

POLITECNICO DI MILANO

SCHOOL OF ARCHITECTURE, URBAN PLANNING,
AND CONSTRUCTION ENGINEERING
MSC. SUSTAINABLE ARCHITECTURE AND LANDSCAPE DESIGN



Parco Maggiore di Piacenza

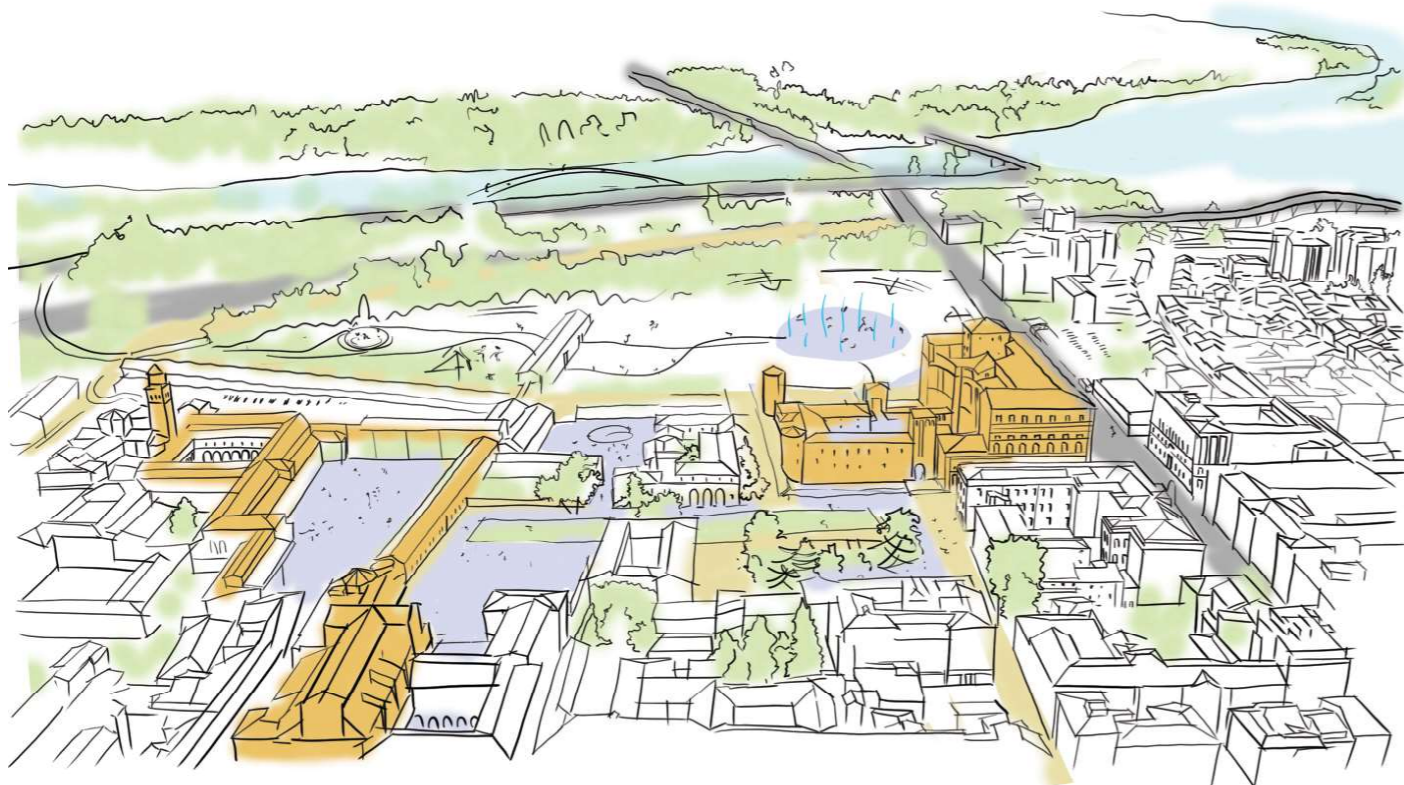
Development of the Northern Sector of Piacenza by reconnecting the city with nature

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"The enjoyment of scenery employs the mind without fatigue and yet exercises it; tranquilizes it and yet enlivens it." – Frederick Law Olmsted



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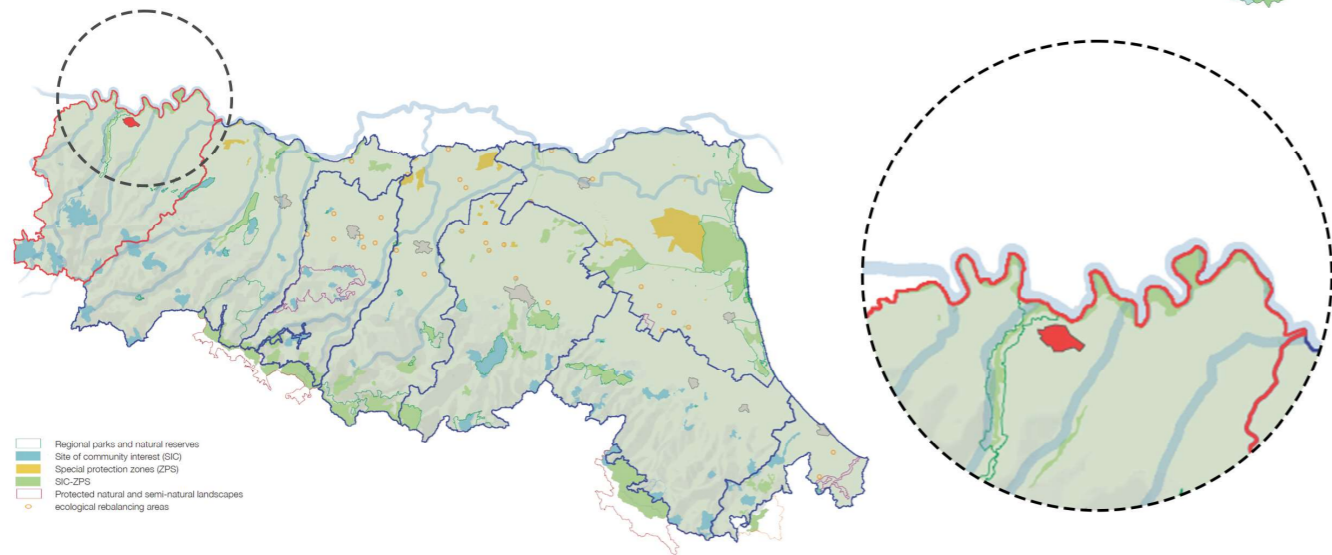
ABSTRACT

The current project aims at bring back the lost connection of Piacenza city to the nature from the urban fabric in city center towards Po River. We are going to execute this concept by both soft and hard interventions. A park is going to be designed as a transition point between the city center and the nature. the park which we called it Parco Maggiore, is going to consist of an active urban park in the place of Arena Daturi and laboratory Pontieri, hosting different events, sports, playground, amphiteatre, etc and a more natural part between the river and this park. in order to make sure this connection is safe for pedestrians we also proposed some revisions in the transportation network as followed: moving the railway underground, removing some roads and move the traffic to other roads or making them more pedestrian friendly. The area is going to be a pedestrian friendly area.

01 General Study

1.1 LAND, NATURE, ECOLOGY

Located in the center of the Po Valley, Piacenza lies on the south bank of the river Po, only 67 Km from Milan. Terminal point of the ancient Via Emilia, the city is located in the most northern and western part of the Emilian region. Its geographical position, at the crossroads between Lombardy, Piedmont, Liguria and Emilia, has always determined its strategic-military destiny and made it an important motorway and railway junction. The territory of Piacenza is home to a variety of landscapes of striking beauty. From the parks and nature reserves that can be visited while enjoying a still intact and uncontaminated nature, to the paths along the rivers.



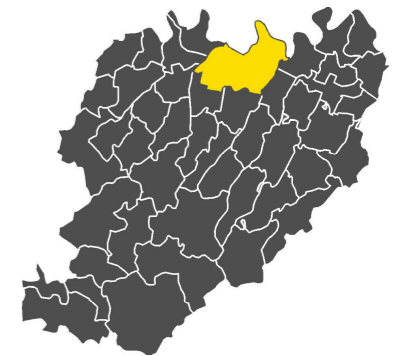
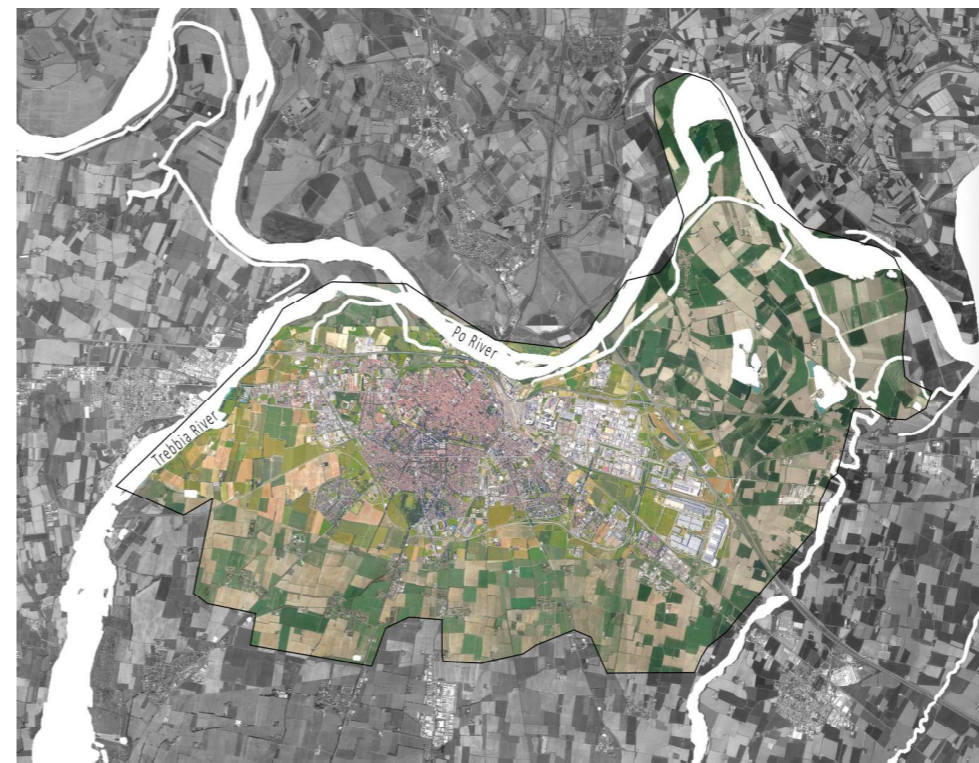
Emilia Romagna Region preserves and protects the regional biodiversity, made up of habitats, animals and plant species, enhances natural and semi-natural landscapes and promotes the knowledge of the natural heritage.

The Protected Areas are represented by Parks, Nature Reserves, Ecological Balance Areas, Protected Natural and Semi-natural Landscapes and, together with the Natura 2000 Network sites, they protect an area equal to 16% of the regional territory.

Nature Reserves are made up of territories of limited extension; they are established because of their regional importance and managed for the conservation of their morphological, biological, ecological, scientific and cultural characteristics and contents.



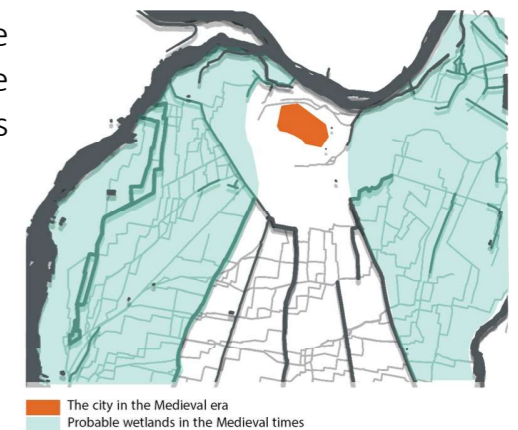
The Po Valley ; The Po river runs along the Po Valley, to the gates of Venice, passing through many Romagnan cities after Piacenza.



Piacenza city in Piacenza Province, Emilia Romagna Region

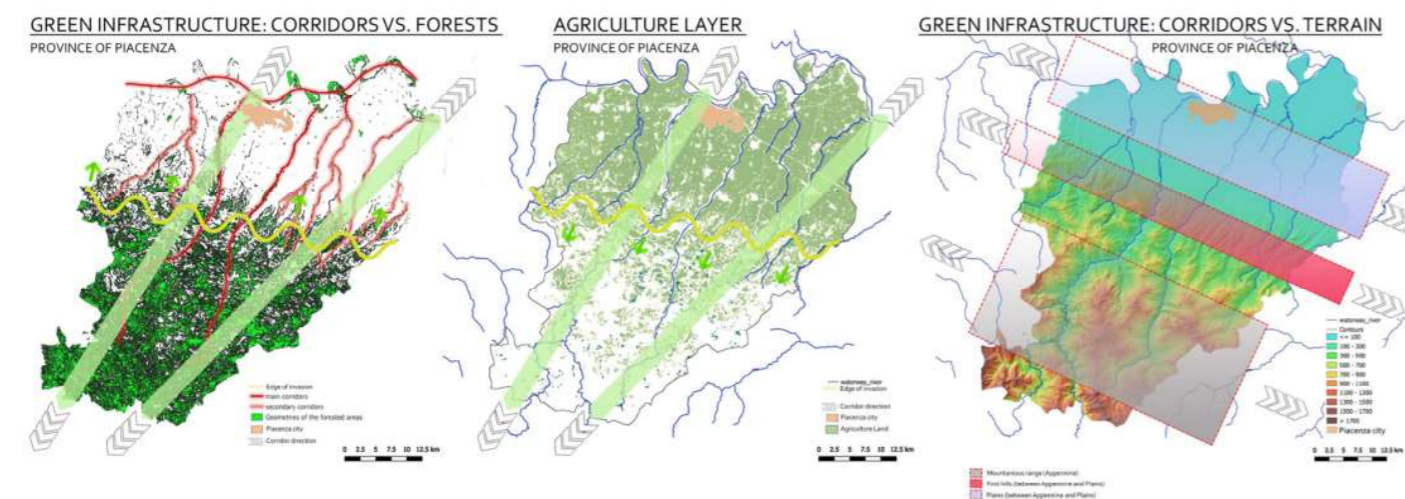
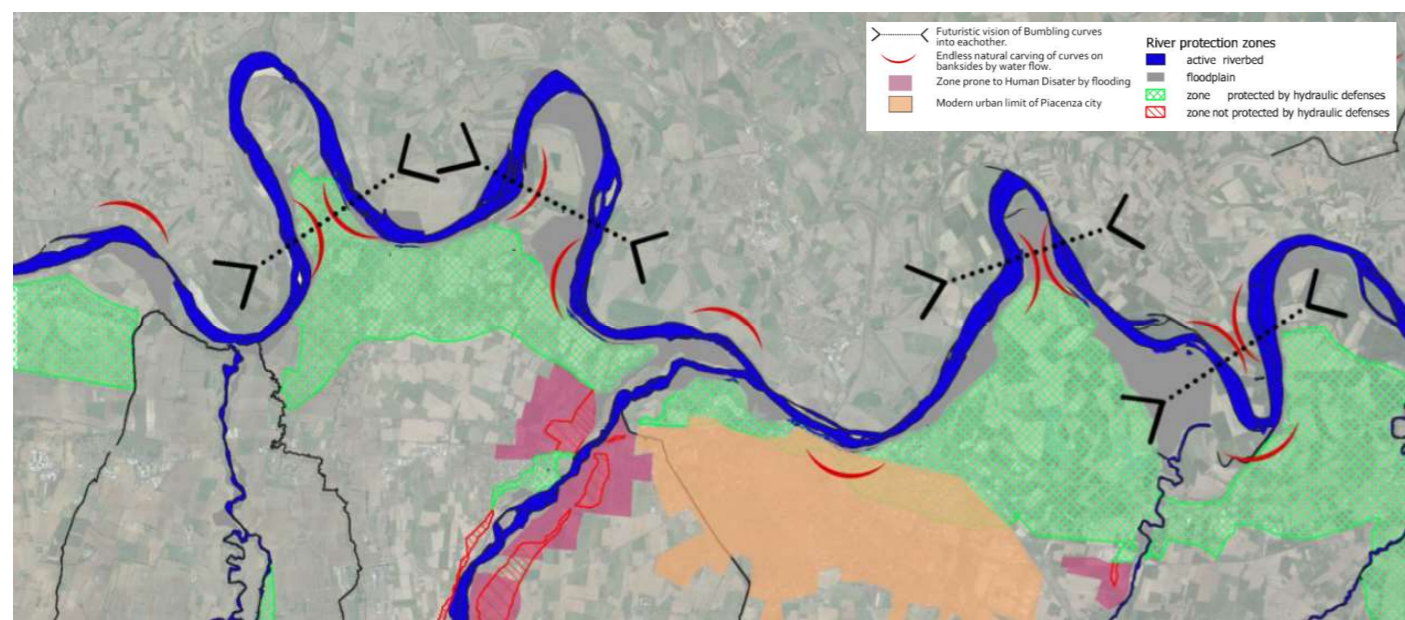
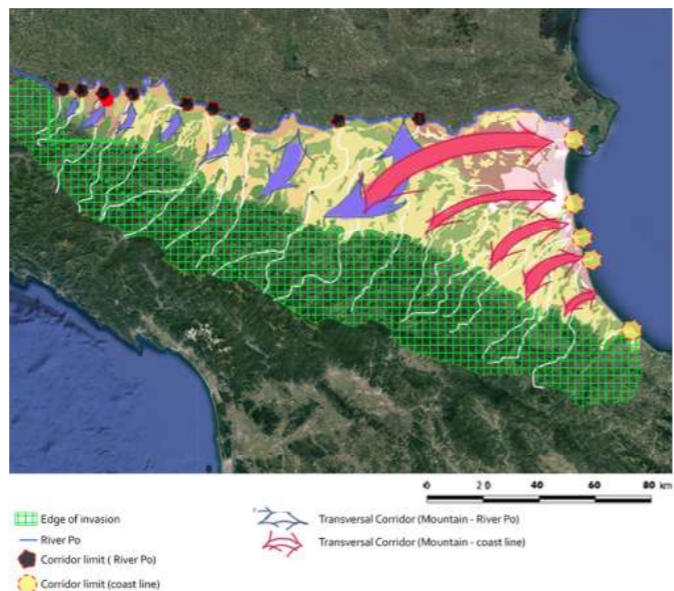
Piacenza is also at the confluence of the Trebbia River, draining the northern Apennine Mountains, and the Po River, draining to the east.

Tenth and Eleventh century benedictines were drainage specialists who transformed the po river plain from the swamp which it had been into tillable land. (The Land as Palimpsest, 1983, Corboz)



Meandering plan river runs in soil allowing rivers to shift their banks and set their own ever-changing courses. Curves in order to form need a little disturbance and a lot of time (both existing in nature). Naturally, curves will keep growing curvier, if not obstructed. In the long run, growing curves will bump to each other. Po river might witness this phenomenon in the future. This phenomenon is a Natural Hazard that might lead to a human disaster if precautions, vulnerability reduction, hazard adaptation, and planning are not taken into consideration. Another phenomenon, natural hazard, is the flooding of the rivers. In our case, the concerned rivers are Po, Trebbia and Nure. A system of anti-flooding prevention is being used, the levee system. Where this sys-

tem is adopted, we have protected area from behind, and when this system is missing, we have unprotected areas, prone to flooding.

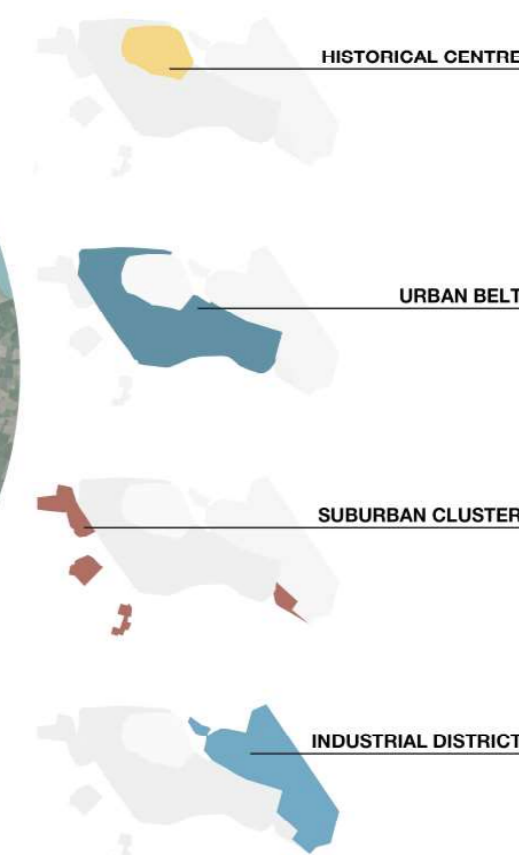
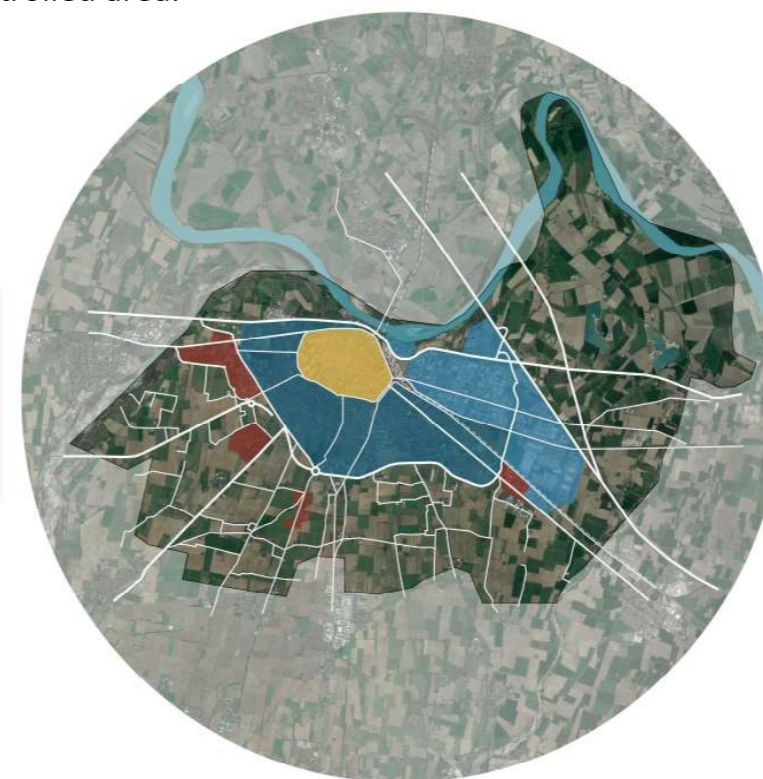
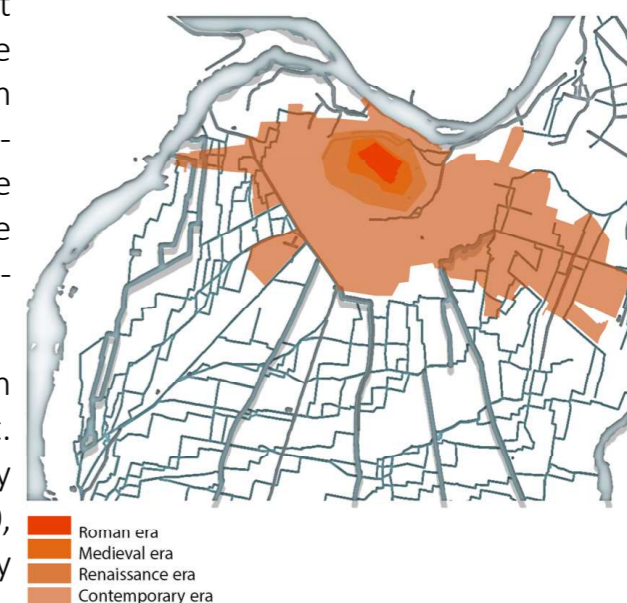


1.2 HISTORY, HERITAGE

Piacenza was founded by the Romans for military purposes in 218 BCE. It was conquered by Carthaginian Hasdrubal II in 207 BCE and the city was sacked in 200 BCE by the Gauls. A key city in the region, it was destroyed by Barbarians but the town was rebuilt under the rule of bishops in the 10th century. By the 12th century, the city was a free comune and it later fought against Frederick I, Holy Roman Emperor as part of the Lombard League. In the Renaissance period it passed from French, to papal, to Viscontis, to Sforzas rule. Pope Paul III formed the Duchy of Parma and Piacenza, and Piacenza became part of this duchy. It voted for a union between it and Piedmont in May 1848; this union was enacted in 1859.

Safety have always been one of the most important factors of forming a city. This is evident from the maps which the city developed in accordance with military boundary. During the Renaissance, the defensive structure was upgraded in order to endure the challenge of state of the art artillery, with the construction of ramparts first, and then the Farnesiano castle that controlled the city.

The city consist of The historic center, the urban belt, suburban cluster and the industrial district. Until 1828, the historic center was surrounded by walls to protect the people from attacks. By 1960, walls were disappeared and city was protected by control towers and city starts to invade to the controlled area.



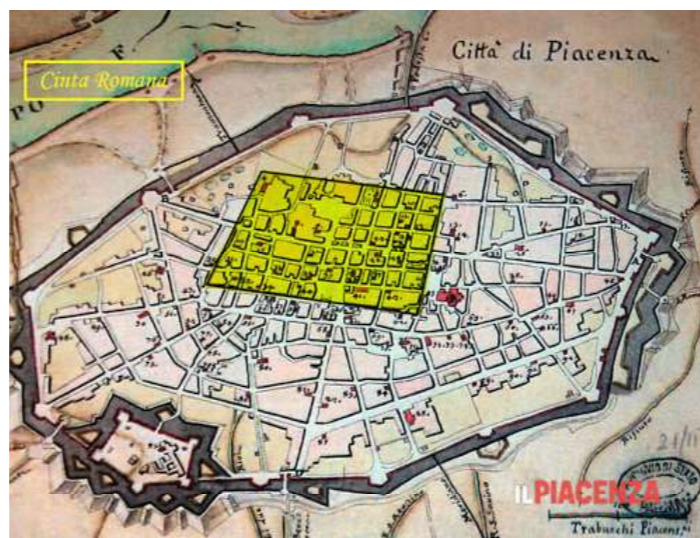
Large, medium and small scale analysis of the green infrastructure, agriculture and rivers in the province of Piacenza.



Piacenza in Renaissance era vs. Piacenza historic center inside the historic walls in current time.

There are many historical elements in the city of Piacenza. Some of them will be discussed in the following.

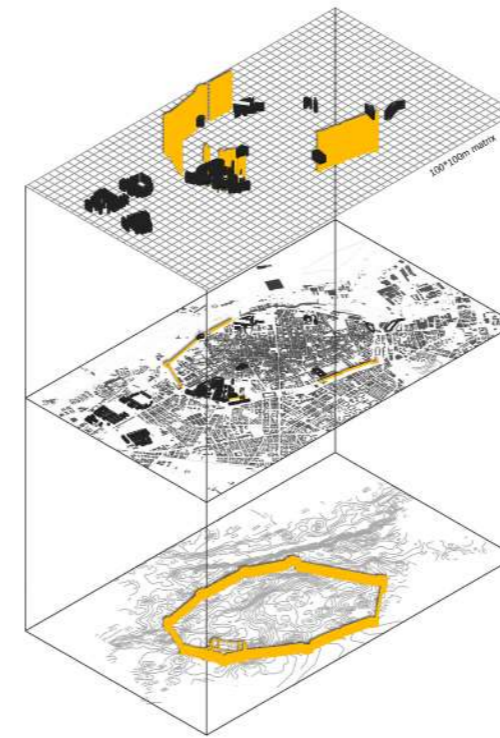
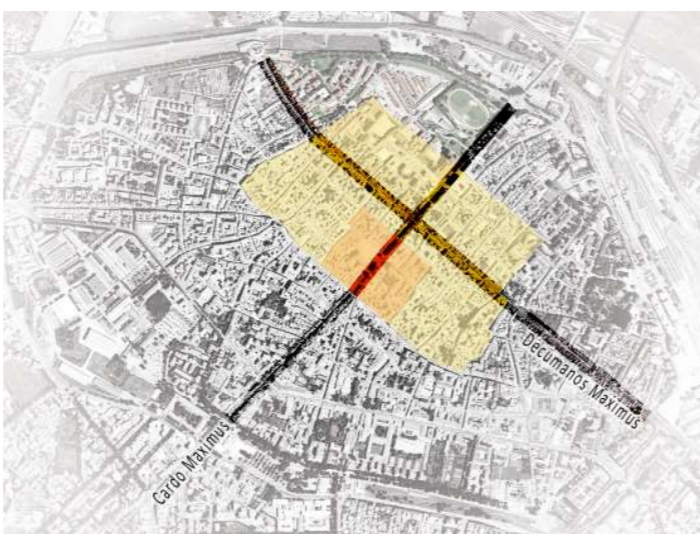
1- The city was founded by the Romans in 218 BC as a colony with the name of Placentia. Piacenza was the first Roman colony under Latin law in northern Italy, playing the important strategic role of military outpost against invading armies.



The city is characterized by a very regular **grid subdivision**, a typical structure of a Roman city, blocks almost square, symmetrically arranged. Traces of the historical Roman Piacenza are still present in the current historical center of the city, where the Roman city used to be.

The Yellow zone in the map shows the Roman grids of the city

2- Moreover, as clear evidence of the Roman origin of the city, are the **two major streets: Cardo and Decumanus**. The cardo maximus corresponds to the current viale Risorgimento and Corso Cavour. The decumanus maximus corresponds to the via Borghetto and Roma and is aligned with the via Emilia, inaugurated in 187 BC.



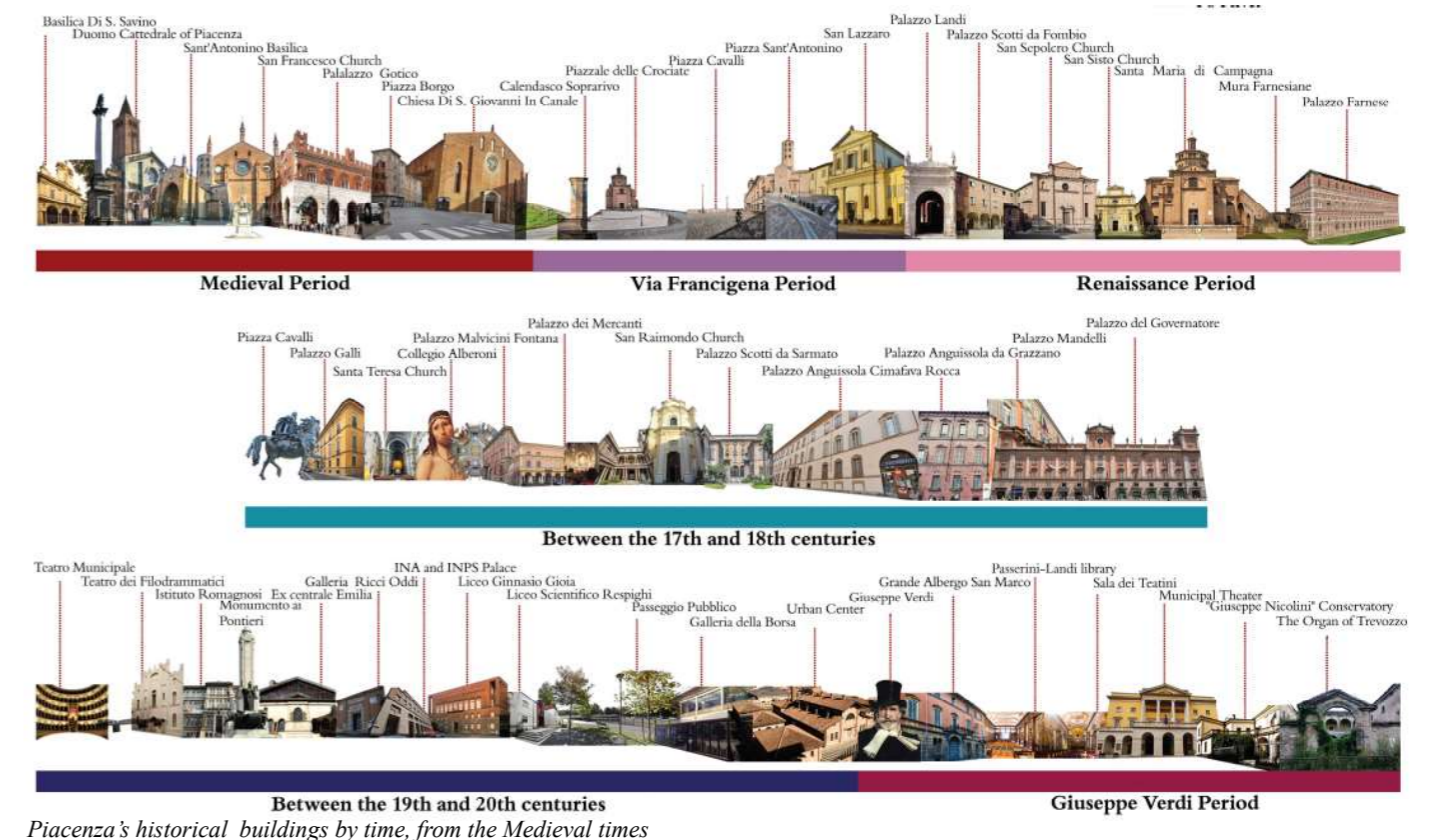
3- Piacenza **historic walls** date back to the 16th century in the Renaissance era. Till then, the city has spread outside the ramparts but some parts of the wall has been preserved. Two major parts of the 6,5 km are still visible, which are in the north west, close to Palazzo Farnese and the other is in the south east along Pubbico Passegio.



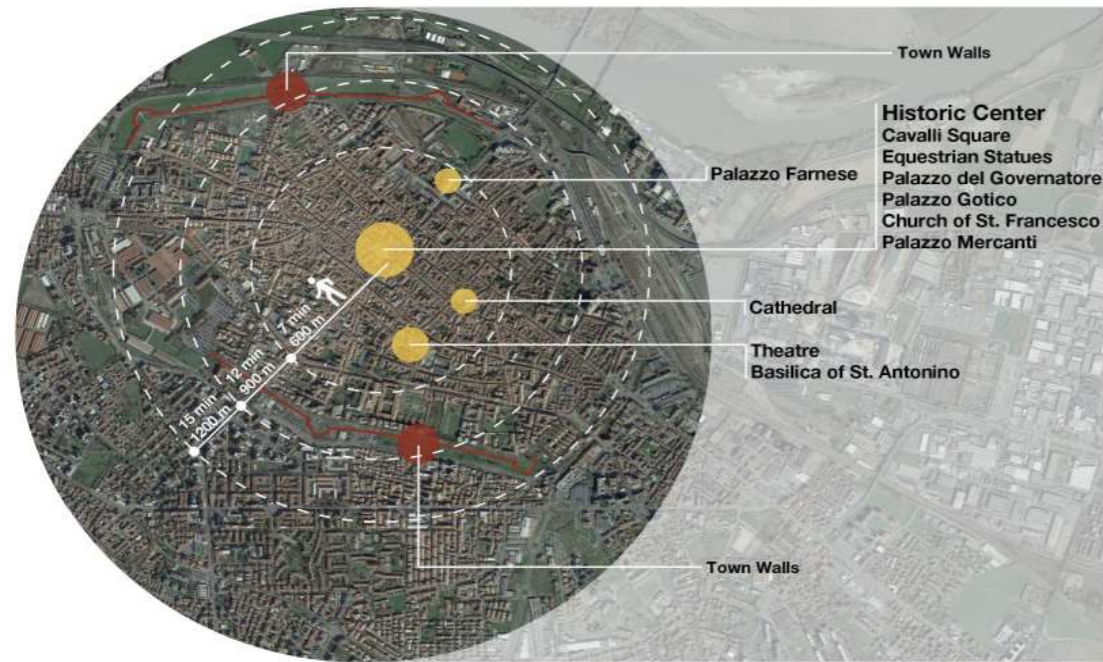
After the plague of 1524 it was decided to continue strengthening the military defenses of the city and developing the settlements. The fortification work, which began in 1525 with excavations and preparation of the timber, continues under Paolo III Farnese, who extends the excavation and construction of the bastions with buttresses, casemates and gunboats on the northern and southern sides of the city.

4- There are many important historical buildings in the city of Piacenza city. We study some of them in the next chapter while analysing the site. Some of the most important historical buildings consist of Palazzo Farnese close to the walls and San Sisto Church.

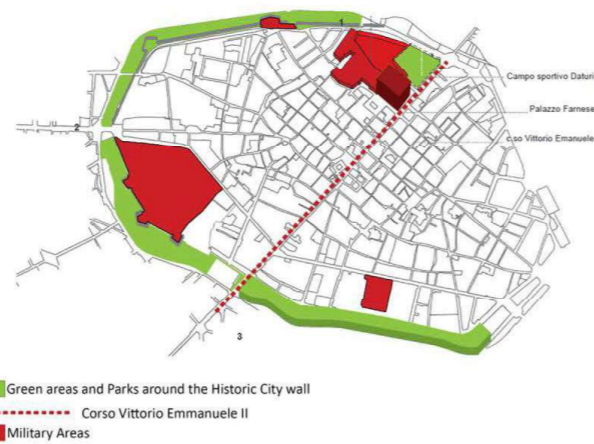
In Renaissance era, The century saw the construction of the castle close to the walls, the Palazzo Farnese, and the renewal of the military and hospital systems.



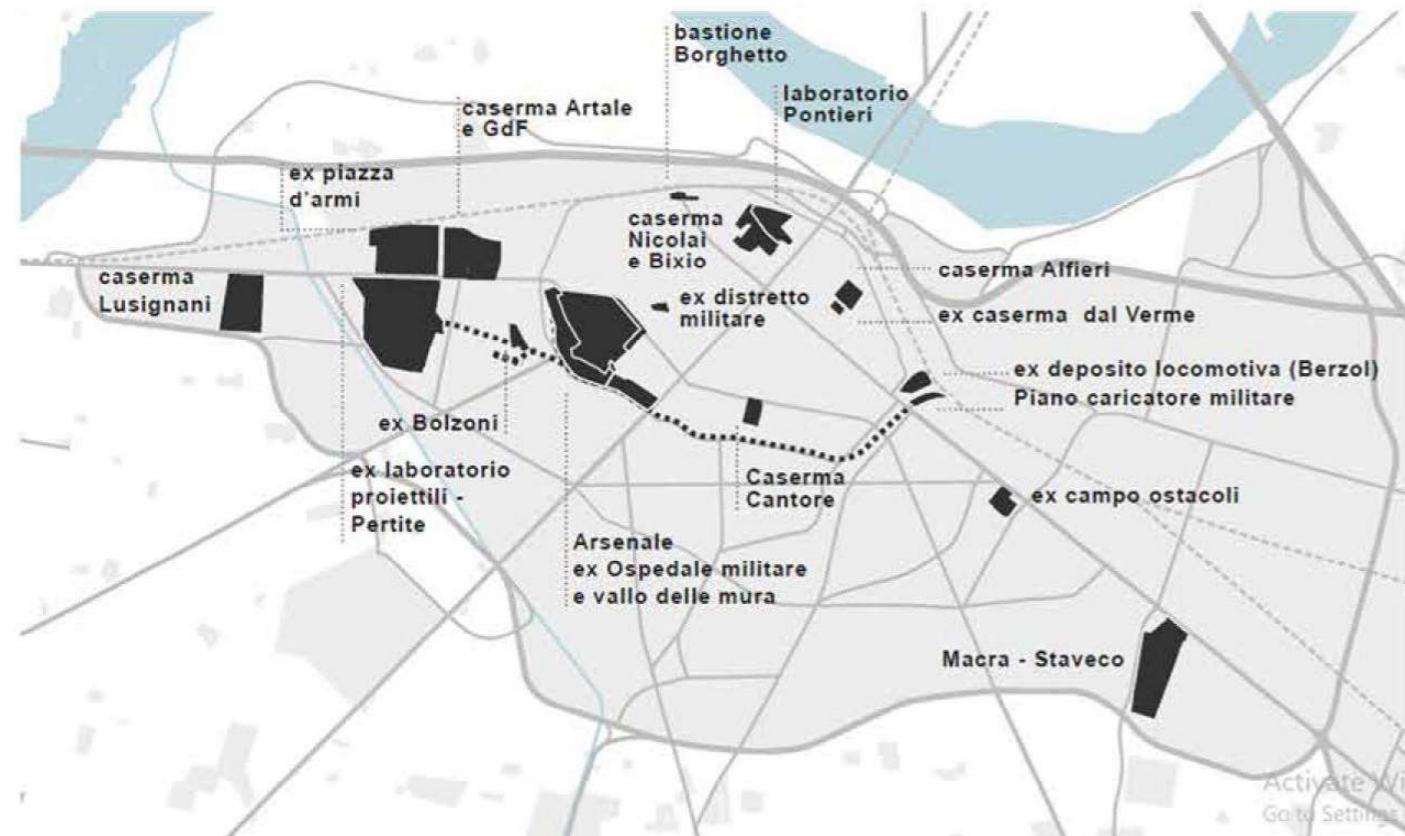
Piacenza's historical buildings by time, from the Medieval times



The points of interest in Piacenza, including Piazzas, historical buildings and the walls



5- Many of the **military domains** are of historical value. However, nowadays they are not accessible by public and they have created unpenetrable unfriendly walls in the city and is impacting the livelihood of the city.



1.3 DEMOGRAPHY, PEOPLE, LIFE

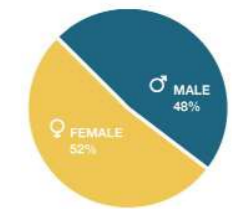
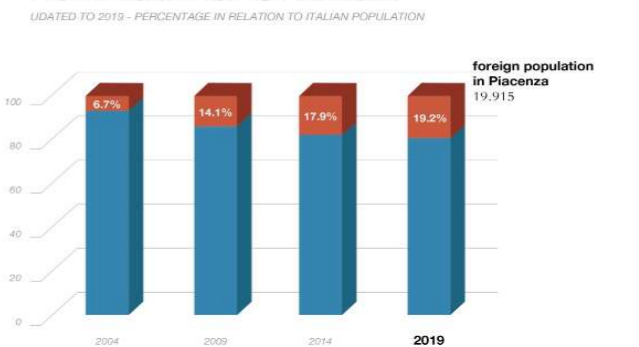
The province of Piacenza is a province in the Emilia-Romagna region of Italy. Its provincial capital is Piacenza city. As of 2016, it has a total population of 287,152 inhabitants over an area of 2,585.86 square kilometres, giving it a population density of 111.38 inhabitants per square kilometre. According to ISTAT data, the population in Piacenza amount to roughly **104.000 inhabitants**, evenly distributed between genders. Regarding age distribution, the mode is in between 50-54 years, mostly consisting of working class attracted by the industrial activity of the city.

The presence of the regional detachment of **two major universities** (Politecnico di Milano and Università Cattolica del Sacro Cuore) attracts a younger population (around 28% of the inhabitants are below 30yo), although the main activity in the urban area is still the secondary sector. Historically, the population in Piacenza experienced a growth for economic reasons, contemporary to the industrial Development during the economic boom. The age pyramid follows faithfully the national trend. Finally, the economic welfare attracted, through the years, **foreign immigration**, with a population contributing to 19% of the total, against the 8% that is the national Percentage.

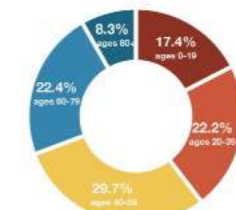
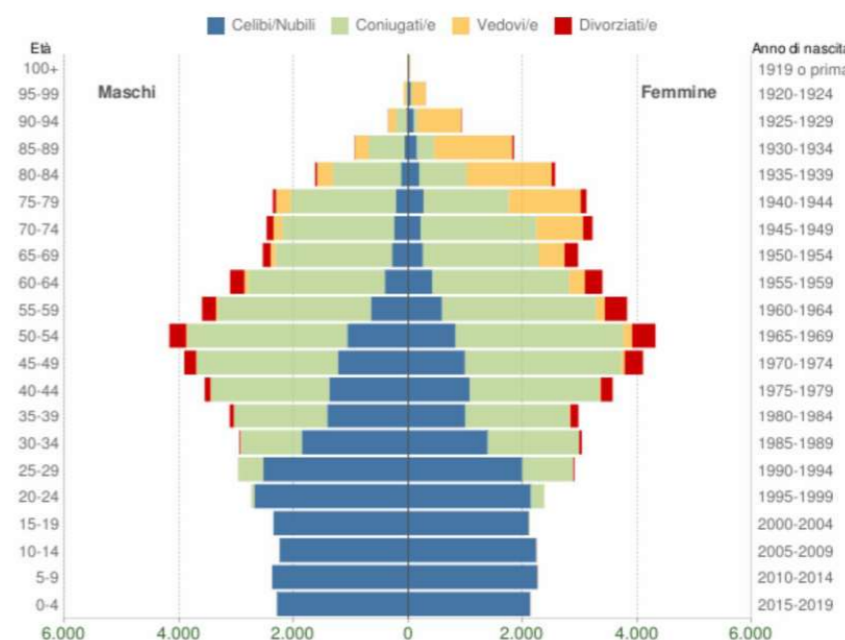


The location & population of Piacenza city and province located in Emilia Romagna Region in North Italy

FOREIGN POPULATION



Gender diagram of the inhabitants of Piacenza city



Age diagram of the inhabitants of Piacenza city

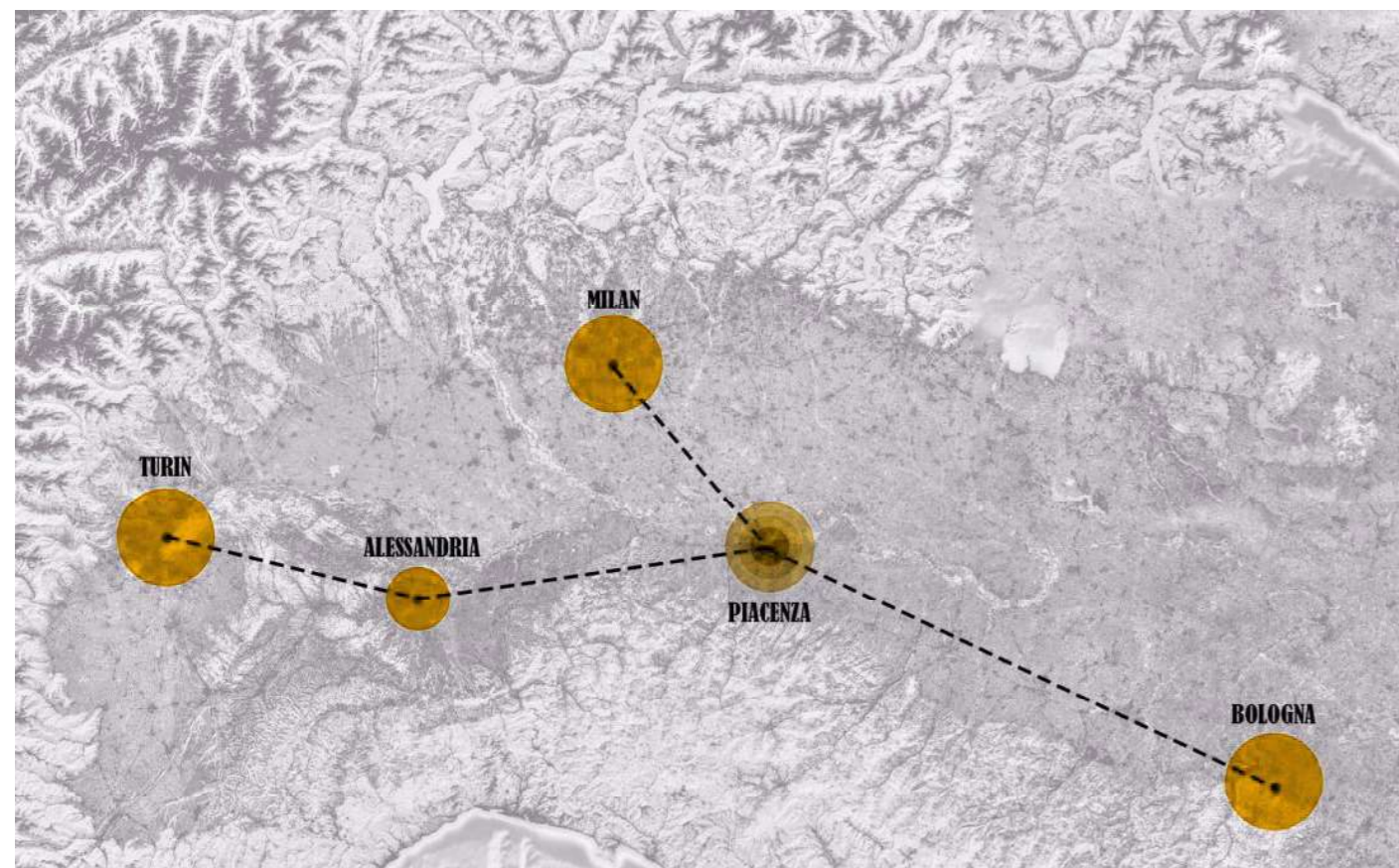
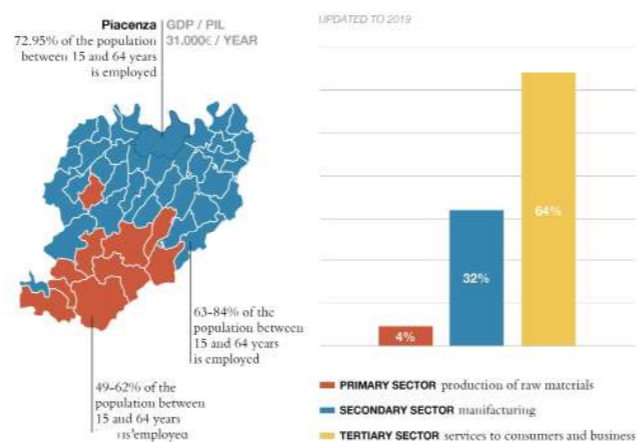
Diagram showing the number of female & male inhabitants of the city based on their age and marital status according to ISTAT data. From the left, the blue one represents single, married, widowed and divorced. As we can see most of the population are between the age range of 50-54.

1.4 ECONOMICS, PROCESSES, RESOURCES

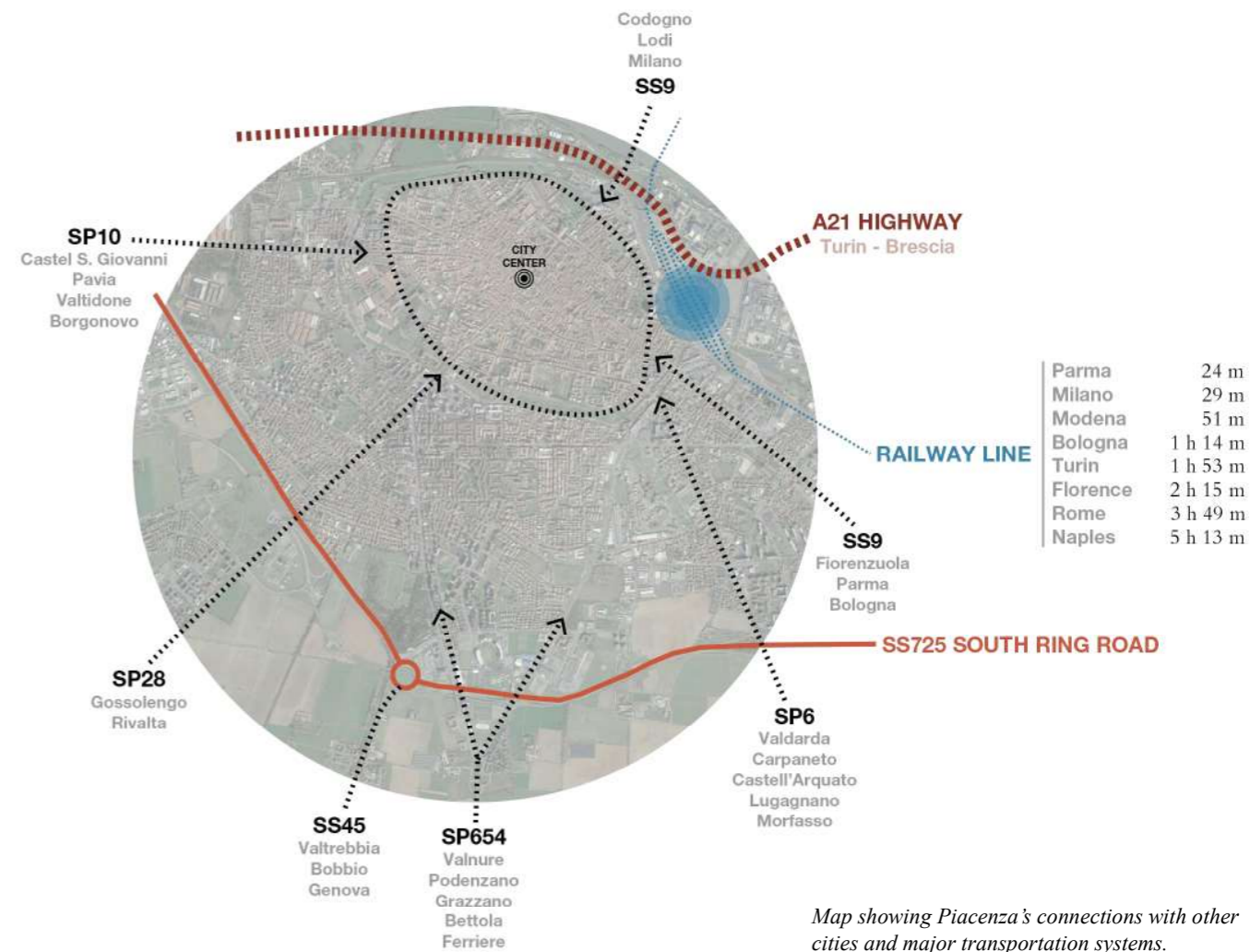
At the end of the 1800s, early 1900s, a large-scale industrialization took place in northern Italy, particularly in the cities of Turin, Milan, and Genoa, which represent the top regions of Piedmont, Lombardy, and Liguria. At the end of the 20th century, in a similar way, an economic boom affected the industrial area of the north-east; the result of this geographical distribution was that the city of Piacenza became a junction for the transport of goods, given its centralized position. From this point of view, the strategic importance of Piacenza is well represented by the presence on the eastern outskirts of the city, the so-called Logistics Pole, home to many large transport companies and warehouses of product distribution companies. The induced activity of this particular sector has also justified by the authorities an increase in transport to other strategic cities, for example Piacenza-La Spezia. In 2013, in fact, a memorandum of understanding was signed between the municipality of Piacenza and the Port Authority of La Spezia for the

strengthening of freight transport, in particular by rail, between the city and the port, so as to allow the increase of services without incurring in infrastructure problems.

From the employment point of study, For the population aged 15 to 64 in 2019 according to ISTAT data, the job seekers are 8 thousand, while 136 thousand people are active in the job force; the employment rate is up to 69%, in line with the market of the region Emilia Romagna, and greater than the national market which amounts to 58.5%.



Piacenza is a nodal city where connects major cities in North Italy together: from north west to Milan, west to Alessandria and turin and from south east to bologna.



map showing the industrial areas & Logistic poles of the city

02 Understanding The Site

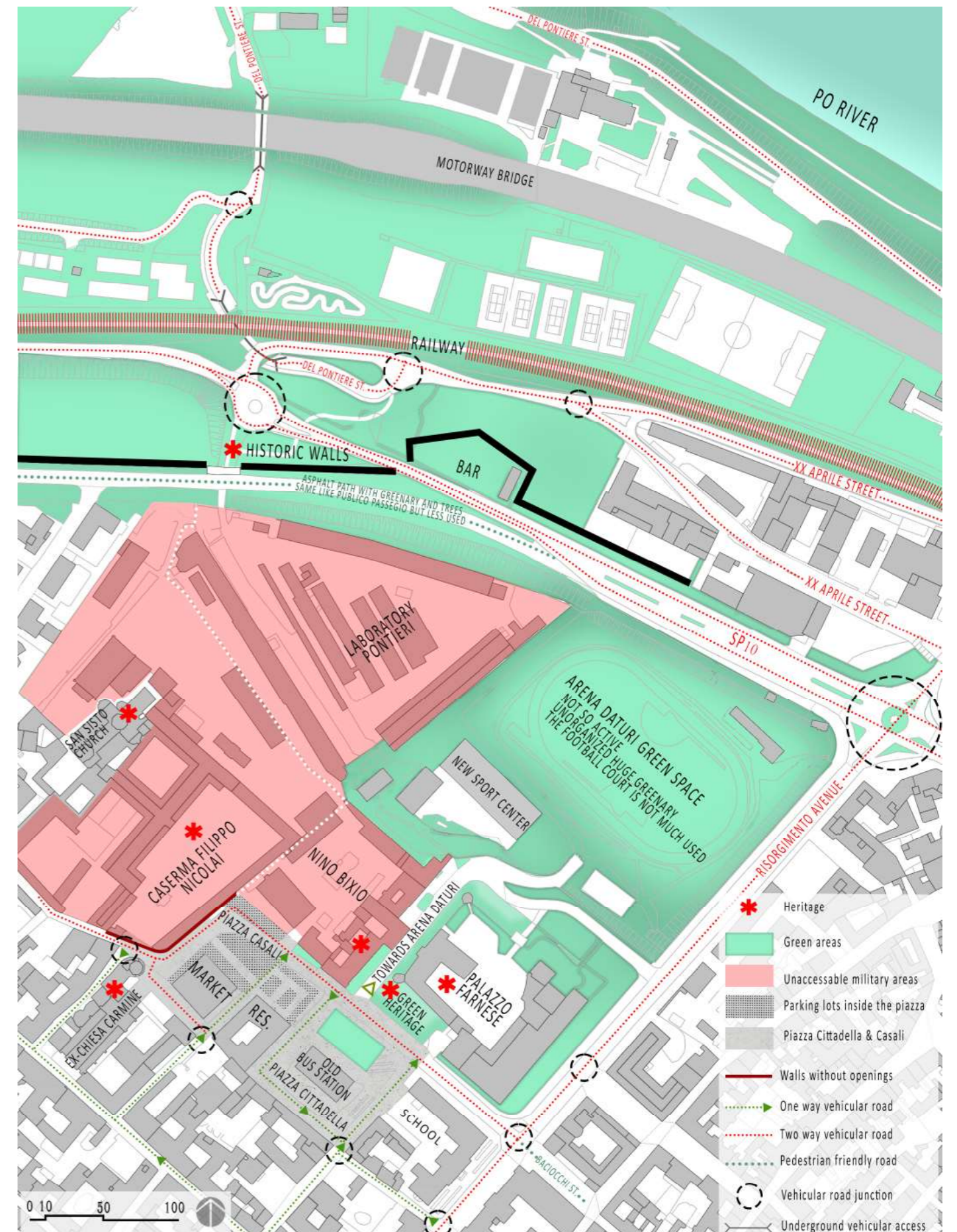
2.1- WHERE IS THE SITE AND WHY WE CHOSE IT?

The project site is located in the northern part of the city close to the city walls and extends to the riverside.



There are many reasons why we chose this site to work on. The process of defining the site limit was a back and forth process in which we tried to analyse and understand the potentials and issues in the site that can affect the whole city in many ways. As students who have experienced life in Piacenza, we also had the opportunity to deeply understand where are the places of interest and active life in the city and where are the places that are not very interesting for people. The main reasons why we chose this site are as followed:

- 1- The Redevelopment of the Northern Sector as a new guideline has been approved by Municipality in 2008.
- 2- Closeness to the River Po and also northern green areas of the city and also Parco Trebbia.
- 3- including many heritage such as buildings from Renaissance era, the northern part of the historic walls and bastions, and also green heritage such as greenery around Farnese Palace.



Map showing the project area in the northern sector of Piacenza, having in itself many heritage and abandoned military areas

- 4- Having many potential abandoned areas & buildings such as Laboratory Pontieri and Nino Bixio military domain. also the old stables, or the there has a good potential to be restored and used for further development of the area.

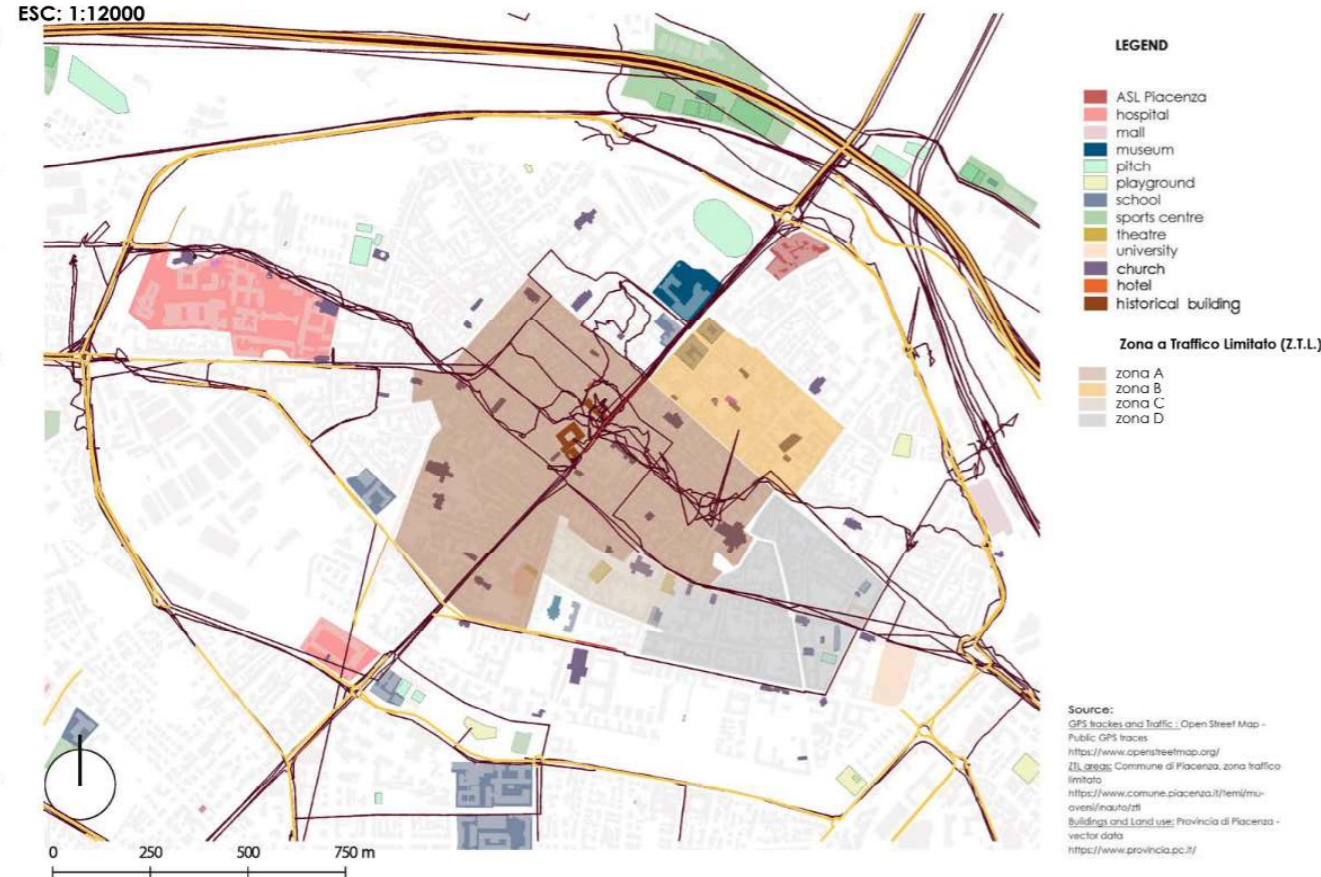
The other building is the old bus station building which is now abandoned and the walls are filled with graffiti.

5- The area has open green spaces which are not organized well for public use. such as Daturi green area exactly in north part of Palazzo Farnese.

6- The type of activities and functions are suitable for further development. The are * Despite these potentials the area is not very friendly and organized for public use. and most of the activities happen just for the school, and the market around Cittadella and Casali Square.

PEDESTRIAN AND VEHICULAR CIRCULATION

ESC: 1:12000



Based on the GPS trace data taken from OpenStreetmaps.org, we can see that the most activities are happening in the city center, where there are most of the commercial activities, close to Piazza Cavalli, Piazza Duomo & the two important shopping streets: Via XX Settembre, Corso Vittorio Emanuele II. There is also activities happening in the green areas and parks such as Pubblico passeggio. The other activities are mostly due to transportation & accessibility such as the train station and the main roads. We can easily understand from this map that most parts of the city outside the city center are less frequent even if there are touristic attractions such as historical buildings or palaces.

2.2- INTRODUCING OPEN/PUBLIC SPACES AND PIAZZAS IN THE SITE

Piazza Cittadella, and next to it **Piazza Casali**, bring together important buildings in history and architecture: archeological evidence from Roman times, monastic complex of San Sisto from the 9th century (Middle Ages), Cittadella Viscontea from the 14th century, Carmine from the 14th century and Palazzo Farnese from the 16th century (Renaissance). As well, important buildings belonging to the modern Era such as the covered market from 1954 and the bus station from 1955.

The Cittadella acquires prestige in the 16th century with the arrival of Pier Luigi Farnese (1545). The Palazzo Farnese, begun in 1558 on a project by Vignola, built only in part, acquires with Margherita the fifteenth-century function of the casino for the otium, typical of the Emilian courts and that of Ferrara in particular.



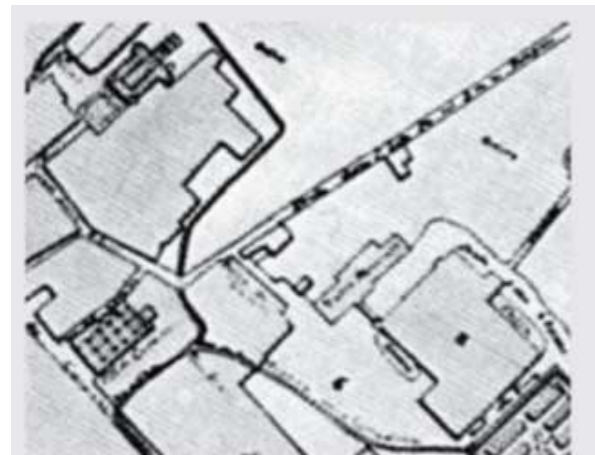
Buildings and Activities around Piazza della Cittadella & Piazza Allessandro Casali

- 1- Palazzo Farnese & the museum
- 2- The former stables or theatre
- 3- The old bus station building
- 4- Ex-Chiesa di Carmine

- 5- Filippo Nicolai military domain
- 6- Former stables of Palazzo Farnese
- 7- Schools
- 8- Mixed-use commercial & Residentials

chronological order

In 1700: In the place of the actual main building of the caserma Nino Bixio, was erected the ducal theater with an elevated bridge connecting to the Palazzo Farnese. The Stables for horses were in the place where we currently find Piazza Casali, in the current place of the municipal market building.



1810
Monastero di San Sisto diventa Caserma Teatro "Abruciato" con cavalcavia

In 1810: The ducal theater was burnt, and the cloisters of the San Sisto became a military barracks. The military barracks was named after the monastery complex San Sisto. Later on, it was named after Filippo Nicolai

In 1836: The location of the old stables was changed. The new stables for the horses of the court of Maria Luigia were built on the area of the destroyed Ducal theatre, today occupied by the Nino Bixio barracks. The elevated bridge that connected Palazzo Farnese to the new stables was still always present.



1862
Caserma San Sisto (ora Nicolai)
Caserma Nuova (ora Bixio)
Cavalcavia

In around 1862, Nino Bixio barracks was established, taking its base as the new horses stables. The Elevated bridge was always there connecting the two facilities: Palazzo Farnese and the new Nino Bixio barrack.

Between 1881 and 1890, Filippo Nicolai barracks was witnessing major expansion. A new building to the North-east was added as well as to the North and to the West later. "Il Campo della Fiera" was demolished to build via del Risorgimento. The elevated bridge connecting the stables to the palace was demolished.



1700 circa
Monastero di San Sisto
Teatro della Cittadella con cavalcavia di collegamento a Palazzo Farnese



1881
Bracci nord-est Caserma Nicolai
Demolizione cavalcavia



1890
Edifici ovest e nord Caserma Nicolai

In 1902, Nino Bixio barracks was witnessing some developments and expansions. A new building was added to the West of the horse stables building, which caused the blocking of the "Starda del Guazzo" street, a road that could have been connecting Piazza della Cittadella to the Via Cardinale Maculani in today's time.

In the early twentieth century, furthermore, the set of military buildings that persist on the site of the former Ducal Theater, later destined for Ducal stables, is also fully defined, while the prospect of the Nicolai Barracks, Genio Pontieri, is aligned on the ancient wall of the gardens of the Convent of San Sisto and welding to "L" with the other front definitively closes the road that connected Piazza Cittadella with Porta Soccorso and the stretch of Farnese walls to the north. The Rio Fodesta is closed as has already happened for the other channels to make place for new streets.

In the Fascist period, with the destination of the old Camera del Lavoro in via Borghetto as "House of the Fascist Martyrs", a new square dedicated to the Marquis Alessandro Casali, who died in 1917 during World War I, was built adjacent to Piazza Cittadella. In 1945, later buildings were added to the same Nino Bixio barrack, on its North and South-east side, giving it its final shape of today.

In 1954 the Covered Local Market was created on a project by Arch. Felice Cattadori, a market that occupies the central part of Piazza Casali. In 1955 the building of the bus station was erected, and the remaining uncovered part is intended for parking.



1902
Edificio ovest Caserma Bixio
Interruzione Strada del Guazzo



1945

Military barracks: The Bixio and Nicolai Barracks, despite being close to the Pontieri Laboratory; which is built on lower ground with embankment from all sides approximately, do not share its condition of isolation. On the contrary, they are located at the height of the historic city, to some extent it represents its limit, being located on the edge of the ancient river terracing and constitutes one of the fronts of the system of Piazza Casali- Piazza Cittadella, the square on which Palazzo Farnese also overlooks, the main historical monument of Piacenza. The set of buildings that make up the Barracks is also close to the convent complex of San Sisto, with which it borders seamlessly. It is therefore a portion of the historic city, which has architectural features of great interest, despite having accumulated over time also different episodes of superimposition with poor quality service buildings.

The current situation: The councilor for Public Works Marco Tassi has publicly announced his intention to demolish the former bus station in Piazza Cittadella within a short time. The commissioner would like to start the construction of the underground garage with 200 public and 50 private parking spaces immediately afterwards.

The intervention has been deliberated by the City Council in 2008 was to begin in 2013 and end in 2015. But to date it has not yet started due to the opposition of the committee of citizens opposing to the works and the existence of objective administrative and technical problems. At actual times everything is still.

Conclusion: Thus, we can say that Piazza Cittadella and Piazza Casali, facing such many important historical buildings belonging to different eras from the Middle Ages until the Twentieth century, without forgetting the archaeological finds from the Roman era, dating back to the foundation of the city of Piacenza, despite all it remained an unresolved space, a place not a place, that the citizens of Piacenza are not never been able to feel their own and live fully.

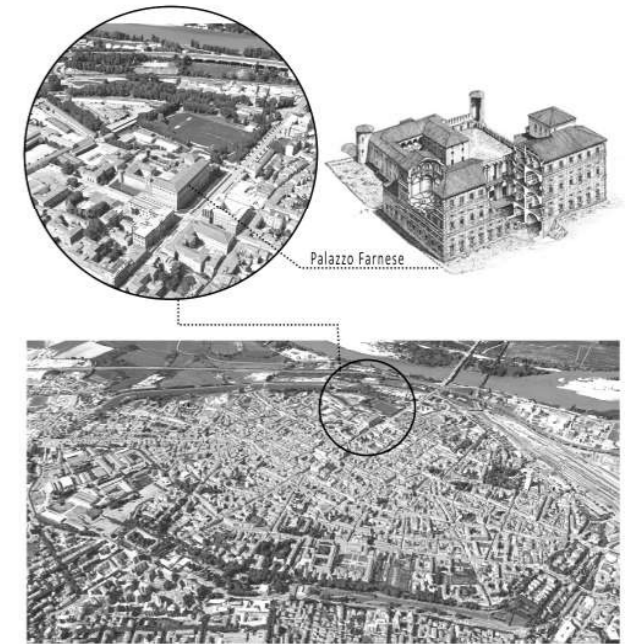
Now it is a complete shattering of a void: people pass, perform their functions but do not live in this space; these buildings stand out for their extraneousness to the spatial context, they are encumbrances that highlight the spatial fragmentation with greater force.

The disconnection of the two roads that used to connect the through these military barracks: Strada del Guazzo and the Casali-Porta del Soccorso Road made the site in general disconnected and fragmented more from its surrounding.

Piazza Cittadella is still the result of one of the many historic squares produced by a design stratification that has never found a solution. It is still in search for its soul.

2.3- INTRODUCING THE BUILDING IN THE SITE

Palazzo Farnese is one of that most important building of Piacenza in which gives identity to all surrounding landscape. Because of its dimensions, it might be seen as far as motorways and bridge over river Po, linking Piacenza to Lombardia. The construction of the building begun in 1568 by demand of Ottavia Farnese and it was meant to hold the family residence. the rectangular plan is about 111 meters by 88 meters. The main façade modeled on the ancient triumphal arch and with a large tower, and a theater in the large inner courtyard. The expenditure of such a large palace plus the political machinations of the Piacentine nobility may have caused Ottavio not to complete the building and instead move his court from Piacenza to Parma.



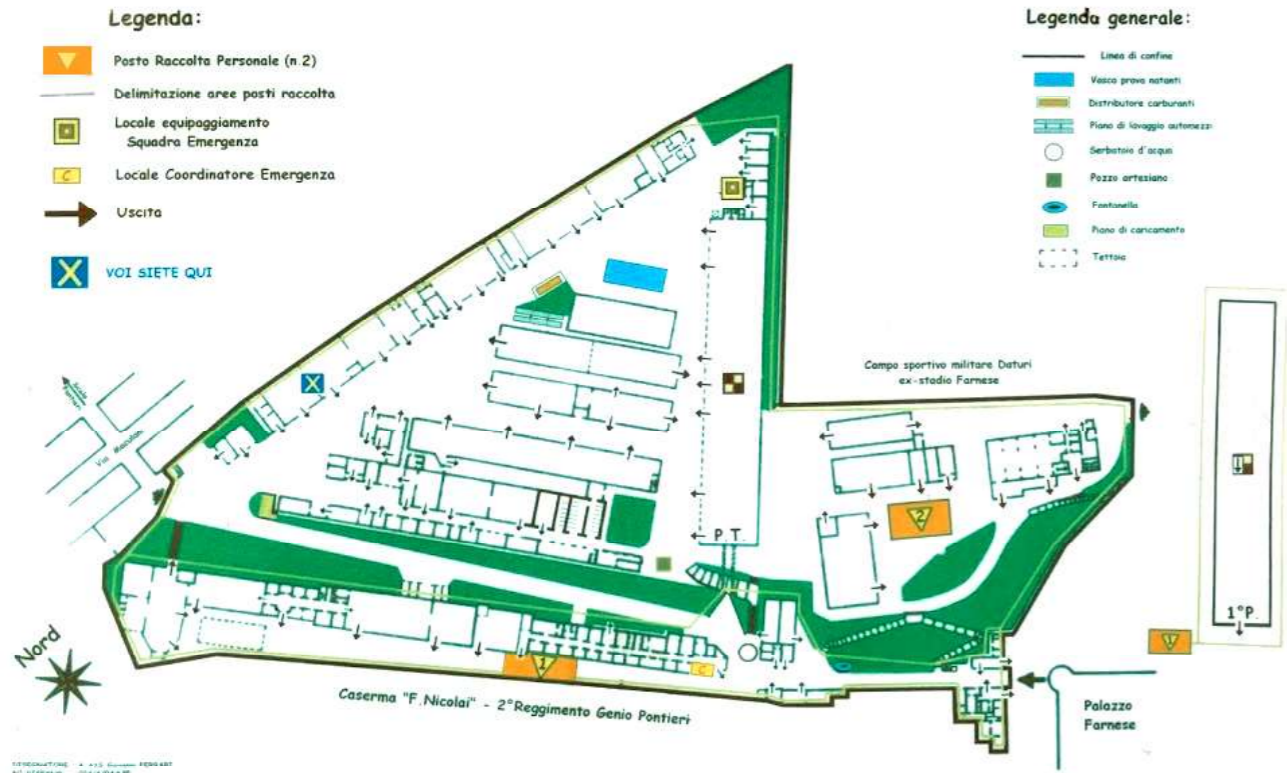
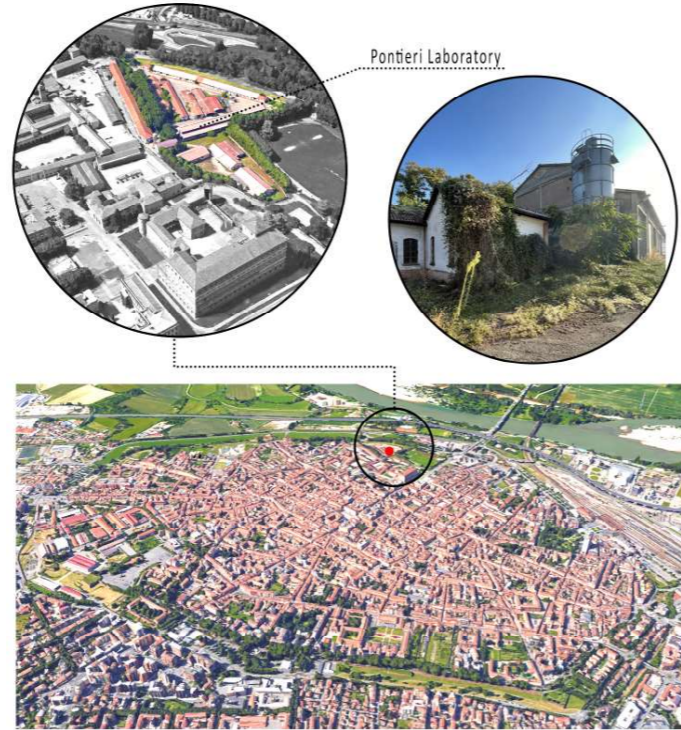
A large park for Palazzo Farnese:

Due to the studies of architect Roberta Morisi which started in the year 2000, evidence show that a garden was designed for palazzo Farnese but was never built. "The garden would have united the piazza in front of the building, the theater that should have been inside the piazza del palazzo and the river Po. There would have been terraces, water features, fountains and an orchard ». We can see the image that have been recreated by this architect & researcher below:

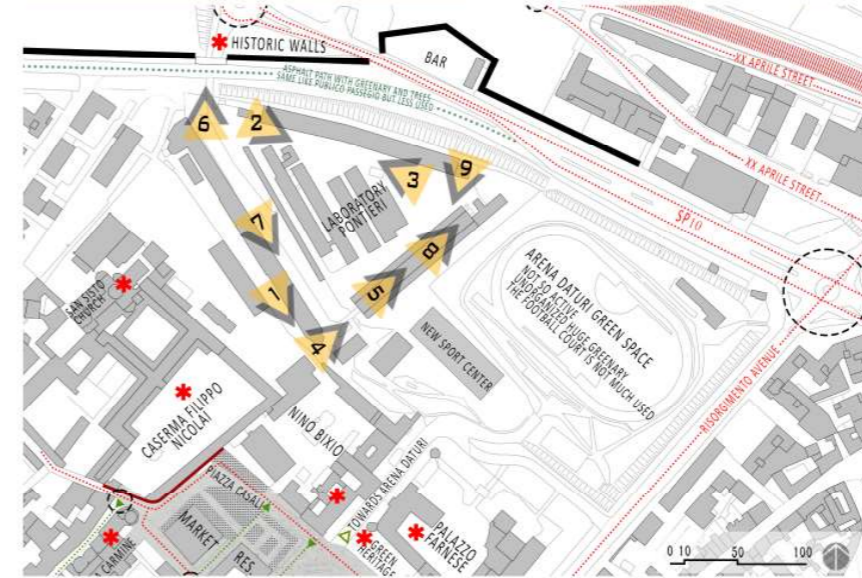


Pontieri Laboratory is an important area of about 44 thousand square meters, which, decommissioned by the Ministry of Defense, was acquired in 2016 through the Agenzia del Demanio in the Municipality of Piacenza. The property is located in the northern section of the historic center of Piacenza in an area of great historical and architectural value.

Some of the buildings are not in good condition but there are some buildings that have the potential to be restored and used for other means. This will be discussed more clearly in the next chapter.



Emergency evacuation map of Laboratorio Pontieri



the former **Chiesa del Carmine**, located between via Borghetto and piazza Casali, dates back to the 14th century. It was transformed into a hospital in 1805 and then to a warehouse. In 2006, the whole complex was left abandoned until 2017 restorations by Municipality of Piacenza to create an open laboratory for mobility and sustainable logistics .
 An urban space usable by citizens and businesses, which will see the coexistence of information services on the environment, mobility, tourism and city events and spaces equipped with advanced information technology, in the name of innovation and sustainability.



The **Rionale Market** was built in 1954, and it is still active now.



The old **Bus Station** building, 1955



2.4- CONCLUSION

The site is located in the northern sector of Piacenza where is already one of Piacenza's municipality priorities to develop it for public realm. Almost none of the decisions taken on the proposed interventions have been executed till now.

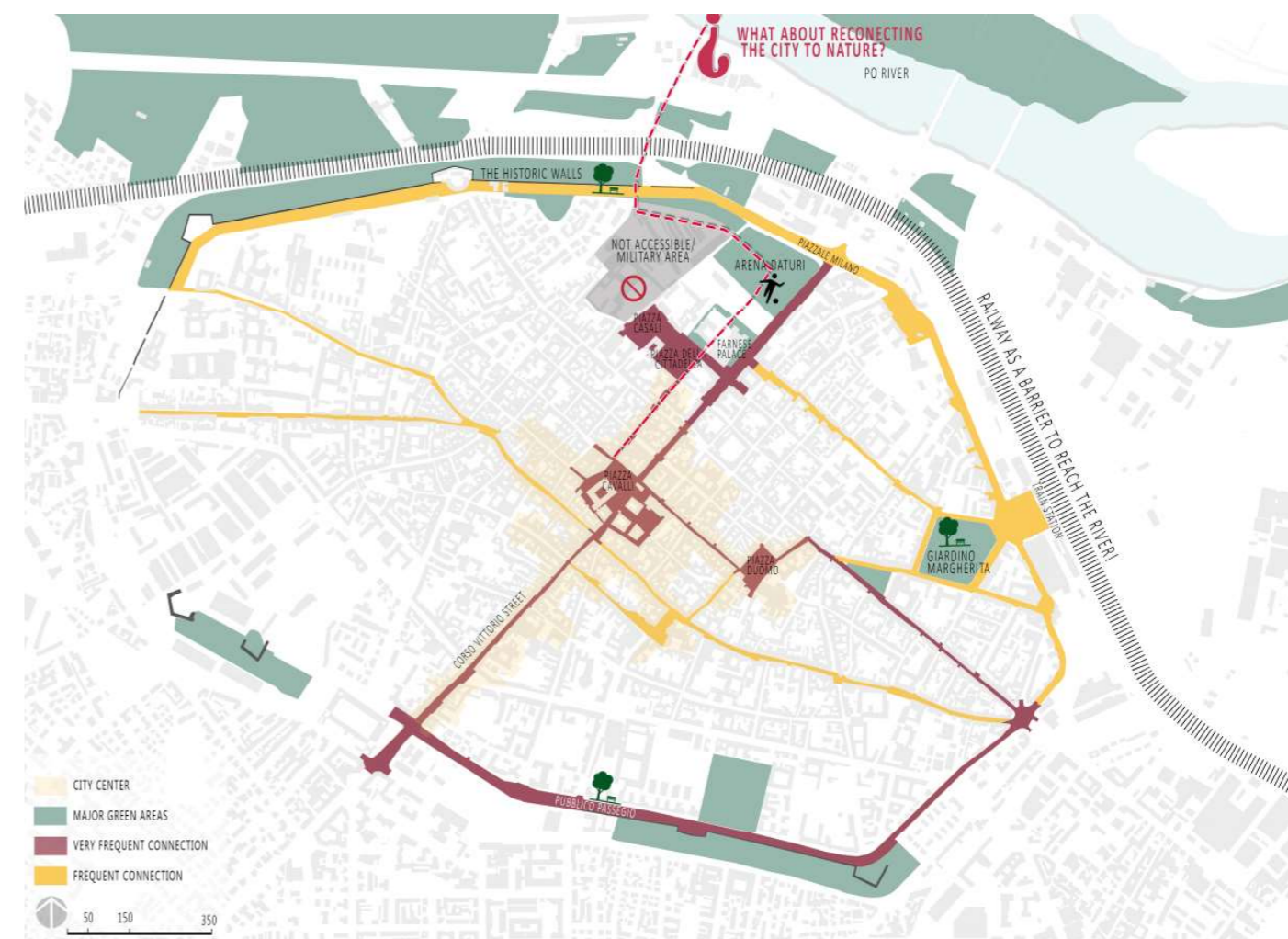
From the general studies and reading the site carefully, we can say the site has many potentials; however in the current situation doesnot accomodate much public activities.

In the next chapter we are going to understand the issues and propose possible solutions in order to bring back the real value of this area, take advantage of its closeness to greenaries and nature and river and make it a new cultural and active hub for the inhabitants of Piacenza, where they can relax from city life and feel more connected to the nature that is already existing around them but is lost and invisible to the city users.

03 CONCEPT & STRATEGIES

3.1 BRIEF

From the dawn of time, human beings always tried to stay close to the nature. Many villages and cities were made close to natural resources specially rivers. City expansion has caused the city inhabitants to loose their connection with nature and get busy in the city life. Many studies show that living in a green areas where people have more visual and physical connection to nature can boost happiness and increase the quality of life for people while in big cities surrounded by buildings, highways, vehicles, industries and so many other urban elements, the level of stress in higher. In our project we intend to bring back that sense of belonging to nature and connection to it by providing a flexible green area for cultural activities and human interactions and also to connect the urban fabric to the River Po by providing a safe pedestrian connection.



3.2 CONCEPT

The city is like a human body in which all the organs should be well connected in order to function well. Just like the human body is not just a matter of physical body but also the mental body, It's important to maintain the balance between these two bodies to become more efficient and sustainable. To us, the mental body in the city of Piacenza is the inhabitants and people, the city itself is the physical body and the flow of social activities in the city are the connection between these two entities.

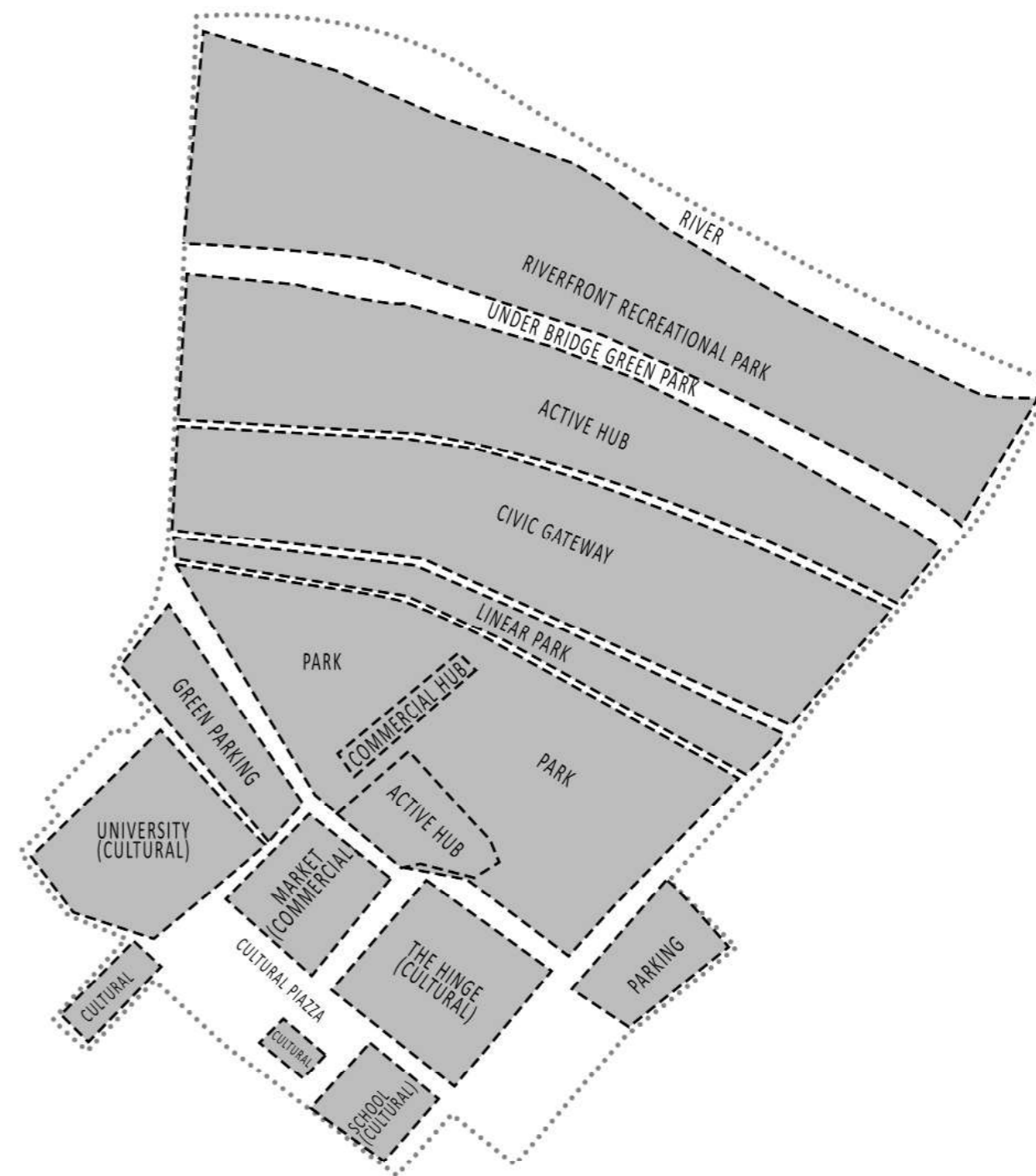
The green which is an important element for us in the city, in alignment to the built environment should work in balance. they should not be disconnected. They should be connected by green/soft infrastructure system which provides a pleasant environment for the people. In the city of Piacenza, there are not much green urban areas for people to relax and interact with each other. The most important public semi-green area is Pubblico Passegio which is basically a long pedestrian path with aligned trees next to the southern historic wall of city. There is another park close to the train station which is not very appreciated by peo-

ple due its location and its fences that separates it from the surrounding area. In General, there is an important lack of proper green urban area in the urban fabric. Due to the strategic location of the site, we see the potential to create a park that connects the upper green areas around the historic walls together and makes a new cultural hub for the city which is greener and can accommodate different activities.

The main idea is to bring back the lost connection to the nature from the urban fabric in city center towards the Po River. We are going to execute this concept by both soft and hard interventions. The strategy is to use both green and gray infrastructure to increase the quality of life and the experience of Piacenza inhabitants. By studying the site carefully, also from the viewpoint of two individuals that lived in this city for almost two years, we intend to make a connection from the city center (Piazza Cavalli) towards Palazzo Farnese and then River Po and create a greener experience along the way by proposing a park in Daturi park.



The idea is to make a pleasant, pedestrian connection from the city center towards the river and nature and rebuild the greenbelt around the city center, along with the historic walls in long term, starting by parco Daturi and connecting it to the green surrounding.



3.3 VISION

Based on the studies done in last chapter and also our own experience of living in Piacenza, we chose an specific area in the northern part of the city as our design area. however the strategies and the design rules can be implemented in the whole city to have a more green and sustainable city with higher quality of life in future.

Due to the current activities and potentials such as: The great historic background of the city, having two important universities and young creative individuals that come to Piacenza every year to study, abandoned or not organized urban areas such as military domains, Daturi park, etc, closeness to green areas and river, we see a high potential to transform it to a green and sustainable pedestrian-oriented city in 3 stages by 2037. (2022-2027 , 2027-2032, 2032-2037)

1- Piacenza, a pedestrian oriented city with green interconnected open spaces; 2- Piacenza, a city of sustainable neighborhoods. We have implemented ten main rules of study in both scenarios. We have imagined three timelines (2020, 2030 and 2040) for the implementation of the strategies in regards to the fact that not all the interventions can be done in the first phase, but needs time and preparation in order to reach to the kind of sustainable city we have envisioned.

.....

3.4 STRATEGIES

In order to achieve our goal, we made 3 main strategies as followed:

1- Revising the transportation network

In the current situation there are high speed roads and also railway between our site and the riverfront. these roads can be reduced and become more pedestrian friendly by transforming them to boulevards and avenues.

2- Providing safe pedestrian accessibility

Providing safety to the inhabitant when using urban areas is an underlying strategy. This can be done by adopting soft and hard interventions in the area to assure a safe accessibility for pedestrian and bikes around the city specially towards our site and then to the more natural areas such as the river. we want to make sure that people can enjoy the nature surrounding the city at any-time of the day without having to worry about their safety.

3- Restoration & transformation of existing buildings and assets.

There are many abandoned building and military domain in our area that need to be planned and be assigned new proper functions to enhance the social interaction and also bring more people to it. These new functions are going to be discussed in the upcoming section.

*By adopting these strategie we will be able to connect the city center to the nature and the existing green belt of the city.



04 DESIGN

GENERAL STUDY

LAND, NATURE, ECOLOGY
HISTORY, HERITAGE
DEMOGRAPHY, PEOPLE, LIFE
ECONOMICS, PROCESSES, RESOURCES

UNDERSTANDING
THE SITE

EXISTING BUILDINGS AND HERITAGE
OPEN SPACES AND PIAZZAS

CONCEPT



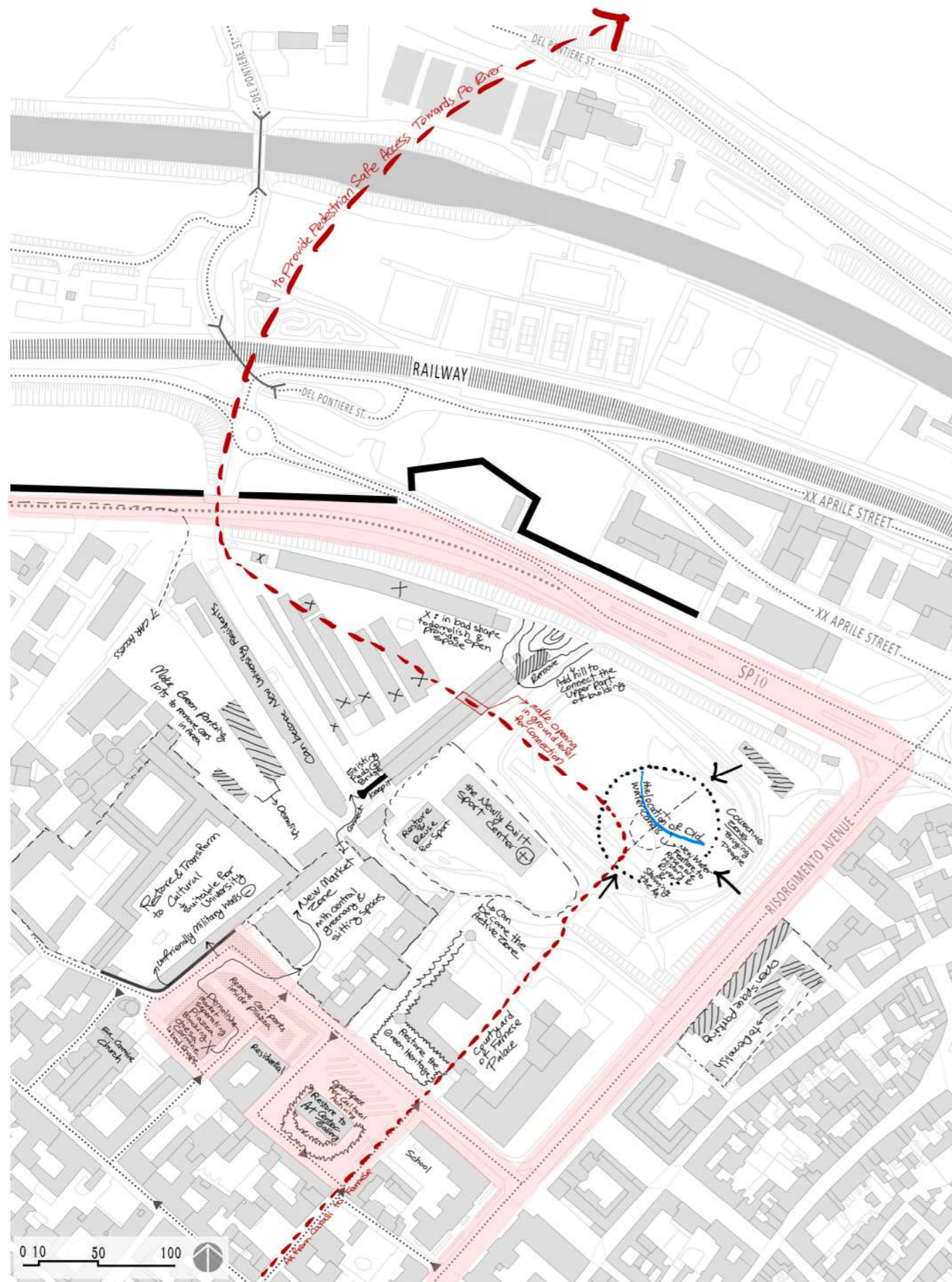
HOW?

STRATEGIES

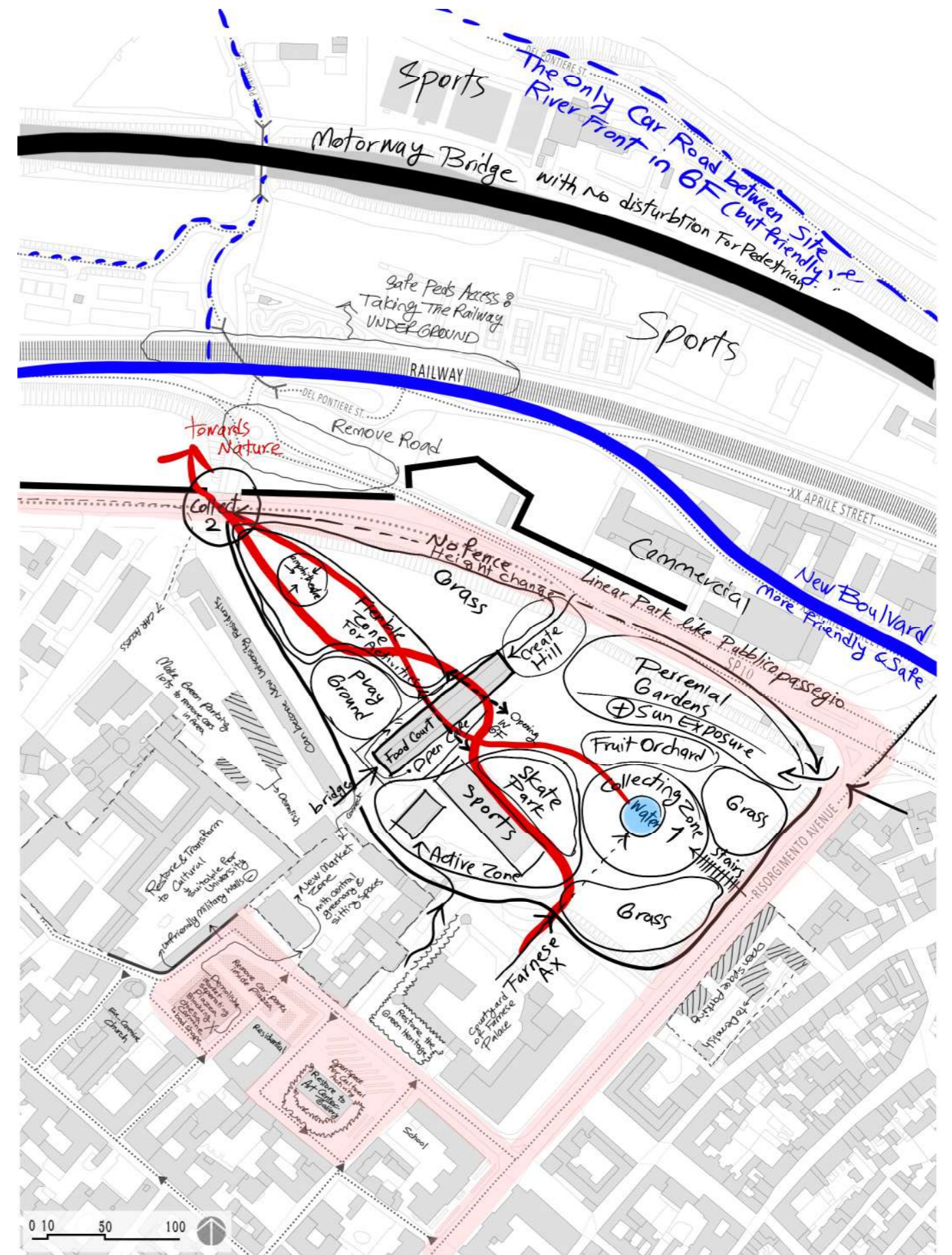
DESIGN

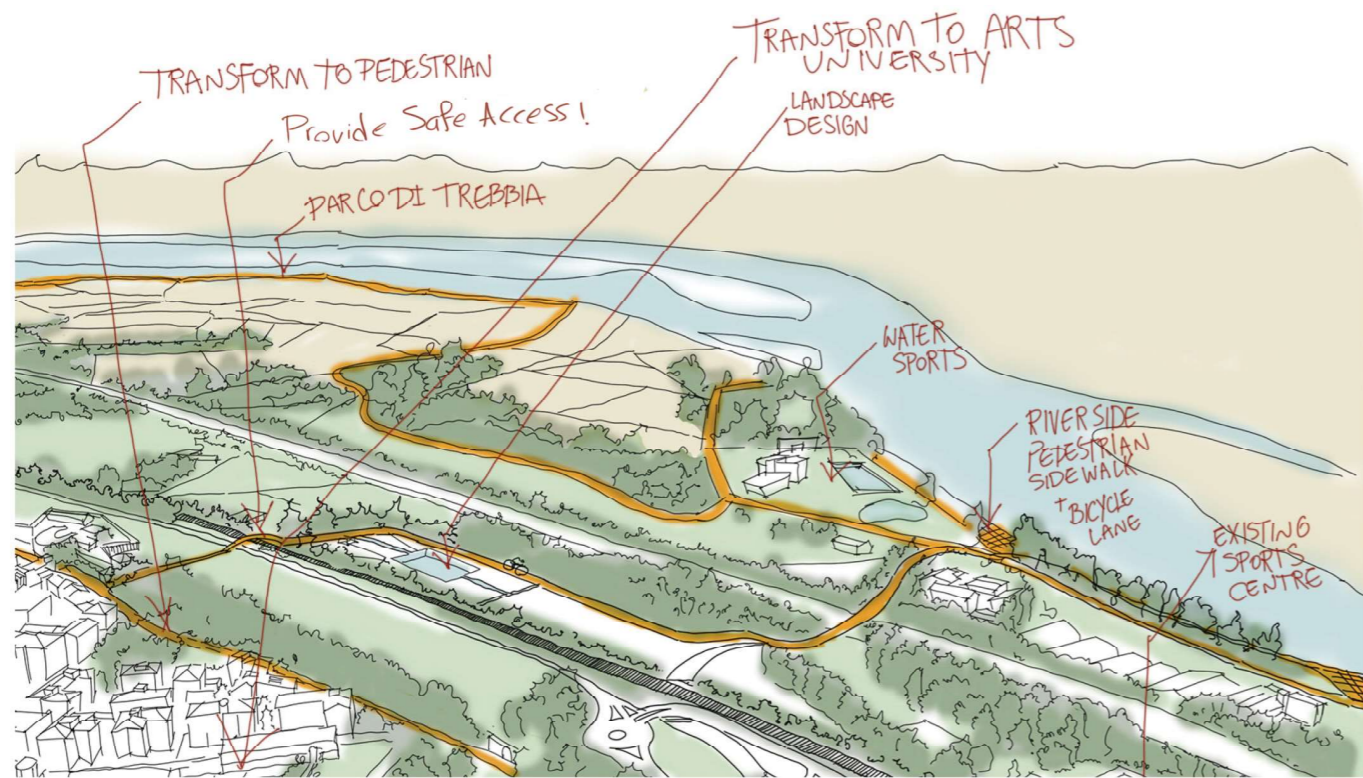


After doing the general analysis on Piacenza in 4 main Atlas topics and studying the site more specifically, we could understand the potentials and issues of the site area. The following sketches show our studies on the site to find the issues and propose solutions.

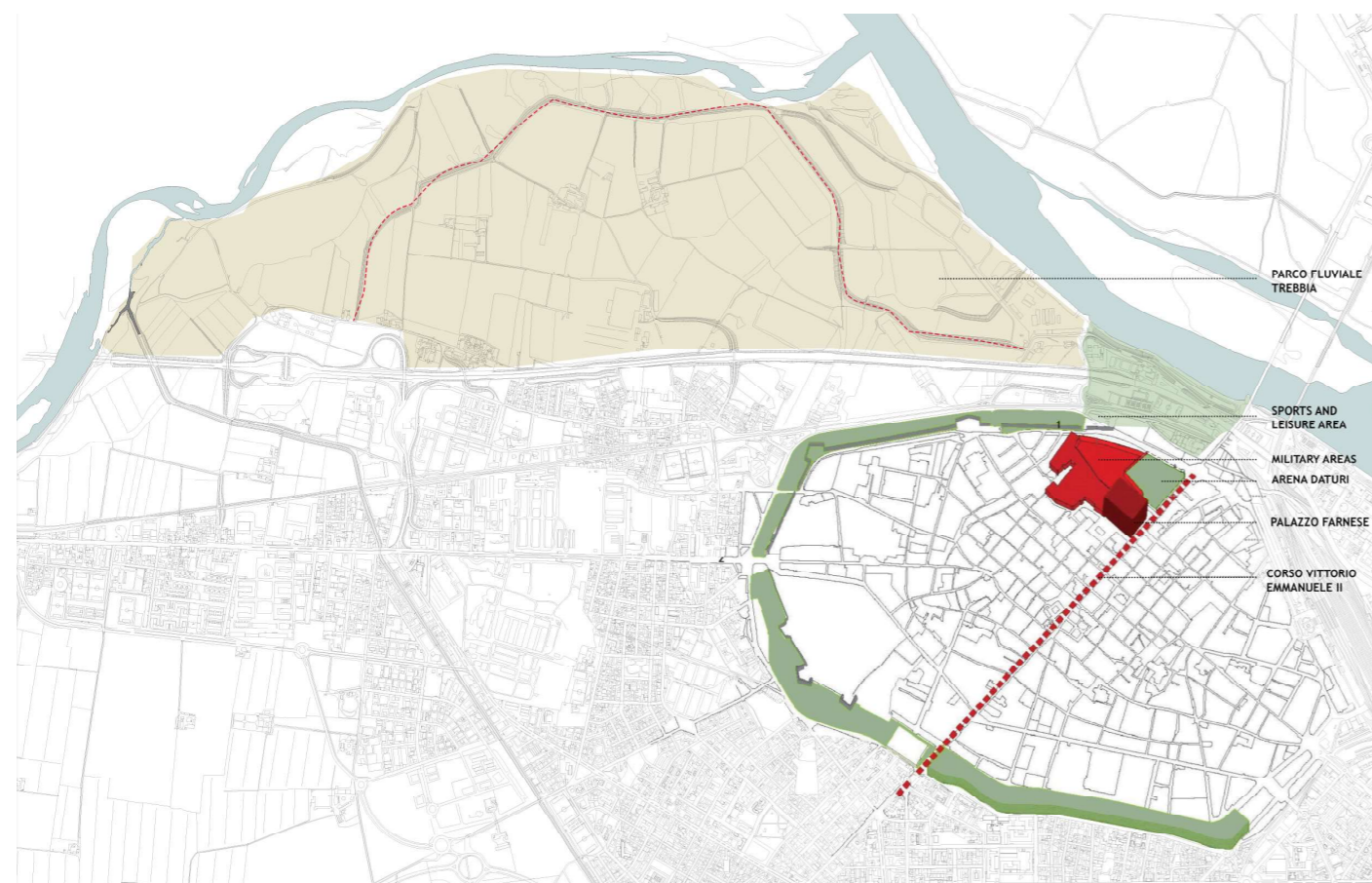


We are proposing to design a park in the location of Arena Daturi and Laboratorio Pontieri in order to connect the city center with nature. This park is going to be like a transition point between the urban fabric and the nature. Therefore the design resembles nature in and also the history of the area while providing new public use and activities in northern sector.



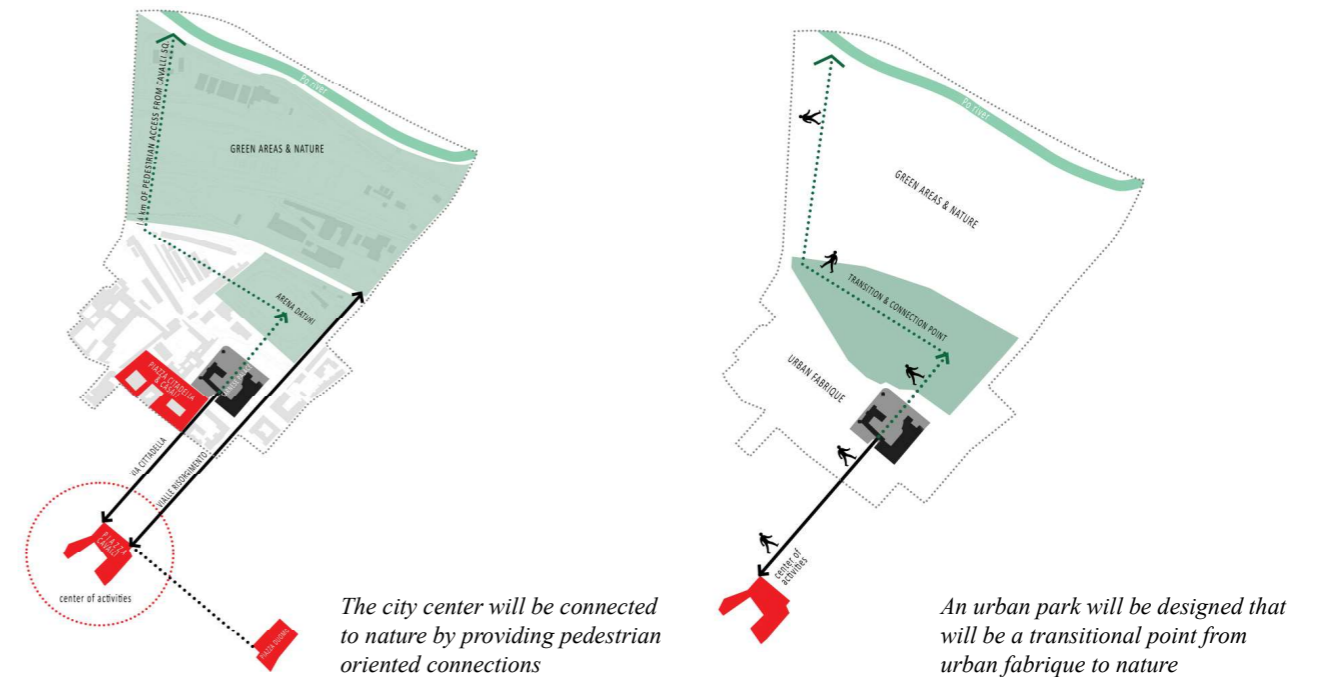


The above sketch is showing the northern sector, west north of our site where city & nature meet. We can see that with our project we intend to connect to the existing parks and greenaries. from the west we are connecting to Trebbia Park and the green belt of the city and from north we are connecting to the Po river. We intend to remove the barriers between the center and the nature from the north sector providing a safe pedestrian access to people between the green areas. As we can see the riverside is full of sport centers. So we can say this area will be a very active area because it is now more accessible to everyone.



The project is going to connect the green belt of the city to the green areas close to green sport and leisure area in riverside and Trebbia park.

As mentioned in the previous chapter our site is located in a very strategic point because not only it has many heritage elements and buildings in itself but also has a very good closeness to the green areas of the city and also the river. We also mentioned that most of the activities are now happening around the city center, mainly Cavalli square, which is connected to our site by two roads: One is Risorgimento Avenue which connects Piazza Cavalli to Piazzale Milano and passes east side of our site and Palazzo Farnese and the other is Via Citadella that connect from Piazza Cavalli and reaches to Piazza Citadella and then straight to the entrance of Palazzo Farnese.



The city center will be connected to nature by providing pedestrian oriented connections

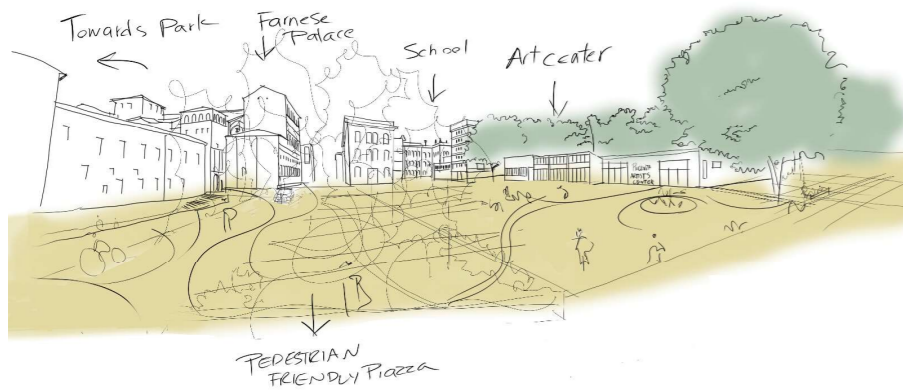
An urban park will be designed that will be a transitional point from urban fabrique to nature

The first thing that we could see was this strong axis that can connect the city center to Farnese palace which is an important heritage from Renaissance era and goes toward the green areas behind it called Arena Daturi. We understood that this will be the main important pedestrian access for us in order to connect the city to nature.

As we could see in the GPS map in last chapter, most of the city center is in ZTL zone A which limits car access. We intend to extend this zone to our site, transforming the area to a pedestrian oriented space that can fulfill our idea of making a safe pedestrian access from the city center towards the nature.

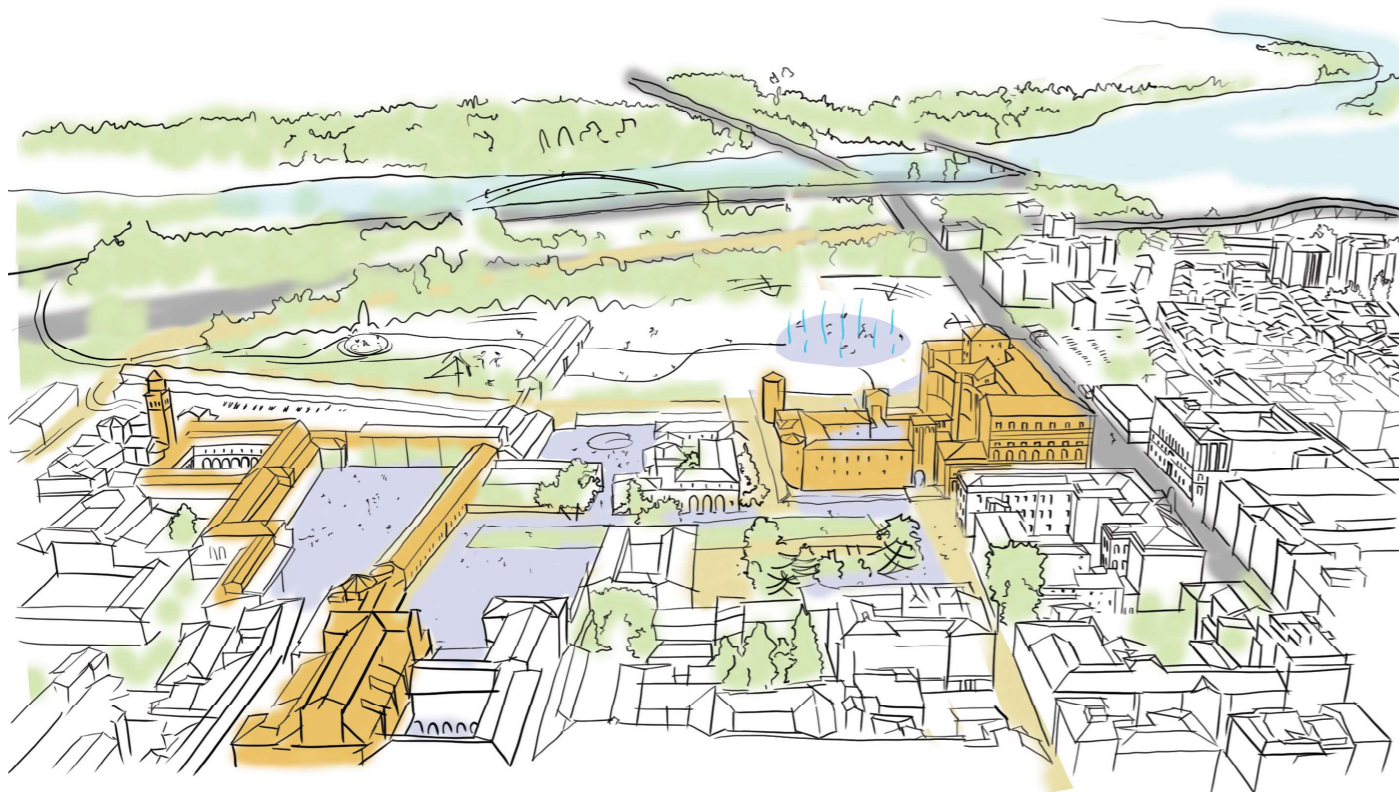


Open space in front of Crai market in Citadella St. which is going to become pedestrian oriented

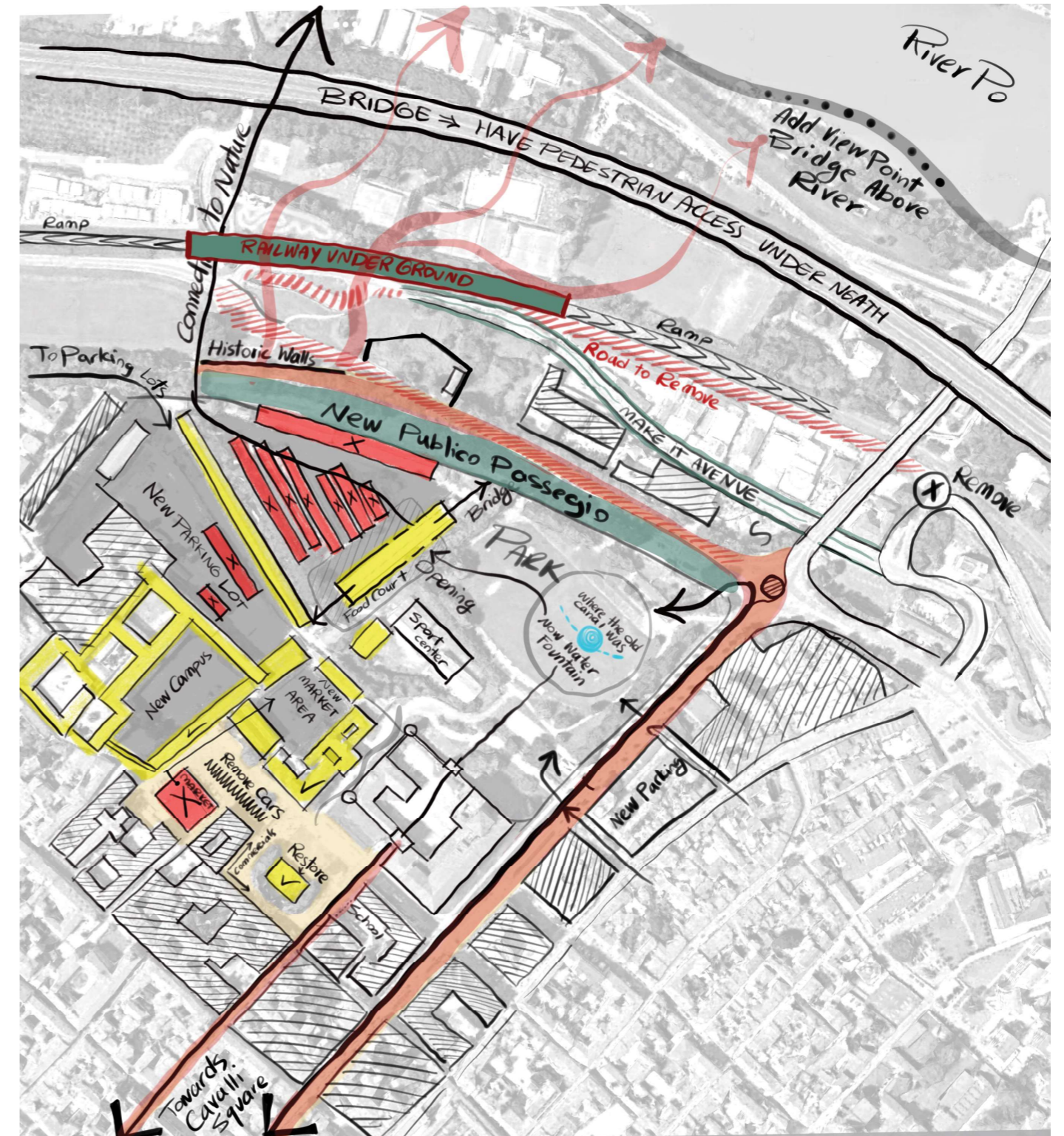


Piazza Citadella & Casali will become a pedestrian oriented, inclusive public space.

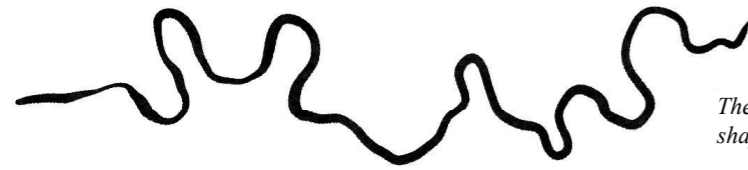
The area around the Farnese palace and piazza casali and parco Daturi will be transformed to a new cultural hub of the city where different activities such as sports, education, entertainment and leisure can take place



The other barrier for safe access to nature is the railway. We had two options: 1- to make pedestrian bridges over the railway 2- removing the railway on ground level and move it underground. Instead of adding pedestrian bridges only in some specific points, bringing the railway underground in this area, will provide a green and safe ground level access to pedestrians and bikes. also the area that we have can accomodate the necessary slope and lenght for it to work.



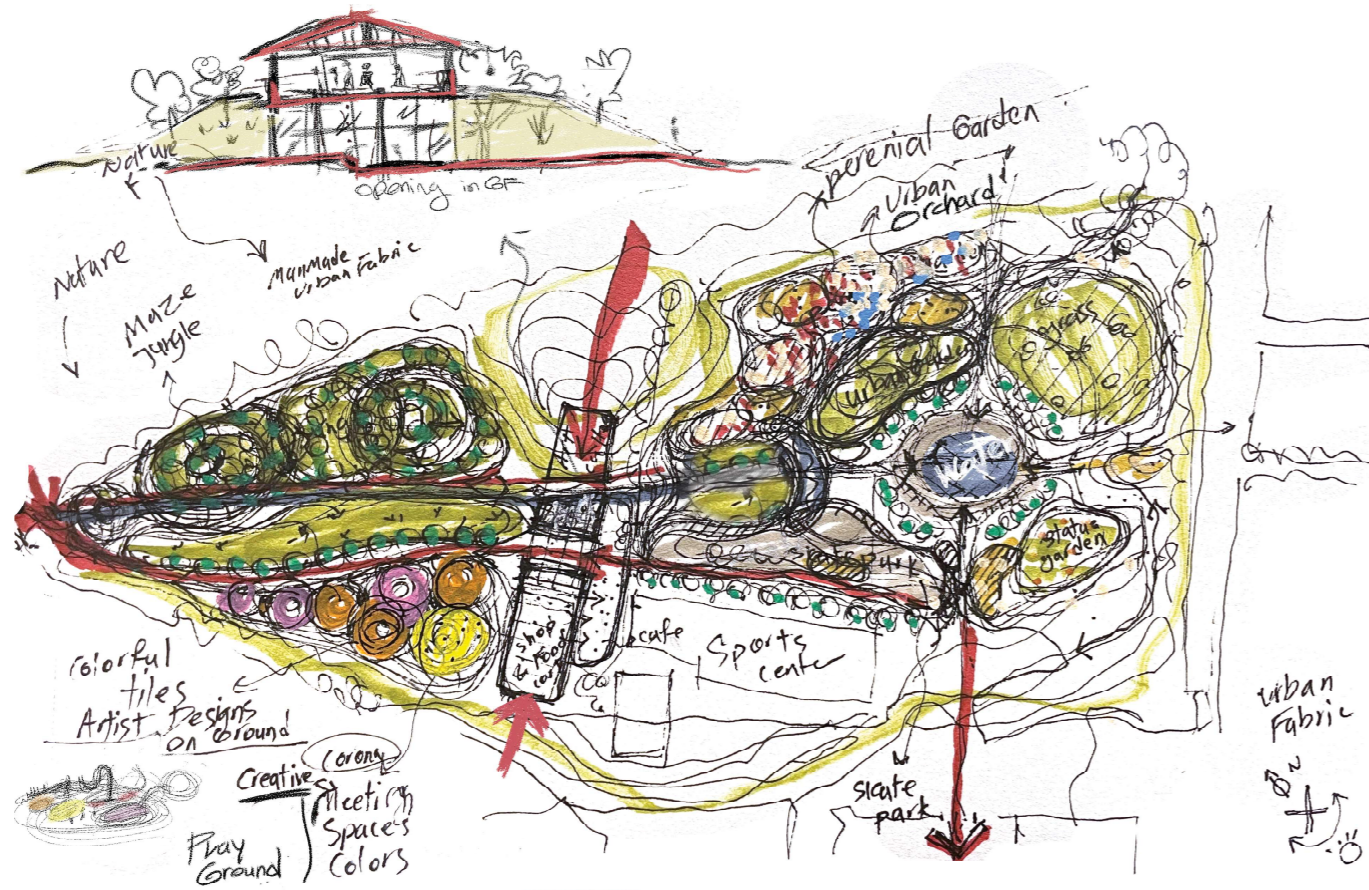
As mentioned earlier we are going to design an urban park in the location of Arena Daturi and Pontieri Laboratory. The park is going to be an inclusive public space where the city and nature meets. Therefore the park is going to be an organic shape park while representing the contemporary era in architecture and art. The organic shape is inspired by the shape of the river. on the other hand, soft edges and organic shapes have better effect on conscious and unconscious mind of human beings, making them feel in peace and give them a sense of belonging to the space.



The organic and curvy shape of River Po



The grid shape of the city, hard edges, No trace of nature, human made



MASTERPLAN

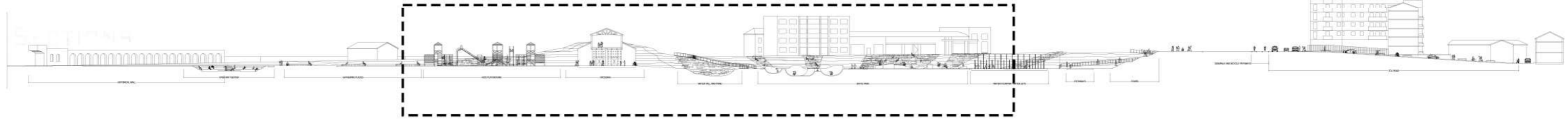


BEFORE

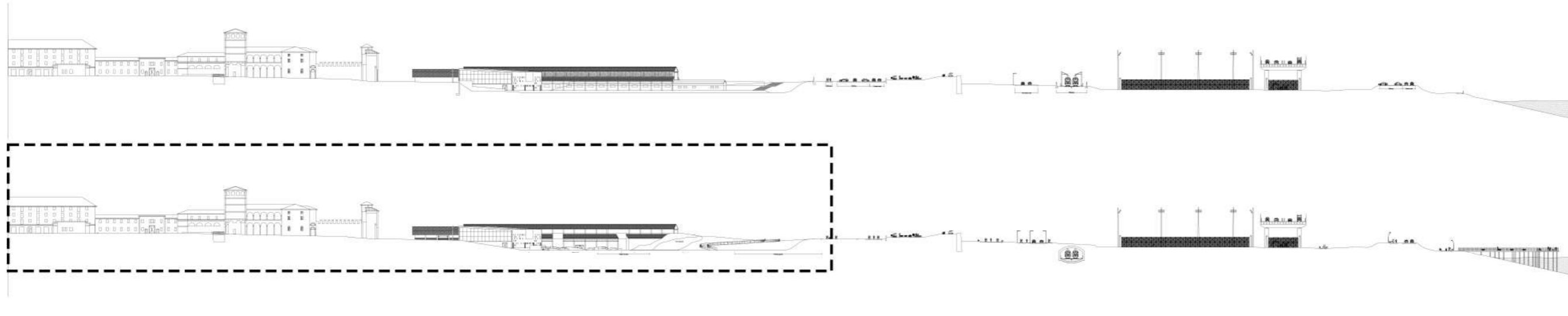


AFTER

SECTION FROM HISTORIC WALLS IN WEST TOWARDS RISORGIMENTO ST IN EAST



SECTION FROM PIAZZA CITADELLA TOWARDS RIVER PO



BEFORE

AFTER



5 15 30 50



THE MILITARY DOMAIN AS A NEW UNIVERSITY CAMPUS



AMPHITREATURE FOR PERFORMANCES



PERENNIAL GARDEN ON THE NORTHERN SLOPE WITH THE MOST SUNNY HOURS



RIVERFRONT VIEW POINT ON WATER



NATURAL ROCKS TO ACCESS THE NEW PUBBLICO PASSEGGIO IN THE GROUND LEVEL



GREEN PARKING LOTS



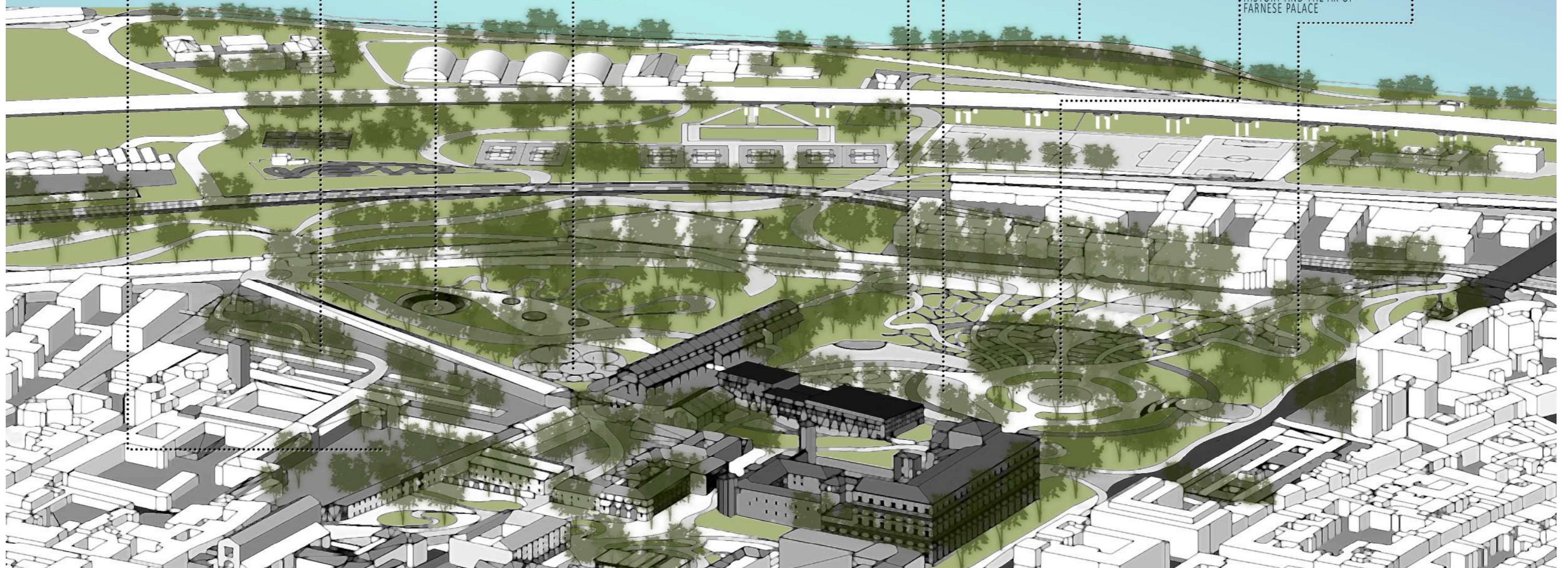
INTERACTIVE PLAYGROUND BOTH FOR KIDS AND ADULTS



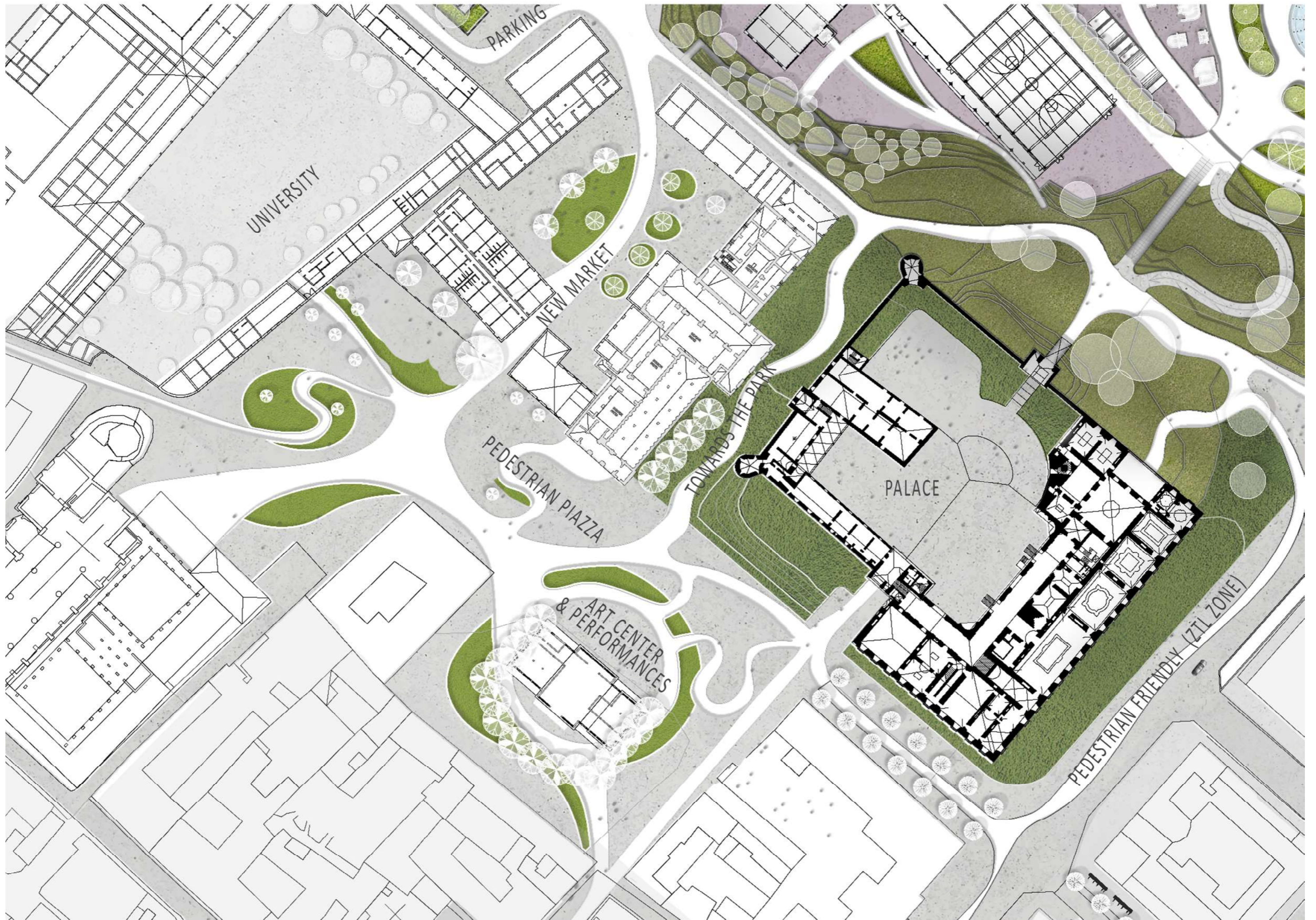
SKATEPARK CLOSE TO THE EXISTING SPORT CENTER

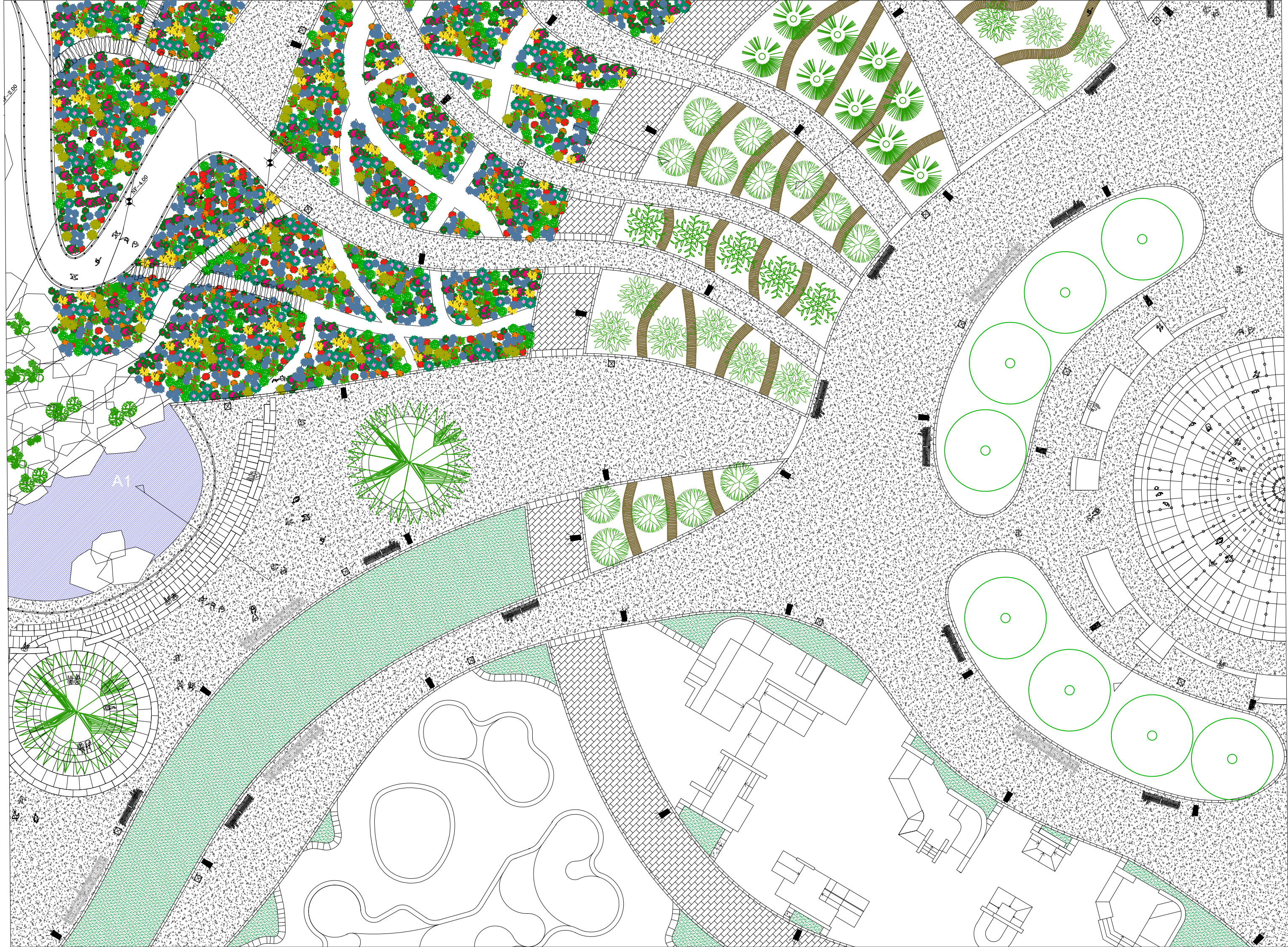


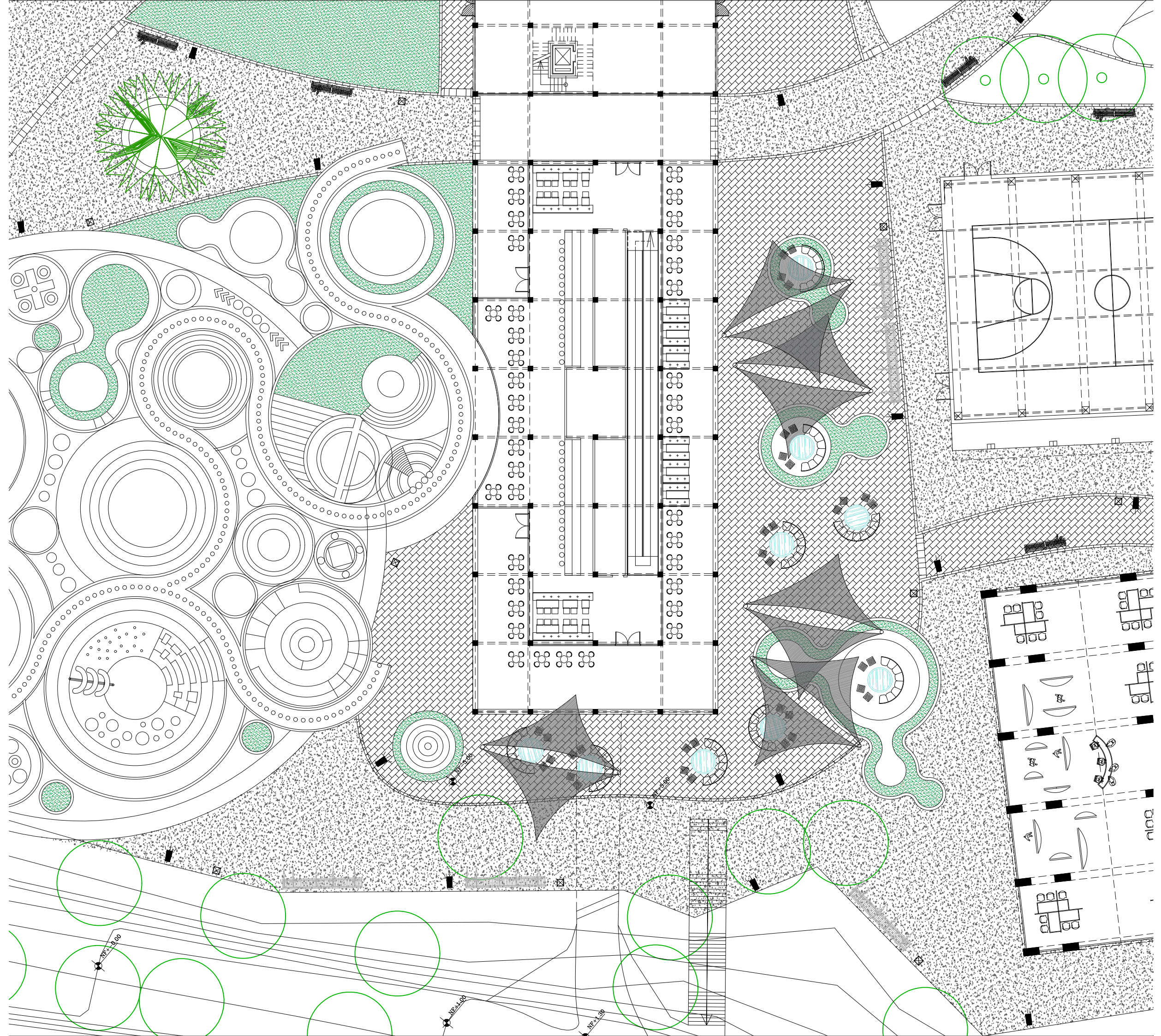
INTERACTIVE WATER FEATURE ON THE SAME LOCATION AS THE OLD CANALS REPRESENTING THE HISTORY AND THE AX OF FARNESE PALACE

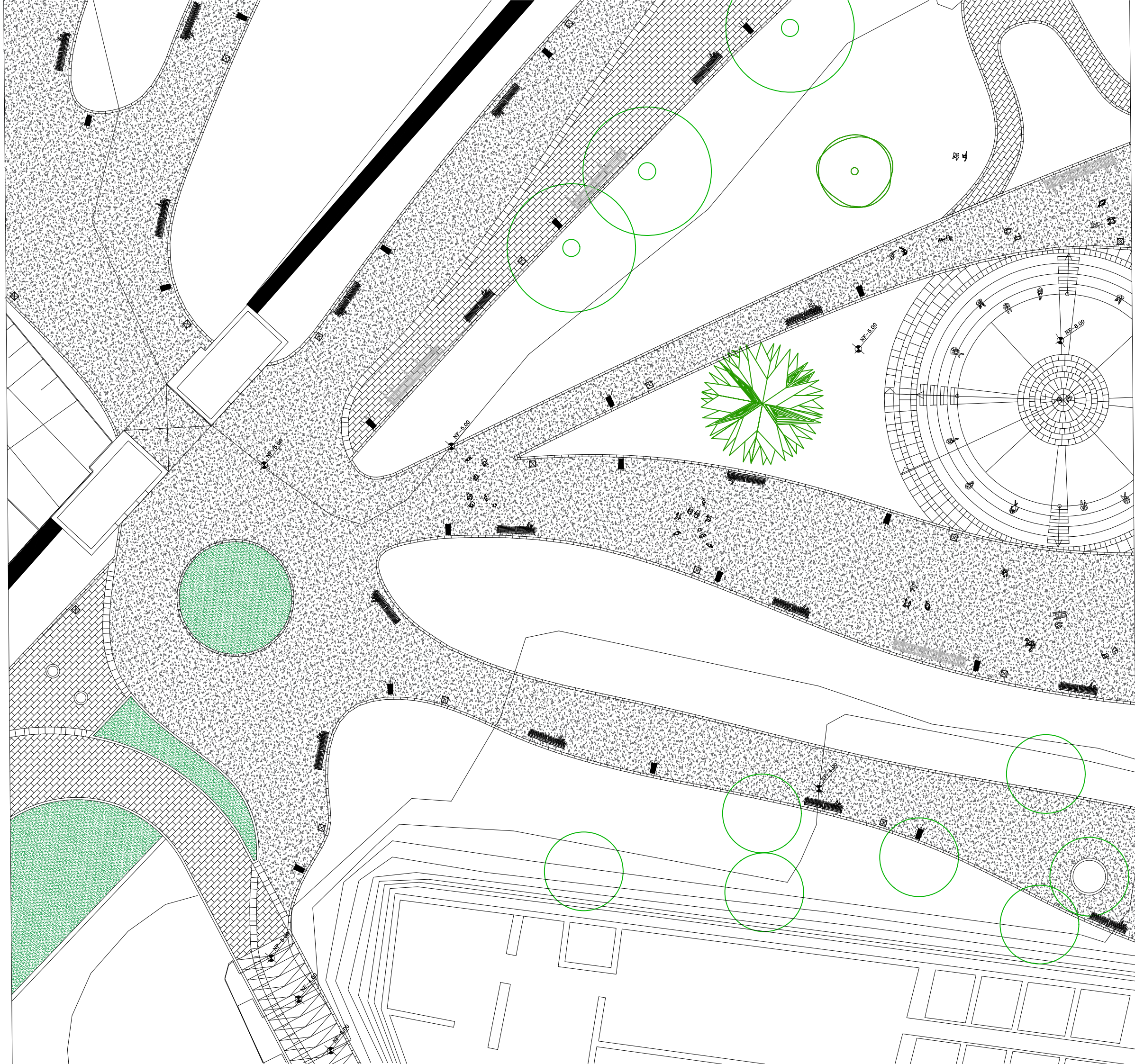


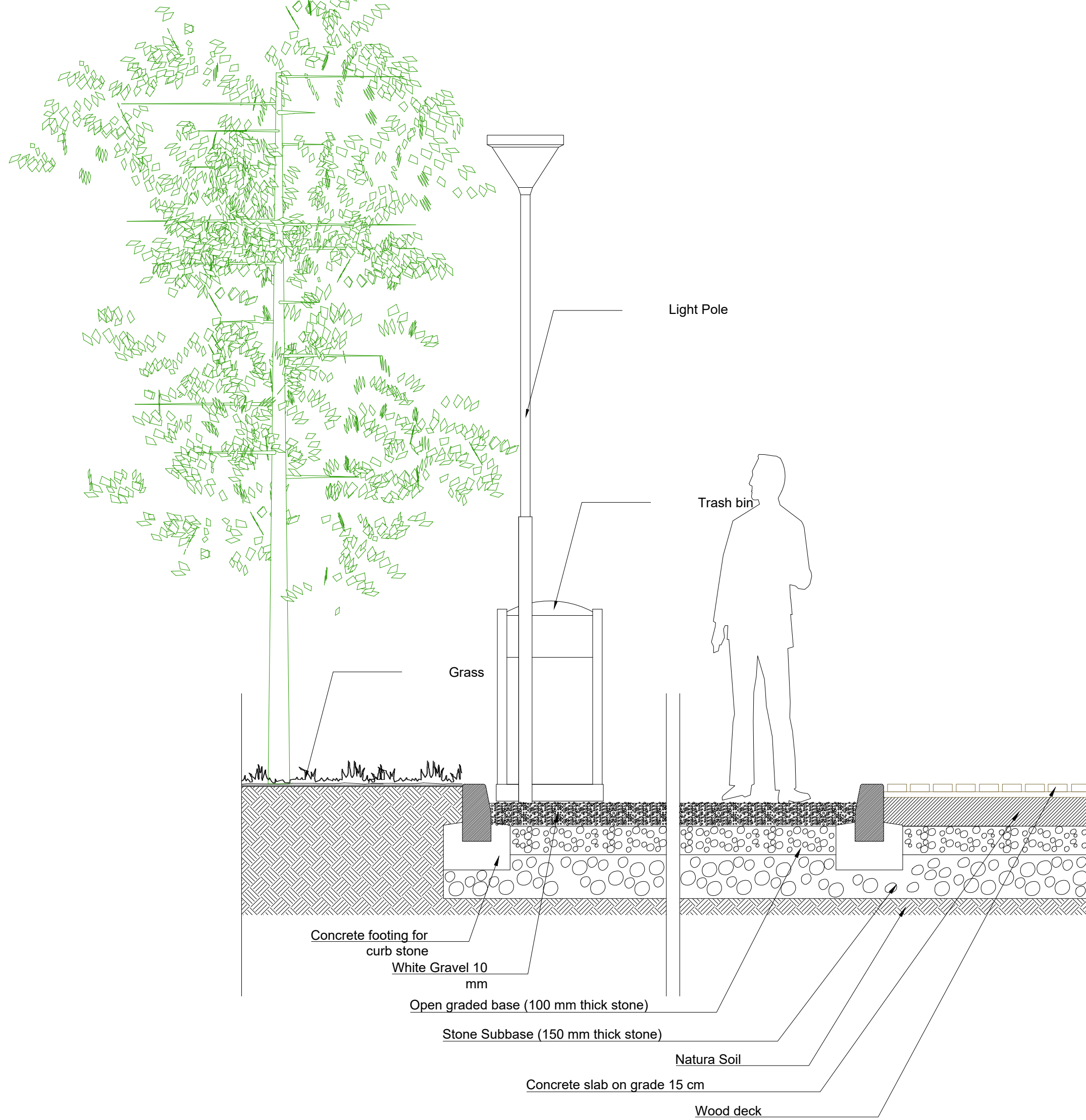












Light Pole

Trash bin

Grass

Concrete footing for
curb stone
White Gravel 10
mm

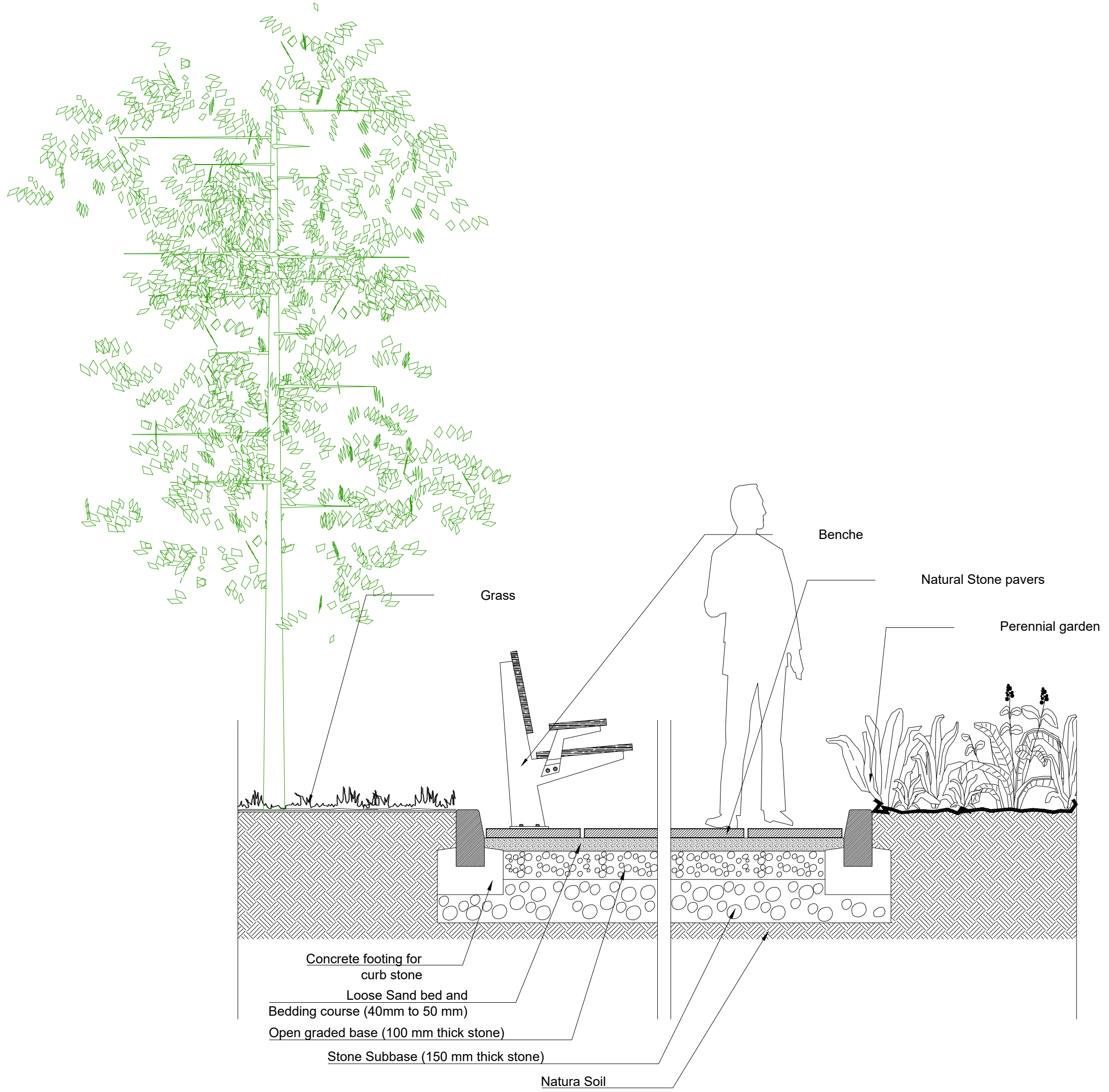
Open graded base (100 mm thick stone)

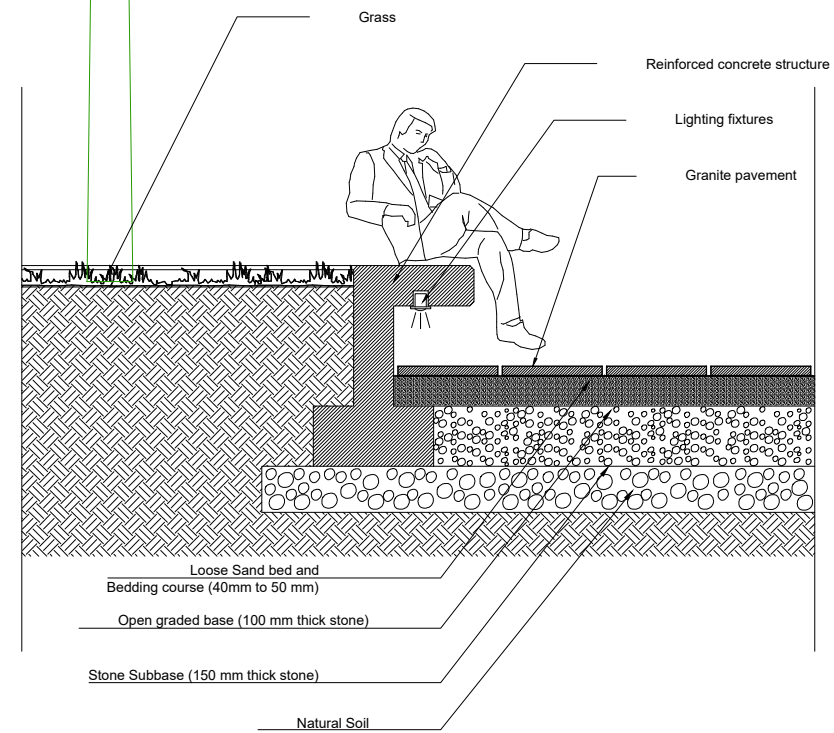
Stone Subbase (150 mm thick stone)

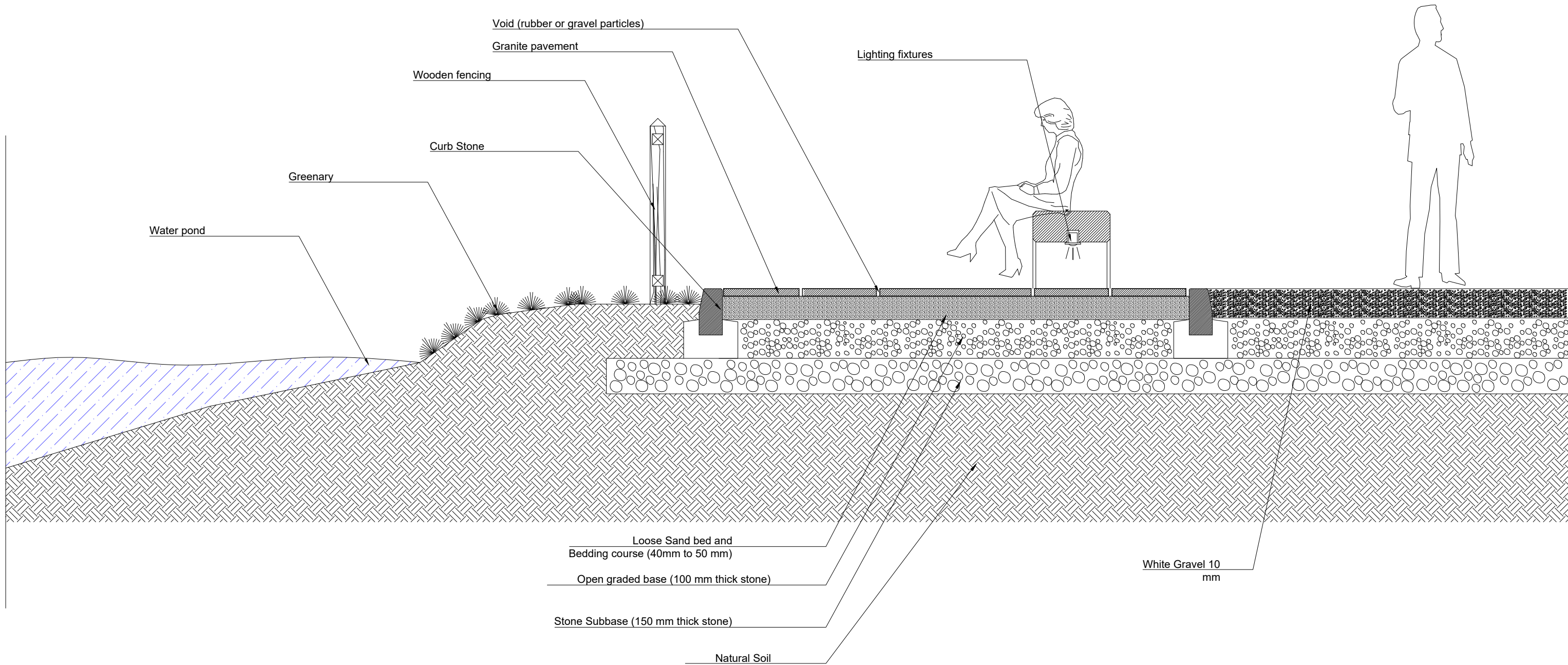
Natura Soil

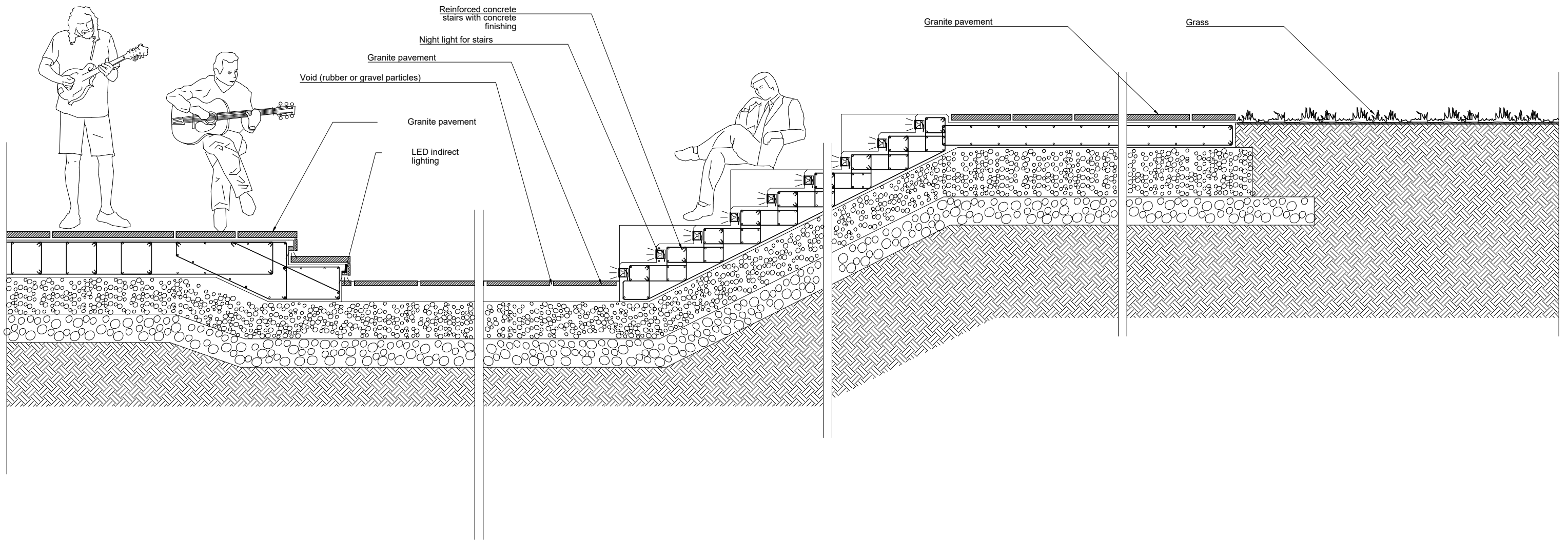
Concrete slab on grade 15 cm

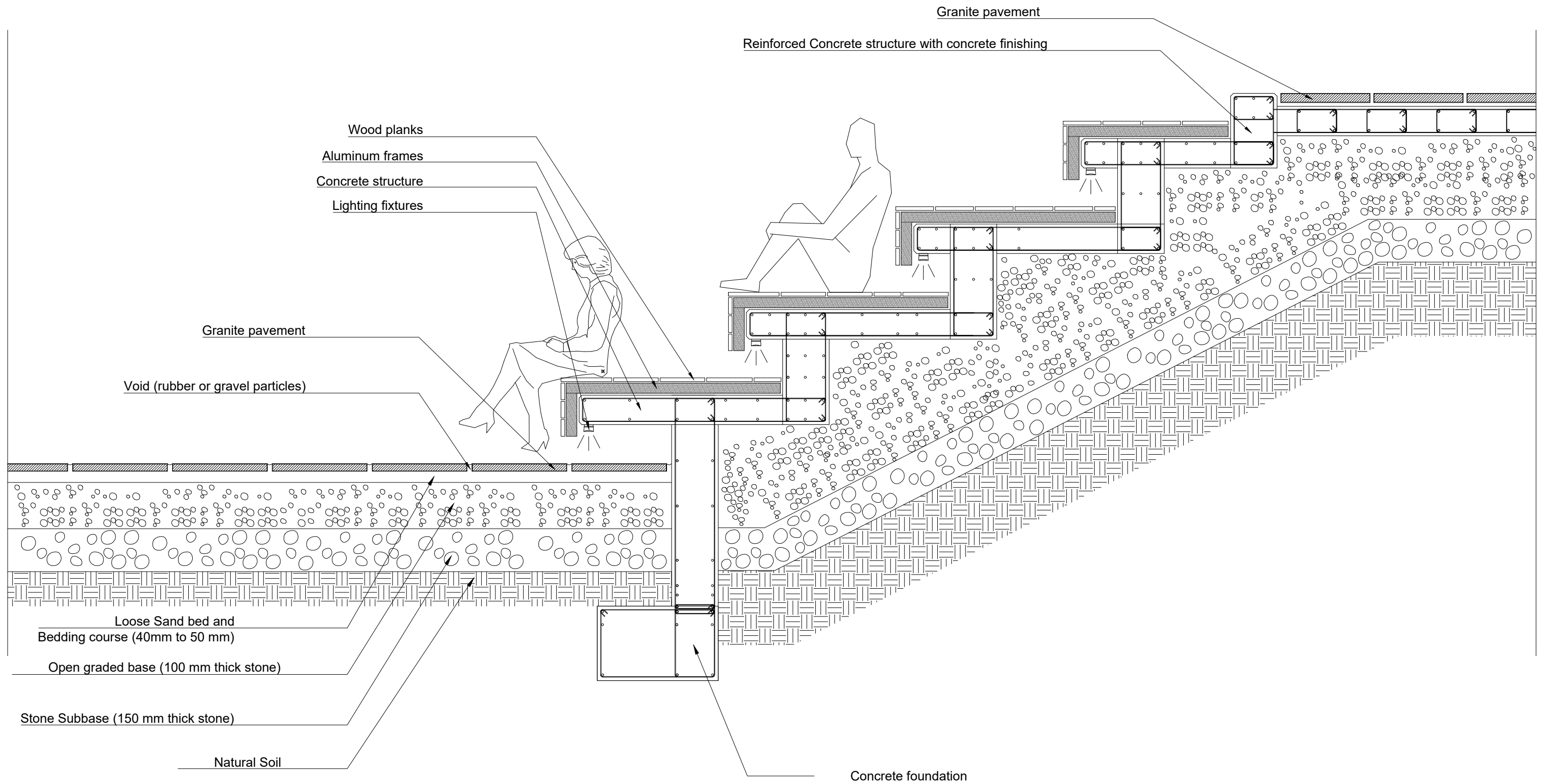
Wood deck

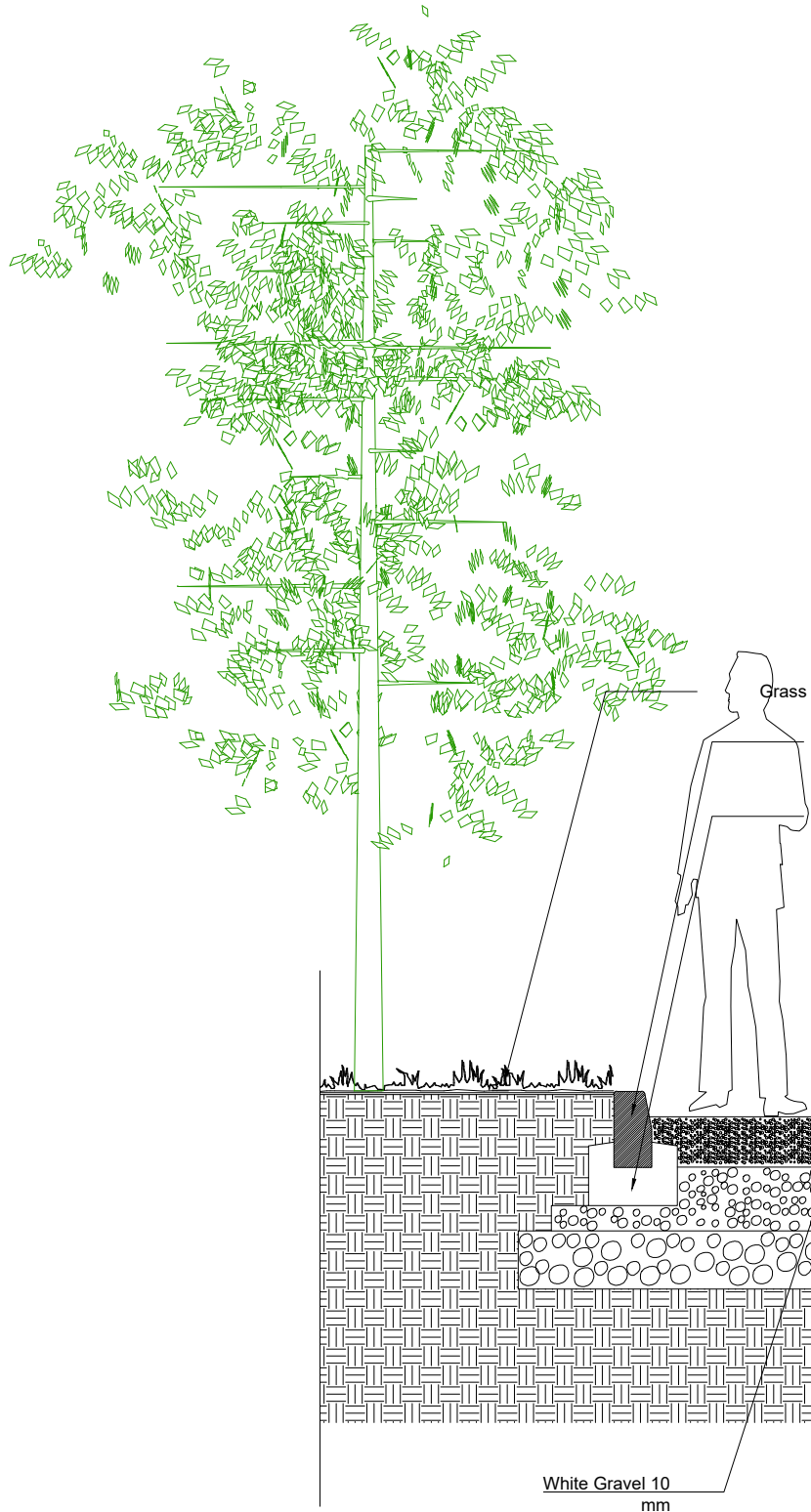




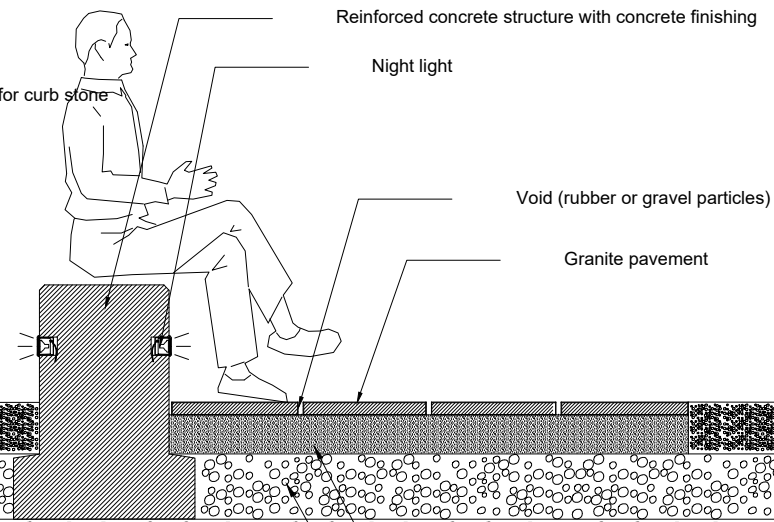








Curb stone
Concrete foundation for curb stone

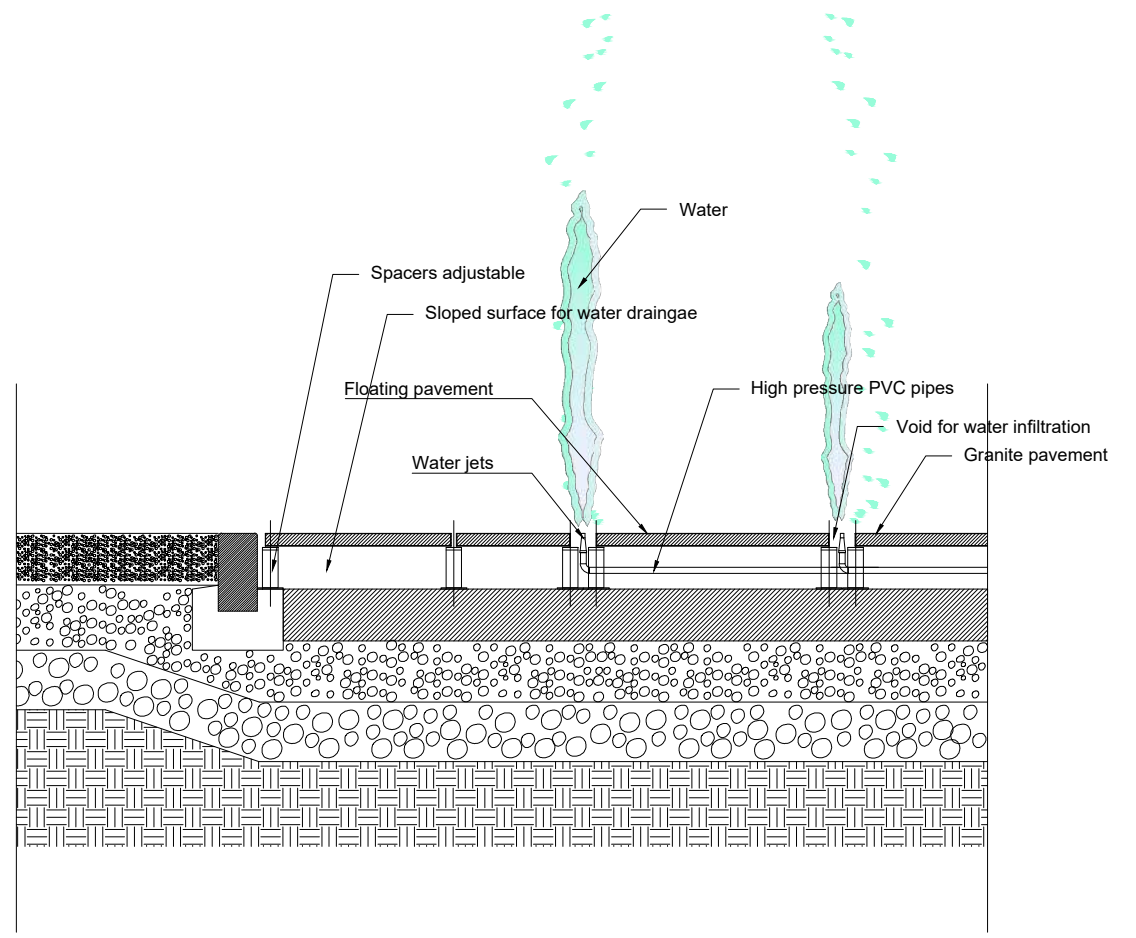


Void (rubber or gravel particles)

Granite pavement

White Gravel 10 mm

- Loose Sand bed and Bedding course (40mm to 50 mm)
- Open graded base (100 mm thick stone)
- Stone Subbase (150 mm thick stone)
- Natural Soil



Spacers adjustable

Sloped surface for water drainage

Floating pavement

Water jets

High pressure PVC pipes

Void for water infiltration

Granite pavement