Europark as an Urban District

The design aims to combine classic urban uses with those of the city logistic periphery to form a mixed urban neighborhood. The previous structure of the Europark district - an area designed in scale and typology for the motorized transport - is transformed by stacking vertically the logistic halls and increasing density along Maria-Probst-Strasse. Behind this dense logistic barrier a livable area appears at the inner part of the district, with soft mobility and a good offer of green areas. As a result of the structure, a district with urban density, mixed use and scale enables the symbiosis of very diversified requirements.

From asphalt desert to sponge city

The examination of the five E17 themes formed the starting point for the design. They were translated into a series of guiding principles along which the neighborhood is to be developed.

Firstly, the guiding principle "MIXING USES" enables a city of short distances and saving of CO2 emissions in the mobility sector. Different sizes of the building plots form the base for a range of uses: warehouses, industrial halls, workshops, offices, shops, apartments, and public buildings - such as a school and a library - can be accommodated in the quarter. Unsealed soils and green roofs are the impetus for a guarter designed according to the "SPON-GE CITY" model. Large warehouses are stacked vertically and therefore enable to unseal and green the free ground as well as increasing the number of trees. Instead of the previous "asphalt desert", the permeable soils are thus able to store rainwater and give it off as evaporative coolness to the surrounding area - where targeted shady zones are formed by an increase in the tree population and corresponding seating. According to the guiding principle "FORM FOL-LOWS SUN", solar inputs in winter are to be used by the targeted placement of the building structures and the formation of winter gardens, while they enable shading in summer. As a design principle, an identity-creating architectural language will be developed in the guarter with a mobile sunshade and greened facades from thermal requirements.

With regard to the construction of the buildings, we propose the guiding principle "RE-USE, RECYCLE OR REGROWABLE". The existing halls should therefore be preserved as far as possible. At the same time, the neighborhood should allow for people-oriented traffic, as well as unsealing. This conflict of objectives is resolved by "cutting up" or deconstructing the halls at specifically selected points in order to then densify them vertically. This will be achieved by adding several stories to the existing halls and by constructing new buildings along Ma-



ria-Probst-Strasse. For this purpose, existing building components are to be used - or (if not possible) a construction made of wood is to be resorted to.

The fifth guiding principle of our design is "ENERGY CIRCULARITY." From the uses of the neighborhood, as well as from the building form, there are different potentials to optimize the use of energy. With regard to the heat supply, the urban district heating network of Munich is to be used. At the same time, a lot of waste heat is generated, especially in the warehouses of the food wholesaler, but also in the other uses. This is to be fed into an energy center on Maria-Probst-Strasse and made usable again using heat pump technology. The roof surfaces, especially of the halls, are suitable locations for large-scale PV systems, which will be used to operate the heat pump in the energy center. On sunny days, electric cars can also be used as temporary storage for the surplus electrical energy.

Focus on people

In the first step, four zones are defined within the design area. They result from the dialogue of the 'Betrachtungsraum' with the surrounding buildings and reflect them in form and scale: Zone I is oriented to the perimeter block struc-





ture of Neufreimann, Zone II mediates between the park and the new development of Viertel FOUR, Zone III takes up the form of Europark from a juxtaposition of very differently scaled buildings and translates it into a human scale, and Zone IV mediates between the track system and Maria-Probst-Strasse through a playful arrangement of independent objects. The central motif of the design is the placement of the warehouses on Maria-Probst-Strasse. Delivery by articulated trucks is to be made possible here in order to guarantee maximum flexibility in renting out the halls. Since this is associated with considerable noise emissions, the warehouses and their logistics areas or delivery yards are arranged along Maria-Probst-Strasse. Due to the comparatively large footprint of the halls along Maria Probst-Strasse, they thus simultaneously form a noise barrier in the direction of the neighborhood.

Mobility and use

While context and use create the form and scale of the neighborhood, circulation is developed by picking up the existing railroad tracks. These are knitted further into green strips that extend in a north-south direction. They are intersected by a varied sequence of squares. They take their starting point at the new railroad crossing



at Lindberghstrasse, dance playfully from there through the neighborhood, and thus form a strong open-space identity for the new district. A series of prominent high points (max. 50m height), as well as the arrangement of public uses in the first floors flank the square sequence and support its urban character with a GFZ of 4.0 in the quarter. The mobility concept for the neighborhood provides for three zones. Zone A is accessible to all road users and applies to Maria-Probst-Strasse and the delivery yards of the warehouses adjoining it. Semi-trailer trucks deliver the goods here and characterize the image of the "logistical backbone" Maria-Probst-Strasse. They are not allowed to enter the zone B. Cars are allowed here, as well as the streetcar with a new stop. Busy first floors with uses that are important beyond the neighborhood level (school, library), as well as the parking garages and underground parking garage accesses are located along this zone. Pedestrians and bicyclists are the focus of Zone C. By placing buildings with a higher footprint along Zone A and B, the square sequence, as well as the easternmost and westernmost green corridor in northsouth direction are shielded from traffic. Access by car is only possible for short-term parking along an efficient ring road at walking speed.

METROpolis

For the arrangement of warehouses in the quarter, a targeted set of rules is to enable a compatible mix of uses.

1. Maria-Probst-Strasse as logistical backbone: Uses that rely on delivery or removal by vehicles with a total weight of more than 12t (hereinafter referred to as "warehouses") may only be located in construction areas on Maria-Probst-Strasse. Delivery and removal shall be made through a yard on this street or through a basement whose access is located on it.

2. Hall Plus X:

A minimum of 25% and a maximum of 75% of the allowable area of building lots fronting on Maria-Probst-Strasse shall be devoted to halls.

3. Urban corners:

Min. one corner of the building field may not be used as a hall. This corner shall not be located on Maria-Probst-Strasse.

4. Vertical Storage:

Halls may be stacked. Their maximum height must not exceed that of the other development on the construction field.





5. Climate relief roof:

PV modules or extensive green roofs shall be provided on the roofs of the warehouses.

Landscapes

A great variety of landscapes characterize the existing buildings and are to be further thought out and formulated in the new quarter. The concept for the open spaces is to create a green connection through the project area to the surrounding green spaces. This will create larger green axes. In the north, Neufreimann Park will be directly connected and, further on, Fröttmaninger Heide. In the south, the green spaces east of Maria-Probst-Strasse will be connected and thus indirectly also the green corridor of the Englischer Garten. Furthermore, the disused tracks in the project area will be formed into parks with a post-industrial character. In the process, the biotopes that have developed there over time will be preserved.

Step-by-step

The design for the study area is such that the new building sites will be placed within the existing properties. This means that the neighborhood can be developed even if individual property owners prefer not to participate in the development. The shape of the plaza sequence in the project area also results precisely from this consideration of the current ownership situation of the lots to be developed. The project area itself is then to be developed from Maria-Probst-Strasse towards the park/north. In the first step, the hybrid buildings consisting of warehouses, workshop and offices are to be arranged along Maria-Probst-Strasse. They can be erected while METRO is in operation and, once completed, will form a noise barrier for the neighborhood. While the new Tram line should already be running at this time, the buildings can then be erected along the tracks. In addition to their function as a noise protection shell for the residential buildings to be constructed later, they also serve as attractors for the neighborhood through their function as office and retail uses, as well as a school and library. The residential buildings along the park can then be erected as the final building block.