KARLSKOGA (SE)

AT THE EDGE OF TOWN 3

a place to belong

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On the southern side of the highway the woods and fields are left as intact as possible, to maintain the **country-side appearance**. Trees and vegetation are planted on the new slopes created by the highway and train track. This will stabilize the ground and also reduce the flooding of surface water. Surface water is to be led through delaying- and filtration pools.

The northern side of the train track is **considered urban**, and development here is more extensive. The few areas with wood, both next to each square, as well as the forest directly north of the site are **preserved** in a natural state. The **green corridor park** connecting the two woods is an urban park, maintained and available as an outdoor "living room" for the residents. Through the park runs the main surface water canal for the area. It varies from more natural sections to built-up canal-like sections, with small lakes, filtration pools, wetlands and streams along the way. It also works as a flooding route if necessary.

With the new highway and train line creating a lot of noise it is vital to take measurements to prevent the noise from disturbing residents and others. The highway which is likely to be the noisier one, has been placed behind and in part under the railway. This combined with conventional noise reduction barriers, such as earth berms and trees, efficiently blocks noise from the highway to the residential areas. The railway is likely to be less of a noise polluter, especially with brand new trains and tracks. However its noise pollution too needs to be taken into account. The housing blocks are formed in such a way that the building masses create a **barrier against noise**. Robot parking occupies the noisiest facades of the buildings. Lastly, the alleys between the houses have trees and vegetation to further block out noise. The aim is to keep the courtyards, small streets, squares and parks free of outside noise pollution.







For public transport it's well accepted to have to walk a hundred meters or more, and if the use of private cars is to be discouraged, then the "right" to park right in front of your door should be questioned. The outset usability and comfort requirements for these two means of transportation should be **equalized** – to start with. This however doesn't mean worsening one but primarily improving the other.

The technology for automated parking solutions as well as self-driving cars is developing all the time and it will have a significant impact on town planning for the future. At the same time there is a will to reduce the use of private cars. Therefore new residential areas should be planned in a ways that are **adaptable** to either an increase or decrease of demand for parking, without having to rethink the whole dynamic of the residential area.

Robot parking houses that are **integrated** in the housing block can be one solution. These can be concentrated near the entrances, towards main roads or otherwise least attractive side of the block. One might have to walk a maximum of 100 m to the parking but can still temporarily park closer to the door, for pick-up or drop-off. In the future, one can step out of a self-driving car at a drop-off point closer to the door and then let the car drive itself away for parking.

The robot parking flips up the garage door and sends the desired car to the front of the parking unit. The garage door functions as a rain shelter and the area to enter the car meets the dimensions for accessible parking. Therefore, all robot parking spaces can be considered **accessible** parking.



The new district has a **wide network** of **pedestrian routes**, with the main emphasis of making them inviting, fast and safe to use. They mainly go **through park areas**, thus avoiding car roads. The main pedestrian connections towards Karlskoga are also moved away from the main street, so that the new route goes near the lakeside (Finnebäck) and another through the residential area at the western side of the main road. A pedestrian bridge also crosses the lake under the two other bridges, hanging down quite close to the surface. It is situated on the southern side so that it gets more sunlight but still has some protection from rain from the bridge above. Bicycle parking areas are placed intermittently over the district with long-term parking inside the main station building.

Any transportation leading out of Karlskoga can be done via the main transport hub. However, there is also

public transport within the **city** as well as within the **district** itself. The city buses have three stops within the district. One at the main square, one at the school and kindergarten, and one at a central point within the residential blocks. Furthermore there is a **local** self-driving transport pod that circles between to two squares with another four stops in between. At a slow and safe speed of 10-15km/h it will manage to do one lap of 1.5km in about 10 minutes. At less busy times it can stop to charge and when needed, be called upon by pressing a button at any of the stops.

To achieve a high level of accessibility, safety and inclusiveness for all residents, young and old, the pedestrian routes and public transport stops are placed in **natural meeting points**, well-lit places, which are also visible from residential houses.



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