### **SOLANDER RING**

### A VISION FOR A SOCIAL, CONNECTED, AND CLIMATE-RESILIENT PITEÅ



The implementation of the North Bothnian Railway and the new Piteå train station provides an opportunity to rethink Piteå's future development towards a more connected, vibrant, and sustainable urban environment.

The "Solander Ring" is an urban and ecological strategy for the town of Piteå. It takes its name from Daniel Solander, an esteemed botanist and explorer born in Piteå in 1733. Solander was a pioneer in the field of botany and zoology, part of a selected group of avant gardist scholars that travelled around the world, driven by exploratory energy and a passion for

discovery. By celebrating his progressive figure we aim to implement an innovative strategy that bridges the past with the future of Piteå. The ring coincides with the traces of the former island of Piteå that embraces the historical centre defined by an orthogonal grid morphology. This linear structure is centred on slow mobility, climate-adaptation, and biodiversity. Existing and new parks, gardens, and urban developments are linked to the ring, turning it into a continuous urban ecosystem that fosters an harmonious symbiosis between humans and nature.

#### WATERFRONT: BRIDGES AS EXPERIENCE

In our proposal, the layout of the new railway responds to the morphology of the city grid and runs in parallel to Timmerleden to preserve the existing waterfront and maintain urban coherence. The waterfront is maintained and improved as a key public space for Piteå. A new design integrates contemporary elements with the current layout, by providing an improved accessibility and multiple relationships with the water. When approaching Piteå by train, unobstructed views of the southern bay open to the viewers and offer a picture of Piteå's water-related identity. The implementation of four active bridges improves the accessibility to the waterfront, by overcoming the railway and offering attractive programmes and experiences. The bridges are envisioned as destinations themselves, rather than just infrastructural elements.

### **MOBILITY HUB: A NEW URBAN CENTRALITY**

The new train station is a mobility hub that brings together different transport modes, optimising the mobility experience. The station is conceived both as an entrance gate to Piteå and a bridge connecting two parts of town separated by the new railway line. The mobility machine is organised by a clear layout, in an attempt not to overcharge the waterfront area with infrastructure and at the same time promoting the use of public space by short-distance walking between modalities.

K+R and taxi drop-off, bike parking, and station logistics take advantage of the space between Timmerladen and the rails, with direct road access. The access to these functions happens directly from the station bridge. The bus terminal is open to the northern station square and can be easily reached on foot from the station hall. The primary P+R location occupies the plinth of a new waterfront block. From there, travel-



lers can directly access the train platforms by using the new circular bridge.

The main station building hosts public functions, such as library, cafés, movies and lecture halls, becoming a new vibrant centrality. Two station squares with different characters welcome travellers from the town centre and Västra Kajen.

#### **ECOLOGY: FOSTERING BIODIVERSITY**

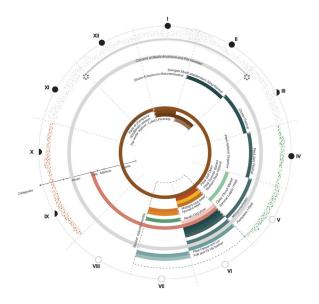
The Solander Ring brings together several existing and new parks and gardens, creating a resilient urban oasis that defines the new identity of Piteå. The Ring can be seen as a linear botanical garden that celebrates the richness of Norrbotten County ecology, through the implementation of green spaces defined by the presence of an extensive selection of local botanical species.

In the east-west axis of Sundsgatan, the street profile is transformed into a linear garden for snow retention, in the form of a polar wadi. The eastern border of the Ring (Tradgardsgatan) is defined by the presence of the existing park Badhusparken, while the western one is a new green boulevard that connects the city with

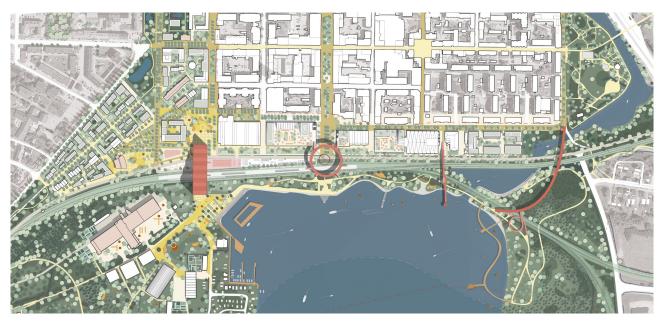
the new multi-modal hub, the new development and the Västra Kajen creative and active campus located in the south. The south edge of Timmerleiden is downgraded to increase the pedestrian quality and experience. The waterfront itself can be seen as a continuous ecological corridor that mitigates the relationship between city and water. Our proposal aims to improve human liveability and the integration with nature, taking in account non-human perspectives with a holistic approach towards the future of Pitea.

# **CURATING PROGRAMME: PITEÅ'S LIFE CYCLES**

With our strategy for Piteå we stress the importance of curating urban content, alongside space, in achieving a liveable and attractive urban environment. Piteå's calendar has a high seasonality, with peaks of use, coinciding with events that attract a large number of visitors in a short time, such as the Piteå Summer Games youth soccer event or the Midsommarfest. In these moments there is a problem of hosting capacity and overcrowds. On the other hand, there are low periods when little is happen-



ing and life in town "shrinks". We plot these use-dynamics over one year in Piteå on a Life Cycles diagram, a strategic tool that informs the elaboration of a city-wide programming strategy and allows for adequate allocation of spatial resources at different times. The areas at Västra Kajen and the waterfront provide opportunities for interventions that span from temporary to more structural ones. We envision, amongst other uses, a Sports Village with short-term accommodations and training fields



for teams at Västra Kajen, as well as floating performance stages on the water near the station area.

## NEW URBAN DISTRICTS: BRIDGING COMMUNITIES

Piteå's station area is conceived as a new centrality, developed in continuity with the existing urban fabric. The new district ties the orthogonal urban grid of Piteå downtown with the direction of the former railway yard, which inspired the layout of the new urban blocks. The ring park works here as a binding landscape element for the two urban tissues. The locomotive depot stands as a landmark and urban hotspot in a new square, where traces of the old railway are celebrated in the design of the public space with tree lines following their orientation. Existing railway sheds are reinterpreted as linear housing typologies and stand out as special objects within the blocks. In the north, on the site of the current bus station, the urban structure opens towards the park with a cluster of villas.

For the area of **Sörfjärden** we propose a series of blocks standing on a 7m high podium, defining a second ground-floor with terraces for restaurants and cafes that offer panoramic views to the water over the railway. These high plinths house parking facilities (P+R), commercial functions, and logistics, accessed from Timmerleden. In this scenario, Hamnplan has potential to be transformed into a pedestrian-friendly boulevard with supermarkets, shops, office and home addresses.

The area of **Västra Kajen**, between the new railway line and the terrain of the paper mill of Smurfit Kappa, is characterised by the presence of isolated elements. This unfinished and unorganised environment offers an unique opportunity for experimenting with alternative forms of appropriation and building typolo-

gies. Therefore we envision a free-form urban structure in a new forest at Västra Kajen: a Campus related to learning, research, ecology, and active lifestyle. Here, the Båt Museum gains room to expand; a Music Academy is located near the water with floating stages for performances; research facilities of the Technical University of Luleå can be placed next to the current police station, which is transformed into a makerspace and creative incubator. The forest Campus at Västra Kajen provides a platform to link these different places and urban actors.

## DEVELOPMENT STRATEGY: NEW TRAJECTORIES FOR PITEÅ

Piteå's new expansion has potential to become a testing ground for community-driven development models. With our vision we made an attempt to define a flexible framework that provides extensive freedom of appropriation by the community and a highly diversified real estate offer. The new block layout leaves space for different typologies and ownership structures, while incorporating pre-existing buildings and public spaces. A "community land trust" model can be tested in the new urban areas, where property is managed and transformed in a cooperative way.

With the North Bothnian Railway project Piteå faces a major transition that can reshape its identity and position within the region. In this context, stimulating cooperation among different stakeholders and attracting responsible investment are crucial factors to achieve a just and sustainable transition. Piteå Kommun can play the role of curator of the transformation, bringing people together towards the implementation of an ambitious plan. We hope that our vision shall provide the optimistic image to inspire new trajectories for Piteå.