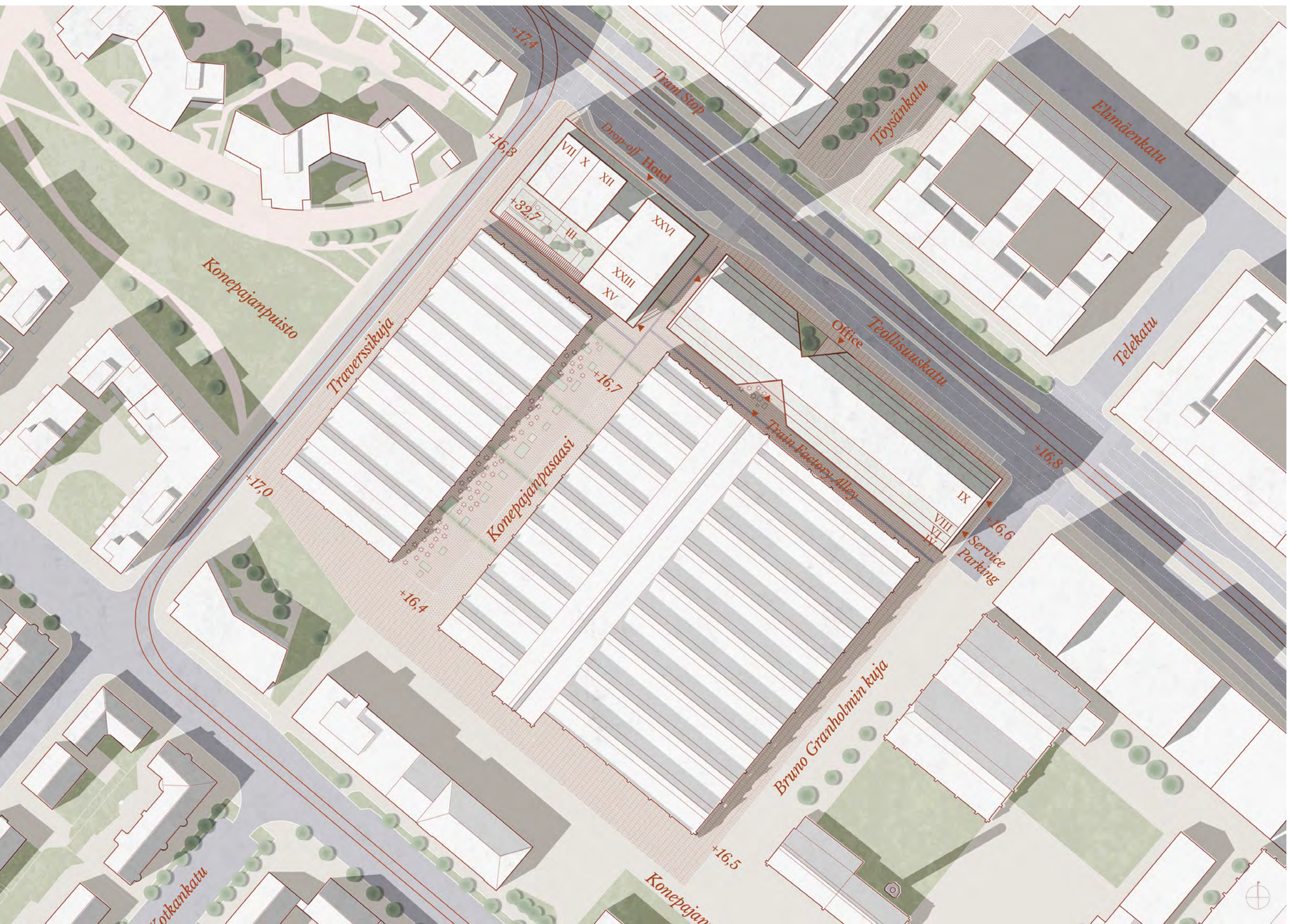

*Illustration from Konepajanpasaasi*



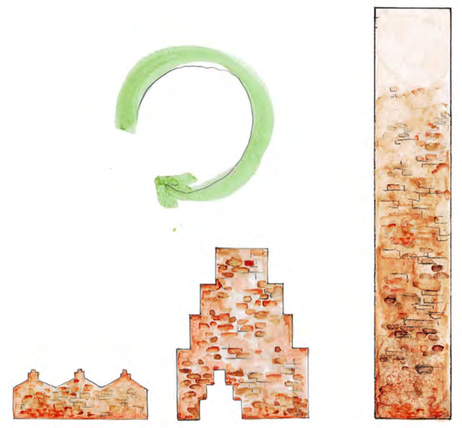

New brick-clad halls rise from the fabric of old brick sheds. The newcomers complement and continue the characteristics of the existing buildings. One tall tower rises as a landmark and pinpoints the location of the Train Factory, but the rest of the new additions follow a lower roof line and adapt in subtle steps to the surrounding buildings and streets. The transverse passage that cuts through the old Assembly Hall has a counterpart in the new building. There is a cut, too, a wayfinding signal visible from afar and marking an important entrance.

The proposal foregrounds the pedestrian environment. By opening new alleys and sightlines through the site and solving service from the underground, the proposal maximises the amount of lively shopfront. Simultaneously, it offers pedestrians a variety of choices and experiences to pass through the site, with new leisurely routes inviting to linger. Old, hidden brick facades are revealed again.

Reused brick is suggested on the podiums, with the possibility to continue using them also on the upper floors of the new buildings, depending on availability and economy. In addition to reducing the CO2 emissions to 1/100th of new bricks, the rustic, patinated appearance of reused bricks are important in blending the new buildings with the old and enhances the effect of brick gradient on the tower facades. The circularity concept includes reusing the tile-clad elements from the demolished Electric Train Building as outdoor floor material and in the interior either as partition walls or floor elements. The exact use will be studied subsequently.

The hotel consists of two slim towers. The lower guestroom tower descends to the height of the residential building in the northwest, thus minimising the shadowing. A verdant garden on the top of the hotel podium extends the public space and is accessible directly from the passage.

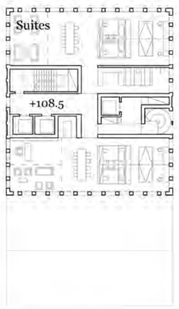
The office building is efficiently linear and divisible. The varying depth of the floors enables a variety of office sizes and other qualities, suitable for both large headquarters, small studios, and workshops, with a possibility of showrooms on the ground floor. The alley between the office building and the old Assembly Hall brings daylight to the deep podium floors of the office, enabling their versatile use.



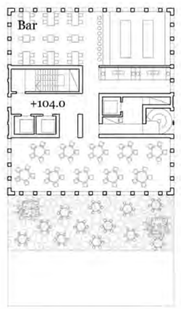
*Circular Facade Concept*

**Recycled brick** is implemented on the podium floors. The facade design concept allows for a gradual and flexible transition from reused to new bricks upwards, according to availability and economy. The recycled brick also helps to integrate the new buildings to the existing context.

*Site plan 1:1000*



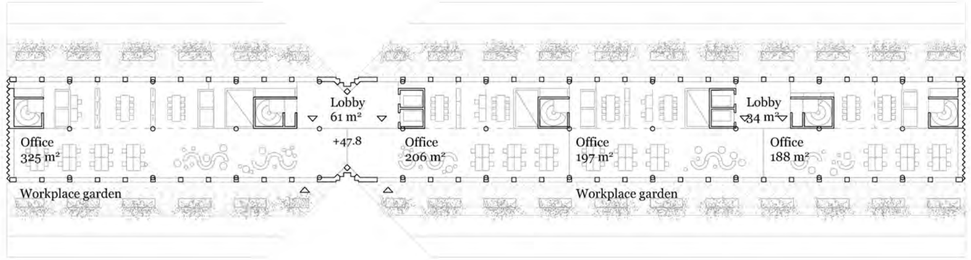

Hotel floors
24th-25th 410 brm²



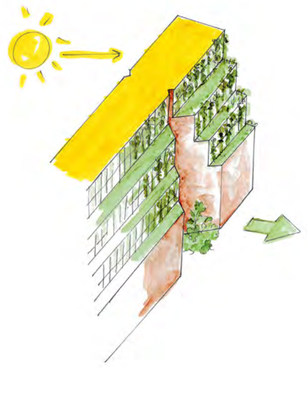

Hotel 23rd floor
410 brm²


Hotel floors
4th-6th 1 120 brm²
7th-9th 1 000 brm²
10th-11th 880 brm²
12th-14th 660 brm²
15th-22nd 530 brm²

Standard rooms in hotel 24 sq.m




Office 8th floor
1 320 brm²



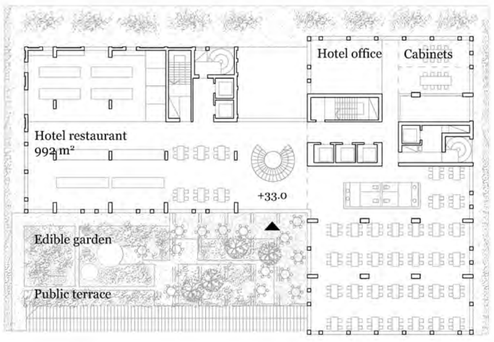
## *A Living Building Concept*

The key concepts include low maintenance and lightweight planting on the roof terraces. Vines trellises are integrated in the facade system of the office building. The vines are shade resistant and do well also on the north facade. Rain water from the roofs is collected and stored to an automated irrigation system and the roofs are equipped with solar panels.

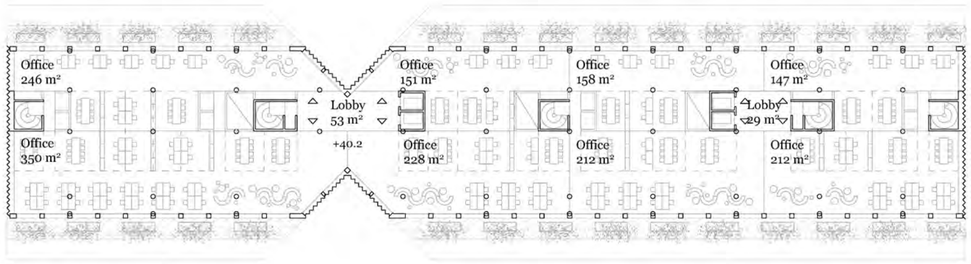
The plantings provide shading on the south side, balancing out heat periods with a cooling effect.

On the north side they have a positive impact on the street environment, mitigating the effects of pollution from Teollisuuskatu.

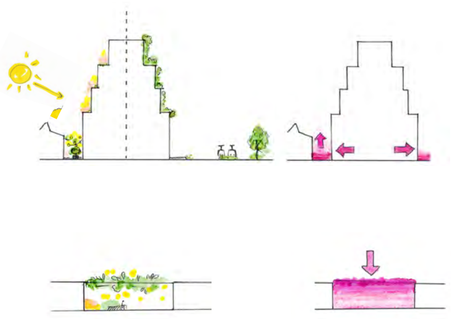
Overall the greenery adds to biodiversity and helps to reduce storm water on ground level surfaces.




Hotel 3rd floor
1 210 brm²




Office floors
6th-7th 2 110 brm²



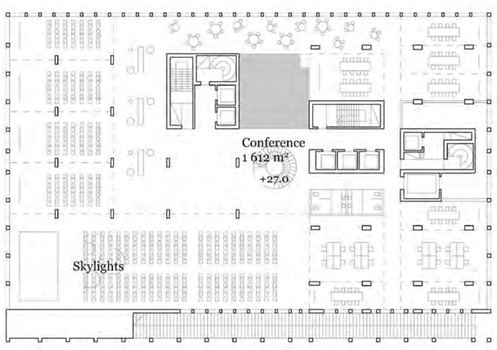
## *Spatial Qualities*

The new buildings are detached from the existing listed buildings, establishing an intimate alley with service areas, seating, plantings and inherent charm. The facades are active on both sides which creates safe and pleasant environments.

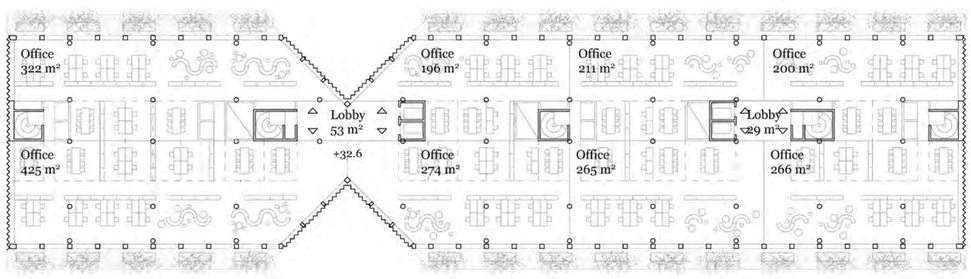
Detaching the office and hotel from the existing also allows for daylight to enter the lower floors of the deep building cores. The south facing roof gardens have splendid views over Helsinki.

Public space is formed by activities taking place on the ground level, and Konepajanpasaasi provides areas for outdoor serving and places for gathering.

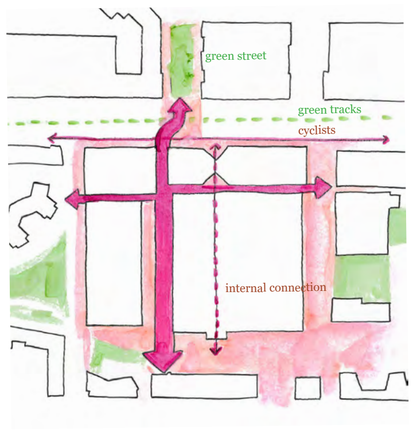
In the passage, a feeling of space is also created by placing green structures above the passage, following the principles of existing similar structures in the area.




Hotel 2nd floor
1 860 brm²



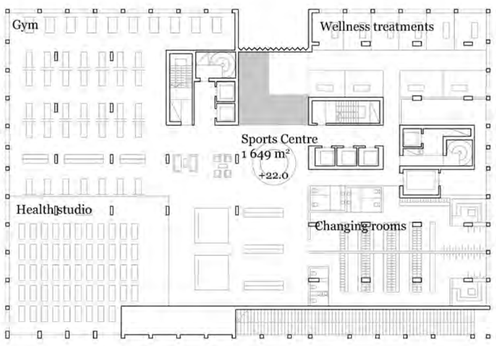

Office floors
4th-5th 2 580 brm²



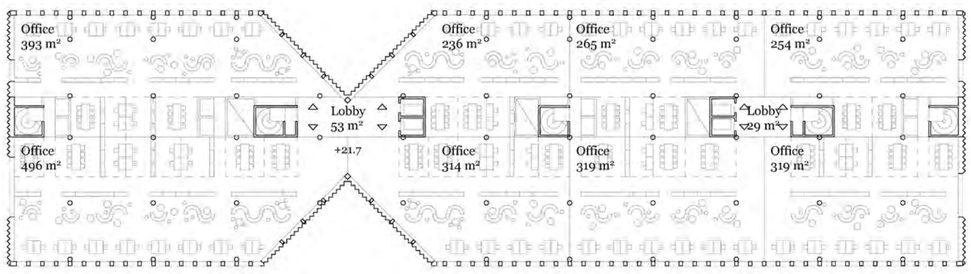

## *Renewed Walkable Area for Pedestrians*

The proposal foregrounds the pedestrian environment. By opening new alleys and sightlines through the site and solving all service from the underground, the proposal maximises the amount of lively shopfront and creates safe walkable environments. This adds to the attractivity of the area as a whole.

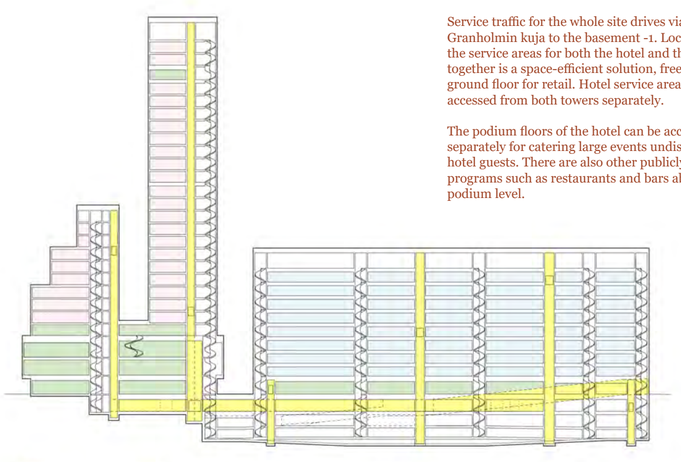
Pedestrians are offered a variety of choices and experiences to pass through the site, with new leisurely routes inviting to linger. Old, hidden brick facades are revealed again.




Hotel 2nd floor
1 900 brm²




Office floors
1st-3rd 3 020 brm²

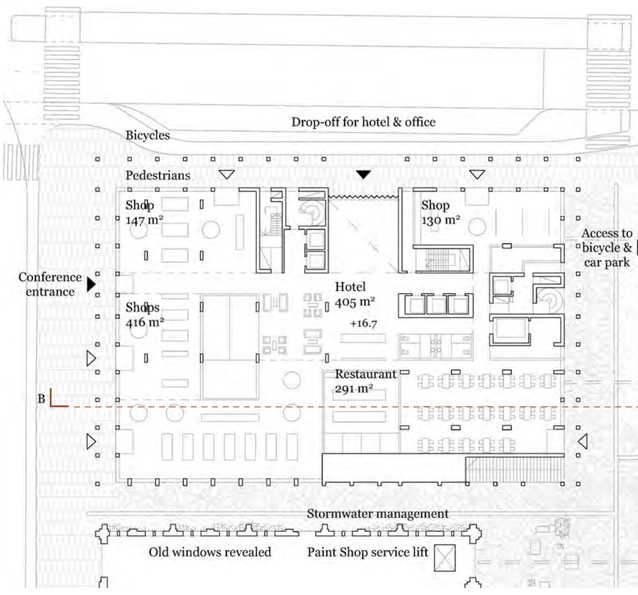


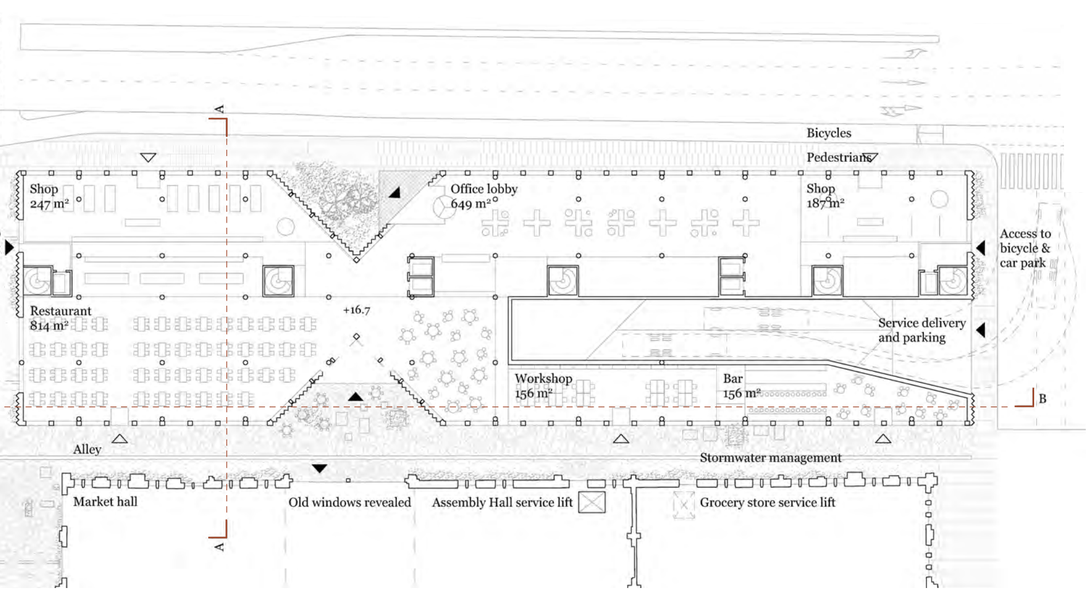
## *Circulation and logistics*

Service traffic for the whole site drives via Bruno Granholmin kuja to the basement -1. Locating the service areas for both the hotel and the office together is a space-efficient solution, freeing the ground floor for retail. Hotel service areas are accessed from both towers separately.

The podium floors of the hotel can be accessed separately for catering large events undisturbing hotel guests. There are also other publicly accessible programs such as restaurants and bars above the podium level.

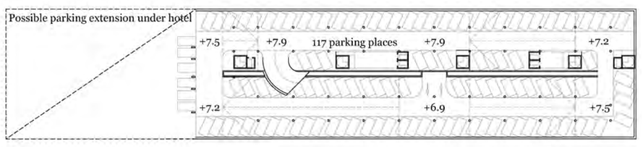
Service circulation
Visitor floors
Guest rooms
Office
Service connections to existing buildings



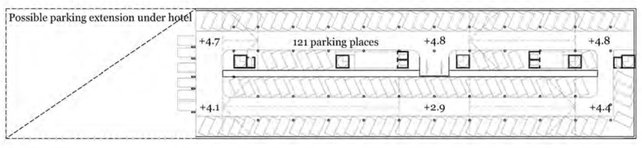




*Principle of parking floors, not in scale*

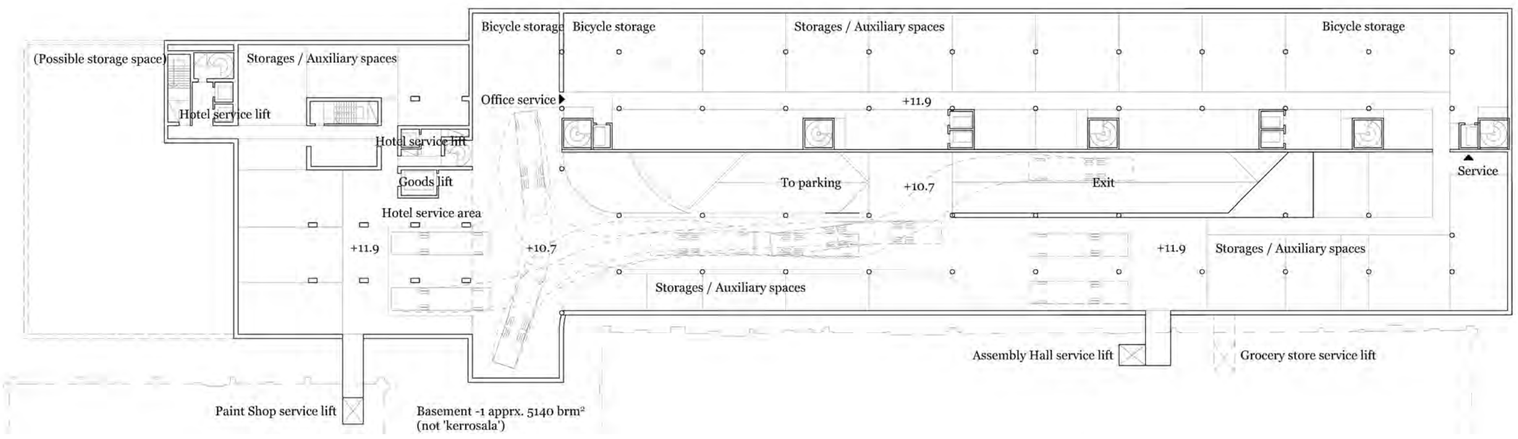
The parking floors are adjusted to the office and hotel structural grid. Optionally, the parking can be extended also under the hotel regardless of chosen phasing model.




Basement floor -2




Basement floor -3




*Typical floor plans of hotel and office, 1:500*

## Hotel building

| Gross floor area (kerrosala)* sq.m | Level Ground | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | Total | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hotel** | 570 | 1900 | 1860 | 1210 | 1120 | 1120 | 1120 | 1000 | 1000 | 1000 | 880 | 880 | 660 | 660 | 660 | 530 | 530 | 530 | 530 | 530 | 530 | 530 | 530 | 410 | 410 | 410 | Attic | 21110 | sq.m |
| Shops & restaurants | 1100 | | | | | | | | | | | | | | | | | | | | | | | | | | | 1100 | sq.m |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | Total gross floor area | 22210 | sq.m |
| Net area*** sq.m | Level Ground | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | Total | |
| Hotel | 400 | 1650 | 1610 | 990 | 870 | 870 | 870 | 760 | 760 | 760 | 650 | 650 | 510 | 510 | 510 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 290 | 290 | 290 | Attic | 16440 | sq.m |
| Shops & restaurants | 980 | | | | | | | | | | | | | | | | | | | | | | | | | | | 980 | sq.m |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | Total net area | 17420 | sq.m |
| Hotel guestrooms number | Level Ground | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | Total | |
| Guestrooms | | | | | 29 | 29 | 29 | 25 | 25 | 25 | 19 | 19 | 17 | 17 | 17 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | | 2 | 2 | Attic | 351 | rooms |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | Suites (from the total) | 8 | suites |

## Office building

| Gross floor area (kerrosala)* sq.m | Level Ground | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | Total | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Office | 810 | 3020 | 3020 | 3020 | 2580 | 2580 | 2110 | 2110 | 1320 | Attic | 20570 | sq.m |
| Shops & restaurants | 1820 | | | | | | | | | | 1820 | sq.m |
| Ramp | 420 | | | | | | | | | | 420 | sq.m |
| | | | | | | | | | | | Total gross floor area | 22810 | sq.m |
| Net area*** sq.m | Level Ground | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | Total | |
| Office | 650 | 2680 | 2680 | 2680 | 2240 | 2240 | 1790 | 1790 | 1010 | Attic | 17760 | sq.m |
| Shops & restaurants | 1560 | | | | | | | | | | 1560 | sq.m |
| | | | | | | | | | | | Total net area | 19320 | sq.m |

Grand total gross floor area 45020 sq.m  Net area grand total 36740 sq.m

The areas and room numbers are estimates based on schematic floor plan sketches.

* Gross floor area means the Finnish "kerrosala". It has been counted without assuming any statutory building right overruns. The topmost levels are assumed as technical attics, i.e. not as "kerrosala". No "kerrosala" has been assumed in the basements.

** Hotel areas include the lobbies, the sports and conference spaces, the hotel restaurant and bar in addition to the guestrooms.

*** Net area includes internal areas, excluding assumed internal structural walls and columns, walls enclosing excluded net areas, stairwells, lift wells, fire corridors, vertical ducts and plant rooms. Net area has not been counted in the basement, although the basement may include rentable storage area.

The project targets at the Outstanding level of BREEAM Internatiol New Construction. The following measures are considerd for reaching the ambitious goal.

**Management**
+ Sustainability is considered a living principle throughout the design process
+Life cycle cost and service life planning

**Energy**
+ Reduction of energy use and Co2 emissions
+ Low carbon design
+ Energy efficient systems and equipment
+ Energy monitoring

**Transport**
+ Safety and vitality for pedestrians and cyclists
+ Several modes of public transportation
+ Proximity to amenities

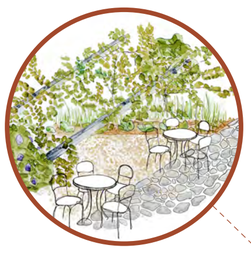
**Water**
+ Harvesting rain garden green roofs
+ management of stormwater
+ automatic irrigation system

**Materials and Waste**
+ Demolition waste reuse
+ Life cycle impacts of materials
+ responsible sourcing

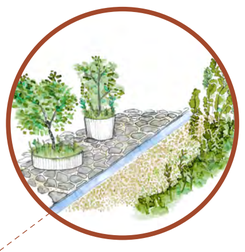
**Land Use and Ecology**
+ Previously developed site
+ Enhancing site ecology and impact on biodiversity
+ Trees and vegetation for a healthy environment and noise reduction

**Pollution**
+ Green facades with shade resistant vines, cooling and mitigating pollution
+ Positive impact on Teollisuuskatu pollution

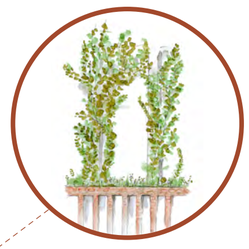
**Innovation!**
+ Solutions that exceed the scope of BREEAM
+ Green/blue building system
+ Strong circularity concept on-site



Edible gardens add to biodiversity, local food production and visitor attractivity.



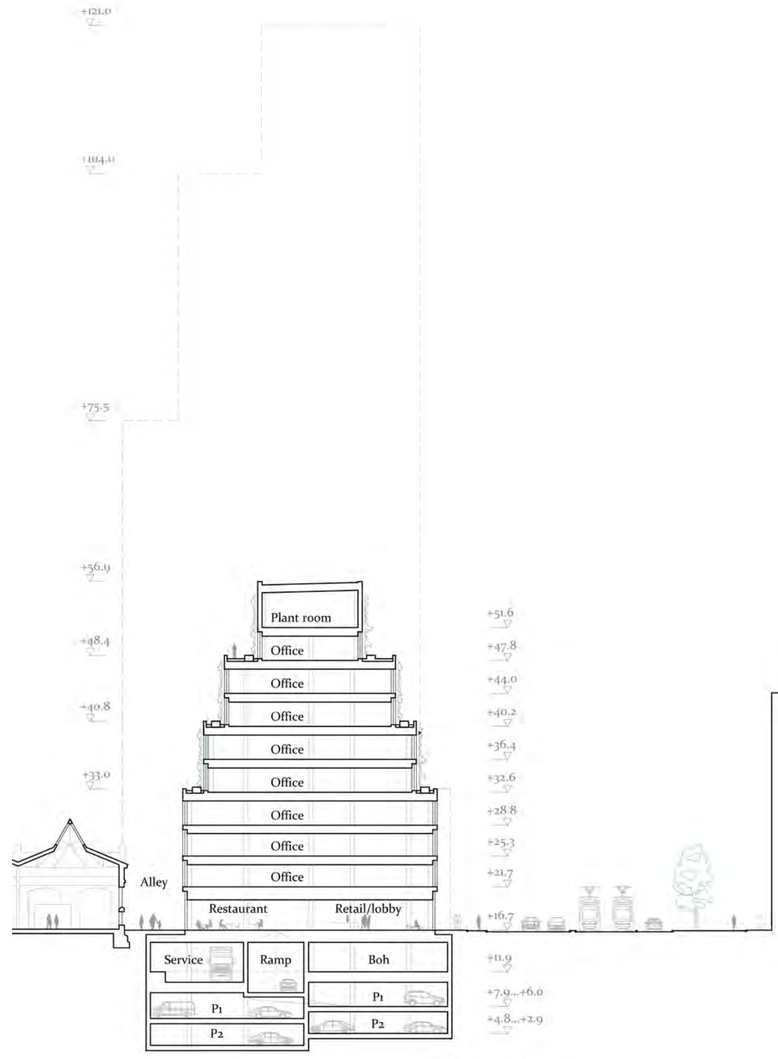
Recycled paving materials from the demolished Electric Train building connect the alleys and create a distinct character to the outdoor spaces. Large planters are used for vegetation and small trees.



Vines trellises are integrated in the facade system of the office building. The vines are shade resistant and do well also on the north facade. Rain water from the roofs is collected and stored to an automated irrigation system.



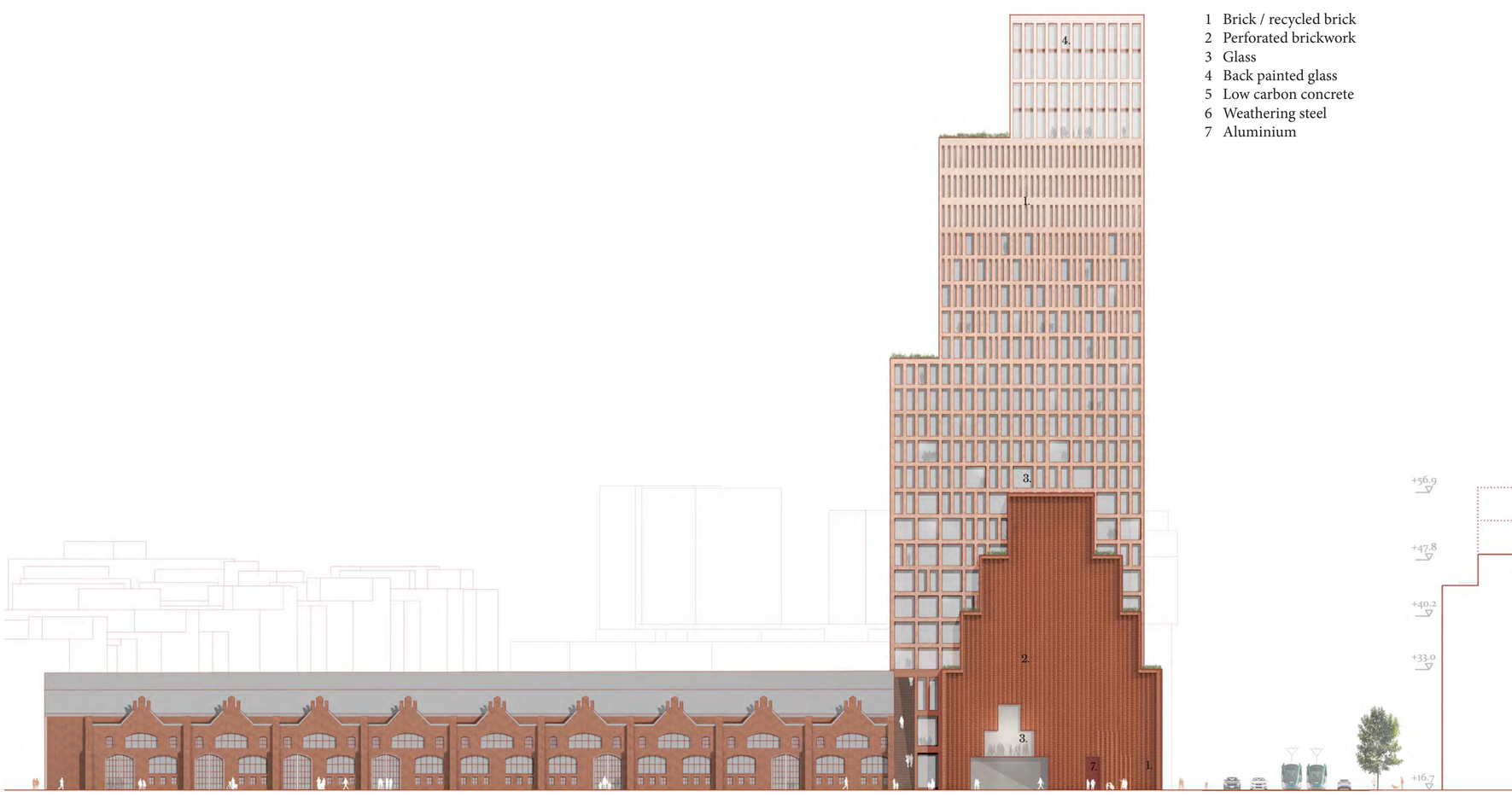

*Section B-B 1:500*




*Section A-A 1:500*


*Elevation towards Traverssikuja 1:500*

1 Brick / recycled brick
2 Perforated brickwork
3 Glass
4 Back painted glass
5 Low carbon concrete
6 Weathering steel
7 Aluminium




*Elevation towards Bruno Granholmin kuja 1:500*

*Illustration from Bruno Granholm Square*

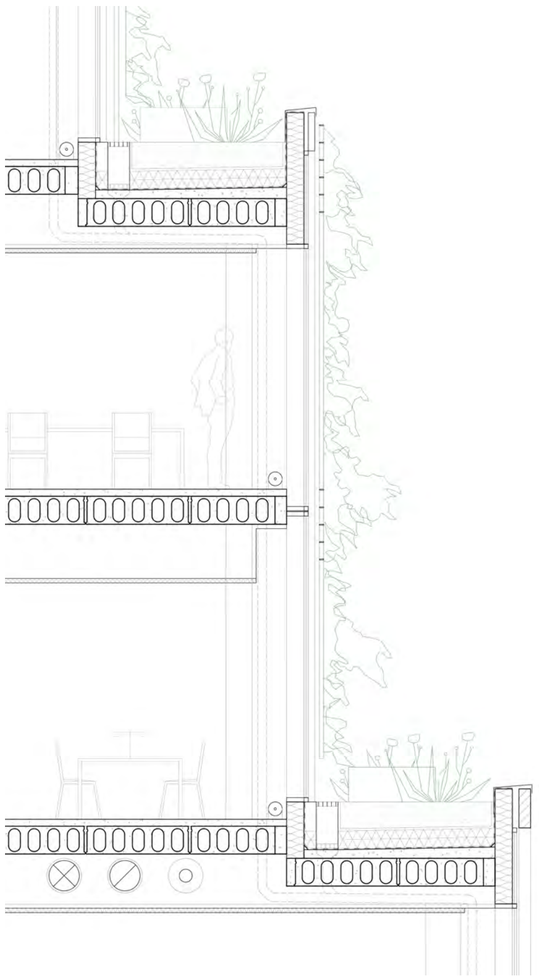
*Aerial view*

The proposal provides multiple benefits based on natural processes. Greenery on the various terraces and on the ground purifies the air and water, provides summer-time shading, produces edible plants and supports green well-being in general. The greenery impacts the site beneficially as a place of social interaction and community activities. For example, workers in the office building can tend to the terrace gardens. Rainwater is harvested to tanks in the attics for an automated irrigation system of the vegetated roofs. The harvesting and the vegetated roofs are a climate-wise solution to reduce runoff water on the ground. At the ground level, stormwater is managed in narrow water paths functioning also as site guidelines.

Service traffic for the whole site drives via Bruno Granholmin kuja to the basement. Putting the service areas for both the hotel and the office together is a space-efficient solution. They also share the ramp with the underground parking. Furthermore, locating the service in the basement frees the precious ground floor for shops and restaurants. The solution is also safer as lorries and taxis do not reverse to the streets. All of this creates a high-quality pedestrian environment, which elevates the value of the Train Factory area as a whole.

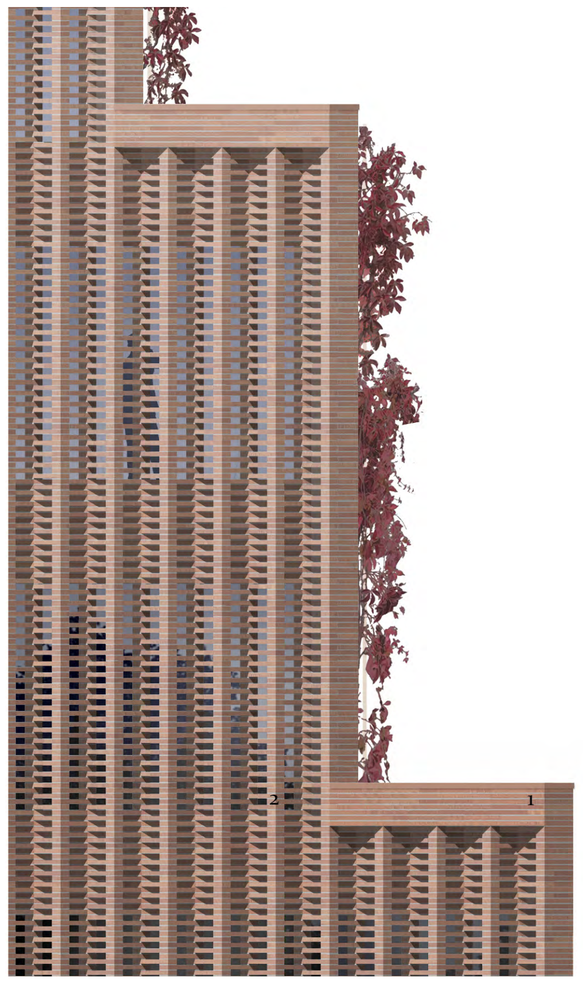
The office is proposed to be built before the hotel. This way, the high-class hotel does not risk having unfavourable customer reviews from the construction site of the office. It would also enable building additional storage or parking reserved for the hotel. However, if the hotel is built before the office, service traffic to the hotel can drive temporarily through the remaining part of the Electric Train Building on the ground floor.

The gross floor area (kerrosala) of the site is 45,000 sq.m.



*Office section, principle of planting structures 1:50*


*Office facade study 1:50*




*Office facade study, principle of brickwork 1:50*


*Hotel facade study 1:50*

1 Brick / recycled brick
2 Perforated brickwork
3 Glass
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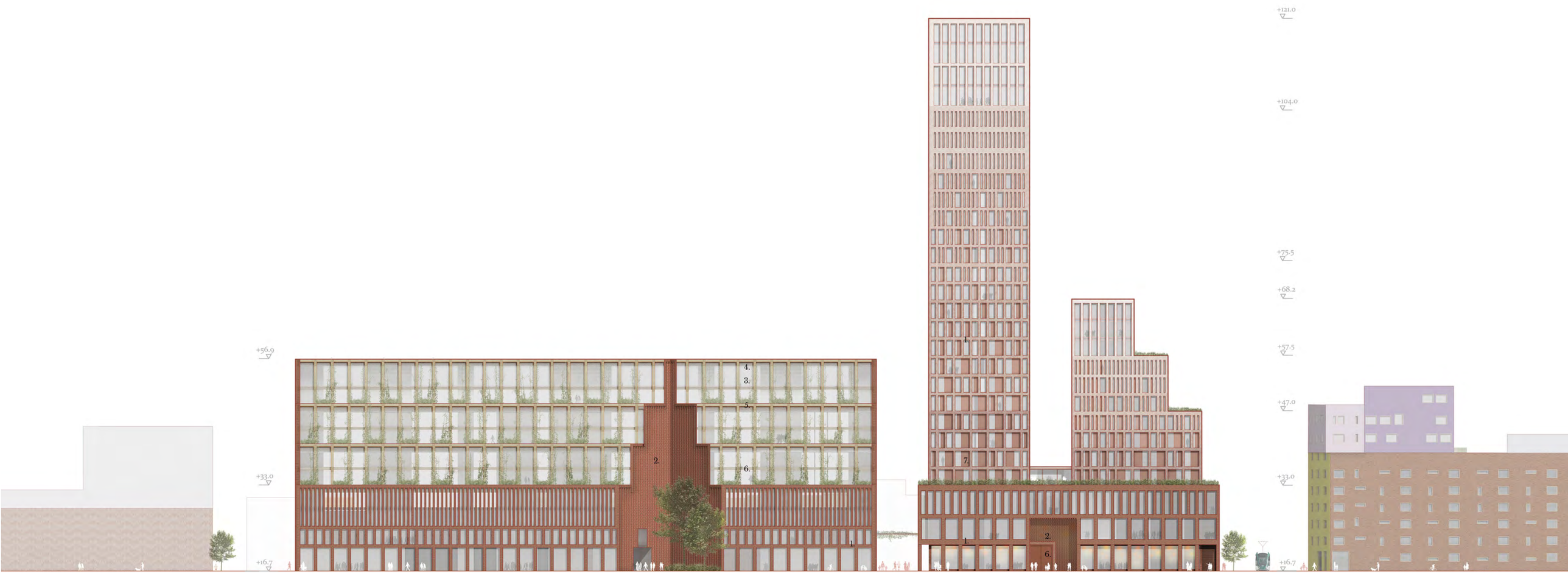
7 Aluminium




*Elevation towards Teollisuuskatu 1:500*


*Illustration from Teollisuuskatu*