

From the Green Belt to the Green Stripe of Timisoara
- Conversion as Urban Development Strategy -

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| | |
|------------------------------|-----|
| ■ Introduction | 4 |
| ■ Timisoara Today | 7 |
| ■ Historical Context | 17 |
| ■ Case Studies | 37 |
| ■ Analysis | 53 |
| ■ Project | 79 |
| ■ References | 114 |
| ■ Attachment | |
| Master Plan Solventul 1:2000 | * |
| Master Plan Ilsa 1:2000 | * |

The project approaches the theme-Conversion as urban development strategy- in the context of Reestablishing of the Bega Canal as Waterway and Revitalization of its Waterfront. The project's aim is overtaking and expanding the green historical area of the city, throughout the whole length of the embankment, by creating urban development poles which would ensure a dynamic revival of highly qualitative spaces. The project's design tools are the two natural elements which represent the innate quality of the place: the waterfront and the green scape together with urban design instruments (spatial patterns) like mixed use functions and public space.

Timisoara in Europe

Timisoara is located at half the distance between the North Pole and the Equator (the parallel 45°17') and two hours east from the Greenwich (21°17'). In order to enter through this so called "Western Gate" of Romania, one has to travel 160 km from Belgrade, 300km from Budapest and 550km from Vienna. 600 km further eastward, one reaches Bucharest, the capital of the country.¹

Located in the south-east side of the Pannonian Basin and situated in a position of ample convergence, Timisoara capital of Timis County, is served by two important European roads, E 70 (La Coruna-Lyon-Milano-Zagreb-Belgrad-Timisoara-Craiova-Bucuresti-Varna) and E 671 (Timisoara-Arad-Oradea-Debrecen) and an international Airport, second in size and importance in Romania.

Due to its favored position, with lots of terrestrial and aerial interconnection possibilities, to which adds one of the most important telecommunication through optical fiber lines of Europe, Timisoara is currently the main Entrance Gate to Romania from Central and West Europe. The advantages created by its position are amplified by the possibility of access through Bega Canal, to the corridor nr. 7, Danube – Main – Rhine, fluvial diagonal which binds the North-West to the South-East of Europe (North Sea to Black Sea). In this context, the initiative of the municipal and county public administrations to reactivate circulation on this Canal, is explainable.

On a national level, the Timis County is situated 571km away from the Capital Bucharest, Timisoara being the most important town in west side of the country. With a permanent population of 319,279 inhabitants, the city is third as size in Romania.²

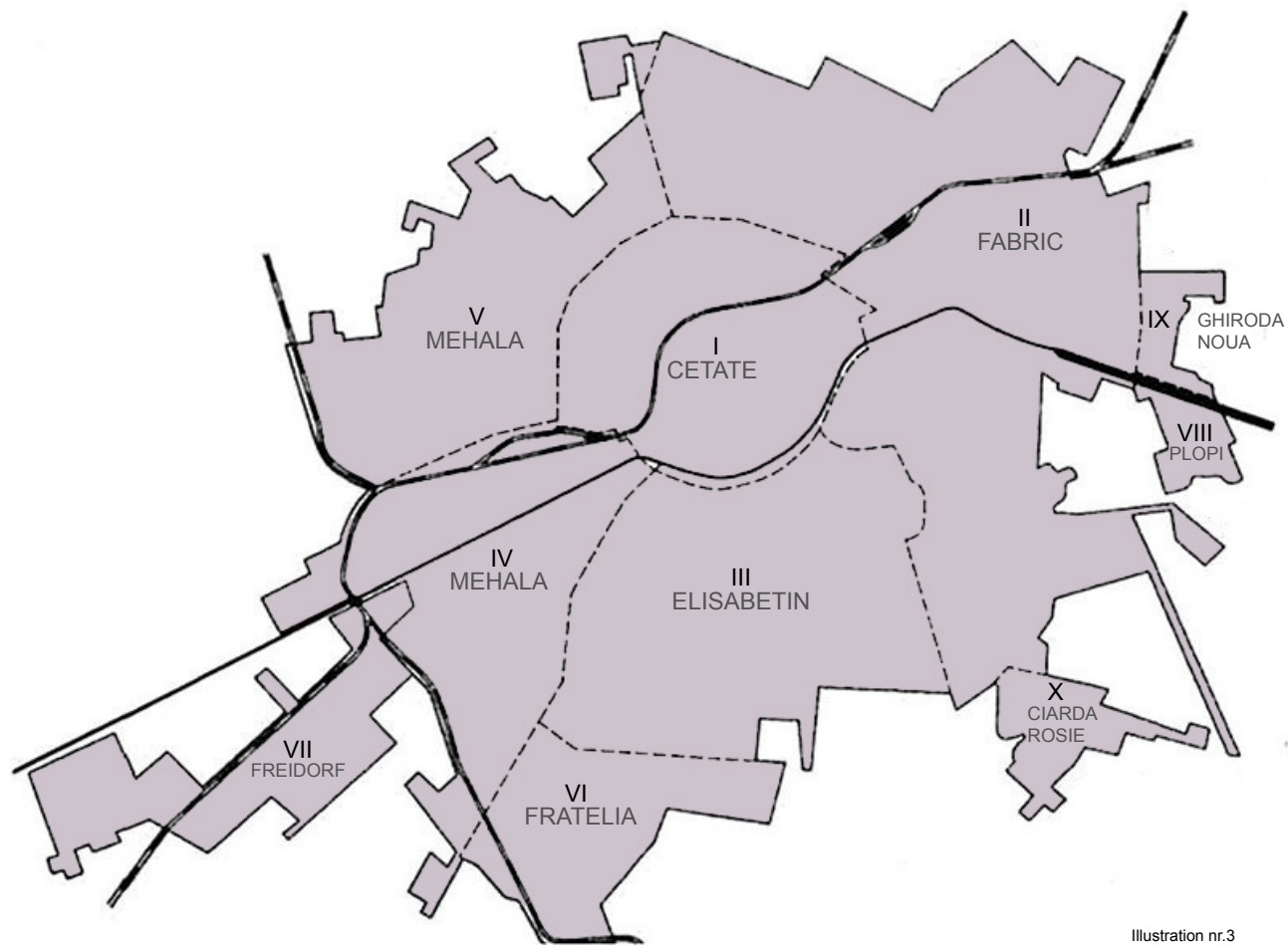
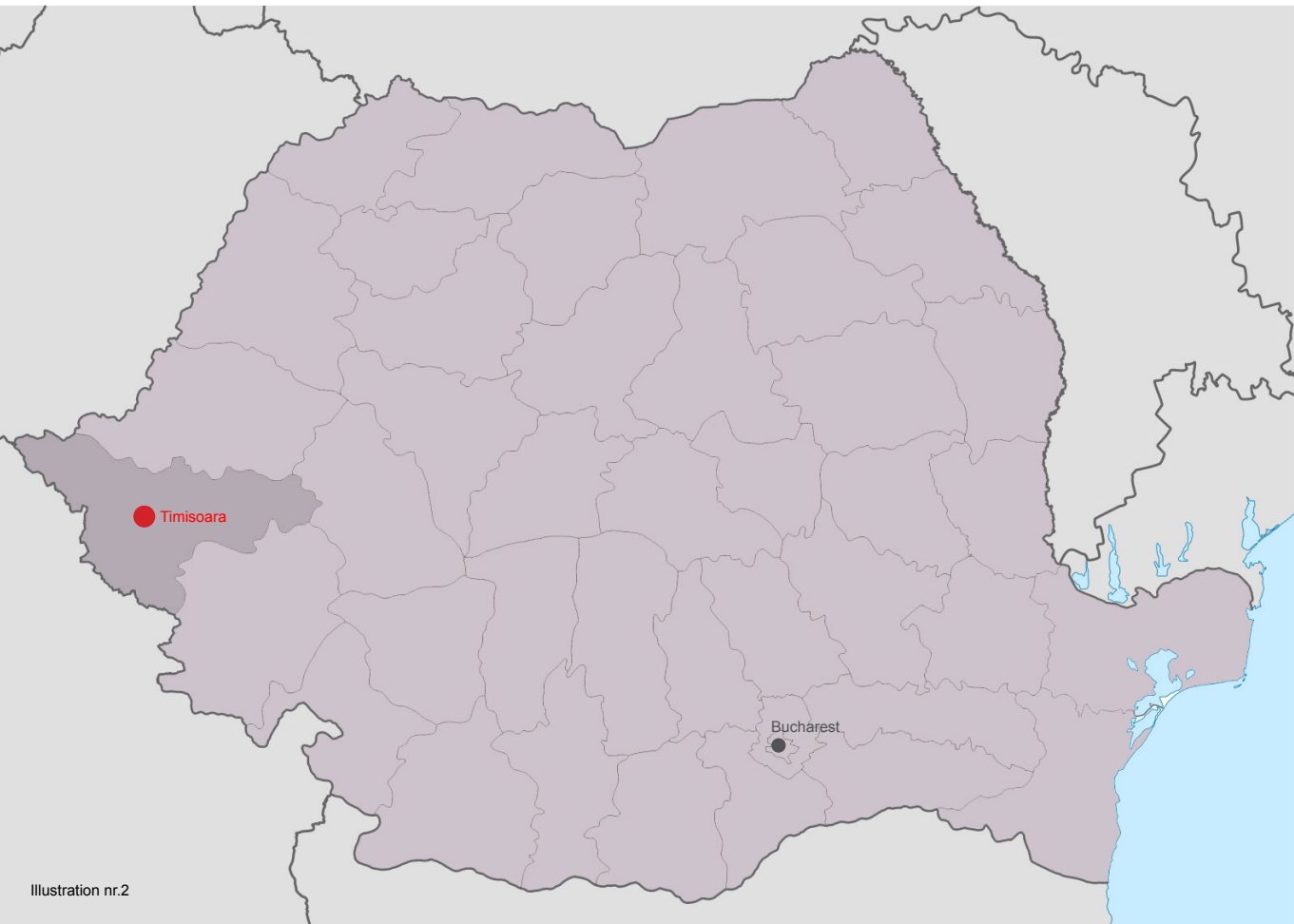
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¹.Cf. Buruleanu, Dan Nicolae; Medelet, Florin *Timisoara: Povestea oraselor sale = The story of its towns, second edition*, Timisoara: Editura Marineasa 2006, ISBN 973-631-287-9, page 10.
².Cf. Primaria Municipiului Timisoara – Prof.Dr. Ing. Nicolae Robu – primar/ "Starea economica, sociala si de mediu a municipiului Timisoara 2013" page 5



Illustration nr.1

Timisoara³

| | |
|-------------------|--------------------------|
| Country | Romania |
| Historical Region | Banat |
| County | Timis County |
| Status | County Capital |
| Area | 130.5 km ² |
| Elevation | 90m |
| Density | 2,446.58/km ² |



³Cf. <http://en.wikipedia.org/wiki/Timisoara>

The urban development of the city is the result of evolution in time. CETATEA (the Citadel) is located in the center of the urban agglomeration and the rest of the districts gravitates around as urban subsystems. Due to their independent evolution, these districts show different formal and functional characteristics, a fact which resumes in an urban system with polinuclear character.

The necessity of satisfying different functions has led to the emergence of different types of urban morphology: XVIII siècle and first half of the XIX siècle, second half of the XIX siècle and the beginning of the XX siècle, villas districts from the first half of the XX siècle and the period 1960-1989 (communism).

The typology of XVIII siècle and the first half of the XIX siècle predominates in CETATE (Old Fortress) and is represented by narrow streets without vegetation, two stories buildings which form aligned street-fronts. At the periphery of the other historical districts (Iosefin, Fabric) still stand some ground floor

area constructions with the narrow facade facing the street and rural appearance from the mentioned period.

The typology of the second half of the XIX siècle and the beginning of the XX siècle is exemplified by multi stories buildings forming aligned street-fronts, and is to be found compact in the ensembles executed in order to connect the two historical districts that were situated outside the fortress walls with the historical center.

The villas districts from the first half of the XX siècle (inter-war period) are to be found in the interstitial areas in-between the historical districts conferring a "garden city" appearance, aspect which degenerates towards periphery in a demi-rural structure.

The characteristic typology of the 1960-1989 period expresses itself in either in massive ensembles which were placed in the formerly low constructed zones of the city or isolated throughout the historical areas and are constituted by socio-cultural buildings, high living blocks and production ensembles executed with industrialized technologies.⁴



Illustration nr.4

4.Cf. Primaria Municipiului Timisoara – Prof.Dr. Ing. Nicolae Robu – primar! "Starea economica, sociala si de mediu a municipiului Timisoara 2013" page 7-8.



Illustration nr.5

Demographic situation

Timisoara is demographically defined (conform Zipf law) as a second grade city on a national level, along with Iasi, Constanta, Cluj-Napoca and Brasov. It overtakes macro-territorial functions having the second most extended direct influence area after Bucharest: 5000 km². Its population represents 45,07% of the Timis county population, 16,07% of the West Region population and 1,44% of the total population of the country. Timisoara, capital of the Timis County, is the third city in Romania as number of inhabitants.⁵

Education

Timisoara has a total number of 128 schools and 41 Faculties, organized in 8 institutions: Polytechnic University of Timisoara, West University of Timisoara, Victor Babeş University of Medicine and Pharmacy-Timisoara, Mihai Eminescu University, Tibiscus University, Ioan Slavici University and the Faculty of Management in Tourism and Commerce Dimitrie Cantemir.⁶

Economic Development

Timisoara started affirming itself as a powerful economical center, starting in the XVIII siècle during the Habsburg administration. The colonization with Germans, the ethnic and religious diversity, the reconstruction of the fortress but also the legislative system which favored private property, determined the development of craftsmanship and commerce. This craftsmanship society has been for over 200 years Timisoara's secret of economic flourishing.

When the Industrial Revolution started manifesting, Timisoara was presenting all the necessary conditions in order to align to it and adopt the most modern inventions of the time. The craftsman atelier made place for the industry.

A very important factor for the development of commerce was the Bega Canal, which allowed the merchandise transport on the waterway, creating the connection on Danube to Europe and the rest of the world, through the Black Sea harbors. In 1857 the railway

was introduced, completing thus all the necessary premises for modern industrial economy development. In 1948, when the nationalization and the suppression of private property started, this specific economic model stopped after 250 years of functioning. Timisoara has been massively industrialized, following different criteria from the past. Industrial giants were created in different branches like chemical and mechanical industry. Massive migration of population from the rural zone and other regions of the country has been necessary in order to supply the work force needed for this industrial plants.

After the 1989 Revolution, several major changes have taken place in the structure of industrial activities, due to restructuring and technologizing processes. The main industrial branches that have extremely developed are: auto components industry, chemical and petrochemical industry, electronics and electrotechnics industry.

The first 5 industry branches considering the rate of turnover (2011) are: food industry, metal constructions (exclusively machines) industry, textiles production, food industry, tanning of hides and skins and fur dyeing.

Out of a spatial point of view, a development mostly west (Freidorf, Torontalului, Sagului districts) and less east (Buziasului, UMT), along the main transport arteries, of the industrial areas can be observed.

The central industrial zones that were affecting the cohesion of the urban structure, are currently in reconversion process, making place for services, institutions and housing areas. Although industrial units dispersed all around the city have the advantage of easy access for the work force, this situation presents urban dysfunctions like: incompatibility of the industrial activity with the surrounding habitat, interchange of products between industrial units using the street infrastructure of the city and agglomeration of the access roads inside the city.

The old industrial halls and repositories, over dimensioned and hard to adapt to new technologies, have been abandoned and determine an over load of the urban structure in the old industrial zones. This zones have already been proposed in the new Land Use Plan for urban conversion.⁷

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⁵.Cf. Primaria Municipiului Timisoara – Prof.Dr. Ing. Nicolae Robu – primar/“Starea economica, sociala si de mediu a municipiului Timisoara 2013” page 13.

⁶.Cf. Primaria Municipiului Timisoara – Prof.Dr. Ing. Nicolae Robu – primar/“Starea economica, sociala si de mediu a municipiului Timisoara 2013” page 135.

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⁷.Cf. Primaria Municipiului Timisoara – Prof.Dr. Ing. Nicolae Robu – primar/“Starea economica, sociala si de mediu a municipiului Timisoara 2013” page 12.

Historical Context - A Chronicle of Urban Development

Timisoara is a city with a long and rich history, which begins 6000 years ago, during the so called new Stone Age in the Neolithic. Discoveries like the complex of 400 houses, ceramic fragments or tombs have been brought to light on the archeological site of Sanandrei¹. Further on, in the districts Cetate, Mehala and Padurea Verde (The Green Forest) objects dating from the Vinča culture, and an incineration necropolis in the district Fratelia dating from the Bronze Age bring testimony about the first inhabitants of this area². The Iron Age is related to the Geto-Dacians. Traces of the Roman Era like coins, fibulas, spearheads, ceramics (autochthon and roman), tombs, and necropolis that have been found in the districts of the city and the settlements close by demonstrate a continuous inhabitation of the region.

“Castrum Tymes”

Around the year 1000, Prince Glad was ruling over the voivodeship of Banat. After the Hungarians were stopped in their expansion towards Germany by King Otto in Lachfeld, near Augsburg, they started to orient their domination eastward towards Banat and Transylvania. They subdued the wallachians living along Bega River's Valley, and the province of Timisoara became a comitatus of the Magyar Kingdom. The first written attestation of the Timis County is in 1175. In 1266, Timisoara is especially mentioned under the name of “Castrum Tymes”, in a document signed by King Stephen the Young.

Temesvar – Timișoara – the name

The middle course of the river Bega was called by locals Timișul Mic or Timișel and was a name of dacian origin Tibiscus – Tibisia. By adding the suffix “var” (city) of Magyar origin, Timișoara – Temesvar was obtained.³

Medieval Timisoara – the Hungarian Realm

At the point in time where Timisoara was being mentioned in official documents of the Magyar Kingdom, the citadel had a rectangular shape, and the fortifications were a wall of earth with palisades, which were defended from three sides by water and on the fourth side by a canal. A civilian settlement was located north of the fortress.

Being located in a strategic geographical point, which allowed control over most of the Banat Plain, both Timisoara and the ruler position of it, become more and more important.

Timisoara knows a new development era during the rule of King Carol Robert of Anjou who following his visit here in 1307, orders the building of a fortified Royal Castle. The construction was executed by Italian craftsmen and was organized around a rectangular courtyard, having a main corpus with donjon. Between 1316 and 1323, Timisoara becomes the actual capital of the King. The status of capital of the Hungarian Kingdom determines a demographic increase and a gain in commercial and political importance. Timisoara starts playing an important role against the new menace from east: the Ottomans. It will serve as a concentration point of the armed Christian forces for the Battle of Nicopolis.

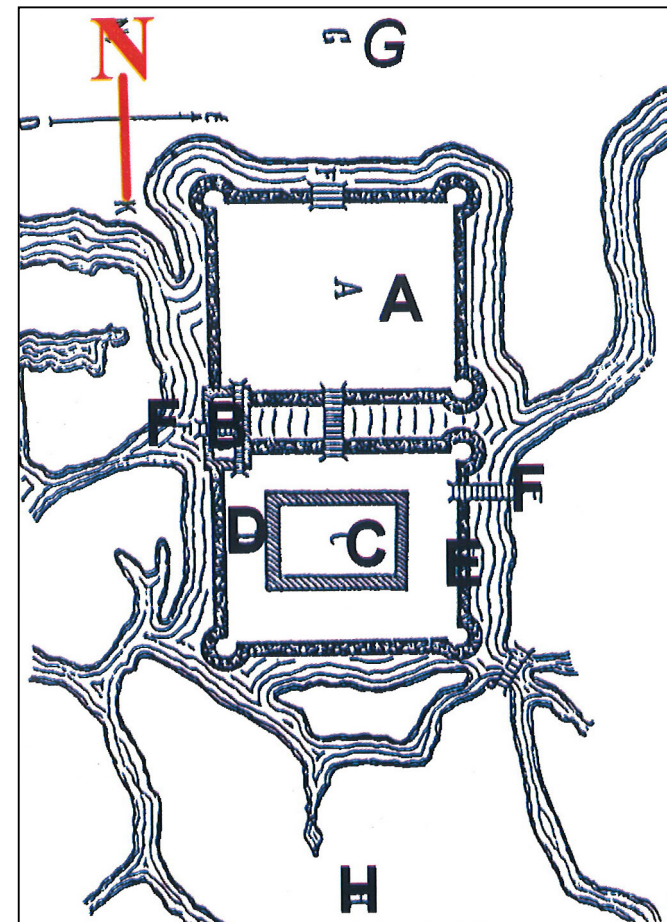


Illustration nr.6 / Castle of King Carol Robert of Anjou in Timisoara

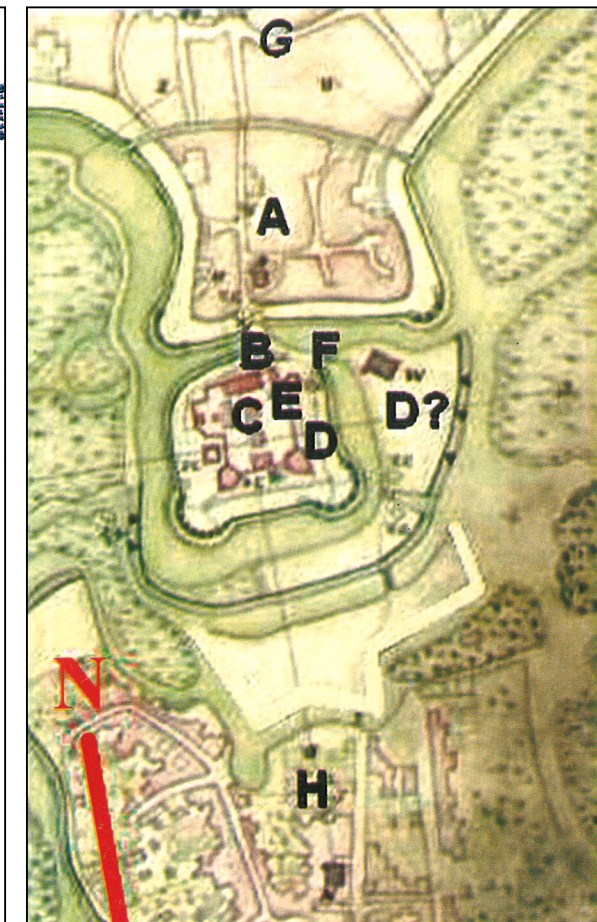


Illustration nr.7 / Part of Perrette Plan representing the same cut out

- A – Initial Castrum crossed by Cardo&Decumanus
- B – Water Tower
- C – Interior Courtyard of the Castle
- D – Exterior Courtyard of the Castle
- E – Castle Walls
- F – Draw-Bridge
- G – City
- H – Future district Palanca Mare

1. Cf. AGERPRESS <http://www.agerpres.ro/cultura/2012/07/10/sute-de-case-datand-din-neolitic-au-fost-descoperite-langa-timisoara-19-04-40> //Translated by Oana Ilie
 2. Cf. Capotescu, Valentin, *Arhitectura bastionara militara in Romania-Cetatea Timisoarei*, Editura Bastion 2008, ISBN 978-973-88780-1-3, page 10. //Translated by Oana Ilie
 3. Cf. Buruleanu, Dan Nicolae; Medelet, Florin *Timisoara: Povestea oraselor sale = The story of its towns, second edition*, Timisoara: Editura Marineasa 2006, ISBN 973-631-287-9, page 10. //Translated by Oana Ilie

The next important chapter in Timisoara's history begins with the naming of Ioan of Hunedoara as Earl of Timis and Voivode of Transylvania. He will be famous throughout the whole region due to his reputed victory from Belgrade against the ottomans and considered a defender of Christianity.⁴ Ioan of Hunedoara will show a special interest in Timisoara, contributing to both its military and economic development. He rebuilds the walls of the fortress, the churches and the old castle, built by Carol Robert of Anjou and severely damaged by the earthquake in 1443. After finishing the restoration works, Timisoara will be his permanent military camp and residence and he will bring his family here from Cluj. The fortress will remain a Corvines Family possession until 1490. After the death of Ladislau the Vth, King of Hungary, it will be Matthias Corvinus, son of Ioan Huniade who is invested as Sovereign of Hungary and he will be valued as one of the greatest Kings in Hungary's history.

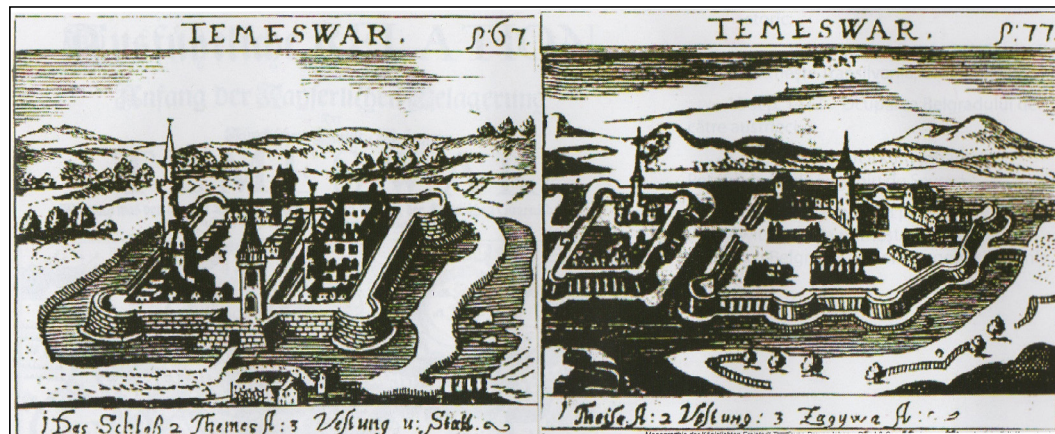


Illustration nr.8 / Timisoara Fortress in an Engraving from 1685

Timisoara - The Ottoman Period

In 1552, Timisoara falls under Turkish occupation after the siege lead by Ahmed-Pasha. For 164 years the city was occupied and transformed into the capital of the Banat Pashalik. The city was divided into 4 districts and the suburbs in 10 mahallas. The houses were built out of adobe and the roofs covered with shingle. The dwelling streets were paved with wood. The washing and drinking water came out of Bega and in the same place garbage was disposed of. The city had a polycentric character, and due to geographical and military reasons, each and every district had to be fortified. All the fortifications excepting the castle were made out of wood and earth. Being a Turkish Pashalik residence and due to the strategic importance of the area, Timisoara becomes an administrative and military key point of the Ottoman Porte.

⁴Cf. Capotescu, Valentin, *Arhitectura bastionara militara in Romania-Cetatea Timisoarei*, Editura Bastion 2008, ISBN 978-973-88780-1-3, page 12.
//Translated by Oana Ilie



Illustration nr.9 / Plan of Timisoara, 1716, Superintendent engineer Perrette

- | | |
|-------------------------------|---------------------------------|
| A – Prince Eugene Gates | M – “Franciscans” |
| B – Gate of the Tower | N – City Bathhouse |
| C – Belgrade Gates | O - City Bathhouse Palanca Mica |
| D – Water Gate | R – New Ravelin |
| E – Arad Gates | S – The New Dam |
| F – Transylvania Gates | T – Old Turkish Dam |
| G – Cathedral or Great Mosque | V – Border of Channel |
| H – Other Mosques | X – Mill |
| I – Castle Mosque | Y – New Bridges |
| K – Palanca Mica Mosque | Z – Old Bridges Repaired |
| L – Palanca Mare Mosque | |

Timisoara - The Habsburgic Period (1716-1778)

After several unsuccessful attempts of the Imperial or Romanian sides to regain the city, a new war burst out between the Habsburg Monarchy of Austria and the Ottoman Empire which ended with the decisive Victory of Petrovaradin⁵ for the Austrian forces. Prince Eugene of Savoy decides immediately after to conquer Timisoara Fortress and gain this important strategic position. After 48 days of repeated bombing, which destroyed the most part of the buildings inside the citadel, on 12 October 1716 the Ottoman commandant capitulates.

In October 1716, the prince Eugene of Savoy will address the Imperial House concerning the organization and modernization of Banat. In 1719 the Emperor will sign the decree which was nominating Banat's Administration, establishing Timisoara as capital of Provence. Functioning under military administration, General Claudius Florimund Mercy will be assigned as Governor and the one adopting the first urban regulation of the city.



- 1 - Bazarul (sec. 18); - Basar (18.Jh.); - Bazár
- 2 - Hamam – băi turcești; - Hamam – türkische Bäder; - Hamam – török furdök
- 3 - Moschee
- 4 - Moscheea Mare (fosta biserică medievală Sf. Gheorghe); - Große Moschee (ehemalige mittelalterliche St. Georg Kirche; - Nagy mecset (egykori középkori Szent György-templom)
- 5 - Fosta biserică a primei cetăți medievale (moschee); - Ehemalige Kirche der ersten mittelalterliche Festung, Moschee; - Az első erődítés egykori temploma – a későbbi mecset
- 6 - Casa Pașei (localizare aproximativă); - Paschas Haus (ungefähre Lokalisierung); - A pasa háza (feltételezett hely)
- 7 - Podul cel lung; - Lange Brücke; - Hosszú hid
- 8 - Poarta Apei – Soukapi (devenită după 1716 a Lugojului); - Wasser-Tor (nach 1716 Lugoscher Tor); - Vizi-kapu (1716-től Lugosi kapu)
- 9 - Turnul Apei; - Wasserturm; - Viz-torony
- 10 - Bastionul Porții apei; - Wassertor Bastei
- 11 - Poarta Nouă (devenită după 1716 a Belgradului); - Neues Tor
- 12 - Castelul; - Schloß; - A kastély
- 13 - Poarta Turnului sângieru – Kanakapi (devenită după 1716 a Turnului); - Blutröter-Turm Tor (nach 1716 Turmtor); - Vörös kaputorony (1716-től Torony-kapu)
- 14 - Bastionul lenicerilor; - Janitscharenbastion
- 15 - Poarta Cocosului – Horoskapi (devenită după 1716 Prințului Eugen); - Forforosa Tor, Hahnetor (nach 1716 Prinz Eugen Tor); - Kakas-kapu (1716-től Savoyai Jenő-kapu)
- 16 - Bastionul spahilor; - Spachenbastei
- 17 - Poarta Azapilor – Assapkapi (devenită după 1716 a Aradului); - Assaper Tor – (nach 1716 Arader Tor); - Ázáb-kapu (1716-től Aradi kapu)
- 18 - Turnul Azapilor; - Asapen Turm; - Ázáb-torony
- 19 - Bastionul arsenalului de artilerie; - Zeughausbastion
- 20 - Turnul rotund – Pulverarie; - Runder Turm, Pulverturm; - Kerek torony, Lőporraktár
- 21 - Hanul Azapilor (localizare nesigură); - Asapen Herberge (ungefähre Lokalisierung); - Ázáb fogadó (bizonytalan hely)
- 22 - Turnul Tunarilor; - Kanonier Turm; - Ágyúsok tornya
- 23 - Cartierul "Cetate"; - Festung; - A vár
- 24 - Palanca Mare; - Große Palanka; - Nagy Palánka
- 25 - Biserică(?); - Kirche(?); - Templom(?)
- 26 - Palanca Mică; - Kleine Palanka; - Kis Palánka
- 27 - Ravelinul nou (construit de austrieci, imediat după cucerire); - Neues Ravelin



Illustration nr.10 / Timisoara in 1716 – Turkish Fortress (graphic representation by Radu Olteanu)

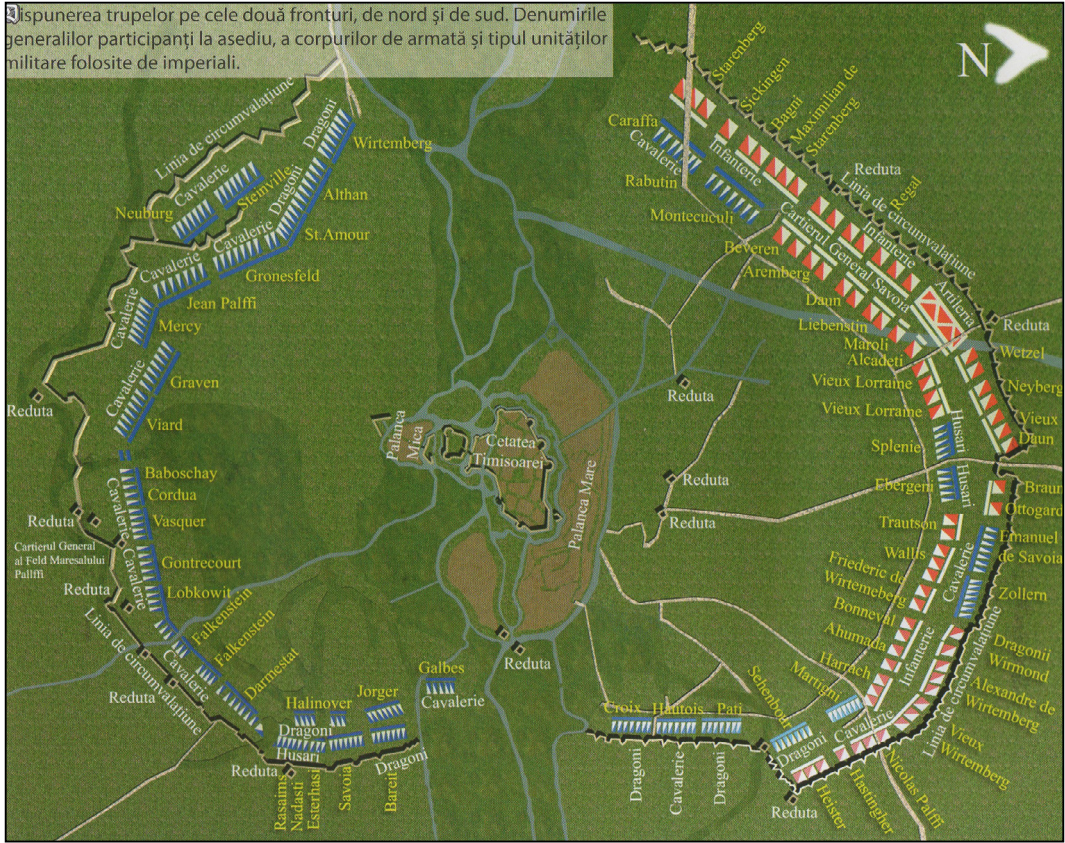


Illustration nr.11 / Disposal of the Imperial Austrian Troops – Timisoara Siege 1716

⁵Cf. Battle of Petrovaradin http://en.wikipedia.org/wiki/Battle_of_Petrovaradin

Bega Canal

(1728-1732)

Water has been an important factor in the emergence and appearance of the settlement, but in the 13th century the swamps surrounding Timisoara had become a main source of pestilence. In 1738 the town is hit by the pest cholera epidemic, losing 1000 inhabitants out of 6000.

The most important changes under Habsburg governance were the hydro-technical works: regulation of the water debit and inring of the swamps. Between 1728 and 1732, the course of the river Bega was changed and a navigable river-canal was created between Timisoara and the inferior part of the river course. Thus the city was through the Tisa and Danube rivers connected to the European fluvial network, becoming capable of massive transport before the appearance of the railway.⁶

The river Bega was also turned into a source of energy for the manufactures and into a carter for the building materials (wood, lime, sand, earth, and stone), necessary for the new Fortress.

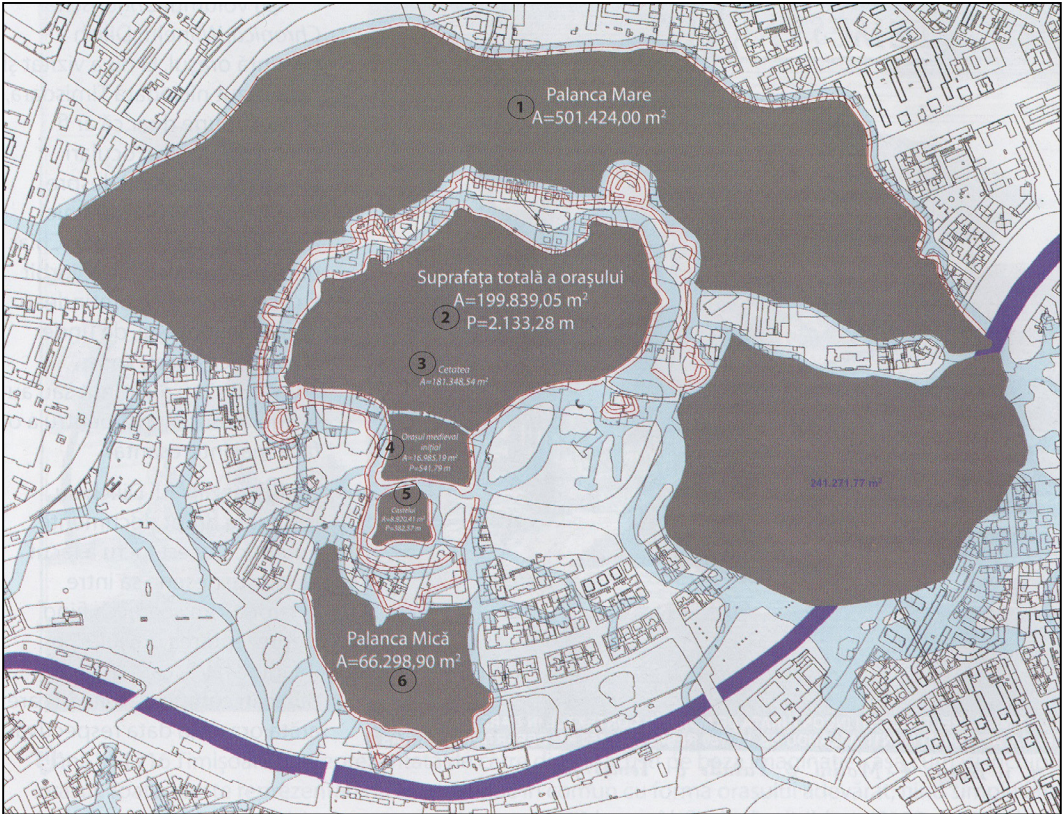


Illustration nr.12 / Area and Perimeter of the Fortress and City Districts in 1716

| | | |
|--------------------------|----------------------------------|------------------------|
| 1.Palanca Mare District | Area / 501.424,00 m ² | |
| 2.Total Area of the town | Area / 199.839,05 m ² | Perimeter / 2.133,28 m |
| 3.Citadel | Area / 181.348,54 m ² | |
| 4.Initial Medieval Town | Area / 16.985,19 m ² | Perimeter / 541,79 m |
| 5.Castle | Area / 8.920,41 m ² | Perimeter / 382,57 m |
| 6.Palanca Mica District | Area / 66.298,90 m ² | |

Illustration nr.13 / Plan of the Navigable Channel Bega (until Titel) – 1732



⁶Cf. Capotescu, Valentin, *Arhitectura bastionara militara in Romania-Cetatea Timisoarei*, Editura Bastion 2008, ISBN 978-973-88780-1-3, page 16.
//Translated by Oana Ilie

Timisoara – The Austrian Fortress

“The new Fortress was conceived by the imperials according to military needs. It was meant to become the key of the strategical defense for both the newly acquired Banat, and an important area in the north Balkans. On one hand, it was to contain a powerful garrison and large logistical dumps, on the other hand, it was meant to face – in case of necessity – the modern sieges of the 18th century. More than 15 years were necessary for the foundation to be built. Branches of the river were covered, districts were demolished and a new water way was dug. The Bega became once again, not only the main drinking water source and the permanent valve for waste water of the Citadel, but also an organic element in the exterior defense system – a natural obstacle in front of the walls eastwards, southwards and westwards – a hollow replica of the vallum – “circumvalatio” – northwards (the current Circumvalatiunii Boulevard)”⁷

The surface of the new fortress was 10 times larger than the old one, encompassing 53 ha, and 138ha together with the non edificandi zone outside the city walls.

“The foundations of the fortress, made of 8 meters deep oak wood pillars, could bear the weight of 12m high walls, organized with canon and gun grooves, located in vaulted casemates. Three meters deep ditches, connecting the 3 stellat enclosures, could be filled with water from Bega. The new fortress – the largest in Romania – was a modern system for that time and it was designed and achieved by the French marshal Sebastien Vauban: a stellat fortress, buried in the ground, practically invulnerable. The access in the Citadel was made through 3 gates (Vienna, Ardeal and Petrovaradin), over wooden bridges”⁸

Designed as a south-eastern anti-Ottoman shield of the Habsburg Empire, the Citadel will never be attacked throughout 13 decades until 1849 when it will be bombed and besieged by the Hungarian Army of Kossut Lajos, commanded by polish General Josif Bem.



Illustration nr.15 / Timisoara Fortress 1730

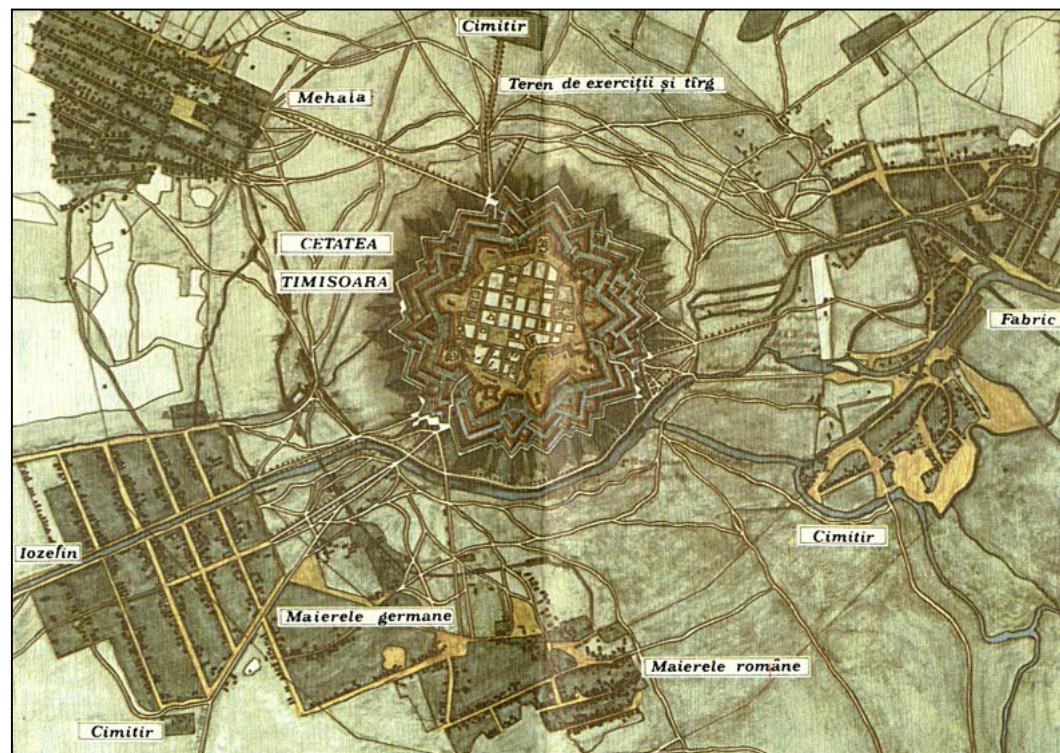


Illustration nr.14 / Timisoara 1790-1808

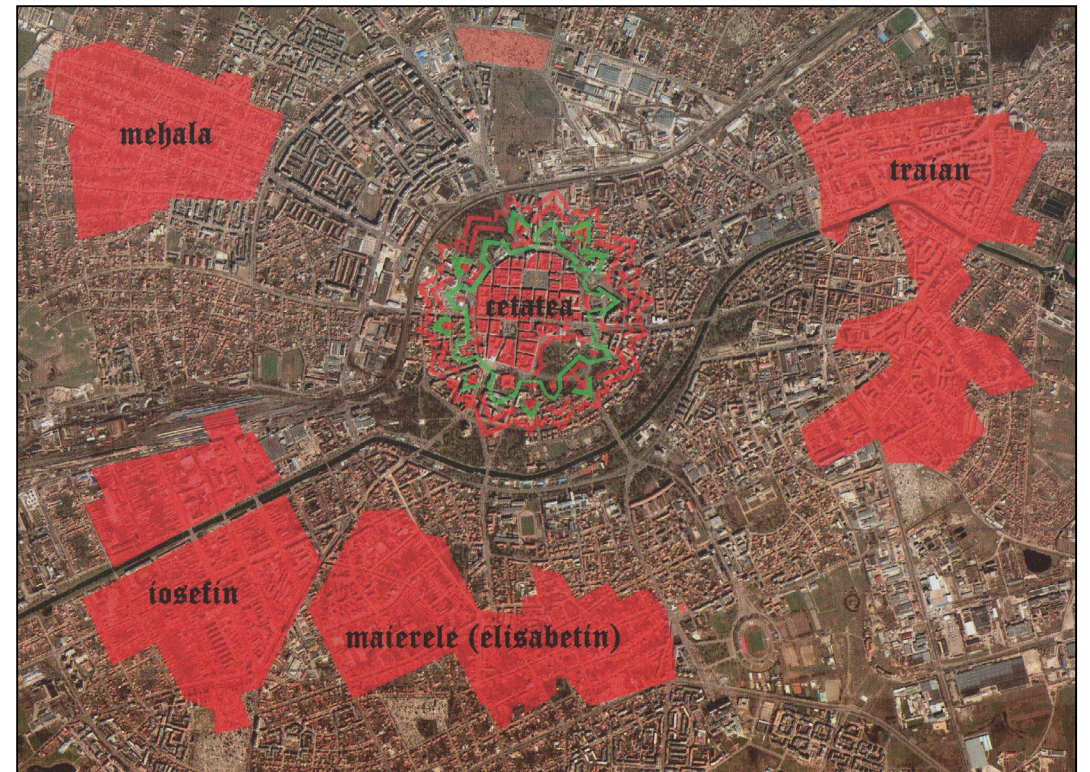


Illustration nr.16 / Timisoara 1790-1808

7.Cf. Buruleanu, Dan Nicolae; Medelet, Florin *Timisoara: Povestea oraselor sale = The story of its towns, second edition*, Timisoara: Editura Marineasa 2006, ISBN 973-631-287-9, page 20. //Translated by Oana Ilie

8.Cf. Buruleanu, Dan Nicolae; Medelet, Florin *Timisoara: Povestea oraselor sale = The story of its towns, second edition*, Timisoara: Editura Marineasa 2006, ISBN 973-631-287-9, page 20. //Translated by Oana Ilie

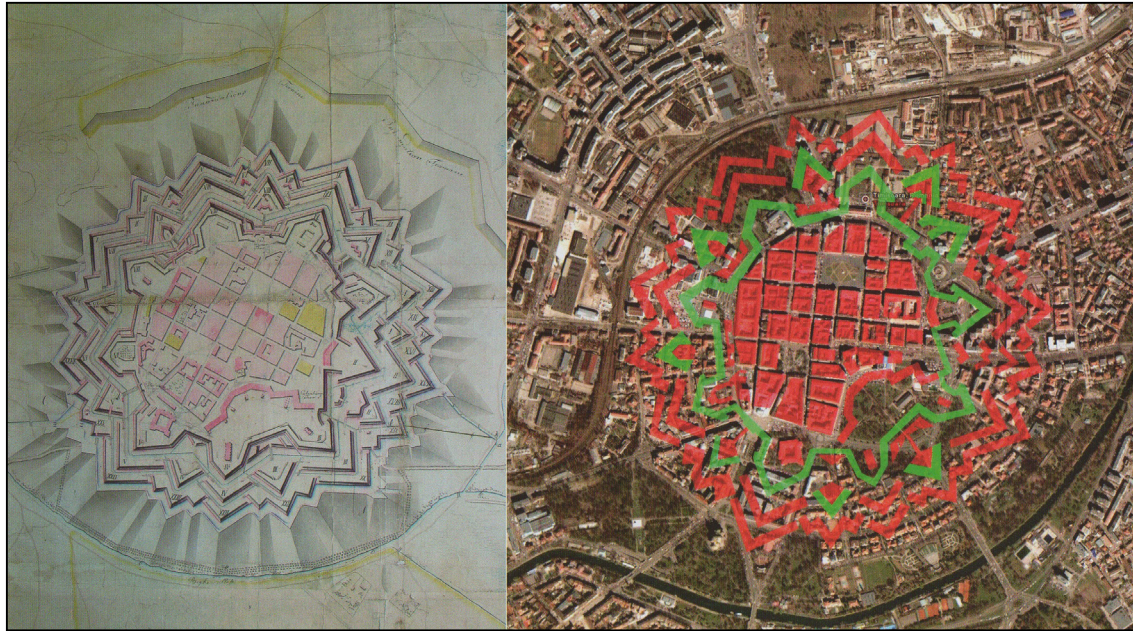


Illustration nr.17 / Timisoara Fortress 1790(1808) – 1892 / Overlapping Timisoara Today

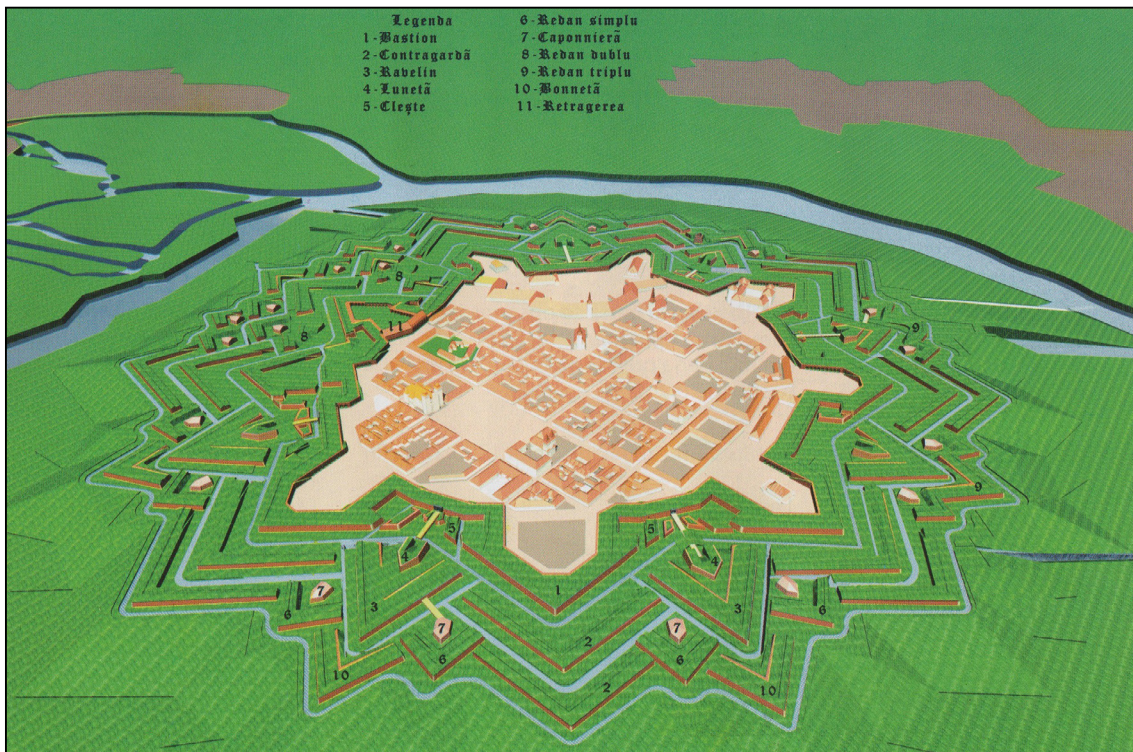


Illustration nr.18 / Timisoara Fortress from 1765 till 1892. Defense System

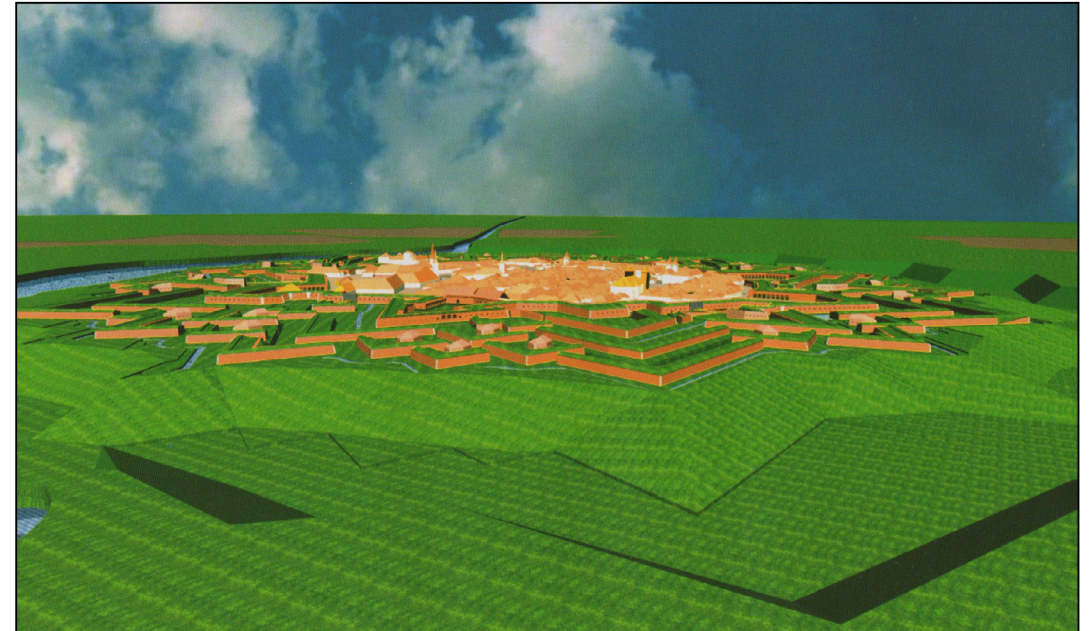


Illustration nr.19 / Timisoara Fortress from 1790 till 1892. Detail of the Glacis and Non Aedificandi Zone

Timisoara – Losing the Fortress Character - the Modern City

The analysis of the development of art and architecture in a city, points sometimes to the interdependency between a radiant Center and a surrounding Periphery. The intensity of take over and interpretation of influences that come from a center as a basis for further interchange, depends on the cultural-historical context. In architecture this can take the form of a style that serves as a pattern for the development of further smaller cities. Provincial art stands mostly in the shadow of big centers, but peripheral art, as it finds itself further away, assimilates influences out of all directions. By processing and using them for new purposes, peripheral art also transforms them in its own traditions.

This peripheral development phenomenon was very pronounced in the Austrian-Hungarian Empire. In a multi-cultural multiethnic state, the Capital was the model city for the province, and its pattern adopted and adapted to own traditions. This complex situation became even more multilayered at the second half of the 19th century, as the “k.u.k Kosmopolitismus” brought new political, economic and cultural circumstances and national particularities.

In 1718, Banat becomes simultaneously with other regions, a crown land of the Habsburg Monarchy. The same happens in 1774 with a further Romanian province, Bucovina. Both provinces were cultivating rather territorial than national autonomy thoughts and were pleading for national patriotism, which was opposed to the Viennese centralism. If we go further with the comparison between Banat and Bucovina, we can find similarities between their capitals, Timisoara and Cernauti, that have developed to “Metropolis in the province” at the second half of the 19th century and begin of the 20th century as a result of progressive building activity and general modernization process.

The settlement between Austria and Hungary in 1867, with the creation of the Double Monarchy, has led to meaningful changes in the history of Banat, especially after the replacement of the Austrian imperial public administration with the Hungarian one. As capital city of Banat, Timisoara kept its free crown city status which had been lost in December 1781, together with autonomy in internal affairs and the right to keep and use tax income. At this point in time, Banat and Timisoara register a major increase in Magyar population, due to immigration and colonization. After the change to Magyar administration, the Romanians lose their second position as a population group and find themselves at third place after the German and Austrian on first place and Magyar on second place (the population census in 1851). As a consequence Timisoara follows the architectural and urban model of Vienna, with a special taste for Jugendstil of Viennese provenience, which becomes a characteristic of the town.

The citadel like "Cetate" (inner city) that was built in 18th century had become by the end of the 19th century an anachronistic construction. The fortifications stopped being used after the 1848 Siege. The high walls, the ditches, the glacis and the non aedificandi zone, the drill grounds, and the military facilities remained in the use of the army. The corresponding construction interdiction on this space became an impediment for the urban development of the city. The three city gates were an obstruction of the traffic because they were very narrow and also closed at night. As a consequence they were demolished in 1891, act that meant the first step for urban expansion. In 1892 the city council took the decision to renounce the fortress character of the city and started the negotiations with the army for these grounds. The demolition works started in 1898 and took place until the First World War. The army received payment by installments annually. The so obtained free spaces for the city were parceled and sold at the highest prize possible in order to pay the army and finance the new city strategy. Following the example of Vienna, an urban expansion fund was instituted. The city administration had obtained central building area and the possibility to connect the city center with the fringe areas which were 2.5 till 3 kilometers away, through great boulevards.

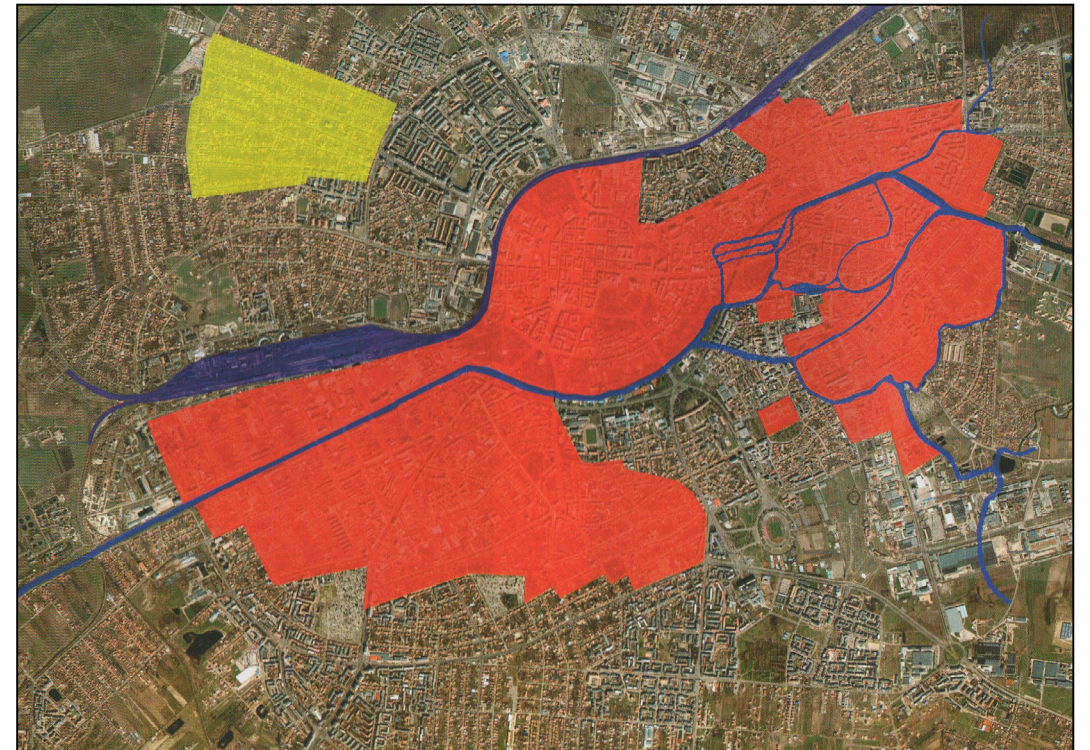


Illustration nr.21 / City expansion 1920-1930

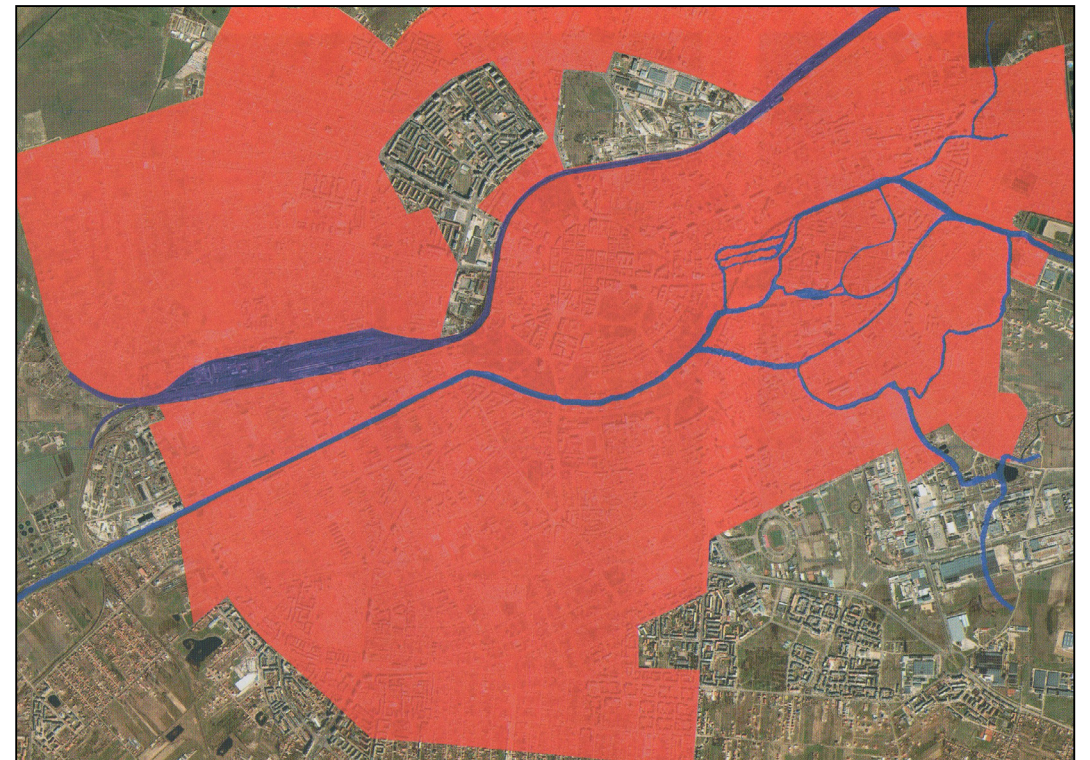


Illustration nr.22 / Timisoara – City expansion 1940-1950



Illustration nr.20 / Timisoara – Demolition of the Fortifications

In 1867 a control authority was set up, with the sole purpose of taking over the urban planning. After several discussions and different proposals like continuing the rectangular net of streets of the inner city, or extending only the two districts Josefin and Fabric, the decision was taken to imbed all the city areas in the planning strategies and to keep “Cetate” in the middle of the new urban tissue, as core.

Architect Lajos Ybl from Budapest was contracted for the general planning. He had studied architecture in Wien and Stuttgart, and was preferring the urban models of Otto Wagner to those of Camilo Sitte.

The “Green Belt” of Timisoara

Wagner’s concept was considering the constant need of growth and expansion of the modern big city, and was promoting a system of wide radial boulevards and concentric thoroughfares. Ybl also preferred Wagner’s model, because the municipal officials were in favor of Modernism, which meant practical solutions. The image of the “province metropole” dictated up to a certain degree the choice of solutions. From 1893 until 1895, based upon the radial-concentric street system, there were several proposals of development: a wider inner ring instead of the ramparts and a narrow boulevard at the boundary of the former glacis. The outside city districts have been connected through traffic arteries (thoroughfares) to the inner city, and the public buildings were so placed in order to build end perspectives. The quality of this master plan was his geometrical, functional clarity. The second planning phase led by Laszlo Szesztay from Budapest took a practical direction into respecting the earlier proposals from 1867 that were suggesting to reduce the intervention to the areal of Cetate and the non aedificandi zone. Out of the two ring streets, just one half, southern the Citadel remained.

Just like Ybl, Szesztay, was against modifying the historical part of the city. His projects accomplishment was that it implemented the modern concept of a wide green continuous belt. Based on these two plans, the urban planning authority, led by Emil Szilard, designed a master plan for Timisoara: the city was divided in two zones. The number of stories and eaves heights was established as well as the areas with perimeter block development or streetlines with courtyard houses. Also the width of the streets and boulevards was determined up to a maximum of 45 meters. In front of the theater, where earlier fortifications were to be found, a big Corso, measuring 340 x 53 meters was designed. Near the north railway station housing complexes for the workers were planned. In the same urban planning strategy, a water supply and sewage system were foreseen for the whole city area. It was built in 1910-1914 by the engineer Stan Vidrighin and completed with several infrastructure elements such as: water purification plant, spring tapping, and water towers by the designs of the architects Janos Lenarduzzi and Richard Sabathiel.

Another important aspect of the urban design was the regulation of Bega (1902-1907), designed by the architect Emil Szilard, chief engineer of the urban planning authority, in the same style as the straightening of Danube in Vienna. In this context, a small hydroelectric power station was build, that later supplied the electric tram with electric power. His development designs included amongst various parks a further 800 hectares Green Forest (Hunting Forest) which became la local recreation area.

On the free created spaces after the taking down of the fortification, typical vienesse Jugendstil housing buildings named “Mietspalast” were erected. The city was embossed with the Viennese architectural style of the time and Hungarian elements of influence.⁹

⁹ Cf. Pintilie, Ileana, “Im Zentrum der Peripherie: Die Stadtebauliche und Archi-tektonische Entwicklung von Timiosara”, in Eve Blau, Monika Platzer : *Mythos Großstadt – Architektur und Stadtbaukunst in Zentraleuropa 1890-1937*, Prestel München 1999, ISBN 3-7913-2185-4, page 154-157.
//Translated by Oana Ilie



Illustration nr.24 / Theresia Bastion, Old City “Cetate”, Green Belt of Timisoara

Timisoara – Part of the Romanian Kingdom 1919-1947 -The city of villa districts and „cubist” modern architecture-

After the defeat of the Dual Monarchy in World War I (1914-1918), Timisoara will be occupied first by Serbian(November,1918) and then by French troops(December,1918). The Romanians constituted the majority of the population and since the Unification of the Romanian United Principalities in 1859 (Moldavia and Wallachia), their abiding dream was becoming tangible: the unification with Romania. Thus on the first of December, 1918, the romanian delegates, despite the opposition of the new serbian authorities, go to Alba Iulia and proclame the Unification of Banat with Romania.

In 1920, the „Polytechnic School” was founded. In addition to its economic functions, Timisoara acquired a new function that of a university Centre. This feature assured a strong development in comparison with other cities. Around the central area, numerous districts of villas located in gardens appeared, villas presenting the specific architecture of the interwar period. Also the so-called “neo-Romanian” style emerged.

Between the two world wars, the wide boulevards that had been previously designed, were completed. The University of Medicine (1924 - 1926), the Prefecture (originally designed in 1933, executed from 1938 to 1943). After 1930, many buildings were constructed in the “cubist” style or “modern, international” style. Some of them, such as the Faculty of Dentistry on Revolutia din 1989 Boulevard, or Campeanu House on Take Ionescu Boulevard, are true masterpieces of this style.



Illustration nr.25 / Timisoara – City Hall, neo-Romanian style, built in 1924-1925



Illustration nr.26 / University of Medicine, Timisoara, built in 1924-1926



Illustration nr.27 / Prefecture – Timisoara, built in 1938-1943



Illustration nr.28 / Politechnic University Timisoara, built in 1920



Illustration nr.29 / Faculty of Dentistry Timisoara



Illustration nr.30 / Campeanu Villa, Take Ionescu Boulevard, Timisoara

The Communist Period (1947-1989)

- The era of introduction of blocks of flats, of industrial areas and of big prefabricated panel constructions -

Between 1974 – 1988, huge “bedroom districts” for the new factories workers were built, consisting of blocks with four, eight or ten floors, made of large prefabricated panels. In the late 1980s, over two thirds of Timisoara’s population lived in such districts. The blocks had strictly the technical facilities and utilities necessary for living, with the minimum space required per person. No aesthetical consideration was implied, thus contrasting sharply with what had previously been built in Timisoara.¹⁰

Illustration nr.31 / “Bedroom Districts”- Prefabricated Panel Constructions



¹⁰. Cf. *Timisoara – A somewhat short history* <http://www.hostel-costel.ro/tourism.html>

The Danube Waterfront

The Danube Waterfront

Drawings: Academy of fine Arts, Vienna

Architect: Otto Wagner

Client: Commission of Infrastructure, Vienna

Date: 5.12.1896



Illustration nr.32 / Bird's Eye View

The High k.k. Commission of Infrastructure in Vienna officially assigned Wagner on the 5th of December 1896 with the architectural design of the river Danube waterfront over a span of 2000 m from the existing bridge “Augartenbrücke” up to “Franzensbrücke”, also included in the planning. The architect set up an undated project “Expose” with the deadline in Mai 1897, concerning both riverbanks, the bordering walls, and the two bridges, new and old constructions, the street and construction regulations, that led to under 1500 plans for the river Danube. Although none of the proposals for the “Aspernplatz” and housing quarter were entirely viable Wagner was still able to conclude his studies to the high k.k. Commission in a solution that embodied both practical-economic as well as esthetic aspects at the same time. The goal was to improve and facilitate commerce and traffic development in such a way that would enrich and brighten the capital city. Naturally the practical question of which aspects should be taken into consideration when designing the riverbank was raised. The answer underlay several points:

1. Supplying the city of Vienna with fruit, vegetables, fish etc.
2. Handling centers for the wholesalers at “Franz Joseph’s-Kai” (import was allowed into small amounts). Wood, coal and brick handling centers were better to be placed at the city periphery, in view of the bank from “Augartenbrücke” to “Franzensbrücke” belonged to the city center.
3. Steamboat stations for passengers and landing docks for the people’s local transport
4. Fish-market placement
5. The possibility of using the steam-tram for supplies transport between “Stefaniebrücke” and “Augartenbrücke”.
6. Minding buildings and constructions such as bridges, street-lines, etc. reserved for later consideration.

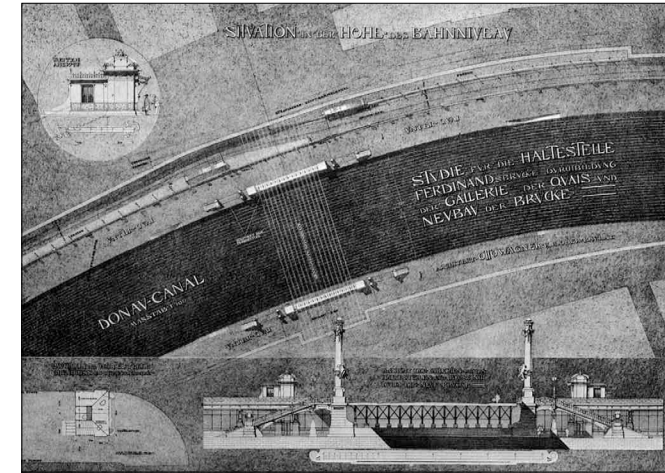


Illustration nr.33 / Ferdinand's Bridge - Situation and Section , Railway Level

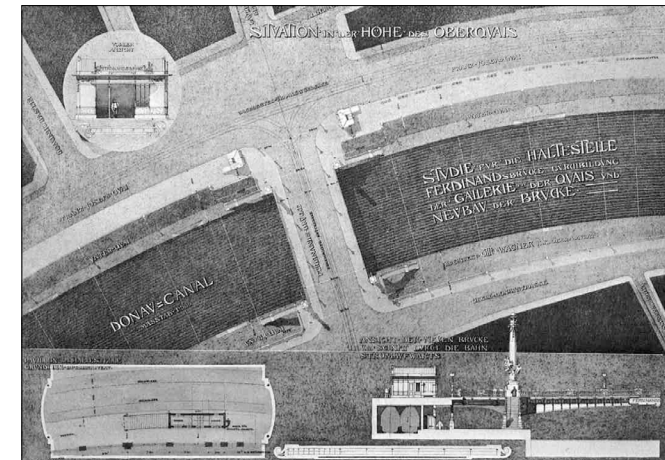


Illustration nr.34 / Ferdinand's Bridge - Situation and Section , Railway Level

Regarding the esthetic aspect of the planning the partitions of the upper-bank walls had to be placed in relation with one another. Literary impossible to carry out the task, whereas the bridge axis is not perpendicular to the river trace, the compensation was made through regular radial divisions of the space, so that the irregularity remains almost unperceived. At the horizontal level of the upper-bank the “Trottoir-Nivelette” finds its solution in the step insertion. The leaped street alignment and the given situation that the bank bordering walls have to follow the tram line, the left lower-bank faces the same leveling issue.

STADTSEITIGER RECHTER BRÜCKEN
 PFEILER MIT EINER
 DER DENKSÄULEN Z
 ERINNERUNG AN DIE
 NEUGESTALTUNG VON
 WIEN GALLERIE
 UND EINSTEIGHALLE
 DER STADTBAHN
 ENTWORFEN VON
 OTTO WAGNER
 OBERBAURATH

○ MDCCCXCVI ○



Measuring a normal width of 15 m, it sums up to 8 m between “Stefanie - and Rothenthurmstrassenbrücke” while it respectively up to 25 -26.5 m then broadens. The widenings and narrowings were managed through stepped insertions in which the stairs and the lifts were placed. Due to this unequal width of the waterfront places with future determined functionality, suchlike the fish-market, naturally unfolded. The idea was to position the fish-market at a central point with adjacent stands on the upper part of the “Augartenbrücke”. Near the low prices and increased consume the architectural value of such an intervention is undoubtedly of great importance. From the urban point of view regarding esthetics and traffic, it is highly recommendable to push certain centers towards the periphery of the city, in this case the fish-market, transforming this way an unfortunate place into a means for a flourishing city.

The lower-bank is open to traffic, accessible from the ramps at the end of the riverbank. The distance between the ramps measures 2100 m on the left riverbank, whereas on the right side, at the intersection of the bank with the estuary (“Wienmündung”), the measuring come to 1380 m, possibly 743 - respectively 620 m. On the broad parts of the upper-bank unfold various places functioning as gardens, stations, rail pavilions, buildings belonging to the Danube-Steamboat, cafes, pavilions with sitting places, lifts, withdraw places, finally forecourts announcing the existing and the future bridges. The 1973 m long stretch from the ‘Augartenbrücke’ up till “Franzensbrücke” connects the two shores over 8 bridges.

The perspective of the project advances an explicit picture of a proper urban design and planning of the waterfront area stretching from “Augartenbrücke’ up to ‘Franzensbrücke” and offers in spite of the simplicity of the applied form a unique monumental grasp of a part of the city.¹

1. Cf. Graf. Otto Antonia: “Otto Wagner. Das Werk des Architekten 1860-1902”, Bd. 1, Wien 1985, Akademie der Bildende Künste, page 293-298 // translated by Oana Ilie

Eurovea, the Danube Town

Eurovea, the Danube Town
Drawings: Academy of fine Arts, Vienna
Architect: Murray Ó Laoire Architects
Ciarán Ferrie Architects
Client: Municipality of Bratislava, Slovakia
Year: 2006

The city of Bratislava extends on a surface of approximately 368 km² with a population of 426.000 inhabitants in the southwest of Slovakia, within the feet of the Small Carpathians and the river Danube. At the core of the city, the old historical Center was in the middle-ages a venue for the organic growth of the adjacent quarters later on marking the urban outskirts. In the 18th century the fortifications were obliterated and with it a Baroque style city revival was set in motion. The following 19th century Industrial revolution renewed constantly the image of the city, ergo the 1818 Steamboat transport on the Danube and the 1848 railway connection to Vienna. After the 1st World War an immigration wave determined the construction of large-scale factories and residential areas, accompanied by an architectural and economic modern sprout. An achieved development that also found the loss of growing urban structures as well as buildings of historic value, thus replaced by vast prefabricated housing. The political and economic changes amidst the 1993 Independence of Slovakia allowed the urban planning increasingly in the hands of private investors. In order to regain jurisdiction an Urban Planning Committee and a new urban

development plan were established with the current task of winning back and managing ample urban designs. An important theme in the city development of Bratislava was the conversion of the surrounding industrial areas. Because of their central location, near the inner city they constitute valuable urban development areas. A further matter of concern was the reviewing of public spaces along with the functional qualities of the city. Assuring an increased attractiveness of the free urban spaces and solving the traffic problem by investing in the public transport, together with the rehabilitation of the residential buildings, the environmental conditions will benefit, and improve air quality.



Illustration nr. 36 / Bratislava in 1960

Eurovea Project

The Bratislava landscape whereas Danube was concerned was initially outlined by a promenade on the right shore and park zones on the left side of the river. However the river's adjustments, the construction of Petržalka establishments and the " New Bridge " as well as the water protection walls obstructed the view to the watercourse. The old harbor region was strongly debated over the last few years along with a possible connection to the city center. The discussion resulted in the Eurovea urban project, which acts as a social focal point in the center of Bratislava, and the Culenova - new city center with a design based on a dynamic field strategy which organizes the new city center's program along a gradient of circular and elliptical patterns. The cultural plaza, designed by " Zaha Hadid Architects " during 2010-2013, is built adjacent to an existing decommissioned power station, converted to a downtown protected core monument.

Eurovea is the name of the new business, retail and residential center in Bratislava, Slovakia, located near the Apollo Bridge and Tower 115 building, on the right side of the river. Eurovea connects the Danube riverbank with the city center and offers amongst new stores and leisure time facilities a generous park from which the newly built Slovak National Theater is beheld. A new Danube promenade complemented with over 2 ha expanding river-side parks and an overview bridge enrich its front panorama. The project comprises in phase 1 an overall of 55.000 km² shopping mall, 20.000 km² of prime office space, 250 riverside apartments, a 5 star hotel, cinema, leisure center along with the riverside park. There are three basement levels containing over 1700 car parking spaces and service areas for the various elements of the project.

The project reached completion in March 2010 and has become an important part of the Bratislava cityscape.¹

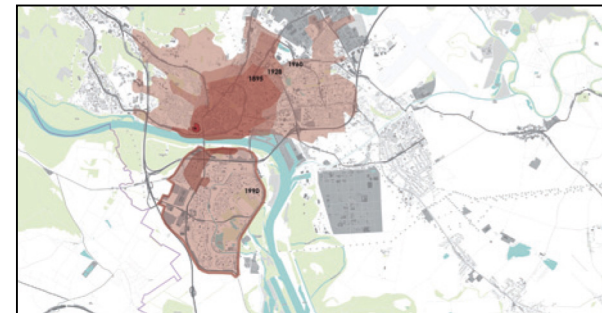


Illustration nr. 37 / Bratislava - Historical Urban Development



Illustration nr. 38 / City Development Area - Old Harbour on the left Bank of Danube



Illustration nr. 39 / Eurovea - Danube Bank Promenade



Illustration nr. 40 / Eurovea - Conversion of a Warehouse

1. Cf. Ausstellung " Stadt bauen . Beispiele für und aus Wien " / <http://www.wien.gv.at/stadtentwicklung/studien/pdf/b008252.pdf> //translated by Oana Ilie

Aspern, Vienna's Urban Lakeside

Aspern, Vienna's Urban Lakeside
Architect: Wien 3420 Aspern Development AG
Client: City of Vienna, Austria
Year: 2005-2030



Illustration nr.41 / Aspern -the Vienna's Urban Lakeside - Bird's Eye View

Vienna and Bratislava do not only boast a shared history but are also linked by the Danube River, the Danube Floodplains National Park and the vast cultivated Marchfeld plain. The wetlands of the Danube are the last big, largely untouched riverside floodplains in Central Europe. On the 1st of May, the Aspern airport was closed and on the abandoned site emerged one of the largest urban development projects in Europe. The former airfield is planned to evolve along the Vienna-Bratislava axis, distinguishing itself into an international point of attraction and hub of economy, science and research in the "Centropo" region. The concept was to promote and support the creation of a self-sustaining community capable of offering provision for a range of employment opportunities, housing types and community facilities. The urban planning started up in 2005, and undertaken from 2007. With an estimated completion in 2030 the, entailing a 2.4 million m² area, the project's key structure-creating elements of the overall concept engage the northern quarter, station and shopping street improving local mobility, the green heart and it's extensions to the east and west whereas the central park with



Illustration nr. 42 / Aspern in Centropo



Illustration nr. 43 / Aspern in Vienna

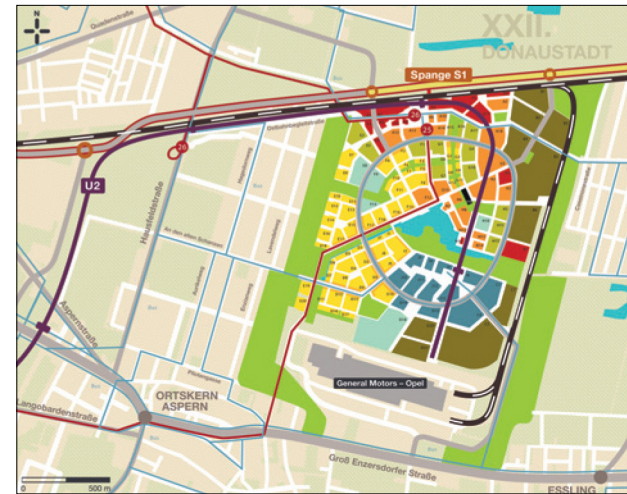


Illustration nr. 44 / Aspern and Surroundings

its large lake provide one of the most important design elements, the ring road conferring another key element in the spatial structure embodied in the plan, the industrial zones characterized by low - large scale structures visioned as key access points to the city quarter and eventually, the science and education campus.

“The Blue Zone” embodying the park zone and it’s large lake portrays an island landscape, the green heart of the sea-city, employing a chain of sport and fitness, recreation and enjoyment furnishings encouraging public involvement. These social spaces are to be seen in conjunction with the overall landscape network, thus to Vienna’s Green Belt.

“The Red Zone”, the core of Aspern subsumes predominantly cultural and commercial activities. Decisively unfolding at the ground floor, the red area implied a reserved landscape architectural intervention as well as flexible places conveniently arranged in the middle of the street.

“The Ring Road” links all main access roads to the area and emphasizes the radial network of secondary streets and greened, interconnected footpaths. The Ring Road vicinity to all important functions will transform it into a prime distribution and supply artery in the metabolism of the new city quarter urban life.

All of a sudden, Aspern Urban Lakeside is no longer a project for the future but something very present and real, something that also “feels good”.

The new, sustainable city “Aspern, Vienna’s Urban Lakeside” will contribute to the national and international image of the Austrian capital – in particular through its links with Central and Eastern European countries, their people and cultures, and base its own identity on precisely this interface role.¹

.....
 1. Cf. Ausstellung “Stadt bauen . Beispiele für und aus Wien “ / <http://www.wien.gv.at/stadtentwicklung/studien/pdf/b008252.pdf> //translated by Oana Ilie

Illustration nr. 45 / Northern Quarter and Railway Station



Illustration nr. 46 / Green Heart



Illustration nr. 47 / Ring Road

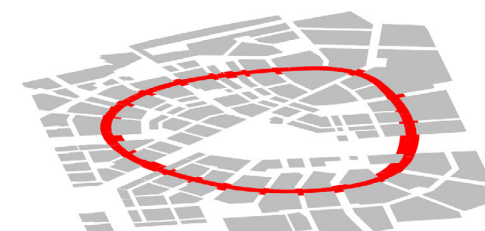


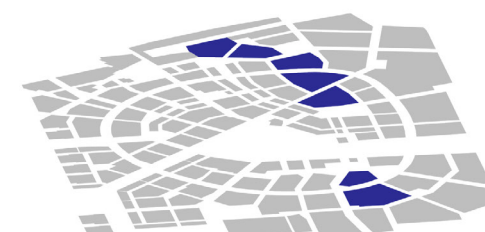
Illustration nr. 48 / Industrial Zones



Illustration nr. 49 / Science and Education Campus



Illustration nr. 50 / Super Blocks + Subway



Ljubljana River Banks Rehabilitation

Ljubljana River banks rehabilitation
Architect: Boris Podrecca, Atelier Arhitekti, BB arhitekti, Atelje Vozlic,
Dans Arhitekti, Trije Arhitekti & Medprostor
Client: City Council of Ljubljana, Slovenia
Year: 2004-2011

These days one can but take notice of the unfolding flexible architectural and urban planning designs. In a contemporary city that enables numerous utilities of long lasting and further development accession, encouraging participation and self-organization, the increasing social plurality and the democratic aspect of the public spaces are of veritable importance. The 280 000 citizen city of Ljubljana forms the scene of a remarkable and coherent large scale urban-design that gives relevance to the capacity of the river to structure the city. This unique and ambitious design covers the entire riverbank space and thus the enhancement of the city center's power of attraction in order to combat the less fortunate trend towards urban sprawl.

From the 1930s, Joze Plecnik marked the river's course with a profuse and varied collection of buildings, squares, canals, embankments and riverside parks, recognizing the structural role of the river and endowing it with a welcoming and cultured monumentalism. He envisioned Ljubljana as a new Athens, an enlightened model city, furthermore redesigning a range of bridges over the river, amongst which the Trnovo Bridge, the Cobbler's Bridge and the centrally located Triple Bridge emphasizing the city's unique character. Today's tamed Ljubljanica River and its attractive concrete embankments owe much to the architect.

Ljubljana, reaches of a karst river, formerly used for carrying goods to and from Ljubljana, flows through the capital's old center, sinuously around the northern slope of Castle Hill, and withdrawing east from the city. In an attempt to remedy frequent flooding, the Gruber Canal (Grubarjev precop) was opened, cutting through the southern end of the promontory, thus confining the old city center on an island.

Within the large-scale urban system the river Ljubljana was to resume the role it had been given by Plecnik, literally bridging the confined old city center with its accumulated generous repertoire of architectural styles reflecting from the Baroque era all the way through to the Vienna Succession. Moreover considering the star-shaped actual urban plans of the capital of Slovenia -a following development from a historical city-core- and the ample green spaces in the urban fabric, the introducing modern work urban development is nevertheless carried in the spirit of the renowned master architect. The city's sustainable transformation naturally underlays several dominant points up to completion:

- the rehabilitation of the city's historical center over highlighting the public areas and the expansion of pedestrian zones
- the encouraging of mixed-use functions structured in the inner-city in view of charging the venue
- advancing traffic infrastructure through public and bicycle transport over individual vehicular traffic

In other aspects, a new footbridge between the Botanic Gardens of the University of Ljubljana and the new Spica was fashioned in 2010, the same year as the Krakovo and Breg embankments, leading up to the Nova Square (Novi trg), were scheduled for renovation. The City Municipality of Ljubljana has also completed the construction of several new piers for tourist boats cruising the river Ljubljana and renovated most of the city center river embankments designed by J. Plecnik, the Breg, Krkovski nasip, Trnovski pristan and Spica (City Park) embankments, and most of the footpaths alongside the riverbanks.



Illustration nr. 52 / Image of Nova Square prior to the Intervention.



Illustration nr. 53 / Image of Nova Square after its renovation



Illustration nr. 54 / Night-time view showing the footbridge over the Gruber Canal in profil.

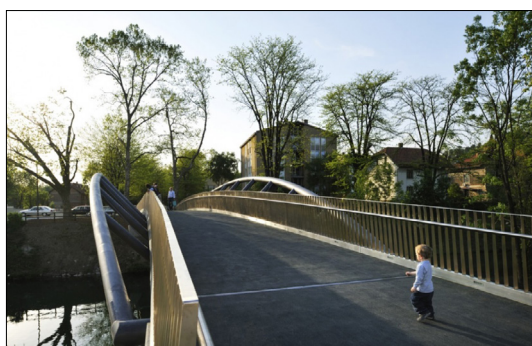


Illustration nr. 55 / Detail from the footbridge over the Gruber Canal



Illustration nr.51 / General plan of the Intervention. The Project brought together and coordinated several teams of local Professionals who worked on a series of specific, realistic and viable Interventions which, however, were organised within one large - scale urban system

Thanks to the reconditioning of the Ljubljana Banks and Bridges project, the old city Center of Ljubljana has been re-establishing one of its greatest qualities defined into the connectedness of the city's life to its river.¹



Illustration nr. 56 / Aerial view of the footbridge over the Gruber Canal which links botanica garden of University of Ljubiana with the new city park (Spica)

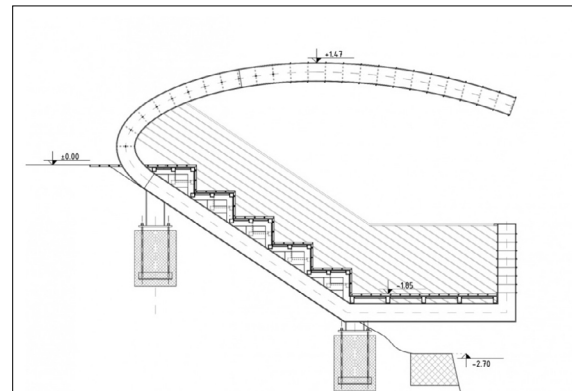


Illustration nr. 57 / Transversal Section of the new Pavillion built on the Petkovskovo Embankment



Illustration nr. 58 / The new Pavillion on the Petkovskovo Embankment

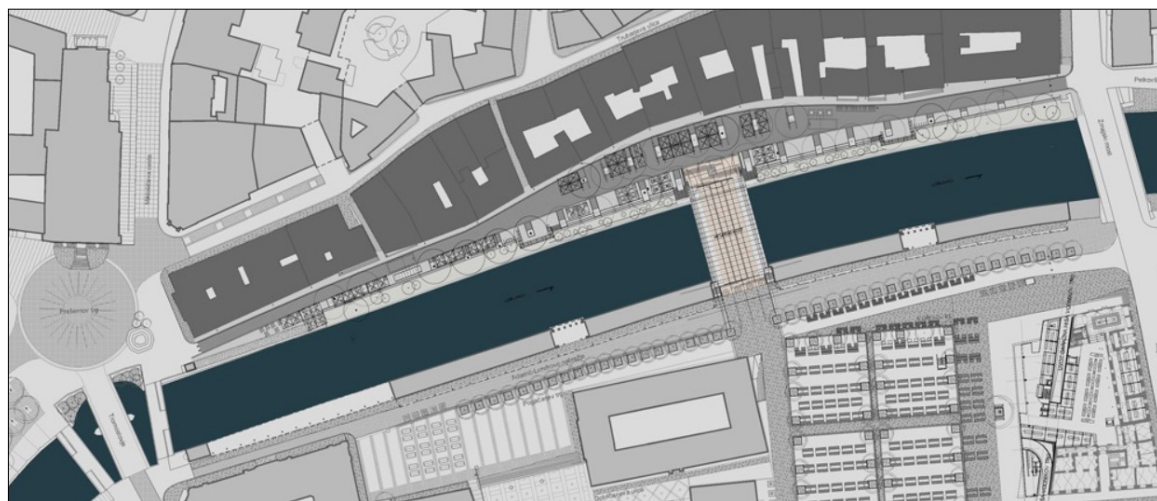


Illustration nr. 59 / Plan of the Intervention between Triple Bridge, on the left, and Grain bridge on the right. In the Centre is Butcher's bridge

1. Cf. *Ljubljana River banks rehabilitation* / <http://www.publicspace.org/en/works/g072-preureditve-nabrezij-in-mostovi-na-ljubljani/prize:2012>



Illustration nr. 60 / New riverside walk along the Gruber Canal

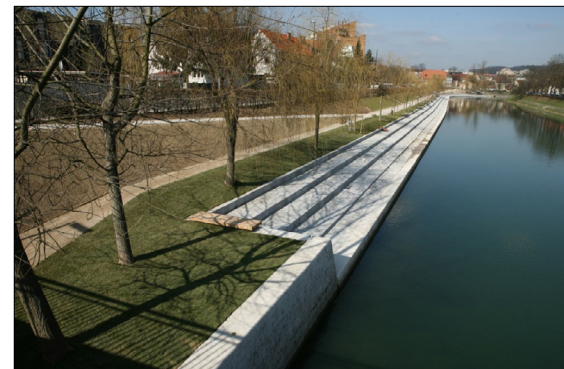


Illustration nr. 61 / The Trnovo Embankment after renovation



Illustration nr. 62 / The Trnovo Embankment after renovation



Illustration nr. 63 / Tiered seating in the Spica (City Park)



Illustration nr. 64 / The new Pavillion on the Petkovskovo Embankment



Illustration nr. 65 / The new Pavillion on the Petkovskovo Embankment



Illustration nr. 66 / Pergola in the Spica (City Park)



Illustration nr. 67 / The new Spica (City Park), a green Riverbank space that completes the Project at southernmost point the Island on which the City Centre is located.



Solventul

The former industrial site “Intreprinderea Chimica Solventul Timisoara”, is situated in the historical area of the city, named Iosefin. The Company initially produced alcohol and solvents and the first factory on site was built in 1869.¹ Later on the field of activity extended on producing several further chemical products as well. After 1990 the company’s activity started to decline and in 1998 official bankruptcy was declared. In the last 10 years, the fabric was demolished.²

The 574.920m² site is situated western from the Old City, on the northern Bench of the Bega Canal. The area is bordered to the North by the North Railway Station, to the South by the Bega Canal and the leading along Splaiul Nicolae Titulescu Street, to the West by the railway lines and a Water Purification Plant, and to the East by the Nufar street.

The Site defines the western borderline of the city, which resides in being badly connected to the street network of the city. The location of the plot also marks the turning point for the bus line. The tram line stops north of the site, after the railway lines. There is one main traffic artery linking to the Main Railway Station to the east, but no direct connection to the south of the city.



Ilsa

“Industria Lanii SA” was first set up in 1905. In 1970-1975 the first modernization process takes place. The company was producing textile and tapestry, supplying other industrial units in the rest of the country. After 1989 it started to decline.³

The 84.907m² Site is situated east from the Old City, on the northern Bench of the Bega Canal. The area is confined: in North by the Take Ionescu Boulevard, to the South by the Bega Canal and the leading along Splai Protopop Street, to the West by the Dimitrie Gusti Academy street and Municipal Police Station, and to the East by the Mihail Kogalniceanu street and Badea Cartan Market.

The Take Ionescu Boulevard that sets the north borderline of the site, is one of the radial streets of the city and connects the Inner City with the Periphery. It is also the road that leads to Transylvania. Western to the site, less than a kilometer away, on the way to the Center of the city, we find important public institutions like the Prefecture, the Medical University, Central Post Office and major landmarks like Hotel Continental or the Flower Clock.

The site is connected to the southern river bench through Podul Dacilor (Dacians Bridge) and Strada Dacilor (Dacians street), which leads to Piata Traian (Traian Square), which is the central point of the historical area Fabric and an important traffic node. Further on going to the south, we step into nowadays industrial zone of the city.



Illustration nr. 68 / Solventul - Aerial Image



Illustration nr. 69 / Ilsa - Aerial Image

1.Cf. <http://www.romanialibera.ro/actualitate/proiecte-locale/solventul-timisoara-un-falimant-provocat-de-nato-91525>
 2.Cf. <http://www.debanat.ro/2012/03/solventul-o-istorie-demo-lata-pe-sest-foto/>
 3.Cf. <http://waiting-spaces.simultan.org/post/45884223799/fosta-ilsa-2013>

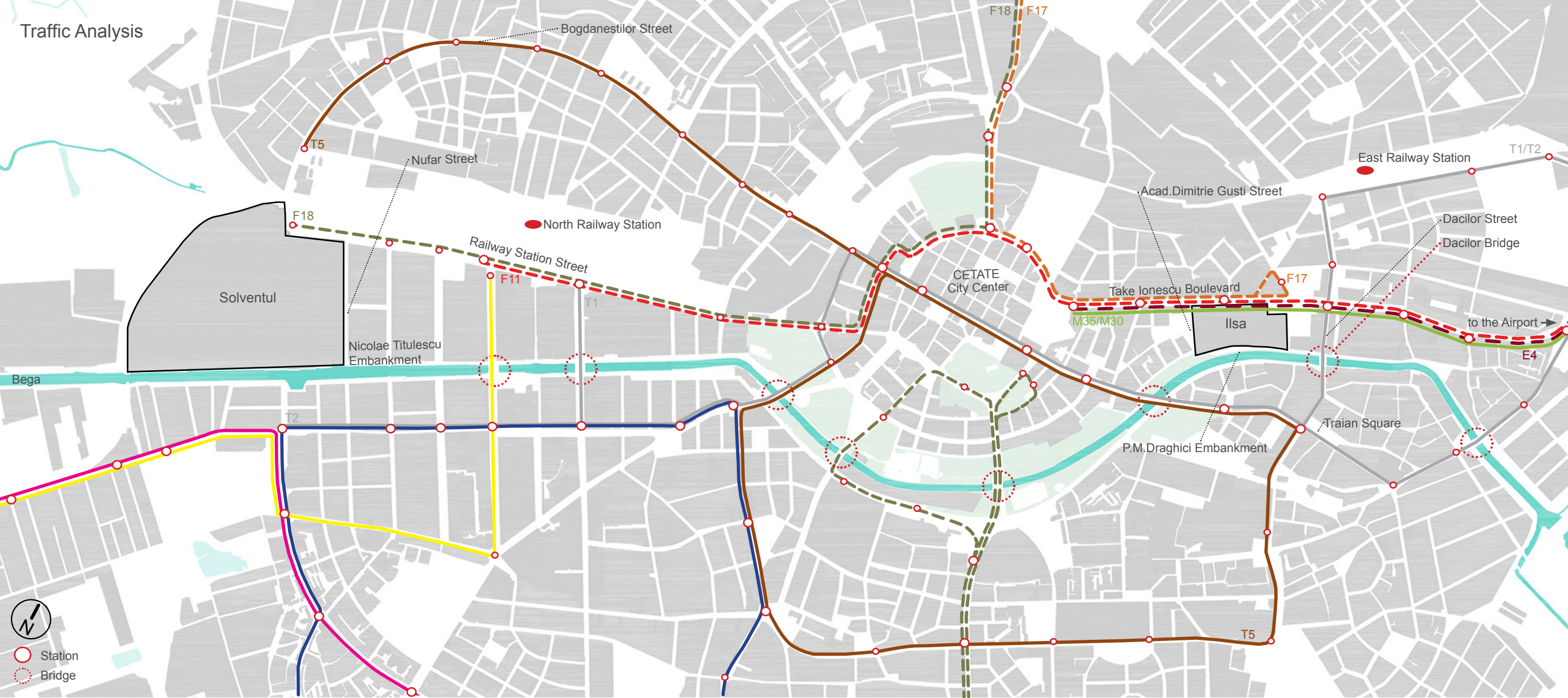


Illustration nr.70

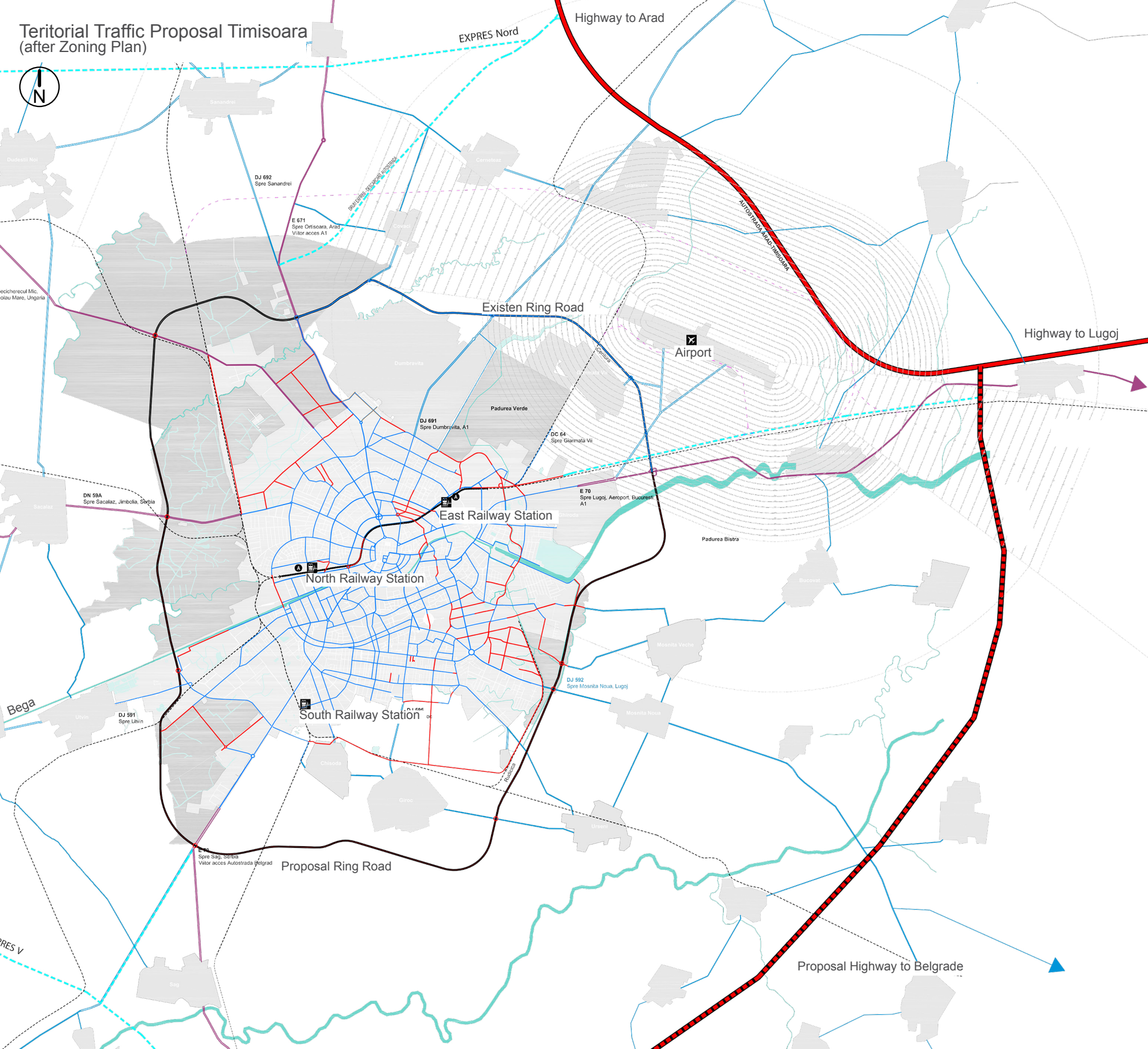
Solventul

The area may be accessed from North-East, from Strada Garii (Railway Station Street), and from south-east, from Splaiul Nicolae Titulescu (Nicolae Titulescu embankment). Crossing the railway tracks, there is also one more road, north of the site: Calea Bogdanestilor, which is the route for the tram line T5 and the connection to the center of the city: "Cetate" and further public transport lines. The city trolleybus line F 18, connects the site with the center and the north of the city. We notice the lack of a direct link with the southern shore of Bega and as such, with the southern part of the city.

Ilsa

The area has the advantage of having the 4 lanes Take Ionescu Boulevard as direct borderline in North, which means excellent connection by car, and two bus stations on site and five public transport lines running along: two trolleybus lines, T 17 and T 11, the Express line 4, connecting the Bastion with the airport, and two Metropolitan lines which lead to periphery. Also, 500 meters away from the site there are two tram lines, which assure a connection as well with the southern shore as with the north part of the city, including the East Railway Station. Secondary access to the site is provided through the Acad. D. Gusti Street and P.M. Draghici embankment.

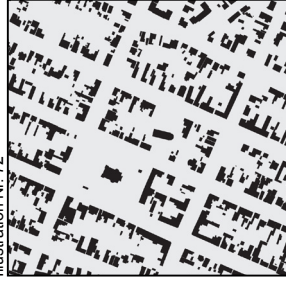
Teritorial Traffic Proposal Timisoara
(after Zoning Plan)



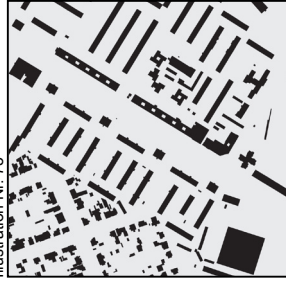
Black Plan Timisoara



Individual Housing



Collective Housing



Collective Housing ,
Open System



Mixed Function, Historical
Area, Courtyard Block



Individual Housing - Suburbs

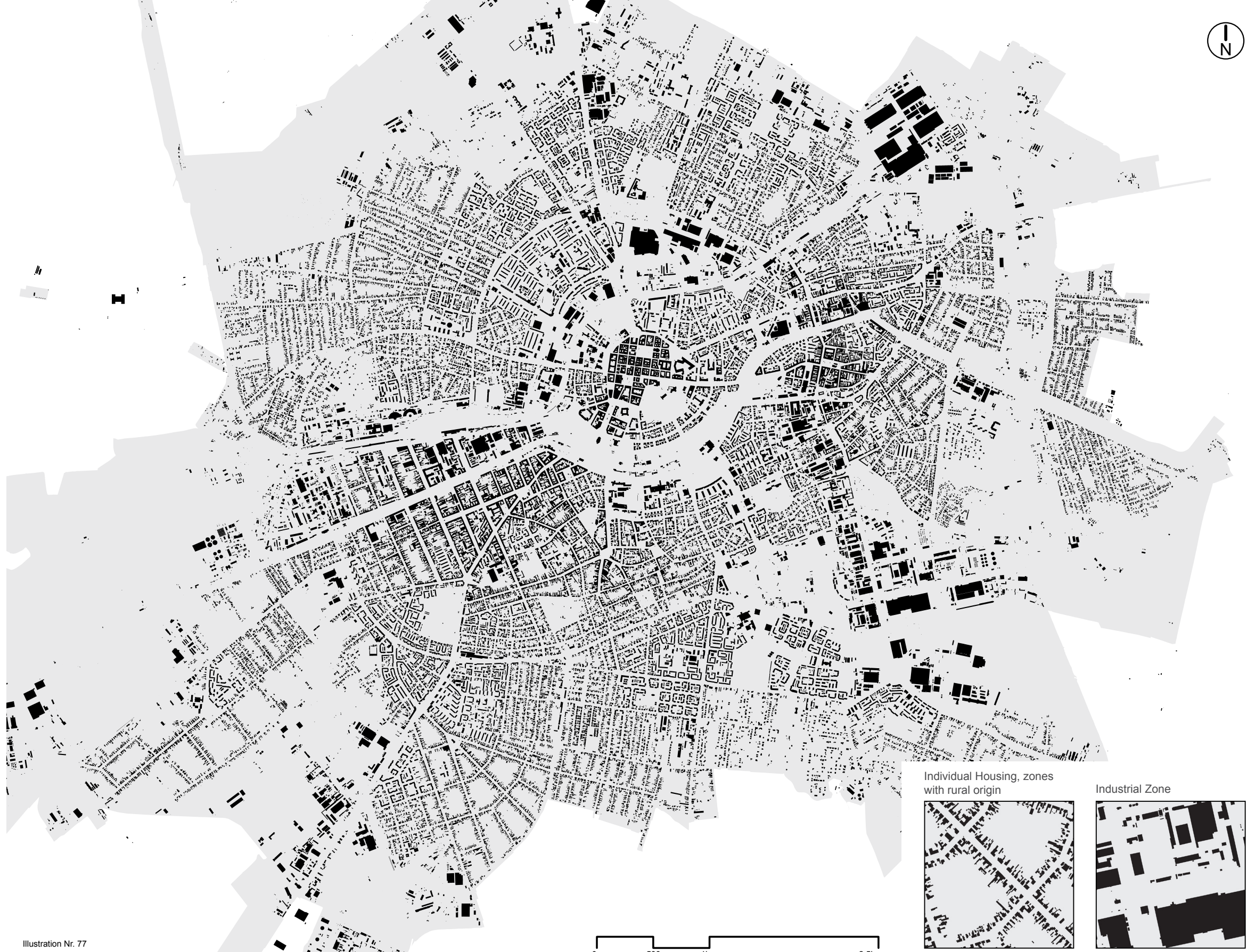


Illustration Nr. 77



Individual Housing, zones
with rural origin

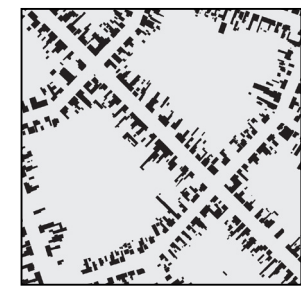


Illustration Nr. 78

Industrial Zone

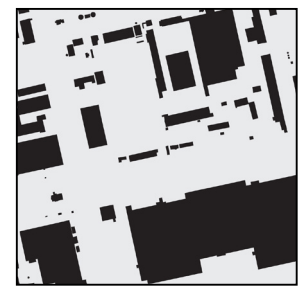


Illustration Nr. 79

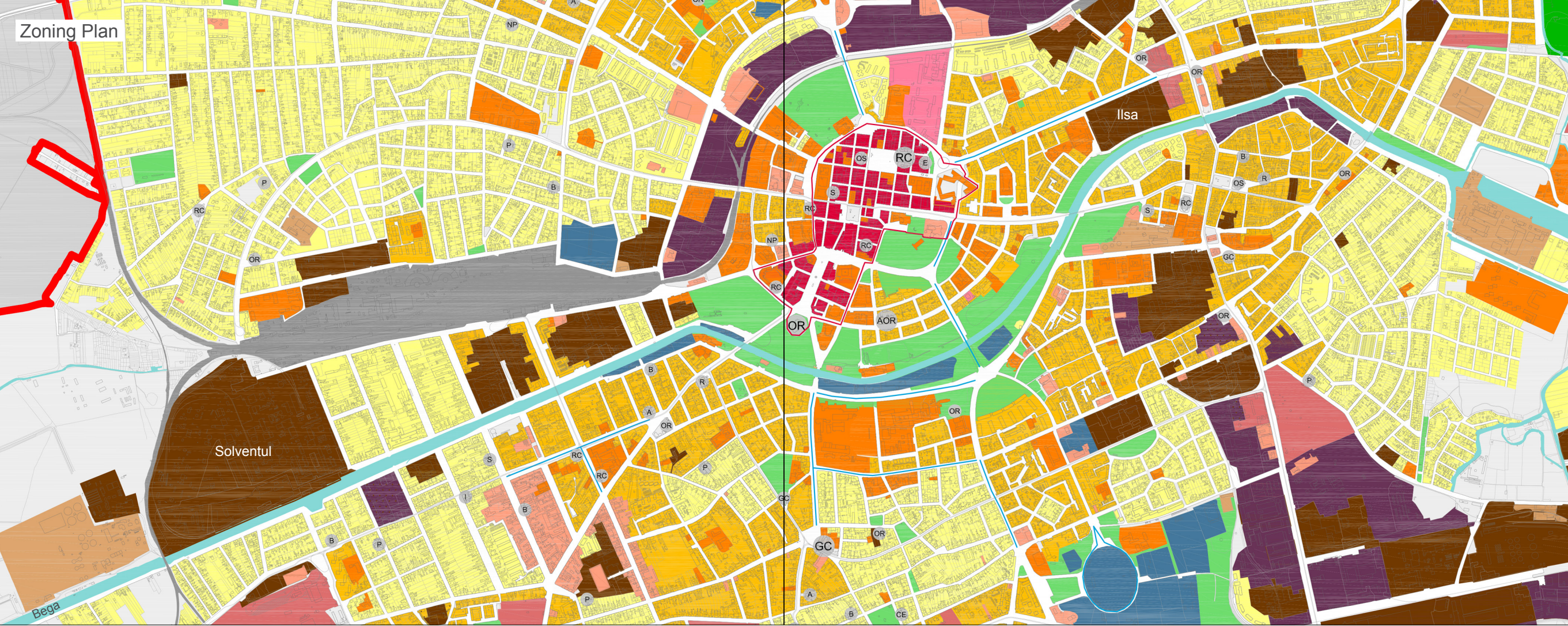


Illustration Nr. 80

- Outside City Boundaries
- Outside City Boundaries
- City Boundary
- Administration Border
- City Center
- Housing
- Housing & Services
- Institution & Services
- Comercial Zone

Solventul

Being a former major industrial concern, the site, is quite peripheral situated. It is surrounded predominantly by a housing area, which has a major lack of public functions like services and institutions, schools and commercial zones. Such utilities are to be found on the southern shore of Bega, but the connection to it needs improvement, the next pedestrian bridge being 200 meters away from south-east corner of the site, and the next succeeding vehicular traffic bridge 650 meters away.

Ilsa

Extremely well connected to the individual and public transport network, the site is located in a mixed functions zone. It is a housing zone with direct access to services and institutions as well as a direct link, west of the site, to the center and south of the site, to the historical area Traian.

- Sport Zone
- Economy, Industry, Storage, Logistics, Retailing
- Zone Recycling in Process
- Railway & Funktions
- Urban Construction
- Green Zone, Sport
- Special purpose Zones
- Forest
- Bicycle Route

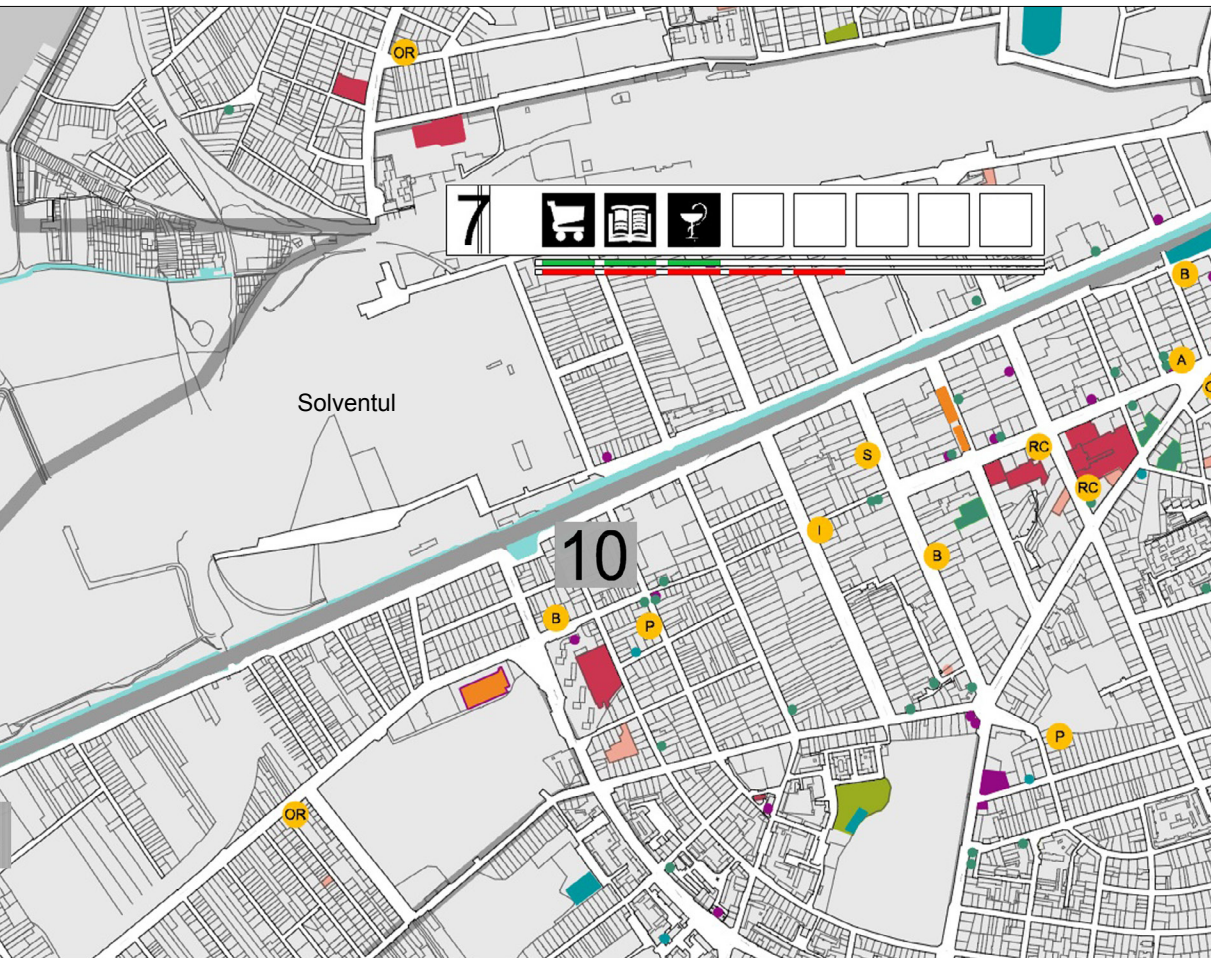


Illustration Nr.81

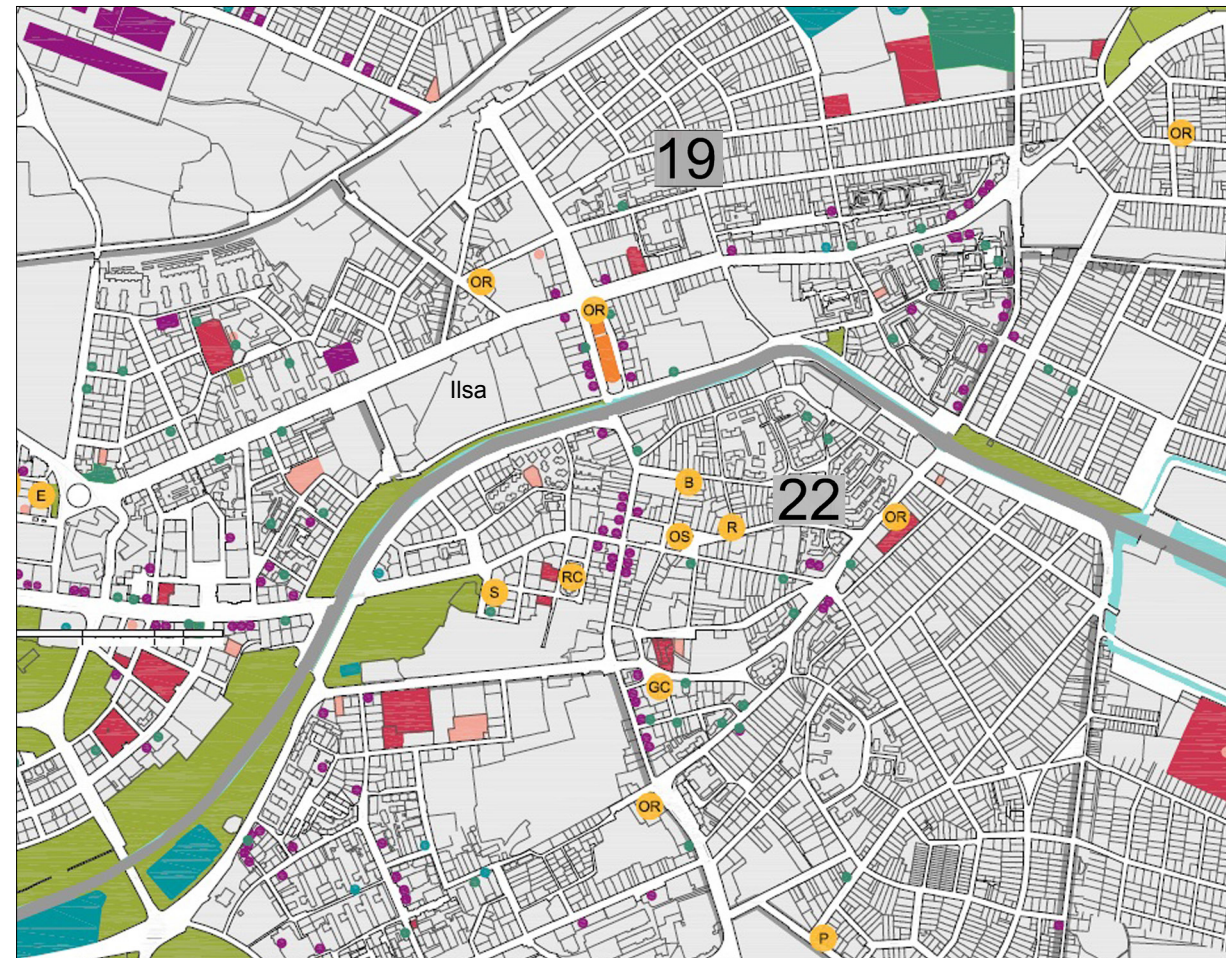
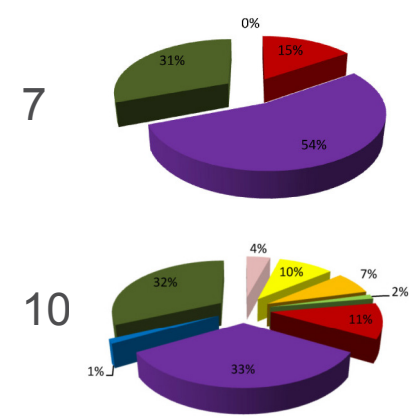


Illustration NR. 82

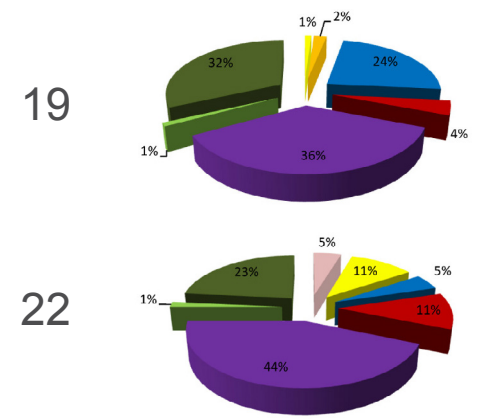
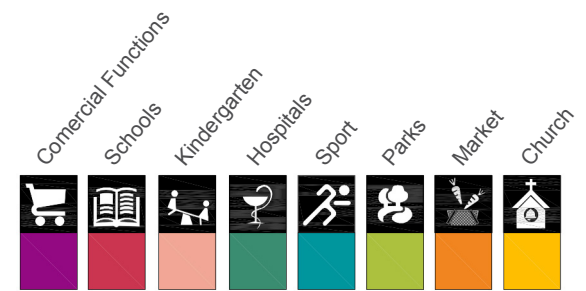
Solventul

In the proximity of the site, on the other side of the railway lines which border the North part of the site we find two schools, as well as a church. The rest of the necessary public functions like shops, markets, schools, healthcare units or cult institutions are to be found on the southern shore of Bega.



Ilsa

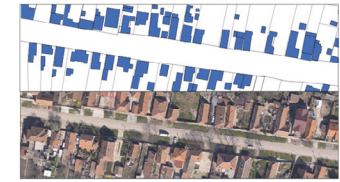
The site is to be found in the immediate vicinity of an important commercial point: Badea Cartan Markt (right from the site), around which a series of functions gathered along: shops, schools, kindergarten, healthcare, cult and sports.



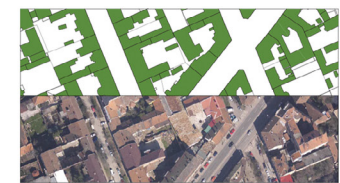
Urban Structure - Typology - Solventul



Courtyard Block Development



Row Housing with alignment



Historical Block Development



Single Housing with alignment



Uncontrolled Development



with draw from alignment



duplex Housing with alignment

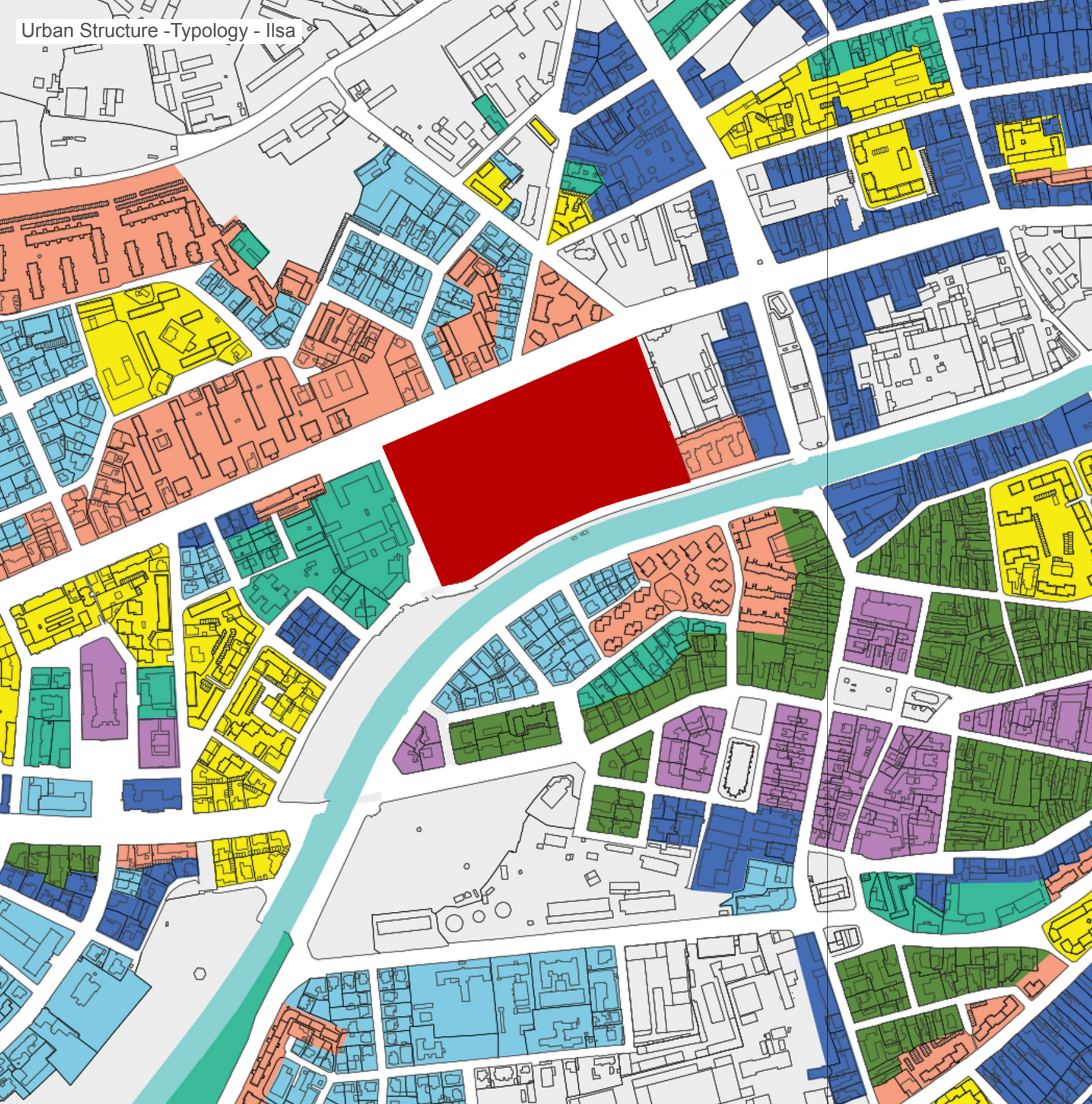


Free Standing Precast Concrete Buildings

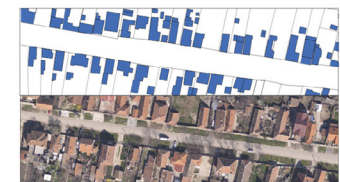


Housing Blocks

Illustration Nr. 83



Courtyard Block Development



Row Housing with alignment



Historical Block Development



Single Housing with alignment



Uncontrolled Development



with drawal from alignment



duplex Housing with alignment

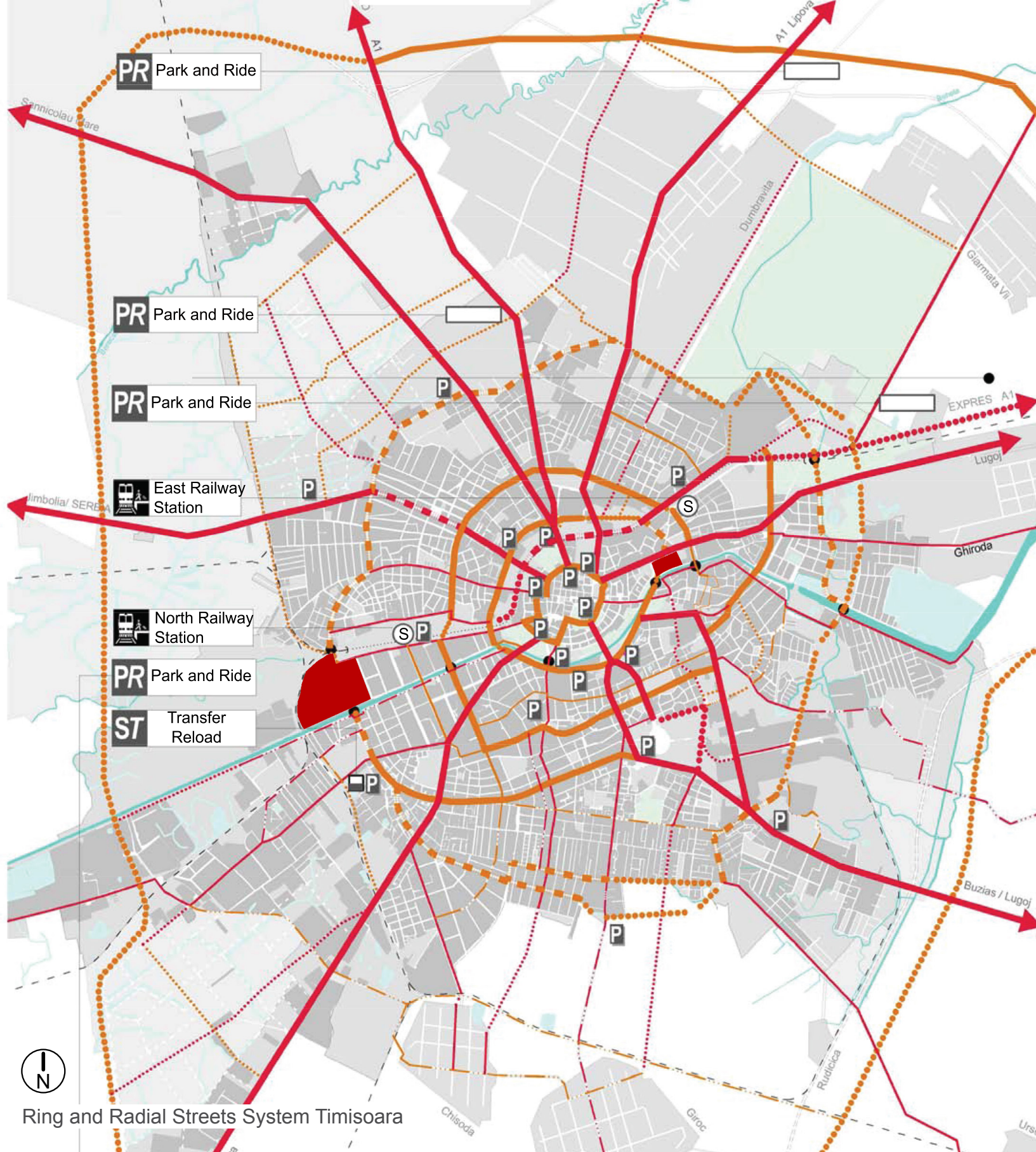


Free Standing Precast Concrete Buildings



Housing Blocks

Illustration Nr.84



PR Park and Ride

PR Park and Ride

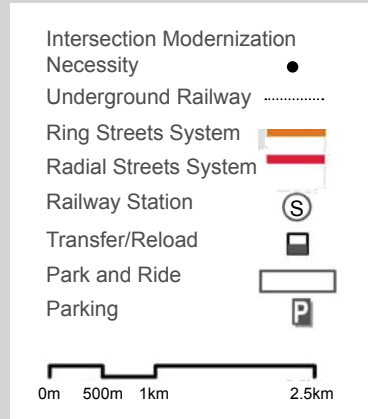
PR Park and Ride

East Railway Station

North Railway Station

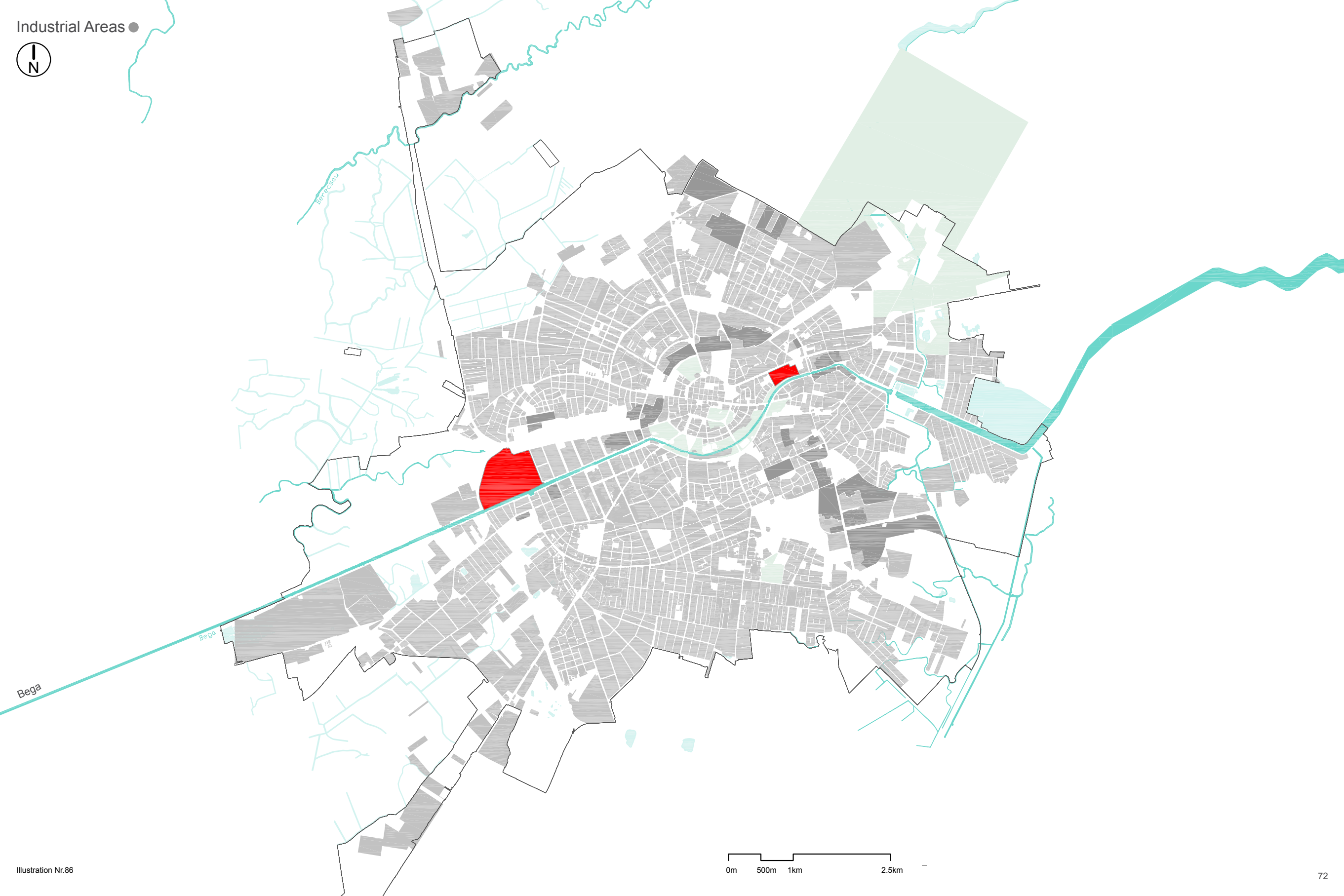
PR Park and Ride

ST Transfer Reload



Ring and Radial Streets System Timisoara

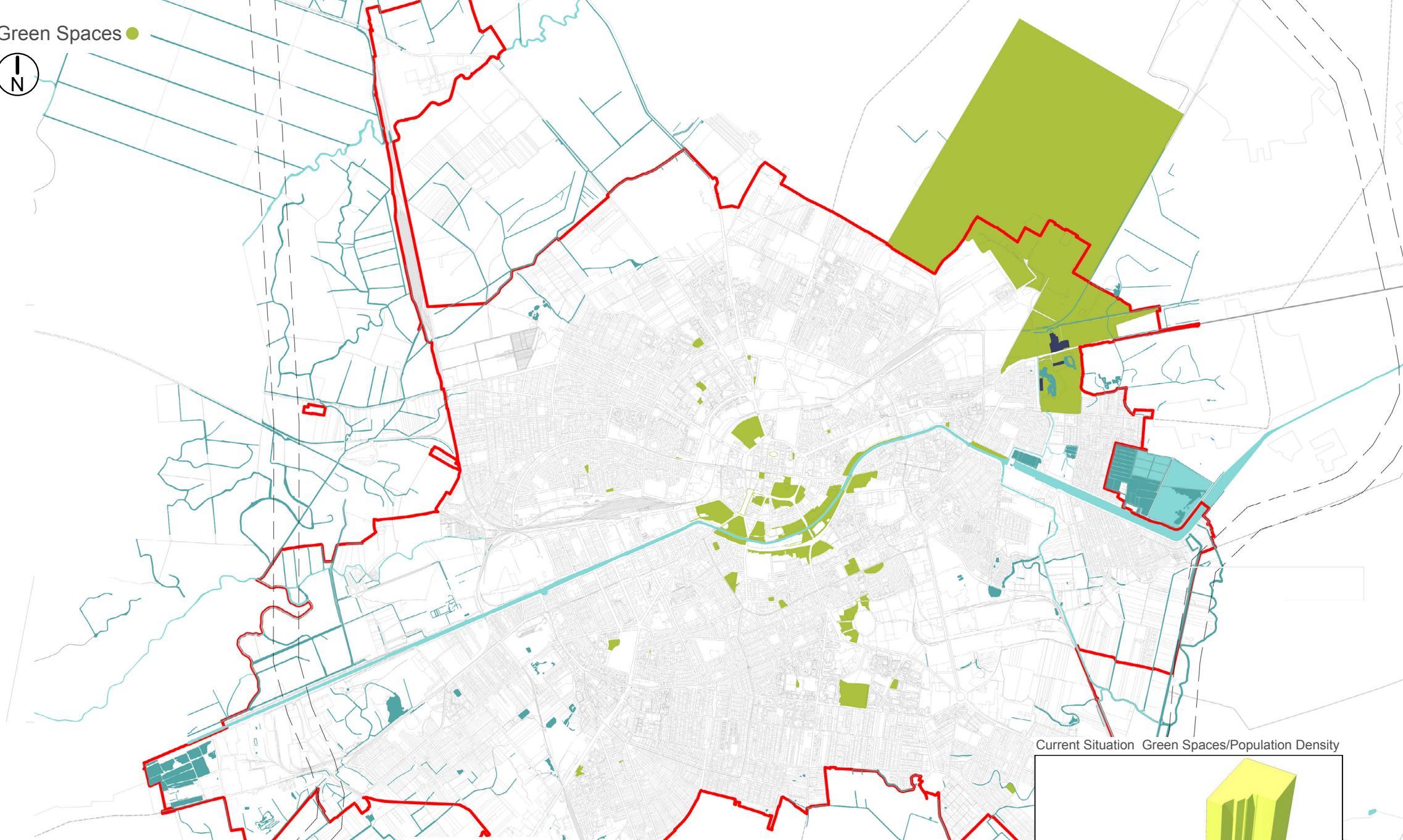
Industrial Areas ●



Green Spaces ●



0m 500m 1km 2.5km



Current Situation Green Spaces/Population Density

Parks - Current Situation



Illustration Nr.88

Parks & Public Squares

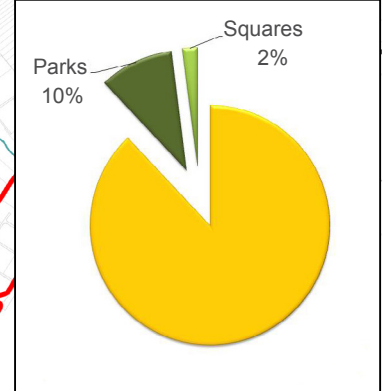


Illustration Nr.89

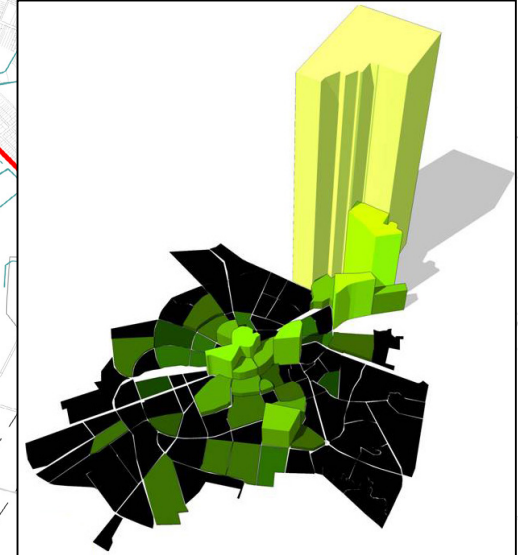


Illustration Nr.90

Ideal Situation

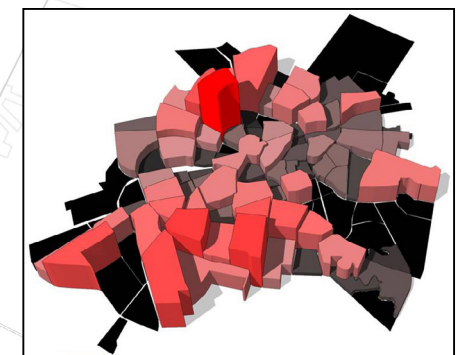


Illustration NR.91

Illustration Nr.87

Density

Population Density

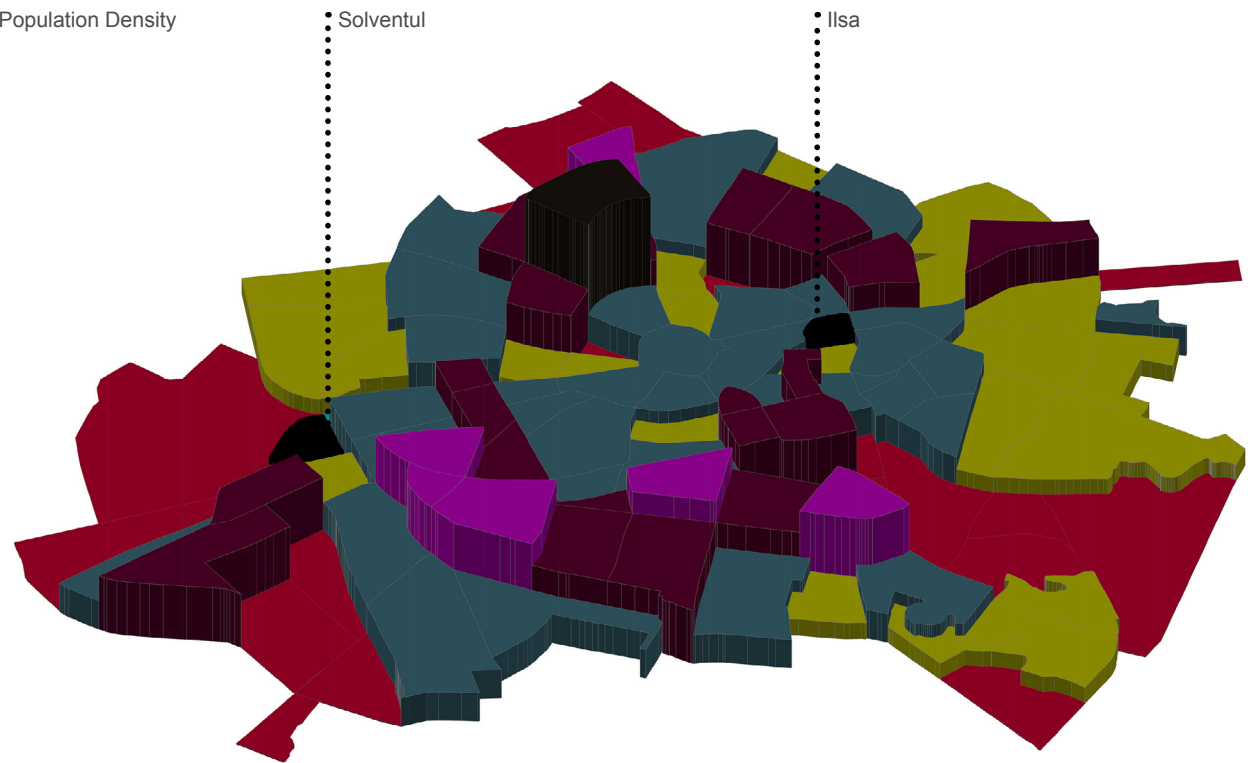


Illustration NR.92

Housing Density

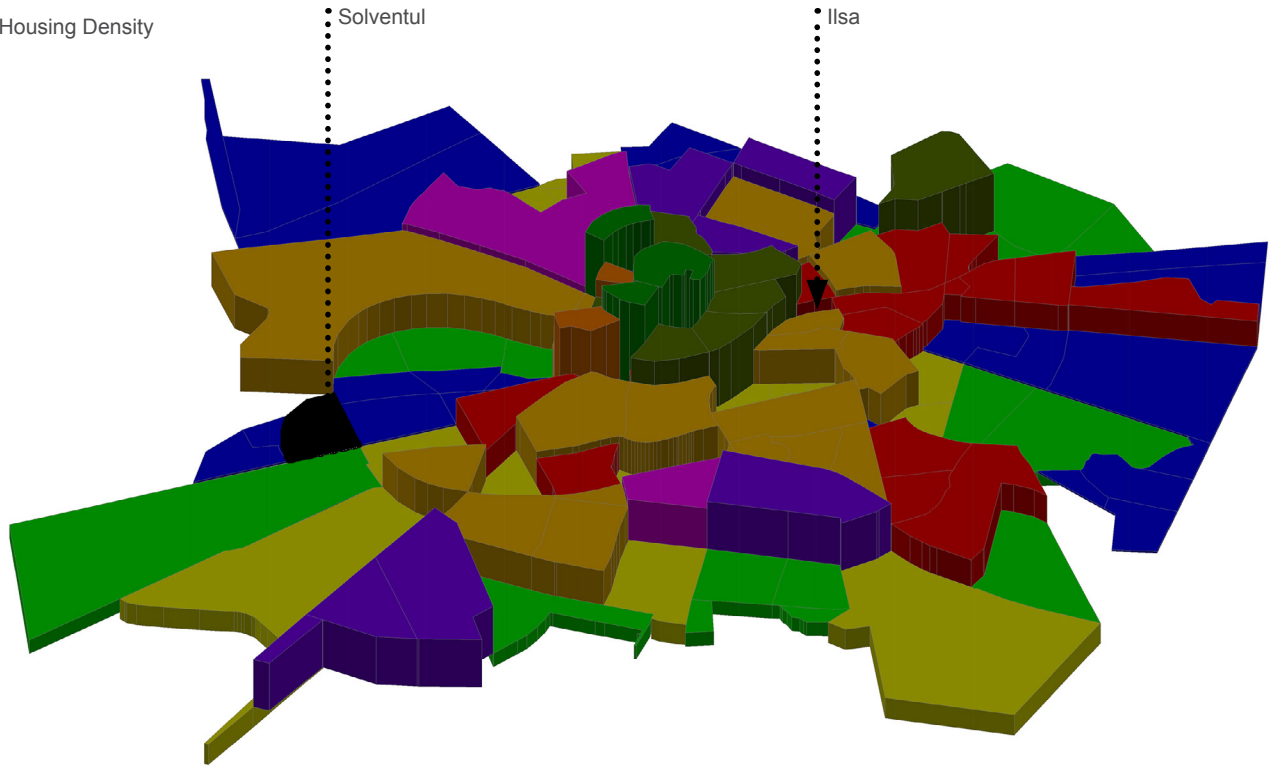


Illustration Nr.93

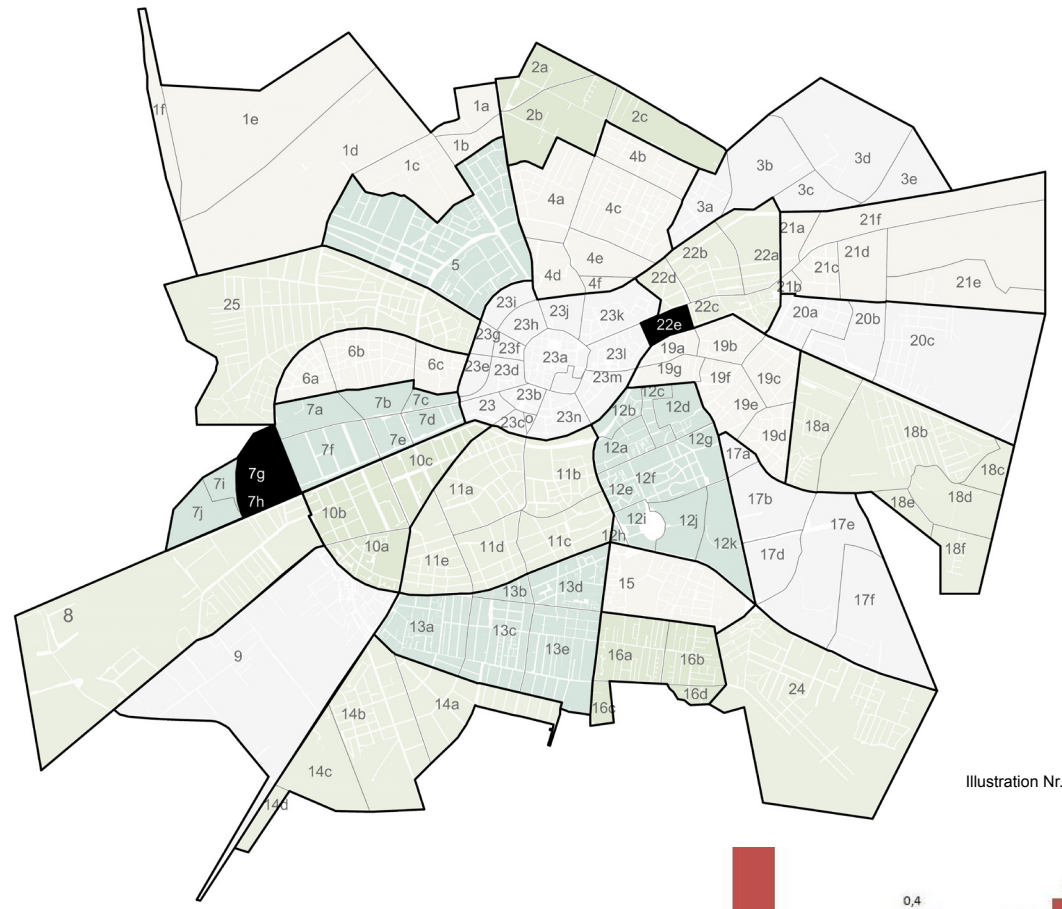


Illustration Nr.94

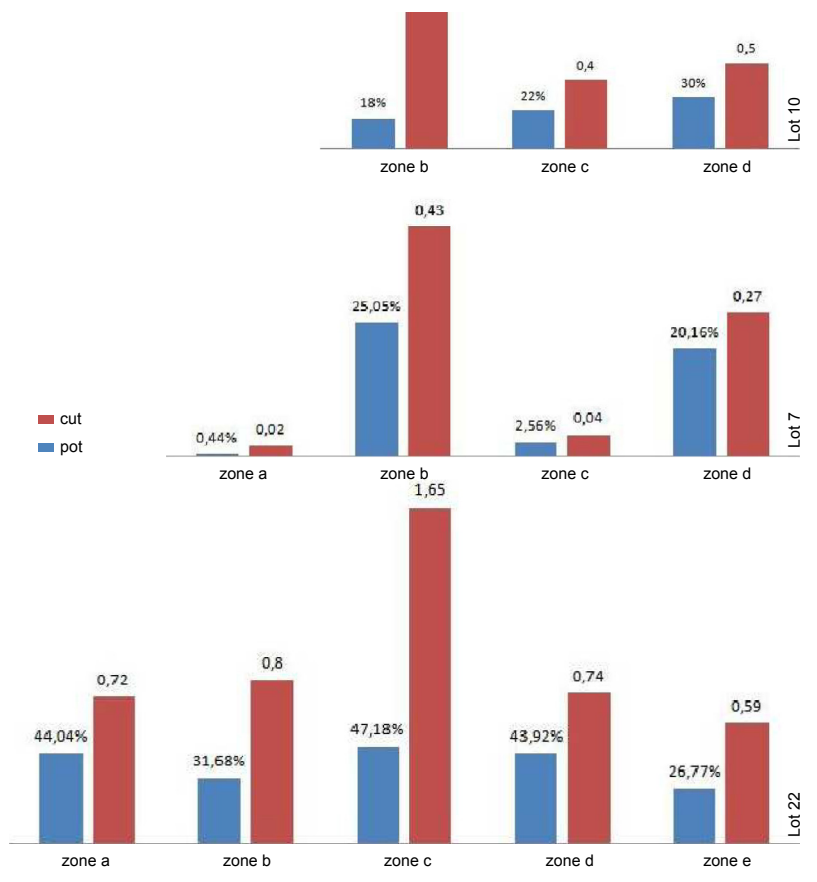
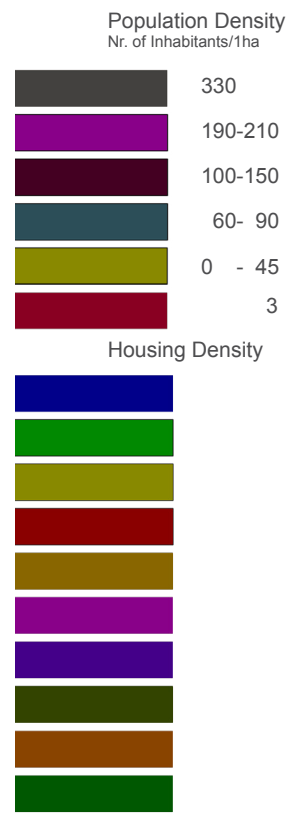


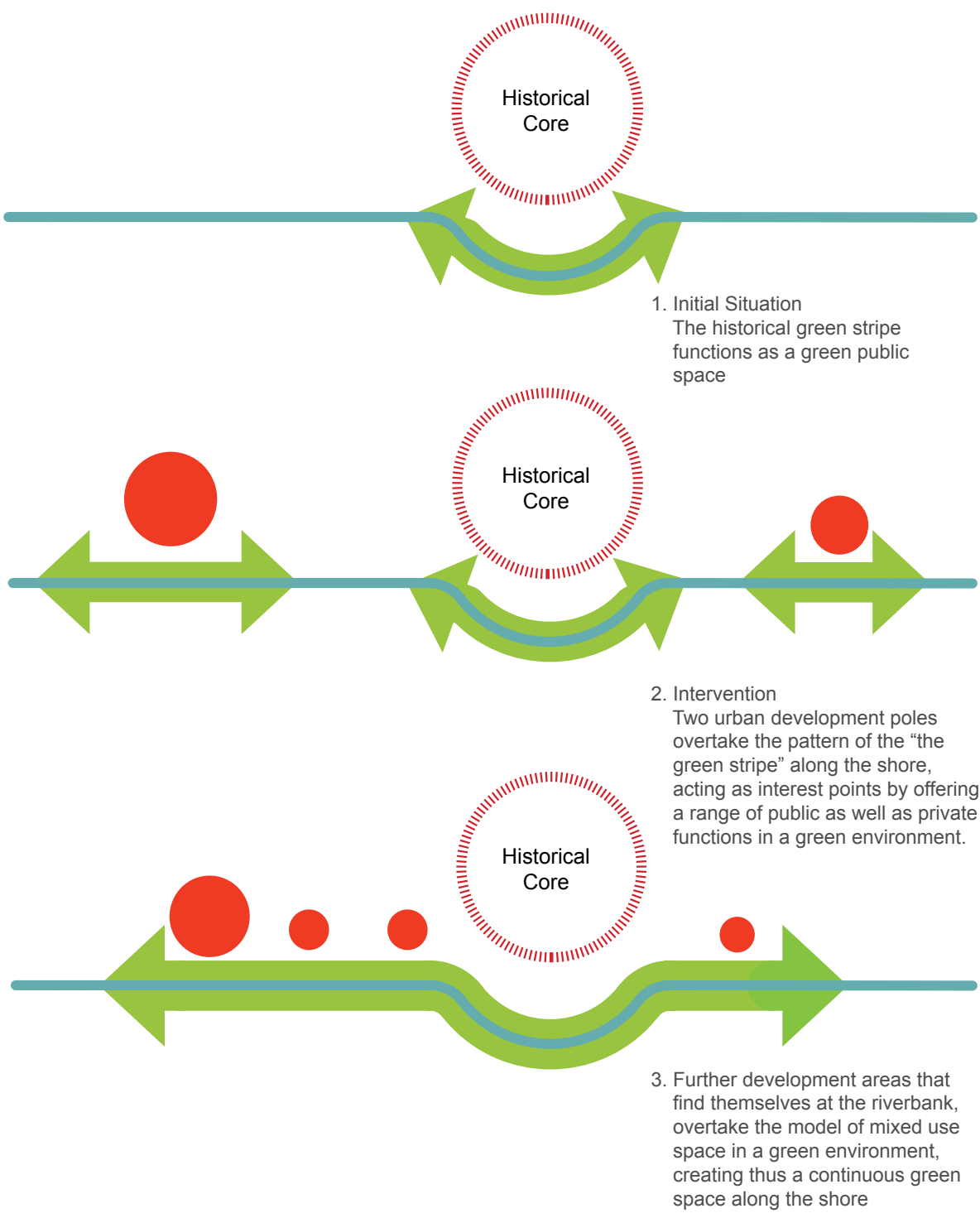
Illustration nr.95 / Bega Waterfront Today



Illustration nr.96 / Bega Waterfront in the Past



Concept: From the historical „green belt“ to the „green stripe“ of Timisoara



Concept
From the Green Belt to the Green Stripe

The Green Belt area along the Bega riverbank emerged as a concept once with the need of the obliteration of the city walls and the decision of preserving the non-aedificandi realm, characterized as a non-build green site, a public park that alongside the Botanic Park is even nowadays the largest green public space area of the city.

In the context of reestablishing the status of Bega as a waterway Canal transpires the necessity of carefully considering the bank-sides stretching east and west along the river stream as well as a modernization of the adjacent area not only through insertions of new public spaces but also by the rehabilitation of preexisting ones. The concept overtakes and expands both ways the wide green area of the historical part of the city and assumes the establishment of two urban development poles that would trigger a following expansion pattern along the riverbanks. The project's objective is to create dynamic city elements embedding mixed-use functions, highly qualitative housing as well as public and cultural services. This mixed-use functions character of the generated area encourages the access of both residential as well as public use. In short the project's brief pursues a dynamic revival of highly qualitative spaces by means of two simple, but of undoubtedly great importance,

elements: the green-scape and the water. At the present time there is a spread of various industrial and production spaces alongside the banks, which are decommissioned. These spaces owe their riverbank placement, much to the throughout urban development of the city. The green banks of Bega and the promenade alike capture public attention due to their historic value and the numerous adjacent public, cultural and leisure spaces such as "Parcul Central", "Terasa Flora" and "Terasa Vaporul" restaurant, "Terasa D'arc", the City Center, the "The Summer Garden" with its open air Cinema, "Terasa Banateana" restaurant, the "Roselor" Park with the Summer Theater, the Children's Park and diverse terraces along the southern embankment. It is nevertheless to be mentioned that the facilities on the southern shore are not facing the shore and enclosed to the promenade, thus denying public access towards the waterfront. Therefore most of the spaces should be subject to rethinking and redesigning by taking into account the relationship to the water.

The project seeks to define an optimal model, using the Water and Green Stripe as main elements in such a way that it would be further overtaken into the design of other emerging public spaces along the river shores. It also prompts the extension of the green leisure activity area all throughout the Bega riverbanks stretching at the core of the city of Timisoara.



Illustration NR. 97 / The Green Banks of Bega



Illustration NR.101 / Terrace D'arc



Illustration NR.104 / Summer Theater / Roses Park (Parcul Roselor)



Illustration NR.98 / Terrace Flora

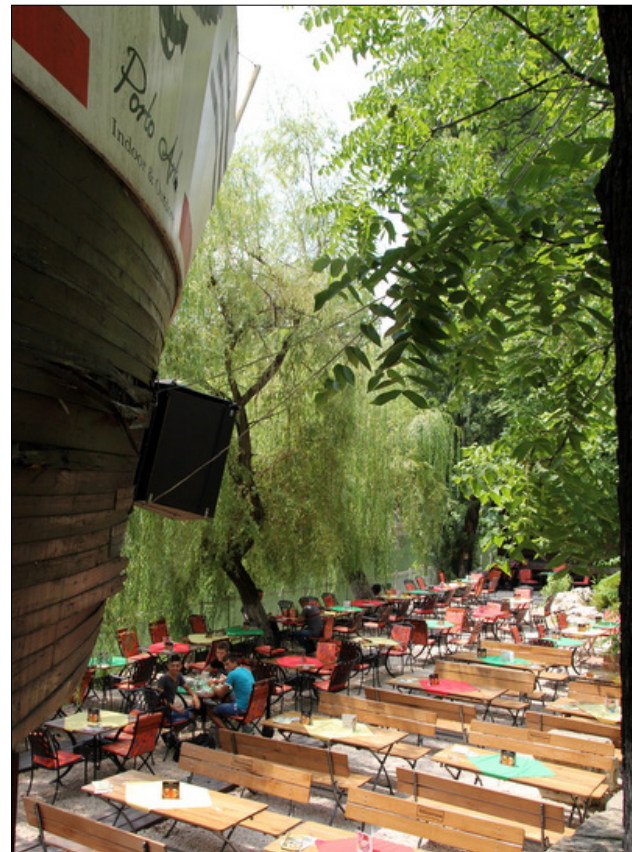


Illustration NR.100 / Terrace Vaporul (Restaurant Porto Arte)



Illustration NR.102 / The Summer Garden - Open Air Cinema



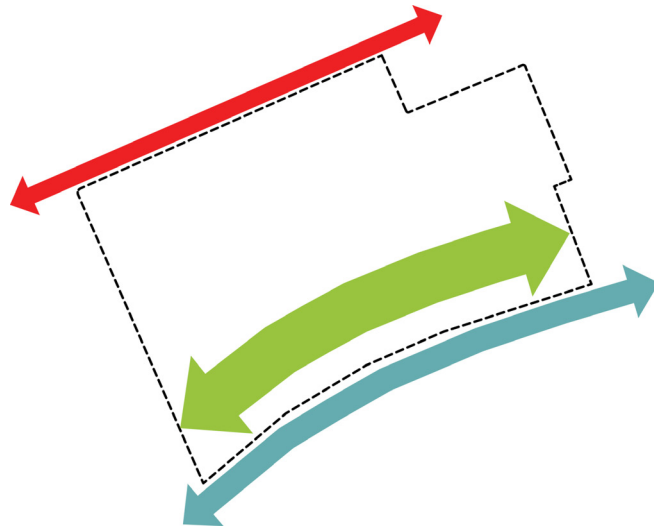
Illustration NR. 105 / Children's Park (Parcul Copiilor)



Illustration NR.99 / Central Park (Parcul Central)

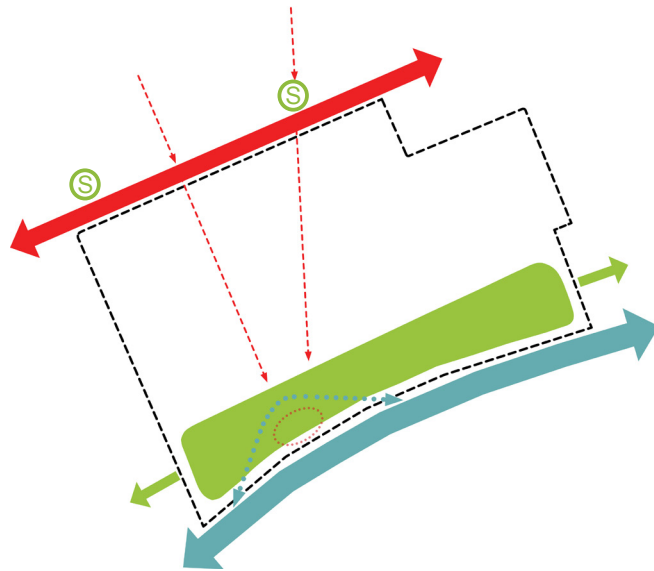


Illustration NR.103 / Terrace Banateana

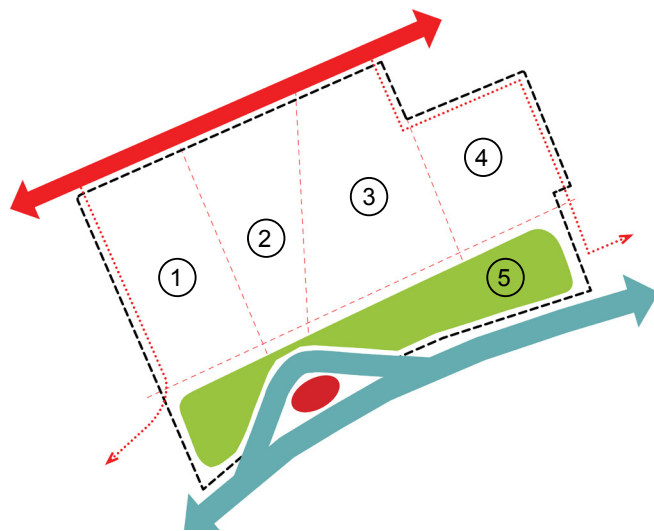


1. As key design elements with immutable character have been determined the water surface and the generous Green.

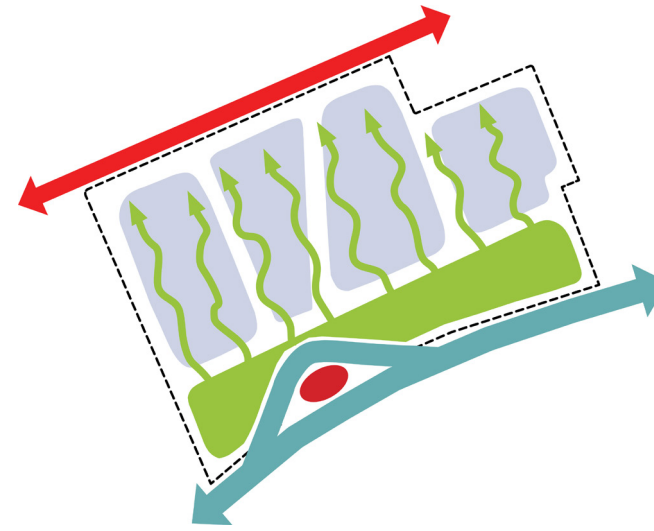
The first director factor of the planning process is the main boulevard which defines the north border line of the site.



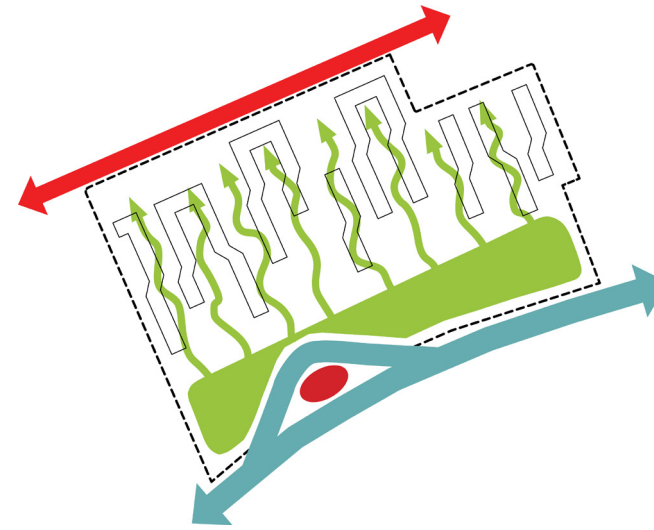
2. As a main connection way between the center of the city and its outskirts, it is a four-lane road with public transport lines, which provides the site with two bus stations. They will define the position of two public spaces. Out of the urban street grid encompassing the site, two streets intersecting the boulevard relieve themselves as relevant axis and will generate pedestrian access roads to the water/green side of the area. In order to draw the public flow into the park, a point of interest is placed by the riverbank.



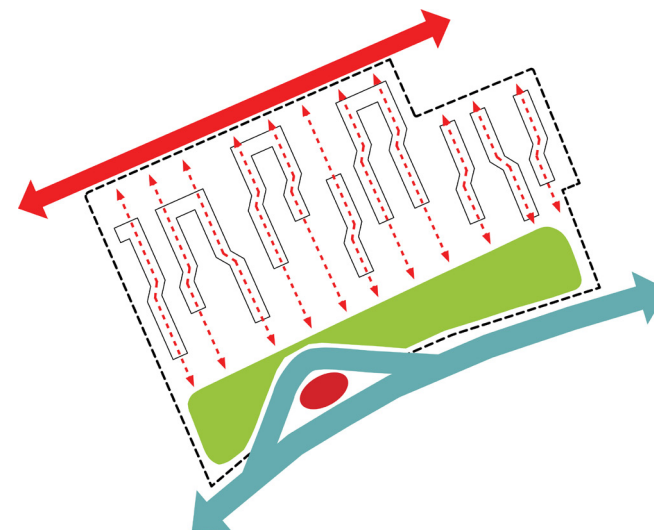
3. Further local public infrastructure is being defined through sideways and along the green area axis. The interest point by the riverbank takes the form of an island, creating a minor deviation of the water course and bringing the water surface closer to the spectator.



4. The defined access ways on site deliver the forthcoming structure assembly. The green scape inserts itself into the rest of the site creating the premises for green living.



5. The end structure of the built-up area takes form, defining public and private spaces.



6. The construction volumes define access ways, directions which all connect the main boulevard with the water course and the green area.



-  Tramline / Station
-  Trolleybus line / Station
-  Site Borderline
-  Parking / Underground
-  Parking Access
-  Pedestrian Paths / Public Spaces

- 1** Restaurant / Coffee Shops / Offices / Rent Spaces / Studios / Services.
- 2** Housing Units
- 3** Modern Art Museum / Café
- 4** Platform

Detailed Project Description

Ilsa



The main idea of the project (as mentioned before) is to overcome the wide green area of the old part of the city, generated by the renouncing the fortress character of the city at the beginning of the 20th century, and bringing down the defense walls. At south-west corner of the site finds itself the last part of the range of parks which define “the green belt” of Timisoara, with the specific width of the old “non aedificandi” zone of the fortress. As a first design measure we will prolong the park sequence, keeping the specific width.

The construction site is bordered in north by a major circulation artery which provides public transport in form of trolleybus and bus lines. Two bus stations are already at hand and will be further used as such. This boulevard is at the same time a benefit and impediment: it directly connects the center of the city with the peripheral zones (it is a gateway/exit), but it is also a source of phonic and air pollution. Reacting to this given condition, the specific U shaped form of the buildings is chosen in order to generate protective barrier along the boulevard and private demi-closed interior spaces for the housing units.

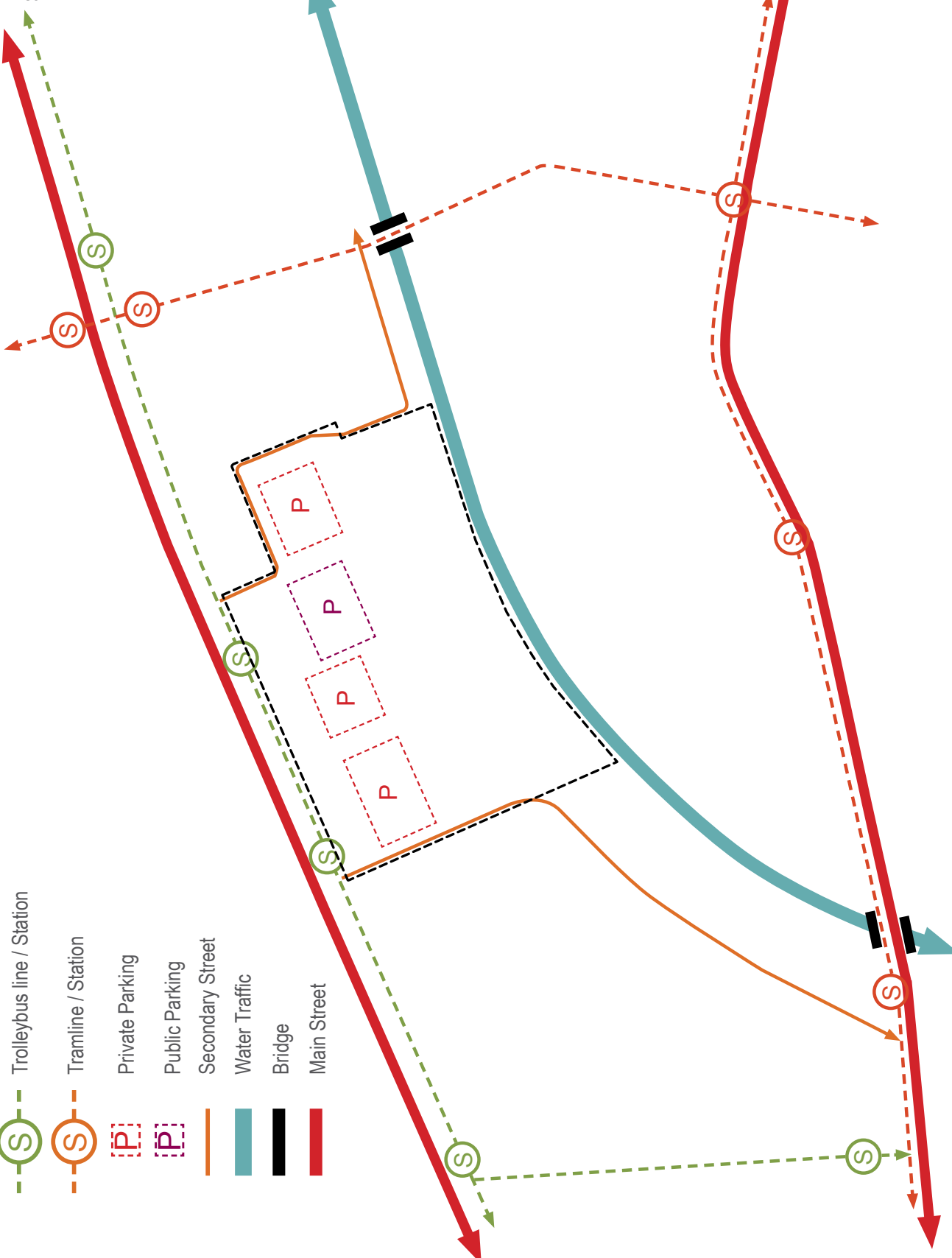
The horizontal part of the U shaped buildings will have a mixed use function and host restaurant, cafes and shops on the ground floors and continue the public use with offices and services on the upper floors as well as studios and spaces to rent on the last floor. As a statement of the public use, the buildings are retracted from the street alignment, creating thus public spaces.

Out of the urban street grid encompassing the site, two streets intersect the boulevard at the opposite side of the construction site and as relevant circulation axis will be prolonged and further used as access roads towards the water/green area. The direction of movement is oriented towards water, focusing on bringing the public through the site to the park and water. In order to attract the large public into this green environment, an interest point is added at the end of the oblique access axis in form of a Modern Art Museum placed on an artificial island, which strengthens the connection to the water by giving the visitor the chance to walk around it and at the same time be surrounded by water. The island also has to offer a coffee house. A further leisure facility is the nearby platform which invites the passenger to take a brake by the river shore.

The circulation on site will be solely pedestrian. As such, the two access roads to the water have alleys character being accompanied by public spaces which announce the leisure functions by the water.

The secondary but not less important aspect of the design are the housing units of the project, which have the great advantage of disposing of both demi private green areas as well as the fortunate position near the public park and water front access. The housing blocks are foreseen with underground parking lots which can be accessed as well from the sideway streets left and right of the site, as from the main boulevard. The parking lot that finds itself under the central building block of the site, will have supplementary parking possibilities for the open public.

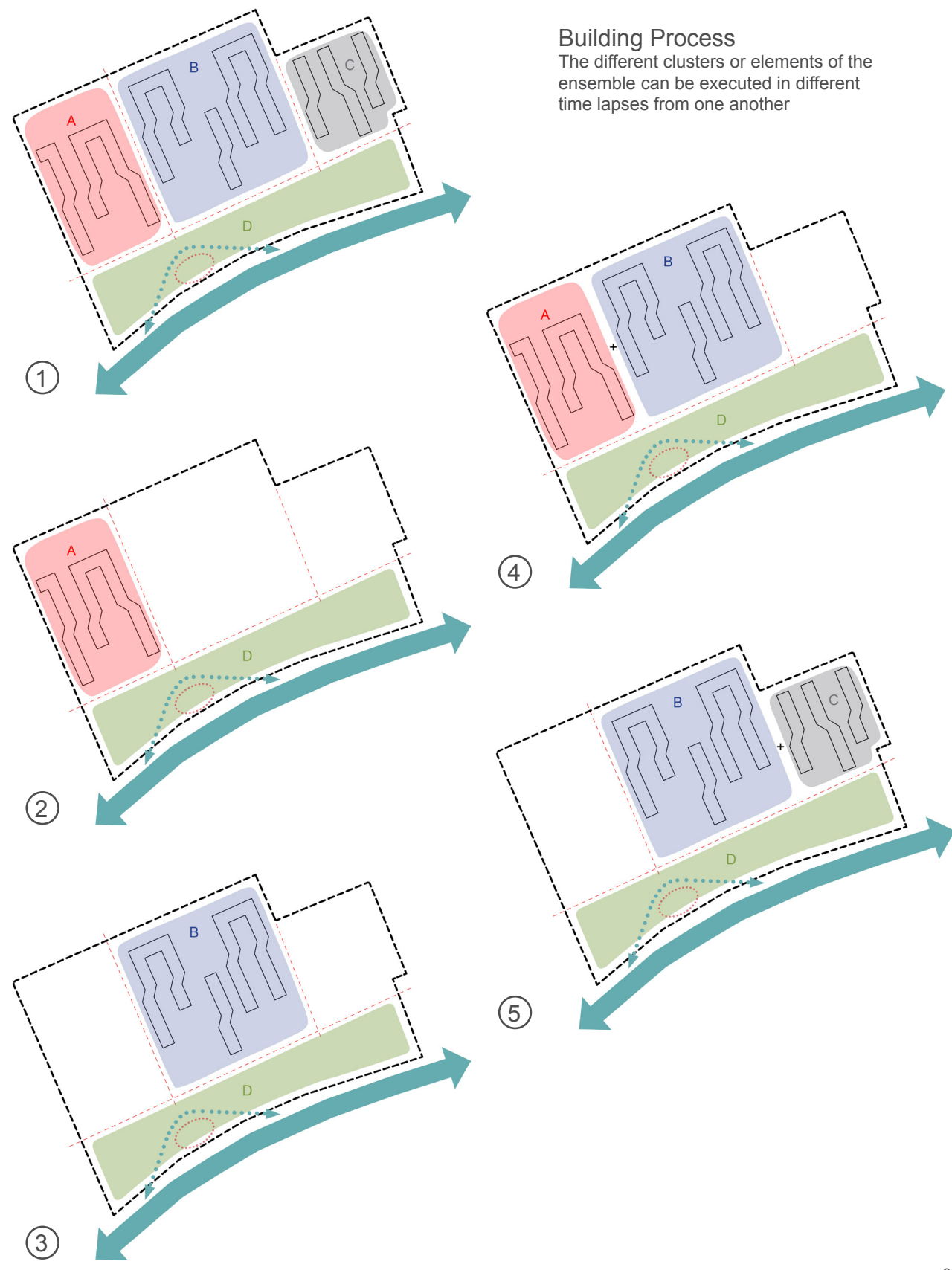
Traffic Circulation Concept

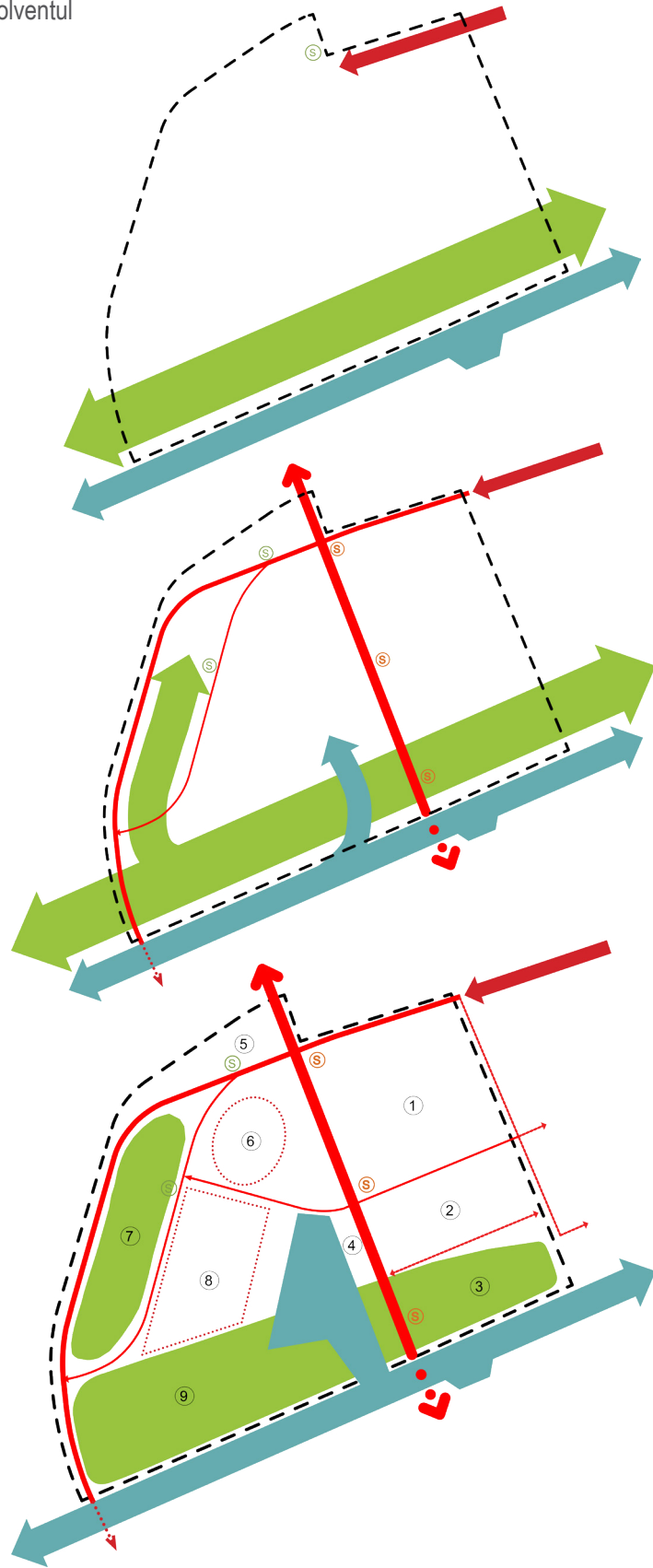


- Trolleybus line / Station
- Tramline / Station
- Private Parking
- Public Parking
- Secondary Street
- Water Traffic
- Bridge
- Main Street

Building Process

The different clusters or elements of the ensemble can be executed in different time lapses from one another

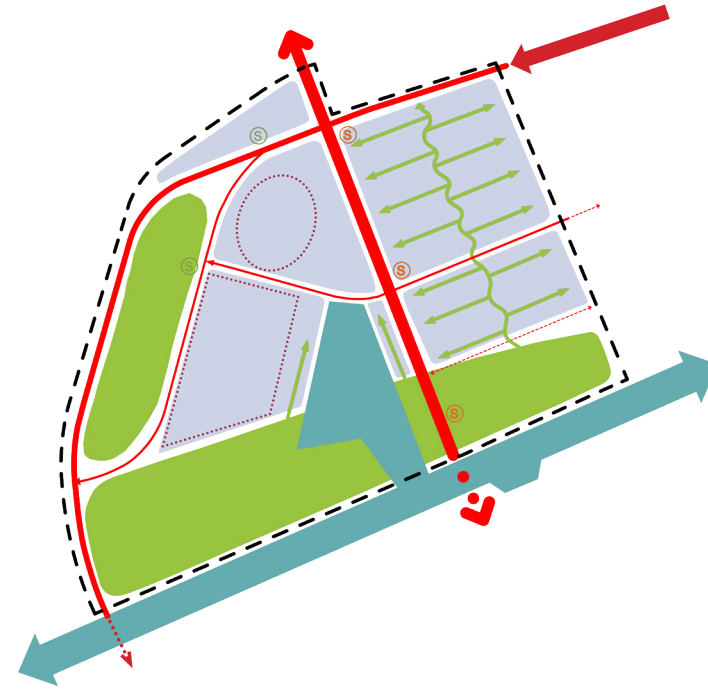




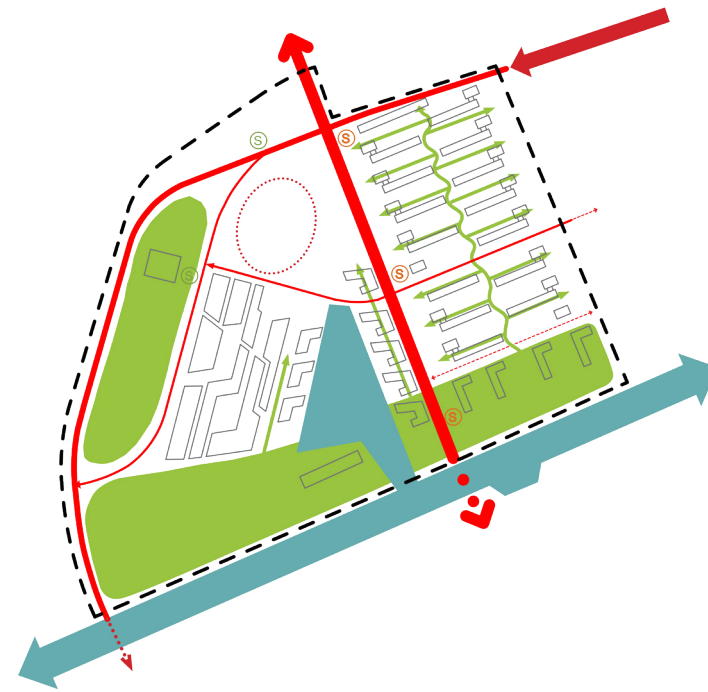
1. As key design elements with immutable character have been determined the water surface and the generous Green. The first director factor of the planning process is the four-lane road which connects the construction site with the North Railway Station. A bus line has its end station and turning point at the north corner of the compound.

2. Following the existing street grid, the local public infrastructure is being set by drawing a more or less median axis of circulation which makes the north-south connection on site and further connects the northern and the southern shores of Bega through a bridge. This axis will turn into the main circulation artery of the site bringing a tram line into play, which already obliges to setting three tram stations (by taking into account the accepted distance in-between tram stations) The in north confining boulevard is prolonged, thus encompassing the site, and again passes to the southern shore of Bega through a second bridge. A secondary road is set as well, defining an additional green area of public use. The element water riches further towards the center of the site.

3. Additional secondary roads divide the area into sections, shortening the distances. The position of the main attraction points (stadium and exhibition center) of the site is being set along the new "Laguna" like water element.



4. The building areas of the site are taking contour. The generous green scape by the riverbank, inserts itself into the rest of the site creating the assertion for supplementary green public spaces and green living.



5. Having the exhibition center and stadium position set, further necessary functions for them like hotels and office/service buildings align along the "Laguna" banks. On the right side of the main circulation axis, highly qualitative living areas make use of the green environment and orient themselves in direction of the stadium and exhibition center. This sector continues towards water with a structure of public use constructions perpendicular to the water course.



- 1** Housing Units
- 2** Restaurant / Coffee Shops / Offices / Rent Spaces / Lofts
- 3** Stadium
- 4** Exhibition Center
- 5** Hotels
- 6** Office / Service Buildings
- 7** Sports Fields
- 8** Swing Bridge
- 9** New Bridge

- Parking Lots
- Parking
- Tramline / Station
- Trolleybus line / Station
- Site Borderline
- Railway
- Pedestrian Paths / Public Spaces

Master Plan 1:5000
Solventul



Detailed Project Description

Solventul

First aspect of the design is again setting the green stripe and the water surface as defining project frames. The park by the river bank is kept as wide as possible in the attempt of creating harmonious green spaces which intertwine themselves with urban public spaces, promenade paths and functions with magnet character such as the stadium and the exhibition center. Because of the magnitude of the site at hand, an intervention such as drawing the water course deeper into the site area is possible and offers the chance of broader access to the water surface. Also a new way of access into the core of the location, and a selective fashion of reaching its hot spots is opened for boats. In order to preserve the continuity of the promenade and the character of Bega's shore, a swing bridge is needed.

Being situated at the west terminal point of the city, and due to its former private condition the site is not ideally integrated into the city street grid, but offers potential for expansion. The four-lane access road that connects the studied area to the North Railway Station, just slightly touches the northern border of the perimeter and after crossing the railway lines goes up to the north of the city narrowing itself. The public transport means is a trolleybus line which has its turning point (end of line) on site. The tram line also stops north of the site, behind the railway lines. Drawing a more or less median axis of circulation, perpendicular to the water course which makes the north-south connection on site and further connects the northern and the southern shores of Bega through a bridge, and adding the tram line along we have the main circulation artery of the grounds. By prolonging the in north confining boulevard and thereby encompassing the site we have a secondary circulation artery which passes over a second bridge to the southern shore of Bega. A third road is set as well, parallel to the second one, defining an additional green area of public use. Other roads of secondary grade, perpendicular on the main artery,

subdivide the right side of our realm into sections shortening the distances.

Having set the traffic grid which serves the compounds, the green area and the "Laguna", a structure of sectors takes shape, relieving the most representative position for the stadium and the exhibition center. Complementary functions for them like hotels and office/service buildings align along the "Laguna" banks. The exhibition center disposes of generous interior covered display spaces in form of inner courtyards, as well as wide surrounding public spaces facing the "Laguna" and the park by the river. The passenger follows a wide alley from the stadium, passing by the exhibition center, to the shore of Bega. Plentiful parking places align themselves on the west and north side of the two attraction points.

Sports fields for the open public are staged on the green area which defines the western borderline of the compound.

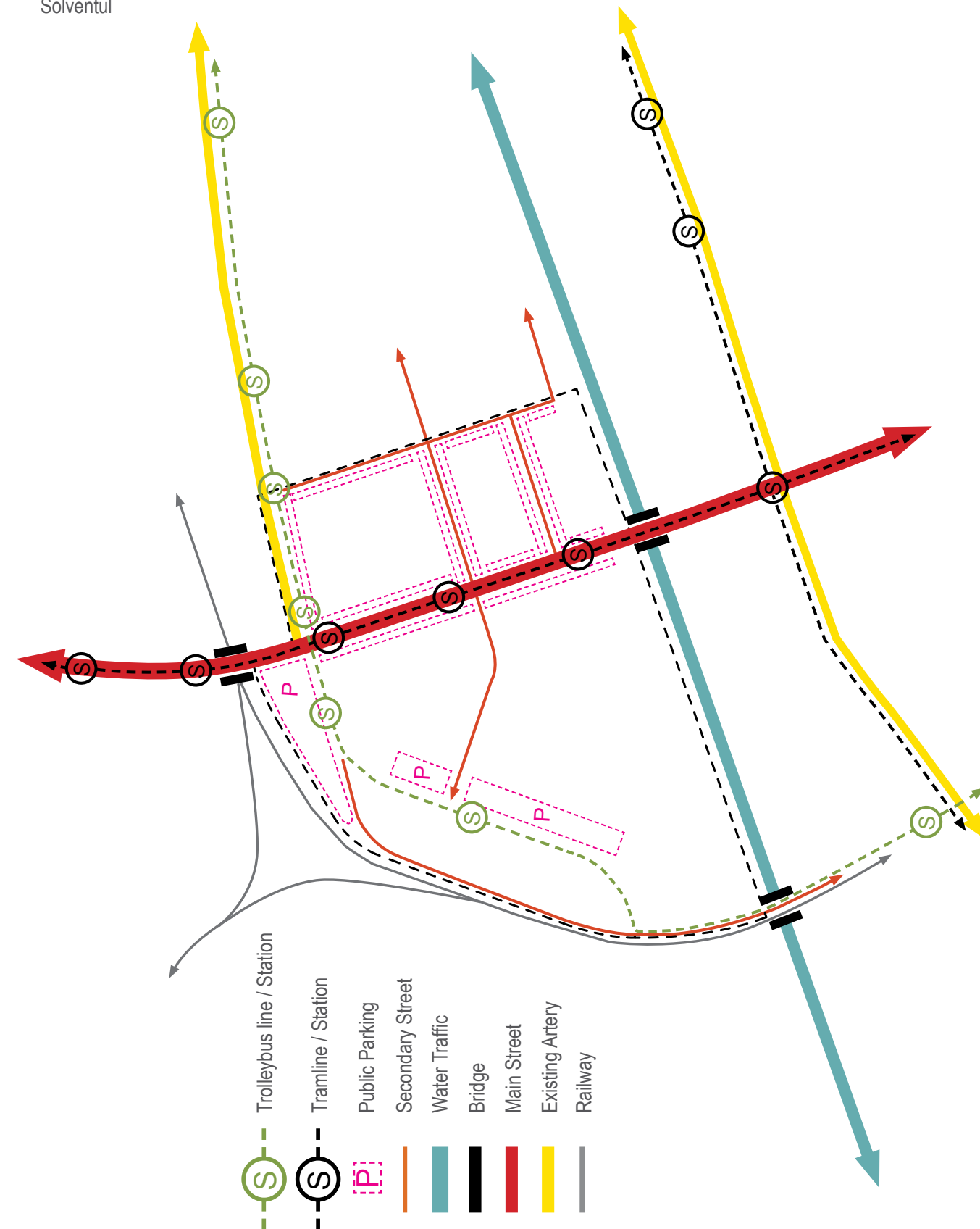
In order to stimulate an expansion of the city to the west and make further use of this qualitative conditions along the shore, a densified housing area adds to the picture. The housing structures are oriented parallel to the bank line, thus creating in-between spaces which allow view over the stadium and exhibition center and quick access to traffic lines. The concept of green living is again part of the design.

The structure changes form, orientation, and use when approaching the shore. The living area of the buildings is restricted to the upper floors in form of lofts, whereby the lower ones host offices and rent spaces (envisioned with public service functions). The ground floors is reserved for restaurants, cafés and shops.

A special feature of the project is keeping one of the old, representative buildings of the old Petrochemical Plant Solventul and transforming into a Hotel.

Traffic Circulation Concept

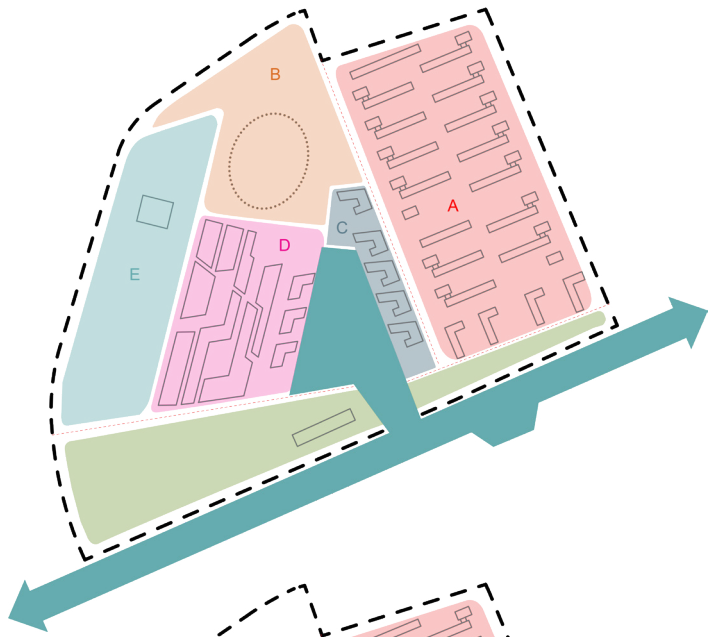
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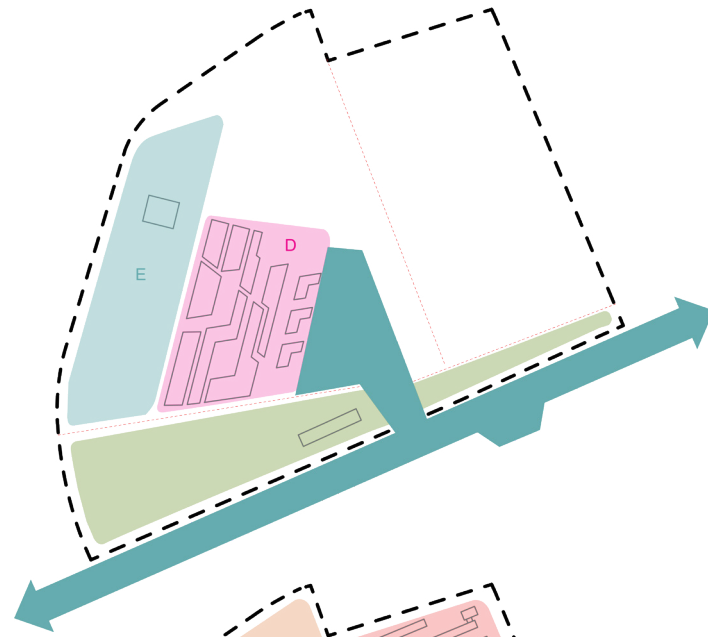
Building Process

The different clusters or elements of the ensemble can be executed in different time lapses from one another

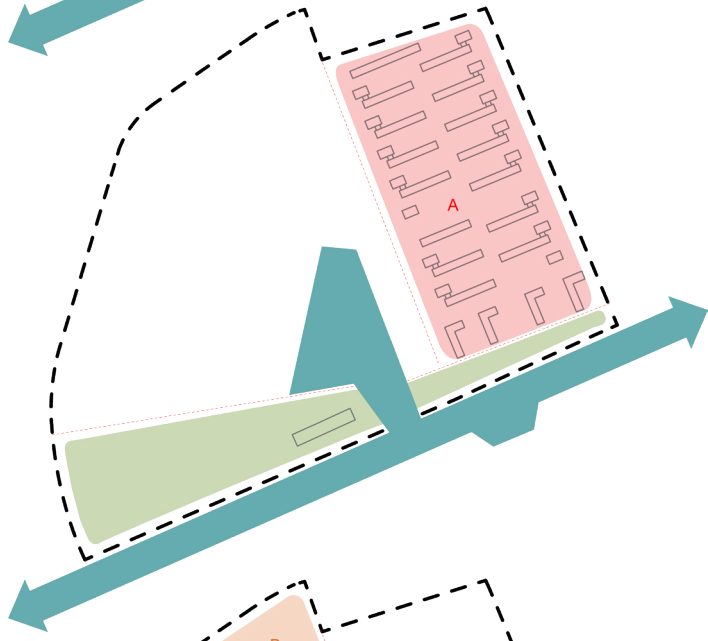
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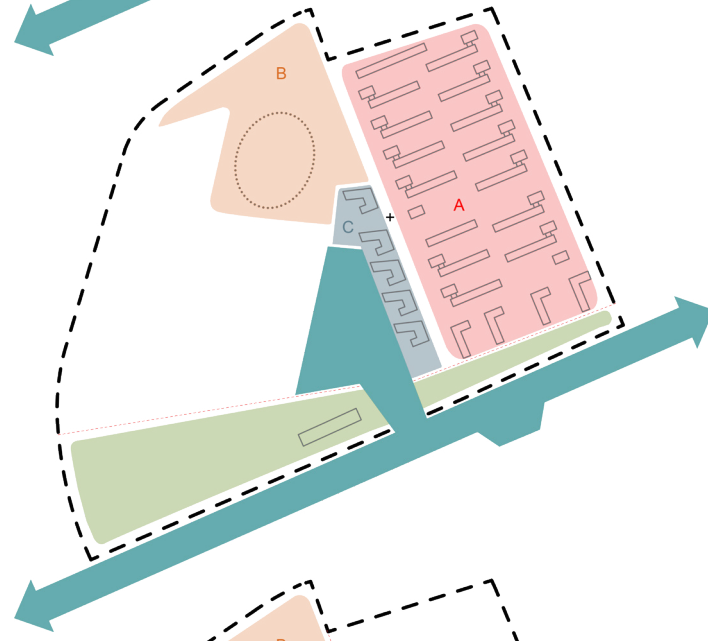
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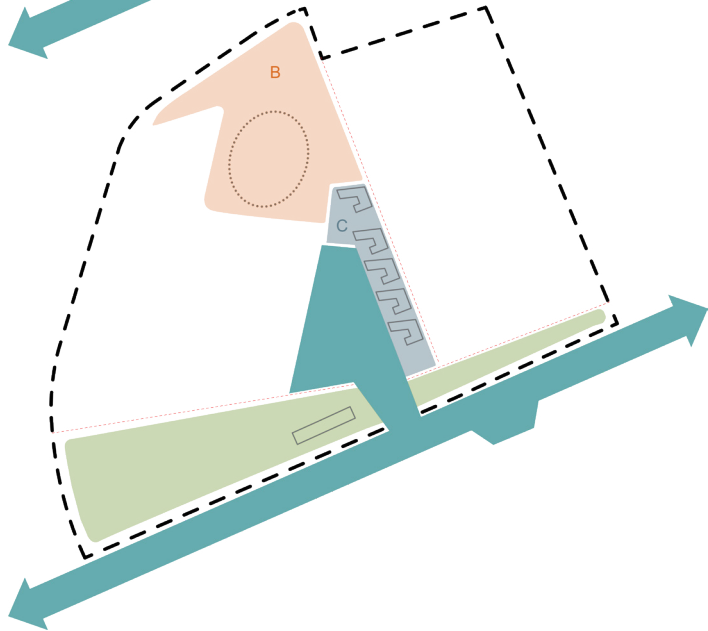
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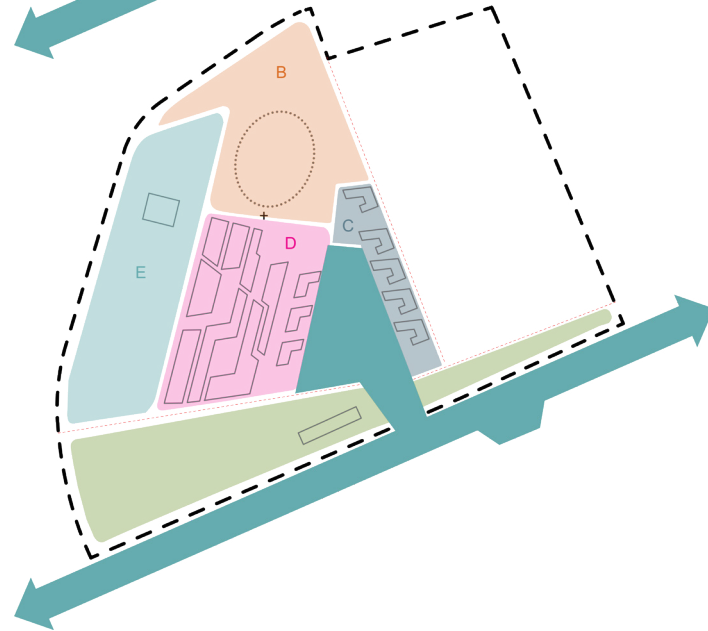
⑤



③



⑥



New Connections to the Public Transport Grid

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- The Tram Line T5 crosses the Site to the Southern Shore
- The Trolleybus Line F18 is prolonged and encompasses the site, crossing the bridge to the southern shore, giving the possibility of transfer to the next Trolleybus Lines, Tram Lines (T2 – towards Center), and Bus Line

Ilsa

- Very well connected to the Public Transport Grid – no new connection needed.

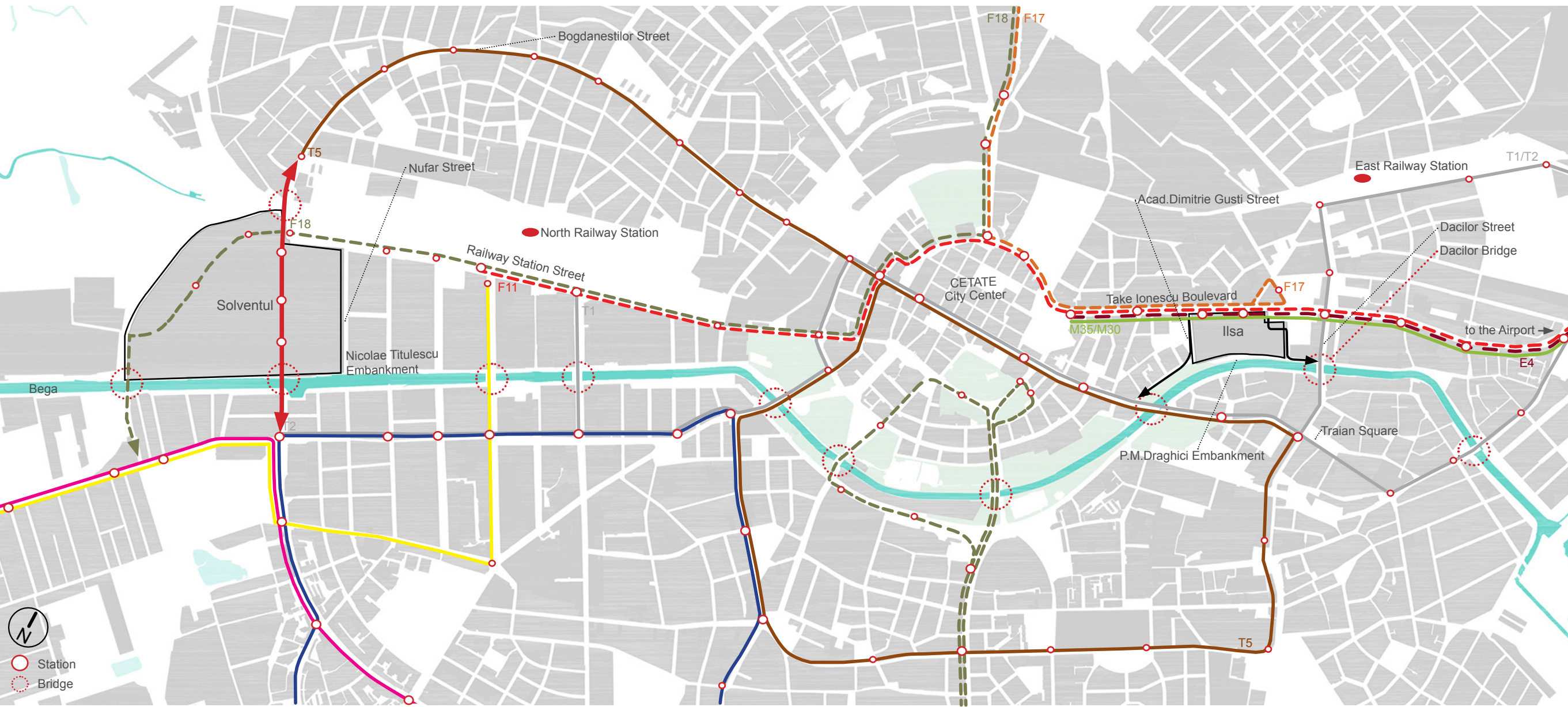


Illustration nr.106

Teritorial Traffic Concept

Connections to the City Traffic Belt Line

towards Becicherecul Mic / Sannicolau Mare / Cenad Frontier / Hungary

Highway to Arad / Nadlac Frontier / Hungary

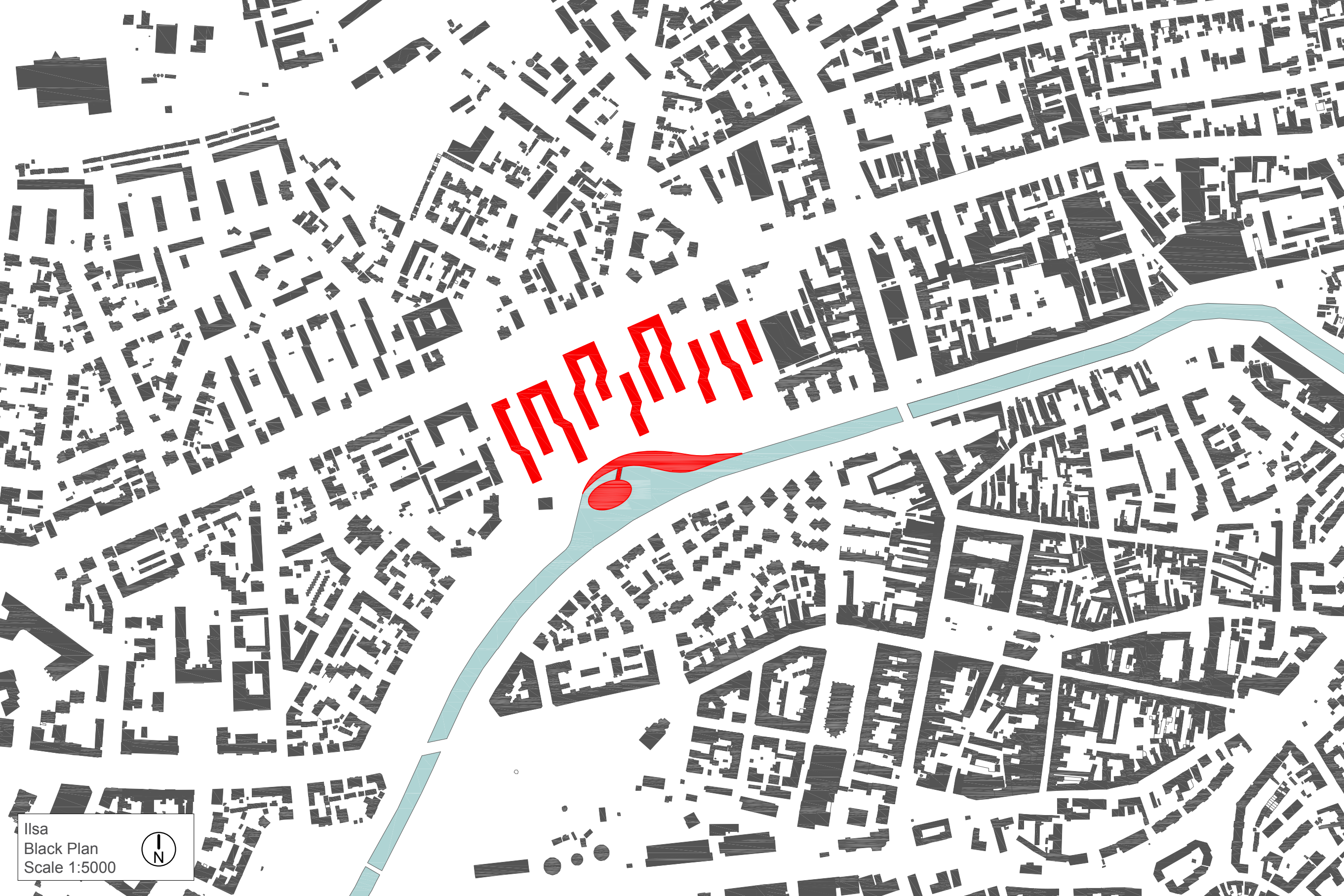
DN 59A
Spre Sacalaz, Jimbolia, Serbia
towards Sacalaz / Jimbolia Frontier / Hungary

towards Highway / Airport / Bucharest

towards Sag /Stamora Moravita Frontier/Serbia

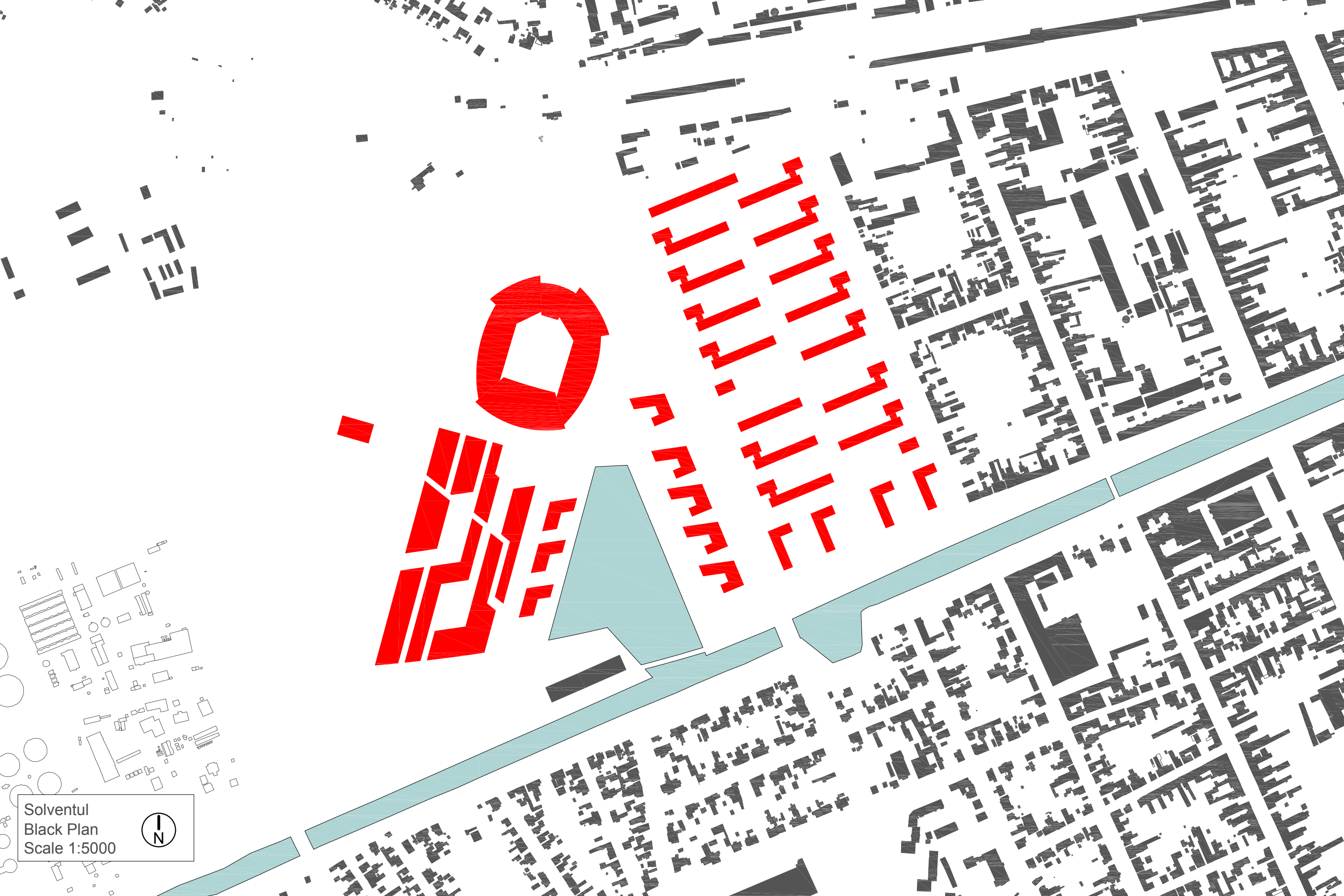






Ilisa
Black Plan
Scale 1:5000





Solventul
Black Plan
Scale 1:5000







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List of Illustrations

■ Timisoara Today

- Illustration 1 / <http://verificarsuvoluntad.blogspot.co.at/2011/05/timisoara-romania.html>
Illustration 2 / http://en.wikipedia.org/wiki/File:Romania_location_map.svg
Illustration 3 / http://commons.wikimedia.org/wiki/File:Stadtbezirke_von_Temeswar.jpg
Illustration 4-5 / http://www.primariatm.ro/uploads/files/PUG/URBANISM/parte%20desenata/04_ANALIZA%20PATRIMONIU%20CONSTRUIT/U%2014%20evo%20oras.PDF

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Illustration 8 / Capotescu, Valentin, Arhitectura bastionara militara in Romania-Cetatea Timisoarei, Editura Bastion 2008, ISBN 978-973-88780-1-3, page 101.
Illustration 9 / Opris, Mihai, Timisoara Monografie Urbanistica: descoperiri recente care au impus corectarea istoriei urbanistice a Timisoarei, Editura Brumar 2007, ISBN (13) 978 973 602 245 6, page 17
Illustration 10 / Opris, Mihai, Timisoara Monografie Urbanistica: descoperiri recente care au impus corectarea istoriei urbanistice a Timisoarei, Editura Brumar 2007, ISBN (13) 978 973 602 245 6, page 88-89
Illustration 11 / Opris, Mihai, Timisoara Monografie Urbanistica: descoperiri recente care au impus corectarea istoriei urbanistice a Timisoarei, Editura Brumar 2007, ISBN (13) 978 973 602 245 6, page 123
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Illustration 14 / Capotescu, Valentin, Arhitectura bastionara militara in Romania-Cetatea Timisoarei, Editura Bastion 2008, ISBN 978-973-88780-1-3, page 258.
Illustration 15 / Capotescu, Valentin, Arhitectura bastionara militara in Romania-Cetatea Timisoarei, Editura Bastion 2008, ISBN 978-973-88780-1-3, page 145.
Illustration 16 / Capotescu, Valentin, Arhitectura bastionara militara in Romania-Cetatea Timisoarei, Editura Bastion 2008, ISBN 978-973-88780-1-3, page 258.
Illustration 17 / Capotescu, Valentin, Arhitectura bastionara militara in Romania-Cetatea Timisoarei, Editura Bastion 2008, ISBN 978-973-88780-1-3, page 164.
Illustration 18 / Capotescu, Valentin, Arhitectura bastionara militara in Romania-Cetatea Timisoarei, Editura Bastion 2008, ISBN 978-973-88780-1-3, page 166.
Illustration 19 / Capotescu, Valentin, Arhitectura bastionara militara in Romania-Cetatea Timisoarei, Editura Bastion 2008, ISBN 978-973-88780-1-3, page 197.
Illustration 20 / Pintilie, Ileana, Im Zentrum der Peripherie: Die Stadtebauliche und Architektonische Entwicklung von Timisoara, in Eve Blau, Monika Platzer : Mythos Großstadt – Architektur und Stadtbaukunst in Zentraleuropa 1890-1937, Prestel München 1999, ISBN 3-7913-2185-4, page 155.
Illustration 21 / Capotescu, Valentin, Arhitectura bastionara militara in Romania-Cetatea Timisoarei, Editura Bastion 2008, ISBN 978-973-88780-1-3, page 260.
Illustration 22 / Capotescu, Valentin, Arhitectura bastionara militara in Romania-Cetatea Timisoarei, Editura Bastion 2008, ISBN 978-973-88780-1-3, page 261.
Illustration 23 / <http://www.debanat.ro/2013/07/splendoare-de-sus-cum-sa-vezi-timisoara-dintr-o-cessna-foto/>
Illustration 24 / <http://www.debanat.ro/2013/07/splendoare-de-sus-cum-sa-vezi-timisoara-dintr-o-cessna-foto/>
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Illustration 26 / http://www.umft.ro/istoricul-universitatii-de-medicina-si-farmacie-victor-babes-din-timisoara_48
Illustration 27 / <https://www.flickr.com/photos/sorina963/5908440013/>
Illustration 28 / <http://www.trekearth.com/gallery/Europe/Romania/West/Timis/Timisoara/photo1325871.htm>
Illustration 29 / <http://ftp.umft.ro/despre/cladiri.htm>
Illustration 30 / <http://arhitectura-1906.ro/2012/01/silvestru-rafiroiu-1903-1961/>
Illustration 31 / <http://www.debanat.ro/2011/06/apartamente-mai-ieftine-in-timisoara/>

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Illustration 36-40 / <http://www.wien.gv.at/stadtentwicklung/studien/pdf/b008252.pdf> page 15-16.
Illustration 41-44 / <http://www.wien.gv.at/stadtentwicklung/studien/pdf/b008252.pdf> page 29-31.

- Illustration 45-50 / <http://www.wien.gv.at/stadtentwicklung/projekte/aspern-seestadt/pdf/0303strukturbildner.pdf> page 1.
Illustration 51-67 / <http://www.publicspace.org/en/works/g072-preureditve-nabrezij-in-mostovi-na-ljubljani/prize:2012>

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- Illustration 68-69 / <https://www.google.at/maps/place/Temeschwar/@45.7518158,21.2318677,14z/data=!4m2!3m1!1s0x4745677dcb0fb5a7:0x537faf6473936749>
Illustration 70 / After a cadastre plan by Dipl.-Ing. Rudolf Gräf // Modified by Oana Ilie
Illustration 71 / http://www.primariatm.ro/uploads/files/pug_etapa_3/U01_INCADRARE%20IN%20TERITORIU.pdf // Modified by Oana Ilie
Illustration 72-79 / http://www.primariatm.ro/uploads/files/PUG/URBANISM/parte%20desenata/01_STUDIUM%20DE%20MORFOLOGIE%20URBANA/01_sm_PLAN%20NEGRU.pdf // Modified by Oana Ilie
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Illustration 86 / After a cadastre plan by Dipl.-Ing. Rudolf Gräf // Modified by Oana Ilie
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Illustration 96 / Urban History Lecture , Ao.Univ.-Prof. Dipl.-Ing. Dr.techn. Grigor Doytchinov , Institut of Urbanism ,Tugraz. http://lamp.tugraz.at/~f145stdb/VO_Geschichte_Stadt_2012_2013/Urban_History_10_CentralEurope.pdf page 19.
Illustration 97 / Photo by Oana Ilie
Illustration 98 / Photo by Oana Ilie
Illustration 99 / <http://redsky2010.wordpress.com/2012/07/05/10-locuri-de-vizitat-in-orasul-tau/>
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Illustration 102 / <http://www.debanat.ro/2014/04/gradina-de-vara-capitol-curatata-si-renovata-se-deschide-in-mai/>
Illustration 103 / <http://www.viitoaremireasa.ro/articole/Restaurante-pentru-organizarea-nuntii-in-Timis-2456.html>
Illustration 104 / <http://www.opiniatimisoarei.ro/wp-content/uploads/2013/07/festival-opera-opereta-timisoara.jpg>
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Illustration 107 / http://www.primariatm.ro/uploads/files/pug_etapa_3/U01_INCADRARE%20IN%20TERITORIU.pdf // Modified by Oana Ilie
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Graz University of Technology
Institute of Urbanism
May 2014