

Studio Sergison  
Spring Semester 2020

A Plan for Zurich, 6  
Milchbuck, Oerlikon and Schwamendingen

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## Introduction

Over the course of the semester we will conclude our work in Zurich, the largest city in Switzerland. This is the last part of a six-semester research project that aims to produce an urban plan for Zurich as the cumulative result of six separate area studies. In this instance we will focus on the Milchbuck, Oerlikon and Schwamendingen areas of Zurich.

Several years ago, the Department of Urbanism and Architecture for the municipality of Zurich announced that the future development of the city would prioritise densification within the existing urban area and limit the expansion of building on agricultural land. This was endorsed by a public vote. The result of this strategy will ensure that denser, more compact urban growth is promoted. For a city that is well served by public transport, has a refined public realm and has generally experienced well planned urban growth, this ambition seems a logical response to the need to absorb a growing population and deal with the pressures it exerts on housing and other public services.

This is the context we will be operating in. Concrete proposals should be developed for sites designated for future densification and development. Projects should offer credible options and will take the form of realistic proposals based on current building regulations.

A commission of experts has been assembled to support you in developing project proposals, and your work will contribute to a wider discussion on the future of Zurich.

Aerial view of Milchbuck,  
Oerlikon and Schwamendingen

Our ambition to develop a plan for the city of Zurich is an academic exercise in the sense that it will have no legally enforceable planning status. Nevertheless, it is intended to generate realistic design proposals as a form of propositional planning and to demonstrate that the largest city in Switzerland can absorb the growing pressure on housing without resorting to an expansion of its current territorial limits.

Our work will address questions relating to the evolving image of the city and the strategies it might adopt for densification.

Each semester will focus on a specific neighbourhood, and situations where it is realistic to consider densification and re-building. Naturally, this leaves out the historical centre and nineteenth century neighbourhoods that are already reasonably dense and protected by planning regulations.

At the beginning of the semester a 1:1000 model of the area under study will be constructed and used as a tool for assessing urban strategies.

As in previous semesters, we will survey existing buildings carefully. We hope that, by accurately recording older existing examples, it will be possible to offer contemporary solutions rooted in place and in local building culture.

In addition to a day-trip to Zurich, which will take place in the second week of the semester, we will travel to London.

We will rely on a panel of experts – architects, planners and people with experience of building and commissioning buildings in Zurich – to assist us in our work. Irina Davidovici will give a lecture on themes connected to the work of the semester.

In addition to the studio reviews and programmed critical appraisal of projects, a number of lectures will be organised to address relevant themes.

On completion of the six-semester programme, the studio will organise an exhibition in Zurich and produce a book documenting the range of proposals developed.



View from the Seebacherstrasse  
towards Oerlikon

### Milchbuck

Extensive vineyards and small family estates once covered the sunny slopes of the suburbs of Unter- and Oberstrass which stretch along the country roads to Schaffhausen and Winterthur.

In the nineteenth century Unterstrass was characterised by the presence of factories on the banks of the Limmat and initially developed into a workers' neighbourhood. Before World War I, the construction of electric tramlines caused a building boom in both districts, which triggered an influx of middle-class residents. The construction of cooperative housing, which played an important role especially in the Unterstrass neighbourhood, was developed to meet the needs of average households. Riedtli, in particular, a pioneering modern housing development, was designed to accommodate average workers and their families.

After World War I, urban planners designed the so-called Milchbuck neighbourhood between Guggach, Irchel and Oerlikon: a prime example of modern urban development. Characterised by low-rise rows of houses, many of them detached, Milchbuck was masterplanned in line with garden-city principles in 1925, with large green spaces and sports facilities. The broad, tree-lined Bucheggplatz and Milchbuckstrasse link Oerlikon to the Zürichberg and Käferberg forests.

In Unterstrass, building cooperatives own 26% of all apartments, while in Oberstrass the proportion is only 5%. However, social housing projects figure prominently in Oberstrass, too. In the Twenties, the Vrenelisgärtli housing cooperative was active here, and built terraced single-family houses for middle-class owners. Their extensive garden-like quarters on Langmauerstrasse, Zanggerweg and Seminarstrasse were partially built on public land and with subsidies from the municipality.



1



2



3

1  
Zurich Oerlikon around 1954  
from e-pics, online image archive,  
ETH Library, Zurich

3  
Sternen Oerlikon around 1950  
from e-pics, online image archive,  
ETH Library, Zurich

2  
Hirzenbachstrasse in  
Schwamendingen around 1954  
from e-pics, online image archive,  
ETH Library, Zurich

## Oerlikon

Oerlikon is located to the north of Zurich on the edge of the Glatt valley and connected to the city by the Milchbuck tunnel.

As the site of a mechanical and electrical engineering industry of international importance, Oerlikon experienced rapid growth at the end of the nineteenth century. In the triangle between the railway station and Sternen Oerlikon an urban centre developed before World War I.

Until it was incorporated into Zurich in 1934, Oerlikon was its largest suburb and the centre of its own agglomeration, which included Affoltern, Seebach and Schwamendingen. During World War I, the large marshlands in the Glattal were drained and opened up to agriculture, and soon after to the rapidly expanding construction industry. The imposing avenues of poplar trees in Wallisellenstrasse date from this period. With the construction of the Rennbahn in 1912 and the Hallenstadion in 1939 the neighbourhood became an important venue for open air sports for the whole region of Zurich.

Cooperative housing developments occupy only peripheral areas in Oerlikon. Around 1926, the Allgemeine Baugenossenschaft Zürich began building on Regensbergstrasse, near the large industrial plants. After World War II, smaller settlements were built on the southern and eastern edges of the neighbourhood.

Since the 1980s, new residential developments have been built around the Hallenstadion and on former industrial sites in the Neu-Oerlikon development area. This new urban neighbourhood was planned jointly by the city and local landowners after large industries moved out of the area.

In the extensive new development area, the contribution of the building cooperatives is doubly important: the apartments they offer, which are both inexpensive and spacious, are affordable and attractive for families with children and, as a way to revitalise the neighbourhood and add to the mix of residents, they also offer apartments to students with the financial support of the city.



1



2

1  
Tramstrasse in Oerlikon around  
1914  
from e-pics, online image archive,  
ETH Library, Zurich

2  
Affolternstrasse with train station  
around 1930  
from e-pics, online image archive,  
ETH Library, Zurich

## Schwamendingen

The rural village on the northern slope of the Zürichberg was one of the last to be developed. When the marshlands along the Glatt were reclaimed in 1918, people saw it as new arable land rather than building plots for housing. The fan-shaped geometry of the drainage channels dug at the time and the structure of the new plots formed the basic framework for the Schwamendingen masterplan, which was brought into force at the end of World War II. In the area of the main drainage canals, wide linear parks were preserved (Glattwiesenstrasse).

The masterplan was developed to deal with the building boom at the time, as the Minister of Urban Development, Albert Heinrich Steiner, launched an overall vision and development programme which made land available for housing development and promoted the role of housing cooperatives. This resulted in large settlements of single-family houses and the typical garden-city layout that characterises the Schwamendingen-Mitte district in particular. The upper slopes of the Probstehütte and Ziegelhütte form a broad green belt around the area and an inner green link runs along the Saatlenstrasse to Oerlikon. Schools, kindergarten and other public buildings are connected to these traffic-free linear parks.

Around 1960, mat-buildings and occasional high-rises, abstract in form and surrounded by public open spaces, were built to further develop Schwamendingen.

In the Fifties and Sixties, owning an apartment in modern Schwamendingen was regarded by many young families as a sign of social success. This is no longer the case, especially since the highway construction and the noise pollution that has come with it. Today, the apartments built in the post-war period have become too small for many families with children. Also, the large number of immigrants in Schwamendingen – which was 23% around 1990 and is now 40% – poses challenges to the social integration of the neighbourhood.

Building cooperatives, together with the town and municipal foundations own 45% of all apartments in Schwamendingen. Their family-friendly house letting policy and the availability of inexpensive single-family houses in the district have determined the demographic structure of the area and Schwamendingen is today the city district with the highest proportion of children and under-20s (28%). Nowadays, the building cooperatives' mission is to focus on families with children and provide an attractive residential oasis on the edge of the vibrant "Glattalstadt".

p 14-15  
View of Oerlikon towards Lake Zurich around 1963  
from e-pics, online image archive,  
ETH Library, Zurich



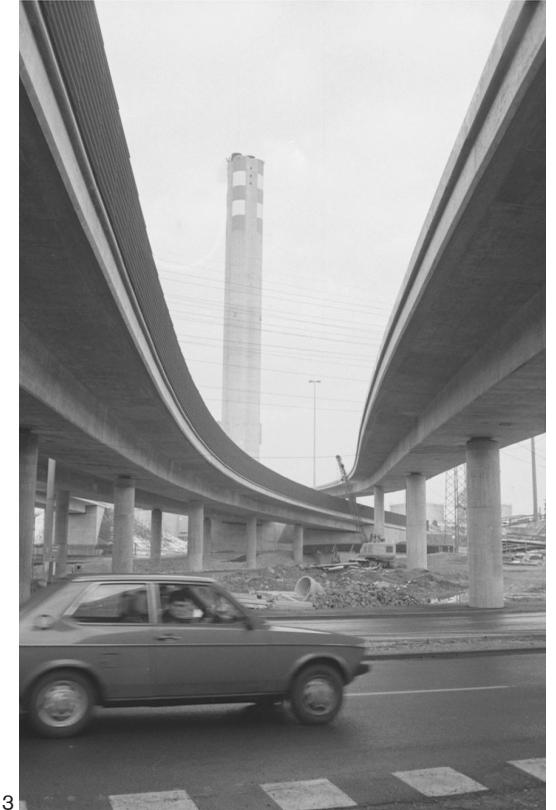
1



2

1  
Schwamendingen  
around 1960  
from e-pics, online image archive,  
ETH Library, Zurich

2  
Randrennbahn in Oerlikon  
around 1961  
from e-pics, online image archive,  
ETH Library, Zurich



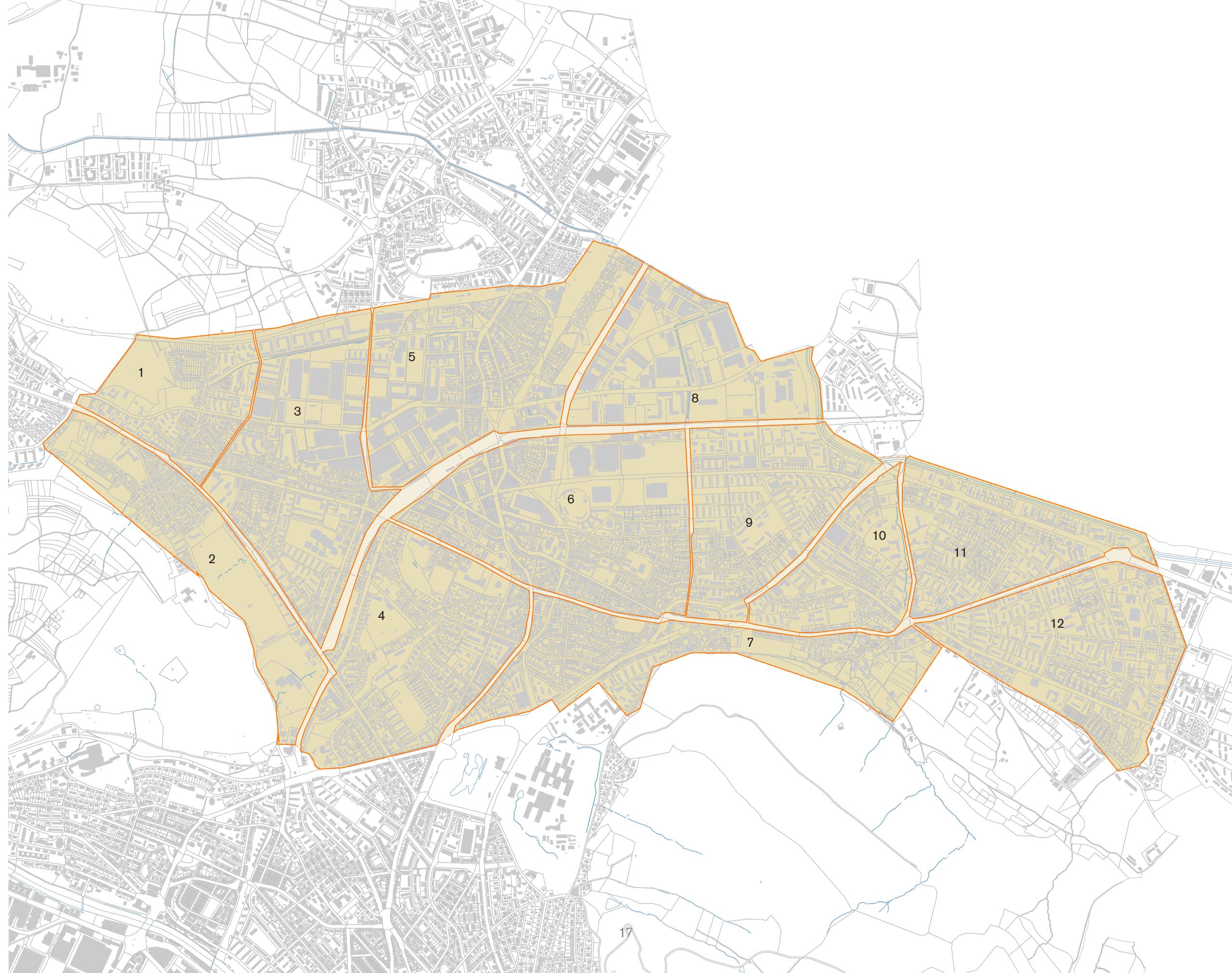
3

3  
Highway infrastructure in  
Schwamendingen around 1974  
from e-pics, online image archive,  
ETH Library, Zurich



Project sites

- 1 Landesmuseum
- 2 Guggach
- 3 Nord
- 4 Allenmoos
- 5 Seebach
- 6 Sternen
- 7 Frohburg
- 8 Leutschenbach
- 9 Saaten
- 10 Auhof
- 11 Herzogenmühle
- 12 Dreieck







## First exercise: Survey

We believe that invention is a necessary ambition in architecture, although it rarely emerges by spontaneous intuition. Years of study and reflection are necessary before an architect can make a truly unique proposal, and it is questionable whether true originality can ever be achieved in view of the wealth of examples in the history of architecture.

To help you understand the task you are attending to this semester, we would like you to make a survey of a significant building in Zurich.

Your work should consider the organisation of the plan of the building and particular attention should be given to the facades, describing them clearly and analytically with diagrams where necessary. The plans and facades of the building should be drawn at 1:100. A number of representative details should be selected and drawn at 1:20. Drawings should not include textures or shadows.

In addition to the drawings, you should take a series of photographs that portray the building, its character and atmosphere.

This exercise requires you to look carefully and communicate your observations in a clear and understandable manner. The work you are undertaking at this stage will contribute to a collective piece of research that will inspire and inform the projects you will develop later in the semester.

A lecture will be offered to introduce this exercise.

p 20-21  
Kolonie Wasserwerk I/II  
Wasserwerkstrasse 130-146  
1945-46  
Aeschlimann & Baumgartner

Survey drawing  
Antonio Mazzolai and Margherita  
Zompa  
Autumn Semester 2019





1  
Wohn und Gewerbeüberbauung  
Hohlstrasse 480-510  
2009-2005  
Adrian Streich with Loeliger Strub  
Architekten

2  
Wohnsiedlung Stöckenacker  
Stöckenacker. / Bodenacker  
1997-2002  
Von Balmoos Krucker Architekten

3  
Wohnsiedlung wasserschöpfi  
Friesenbergstr. / Wasserschöpfli  
2004-2011  
Althammer Hochuli Architekten

4  
Wohnhaus Hunziker Areal  
Hunziker Areal, Building C  
Dialogweg 7  
2009-2015  
Miroslav Sik

5  
Maschinenfabrik Oerlikon  
Elias-Canetti-Str. 146  
Unknown architect

6  
Wohnsiedlung Letziggraben  
Letziggraben 21-43  
2012-2019  
von Balmoos Partner Architekten



7



8



10



11



12



9

7  
Wohnsiedlung Zwicky Süd  
Zwicky-Areal Dübendorf  
Am Wasser 6 -15  
2016  
Schneider Studer Primas

9  
Mobimo Tower  
Maag Areal Zürich  
2002-2011  
Diener & Diener Architekten

8  
Wohnüberbauung Zollstrasse-  
Ost  
Zollstr. 51-59  
2014-2019  
Esch Sintzel Architekten

10  
Alterssiedlung Eichacker  
Dübendorfstrasse 182  
1957  
Unknown architect

11  
Alterssiedlung Helen Keller  
Helen-Keller-Str. 4a-d  
2013-2020  
Abraha Achermann Architekten

12  
Wohnhaus Freilager  
2010-2016  
Office Haratori and Office  
Winhov

The first component of the work to be undertaken this semester requires you to develop a strategy plan. This can be understood as an urban planning exercise and should result in a clear and appropriate urban concept for developing the site you have been invited to study. The principal tool to assist you in this exercise will be a 1:1000 model. This will be produced collectively and will encompass the area of Zurich under study this semester. Plans and other drawings should be produced to represent and communicate this work.

To begin with, you will be invited to develop a collectively produced strategy plan for the entire area under study. This should consider heritage and building preservation and include a strategy for the public realm. You should consider movement, and the distribution of non-residential uses, educational needs, medical facilities and other public functions, as well as work spaces. This exercise should also consider neighbouring site conditions and the place Gewerbeschule, Escher-Wyss and Hardhof area occupy within the city as a whole.

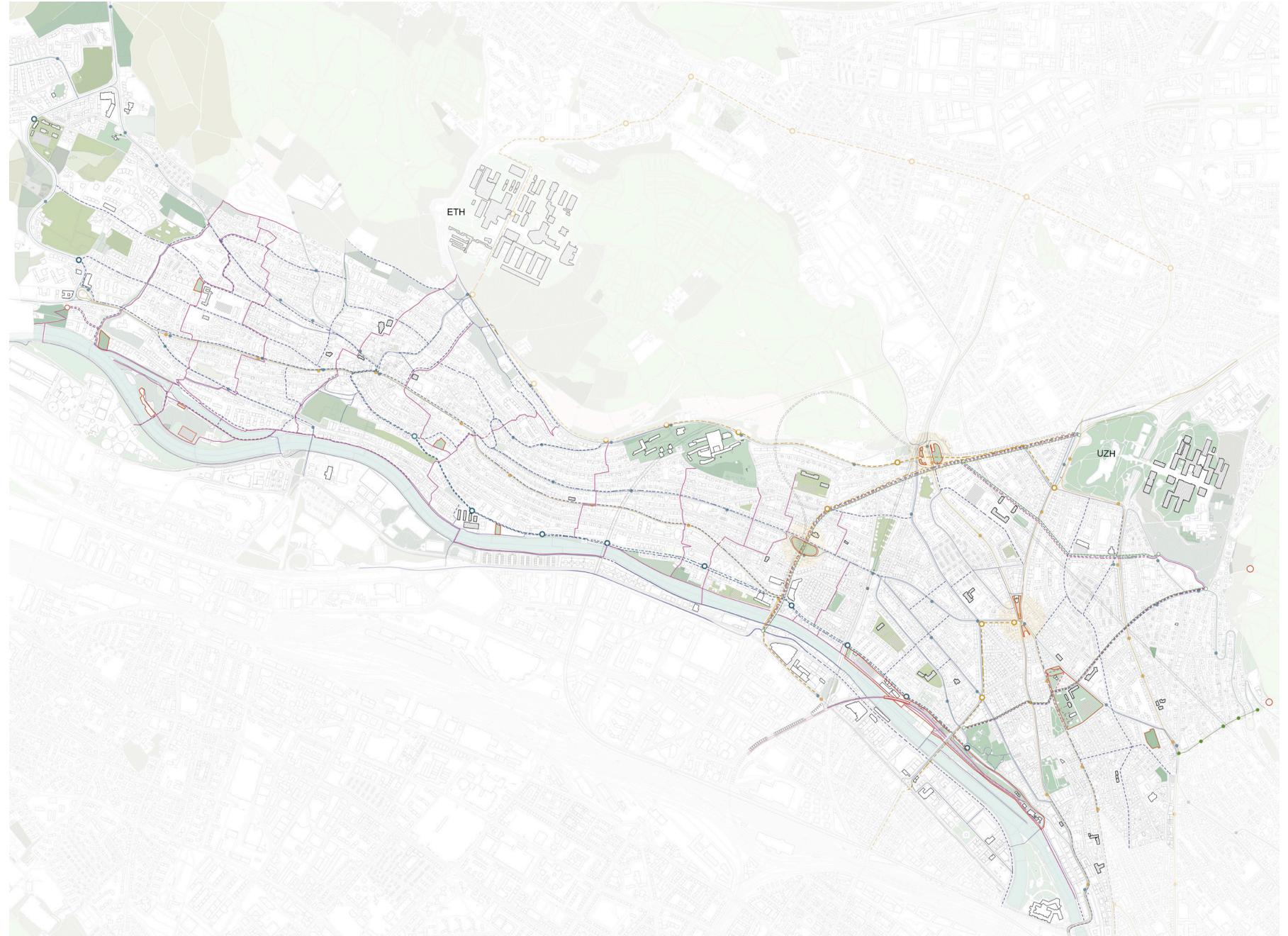
This is an iterative process and the collectively developed research should inform the studies of the specific site or urban block you have been allocated.

We ask you to begin by exploring various options for the location of new buildings to develop a strategy that takes into account the wider needs of the neighbourhood. This should take the form of an appraisal that begins to develop an idea of the project you will be working on throughout the semester. Once this task is completed you should be able to argue the case for how the site should be developed.

It is important that you bear in mind the various planning codes that affect the site you are working on. This includes density and height restrictions, permitted uses and any protected buildings on the site.

Your work should also be sensitive to the ideas and proposals of colleagues working in neighbouring sites and should be developed in parallel with their own proposals.

A lecture will be offered to introduce this exercise.



p 29  
Mobility and Public Realm  
Strategy Plan  
from 'A Plan for Zurich 5'  
Autumn Semester 2019

### Third exercise: Building concept

The third component of the work to be undertaken this semester requires you to develop a clearer concept for the new buildings you are proposing for the site. This should be understood as a typological exercise. You should be able to explain how your buildings address the planning codes and conform to the wider strategy the studio has developed for the neighbourhood. It is important to consider how any new building would sit in relation to existing buildings and what relationships are being proposed.

At this stage the presentation of your ideas should prioritise the study of plans and the organisation of the different uses or building programmes. When working on this, it is helpful to ask yourself what the organisational role of a building should be, how it might be inhabited and how flexible it might be. Also consider how a building might serve a variety of uses and functions.

You are expected to produce drawings and models at different scales, depending on what aspects of a project they are exploring, and while priority should be given to the plan, you will also need to produce sections, elevations and sketch models. You should build on the lessons learnt in the first exercise and draw upon the precedents visited in our study trip to Zurich.

A lecture will be offered to introduce this exercise. At this stage in the semester your work will be subject to an intermediate review.



p 31  
Cast models  
from 'A Plan for Zurich 5'  
Autumn Semester 2019

You will now need to focus on the overall appearance of the building. The plans you have developed will need to be adjusted to include a clear volumetric idea and the organisation of the facades.

You need to explain why your project appears as it does in the manner that you propose it, and what it says about adjacent buildings and local building traditions.

Priority will be given to model making to assist this stage of the work. Models should be produced quickly to explore options and then adjusted and remade as necessary. We are interested in using models as a way of describing the atmosphere of streets and spaces, and photography will be used to explore their atmospheric potential

A lecture will be offered to introduce this exercise.



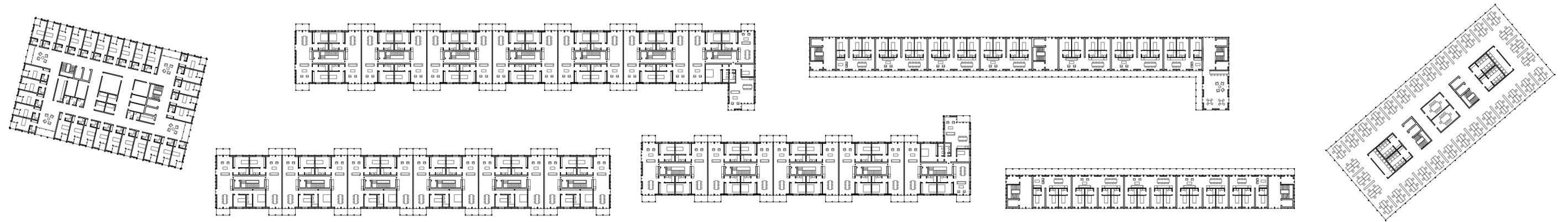
Cristina Maté and  
Elisabetta Muttoni  
Project model from  
'A Plan for Zurich 5'  
Autumn Semester 2019

As a convincing set of ideas for your buildings emerges, you will need to produce a series of drawings at appropriate scales.

A landscape plan at scale 1:200 should describe landscape surfaces, hard and soft elements and a general approach to the public realm. This should be complemented by the 1:1,000 model revised to include your project.

The main piece of work will be the final version of a model at an appropriate scale. Careful consideration should be given to the choice of materials and the model should be accompanied by plans, sections and elevations at a scale of 1:200 or 1:100.

Finally, you should produce a pdf or Powerpoint presentation. This is an important tool for presenting your project and should explain the development of your work and the strategy you propose, drawing upon references where appropriate.



Fabrizio Peirce and  
Anastasia Zharova  
Project model from  
'A Plan for Zurich 4'  
Spring Semester 2019

Date	Event	Details	Assignments
20 February	Studio presentation		
21 February	Studio introduction	An introduction to Zurich and spring semester studio presentation by Jonathan Sergison (JS) Lecture "Survey drawing" (JW) Lecture "Strategy plan" (MSA) Introduction to the 1:1000 site model (MSA and JW) Introduction to casting, by Matteo Clerici, modellistica	1:1000 site model
27-28 February	Zurich and AAM	Thursday: trip to Zurich with visit to relevant projects Individual survey and site visit Lecture "Look Both Ways: Contemplating A Plan for Zurich" by Irina Davidovici Friday: 1:1000 model preparation AAM / survey / strategy plan	1:1000 site model Survey and site visit
5-6 March	Survey drawings review	Presentation of the survey drawings Strategy plan discussion Model 1:1000	1:1000 site model 1:1000 model studies Strategy plan
12-13 March	Strategy plan review	Presentation of the strategy plan Models 1:1000 Building concepts Urban concepts 1:1000	1:1000 site model 1:500 plans, sections, elevations 1:500 model studies Diagrams
19-20 March	Tutorial	Building concepts 1:500 plans, sections and elevations Lecture "Big buildings" (JS)	1:1000 site model 1:500 plans, sections, elevations 1:200 model studies
26 March	Intermediate review	Project reviews with guest critics	All previously produced material PDF 1:1000 model 1:500 plans, sections, elevations 1:200 models in plaster
2-3 April	Study trip to London	Detailed programme to be issued	Photographs
9-10 April	London photographs review	Review of the London photographs 1:500 plans, sections and elevations	1:500 site model 1:500 plans, sections, elevations
16-17 April	Easter break		

Date	Event	Details	Assignments
23-24 April	Review	Lecture "On image and model making" (MSA and JW) Revisions to all plans, sections elevations	1:500 site model 1:500 plans, sections, elevations 1:200 facades
30 April	Review	Revisions to all plans, sections elevations	1:500 site model 1:500 plans, sections, elevations 1:200 facades
7-8 May	Tutorial	Revisions to all plans, sections elevations	1:500 site model 1:500 plans, sections, elevations 1:200 facades
14-15 May	Mandatory hand-in of all plans	Revisions to all plans, sections elevations	Drafts of exterior image 1:200 / 1:100 model idea
21-22 May	Tutorial	Revisions to images and models	Exterior image 1:200 / 1:100 models
27-28 May	Final review		PDF presentation 1:1000 site model 1:200 ground floor plan 1:500 plans, sections and facades Exterior image 1:200 / 1:100 models Other materials as appropriate

**L'Architettura della città**

Aldo Rossi, Marsilio, Padova 1966

**Das Haus und die Stadt / The House and the City**  
Diener & Diener, Städtebauliche Arbeiten / Urban Studies  
Roger Diener, Martin Steinmann, Birkhäuser, 1995

**Dichte / Density**

Archithese, Niggli Verlag, 2011

**Forme forte**

Martin Steinmann, Birkhäuser, 2003

**The seduction of place: the city in the twenty-first century**

Joseph Rykwert, Weidenfeld & Nicholson, 2004

**Papers 3**

Jonathan Sergison and Stephen Bates, Quart Verlag, Luzern, 2016

**Critical Regionalism: modern architecture and cultural identity**

Kenneth Frampton in Modern architecture. A critical history, Thames & Hudson  
(1980) 2007

**Die Stadt im 20. Jahrhundert: Visionen, Entwürfe, Gebautes**

Vittorio Magnago Lampugnani, Wagenbach Verlag, Berlin, 2010

**Mehr als Wohnen, Genossenschaftlich Planen. Ein Modellfall aus Zürich**

Margrit Hugentobler, Andreas Hofer, Pia Simmendinger (Hrsg.), Birkhäuser  
Verlag, Basel, 2016

**Mehr als Wohnen - Gemeinnütziger Wohnungsbau in Zürich 1907-2007**

gta Verlag, Zürich, 2007

**Bauen und Wohnen in Gemeinschaft**

Annette Becker, Laura Kienbaum, Kristien Ring, Peter Cachola Schmal (Hg. /  
Eds.), Birkhäuser Verlag, Basel, 2015

**Zürich - für eine neue Planungspraxis**

Archithese, Niggli Verlag, 2015

**Wohnen in Zürich - Reflexionen & Beispiele 1998-2006**

Axel Simon (Hrsg.), Niggli AG, 2006

**Building Zurich: Conceptual Urbanism**

Angelus Eisinger, Iris Reuther, Franz Eberhard, Regula Lüscher, Birkhäuser  
Verlag, Zürich, 2007

**Urbanity and Density in 20th-century Urban Design**

Wolfgang Sonne, Dom, Berlin, 2017

**Zürich Als Industriestadt**

Hans-Peter Bärtschi, Zürich: Schweizerische Verkehrszentrale, 1980

**INSA Inventar der neueren Schweizer Architektur 1850–1920**

Nr. 10, Winterthur, Zürich, Zug. Hg. von der Gesellschaft für Schweizerische  
Kunstgeschichte, Orell Füssli, Bern 1992

**Zurich Housing Development 1995–2015**

Heinz Wirz, Christoph Wieser, Quart Verlag, Luzern 2017

**Wohngenossenschaften in Zürich**

Dominique Boudet, Park Books, Zürich 2017

**Baukultur in Zürich: schutzwürdige Bauten und gute Architektur der letzten  
Jahren**

Hochbaudepartement der Stadt Zürichm Amt für Städtebau,  
Neue Zürcher Zeitung Verlag, Zürich 2013

**Städtebau als politische Kultur**

**der Architekt und Theoretiker Hans Bernoulli (1876-1959)**

Sylvia Claus, Lukas Zurfluh, gta Verlag, Zürich 2018

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