Fly over
Live under

Presentation

- A project on two levels
- Strategies and spaces involved
- The new mobility paradigm
- Corvetto and its social resources
- Monitoring for an incremental design
- The new Corvetto Square
- The new urban attractor
- Project urban materials
- Project green materials
- The Project in numbers

Appendix

- References
- Results of the questionnaire and the focus group
- Trees benefits calculus model

A project on two levels

Any intervention on the flyover will have a **major impact** on the life of the Corvetto neighborhood and its residents. After all, so it was with the introduction of a weighted road infrastructure, the flyover. The consequences have been greater **automobile accessibility** for Milan but **neglect for the neighborhood**. We cannot repeat the same short-sightedness with a project for the city of Milan but not for Corvetto. So here our proposal moves on **two levels**, the return of a quality public space to the inhabitants and the introduction of a project of international scope. Two **reference scales**, first the local one and then the metropolitan one, which are developed on two levels, the **square and the flyover**. They are and must be sides of the same coin, working in synergy and able to accommodate both the daily practices of the inhabitants and the extraordinary practices of people from outside, workers and tourists. A place that is capable of **attracting** the best talent **without excluding** those who reside here. That is why the title we have chosen to give our project is **"Fly over live under".**

The project we came up with aims to respond to the following **Sustainable Development Goals** of the United Nations Agenda 2030:



Our project crosses all of "The 10 Principles for a Green & Thriving Neighbourhood", but particularly investigates the following:

1. Complete neighbourhoods
2. People-centered streets and low-carbon mobility
3. Smart and connected places
8. Green spaces, urban nature and climate resilience

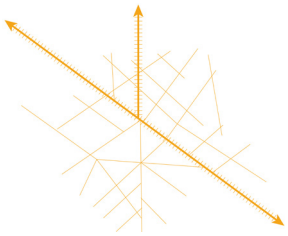


"Stop Gentrification" hanging from the flyover (Authors' image)

Strategies and spaces involved

We have defined **3 major intervention strategies** that hold together the **two dimensions**, local and metropolitan. The first concerns **mobility** within the neighborhood that puts the pedestrian at the center and attenuates the car-oriented logic. Two major axes of mobility for goods and people are defined, and a capillary grid of slow roads. The second seeks to **enhance and network service spaces in the neighborhood, sharing resources, spaces, experiences and knowledge**. The third is the definition and design of widespread **meeting spaces** in the neighborhood, held together by safe routes. Finally, an enhancement of the green heritage.
The strategies will all be developed **in phases** to have greater control and adaptability of the project. The first is an **exploratory** phase in which the city's reactions to the interventions are tested, the second learns and corrects the direction towards a **stable** milestone, and the third dares a grand **visionary project.**

Reorganization of mobility spaces for an intermodal rebalancing of flows of people and goods

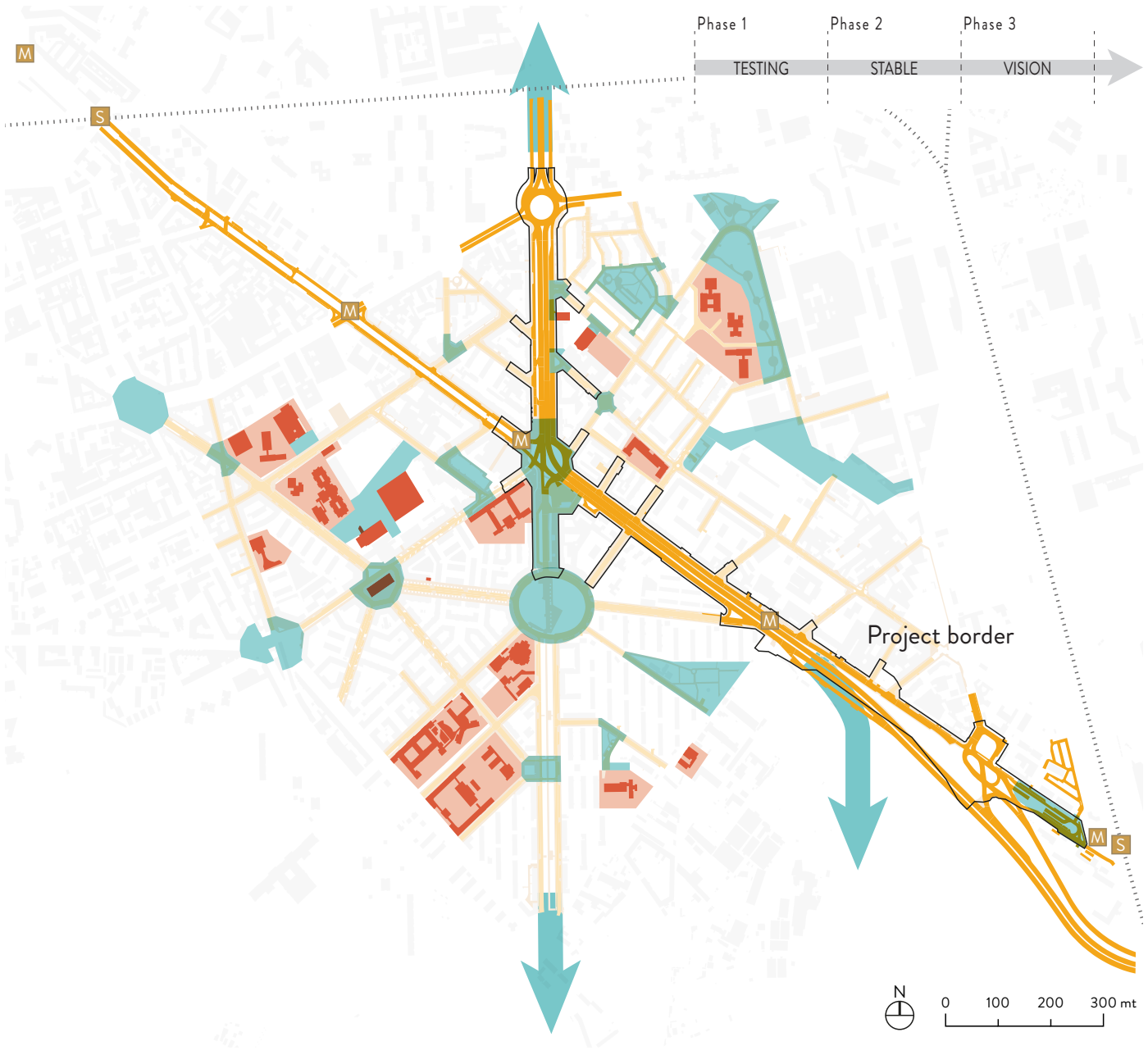


Recognition, networking and promotion of public and association service resources spread throughout the neighborhood



Redesign and widespread expansion of the supply of open and green spaces in the neighborhood



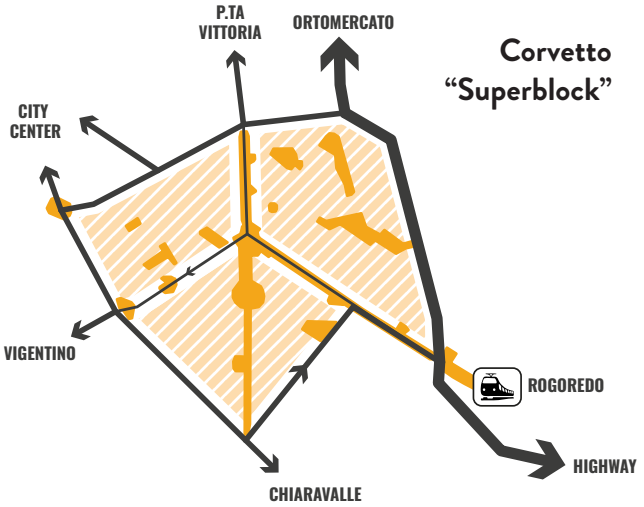


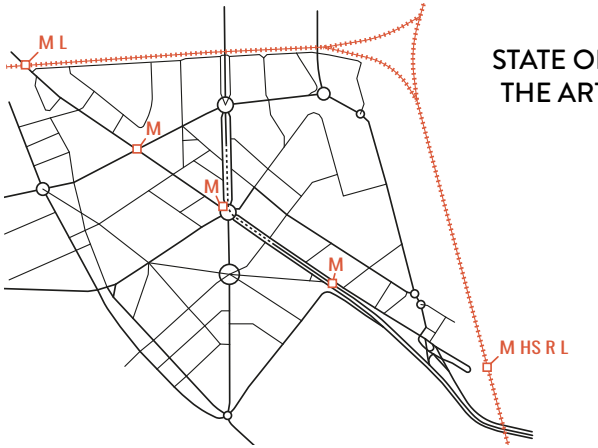
The new mobility paradigm

The mobility strategy is the **trigger of our project**, as well as the one that really refers to the whole neighbourhood scale. The State of the Art of mobility in Corvetto is **dominated by the vehicular traffic**. All roads were planned and meant to answer cars demand and movement and there is a **lack of a real hierarchy** of streets, expecially in the local ones. The A1 motorway, that is represented by the **flyover** in its final part, was meant to directly reach the urban fabric of Milan and let cars and expecially trucks quickly arrive to the main attractive points of the city (e.g the *Ortomercato*). The most evident result is the configuration of Piazzale Corvetto: basically **a road junction**. We think that the mobility of the area needs a radical reconsideration **towards a new paradigm**, following 3 main actions:

1. ***Setting back the motorway connection***
   Since over the years the city has expanded and we need to rethink where and how the motorway road system should link to the urban road system.
2. ***Making Piazzale Corvetto a real square***
   The logic of this car intersection must be reversed, in order to give back to the inhabitants a public space that can be lived and easily accessed.
3. ***From a network of streets to a network of spaces***
   The residential and local streets have become the reign of cars, with overdesigned sections and parking spaces. We must design new **places for people** in the public space par excellence, which is the street.

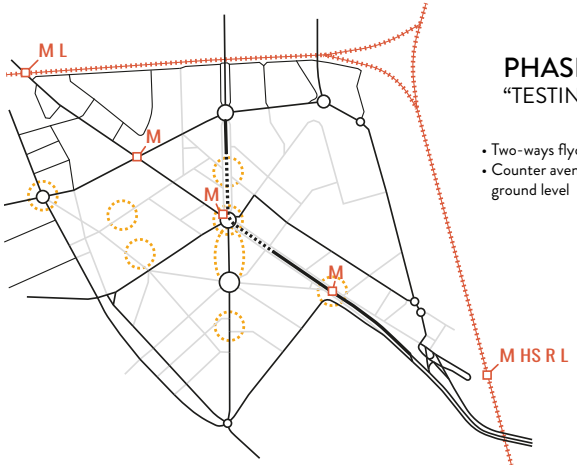
All these strategies find place in the 3 phases of our project, which are detailed in the diagrams below. The long-term goal is to achieve a mobility model that recalls the Barcelona's **superblock logic**. In our case the block is divided in 3 more smaller blocks. In each of them we foresee a radical change in order to achieve new spaces for people and not only for cars.





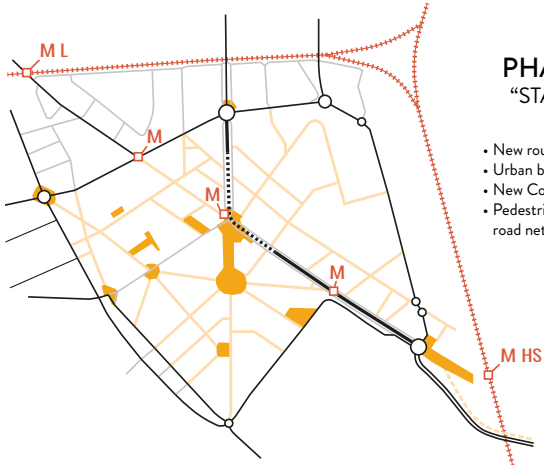
STATE OF THE ART

Main road network
Main road intersection
Two-ways flyover
Local road network
Pedestrian-oriented road network
New squares and public spaces
Tactical urbanism
? ? Long-run urban regeneration
Public transport node
Railway
M Metro stop
HS High speed stop
R Regional train stop
S S-Line train stop



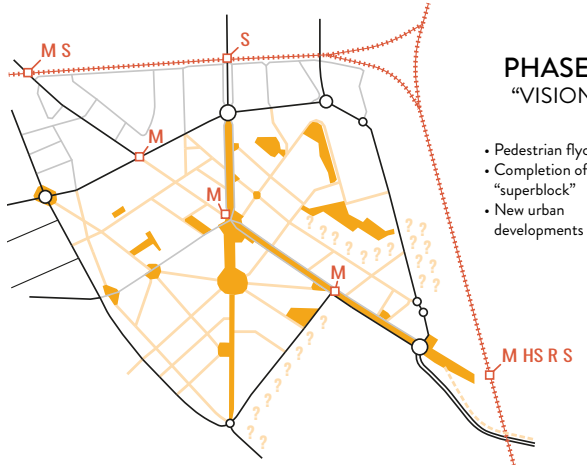
PHASE 1 "TESTING"

- Two-ways flyover
- Counter avenues at ground level



PHASE 2 "STABLE"

- New roundabout
- Urban boulevard
- New Corvetto square
- Pedestrian-oriented road network



PHASE 3 "VISION"

- Pedestrian flyover
- Completion of the "superblock"
- New urban developments

Corvetto and its social resources

In order to investigate the social tissue of Corvetto and to collect data and information, we experimented many social research techniques:

- **Interview** with Vincenzo, founder of **Corvetto Street Basket Academy**;
- **Participation** in the **meeting Corvetto in trasformation: toward what?** at C.I.Q. (Centro Internazionale di Quartiere);
- **Interview** with a worker of **DOPO?**;
- **Questionnaire** with open format questions;
- **Focus group** with 10 people belonging to age group 70 - 80;
- **Participation** in the monthly meeting of **Rete Corvetto at Laboratorio di Quartiere Mazzini**, where various associations meet up (like Terzo Paesaggio, La Strada, Equi.libri, QuBi, Todo Modo, Dare.ngo)

The main goal of this study was to **investigate the perception** of the present life in the neighbourhood, mainly referring to green areas, public spaces, mobility, cycle lanes, and the flyover and to let them **guide our deisign solutions**. We were able to collect testimonies of male and female residents with an age range of 21 to 80 years old, who gave us their impressions, ideas and memories regarding our project's main topics.

In particular, the negative comments and blurried memories regarding the flyover were very often balanced by the desire to first realize something below it.

"Why should we do the Corvetto's High Line, if it's still a mess below?" (Vincenzo)

For this same reason, most of the people's recommendation for a better livability referred to the creation of playgrounds, outdoor gyms, aggregation spaces. These desires were directly linked to the proposed vision for the flyover.

We refer to the dedicated appendix for the detailed results of the work.



Meeting of Rete Corvetto at Laboratorio di Quartiere Mazzini.
(Facebook page, Laboratorio di Quartiere Mazzini)



Meeting of Rete Corvetto at Laboratorio di Quartiere Mazzini.
(Facebook page, Laboratorio di Quartiere Mazzini)

NEIGHBORHOOD VIEWS

STRONG POINTS

«**Proximity** to the city center and the countryside; efficient connection of public transportation»

«Green areas and many facilities»

«Human strenght, multiculturalism. benevolent **community dimension** which is not present in the city center»

WEAK POINTS

«**Insecurity** of certain pedestrian crossing»

«Dirt , neglect, **crime**, bivouacs»

«The cars parked on the pavement which make anything ruined»

GREEN AREA EVALUATION

«Nice, but **unlivable**»

«They could be increased»

BIKE LANE EVALUATION

«Nice, but improvable»

«**Very positively**, an improvement has been made»

«It was built without criteria; **missing sections»**

FLYOVER PERCEPTION

«Ugly thing»

«**Junk**»

EXPECTATION AND DESIRES

«Perception to be **blocked up in the traffic»**

«Possibility to attend public areas **calmly**»

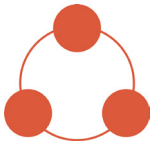
«Possibility to have much more **social and cultural spaces**»

Monitoring for an incremental design

The purpose of this approach is:

- **Monitor** how social actors' perceptions change as a result of the changes implemented;
- Let the monitoring activity **guide the project implementation** process in a perspective of incremental design, open to adjustments in progress;
- Keep up the level of **communication and attention** among the different actors involved, both on the side of the public administration and on the side of individual citizens or local associations.

The monitoring activity will be held following the scheme.



Operating table consisting of:
- Comune di Milano
- Municipio 4
- Comitato di Quartiere

announces a

PERIODIC MONITORING QUESTIONNAIRE about the intervention





The questionnaire will be administered every 2 years



All residents who wish to contribute to the success of the project will be involved. Establishing a feeling of **attachment and care** toward the same.



The observations that emerge will be discussed in a week of **events and meetings** on the topic. And will result in a monitoring report that will be delivered to the operational table.

Our hypothesis assumes that the data collection will be done 1 time every 2 years in order to be in line with **actual needs** of the city users at that future time.
It is intended to construct a questionnaire through which respondents:

- Will be asked to express their degree of **agreement/ disagreement about the statements** that will be proposed from time to time;
- Will **actively mention the difficulties or the negative aspects** emerged during project's phases;
- Will **actively propose new ideas, suggestions, possibilities and desires;**

This approach will let us develop **indices** of perceived environmental qualities that reflect the specificity and uniqueness of the context of reference and enable respective longitudinal monitoring (Repeated Cross- Sectional). But it will also allow us to include a more **active role** for the city users, expecially fostering those feelings of **care and attachement** to the project that we mentioned earlier, because they will be one of the main engine of its **success over time.**

The indicators investigated will be as follows:

ARCHITECTURAL-URBANISTIC ASPECTS
Perception and pleasantness about the visualizedand practiced space and the green areas

SOCIAL ASPECTS
Perceived safety, sociability, and the presence offriendly and cooperative people

FUNCTIONAL ASPECTS
Social services like school and health services, recreational services like sports services and facilitiesand socio-cultural activities, commercial services andtransportation services

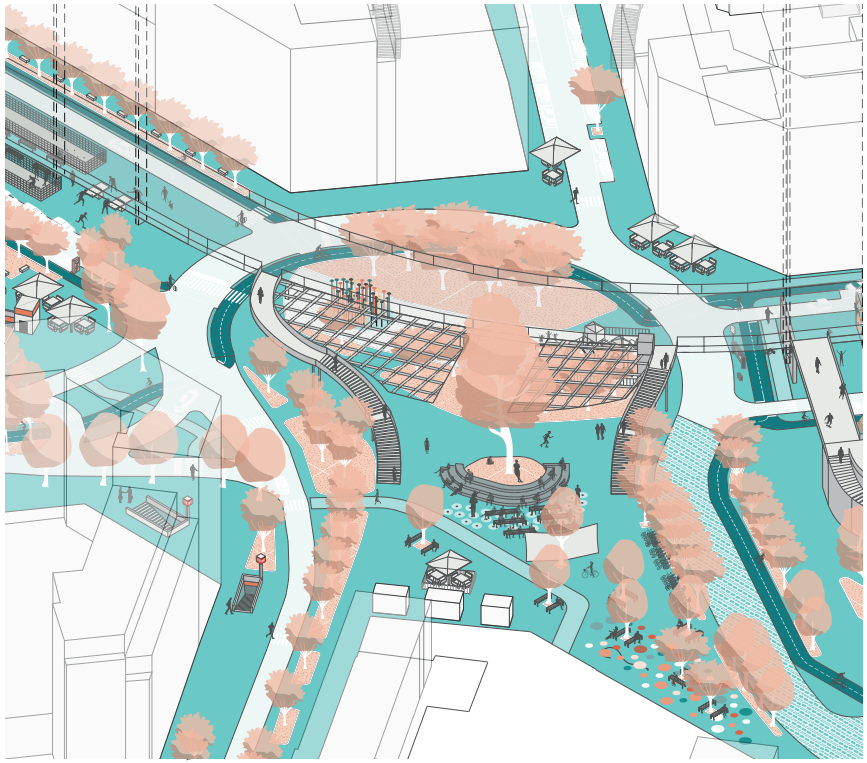
CONTEXTUAL ASPECTS
Perceived psychological climate, environmental healthiness(noise and air pollution), maintenance and care

PLACE ATTACHEMENT
Symbolic dimension measured by considering theconnection with their neighborhood

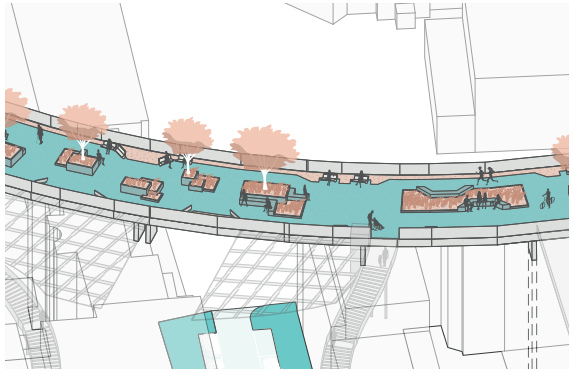
COMMUNITY PARTECIPATION
Perception of what an individual "can do" and "should do"to improve his or her living environment

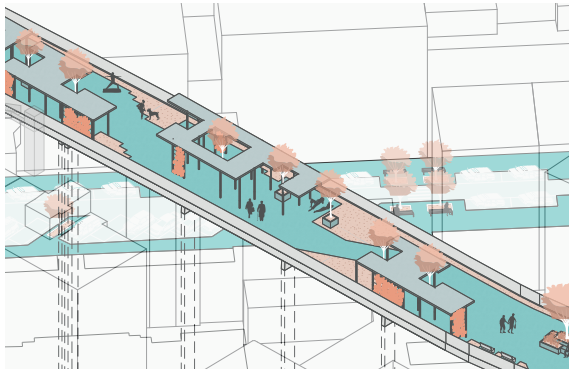
The new Corvetto Square

New face of the square

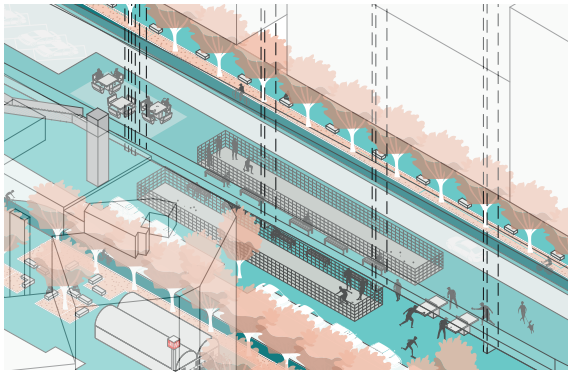


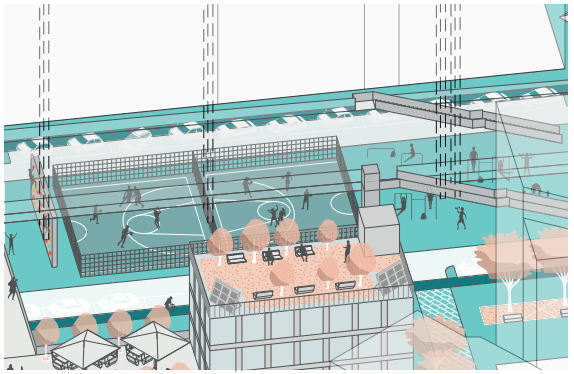
Fly Over





Live Under





The idea behind the whole project is facing the dualism between the **over** and the **under**. The peculiarity is trying to force the current situation, in which both the dimensions are almost inaccessible and often unpleasant for inhabitants and activities. The goal is redeeming and giving them back to people which would be the main actors in this process.
Over the highline will be a **pleasant place** where to look at the city from a different point of view, having a fascinating walk through wooden canopies, greenery and seats.
Under the highline is the **place where most of the activities are placed**. The realization of new public spaces through the redemption of surfaces which today are bounded to vehicular traffic, will guarantee an increasing quality of the entire area.





The new urban attractor

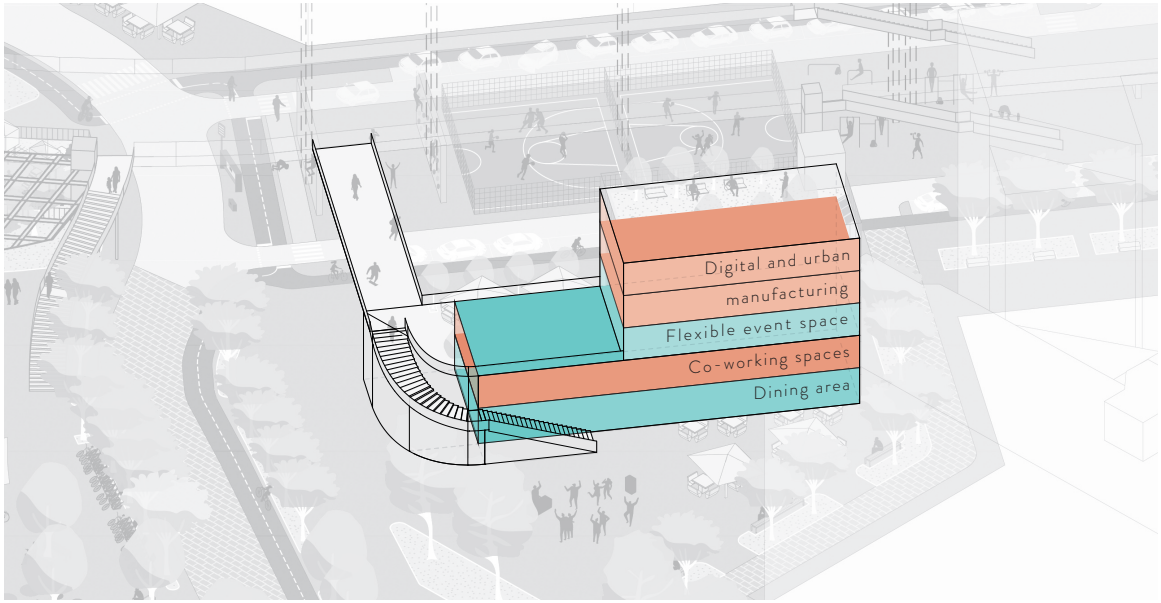
Comune di Milano launches a call for the design, construction and management of the Piazzale Corvetto

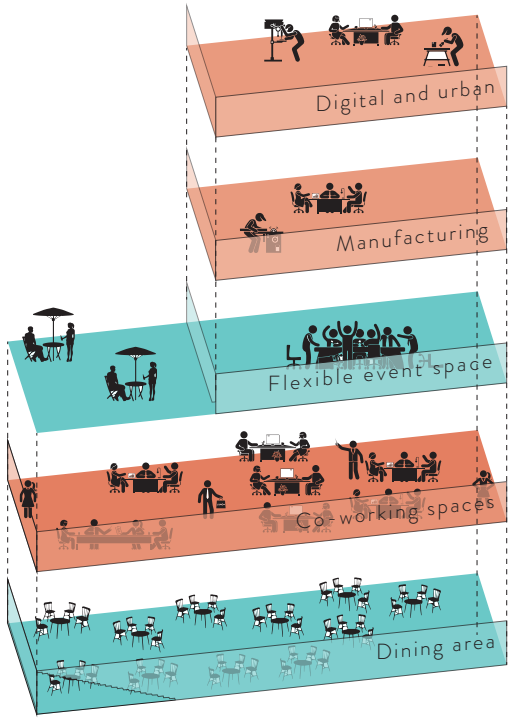
Milano
Comune di Milano

A co-design agreement is signed between the city and the private developer

Tool:
"Contratto di concessione per la progettazione, costruzione e gestione di opere pubbliche in Partenariato Pubblico e Privato"

The private developer:
- designs and implements the project
- takes care of public space management for 50 years
- obtains ownership of the building



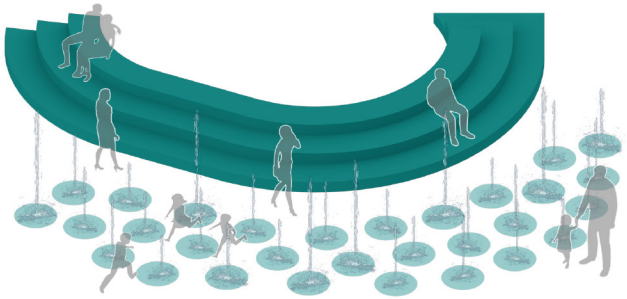


Profitable uses of the building

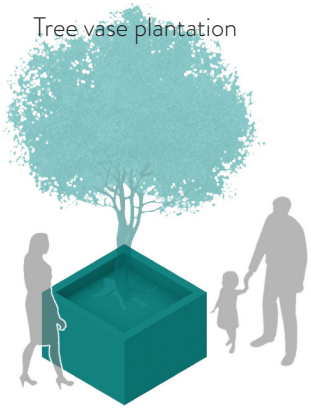
- co-working spaces
  es. COWO Network
  is a network of independent co-working spaces based in Milan but present throughout Italy
- creative, digital and urban manufacturing
  es. LOM - Locanda Officina Monumentale
  is a space in Milan where digital technologies and craftsmanship meet
- dining area
  es. Rob de Matt
  is a bistro that is based on a social and labor inclusion project aimed at people with distress
- flexible event space
  es. Daste
  is a former thermoelectric plant in Bergamo, now an open hub for sociality and aggregation

Project urban materials

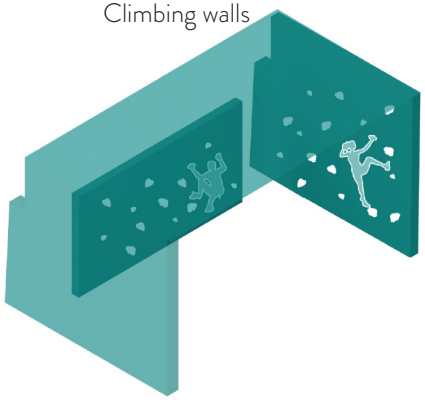
Seats and water games

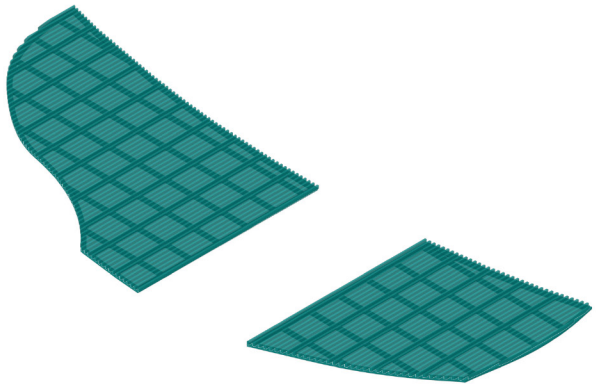


Tree vase plantation

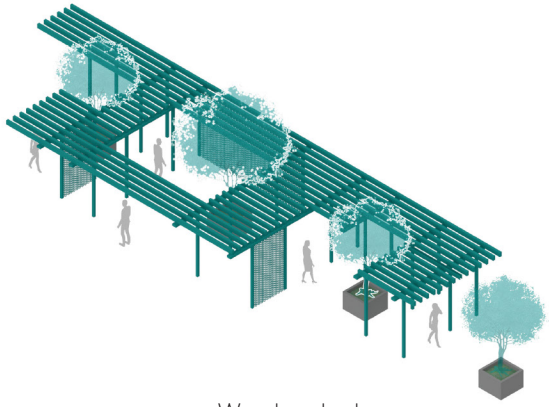


Climbing walls

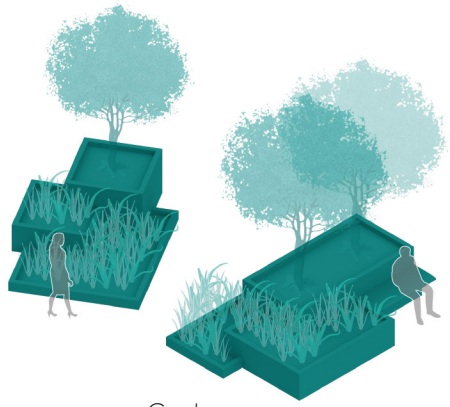




Corvetto Pavillon



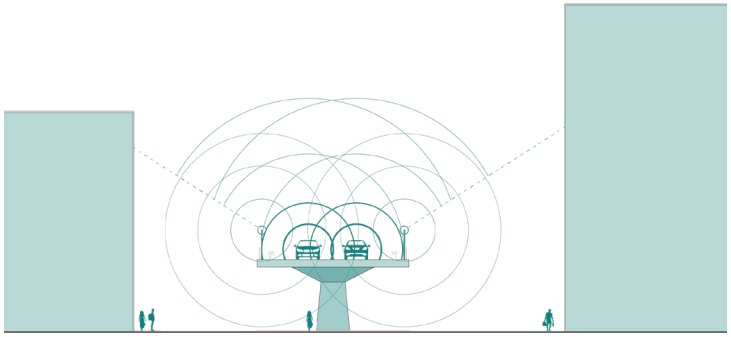
Wooden shed



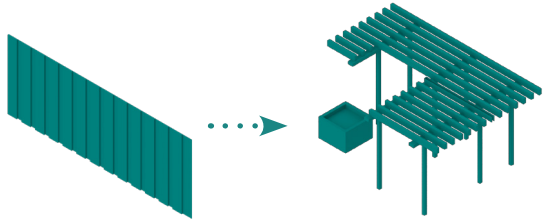
Gardens

Dealing with **Noise Pollution**

The **second phase** of the intervention must take in consideration the management of the noise pollution that would be produced mostly over the **high line**. However, this would represent a restricted criticity due to the reduction of heavy vehicles. The project deal with this problem through the use of **high density plants** and **wooden acoustic panels**. This will guarantee an attenuation of the noise, providing an healthy environment for inhabitants and neighbourhood users.

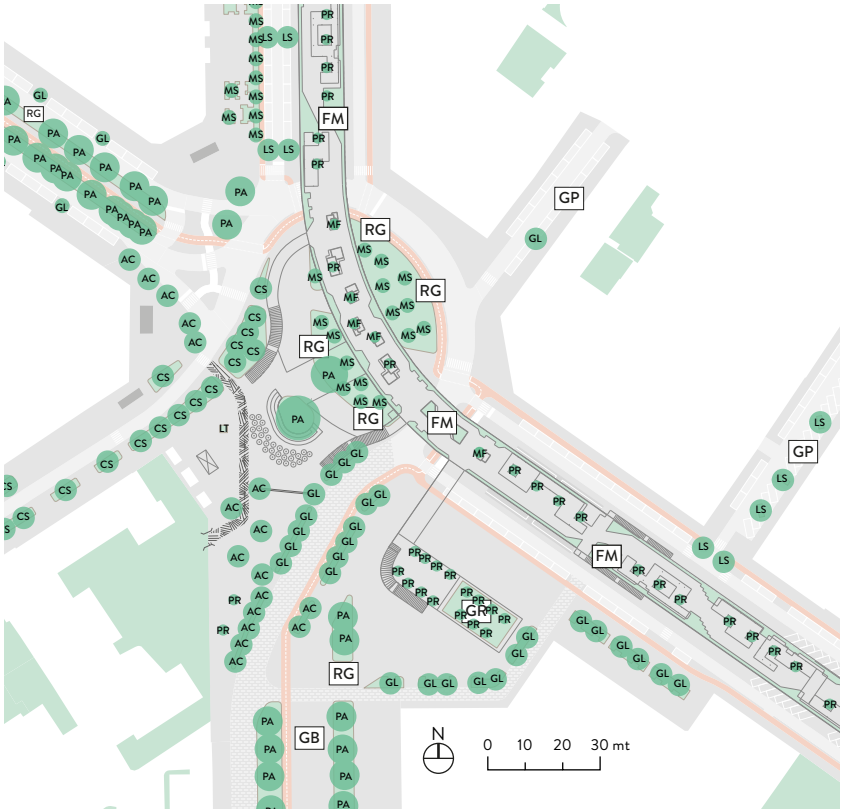


During the **third phase**, would be possible to **recycle** the wooden panels to create furnitures and elements, such as **wooden sheds**, **vases** or **benches**.



Project green materials

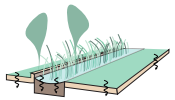
Fly over Live under
Project presentation



Species name	Seasonal Foliage W	SP	SU	A	H	W	Co2 detected (kg)	Suggested Position	Map position
Gleditsia triacanthos	○	●	●	●	30 m.	8 m.	21.7	Square / Garden	GT
Liriodendron tulipifera	○	●	●	●	25 m.	8 m.	19.6	Square / Garden	LT
Liquidambar styraciflua	○	●	●	●	20 m.	6 m.	13.7	Square / Garden	LS
Acer campestre	○	●	●	●	18 m.	8 m.	20.6	Square / Garden	AC
Cercis siliquastrum	○	●	●	●	8 m.	6 m.	11.7	Square / Garden	CS
Magnolia x soulageana	○	●	●	●	7 m.	4 m.	18.9	Square / Garden	MS
Acer griseum	○	●	●	●	7 m.	4 m.	10.3	Square / Garden	AG
Prunus avium	○	●	●	●	10 m.	8 m.	10.5	On the viaduct	PA
Cornus florida	○	●	●	●	6 m.	4 m.	9.2	On the viaduct	CF
Malus floribunda	○	●	●	●	8 m.	5 m.	15.7	On the viaduct	MF
Prunus cerasifera 'pissardi'	○	●	●	●	5 m.	5 m.	14.3	On the viaduct	PC
Carpinus betulus	○	●	●	●	15 m.	12 m.	30.3	Sound barrier	CB

NATURE BASED SOLUTIONS

RAIN GARDEN [RG]



Rain garden are designed to absorb rainwater that runs off from a surface and release it in more time. They also have the function of lowering the temperature during the warm period.

GREEN ROOFTOP [GR]



Green areas on the rooftops can be used by the people and they increase the permeable surfaces. Furthermore they reduce the heat island and they absorb rainwater.

GREEN PARKING [GP]



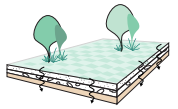
Parking with trees to create more shadow areas and with permeable materials.
They also reduce the heat island.

GREEN BOULEVARD [GB]



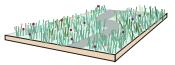
It creates more shadow areas and more green spaces that increase biodiversity and absorb the rainwater.
They also reduce the warm area.

DRAINING FLOORING [DF]



They reduce the run off, they increase the biodiversity and they reduce the warm area.

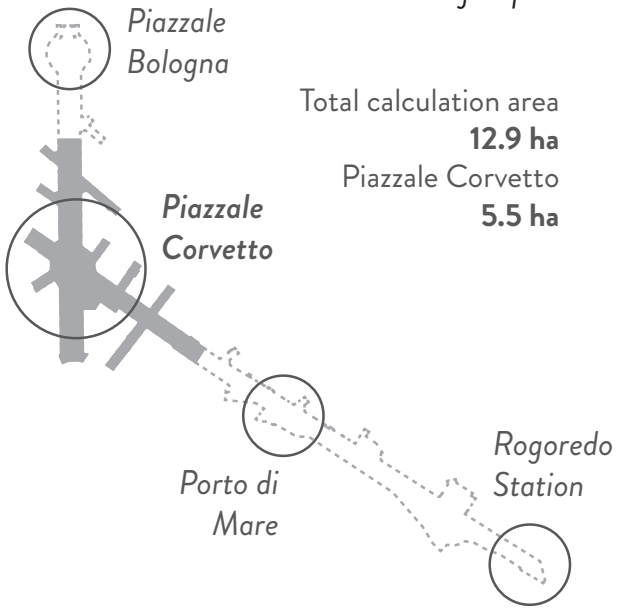
FLOWERY MEADOW [FM]



Green areas that are increasing biodiversity and thet are also reducing the warm areas.
The swathes can be three at a year.

The Project in numbers

The final image we intend to present is an overall evaluation of the project using aggregated quantities and numbers. All the calculations were carried on **inside the main border of the project** (the dashed line in the image on the right) and they measure the changing between the state of the art situation and the **Phase 3 outcome**. "Space and activities" are referred to the only *Piazzale Corvetto* area, with a focus on the new spaces and activities.



Total calculation area
12.9 ha
Piazzale Corvetto
5.5 ha

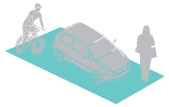
Surface use



-5.5 ha (-68%)
of car only space



+5.4 ha (+225%)
ha of pedestrian space



+0.5 ha
of new shared spaces



-16 %
of parking spaces*



+2.8 km
of cycle lanes



+1700 m²
of permeable surface

Trees benefits



+485
of trees



+1.05 ha
of tree canopy



+4.6 tons/yy
of carbon sequestration



+154 tons
of carbon storage



+191 m³/yy
of avoided water runoff



+115 kg
of removed pollutants

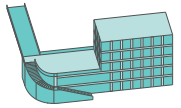
Piazzale Corvetto



+1
new multi-use square



+2410 m²
of new spaces for sport and game activities



+1460 m²
of new building for services and commerce

*following the reduction of per capita car ownership from Milan's SUMP