



Schwarzplan 1:15.000

Concept
Regensburger Nordstern creates an urban and green connection between the existing settlement of Wurzfelden and the northern commercial area. The green heart of the new neighborhood is a star-shaped park with blue-green corridors that connect the adjacent landscape with the new mixed-use neighborhood islands. The center of the quarter is the newly open square, the main development - with 4-7 story multi-story houses, where they open up towards the blue-green corridor with 5-story townhouses. Every island has a connection to public open space. To the east of the Plan Allee (main line), commercial yards are integrated into the neighborhood changes, which also act as noise protection. In the northern part of the district, the typology changes to coarser commercial structures. Most of them have common commercial yards and form the transition to the existing commercial structures in the north.

Urban design
The basic urban design motif is formed by the compact neighborhood islands with a small residential space in the middle. Each island forms clear spatial edges to the outside - towards the park or the main development - with 4-7 story multi-story houses, where they open up towards the blue-green corridor with 5-story townhouses. Every island has a connection to public open space. To the east of the Plan Allee (main line), commercial yards are integrated into the neighborhood changes, which also act as noise protection. In the northern part of the district, the typology changes to coarser commercial structures. Most of them have common commercial yards and form the transition to the existing commercial structures in the north.

Green and open space
The star-shaped green space forms the central framework and connects the new district with the adjacent landscape and recreational areas of Brandberg, Wurzfelden and Mühldorf. The centrally located funnel-shaped Park am Stern has an urban character: the blue-green corridors leading away from it have more vegetation and form the transition to the landscape. The biotope area along the railroad line will be integrated into the green network as a green oasis between the new center and the school campus. Therefore, it will create synergies with the school right next to it for educational or recreational uses. At the edge of the settlement, existing orchard structures in the north of Regensburg will be incorporated. New orchards connect the open residential courtyards with the adjacent landscape.

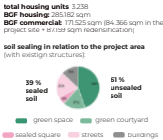
A central element of the green and open space concept is the railway management across all plots. By integrating retention areas in the green corridors and in the park, rainwater from the neighborhood surface is directed into the open space. Larger collection points are located in the raised points in the central park and the existing retention basin to the east of the railroad line. However, the retention basins should be conceived as technical infrastructure and as a design element of the open space. The water management in the green network can therefore contribute to different irrigation of the vegetation and help to cool down the neighborhood through evaporation. In addition, rainwater for the public green spaces, areas for apartment gardens are planned in the western edge.

The area in the streets and squares are provided with sufficient green beds and retention areas in order to keep surface cooling to a minimum. On the east, the high proportion of green spaces and the careful use of the soil results in a soil sealing area of 39 % in relation to the project area.

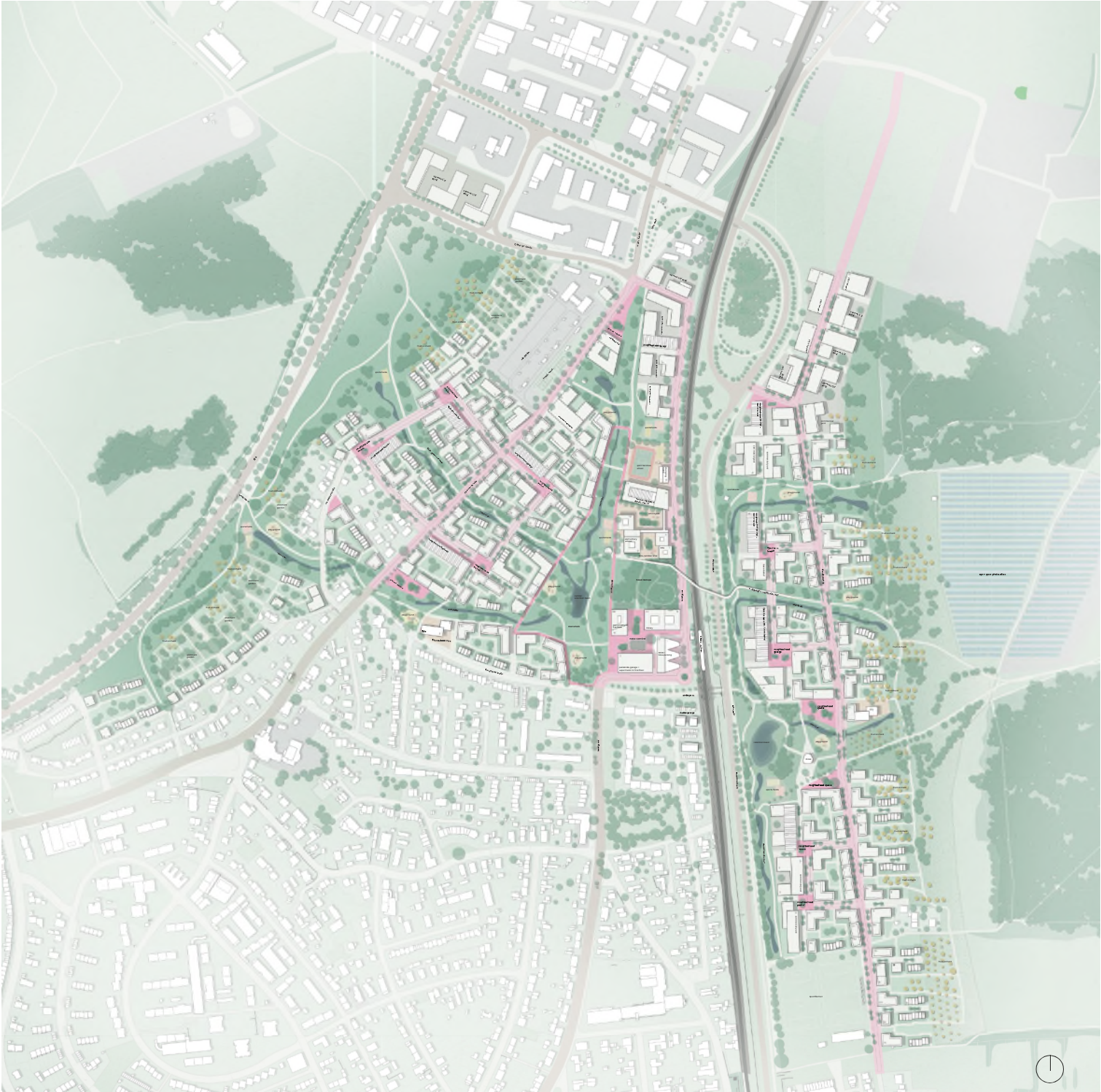
Mobility
The new district should offer a flexible basic structure for current mobility requirements and future mobility behavior. The main access roads, Chamer Straße and the extension of Heidenberg, will be the main routes for motorized traffic. The extension of Sandgasse along the railroad line is mainly used for bus traffic, but can be opened up to local residents. Motorized traffic can drive up to the turning circle at the underground to the S-Bahn station. The extension of the S-Bahn station, the remaining area of the new quarter are largely used for the 4-story quarter garages. These are located at the neighborhood squares and intercept the heavy traffic from the main development. This keeps the secondary developments largely free of stationary traffic, leaving more space for retention areas in the streets. The neighborhood garages are also used as decentral mobility hubs with changing infrastructure (bikes, carshare) for the citizens. With the regional bus station (RBS), which is located directly at the new S-Bahn station and the new center, Regensburg Nordstern will become an important connection point between the district and the city of Regensburg in the future. The spatial linking of the Sandgasse quarter garage RBS, S-Bahn station and bicycle garage thus forms an important mobility hub in the entire north of Regensburg. The existing bus route 4 could also continue via the Sandgasse extension and thus better connect the new educational campus to the public transport network. For pedestrians and cyclists, the new bridge over the train tracks and Plan Allee forms the heart of the new quarter. This also represents an important connection in an east-west direction to the existing cycling connection in a north-south direction.

Uses
With the new center and the school campus, important new uses for the entire north of Regensburg will be placed directly in the center of the district. In addition to the infrastructure for mobility, a new location for the Regensburg City Library will be built on the first floor of the Sandgasse parking garage and the base of the 15-story residential tower will provide space for gastronomic uses. The new school campus with a 4-story elementary school with adjoining sports area, a day nursery and the new Nordstern swimming pool forms the other building block in the social use along the railroad line. In the neighborhood squares, themselves, active first floor areas for smaller stores are planned at the neighborhood pockets along the main development and at the edge of the park. In the transition to the commercial use, there are also partial areas for small businesses such as crafts, due to the greater depth of the buildings on the first floor of the residential buildings. To the west of the railroad line, the commercial courtyards are even more strongly integrated into the neighborhood islands and also act as noise protection. In the northern part of the district, the mixed use changes to purely commercial use. The commercial yards offer space for various uses of smaller commercial enterprises.

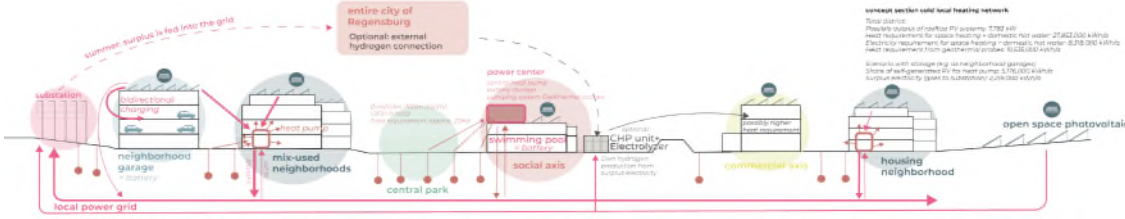
Step-by-step development
The new district can be easily divided into different development steps thanks to the concept of the district islands. The first building block to be developed should be the central area between Chamer Straße and the railroad line, whereby important infrastructure such as the new center, the school campus and the central park can already be established. The area west of Chamer Straße could follow in the second phase. In the next two phases, the area to the east of the Plan Allee and the south-western extension along the RBS could be developed. The commercial re-qualification can be implemented simultaneously to the other phases.



structure plan without scale



site plan 1:3.000



Energy concept

The new district is characterized by its cold district heating network (District Heating Network), which makes it a climate-neutral showcase project for the whole of Regensburg. The district's energy electricity and heating requirements are covered by its own production and any surplus energy is fed into the Regensburg grid. The central elements of the cold district heating system are the energy center, geothermal probes, an energy storage facility, and an energy storage facility. The energy center is a structural highlight and, optionally, a CHP unit (combined heat and power) unit. The energy center is a structural highlight and, optionally, a CHP unit (combined heat and power) unit. The energy center is a structural highlight and, optionally, a CHP unit (combined heat and power) unit.

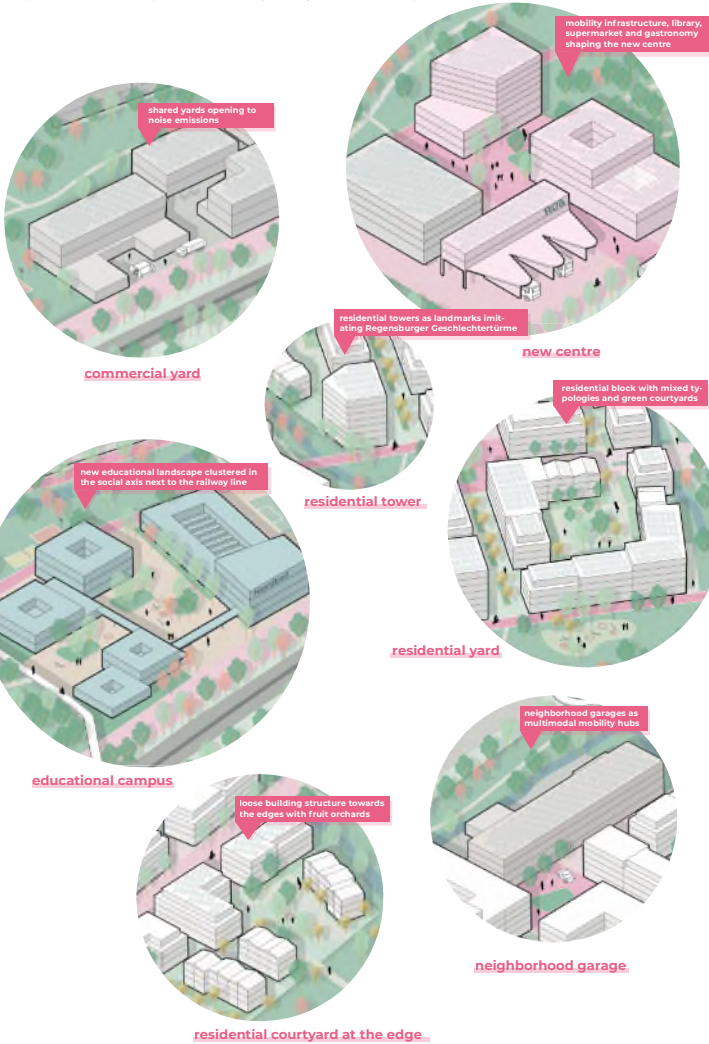




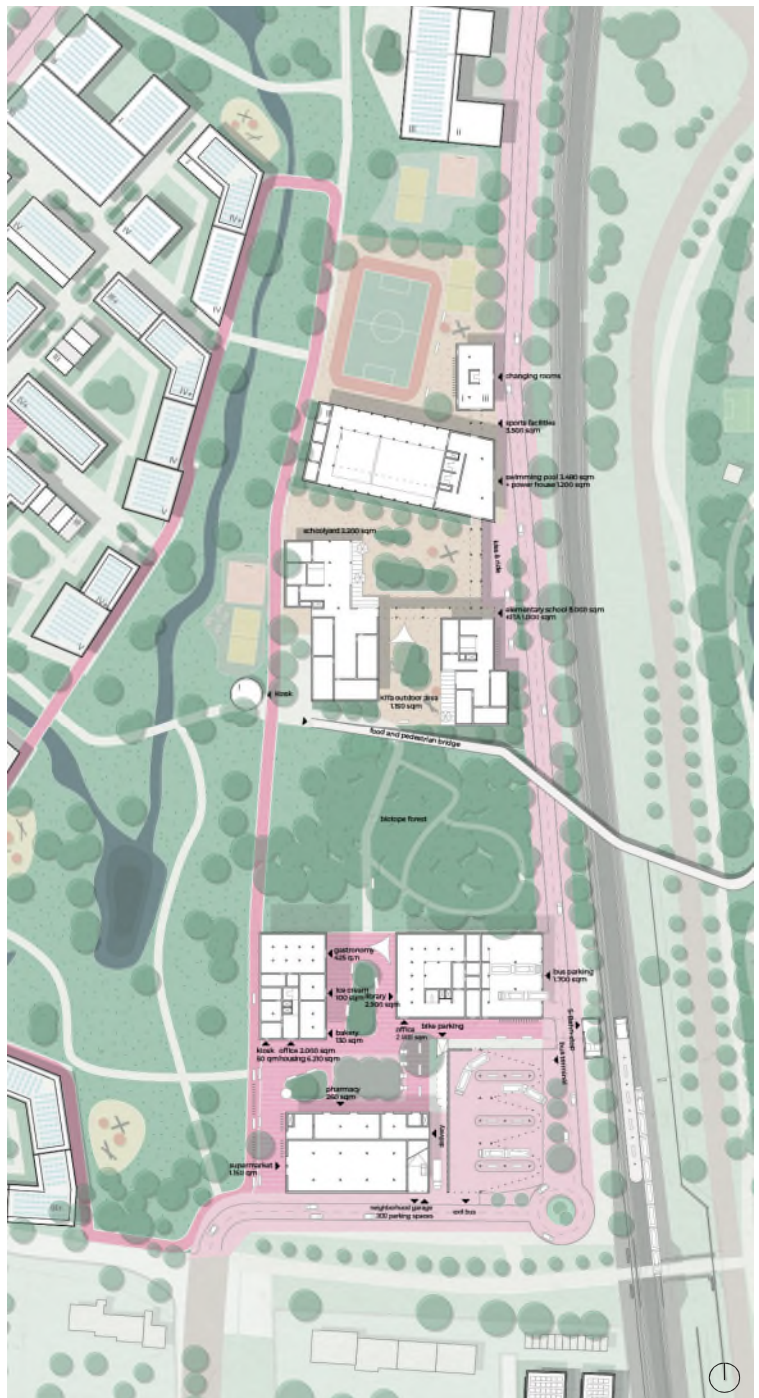
perspective view from the pedestrian- and bicycle-bridge with view of the park



zoom-in neighborhood island 1:1000



typologies: main principles



zoom-in new centre 1:1000



perspective new centre