

# More Stockholm to love!

## Developing the Stockholm Central Station Area

Program for parallel commission

2021-02-09



*The Stockholman is the blue, the green and the yellow. The water, the greenery and the buildings.*

*It is also the unique possibility to combine an urban life with easily accessible nature. Wherever you live, you can reach exciting destinations, both in the urban and in nature, in just 30 minutes.*

*Stockholman also means power in innovation and creativity.*

*Torleif Falk*

*The City Architect of Stockholm*

# Welcome!

## The parallel commission for the development of the Stockholm Central Station area starts now.

The program for the parallel commission describes the intention, goals and requirements for the urban development in the Stockholm Central Station area within the framework of the zoning plan. The aim of the zoning plan is to examine the development of the Central Station area, enabling improved accessibility to the Central Station hence coping with an increased rate of rail traffic including more passengers. By covering the track area between Vattugatan in the south and Kungsbron in the north, the district can be healed together by applying mixed use buildings for offices, retail, housing, culture, services and public spaces.

The developer and organizer of this parallel commission is the property owner Jernhusen in collaboration with the City of Stockholm and the Swedish Transport Administration.

Up to this point the zoning plan process has been a long journey, based on the thoughts, ideas and decisions of numerous people. The process has also included extensive investigative work establishing a solid ground for various propositions in this program. Given this background, we hope that the participants of the parallel commission, as well as other parties, will find the program coherent, relevant and inspiring enough in order to meet this complex and challenging task.

The intention of the parallel commission is to produce several development proposals and choose one of them to form the basis for the area's new zoning plan. The intention is also to choose a team of consultants that, in collaboration with Jernhusen, will be able to complete consultation documents and to develop parts of the implementation of the zoning plan from program and engineering documents into construction production. .

We have been looking forward to this point in the zoning plan process for several years, and it will be interesting and exciting to take part in the ideas and proposals that the chosen teams will present during this parallel commission.

*Kerstin Gillsbro*  
CEO of Jernhusen

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*In Stockholm, city beat is faster, development is stronger and creativity is richer.*

*In a Stockholmer a compassionate superhero resides, ready to offer one's services when the situation demands, something that became apparent during the terrorist attack as well as during the corona pandemic.*

*Even if we do not know each other we are there for each other and help out if needed, that is the Stockholm spirit that I am enormously proud of.*

*Anna König Jerlmyr  
Financial City Commissioner*

Jernhusen makes a difference for people and the environment by promoting increased rail travel and transportation.



## About Jernhusen

Owned by the Swedish state, Jernhusen is a real estate company that contributes to a better transport sector and a more sustainable Sweden by owning, developing and managing station areas, maintenance depots and road-rail combined terminals.

Our properties aim to make the railway system more attractive for both travel and freight transport. Since the start in 2001, we have invested approximately SEK 14 billion in properties contributing to a better railway infrastructure.

We gather around the common notion of the importance of sustainable transport in an increasingly urbanized society with major climate challenges. By transforming our station areas into sustainable, vibrant neighbourhoods, more people are able to live, work and reside near the station and to a large extent choose sustainable means of travelling. Jernhusen own a lot of land at the central stations in Stockholm, Gothenburg and Malmö and in

other Swedish regional capitals. These cities are growing rapidly and can be condensed in a sustainable manner by developing the station areas and thus also supporting regional growth.

An increasing number of people are realizing the economics and practicalities of commuting by public transport instead of by car. Soon, stations will be as important as during the time when they entailed modernity and city growth. More people want and are able to use trains as means of travelling and transport, beneficial for people and for the environment. Thanks to an increased awareness of the need for sustainable development the railway will reach a new golden age.

# Sustainable Urban Development for Sustainable Travel

Jernhusen’s vision of making a difference for people and the environment by promoting increased rail travel and transportation is fundamental to the urban development of the Stockholm Central Station area. By developing the station and its immediate surroundings we will improve travel comfort, cope with future travel demand and develop the centre of Stockholm. We call it sustainable transit-oriented urban development.

## Transit-oriented Urban Development Contributes to Agenda 2030

An additional purpose of Jernhusen’s work with transit-oriented urban development is to contribute to the global sustainable development goals – Agenda 2030. In order to explicitly relate Jernhusen’s transit-oriented urban development to Agenda 2030, we employ the tool Citylab Action Guide for sustainable urban development, by Sweden Green Building Council. The Citylab Action Guide identifies a number of sustainability indicators for urban development, all of which are related to one or several of the global goals for sustainable development. For this project, Jernhusen have specific goals based on those indicators, described in this program.

## Our Positions

Jernhusen’s transit-oriented urban development focuses on the traveller. The meaning of this is laid out in our quality program Transit-oriented urban development where six positions form the basis of our work. They stipulate that we should:

- Promote sustainable mobility
- Support a cohesive city
- Create site-specific and sustainable architecture
- Strengthen the site’s attractiveness and competitiveness
- Integrate greenery and water
- Generate inclusive public spaces.

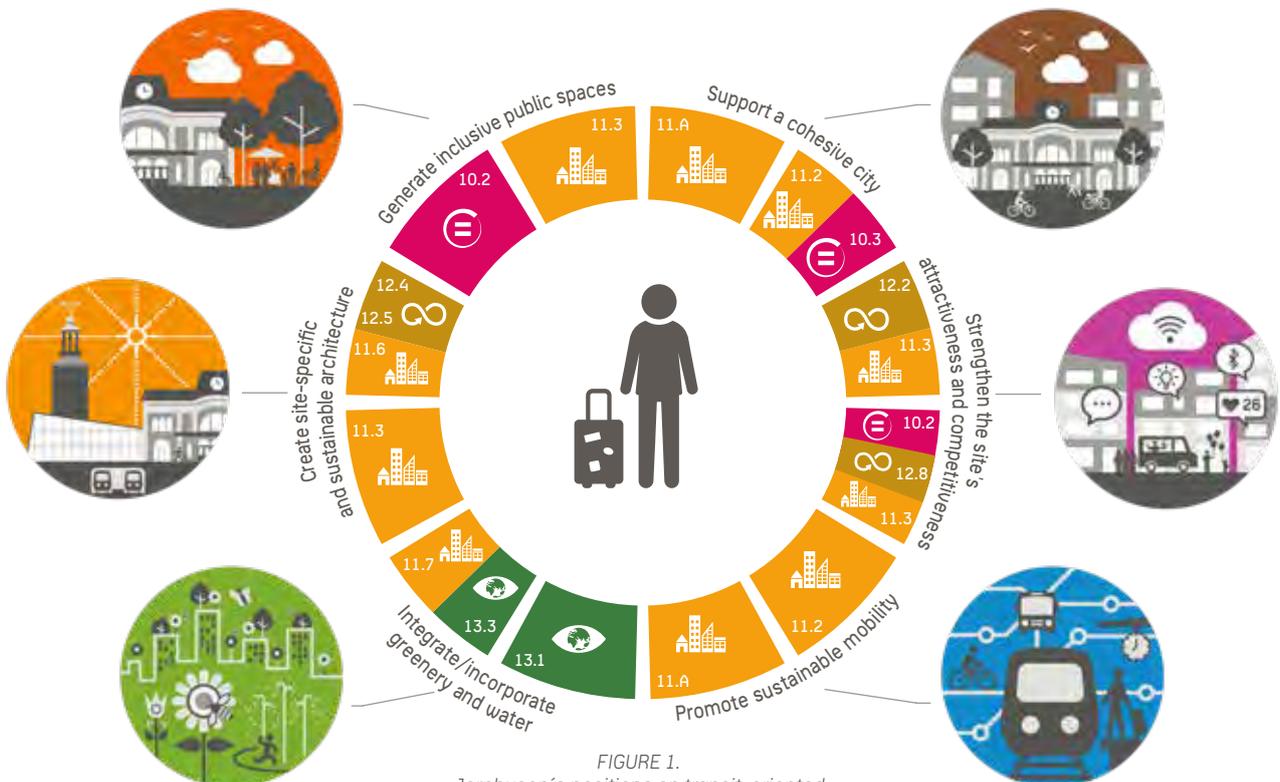


FIGURE 1.  
Jernhusen’s positions on transit-oriented urban development



By its location and function the Stockholm Central Station area has always had an important significance for Stockholm and Sweden.



Klarabergsviadukten  
47-49

RODA Utbildning

CONVENDUM

Vetenskapsrådet

FALVERN

69 Kalkbästornet

# The site

# Mid- Stockholm since 1871

By its location and function the Central Station area has always had an important significance for Stockholm and Sweden. When the railway, the so-called connecting line, was built in the 1860s it had a major impact on site activities. The Central Station area has since continued to change according to, as well as a reflection of societal development. The area is now transforming again, this time towards a sustainable future.

## From 100 to 230 000 travelers

Stockholm Central Station was inaugurated on July 17th in 1871. At the time a hundred people a day travelled by train. Train travel increased steadily until the 1960s. The Central Station and its surroundings were an important hub for travel and for shops, restaurants, hotels and other businesses in Stockholm.

As road and air travel took over, the station area became encircled by road systems and turned into the back end of Stockholm city centre.

Since the 2000s, rail travel has begun to increase and the area has yet again developed into a more attractive place for different establishments. 80% of all journeys in Sweden begin or end in Stockholm. Some 230,000 people pass through the station every day, constituting the largest travel flow in any place in Sweden.

*For more site history, read appendix 1. History of the Central Station area.*

## Development for the future

Stockholm is growing and developing with an ongoing population and business growth. According to a vision involving further development and reinforcement of the area as a meeting place, including a more versatile and rich urban environment and increased feature mix, Stockholm City has been acknowledged as one of the city's development areas for new buildings. The site functioning as Sweden's largest exchange point for public transport also needs further development in order for more people to be able to travel collectively and climate-friendly.

In March 2016, Jernhusen submitted an application for a new zoning plan regarding the Central Station area. This related to the urban environment renewal that began with the construction of the building within the property Orgelpipan 6 at Vasagatan- Klarabergsgatan containing the new entrance to the commuter trains, a hotel and housing located on top. The development now continues.



*Stockholm Central Station, staff and passengers on the platform around 1894.*



Centralplan in front of Stockholm Central Station around 1920

# The Central Station area today

The site is a central regional core where the Central Station together with Cityterminalen, for travelling by bus, represent two important national, regional and local public transport supply facilities. The site is one of Sweden's most densely populated places housing large flows of people. While around 6,000 people work in Västra City today, only about 250 people live here.

## The urban landscape

The site has buildings from different eras, commonly characterized by a large scale. Existing buildings are partly raised at a higher scale in relation to the so-called *stone city*. The City Hall and the Klara kyrka are both important landmarks in the city skyline. The main part of the site area consists of a railway yard and the tracks area, which constitutes a strong barrier dominating the experience. The area around the Central Station is also characterized by an extensive traffic structure at Tegelbacken and along Klara sjö.

The site consists of different levels where the topographical variations are partially reinforced by traffic barriers. The existing bridges and traffic ramps do not sufficiently contribute for pedestrians to easily get around and orientate themselves in the area. Even though the Central Station is an important iconic building for the area, it plays a more low key part within the overall urban landscape nowadays.

The sculpturally designed large complex Cityterminalen/World Trade Center is located on the previously covered part of the track area. Opposite Cityterminalen is the newly reconstructed Kungsbrohuset. The building stretches eight storeys towards the Klarabergsviadukten and ten storeys towards Kungsbron. The colour scheme of the postmodernist housing structure on Blekholmsterassen relates to the functionalistic building on the Kungsholmen side.

*Read more in appendix 2. Befintliga byggander (Swedish).*

## The station & the multimodal hub

The Central Station and Cityterminalen form a central hub for trains, buses and metro traffic in the Stockholm region as well as a hub for the national and international bus and train traffic. Buses and trains to the airports Bromma, Arlanda, Skavsta and Västerås also depart here. More than 70 million travelers cross the area every year.

The area close to Centralbron and Klarabergsleden is highly characterized by motor traffic. Several bus lines can be found in connection to the area, both inner city- as well as regional buses.

Today's local bus service have stops on different sides of the station building. From Tegelbacken, overlooking the City Hall, both local as well as regional boat traffic depart.

In 2017 Citybanan was inaugurated and commuter train traffic was moved from the railway yard to the city tunnel. Spårvagn City will likely be extended in the future, getting an end stop on Klarabergsgatan. Important regional bike lanes pass through the area. Major movements between train, bus and metro traffic and all the inner city destinations are mainly pedestrian.

## Public space and streets

### Centralplan

Centralplan, the Stockholm Central Station historical forecourt, has changed in character over time. However, it has always been characterized by heavy traffic of various kind, from horse-drawn carriages to trams and taxis. The dominating features of Vasagatan and the taxi zone divide the area leaving little residual space for activities. By decreasing the size and dominating features of the taxi zone great potential for site improvement is allowed. The ongoing project for the transformation of Vasagatan along Centralplan will leave more space for both pedestrians and bicyclists as well as an adjustment of the taxi service on site.

### Klarabergsviadukten

Klarabergsviadukten that connects the districts Norrmalm and Kungsholmen is the westward extension of Klarabergsgatan. The Central Station's upper entrance hall and the entrances to the City Terminal and the World Trade Center all face Klarabergsviadukten. Nowadays Klarabergsviadukten has relatively large parking areas and parking bays for cars and taxis on both the north and south side of the viaduct as well as bus stops. Following future site development the parking deck facing the track area as well as the existing upper station hall will most probably be demolished.

### **Nils Ericsons plan**

Nils Ericsons plan is the place between the Central Station upper entrance hall and the Stockholm Waterfront Congress Center and the Radisson Blu Waterfront Hotel on the west side of the track area. Currently, the space is mostly used for parking and external events related to the major trade fairs at the Waterfront Congress Center. At the southern end Nils Ericsons plan faces directly towards the Centralbron and the traffic jam. However, the view towards the City Hall and Riddarfjärden has great potential that is not being captured today.

### **Västra Järnvägsgatan**

The street location between Klarabergsgatan and Kungsgatan and the proximity to the Central Station has great potential. However, there are several aspects that need to be developed in order for the area to be a vibrant urban environment.

Today, the street is flanked by office buildings on the west side with the track area opening on the east. Basically all ground floors are active, however being occupied by a few large functions that lack detailing with sparsely placed entrances. The interaction between the new and the existing blocks along Västra Järnvägsgatan will become crucial for how the place is experienced.

### **Terminalslingan**

The block that stretches between Kungsgatan and Klarabergsviadukten on the east side of the railway yard contains Cityterminalen holding long-distance buses on lower levels and the World Trade Center office and conference centre on the remaining levels. Terminalslingan runs along the railway yard including lanes, parking spaces and stops for long-distance buses, airport buses and chartered buses. From Terminalslingan there is also a ramp stretching into a bus garage ..



*It is a 'meeting place for want of a better one' and not a destination in itself.*

# How is the area perceived ?

Changing an area, that many people use daily, requires attentiveness to their views. In order to understand how to bring about the Central Station area's journey back to its position of a natural meeting place and the entrance to the capital, we asked people how they experience the area today and what they think is important to consider when it will be developed.

## **"A meeting place for want of a better one"**

Jernhusen has thoroughly investigated how the area is perceived and how it can be improved, by conducting dialogues, site observations of pedestrian movements and visits and by an urban environment analysis. The dialogues included an open, qualitative online survey, a quantitative survey, in-depth interviews with focus groups and on-site intercept interviews.

The results indicate that there are considerable shortcomings in terms of accessibility, as the area is perceived as complicated to navigate to for pedestrians and cyclists. Many feel unsafe, especially at night and in some parts of the area also during the day. Certain areas are perceived as deserted and desolate. There is a shortage of pleasant green meeting places and a lack of contact with nearby open water surfaces.

Few people perceive the area as somewhere they would like to spend time. Most people regard the Central Station area as solely associated with commuting to work, not as a place for hanging out after work.

Barriers of roads, split levels and car parks create a stressful, noisy and confusing environment. The image is of a cold, unsafe, hard, vast and grey environment. It is a "meeting place for want of a better one" and not a destination in itself. The area is confusing and not the grandiose entrance to the capital it once was.

## **Confusing and inaccessible**

The Central Station area is largely experienced as inaccessible and confusing, partly because of the split-level structure and the shortage of alternative routes to avoid areas that are perceived as unsafe.

People who live and work in the area point out that tourists have great difficulty in finding their way to famous attractions and destinations from their various entry and connection points in the area. Many people also find it complicated to change between different modes of transport as well as locating some travel services.



*Klarabergsviadukten facing northwest*

The area is confusing and not the grandiose entrance to the capital that it once was.



Klarabergsviadukten facing southeast

### **Pedestrians have been neglected**

The Central Station area's social value has decreased at the same rate as accessibility for road and rail traffic has increased. The fact that pedestrians and cyclists have been neglected is also evident in the design of the streets, with an ambiguous traffic hierarchy and unclear information for pedestrians at crossings, with too narrow pavements and unsafe conditions for cyclists. Another flaw in the pedestrian system is that some places have poor or no accessibility for disabled persons.

Because of traffic barriers, over-passes and long crossing distances the Central Station area is generally perceived as cut off from the rest of the Stockholm city centre, despite being geographically close.

### **More of everything, please!**

The area currently comprises a great number of offices as well as the Waterfront Congress Center and the World Trade Center, which attract many visitors every year. There is a desire that the events that take place in the Waterfront should "filter out" to public space to enrich city life.

The wish list of the people of Stockholm also features more greenery, more restaurants and a simpler and safer environment for pedestrians, which corresponds to the expressed shortcomings of the Central Station area.

Many people want services that would make everyday life easier, and more street-level entrances, as well as cafés and restaurants with outdoor seating and cultural offerings like museums and libraries.

Many people want activities that attract "common people" to the area, which can include sports and events that activate the site around the clock and populate the outdoor environments.

## **Top Ten List**

### **What should be improved in the Central Station area?**

1. More greenery
2. More restaurants and cafés
3. Easier to walk
4. Safer
5. More street life
6. Better places for meeting friends
7. New housing
8. More shops and services
9. More peace and quiet
10. Easier to cycle

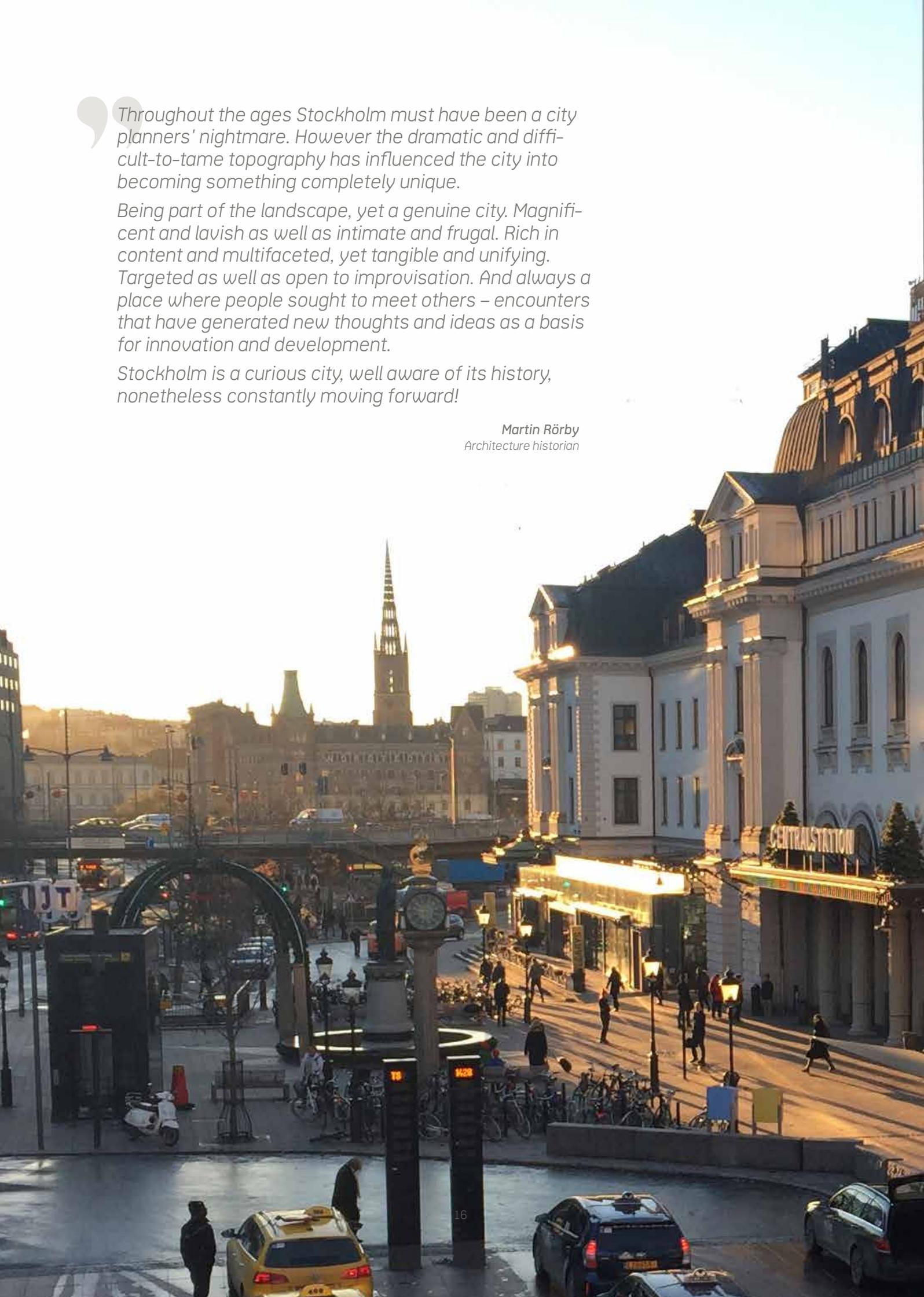
*The result of a 2018 open, qualitative online survey*

Throughout the ages Stockholm must have been a city planners' nightmare. However the dramatic and difficult-to-tame topography has influenced the city into becoming something completely unique.

Being part of the landscape, yet a genuine city. Magnificent and lavish as well as intimate and frugal. Rich in content and multifaceted, yet tangible and unifying. Targeted as well as open to improvisation. And always a place where people sought to meet others – encounters that have generated new thoughts and ideas as a basis for innovation and development.

Stockholm is a curious city, well aware of its history, nonetheless constantly moving forward!

Martin Rörby  
Architecture historian





# Vision & goals

TAXI

# More Stockholm to love

Since 2015, the attempt to formulate a vision and common goals for the development of the Central Station area has been going on. Based on local history and current site experiences, this has involved a large group of stakeholders such as the City of Stockholm, the Swedish Transport Administration, local property owners and other parties.

## The Vision

*This is where a new part of the city will emerge. A back end of Stockholm will become an inviting place in the centre of the city with a vibrant street life. It will add more Stockholm to love.*

*The city will move in on new ground on top of the railway yard. Klarabergsgatan will become a living square and the roof of the new station building will provide stunning views of the city. It will be a place that welcomes everyone to the capital of Sweden. Attractive workplaces will foster the talents of the future. Shops, restaurants and cafés will provide the area with its pulse. In a world of increased competition, Stockholm will emerge stronger.*

*The new station will make traveling smoother, easier and more pleasurable. It will offer peaceful green environments and inspiring cultural activities. An urban environment with sustainable architecture and well-thought-out planning will create an area that looks forward and upward in order to regain its former glory as the hub of the city.*

*Welcome to Centralstaden!*



To me the Stockholman contains potential and a constant will to take the next step - forward-thinking, curious and open to influences - although Stockholm still does it in its very own way.

Daniella Waldfoegel  
 Head of Business Policy,  
 Stockholm Chamber of Commerce

## The Identity of the Site

The vision is supported by six words that characterize how we want people to experience the area in the future. Welcoming, Guiding and Authentic represent the constant experience on the site. Stockholman and Expressive will be distinctive for the area. Effervescent represents the element of surprise.



### Stockholman

Fearless, curious, innovative and confident. A world reknown metropolitan pulse close to both water and greenery.



### Expressive

Sustainable architecture and design reinforce the identity of the place with attention to detail. Artistic expression offers both permanent and fleeting affordances.



### Effervescent

Wow! The energy here is intoxicating! The place is alive and edgy, just like Stockholm itself.



### Guiding

Smart solutions for current and future needs - for everyone who travels, works and visits. This is a place that doesn't take your time, but enriches it.



### Welcoming

This is where Stockholm welcomes everyone to an inviting and safe environment that lives, breathes and inspires - any time of day or night.



### Authentic

A place that is what it is. Details, knowledge and qualities create a unique environment for future needs in a setting whose history is always present.

FIGURE 2. The six words supporting the vision

## Thoughts on Centralstaden and the spirit of the city

Like a giant artery, the large railway body has made its way through the heart of the city and its most magnificent water space and historical islands. As the open water was already protected the connection of the tracks in 1871 was of great concern. The Central Station was established on fillings in the periphery of the former city. As late as during the first decade of the 21st century commuter train tunnels and a substantial underground metro infrastructure were added to the tracks. The underground stations and the connections to the Central Station have transformed into a great modern traveling space, used daily by hundreds of thousands of Stockholmers.

On the surface, the tracks still stretch through the most beautiful parts of Stockholm. Passengers entering Stockholm

have at all times stated the sudden beauty experience as the northbound train emerges out of the tunnel and passes in the clear light over Riddarfjärden, finally diving down into the Central Station. Throughout urban development, the Central Station and Järnvägsparken have contributed to Vasagatan being established as a new parade street including a panoramic waterfront view. However, the Centralbron and Tegelbacken large traffic expansion generated new backsides. Traffic and track areas led to urban disconnection.

At the surface level, there is still a great potential to connect the city in this area. Streets may well be perfected leading city life through past barriers. The street system ending in panoramic views of open water is a typical Stockholm feature. By decking Klarastrandleden in the 1990s,



# What is Stoc

*previously being an industrial backyard, this type of urban context was created, including a new street, a view of the City Hall and a green waterfront. Urban beauty can really be consciously created. By the modest scale of Stockholm, a natural growth can be created above the “ditch” of the track area. This is something that would connect, unite and reduce perceived distances and benefit the city life.*

*The large spaces of water stretch through the city like a large east-west axis. The water adds great drama to the light scenario from morning to evening with the reflection from the narrow coastal inlets during summertime as well as from the low winter solstice. The incidence of light is reflected in the facades and by the street space configuration. Stockholm is also the city where thousands of outdoor cafés attract residents for an increasing part of the year.*

*Waterfronts and roof terraces encourage an expansion of urban life. Few things can make the Stockholmers come to life as a sparkle of sunshine along with a sheltered corner to rest in. The closeness to greenery and water even in the most central parts of the city both contribute to the spirit of Stockholm. However, the city also has a long period of darkness and cold throughout the year. Then, the warm well-lit, intimate indoor spaces offer reassurance for travelers as well as for other urban residents. Thus are the larger traveling spaces and hubs becoming increasingly important in the everyday life of Stockholmers. Centralstaden needs to be transformed into an all-year round attraction and meet the most crucial needs of urban life.*

*8th of June 2020*

**Per Kallstenius,**  
*Former City architect of Stockholm  
1984-89 och 1993-2010*

# Stockholmian?



# Common goals for the site

The vision for the Stockholm Central Station area has informed Jernhusen, the Swedish Transport Administration and the City of Stockholm into articulating shared goals for the development, that should result in a functional and attractive communication node as being part of a long-term sustainable urban environment.

## The common goals are:

- To increase sustainable travel by creating an attractive, functional and accessible interchange station with high travel comfort in terms of orientability, comfort and service.
- To create conditions for efficient railway traffic at the Stockholm Central Station as part of a robust national system.
- By means of its structure, design, function and content to interlink the centre of Stockholm physically as well as socially, by developing the unique character of Stockholm.
- With the station as a hub, to clearly contribute to developing the centre of Stockholm into an active, integrated and attractive 24-hour city with a varied content, living street-levels and attractive public spaces.
- To create a representative entrance to Stockholm and Sweden, with the Central Station as a clear symbol and destination that relates to its historical significance.
- In a long-term perspective, to realize the area's full potential and ensure an economically viable solution for the benefit of society.

## Creating social value

The City of Stockholm has developed a model for social value-creating analysis, SVA, which is used in the city's urban development projects to ensure that all projects provide social added value. The analysis is based on four urban development goals from Stockholm's Overview Plan; a growing city, a cohesive city, a good public environment and a climate-smart and resilient city.

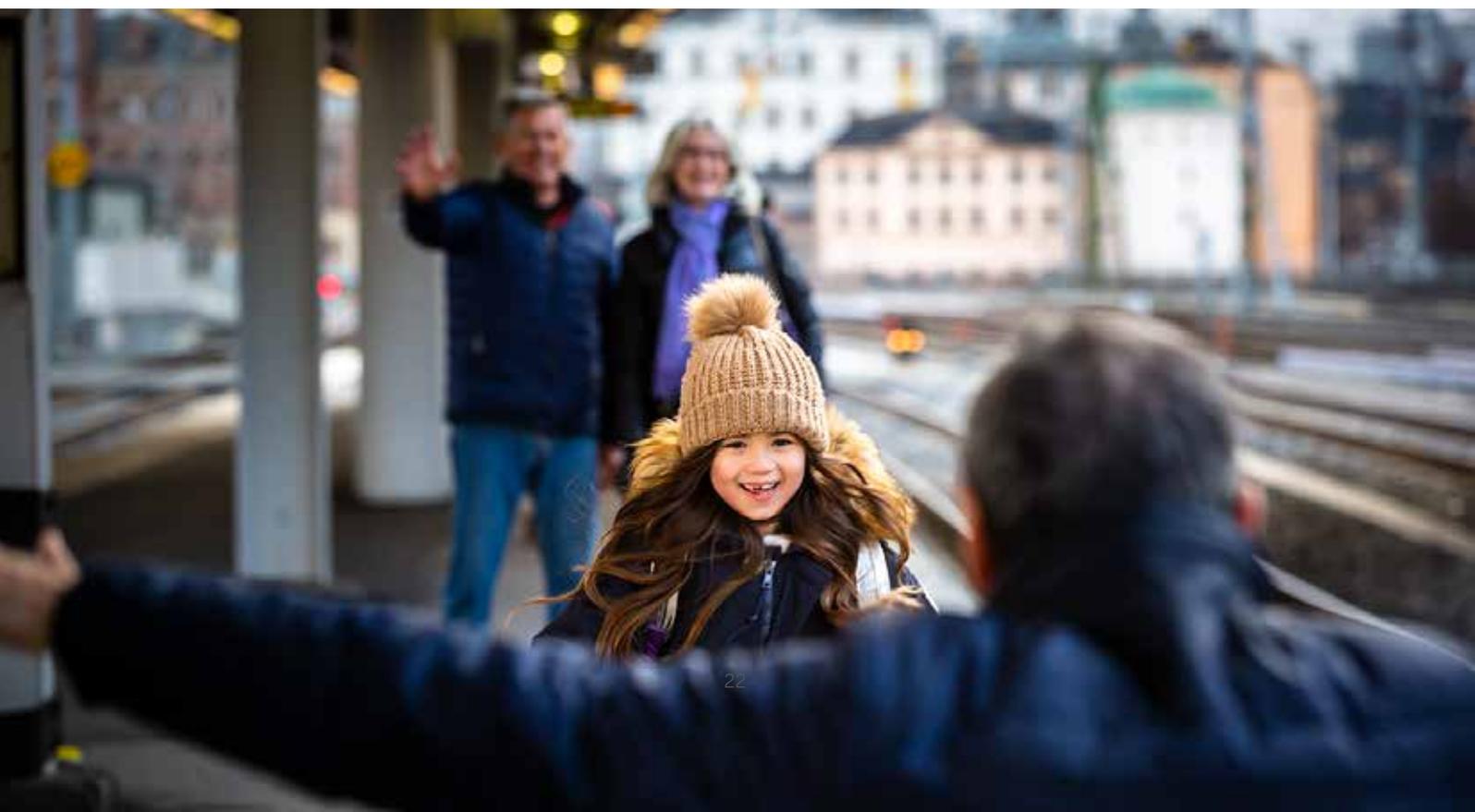
In 2018, an analysis of the current situation was made and based on it, the effect goals for social value creation were formulated with indicators that have been integrated into the description of the goals.

*See appendix 5.1 SVA\_Centralstationsområdet 190222 and appendix 5.2 SVA PM effektmål för Centralstationsområdet (both in Swedish)*

## Sustainability goals

In addition to the common goals, there is Jernhusen's overall sustainability goal:

- New buildings within the zoning plan area must be climate neutral from an LCA-perspective.



EXPLAINING THE COMMON GOALS:

- ➔ To increase sustainable travel by creating an attractive, functional and accessible interchange station with high travel comfort in terms of orientability, comfort and service. .
- ➔ To create conditions for efficient railway traffic at the Stockholm Central Station as part of a robust national system.

## Future traveler environment & railway traffic

### The future Central Station of our capital

Urbanization as an effect of globalization leads to more frequent travelling as well as longer everyday journeys. At the same time, more and more people become aware of the need for sustainable travel in order to protect the environment and the climate. The more people who travel sustainably, the more important the station's function as an attractive, multimodal hub for sustainable modes of transport becomes.

Stockholm, being the capital of Sweden, requires a well-functioning central station in order to provide traveler and visitor accessibility, comfort and service. The area, including the Stockholm Central Station, Cityterminalen and a direct connection to Station Stockholm City and the metro's T-Centralen, is also the largest public transport hub in Sweden. In order to enable future efficient and climate-smart travelling as well as an attractive station, improvement is needed.

The city must connect in a clear and seamless way, both to the Central Station and to the interchange hub. Orientability and accessibility are crucial, the visibility of public spaces connecting to the station as well as

landmarks enabling orientation. Perceived distances and obstructions must be removed as much as possible, i.e. poor quality pedestrian areas characterized by social precarity, noise or changes in altitude and direction. Furthermore the supply of street-level functions is equally important to consider.

### Focusing on the traveler

Travelers´ needs are the key starting point for station area development. The needs can be arranged within a hierarchy, where safety and reliability are the basis for all qualitative service that must be delivered at all times. As people move through the station area, speed and ease are important, while when dwelling in the station area, comfort and experiences make people happy.

Travellers in a hurry, such as the everyday commuter, often want to move quickly and effortlessly through the station, while travelers with more time to spend, such as sightseers, tend to be more interested in station atmosphere and variety of events. All in all, this means that both the terms moving and staying are key in station design. Figure 3 illustrates the connections as a pyramid of needs, in which the base indicates anticipated aspects, creating dissatisfaction if lacking, whereas the upper parts are creating satisfaction if delivered.

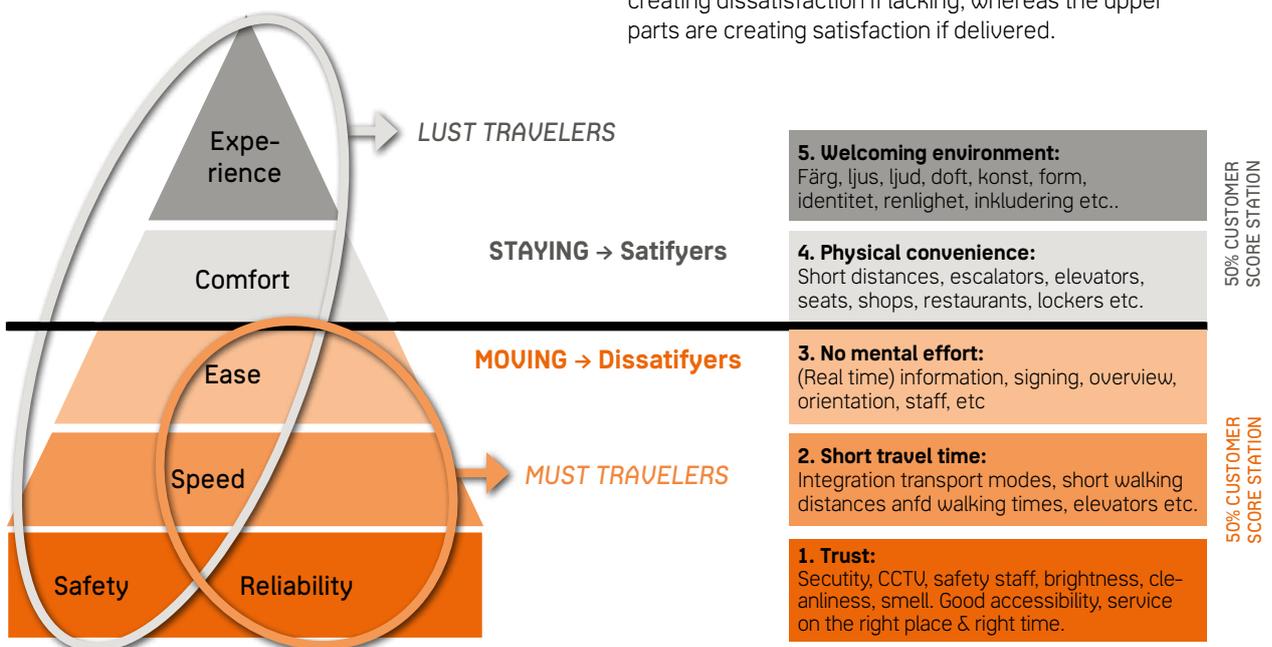


FIGURE 3. The pyramid of travelers´ needs according to Mark van Hagen et.al. (2011). Waiting experience at train stations. Dissertation, Eburon, Delft (NL).

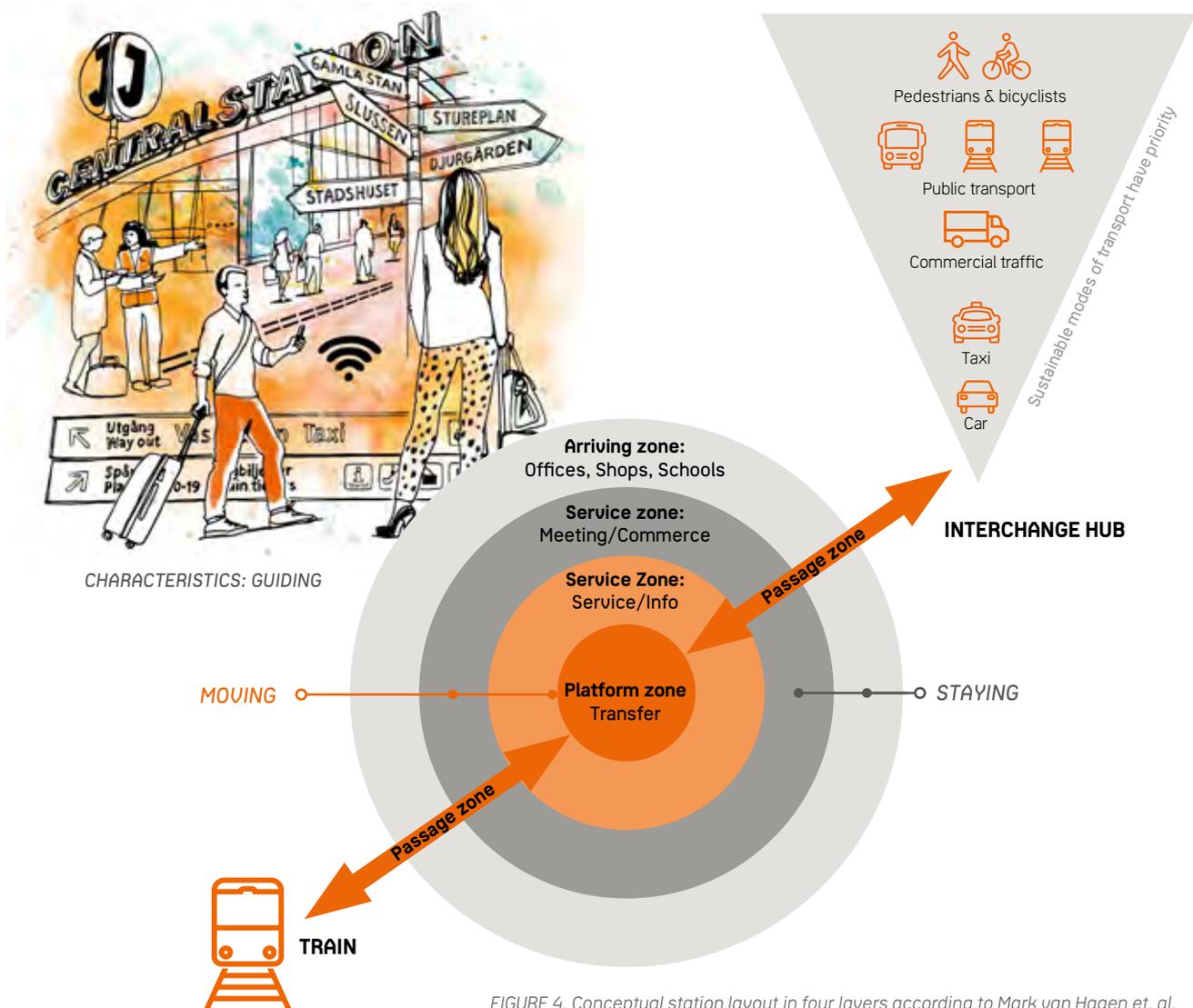


FIGURE 4. Conceptual station layout in four layers according to Mark van Hagen et. al.

The previous analysis leads to the following goals regarding the spatial organization of the hub:

- The station being *the core* of the hub, has to connect various modes of transport, with a *passage zone* of walkways leading to and from platforms and vertical passage etc.
- Connected to the core, *the service zone* with traveler services in terms of information, signage, accompaniment, luggage service, etc. have to operate quickly and comfortably.
- Connected to the passage zone, slower pace *service zones* including social, commercial and cultural settings, must be placed. In these areas the key components are characteristics, attractiveness and richness in experience.
- The outer layer of the hub should consist of *the arriving zone* – where the station transforms into the city. This layer includes offices, housing, shops and community services etc. The station qualities and the surrounding urban environment should harmonize, to provide travelers and visitors with a significant sense of place identity and character. See figure 4.

Relevant to the station and the hub, there is an effect goal for social value creation in the upcoming zoning plan:

➔ **The Central Station area should be an easy interchange hub**

The notion of an easy hub suggests short distances and easy access to all modes of transport such as long-distance trains, commuter trains, metro, trams, buses, taxis, bicycle parking and main streets. Links between sustainable mobility solutions must be prioritized. Disabled people must be offered as easy access as other travelers. Pedestrian flows and links between various modes of transport must, as much as possible, take place within the urban environment in order to enrich city life as well as to contribute to public safety.

**WHAT TO ACHIEVE:**

- **Short distances between modes of transport.**
- **Short distances between modes of transport without vehicles crossing.**
- **Access to station entrances with bicycle connection.**



Stockholm Central Station with the grand display of arrivals and departures

### Prioritizing sustainable modes of transport

The development must also enable sustainable travel to and from the station. Access to viable transport modes near the station will be upgraded, hence the proximity to the Central Station as a multimodal hub as well. Being part of the hub, a large diversity of mobility operators must be able to offer their services near the station. Each mode of transport must have its distinct location within the area, dimensioned in a flexible manner in order for it to change shape or size according to variations in supply and demand. In order to promote diversity and freedom of choice, public traveler environments should provide access to thorough traffic information, regardless of operator or mode of transport.

Interchange between trains to metro, commuter trains, trams, local, regional and long-distance buses, taxis, rental cars and bicycles must be provided in various ways. Individual car traffic should be given minimum priority and then only be allowed within so called Kiss 'n ride-zones.

The space intended for different users is prioritized according to the City of Stockholm's traffic hierarchy, see figure 4.

The effort of selecting sustainable modes of transport involves several parts as a comprehensive whole:

- the design and visibility of the platform entrances
- the number of available modes of transport and how easy it is to change between them
- the capacity to accommodate high traveler flows
- signage and updated information
- location of stops and distances between interchanges, in terms of meters as well as spatial simplicity and attractiveness
- distance to destinations, in terms of meters as well as spatial simplicity and attractiveness.
- generous space and rich level of detail adapted to the speed of the pedestrian.
- accessibility as far as possible at the pavement edges and pedestrian crossings.

## EXPLAINING THE COMMON GOALS:

- By means of its structure, design, function and content to interlink the centre of Stockholm physically as well as socially, by developing the unique character of Stockholm.

# A connected and vibrant inner city

## A better place to stay

The development of public spaces and streets within the zoning plan area will mend parts of the city thus contributing to a major shift regarding the area's residual qualities. A future plan structure will provide urban environmental values, leading to street development within the zoning plan area and its connections to the surrounding urban fabric. The district's spatial integration with the surrounding city must be strengthened in a way that it can also contribute to increased social inclusion.

The environments inside the Stockholm Central Station as well as those surrounding the station represent some of the public spaces in Stockholm. In order for them to serve a variety of people as well as to attract more people to travel by train and other sustainable means of transport, these public spaces have to become more vibrant as urban environments. Centralstaden will be a part of Stockholm City aimed to be an attractive place to stay for travelers, visitors and Stockholmiens.

In order for an urban setting to become vibrant, welcoming streets, available public spaces and attractive meeting places are required. Streets and public spaces should be provided with increased comfort, functionality

and more pedestrian-friendly concepts. Other important qualities are improved microclimate, comfortable seating and sufficient pedestrian space as well as places for peace and quiet.

Enhanced design detailing should also lead to a more eventful environment including active open ground floors and several visible entrances. Based on three areas Jernhusen, in collaboration with Spacescape, has developed indicators to work with: *Easy to reach, amazing to be and plenty to do.*

See appendix 6. *Rapport levande stadsmiljö (In Swedish).*

## Social inclusion – open to everyone

The notion of social inclusion concerns security, openness and accessibility. Security in the sense of transparency and being noticed as well as noticing others. Openness and accessibility are crucial in conditions ensuring pedestrian and cyclist traffic safety as well as social diversity.

For the zoning plan area as a whole, the proportion of qualitative free space should increase, enabling and attracting numerous people to stay, meet and take part in various activities throughout the day and all year round.

Relevant to a vibrant inclusive inner city, there are two effect goals for social value creation in the upcoming zoning plan:

- **The Central Station area must have open space, intended for everyone**

The goal implies that the zoning plan area must contain public squares, green areas and other open spaces including a variety of things to do, aimed at several user groups, ages and interests with activities, taking place throughout the day, week and year. These spaces must also be clearly public hence not excluding anyone due to age, gender, background or financial situation. Surrounding the open space vehicular traffic should be limited or completely removed in order to avoid barriers and noise.

### WHAT TO ACHIEVE:

- Number of city life functions per place (Appendix 6. *Rapport levande stadsmiljöer*).
- Proportion of socially significant open space (valuable green areas, parks, public squares, pedestrian streets) of the zoning plan ground area.
- Proportion of green area - proportion of publicly available green space of the zoning plan ground area.



VÄRDEORD: VÄLKOMNANDE



Stockholman is unique and carries a bit of the spectator's attitude, a mix of early hesitation, curiosity and reflection that turns into something unexpectedly new. As if we got to choose the best and then made it ours.

Stockholman is not a copy but its own brew of past, present and all sorts of influences from within and outside, innovative, desirable, reasonably familiar and rediscovered.

**Karolina Keyzer**  
Former City architect of Stockholm  
2010-2016

*A place that is perceived as safe by children and elderly is a nice place for everyone..*

→ **The Central Station area should have safe places**

Safe places require active ground floors both day and night. Walkways and urban spaces must be transparent and accessible within the general street structure. The active ground floors must be provided with a variety of content, including commercial and public activities and services, such as retail, culture, hotel lobbys, restaurants and cafés. The ground floors must include a high frequency of entrances. Dark places during the day and evening should be avoided. The urban landscape must provide good overview and key locations and streets must offer high pedestrian flow potential. In order to attract residents, all venues should be designed by the means of scale, furnishing, materials and surrounding building interface.

**WHAT TO ACHIEVE:**

- Entrance frequency per every 100 meters and active ground floors as a proportion of outreaching activities
- Orientability and local visibility as a low proportion of street structure featuring low spatial integration
- A low proportion of covered public outdoor spaces

**Physical integration**

In order to strengthen the physical integration of the zoning plan area with the rest of Stockholm City, urban space continuity as well as entrance frequency and variety of events, must be improved. In order to improve area orientability, incorporation of urban space visibility and landmark sight lines is crucial. In the Central Station area, the reduction of perceived distances regarding intrusions and barriers such as noise, feelings of insecurity or lack of attractiveness as well as changes in altitude and direction is essential.

Relevant to physical integration there is a goal for social value creation in the upcoming zoning plan:

→ **The Central Station area should be pedestrian and bicycle friendly**

A pedestrian- and bicycle friendly Central Station requires ease in mobility and wayfinding. Furthermore the urban environment should be perceived as spacious, safe and secure and it should be easy to park your bicycle near entrances. Disabled people being able to move between different street levels is critical.

**WHAT TO ACHIEVE:**

- Connectivity and quality in pedestrian network
- Connectivity and quality in bicycling network
- High proportion of pedestrian and bicycle area of total street area in the zoning plan area

## EXPLAINING THE COMMON GOALS:

- *With the station as a hub, to clearly contribute to developing the centre of Stockholm into an active, integrated and attractive 24-hour city with a varied content, living street-levels and attractive public spaces.*

# An attractive 24-hour city

## Central attractiveness

The station area is located at the city's most central location. At this spot new offices and housing are able to attract companies, labour and residents from all over the region, as well as nationally and internationally. Offering a central office space close to communication, appealing to international companies that otherwise would choose e.g. London, Paris, Copenhagen and other major European cities, the location is particularly attractive. The fact that more people can travel collectively to work will support the station in boosting surrounding business, service and retail.

By enhancing the site's attractiveness and competitive edge during a major part of the day, several purposes are achieved simultaneously. People wanting to travel to and from the premises, wanting to move to or reside, or choosing to work and rent premises within the station areas, the buildings will be safer as well as more vibrant, hence increasing property value. Within this area, the zoning plan also incorporates objectives regarding the innovation of social significance: Relevant to an attractive 24-hour city there is an effect goal for social value creation in the upcoming zoning plan:

## → *The Central Station area should be one of Stockholm's most vibrant places*

Turning the Central Station area into a vibrant place requires local, around the clock active city life, incorporating a natural mix of flows to and from the station. This demands a variety of activities and destinations, being mutually active from early morning to late evening, every day of the week.

Day activity are generated by offices, restaurants, shops, service and culture but also by outdoor work-places and various events in public space. Evening activity are generated by housing, hotels, shops, culture, nightclubs and restaurants. Travelers to and from the Central Station as well as the station staff members contribute to life around the clock. Areas that are inhabited around the clock also contribute to increased security.

### WHAT TO ACHIEVE:

- *Optimized share gross area intended for people inhabiting the area during daytime (offices, restaurants, shops, service and daytime cultural activities)*
- *Optimized share gross area intended for people inhabiting the area during nighttime (housing, hotels, trade, evening cultural activities, nightclubs and restaurants)*
- *Number of Central Station and City Terminal entrances*

## Mix, dynamics and circularity

Public spaces and content should contribute to people's willingness to stay, dwell and to meet within the area as well as to use the urban space in various ways. The large flow of people inhabiting this unique place must be taken advantage of, hence the need for a more varied mix of content than is offered today. The real challenge is to accompany the Central Station and Cityterminalen as being part of a hub, providing a fresh and diverse offer. This approach has to measure up to future consumption patterns regarding food and drink, social and cultural experiences, retail, service and recreation.

The only thing certain is the constant change. Therefore a dynamic range needs to be presented, offering multi-functional premises and convertible zones. Lower levels must incorporate a well-planned ratio of open and closed parts as well as a feasible mix between public and private activities. The area should offer spatial possibilities for creativity, innovation and local initiatives.



CHARACTERISTICS: EFFERVESCENT



*The statue of Nils Ericson by the Central Station main entrance dressed up for Stockholm pride festival*

The implementation of different types of circularity and shared space premises will promote various urban events and educational elements, providing a future-proof built environment. Within this context is an effect goal for social value creation in the zoning plan:

→ ***The Central Station area should be a varied destination***

A varied destination suggests that the Central Station area includes sites to visit as well as places and facilities embracing different types of events and happenings aimed at culture, democracy, fairs and conferences etc. Located as an entrance to the capital of Sweden there is great potential for creating unique meeting places, and

the different entrance points also serves as important representative spaces, creating a positive first impression. Within this context the city panorama is an essential quality.

**WHAT TO ACHIEVE:**

- *Space for creating destinations (conferences, fairs, events, culture and entertainment including Stockholm Waterfront Congress Centre and other areas adjacent to the zoning plan area)*
- *Open space including conditions for arranging events.*
- *Views from station entrances - visible space and landmarks from each station entrance.*

## EXPLAINING THE COMMON GOALS:

- ➔ To create a representative entrance to Stockholm and Sweden, with the Central Station as a clear symbol and destination that relates to its historical significance.

# Architecture for a Stockholm to love

## Architecture for the future of Stockholm

To travel is to experience different places. Traveling by train often means that you end up right in the centre of your final destination centre and its pulse. Station based urban development will reinforce the unique character of the current destination by the means of site-specific architecture. For Jernhusen, architecture is crucial in order to succeed in reaching our goals. In a practical sense, it is about the deliberate management of several flows and an efficient organization of areas aimed at amenities and transport.

In terms of design, it is valuable that travelers and visitors can experience the identity and uniqueness of the destination. It comes down to respecting historical values but also to creating future architectural cultural heritage, relating to the place in terms of form, function and aesthetics, thus asserting their uniqueness during the time it was created.

## Architecture with challenges

The architecture being created in the Stockholm Central Station area will meet many exciting challenges and interests. It is a complex task of great dignity as well as an opportunity to design centrally located buildings carrying great symbolic value, taking into account the national interest of the cultural heritage that include the zoning plan area.

*See appendix 3 and 4 for Kulturmiljöutredning and Konsekvensanalys. (In Swedish)*

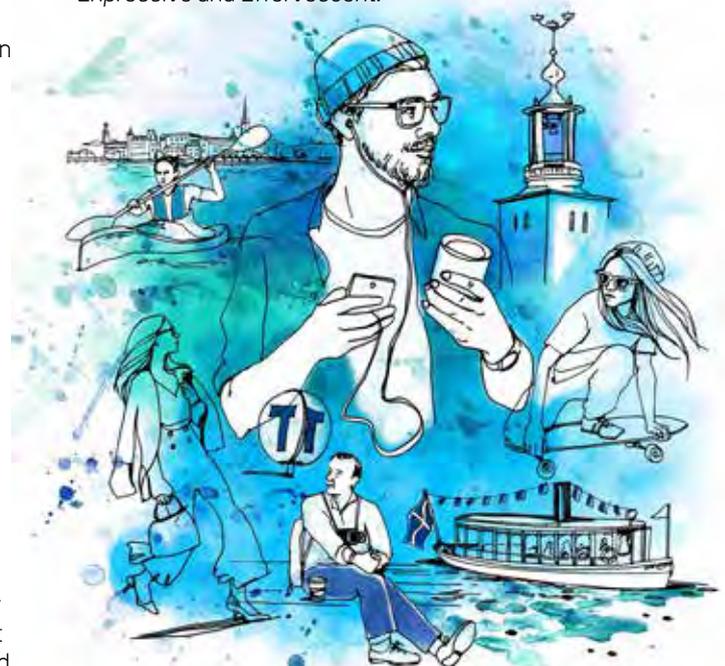
The architecture should maintain the tradition of Scandinavian and Stockholman architecture and at the same time look ahead. It should be innovative and confident characterized by a welcoming and positive appeal adding warmth and human scale to the place, both being absent qualities today. We want to add something beautiful to Stockholm and to Swedish architecture. To combine the need for rationality with careful detailing withstanding up-close inspection will be a challenging task. Warmth, optimism, human scale and long-term perspective are words expressing this.

The architecture should enable change of activities over time, especially at the lower level ground floors. The interior events of the buildings, not the configuration of facades, should set the boundaries for how a ground floor develops over time. The public parts of the buildings must relate to the public space and businesses must be allowed to expand to the street during warmer seasons.

## More Stockholm to love

The architecture of Centralstaden will through new buildings, sites and streets contribute to enhance the impression of the existing buildings and the area as a whole. Creating additions to an area of fairly recent and large-scale architecture yet relating to the national interest of cultural heritage is a real challenge. New architecture will ultimately contribute to the notion that there is *more Stockholm to love* by:

- becoming a future architectural cultural heritage serving as an representative entrance to the capital, consciously relating to the surroundings and enriches by enhancing existing qualities.
- site-specific architecture reflecting the past as well as future needs.
- experiences on all city scales; from the extended city perspectives to the intimate and intricate scale, enabling activity variations.
- encountering the waterfront by forming a symbolic and more appealing and cohesive silhouette, utilisation as well as expression.
- architectural concepts expressing the notions of *Guiding, Welcoming, Authentic, Stockholman, Expressive and Effervescent.*



CHARACTERISTICS: STOCKHOLMIAN



*The architecture being created in the Stockholm Central Station area will meet many exciting challenges and interests. It is a complex task carrying great dignity as well as an opportunity to design buildings with great symbolic value in the heart of Stockholm..*

## EXPLAINING THE COMMON GOALS:

- In a long-term perspective, to realize the area's full potential and ensure an economically viable solution for the benefit of society.

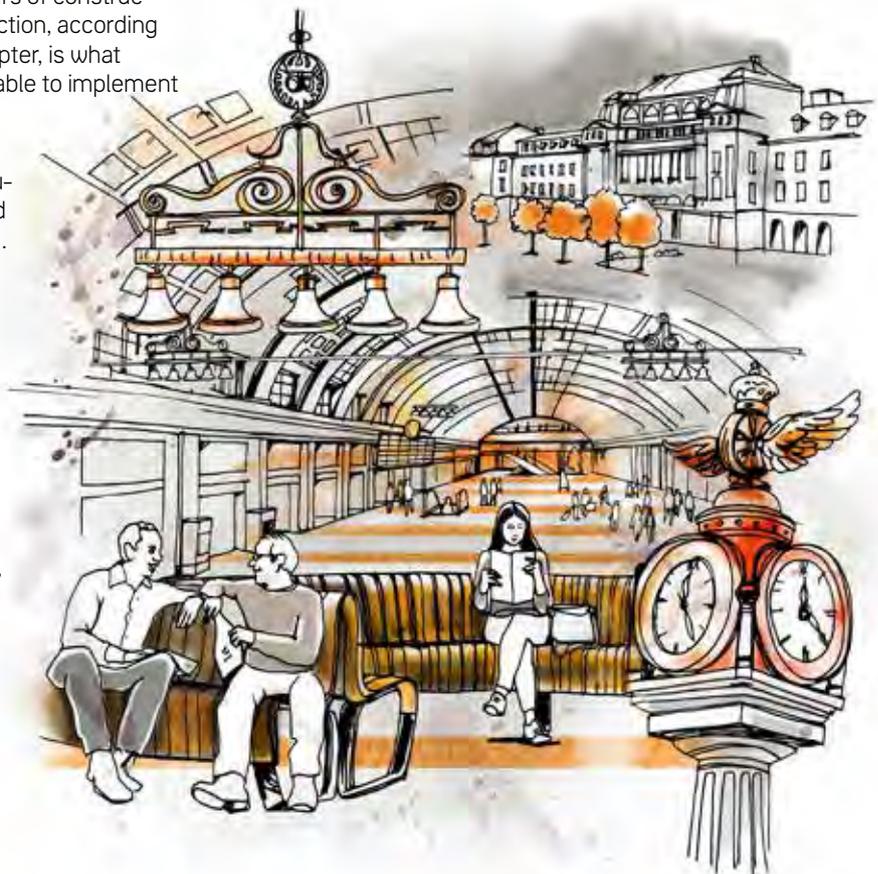
# A feasible & socially beneficial solution

## A feasible development

The fantastic potential of Centralstaden can only be utilized if Jernhusen, in collaboration with the City of Stockholm and the Swedish Transport Administration, has the possibility to realize ideas by executing our plans. Our hope is that the goals and requirements described in this program will generate proposals that we are prepared to implement in full, without unnecessary compromises. The solutions must be beneficial to society as well as commercially sustainable for those who are to implement the plans. Criteria for the above are:

- All new buildings, the station function and the decking must be financed by the revenues that is created by rentable space. Jernhusen does not receive any government funding, but must deliver returns to the Swedish state through value-added results in the business. 150,000 new square meters of construction with an area distribution per function, according to descriptions following in next chapter, is what Jernhusen deems necessary to be able to implement the development.
- To create long-term attractiveness, functionality and quality providing business sustainability by high demand and limited needs for reconstruction.
- That the proposals must be possible to implement while offering good urban and traveller functionality in regards to the expansion stages planned by Jernhusen in collaboration with the Swedish Transport Administration and other parties. Description of expansion stages, see Governing conditions.
- The areas created must be efficient, generating value for travelers, visitors and tenants. Investment costs must be balanced by revenue-generating areas. The aim is to create a large proportion of multi-functional areas.

- The Centralstaden building blocks and structures must enable an efficient and attractive main structure regarding business and communication areas enabling a variety of content over time. This also concerns the structure intended for horizontal and vertical flows.
- Commercial areas in the Central Station must provide a cohesive, strong identity framework allowing change over time, incorporating a blend of content and events involving different parties.



CHARACTERISTICS: AUTHENTIC



*The Centralstaden building blocks and structures must enable an efficient and attractive main structure regarding business and communication areas enabling a variety of content over time. This also concerns the structure intended for horizontal and vertical flows.*

T-Centralen  
Stockholm City

T-Cent  
Stock

- New buildings within the zoning plan area must be climate neutral from an LCA-perspective

## A climate-friendly district

### Climate-neutral development

Centralstaden should contribute to an increased amount of people choosing to travel in a climate-friendly way, in everyday life as well as during leisure time. However whatever is built also needs to be climate-friendly. The most sustainable architecture is the one you enjoy, simply because it is nurtured and used in the long run. New buildings within the zoning plan area need to be climate-neutral according to the LCA. Within this context the definition of climate-neutral applies to the calculation method used in the certification ZeroCO2 from the Sweden Green Building Council, see sgbc.se. Additional structures must be made as climate-friendly as possible. The following subcategory goals have been formulated:

- Buildings and ground cover in Centralstaden must be performed using robust and sustainable materials that mature beautifully hence minimizing climate footprint according to the LCA. We invest the most in parts with the longest building lifespan while those with shortest lifespan, we can keep simpler. The primary decking construction as described in Governing Conditions being an exception. Usage of recycled materials is appreciated.
- Centralstaden must have zero energy usage per sqm on an annual basis.
- Centralstaden will significantly cut power peaks compared to the levels in 2019.
- Centralstaden must have a 100% share of energy deriving from renewable sources.
- Products and materials should avoid the spreading of environmentally and health hazardous substances into air, water and soil. These materials should also generate terms for good quality working conditions as well as a feasible working environment during the production and construction phase.



Symbolen för certifieringen NollCO2 från Sweden Green Building Council

### Greenery and water

The development of station areas often appear in fairly harsh environments, offering only little or no greenery at all. At this point there is a need for green and blue structure development throughout the station areas by:

- Resilient water management preparing for future climate change and extreme rainfall.
- Surface water management and greenery for the purification of surface water.
- Creating greenery and water conditions in order to promote good health and biodiversity.
- Enhancing the visibility and accessibility of the existing green and blue structure throughout the surroundings.
- Reinforcing the dispersal and completion of the critical parts of the urban green and blue infrastructural puzzle, providing ecosystem services.

### Centralstaden ecosystem services

In order to identify which actions to take delivering a more sustainable site in the future, the zoning plan conditions regarding ecosystem services have been studied.

*See appendix 7. Förstudie Ekosystemtjänster. (In Swedish)*

In regards to Centralstaden mainly five ecosystem services are relevant according to figure 5. Specifically, at least the following scope of ecosystem elements regarding the zoning plan area is recommended:

1. Centralstaden should include an open space in terms of a green public meeting place, large enough for establishing habitats.
2. Centralstaden should include larger trees and functions substantial enough for establishing habitats. Streets and entrance areas planted with trees in tree pits according to the standards of the City of Stockholm *Växtbäddar i Stockholm stad - en handbok 2017*.
3. Centralstaden should have green street areas including streets planted with trees featuring undergrowth rich in species, for purification of surface water and two- to three-layer vegetation in street zones.
4. Traditional soil bed creepers, apart from vertical soil beds.
5. Roof surfaces should be made green using biotope roofs, to as large extent as possible.



*Jernhusen is the trustee of a cultural heritage presenting an identity based on the historic railway park but also being based on the new narrative of sustainable means of transport and with that – a more sustainable lifestyle.*



**4.4**  
**SOCIAL INTERACTION**  
 Greenery and nature offering meeting places aimed at people of diverse backgrounds and ages.



**4.5**  
**CULTURAL HERITAGE AND IDENTITY**  
 Greenery and nature creating attractive environments, promoting local identity as well as being a part of the cultural heritage.



**2.6**  
**PURIFICATION AND REGULATION OF WATER**  
 Wetlands, green areas and other ecosystems delay, filter and purify water from pollutants as well as prevent floods, erosion and drought.



**2.1**  
**REGULATION OF LOCAL CLIMATE**  
 Greenery and nature contributing to a local regulation of temperatures as well as to an increased degree of humidity, shade and wind protection.



**1.1**  
**BIODIVERSITY**  
 A large variety within biological species and large range of ecosystems allowing for adaptation and resilience.

FIGURE 5. In regards to Centralstaden mainly five ecosystem services are relevant.



*The commission area is located in the heart of Stockholm, where Riddarfjärden meets Norrmalm, near Stockholm's famous City hall, the Swedish Parliament House and the Government quarters. When arriving to Sweden's capital by train, this is the gateway to Stockholm.*



# The commission

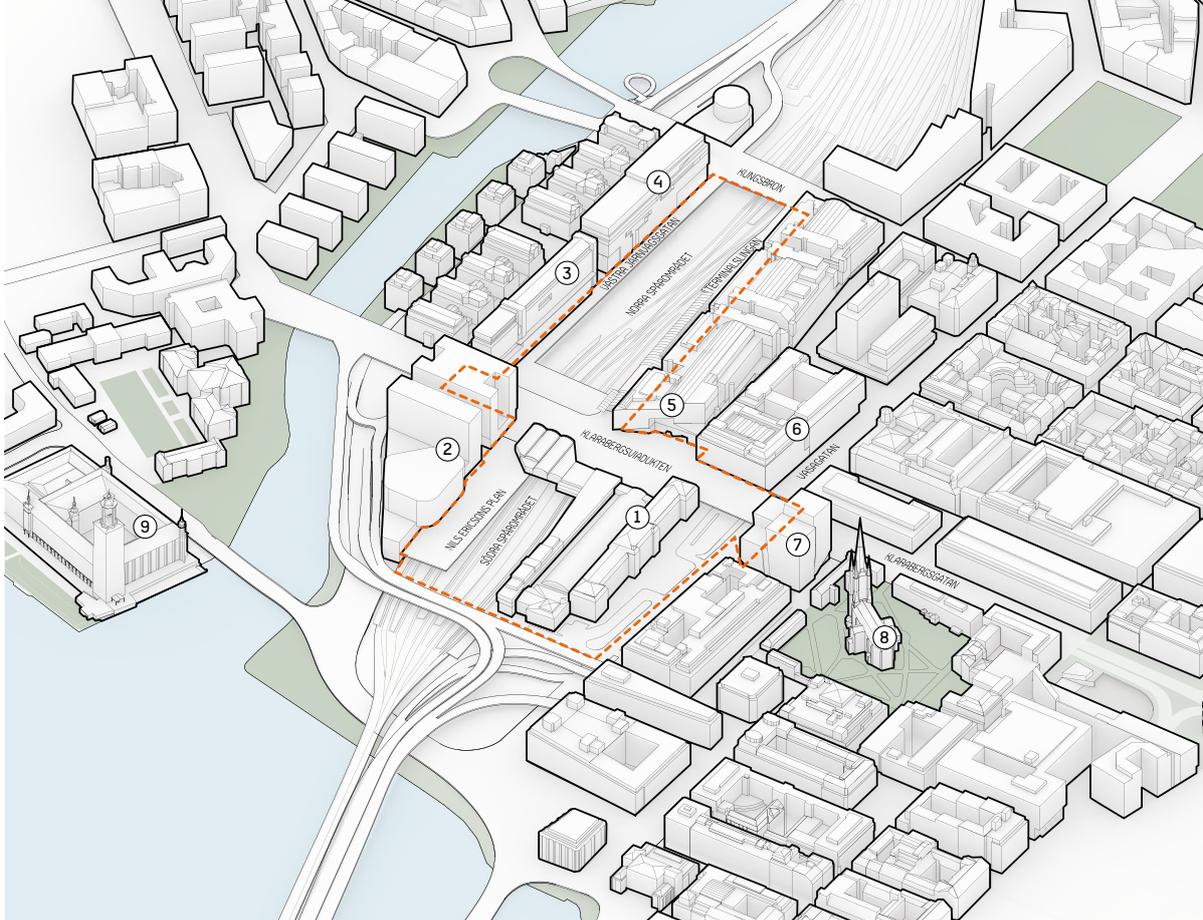


FIGURE 6. The commission area (orange outline) with surrounding urban fabric. 1.Stockholm Central Station 2.Waterfront Congress Centre 3.Klarabergshuset 4.Kungsbrohuset 5.Cityterminalen & World Trade Center 6. radisson blu royal viking hotel 7.Scandic continental 8.S.ta Clara Church 9.Stockholm City hall

# The commission area

The commission area is located in the middle of central Stockholm, where Riddarfjärden meets Norrmalm, near Stockholm's famous City hall, the Swedish Parliament House and the Government quarters. When arriving to Sweden's capital by train, this is the gateway to Stockholm.

The zoning plan area stretches from Vattugatan in the south to Kungsbron in the north, incorporating the track area, parts of Klarabergsgatan and Centralplan and the Cityterminalen traffic deck. The track area will be covered by an overdecking.

The existing Central Station and Cityterminalen are also included in the zoning plan area in the sense that the additional buildings will be appropriately connected to the Central Station's Centralhallen and by other means of public transport infrastructure, forming a new whole. Prior to the overall development in the area and the expansion of the tracks zone, the C-house close to the tracks as well as the Upper entrance hall at Klarabergsviadukten, will be demolished according to figure 7.

A number of streets and places are incorporated in the development; Klarabergsviadukten, Västra Järnvägsgatan, Terminalslingan and Nils Ericsons plan as well as Centralplan. The surrounding properties are not included in the commission but are also affected by the development; Stockholm Waterfront Congress and hotel, Waterfront Building, Royal Viking Hotel, World Trade Center, Klarabergshuset and Kungsbrohuset.

See appendix 2 *Befintliga byggnader (In Swedish)* .

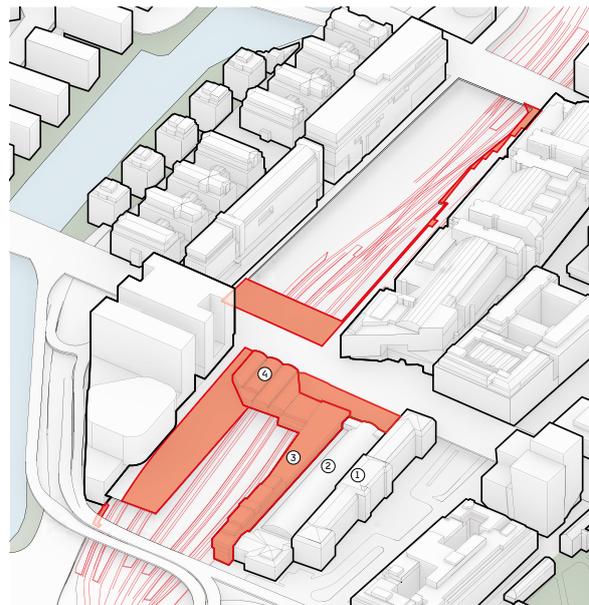


FIGURE 7. Red structures will be demolished or changed considerably due to the development 1.A- house 2.B- house -Central Hall 3.C- house 4.Upper entrance hall.



A total of 150,000 m<sup>2</sup> gross area  
new construction

# The commission brief

The parallel commission brief is to develop a structural plan for the entire zoning plan area and the mobility hub that the place constitutes. The brief also comprises the architectural design of the spaces for travel, the urban spaces and the buildings on a schematic level.

## The Scope

### 1. The station area as a mobility hub

A development of the station area by including both existing and new functions in forming a new whole as Central Station and a future mobility hub.

### 2. Sustainable mobility and traffic lanes

Pedestrian, bicycle and public transport connections as well as vehicle traffic going to and operating within the station area.

### 3. Public space and streets

Development of existing and additional streets and urban spaces as well as green structure.

### 4. Climate-friendly architecture

- New station areas
- Offices and workplaces
- Housing
- Retail and service
- Culture

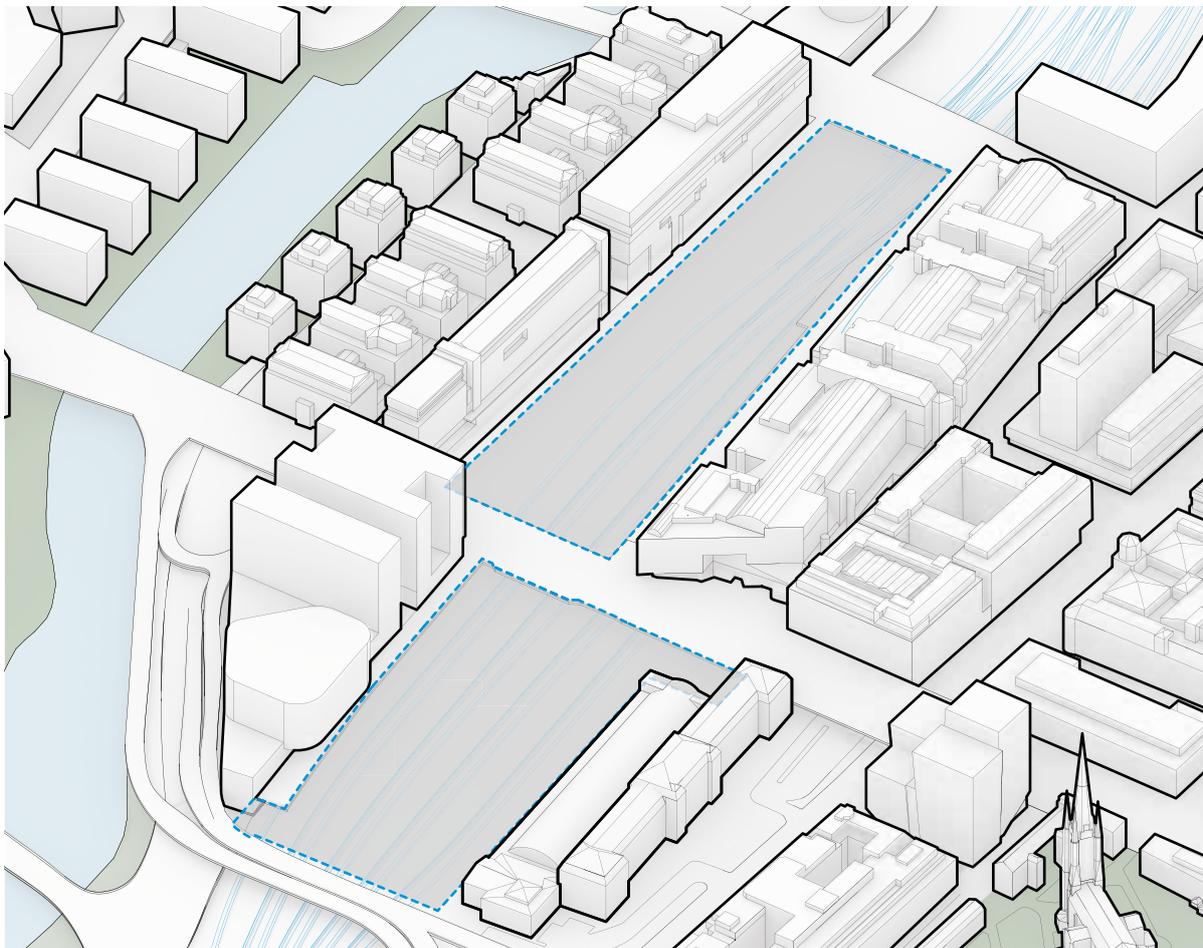


FIGURE 8. The commission starting point; new track area, overbuild, the A & B -house.

SCOPE:

➔ To develop and design the mobility hub that the Stockholm Central station are constitutes.

## Scope 1/ The station area as a mobility hub

### A multimodal hub

The parallel commission includes a proposal of how the Stockholm Central Station area can be transformed into a functional and attractive multimodal hub for sustainable means of transport, easily accessible to everyone and highly integrated part of Stockholm City.

Being Sweden's largest hub for public transport, the area includes train traffic at Stockholm Central Station, the buss traffic passing Cityterminalen as well as a direct connection to commuter trains at Station Stockholm City and the metro lines from the stop T-Centralen. Tram and bus lines also have stops in the area. Developing the multimodal hub should:

- increase capacity and traveler comfort, accessibility and service.
- improve connections within the station area and between sustainable means of transport adjacent to the Stockholm Central Station.
- optimize flows of travelers and visitors around the clock for increased security and attractiveness.

### The future Central Station

The Stockholm Central Station is the centre of the hub and the proposals should present a future Central Station, in a combined function offering easy access to and from the trains, high overall accessibility, comfort and the sense of being in the middle of Stockholm, the capital of Sweden. The Stockholm Central Station should deliver a seamless, smooth and attractive traveler experience, from the city to the train and the other way round. The future Central Station incorporates the following parts;

- The Central station including today's A- and B-houses, which will be linked to new buildings on the decking construction south of Klarabergsviadukten, in which new vertical platform connections establish the core of the new station area.
- Station functions of additional buildings located on the decking construction north of Klarabergsviadukten in which new vertical platform connections are added
- Cityterminalen, though already linked to the Central Station today, the terminal requires a more significant connection to station flow and experience.

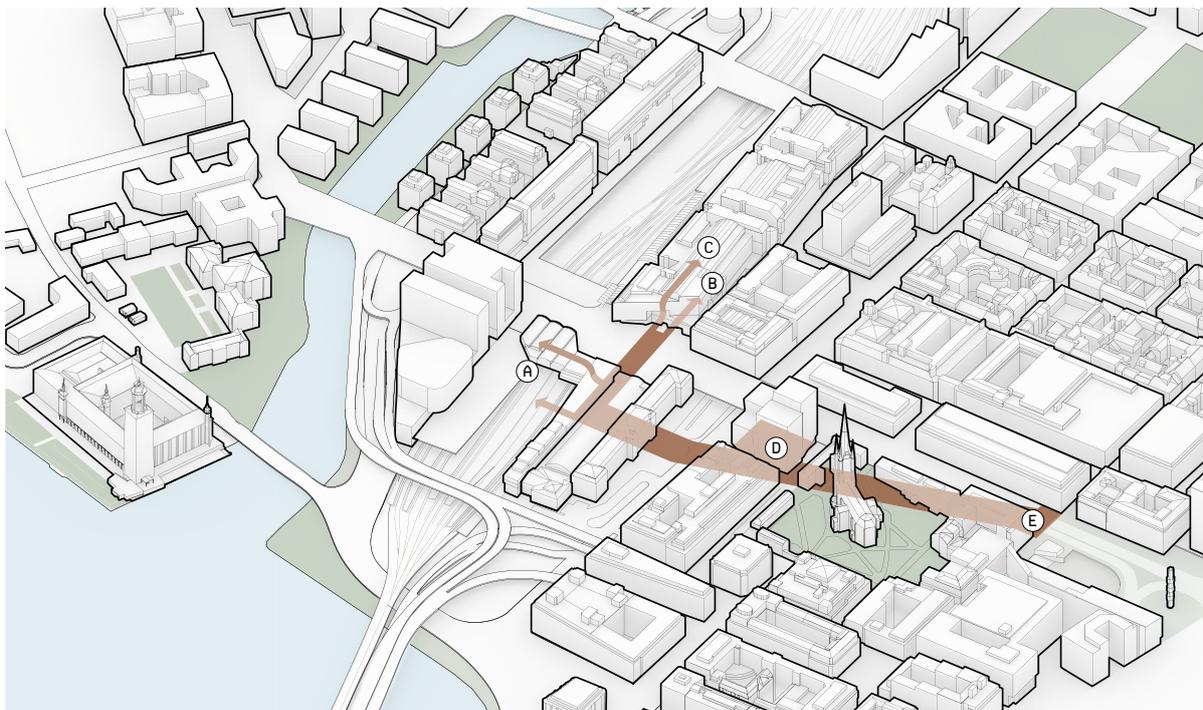


FIGURE 9. The multimodal hub; A & B. Stockholm Central Station: long-distance & regional train traffic B. Airport link train C. Cityterminalen: long-distance & regional buses D. Station Stockholm City: commuter trains E. T-Centralen: Metro.



### Long-distance travelers

The long-distance traveler also needs sufficient functionality, however general advancement increases the demand for various experiences related to the trip. They take a particular interest in social and recreational aspects of traveling, suggesting a demand for comfort and attractiveness during the actual journey until arrival at the final destination.



### Commuters

Commuters are part of an increasingly large group, regional commuters being particularly interesting in being an expanding group expected to stay longer at the station compared to local commuters. Taking the train allows people to do other things while traveling and to run errands at the station before embarkment, hence facilitating everyday life.



### Business travelers

For the business traveler, the train competes with air travel in terms of short distance comfort. By train, though, you arrive centrally and you are close to everything.



### Visitors

Whether the station works as a meeting place or functions as the spot for a high-quality range of restaurants, bars or shops, the station must offer the visitor something more than just being a place filled with travelers.

## The station - a place for everyone

As public traveling increases, the station's status as an entrance and a meeting point in the city becomes increasingly important.

In order for various groups of people to be able to respectfully gather in the same place on their own terms, the social sustainability aspects of the station as a public space are vital.

Today's Stockholm Central Station is one of Stockholm's and perhaps Sweden's most inclusive public spaces. The station incorporates nearly round-the-clock accessibility, including all people, regardless of financial and physical ability. This becomes obvious in regard to the rich variety of people passing by and staying at the station every day.

The station's supply is essential for generating meeting places and for the station to occupy a core position in society. The basis for station supply and content is access to the flows of travelers and these being accordingly docked to supplies. The basics of local conditions are equally important as the likelihood of the station being a destination in itself, as a supplement to the overall city offer, utilizing its excellent public transport location.

See appendix 8 for additional functional requirements regarding the station.

## Supply & target groups

With service, food & drink and experience-based concepts being attractively located, the station is able to operate as a natural meeting place aimed at several target groups simultaneously; travelers, visitors, tourists, residents, workers, shopping customers and Stockholmers. Equally the combination of the station and other activities such as offices or culture has potential value.

### SUMMARY OF SCOPE 1

- Design of the future Stockholm Central Station, in regard to structure and content, including vertical and horizontal connections. According to Governing Conditions these links need to be adapted to a new tracks layout as part of a whole, incorporating both current and added buildings.
- Proposal for programming of space.
- Traveler flow layout within and between the different parts of the future Central station and in regard to nearby sustainable modes of transport.
- Arrangement and stop locations regarding connecting mobility solutions at the Central station.

SCOPE:

- ➔ To design future traffic lanes distributing space between different modes of transport passing through the zoning plan area in order to interlink it with the surrounding Stockholm City.

## Scope 2/ Sustainable mobility and traffic lanes

### Increased traveler flows & more work places

According to the Swedish Transport Administration's dimensioning prerequisites in the year of 2045, morning traveler flows at Stockholm Central Station are estimated to 30,400 and afternoon traveler flows to 29,700 during peak hour. An estimate of 7,000 to 10,000 new work places can be generated by the decking construction. Based on this assumption, inquiries have indicated how different modes of transport can develop throughout the area, hence generating the dimensioning input for the task.

### Focusing on the pedestrian

Traffic solutions must be designed on the conditions of travelers and pedestrians. The proposals must demonstrate overall distribution of space for increasing the share of pedestrian space as well as the quality and accessibility of the various zones. Furthermore the connectivity of pedestrian network should be improved.

### Bicycling

Future traveller predictions and the increased amount of workplaces by the Central Station indicate a need for extended bicycle parking facilities. Analyses indicates a need for 2600 bicycle parking in total in the zoning plan area, where 660 of these are existing, 740 correspond to the increased demand of travelers and 1200 refer to the need generated by new workplaces within the zoning plan area.

### Buses

Cityterminalen continues to function as the node for long-distance buses, charter bus traffic and airport buses. By developing the tracks area, lifts and escalators will be located more adjacent to Cityterminalen, hence creating a potentially more uniform traveler experience as the train station and the bus terminal more apparently connect. In the future the bus lines of Region Stockholm will most probably pass Cityterminalen in addition to those already passing on Kungsbron and Kungsgatan.

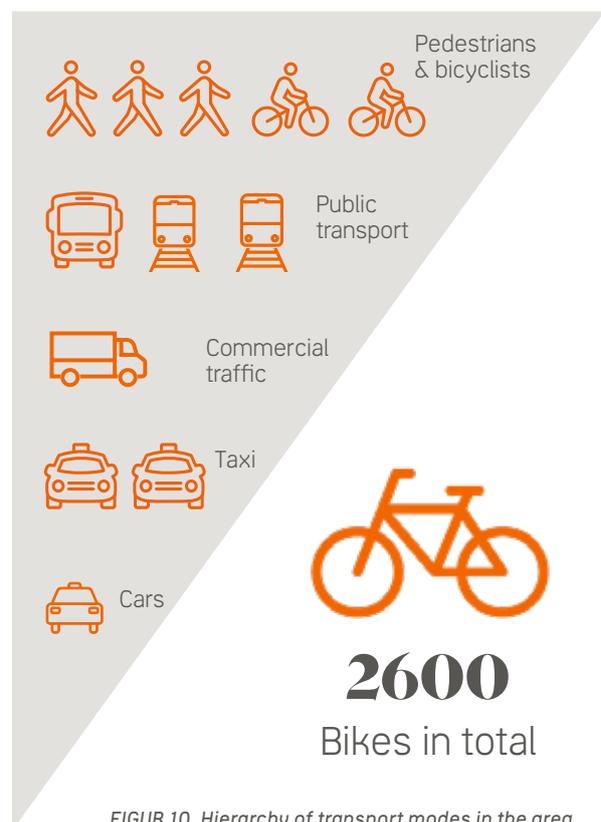
### Commercial traffic

In order to secure the capacity of the additional buildings located on the decking construction the transports involving goods and waste have been reviewed. The existing station supplies are currently being handled from a goods reception, located south of the A-house and it is assumed to continue operating also serving the the new buildings south of Klarabergsviadukten. For new

buildings north of Klarabergsviadukten the current working hypothesis is to establish a new goods reception in connection to the graveled area between the tracks area and Klarabergshuset. Commercial traffic to a new goods reception will arrive via Blekholmmsgatan. In order to reduce the total number of heavy transports within the area, clustered transports will operate between the new goods reception and a hub outside the city. The majority of the area's commercial traffic should go to and from the current and future goods reception operating once the decking construction is completed.

### Taxi

Based on the current need for taxi services, predictions have been made regarding future travel development and their impact on spatial requirements. Based on these predictions, a consistent and regulated taxi service is proposed for clarity and accessibility.



FIGUR 10. Hierarchy of transport modes in the area



Traffic solutions must be designed on the conditions of travelers and pedestrians.

To disembark the train platform and walk to the taxi zone should not take more than five minutes. New technology and new ways of utilization will reduce the need for taxi parking space, hence converting attractive areas into meeting places or into space for activities. Today's number of parking spaces at Centralplan is believed to be sufficient in order to meet future demands throughout the entire zoning plan area. At Cityterminalen, World Trade Center and Nils Ericsons plan delivery and pick-up zones are likely to be required in the future as well.

### Car traffic and residential parking

In Centralstaden, private vehicle traffic must be minimized as far as possible, the exception being accessibility requirements in regard to the disabled. Assuming about 100 housing units within the zoning plan area, residential parking will pose a challenge. Jernhusen and City of Stockholm's Traffic planning office examine the idea of the area as a pilot project for the parking-ratio 0, this also being the starting point for scope 2 of the brief. In order to justify these deviations the proposals should include innovative solutions hence becoming a pioneering project in regard to everyday life sustainable mobility. If residents want their own car, it will be possible to rent a parking space in a parking garage nearby.

### Residential parking for the disabled

Due to height differences between the overbuild and the surrounding streets required parking for the disabled must be accommodated at Västra Järnväggsgatan.

## Measures for P-ratio 0

Centralstaden's favourable location and great access to public transport combined with the supposed concepts for future housing, result in the following mobility measures, in order to reach parking ratio 0:

- Qualitative, innovative bicycle parking facilities, placed in close proximity to the housing area.
- Bike pool including cargo bicycles.
- Public bike pool, placed in the zoning plan area.
- Proximity to carpooling arrangement, in regard to the zoning plan area, fulfilling the need for a car on special occasions.

## SUMMARY OF SCOPE 2

- Schemes of different flows of traffic within the zoning plan area
- Design of the traffic spaces and parking areas within the zoning plan area regarding governing conditions.

## SCOPE:

- ➔ To organize, design and program public spaces and streets within the zoning plan area, incorporating solutions regarding scope 2. New urban spaces should also be described.

# Scope 3/ Public space and streets

## Centralplan

An ongoing project for the transformation of Vasagatan along Centralplan entails more pedestrian and bicycle space as well as certain on-site adjustments regarding taxi services. Today 70% of this area is planned for traffic line up or transit while only 30% is intended for pedestrians. These numbers should be reversed. The development of Centralplan should reinforce the historically representative character, hence creating a more cohesive public square incorporating a slower pace, additional greenery and residual space. Car designated areas should be reduced in favour of delivery and pick-up zones.

## Klarabergs torg

Klarabergsviadukten should be transformed into a new city destination – a new Klarabergs torg. Klarabergs torg should connect the northern and southern part of the zoning plan area, thus establishing a significant urban space at the juxtaposition of Klarabergsgatan, stretching from Sergels torg. Klarabergs torg needs its own character as a contrast and complement to the pearl ribbon of Stock-

holm city spots –from Berzelii park via Norrmalmstorg, Kungsträdgården, Sergels torg to the Central Station and on to Kungsholmen.

The connection between Klarabergsviadukten and Centralplan should be made more attractive, partially using the expansion of a currently shielded escalator and by using new open vertical connections on the south side of the viaduct.

The design of Klarabergs torg should focus on pedestrians, thus creating places for meetings, to stay, outdoor cafes and various all-year-round activities. The challenge is the spatial organisation of zones intended for e.g. bicycle areas and public transport, while presenting enhanced residual qualities.

## Nils Ericsons plan

Even though the southern decking construction establishes new conditions for Nils Ericsons plan by improved connections to Vattugatan, the new buildings on top of the decking construction provide the most important link.

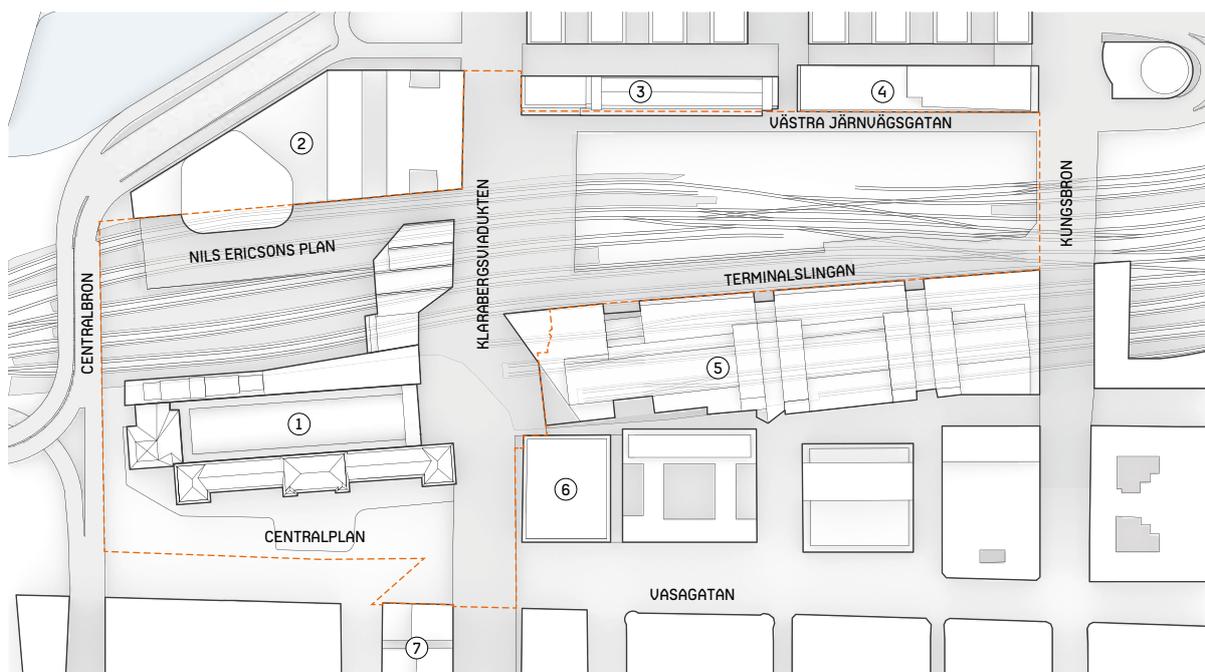


Figure 11. Public space and streets within the zoning plan area (orange outlines). 1. Stockholm Central Station 2. Waterfront Congress Centre 3. Klarabergshuset 4. Kungsbrohuset 5. Cityterminalen & World Trade Center 6. Radisson Blu Royal Viking Hotel 7. Scandic Continental

The seasons play an important part. The light falls over the city in different ways depending on the season. And the large mirrors of water act as huge reflective screens. The light in Stockholm is thus created not only by the sun but also by the water.

**Jepe Wikström**

Stockholm photographer and publisher  
Bokförlaget Max Ström



Uyn över vattnet och Riddarholmen.

The shape and function of the space should promote staying as well as various events. How to combine necessary taxi services and deliveries for fair activities with improved residual qualities and on-site activities, is an important issue. Other key issues are ground floor design and building height adaptation to solar access.

New connections to Vattugatan and the link to Tegelbacken including the street towards the City hall are crucial in regard to the current street integration with the surrounding urban context. Some traffic conditions are indicative of Nils Ericsons plan;

- Design of pedestrian conditions providing connections to a new walkway along Vattugatan.
- Bike lane connections to a new bike lane along Vattugatan.
- The current rudimentary staircase connecting Nils Ericsons plan to Västra Klara Mälarstrand should be replaced with a more attractive and representative solution linking the different levels and reinforcing the connection to the Stockholm City Hall as a target destination.
- Vehicles will only enter the site from Klarabergsgatan

from the west, turning at Nils Ericsons plan, delivering goods to the Waterfront Building or picking up or dropping off hotel guests or visitors for the congress centre by taxi.

- Taxi and commercial traffic from Vattugatan from the south might be possible despite certain risk factors and traffic conflicts. Proposals improving the area as a whole could be accepted. However, there will be no exit towards Centralbron.

### **A public space for Stockholm panorama**

As the tracks area between Klarabergsviadukten and Vattugatan is covered, new non-existent areas will be created along the waterfront of Stockholm. The prospect of creating a new public space should be fully comprehended, providing everyone passing through the area with a magnificent panorama of the Stockholm open water, the City Hall and of Riddarholmen. It must be publicly accessible from surrounding streets and spaces and may include restaurants, cafes, activities as well as greenery. The conditions enable creating one of Stockholm's most magnificent public spaces.

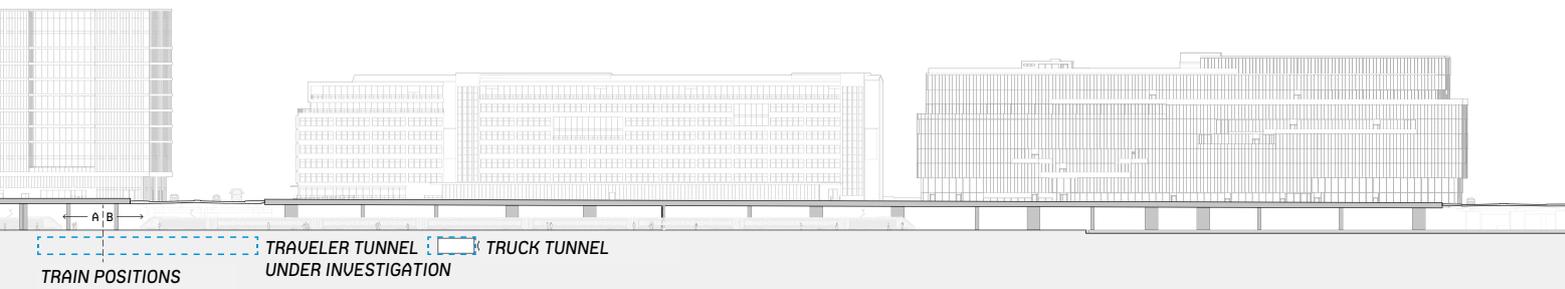


FIGURE 12. Longitudinal section facing west of Västra Järnvägsgatan, the future decking, new tracks and platforms.

## Västra Järnvägsgatan

The buildings on the decking construction should give Västra Järnvägsgatan a new identity as an urban space. The street should become a more dynamic space on pedestrian terms holding smaller outdoor cafes and greenery that is missing today. Västra Järnvägsgatan's connection to Kungsgatan and Klarabergsviadukten will be crucial for reinforcing the link between Kungsholmen and City. The street towards Nils Ericsons plan should also be refined. The functional requirements are;

- The street must be designed on pedestrian terms
- Bicycle traffic as a local function, possibly on pedestrian terms.
- Admission of access mobility services for the disabled or emergency vehicles only
- Parking space for disabled and access to entrances must be resolved along the street and along additional intersecting streets.
- A 3.5 metre carriage width for emergency vehicles alternatively lanes for 12 meter long vehicles.
- Commercial traffic according to scope 2, one-way traffic being a possible exception.
- Optional street width, however not exceeding 16 meters between ground floor fronts.
- Intersecting streets, for walking and cycling, from Västra Järnvägsgatan are requested.

## Terminalslingan

Future traffic on Terminalslingan has not been completely determined, however according to scope 2 and 3, the street should be prepared for placing stops of Region Stockholm's bus lines along Terminalslingan in addition to existing long-distance and charter bus traffic. The street is planned for two-way bus traffic, including entries and exits at Kungsbron and Klarabergsviadukten. The Terminalslingan should also be made safer, more obvious and more pedestrian friendly. The functional requirements are;

- A 13 meters wide roadway stretching as far as possible to maximize vehicle access capacity, flexibility and robustness.
- The sidewalk on the east side of Terminalslingan is primarily used for passengers boarding or disembarking buses at the gates and passengers wait indoors.
- The sidewalk on the west side of Terminalslingan must have the capacity to accommodate both waiting passengers as well as those boarding or disembarking. The pavement should also present an unoccupied north-south passage walkway.
- North-south passage could strategically also take place through Cityterminalen.
- The amount of pedestrians that need to cross the roadway must be minimized. The option to cross must be arranged in a traffic-safe manner, resulting in minimal disruption of bus logistics.

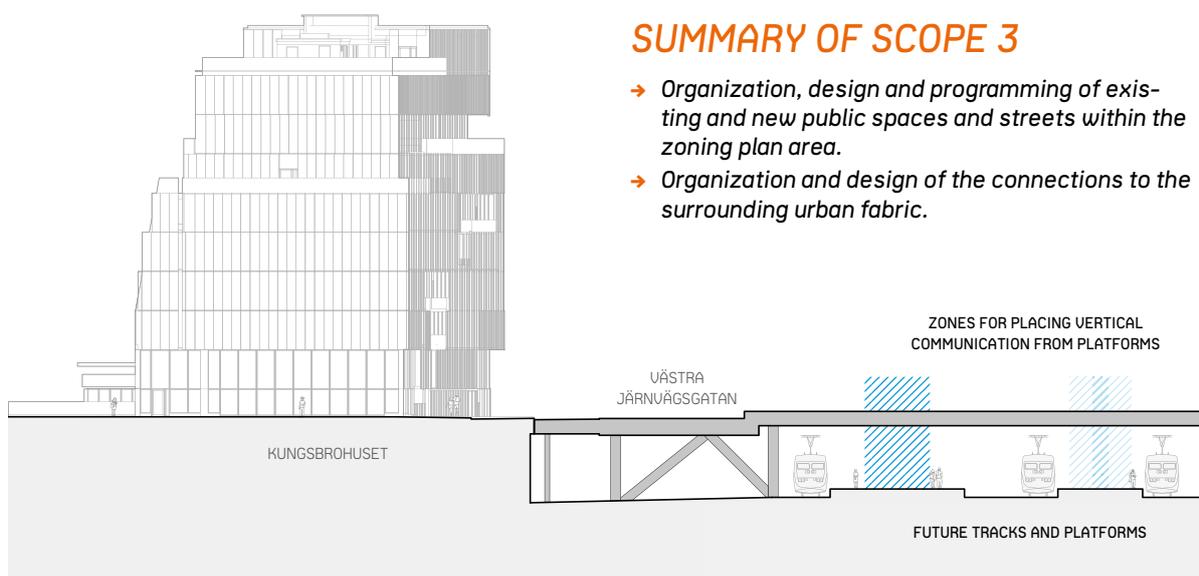


FIGURE 13. Cross section of Västra Järnvägsgatan facing north, the future decking, new tracks and platforms

## SUMMARY OF SCOPE 3

- Organization, design and programming of existing and new public spaces and streets within the zoning plan area.
- Organization and design of the connections to the surrounding urban fabric.

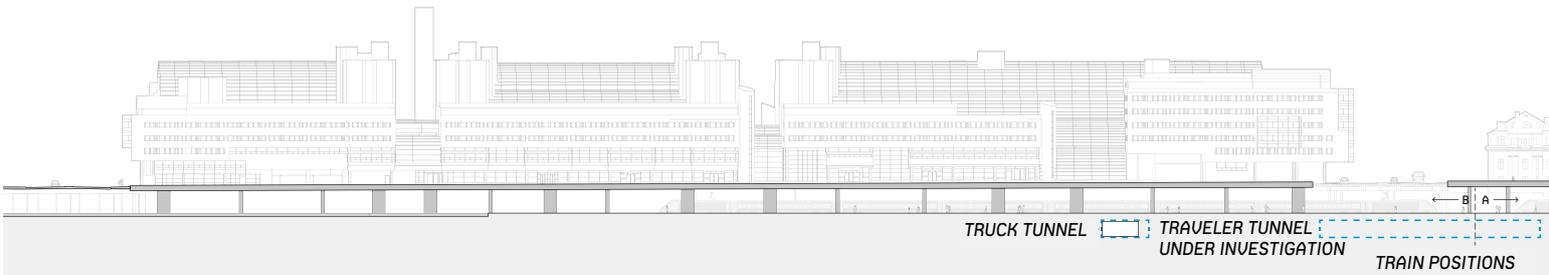


FIGURE 14. Longitudinal section facing east of Terminalslingan, the future decking, new tracks and platforms

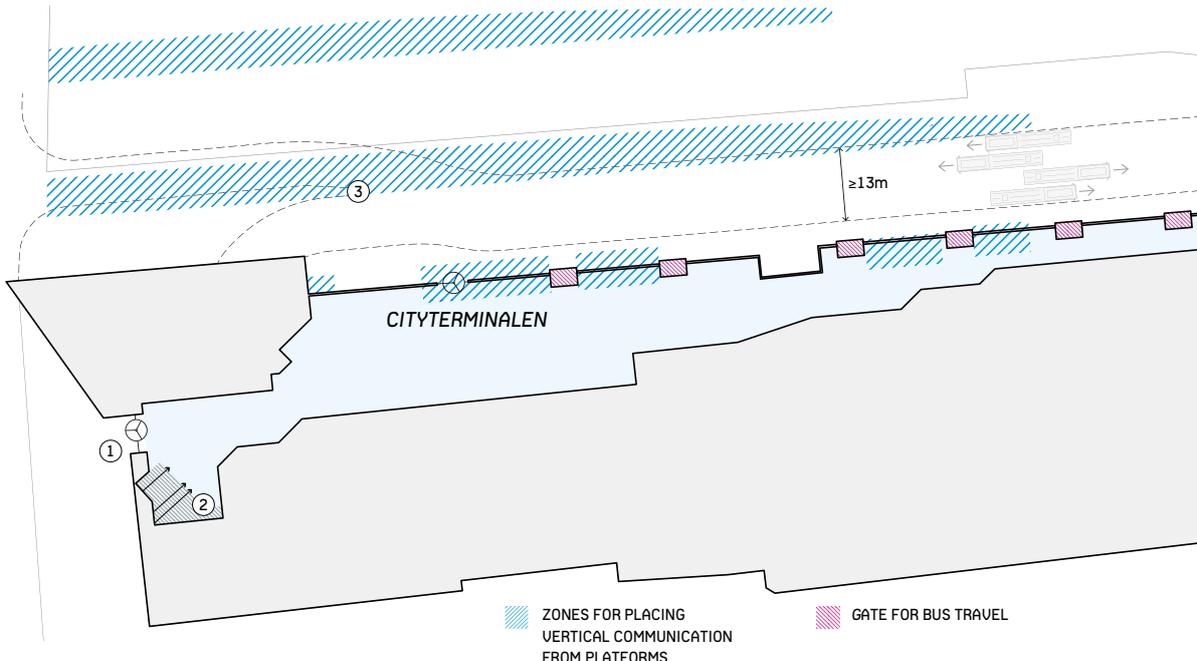


FIGURE 15. Plan section of Terminalslingan and Cityterminalen, 1. Entrance from Klarabergsviadukten, 2. Connection to Stockholm Central Station 3. Bus ramp- future layout under investigation

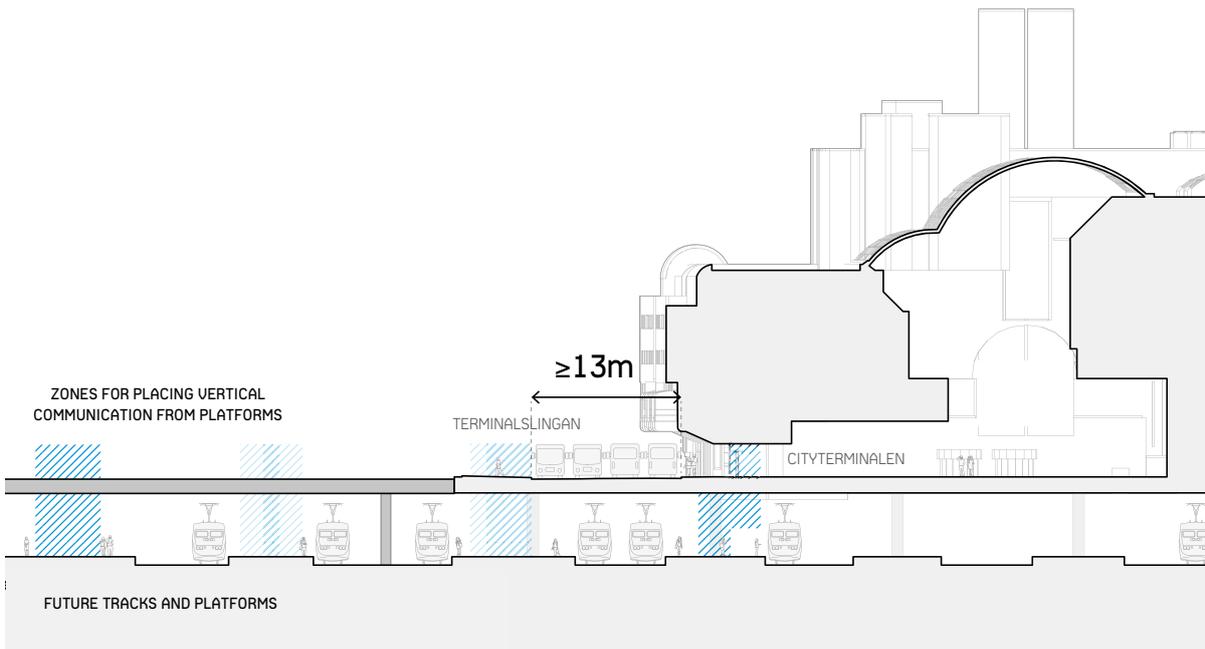


FIGURE 16. Cross section of Terminalslingan and Cityterminalen facing north, the future decking, new tracks and platforms

## SCOPE:

- To structure, design and program new buildings with mixed use within the zoning plan area, including program and main structures for technical installations.

# Scope 4/ Climate friendly architecture

## New station environments

The new development at the southern decking construction forms a central part of the area's new architecture. The expansion should include a new part of the Stockholm Central Station, offering the majority of the station platform connections. In addition to the station function itself, the buildings located at the southern decking construction should include service, retail and offices according to the area composition on page 50. Important issues are;

- The connection and approach to the current station and specifically in regard to Centralhallen.
- The waterfront encounter
- How the public aspects of the station as a civic building are being expressed architecturally.
- How the new volumes relates to the Stockholm skyline.
- How distribution, structure and shape facilitates the concept of an improved urban space by connecting to the Waterfront Congress Center.

*See appendix 8 for additional functional requirements regarding the station.*

## Centralstaden work space

A significant share of the space created should contain a range of various office workplaces.

## Target group and market

The Centralstaden work spaces are aimed at companies that understand the additional values in being located in close proximity to Sweden's most important transport hub, being located within walking distance of Stockholm City, close to all employees and visitors. These are companies that see the benefits of potential exposure as well as the interaction with travelers and other area parties. Businesses are increasingly connecting their brand to city locations, to the building itself and to the building premises. A location close to public transport nodes is becoming increasingly important in buildings at the forefront of sustainability, amenities and architectural qualities.

Today's Stockholm Central Business District (CBD) offers a large selection of small to medium-sized premises. Properties offering more than 1,000 square meters at one connected floor level are less common.

The demand for large and modern city premises has recently increased significantly, especially from multinational tech companies to which attractively and centrally located premises are crucial for being able to recruit the right talents.

## Tenants must enrich and be enriched

The companies renting premises in Centralstaden should contribute to enhancing the life of the station and surrounding areas. The premises and functions could be physically integrated within the station area in various ways e.g. station functions could actively be aimed at both companies and travelers. The notion of shared use business space is also an interesting idea and around-the-clock circular use for increasing the utilization rate of premises and activating the area longer hours of the day. Solutions boosting creativity and productivity for tenants and visitors in the area, are being encouraged.

## Sustainable structures

The fact that the future is uncertain and that work may be carried out in different places has become clear during the pandemic. It is more important than ever to build general structures that can be used in various ways. The design of new buildings and office space must be capable of adapting to change while maintaining quality and attractiveness.

- Buildings must be planned as flexible multi- or co-tenant premises with office space ranging from about 350 sqm up to several thousand square meters.
- The area should offer cohesive premises of around 10,000 sqm.
- Average floor levels must provide office spaces ranging from 350 sqm to at least 1500 sqm.
- The office space should be arranged applying an efficient modular system.
- Benchmarking, premises should be furnished equalling 10 sqm per office unit, while ventilation should be dimensioned for a density of 8 sqm per person.
- In order to enable a variety of activities, the lower levels should have a floor to ceiling height of 4 - 5 meters.
- Office floor levels should have a floor to ceiling height of at least 2.6 meters.
- Attractively located and representative entrances should be possible to create. Main entrances must be accessible by taxi.



*In Stockholm, you often live in a house full of other people, without knowing anything about those living in the building.*

*Also, more than one in three homes within the capital is a single household. Therefore, to me, Stockholmian is a bit anxious and isolated.*

*Kristian Luuk  
TU host and comedian*

## Housing

The area challenges regarding noise and vibrations that needs to be taken into account. There is an uncertainty as to whether it is possible to create sufficiently good housing qualities here. To be able to assess whether housing is possible on the site, testing housing within the parallel commission is needed. The task involves proposals for placement and design of approximately 100 new housing units with excellent dwelling qualities and the potential of having a positive impact on city life.

### Target groups and market

The primary target group for housing within the zoning plan area are those who want a smaller, centrally located apartment and do not live with small children. It may also be weekly commuters who need a centrally located, overnight apartment close to public transport. The location is also interesting for companies that want access to centrally placed apartments thus being able to offer accommodation when recruiting new employees who do not live in Stockholm.

### Legal and functional prerequisites

Jernhusen neither builds nor manages housing, which means that the housing included within the zoning plan will be built and owned by another party. Therefore, the proposed housing units must be possible to define as a separate legal property, where a 3D property might be possible as well.

As the centrally located site is exposed to noise, the need for a relaxed atmosphere within the housing units and at the courtyard / roof terraces, becomes a particularly important concern.

- The approximately 100 housing units should mainly consist of efficient 1-2 bedroom apartments intended for 1-2 person households.
- The apartments must be presented with shared functions such as a roof terrace, a lounge or a gym.
- Households may share bicycle storage with nearby office premises for management benefits.
- Local environment design should refine the spatial boundaries between private and public space.
- The housing units need to be located and designed in such a way that they can be produced and managed as independent as possible.



*The challenge regarding new volumes is balancing the need for exploitation and the consideration of the national interest for cultural heritage protection.*

The ground floors should form a robust and beautiful framework promoting change over time.

### Retail, service and future consumption

When, where and how we consume goods and experiences is constantly changing, an issue that Centralstaden must be prepared for. Therefore, the ground floors should form a robust and beautiful framework promoting change over time and delivering an assortment that attracts people to reside and meet up.

Throughout the zoning plan area, active ground floors should incorporate supply meeting the demands of future consumption patterns regarding food and drink, social and cultural experiences, trade, service and recreation. In order to reinforce and complete the area as a whole, the supply must be established while considering the overall supply within a distance of 1 kilometre radius.

### Location and magnitude

The notions of magnitude and content are based on estimated traveler flows in the year of 2045 as well as on recent understanding regarding the requested concepts. The Central Station's A-house and B-house area might include the enhancement, upgrade and complement of supplies. Simultaneously, retail and service will develop on the decking construction, south of Klarabergsgatan. The new station layout is crucial for retail space magnitude.

At the northern decking construction, the supply of retail and services will be concentrated towards Klarabergsgatan, towards Kungsgatan and along Västra Järnvägs-gatan. Entry density is vital, as is enabling synergies between retail, services and e.g. meeting places and culture.

## 155 000 sqm Gross area

### Southern overbuild 45 000 sqm GA of which:

- Station area 5000 sqm GA
- Retail and service 6000 sqm GA
- Office space 30 000 sqm GA

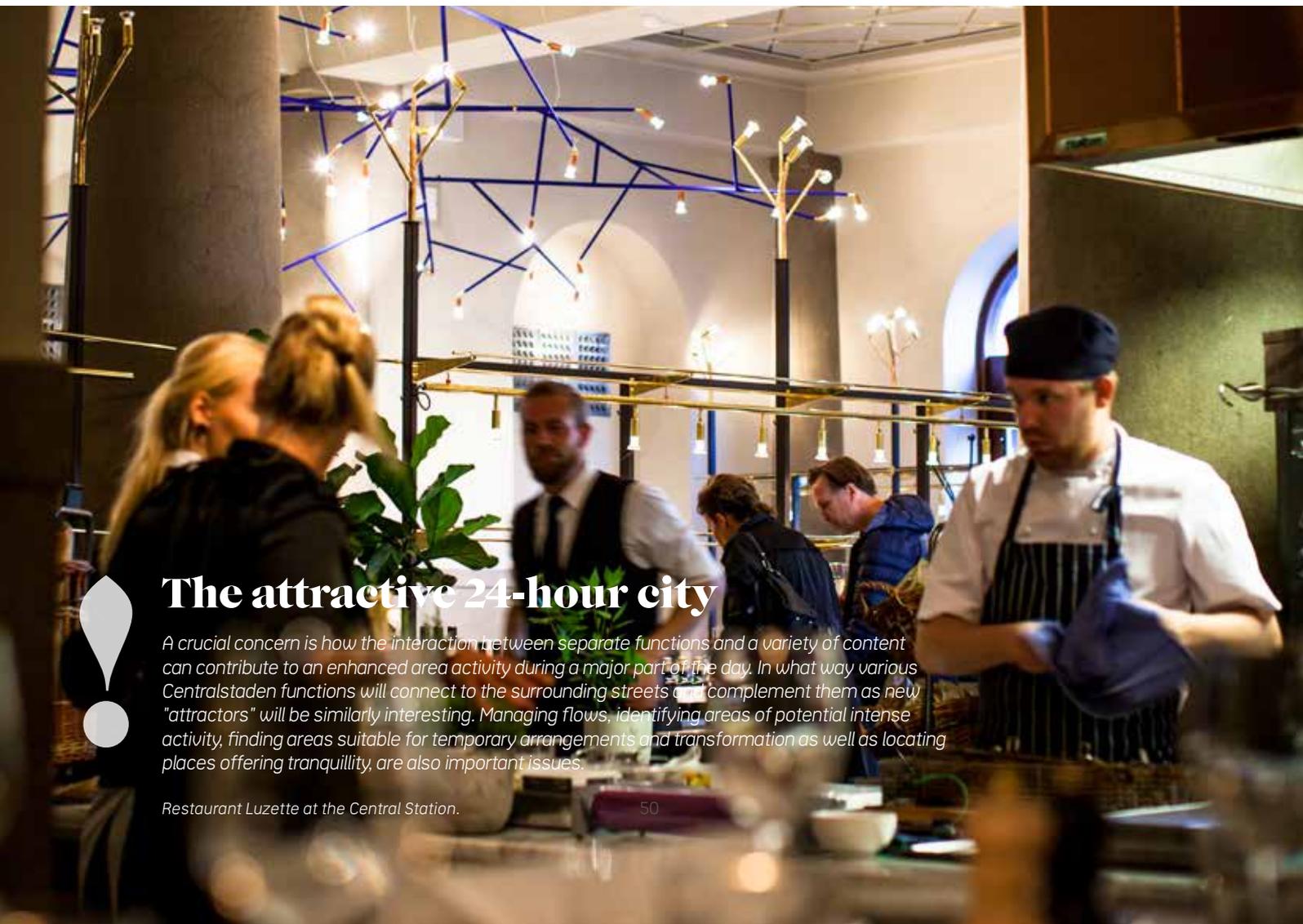
### Northern overbuild 110 000 sqm GA of which:

- Station area 5000 sqm GA
- Retail and service 7500 sqm GA
- Office space 90 000 sqm GA
- Housing around 6000 sqm (100 units)

## The attractive 24-hour city

A crucial concern is how the interaction between separate functions and a variety of content can contribute to an enhanced area activity during a major part of the day. In what way various Centralstaden functions will connect to the surrounding streets and complement them as new "attractors" will be similarly interesting. Managing flows, identifying areas of potential intense activity, finding areas suitable for temporary arrangements and transformation as well as locating places offering tranquillity, are also important issues.

Restaurant Luzette at the Central Station.





A concert in the Central Hall

## Culture

The development will add further cultural elements to the area. For scope 4, this means creating the physical conditions for providing these components. The new structures will accommodate culture in other ways than applying cultural buildings in a traditional sense, such as a theatre or a concert hall. Within the immediate area there are existing premises incorporating larger crowds capacity; at the Waterfront Congress building, at Oscarsteatern and at the jazz club Fasching on Kungsgatan or even in our own building, Centralhallen, as the station conducts recurring events including choir singing and Christmas concerts.

Centralstaden will add to the prospect of cultural practice by using arenas for a recurring yet flexible cultural program taking place on a regular basis at different spots within the zoning plan area. Concentrating cultural events inside the Central Station as well as throughout the immediate surrounding areas, Centralhallen will become the main arena. The operation at Union Station in Los Angeles is an inspiring reference regarding recurring cultural programs, see [unionstationla.com](http://unionstationla.com).

Scope 4 includes the presentation of a spatial structure allowing an ambulating use of the areas aimed at cultural events. These events should take place inside or in close proximity of the station, occurring at appropriate times of the day and during suitable weekdays.

## What do we mean by Culture?

"Architecture, tourism and hospitality industries, fashion, design, film, photography, computer and video games, media, music, meals, experiential learning, literature and performing arts."

*The definition of cultural and creative industries according to Tillväxtverket.*

## SUMMARY OF SCOPE 4

- New buildings throughout the various parts of the zoning plan area, as well as connections to the existing structures and to new vertical communication from the tracks area, according to Governing Conditions.
- Architectural design and programming of the new buildings as part of a cohesive whole incorporating the current Central Station.

