

RÖD TRÅD – Varberg’s Common Thread

Relation to the theme

The central axis of the development is Trädlyckevägen. Currently it is a radial axis connecting the city centre with surroundings designed to bring commuters to the city centre as fast as possible. Such approach results in a certain design language: wide car lanes for speed of 60km/h, greenery and topography as a buffer, separated modalities, multi-level crossings prioritizing cars (pedestrians and cyclists have to use their muscles to go up and down, while a car comfortably stays on the same level), space shaped by fences and walls with no direct entrances. Such space created for efficient (car) flows is a “tunnel”, which is paradoxically a barrier not only perpendicular to it but also along it. A mental barrier. A gap that a cyclist or pedestrian wants to pass as fast as possible to get to its destination. And even though Varberg is a very cyclable city, the city centre is only 10 min away, it can feel like an eternity to get there...

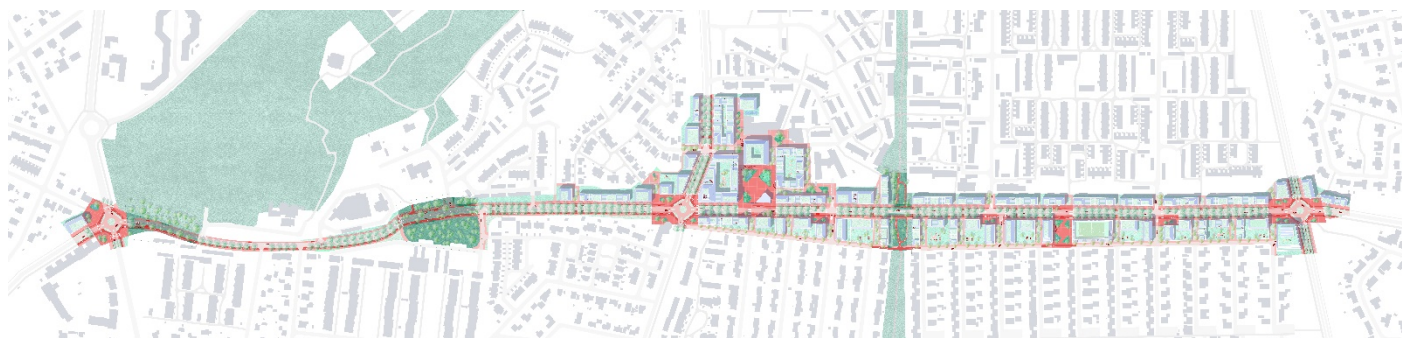
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Transforming from infrastructure starts with shifting the focus on who we design mobility infrastructures for. In the end, it is people, not cars, who live in the city. Therefore, we look at pedestrians’ and cyclists’ needs, their movement patterns, perception of space and reimagine Trädlyckevägen as not only an attractive route to take but as a destination and a place to live.

Concept

How to design a route that is pleasant to cycle and walk along? Or should you have to walk to the city centre at all? How can a barrier be transformed into a connector?

It can be achieved by transforming Trädlyckevägen into a Röd tråd - a common thread - by extending a mixed-use dense and permeable urban fabric from the city centre along one of the city’s radial streets. As a thread, it also stitches surrounding neighbourhoods and becomes a destination on its own. It facilitates proximity, brings all the daily functions within 10 min reach by walking. As a thread it creates not only physical, but also social bonds. Spatial efficiency is the key. It involves compact space in between buildings which fosters social interactions and ensures the space can be used all the time by various social groups. For example, narrow residential streets provide just enough space for movement and biodiverse greenery. Neighbours passing by greet one another.

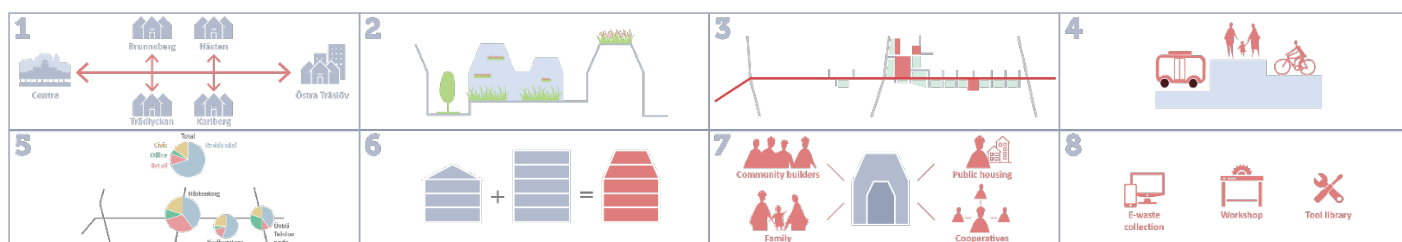


Values and design principles

Values:

The development fosters these values: Health (physical, mental), resilience, proximity, balance between liveliness and quietness, inclusivity, child friendliness. Design principles which are further detailed in drawings explains how these values are achieved.

Design principles:



1) **Link between East and West, North, and South**

Trädlyckevägen is the link between Varberg city centre and the central station to Östra Träslöv. At the same time, it is a destination that connects Håsten and Karlberg neighbourhoods with additional functions, public spaces.

2) **Ecosystem services integrated in architecture and public space**

Currently, the project area is a buffer space of road infrastructure containing various trees, shrubs and grasses. Where possible, existing trees will be preserved, replanted.

The new intensive biodiverse vegetation composed of local species will be integrated in architecture (roofs, terraces, facades, (elevated) communal courtyards) and public space (streets and squares), enabling ecosystem services such as provision of nutrient for species all year long, regulating water circulation and microclimate, adding recreational, aesthetic, educational value. The green link connecting Håstensskogen and Karlbergsskogen is preserved. Ground bound green is multifunctional. It has the space not only for biodiverse vegetation, but also meeting places for neighbours, playgrounds for toddlers, pod waiting stops, bicycle parking. The higher the green is, the more biodiverse and quite it gets. Green roofs of plinths provide a feeling of living in a countryside while at the same time enjoying the proximity to functions and cultural program, extensive green roofs are inaccessible biodiverse green as steppingstones for flying species. Green on multiple levels also helps to store, buffer and infiltrate rainwater.

3) **Diversity, hierarchy, and definition of public space**

Trädlyckevägen is transformed from a radial car artery into a high street with a width of 24 meters. This is a distance that allows strong visual connection between the two sides. Håstens torg and Kalbergs torg squares act as 'windows' extending the streetscape and revealing the life of surrounding subcentres. Squares are placed where direction changes, providing local meeting points. Residential streets provide a refuge from a city buzz and connect neighbours. Green rooftops of plinths are quite semiprivate spaces.

4) **Mobility. Infrastructure prioritizes healthy and sustainable modes of transport**

Walkability is facilitated by a dense and comfortable pedestrian network. Cycling infrastructure accommodates different travelling types by providing commuting lanes, cycling lanes on both sides of the road, safe single level crossings, bicycle parking places close to shops. Every house has a protected bicycle storage. Main bike lanes are separated from 40km/h car roads providing a child-friendly experience. A conventional bus service is replaced by autonomous pods providing shared ride service. It eliminates the need to transfer, bringing passengers from departure to destination in the same pod. The transfer is one of the most frustrating parts in a passenger journey. 2 minutes of a waiting time can feel 2-3 times longer than it actually is.

Hubs provide multiple shared services: bikes, e-bikes, cargo bikes, e-scooters, e-cars, as well as repair services. They are located close to the main public spaces. They also provide bike and car parking for visitors. As the parking is indoors, public space is clutter-free.. The hub is well linked to the infrastructure of all mobility modes and therefore also provides logistic services: pick-up and post office. In addition, it also has community services such as community info point (where you get informed about events, join a neighbourhood ice hockey or football club), tool sharing library, recycling point and a workshop.

Car infrastructure is reduced to the necessary minimum. The change of speed from 60km/h to 40km/h makes the width of Trädlyckevägen lanes over-dimensioned. They are adjusted to city street width. Roundabouts are optimized in size but keep the same capacity. Neighbourhood streets are shared streets with 15km/h, and priority for cyclists.

5) **Mixed use development with different character**

The total development has a function mix of 65% housing, 35% of other functions. This percentage differs depending on the location; however, it always has at least 40% of housing to ensure that the space is used 24/7.

- a. Håsten torg is a shopping and culture centre,
- b. Kalberg torg acts as a community centre with community information point, education, work, retail functions.
- c. Trädlyckevägen is a city boulevard. Ground floor storefront windows and small plots housing retail, education, healthcare functions ensure diverse experience while walking/cycling along the boulevard.

6) **Identity + compactness = new spatially efficient Varberg typology**

Varberg city centre buildings are characterized by 1-3 floors with a pitched roof housing 1 floor of attic. An urban block has a length and width of 60-75 m, and is composed of multiple buildings, between 12 and 40 m in length. The result is - a diverse, small-scale environment. In some of the blocks, courtyards are filled with buildings and have very little green, making a city centre dense. Such density enables what we all like about city centres - lively public space. We intended to create such density and at the same time keep the feeling of Varberg's small-scale architectural identity, as well as to add more green. The result is a 3-storey building with a steep pitched roof containing 2-3 floors and finished with a flat extensive green roof

7) **Diversity of inhabitants and developer groups**

Small to medium size plots enable more diverse developer groups, such as community builders ('Baugruppen'), owner-occupiers like single families, cooperatives. A wide range of building types can offer apartments of various price categories enabling a mix of social groups. The proposal offers approximately 10% individual townhouses, 25% collective townhouses (Lamelhus 2.0.), 25% small urban apartment corner blocks, 20% prominent urban corner blocks, 20% Large Urban Solitaires. As building blocks can be composed of various building types, this mix can change according to the actual demand.

8) **Recycling and sharing**

Recycling starts with collection and in detail sorting. Each block has a waste collection point (biomass (fruit, coffee, biodegradable material), wood, metal, plastic, glass). Mobility hubs have collection points of technical appliances. When sorted appliances will be brought to factories where materials are further extracted. As extraction involves chemical processes it is done at scale. These materials later can be used as raw materials for production of new appliances. Maker spaces have a tool library for sharing and a workshop space. It enables residents to fix their appliances or make furniture for example. Housing blocks of cooperatives can bring the concept of sharing even further by providing shared laundry rooms, refrigeration, etc.

9) **Participatory and gradual development**

The urban structure is designed to consider gradual development and participation. Kalbergs torg square acts as a catalyst for participation. Its position ensures that it is well accessible from surrounding neighbourhoods without interventions in traffic infrastructure. In phase 1, it is a space for debate with a pavilion and a space for play, sport, festival, market programs, adding activities (for teenagers) that are now missing in the surroundings. During this phase, workshops will be held in the pavilion where existing and future inhabitants can brainstorm on programmatic, spatial and process aspects of the future development. In phase 1, existing trees are starting to be prepared for replanting. Phase 2 starts by transforming road infrastructure and building around subcentres: Håstens torg and Kalbergs torg. In phase 3 the development would be completed. Small block sizes ensure that the development can be implemented gradually and therefore make it resilient to economic crisis.

Performance indicators:

Håstens torg

Håstens torg is a sub centre oriented to retail and cultural activities. The currently undefined parking space is transformed into a car free square shaped by surrounding building blocks.

It is well linked to a pedestrian network. Mobility hub provides access for cars, logistics and other motorized traffic. It is "hidden" in the deep/dark core of the plot. Edges of the block are dedicated to functions that contribute to liveliness of public space: retail, catering, cultural functions. 40 % of housing is kept ensuring liveliness 24/7.

Mixed use blocks have an elevated courtyard surrounded by housing, which makes it possible to live in a small community and have your own front garden while living in a dense urban block.

The highest building in Håstens torg is a landmark visible in sight lines of Äckregårdsvägen and Trädlyckevägen streets. The top floor is a public viewing platform towards the city centre and the coast.

The square is the place where community and city meet. It has several zones and accommodates activities for all the ages. The central part is a gathering space suitable for larger events, such as concerts, dancing, or sports events. Around it, on the northern edge, further away from the street is a children's playground that has both play elements on a paved surface and in the patch of greenery. The other patch of green is a rainwater garden, the lowest part of a square which collects, buffers, filters, and infiltrates rainwater. A pavilion in the south provides a sheltered space from rain enabling the use of a square during rainy days. The 8 m edge of a square is dedicated to terraces, and access to ground floor functions.

Håstens torg square is part of a network of squares. They occur where a route changes direction. It is a moment to stop to meet.

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