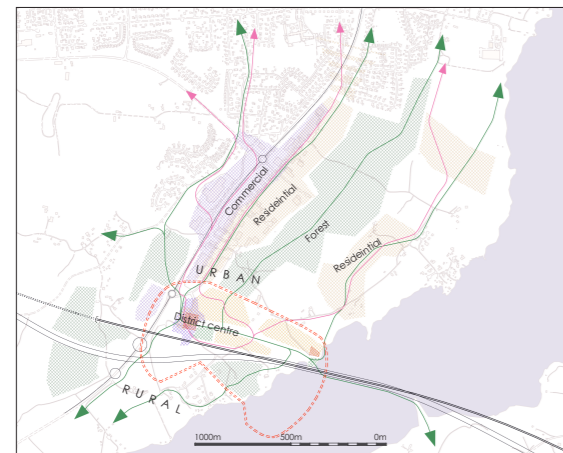
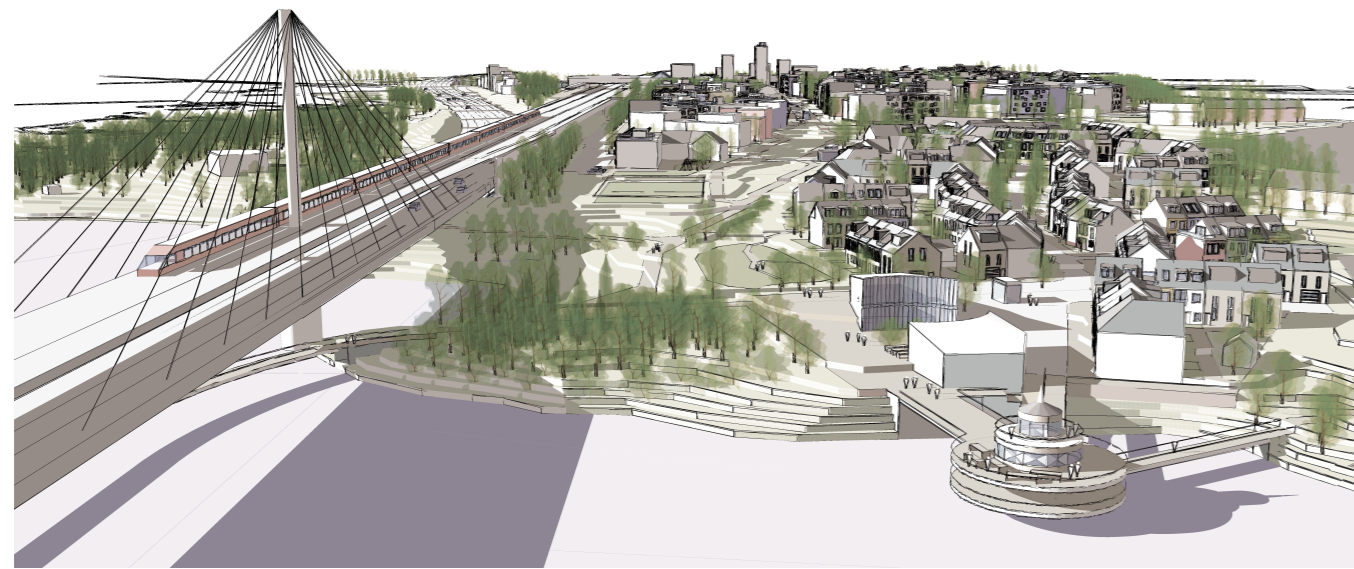


a brutal wall

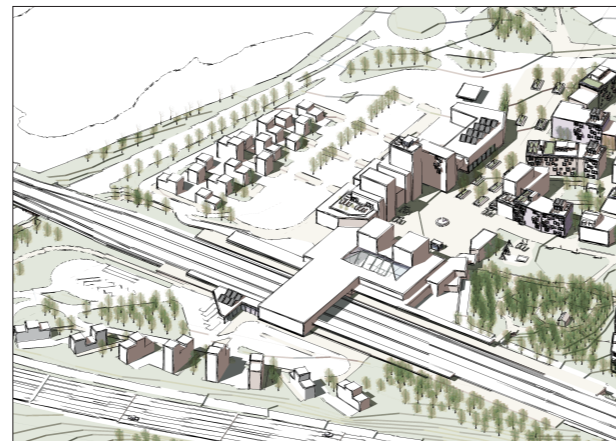


The two massive pieces of infrastructure that cut through the site create intriguing challenges to be solved. How to create interfaces with porous edges across, not one, but two walls of noise concepts? And a smooth transition from urban to rural at the edge of town?

The train line and highway that cut through the middle of the site divides the area into two distinctly different landscapes. To the south the area remains as rural as possible, with no new functions or residents. To the north is a new, highly urban and diverse district of town.

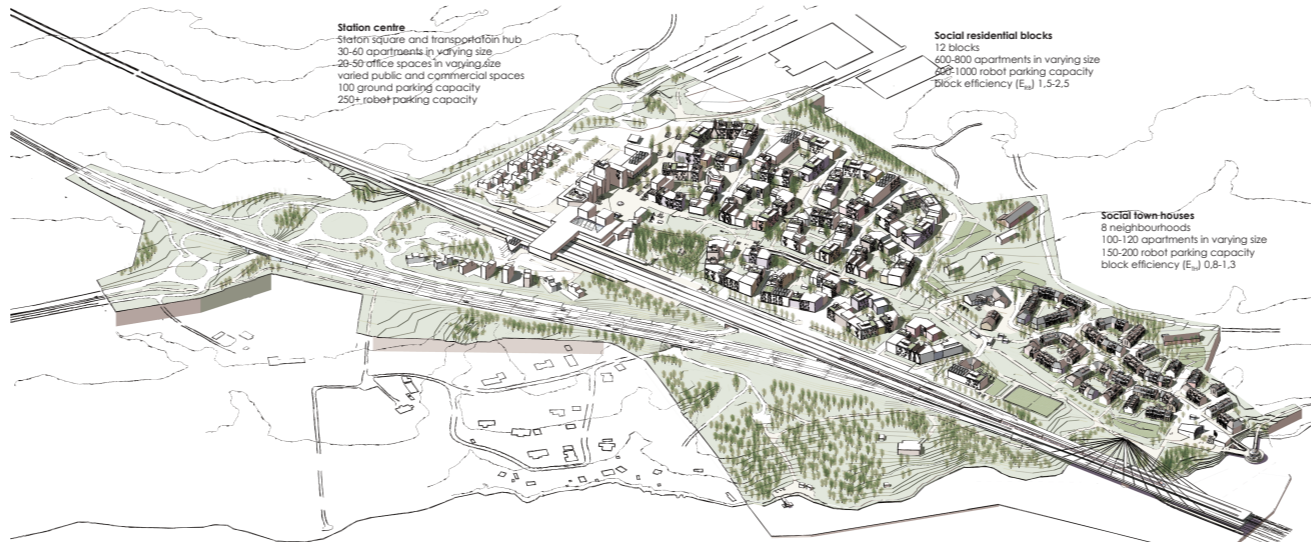
The residential area explores new ways of social housing, where inclusiveness, accessibility and direct democracy are able to thrive.

a coming together



The station square (50m x 60m) is the centre point of the new district, connecting all functions to thereby create a vibrant meeting point, for not only necessary, but also voluntary and social activities.

In addition to the transportation station square connect a multitude of other functions: shops, restaurants, services, small scale workshops, offices, sports terrain and viewpoints, residential apartments, as well as one end of the main park and a playground. This mix of functions will keep the square a vibrant place throughout the day and late into the evening.



Station centre
Station square and transportation hub
30-40 apartments in varying size
20-50 office spaces in varying size
100 public and commercial spaces
100 ground parking capacity
250 robot parking capacity

Social residential blocks
12 blocks
400-800 apartments in varying size
200-1000 robot parking capacity
Block efficiency (E_u) 1.5-2.5

Social town houses
8 neighbourhoods
100-120 apartments in varying size
150-200 robot parking capacity
Block efficiency (E_u) 0.8-1.3



The social residential blocks consist of 3-5 buildings that creates a common inner courtyard for each block. The apartment blocks are 3-5 stories high in order to maintain a human scale for the courtyard and the streets between the blocks.

Each house has a shared roof terrace and interior space of the top floor so that every inhabitant has access to the terrace and living room with the best view. The roof can be used as chosen through direct democracy by the inhabitants of each house.

Because the blocks have similar dimensions to one another they should have somewhat different style regarding roof types, materials, colours, windows and balconies, so that each block and each courtyard have their own distinctive expression.

The parking solution for the residential blocks is robot parking in units, which partly occupy one building closest to the entrance road. It has the same dimensions and style as the rest of the block and will serve the parking needs for two residential neighbourhoods.

Both the residential blocks and the town house blocks have in common the idea that everyone has not only access, but also inclusivity and influence over all four levels of private and public spaces:

- private: the apartments, small gardens in front of townhouses
- semi-private: roof terraces, common interior spaces (workshops, meeting room)
- semi-public: the courtyards (BBQ place, playground, allotment), robot parking
- public: parks, squares and outdoor activity nearby, as well as public and commercial services within walking distance

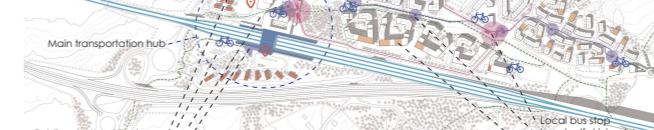
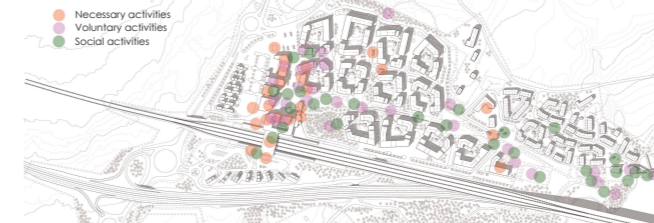
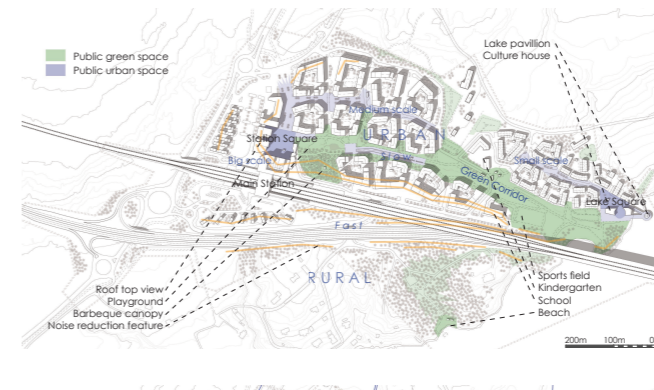


The social town houses consist of dense and organic blocks of terraced housing, 2-3 stories high. The buildings consist of unique housing units with modular units in between, adding up to a total of 10-25 units per block. Most units have their own small garden and roof terrace.

One unit in each neighbourhood is a shared unit with social areas (workshop, meeting room, terrace, storage)

2-3 units per block are allocated for residential parking. Due to its function (see robot parking) all parking spaces here meet the demand for accessible parking as well. The units have similar dimensions and style to the rest of the residential units, but it contain a rotary parking system within that has space for 8 cars each. Temporary parking and guest parking is allowed on the streets.

a place to belong



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. It will stop 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 new 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.

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 residential areas.

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 quiet 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 at 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 way 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 spaces that are integrated in the housing blocks 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 lifts 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.

Example:
The use of a town house parking unit

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 lake (Finnveds) and another through the residential area on the western side of the main road.

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 of the main squares, one of the school and kindergarten, and one of a central point within the residential blocks. Furthermore there is a local self-driving transport pod that circles between 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-placed, which are also visible from residential houses.

