

# **Turn the StatiON**

## **Varna / Bulgaria**



Politecnico di Torino

Master's Degree in Architecture For The Sustainability Design

Turn the StatiON: Adaptive reuse of the former power station  
"Yanko Kostov" in Varna, Bulgaria

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# Introduction

During the period of transition from a centrally planned economy to a market economy, the state of the Bulgarian industry is characterized by a number of unfavorable and unsettled issues. In the past decades, especially during the government of Socialist Party, the industry has been leading economic and urban factor. As a result of an enormous quantity of industrial heritage mainly composed of industrial buildings and complexes, was accumulated. After 1989 the effectiveness, as well as the interrelation of traditional production in Bulgaria, decreased intensively and the main focus is concentrated on the development of the tertiary sector. Many enterprises stopped its production, while in those that continue to operate is easily noticed a low efficiency concerning the use of the industrial building or complex and dramatic decrease regarding the quality of the production processes and quality of social conditions of factory workers. The process of industrialization and the subsequent deindustrialization

“produced” a vast quantity of territories, complexes, and buildings without any function inside them. The main result of these processes is the change of the social structure of society as well as the increase of urban population. The growing city systematically “takes possession” of new terrains from suburban territories. A simple and clear solution, for example, is the Netherland’s practice of reusing former industrial buildings. Two major economic processes are now available all around the world: industrialization and deindustrialization which bring entire cities and regions to collapse and disuse. The rapid urban expansion during the period of industrialization proved to be unnecessary: territories, zones, complexes, buildings, and even entire cities remain empty as a result of the following deindustrialization process. This academic work focuses on the design process in the adaptation and reuse of these abandoned buildings and facilities that are located in the dense urban structure of the city, as well as in the suburban areas.

The aim of this dissertation is to reveal the potential of adaptive reuse as a successful solution for the former industrial buildings. The final goal is to develop a strategy in order to solve the problems related to disused buildings in Bulgaria (reconstruction, sustainable development, a new program, use of new materials). To achieve the ultimate goal of the work, the following research tasks were formulated:

- To understand why the phenomena of adaptive reuse is still something new in Bulgaria
- To understand which typologies of buildings become subject to abandonment
- To analyze the strategies that can be adopted for the reusing of abandoned buildings
- To study the effectiveness of adaptive reuse
- To understand better how adaptive

reuse strategies can create a new identity for the abandoned buildings

- To understand better how the adaptive reuse strategies can be used as an urban regeneration processes
- To analyze successful case studies in order to understand the type of structures used for adaptive reuse
- To draw parallels between case studies in order to find a common thread
- To understand which are the most appropriate activities for effective social and economic transformation
- To understand which are the pros and cons of adaptive reuse

Due to the complex nature of this work, the interdisciplinary methods of research were used in the development of the methodological form of the dissertation:

- Historical analysis of the industrialization and deindustrialization processes in Bulgaria
- Development of criteria for evaluation and comparison of the analyzed case studies
- Comparative case studies analysis that contains the following components:
  - Illustrative studies that aim to describe the analyzed case studies: urban analysis, indoor and outdoor activities, reuse and adaptation strategies, the evolution of the analyzed building or complex during the years
  - Cumulative studies that analyze more than one case study with a similar new adopted program, in order to select more

valid evaluation criteria.

- Direct analysis of the context where the project site is located that includes analysis on a different scale: city, district, plot, and building)
- Suggestions for the development of the project through Interviews. Since the number of interviewed people is not sufficient, in this case, the interviews will be considered as a suggestion instead of a sociological study
- Application of the results obtained during the previous analysis

The dissertation consists of an introduction, exposition of the study that includes four chapters, conclusion, bibliography, sitography, and list of images.

- The Introduction describes the relevance and the necessity of the study and shows some general information about the dissertation.

- Chapter 1 “Industry / Deindustrialization / Abandoned buildings” is subdivided into three parts. The first one concerns the history of industrialization of Bulgaria in the period between 1878 until 1989. The second part is focused on the development of the industry in the country after 1989 until nowadays. The third part “Abandoned factories: economic and social problems” explains the social and economic problems related to the buildings in Bulgaria.

- Chapter 2 “Case studies” shows some successful examples of adaptive reuse in Europe. All the information that was collected during the analysis of the

case studies is organized in technical sheets composed by description, simple schemes, drawings, and pictures.

- Chapter 3 “Project site analysis” is mainly subdivided into 2 parts. The first one regards the historical and functional analysis of the site of the project at different scales: city scale, district scale, and plot scale. The second part is related to the suggestions obtained during the interviews with young creative people from the city of Varna.

- Chapter 4 “Project development” includes a historical and functional analysis of the former industrial building and shows the design proposal related to its future development.

- The Conclusions summarizes the results that were obtained during the research.

- The Bibliography and Sitography contains the sources related to the topic that were used during the research.

The following definitions explain some of the key-terms that were used in this dissertation.

- Adaptive reuse: the renovation and reuse of pre-existing structures (such as warehouses) for new purposes

- Artist: A person who practices or performs any of the creative arts, such as a sculptor, film-maker, actor, or dancer.

- Creative class: Creative people collectively; people working in fields such as the arts, publishing, design, etc., considered as a class.

- Deindustrialization: The reduction of industrial activity or capacity in a region or economy.

- Industrialization: The development of industries in a country or region on a wide scale.

- Industrial heritage: refers to the physical

remains of the history of technology and industry, such as manufacturing and mining sites, as well as power and transportation infrastructure.

- Urban regeneration: The process of improving derelict or dilapidated districts of a city, typically through redevelopment.

*\* Check the Sitography*

# **Chapter 1**

## **Industry**

### **Deindustrialisation**

### **Abandoned factories**

## After the Liberation

During the period of Bulgarian National Revival, between 1762 and 1878, there was a significant growth and revival of Commodity-Money relations in the country. On this basis, in the economic life in Bulgaria, there were very significant changes, mainly expressed in the creation and widespread distribution of new market relations. This gave a boost to the manufacturing processes and dramatically increased the commodity production in the country. The spread of the capitalist way of production was conditioned by both the intense Commodity-Money circulation and the ever-growing division of labor. After the liberation of the country from the Ottoman Empire in 1878, Bulgaria was still unaffected by the Global Industrial revolution and there were several factors that limited the possibility for industrialization of the newly liberated Principality. The Treaty of Berlin [1], signed on 13 July 1878, reduced dramatically the territory of the country and broke up the existing economic links between Thrace, Moesia, Dobrudja and Macedonia. Bulgaria was charged with the regime of Capitulations and free trade as well as to pay its debts that have remained to form the period of Ottoman domination. Another one reason that slowed down the industrial modernization of the country was the lack of opportunity to conclude trade agreements with other countries. Fortunately, in the first years after the Liberation, all these difficulties were overcome. The process of regeneration, stabilization, and modernization of the Bulgarian industry was going slowly,

together with the gaining of experience and the development of modern Bulgarian legislation.

After the Unification of Eastern Rumelia with the Principality of Bulgaria in 1885, [2] and especially after the government of Stefan Stambolov, [3] the new Bulgarian legislation was oriented towards the creation of conditions that can accelerate the modernization processes. Due to the limited resources, the government wasn't able to provide effective support for the development of the local industry. At this stage, the solutions that the government provided were: granting interest-free loans to the owners of industrial plants, and the concessions to local producers that were exempt from taxes and fees. Economic life in the Principality of Bulgaria has become more and more lively and it has marked very significant achievements: the construction of railways started (during the government of Stambolov around 360 km of railways were built); around 80 new industrial enterprises were opened; there were also new trade agreements between European countries and Bulgaria. Increased economic activity encouraged the government to pay more attention to the problems linked to the "young" Bulgarian industry. It became clear that the State had to support as much as possible the private initiatives. The most important role for the aid of the national economy was played by the Agricultural and Industrial Council, formed on 25 September 1892. A program for the State's economic policy, based on the possibility of private initiative and the active trade protectionism was established.





Map: Results of the Treaty of Berlin

The State definitely started taking part in the regulation of capitalist production, a very difficult process especially in an economically underdeveloped country like Bulgaria. Several laws were providing a lot of privileges for the privates who decided to establish a new factory (textiles, faience, bricks, glass, sugar, paper, chemical, mining and metallurgical industries). The new enterprises had the possibility to import their equipment and raw materials almost for free by using the Bulgarian State Railways, as well as to obtain a free municipal construction site for the new industrial buildings. Another important issue that took place in the process of industrial development of the country was linked to the decision of the legislators to allow foreign companies to set up their enterprises in Bulgaria. Since the local opportunities in terms of capital and experience were very limited, this authorization was one of the best ways to attract foreign capital and investors in the country. At the end of 1899, the number of large-scale industrial enterprises promoted by the State has increased from 72 in 1894 up to 103. At the end of the 19th century and the beginning of the 20th century, Bulgaria experienced an undeniable economic upturn. It covered all economic sectors, but it was more evident in the industry. Over the next two decades, the Bulgarian government adopted a new policy that was focused on the industrialization of the country. In comparison with the countries of Western Europe, Bulgaria was underdeveloped from an industrial point of view. That is the main reason

why the new policies focused on the industrialization of the country were considered as a kind of "Bulgarian economic miracle". In 1905 there were adopted new laws that encouraged local industries and commerce and in the next few years, the new policy of the Bulgarian State has given rapid and tangible results. Although Bulgaria was lagging economically in comparison with the other European countries, the rates of economic growth showed that the country had the potential to reduce this gap in a relatively short period. The reports from that period that regards the number of established enterprises were clearly showing the potential growth of the country (In 1894 there were only 72 state-sponsored factories and in 1911 they were already 345). Until World War I the main purpose of the State was to create favorable conditions for the development of private entrepreneurship through before mentioned mechanisms (laws, relieves, etc.).

#### After World War I

The great losses of Bulgaria during the World War I were detrimental to those production activities that were not related to the supply of the troops. Unlike other countries, in Bulgaria, some peculiar processes took place in the period after the war. Some enterprises reduced their production activities, but generally, the fast-growing construction of new industrial plants continued. In some industrial sectors, the number of new factories was even bigger than the factories built in the period before the



war due to the continuous transfer of accumulated capital during the war. In the first three post-war years, the average annual investments were increasing dramatically and a lot of factories were expanded and reconstructed. Bulgarian industry has undergone structural changes as well. In 1921 the enterprises in the country were around 1544 and they were subdivided in this way: 1.62% of them were state-owned, 29.4% private encouraged, 61.53% private unqualified, and 7.5% of them were co-operative. The state-owned enterprises were concentrated mainly on electricity production, as well as the coal and metal industries. Encouraged enterprises were the core and the force of the new Bulgarian industry. More than 60% of the capital provided by the State was invested in this type of enterprises, which was the proof that the laws and relieves focused on the promotion of the local industries were the right choices to do. The most developed branch at this time was the food-processing industry. The number of mill companies was the biggest one (around 657), followed by sugar, brewing and other industries. Secondly, the tobacco industry, which was at one of the last places in the rank list before the War. At third place there was the mining industry, the industries focused on the processing of leather and leather products, the metal and ceramics industries. On the basis of the before mentioned data became clear that the Bulgarian industry was mainly composed by the Light Industry at that time (processing of raw materials from

agriculture).

The stabilization of the Bulgarian agriculture and industry, after 1923-1924 has emerged as an important condition for the growth of the local industry. The economic upturn has also affected the inflation, whose values was almost zero since 1923.

Mining and coal mining rapidly developed during this period. Until the end of the 1920s five new Thermal Power Plants (TPP), one Hydro Power Plant (HPP) had been erected in the country. In order to preserve and promote the Bulgarian industry, in 1924 was created a law that prohibited the importation of non-essential goods inside the country. Thanks to this strategy there was the possibility for the industrial capital of Bulgaria to reach as much as possible the internal market. After the stabilization of the agricultural sector, the purchasing power of Bulgaria increased.

Even the governments that were elected afterward also extended the tenure of the Law for the promotion of the local industry. Most of the benefits focused on the development of the private encouraged enterprises were preserved: duty free imports of machinery and raw materials, municipal sites for the construction of factories and industrial complexes, preferential prices for the companies that use the Bulgarian State Railways for the transportation of equipment and raw materials; exemption from some taxes.

Until 1929 the industrial production in Bulgaria has grown up by 88% compared to 1923, which shows an average annual rate of 11%. The food processing

industry was still the main one, followed by tobacco and textile industries. In this period the contribution of the Heavy Industry continued to be low (only 17% of total production). Due to economic and strategic reasons, the transport has developed rapidly in the second half of the 1930s and the transport network was built. During the Great Depression (1929 – 1934) the Bulgarian economy was heavily affected. The economic crisis in Bulgaria was manifested in the fall of stock prices, the decline of the production and the rapid inflation growth. The Crisis brought to the end the economic policies focused on the promotion of the local Bulgarian industry. Unlike agriculture, the Great Depression has contributed significantly to the industry. The main reason for this was that the Bulgarian industry had not fully conquered the domestic market. Excluding the food processing, tobacco and building materials industries, which were able to satisfy the domestic market, all the other industrial branches had their significant reserves. The reduced Purchasing Power of the country, as well as the surplus stock of products from the food and tobacco industries, forced the owners of the establishments to reduce the production or even to stop it completely. The fall in the production during the economic crisis has led to a decline in many industrial sectors, except the textile industry. The Great Depression also had a negative impact on the development of the Service industries, as there were no funds for health care, education, etc. In fact, during the same period also the tourism and transport

sectors were affected since there was a lack of investments as well as users.

In 1930 a new customs fee was adopted, which made the import of manufactured goods almost impossible. At the same time, the import of machinery, fuels and raw materials for the underdeveloped industrial branches were even easier than the past. Thanks to this efficient strategy, the industries that were unsatisfied the domestic market had increased their production. Some industrial sectors in Bulgaria were even not affected at all by the Great Depression.

Until 1934 was still possible to perceive the consequences caused by the economic crisis. Since then, the Bulgarian industry has constantly increased the number of enterprises, as well as the amount of annual production and the number of workers. In the period between the end of the 1930s and the beginning of the 1940s the Bulgaria, industry reached its peak. One of the main reasons for this economic upturn was the expansion of trade relations with Germany. In 1939 there were around 3013 small enterprises (10 to 50 workers), 330 medium enterprises (50 to 200 workers) and only 90 big enterprises (more than 300 workers). This data clearly shows that the Bulgarian industry was still composed mainly by small enterprises. The food processing industry together with the tobacco industry were still the most productive in comparison with the other branches (62% of the total production of the country). They were followed by the textile industry (16%), the leather, the rubber, and the wood

processing industries (4%) and the glass and ceramic industries (2%). The values linked to the production of electricity (2%), metal (3%) and chemical (4%) industries were almost unchanged in comparison with the past decades.

In the years before World War II, the adopted strategy for the development of the Bulgarian economy was following the Law of 1936. This Law abolished all benefits (relieves, preferential prices, etc.) and attempted to create a new system of industrial relations, as well as to regulate the production processes. Another one of the aims of this new Law was to introduce new standards regarding the production, as well as to develop new programs for the improvement of the production processes. A key element in the new legislation was the introduction of the so-called “saturation” of some branches, which gave to the State the possibility to decide if the production of some branches has to be reduced or even stopped. In this way was easier to improve some underdeveloped fields as well as to reduce the unnecessary production and consumption of raw materials. The State has had the task to manage some branches and to regulate the production of some industries.

The industry cannot bear the damages caused by World War II. All the branches part of the Bulgarian industry, except the food and tobacco industries, depended on the importation of raw materials for their production processes. In 1939 the importation of the necessary goods decreased by 38%. The main reason for this phenomena was directly linked to the

future war as well as to the accumulation of goods of most of the countries in Europe. The industries that depended on imported raw materials were forced to reduce dramatically their production due to the lack of inputs.

During the World War II Germany, which was the only one provider of goods at that time, failed to meet its obligations to supply Bulgaria with raw materials and industrial equipment. This created great difficulties for the Bulgarian industry, which required the introduction of the State as a regulator, in order to distribute available goods. The Ministry of Commerce together has had the power to control the quantity and quality of the industrial production, and the prices of the produced goods.

### **After World War II**

The development of the industry, as well as the socialist reconstruction during the transitional period in a country like Bulgaria was a complex and very difficult process. The successful resolution of this crucial problem for the dictatorship of the proletariat required not only time but also political and economic changes, which can guarantee socialist industrialization. The first acts of the State, after 9 September 1944, [5] were aimed to limiting and expropriating the bourgeoisie; eliminating the dominance of large capital in the economy; creating of the prerequisites that are necessary for the establishment of the socialism.

The great economic destruction caused by the bourgeois policy, together with the participation of Bulgaria in the World

War II, slowed down the accelerated development of the industry. The raw material crisis, which has been a constant companion to the economic development of Bulgaria was particularly acute at that time. Some of the industries were based on imported raw materials, like rubber and metal industry for example. Even the branches of textile and leather industry relied more or less on additional imported raw materials. Unfortunately during the war trading relations with other countries were interrupted, which bring some industrial branches in a critical situation. During the first three years after the Socialist Revolution, capitalist property in the industry was temporarily preserved, but its exploitation was limited by the State. Taxation was increased. The state took control over the determination of sale prices of the products. The opportunities for speculative diversion of part of the production for black-market sales have been eliminated. The industrial capital had to meet precisely the new standards of the labor laws. The workers' organizations had a very important role in the realization of the new strategies adopted by the Socialist State. They actively contributed to the increment of the production in the industrial enterprises, but they also helped to overcome the wartime economic disorder. As a consequence, a new labor control over private capitalist enterprises was built-up in Bulgaria. This labor organization had several tasks: coordination of working groups in order to implement and achieve the production plans; to improve the quality of production; to strengthen labor

discipline; to control the economically use of raw materials, fuels and electricity. However, the labor organization wasn't able to displace administrative and technical management of enterprises, although the organization severely restrict the power of capitalists in this direction. During the three years of its functioning, labor control played the role of a training school through which the working class was prepared to manage the production. As a result of the correct policy of the Socialist Party, in 1947 the level of industrial production of the country easily reached and exceeded the great economic success of 1939. The supply of the most important industrial products for mass consumption was stabilized.

In order to restore the Bulgarian economy, in the first years of administration of the Socialist Party, there were several changes focused on the expropriation of the bourgeoisie in the field of industry. As a consequence, in the years 1945 and 1947 there were a lot of confiscations of the assets of illegally wealthy persons; appropriation of the enterprises with German capital and their transformation into Bulgarian-Soviet companies; forced buyout of the shares of the largest private industrial enterprises; creation of state-owned tobacco, alcohol monopoly and nationalization of the industrial enterprises. All these acts created the basis for the future Nationalization Law. [6] The expropriation of the industries in Bulgaria was followed by consolidation of the existing industrial enterprises in order to provide prerequisites for a more rational organization of labor and use of



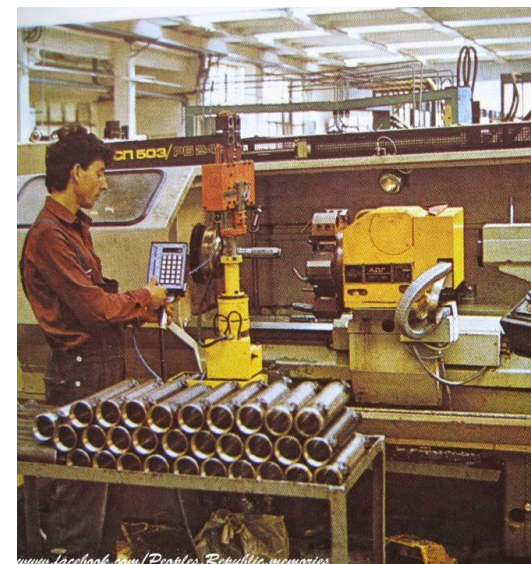
the maximum capacity of the available equipment. For a very short period, a new system for the management of the industry was created. Since 1949 the State capital investments, mainly dedicated to the creation of new industrial enterprises and for the expansion of the existing enterprises, has increased dramatically.

One of the most important peculiarities of the industrialization of Bulgaria is connected to the assistance of the USSR. In the first five-year period after the Socialist Revolution has been paid primary attention to the development of the mining industry, chemical industry, machine construction, and power generation industries. During the second five-year period the development of the industry in Bulgaria, especially the machine construction industry was slowed down. This had a negative impact on the whole Bulgarian economy. The machine construction industry, as a core of the Heavy industry, provides the right conditions for a rapid expansion of the production only if it develops rapidly as well.

The detention of the development of the machine construction industry had a negative impact also on the technical progress, especially on the mechanization of production processes, which affected also labor productivity and the final cost of production. One of the reasons for this lagging behind of this branch during the second five-year period is linked to the lack of attention to its raw material supply. Unfortunately, the production of raw materials has not increased and

also shit had a negative impact on the development of machine construction industry. Another circumstance that contributed to slowing the development of this branch was the moderate production of electricity in the country at that time. The electricity generation gap caused a lot of difficulties in every branch that contributes to the national economy. The average annual growth rate of electricity production dropped from 25.1% in the first five-year period to 15.2% in the second five-year period. A turning point in the development of the Bulgarian economy, especially in the direction of accelerating industrialization, was the April Plenum of the Bulgarian Communist Party, held in 1956. Despite the mistakes that were made during the second five-year period, the decade after the Nationalization of the industry should be considered as very effective for the accelerated industrialization of the country. The production of machinery for the period from 1948 to 1957 has grown 6.5 times, mining and metallurgy has grown 55.5 times and the production of electricity 5 times. In the period between 1949 and 1957, the production of food and drinks industry increased 2.8 times, the textile and clothing industry has grown 4.1 times, the leather and footwear industries increased 3.6 times.

In the 1950s, Bulgaria was ranked at one of the first places in the world at the rate growth of the industry. The rapid growth of the country's industrial production has allowed mastering the production of a wide range of new industrial products, mainly part of the Heavy industry.



Machine factory, Stara Zagora, Bulgaria



Plastic production plant, Bulgaria



Machine factory, Gabrovo, Bulgaria



Metallurgical plant "Kremikovtsi", Bulgaria

During these years, Bulgaria has begun to produce for the first time nitrogen fertilizers, calcined soda, sulfuric acid, nitric acid, DDT and other pesticides, penicillin, internal combustion engines, electric motors, electric generators, cranes, buses, boats, cast iron, steel, cables, etc.

The rapid growth of the industrial production was provided by large capital investments in industry, a significant part of which derived from a Soviet long-term credit for the supply of industrial facilities. The consolidation of the nationalized industry in 1947-1948 led to the reduction of the number of industrial enterprises. Subsequently, a further reorganization of the industry was carried out, which ended in 1956 for the state industrial enterprises and continued until 1959 for the cooperatives. As a result, the number of state industrial enterprises decreased, but after that, it started to rise again due to the construction of many new enterprises. The increase in industrial production in Bulgaria was also related to the increasing number of employed in this branch of labor.

The industrialization of Bulgaria wasn't the only one focus of the economic policy adopted by the Socialist Party. A lot of attention was also paid to the development of the agricultural branch. A fundamental element of the new economic policy was the unification of the land of the peasants in an organized common farm called Labor Cooperative Farms. This process of unification caused significant socio-economic and demographic changes inside the

Bulgarian villages.

The rural cooperative was adopted in Bulgaria since the Liberation of the country and it was considered as a kind of mutual aid for the peasants. During the 5th Congress of the Bulgarian Communist Party in December 1948 was provided a guideline for the accelerated development of the food cooperatives, which should cover 60% of the peasants for the next five years. This political decision was realized in a forced way and by the end of 1951, almost 52% of the peasants 60% of the cultivated land were introduced into the cooperative farms. The farmers of this new cooperative organizations were trying to resist at this forced acts: there was a failure of the sowing plans, falsification of the final production reports, and mass abandonment of the villages. Despite the actions of the peasants, this process imposed by the Communist Party has not been stopped. In the second five-year period (1953-1957) the situation in the Bulgarian villages was already stabilized and almost 80% of the Bulgarian villages were already part of the Labor Cooperative Farms.

Immediately after the establishment of the new economic organization, it turns out that it needs several changes. A very long process of continuous reforming has begun. In the late 1950s, the Communist Party has the ambitious idea to transform Bulgaria from an agrarian to a developed industrial country. The new organization program, inspired by Mao Zedong's experiments in China, aimed to eliminate unemployment through the accelerated industrialization. Agricultural

branch had the task to reach the same level of production of the developed European countries that already adopted the intensive agricultural production. The real transformation process of the Bulgarian economic policy was decided during the 8th Congress of the Bulgarian Communist Party, held in November 1962. Directives for the Development of the Bulgarian economy were adopted in the period between 1961 and 1980, with the implementation of which Bulgaria should complete the material and technical basis of socialism and move towards the construction of communism. In the 1960s, a new stage in the economic development of the countries of Eastern Europe emerged - the opportunities for extensive development were exhausted and new opportunities were being sought. Economists from Eastern Europe find them in the intensification of the economy by modernizing it, increasing its efficiency, applying the achievements of world science and technology, and stimulating labor productivity. The new strategy required a return to the principles of the market economy that have been denied before. In the middle of the 1960s the Bulgarian leadership, together with the other countries from the Eastern Bloc, have prepared an economic reform, called "A new system of planning and leadership of the national economy". It accepts principles of market economy such as the law of value, self-sustaining enterprises, their responsibility for placement of products and profit distribution, material incentives. Unfortunately, the result of this

reform was very poor. Also, the efforts to plan scientifically and technologically advanced progress with the help of special bodies, like for example the Committee for Scientific and Technical Progress, did not give great results as well.

In the late 1970s, a new transformation of the structure of the Bulgarian villages was adopted. An Agro-Industrial Complexes (APC) were established in order to ensure the industrialization process in the agricultural branch. Several attempts to reform the Bulgarian economy continued also in the 1970s, but they weren't able to overcome the mistakes that were made during the past decades.

During the second half of the 1980s, the socialist economic crisis has emerged. This event has led the head of the state (Todor Zhivkov) to launch its largest economic reform. In 1987, a so-called "July Conception" was adopted. The reform attempted to transform the economic strategies adopted in the market economy. But also this attempts were unsuccessful because Bulgaria wasn't able to make such a change due to the context of a general economic crisis and the rising external debt of the country. From a national and international perspective, it was clear that the time for reforms was over. There was the necessity to replace the Soviet way of economic organization with a new one. The tortuous return to the economic principles of capitalism from which Eastern Europe broke away after the World War II, began.



## The changes after 1989

Deindustrialization in Bulgaria is a process connected to the destruction of the inherited industrial base of the country, without its replacement with new one; the closing of the existing working industrial enterprises created during the socialist period; the sale of state-owned property at very low prices; the privatization and subsequently the cessation of the operation of industrial enterprises. The deindustrialization affected mainly the large-scale structures of the sub-sectors of the Heavy industry. A characteristic feature of the industrialized countries is the fact that these countries develop the branches of the Heavy industry in a very intensive way, while the development of Light industry and Mining industry are a priority in the industrial policy of underdeveloped countries that have no capital for investment in Heavy industry. In fact, these less developed countries are mainly focused on the extraction of raw materials and subsequently on their exportation.

The impact on the Bulgarian industry began immediately after 1989 [7] in the period of transition when the neoliberal propaganda was gaining momentum when the structure of the former socialist enterprises was fragmented and there was a presence of uncontrolled privatization. The quantity of manufactured industrial products in Bulgaria during the period between 1990 and 1999 was reduced to half and it can be considered as the lowest one in the last 30 years. In 1991 the quantity of industrial production shrank by 20.2% and this was probably

the biggest collapse of the Bulgarian industry since World War II. The second most catastrophic year for the industrial production of the country was recorded in 1992 when the quantity of industrial output decreased by 15%. The results linked to this period are not accidental. The sharp suspension of economic subsidies for the industrial enterprises after 1990, the rise of interest rates on bank loans caused by the liberalization in the early 1991 and the neglect of the importance of the industry for the country's economic development, had a decisive impact. As a consequence, there were bankruptcies of several industrial enterprises that could no longer rely on the previously guaranteed source of cheap raw materials (especially oil) such as the USSR after the collapse. The increasing pressure from the EU and the international economic organizations for immediate liberalization of the foreign trade regime in the country has put the Bulgarian industrial producers under additional stress. The inherited foreign trade regime was liquidated immediately and the adopted new one does not provide a reliable base for the Bulgarian industry. As a consequence, the Bulgarian industrial enterprises have had a very critical linked to their development. The policy of uncontrolled liberalization that the EU has imposed, as well as other external factors, favored the economic interests of foreign multinational corporations that saw in Eastern Europe a market with significant future capabilities. In order to develop the industrial branch, there is the necessity of solid capital investments, which can give lower returns in short and

medium term and higher returns in long-term investments. Until 1997 there was a trend of drastic cuts of these expenditures in the country's industry and it also reached its biggest fall of almost 93% in comparison with previous years. This was one of the main reasons for the reduction of a quantity of industrial production in Bulgaria during the first decade after 1989. The economic stability of production has its primary importance not only in the industry but also in any other economic branch. Usually, when capital flows in some sectors are interrupted and there are no future investments, the only one consequence can be the closure of these industries. In Bulgaria, the investments dedicated to the technological renovation of the industry have been reduced, which automatically created many difficulties for the development of the industry on both domestic and international markets, where the competition was very strong. Instead of applying the protectionist strategy in order to preserve the Bulgarian industry in the years of reorganization and adaptation to the new market mechanisms, the State has preferred to stop financing and subsidizing the Bulgarian industrial enterprises. Consequently, the enterprises were forced to find findings by themselves and it was a very difficult task in a period when the economic policy of the country was dominated by chaos.

The start of the privatization process after 1997 has been the most striking hit on Bulgarian industry. In fact, the uncontrolled privatization of industrial enterprises is explained the lowest index of the quantity of industrial production between 1999

and 2000. This index itself revealed the ineffective privatization strategy that was adopted by the government at that time (the industrial production of Bulgaria was reduced by nearly 50%). The export activities of one country are directly related to the level of its industrialization. All the countries that increased their export activities, excluding the countries focused on the mono-cultural economy and the countries that rely on raw material exports, were able to do this transition thanks to the industrial development. After 2000 the index of the quantity of industrial production started to increase. In 2009 there was a slight decrease in industrial production due to the impact of the current global Economic crisis (2008) and the government's inadequate restrictive macroeconomic policy. In 2010, Bulgaria produced the same quantity of industrial output as in 1990 and these results were a clear evidence of the ineffectiveness of the reforms adopted in the national economy, particularly in the industrial field. The membership of Bulgaria in the EU (1 January 2007) was an attractive factor in the field of foreign investments. Unfortunately, the quantitative growth of foreign capitals in the Bulgarian industry does not mean increasing the competitiveness of Bulgarian industrial production. This also does not guarantee the technological renewal and reorganization of the industrial processes, which requires special attention by the government. Foreign direct investment is considered as a key factor in solving problems linked to the increase of labor productivity, improving the quality



Petrochemical plant, Burgas, Bulgaria



Thermal power plant, Bobov Dol, Bulgaria

of products and competitiveness of Bulgarian industry. The risks related to the national economy stemming from the uncontrolled penetration of foreign capital are not highlighted. Foreign investors do not aim to develop the industry in Bulgaria, they are mainly focused on gaining profits. They are not concerned about the deindustrialization processes in the country and the lagging behind of Bulgaria in some industrial branches, in comparison with the already developed countries. This should be one of the main tasks of the Bulgarian State. It should establish and regulate the relations with the foreign investors, in order to benefit both investors and Bulgarian society. The industrial structure at the beginning and at the end of the deindustrialization period is fundamental. They clearly show which are the most developed industrial branches now and which they were more than 25 years ago. In 1990 the leading industries in Bulgaria were the machine construction, electrical and electronics industry, followed by the food processing, chemical, and rubber industries, while the leading industries nowadays are the food processing industry followed by metallurgy and generation and distribution of electricity. During the first years after 1989, the industry was more concentrated on Heavy industry and the production of specialized equipment with high added-value on the international markets. In that period Bulgaria was still an industrialized country, with a huge industrial base, a high number of highly qualified workers, raw materials for the production of goods and market for the

machine construction production. The government of Bulgaria decided to turn machine construction industry into a leading industrial subsector, in order to maintain the industrial development in the country. In comparison with the other industrial subsectors, this subsector created the most value-added industrial products. The changes linked to machine construction sector were significant: in 1990 27.1% of Bulgarian economy were provided thanks to this branch, while in recent years this percentage reached the value of 13.3%. The reason for this decrease can be explained by the fact that the rate of decline in manufacturing of equipment is higher than the rate of decline in general industrial production. This difference was caused by the privatization in the 1990s. Another one subsector that was highly developed in the past was the Food processing industry (production of fruits, vegetables, tobacco, wine, meat, and other high-quality food products). Nowadays Bulgaria is lagging behind in the production of these raw materials and it also turned from a net exporter into a net importer of food products. Of course, the food industry cannot reach high productivity and competitiveness without the use of advanced high-tech farming, which provides the raw base necessary for the production. The chemical, petrochemical and rubber industries were ranked at the third position in the complex structure on which Bulgarian industry was based in 1990. Also, this fact can be explained thanks to the priority given to the Heavy industry subsectors in the overall structure of

Bulgarian industry. The state has invested capital in the development of high-return industrial subsectors, where high added-value goods were produced, the sale of which has provided high incomes. The share of the chemical industry in the overall industrial structure dropped from 12% in 1990 to 10.6% in recent years. After 1999 there was a constant negative trade balance in this sector, also caused by non-governmental environmental organizations, which have been exercising constant pressure on the government in order to limit the production of a number of chemical plants. The subsector of the food industry (17.1%) is the leader in the structure of the modern Bulgarian industry and this fact confirms the ongoing process of deindustrialization in the country. The practice has shown that the food processing industry is a leading industry in the world's less developed countries, where there is a lack of financial, innovative and technological potential to develop the Heavy industry. In recent years, Bulgaria has a similar structure of industrial production that is very close to the structure of industrial production of developing countries. The food processing industry is very important for feeding the population, but it is characterized by low returns. Its products have very low added-value and they cannot provide the needed high export incomes, in order to reduce the foreign trade deficit, as well as to provide investments for other subsectors part of the Bulgarian economy. Taking into account also the size of the business units that are predominantly small enterprises,

it can be considered that the chance for these local producers for equal competition on international markets is minimal. The food processing industry in Bulgaria surely needs a new radical approach that includes technological and financial changes, in order to increase the industrial production and competitiveness in that branch. Bulgarian users today consume mainly imported food, while the Bulgarian food processing industry is limiting its production and potential. Metallurgy takes second place with 16.3% in the overall structure of the Bulgarian industry nowadays. Together with the energy production branch, these are the only one sectors that report growth in their share (compared to 1990 the percentage increased from 5.3% to 16.3%). The reason for this increase is based on the exceptional traditions of the country in this field, which in 1989 was at a 27th place in the world. Nowadays, even after the closure of "Kremikovtzi" in 2009 [8], the Bulgarian metallurgic industry continue to produce ferrous and nonferrous metals, mainly exported to major European machine factories. The numerous deposits of ferrous and non-ferrous metals in the county are also favorable for the growth of this industrial branch. The production and distribution of electricity, heat, and gas is the third most productive sector in Bulgarian industry with 15.3% in the overall industrial structure of industrial in the country. Increasing the production of the sub-sector leads to an increase in its share in total industrial production, which is growing at slower pace.



# Abandoned factories: economic and social problems

The industrial development left its traces in every city on the territory of the Republic of Bulgaria. On average, between 25 and 40% of the populated areas are occupied by industrial zones, without taking into account the enterprises located in the suburban area of the cities. However, most of these territories have disappearing functions, they are unsupervised, isolated, with buildings, infrastructures, and facilities in very bad conditions. This scenario is not something new in Bulgaria as well as in all the countries with an industrial past that passed through the process of deindustrialization. The post-industrial city, where these transitional processes are very common, appears. The reason for this phenomena can be found in some factors such as the historical development of the Bulgarian industry, the contemporary tendencies regarding the deindustrialization of the cities, as well as specific social and architectural development plan policies of the countries that take part of the former Socialist Bloc.

There are many aspects that are directly related to the abandoned buildings (environmental, quality of life, local culture, historical memory etc.) in Bulgaria, but two of them are probably the most important ones: the economic and the social aspect.

From a social point of view: Abandoned buildings give out the aura of an area deteriorating. This can lower local moral and also discourage people from visiting the area. On top of this, the aesthetic of a lot of boarded-up windows in a building

can discourage new businesses from buying in the area, something that can be essential to the growth of the district. Very often abandoned buildings can generate crime and vandalism. Usually, criminals and vandals are attracted to an abandoned building because they are lacking control that is the main reason why this places can meet their needs. Very often abandoned buildings become a temporary shelter (during the winter period) or even a permanent home for homeless people. Due to the decaying of these structures, they are very dangerous [9] for both homeless people and pedestrians.

From an economic point of view: Due to environmental impact, improperly used buildings lose their mechanical stability and steadiness, resistance to fires and do not meet the current requirements of hygiene, health, and environmental protection. Decaying and crumbling constructions of unused and abandoned buildings might also influence the fall of other unused buildings that are situated nearby. It is particularly relevant while speaking about buildings located in densely populated and urbanized territories. Another one reason that causes the decay and the instability of abandoned buildings' construction is the thieves of metal and construction products. Unfortunately, this is a very common practice in Bulgaria since the buildings are not secured and controlled. In order to avoid the decaying and the subsequent demolition of the former industrial buildings, there will be the





Former Railway plant, Sofia, Bulgaria



Building materials manufacturing plant, Momchilgrad, Bulgaria



Metallurgical plant "Kremikovtzi", Sofia, Bulgaria



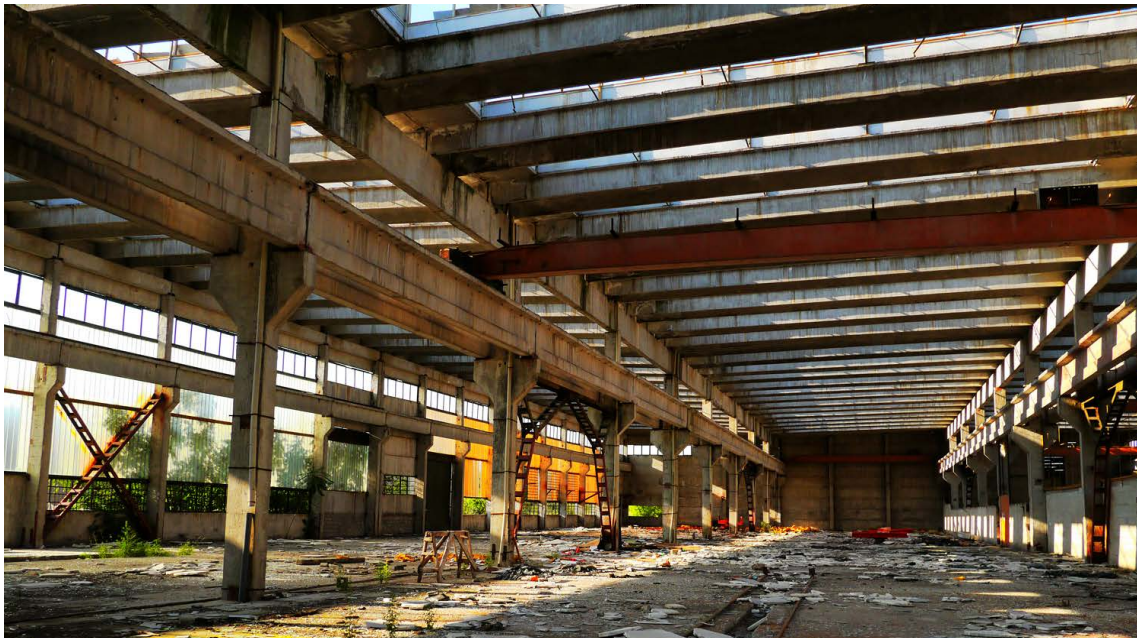
Building materials manufacturing plant, Momchilgrad, Bulgaria



necessity of funding (that are proportional to the current state of the building). The restoration of these structures should be taken into account as soon as possible in order to reduce the amount of money that will be necessary for the regeneration processes. In this way will be possible to avoid the decaying and the demolition of the former industrial structures.

The revival of post-industrial cities is a complex process that concerns many different aspects related to the choice of possible solutions. Nowadays, there are there are some trends regarding the development of these type of areas located in the city or in the suburbs:

preservation of the industrial function and reconstruction according to the adequate requirements; change of the function according to a specific requirements; conservation and adaptation of the buildings in case that they are recognized as architectural or historical heritage; demolition of the existing structure followed by a complete regeneration. The process of revitalization of the industrial areas in the urban context is directly related to the achievement of the main goals of sustainable development. Many organizations, both at the international, national and regional level are being set up in order to exploit the potential of these former industrial areas.



Crane manufacturing plant, Aytos, Bulgaria

# Notes

[1] Treaty of Berlin: In the aftermath of the Russian victory against the Ottoman Empire the major powers of Europe totally changed the map of the Balkan region and the Ottomans lost their major holdings in Europe. The Treaty recognized the independence of Romania, Serbia, and Montenegro as well as the autonomy of Bulgaria. The territory was divided into three parts: the Principality of Bulgaria, the autonomous province of Eastern Rumelia and Macedonia, which was given back to the Ottoman Empire.

[2] The Unification of Bulgaria was the act of unification of the province of Eastern Rumelia and the Principality of Bulgaria in 1885. Both provinces had been part of the Ottoman Empire, the Principality of Bulgaria nevertheless had functioned as an autonomous province. The unification was coordinated by the Bulgarian Secret Central Revolutionary Committee.

[3] Stefan Stambolov is considered one of the most important “Founders of Modern Bulgaria” as well as one of the initiators of economic and cultural progress in Bulgaria during the period of the Balkan Wars. He served as a Prime Minister of Bulgaria in the period between 1887 and 1894.

[4] The Great Depression was a worldwide economic crisis that took place during the 1930s. It is considered the most widespread depression of the 20th century. This phenomena that started in the United States after a big fall in stock prices, had devastating effects in both rich

and poor countries.

[5] 9 September 1944 Bulgarian Coup d'état was a forced change in the Kingdom of Bulgaria's government. It is also called “Socialist Revolution” as it was a crucial point for the political changes in the country, as well as the beginning of the reforms towards socialism.

[6] Nationalization in Bulgaria 1947 is the process of forced retention of big part of the industry and services in the imposition of the totalitarian communist regime in the late 1940s. The nationalization eliminated private ownership of production assets and private companies (factories, banks, insurance companies, shops, craft workshops).

[7] “Kremikovtzi” was the Bulgarian biggest metallurgic company. The plant was built in 1960 and it started producing cast iron and coke in 1963. In 1999 the company was privatized and after ten years it has been shut down.

[8] Transition of Bulgaria towards Democracy and Market Economy indicate the political and economic development of the country in the years after 10 November 1989. The Bulgarian economy before 1989 was the same one that was adopted by the Socialist government after 1947.

[9] Bulgarian Building Chamber defines dangerous those buildings and structures which have become unable to use due to their natural decay or other circumstances.

# **Chapter 2**

## **Case studies**

### European Route of Industrial Heritage:

ERIH is a network, supported by European Union that puts together the most important industrial heritage sites located in Europe. The organization started operating in 1999 with the main aim to promote former industrial sites as new touristic and educational destinations. Until 2010 around 850 former industrial sites from 32 European countries were already part of ERIH. The structure of ERIH is based on routes composed by “anchor points” that presents the most important and the most attractive former industrial sites; regional routes; theme routes that show the diversity of industrial landscape located in Europe. The last category is subdivided into twelve different categories: Application of Power; Housing and Architecture; Industry and War; Iron and Steel; Paper; Mining; Production and Manufacturing; Salt; Water; Transport and Communication; Textiles; Service and Leisure Industry.

### Trans Europe Halles (TEH):

Trans Europe Halles is a European network of cultural centers. This non-profit organization was born in 1983 with the main idea of repurposing former industrial buildings around Europe for new uses, mainly linked to art, culture, and activism. Until 2018 around 109 cultural centers and organizations are taking part in this project. The mission of Trans Europe Halles is to enhance the sustainable development of non-profit and non-governmental culture centers. It also helps to create a strong connection between different European cultural centers, providing opportunities for sharing and promoting the value of

art and culture. The key objectives of this non-profit organization concerns: the establishment of strong exchanging and collaborative structure for the members; promotion of the importance of non-governmental cultural centers as a new creative space in the city; the importance of international exchange and development in the cultural sector. To reach this aims Trans Europe Halles organize: international meetings; manage international projects; organize professional development training; influence cultural policies on the countries where its members are located. The organization considers art and culture as a powerful inspirational force that has the capacity to change people's lives as well as the perception of societies. There are some basic conditions that future members of Trans Europe Halles have to meet before joining the organization. First of all the future members have to be non-profit citizen-initiated cultural centers with a legal independent structure. On the other hand, these organizations have to be located in a former industrial building as well as to have autonomous multidisciplinary social and cultural program that supports the idea of equal opportunities and democracy.

### ARTfactories:

ARTfactories is a French non-profit organization, born in 2002, that unites research, transmission, and action for the development of art centers. The main topic of the association is focused on the practice and experiments regarding the relationship between people, art, society, and territories. The platform takes its origins from many different experiences



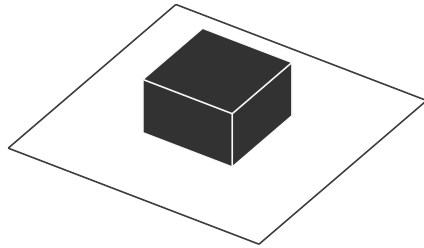
in developing and creating cultural centers in France. The main purpose of the association is to spread their competencies and resources acquired during the projects that they worked on. The mission of ARTfactories can be summarized in few steps that concern sequent actions: identify and promote of the phenomenon of creative citizens' projects all around Europe; create possibilities for

development of such projects thanks to the exchange of competencies; stimulate artistic exchange thanks to the mediation; give more information to the cultural operators and public authorities through the sharing of different tools like text, reports, studies; give additional value to the architecture of these projects; create strong relationship between artists and the audience.



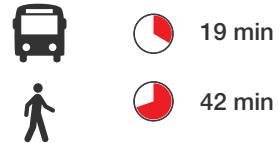
Proportion  
diagram  
public space  
/ building

SIZE:



Ground floor: 18 000 sqm / 1 floor  
Public space: 113 000 sqm

DISTANCE:



PROPERTY OWNER:

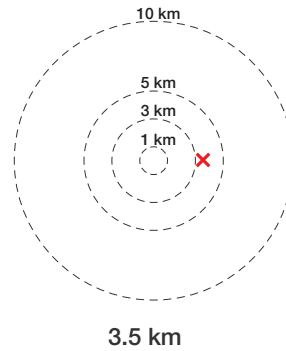
Public / Private

BUILDING MATERIAL:

Bricks / Concrete / Mixed

Distance to city  
center diagram

LOCATION:



TIMETABLE:



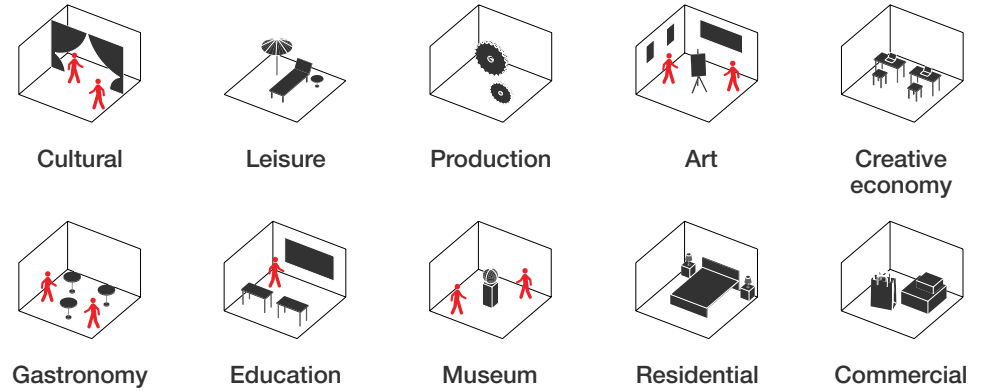
FINANCING:

Profit / Non-profit

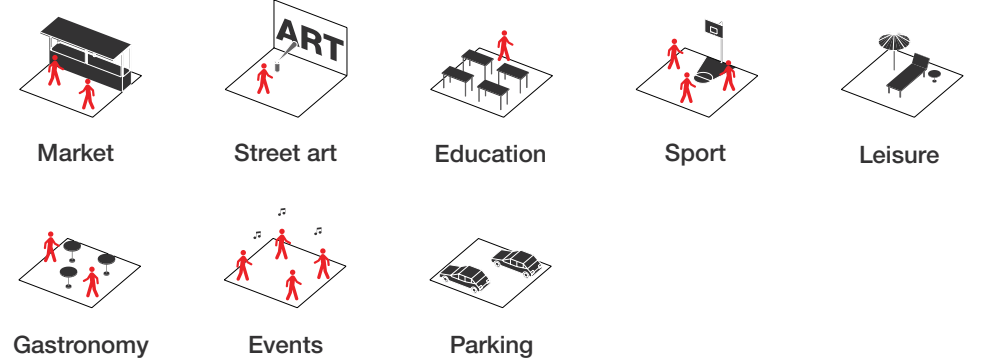
FORM OF INTERVENTION:

Minimal / Medium / Intense

PROGRAM:



OUTDOOR ACTIVITIES:



MEMBERSHIP:

Trans Europe Halles / European Route of Industrial Heritage / Art Factories

Indoor  
activities

Outdoor  
activities



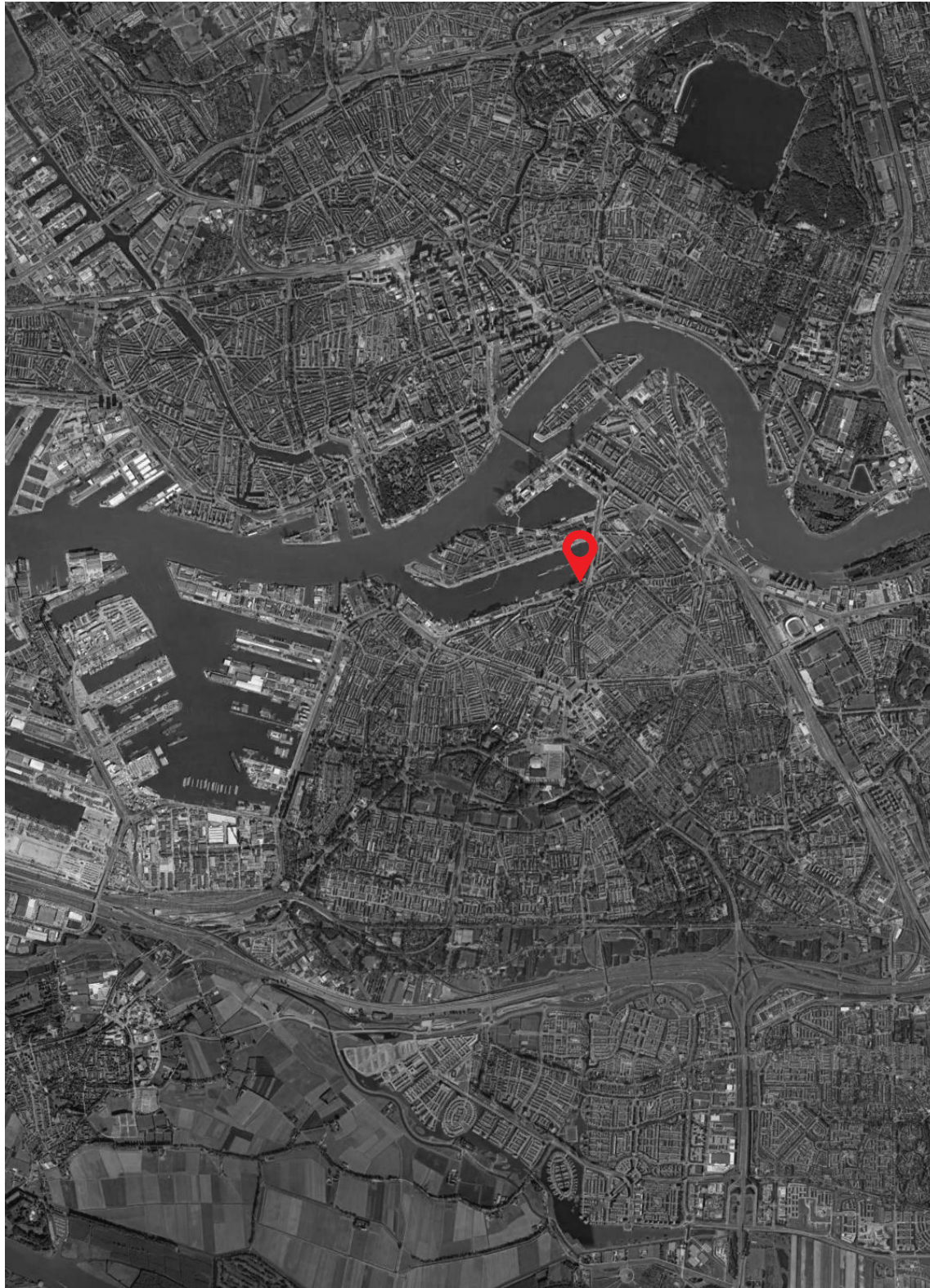
The building  
in the past



# MAASSILO

Rotterdam, The Netherlands

51°53'50.94"N , 4°29'38.12"E



## Description:

The silo is located at Maashaven port in Rotterdam South. This area on the left banks of the Maas River changes during the second part of the 19th century from an agricultural area in the new economic part of the city. The concrete colossus towers above its surroundings and basically, it is composed by five-story, seven-story, and ten-story concrete clocks. In order to obtain wider indoor spaces, there was a necessity to eliminate the obstacles caused by the presence of columns. In fact, some of the big concrete pillars inside the main hall of the silo building were cut. Consequently, they were replaced by steel columns with smaller dimensions.

## History:

In 1906 Rotterdam Grain Silo Company has been allowed to build the silo. The architect JP Stok Wzn was responsible for the design. With a capacity of 20 000 tons, this grain silo was the biggest one in Europe at that time. In 1919 it was agreed that Rotterdam Grain Silo Company came into possession of The International Control Company and The Grain Elevator Company. Due to the fast-growing demand for storage space, these two companies decided to increase the capacity of the existing silo, soon after the takeover. The project was carried out by the architects J.A. Brinkman and L. C. van der Vugt. Their proposal was twice the size and the capacity of the original silo. In 1951 a second and last extension was realized according to the design of the architects A.G. Postma and J.D. Postma. Their proposal consisted of the addition of two new 40 meters-tall blocks with the capacity of 22 000 tons each one. They also added a decorative concrete grid on the south façade of the building in order to give more transparency to the building. In the early 80's it became clear that the Maashaven grain complex was difficult to automate. For this reason in the late 90's the silo was relocated in the Botlek industrial area. The Maashaven Grain Silo was used as storage until July 2003.

## Development:

Due to its strategic location, the former grain complex was purchased by Rotterdam Municipal City Management & Urban Development Office (OBR). The new owners of the building realized that the demolition of the complex wasn't the right solution. The future of the complex was linked to its reuse, with future possibilities to redevelop the site. For that reason, in 2003 OBR has commissioned Transformers Agency to carry out the cultural and historical exploration of the building as well as to develop a future vision for the building. There was the necessity of some renovation with particular attention to the preservation as many authentic details and industrial appearance as possible. In 2004 the former industrial building opened its doors as an event location called NOW&WOW discotheque, which organized events every Saturday night. In 2007 NOW&WOW decided to move to another location and Maassilo take its place as an independent event location (company parties, dance events, presentations, and seminars). In 2008 also Creative Factory moved in the former industrial complex, occupying five floors from the east portion of the building. The organization is mainly focused on renting of office space for start-ups from the field of media, fashion, music, and design. Still, in 2008, 2200 square meters located on the cell lofts on the 10th floor were redeveloped into renting space for the different type of venues, called Factory010.

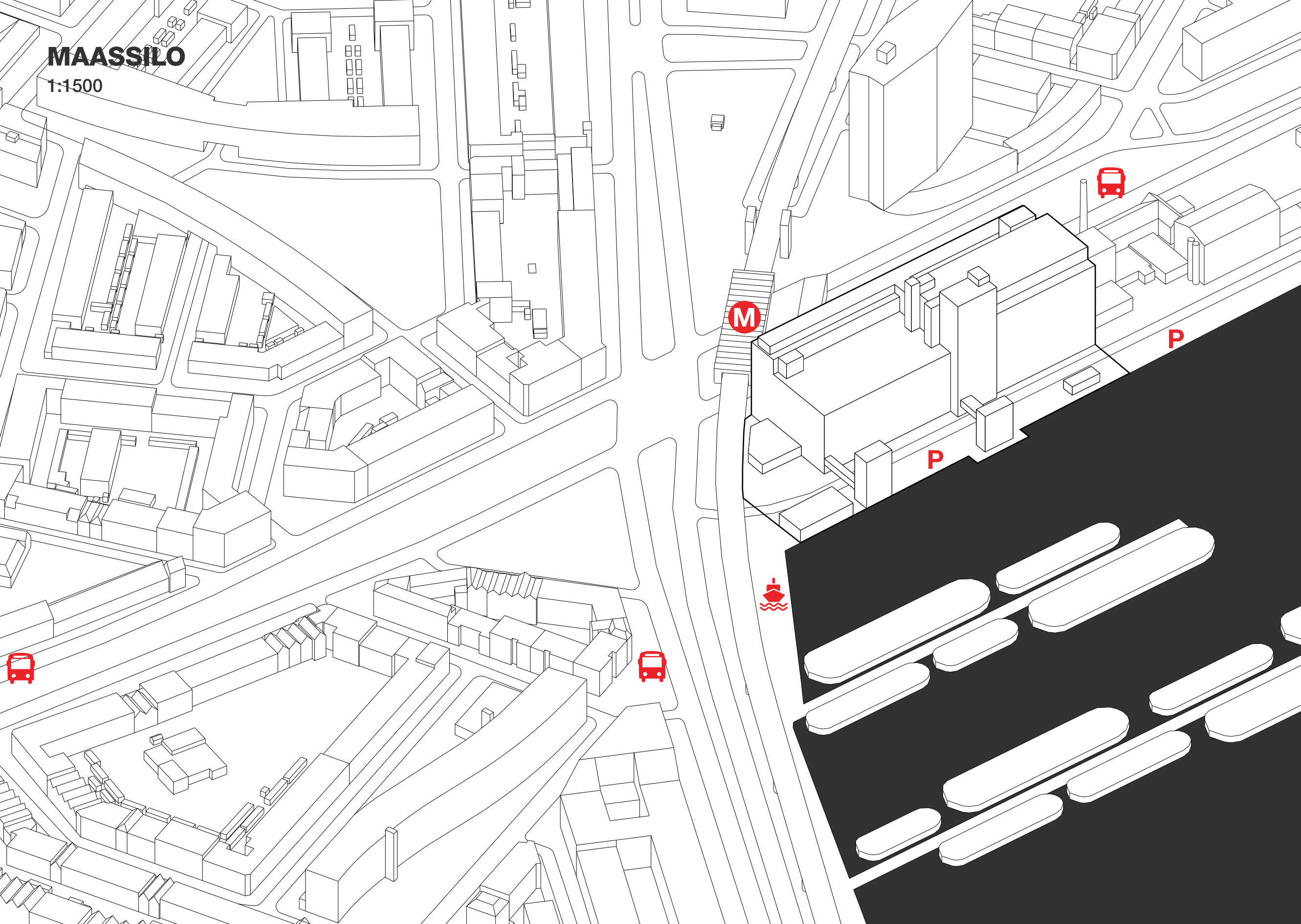
## Program:

Nowadays, Maassilo is probably one of the most famous and biggest party venues in Rotterdam. The building offers a variety of halls and spaces with a different dimension that can be rented and then used for various types of events (parties, concerts, presentations, lecture, and film screening). The portion of the building that is managed by Creative Factory hosts office spaces based on the principles of co-working structures, as well as choir rooms, bars, and coffee shop.



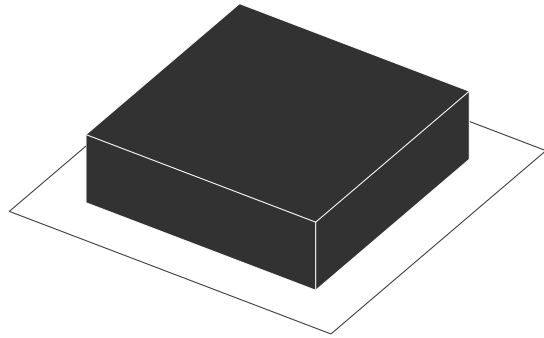
MAASSILO

1:1500



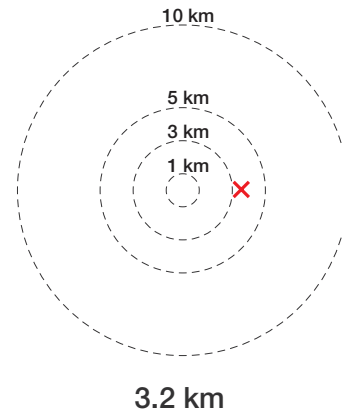


## SIZE:

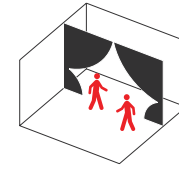


Ground floor: 5700 sqm / 7 - 10 floors  
Public space: 300 sqm

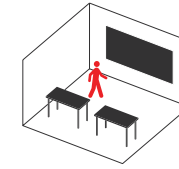
## LOCATION:



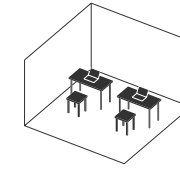
## PROGRAM:



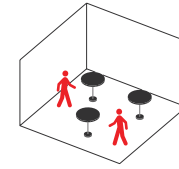
Cultural



Education



Creative  
economy



Gastronomy

## DISTANCE:



11 min



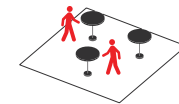
49 min

## TIMETABLE:



24 / 7

## OUTDOOR ACTIVITIES:



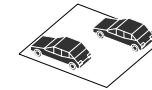
Gastronomy

## PROPERTY OWNER:

Public / Private

## FINANCING:

Profit / Non-profit



Parking

## BUILDING MATERIAL:

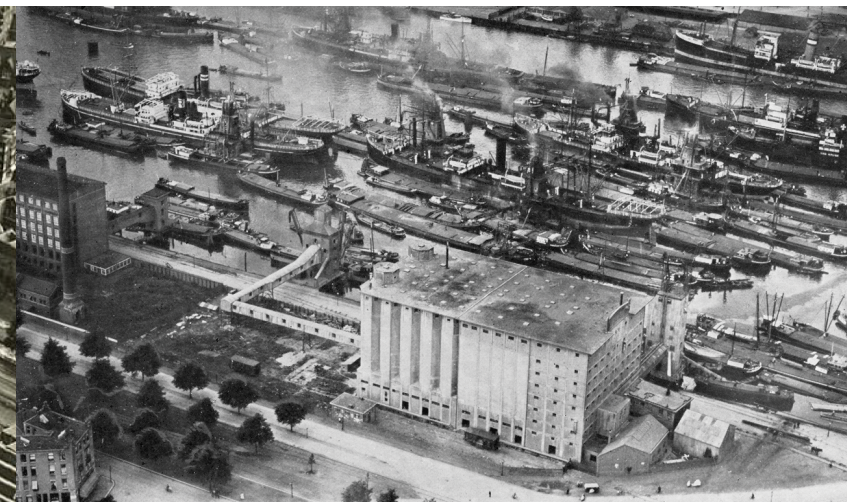
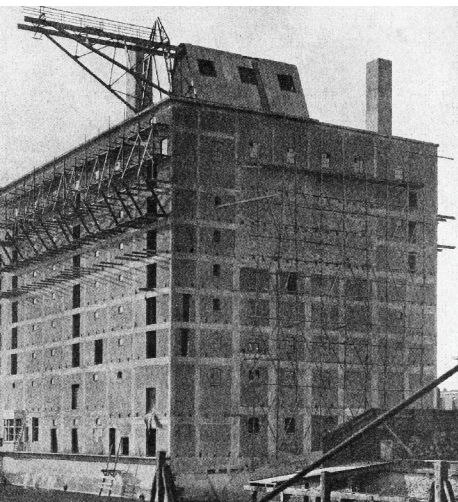
Bricks / Concrete / Mixed

## FORM OF INTERVENTION:

Minimal / Medium / Intense

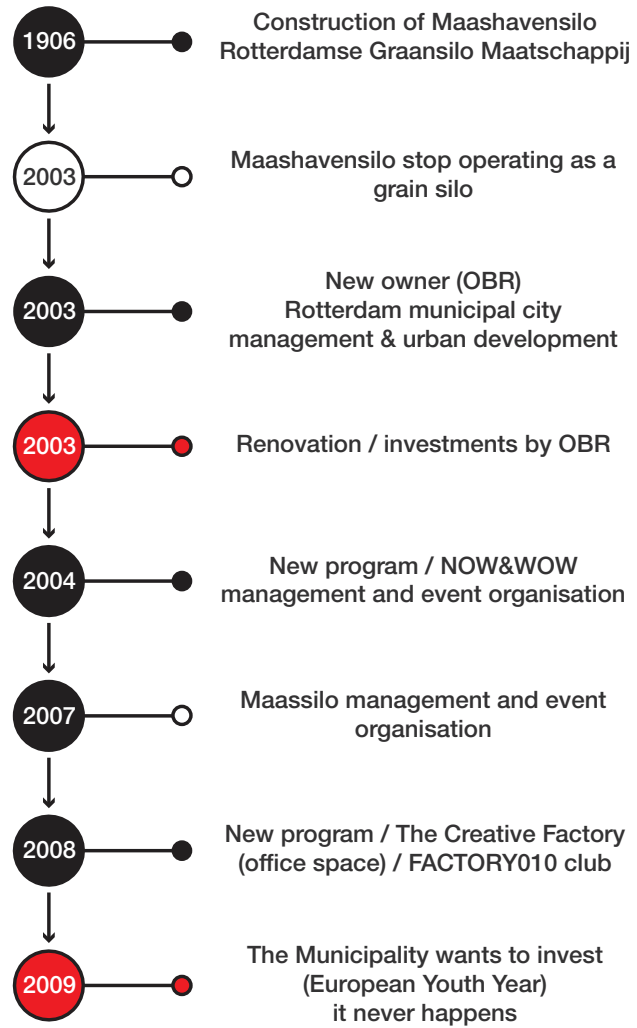
## MEMBERSHIP:

Trans Europe Halles / European Route of Industrial Heritage / Art Factories

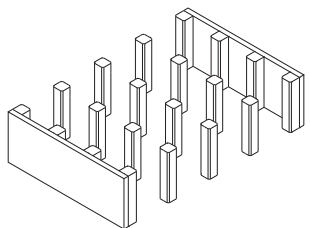




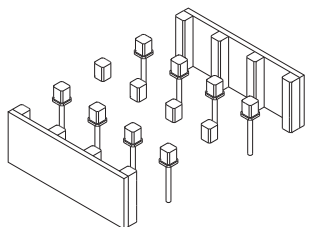
## TIMELINE:



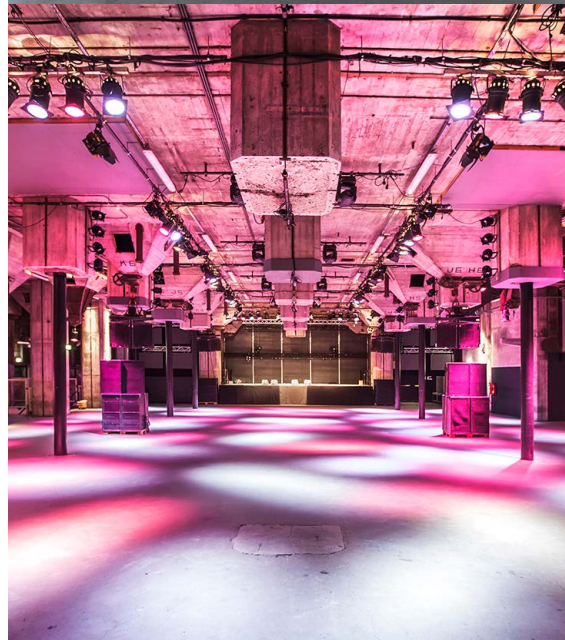
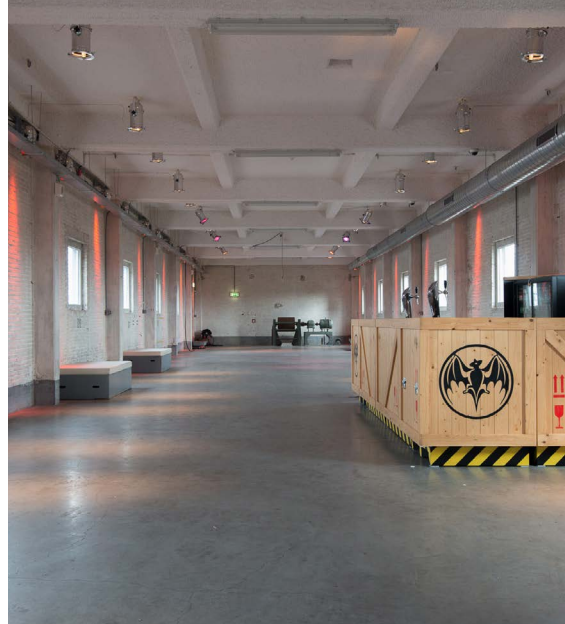
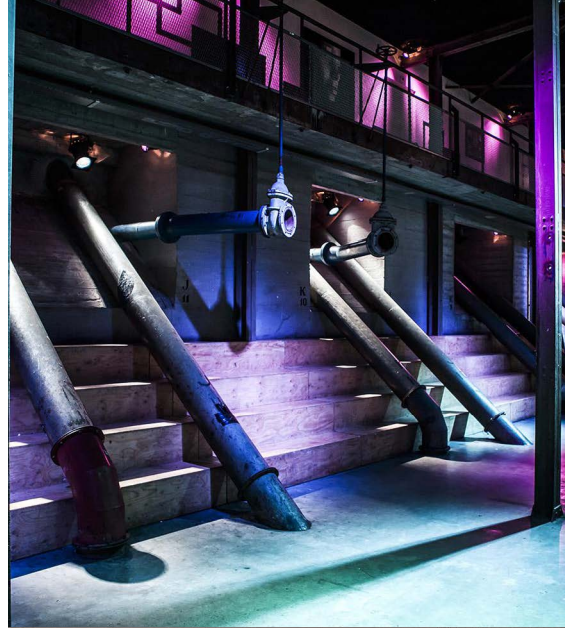
## INTERVENTION:



Grote zaal / original  
concrete pillars



Grote zaal / new  
iron cuted pillars





# NDSM

Amsterdam, The Netherlands

52°24'04.11"N , 4°53'47.58"E



## Description:

The NDSM warehouse, a huge container made by bricks and steel, is characterized by its raw industrial appearance. The most interesting interventions are focused on the indoor space of the large shipbuilding hall. In the beginning, the hall was emptied in order to obtain a kind of empty box where consequently a metal frame structure with concrete flooring was inserted. The tenants were able to model and adapt their own workplaces with different dimensions inside this structure.

## History:

The Dutch Shipbuilding Society (NSM) was founded in 1894. Originally the company was located in Oostenburg (Amsterdam-East). Thanks to the fast-growing shipbuilding industry soon there was the necessity of a bigger site where the company can be relocated. In fact, in 1915 the society moved its warehouses close to the riverbanks of IJ River in the northern side of Amsterdam. Five years later The Dutch Dock Society (NDM) also found a place for its buildings on the adjacent site. After the Second World War there was a decision to merge both companies and in 1946 NDSM (Nederlandse Scheepsbouw en Droogdok Maatschappij) was established. In that period the NDSM was considered as one of the largest and most modern shipbuilding yards in the world. The Dutch company has invented many innovations in the shipbuilding field, which are still in use nowadays. Its main client was Shell Tankers and the Royal Navy. Unfortunately in 1970's the company had some difficulties caused by the oil crisis and political games, as well as the huge competition with other shipyard groups. These events brought NDSM to bankruptcy and in 1984 it was forced to stop its activities.

## Development:

Between the end of the 80's and the beginning of the 90's many companies, artists and designers moved their workshops inside the former shipyard building close to the IJ River. The initial plans about the area were focused on the

conversion of the site into an expensive commercial, residential and office area. A lot of creative entrepreneurs, artists, designers were about to lose their working spots. In order to find a temporary program for the eastern part of the NDSM site, in 2000 there was a competition. The bottom-up city developer Eva de Klerk won it with her complex project including development plan, studies, and arrangement of the financing. Together with other artistic entrepreneurs, Eva de Klerk formed a non-profit working group called Kinetisch Noord and they relocate their offices and workshops inside the huge shipyard building. Soon the working group became an initiator of very important projects such as Kunststad, Skatepark, and Noorderlicht. In 2008 the management and ownership of the area passed into the hands of the local authorities but they continued working closely with the community of artistic entrepreneurs. The rental price of the offices located inside NDSM warehouse is lower than usual, but the tenants are involved economically in the conversion of their own working space. Kinetisch Noord will be responsible for the management of the area until 2027 when their renting contract will expire. The future outlook is that this vibrant and unique space will evolve into a cultural hotspot where different activities will be offered through the years.

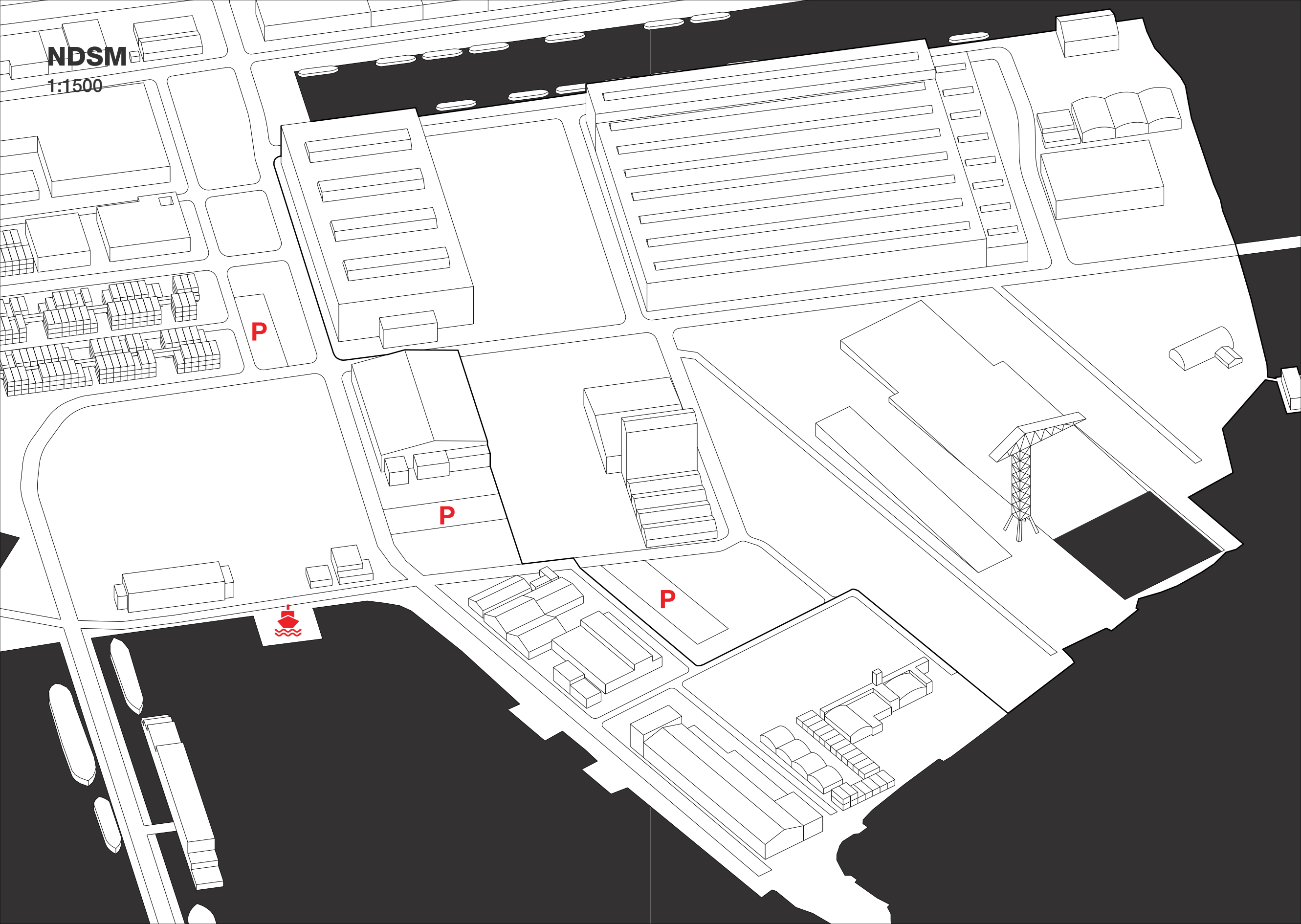
## Program:

The NDSM hall is probably one of the most famous alternative hotspots in Amsterdam. This great example shows very clearly the possibility to mix different program in the same area. Studios, artistic workshops, restaurants, leisure facilities, residencies for artists, concerts and festivals, flea market, skate park, exhibition and theater space are put altogether. The development strategies mainly focused on art, culture, and youth creates a situation in which each part benefits in some way. There are advantages for the city of Amsterdam, advantages for the area of Amsterdam Noord as well as advantages for the cultural scene in general.

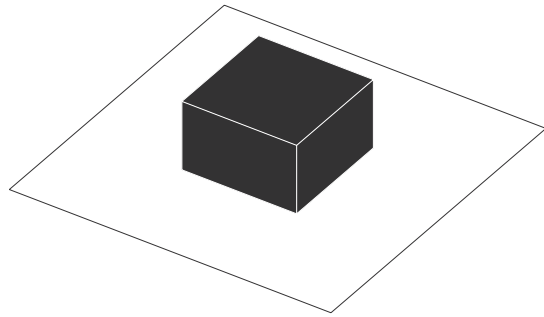


NDSM

1:1500

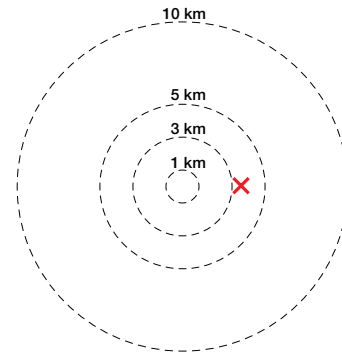


## SIZE:



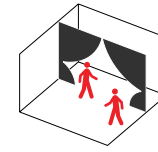
Ground floor: 18 000 sqm / 1 floor  
Public space: 113 000 sqm

## LOCATION:

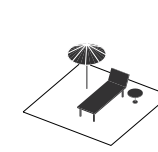


3.5 km

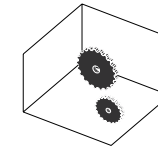
## PROGRAM:



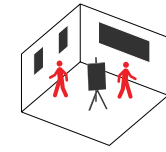
Cultural



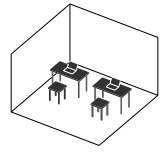
Leisure



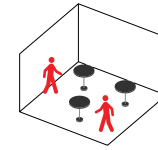
Production



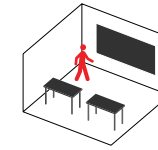
Art



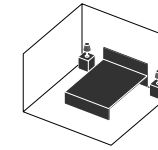
Creative economy



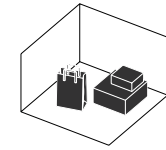
Gastronomy



Education



Residential



Commercial

## DISTANCE:



19 min



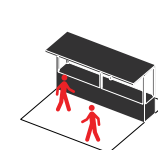
42 min

## TIMETABLE:

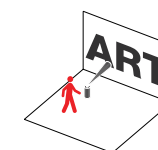


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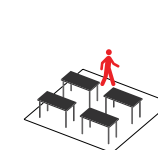
## OUTDOOR ACTIVITIES:



Market



Street art



Education



Sport



Leisure

## PROPERTY OWNER:

Public / Private

## FINANCING:

Profit / Non-profit

## BUILDING MATERIAL:

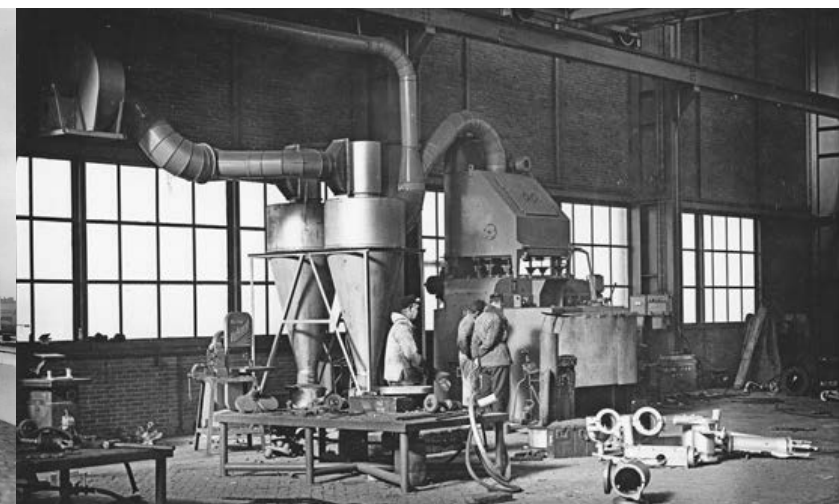
Bricks / Concrete / Mixed

## FORM OF INTERVENTION:

Minimal / Medium / Intense

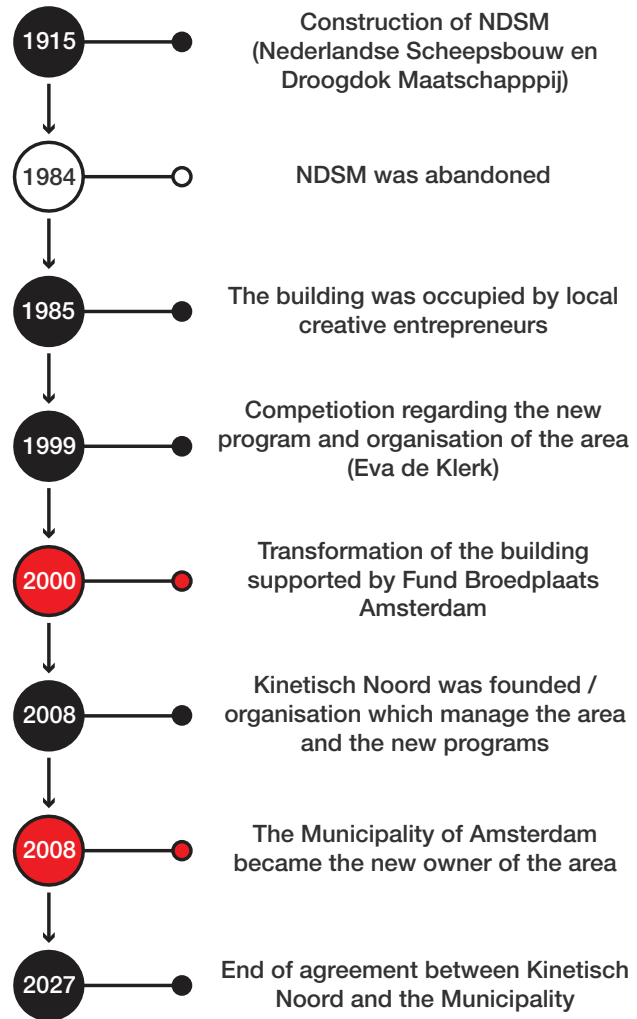
## MEMBERSHIP:

Trans Europe Halles / European Route of Industrial Heritage / Art Factories

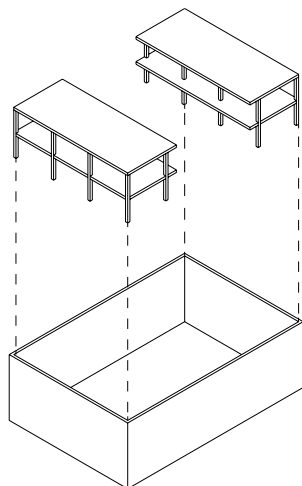




## TIMELINE:



## INTERVENTION:



Steel framework  
concrete flooring

Empty box  
building

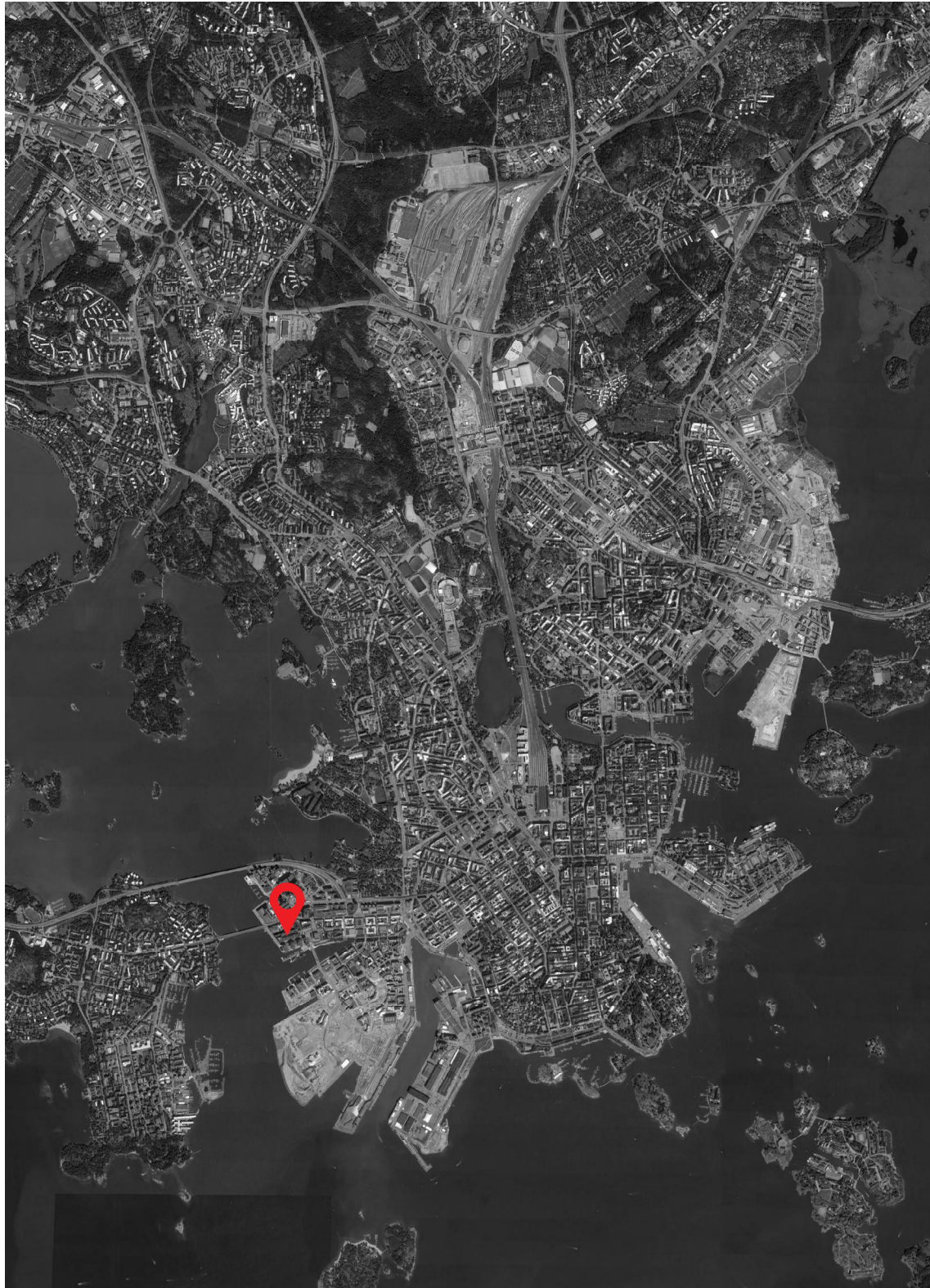




# KAAPELITEHDAS

Helsinki, Finland

60°9'43.36"N , 24°54'18.16"E



## Description:

The Cable factory is located on the west side of Helsinki, close to the seashore. In the past that area was a rocky island mainly occupied by factories and warehouses. In fact one of the first industrial complexes located there was The Cable Factory. The U-shaped building has a total surface area of 55 000 square meters and it is composed by three, five and seven stories blocks. The main materials used for the construction are concrete and light-colored limestone bricks.

## History:

The construction of The Finnish Cable Factory (Soumen Kaapelitehdas Oy) started under the direction of the manager Verner Weckman. It was built in three different stages between 1939 – 1954, according to the design of the Finnish architect Waino Gustaf Palmquist. For a long period, the factory was considered as the biggest industrial building in the country. After the Second World War the factory was producing telephone and electrical cables that was mainly exported to the Soviet Union. During the 60's the company started collaboration with University of Helsinki and the School of Technology and together they concentrate more on electronics and computer industry. As a consequence, in 1967 the Cable factory merged with Nokia Oy. In the same period there were also changes regarding the general town plan of Helsinki due to the fast growing industry. For that reason the Municipality took the decision to move all industrial buildings far from the city. Due to the new production of the factory, there was less necessity of space. As a result the unused portion of the building was rented to artist in the early 80's. The factory was operating until 1989 when Nokia Company moved out of the building.

## Development:

In 1987 there was an agreement between the city of Helsinki and Nokia Company regarding a transitional period while the future use of the building had to be decided. There were plans to build

schools, hotels, museum inside the former factory. The tenants that already were located there weren't agreeing because this decision would force them to leave the factory. That's why an artistic co-operative called Pro Kaapeli was formed in order to manage the space in less severe way. In 1991 the city of Helsinki purchased the building from Nokia Company and consequently converted it into a cultural center. During the first years after the establishment of Kaapelitehdas there were two main issues: how to increase rent income and how to reduce the costs linked to the maintenance of the building. Since the only financing available for the renovation of the building has always been rent income, it was necessary to invent all the means to build at a low price. For that reason the restoration works were carried out step by step, when funds were available. The repair and consequent reuse of every single wall, door and lamp inside the building also permit to keep lower the renovation costs of the building. In this way was created a new economic, ecological and sustainable construction method called "The Cable Standard". The Municipality of Helsinki is still the owner of The Cable Factory nowadays, but it doesn't take care of the activities that take place inside it. A public company called Kiinteistö Oy Kaapelitalo was founded, in order to manage the use of the space inside the former factory.

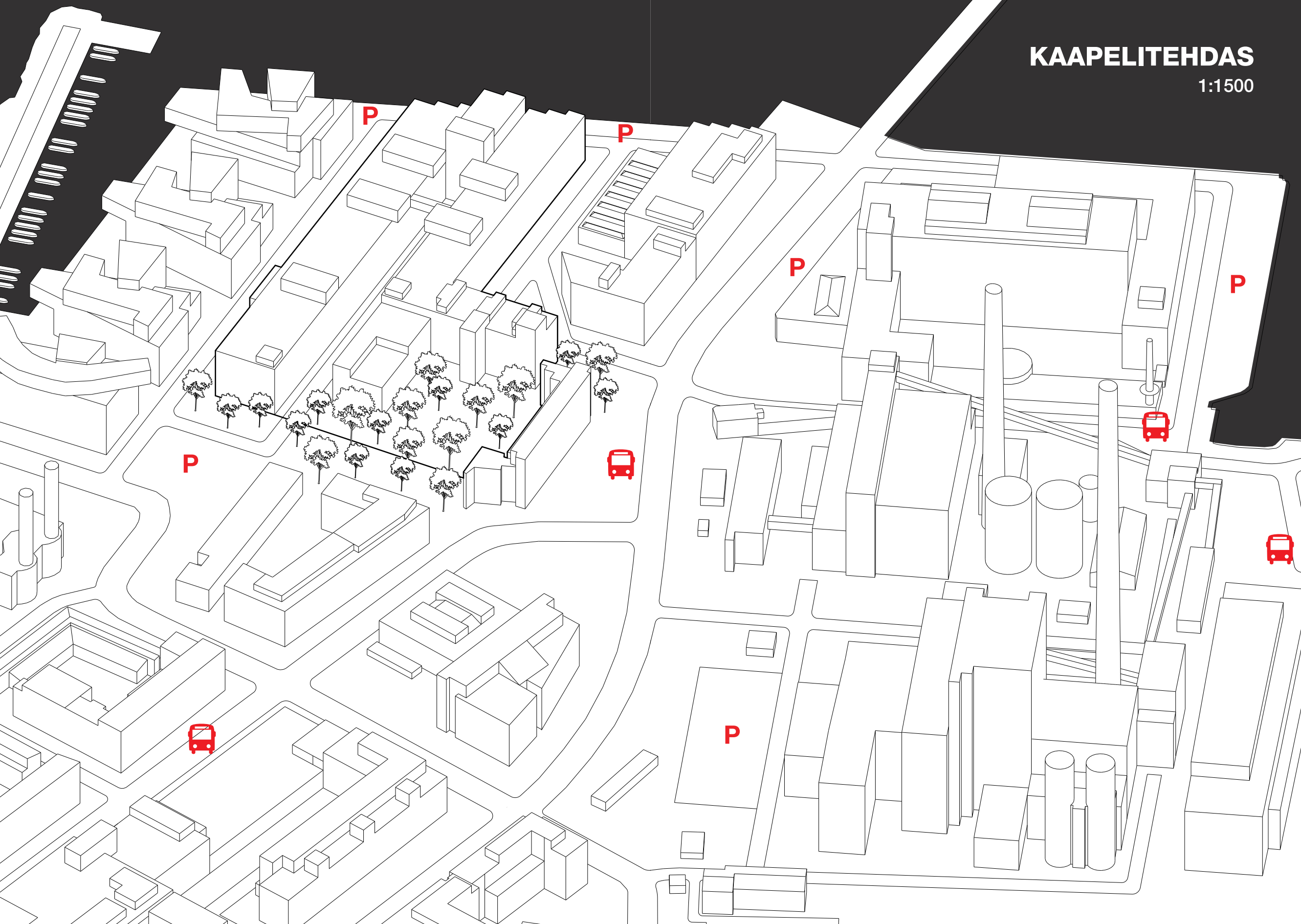
## Program:

Kaapelitehdas is the biggest independent cultural center in Finland nowadays. It hosts three different museums, art galleries, workshops, theatres, art classes, working space, exhibition and concert halls, restaurants, bars and art residences. Total usage of the space is around hundred percent, while the annual rate of replacement of the tenants is around ten percent. There is the possibility for short-term rent (concerts, fairs, festivals) as well as long-term rent (working space, workshops), based on the different users' needs.



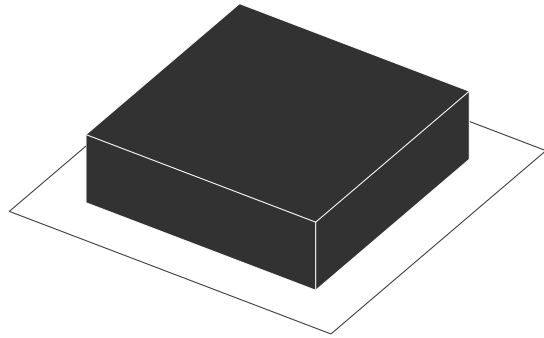
# KAAPELITEHDAS

1:1500



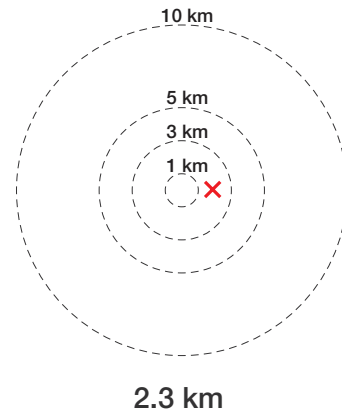


## SIZE:

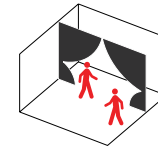


Ground floor: 11 000 sqm / 5 floors  
Public space: 8 000 sqm

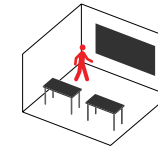
## LOCATION:



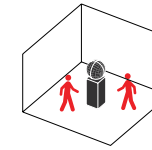
## PROGRAM:



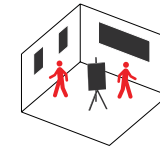
Cultural



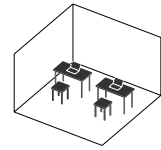
Education



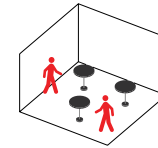
Museum



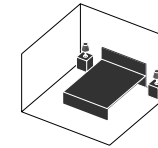
Art



Creative economy



Gastronomy



Residential

## DISTANCE:



11 min



34 min

## TIMETABLE:

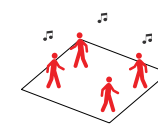


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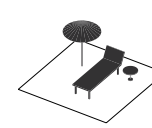
## OUTDOOR ACTIVITIES:



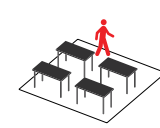
Market



Events



Leisure



Education



Sport

## PROPERTY OWNER:

Public / Private

## FINANCING:

Profit / Non-profit

## BUILDING MATERIAL:

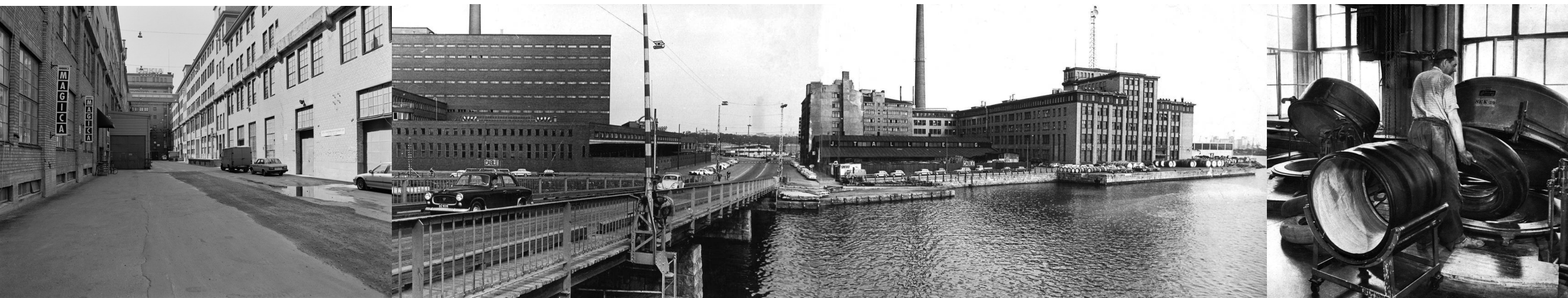
Bricks / Concrete / Mixed

## FORM OF INTERVENTION:

Minimal / Medium / Intense

## MEMBERSHIP:

Trans Europe Halles / European Route of Industrial Heritage / Art Factories

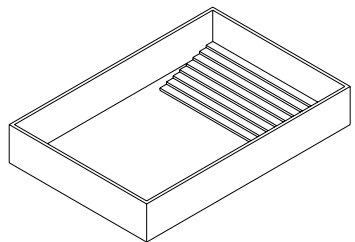




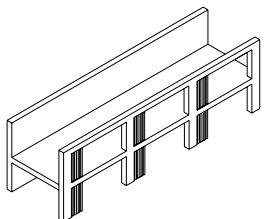
## TIMELINE:

- 1939 — Start of construction of Kaapelitehdas (Soumen Kaapelitehdas Oy)
- 1954 — End of construction of Kaapelitehdas
- 1967 — Soumen Kaapelitehdas Oy and Nokia Oy companies were merged
- 1989 — Kaapelitehdas stop operating as a factory / some spaces were already rented to local artists
- 1991 — The Municipality bought and trasformed Kaapelitehdas into the biggest cultural center in Finland
- 1992 — Kiinteisto Oy Kaapelitalo manage the building / the funds are obtained thanks to the rents of the spaces

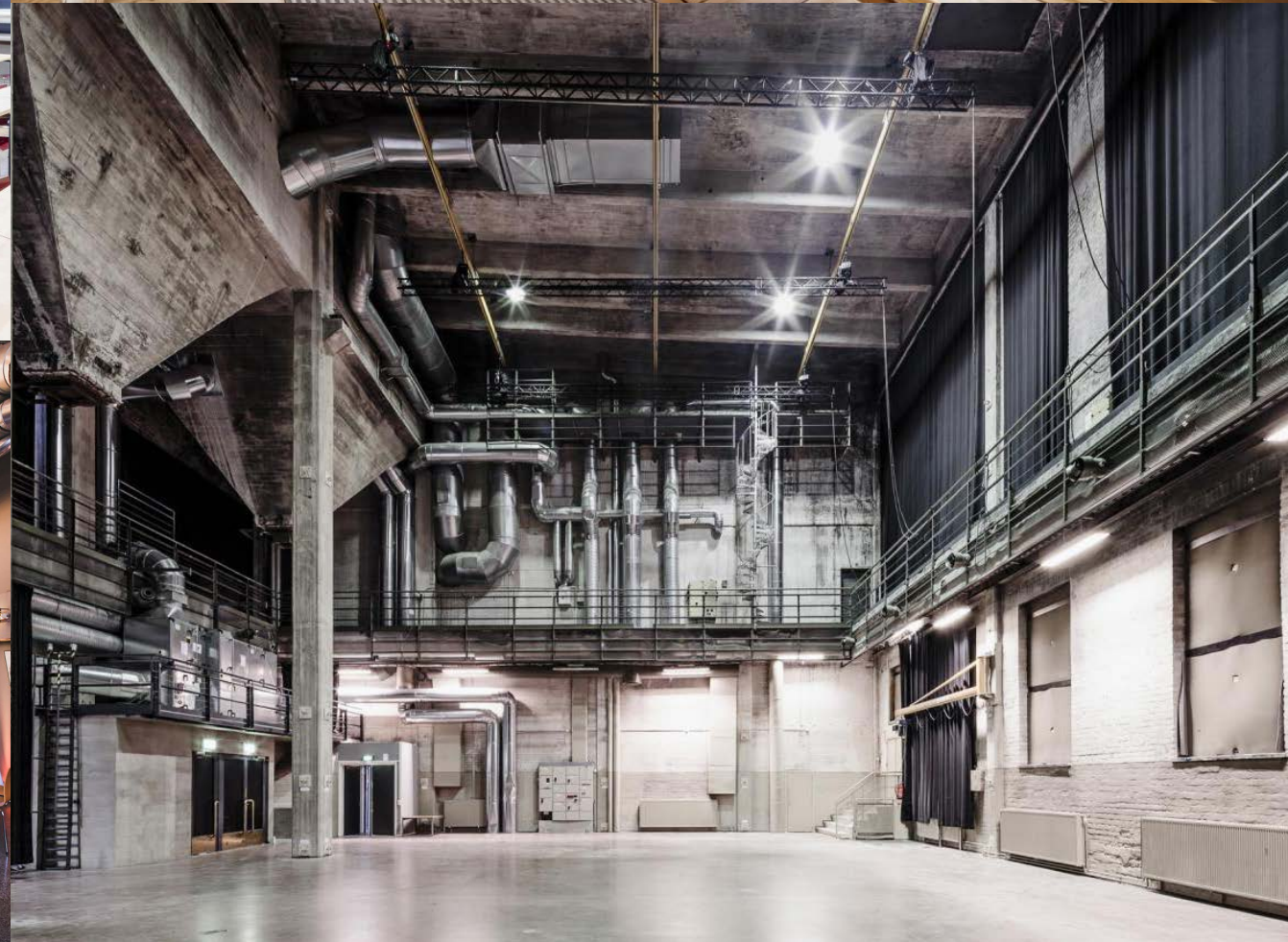
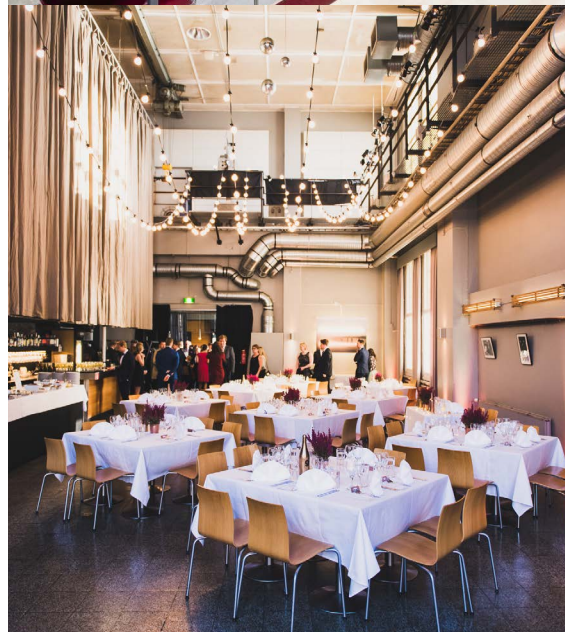
## INTERVENTION:



New elements /  
as less invasive as  
possible



Use of curtains for  
the subdivision of  
the space





# HALLE 14

Leipzig, Germany

51°19'38.09"N , 12°19'05.09"E



## Description:

HALLE 14 is a five-story industrial building, located at the site of the former Leipzig Cotton Spinning Mill complex. The building is located on the South-West side of Leipzig, far away from the city center. Nowadays, it is possible to notice that the building has been well preserved over the years thanks to the solid construction methods used in the past: stable walls with a thickness of one meter; large cast iron box windows. The surface upgrades, as well as the infrastructural improvements of the building, are part of the revitalization process started in 2007.

## History:

The industrial complex (Leipziger Baumwollspinnerei) was founded in 1884 and soon it became the biggest Cotton Spinning Mill in Europe. Around 4000 people were working and living in this industrial structure. In order to improve the quality of life of the workers, a spinning school works canteen, bathhouse, residential buildings for the workers, park, gym, and even a kindergarten were established inside the cotton spinning mill complex. Due to the fast-growing cotton industry in Europe, there were several expansions in the following 25 years after the opening of the industrial complex. In 1891 the hall that host HALLE 14 was erected because of the necessity of more production halls. Unlikely in 1993, a few years after the fall of the Berlin wall, the production was permanently suspended. This caused the liquidation of the business as well as the dismissal of all the workers. After the closing of the Cotton Spinning Mill, there were some attempts to revitalize the complex by using some portion of it for the production of cords for car tires. In 2000 any type of production line, hosted inside the former industrial structure, was closed down.

## Development:

In the early 90's, under the leadership of the administrator Regina Lenk began a completely new phase regarding the use

of the former industrial site. The empty spaces of the complex were initially used for alternative purposes, mainly linked to the need for affordable space for young creative people. In 2001 the industrial complex was sold out to a newly established company Baumwollspinnerei Company LTD, founded by F. Busse, T Sauer-Morhard and B. Schultze. In 2002 together with Federkiel Foundation, a commercial development plan was created, in order to promote the site as a new artistic venue. In the same year was also taken the decision to transform Hall 14, the biggest building of the complex, into a non-profit center for contemporary art. Since the building was well preserved there wasn't the necessity to repair Hall 14 immediately. Currently, the space is managed by the association called HALLE 14, which takes care of the events located inside the building. The funding system of the organization is a mix of private and public funds. The main partners that take part in the financing of this project are Federkiel Foundation, the City of Leipzig which founds HALLE as an institution, The Columbus Art Foundation, the Leipzig Academy of Visual Arts and the Federal Foundation of Germany. HALLE 14 is reserved for public use for the next 15 years.

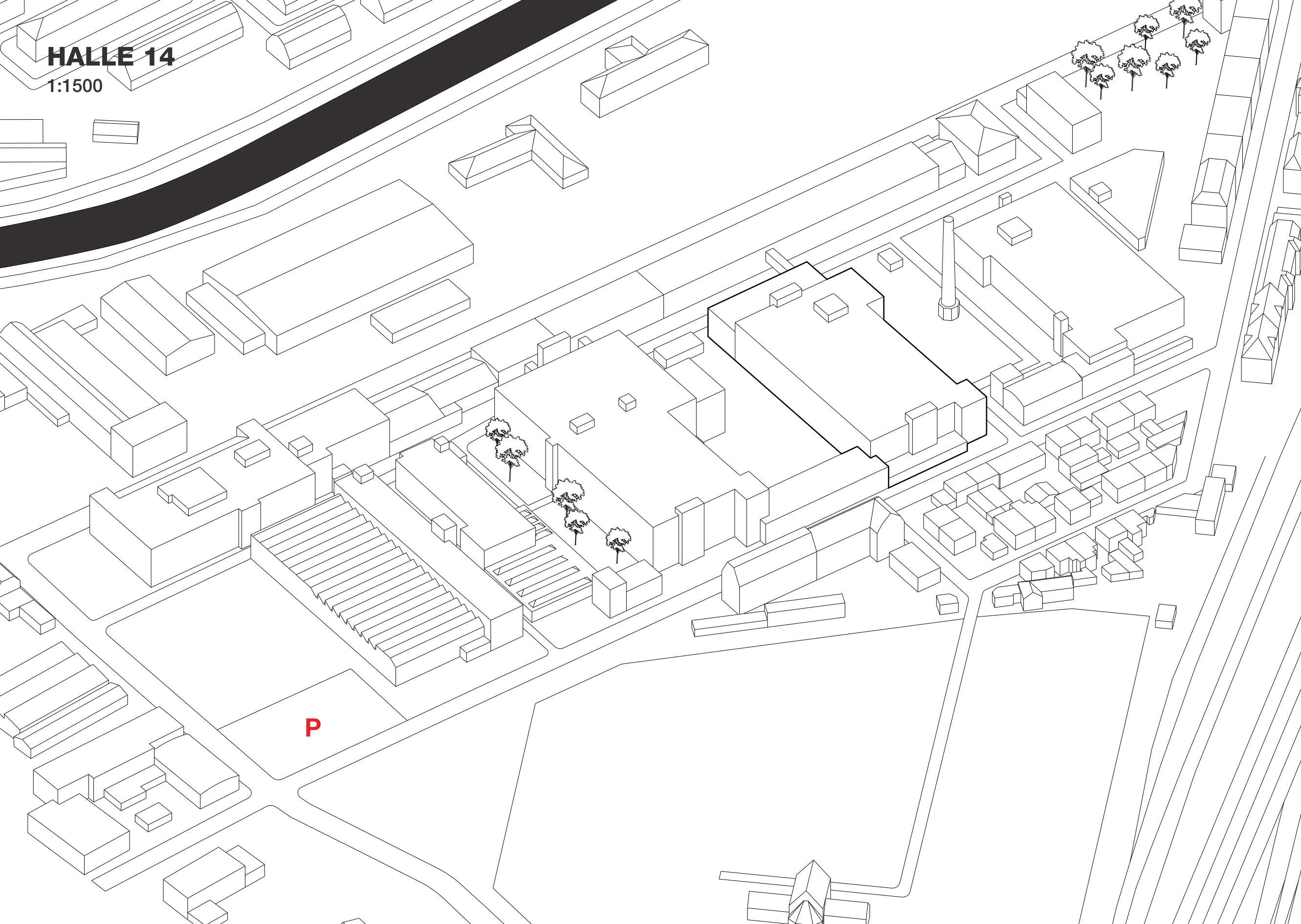
## Program:

HALLE 14 is an independent art center that mainly focuses on the presentation and promotion of contemporary art. The main goal of this non-profit organization is to serve the public interests in its artistic commitment. Exhibitions, film screening, artistic residencies, workshops, concerts, festivals, art classes take place inside the former Leipzig Cotton Spinning Mill. Exhibition hall and visitors center, located at the ground floor were opened in 2007. On the second floor was established a presentation space, dedicated to the partners of HALLE 14. In 2010 the former women's cloak room located on the ground floor was transformed into a library and space for art education program.



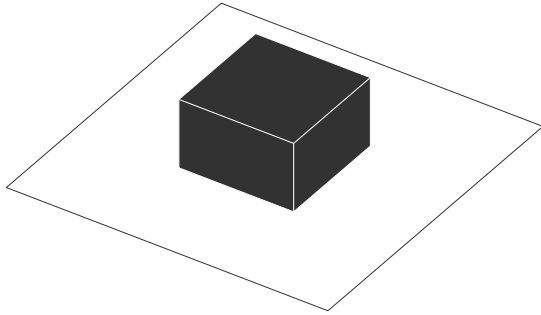
**HALLE 14**

1:1500



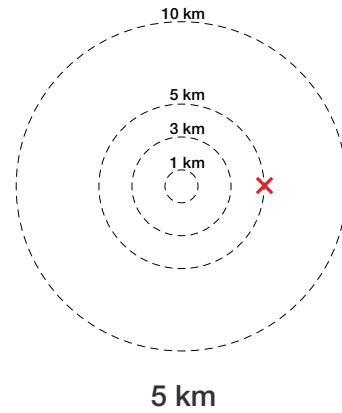


## SIZE:



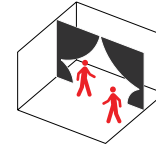
Ground floor: 4 000 sqm / 5 floors  
Public space: 33 400 sqm

## LOCATION:

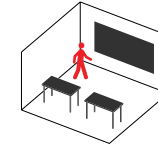


5 km

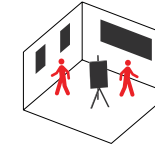
## PROGRAM:



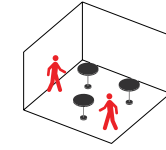
Cultural



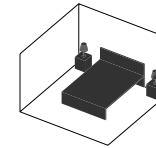
Education



Art



Gastronomy



Residential

## DISTANCE:



21 min



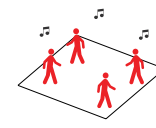
60 min

## TIMETABLE:

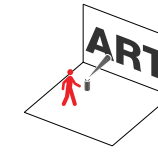


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## OUTDOOR ACTIVITIES:



Events



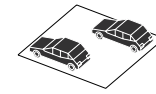
Street Art

## PROPERTY OWNER:

Public / **Private**

## FINANCING:

Profit / **Non-profit**



Parking

## BUILDING MATERIAL:

Bricks / Concrete / **Mixed**

## FORM OF INTERVENTION:

**Minimal** / Medium / Intense

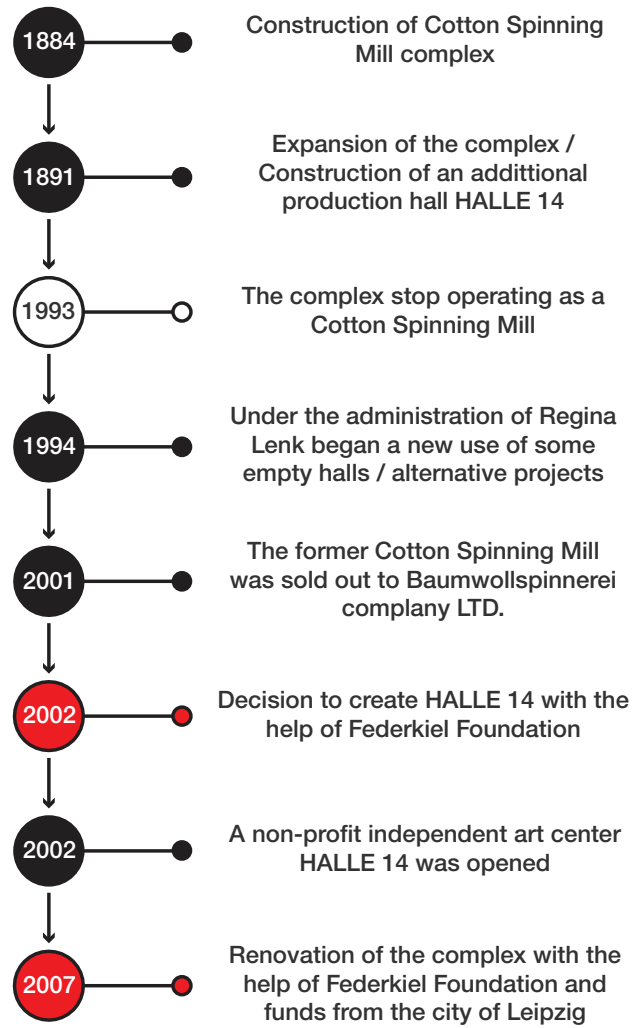
## MEMBERSHIP:

**Trans Europe Halles** / **European Route of Industrial Heritage** / Art Factories

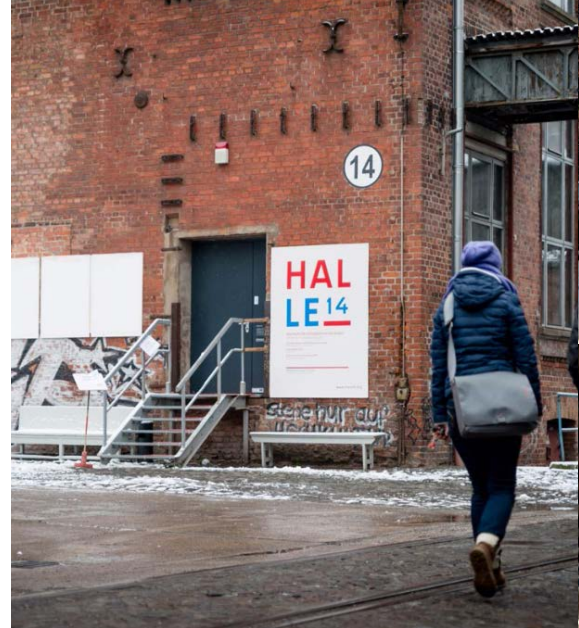
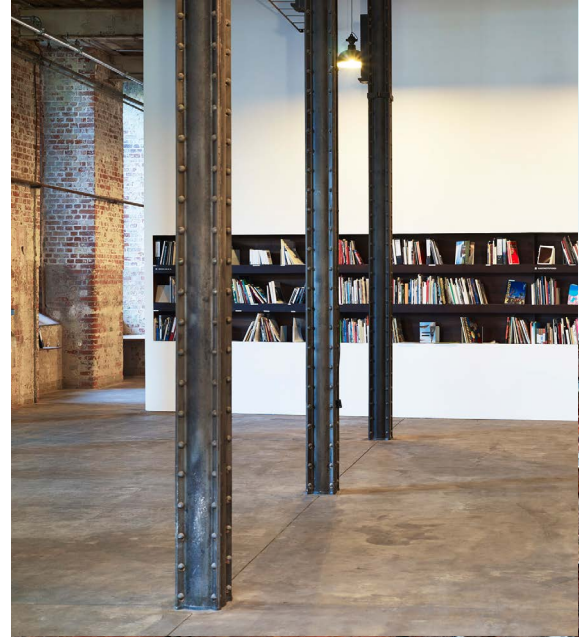
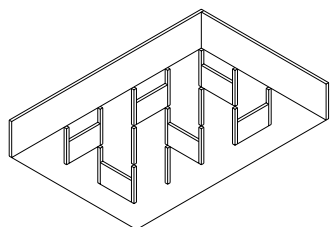
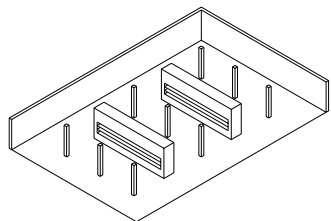




## TIMELINE:



## INTERVENTION:





# LA FRICHE LA BELLE DE MAI

Marseille, France

43°18'14.11"N , 5°23'08.77"E



## Description:

La Friche la Belle de Mai is a former tobacco factory located close to the railway at Belle de Mai neighborhood. It is considered as a cultural and social container which serves local residents and the citizens of Marseilles. One of the most interesting aspects of this complex is linked to the construction work on the top of the complex (Tour-Panorama). In this way was possible to provide access to the rooftop terrace as well as to obtain 85 000 square meters with extraordinary views to the sea and the city.

## History:

The company was founded in 1860 and initially, the tobacco complex was located in Sainte Street, close to the old port of the city of Marseilles. During the 19th century the tobacco manufactory, probably one of the biggest in that period, was relocated in the Belle de Mai neighborhood, close to the railways. Due to the increased consumption of tobacco and the necessary modernization of manufacturing, the factory has undergone various changes over the years. Due to following orders from Paris, focused on a new industrial strategy that reflects the new trends on the market the factory stopped its production in 1970. Even today the building is still owned by SEITA.

## Development:

In 1990 an organization called Systeme Friche Theatre (SFT) was founded. It was mainly focused on the organization and development of cultural projects in Marseilles. In 1992 SFT signed an agreement with the owner of the site SEITA with the possibility to use the site for free. Consequently, the organization moved to the former tobacco factory. A lot of local artistic and cultural groups, operators and producer joined the organization in the following months. In 1995 the famous French architect Jean Nouvel joined his forces with the organization with the main aim to promote artistic and cultural initiatives as a generator for a future urban development of the area. During the presidency di Jean Nouvel (1995 – 2000)

the former industrial site became the property of the city of Marseilles. Between 2001 and 2002 there was a decision to split the site into 3 different subareas: multimedia hub, historical hub, and institutional hub. In the following years, around 70 organizations moved gradually to La Friche. After the first transformation in 2005 a Skate Park, Restaurants and office space were added. In 2007 Societe Cooperative D'interet Collectif (SCIC) was founded in order to continue the already started urban transformation and development of this part of the city of Marseilles. The model of governance used for SCIC was divided into three categories: residents, local area and contributors. In the first years after SCIC was founded, there were some investments thanks to the choice of Marseilles as a European Capital of Culture in 2013. For a few years, both organizations SFT and SCIC were coexisting in the same place, but their tasks were focused on different topics. SFT was more concerned to the organization of artistic and cultural events, while SCIC was responsible for the management of the site. In 2013 the organization Systeme Friche Theatre was de-activated and SCIC took over their remit. The organization has a lot of important supporters and partners such as the City of Marseilles, the Regional Authorities, and The Ministry of the Culture and Communication. Nowadays, SCIC has the task to manage around 45 000 square meters site for the next 45 years.

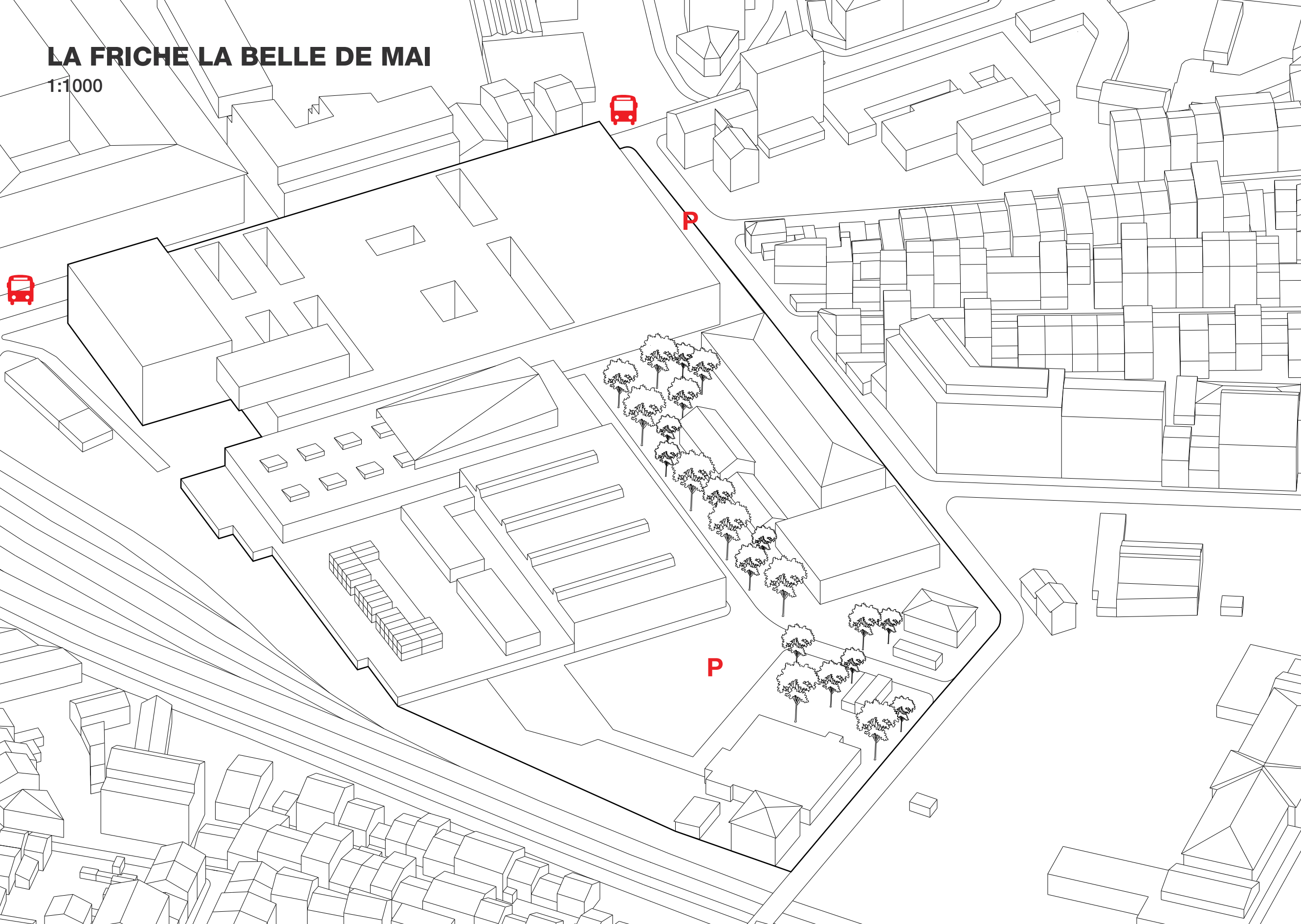
## Program:

La Friche la Belle de Mai is a multifunctional area that hosts both artist and producers from a different branch of contemporary art. Culture and art are mixed with other activities such as working space and offices, theater, exhibition space, housing, children facilities such as playgrounds, skate park, and urban sports park, shared gardens for the local residents, leisure areas. The Mediterranean Institute of Performance Arts joined La Friche in 2015. Two years later also Marseille National Centre for Musical Creation was relocated there.



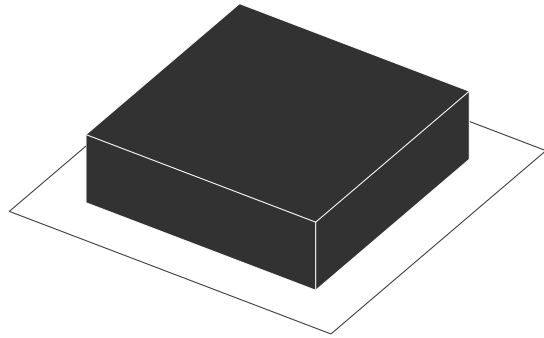
# LA FRICHE LA BELLE DE MAI

1:1000



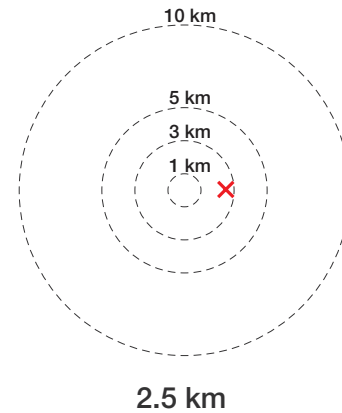


## SIZE:

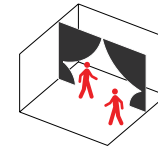


Ground floor: 25 100 sqm / 2 - 6 floors  
Public space: 14 000 sqm

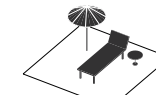
## LOCATION:



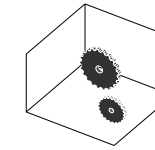
## PROGRAM:



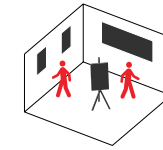
Cultural



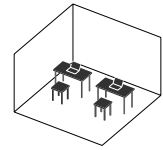
Leisure



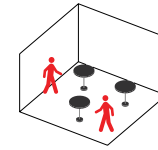
Production



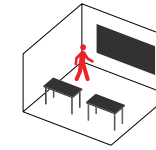
Art



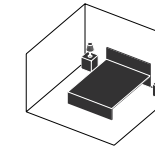
Creative economy



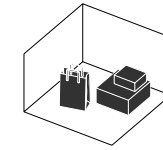
Gastronomy



Education



Residential



Commercial

## DISTANCE:



15 min



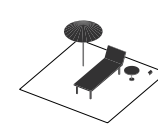
20 min

## TIMETABLE:

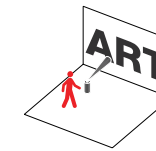


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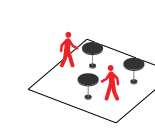
## OUTDOOR ACTIVITIES:



Leisure



Street art



Gastronomy



Sport

## PROPERTY OWNER:

Public / Private

## FINANCING:

Profit / Non-profit

## BUILDING MATERIAL:

Bricks / Concrete / Mixed

## FORM OF INTERVENTION:

Minimal / Medium / Intense

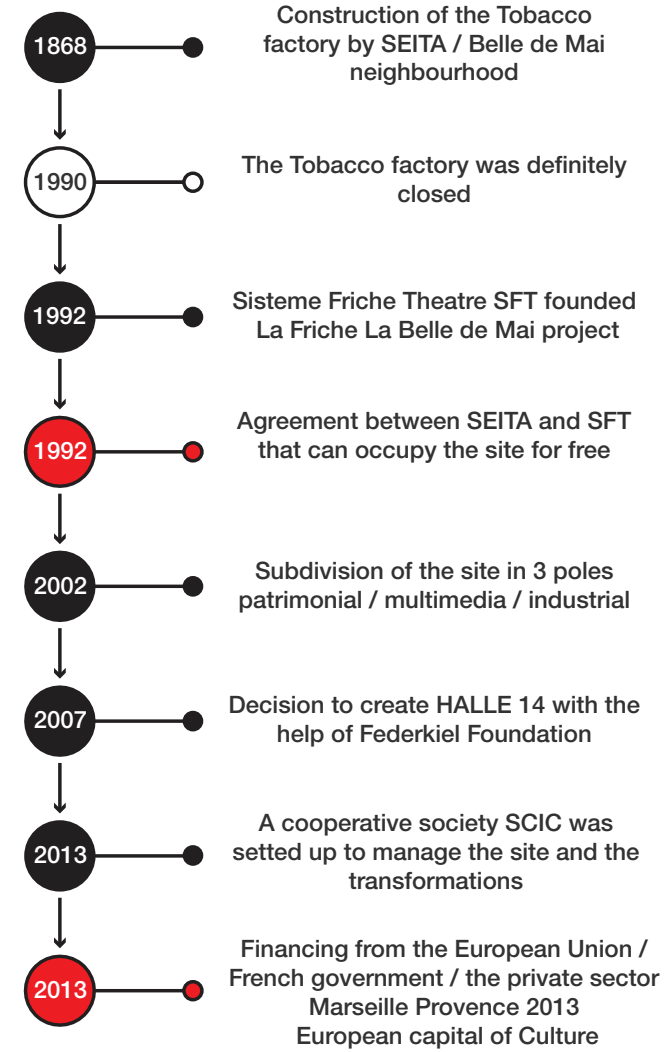
## MEMBERSHIP:

Trans Europe Halles / European Route of Industrial Heritage / Art Factories

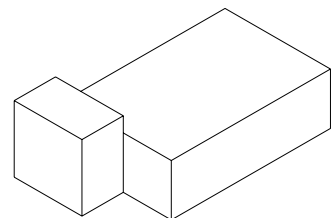




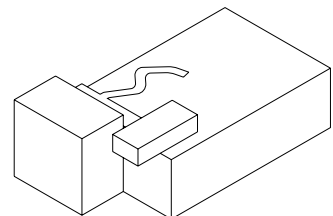
## TIMELINE:



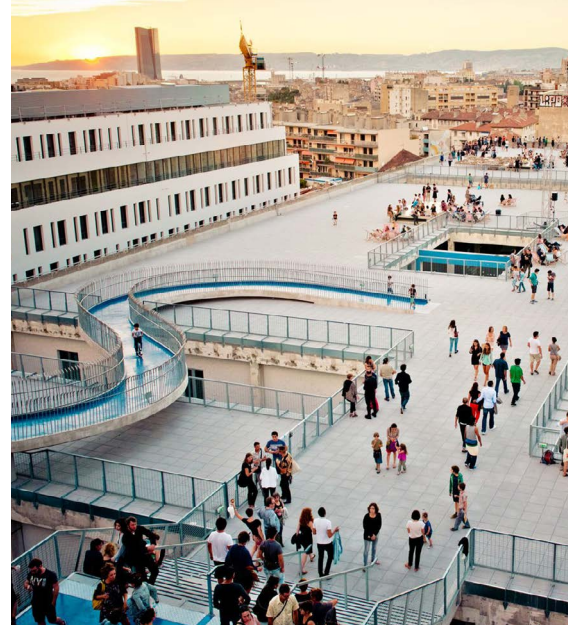
## INTERVENTION:



Empty rooftop



Additional structures on the rooftop

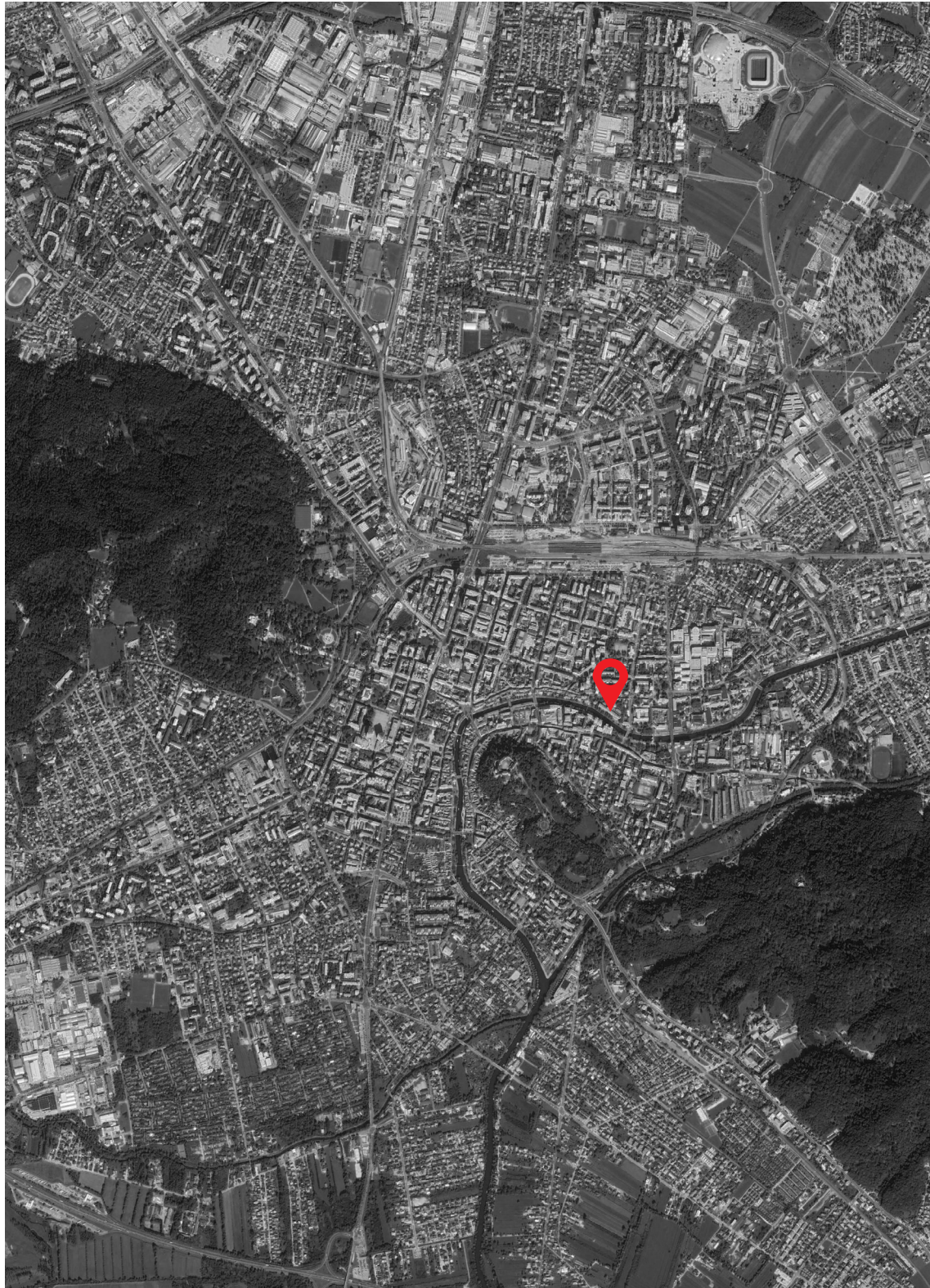




# ROG FACTORY

Ljubljana, Slovenia

46°03'07.71"N , 14°30'53.50"E



## Description:

The former bike factory is located in St. Peter's district, one of the oldest districts of the city of Ljubljana. The Rog Factory is a complex of five smaller buildings plus the main building and all of these constantly house various activities. The main building is probably the most interesting and unique example of industrial architecture in the country. It was the first reinforced concrete structure in the city. Furthermore, it was also the biggest industrial building at the beginning of the 20th century. The construction methods used for the erection of the factory were those of the French engineer Francois Hennebique. This method consisted in the use reinforced concrete structure composed of beams and pillars, in order to obtain a wider span between the columns. The use of this construction method allowed creating interior space without any obstacles (120 m by 9 m).

## History:

The history of the building has its origins in the first quarter of the twentieth century. Originally, on the same site of the former bike factory was located a small one-story tannery. Subsequently, there were some building renovation works and the tannery was replaced with a leather factory that soon became one of the biggest in the country. In 1922 the leather company had the permission to expand the structure and three more floors were added to the existing building. The leather company failed in 1932 due to the current economic crisis. Then a new company called Indus took control over the leather production. After the Second World War, there were some significant changes regarding the company; it became the property of the state and then it was transformed into a bike factory. In the 90's Slovenia went through a period of important political, social, and economic changes that brought the Rog Company to a critical financial situation. Also, the new denationalization law from 1991 contributed to the definitive closure of the factory.

## Development:

In 1998 the former industrial complex became part of the cultural heritage sites of Slovenia. Four years later the Municipality of Ljubljana took a very important decision; it became the new owner of the former industrial complex. After almost 15 years when the complex was abandoned, in 2006 it was "consensually" occupied by some non-profit organizations. The new tenants were mainly groups of young creative people that carried out cultural, artistic and social activities. Due to the lack of any type of funds, in 2010 the Municipality of Ljubljana took part in the Central European Project called "A Second Chance: From Industrial Use to Creative Impulse". The main aim of the project concerned the strategies and concepts in order to transform former industrial sites into a cultural new cultural hub. Unlikely the future of Rog is still under question. The Municipality plans to upgrade and transform the former industrial site into a space dedicated to creative industries and contemporary art. The idea is to turn the main building into Contemporary Art Center with studios, exhibition halls, artist residencies, art classes, and shops. However, the Autonomous Rog organization has been active for around ten years when the local authorities were unable to invest or attract funding in order to realize the above-mentioned plans.

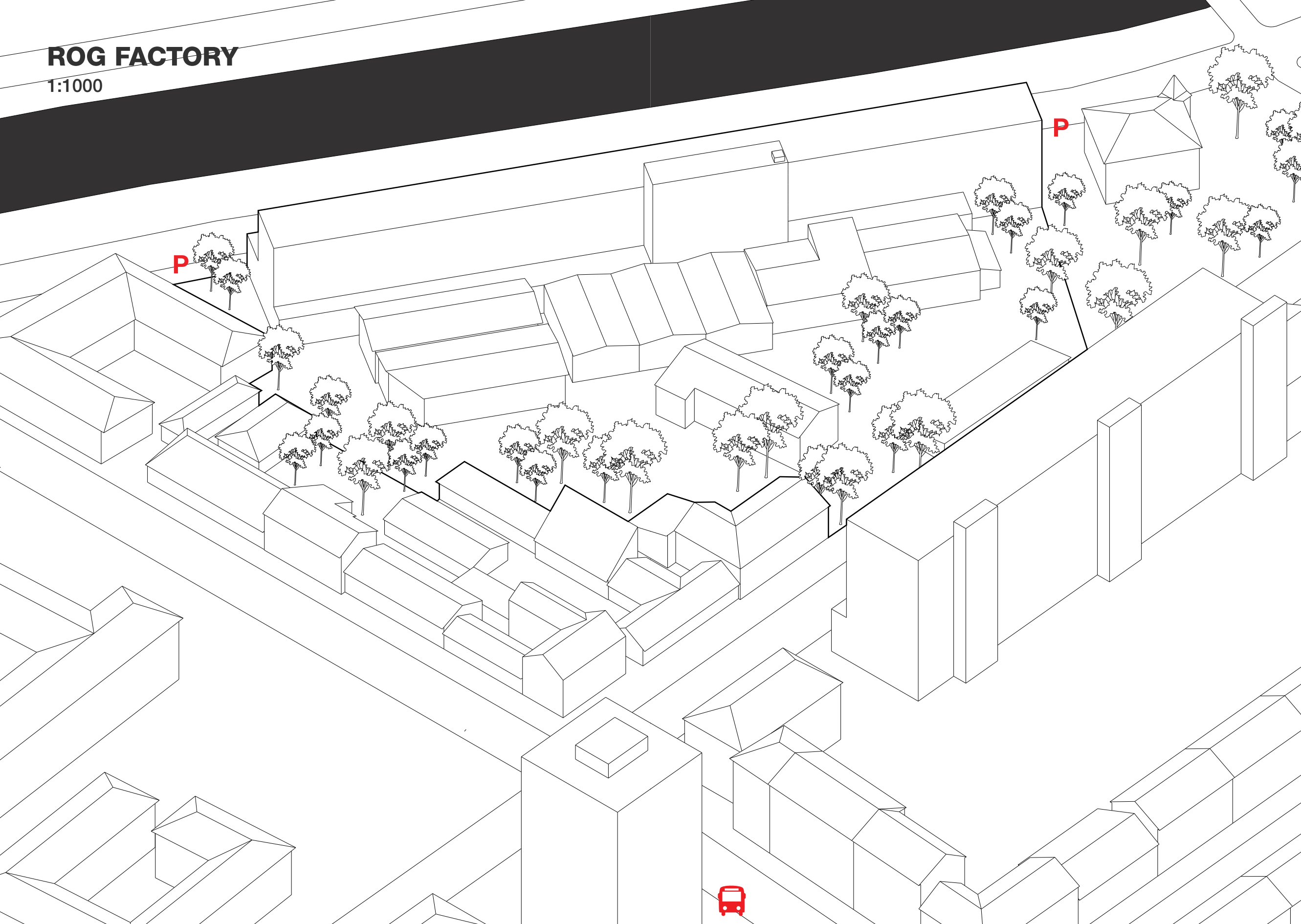
## Program:

Nowadays, the former Rog factory hosts a rich program of social and cultural activities. Lectures, street art competitions, rave parties, skate park, kitchen, film projection, artistic workshops, artist residencies, gallery space, a social center for disadvantaged groups, bike workshops, theater, circus school are some of the activities that take place inside the former industrial site. Most of the activities taking place inside the factory are based on DIY principles. "We don't plan things that cannot be realized in less than three days."



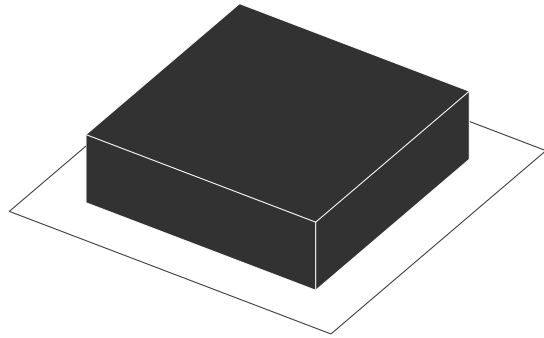
# ROG FACTORY

1:1000



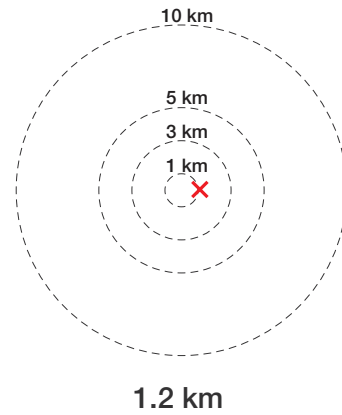


## SIZE:

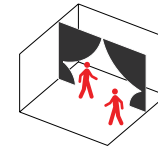


Ground floor: 7 000 sqm / 4 floors  
Public space: 4 700 sqm

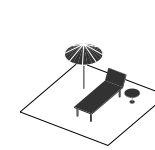
## LOCATION:



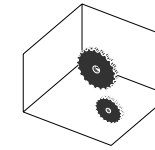
## PROGRAM:



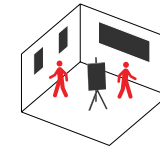
Cultural



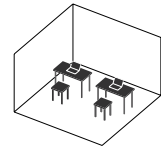
Leisure



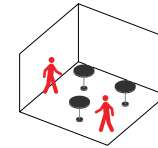
Production



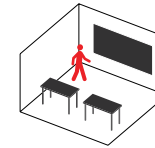
Art



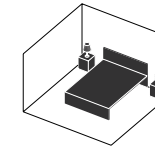
Creative economy



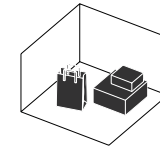
Gastronomy



Education



Residential



Commercial

## DISTANCE:



12 min



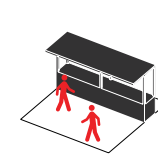
15 min

## TIMETABLE:

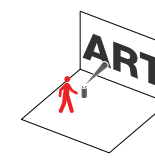


24 / 7

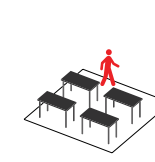
## OUTDOOR ACTIVITIES:



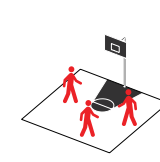
Market



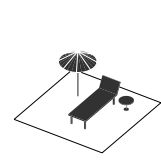
Street art



Education



Sport



Leisure

## PROPERTY OWNER:

Public / Private

## FINANCING:

Profit / Non-profit

## BUILDING MATERIAL:

Bricks / Concrete / Mixed

## FORM OF INTERVENTION:

Minimal / Medium / Intense

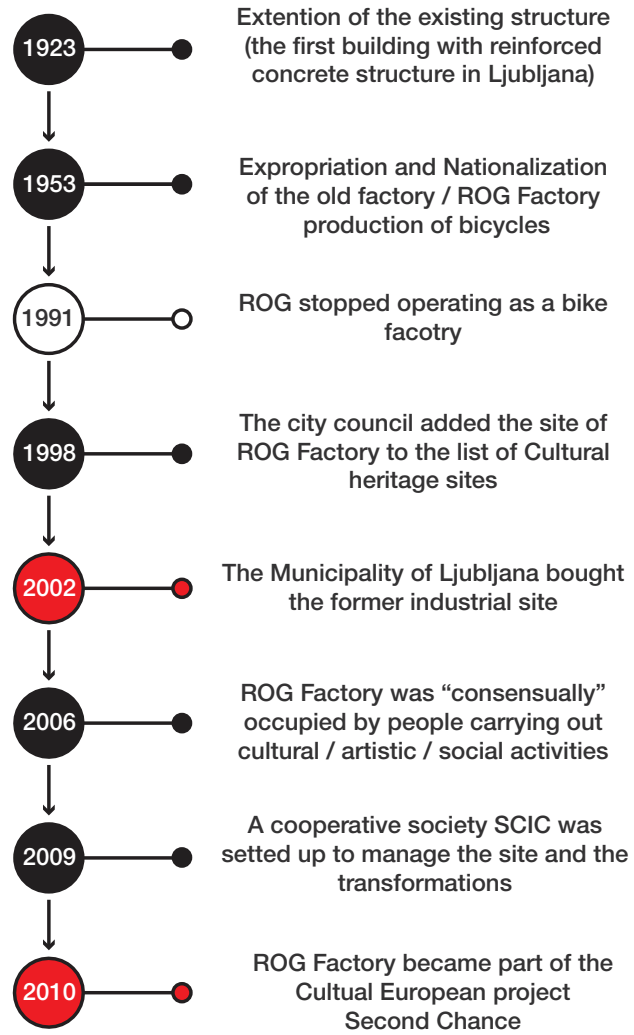
## MEMBERSHIP:

Trans Europe Halles / European Route of Industrial Heritage / Art Factories

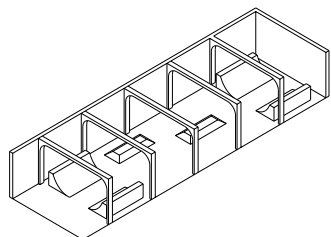




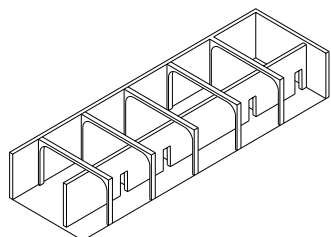
## TIMELINE:



## INTERVENTION:



skate park



addittional walls  
space subdivision

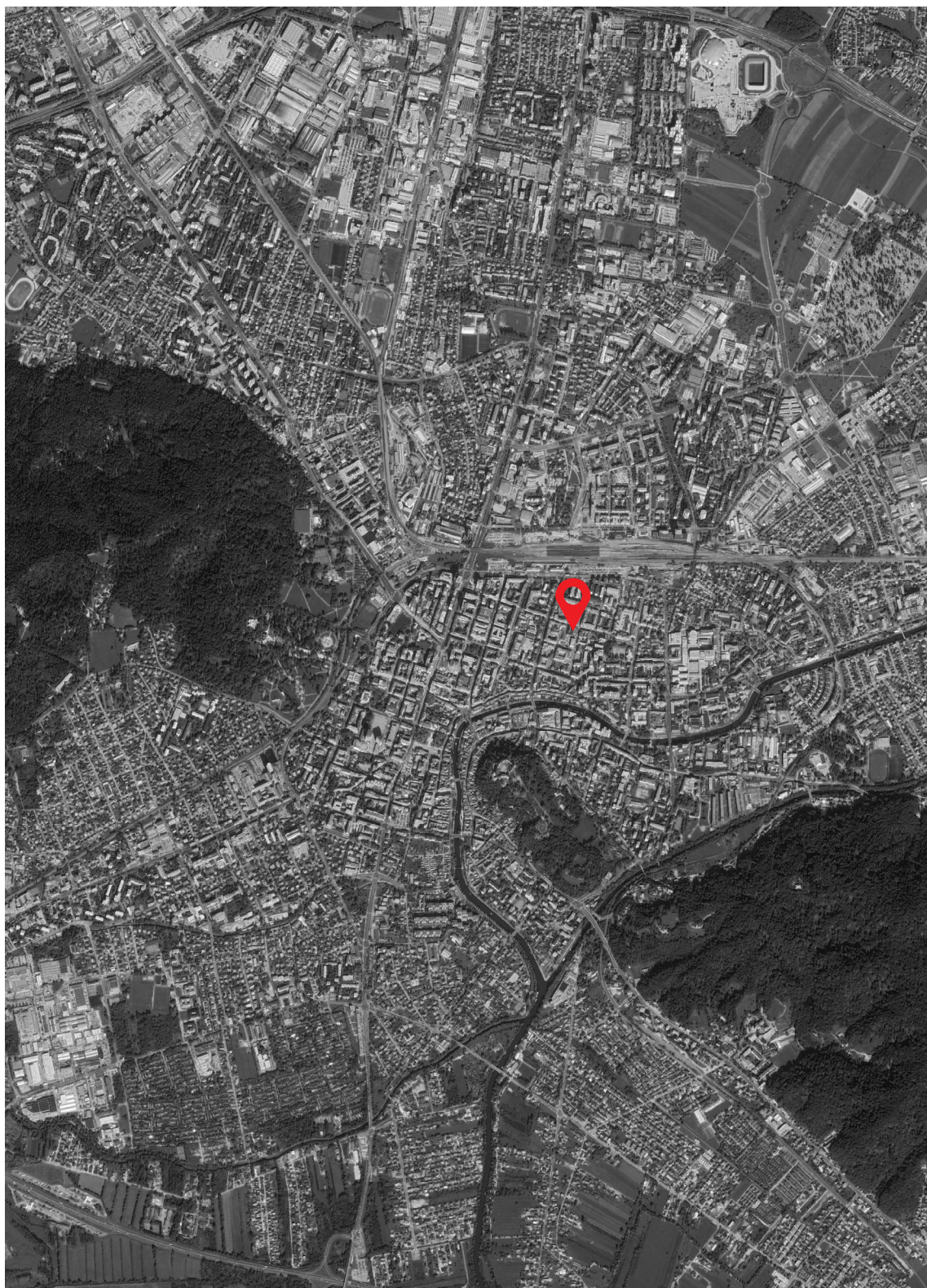




# STARA ELEKTRARNA

Ljubljana, Slovenia

46°3'18.02"N , 14°30'45.87"E



## Description:

Stara Elektrarna (The Old Power Station) is located in Saint Peter's district, close to the city center and the central station of Ljubljana. The red brick building has the characteristics of a typical industrial building from the end of the previous century. It consists of two halls, a three-story office part and a chimney which has become a landmark for this area of the city.

## History:

The Power Station was built in 1898 as Ljubljana's first city power plant. During the years this building experiences a lot of alterations. The building was updated, enlarged and modernized several times during the years. The preparation for its construction began as a consequence of the earthquake in Ljubljana in 1895. After this event, almost all the city was totally modernized. When in the 40's its technology became obsolete, the power station stopped operating. Fortunately, it was modernized in the 60's and from then until the 80's the station produced some of the city's electricity. At the end of the 80's and the beginning of the 90's, in the period when socialist Yugoslavia collapsed, local and foreigner alternative artists discovered the potential of the power station. Slovenian artist, film director, and performer Ema Kugler was the first one that used the space as a performance venue. During the 90's it became clear that Ljubljana needs more space dedicated to performing arts as well as a space for rehearsal.

## Development:

In 1998 the former power station became part of the cultural, technical and historical heritage sites of Slovenia. The Slovenian Ministry of Culture, together with Ljubljana Urban Municipality have reached an agreement with the Company Elektro Ljubljana regarding the free rental of the building for cultural purposes. Before mentioned authorities invested in the renovation works and in 2004 Stara Elektrarna was available for the independent performing art scene.

The intervention was supervised by the Slovenian architect Matija Suhadolc. Consequently, there was an open call for a non-governmental organization that had to manage the space and the events hosted inside it. Bunker Institute, a non-profit Slovenian organization had the assignment to manage the former power station. The main aim of Bunker was to refresh the Slovenian cultural scene with some innovative approaches. The organization encouraged the exchange of experience, interest, and knowledge between local and foreigner contemporary artists, as well as the promotion of different alternative art disciplines to various audiences. Bunker has a solid background in the participation in various international cooperation projects which have ensured economical support from different funding programs of the European Commission. Stara elektrarna is a unique example in Ljubljana of a long and well-established international tradition in the preservation and transformation of former industrial structures into cultural centers.

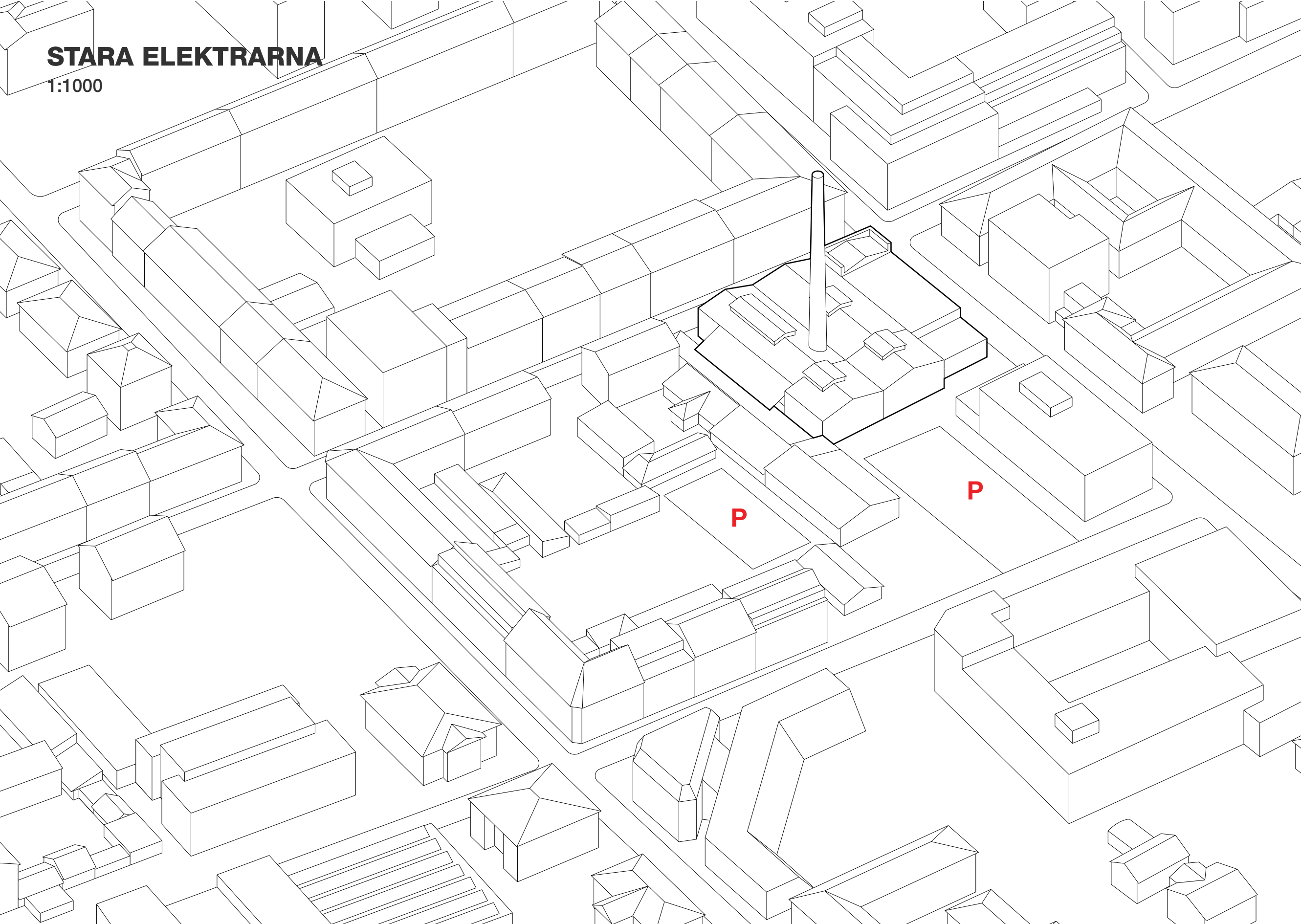
## Program:

The Old Power Station is probably one of the most important performing arts venues in Ljubljana that concerns contemporary theatre and dance performances. Also the important Slovene international theater and dance festival "Mladi Levi" takes place there. The facility is used for rehearsals, educational activities, stage performances, and concerts, presentation of different art projects, roundtables, artist residencies, and bar. A smaller part of the building was transformed as a museum where the visitors can see the old turbines, part of the chimney and some of the remaining original instruments of the Power Station.



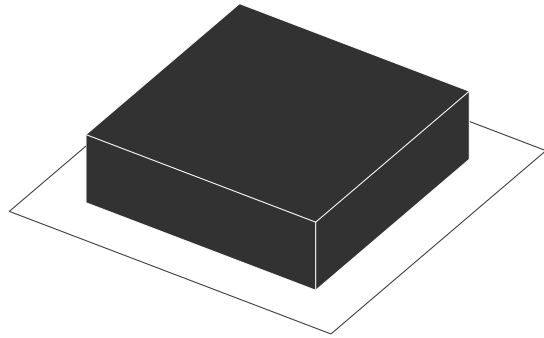
# STARA ELEKTRARNA

1:1000



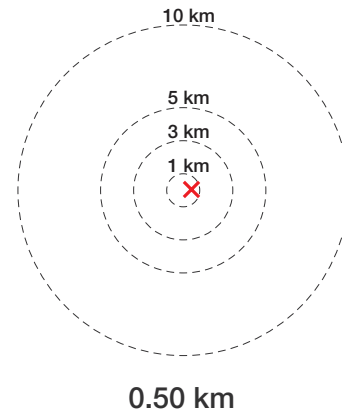


## SIZE:

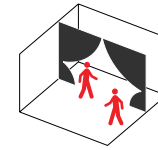


Ground floor: 2 000 sqm / 1 floor  
Public space: 4 000 sqm

## LOCATION:



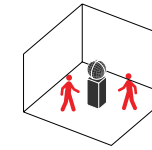
## PROGRAM:



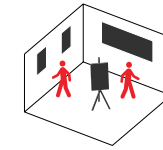
Cultural



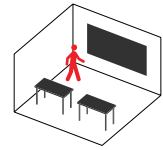
Leisure



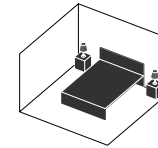
Museum



Art



Education



Residential

## DISTANCE:



0 min



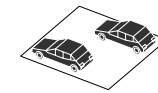
7 min

## TIMETABLE:



24 / 7

## OUTDOOR ACTIVITIES:



Parking

## PROPERTY OWNER:

Public / Private

## FINANCING:

Profit / Non-profit

## BUILDING MATERIAL:

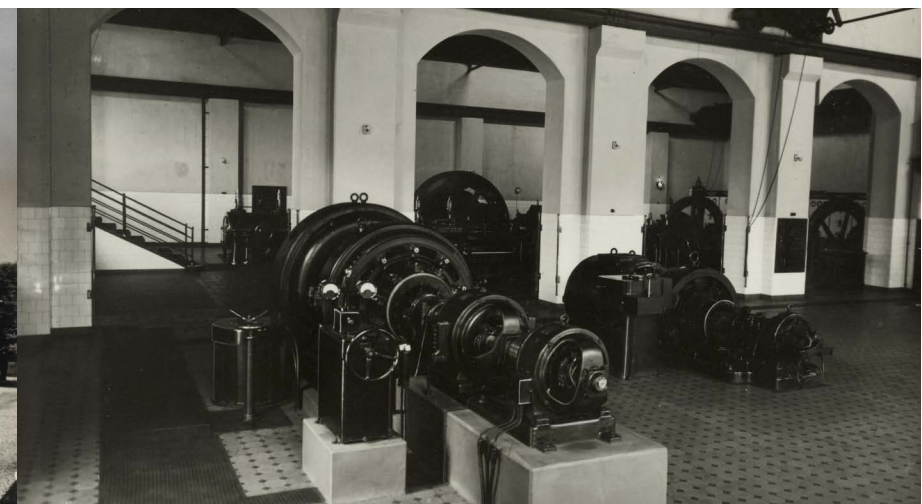
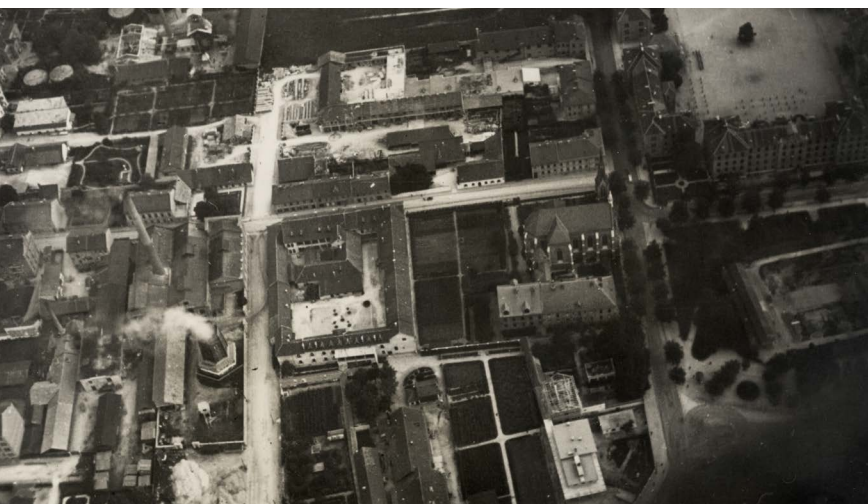
Bricks / Concrete / Mixed

## FORM OF INTERVENTION:

Minimal / Medium / Intense

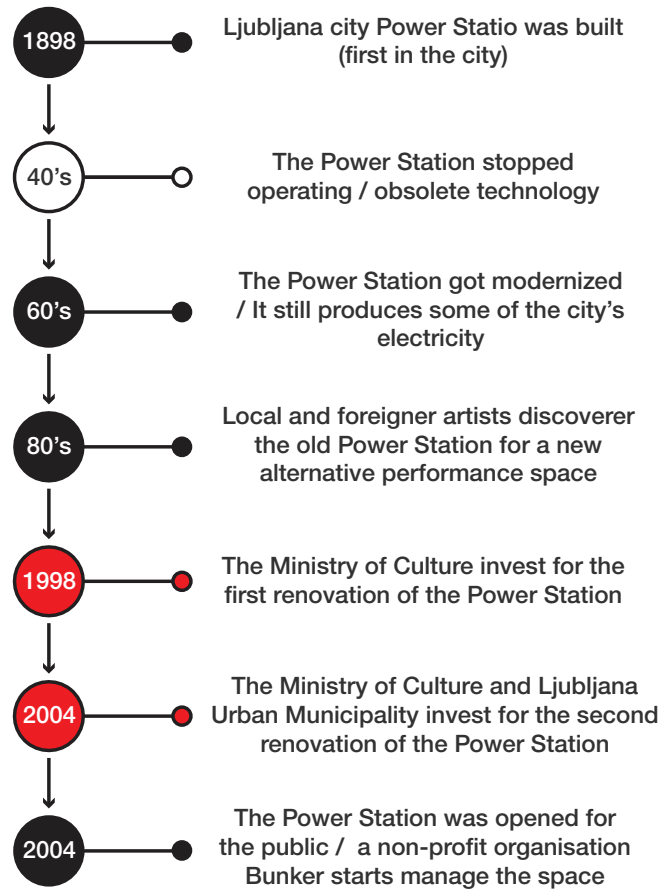
## MEMBERSHIP:

Trans Europe Halles / European Route of Industrial Heritage / Art Factories

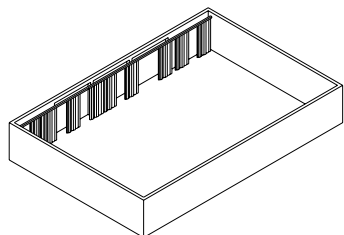




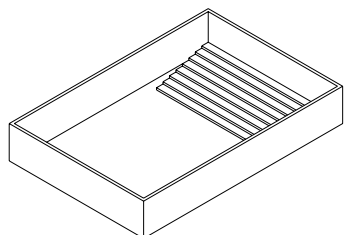
## TIMELINE:



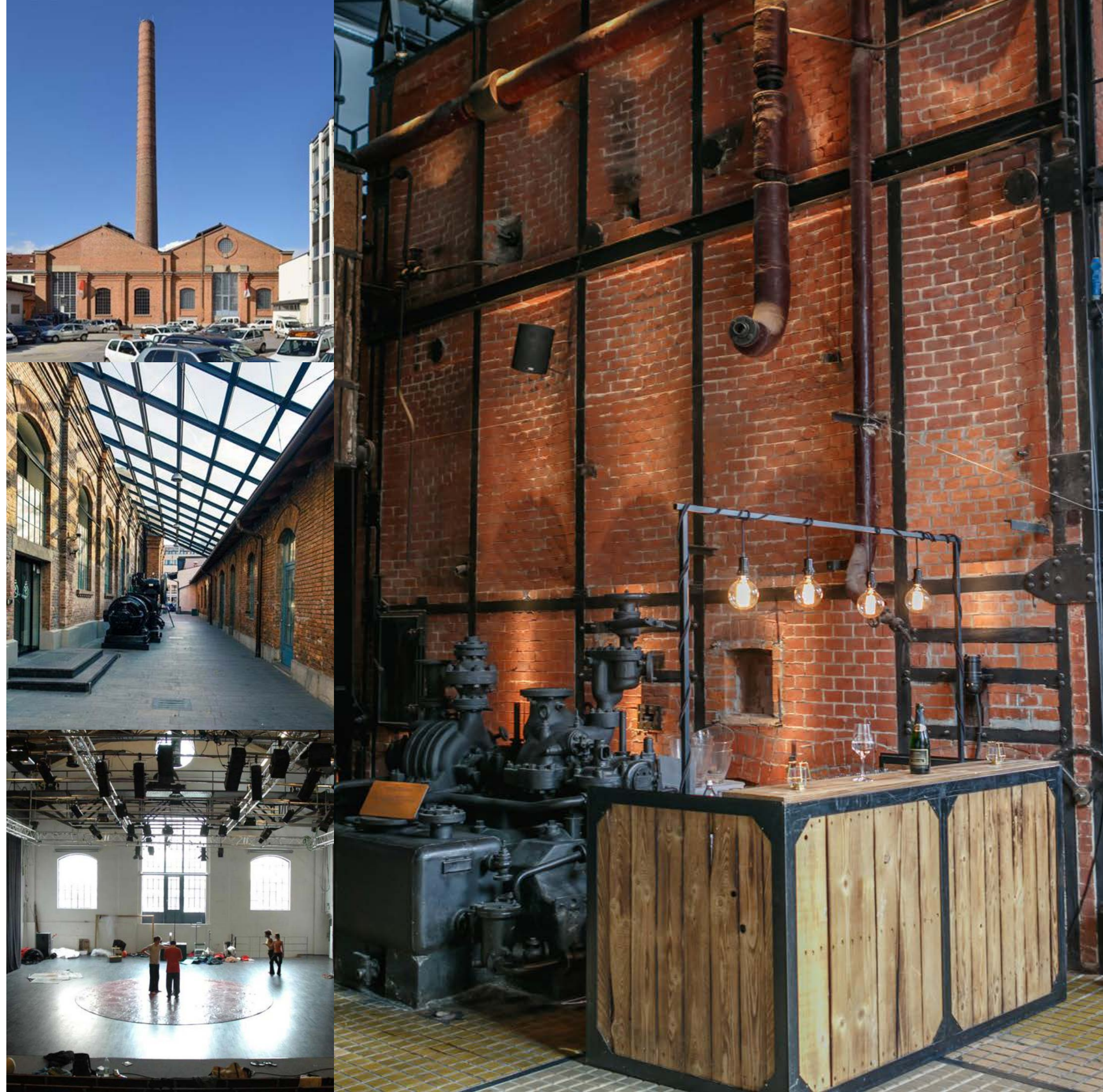
## INTERVENTION:



Use of curtains for the subdivision of the space



New elements / as less invasive as possible

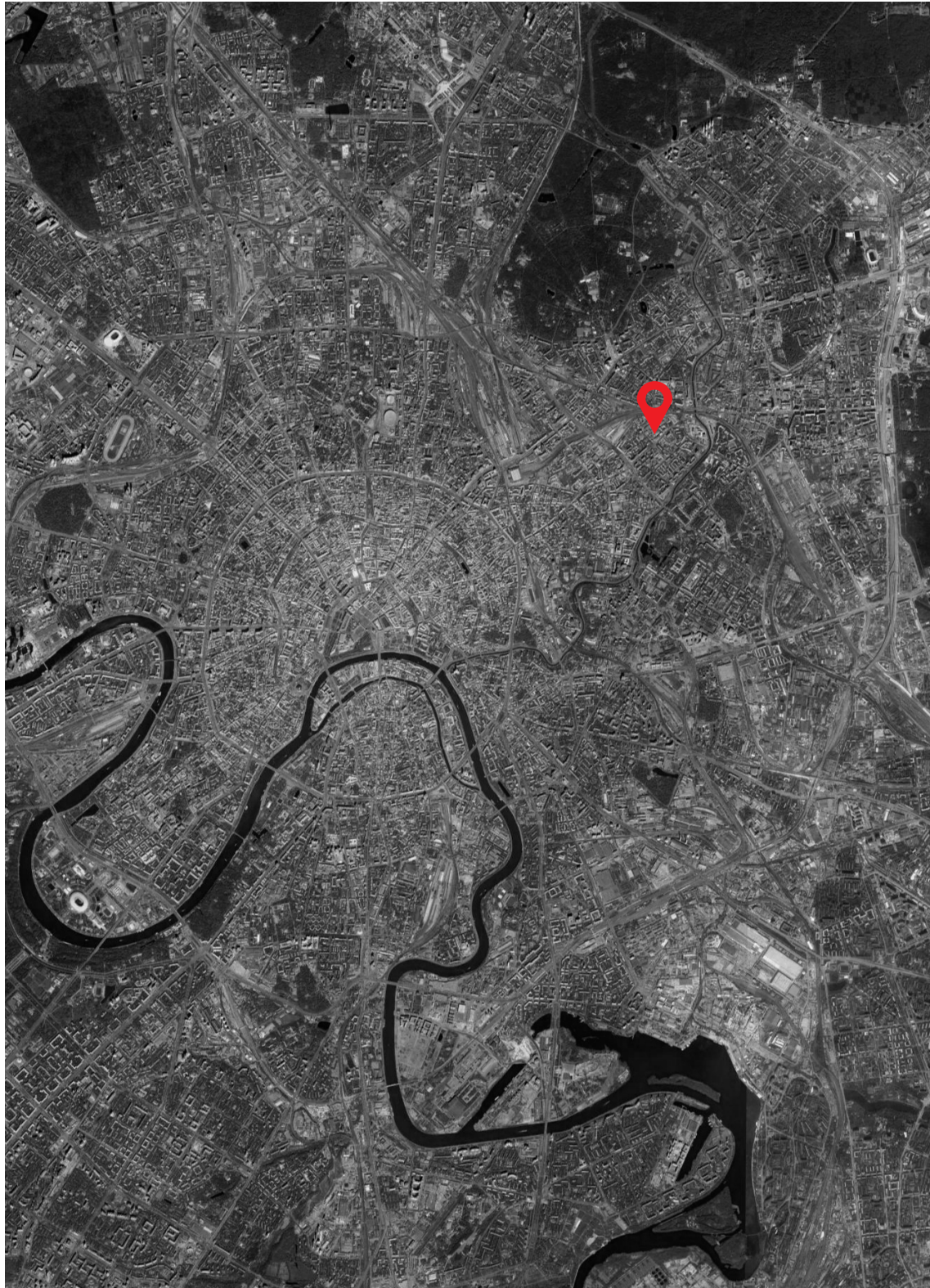




# CCI FABRIKA

Moscow, Russia

55°46'46.21"N , 37°41'25.89"E



## Description:

The former Technical Paper Factory "October" is located on the North-East edge of Moscow's historical center. The complex is composed of 17 structures that were erected in different historical periods. Big amount of them was built during 1898 but there were additional structures also during the Soviet governance in 1929, 1953, 1961 and 1965. Every single building that takes part in the former industrial complex has a different monochromatic façade. The interior space is a mixture of new modern materials and old elements from the factory that were maintained (metal flooring). A small part of the factory is still focused on the production of paper.

## History:

In 1870 one of the plots located along Perevedenovsky streets was bought by Elisaveta Andreevna Dislen. She asked permission from the Moscow City's Government to build the first one-story industrial building where textile and leather products were have been made. In the next 30 years Andreevna acquired a big part of the plots along the same street and in 1900 the V.A. Dislen Association became the official owner of this neighborhood area. A lot of the buildings that still exist nowadays were built around 1898. Unfortunately after 10 years, the company had some economic problem and it was subsequently sold to Osip Hishinu in 1910. The new owner transformed the area by adding new buildings for both industrial and residential use. In 1924, during the administration of the Soviet government the leather factory was nationalized and in 1929 it was turned into a paper dyeing plant. Only in 1941, the factory started the production of technical paper and its name was changed into October. The Soviet government was extremely interested in the development of this factory and its production since it was one of the few light industry enterprises in Moscow. With the beginning of the war, the factory became an important

enterprise for the Government because of its production of military products. After the fall of the communist regime, in the middle of the 1990's the factory was taken over by private actors.

## Development:

In 2004 the manager of the business Asya Filipova opened the Factory to the public audience and initially it was used for various purposes. In 2005 during the Moscow Biennale of Contemporary Arts was opened the first exhibition hall. Some parts of the October factory were unused due to the lower production of paper. Asya Filipova decided to propose to the shareholders to develop a center for contemporary arts. Since there wasn't enough money to fix all the building there were only a few parts of it that were rented as ateliers and offices on very attractive prices. The rentals that depend on the usage of the space create incomes that are necessary for the organization of events, as well as the maintenance of the structure. The tenants have the possibility to modify the rented space in order to adapt it to their needs. Nowadays, one-third of the factory is focused on the production of paper. Until 2011 the name of the organization was "Proekt Fabrika", but after when it became more concentrated on the collaboration between business and art, it changed into Center of Creative Industries "CCI Fabrika".

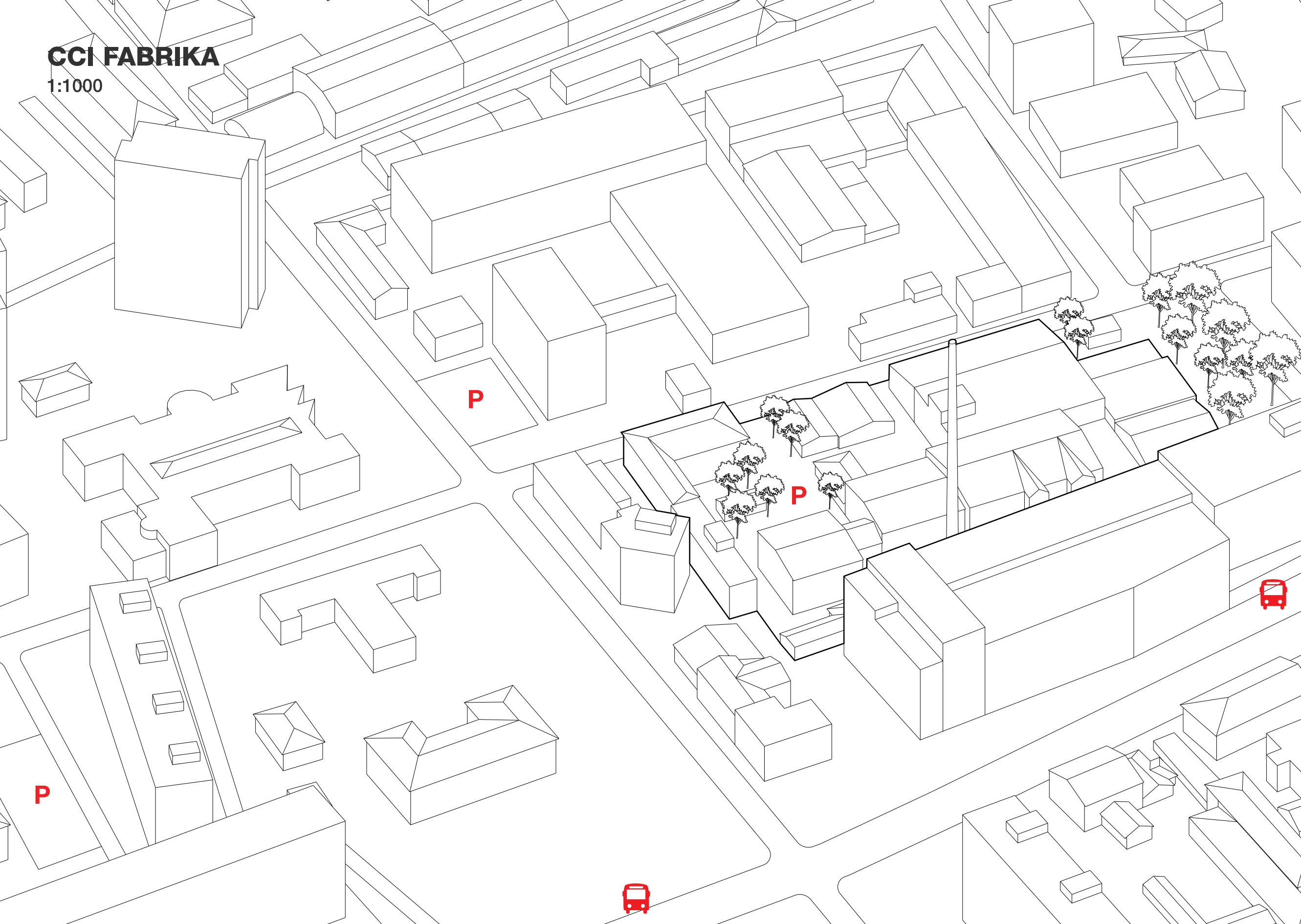
## Program:

The center is used for many different purposes but they can be subdivided into 3 functional categories: creative economy, art and production space. There is around 700 square meters hall for exhibitions, 1000 square meters used to host various social and cultural events such as theatre, dance performances, music concerts, film screenings, and lectures. CCI Fabrika has also its own international "artists in residence" program.



**CCI FABRIKA**

1:1000



P

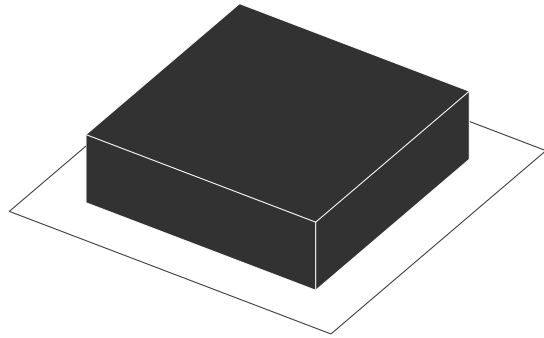
P

P



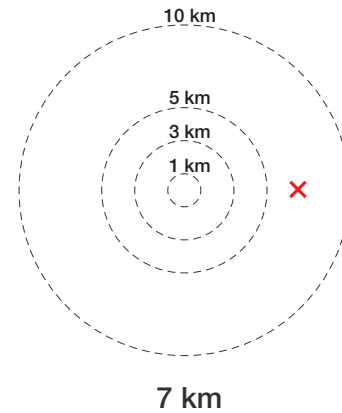


## SIZE:

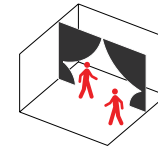


Ground floor: 8 500 sqm / 1 - 2 floors  
Public space: 5 100 sqm

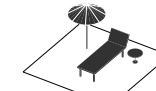
## LOCATION:



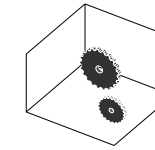
## PROGRAM:



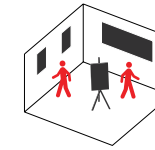
Cultural



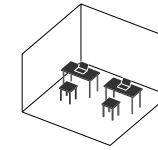
Leisure



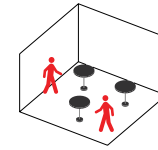
Production



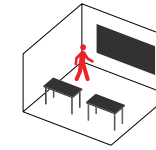
Art



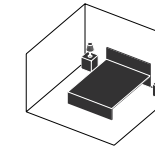
Creative economy



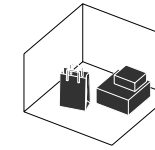
Gastronomy



Education



Residential



Commercial

## DISTANCE:



21 min nearest train station



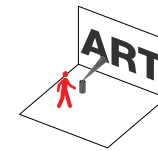
43 min

## TIMETABLE:



24 / 7

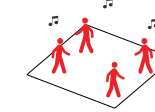
## OUTDOOR ACTIVITIES:



Street art



Education



Events

## PROPERTY OWNER:

Public / **Private**

## FINANCING:

**Profit** / Non-profit

## BUILDING MATERIAL:

Bricks / Concrete / **Mixed**

## FORM OF INTERVENTION:

**Minimal** / Medium / Intense

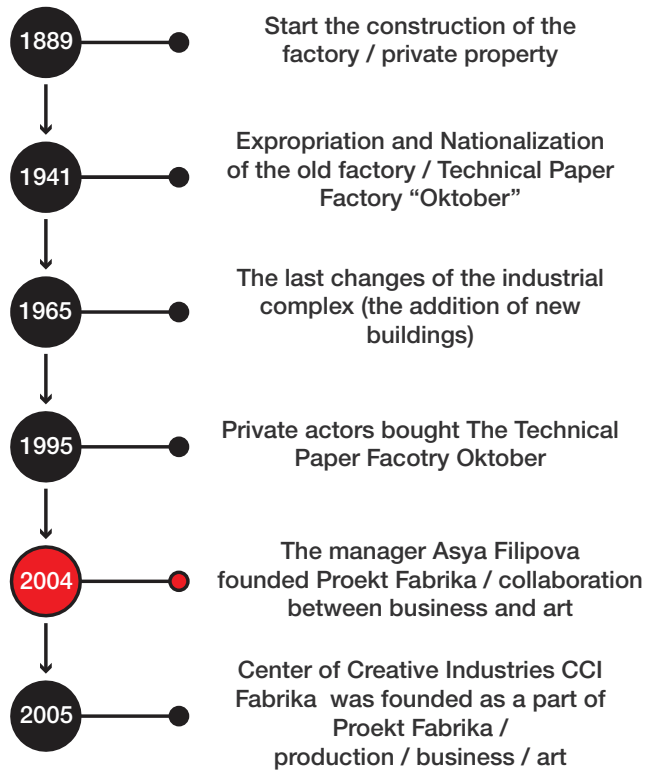
## MEMBERSHIP:

**Trans Europe Halles** / European Route of Industrial Heritage / Art Factories

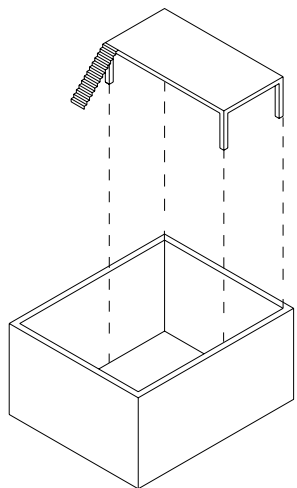




## TIMELINE:



## INTERVENTION:



Additional metal structure

Empty box space





# **Chapter 3**

## **Project Site Analysis**



# Varna: description and history

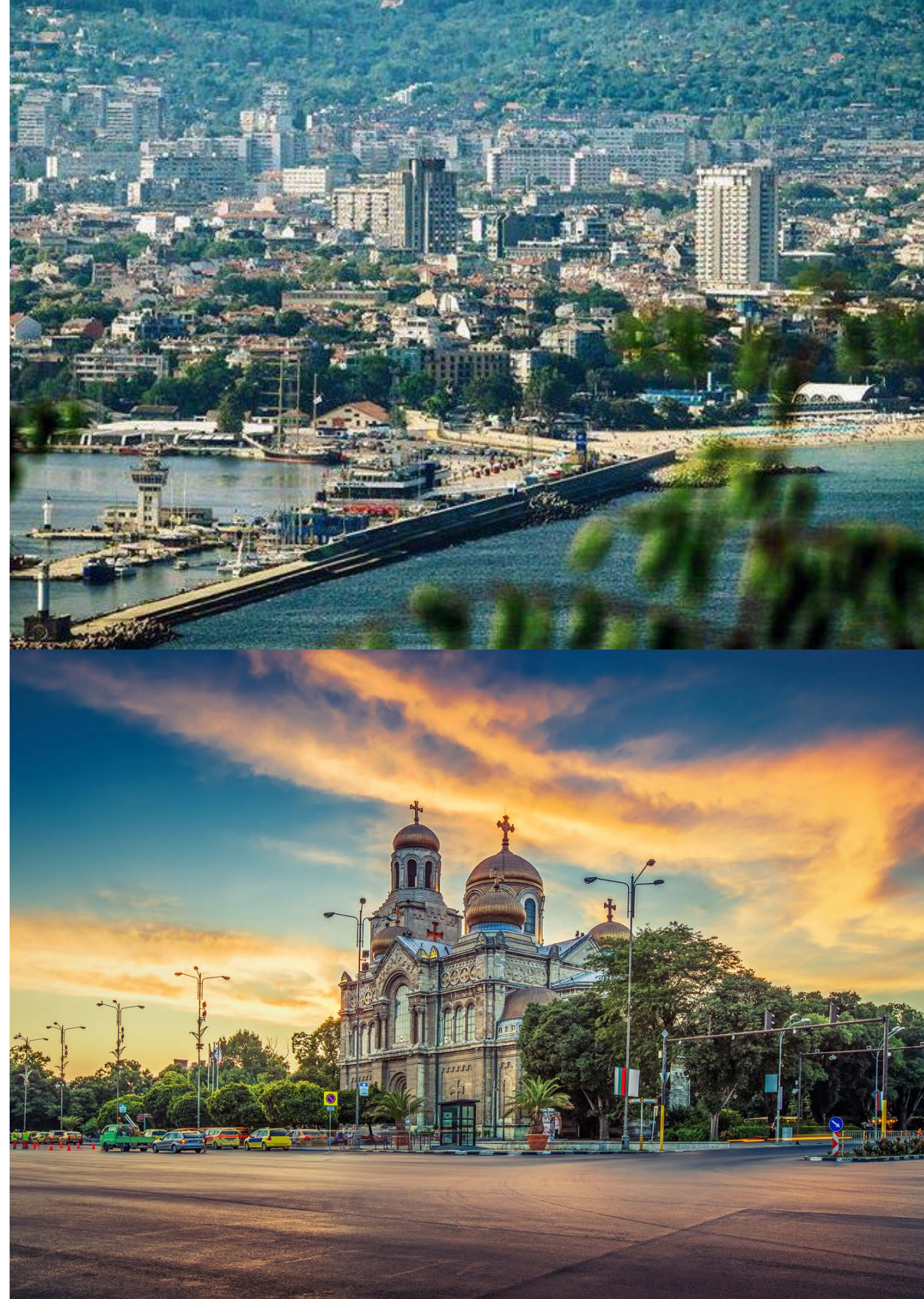
## Description:

Varna is a Bulgarian city on the northeast side of the country, next to the shores of the Black Sea and Varna Lake. It is considered as an administrative center of the municipality and the region, as well as the Maritime capital city of Bulgaria. According to the number of inhabitants (around 335 750 until 31 December 2017), Varna is the third largest city in Bulgaria after Sofia and Plovdiv. The city of Varna is situated in a very strategic position on the North-West coast of Varna Bay, next to the Varna Lake. The central part of the city where the majority of services are located is linked to the southern side of the city (Asparuhovo and Galata districts) through the Asparuhov Bridge. The total area of the city is around 238 square kilometers. On the northern shore of the canal between the Black Sea and Varna Lake, there is located the main industrial zone of the city, as well as the Port of Varna. On northeast of them, there is the city center which is situated in the same place where the ancient city of Odessos raised. Gradually around the city in the suburban area were formed villa zones. From an economic point of view, Varna is one of the best-performing and fastest-growing Bulgarian cities. The incomes based on the local activities can be subdivided into four main sectors: 61% of them are generated by trading and tourism; 16% are produced thanks to manufacturing; 14% are generated by transportation and communications, and 6% in is provided by construction. The major industries of the city of Varna are linked to transportation (Navibulgar, Port of Varna, Varna Airport), distribution (Logistics Park Varna),

shipbuilding and ship repairing (Bulyard), and other marine industries. Together with the towns of Beloslav and Devnya, Varna composes the Varna-Devnya Industrial Complex, which hosts some of the largest chemical, thermal power, and manufacturing facilities in Bulgaria. Varna's Thermal Power Plant and Sodi Devnya, the largest cash privatization deals in the recent history of the country, are also part of this industrial complex. There are also many facilities for radio navigation devices, household appliances, security systems, textiles, apparel, food and beverages, printing, and other industries.

## History:

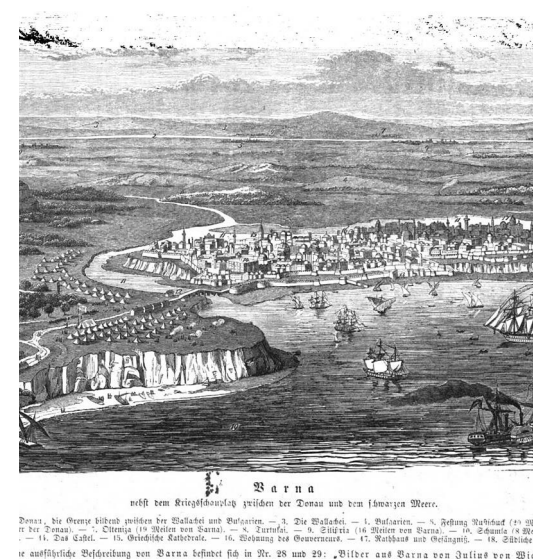
Varna is an old city located along the Black Sea coasts in Bulgaria. During an archeological excavation in October 1972, an ancient Necropolis was accidentally discovered. The site was about four kilometers from Varna's city center and about half a kilometer from Lake Varna. It turned out to be one of the most important archeological finds dating back to the Prehistoric period. The archeologists estimate the graves to be in the 4600 – 4200 BC period. These graves are considered to be the burial sites of people belonging to the Eneolithic Varna culture, which was a transitional period spanning the Stone Age and the Bronze Age. Around 300 graves were found in the Necropolis which contained metal artifacts of gold and copper. In the Bronze Age close to the shores of Varna Bay new inhabitants, that later will be called Thracians, appeared. During the whole first millennium BC, the Thracians populated densely the shores of the bay and the Varna lakes. Here they





settled many sites one of which became the basis of the future Odessos (now Varna), one of the oldest European cities. Towards the end of the seventh century BC, the 'Miletians' founded a trading colony (apoikia) on the territory of Odessos. Archeological excavations indicate that the area was occupied from the seventh to the fourth centuries BC without any interruption. Thracian inscriptions using the Greek alphabet have been found dating back to the fifth century BC. The region fell into the hands of Alexander the Great in 335 BC. The Roman city of Odessus was situated in 47 hectares of land that is located in present-day central Varna. The city was surrounded by a new wall, built by the Romans. They also build other public structures like for example the enormous public baths, the most famous ancient thermal complex which was erected in the late 2nd century AD. The historical site is considered the largest Roman remains in Bulgaria. After the division of the Roman Empire in 395, the trading colony of Odessos was included inside the boundaries of the Eastern Roman Empire, also known as Byzantium. In the 4th- 5th century, the ancient culture of Odessos gradually declined and the early Christian culture developed: lots of churches were built. In that period Odessos was the center of eparchy and for a short time, the city was considered as a center of a large administrative province in the early Byzantine State. In 681 AD on this territory proto-Bulgarians together with the settled earlier Slav tribes set the foundations of the Bulgarian state organizations and culture. The city was named Varna by its new inhabitants. In 863 Bulgarians adopted

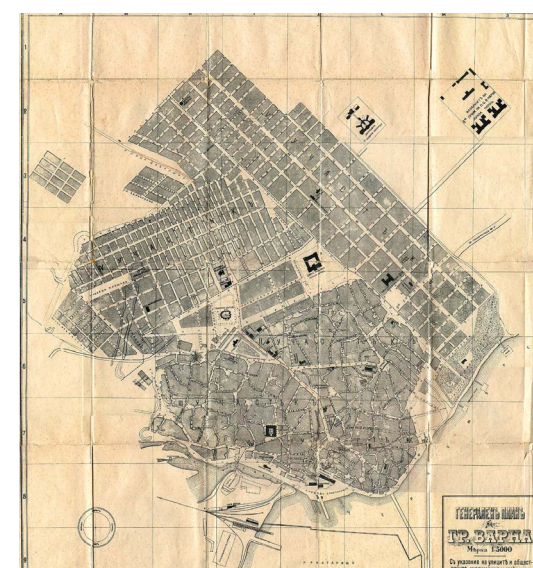
Christianity and soon after that in the town big and richly decorated monasteries were built. They became centers of educational and literary activities in order to spread the ancient Bulgarian language and culture. During the Second Bulgarian Kingdom, between the 12th and 14th century, the city of Varna was the largest Bulgarian port in that area. The town became a religious center with lots of churches. In 1389 Varna was also conquered by the Ottoman Empire. Varna maintained its strategic and commercial importance also during the period of Ottoman domination. During the 18th and 19th centuries, there were several attempts by the Russian troops in order to liberate the city of Varna. The first one was in 1773, while the second one was during the Russo-Turkish War in 1828. The third attempt was the successful one and thanks to the Russian troops Varna was finally liberated on July 27, 1878. After its liberation, Varna starts growing very fast and soon it became an important commercial, port and industrial center. One of the largest cotton spinning mills, shipbuilding, and ship repair enterprises were born in the country; the first telegraph line was installed; the first railway line in Bulgaria (direct connection between Rousse and Varna) was completed. Also from an architectural point of view, the city changed very quickly. A group of architects and engineers who studied abroad have the task to develop the new European modern look of the new city. They create dozens of private and public buildings like bank, schools, hospitals, churches and community centers. Varna also changed its administrative status, it became a Municipality. In the 20th century,



Map of Varna 1854



Map of Varna 1878



Map of Varna 1897



Map of Varna 1923



Varna increased several times its territory. Its streets were widened and its main boulevards were built. Its architectural and urban shape sharply changed. Thanks to the import of raw materials through the harbor there was the possibility to develop textile, metalworking, and machine construction industries. Thousands of people were working in the city in that period and soon it became a leading industrial center in northeastern Bulgaria. In 1920's the first Shipyard property of the state were established. Unfortunately, the economic crisis from the late 1920's also affected in a negative way the development of the city. After the start of the governance

of the Socialist Party in the 1940's all the industrial complexes and private enterprises were nationalized. Many of its today's most important and fascinating buildings were erected then: the Drama and Opera Theatre, the Maritime Gardens, the Railway Station, the Palace of Culture and Sports, the Festival and Congress Centre, the large resort complexes along the beach, the Seaport, the International Airport, and the Asparuhov Bridge. For all these centuries the city is a point of intersection of inhabitants, cultures, and religions. Varna and its surroundings are marked by the signs of all historical periods which the town has survived.



Picture of the city of Varna



01 Museums



02 Art Galleries





03 Theatres



04 Cinemas





05 Youth centers



06 Concert halls





07 Touristic attraction



08 Hotels





09 Clubs



10 Restaurants





## 11 Malls/Commercial area



## 12 Sport centers/Stadiums





## 13 Active industrial sites



## 14 Former industrial sites





# General overview



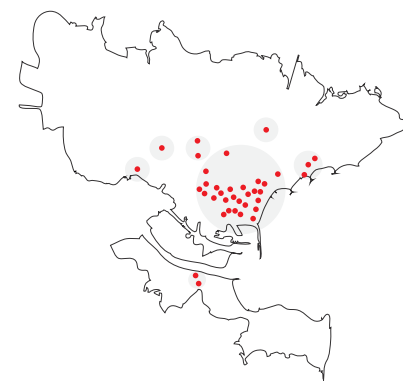
Museums



Art Galleries



Touristic Attractions



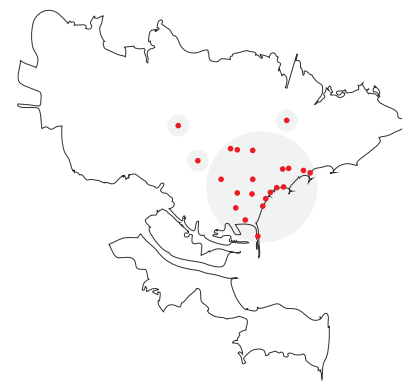
Hotels



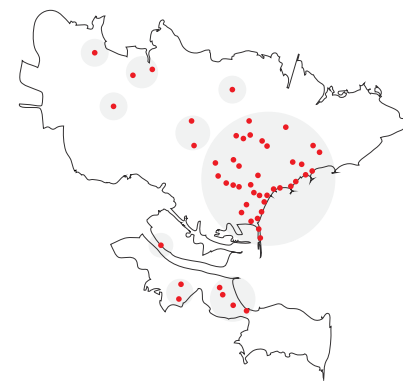
Thwatres



Cinemas



Clubs



Restaurants



Youth Centers



Concert Halls



Malls/Commercial area



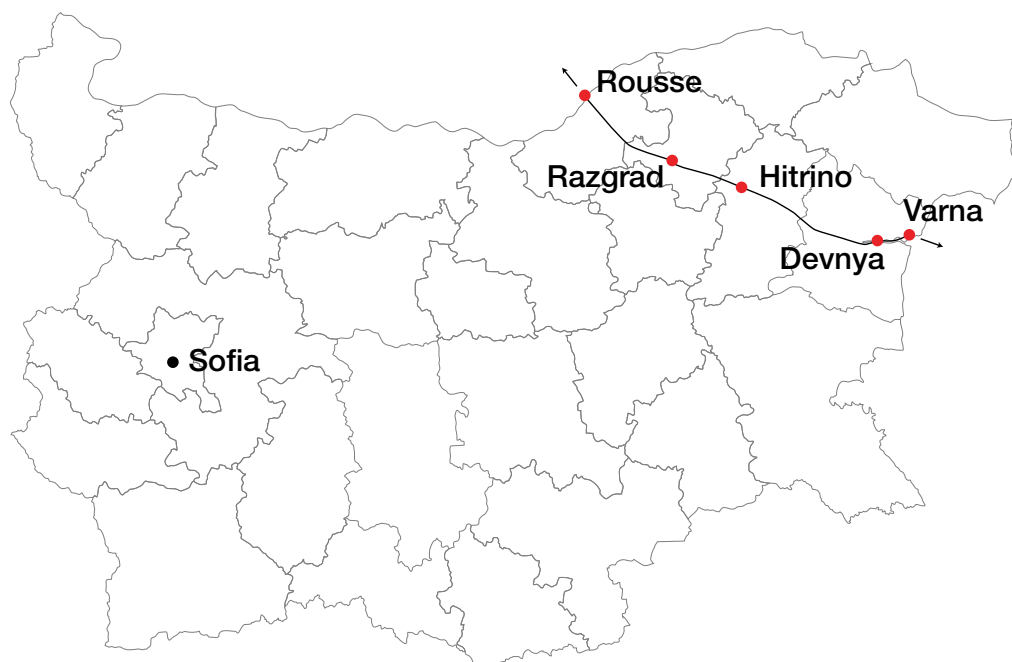
Sport Centers/Stadiums



The Island (Ostrova in Bulgarian) is an artificial island that takes part in the Southern Industrial Complex of the city of Varna. As the name itself suggest, the area is surrounded by water and canals part of the system of deep-sea waterways that connect the Black Sea with Varna Lake. One of the most iconic infrastructures in Varna called Asparuhov Bridge passes over the Island and divides it into two main areas: eastern and western one.

The history of the Island has its origin at the beginning of the previous century. After the Liberation of Bulgaria underwent various changes mainly linked to the urbanization of the city. The Devnya River that flowed into Varna Lake was gradually drained up. As a consequence, the level of Varna Lake reached the same level as the sea and the swampy areas located on the southern side of the city disappeared. There was the possibility to create a direct link between the lake and the sea. In fact, in 1907 began the construction of the first canal between the Black Sea and Varna Lake. Due to the lack of sufficient economic resources for a more solid structure, a wooden pontoon bridge was built in order to connect the two banks as well as to continue the road connection between the central part of Varna and Asparuhovo neighborhood. In 1927 the bridge was lifted two meters above the water in order to allow also the passage of vessels under it. During the next decade, the city was growing very fast and a lot of new industrial areas were located

on the southern side of Varna. Also, the traffic along the bridge increased and it became obvious that the wooden bridge should be replaced. The construction of a new movable iron bridge (Asparuhov Bridge) began in 1937 and it was officially opened on May 28th, 1939. Thanks to the fast-growing industrialization of the city in the next decades, and the consequent construction of the new Varna-West Port, the necessity of new waterway became more than obvious. There was need of a new larger navigable canal in such a way as to ensure the passage of ships to the new port, without disturbing the already existing road connection system of the city of Varna. The old canal between Varna Lake and the sea wasn't able to absorb the expected shipping traffic. A competition was held in 1967 in order to find the best technical solution of this transport problem (high passage over the canal, a tunnel under the canal, a ferry, and walk around Varna Lake). The construction works on the new high passage reinforced concrete bridge have been completed in 1976. Also, the new canal that connects the lake with the sea was opened in the same year. This was only the beginning of another important project linked to the development of Varna. The idea about a canal linking the Danube and the Black Sea is nothing new, it dates back to 1876. Even in that period, it was considered that the most suitable place to locate the port of Varna is on the lakeshore instead of the Black Sea bay. The main purpose

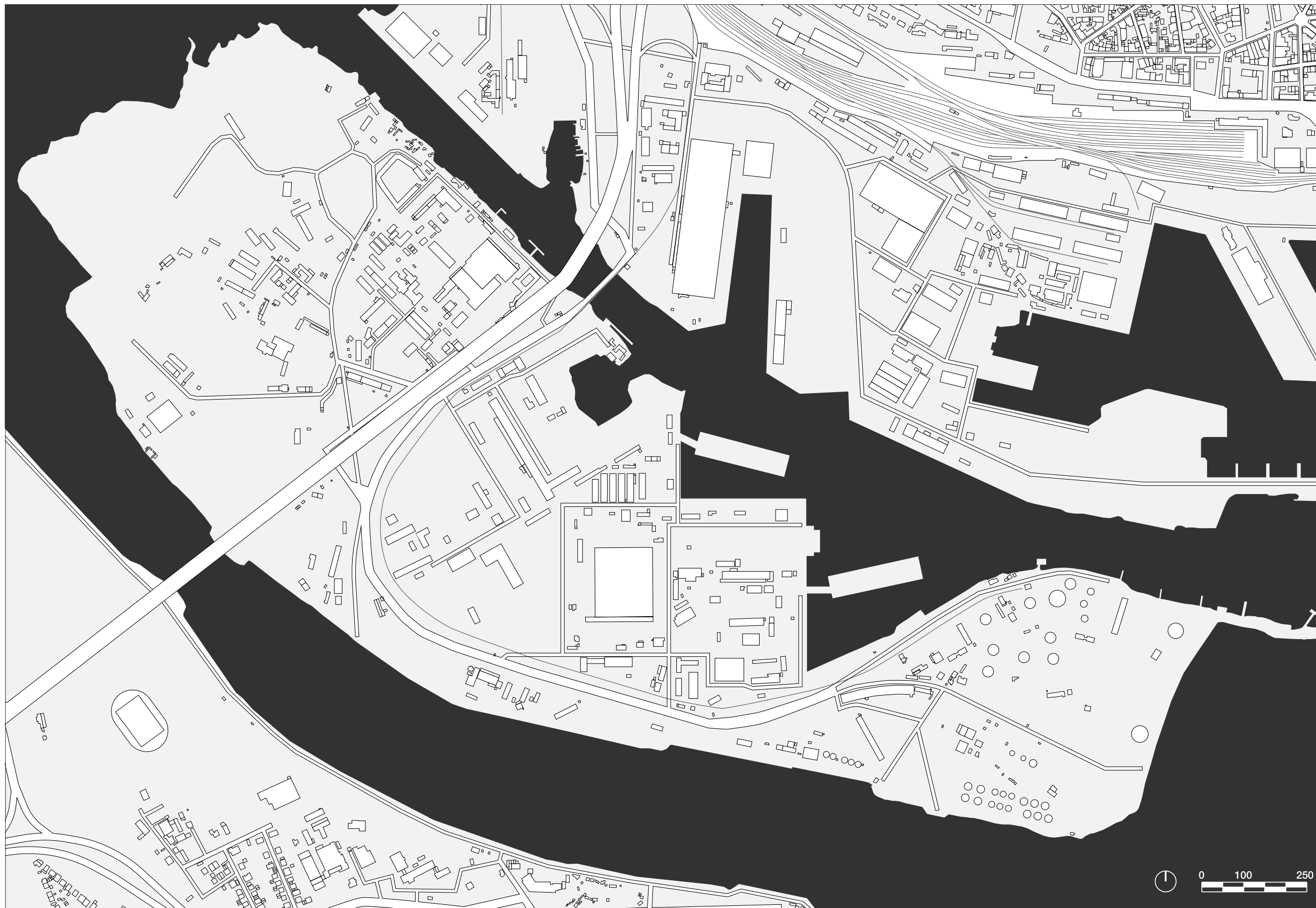


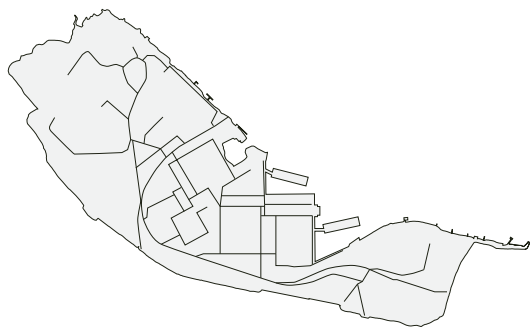
of this port was to ensure the transit and exchange of goods arriving from Central Europe to the Balkans. However, the specific studies and analysis regarding the realization of this massive project began in 1968. The preliminary draft of the waterway that connects Varna and Rousse (along Provadiyska River, Kamchia River, Varna River, and Rusenski Lom River) was developed by the architect Marko Stoyanov. The canal was suitable for both riverboats and bigger ships due to its technical characteristics: 33 meters wide

and 5 meters deep. For the construction of this aqueduct was necessary to free up around 19 000 acres located along the canal. It was supposed that in the future the adjacent area around the canal will become an industrial zone. In 1976 was opened the first part of the canal that links Varna with Devnya (along Varna Lake and Beloslav Lake). Some years after the construction of this portion of the new waterway the project was stopped due to the lack of financial resources.

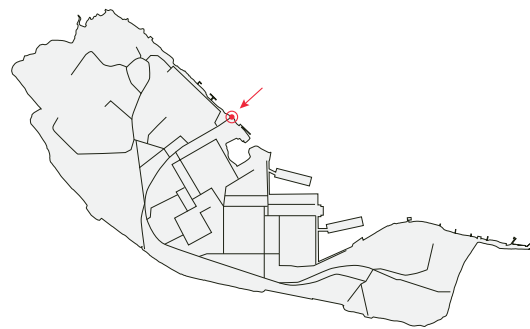




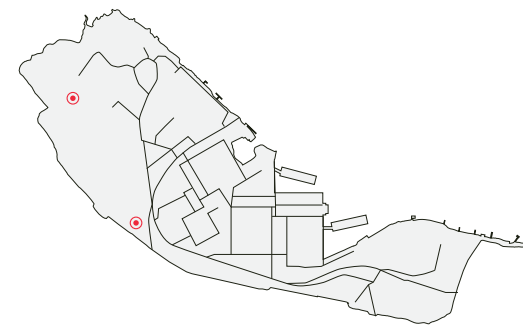




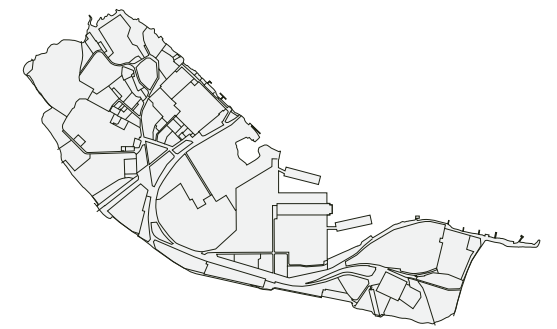
Streets



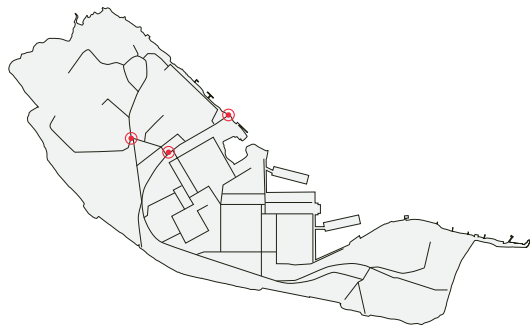
Access point (by the streets)



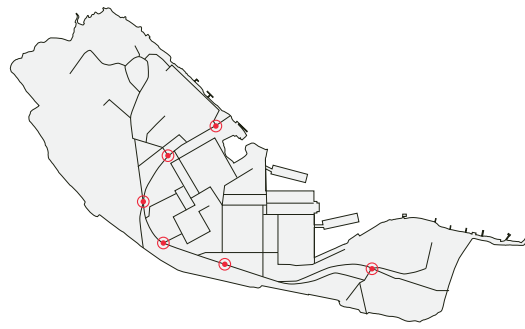
Sand caves



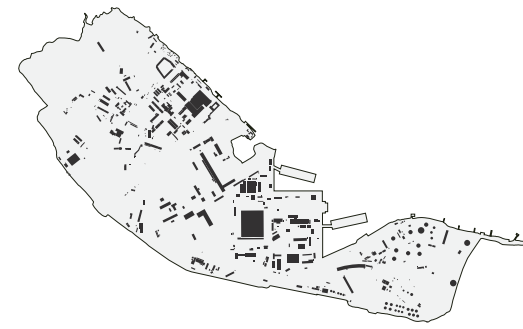
Land property subdivision



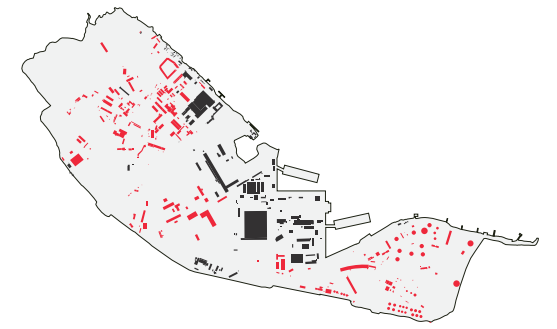
Nodes



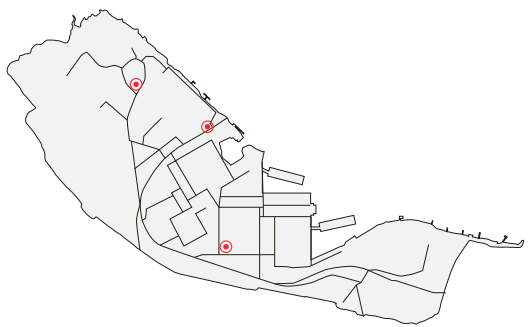
Bus stops



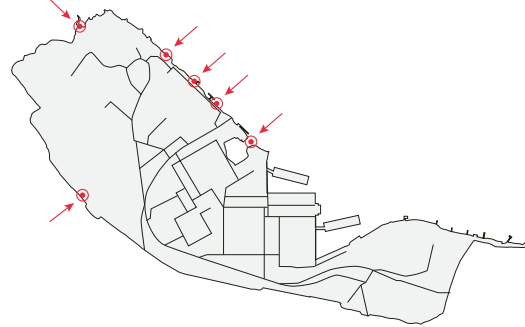
Building footprint



Storage activities



Parking



Access points (by the sea)

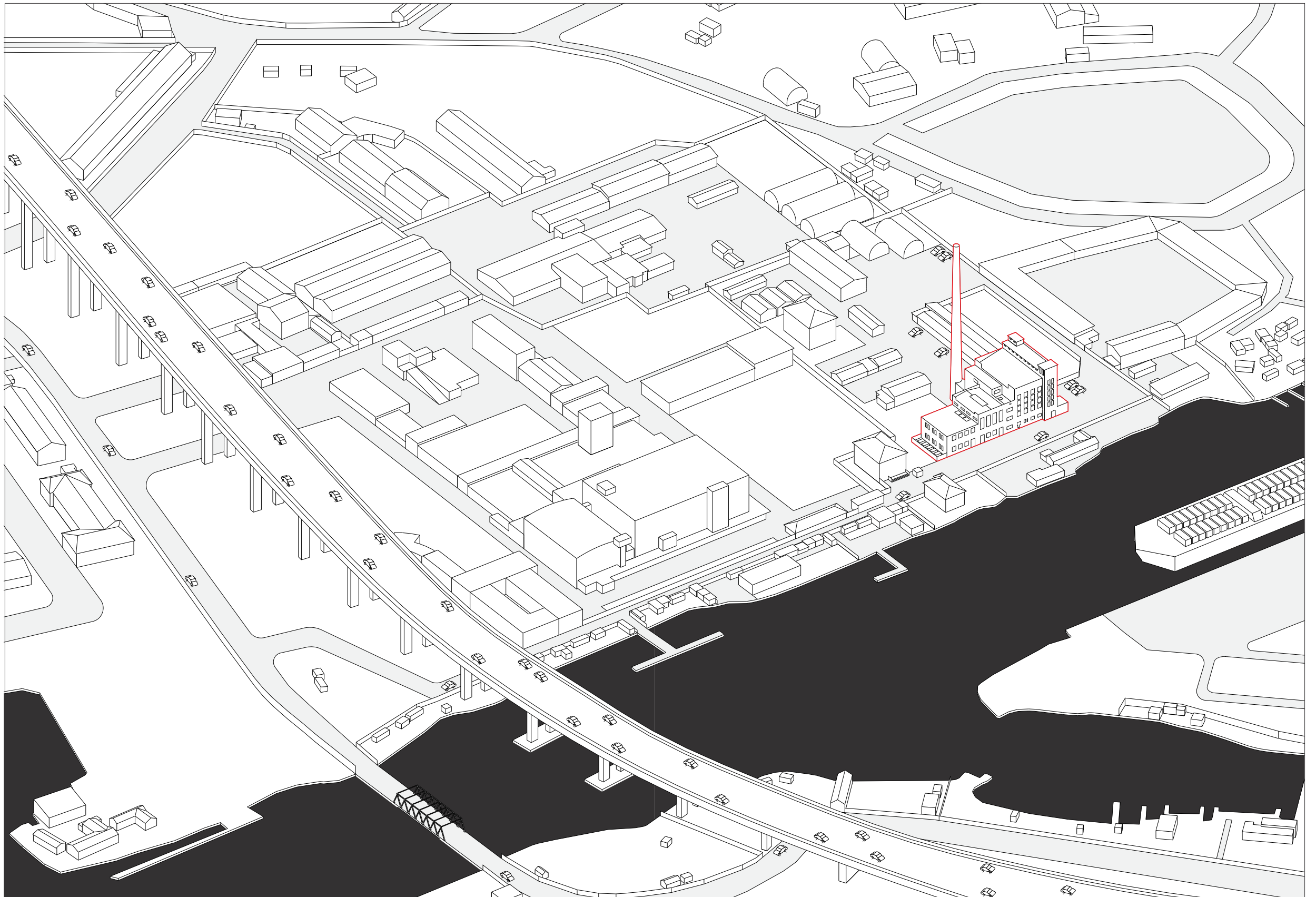


Activities connected with the sea



Abandoned buildings

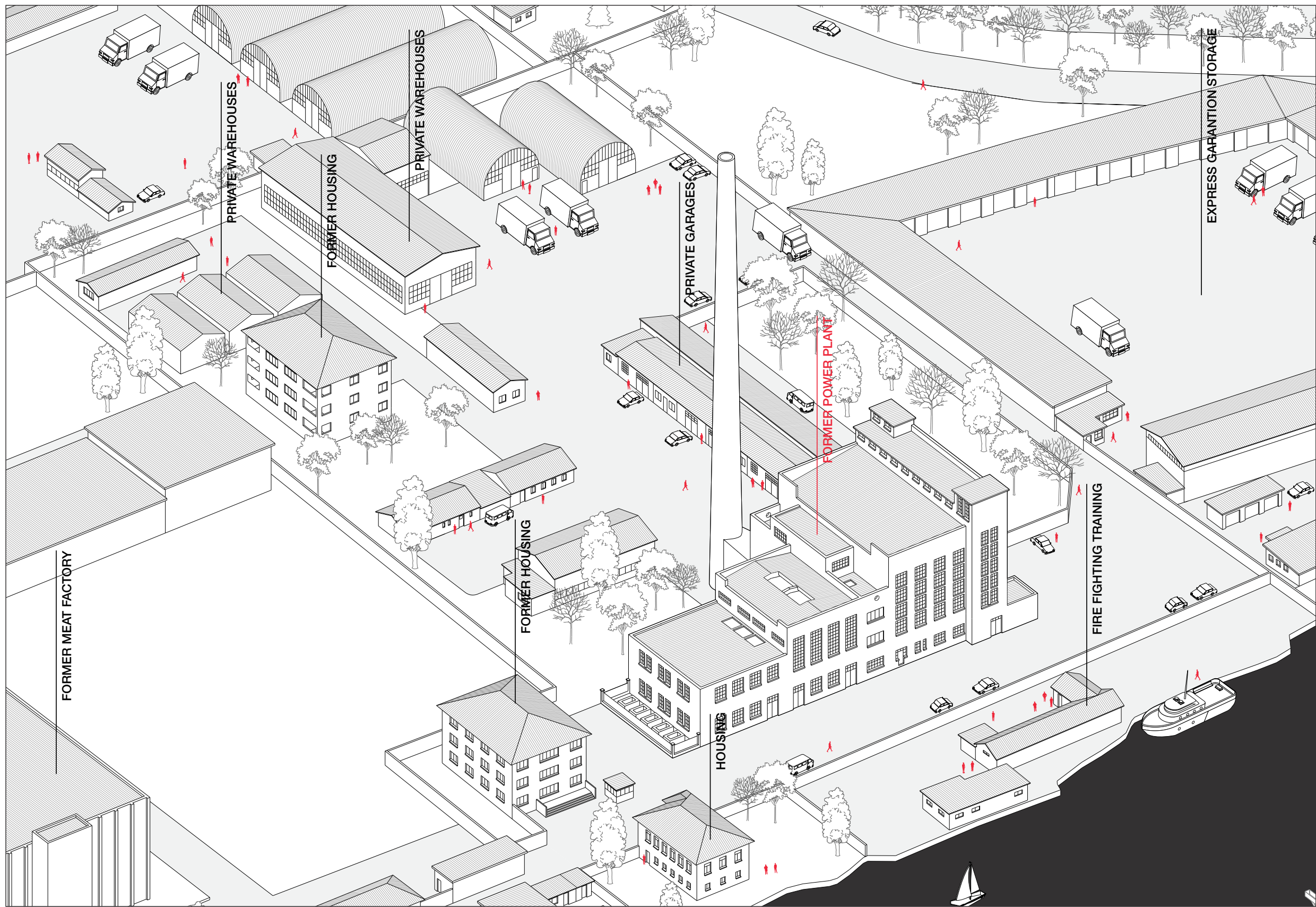




The plot is located on the west part of the Island in front of the canal between the Black Sea and Varna Lake. The land is surrounded mainly by storage warehouses and active or former industrial buildings. There are two functional exception that takes place inside the plot area: the first one is defined by three former residential buildings on the left side of the plot that were built for the workers of the power station; the second one, located next to the seashore is represented by the training facility property of fire fighting training school.

The total area of the plot where the former power plant is located is around 65 000 square meters. Initially, the building and the terrains were private property but thanks to the nationalization law they became the property of the state after December 1949. Subsequently, the land was subdivided between various state-owned enterprises like “Rodopa Meat Factory” and “Black Sea Fisheries”, both located to the left of the former power station “Yanko Kostov”. After the political changes in 1989 these two enterprises were privatized by various companies and probably this is the main reason why is still very difficult to understand which is the rightful owner of the plot. Currently, there are several lawsuits between some private companies and the state but ownership of the land is still questionable.





FORMER MEAT FACTORY

PRIVATE WAREHOUSES

FORMER HOUSING

PRIVATE WAREHOUSES

FORMER HOUSING

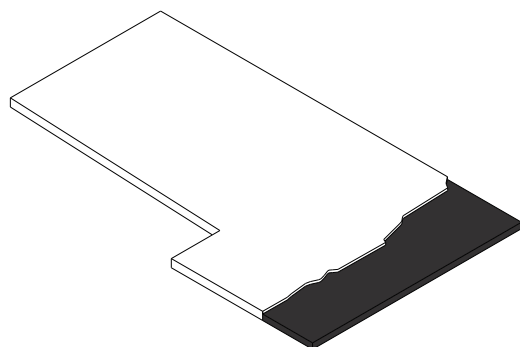
PRIVATE GARAGES

HOUSING

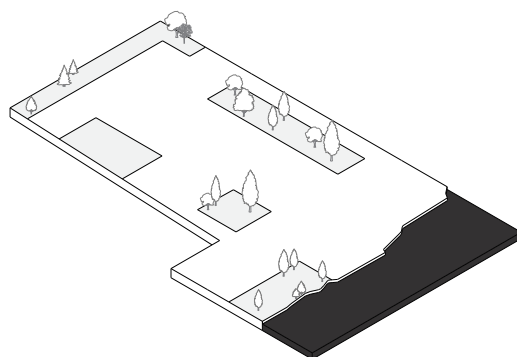
FORMER POWER PLANT

FIRE FIGHTING TRAINING

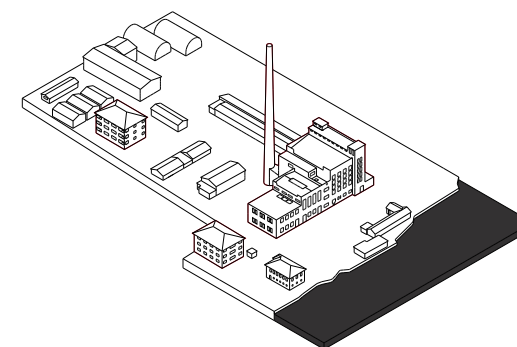
EXPRESS GARANTION STORAGE



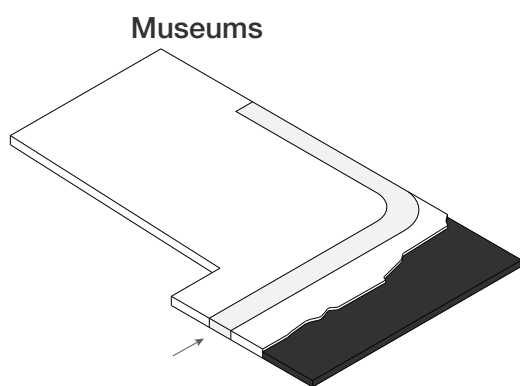
Plot area 20 000 sqm  
Plot number 306 (cadastral survey)



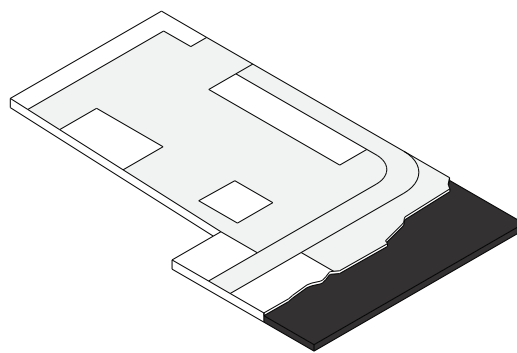
Green area 5 000 sqm  
25% of total area of the plot



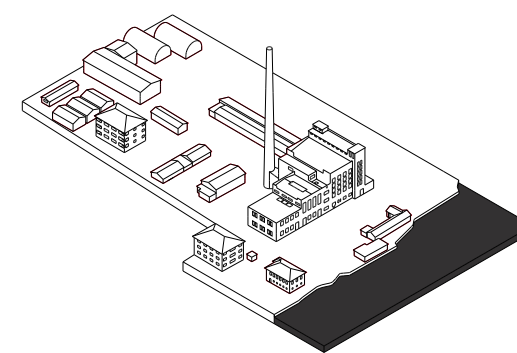
Unknown property 1 800 sqm  
36% of total area occupied by buildings



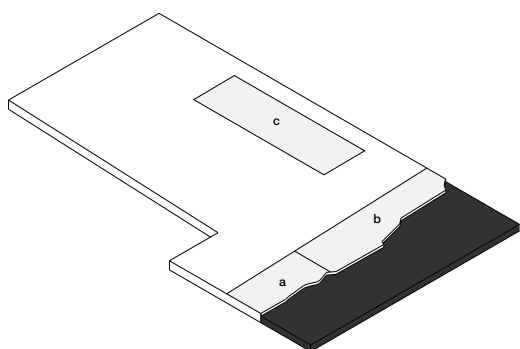
Access point and districution



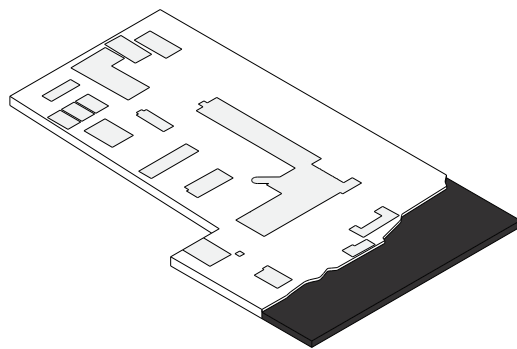
Paved area 15 000 sqm  
75% of total area of the plot



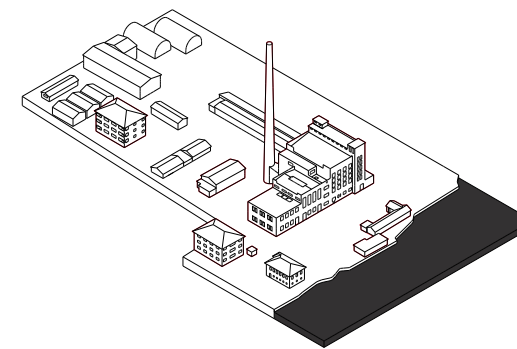
Private property 3 200 sqm  
64% of total area occupied by buildings



Internal subdivision of the plot  
a 850 sqm  
b 1 750 sqm  
c 2 000 sqm



Building footprint 5 000 sqm  
25% of total area of the plot



Disused buildings 2 280 sqm





**name:** Elis  
**age:** 27  
**city:** Varna  
**Singer**

When do you start dealing with music / art / organization of events? I think that I was 10 years old. How you will describe the evolution of music / art scene in Varna during the last years? Actually, I don't think that there is a kind of evolution in this field. Varna needs more alternative events and concerts, more initiatives for the young alternative and creative people. Are there enough artistic / musical / cultural events for youth in Varna? Unfortunately no, all big events are usually hosted in the capital city Sofia. Which are the main problems connected to the organization of events? The main problem here is first of all the way of thinking of the majority. The people just want to earn more money without investing in some event / exhibition. A final result is a mediocre event and it's a pity. Are there enough places that can host this type of events and are they adequate? Yes, of course, there are some places where you can organize an event. Unfortunately, the public structures like concert halls / buildings for example are in obsolete conditions. Probably the last time, when they were updated, was 30 or 40 years ago. Some local event planners also try to promote now event spots. Last year they organized a party on the island. The atmosphere was amazing, far away from the residential area. Which is the missing piece in Varna? In Varna, there are not many

people interested in alternative events and I think this is basically the main problem. Unfortunately, the consequence is the total lack of interests regarding the organization / financing of this type of events. In your opinion which is the new service / public structure that Varna needs? I believe that the local people need something new in the city, something different than the usual fancy clubs. Maybe something like the Plovdiv's Art District "Kapana", a place populated mainly by young creative people where you can spend all of your day visiting small workshops, restaurants and alternative concerts / clubs. Why? Are there similar places / events or are they just not enough? No there no similar places at all here in Varna. Do you think that the locals will accept in a positive way a new hotspot in Varna located inside an old power station? In my opinion, the locals are not ready for that, here some urban trends arrive with 3-5 years of delay. Would you visit it? Yes for sure!



**name:** Niki Boychev  
**age:** 28  
**city:** Varna  
**Owner of Rubik**

**When do you start dealing with music / art / organisation of events?** Around 15 years ago. **How you will describe the evolution of music / art scene in Varna during the last years?** There are a lot of musicians in this city and from my personal point of view I can say that in the last two or three years the music scene here is somehow evolving. Sad to say but the general perception about Varna is that here nothing happens, there are no events or exhibition. The reason for this perception usually is connected to the bad organisation and bad advertising of the events. **Is there enough artistic / musical / cultural events for youth in Varna?** Yes, there are a lot of events. Here at Rubik art center, we organize a lot of alternative music concerts, parties and exhibitions as well. **Which are the main problems connected to the organisation of events?** I will say again that the main problems with the organization of an event here are always connected to bad advertising strategies and the lack of information. The event planners remain with the impression that no one cares about what they organized, because there are not enough people on the events. Then they just stop putting effort into their organization. **Are there enough places that can host this type of events and are they adequate?** Yes, there are a lot of clubs and bar where you can organize a concert, there are also enough art

galleries. I noticed that in the last years the young creative here prefer to organize their exhibitions in unusual and alternative places. For example here at Rubik, the place can be rearranged also for exhibitions and if I remember well it was around one month ago. **Which is the missing piece in Varna?** The missing piece is a strong cooperation between privates and the municipality. **In your opinion which is the new service / public structure that Varna needs?** This city need more structures for the youth. Maybe a place where leisure, culture, and sport are mixed all together. It will be also a good alternative for the winter season when the people use to spend most of the time at home or in the clubs / bars. **Why? Are there similar places /events or are they just not enough?** There are not enough alternative places where the young people can meet each other, especially during the winter. **Do you think that the locals will accept in a positive way a new hotspot in Varna located inside an old power station?** In Varna, the people have this strange and rigid conception about the places where they spend their free time. In their opinion, a club should be only a club, an exhibition space, only a space for exhibitions. They can't accept the idea of flexibility. **Would you visit it?** Of course that I will visit it. I get inspired by this alternative places. As an owner of a club / place i have to be as much creative as possible in order to promote Rubik.



**name:** Mihail  
**age:** 28  
**city:** Provadiya  
**Music Producer**

**When do you start dealing with music / art / organisation of events?** Around 10 years ago. **How you will describe the evolution of music / art scene in Varna during the last years?** In the last years, the music scene is a bit static. Of course there are new artists and musicians, they have also their moment of glory but in my opinion, they are not able to keep alive the interest in the people creating something different and new. **Is there enough artistic / musical / cultural events for youth in Varna?** Yes, sometimes new places and event appear here in Varna. In the beginning, the locals are very excited but after 3 times that they visit this place / event, it seems that they get bored. Even I can't understand why this happens. **Which are the main problems connected to the organisation of events?** It's hard to say but, in my opinion, the main problem is connected to the way that event planners in Bulgaria treat the artists. I don't think that the artist is paid enough for the effort and the time that they have to dedicate to their type of art. **Are there enough places that can host this type of events and are they adequate?** If I have to be honest, there are enough place where is possible to organize a small events. On the other hand, it is obvious that this places / clubs can't host a huge international event or a festival. **Which is the missing piece in Varna?** The financing and organization

of more events and festivals. Varna is a touristic city close to the sea, there should be many more festivals during the summer period. **In your opinion which is the new service / public structure that Varna needs?** Bulgarian alternative culture needs more art / creative districts like "Kapana" in Plovdiv or "kvARTal" in Sofia. It's all about places where artist from different fields can meet each other and exchange their experience; place for alternative kind of music concerts and festivals during both summer and winter period. **Why? Are there similar places / events or are they just not enough?** In Varna, they actually do not exist. **Do you think that the locals will accept in a positive way a new hotspot in Varna located inside an old power station?** Why not. This is a common practice all around Europe. In Germany, for instance, one of the most famous clubs are located in former industrial buildings. **Would you visit it?** Sure and it doesn't matter how far from the city center it is. A place like this will probably refresh somehow the static situation in Varna.





**name:** Andy  
**age:** 23  
**city:** Varna  
**Singer**

When do you start dealing with music / art / organisation of events? I started 3 years ago. How you will describe the evolution of music / art scene in Varna during the last years? It's not a big deal but yes, there is some kind of evolution in this field right now. Is there enough artistic / musical / cultural events for youth in Varna? No, I don't think that there are enough music events in Varna. On the other hand, there are not a lot of places where you can actually host these parties. During the winter there are no more than 2 clubs where usually you can find the same artist once per month. Which are the main problems connected to the organisation of events? The planning of an event depends on the club / space where the concert is going to take place. Each club in Varna has its own audience. And this is the main reason why the people visit this event, just because they are part of the audience of the club. It doesn't matter who will be the artist that performs. Are there enough places that can host this type of events and are they adequate? Yes, of course. There are a lot of clubs that can host a music event here in Varna. As I said before the main problem regards the audience of the club and the club itself. Which is the missing piece in Varna? Varna needs more alternative events / concerts. Basically, the main missing piece is the initiative to organize events in the city. We need more different kind of initiatives and

places, instead of clubs. In your opinion which is the new service / public structure that Varna needs? Maybe a place for huge events will be a good choice. There are already a lot of clubs in our city, but their capacity is limited. Why? Are there similar places / events or are they just not enough? There are some public structures that could host a big event, but they should be modernized first. Do you think that the locals will accept in a positive way a new hotspot in Varna located inside an old power station? I think that I could work. For sure this place will exist only if there are a lot of different kind of events. I think that also the location is perfect. Would you visit it? Of course. It will be fantastic if I can also participate in some events.



**name:** Vantka  
**age:** 29  
**city:** Varna  
**Video maker**  
**Music Producer**

When do you start dealing with music / art / organisation of events? I start with music when I was 6 years old. Later I also discover my passion about video making and graphic design. I think that I was 14 years old. How you will describe the evolution of music / art scene in Varna during the last years? I can say that something happens here in Varna. There are a lot of artists and in my opinion they are also quite good. Is there enough artistic / musical / cultural events for youth in Varna? Most frequented clubs have a monthly program but they don't promote it in the right way. I think that the communication between the clubs and the final users is very weak. It happens very often that there are a lot of events in the same day but no one knows about that due to the lack of advertisement. Which are the main problems connected to the organisation of events? Most common problems are connected to the investments of course. I have the impression that the event planners are incapable to find sponsors for their ideas / events. Are there enough places that can host this type of events and are they adequate? In my opinion, there are any kind and type of places here in Varna. Which is the missing piece in Varna? Financing of new projects / events for the youth, new promoting strategies and last but not least an open minded audience able to support new artist and

ideas. In your opinion which is the new service / public structure that Varna needs? Our city needs a public structure where it's possible to organize something different than the usual events. Why? Are there similar places / events or are they just not enough? I have in mind the Sportna Zala's hall, but it should be modernized. Honestly, I don't think that this investment is a priority for our Municipality. Do you think that the locals will accept in a positive way a new hotspot in Varna located inside an old power station? This place will need a strong event program in order to attract as much visitors as possible. Would you visit it? It depends on the event.



**name:** Grozdan  
**age:** 19  
**city:** Varna  
**Singer**

When do you start dealing with music / art / organisation of events? 4 years ago. How you will describe the evolution of music / art scene in Varna during the last years? No, absolutely not. People who contribute to the alternative culture in Varna are not enough. Is there enough artistic / musical / cultural events for youth in Varna? Yes, there are a lot of events / concerts but they are dedicated to the majority of the population. Which are the main problems connected to the organisation of events? The lack of professionalism during the organization of an event. The figure of the event planner is totally missing that's why the artists have to arrange their concerts by their own. Are there enough places that can host this type of events and are they adequate? There are many clubs for small concerts all over the city and in my opinion they are also good enough for this kind of events. Which is the missing piece in Varna? I think that the only one missing piece in Varna is a structure able to host a massive events or even an international music festival. A stadium or a big concert hall, far from the residential area in order to avoid fines and problems with the Municipality. In your opinion which is the new service / public structure that Varna needs? A music center located close to the sea probably. Place that has to deal with the music on each different level of its creation: choir rooms, concert halls and music shops.

Why? Are there similar places / events or are they just not enough? No, unfortunately, there are no places like this in Varna. Do you think that the locals will accept in a positive way a new hotspot in Varna located inside an old power station? Yes, of course. The young people will appreciate it a lot. Would you visit it? . It's obvious. When there is a new music spot in Varna I have to visit it.



**name:** Rags  
**age:** 28  
**city:** Varna  
**Graphic designer**  
**Graffiti artist**

When do you start dealing with music / art / organisation of events? It was a long time ago. How you will describe the evolution of music / art scene in Varna during the last years? I perceived some changes in the last few years, but maybe my opinion is not that objective. Is there enough artistic / musical / cultural events for youth in Varna? Yes of course that there are exhibitions, but the main problem is their organization and the way that the artists are treated. Which are the main problems connected to the organisation of events? Financing of a new fresh ideas. There are some public funds dedicated to art and artistic development, but in my opinion they are not used in the right way. The other main problem is linked to the way of thinking of the audience. Unfortunately nobody is really interested in this field and that's why nobody wants to spend money for art. Are there enough places that can host this type of events and are they adequate? There are a lot of private galleries in Varna. Unfortunately there are no public structures, managed by the municipality or non-profit organizations, where you can show your artworks. Which is the missing piece in Varna? First of all the artists need to be supported by local authorities. Another one problem is the lack of competence and enthusiasm, especially on the part of the event planners. Unfortunately, people who are involved in organization of

art events, have no idea how to do that. In your opinion which is the new service / public structure that Varna needs? I would like to see something like public indoor space for recreation, where people can meet each other also during the winter period. Probably this kind of structure should be managed by local authorities, but they have to be a bit more liberal regarding their management strategy. Why? Are there similar places / events or are they just not enough? No, there is total lack of this type of places in our city. Do you think that the locals will accept in a positive way a new hotspot in Varna located inside an old power station? I think that the locals will accept it positively, but I don't know if they will visit it very often. The building itself can't attract visitors; there should be an intense event program in order to satisfy different type of audience. Would you visit it? Sure, if there is a good reason to do that.





**name:** Rosina  
**age:** 28  
**city:** Varna  
**Event planner**

When do you start dealing with music / art / organisation of events? I started to organize event 4 years ago. The first one was Memento Mori, a hard core festival. How you will describe the evolution of music / art scene in Varna during the last years? No I don't think that the music scene in this city is evolving. As regard the Hard Core scene there are not so many recently born bands. Is there enough artistic / musical / cultural events for youth in Varna? There are a lot of small events, especially during the winter. Sometimes there are even 2 - 3 events in the same day. Which are the main problems connected to the organisation of events? . Problems connected with the financing at first place. For the organization of a festival you need public or private partners that can invest. The second one regards the place where you can do this type of event and the necessary authorizations from the Municipality. Are there enough places that can host this type of events and are they adequate? In my opinion the only one club able to host bigger events is Rubik art center. The rest of the places are small bars and clubs suitable for a smaller audience. Which is the missing piece in Varna? First of all, there is lack of public funds and place where you can put together 1000 visitors. That's why a lot of people that used to organized event in the past, don't do this anymore. In your opinion which is the new service / public

structure that Varna needs? Varna needs a big multifunctional space / hall, where exhibitions, concerts, workshops, movie screening and street markets can be organized. Hale 3 is a similar space, in my opinion, it's not big enough. Why? Are there similar places / events or are they just not enough? Because of their total lack. Do you think that the locals will accept in a positive way a new hotspot in Varna located inside an old power station? Why not? I think that Hale 3 is a very good starting point. We should try to increase the number of alternative places where the locals can spend their free time. Would you visit it? Yes of course. In my opinion a place like this can easily became the new hot spot of the city.



**name:** Martin  
**age:** 21  
**city:** Varna  
**Singer**

When do you start dealing with music / art / organisation of events? I started seriously playing guitar at the age of 14 and 3 years ago I also started practicing professionally as a vocalist in a hard core band. How you will describe the evolution of music / art scene in Varna during the last years? In my opinion, hard core scene already had this glorious period; it was 2-3 years ago. A lot of bands were still releasing new albums and songs, but now some of them doesn't exist anymore. Is there enough artistic / musical / cultural events for youth in Varna? Unfortunately no. The audience of this genre is very restricted here in Varna and this is the main reason why the events are not that much. Which are the main problems connected to the organisation of events? The common problems linked to the organization of event are the lack of funds, the restricted audience and bad advertising strategies. Are there enough places that can host this type of events and are they adequate? There are some clubs that usually host this type of events. I think that in Varna there is no space at all where can be organized a huge hard core festival such as Hardcore Xmass in Sofia. Which is the missing piece in Varna? In my opinion, our city needs more concert halls or clubs where alternative type of music can be played. Varna is one of the biggest cities in Bulgaria and it should offer more diversity regarding

events / concerts / other cultural activities. In your opinion which is the new service / public structure that Varna needs? More clubs / centers like Rubik art center and they have to be financed by local authorities. I think that the way how they use the same space for different kind of events like exhibitions / concerts is amazing. Unfortunately, the capacity of that club is limited. Why? Are there similar places / events or are they just not enough? They are not enough. Do you think that the locals will accept in a positive way a new hotspot in Varna located inside an old power station? Yes, especially the youth. Hale 3 is a good local example of a skate park located in a former printing house. Concerts / exhibitions / street markets are also hosted there. Would you visit it? Sure! I already know the place that you are talking about and I think that it has a very huge potential.



**name:** Gorskiya  
**age:** 34  
**city:** Stara Zagora  
**Music Producer**  
**Dj**

When do you start dealing with music / art / organisation of events? I opened my recording studio 10 years ago and 3 years later I also started with djing. How you will describe the evolution of music / art scene in Varna during the last years? The only one genre that is evolving in the last year is the electronic one. Is there enough artistic / musical / cultural events for youth in Varna? Yes, of course. There are different types of music events, but their attendance is not that big. Which are the main problems connected to the organisation of events? Honestly I don't have a lot of experience in this field. In my opinion, there should be more coordination between different clubs in the city regarding the events that they will organize. In this way the locals will be able to visit more than one event in the same day. Are there enough places that can host this type of events and are they adequate? In my opinion there are a lot of alternative places / clubs where exhibitions and concerts can be hosted. Which is the missing piece in Varna? If we have to take into account only the concerts there are already a lot of club where this type of events can be hosted. In your opinion which is the new service / public structure that Varna needs? I think that a huge covered space that can be used for different purposes will be very useful. Unfortunately there is lack of places that combine different disciplines in the same

structure. Why? Are there similar places / events or are they just not enough? The only one place that combines for instance art / sport / cultural events in Varna is Hale 3. Do you think that the locals will accept in a positive way a new hotspot in Varna located inside an old power station? Hale 3 is a place like this and in my opinion, the young people appreciate it a lot. I'm pretty sure that the people will accept it very well, since we are talking about a new service for the locals. Would you visit it? Of course. Rarely there are new clubs here in Varna.



**name:** Mouse  
**age:** 29  
**city:** Isperih  
**Art Teacher**  
**Artist**

When do you start dealing with music / art / organisation of events? When I was a child. How you will describe the evolution of music / art scene in Varna during the last years? In this moment I can say that the artistic scene is stagnant. There is lack of exhibitions dedicated to visual arts. There are many movie, theater and musical festivals, but there is nothing regarding visual arts. Actually, I feel like I'm the only one that still doing these things in Varna. Is there enough artistic / musical / cultural events for youth in Varna? Yes, there are some events but they are not enough. For instance, few days ago there was the opening of a new branch of the City Art Gallery. But as you know, these things rarely happen. For me is hard to find place and people that would like to organize exhibitions with my art works. Which are the main problems connected to the organisation of events? Honestly, I don't have a lot of experience in organizing events but I can share with you my remarks about this topic. First of all the lack of funds is a very big problem. All the artists know that the Municipality rarely finances art exhibitions and festivals. Are there enough places that can host this type of events and are they adequate? Yes there are the City Art Gallery and private smaller galleries as well, but they are not managed in the right way. That's why young local artists feel demotivated to present their art works.

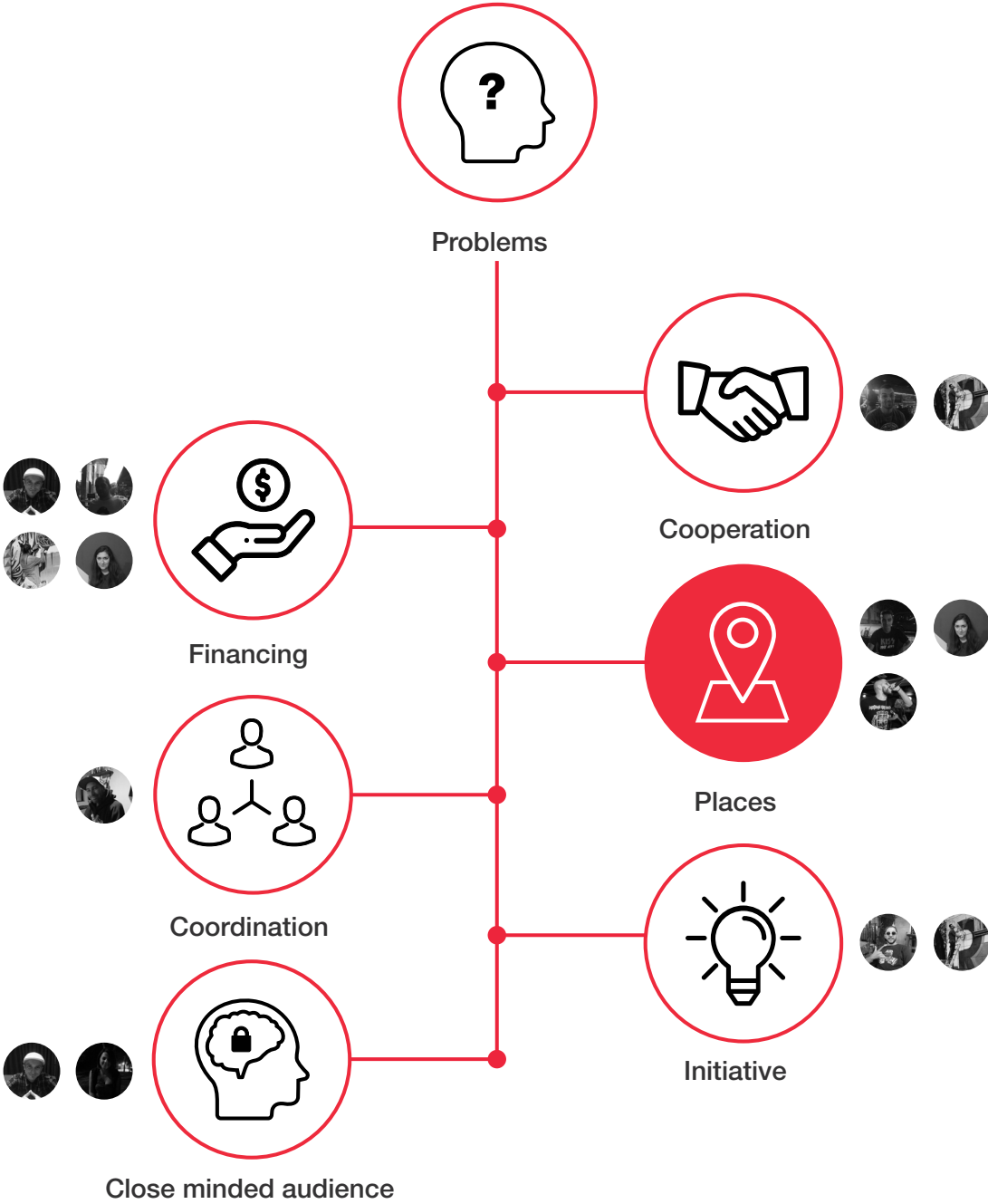
Which is the missing piece in Varna? The artists here know that if they have to organize an exhibition they can only rely on themselves. That's why I think that the young creative need more financial support from both public and private partners. For example, one year ago my creative collective called Sunshiners, decide to open a small showroom in the city center. In this way the visitors will be able to see and buy some of our art works, as well as to discover something more about the creative processes. In your opinion which is the new service / public structure that Varna needs? I will appreciate very much if there is a kind of artistic co-working space where ateliers / exhibitions and painting classes can be hosted. It will be great if the artists from different fields can share their ideas and experience between each other. Why? Are there similar places / events or are they just not enough? . I don't think that there is a place like this in a whole Bulgaria, not only in Varna. Do you think that the locals will accept in a positive way a new hotspot in Varna located inside an old power station? YYes for sure, but I don't believe that the "curiosity" about this place will last for a long time. This place will need a professional team as well as an intense event program. Only in this way it can survive for a longer period. Would you visit it? Of course that I will visit it. It will be nice if I move also my art atelier there.

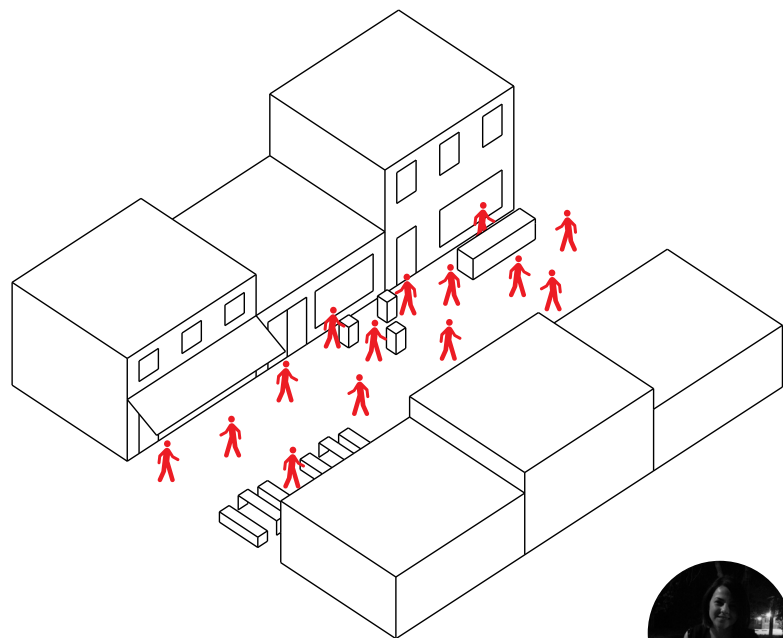


# Conclusions

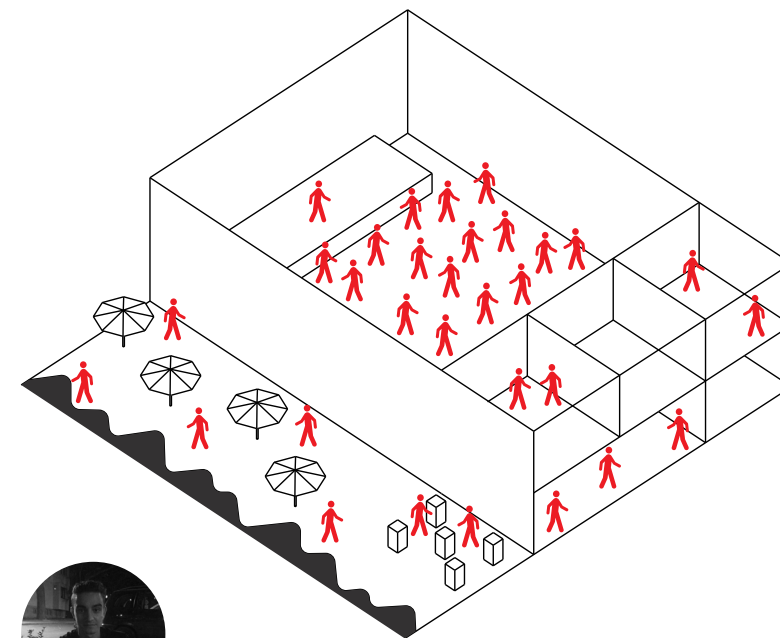
For the realization of these interviews, it was necessary to talk with the young creative people of Varna, who certainly have an extensive observation about the cultural development and evolution of the city (organization of events, where these events are held, their audience, etc.). In order to obtain a broader vision, there was an attempt to extend the interviews on a mixed group of creative people, which includes musicians, producers, DJs, event planners, owners of nightclubs, painters, graffiti and street artists. Are there enough places where the young creative people of Varna can exhibit themselves, as well as spend their free time? Which are the main problems linked to the organization of different type of cultural events? Are the young creative people supported economically by the local authorities? These are some of the questions that have arisen after the interviews. In order to understand as much as possible which the trend is regarding the cultural development of the city of Varna, there was a necessity to answer these questions. In this case, the interviews were meant to help build up a base for analysis and serve as a way of testing the project idea for the former power station “Yanko Kostov”. Apart from giving their opinions regarding the cultural development of Varna, the interviewed also expressed their views on what can be done to improve this process and to solve the

problems related to it. Many problems of a different nature arose after the interviews. One of the most important issues that were pointed out by the interviewed concerns the lack of a place where different activities and events can be carried out. It was also discovered that there is a lack of public and private financing in order to support local artists, which is one of the main reasons why there are no initiatives. It was also pointed out that there is no cooperation between authorities and the young creative people of Varna. Other important issues that were discovered during the interviews are related to the poor coordination between different clubs and event planners, which is connected to the bad advertising strategies adopted by the owners of clubs and the event planners. Due to the complex nature of the problems that arose after the interviews, it can be concluded that the architect is not able to solve all of them. The interviewers were also asked to suggest some ideas for spaces or services that they consider very important in order to improve the quality of life in the city. All the collected results were summarized and illustrated in the following schemes.

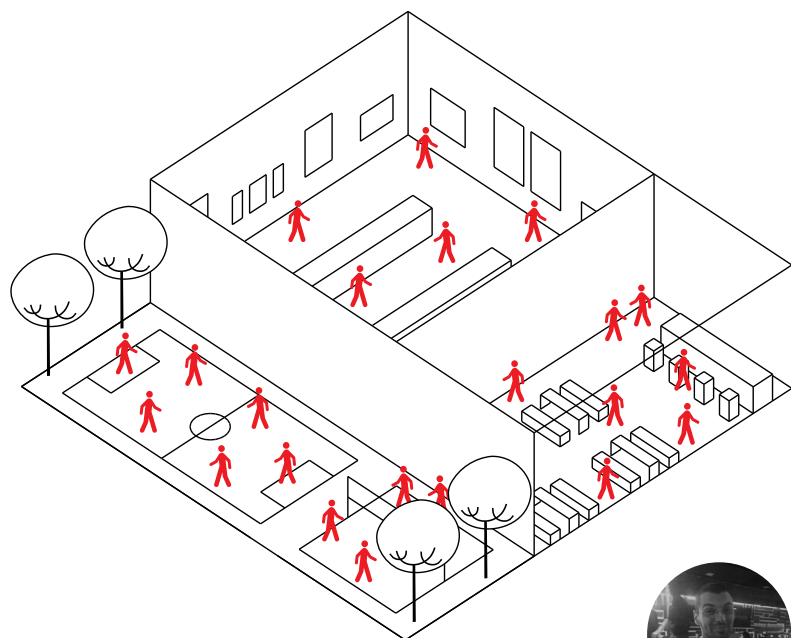




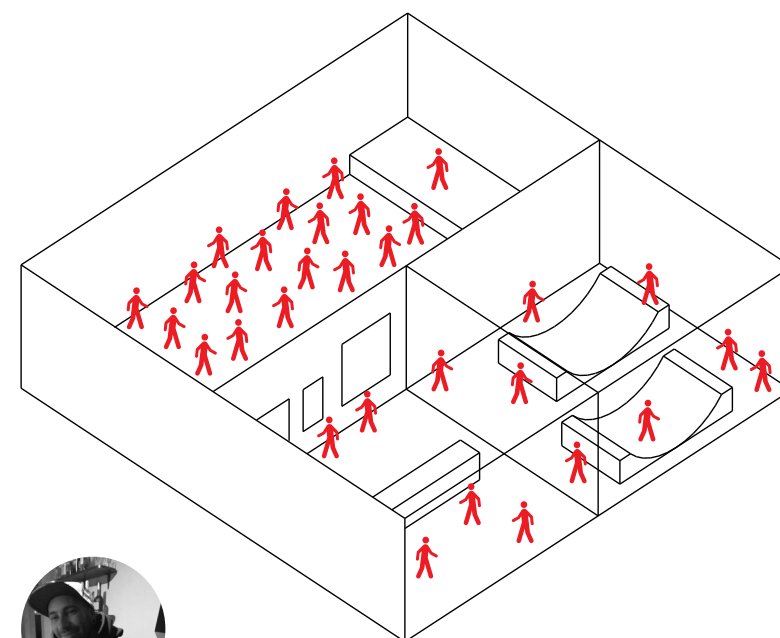
Kapana Art District, Plovdiv, Bulgaria



Music center close to the sea



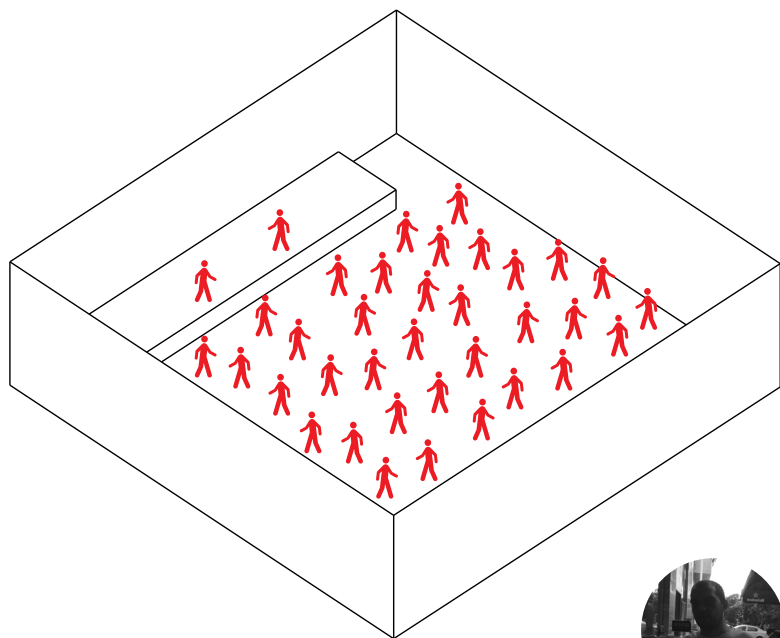
Place for culture / sport / leisure



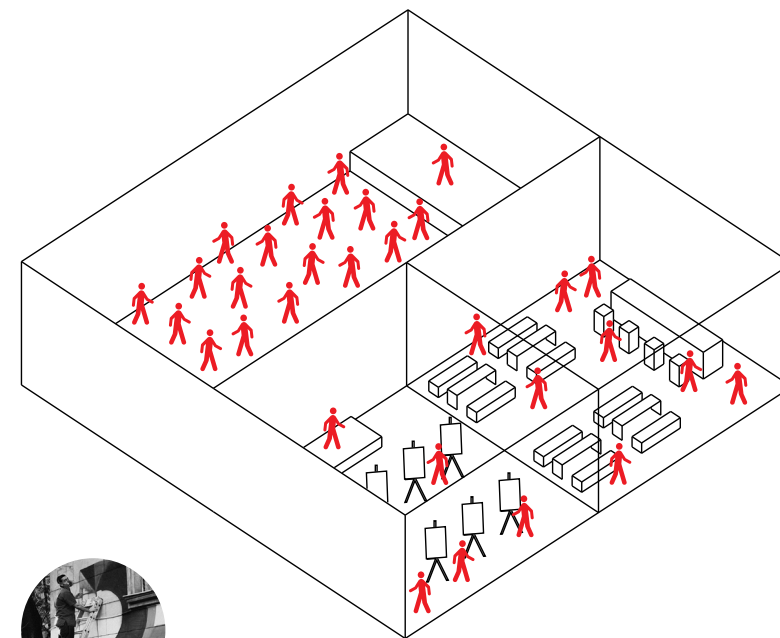
Space for urban sports and culture



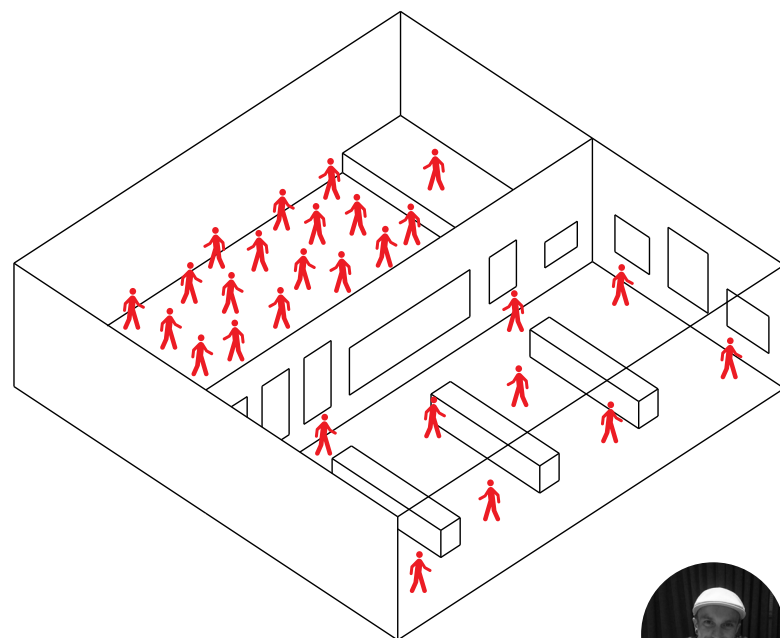




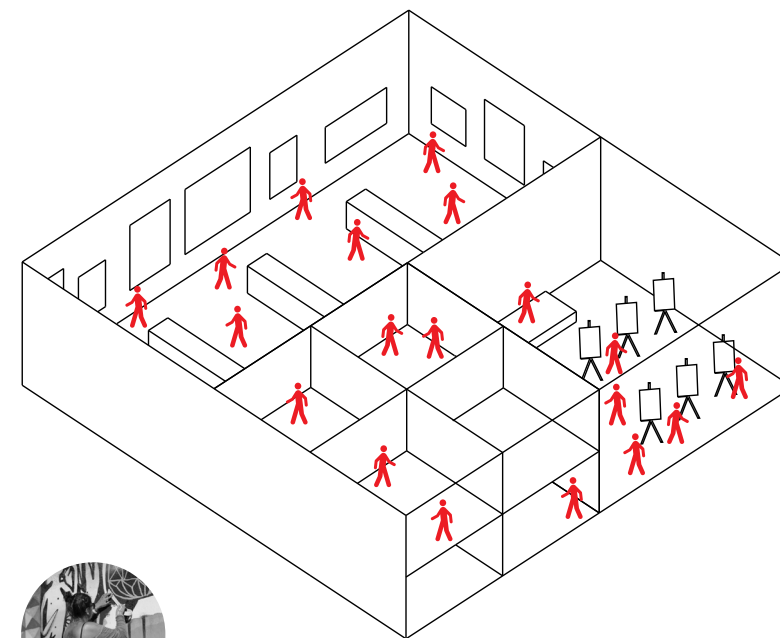
Concert Hall



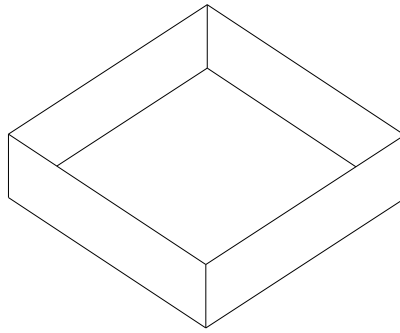
Covered public space for recreation



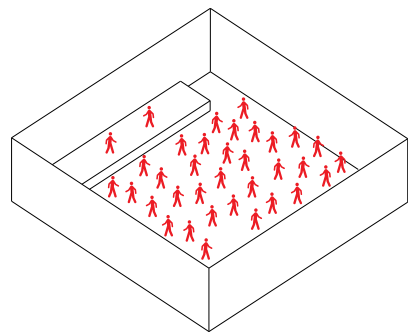
Public building for cultural events



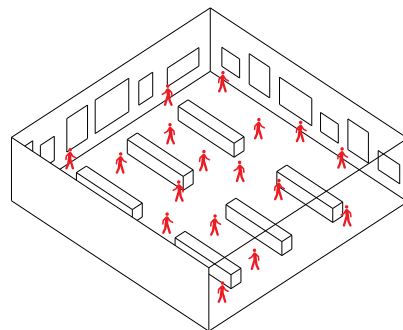
Artistic co-working space



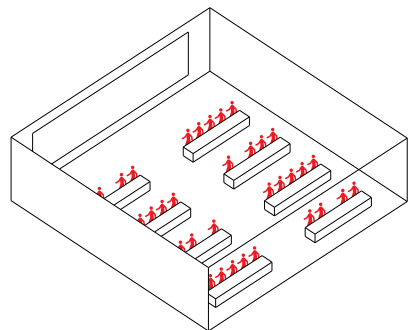
Same building for different activities



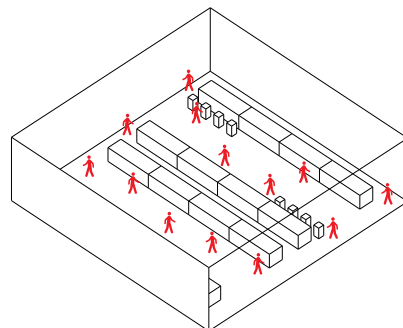
Concert Hall



Exhibition space



Film screening



Street market



# **Chapter 4**

## **Project development**

# History and description of the power station

## History:

In 1940's the city of Varna has been growing very fast: the area of the city has increased; a lot of new industrial complexes were built; the population was almost double in comparison with the number of inhabitants in Varna thirty years ago (41,419 inhabitants in 1910 's, 72 000 inhabitants in the 1930's). It was clear that the electrical system of the city should be modernized in order to provide the necessary amount of electricity for the fast-growing city of Varna.

For that reason, in December 1936 the mayor of the city Yanko Mustakov, together with the Municipal Council of Varna decided that there was a need to build a new power station. Also, the government approved this decision and consequently financed the project, but it established a specific condition. The new power station had to be bigger and more powerful than the previous one in order to satisfy the needs of electricity also in other cities located near Varna.

The construction of the new power station started on 9 November 1941 and it was built in two different stages by the Czech firm Koblen-Decen. During the first phase of construction were installed a turbo group with two water-pipe steam boilers, each with 350 square meters of heating surface and a capacity to produce 15 grams of steam per hour. Also, the 75-meter chimney of the power station was erected in the same period. The turbines finally started providing

energy for the city on 26 October 1944. The second stage was focused on the construction of another one steam boiler and turbine with 5000 square meters of the heated surface. The annual electricity production of the Power Station reached 30,000,000 kilowatt hours. After 1944, during the governance of the Socialist Party, the plant was renamed to TEC "Yanko Kostov". In the next decades, the need for electricity increased with the growing population. For that reason, in 1986 near the village of Ezerovo, the new thermal power station "Varna" was built. Subsequently, the Yanko Kostov plant was shut down. In the following years, the building was used as a training laboratory by the Professional High School of Electrical Energy. In this place, the students and future workers were able to understand better the entire production process of electricity (coal insertion in the furnaces, high-pressure steam generation, turbine propulsion, and power generation). Since the collapse of Socialist regime in 1989 to the present days the Power Station has been abandoned. From 2007 the building has a private state ownership and it is managed by the Ministry of Regional Development and Public Works.

During the years there were some attempts in order to transform the former power station Yanko Kostov into a national museum of science and industry. The idea of creating a museum of science and industry in Varna arose





for the first time in 1988 together with the opening of the first exhibition focused on the scientific and technical companies located on the territory of the city. In 1991 there was a second attempt in which was planned to move the entire collection of the National Polytechnic Museum from the capital city to Varna. The last time when the idea of transformation of the former power station Yanko Kostov was taken into account dates back to 2010. It can be also considered the most successful one because of the initiative committee that was set up in order to restart the project. Several structural analysis regarding the current state of the building has been carried out in order to understand as much as possible the level of conservation of the existing structure. Even after more than twenty years of disuse and abandonment, the concrete structure did not show any kind of damage. Unfortunately also this third attempt has not produced any positive result and the plans regarding the transformation of the former power station are still an idea nowadays.

#### **Description:**

The former power station Yanko Kostov is one of the few examples of Bauhaus architecture in the city of Varna. The building impresses with its regular shape, functional and clear design of the facades, as well as with its 75-meters concrete chimney stack. The main structure is made up by reinforced concrete pillars,

beams and slabs, while the external envelope is composed by double layer brick walls, covered by cement mortar. The openings (windows and doors) are fabricated by a metal frame and single layer glass. They are also based on the same proportion (0.45 meters in length and 0.55 meters in width).

The colossal industrial building can be subdivided into three formal areas. Area one extends on two levels and includes a coal deposit, space where the energy was transformed (transformer rooms) and a staircase in order to connect the two levels. The area has the following dimensions: 15 meters in length, 17 meters in width, and 9.5 meters in height. The structure in this portion of the building, as well as the rest of it, is composed by brick walls (envelop), concrete slabs and internal partitions made by standard bricks and cement mortar (the thickness of the internal walls is around 30 centimeters). In this subarea there are two types of windows: on the North-East and South-West side of the building, there are eight windows (dimensions: 2 meters in length and 2.4 meters in height), while on the South-East façade there are six windows (dimensions 1.3 meters in length and 2.4 meters in height). The flat roof is made up by a concrete slab with a dropped ceiling.

Area two, located exactly in the middle, develops on two levels with different dimensions. On the ground level





(dimensions: 13 meters in length, 17 meters in width, and 4.75 meters in height) is located the main entrance of the building. This hall, without any internal subdivision, hosts an additional concrete structure in order to support the above-positioned turbines. The windows that illuminate this space are the same as the windows present in area one. At the first-floor level (dimensions: 13 meters in length, 17 meters in width, and 9.5 meters in height) there are no internal partitions as well, but it is possible to see the reinforced concrete structure that composes the building. Eight enormous windows (2 meters in length and 5.5 meters in height) illuminates this area and underline the simplicity of the concrete structure inside it. On the pitched concrete roof, there is a big opening in order to add more light to the turbine hall.

The formal area three is the biggest one and it can be further divided into two subareas. Subarea one (dimensions: 4.5 meters in length, 26.5 meters in width, and 12 meters in height) hosts the staircases, the wash closets, and the former office space and it extends on three levels. Also in this subarea is possible to see the concrete skeleton that composes the former industrial building. The solution that was adopted for the roof covering consists of a concrete slab with a dropped ceiling under it. Right behind this part of the building is located the 75-meters concrete stack. The

second subarea is occupied by ashes and dust deposit area, steam boilers hall and control rooms. The ashes and dust deposit is located on the ground floor (dimensions: 20 meters in length, 26.5 meters in width and 4.5 meters in height) and it hosts a reinforced concrete structure made up by pillars and beams, used as an additional support for the heavy steam boiler located on the upper level, and staircase that connects the two levels. The steam boilers hall contains the three former steam boilers (made up by the iron structure and red bricks) and an additional reinforced concrete structure that was used as an additional support for the coal silos. Also in this hall (dimensions: 20 meters in length, 26.5 meters in width and 13 – 15 meters in height), there are no internal subdivisions. Due to the heat produced by the steam boiler in this third formal area was used a roof covering composed of metal beams and corrugated steel sheets. The produced heat is also the reason why in this hall there is the biggest amount of windows. On the North-West façade, there are thirty windows (dimensions 1.3 meters in length and 2.4 meters in height) while on the North-East and South-West facades there are thirty-two windows from another type (dimensions: 2 meters in length and 2.4 meters in height).





## Current state of the former power station

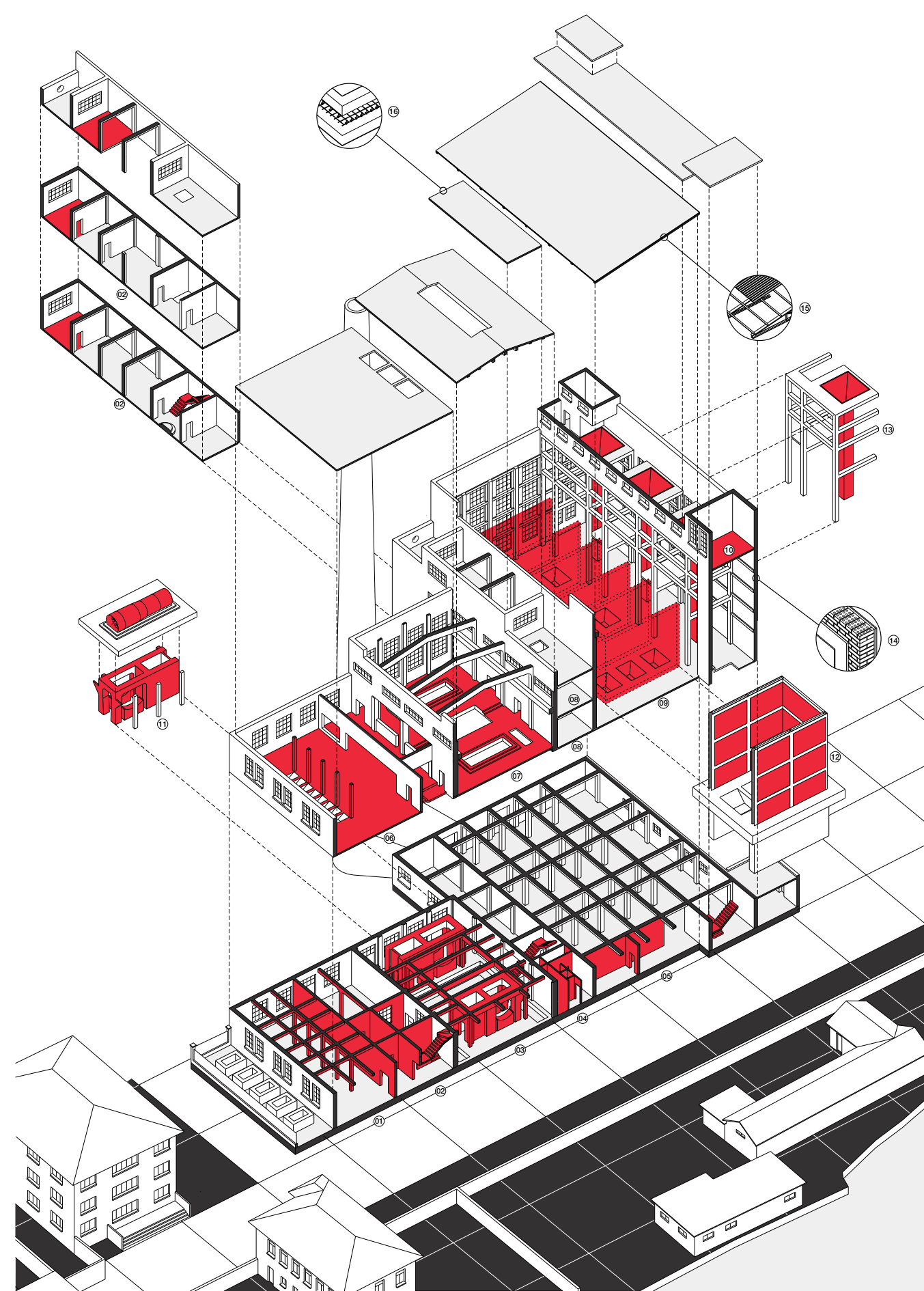




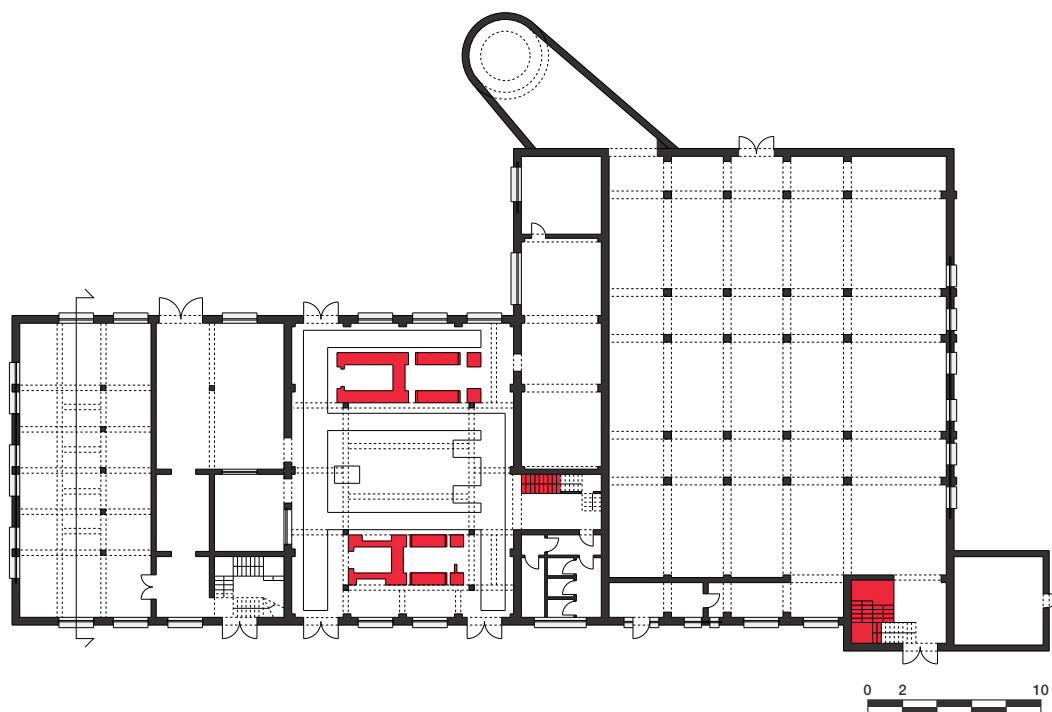
## Legenda

01 Transformer room	130 sqm
02 Auxiliary equipment area	90 sqm
03 Central hall	220 sqm
04 Wash closed	18 sqm
05 Ashes / dust deposit	470 sqm
06 Coal deposit	210 sqm
07 Turbine hall	150 sqm
08 Offices / Administration	14 sqm
09 Steam boilers hall	485 sqm
10 Control room	20 sqm

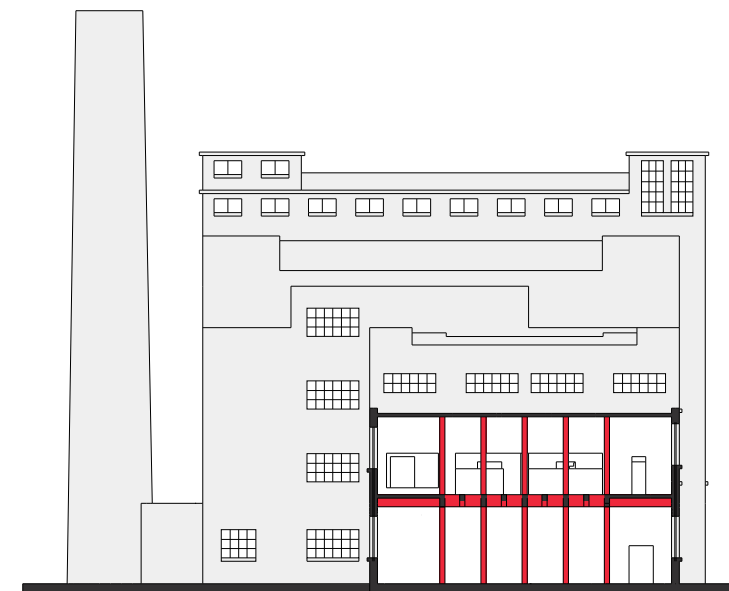
11 Additional concrete structure / turbines
12 Steam boiler
13 Additional concrete structure / silo
14 External wall
15 Steam boilers hall roof covering
16 Auxiliary equipment area roof covering



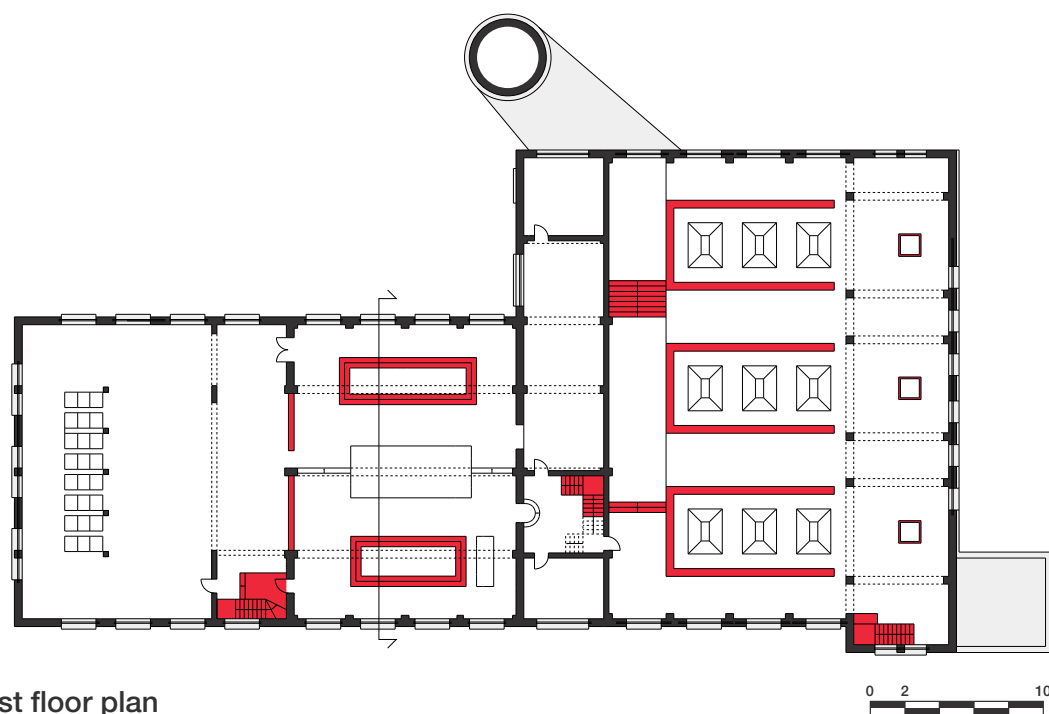




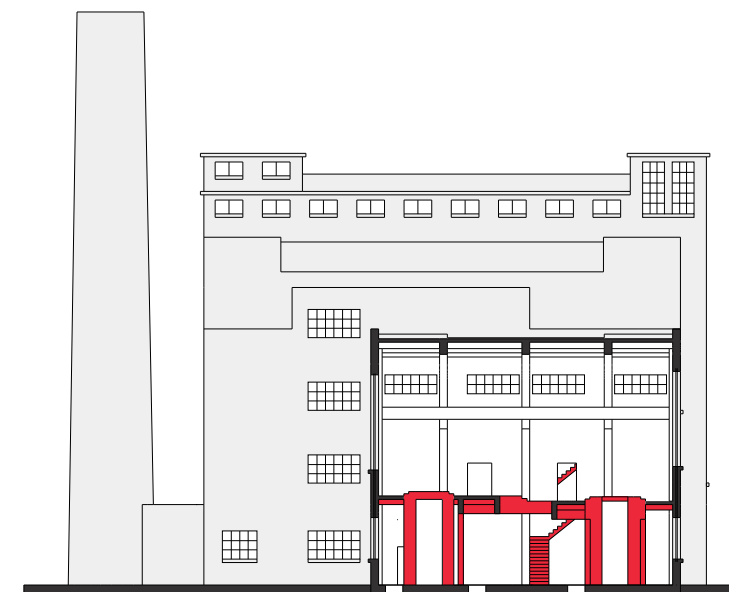
Ground floor plan



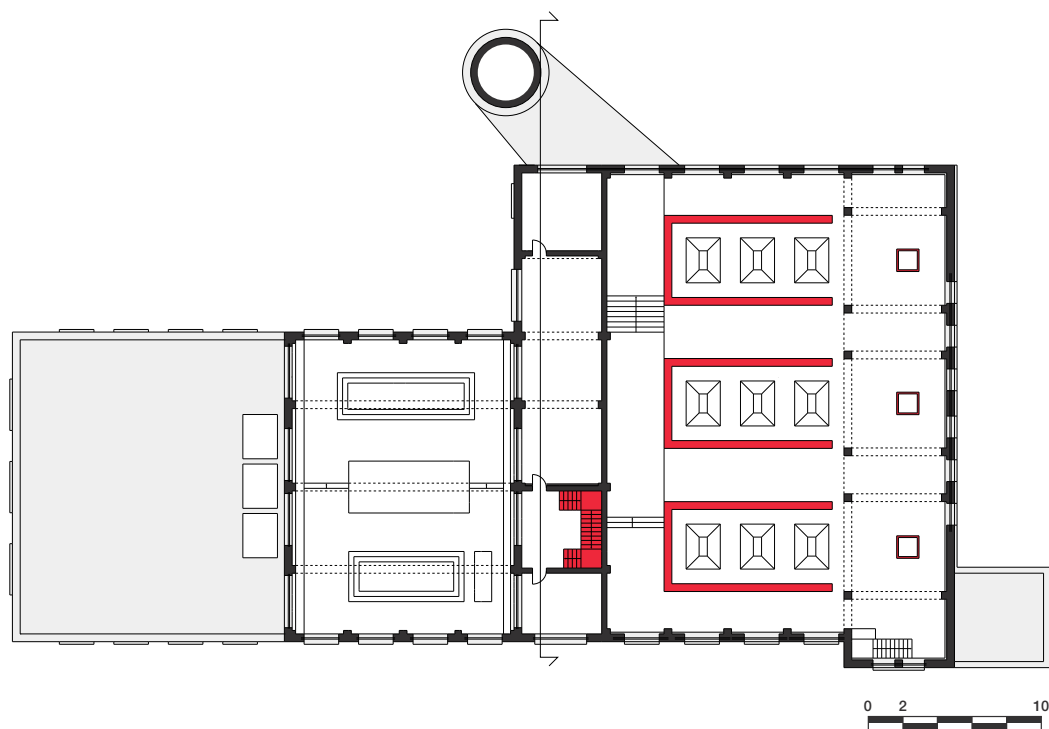
Section 1 Coal deposit



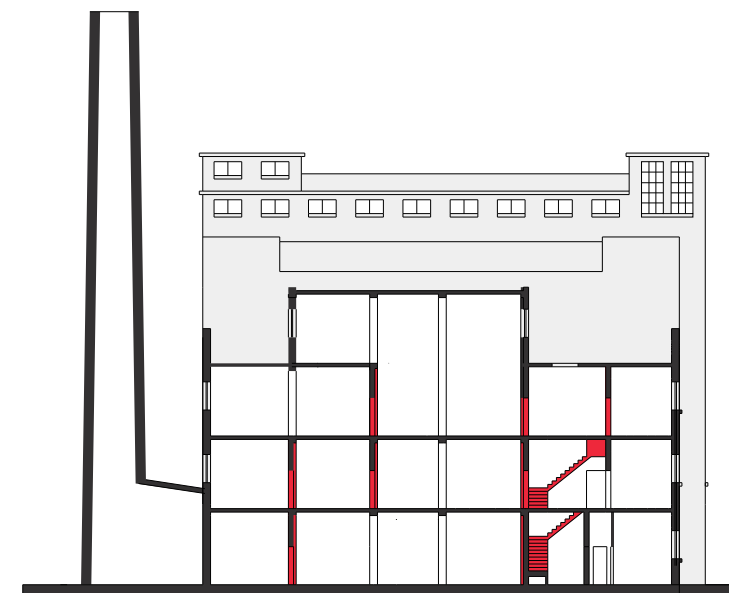
First floor plan



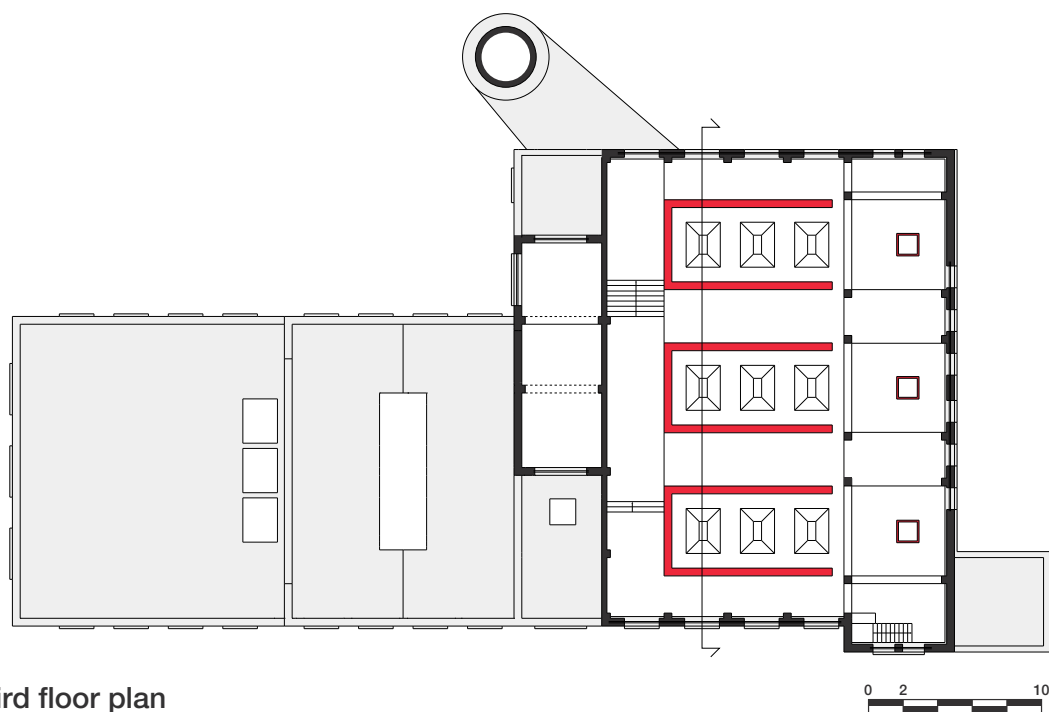
Section 2 Turbine hall



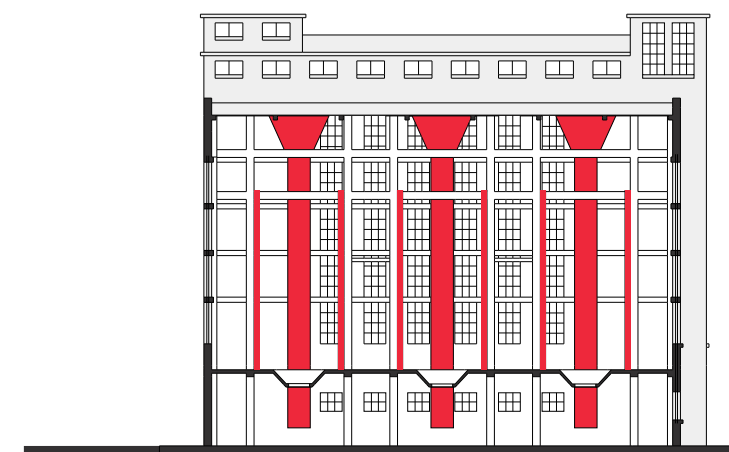
Second floor plan



Section 3 Auxiliary equipment area

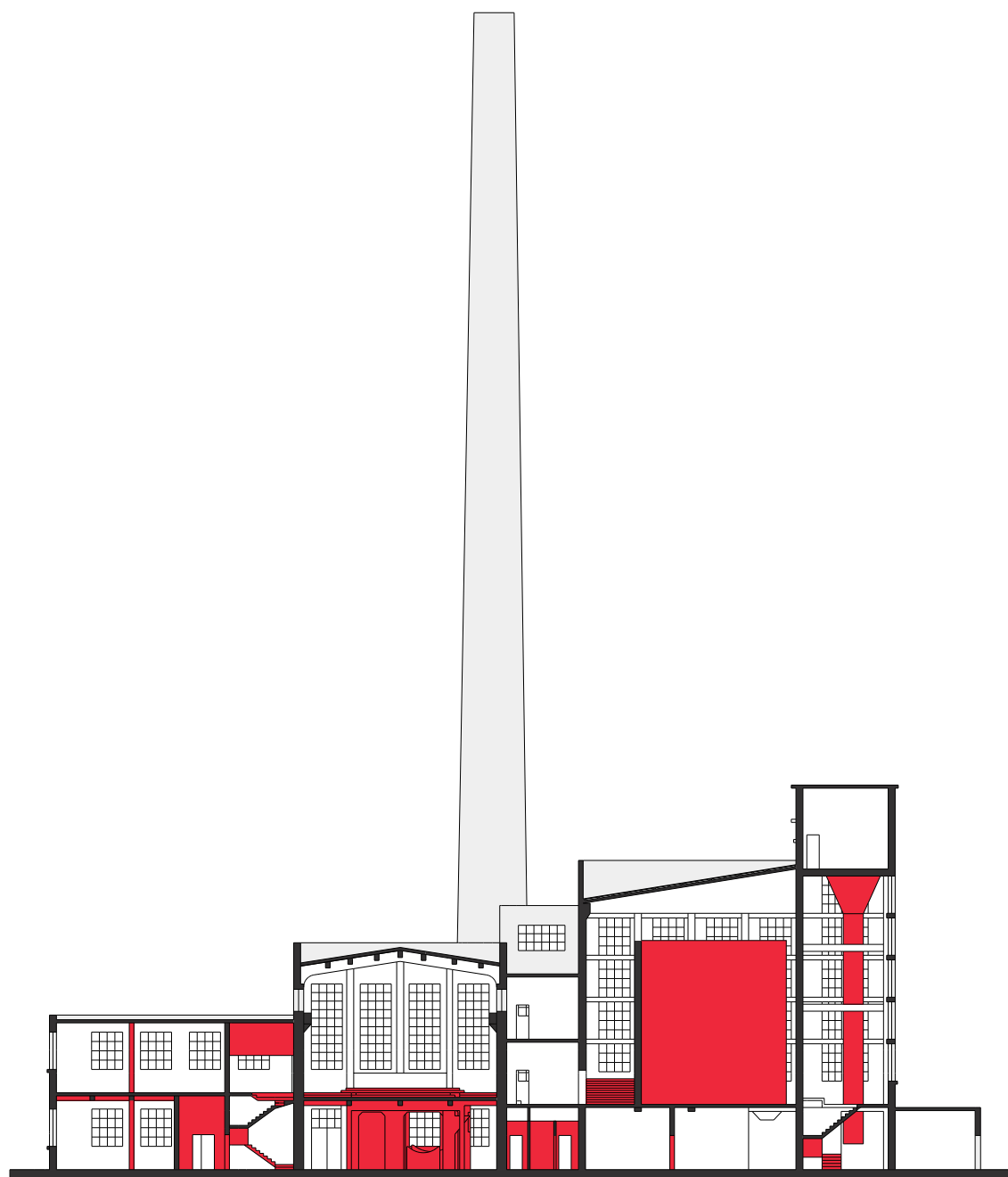


Third floor plan

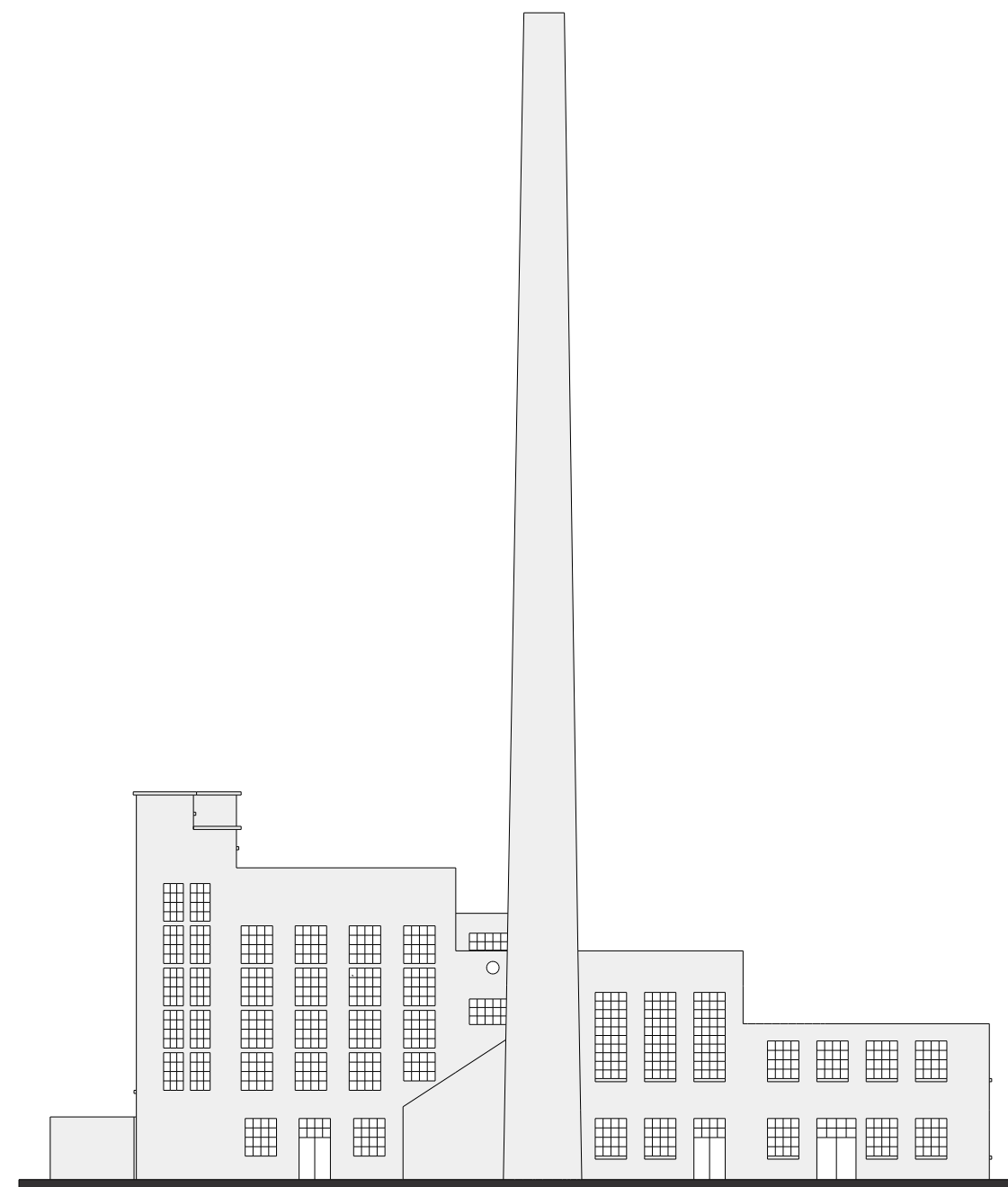


Section 4 Steam boilers hall





Longitudinal section



South-West facade

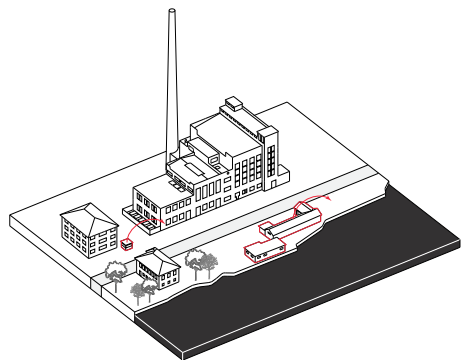
The project starts with the analysis of the results that were obtained during the interviews, the services that are present in the city of Varna and the existing structures located at the site plot (warehouses, garages, abandoned residential buildings). There was the necessity to find the right new functions to be performed outside the building in order to increase the attendance in this former industrial area. One of the main concepts for the outdoor space is related to the position of the building close to the waterfront. In fact, the main idea is based on the creation of public space in front of the new public building (the former power station). All the unused building were removed in order to clean the waterfront and to create a direct connection between the former industrial building and the waterfront. The new public space is accessible by the streets and by the sea, due to the presence of docks in front of the building.

In order to increase as much as possible the attendance of this industrial area, a new program was also added to the area located right behind the station. The area can be subdivided in functional subareas that includes: art hostel (for the artists in residence); residential program inside the former residential buildings in order to restore their original program; car parking; sport area that can adapted for different uses such as open-air concert, festivals or flea markets; garages that can be rented and then used for different purposes

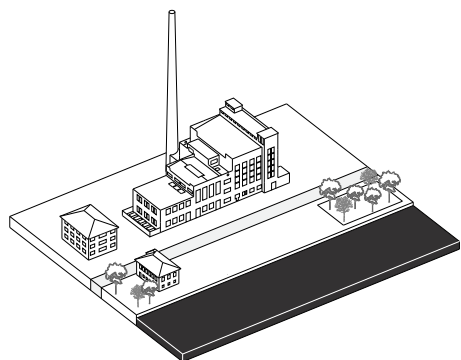
(bike repair workshops, fishermen's workshop, etc.). All the existing buildings and warehouses located on the South-West side of the lot were preserved: the biggest one hosts a market where the local producers can sell or exchange their goods; the two smaller warehouses host a brewery and a club.

While the concept of flexibility is also extended inside the building, while outside it has been tried to preserve as much as possible its original and rationalist appearance. In order to create flexible spaces inside the building, all the existing (unused and damaged structures) were demolished and subsequently, there were substituted with new structures that are inherent to the new program that will take place inside the former power station. In order to explain the project development, also in this case, the building will be subdivided into three functional subareas. The area one (oriented toward South-West) will host a space for rent where local artists, craftsman, musicians, designers etc. can adapt their working space by themselves. The concept of flexibility was easily reached thanks to the use of simple structure (composed of pillars, beams, and slabs) where space is subdivided by removable panels. This gives the possibility to adapt the rented space to the new function that will take place inside it (single room: 22 square meters, double room 44 square meters, triple room 66 square meters). Moreover, it was also attempted to create an access

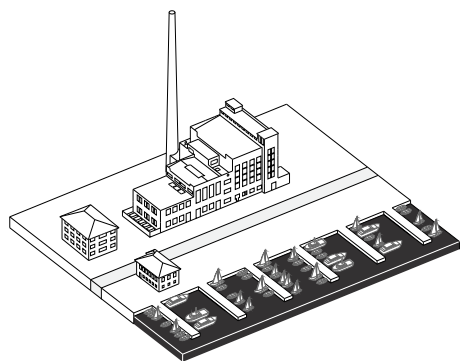




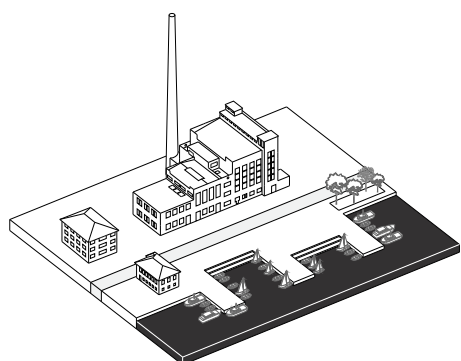
**Current organisation of waterfront area**



**Public space in front of public building**



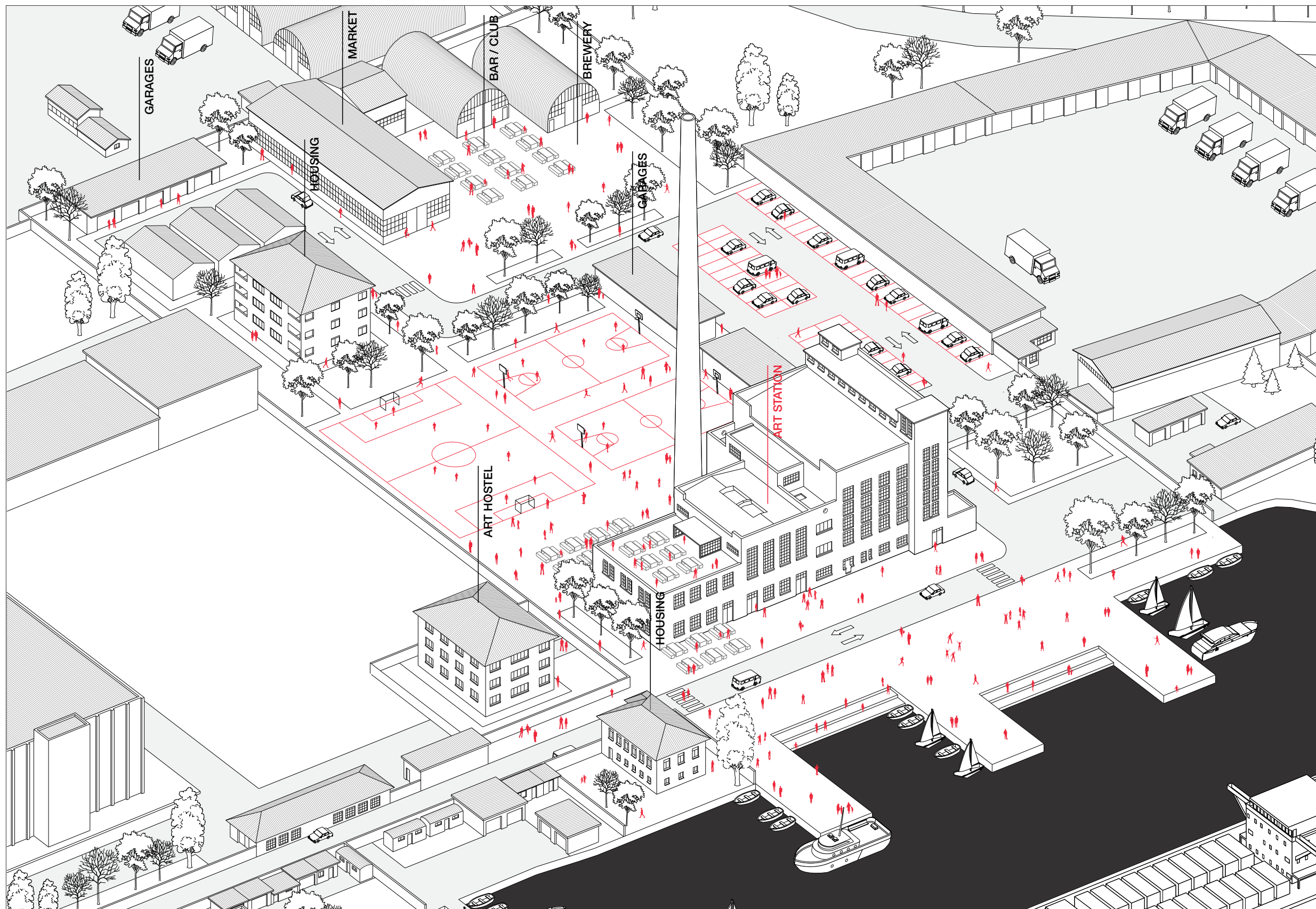
**Docks close to the waterfront area**



**Mix between public space and docks**

point to the rooftop of this area, where an open-air venue was placed. From this point of the building, the visitors could admire the skyline of the city, as well as to enjoy the vibrant atmosphere of the transformed industrial area. The area two has similar characteristics as subarea one. The unused structures were demolished in order to create a bigger space without obstacles where a new program will take place. On the ground level of this subarea is located the entrance hall that is also used as a horizontal distribution point, due to its position right in the middle of the building. On the first floor will be located a performing space that can host a different type of events such as theater, film screening, concerts, and presentations. Also in this area, the main attempt was to preserve the architectural aspects of the building without affecting them. This result was easily reached thanks to a flexible structure that can be removed in the future, in case there will be the necessity to change the program inside this space. Also in this case area, three will be divided into two subareas. Subarea one will be mainly used for the vertical distribution and services, due to the fact that this area hosts the staircases and elevator, as well as wash closets and equipment area that serves both the theatre and the concert hall located next to it. The subarea two, located on the North-East side of the building, will host an exposition hall on the ground floor and venue hall and renting space on the first

floor. Thanks to the big space without the presence of any obstacles this hall can be used for different purposes: a concert, exhibitions, performances, and presentations can be held there. In this hall, the already present colossal reinforced concrete structure (composed of pillars and beams) were preserved and subsequently improved in order to obtain more space inside the hall. This additional space will host two levels where rooms with different dimensions can be rented for different purposes. The concept of flexibility was adopted also here, thanks to the use of removable panels that subdivide the area into smaller rooms (30 square meters, 40 square meters, 70 square meters, 80 square meters, 110 square meters, 120 square meters). On the top of this structure will be located a club with a panoramic view. Another important issue that concerns the realization of this project is its feasibility. It is very important to underline that the project will be executed step by step. The first areas that will be adapted to the new functions are the areas where there is the necessity of minimum intervention (the concert hall and the exposition hall under it). Once when this spaces will open to the public and start generating cash flow, the adaptation and the development of the rest of the building will take place.

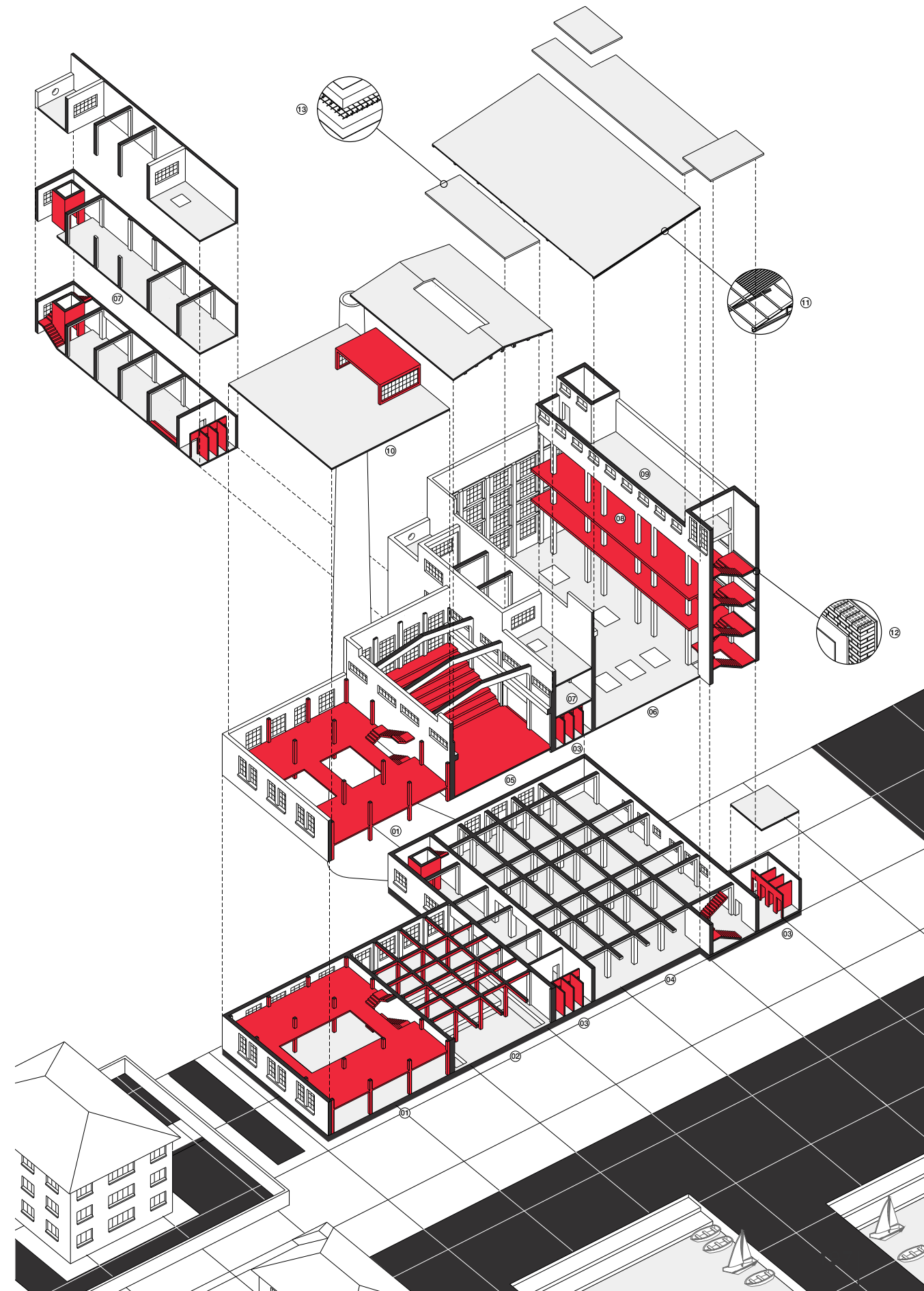


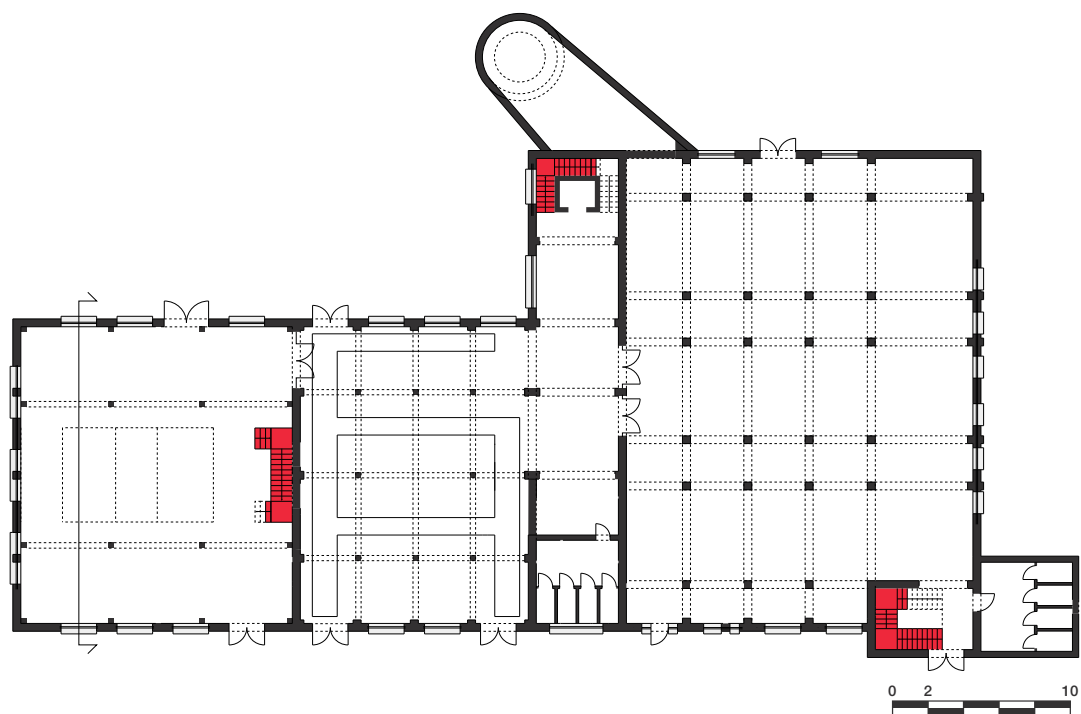


## Legenda

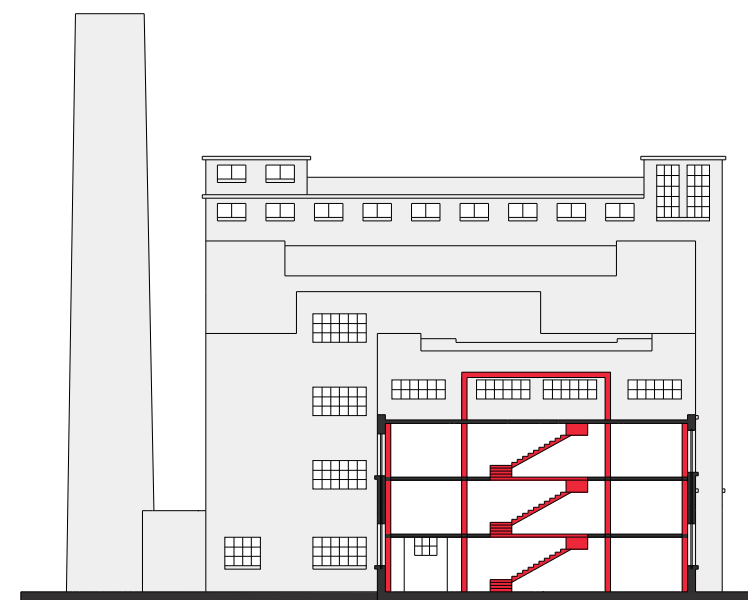
01 Space for rent (area 1)	650 sqm
02 Foyer / distribution point	210 sqm
03 Wash closed	20 sqm
04 Exposition hall	490 sqm
05 Theatre / Cinema	210 sqm
06 Concert hall	500 sqm
07 Equipment area	100 sqm
08 Space for rent (area 2)	260 sqm
09 Coffee / Bar	130 sqm
10 Rooftop club	150 sqm

- 11 External wall
- 12 Steam boilers hall roof covering
- 13 Auxiliary equipment area roof covering

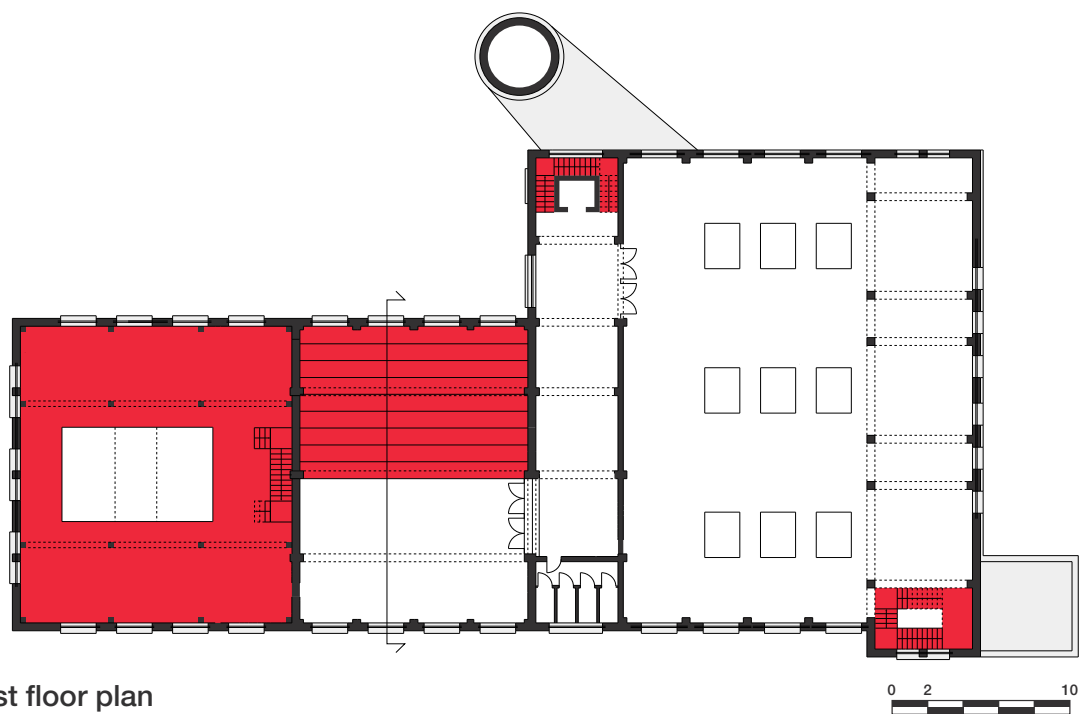




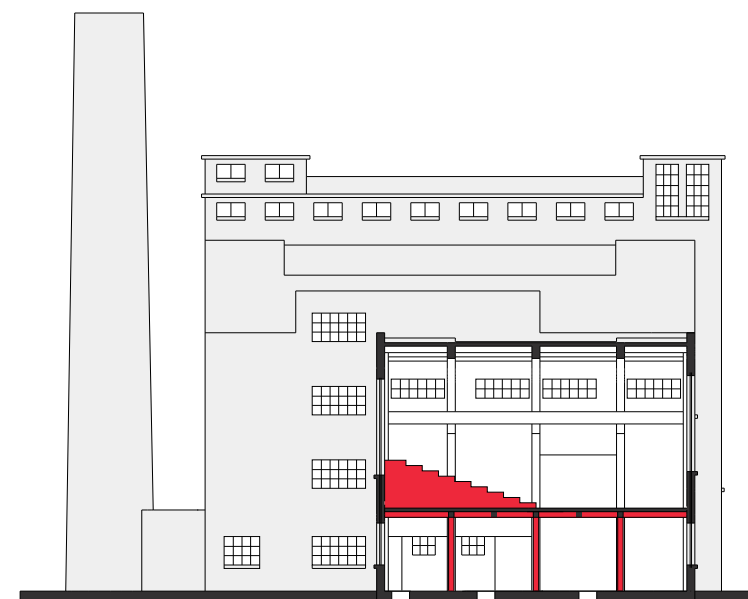
Ground floor plan



Section 1 Coal deposit

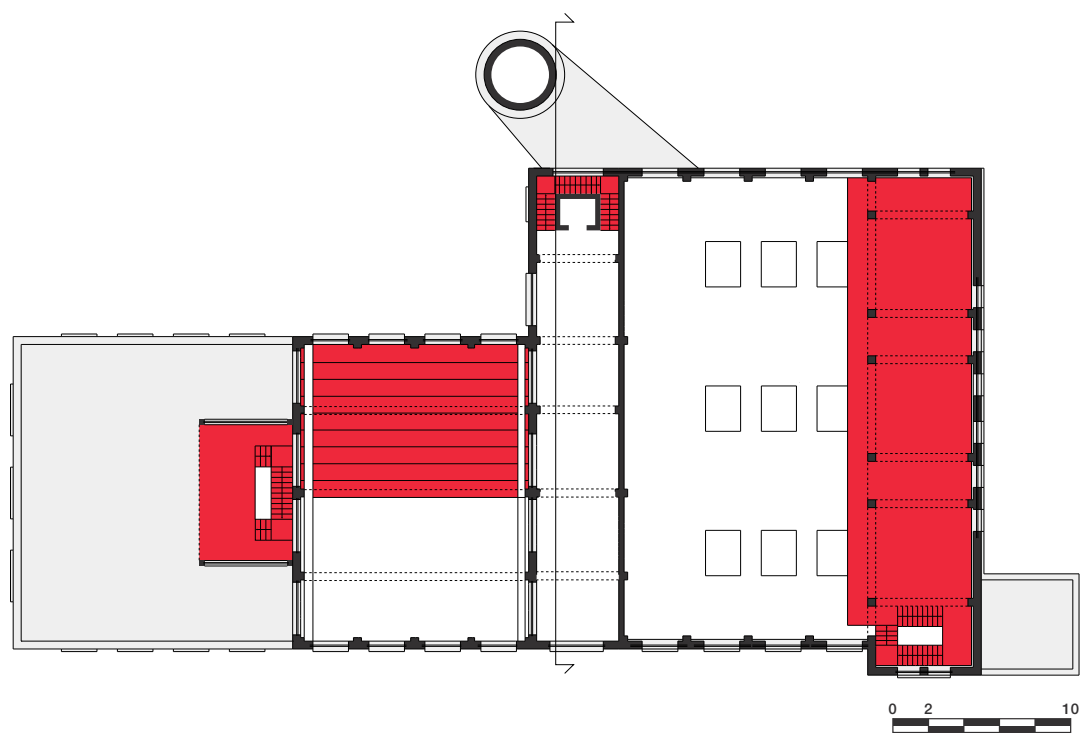


First floor plan

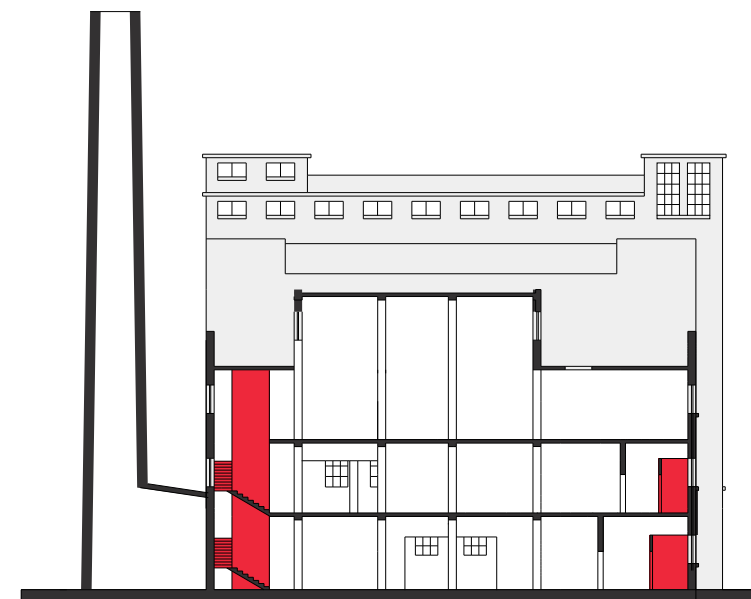


Section 2 Turbine hall

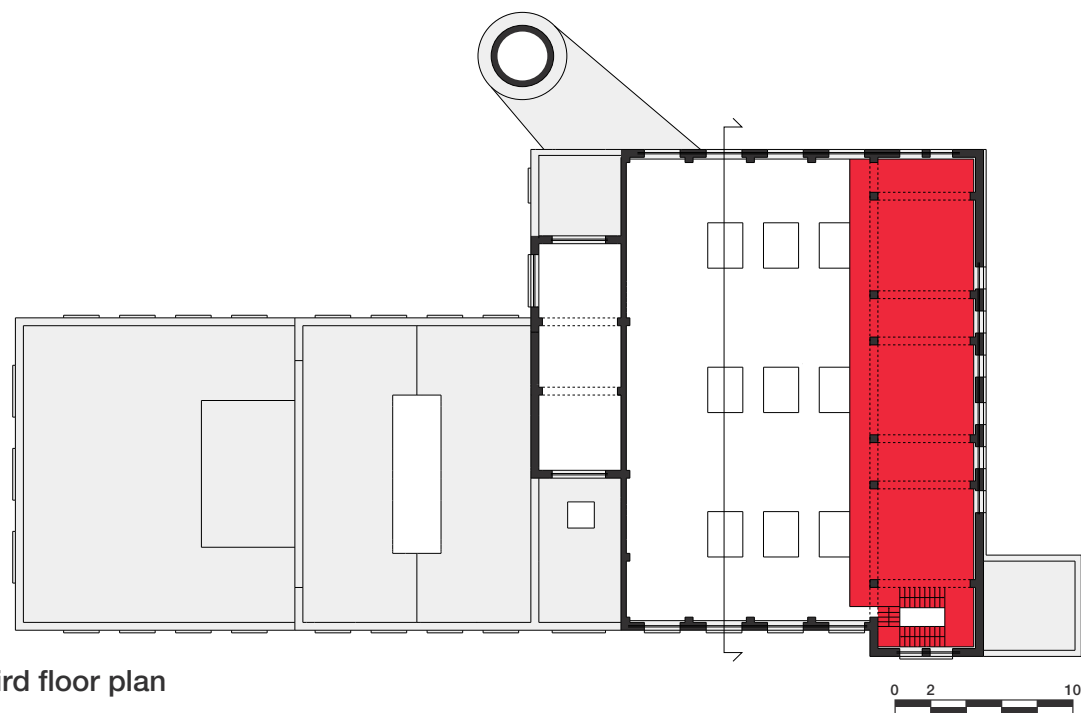




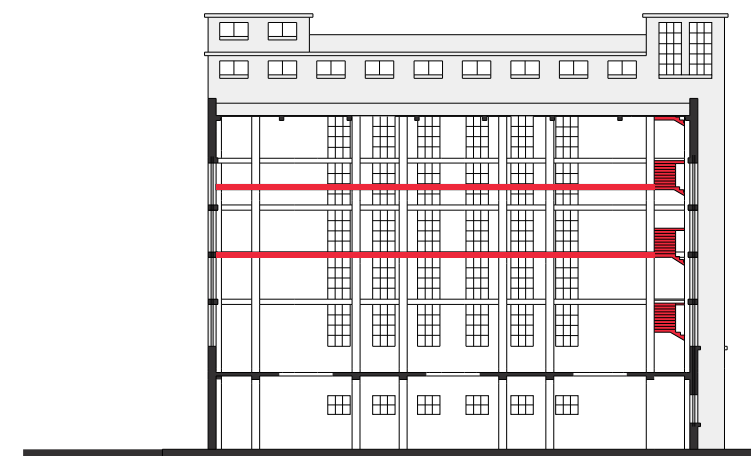
Second floor plan



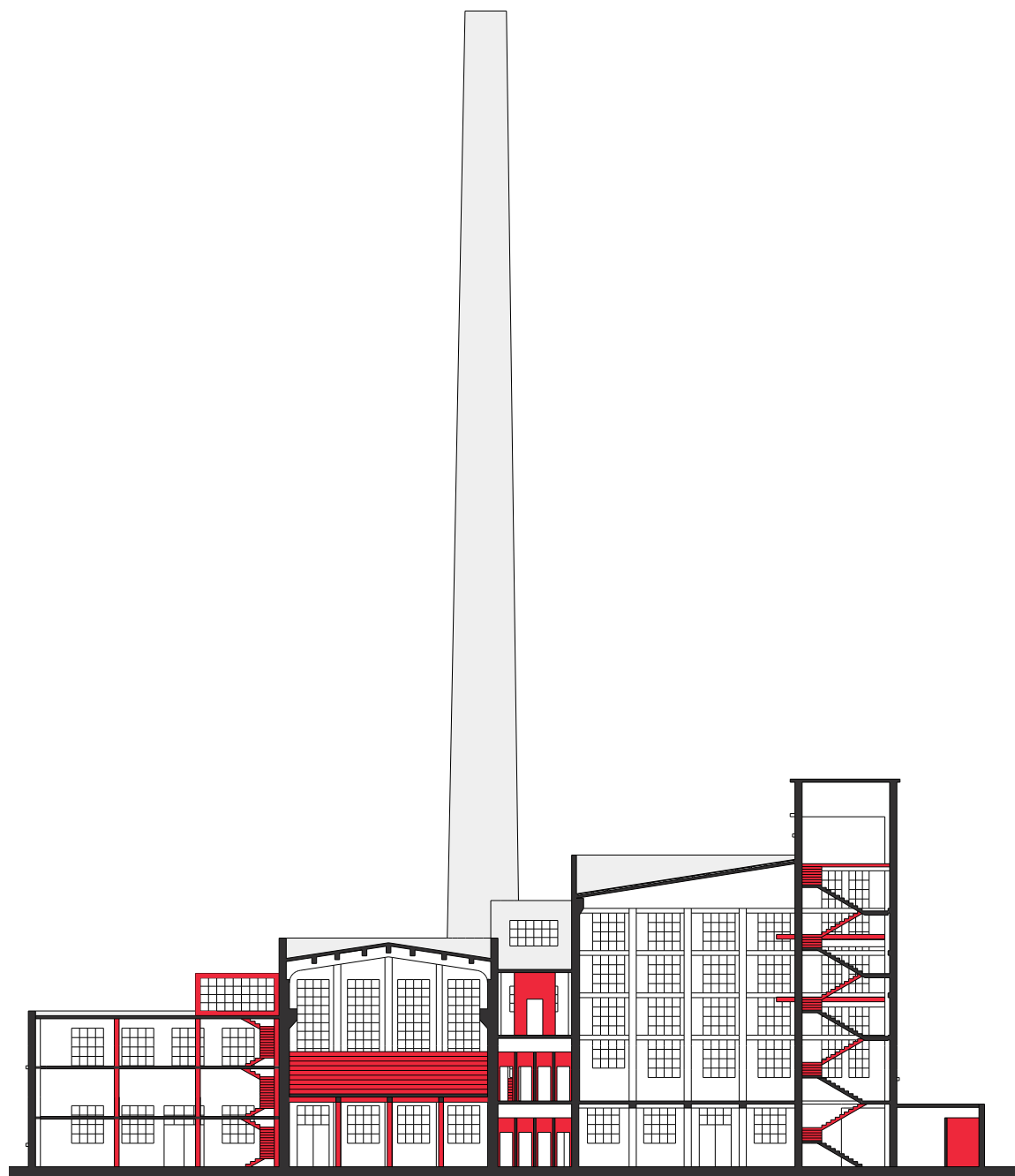
Section 3 Auxiliary equipment area



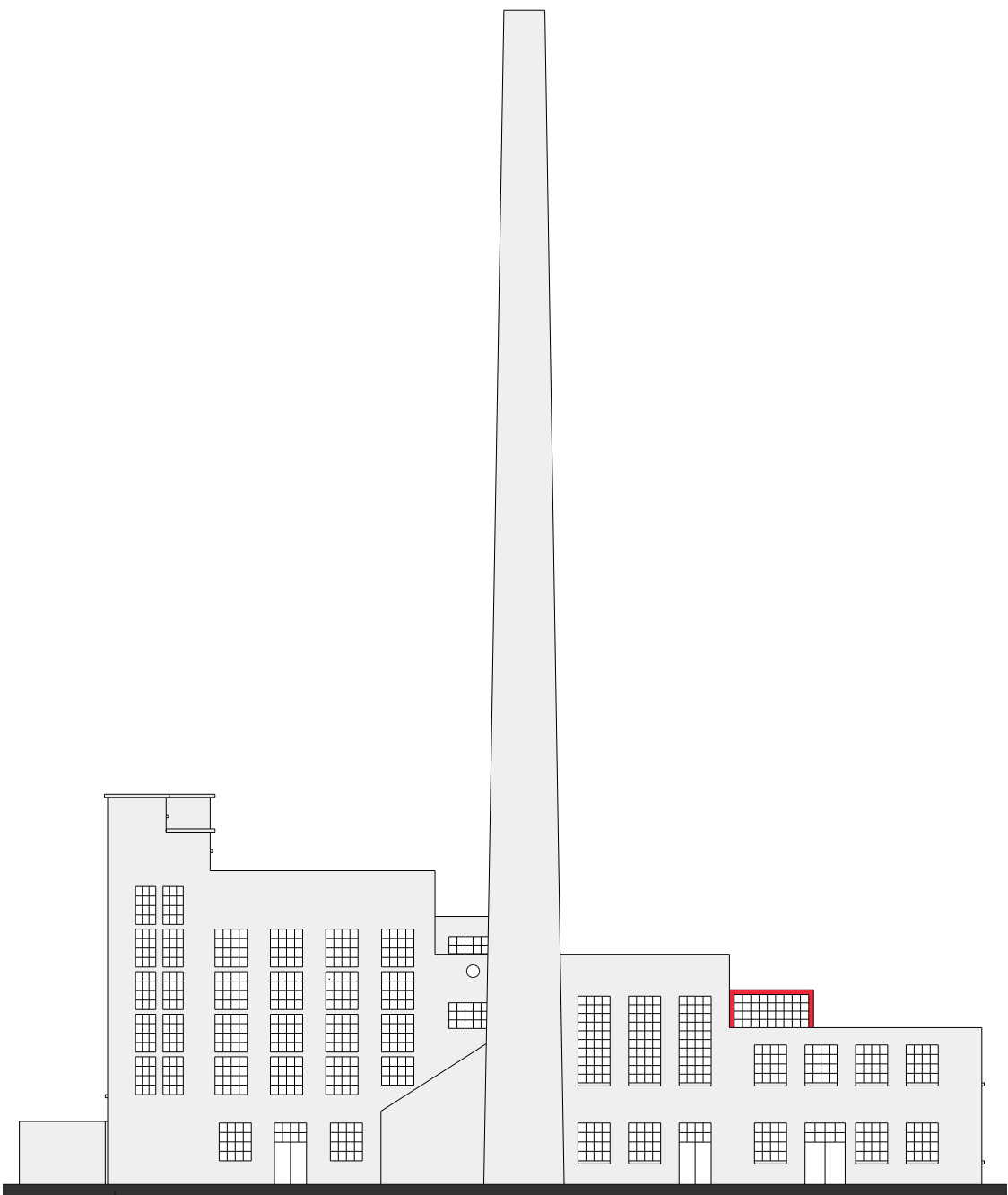
Third floor plan



Section 4 Steam boilers hall



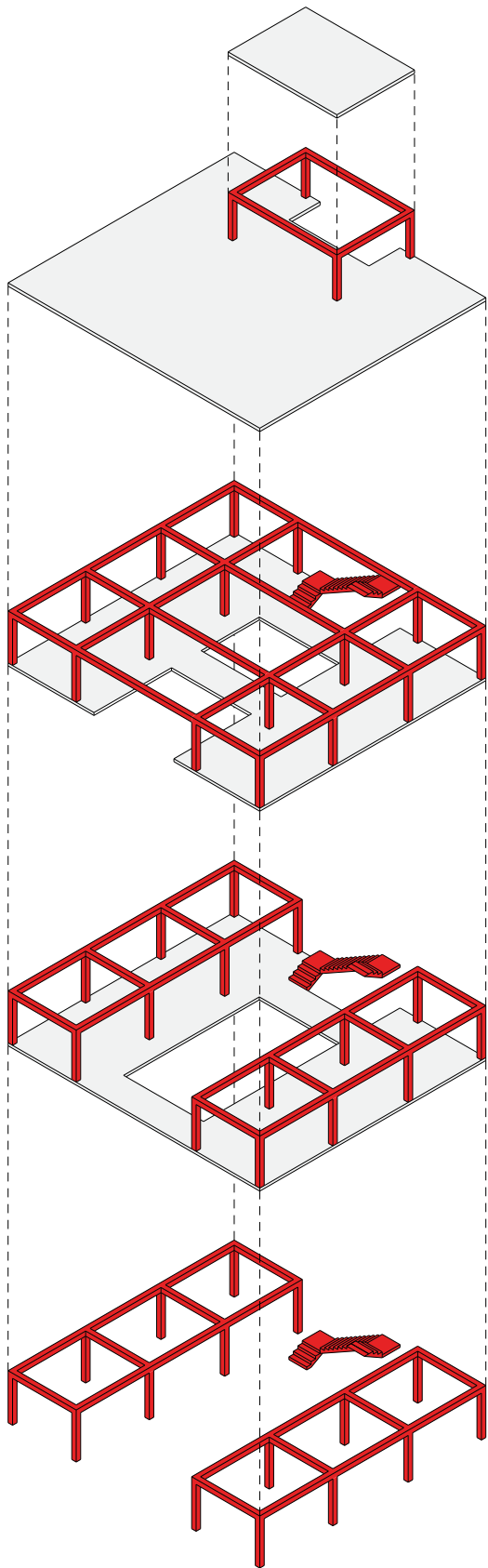
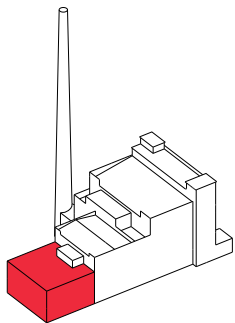
Longitudinal section



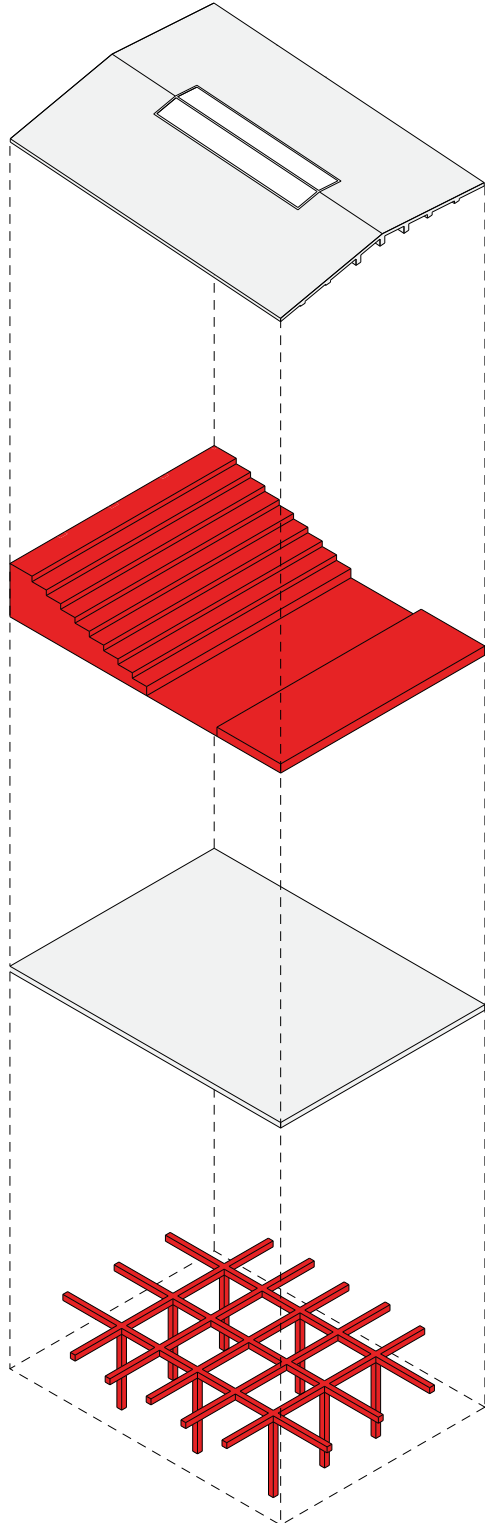
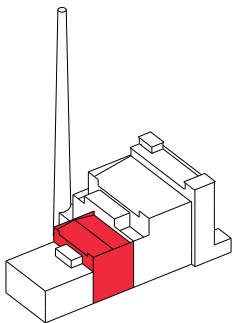
South-West facade



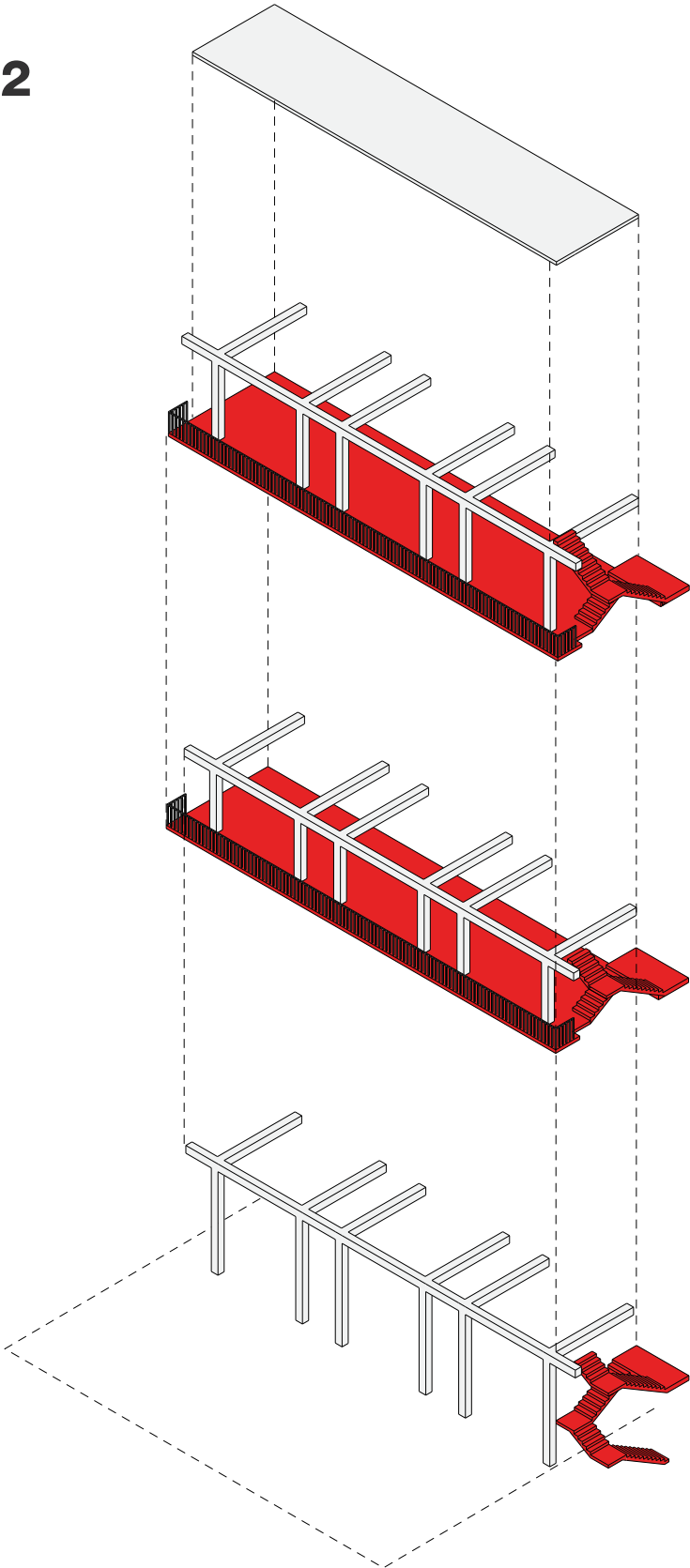
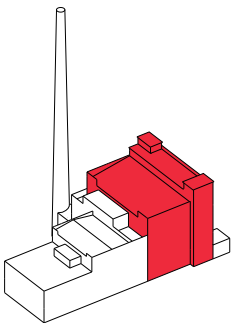
# Coffee / Bar Space for rent 2



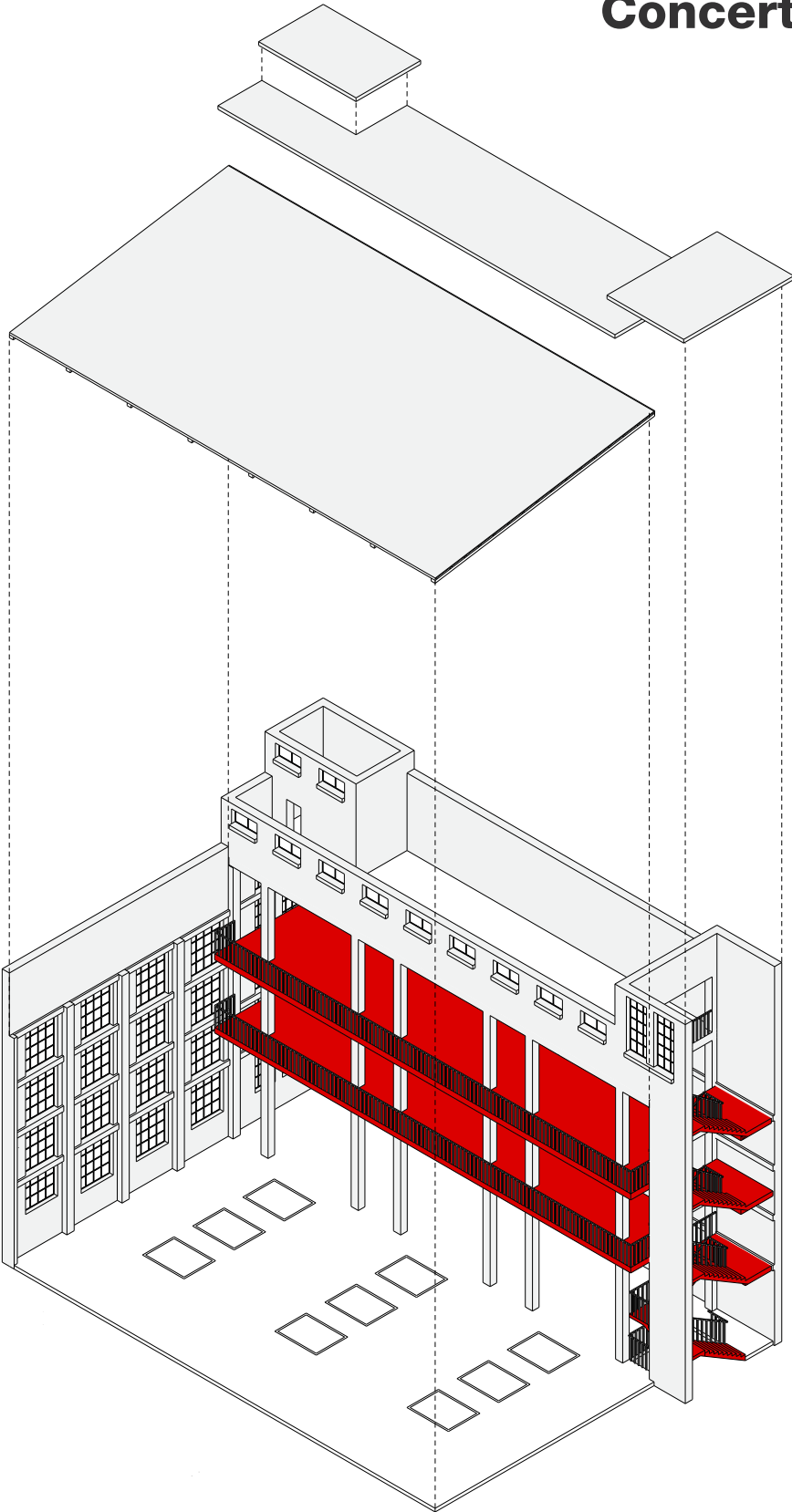
# Theatre / Cinema Foyer



# Coffee / Bar Space for rent 2

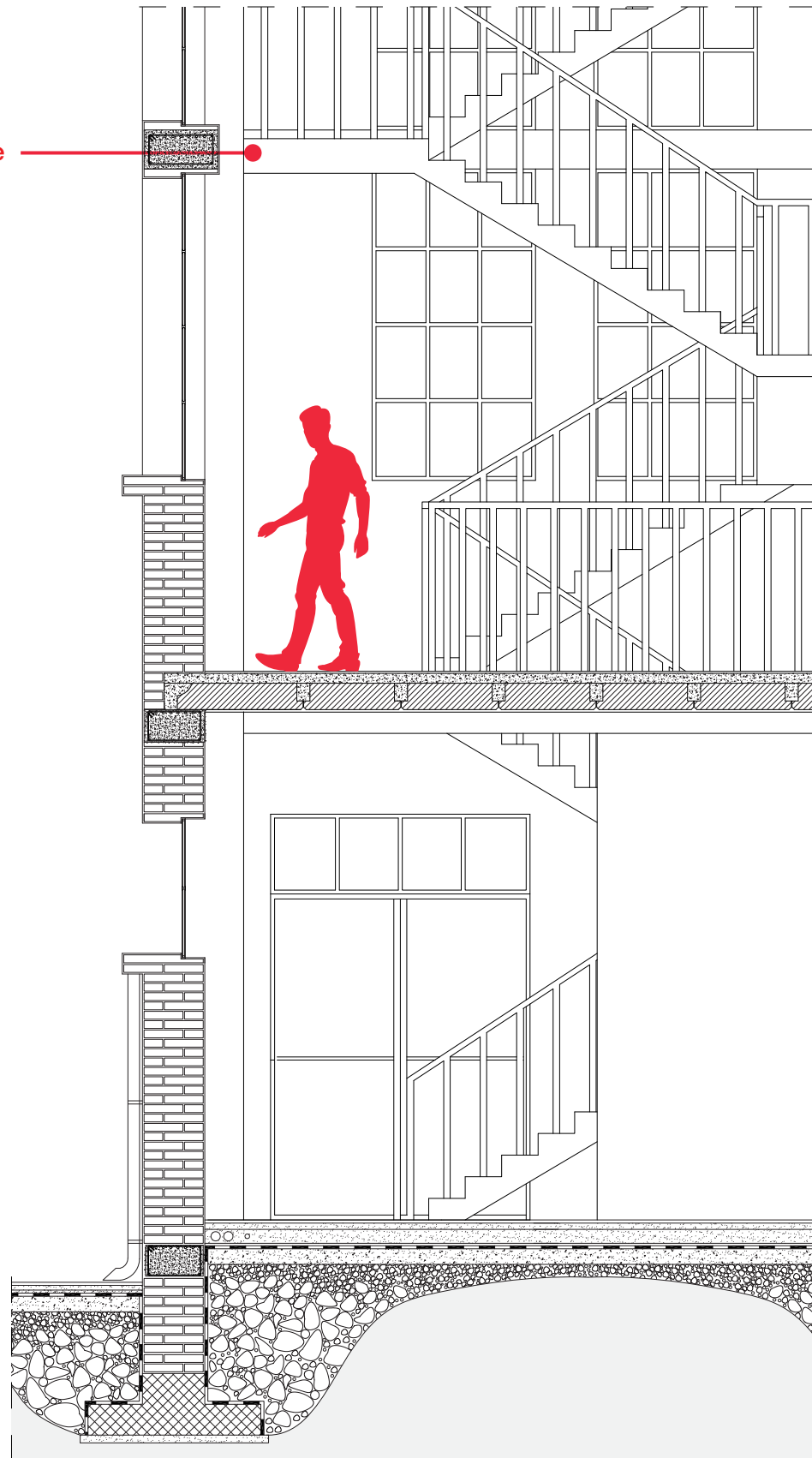


# Concert hall





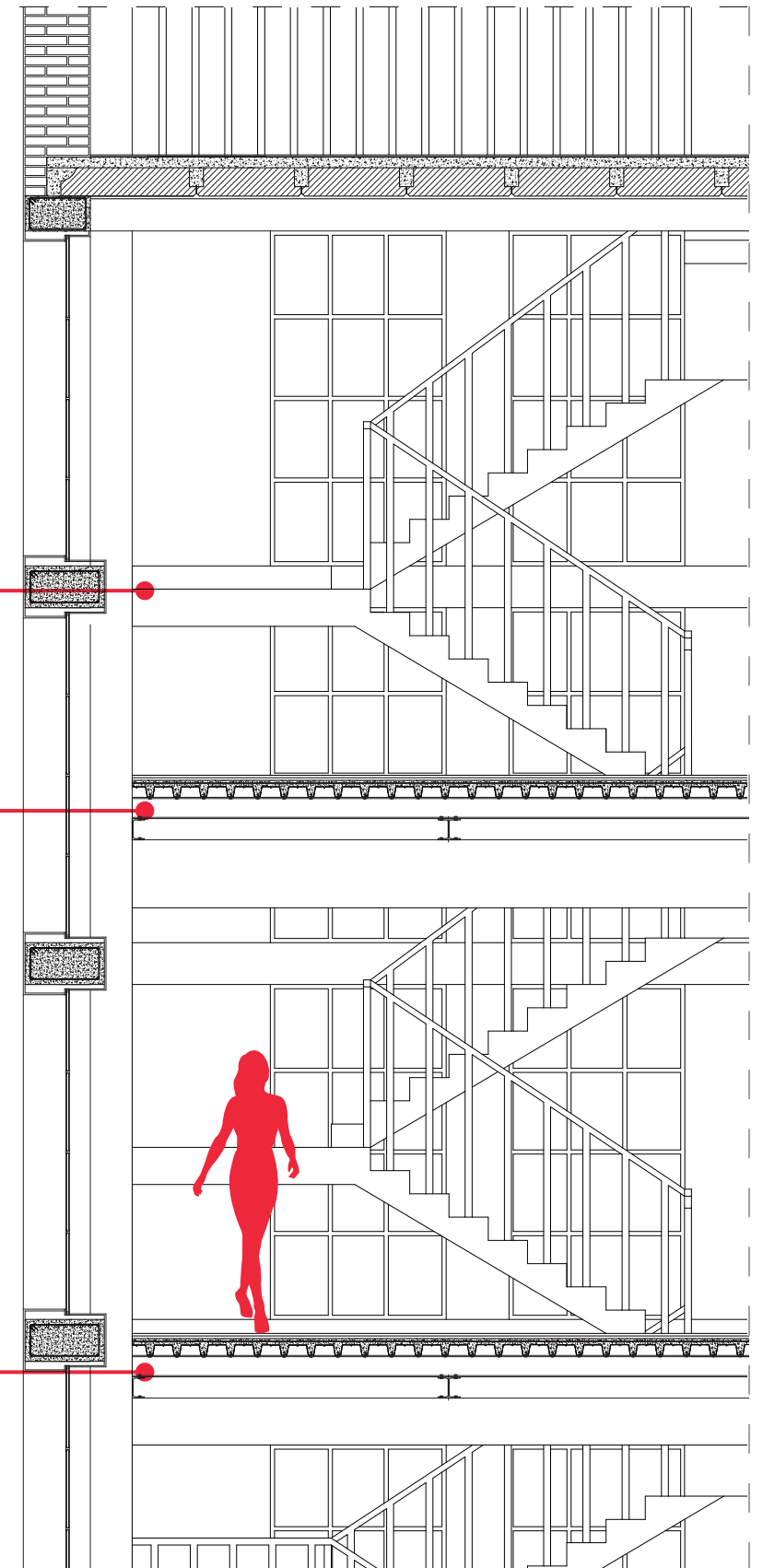
New staircase



New staircase

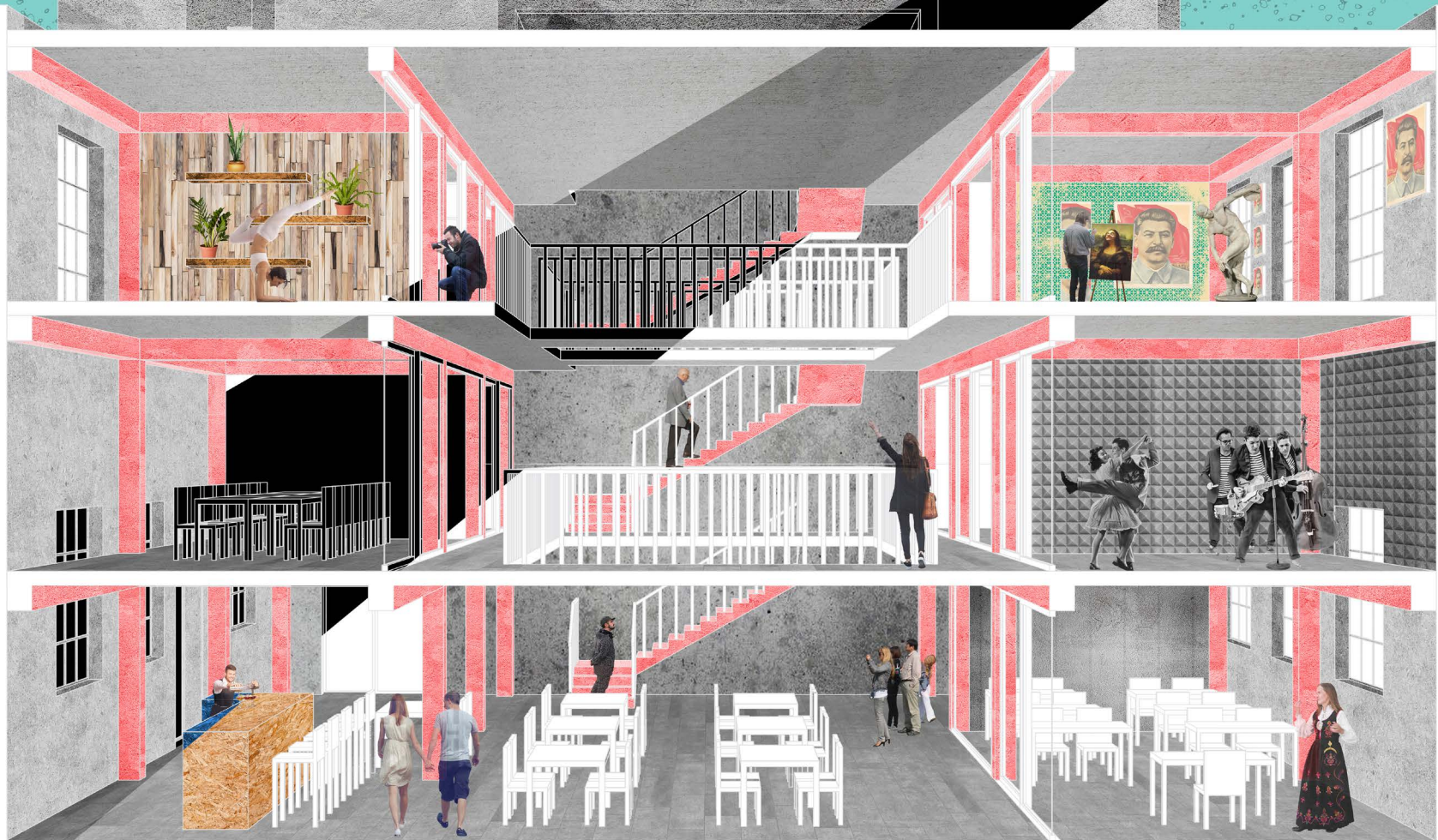
Additional slabs

Additional slabs

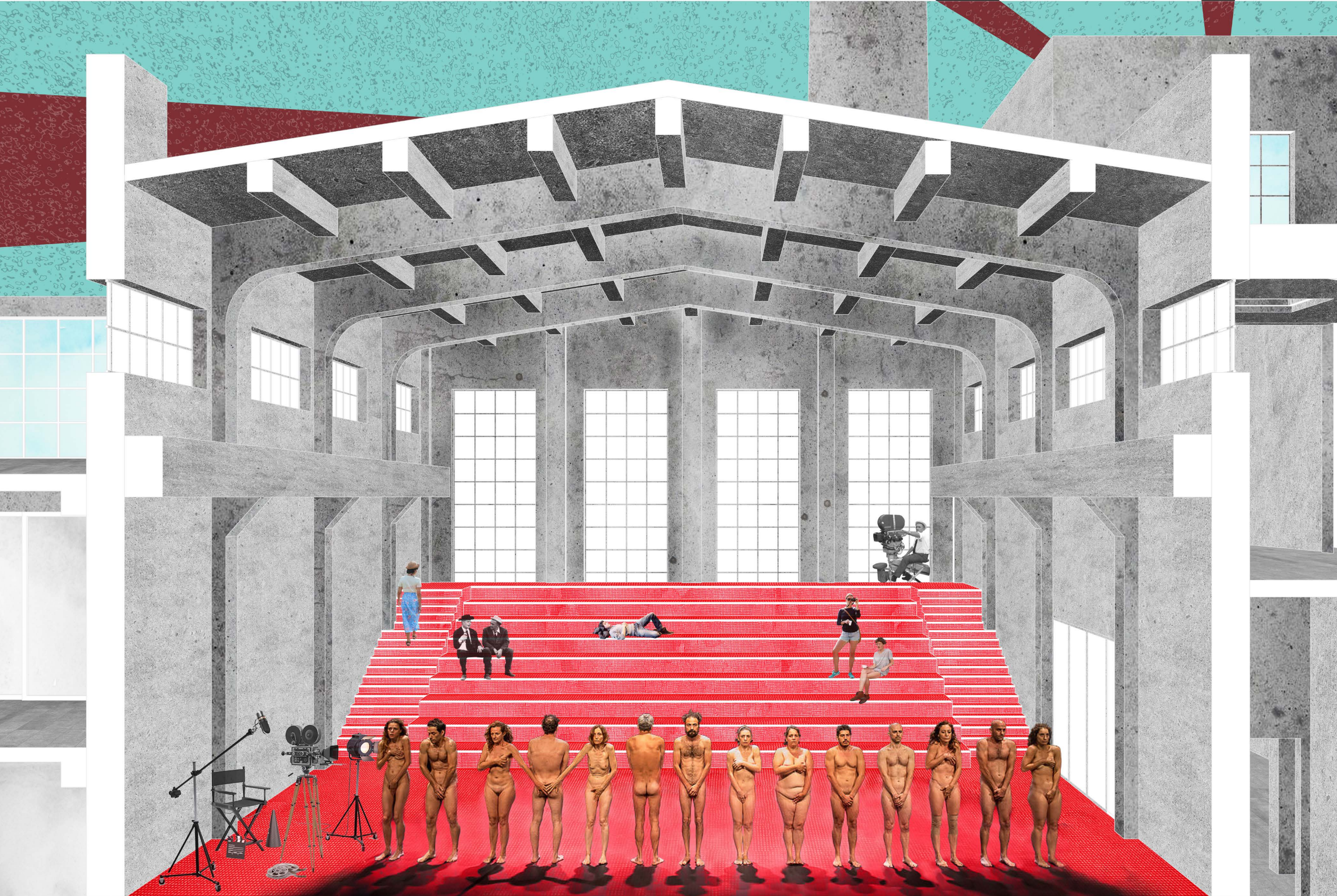


















# Conclusions



## Critical issues

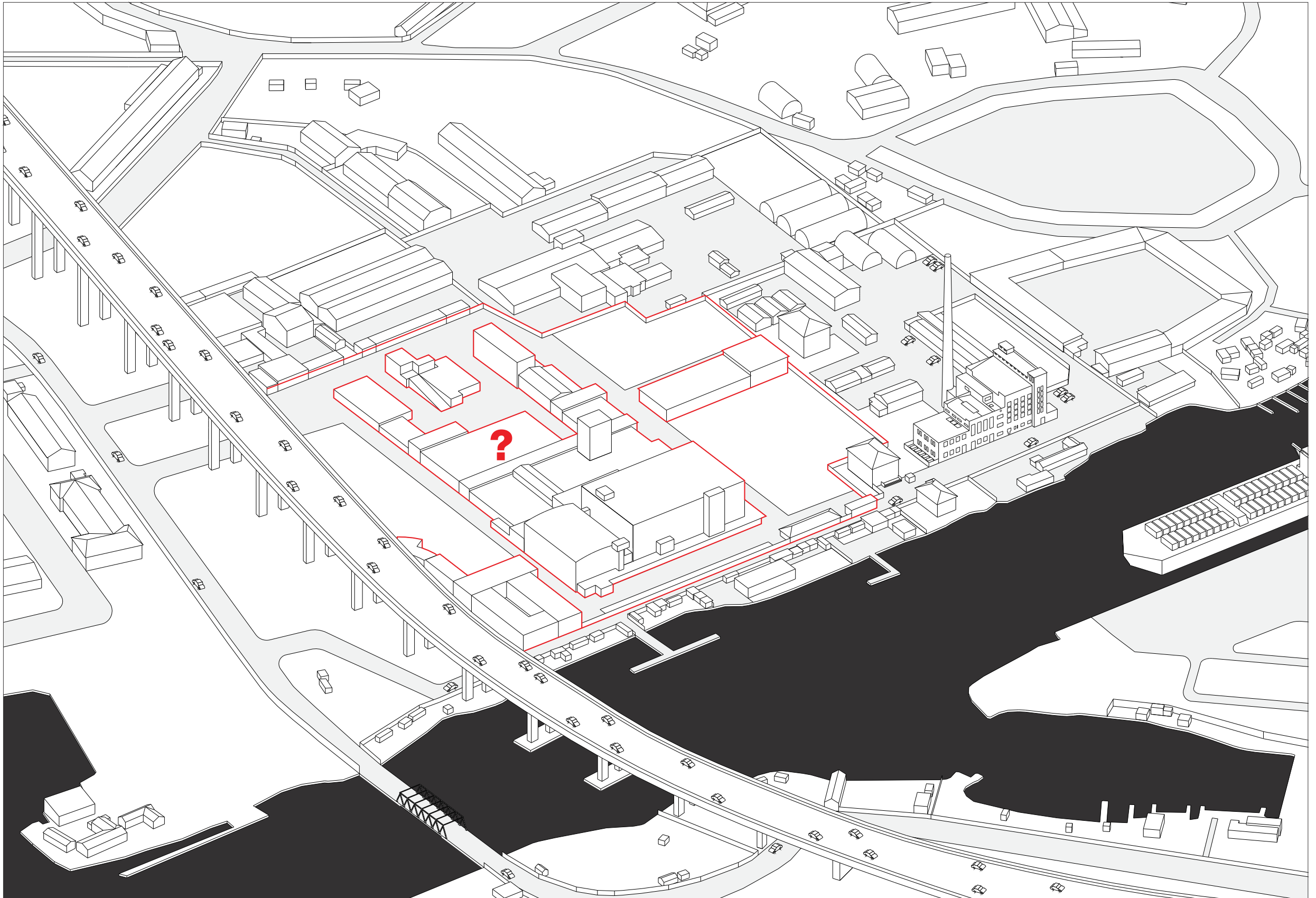
Adaptive reuse strategy can provide a new purpose to an existing building by changing its program and performance. Nevertheless, there are some problems and limitations related to this rapidly expanding phenomena in architecture.

Some of them are directly related to: the physical restrictions caused by the existing structural system of the building (slabs, columns, walls); economic aspects related to the costs of conservation, as well as to the high cost of maintenance and repair caused by the deterioration of the structure; social aspects related to the history and the perception of the local people that are somehow attached to the place; complexity and technical difficulties related to the incompatibility of new materials with existing ones, shortage of local workers skilled in preservation works, refurbishment techniques and innovative solutions; lack of awareness on the opportunities which are created thanks to the adoption of adaptive reuse strategy.

## Future development

For the past thirty years, the developed countries from Western Europe have been paying more and more attention to the reuse and adaptation of former industrial buildings. Unfortunately, in Bulgaria has been done not enough in the reuse of former industrial structures and complexes. The reuse of industrial built heritage is not only a renewal of buildings but refers to culture, society, and economy.

An adaptive reuse strategy could be the only one possible solution in order to preserve the former power station Yanko Kostov in Varna. With the adoption of a new program, which in this case is related to the creation of an artistic hub open to the public, it becomes possible to obtain multiple benefits. The building could be a place for the different type of activities, education, and entertainment for both local people of Varna and visitors. The former industrial building can give a great opportunity for the professional development of artists and performers, securing them a place where they can exhibit and perform. The new artistic hub could become an attractive and regularly visited place, bringing back the spotlight on one of the first power stations of the city of Varna. On the other hand, this adaptive reuse project could serve as a catalyst for the future regeneration of the surrounding abandoned buildings.





# Bibliography

- Aleksandrov Y., Bulgarian industry afret the World War I, ( Българската индустрия след Първата Световна Война), Paper, University of Veliko Tarnovo, Veliko Tarnovo, 2013
- Baum M., Christiaan K., City as loft: Adaptive Reuse as a Resource for Sustainable Urban Development, Zurich, gta Verlag, 2012
- Bruttomesso R., Water and Industrial Heritage: The Reuse of Industrial and Port Structures in Cities on Water, Venice, Marsilio, 1998
- Camocini B., Adaptive reuse: strategie di conversione d'uso degli interni e di rinnovamento urbano, Milano, FrancoAngeli, 2016
- Carter D.K., Remaking Post-Industrial Cities: Lessons from North America and Europe, New York, Routledge, 2016
- Cunha Rodrigues D. S., Transformation of Industrial Waterfronts: An investigation between Amsterdam and Sines, Master thesis, Tecnico Lisboa, Lisbon, 2016
- Dimitrov P., Industrialization of Bulgaria after the World War II, (Индустриализацията на България след Втората Световна Война), Paper, Academy of Economics D. A. Tsenov, Svishtov, 2014
- Dryanovski B., Istoriya na Varna 1878 - 1944, ( История на Варна 1878 - 1944), Varna, Slavena, 2016
- Dryanovski B., Kmetovete na Varna 1923 - 1944, (Кметовете на Варна), Varna, Slavena, 2010
- Dryanovski B., Kmetovete na Varna 1944 - 1990, (Кметовете на Варна), Varna, Slavena, 2016
- Kacarski G., Varna: Arhitekturi pametnici, Istoriya, Lichnosti, (Варна: Архитектурни паметници, История, Личности), Varna, MS, 2016
- Kolektiv, Razvitiye na industriyata v Bulgariya, (Развитие на индустрията в България), Sofia, Nauka i izkustvo, 1990
- Kolektiv, Varna i varnenska oblast: Regionalna enciklopediya na Bulgaria, (Варна и варненска област: Регионална енциклопедия на България), Sofia, Trud, 2009
- Marini S., De Matteis F., La città della post-produzione, Roma, Nuova Cultura, 2011
- Mellegers E.J., De Maashavensilo: cultuurhistorische verkenning, Rotterdam, 2010
- Mellegers E.J., Toekomstvisie Graansilo Maashaven, Rotterdam, 2008
- Mihelic B., Stara Elektrarna: Zgodnja industrijska arhitektura na Slovenskem, Vodnik po arhitekturi, Ljubljana, ZVKDS, 2002
- Paskov E., Kacarski G., Varna: Arhitektura. Arhitekti, (Варна: Архитектура. Архитекти), Varna, MS, 2009
- Popov B., Turisticheski putevoditel Varna (Туристически пътеводител Варна), Varna, Slavena, 2005
- Robiglio M., RE-USA: 20 American Stories of Adaptive Reuse: A toolkit for Post-Industrial Cities, Berlin, Jovis Verlag, 2017

- Robiglio M., The adaptive reuse toolkit: How Cities Can Turn their Industrial Legacy into Infrastructure for Innovation and Growth, German Marshall Fund of the United States, 2016
- Stoyanov P., Varna mezhdu dve svetovni vojni, (Варна между двете световни войни), Varna, Durzhavno Izdatelstvo Varna, 2003
- Stoykova D., The beginning of the industrialization in Bulgaria and protection of the industry, (Начало на индустриализацията в България и държавната протекция за родната индустрия), Paper, University of Economics Varna, Varna, 2008

# Sitography

- <http://agile-city.com/agile-city-research/cultural-regeneration-ndsm-self-made-city-in-amsterdam/> (2018-09-25)
- <http://eurotribe.com/rog-factory-ljubljana/> (2018-09-20)
- <http://fabrikacci.ru/en/> (2018-09-27)
- <http://ftb-october.ru/history.html> (2018-09-28)
- <http://socbg.com/2014/04> (2018-11-14)
- <http://teh.net/members/cci-fabrika/> (2018-09-27)
- <http://teh.net/members/halle-14/> (2018-09-25)
- <http://teh.net/members/kaapelitehdas/> (2018-09-20)
- <http://www.artfactories.net/La-Friche-la-Belle-de-Mai.html> (2018-09-28)
- <http://www.bunker.si/eng/the-old-power-station> (2018-09-21)
- <http://www.creativefactory.nl/over-ons/geschiedenis/> (2018-10-08)
- <http://www.culturefighter.eu/centres-factories-incubators-amp-initiatives/how-they-were-set-up/what-is-the-cable-factory-> (2018-09-20)
- <http://www.evadeklerk.com/en/film-ndsm-1945-2007/> (2018-09-25)
- <http://www.evadeklerk.com/en/ndsm-werf/> (2018-09-24)
- <http://www.halle14.org/info/english-information.html> (2018-09-25)
- <http://www.lafriche.org/en/history> (2018-09-28)
- <http://www.maassilo.com/geschiedenis/> (2018-10-07)
- <http://www.marseille-tourisme.com/fr/decouvrir-marseille/les-incontournables/la-friche-belle-de-mai/> (2018-09-28)
- <http://www.ndsm-werfmuseum.nl/de-werven/ndsm> (2018-10-09)
- <http://www.ndsm.nl/en/story/artikel-geschiedenis-ndsm-loods/> (2018-09-25)
- <http://www.spinnerei.de/from-cotton-to-culture-150.html> (2018-09-25)
- <http://www.waterfrontsnl.com/project-amsterdam-ndsm-shipyard/> (2018-09-25)
- <http://www.znam.bg/com/action/showArticle?enclD=628&article=1894799161> (2018-11-15)
- <http://zal-lj.splet.arnes.si/2017/12/01/arhivalija-meseca-december-2017/> (2018-09-21)
- <https://bg.wikipedia.org/wiki/%D0%92%D0%B0%D1%80%D0%BD%D0%B0> (2018-10-17)
- [https://bg.wikipedia.org/wiki/%D0%98%D1%81%D1%82%D0%BE%D1%80%D0%B8%D1%8F\\_%D0%BD%D0%B0\\_%D0%92%D0%B0%D1%80%D0%BD%D0%B0](https://bg.wikipedia.org/wiki/%D0%98%D1%81%D1%82%D0%BE%D1%80%D0%B8%D1%8F_%D0%BD%D0%B0_%D0%92%D0%B0%D1%80%D0%BD%D0%B0) (2018-10-17)
- [https://bg.wikipedia.org/wiki/%D0%9F%D0%BB%D0%B0%D0%D0%BE%D0%B2%D0%B0\\_%D0%B8%D0%BA%D0%BE%D0%BD%D0%BE%D0%BC%D0%B8%D](https://bg.wikipedia.org/wiki/%D0%9F%D0%BB%D0%B0%D0%D0%BE%D0%B2%D0%B0_%D0%B8%D0%BA%D0%BE%D0%BD%D0%BE%D0%BC%D0%B8%D)

- <https://dgmnewsservice.org/resistance/direct-action/occupation/slovenia-defending-anti-capitalist-autonomous-rog-factory/> (2018-09-20)
- <https://en.oxforddictionaries.com/> and <https://www.merriam-webster.com/dictionary>
- <https://nieuws.top010.nl/graansilo-maashaven-maassilo.htm> (2018-10-07)
- <https://tovarna.org/node/30> (2018-09-20)
- <https://www.bg-istoria.com/2012/11/24-1989.html> (2018-11-14)
- <https://www.bg-istoria.com/2012/12/18-40-50.html> (2018-11-15)
- [https://www.culture.si/en/Bunker\\_Institute](https://www.culture.si/en/Bunker_Institute) (2018-09-21)
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# Aknowledgement

I would like to thank my supervisors for their guidance and insight, for supporting me and helping me become more aware and more practical in a currently focal topic. Their knowledge and patience added a great value to my graduate experience.

I would also like to thank my wonderful family and my friends for helping me and for supporting me during the entire process of the dissertation and beyond.