

PO549

URBAN FARMING

Studies show that 500 square metres of farming land in Sweden is enough for a family consisting of four people to be self-sufficient for one year.

Root City in its full developed stage consists of 65 000 square metres gross floor area of green houses. The green houses also allow for vertical cultivation, which would provide four times as much cultivation area (in total 260 000 square metres). Not only does the area increase, the green house also doubles the cultivation period thanks to the climatic conditions they provide.

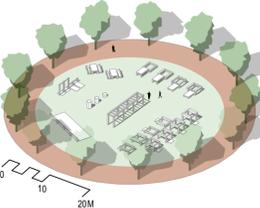
In theory, 260 000 square metres of cultivation area, would make 8 000 people completely self-sufficient for half a year. According to studies, the amount of work that needs to be put in this type of urban cultivation is less than an hour per day.

Taking the surrounding farming lands of the municipality into consideration as well, Root City and Enköping would be a very good example of how a modern city could approach being completely self-sufficient at a local level.

RECREATION AND PLAY

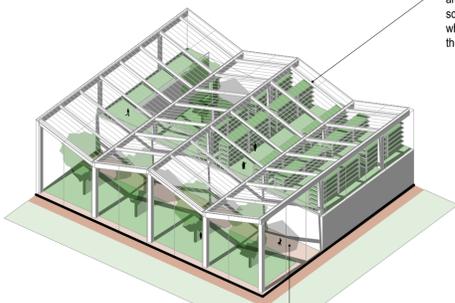
Next to the viewing tower, at the end of the recreational path along the water park, an outdoor gym completely in timber, is proposed.

Root City will offer many spaces appropriated for the sake of health, play and social interaction. Hence parks, playgrounds and squares will be spread throughout the area.



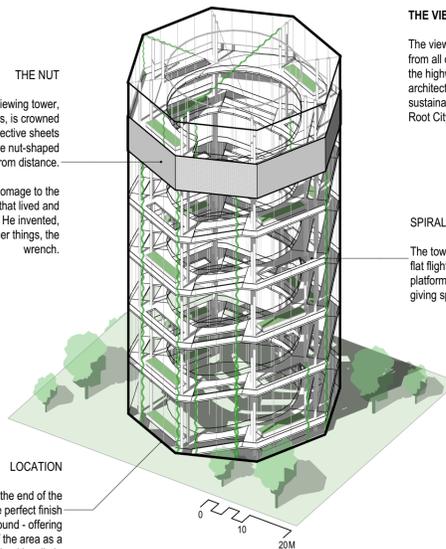
SOLAR ENERGY

The roof surfaces of the glasshouses are laminated with semi-transparent solar cell films that produce energy while giving appropriate shade from the sun.



GREENHOUSES

Existing warehouses and large retail buildings are transformed and rebuilt into productive greenhouses or factories for urban and vertical farming.



THE NUT

The highest level of the viewing tower, at the height of 66 metres, is crowned with perforated and reflective sheets of metal that enhance the nut-shaped form of the tower from distance.

The shape is an homage to the inventor JP Johansson that lived and worked in Enköping. He invented, among many other things, the wrench.

LOCATION

The tower is located at the end of the water park making it the perfect finish of a recreational round - offering spectacular views of the area as a reward of a thrilling and healthy climb.

THE VIEWING TOWER

The viewing tower is visible from all over the area and also from the highway and railway, making it the architectural landmark of the new sustainable, innovative and productive Root City.

SPIRALING STAIRS

The tower spirals its way up through flat flights of stairs. The landings form platforms for viewing and resting while giving space for greenery.

1 2 3 FUTURE STAGES

PRIORITIZED AREA 1C

This area is, in comparison to the other prioritized areas, a relatively small one. It gives space for one single but long-stretched building. The central location of the site in the middle of Root City makes it suitable for a new mixed use building that will serve as an information centre for the area. Spaces for conferences, exhibitions, lectures and offices will be programmed into the building.

PRIORITIZED AREA 1B

This area makes up the entrance to Root City from the south, in the direction towards the city centre. The railway that creates a physical barrier in the city is overbridged with an elevated park that lands on the ground with the help of long ramps that become a part of the landscape. The linking bridge also serves as an access point to the train platforms.

In connection to the bridging park a new mixed use building is proposed in front of the railway containing retail, restaurants, offices and a carpark. On the other side of the railway, facing the mixed use building, a hotel tower with public garden on three levels is proposed.

This area is mixed in its composition of functions. The proximity to the station makes it favourable for many types of activities. Office buildings, educational centres, housing units, retail spaces, recreational parks, sport centre and a carpark will all be part of the program in the area.

THE HOTEL

The hotel is connected to the new elevated park - bridging over the railway that today acts as a major barrier in the city. The 18 floor high hotel tower and the long-stretched park form important parts of the new entrance to the area from the south.

GARDEN LOBBY

The lobby is a public space that works as meeting spot for people. It is easy accessible from the park and creates a good space for work and innovation. A green living room in the productive city.

THE ELEVATED PARK

The raised park serves as a connecting link between the central parts of Enköping and Root City. It has separate pathways for pedestrians and bicyclists.

Along the pathways, planters and small parks create green spaces for recreation and urban farming.

The northern end of the elevated park transcends into the new boulevard that runs through the area.

GARDEN RESTAURANT

The space under the elevated park form the restaurant space of the hotel. It faces the park in the front while being in direct connection to the hotel service spaces in the back.

SKYBAR

A public roof garden skybar is located on the 18th floor offering striking views of Root City to the north and Enköping to the south.

HOTEL ROOMS

TOWER BASE

Hotel service functions and technical functions are located in the base of the tower in level with the railway.

1 2 3 FIRST STAGES

During the initial stages of the transformation of the area, the three prioritized areas will be developed according to the four parts of the concept: brick facades, green routes, green spaces and smart systems.

Likewise, large grocery stores and other big players outside the prioritized areas will follow the Root City-concept and lead the way for the remaining ones.

To connect the two larger areas of initial development, the central street through Myran will be transformed into a straight boulevard with trees and pathways for pedestrians and cyclists on both sides.



AREA 2

The area in between the prioritized areas will be developed in later stages. The first step will be to build a new green boulevard that will stretch from the south to the north, to connect areas 1A and 1B.

This will spark the development of the rest of the pathways, parks, playgrounds and streets and consequently also the development of new buildings and re-development of existing ones.

Housing units will be mixed with retail buildings, offices and industries for a living city. Existing large grocery stores, that are major attractors of people to the area, will produce more and more of their products in large green houses in accordance with the overall strategy of Root City.

1 2 3 EXISTING SITUATION

The area Myran is today a sparsely developed area, characterized by large paved areas, warehouses, simple industrial buildings and large grocery stores. It borders the highway in the north and is cut off from the city by the railway in the south.

Access to the area from the city is almost exclusively made by car. Pathways for pedestrians and cyclists are incomplete and discontinuous. Green spaces and spaces for recreation are limited and undefined.

GREEN STREETS

The street network is transformed to make it safe, accessible and stimulating for pedestrians and cyclists to move around between places within the area.

The street design, promoting travels by foot or bike, does not only create better environmental conditions but it also lowers the speed and thus gives better conditions for social interaction between people.

The pathways are paved with locally produced bricks. The bricked pathways not only form a common theme for the area but they also have a high permeability which is advantageous for handling surface runoff-flows.

Between the pathways and the road, green spaces with trees and vegetation are planned for people to rest but also to allow for natural ecosystem services.

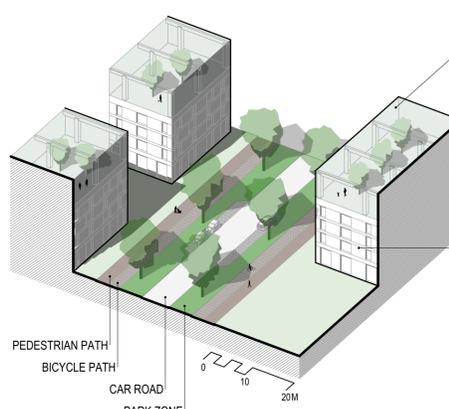
ELEVATED GARDENS

The elevated gardens create a social place for the residents and a place for urban farming and networking. The residents put in a small amount of care per day and in return the space gives them vegetables, spices and root-crops. The up-lifted gardens together also create an attractive roofscape and a visual connection among the residents on a new level.

BRICK FACADES

The architecture in Root City is characterized by its sustainable brick facades. The bricks are produced in Enköping, in the only large scale brick factory in Sweden.

Bricks as a building material allow for a large variety in architectural expression while being an environmental friendly choice thanks to their longevity and thermal qualities.



PEDESTRIAN PATH

BICYCLE PATH

CAR ROAD

PARK ZONE

