



TOWARDS THE BIRSSTADT

A strategic project for the Birs valley in Basel



CONTENTS

1. Strategy for the Birsstadt

... Abby Stoner, Huber Holewik, Takashi Owada

2. Central Green Space

... Livio DeMaria, Nicolas Rüegg

3. Settlement

... Abby Stoner, Huber Holewik, Takashi Owada



1. Strategy for the Birsstadt



BACKGROUND

The Birs Valley

The Birs Valley forms one of Metro Basel's five agglomeration arms, which maintains the populous of a midsize European city while continuing a suburban dependence on the City of Basel.

The rapid growth in the Birs Valley has occurred only in the last 60 years, when the medieval communes of Birsfelden, Münchenstein, Reinach, Arlesheim, Dornach, Aesch and Pfeffingen started to knit together. Despite the built uniformity of the sprawl it is still an area fragmented mentally and politically into its various communes.

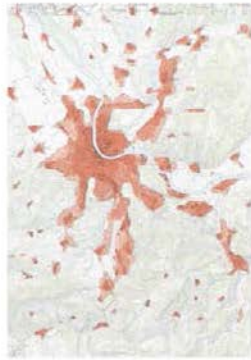
The issue of suburbia is not uncommon for Switzerland, as many contemporary cities have allowed their boundaries to stretch. What used to be village or town is now a sprawling sea of suburbia.



1940



1955



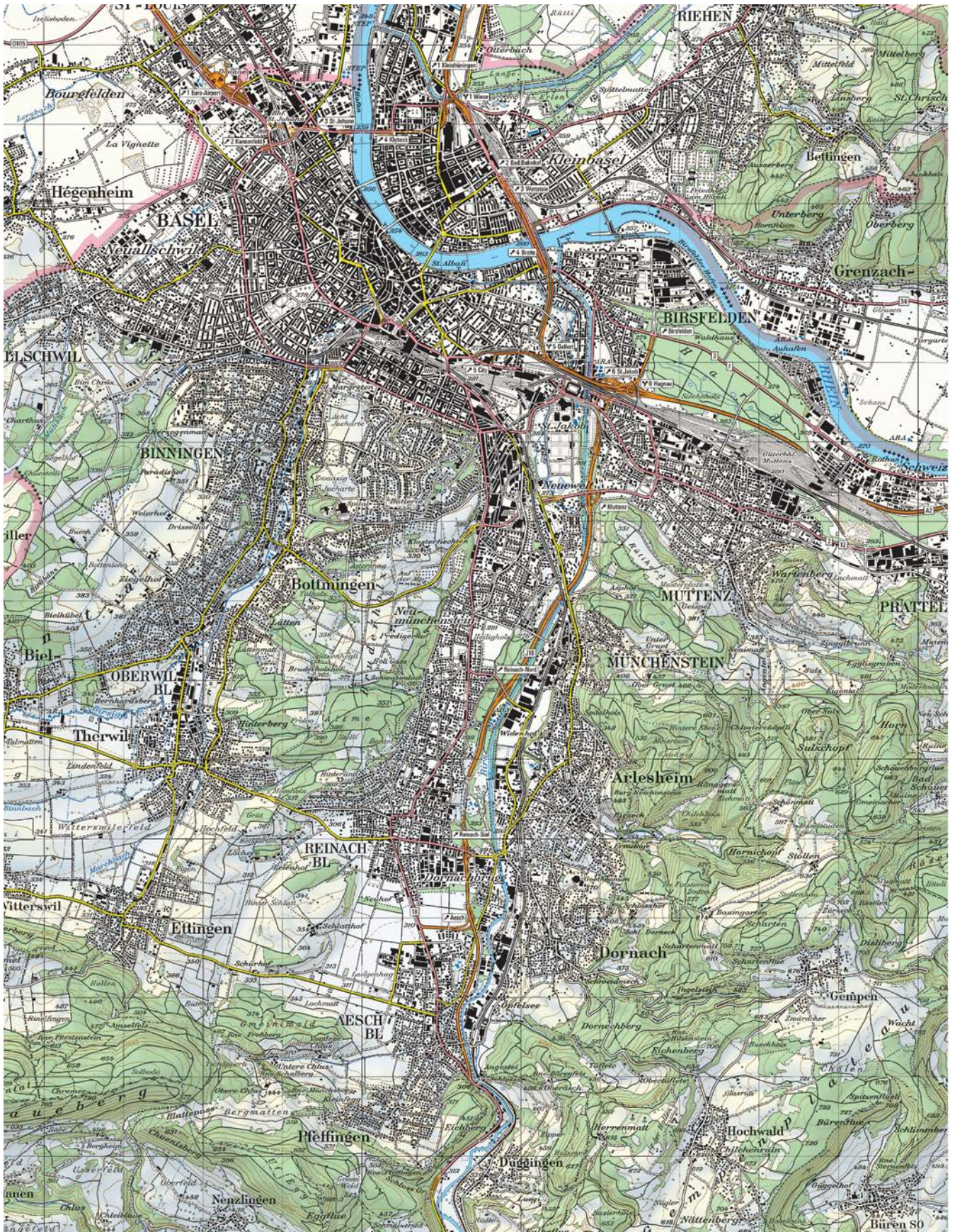
1970



1985



2010



Birsi Valley Overview (swisstopo.ch)



1938



1942



1945



1955



1966



1988

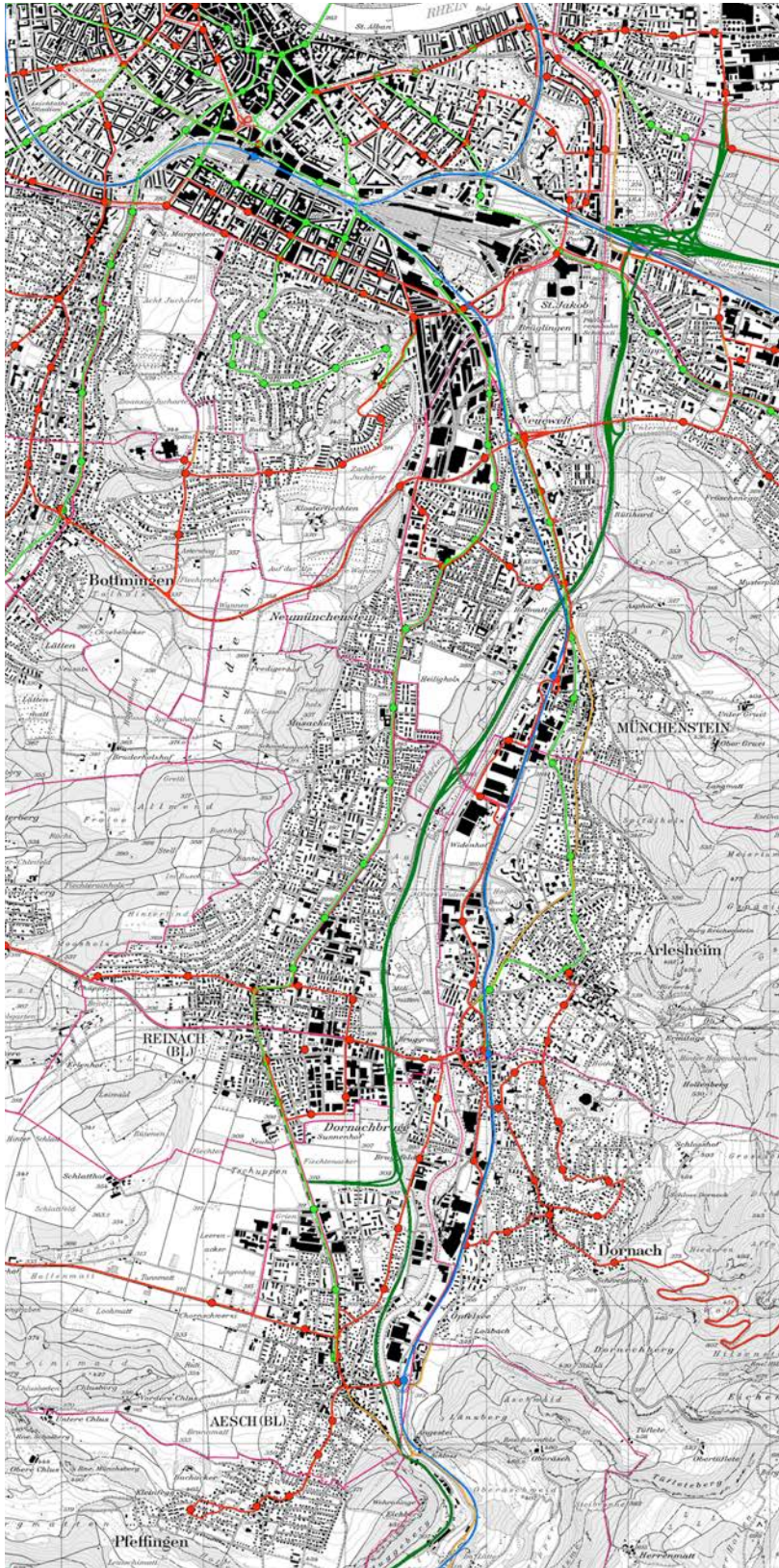


Barriers

Growth was firstly controlled by the geography, contained by the unmoving hills and mountains and the cupped valley. Formed by powerful yet natural constraints the Birsstadt has taken on the diamond shape of the valley itself.

Concurrently, the linear infrastructure of the valley has also dictated its linear growth pattern related to the transportation axis: The historical crucial industrial Birs River, the highway A18, the Tram 10/11 and the S-Bahn S3 are dominating the infrastructural network of the Birs Valley, effecting the creation of strips with designated function as Industrial, Residential and the void. Demonstrated best in the communal zoning plans.





This map clearly illustrates the linear Transportation network of the Birs Valley. On the other hand it shows the strong dependence of the valley to the core city Basel. 40% of the Birs population are consequently commuting by car or public transportation every day and consume large amounts of energy.

- Highway
- SBB train
- Tram
- Bus

ANALYSIS

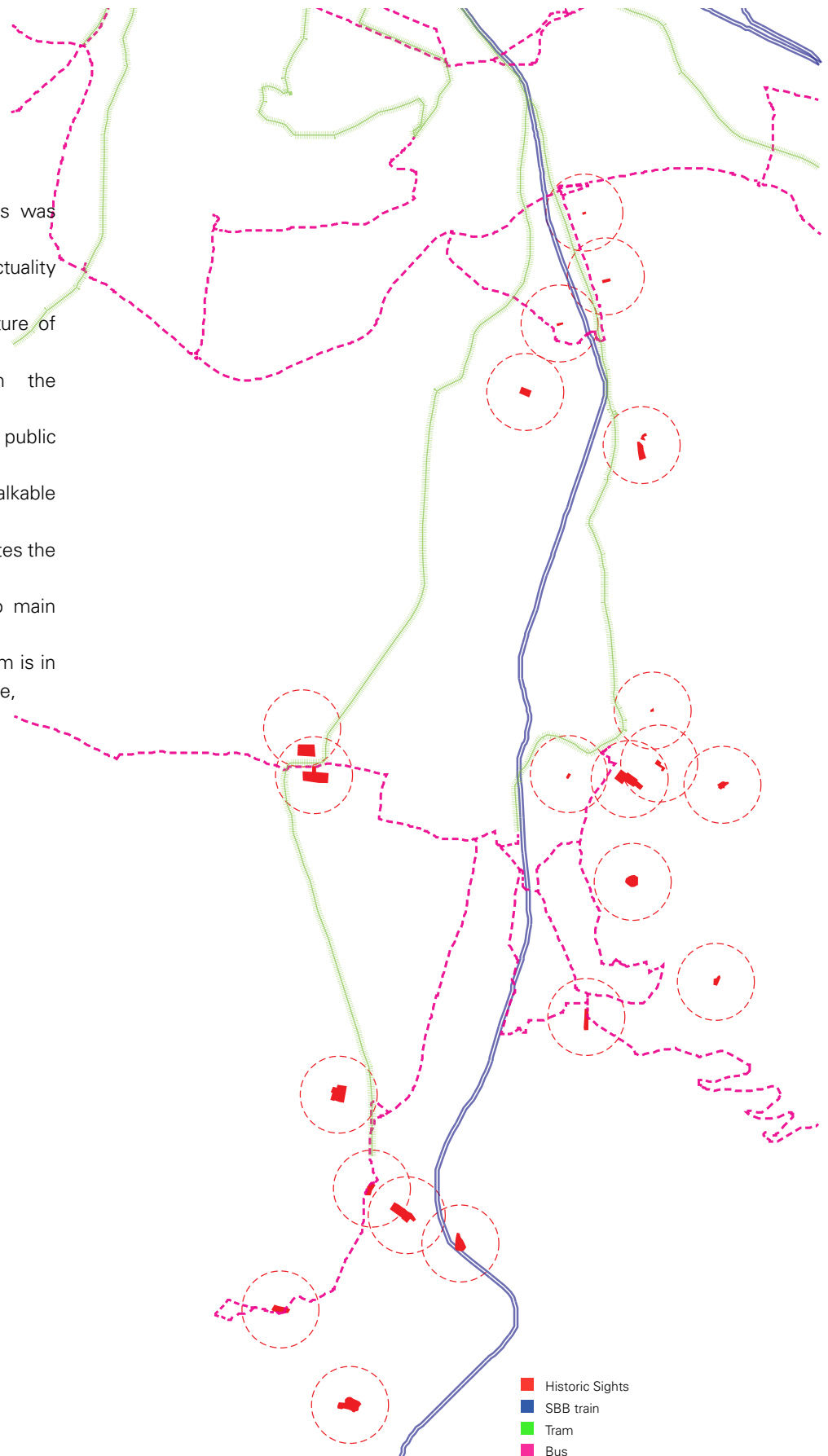
Analysis

The first step of the analysis was programmatic.

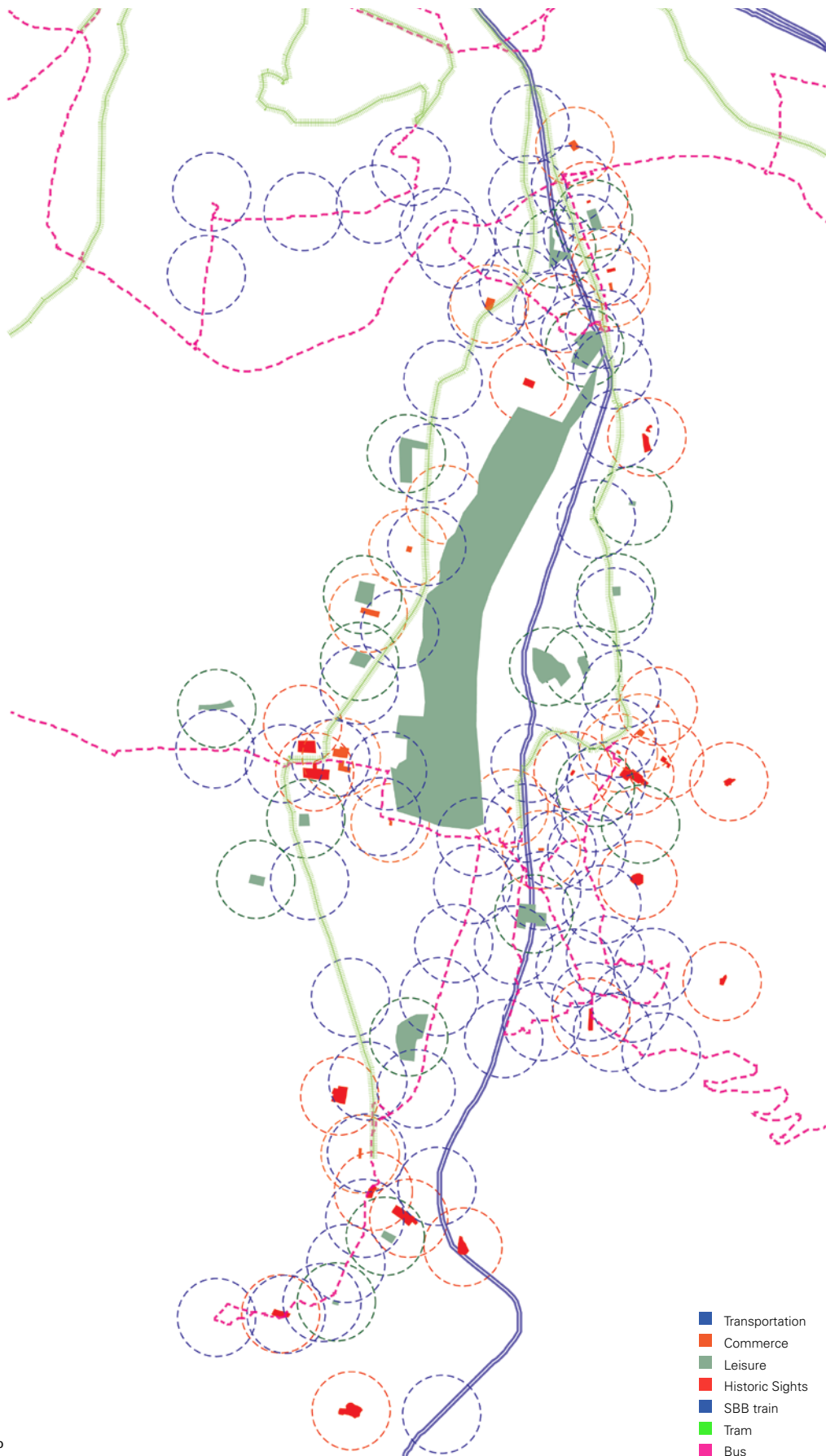
The idea was to check the actuality of the historic centers and their relevance for the structure of the Birs Valley.

The research focused on the allocation of leisure activity, commercial spaces and public transportation, always in relation to the maximal walkable distance of 500 metres.

The overlay clearly demonstrates the programmatic density to be highest along the two main roads of the Birs Valley. Thus the centrality linked to program is in this case not punctual anymore, but very linear.



- Historic Sights
- SBB train
- Tram
- Bus



Program Map

- Transportation
- Commerce
- Leisure
- Historic Sights
- SBB train
- Tram
- Bus

The Loop

The analysis lead us to the simple gesture of closing or connecting the linear structure and introducing the core idea of the Loop. Therby two important issues are adressed:

1. To change the perception of the valley from the current state of sub-urban dependence to a more coherent and independent one.

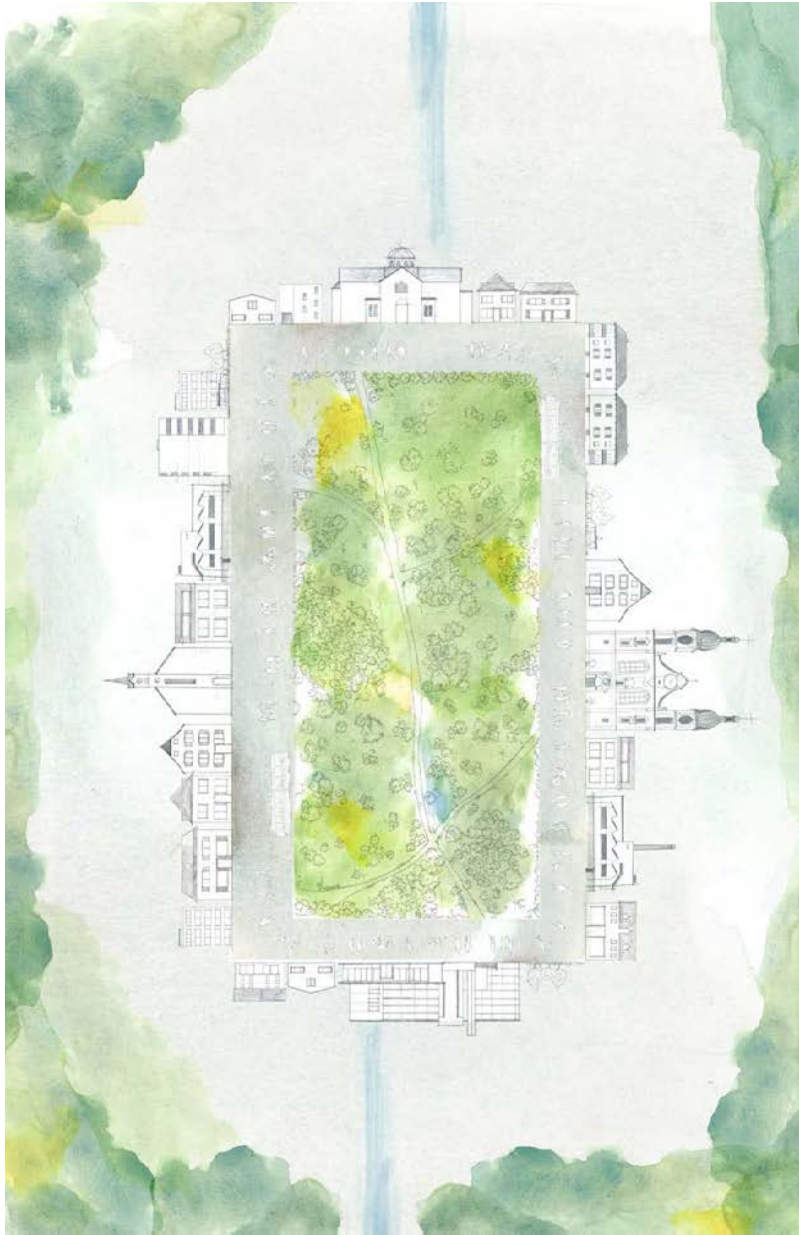
2. To define a new central space for the entire valley.

The central space is in this case a void. Forrest, Field, River are forming a Green space of amazing potential, which clearly is not the traditional center of density, but is rather open ,natural and competely public. This place celebrates the people's relationship to the new town:

"It's all about the Greenspace."



Closing the Loop



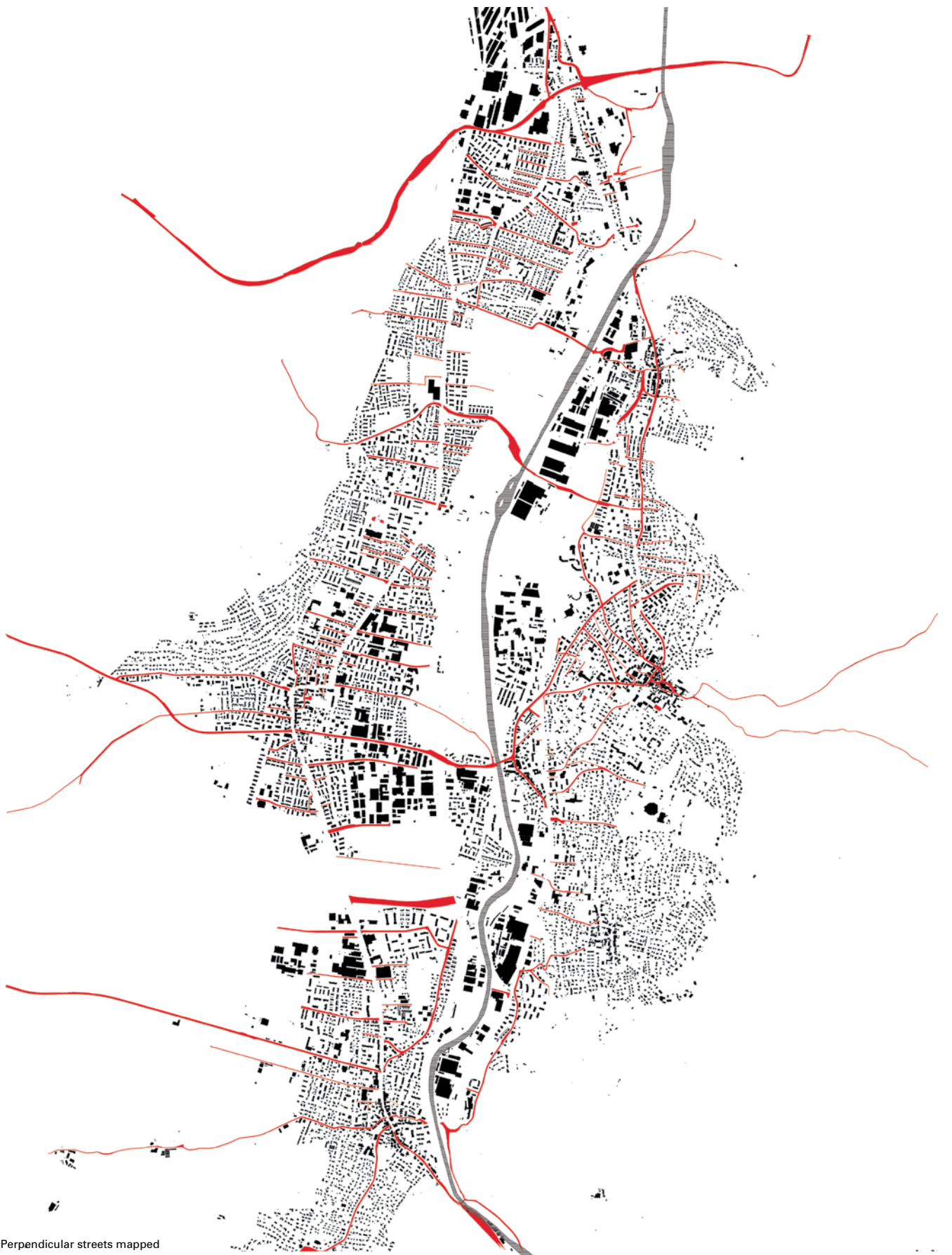
The Loop

To understand the connection between the Loop and the central park a site analysis was necessary. The students walked around the whole of the loop and through the line of the park. The experience was confusing.

The connection to the green core or to the opposite side was in most cases inadequate or completely missing and the car dominance on the street was uncomfortable. No visual landmarks were existing what stimulated the strong feeling of being lost and isolated.





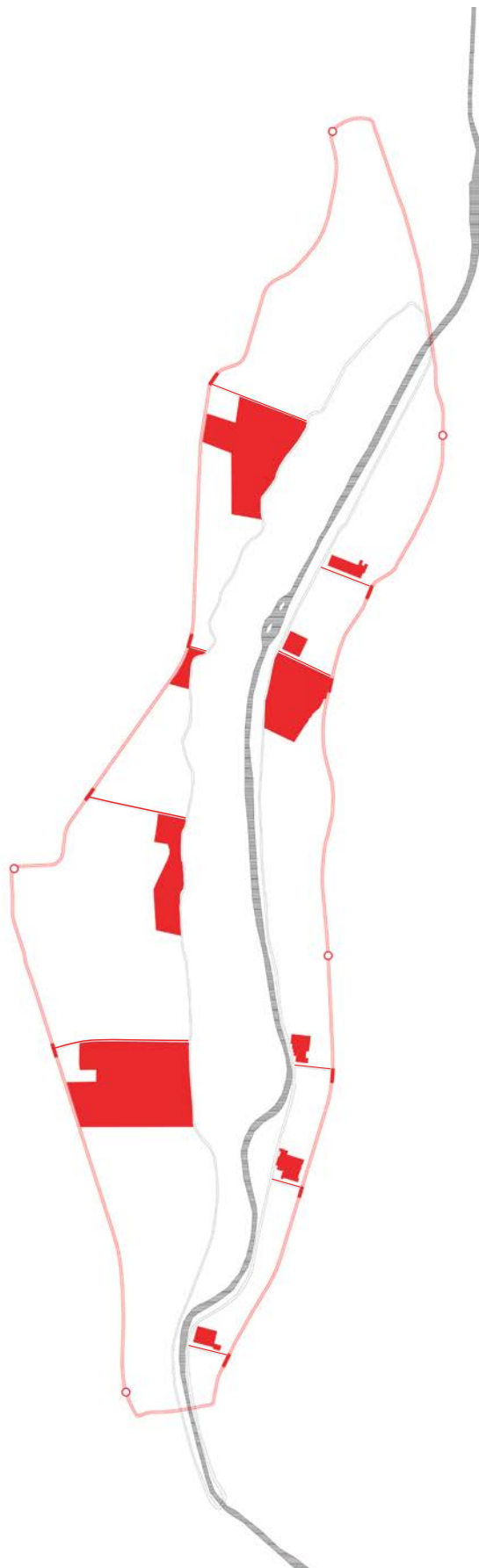


Perpendicular streets mapped

Consequently, the question aroused if there are existing connections to the central space, that could be reinforced and strenghtened in their meaning.

Clearly not all the perependicular rouds can be grand gestures, thats why in the selection the focus was not only on existing tramstops or other programms, but in particulary areas with transformation potential.

On the west side of the valley, in the more residential part, large, left over vacancies were identified as points for new settlements, while in the eastern part the industries would be opened up.



The Boulevard

The transformation of the selected perpendicular streets involves a very simple idea:

A row of trees is planted on each side of the street, which leads precisely from a tram stop, all the way to the park.

This new determined alley becomes the new gateway to the park.

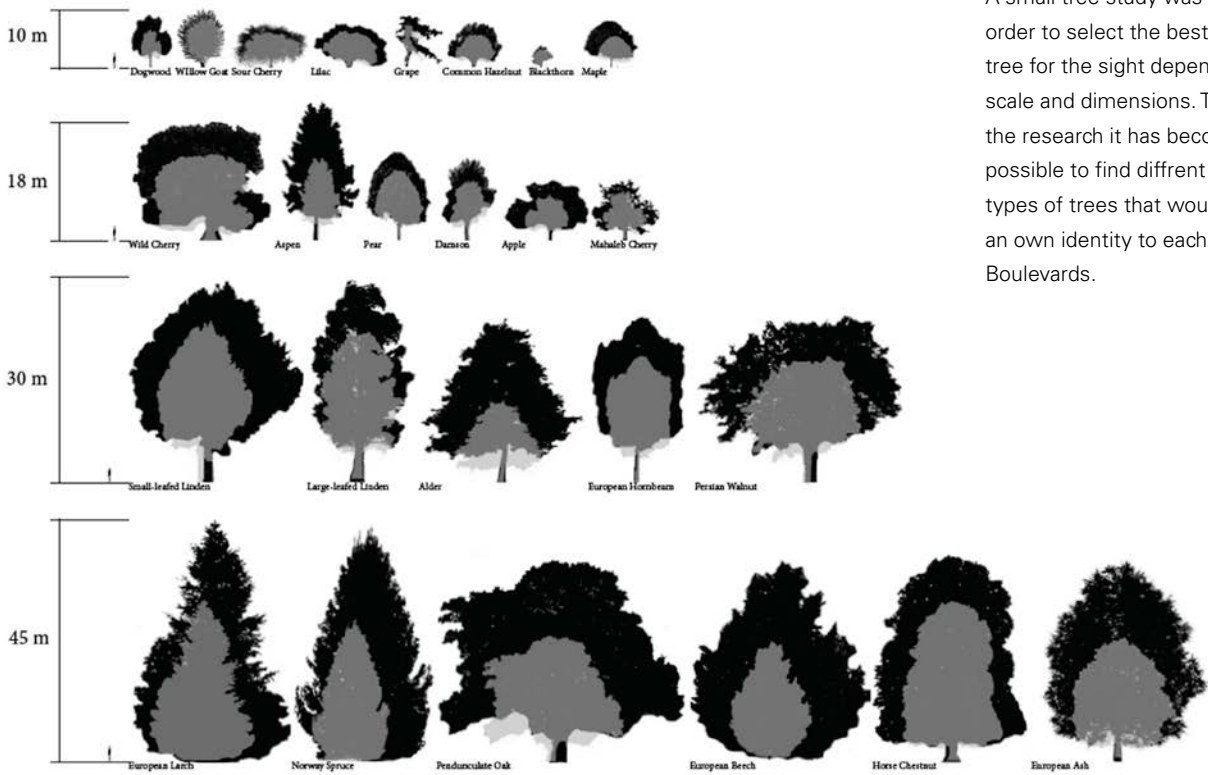
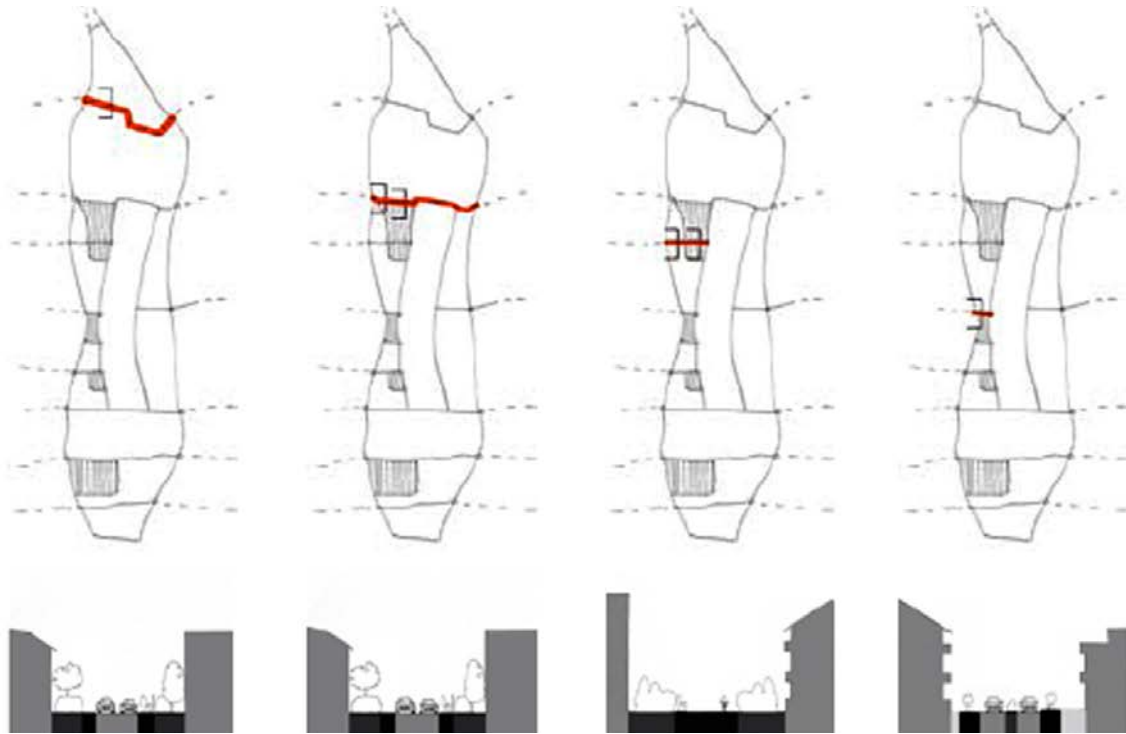
In its visual appearance it should invite or attract the people in the loop to go inside and use the center.

The loop cuts the Boulevard, and although the street continues to the edges of the sprawl, the row of trees will not. Only in thoughts, or conceptually, but in reality it remains a structure within the loop and emphasises the new direction from the sprawl to the inside.



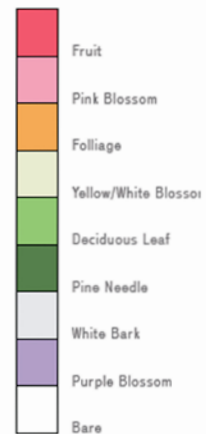
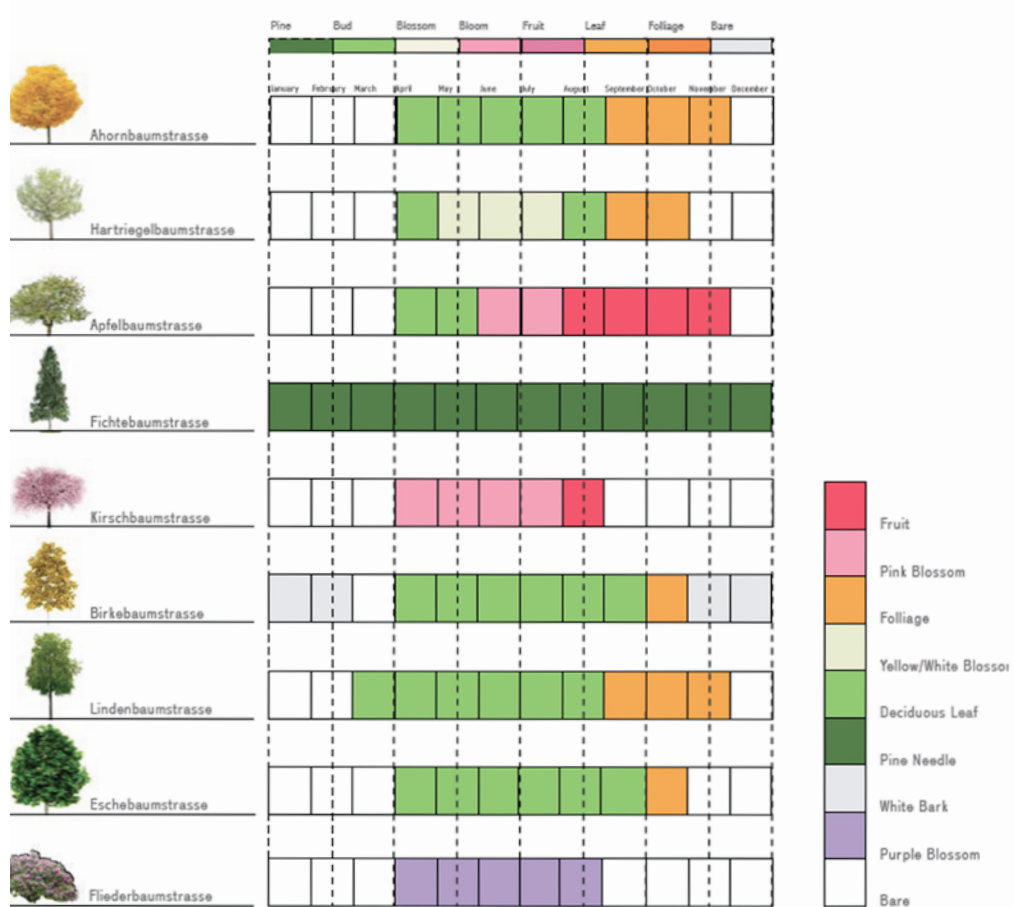
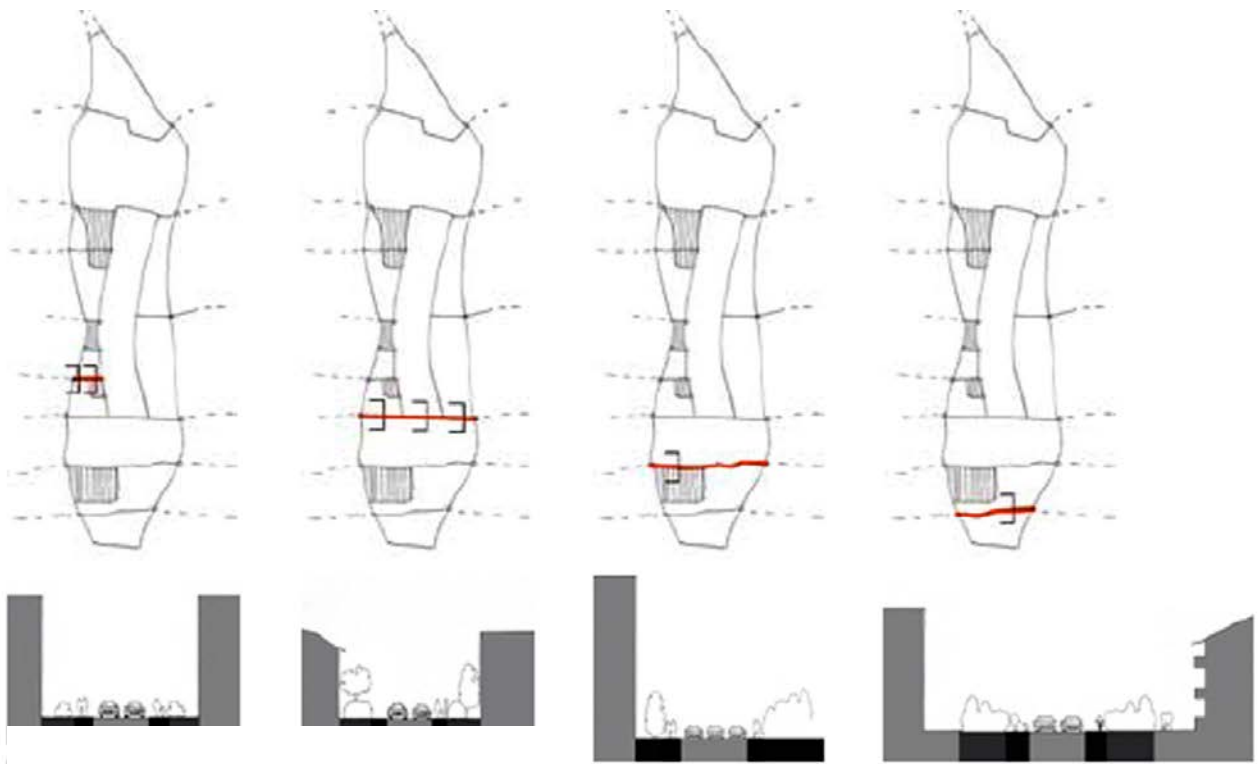


"Green Alley"



Birsstadt Trees

A small tree study was made in order to select the best suitable tree for the sight depending on scale and dimensions. Through the research it has become possible to find different kinds or types of trees that would give an own identity to each of the Boulevards.





Concept "Loop"





2. CENTRAL GREEN SPACE



ANALYSIS/ BACKGROUND

Latent Potentials

Looking on the existing green spaces from Pfeffingen in the south up to Birsfelden in the North, the Birs river acts as a structuring element of the valley. Surrounded by hills the Birs lines up different disconnected green spaces, which are already potentially beautiful.

These latent potentials can be experienced in the forest area of Auwald, where the municipality of Münchenstein has set up a couple of trails. Standing on bridges crossing the river, sometimes allow you to see more powerful parts of Birs floating through the agglomeration. Experiencing a wilder character, the Birs can really be a strong identity caring element. More subtle and accessible parts can be found as well. The extensive vegetation is made possible through the Birs and the landscape almost has a painterly character.

What we discovered throughout looking more carefully into the existing green area is, that specific characters can be already found in those areas and are already used by the Birstadt inhabitants.

Unshaped Areas

Nevertheless there are still areas, which need to be enriched and where issues are arising. In those areas it is often hard to walk the green without having to leave it at some point. Walking on the edge of the park we discovered more unsatisfying situations. Built up areas and infrastructure are dividing the possible visitor from the park.

Where the forest meets the residential areas the green lawns of the residents as well as the forest arm are often divided by fences, one on each side. Walking along the same side of the park entire strips of residential housings are cut of by the Highway running through the valley. The sound walls not only protect the residents from the noise emission, they also block out the feeling for the green space in behind. Another condition we found was on the edge of the Birs river. Big parts of the walkway along the Birs are rarely accessible due to walls and fences put up by industrial facilities.



Forest edge



Highway sound walls



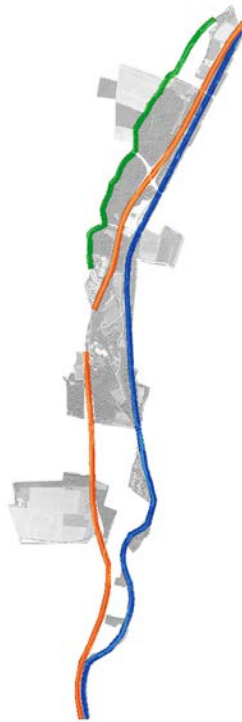
Industrial separation



Latent Potential of existing forest trail



Current Green Space Figure



Green Space Edges



Defined shape of green core



Network of path

Green Core Definition

What we realised was, that the content of the park was already there. But today the green is made up by loosely linked cells cutted off from built up areas by the Birs, the Highway and by unaccessible skirts of the forrest. Therefore we decided to deal with the edge.

Introducing a parkway as a framing element along these 3 edges forming one central green space in the middle of the Birsstadt, we tie the existing greens together and give a clear indication and recognisable form to what is park. Making the edge walk able in 1 go helps to read the park as a unitary element defining the center of the Birsstadt.

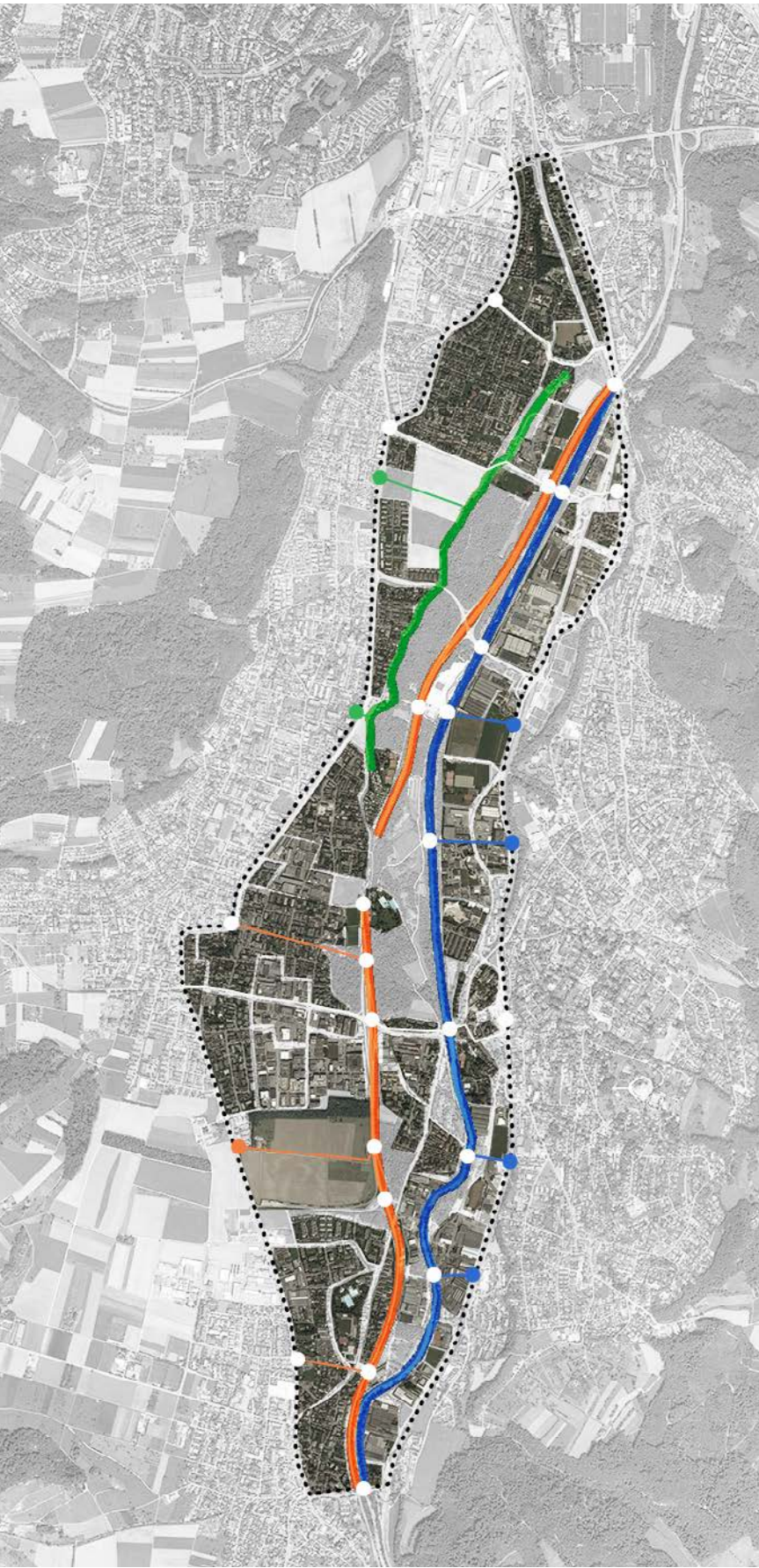
By connecting the single green fragments we would get one park with different characters. We propose to enhance the existing path structure within the park according their specific character and providing a network of connection within the central green.



Landscape along the Birs in Dornach

Bridging Elements

Defining the central green as one piece leaves us the 3 edges. The Birs, the Highway and the Forrest are physical borders deviding the park from the built up area. So we discovered several bridging elements that cross the edges punctually. The Birding elements gives us reference points where to join the parkway with the Loop tram stops. In order to connect the Loop to the Park we introduce the Boulevard.



- Birs
- Highway
- Forest
- Crossing Points

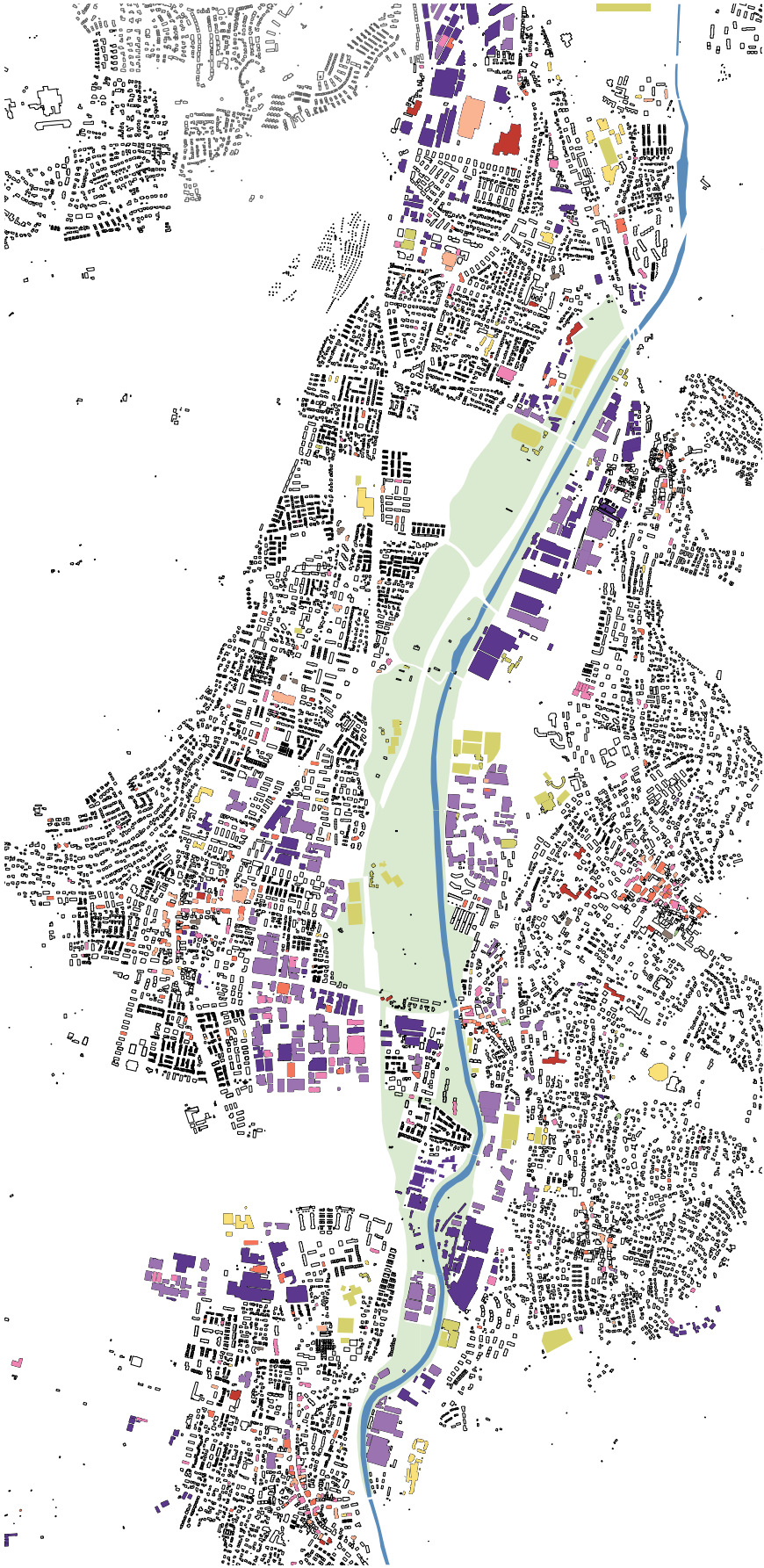
Urban Permeability

By drawing out how permeable the park edges were for possible users, it is striking that on the eastern side of the valley there are hardly any permeable sites and on the western side most areas are of a medium permeability. Not permeable mean sites are closed of by fences and other physical walls and medium permeable means that physical walls don't block the sites but due to private ownership have a lack of an adequate public appearance.



- unpermeable
- medium permeability
- permeable

Programme Birsstadt



- Industry
- Service
- Leisure
- Education
- Commercial
- Communal Facilities
- Food
- Health Care
- Religion

Programme Birsstadt Industries

When you look on the programme map of the Birsstadt the reasons for the lack of permeability are visible. In the previous century a majority of the industries of the valley were set up along the river. These industries are the main reason why big areas along the Birs are hard to access. Although some industries have changed from heavy industries, into more high-tech and clean industries, as well as in small and medium technology businesses and into creative industries, there are still some plots where industrial production happens.

■ Industry
■ Service



Decaying Industries

To take into consideration to open up the sites and the reality of abandoned industries we propose the re-use of strategically selected industrial buildings, based on the proximity to bridging elements, Loop tram stops and structural value of decaying industries selected along the edge.

Placed along the green edge, the industrial buildings function as container for leisure purposes and activities along the park. Through reprogramming of industrial structures, formerly closed of industrial areas open up radically to the public and would offer space to the producing industries right in between.

Activy Containers

In order to re-programme the industrial sites we concentrate on different criterias. Considering the Boulevards to connect the Loop and the Park we selected 5 industrial structures. Those structures posses a repetitive and added character. By emptying them and providing some basic infrastructure as toilets, starge and administrative rooms, these structure allow us to have flexibility in use and are giving certain recognisability. The re-use combined with the recognisable Boulevards flanked by the mirroring trees and the framing element of the walk path around the central green give the structures a programmatic pioneer function.

The structures are spilling out leisure containers from the park, marking the link between the park to the loop. The re-used industrial buildings are designed in order to guarantee a visual and physical permeability within the structure. Additionally it was a goal that the park area could be used throughout the year, not only in the warmer seasons.



Overview Birsfelden

Wirtschaft.

SMI 7594 +0,5%	1 Euro 1.21 Franken -0,6%
SPI 6979 +0,5%	1 Dollar 0.93 Franken +0,2%
Euro Stoxx 50 2652 +0,8%	1 kg Gold 47 354 Franken +1,1%
Dow Jones 13 784.17 -1,5%	1 Fass Öl 114 Dollar -0,6%

Zypern: Kandidat
Brüssel. Der Ausgangsschaftswähler macht e Europapartner für den I wahrscheinlicher. Seite

Swissmetal plant den Abgang

Der Produktionsstandort Dornach ist nur noch für maximal sechs Jahre gesichert

Neue Nutzung. Swissmetal benötigt grosse Teile ihres weitläufigen Areals in Dornach nicht mehr. Foto: Gutschmidt + Partner

Von Kurt Tschan

Dornach. Das Ende von Swissmetal in Dornach steht. Zwar wurde mit dem chinesischen Konzern Baoishida Ende letzten Jahres ein Käufer für das in Nachlassstandung steckende Unterneh-

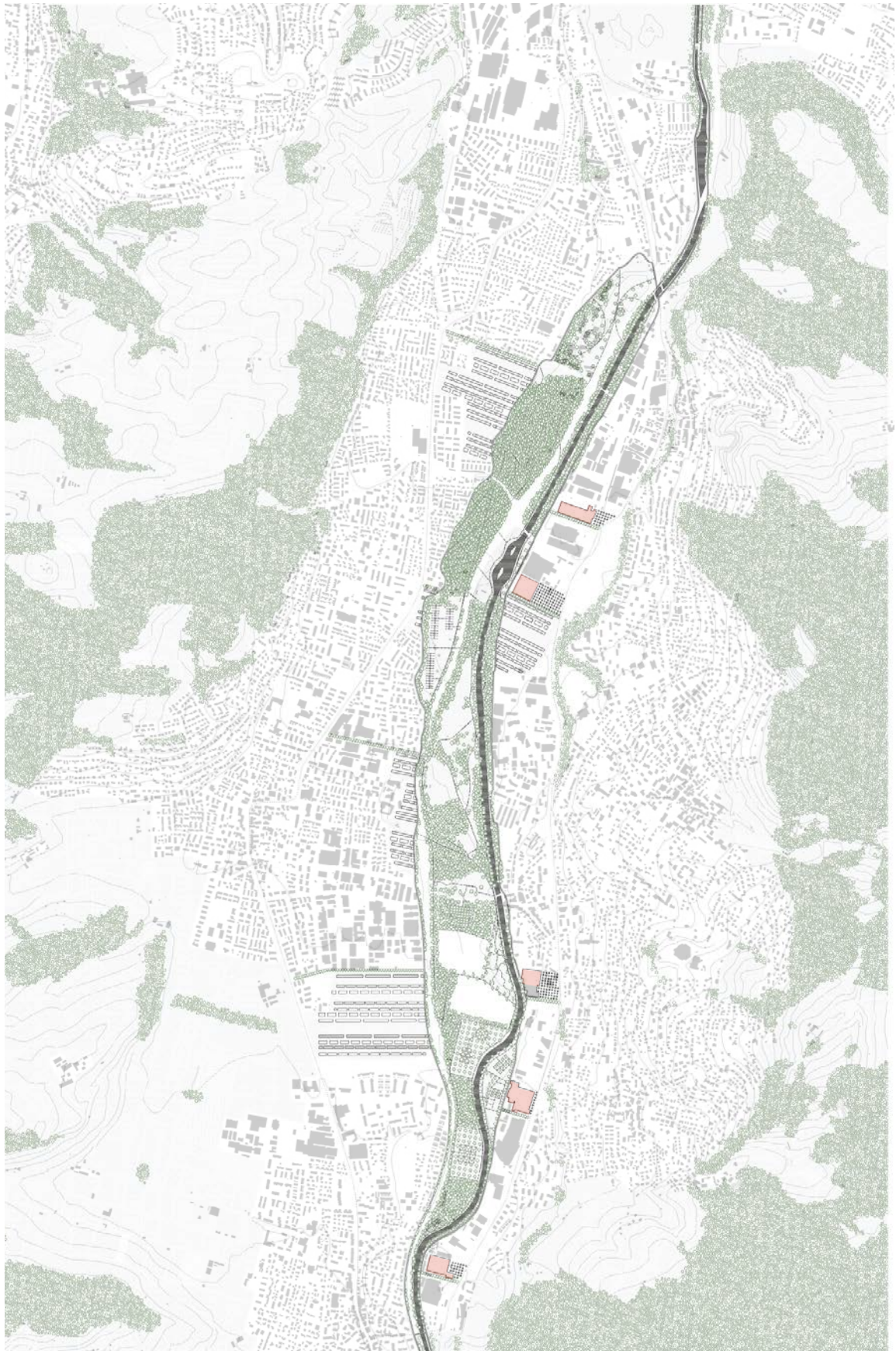
Gemeinde kräftig wachsen. Gemäss Schlatter sehen die Pläne vor, dass im Gebiet Weiden entlang der Birs in 15 bis 20 Jahren über 1000 zusätzliche Menschen wohnen können.

Der Gemeinderat hat gestern Abend einen ersten wichtigen Pflock für die Birsfelden sowie die Entwicklungsgebiete Gestad in Münchenstein, Polyfeld in Muttenz sowie Schoren und Schappe in Arlesheim.

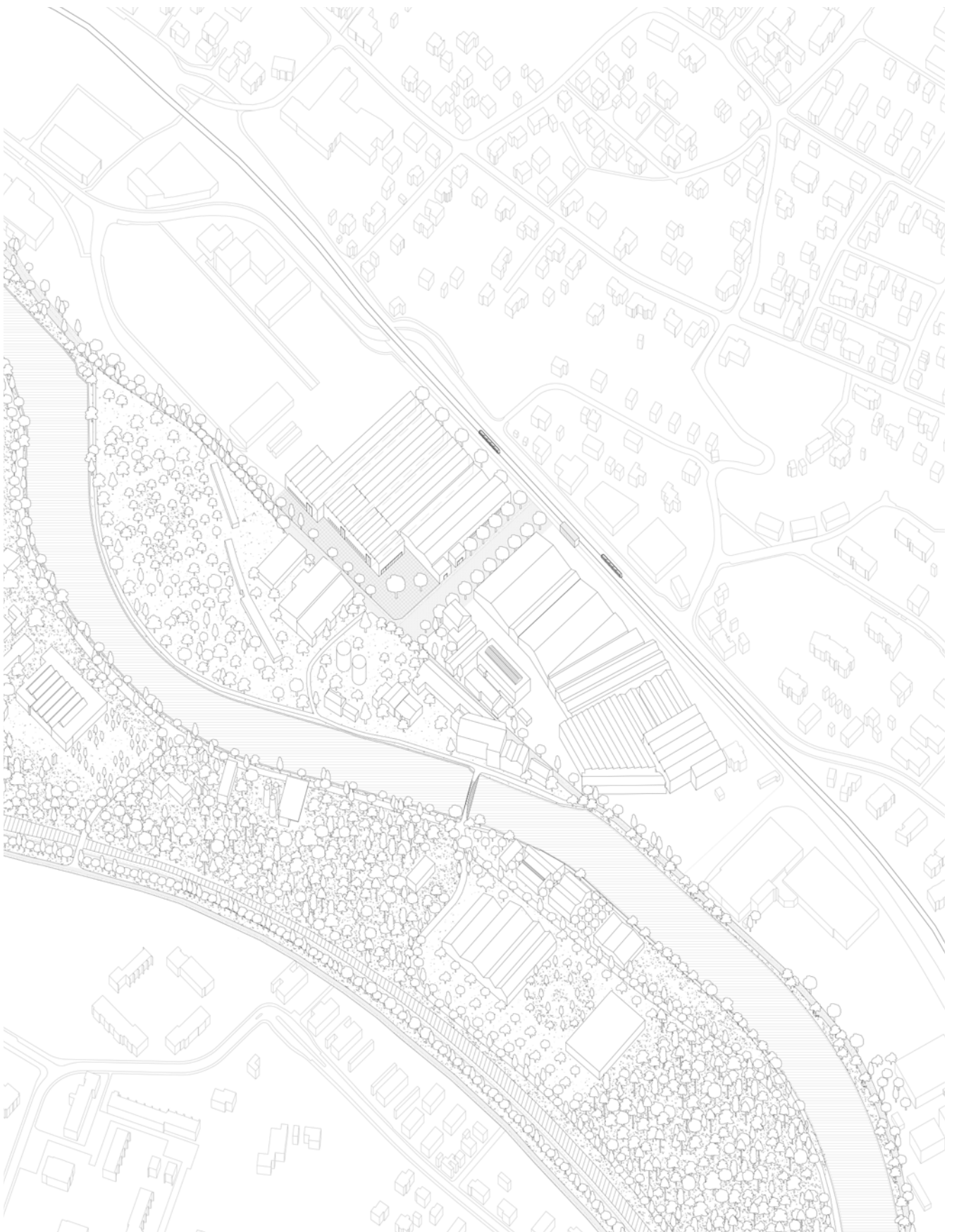
SP-Gemeinderat René Umher glaubt jedoch nicht, dass die Planung noch im Rahmen des laufenden Nach-

te Bauwillige abschrecken könnte. In den Fokus der Planer und der Gemeinde ist inzwischen auch der Vollabschluss der H18 in Aesch geraten. Die Arbeiten für dieses 50 Millionen Franken teure Projekt liegen auf der langen Bank und dürften frühestens 2019 be-

Gli SN
Italie
Zürich
laute
zliche
Girog
bei d
(SNE
ten si
um r
arden
mitte
In
die G
ken i
Euro
gestie
Am h
Di
Wahl
drück
der G
an die
minde
rückte
ken r
leger
der S
st
hatte
gema
Zeit i
Auch
zer Pr
Richt
führ,
lich i
komm



Intervention Points



Industrial areas re-used and bound in to the park



Re-used industrial structure

Cycling Track



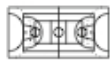
Beachvolleyball



Badminton



Gym



Floorball



Tennis



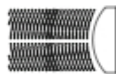
Volleyball



Banquet



Concert



Squash



Playground



Show Jumping



Skate Park



Tennis



Volleyball



Basketball



Tennis



Cinema



Lecture



Theater



Library



Beachvolleyball



Exhibition



Badminton



Beachvolleyball



Gym



Floorball



Volleyball



Handball



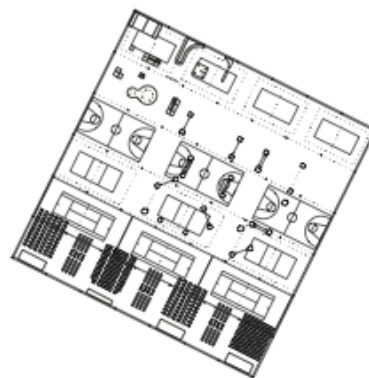
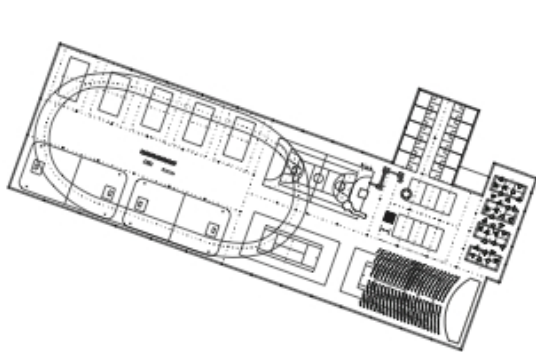
Banquet

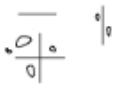














Theater



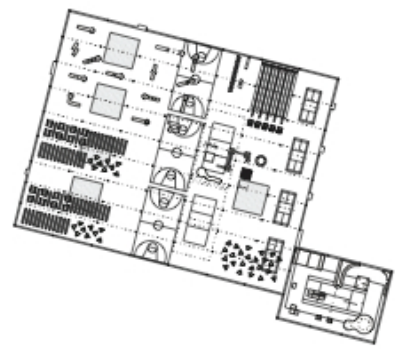
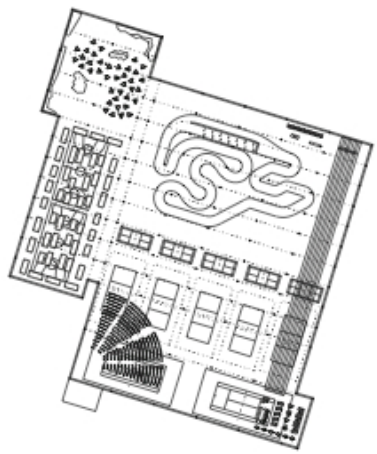
Swimming





- Running Track 
- Kart Track 
- Badminton 
- Basketball 
- Gym 
- Tennis 
- Market 
- Climbing 
- Gastronomy 
- Bike Rental 
- Volleyball 
- Arena 

- Miniature Golf 
- Library 
- Basketball 
- Skater Park 
- Playground 
- Beachvolley 
- Bike Rental 
- Tennis 
- Bowling 
- Lecture 
- Badminton 
- Banquet 
- Dance Floor 



Creating a unitary condition

By combing the walk path framing the park, the loop-connecting boulevards, the industrial structures and their re-programming into leisure facilities we imagine the structures may change the partitioned industrial areas with almost no public into an easily accessible area along the central green park often frequented by people of the Birsstadt.

Since we are dealing with the sprawling city we thinking about what kind of centrality could work within the agglomeration. We quickly found out that we weren't interested in the traditional idea of the city of the built up core. For us a central green and an adjoining set of facilities for leisure use would work much better for the loose fabric of the agglomeration. By re-enforcing the park, a unitary condition with points of attraction would be created.



New walk path framing the park



3. SETTLEMENT



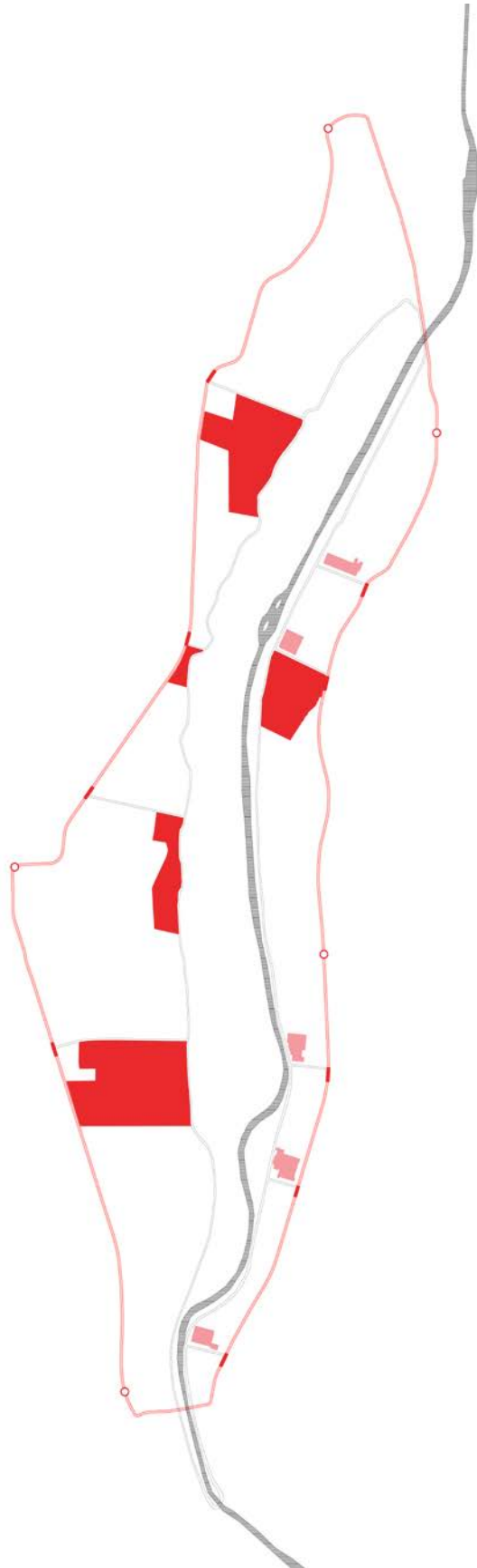
Settlement

The final step in the strategic plan is the settlement, which takes place in five vacant lots framed by the loop.

They have been left vacant for political reasons, as neighboring communes are unsure about what these border areas should become.

In order to combine the separated communes into the new Whole of the Birsstadt, the unified city, the vacant lots should be planned with new settlements.

The settlement becomes "All about the green." Aiming to enhance its visual and physical strength responding to the presence of the central park.



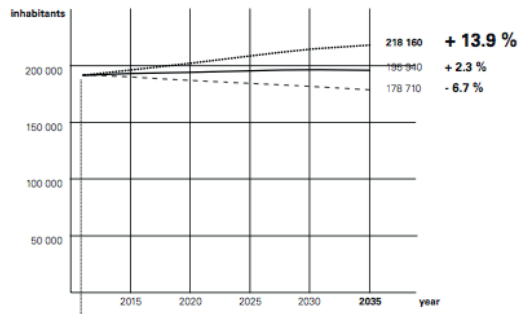
ANALYSIS/ BACKGROUND

Population

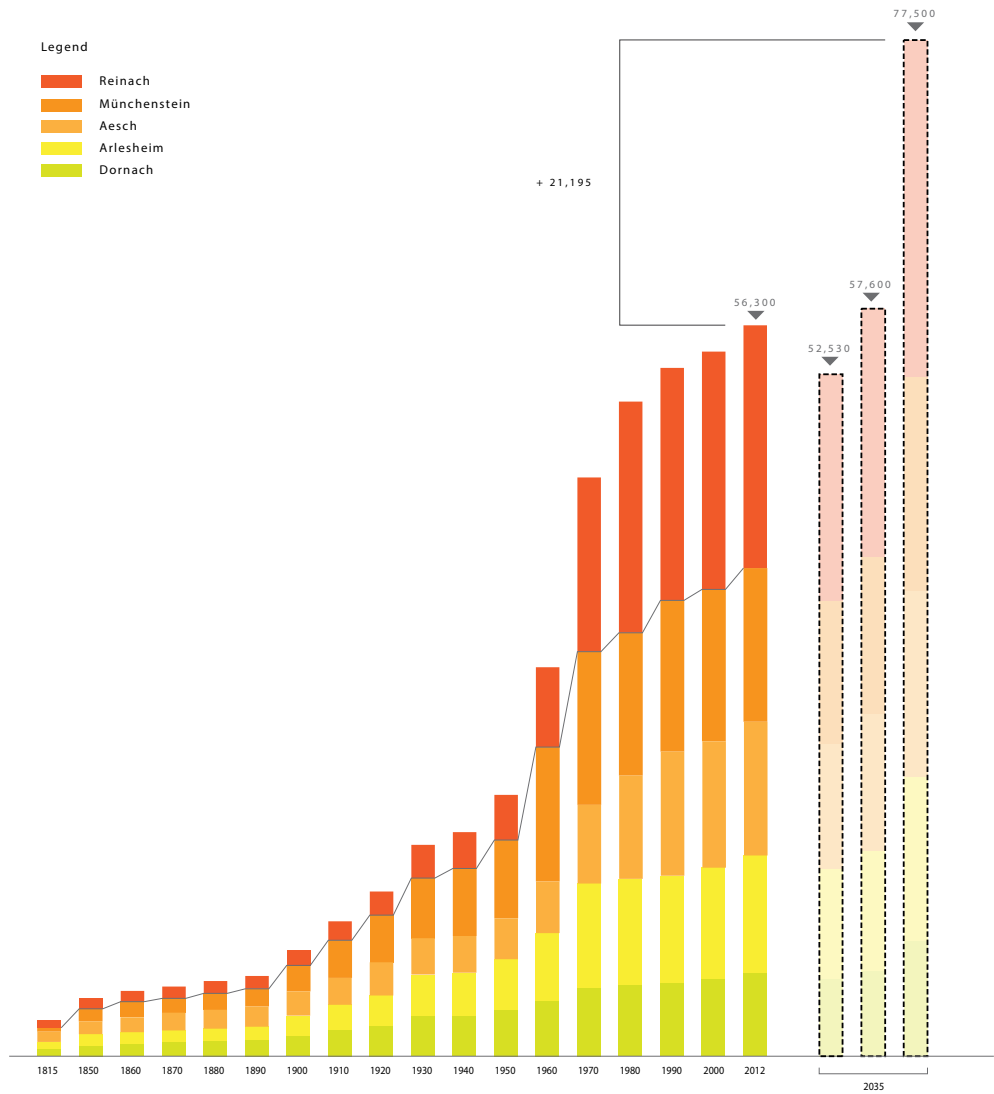
To understand the density and population of our settlement it was important to study the population trends of the Birs Valley. An analysis which culminated in three different predictions:

A high scenario, a median scenario and a low scenario. From this data the population of the Birsstadt cannot be predicted, but it can be prompted.

Hopefully with the attractive qualities of the Loop, the central park, and the overall urban connectivity, the Birs Valley will become an attractor for new homes and new work. Thus we encourage a population increase and consequently an increase in densification.



high scenario
middle scenario
low scenario



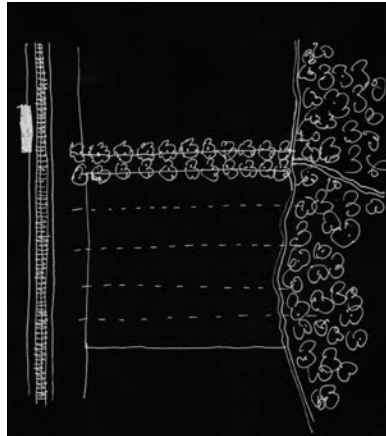
Strategy

The idea is to create a general idea or strategy applicable to all the five sites, whereby the different context also generates different results. The components need to be flexible and intuitive.

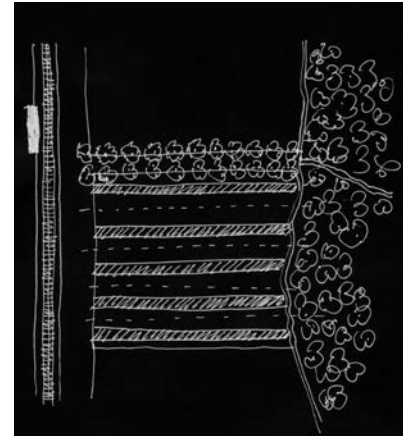
For this reason we draw in a first step a strip structure of each 30m width.

In these, typologies will be inserted by compositional rules. Each of the different typologies are linked to different outer spaces, namely garden typologies. From semi-private to semi-public, a diversification of qualitative spaces is the goal. The gardens stretch from the park to the loop, so emphasizing the idea of the green. People who will travel along the loop, will find them as new referential points.

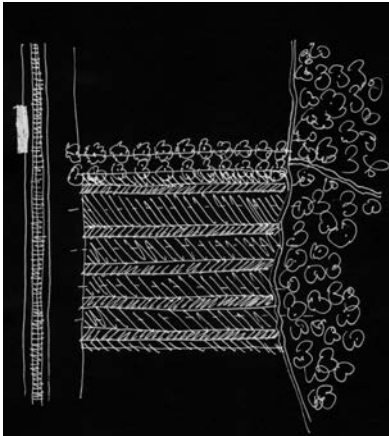
There is no central space in the settlement, whereas its edge is discovered as an essential element. Along the park edge various leisure programs or educational facilities are positioned, as on the opposite, on the loop site, highrises with office functions are set.



1. Divide area in strips of 30m width



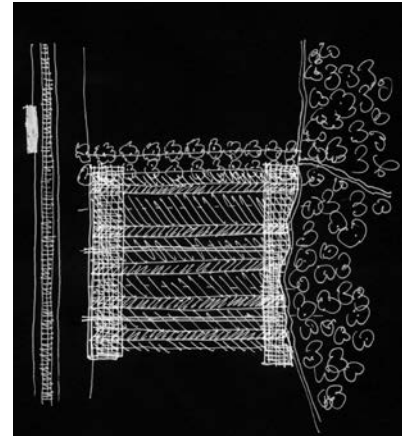
2. Insert buildings types



3. Different housing types provoke different garden situations



4. Access Streets in between two housing strips, in this way the streets will never cut the green



5. Adapt the edges to the context

Typologies

In order to choose suitable typologies for the settlements, that would be architecturally strong enough, we began to study the existing situation or condition in the Birs Valley. We mapped different types that spread randomly through the whole sprawl:

The single family house, the row house, the apartment building and highrises.

However we understood, that copy and paste would not be the only solution.

Consequently we didn't select all the types, but focused on some of them and transformed them according to our understanding.

In this manner we distilled the typologies

of the patio house, the row house, the apartment building and the tower.



Existing typologies in the Loop



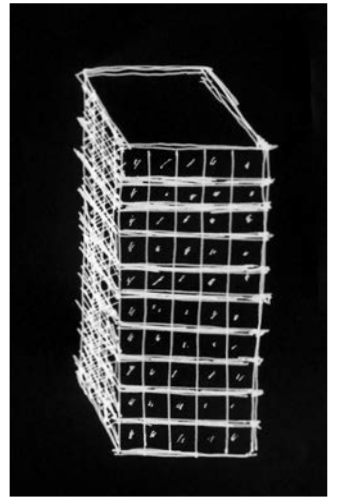
Patio House
 1 story
 single plot: 12x9m
 max. elements: 1
 street
 courtyard



Row House
 3 stories
 single plot: 4x12m
 max. elements: 2
 semi-private garden
 roof-terrace



Apartment Building
 4 - 5 stories
 single plot: 12x12m
 max. elements: 3
 semi-public garden
 loggia



Apartment Building
 8-10 stories
 single plot: depending on typological strip
 max. elements: 1
 balcony

Site 1

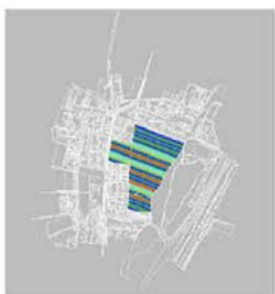
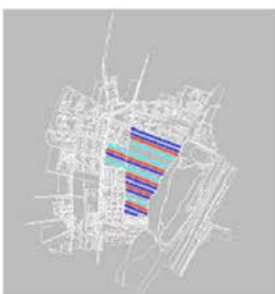
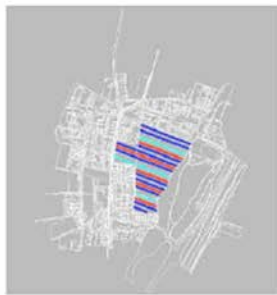
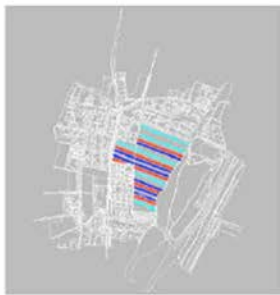
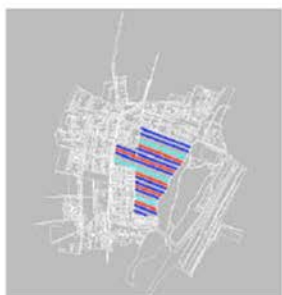
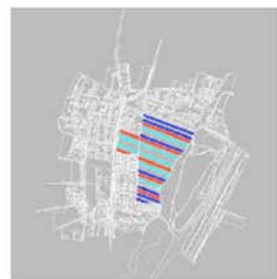
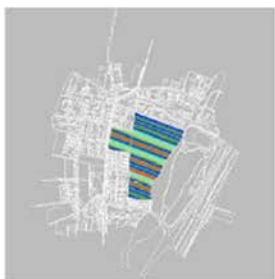
To check our idea, we did a detail study for one of the five sites, where we planned the whole settlement to its very final stage.

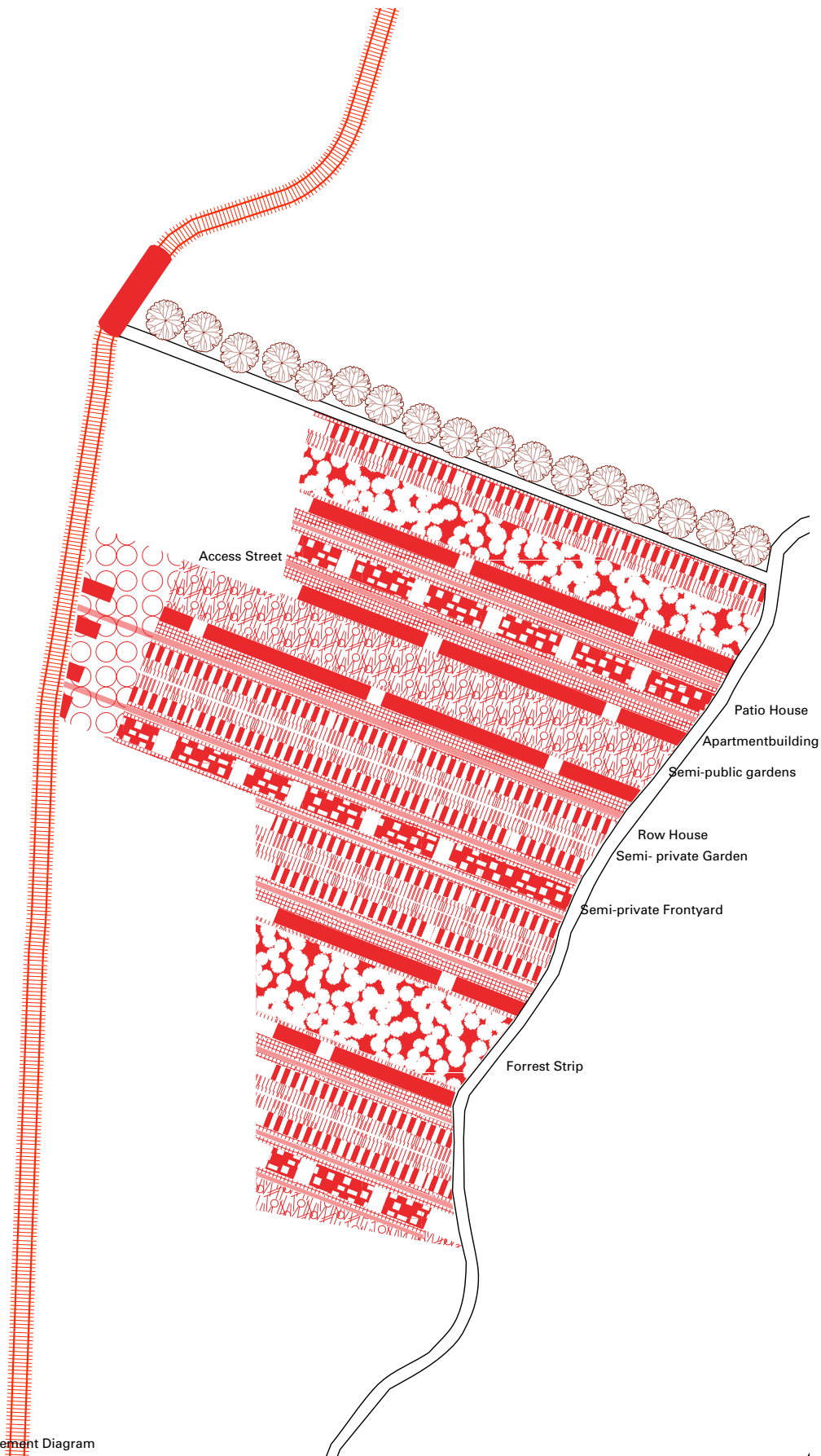
We started with a series of compositions, trying to generate the best suitable solution.

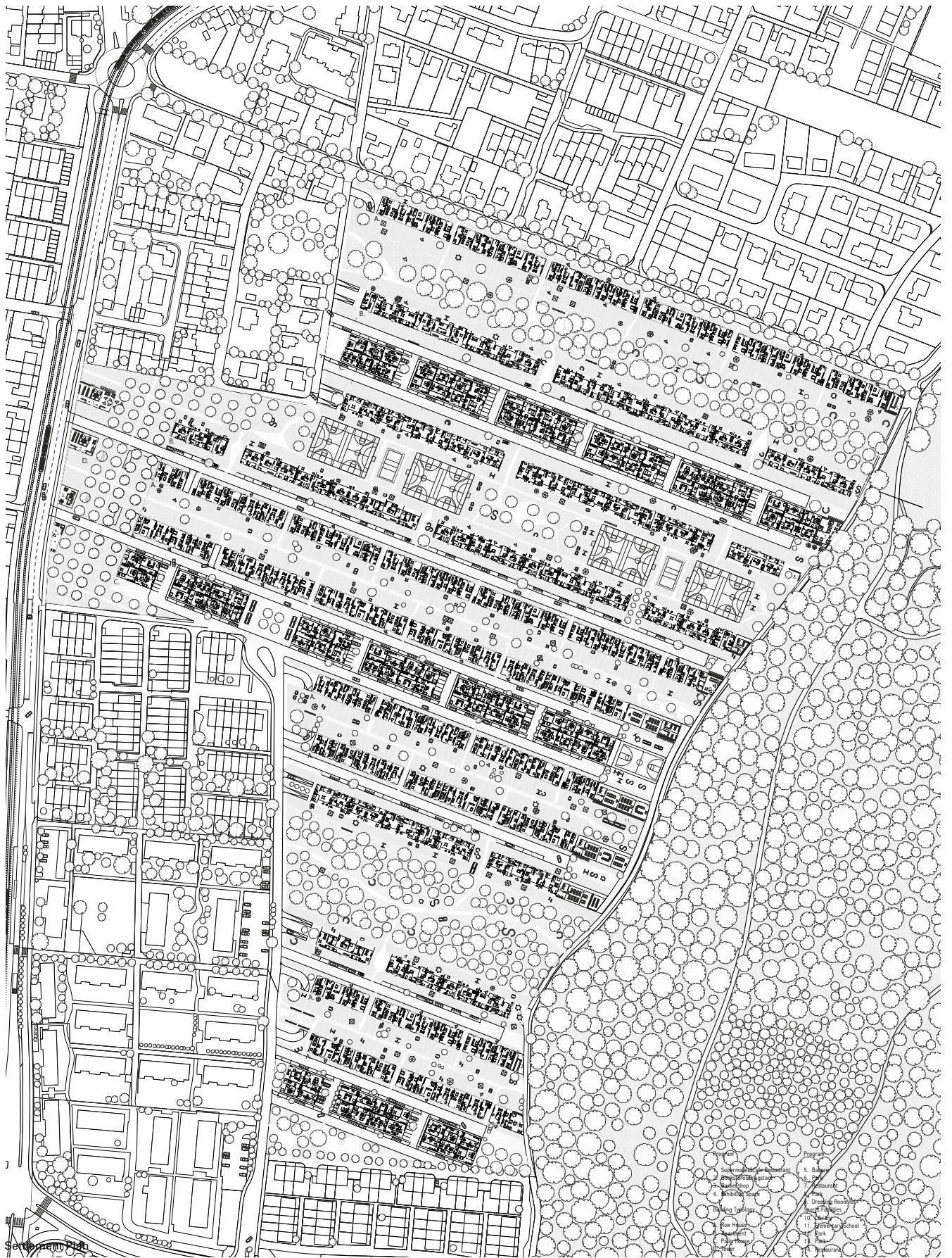
After setting the buildings typological framework, it was not difficult anymore to determine the different gardens.

Finally we reacted in the edges according to the context.



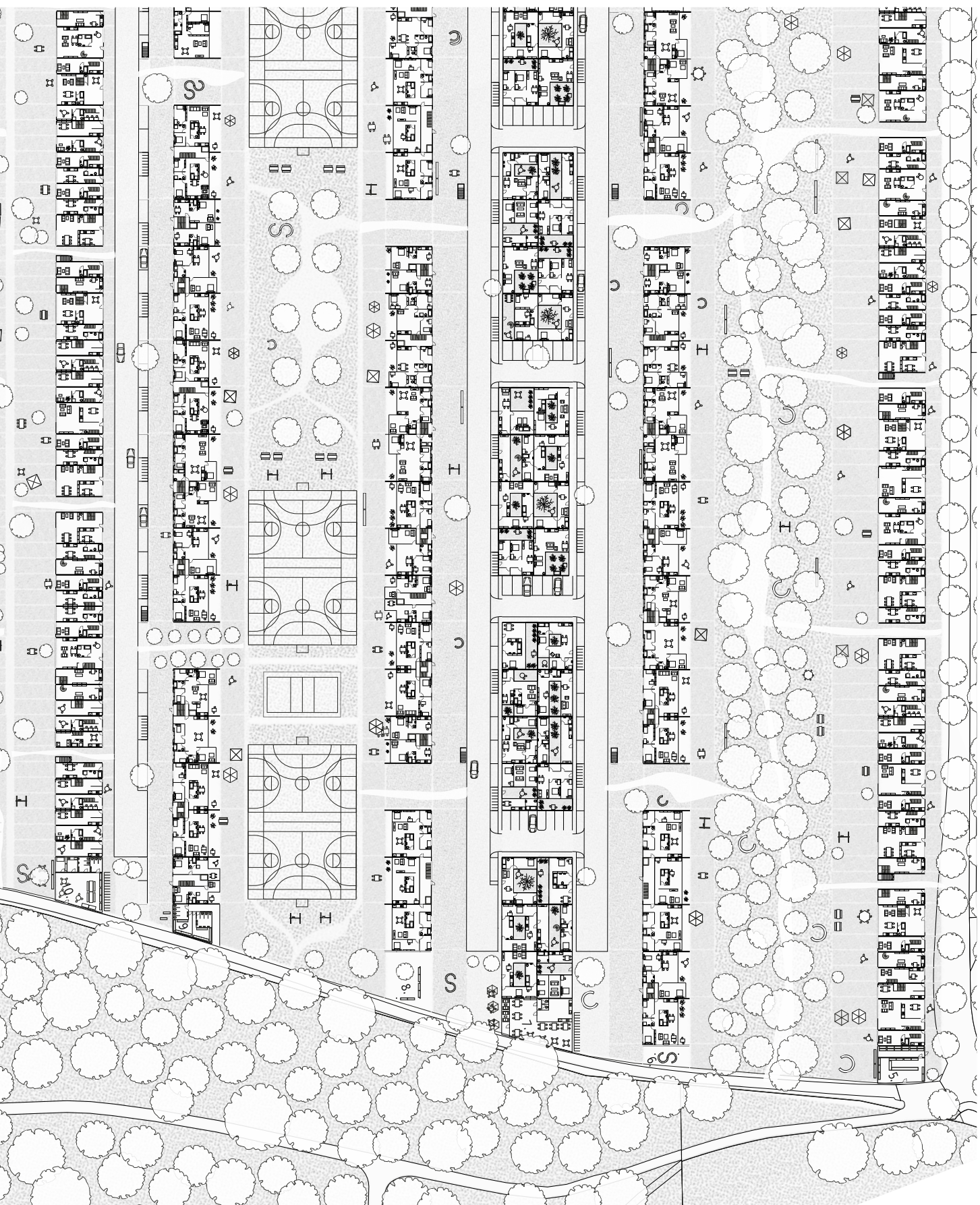






Service Street

- Program
- 1. Southwesterly Residential
 - 2. S. Blvd
 - 3. S. Blvd
 - 4. S. Blvd
 - 5. S. Blvd
 - 6. S. Blvd
 - 7. S. Blvd
 - 8. S. Blvd
 - 9. S. Blvd
 - 10. S. Blvd
 - 11. S. Blvd
 - 12. S. Blvd
 - 13. S. Blvd
 - 14. S. Blvd
 - 15. S. Blvd
 - 16. S. Blvd
 - 17. S. Blvd
 - 18. S. Blvd
 - 19. S. Blvd
 - 20. S. Blvd
 - 21. S. Blvd
 - 22. S. Blvd
 - 23. S. Blvd
 - 24. S. Blvd
 - 25. S. Blvd
 - 26. S. Blvd
 - 27. S. Blvd
 - 28. S. Blvd
 - 29. S. Blvd
 - 30. S. Blvd
 - 31. S. Blvd
 - 32. S. Blvd
 - 33. S. Blvd
 - 34. S. Blvd
 - 35. S. Blvd
 - 36. S. Blvd
 - 37. S. Blvd
 - 38. S. Blvd
 - 39. S. Blvd
 - 40. S. Blvd
 - 41. S. Blvd
 - 42. S. Blvd
 - 43. S. Blvd
 - 44. S. Blvd
 - 45. S. Blvd
 - 46. S. Blvd
 - 47. S. Blvd
 - 48. S. Blvd
 - 49. S. Blvd
 - 50. S. Blvd
 - 51. S. Blvd
 - 52. S. Blvd
 - 53. S. Blvd
 - 54. S. Blvd
 - 55. S. Blvd
 - 56. S. Blvd
 - 57. S. Blvd
 - 58. S. Blvd
 - 59. S. Blvd
 - 60. S. Blvd
 - 61. S. Blvd
 - 62. S. Blvd
 - 63. S. Blvd
 - 64. S. Blvd
 - 65. S. Blvd
 - 66. S. Blvd
 - 67. S. Blvd
 - 68. S. Blvd
 - 69. S. Blvd
 - 70. S. Blvd
 - 71. S. Blvd
 - 72. S. Blvd
 - 73. S. Blvd
 - 74. S. Blvd
 - 75. S. Blvd
 - 76. S. Blvd
 - 77. S. Blvd
 - 78. S. Blvd
 - 79. S. Blvd
 - 80. S. Blvd
 - 81. S. Blvd
 - 82. S. Blvd
 - 83. S. Blvd
 - 84. S. Blvd
 - 85. S. Blvd
 - 86. S. Blvd
 - 87. S. Blvd
 - 88. S. Blvd
 - 89. S. Blvd
 - 90. S. Blvd
 - 91. S. Blvd
 - 92. S. Blvd
 - 93. S. Blvd
 - 94. S. Blvd
 - 95. S. Blvd
 - 96. S. Blvd
 - 97. S. Blvd
 - 98. S. Blvd
 - 99. S. Blvd
 - 100. S. Blvd

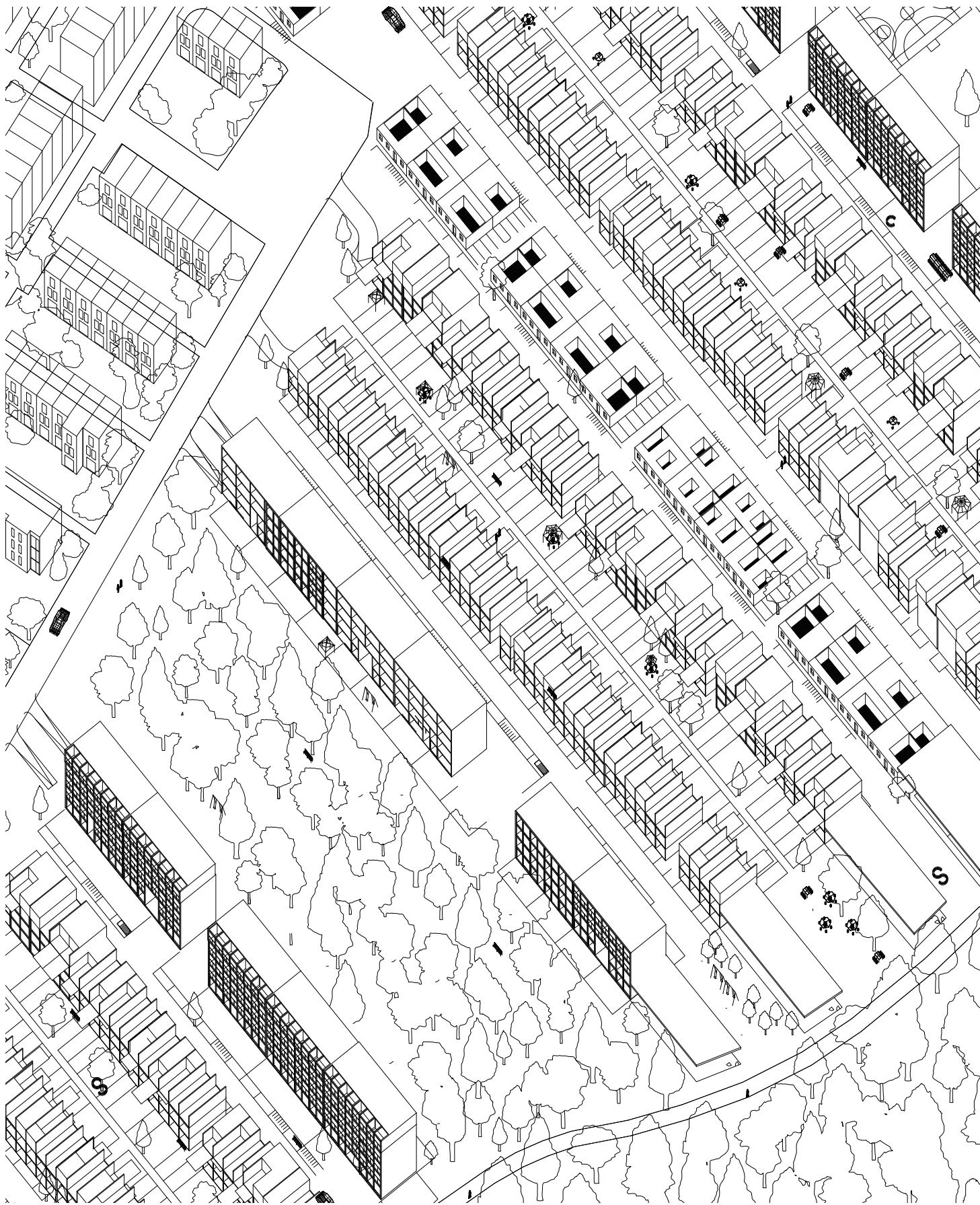




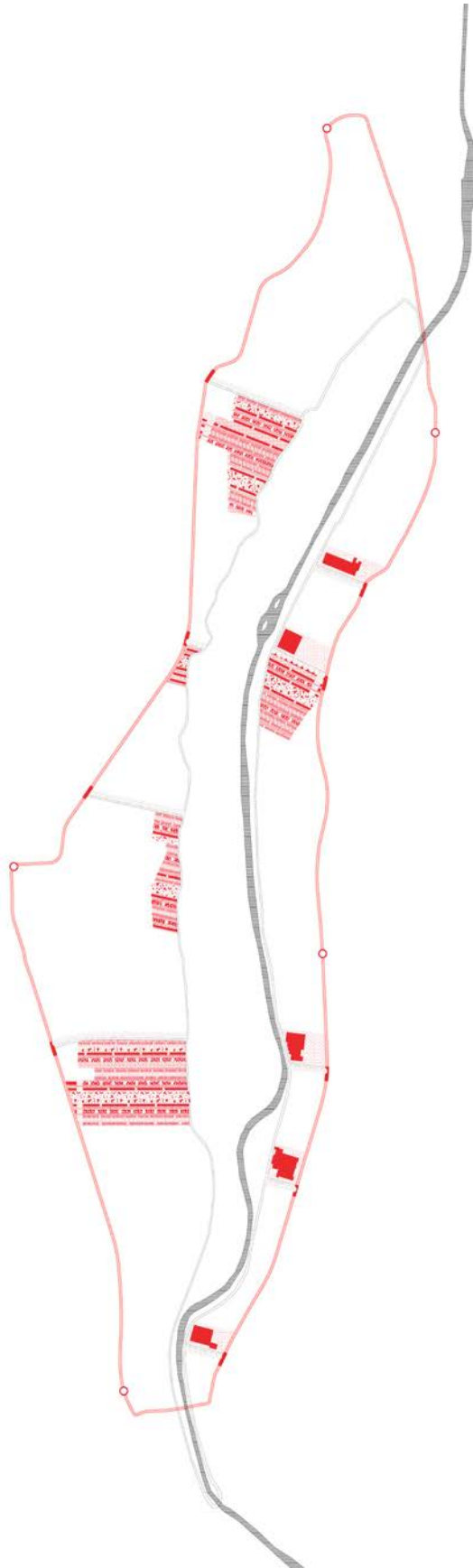
Semi- Public Garden, Collage



Semi- Private Garden, Collage







Conclusion

The settlement is the final step in the strategic project for the Birs Valley, completing the structure from the Loop to the Boulevard to the Park.

The result is a new unified city, which preserves a rural quality in its generous, open center, while operating urbanistically through sufficient systems of connectivity.

This is the Birsstadt.