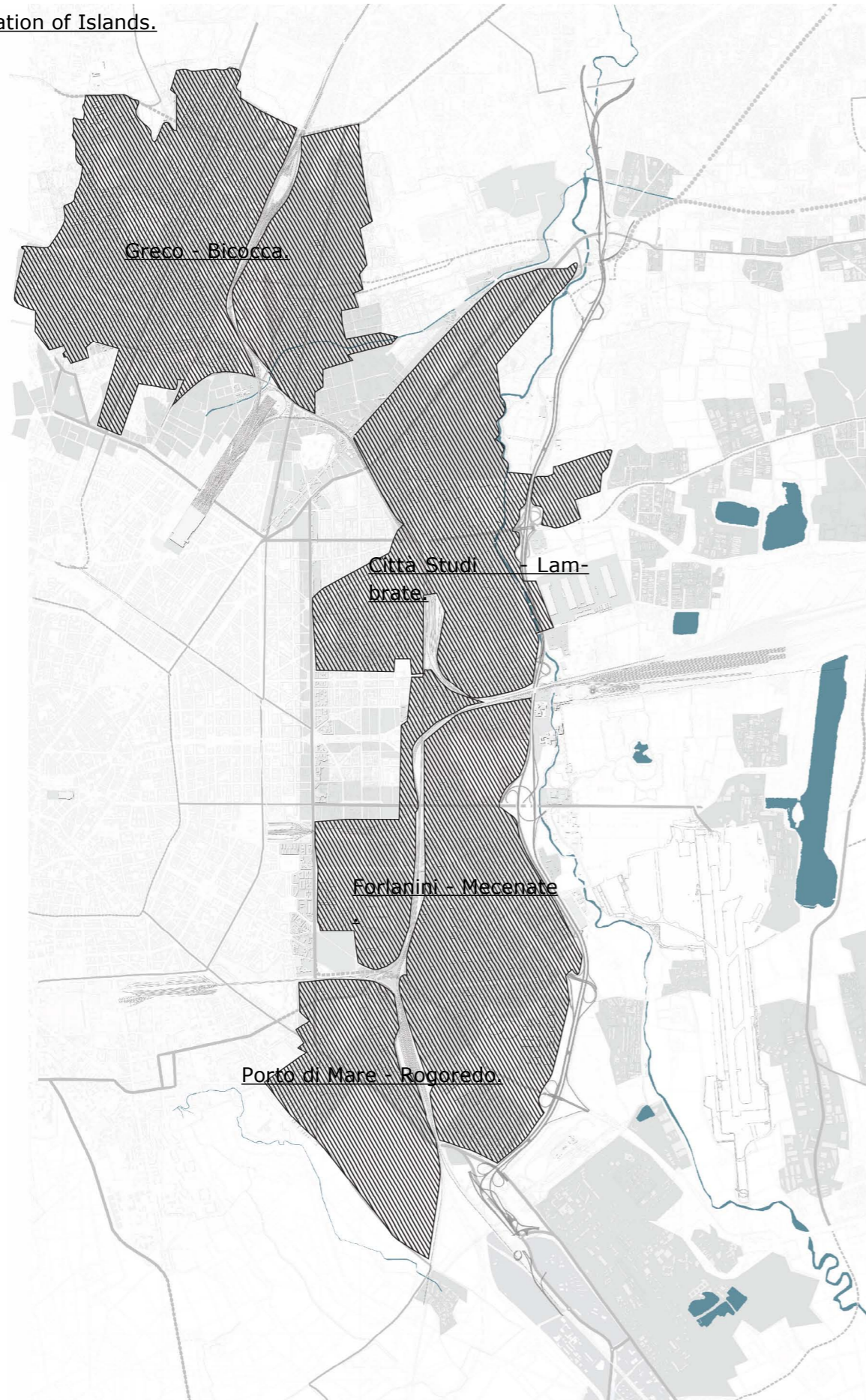
Greco - Bicocca.  
Città Studi - Lambrate.  
Forlanini - Mecenate.  
Porto di Mare - Rogoredo.

#### Maps to be shown:

-Location of the Islands.



Location of Islands.



## +SLOW MOBILITY ZONES & ACTIVITIES.

GENERAL GUIDELINE.

Create Slow-Mobility Zones on dense residential areas with high presence of services and public space.

### Slow Mobility.

Inside each island, there is an intention of converting spaces that are residential and of strong public character to prioritize 'slow mobility', that is to say, pedestrian and bike mobility.

This can be achieved by:

- Creating a network of safe-crossing barriers on roads.
- Creating an interconnected network of bike paths along routes.

Providing this network with amenities and enough public space/ activities in between, so that this network can be used.

### What is taken in consideration for the creation of such system?

- Residential location and density.
- Main activities.

### Maps to be shown:

- SPACE.
- Slow Mobility Zones.
- Repercussion on Islands.

SLOW MOBILITY



- ▨ Slow-Mobility Zones.
- Islands.

REPERCUSSION ON ISLANDS.

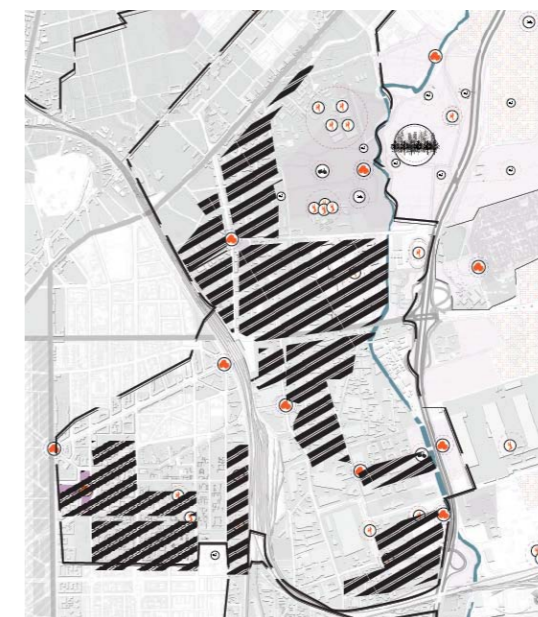
GRECO - BICOCCA.

Centers this zone in Biccocca Project, extending its limits to include access to *Parco Nord* and *Naviglio Martesana*.



CITTÀ STUDI - LAMBRATE.

Along university campuses and Lambrate's Residential Area.



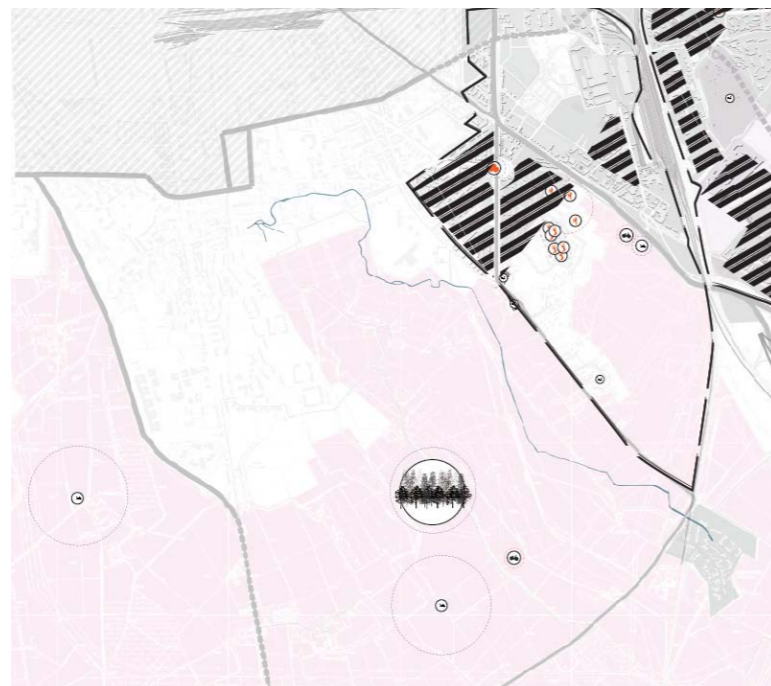
MECENATE-  
FORLANINI.

On residential areas.



PORTO DI MARE-  
ROGOREDO.

On residential areas.



**+ATU & AREAS OF OPPORTUNITY.**

GENERAL GUIDELINE.

Use ATU and Areas of Opportunity to fill in spaces between Slow Mobility Zones and reinforce a Network that prioritizes pedestrian Mobility and services.

**ATU added as reinforces of the peripheral system.**

**Maps shown:**

SPACE.

Slow Mobility Zones are good for visitors and those who inhabit the islands, however, if an integrated system is to be pursued, then the ATU and Opportunity areas, that currently are gray spaces are the perfect links. They can be densified and equipped with new services, depending of the area.

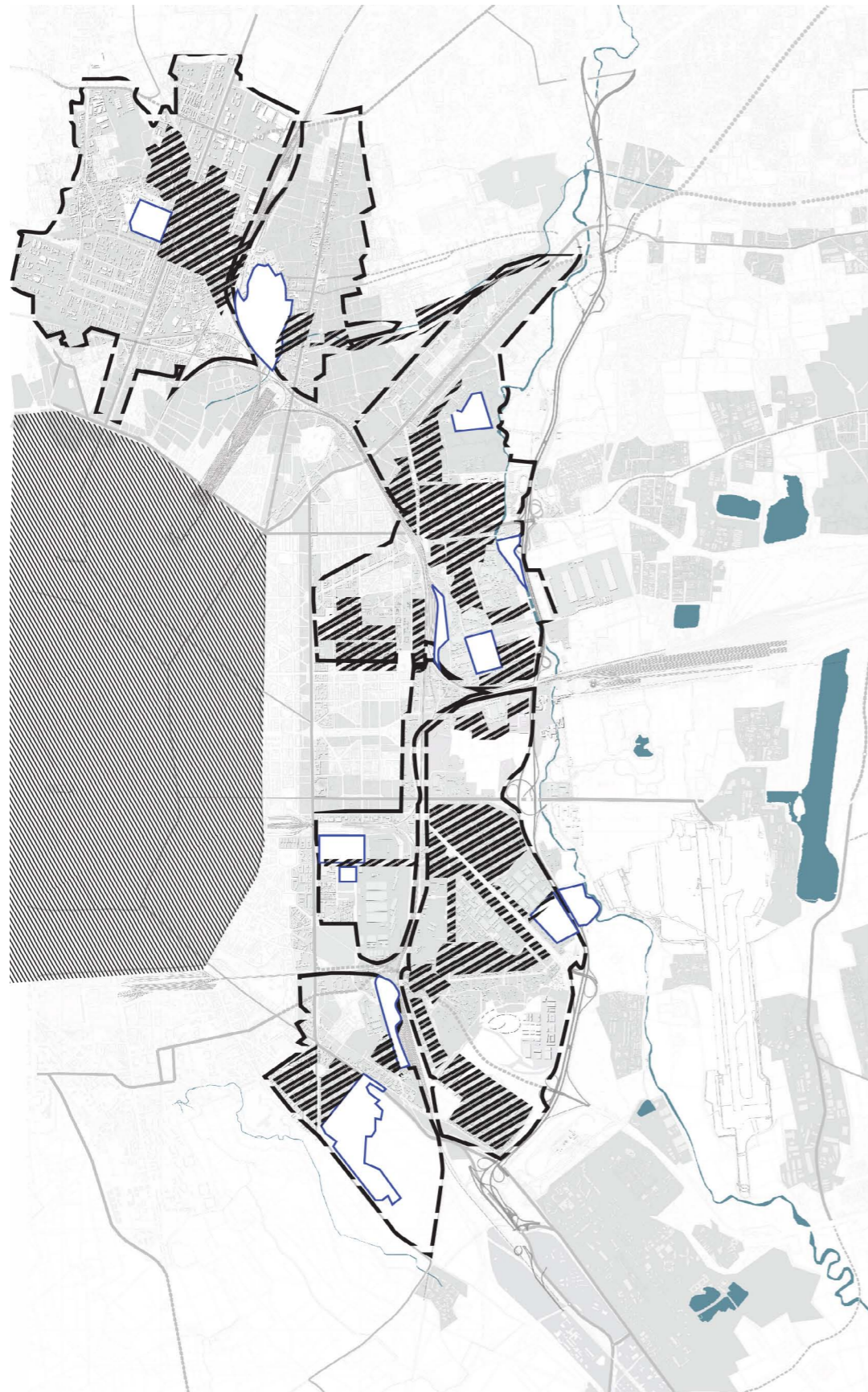
+ ATU & Areas of Opportunities.

-Repercussion on Islands.

**What is taken in consideration for the creation of such system?**

-ATU and Areas of Opportunity.

+ ATU & AREAS OF OPPORTUNITIES.



Slow-Mobility Zones.
  ATU and Opportunity areas
  Islands.

REPERCUSSION ON ISLANDS.

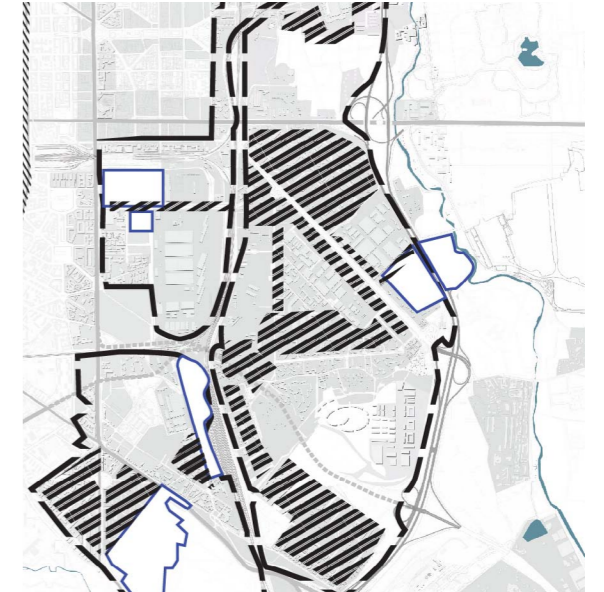
GRECO - BICOCCA.

*ATU Scalo Greco - Bicocca* joins two Slow Mobility Zones.



MECENATE- FORLANINI.

Slow Mobility Zones reinforced on three sides.



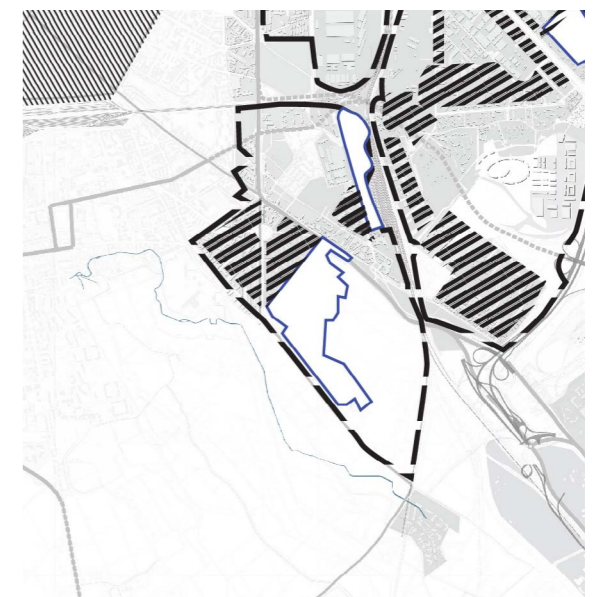
CITTÀ STUDI - LAMBRATE.

*Lambrate - Città Studi* Slow Mobility is reinforced in 4 sides.



PORTO DI MARE-ROGOREDO.

*ATU Porto di Mare Rogoredo* connects with Rogoredo -Mecenate Island



**+ PUBLIC SPACES.**

GENERAL GUIDELINE.

**Expand the system to include existing and projected parks.**

**The space becomes a system.**

When parks are added, we can start to see patterns along the space that suggest us the best paths to follow, when we need to interconnect the system.

**What is taken in consideration for the creation of such system?**

-Public Space, Existing and Projected by the PGT.

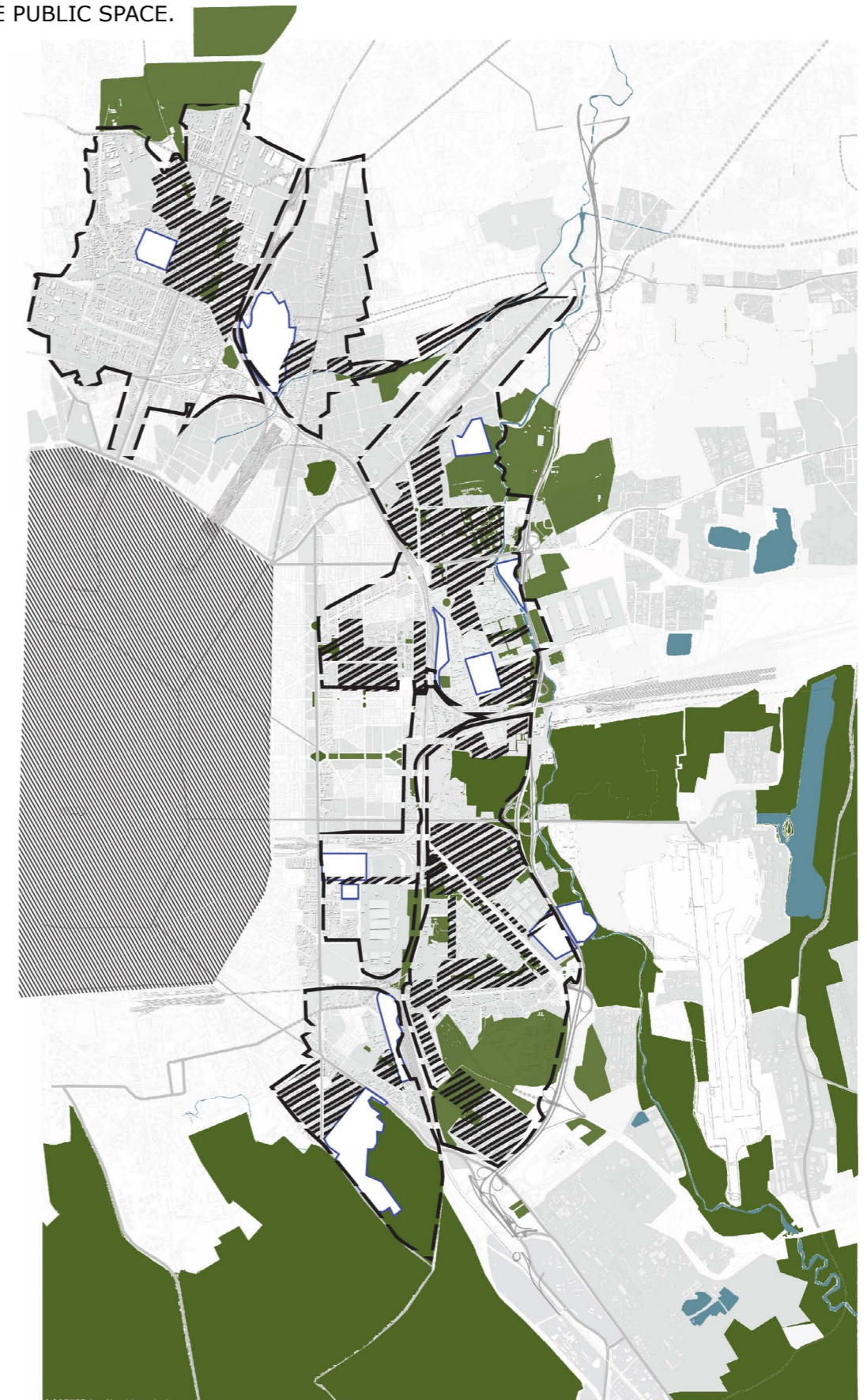
**Maps shown:**

SPACE.

-Slow Mobility Zones + ATU & Areas of Opportunities + The Public Space.

-Repercussion on Islands.

**+ THE PUBLIC SPACE.**



▨ Slow-Mobility Zones.    □ ATU and Opportunity Areas.  
○ Islands.    ■ Green Areas.

REPERCUSSION ON ISLANDS.

GRECO - BICOCCA.

Becomes a Network that Starts in *Parco Nord*, with an epicenter in *Bicocca*, until reaching *Naviglio Martesana* Small Parks reinforce this system.



CITTÀ STUDI -  
LAMBRATE.

This island is now a Slow Mobility Zone, a green large area on the north (*Parco Lambro*) and a chain of parks that go along the river *Lambro* to finally reach Forlanini



MECENATE- FORLANINI.

Becomes a Green Network composed of Parts of *Parco Sud*, *Idroscalo*, *Monluè* and *Santa Giulia*.



PORTO DI MARE-  
ROGOREDO.

Ends as the gate of gigantic *Parco Sud*.



## + CASCINE & AGRICULTURE.

### GENERAL GUIDELINE.

Adding Agriculture and *Cascine*, the space is complete for a peripheral network of pedestrian and bike slow mobility.

#### Agriculture & *Cascine* reinforce the Network

This is a network that, because of the panoramic characteristics, reinforces the green character of the whole network as a leisure and enjoyable space.

#### What is taken in consideration for the creation of such system?

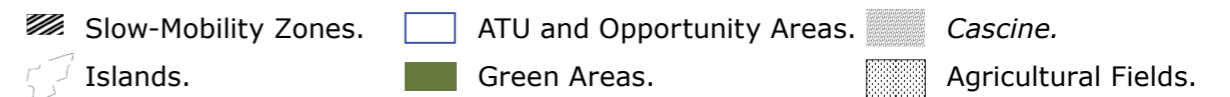
-Agriculture & *Cascine* Space.

#### Maps shown:

SPACE.

- Slow Mobility Zones + ATU & Areas of Opportunities + The Public + Agriculture & *Cascine* Space.
- Repercussion on Islands.

## + AGRICULTURE & CASCINE.



REPERCUSSION ON ISLANDS.

GRECO - BICOCCA.

Though this Island is not very relevant in terms of cascine or agriculture, it ends in the *Lambro System*.



CITTÀ STUDI - LAMBRATE AND MECENATE-FORLANINI.

The gate of *Parco Sud*.



CITTÀ STUDI - LAMBRATE AND MECENATE-FORLANINI.

Create the biggest and most complex network, Including large number of *Cascine* and Agricultural fields.



**FAST MOBILITY ZONES + LARGE COMMERCIAL/INDUSTRIAL/BUSINESS ACTIVITIES.**

GENERAL GUIDELINE.

**Preserving Cluster and Mobility Corridors of Commerce/Business/Industry unobstructed and with direct access to Main Mobility Corridors.**

**Cluster and Mobility Corridors of Commerce/Business/Industry unobstructed.**

Being Milan a city with a large productive base, and being the Main Mobility Corridors key for accessing and exiting the city these spaces must be preserved and left unobstructed.

**What is taken in consideration for the creation of such system?**

- Main Mobility Corridors.
- Large Commercial/Industrial/Business activities map.

**Maps shown:**

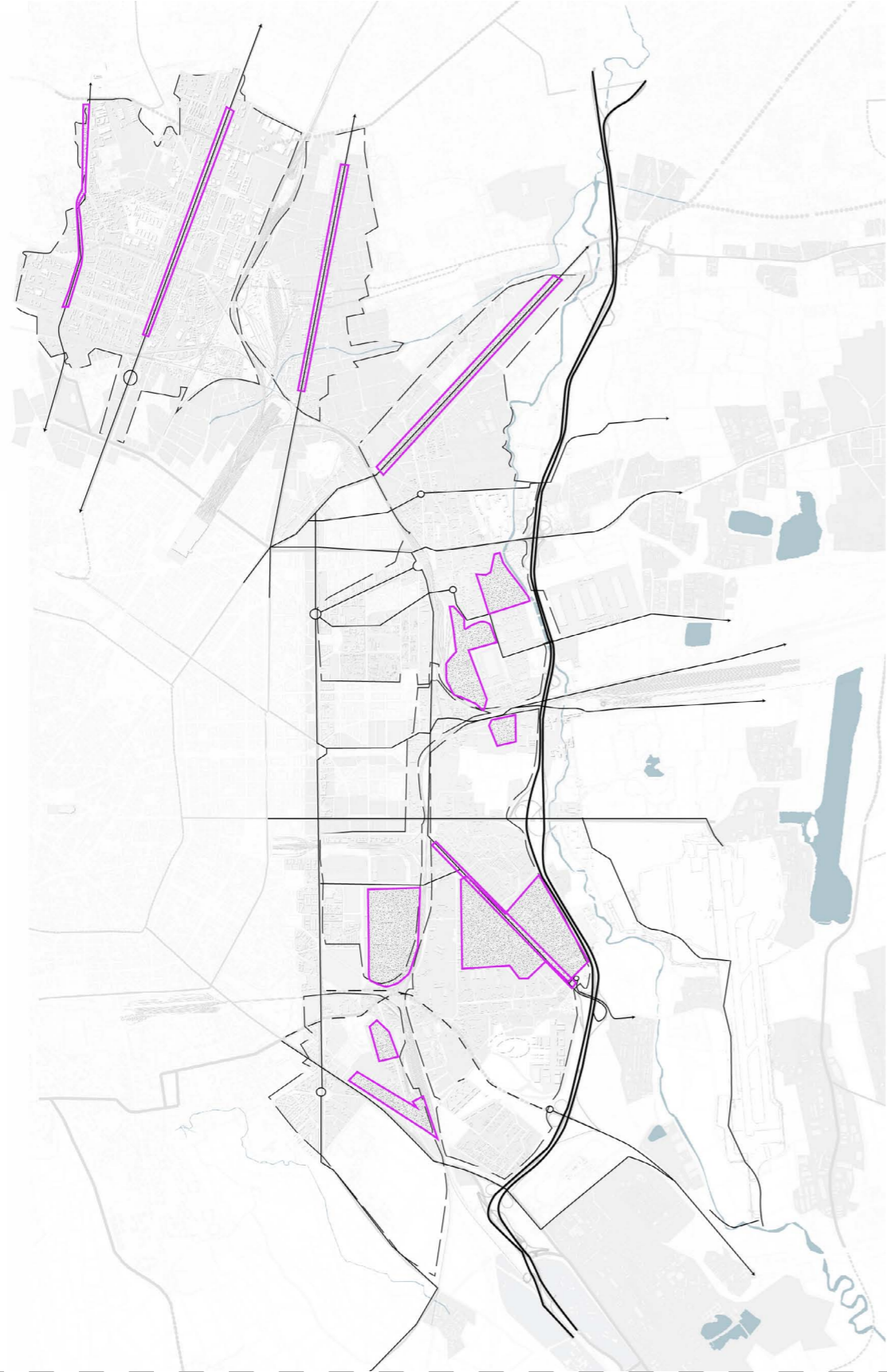
SPACE.

-Fast Mobility Corridors + Large Commercial/Industrial/Business activities.

-Repercussion on Islands.



FAST MOBILITY CORRIDORS + LARGE COMMERCIAL/INDUSTRIAL/BUSINESS ACTIVITIES.



Large Commercial/Industrial/Business activities.
  Islands.
   
 Main Mobility Corridors.

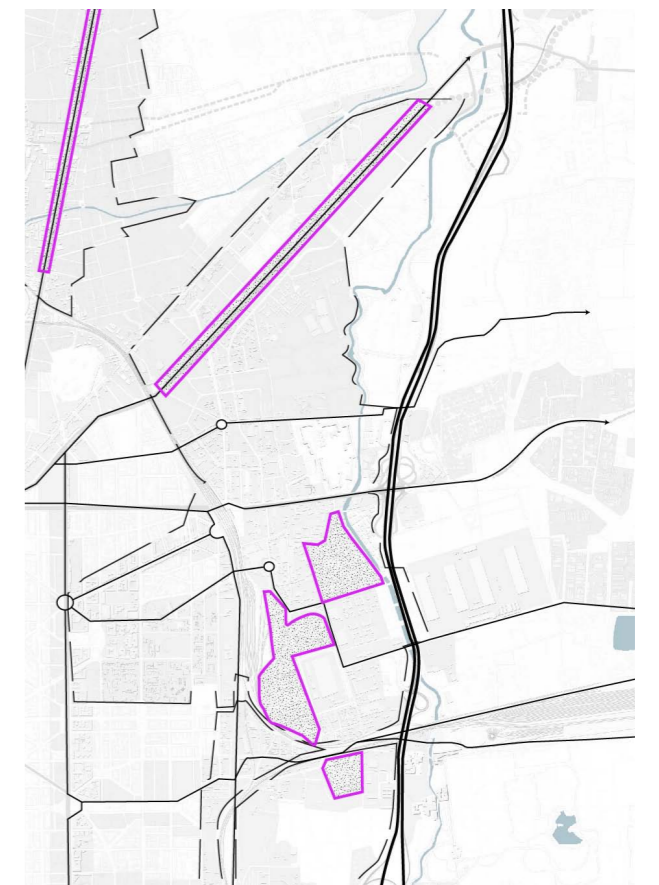
GRECO - BICOCCA.

Along Main Mobility Corridors.



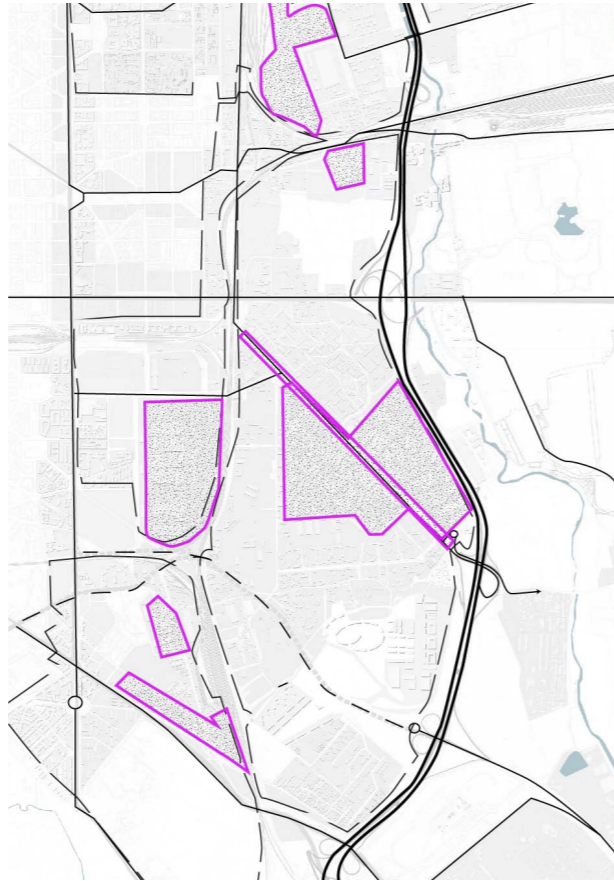
CITTÀ STUDI - LAMBRATE.

On Clusters, near the strategical *Tangeziale Est.*



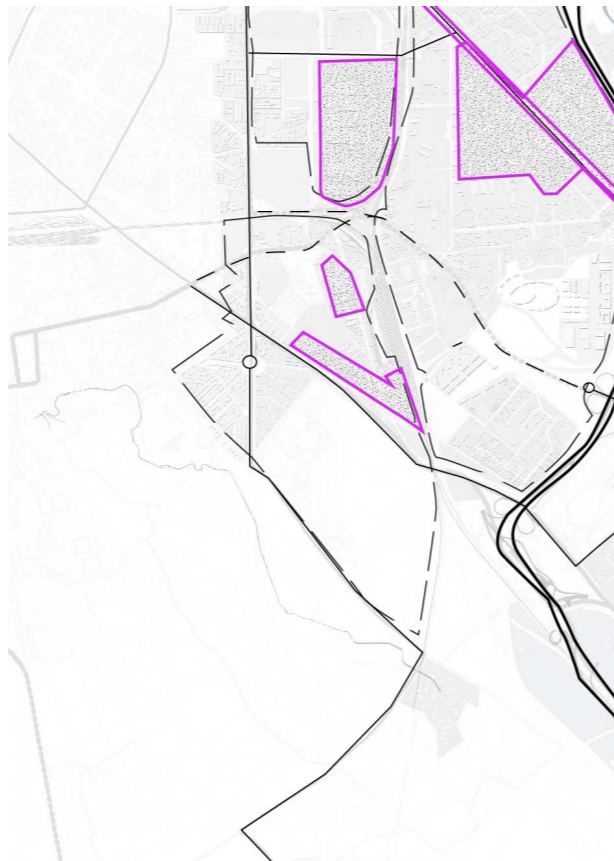
MECENATE-  
FORLANINI.

On Clusters, near the  
strategical *Tangeziale*  
*Est.* And Along Main  
Mobility Corridors.



PORTO DI MARE-  
ROGOREDO.

Along Main Mobility  
Corridors.



**MOBILITY.**

GENERAL GUIDELINE.

**Preservation of car priority in main mobility corridors, but change to pedestrian priority in secondary and local roads, inside slow mobility zones and areas of opportunity .**

**Preservation of main corridors and change of priority in secondary and local network.**

Change in prioritization mean the inclusion of slow mobility measures that will be seen in detail.

**What is taken in consideration for the creation of such system?**

- Road Hierarchy.
- Current Road Network + PGT Provisions.
- Slow Mobility Zones Map.
- ATU & Areas of Opportunity.

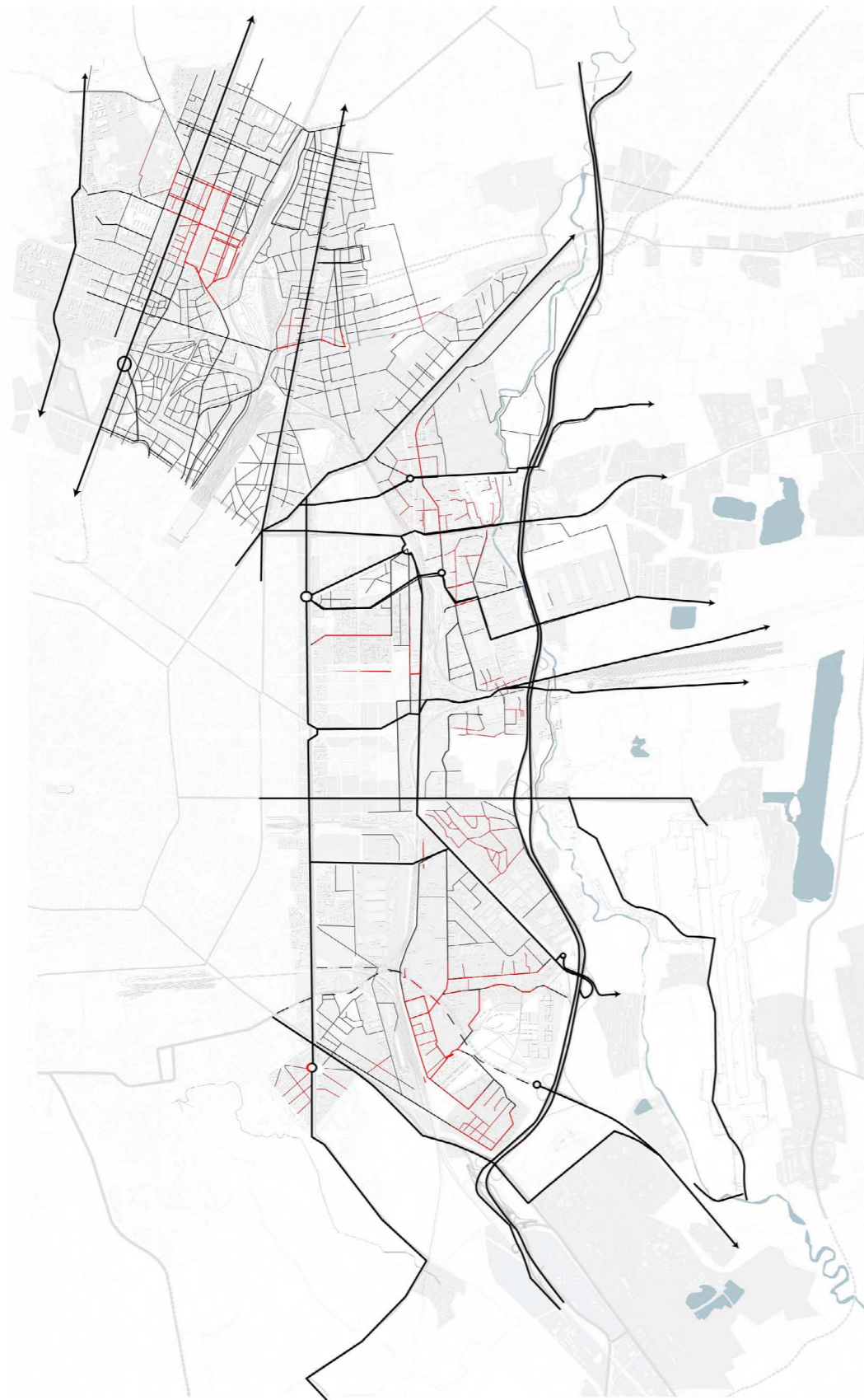
**Maps shown:**

Mobility.

-Roads Affected by Slow Mobility Zones, ATU & Areas of Opportunity.

-Repercussion on Islands.

AFFECTED ROADS.



REPERCUSSION ON ISLANDS.

GRECO - BICOCCA.

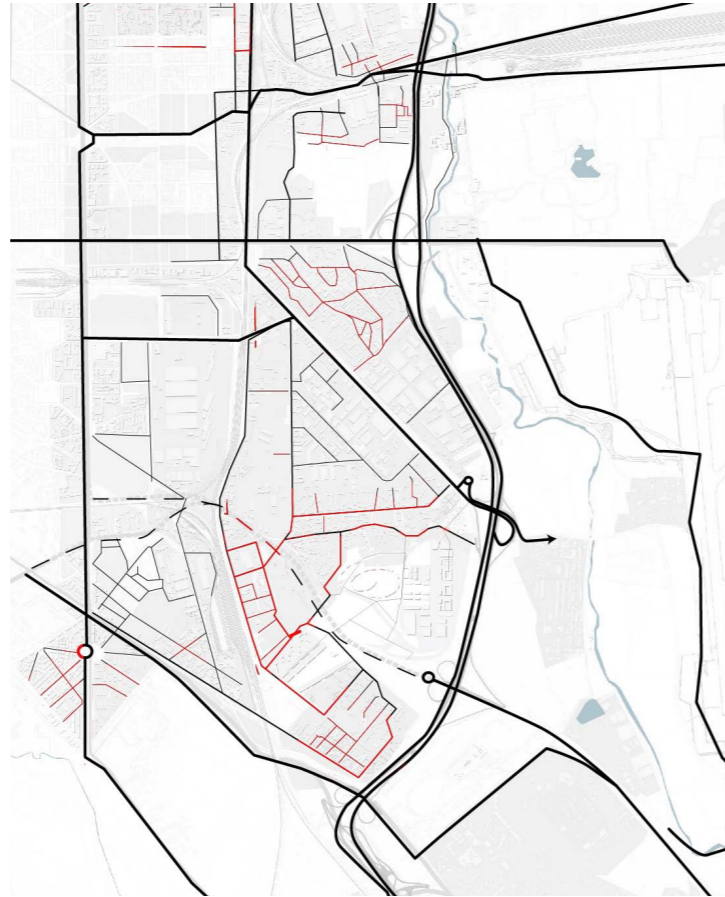


CITTÀ STUDI -  
LAMBRATE.



- Main Mobility Corridors.
- Secondary and Local Roads.
- Affected Roads.

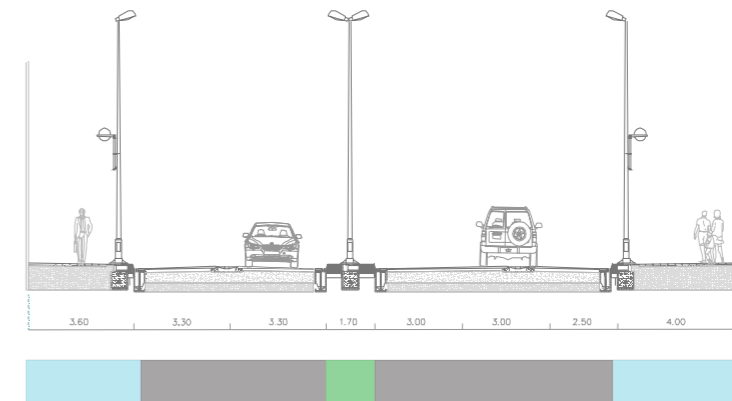
MECENATE -  
FORLANINI.



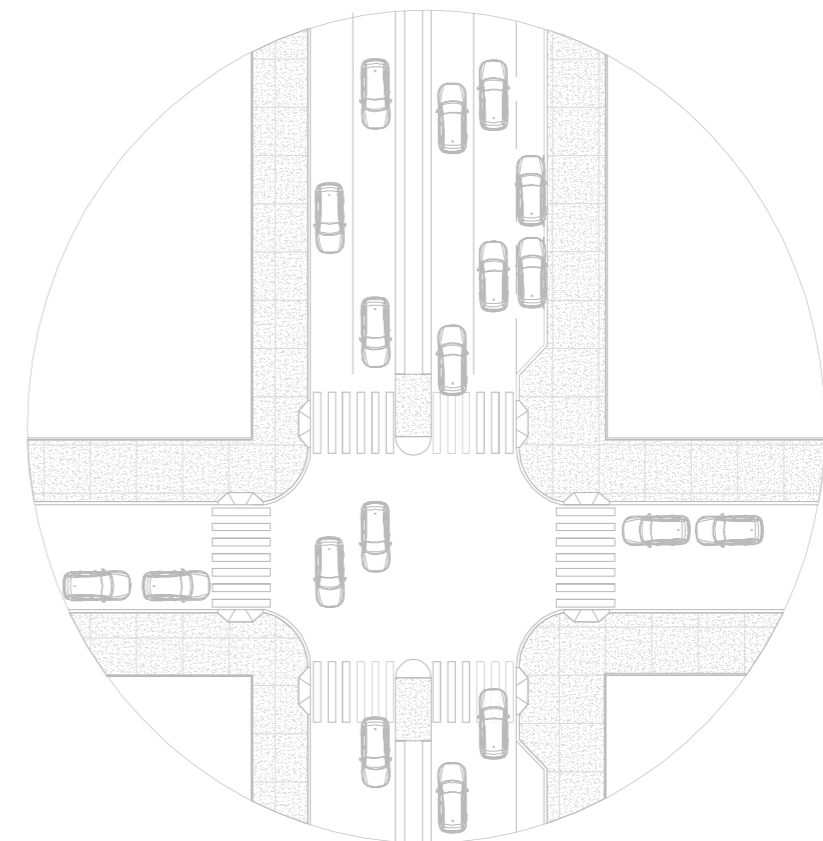
CHANGES IN AFFECTED ROADS.

Non Affected Secondary Roads.

- Pedestrian Sidewalk
- Elevated Sidewalk over
- Bicycle Lane
- Tree/Bush
- Car Priority Street .

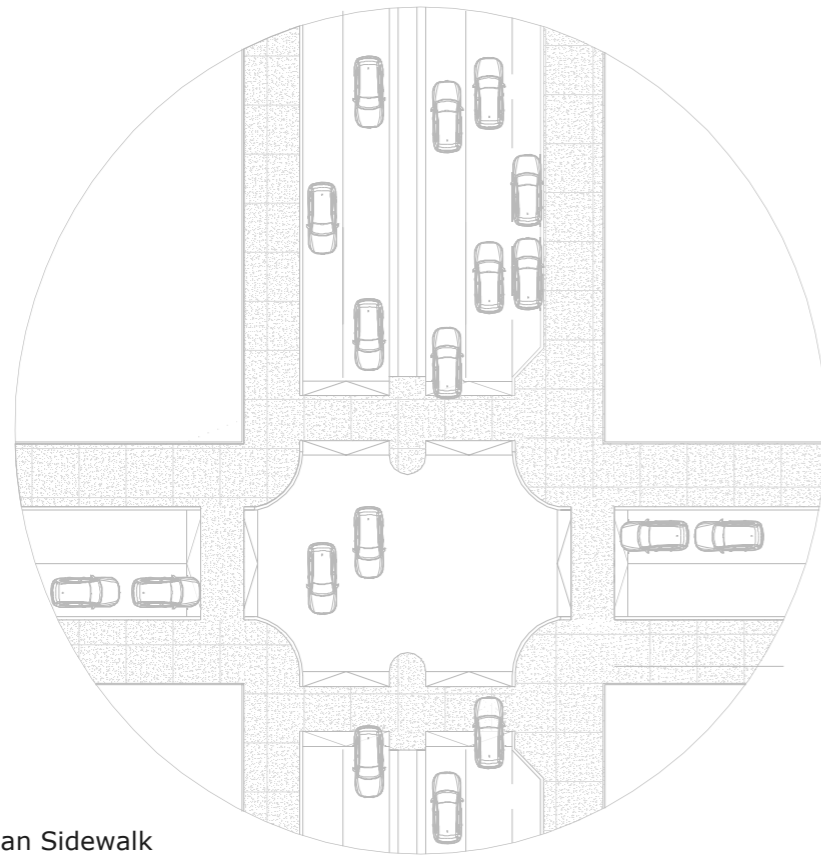
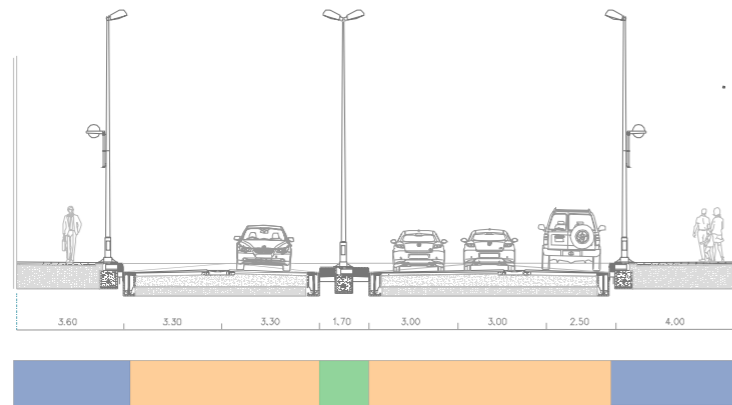


PORTO DI MARE-  
ROGOREDO.



Affected  
Roads.

Secondary  
Roads.

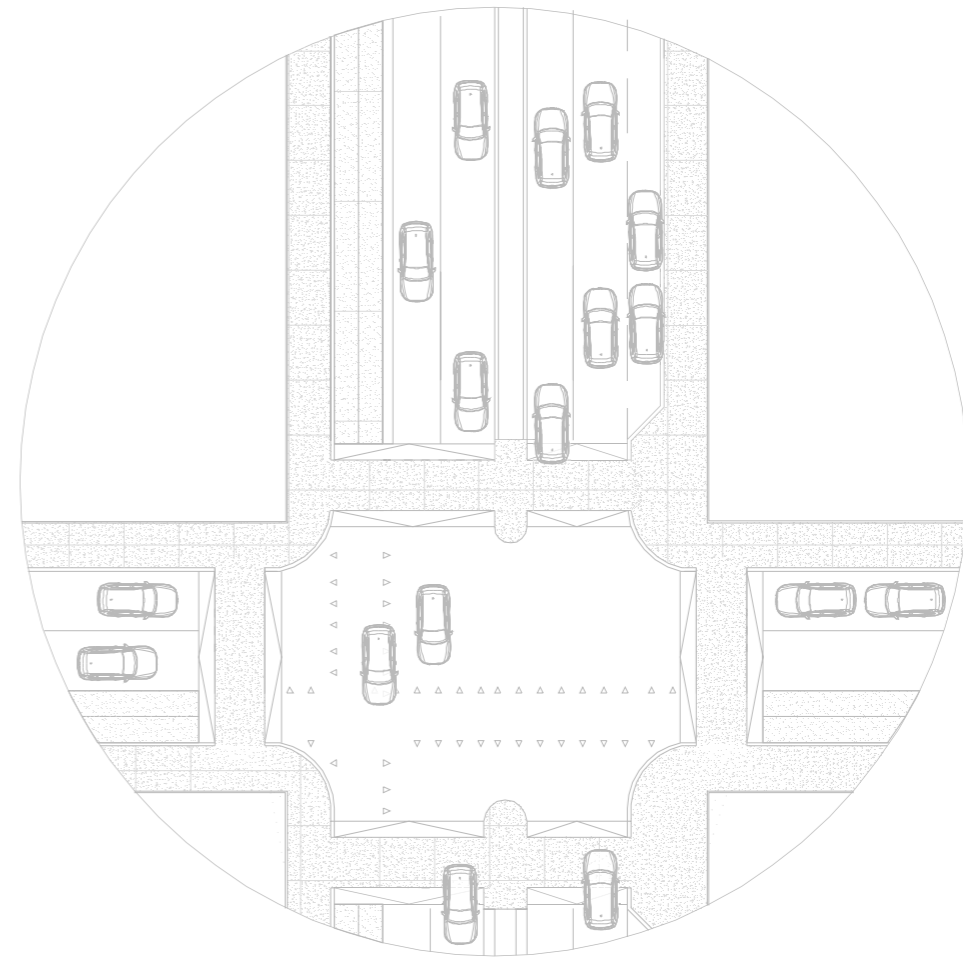


- Light Blue: Pedestrian Sidewalk
- Blue: Elevated Sidewalk over
- Purple: Bicycle Lane
- Green: Tree/Bush

Affected  
Roads with Bike Paths.






Secondary  
Roads with Bike Paths.

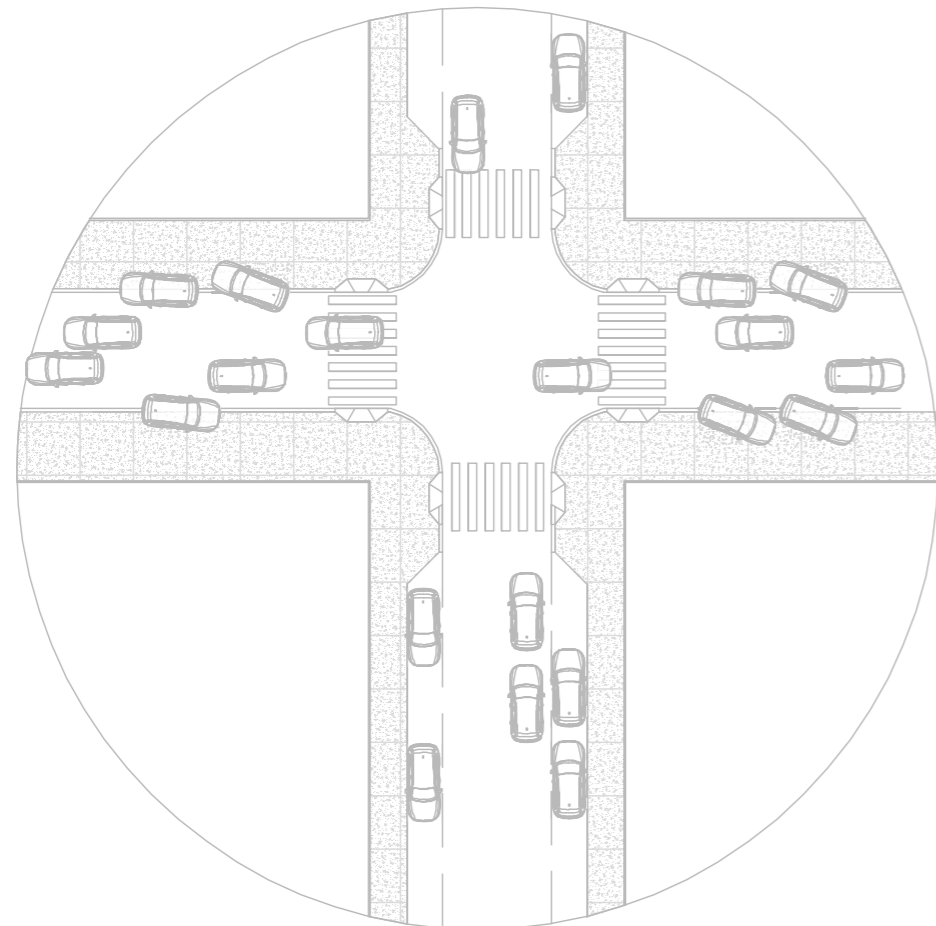
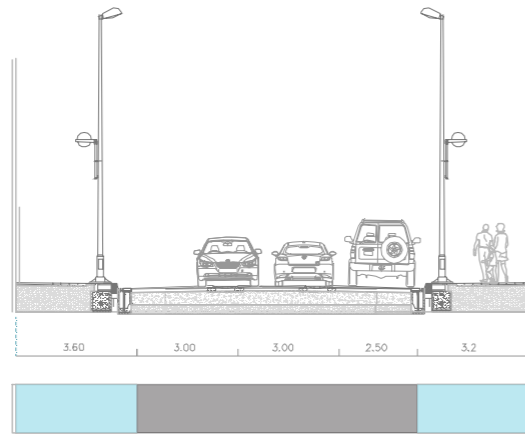
Pedestrian Priority Street








- Light Blue: Pedestrian Sidewalk
- Blue: Elevated Sidewalk over
- Purple: Bicycle Lane
- Green: Tree/Bush

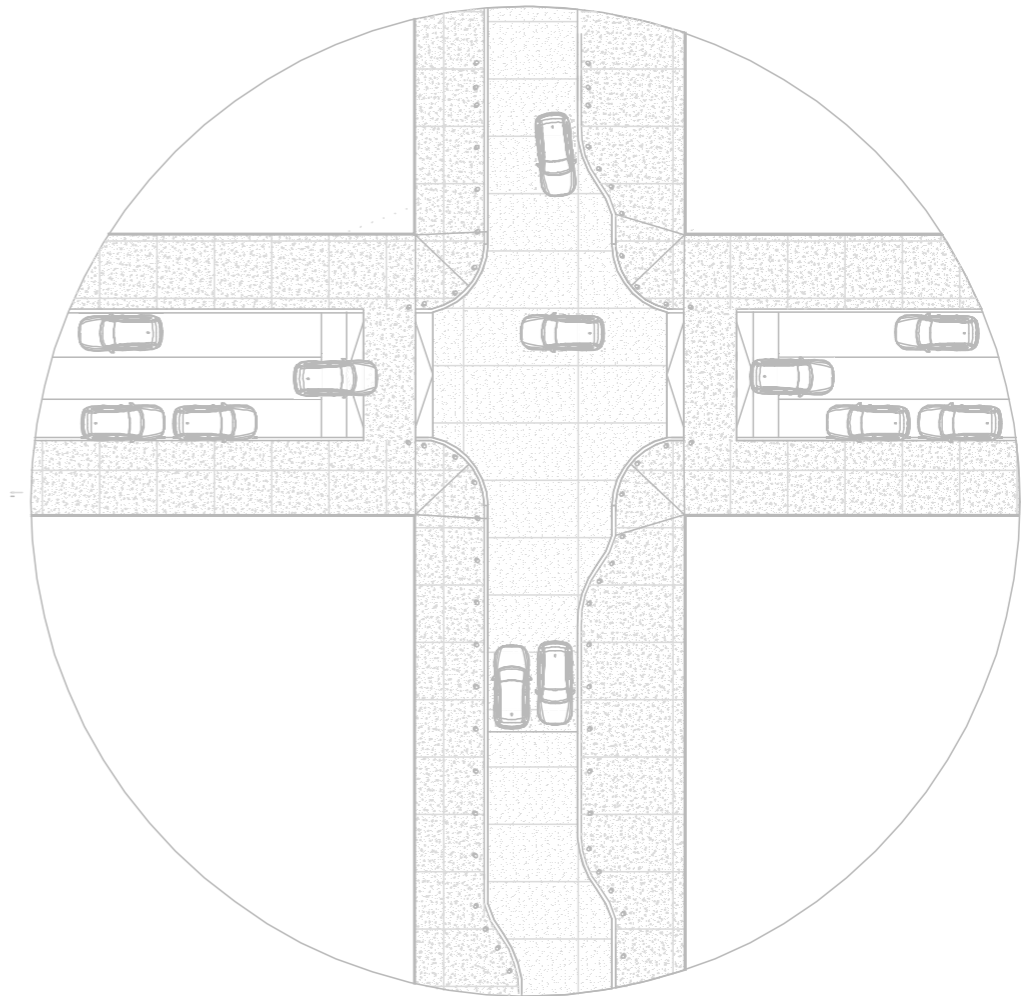
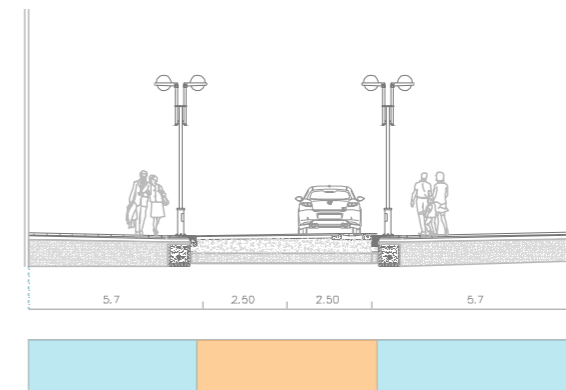
Non Affected Local Roads.

-  Car Priority Street .
-  Pedestrian Sidewalk
-  Elevated Sidewalk over
-  Bicycle Lane
-  Tree/Bush



Affected Local Paths.

-  Pedestrian Priority Street
-  Pedestrian Sidewalk
-  Elevated Sidewalk over
-  Bicycle Lane
-  Tree/Bush



## BIKE PATHS.

### Bike Network

This is a Key network. It takes in consideration the following plans.

- Current Bike Network + PGT Provisions.
- Slow Mobility Zones Map.
- ATU & Areas of Opportunity.
- Cascine & Agriculture.

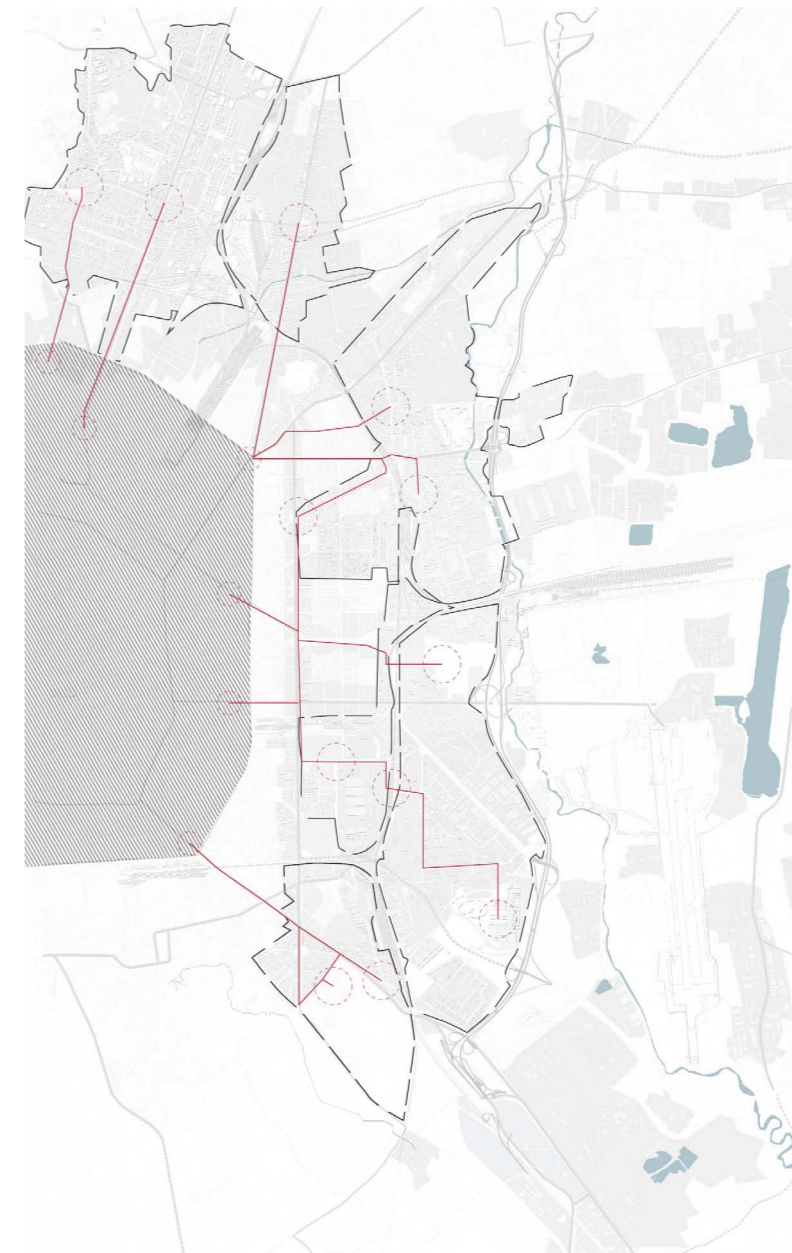
### Maps shown:

- Bike Paths Access to Islands.
- Bike Paths peripheral Network.
- Bike Path Scenery Network.
- Bike Path Complete Network.




## BIKE PATHS ACCESS TO ISLANDS.

### GENERAL GUIDELINE.

**Bike Networks should access the islands via Main Mobility Corridors.**



### REPERCUSSION ON ISLANDS.

-  Consolidated Tissue.
-  Bike Paths.
-  Islands.

**BIKE PATHS PERIPHERAL NETWORK.**

GENERAL GUIDELINE.

**Interconnect the islands with  
bike paths, creating a peripheral  
line.**

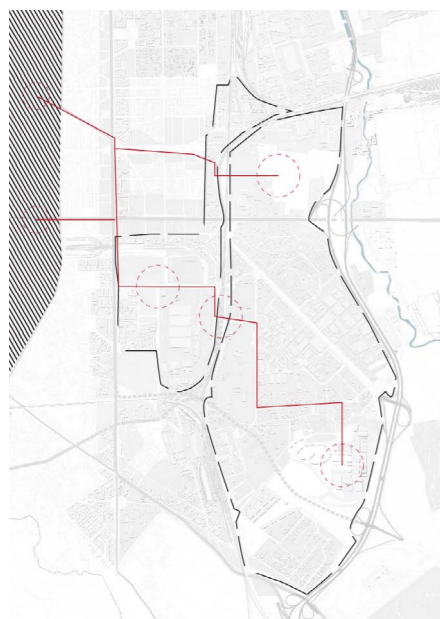
GRECO - BICOCCA.



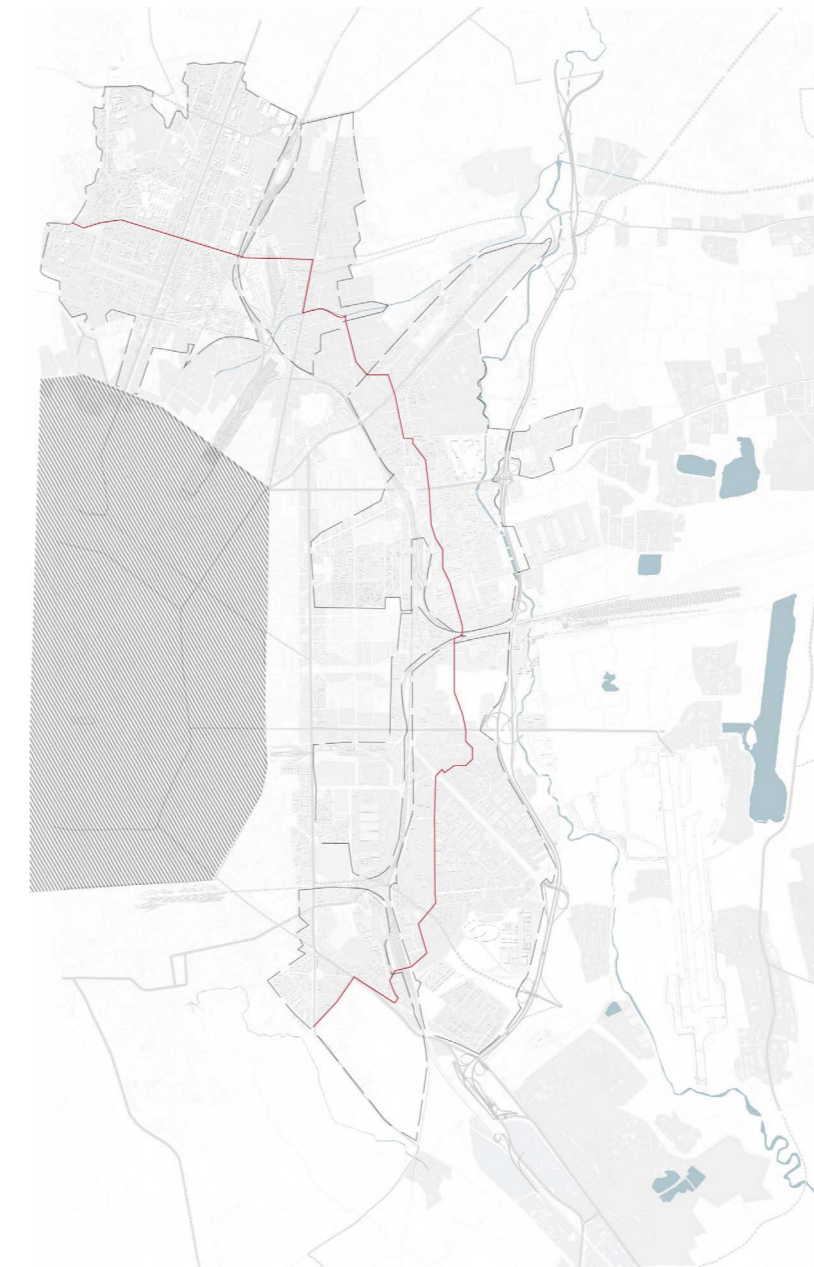
LAMBRATE.



MECENATE/  
FORLANINI



PORTO DI MARE/  
ROGOREDO



REPERCUSSION ON ISLANDS.

- Consolidated Tissue.
- ⊕ Bike Paths.



GRECO - BICOCCA.

Crosses the island in the center, through the densest part, and also the most serviced one.



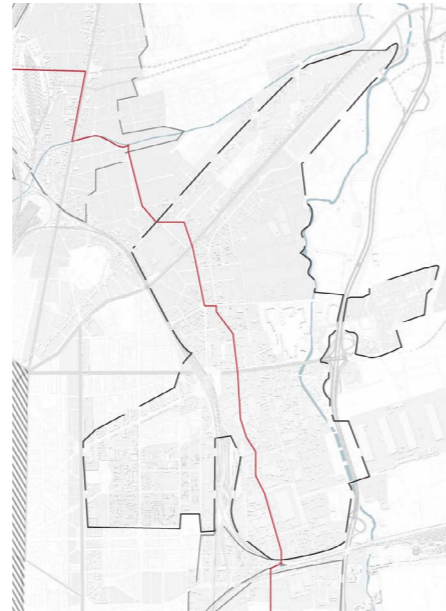
MECNATE - FORLANINI.

Crosses through *Forlanini Park*, and then through the green residential center.



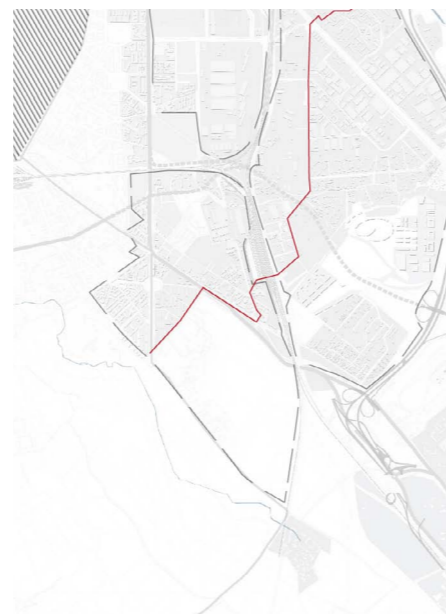
CITTÀ STUDI - LAMBRATE.

Uses a path that crosses main nodal points and the historical center.



PORTO DI MARE - ROGOREDO.

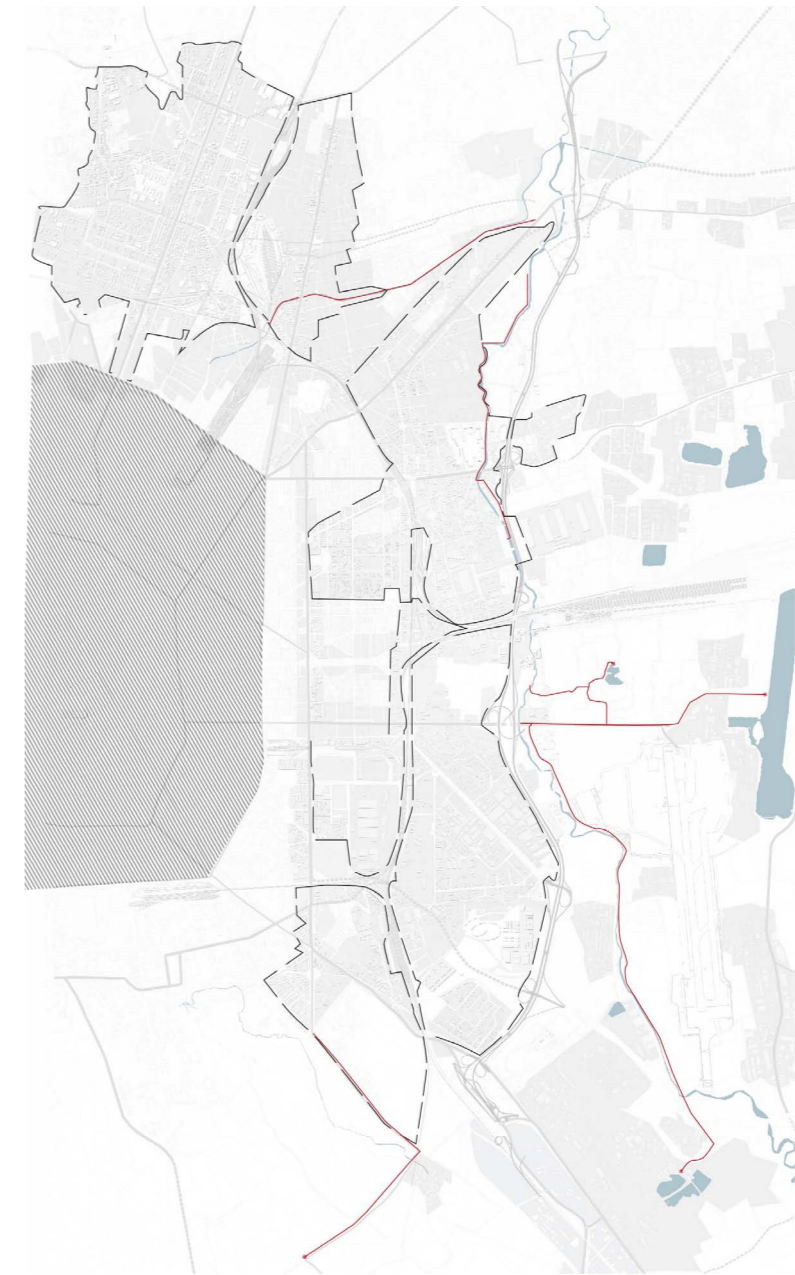
Crosses the rails at *ATU Rogoredo* and through *Porto di Mare*.



BIKE PATH SCENERY NETWORK.

GENERAL GUIDELINE.

Connect using pedestrian and Bike Paths, following areas of special scenery characteristics.



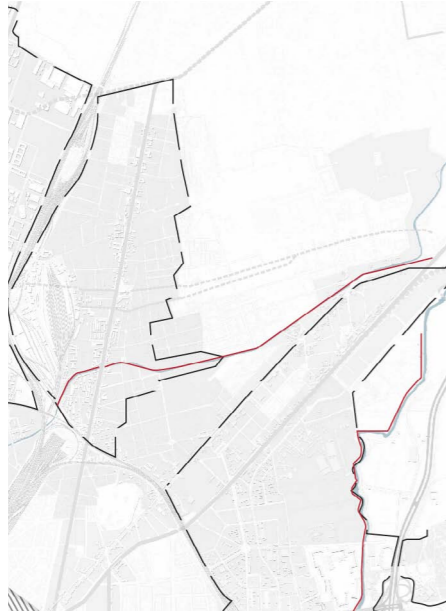
REPERCUSSION ON ISLANDS.

Consolidated Tissue. Bike Paths.

Islands.

GRECO - BICOCCA.

Along *Martesana*  
Canal.



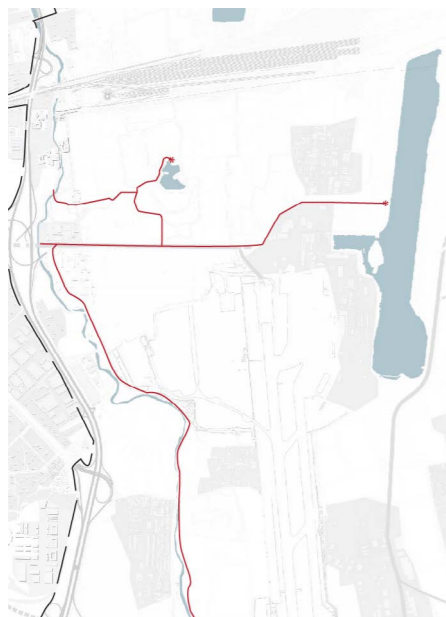
CITTÀ STUDI  
-LAMBRATE.

Along *Lambro* river



MECENATE -  
FORLANINI.

Connecting *Idroscalo*.



PORTO DI MARE-  
ROGOREDO.

Through the Agricul-  
tural Fields of *Parco*  
*Sud*



## BIKE PATH COMPLETE NETWORK.

GENERAL GUIDELINES.

Extend Bike/Pedestrian Net-  
work to include existing and  
projected Bike Network.



REPERCUSSION ON ISLANDS.

Consolidated Tissue.  
Bike Paths.

Islands.

GRECO - BICOCCA.

A thick, expanded Network of Pedestrian/Bike Mobility is the Result.



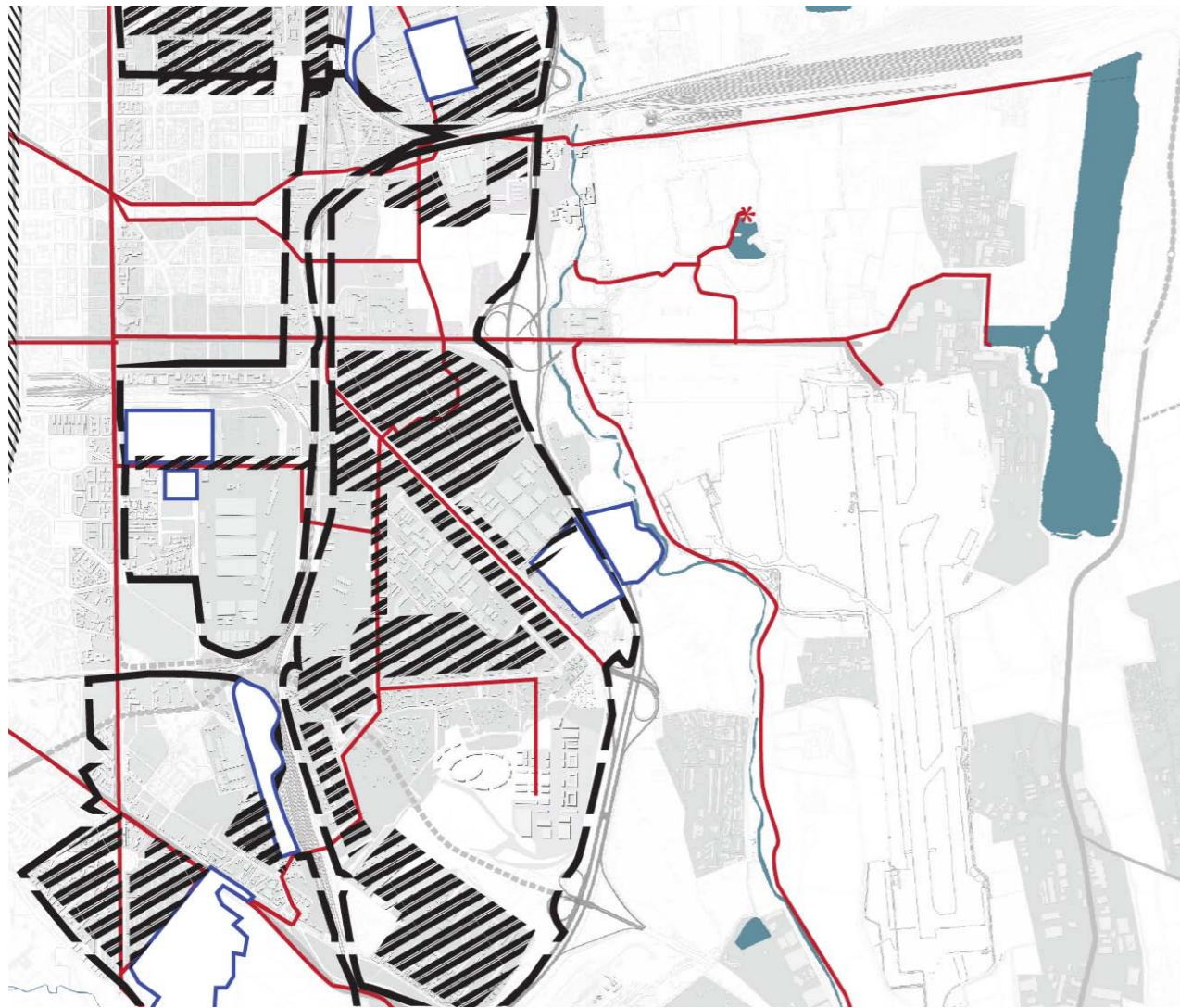
CITTÀ STUDI  
-LAMBRATE.

Lambro Park, The historical Center and The universities are now integrated to a wider Bike/Pedestrian Network.



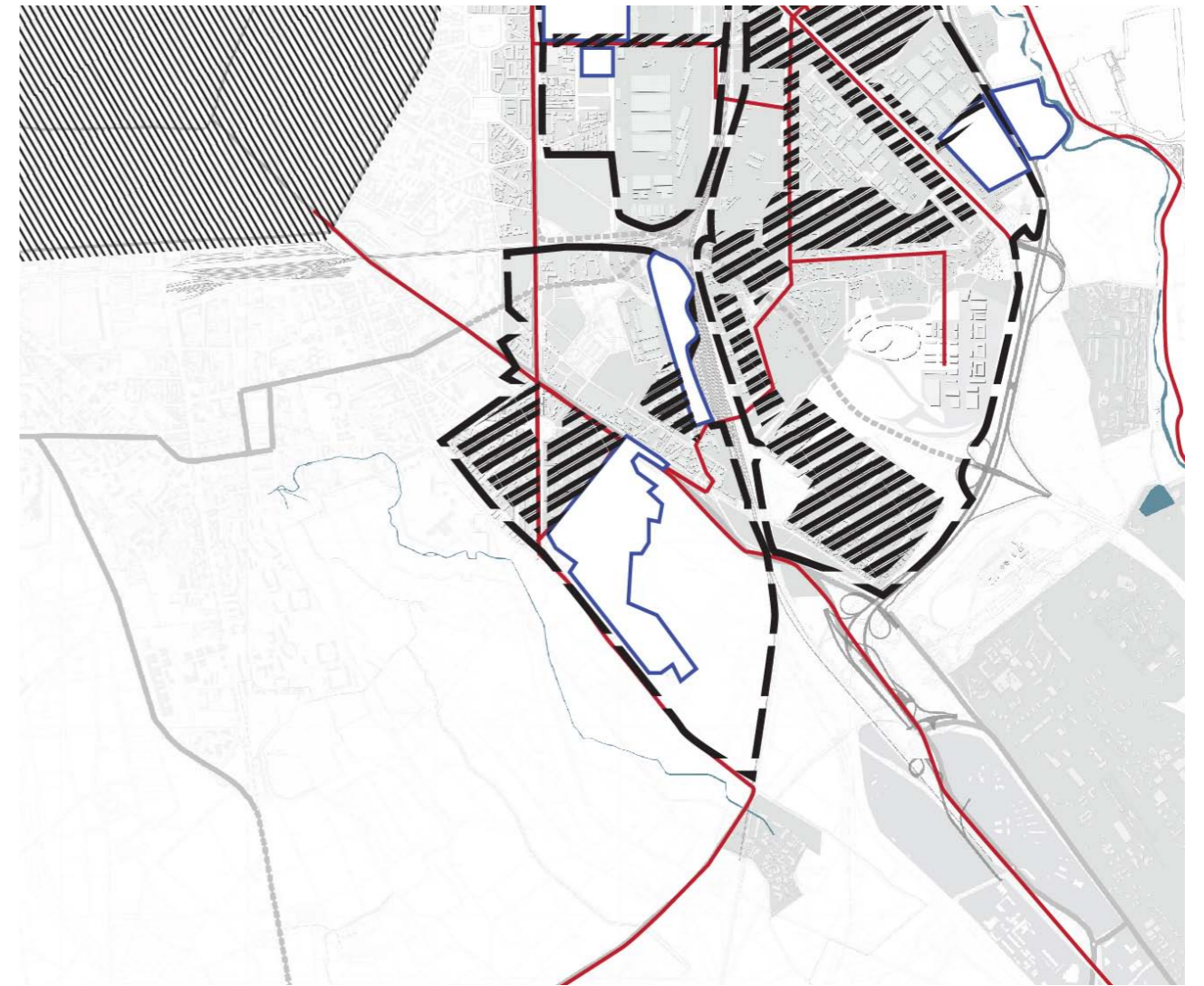
FORLANINI - MECENATE

Becomes a Residential, Slow Mobility sector that also serves as connector to *Forlanini* and *Idroscalo* Parks.



PORTO DI MARE-ROGOREDO.

This is now the connector between Parco *Agricolo Sud* bike Network, and the city of Milan.



## PUBLIC TRANSPORT

### Public Transport Network.

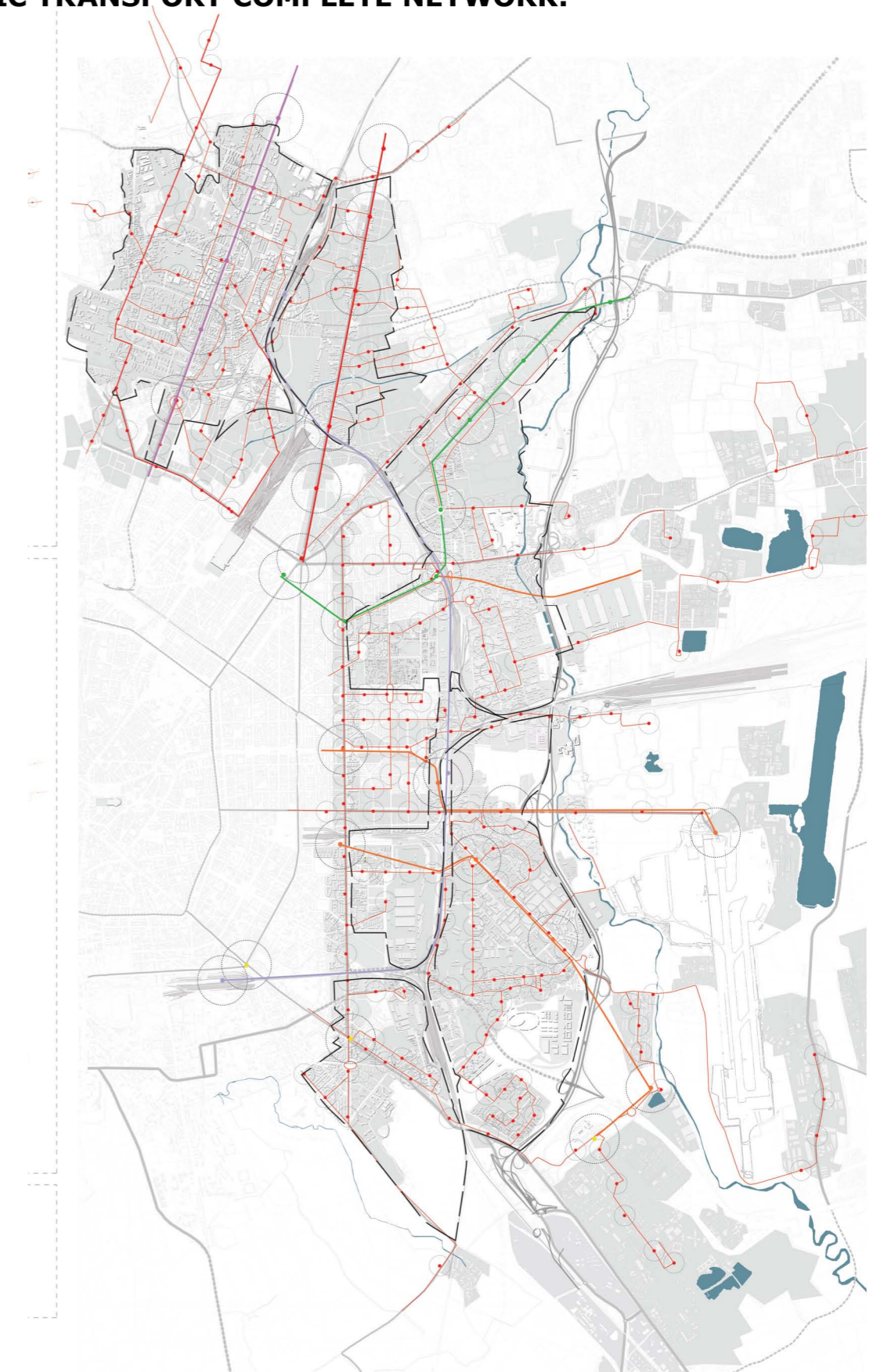
This is a Key network. It takes in consideration the following plans.


-Current Public Transport Network + PGT Provisions.


### Maps shown:

Public Transport Complete Network.

## PUBLIC TRANSPORT COMPLETE NETWORK.



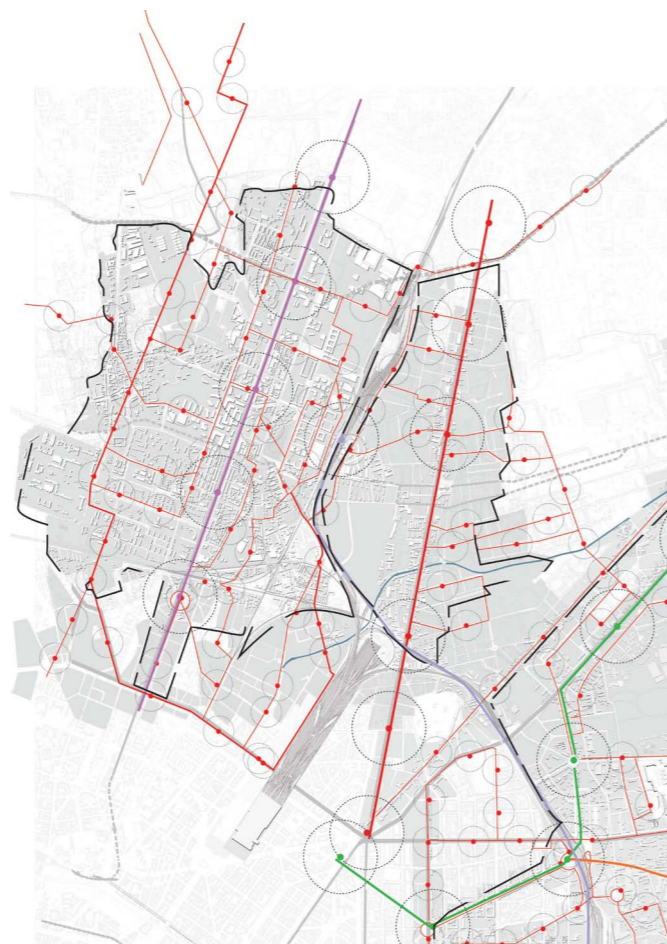
 Metro/Passante Ferroviario.

 Bus/Tram.

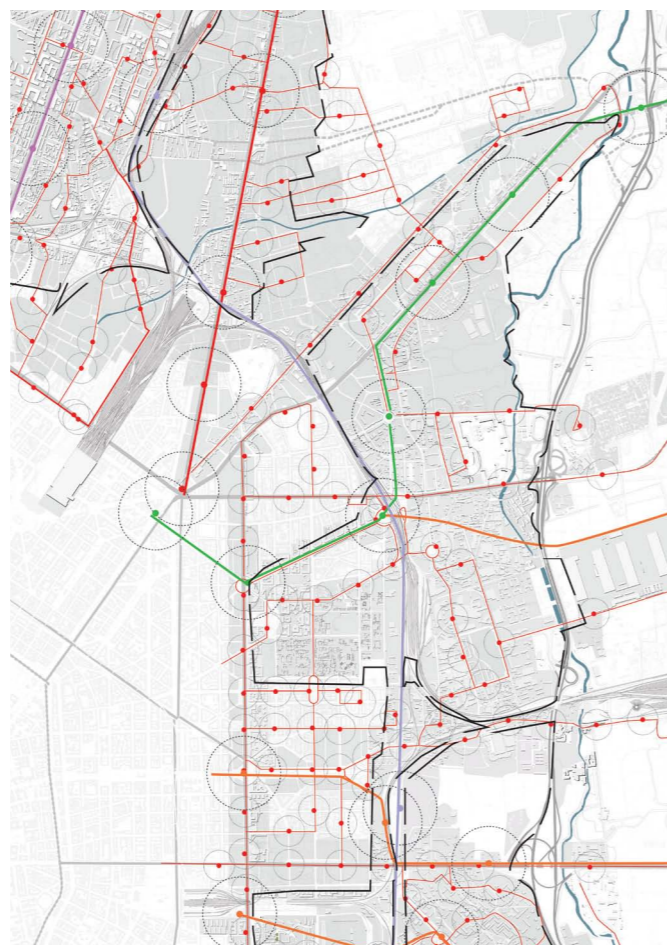
 Islands.

REPERCUSSION ON ISLANDS.

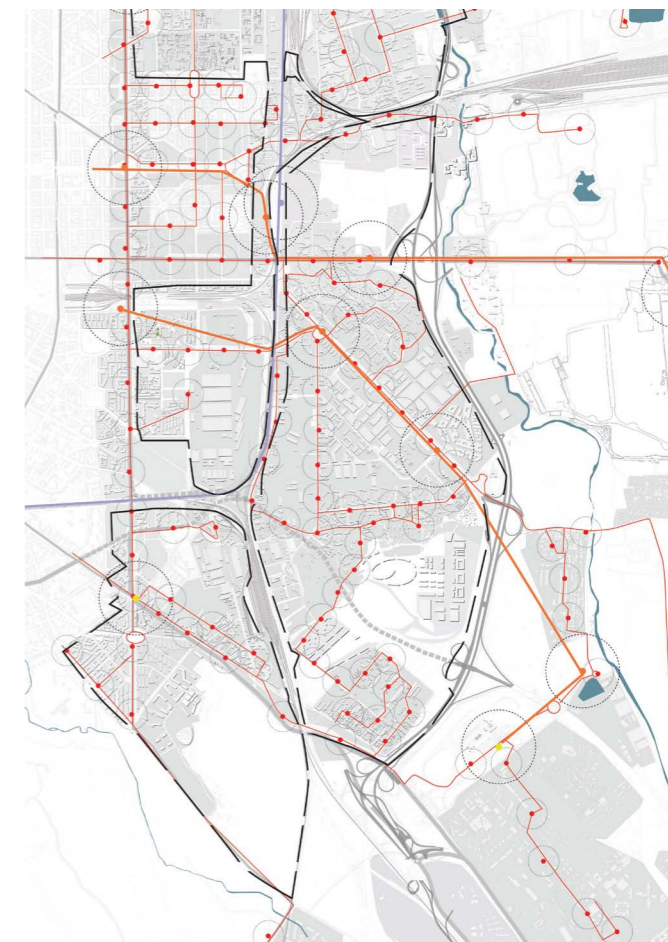
GRECO - BICOCCA.



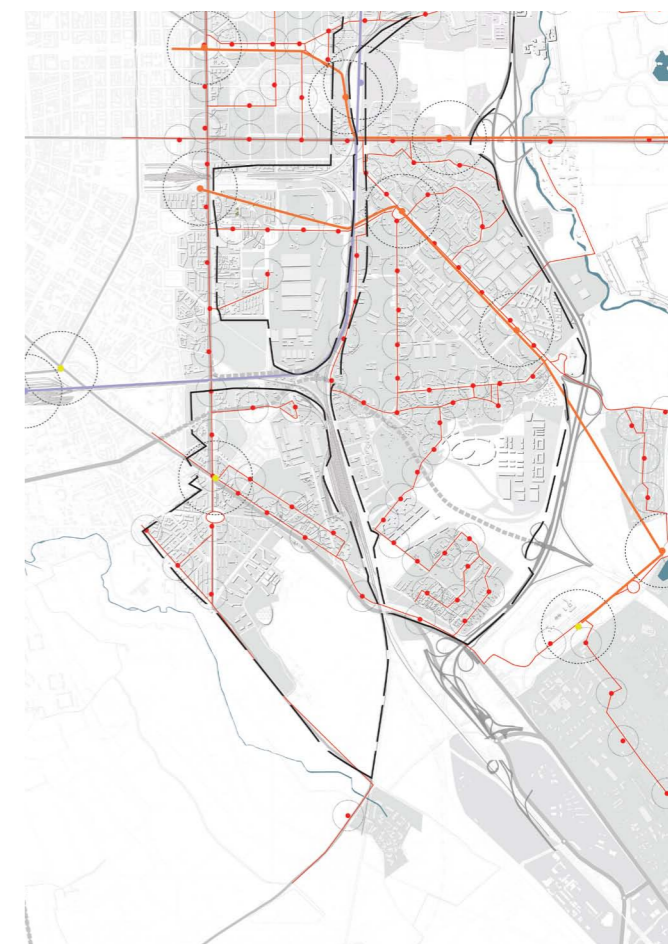
CITTÀ STUDI  
-LAMBRATE.



FORLANINI - MECENATE



PORTO DI MARE-  
ROGOREDO.



## 5.2.1 GUIDELINES MAP.

**THIS IS THE APPLICATION MAP.**

Maps shown:

GENERAL GUIDELINES MAP.

ISLAND MAP.

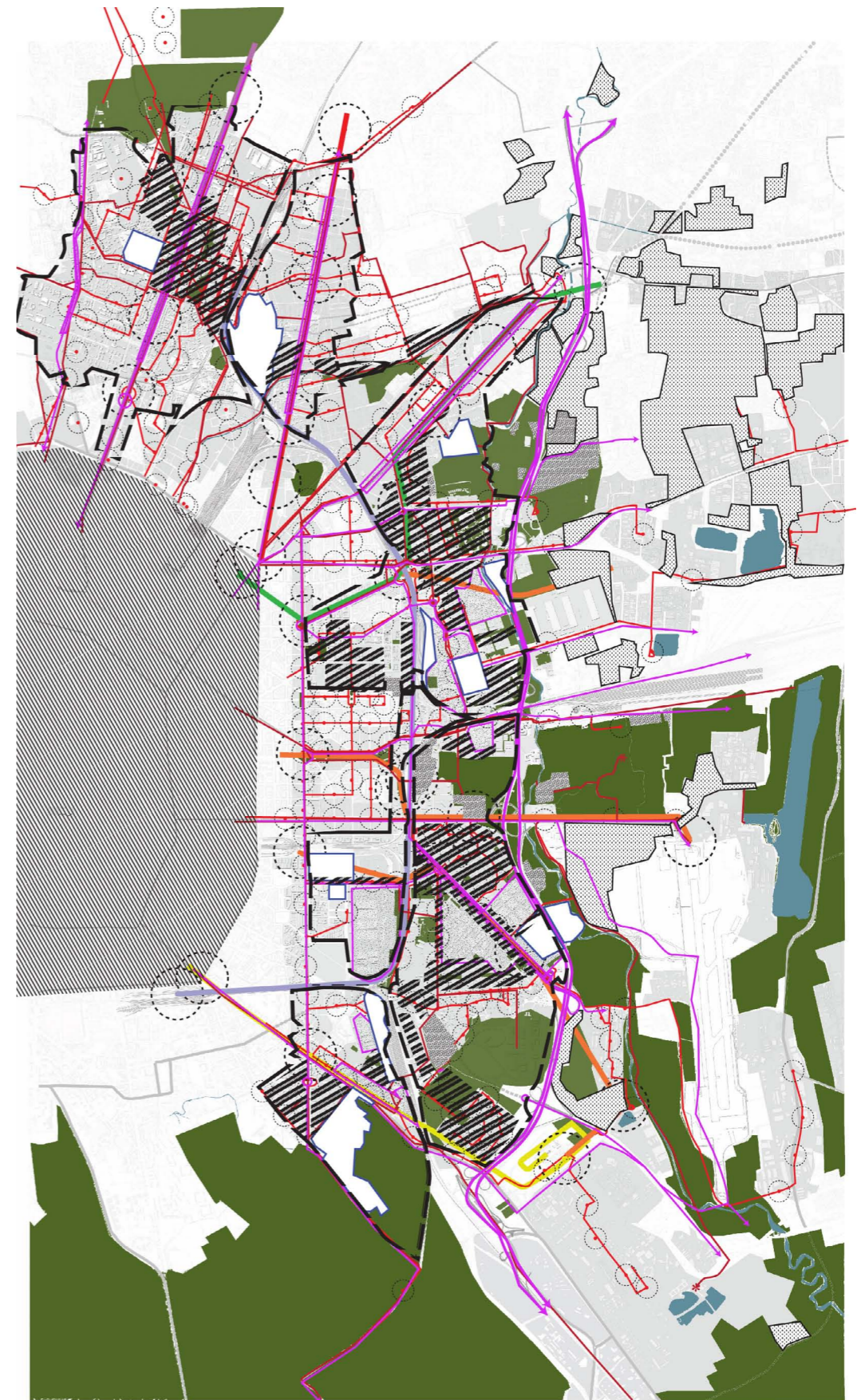
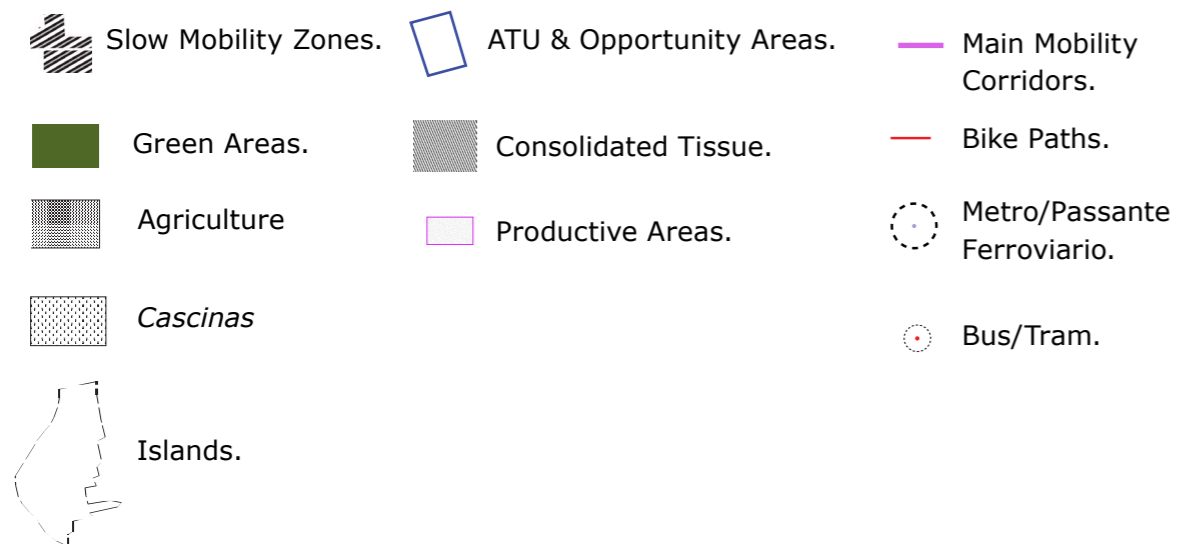
THE PUBLIC SPACE.

AGRICULTURE & CASCINE.

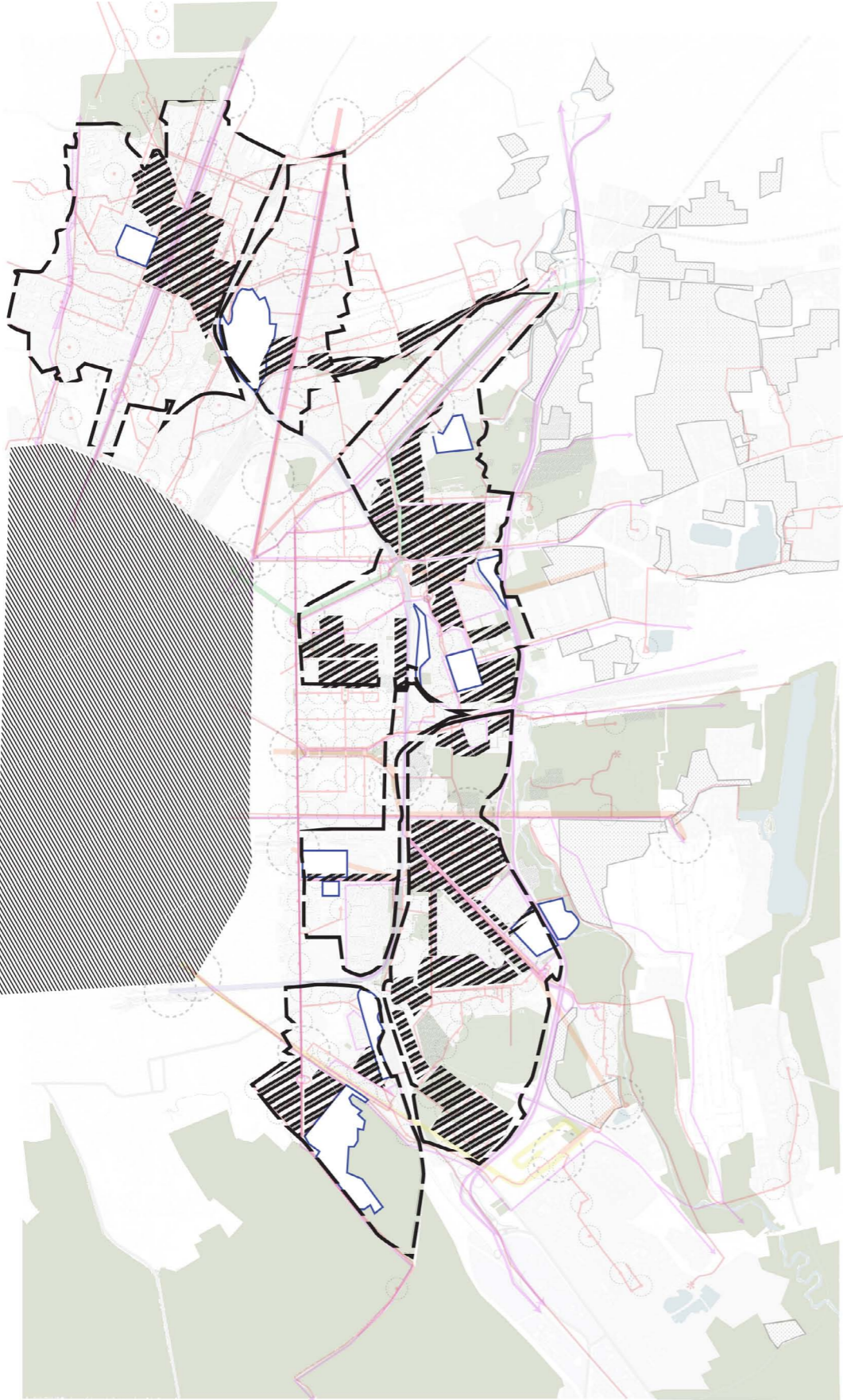
BIKE NETWORK.

PUBLIC TRANSPORT.

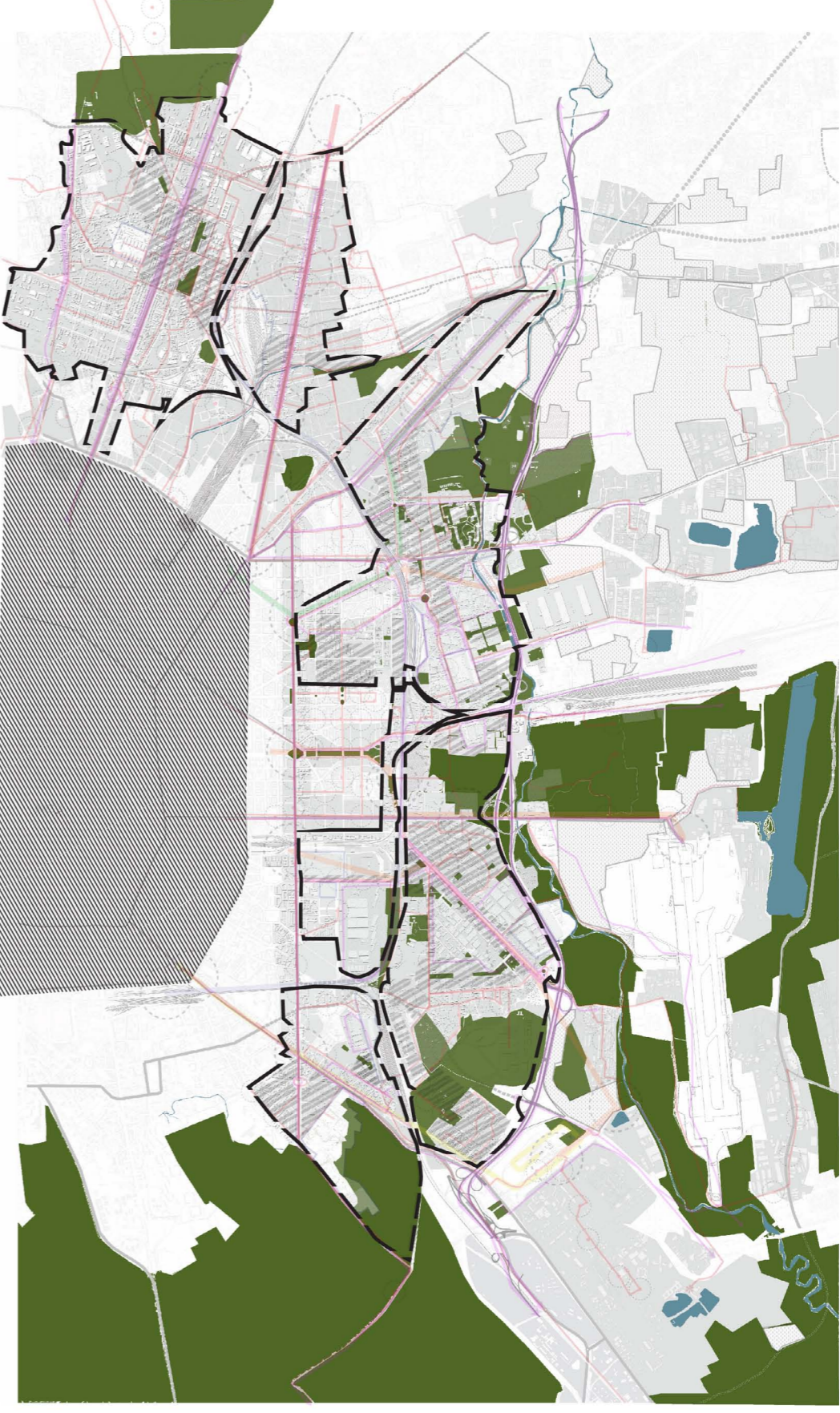
FAST MOBILITY ZONES & LARGE PRO-  
DUCTIVE AREAS.



ISLAND MAP.

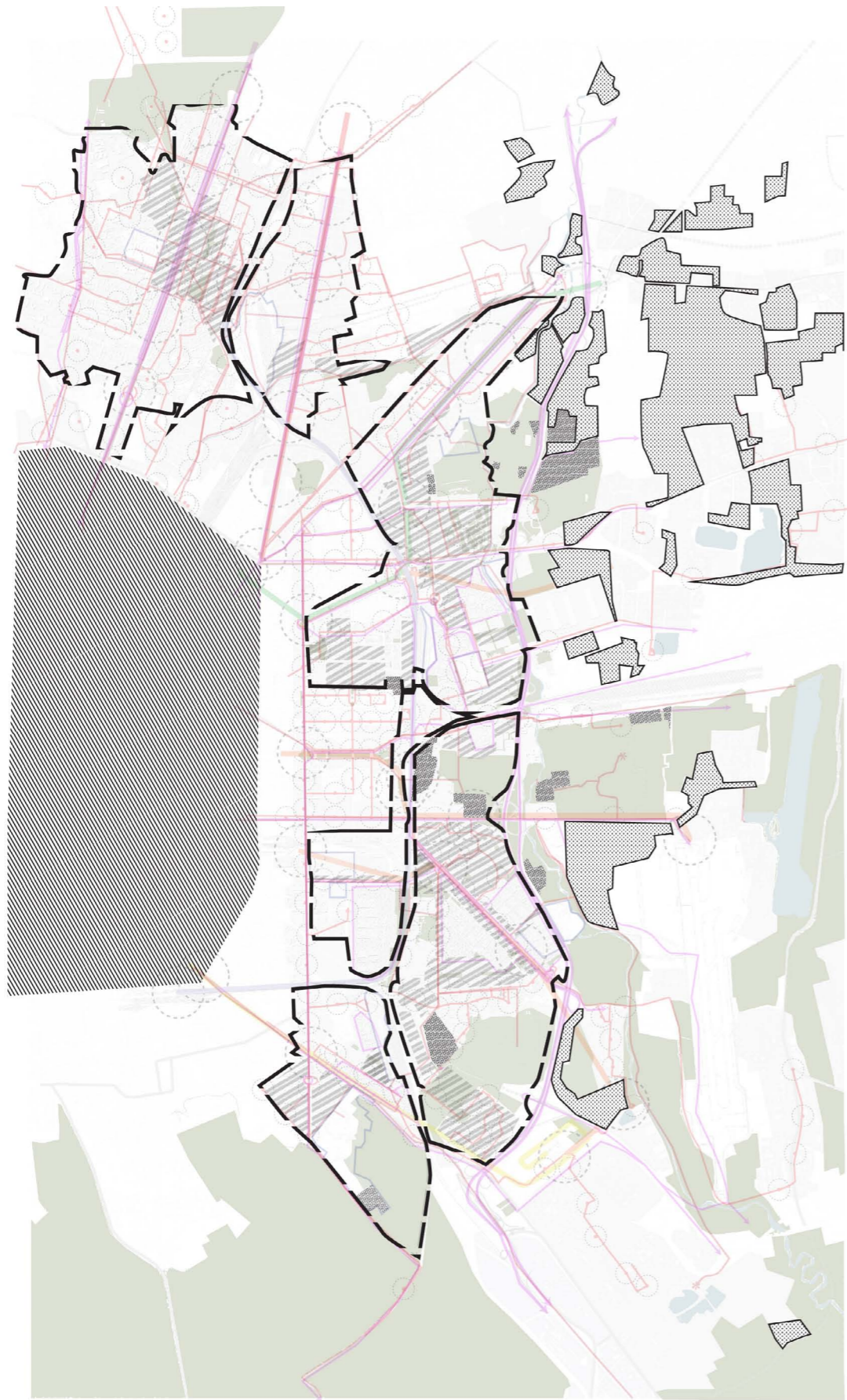


THE PUBLIC SPACE.

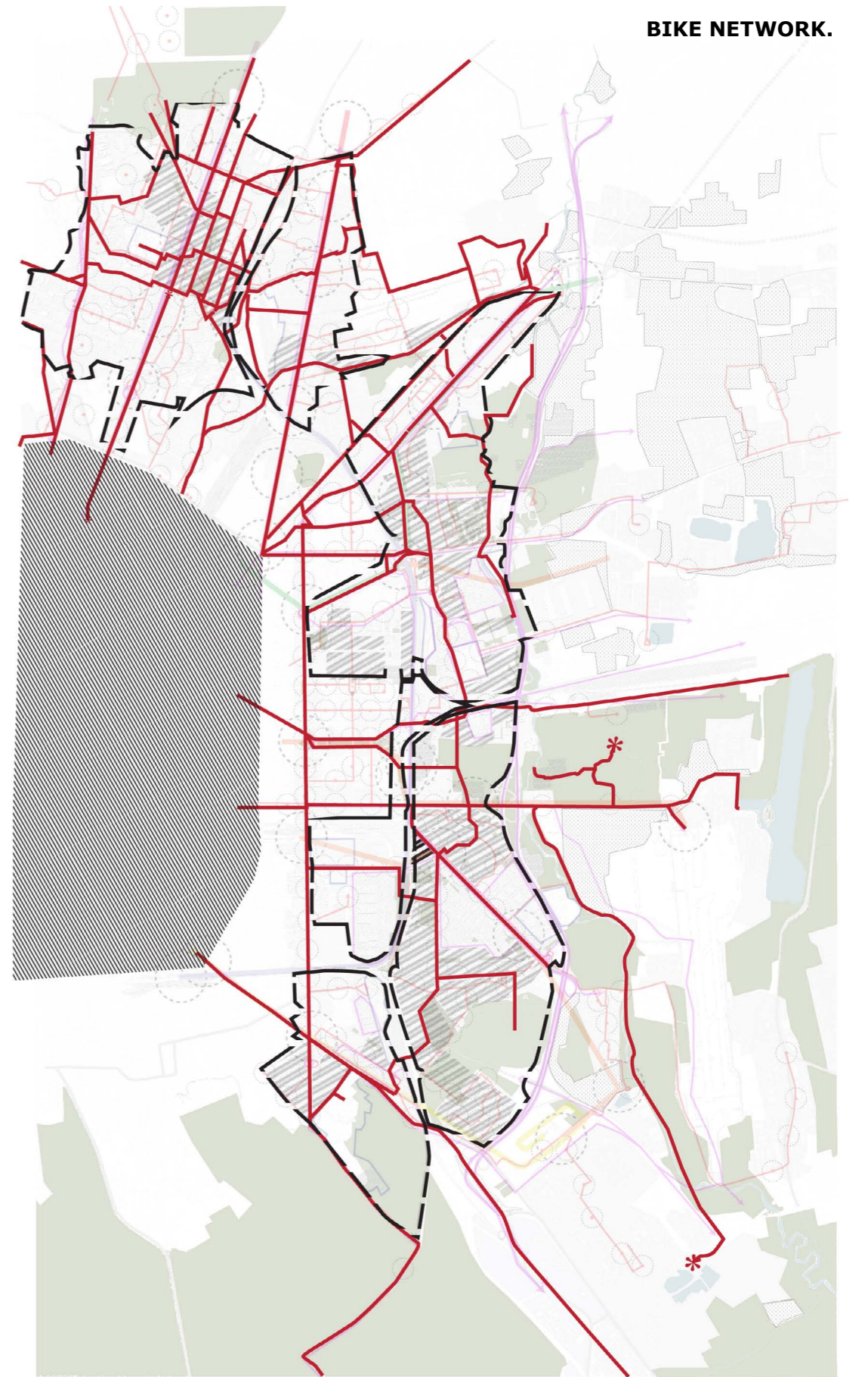




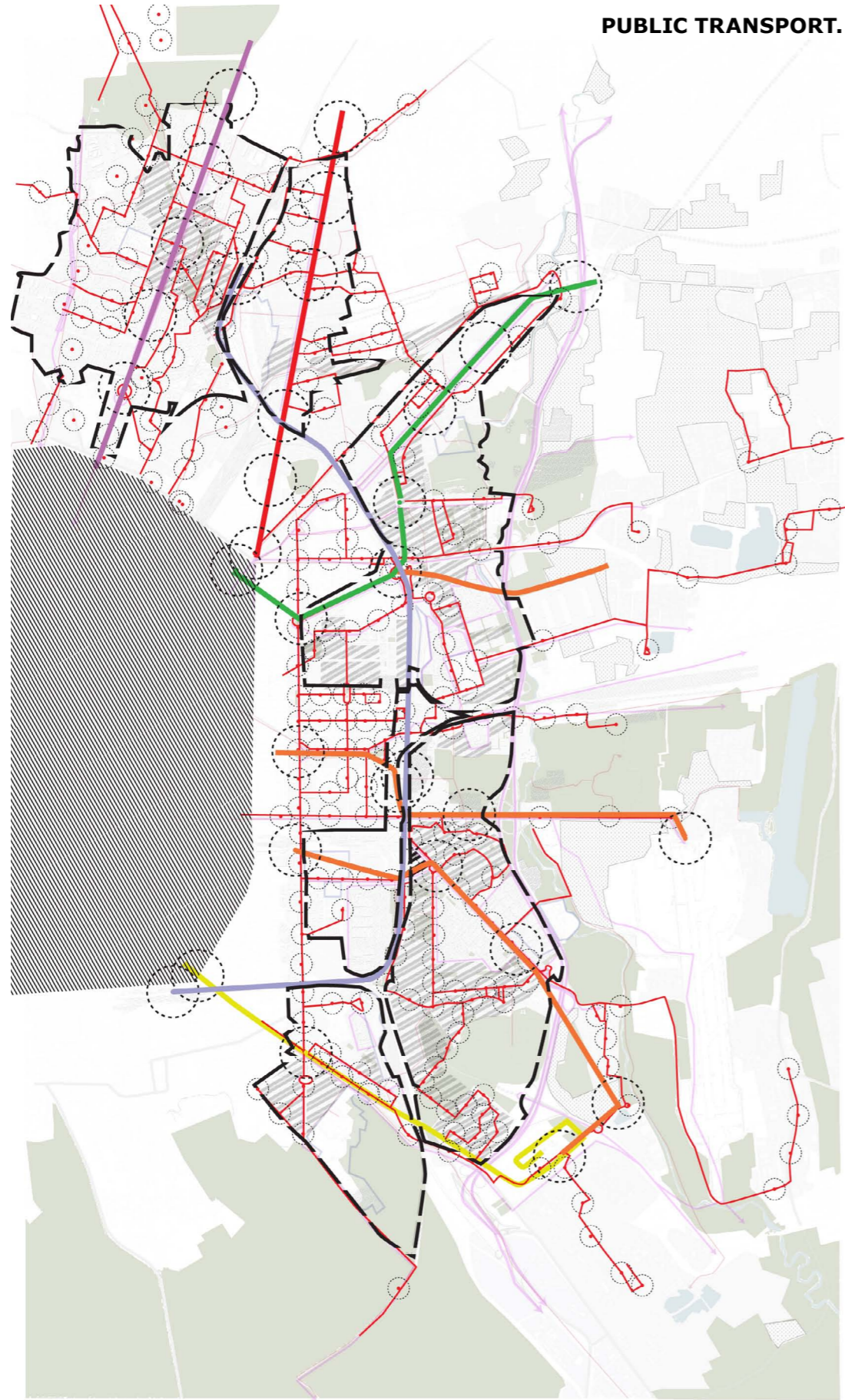
**AGRICULTURE & CASCINE.**



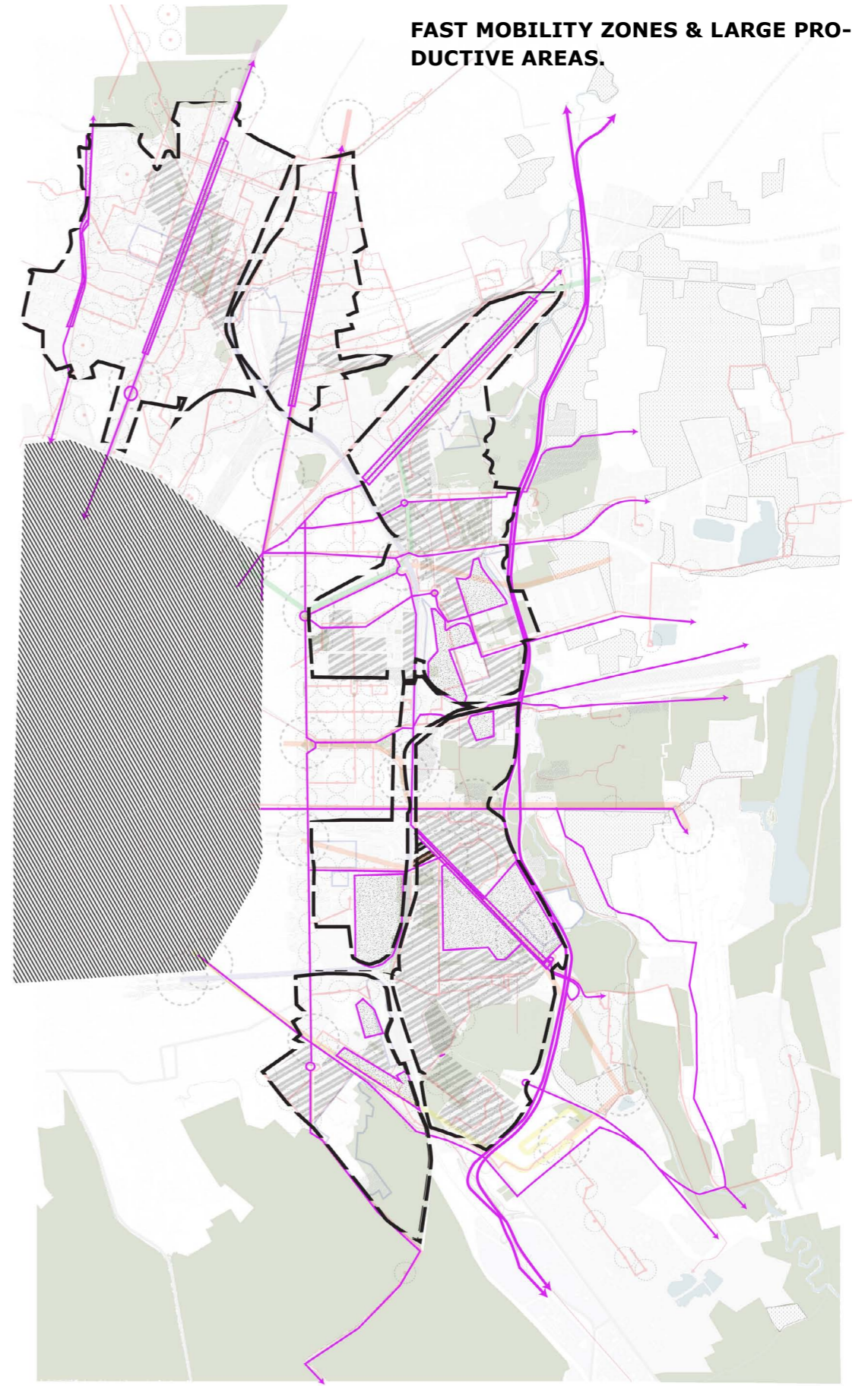
**BIKE NETWORK.**



**PUBLIC TRANSPORT.**



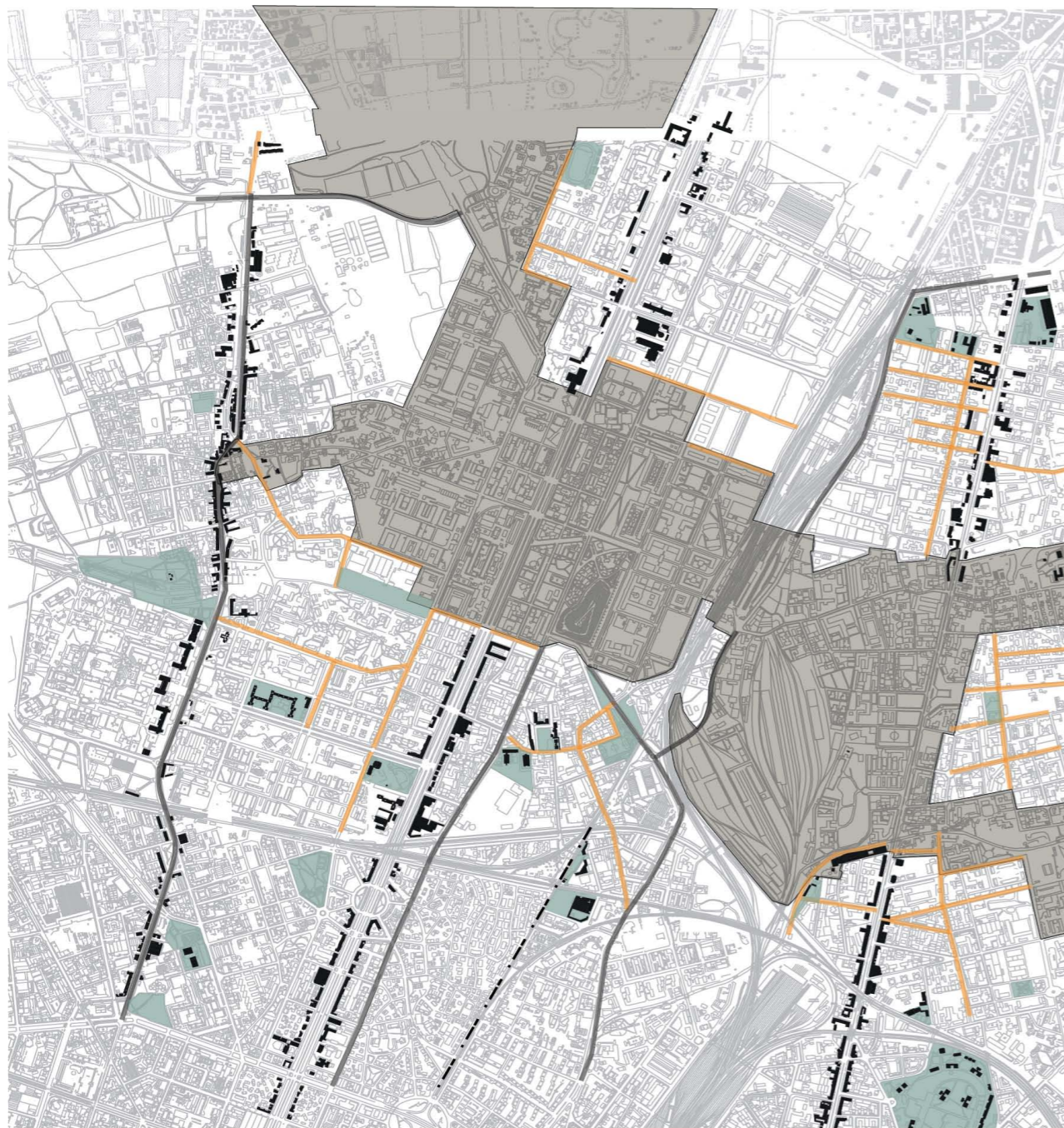
**FAST MOBILITY ZONES & LARGE PRODUCTIVE AREAS.**



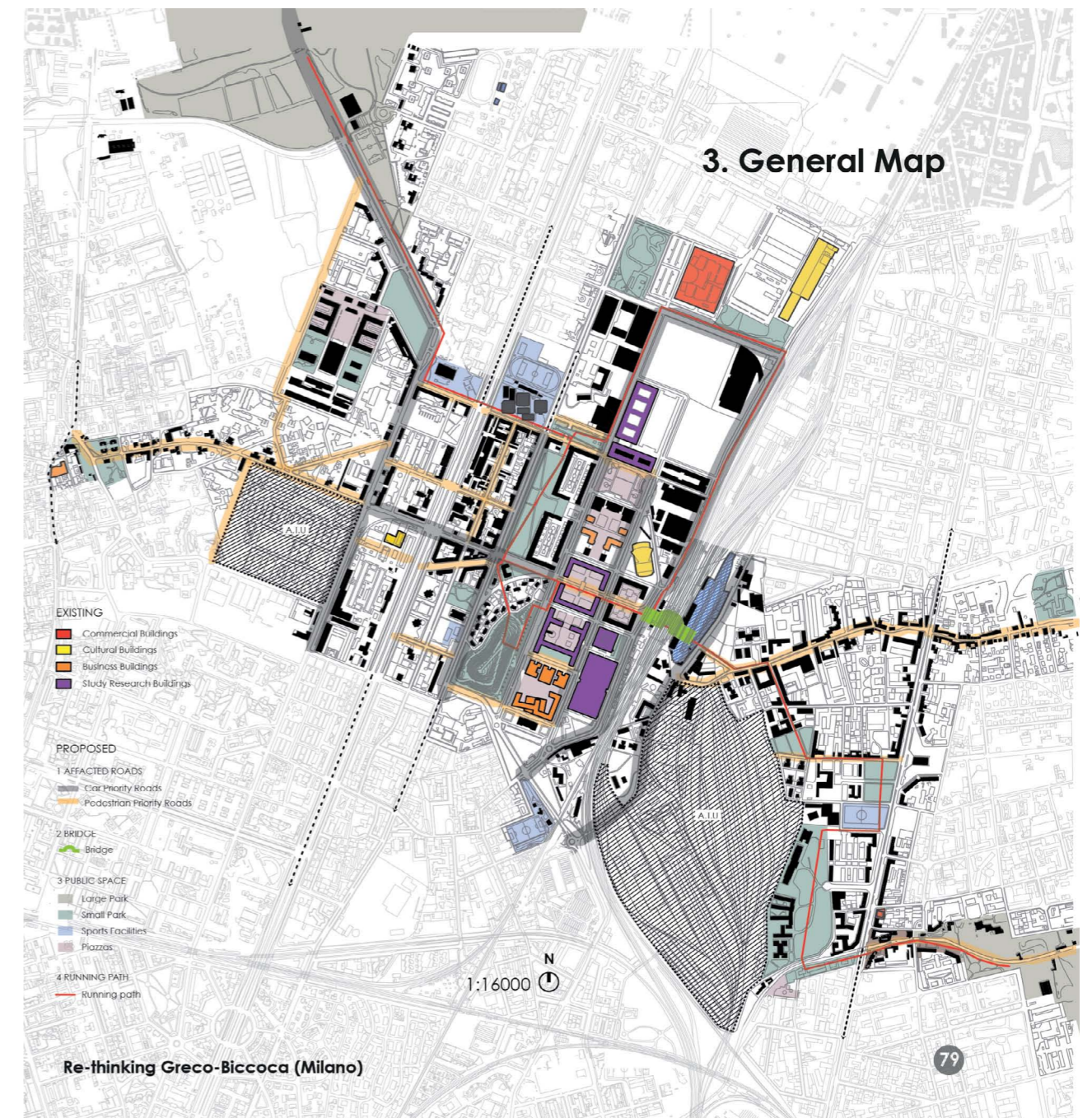
# 5.3 PILOT CASE DEVELOPMENT.

## 5.3.1 MASTERPLAN OF GRECO - BICOCCA.

### SLOW MOBILITY ZONE AND PEDESTRIAN PRIORITY ROADS



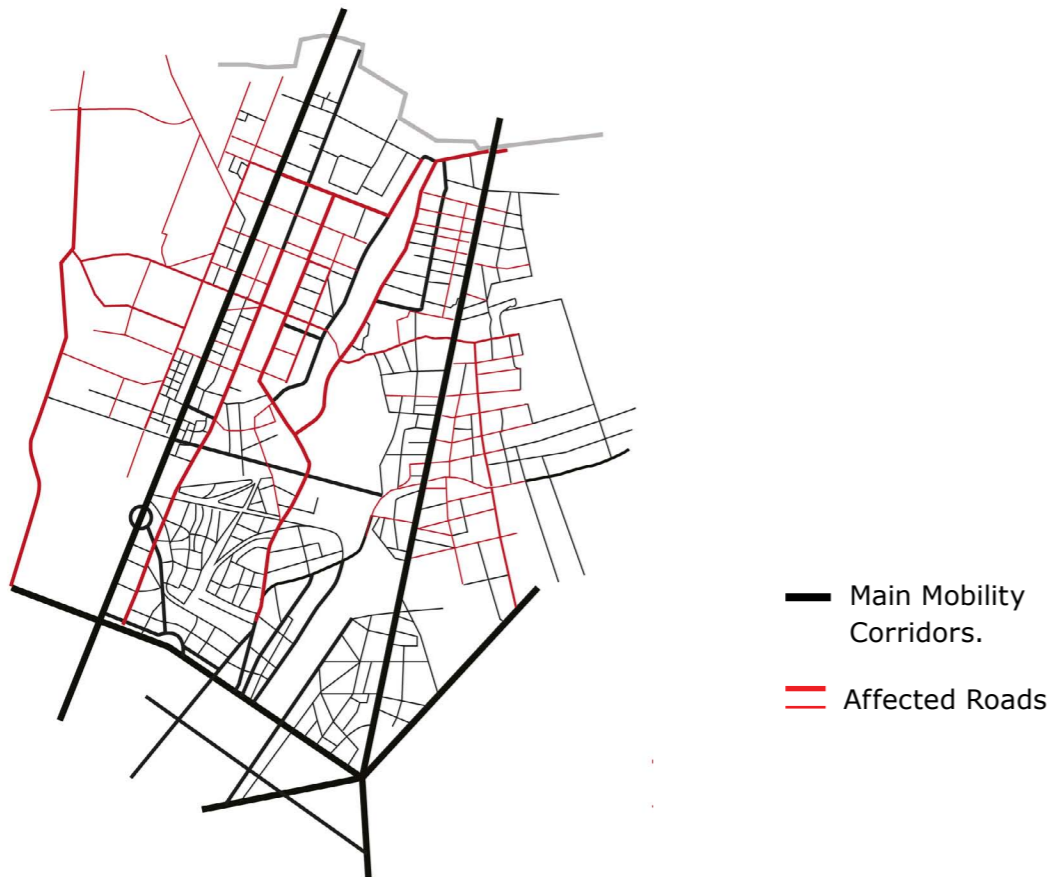
### A SLOW MOBILITY SYSTEM IS CREATED, CONNECTING PUBLIC SPACE AND RELEVANT BUILDINGS.



**ROADS CHANGE HIERARCHY**  
PREVIOUS ROAD HIERARCHY

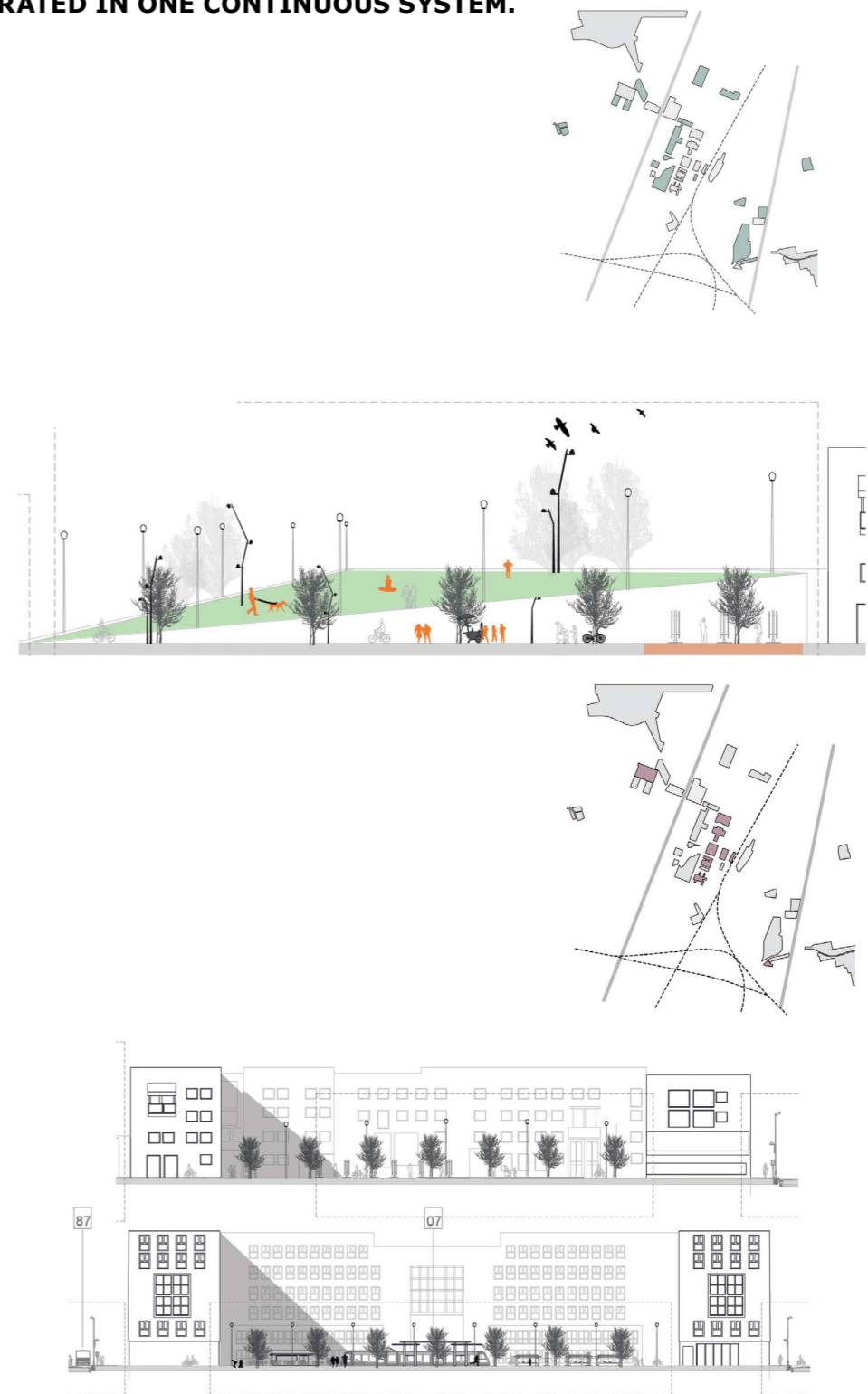


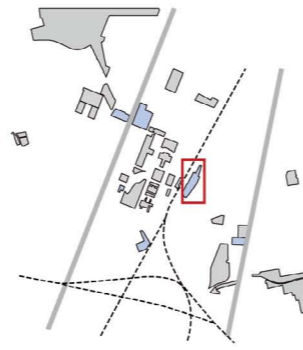
**AFFECTED ROADS - CHANGE TO PEDESTRIAN PRIORITY**  
**MAIN MOBILITY CORRIDORS - UNAFFECTED**



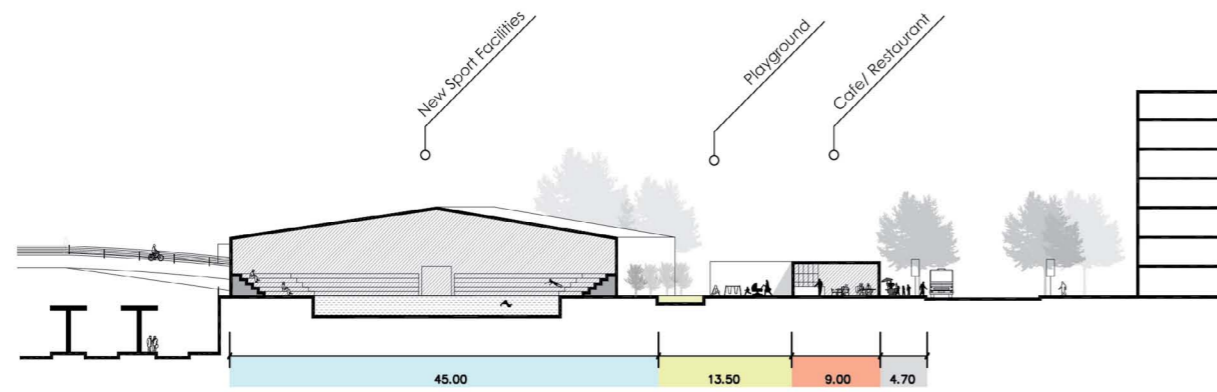
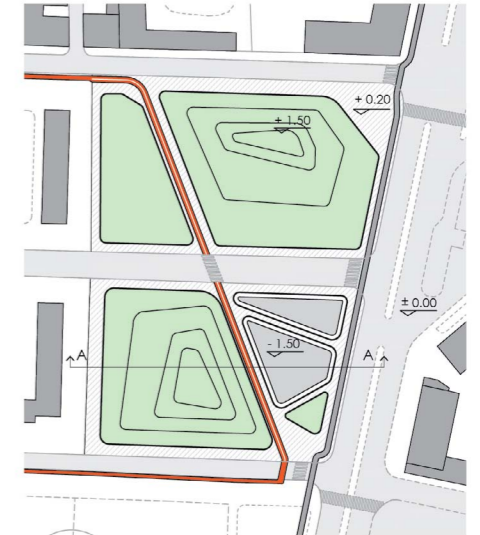
**A GREEN SLOW SYSTEM IS CREATED.**

**SMALL PARKS, PLAZAS, SPORTS FACILITIES**  
**INTEGRATED IN ONE CONTINUOUS SYSTEM.**

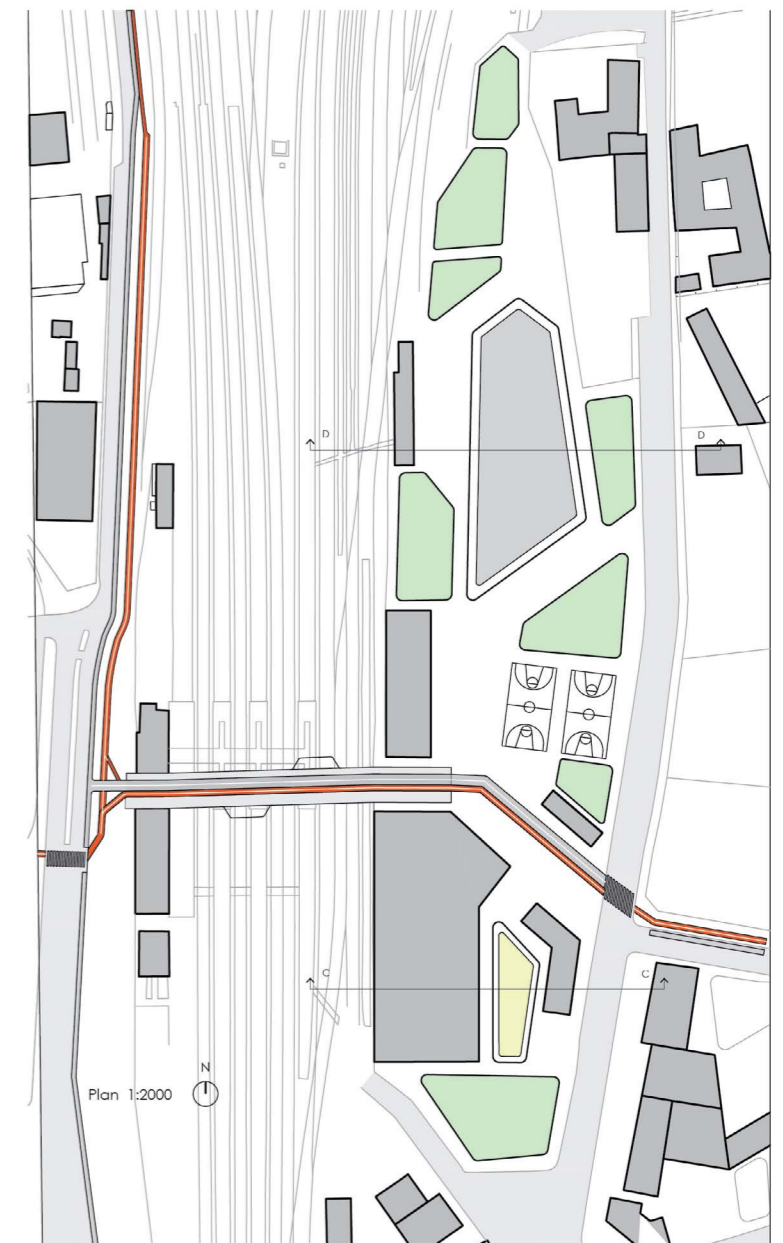
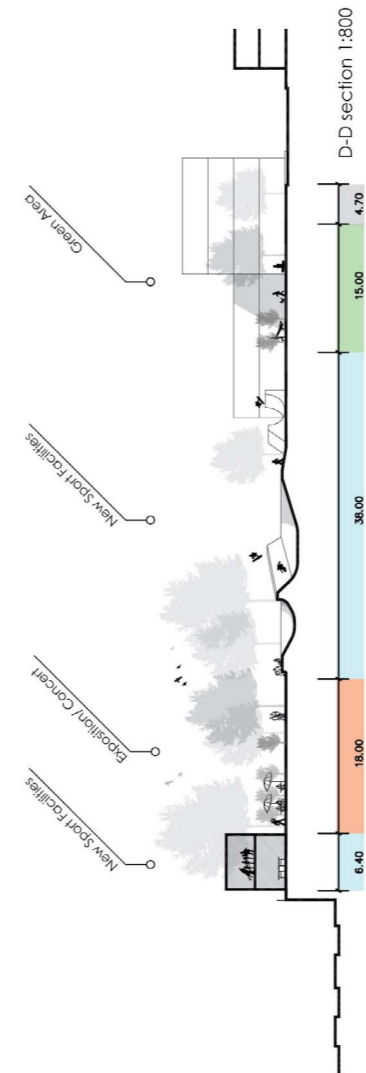




**BIKE PARKS AND WIDE PEDESTRIAN PATHS CONNECT THE WHOLE SYSTEM.**



**LARGE PARKS SERVE AS THE GREAT ATTRACTIONS, THE GATES, OF THE SYSTEM**



**FINALLY, A COMPLEX, INTERRELATED NETWORK OF PUBLIC SPACE, ACTIVITIES AND MOBILITY IS CREATED.**



**GRADUALLY THE SYSTEM EXTENDS**

2012-2020

2020-2030

