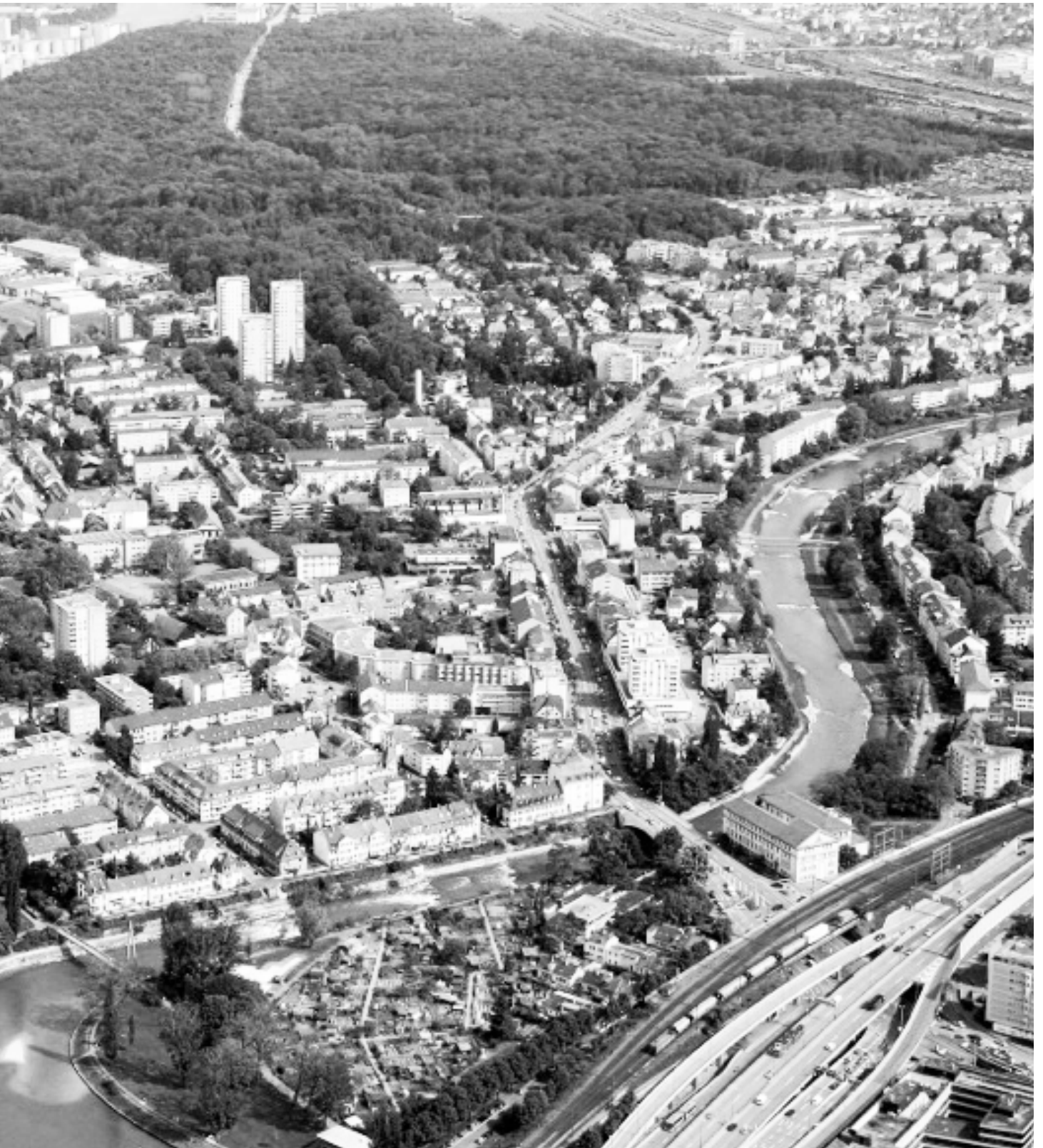




DIE STERNENFELDER

BIRSFELDEN



CONTEXT

Birsfelden and the Sternenfeld

The location of Birsfelden on the border between Canton Basel Stadt and Basel Land has created a particular spatial condition characterized by communal seclusion and beneficial proximity. Although Birsfelden has always been a fringe area to Basel's center it is similarly connected to a picturesque waterfront along the Rhine. As Basel's metropolitan region is growing, however, this peripheral condition is bound to offer new opportunities for densification and spatial improvements.

Natural elements such as the Birs, the Rhine and the Hardwald, the industrial harbor towards the east as well as the infrastructural corridors along the rail-tracks and regional highways have created an urban pocket that seems to cut-off Birsfelden from its immediate bordering communities. As the built territory appears to have already reached its limits, Birsfelden shows no symptoms of the noticeable sprawl so typical for other communities within Canton Basel Land. Meanwhile, the overall population is decreasing and new building projects are rare in Birsfelden while its main shopping street suffers from a mix between residential under-demand and provincial disorientation.

Its initial function as landing area for Basel's first international airport allowed large parts of the Birsfelden area to remain unbuilt till the early 1950s. Following modernist planning principles this virtually untouched condition was soon altered through a swift introduction of mixed-height housing blocks on a large scale. The Sternenfeld masterplan was conceived as a modern living environment for approximately 3000 residents who were mainly state-officers in search for affordable housing close to the city center. Its orthogonal layout stands however in harsh contrast to the original village character of Birsfelden which represents a rather Strassendorf-layout with additional scattered perimeter blocks. Initially designed in order to meet the modernist premises of light, air and space, today, the Sternenfeld represents an area of mono-functionality, undefined open ground spaces and an unclear relationship between buildings and streets.



Aerial view Birsfelden, 1930s



Sternenfeld, 1966



Sternenfeld, 1974



Aerial view of the Sternfeld-Airport, 1930s

CONDITIONS

Urban conditions and shortcomings

The majority of the Sternenfeld buildings are placed within large unappropriated green spaces while being spatially detached from the surrounding streets. The widespread amount of large underground parking facilities with direct elevator access to elevated apartments suggests that this modernist urban typology stimulates a residential lifestyle of high car-ownership and social seclusion. Together with the lack of ground floor residential spaces this condition also reduces interaction between residents in general. We believe that social interaction contributes highly to a certain neighborhood identity and simultaneously reduces additional commuting for leisure purposes. We thus regard this spatial condition, which appears to be reinforced by its urban typology, as one hidden potential or shortcoming requiring improvement.

Furthermore, as current apartments within most building blocks are comprised of only 70 to 90 square-meters allowing a division of 2 to 3 rooms, the Sternenfeld has increasingly been unattractive for young families seeking affordable and yet spacious living arrangements. The result has been that a growing portion of the apartments are inhabited by single and couple households, thereby reducing the amount of newcomers and establishing a sort of domination by people in retirement. Consequently, these various socio-spatial factors have created a living arrangement lacking diversity which is reinforced by the monotony of the buildings and their urban layout. This inherent spatial weakness and lack of public uses has been further exacerbated by socio-economic transformations in general which have caused a transition from small scale shop owners in neighborhoods to large-scale retailers outside of the existing municipal centers. Based on our site investigation, interviews with locals and typological analyses we have detected certain potentials of transformation which intend to address the most dominant shortcomings in a multifaceted and multi-scalar manner.



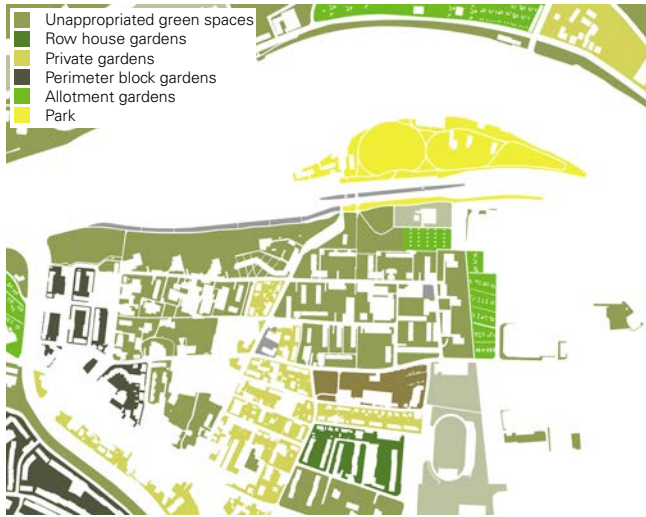
idle spaces



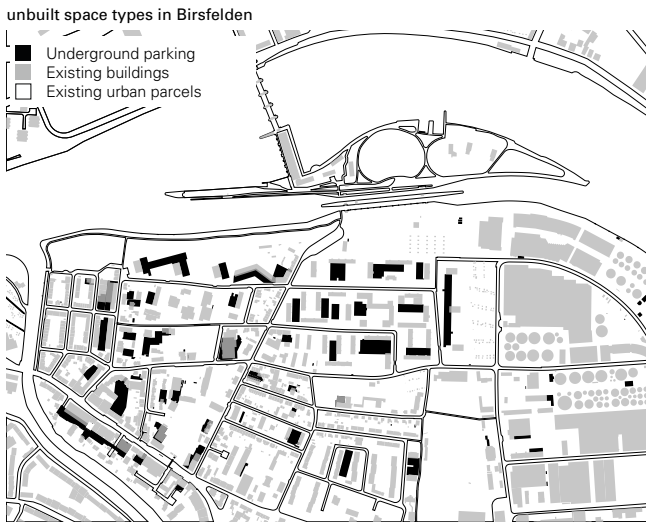
commercial spaces



entrance spaces



in-between space



underground entrance



typical apartment sizes



typical block facade

APPROACH



Initial concept of alternating spaces

Recycle, valorize and transform

In the context of increasingly scarce resources, traffic congestion and rising energy costs, the question arises how post-war modernist housing settlements such as the Sternenfeld can be transformed in order to reduce energy consumption, improve spatial qualities and allow a re-establishment of mixed uses. Technical improvements in relation to energy efficiency are bound to a perpetual replacement over relatively short time periods. Moreover they represent means which have generally very little influence on living and mobility patterns of residents. Therefore, we regard the re-arrangement of open spaces and building typologies along with their potential for transformation as a more promising field of intervention in order to reduce overall energy consumption.

Our proposal intends to approach the transformation of the Sternenfeld in relation to three interdependent propositions. Firstly, by recycling an existing neighborhood we lay our focus on currently idle spaces and hidden potentials instead of engaging in projections for fundamentally new urban structures on unbuilt territories. Secondly, by understanding the existing buildings as valuable stock of embodied energy capital we hope to offer opportunities of overall energy savings and an intervention strategy that is far better embedded within the current conditions of the municipality. Finally, by transforming the urban typology entirely through spatial additions and a rearrangement of its layout, new possibilities of transformation and adaptation are enabled which promise to reveal more flexible scenarios for future growth.

Scales of intervention and transformative concept

On an urban scale, accessibility to public transportation is improved by extending the current tram line in the form of a wide-reaching loop throughout the entire Sternenfeld area. Further access for bus lines and vehicular traffic is given through our proposal of an additional bridge across the Rhine towards the German border. On a neighborhood scale, the quality of open green spaces is emphasized through the introduction of an alternating checkerboard pattern of built blocks and unbuilt vegetated rooms. While the freestanding building slabs are further densified with a carpet of low-rise courthouses, the intensified green areas are defined by contrasting high density clusters of trees providing simultaneously identity and breaks in-between the housing blocks. The spatial depth resulting from the newly introduced checkerboard grid offers redundant connections throughout the quarter and a spatially more rich relation towards the waterfront. We thereby intend to enable a higher degree of accessibility for traffic, a reduction of congestion and an improved connection between the old part of Birsfelden and the Rhine.



Recycle, valorize and transform

On a building block scale, we propose to place additional low-rise volumes adjacent to existing buildings by filling currently open spaces according to our proposed checkerboard grid pattern. The typological merger between highrise slabs and low-rise clusters could thus enable enhanced interaction on new and existing streets at ground level. Further, it also offers relatively secluded and yet defined spaces on each building block in the form of semi-public and private courtyards. In reference to original concepts of modernist building types, the ground and first levels of the existing high-rise slabs are cleared as much as possible from their non-load bearing structures. This alteration creates a covered entrance gallery to each communal block courtyard with an enhanced spatial experience. The addition of low-rise courtyard buildings at various scales further provides additional residential spaces for various types of households and income groups. Each building block is conceived as a mix between existing high-rise slabs, public or commercial buildings and a composition of one to two story courtyard houses. Ultimately, the combination of densely built blocks with a layered sequence of urban rooms and courtyard spaces forms a more human-scaled relationship with existing and additional streets.

PROJECT PLAN



Plan - Scale 1:3'000



ALTERNATING SPACES



Neighborhood square

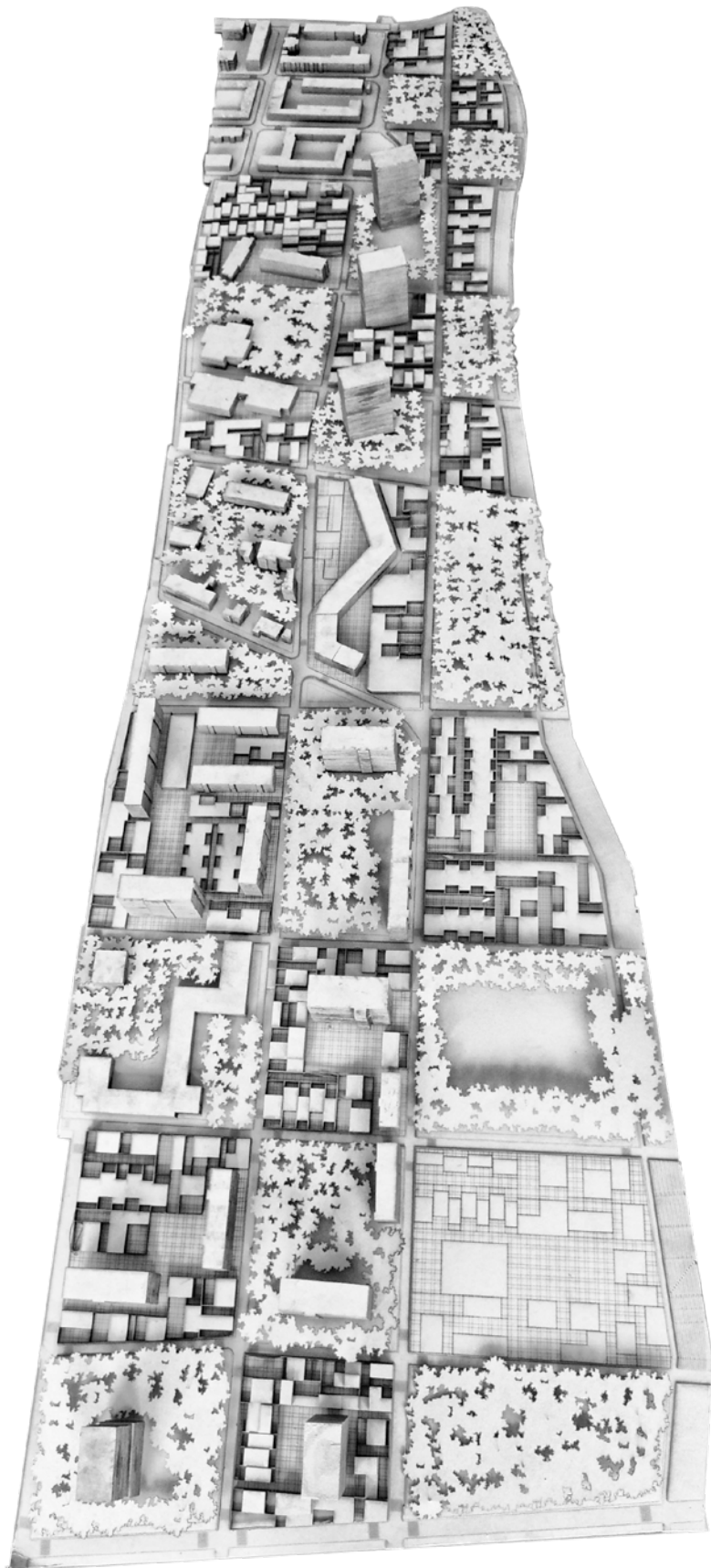


- existing urban parcels
- extended grid proposal
- alternating green squares

Extended grid with alternating green spaces

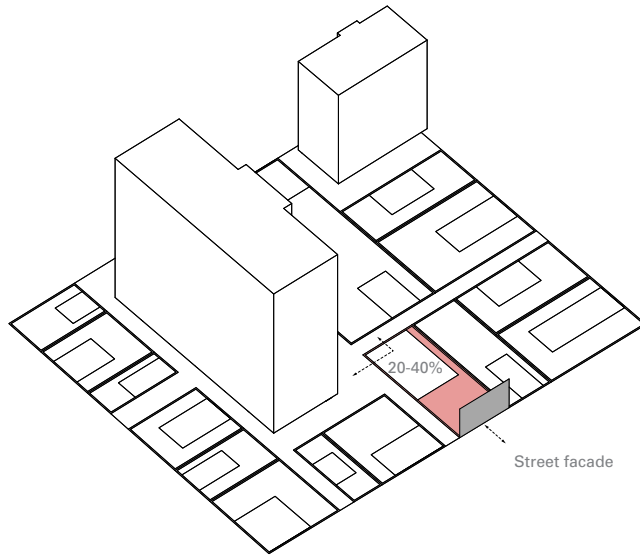


Aerial view model



Model of neighborhood with alternating blocks

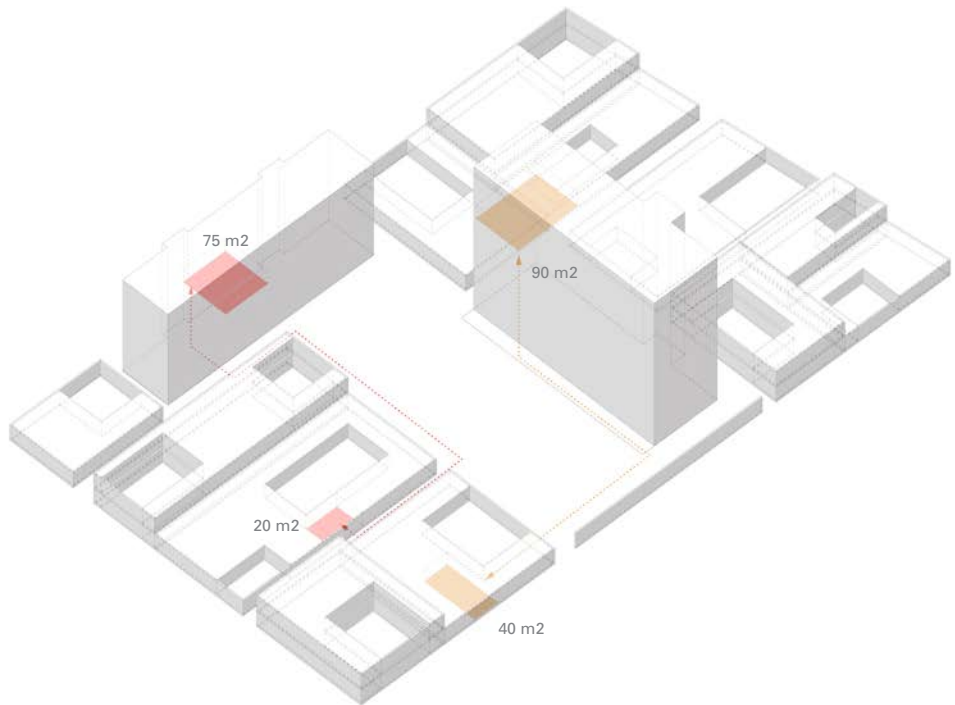
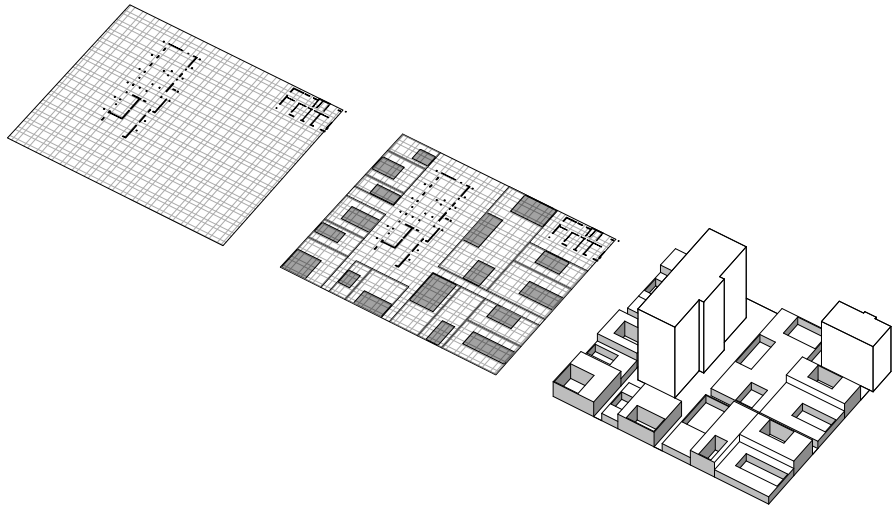
PARCEL REDIVISION

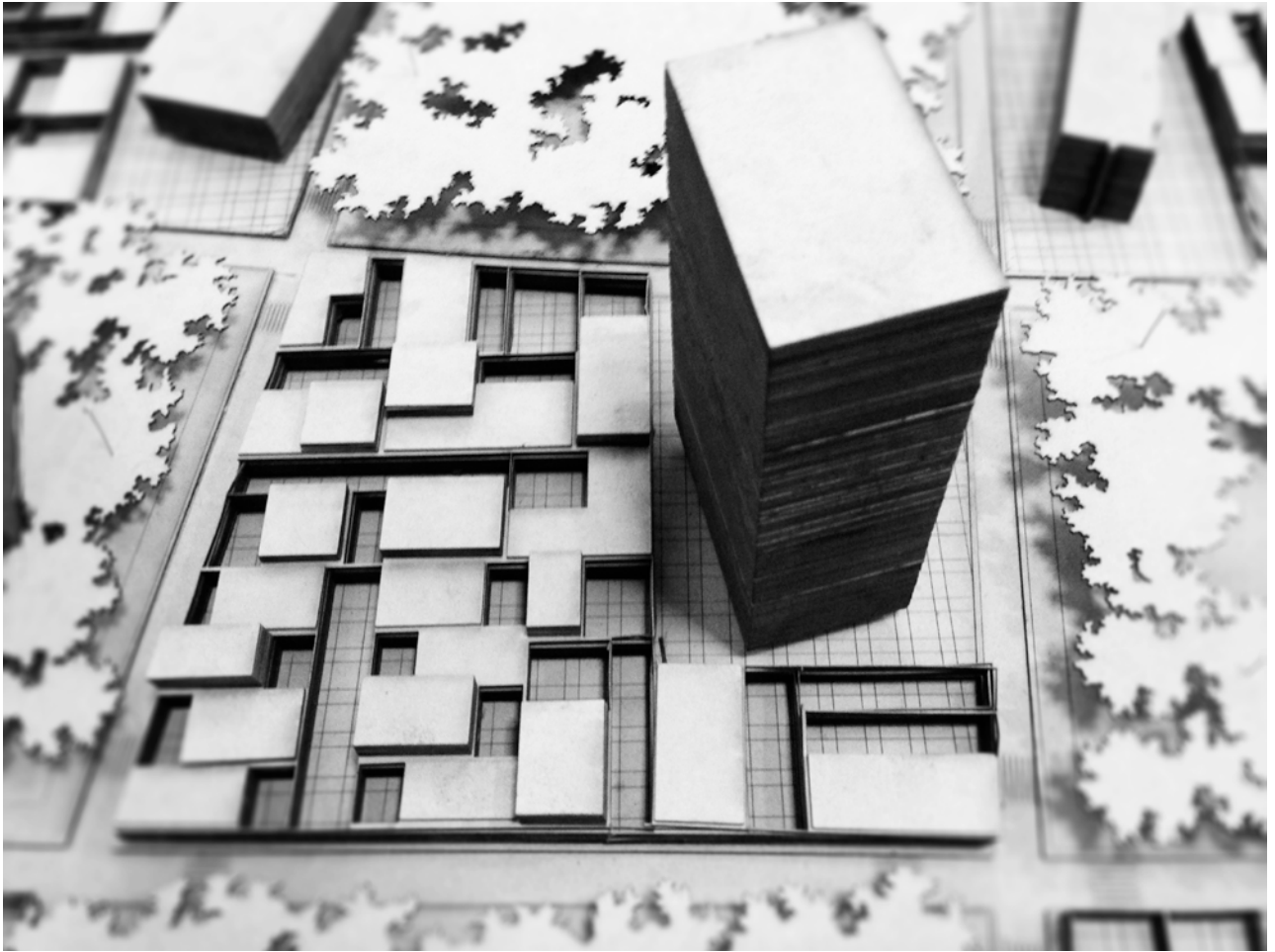


Parcelization requirements

Diversity of uses and courtyards clusters

The additions per building block within certain boundaries and parcel sizes are, however, rather to be seen as property limits within which new spaces could emerge according to specific demands throughout the entire Sternenfeld area over a longer period of time. We regard our proposal of courtyard houses at various scales as a first strategical stage of transformation, whereby only the percentage of uncovered spaces is regulated along with the prerequisite that each property's communal courtyard should face one facade side of its respective building block. Each courtyard house parcel can thus be comprised of variously sized buildings and footprints. Due to a reallocation of property ownership this internalization of currently unappropriated territories could offer a higher identification per resident with the immediate spaces of the neighborhood and thus reduce the likelihood of commuting for leisure purposes. Within the additional courtyard structures we also imagine split ownership of volumes between existing and added structures in order to extend the space per dwelling unit and invigorate the exchange between promenading residents. New mixed-uses at ground level could emerge along new primary access corridors which we imagine as an extension of the current commercial main-street in Birsfelden's center. The overall intervention strategy of alternating building blocks with courtyard houses and various types of spatially framed rooms could thus not only enhance spatial perception and interaction but also a higher mix of uses and locally embedded employment opportunities.





Model of existing tower and courthouse cluster



Axonometric view

LAYERED PRIVACY



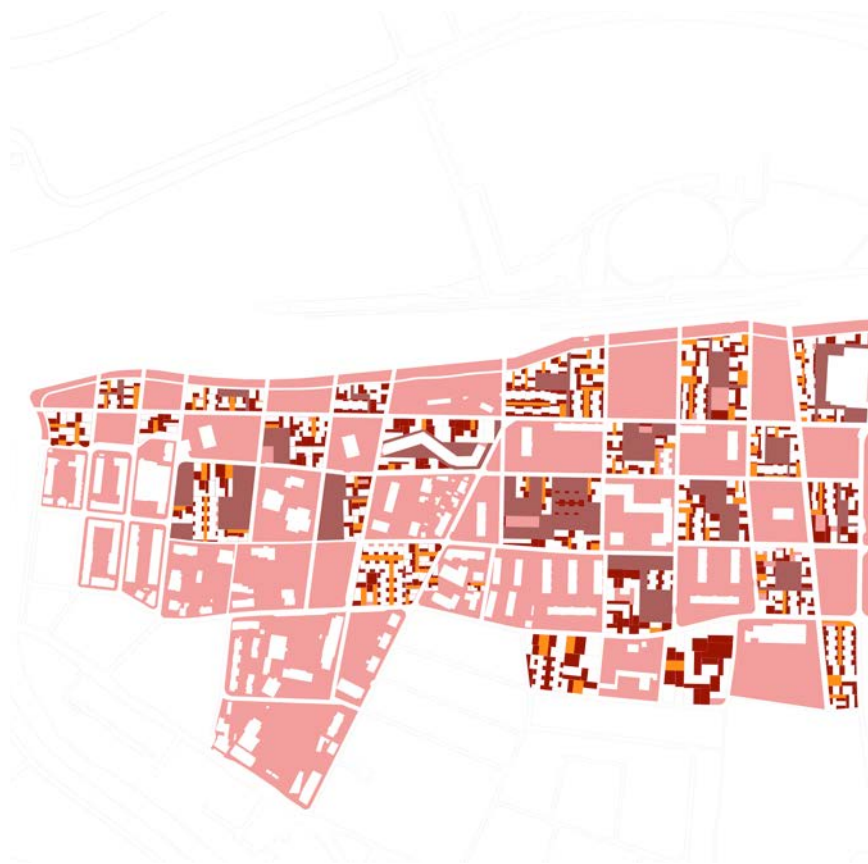
Interior view of courtyard house



current figure/ground plan
1 : 6 000



proposed figure/ground
1 : 6 000



- public green squares
- semi-public courtyards
- private court-yards



Model of existing slabs and proposed courtyard buildings



Street view of courthouse cluster and park