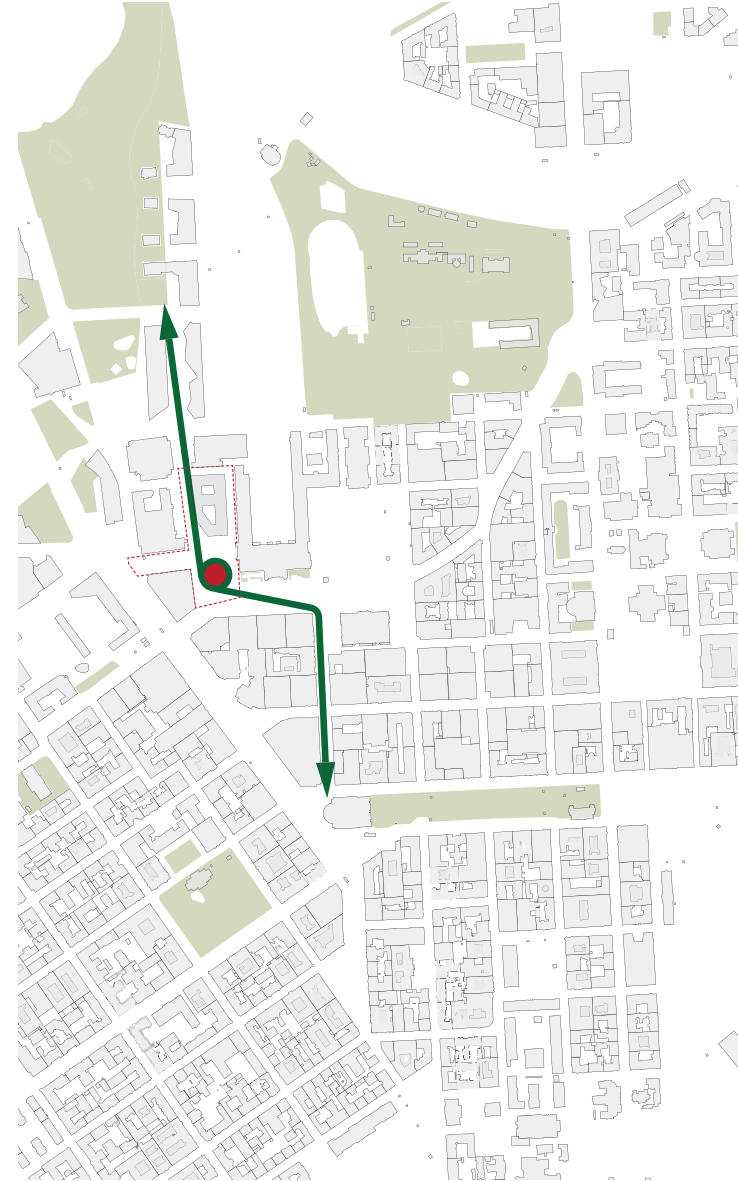
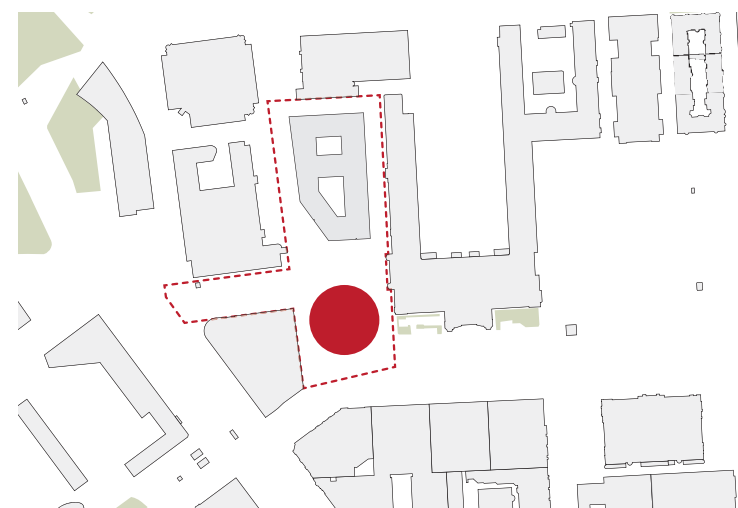




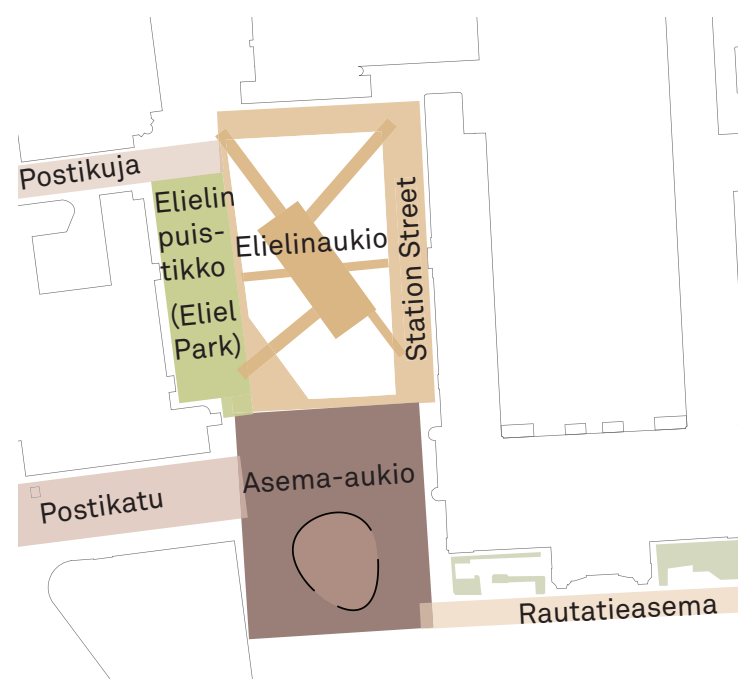
View from Elielin puistikko to the new quarter on a summer day



Destination point on the recreational route



Orientation point at Asema Aukio "You are here"



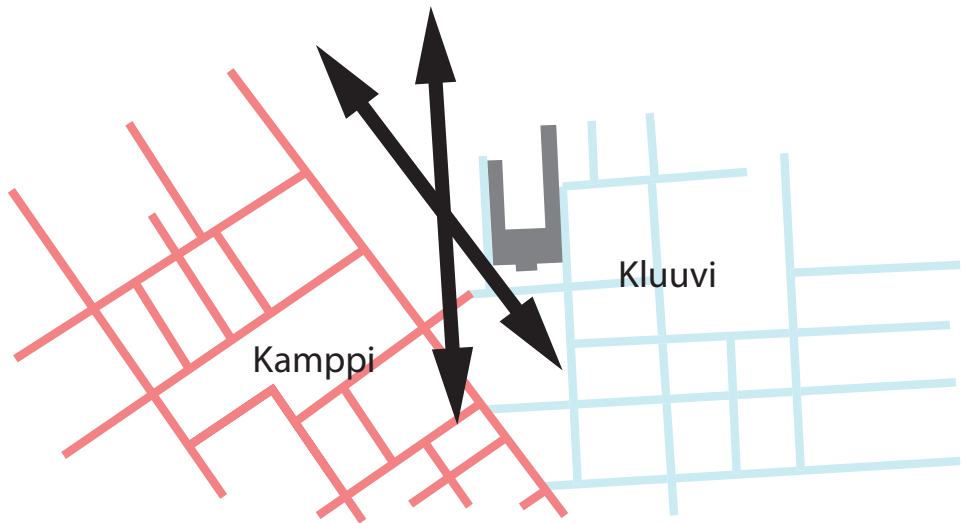
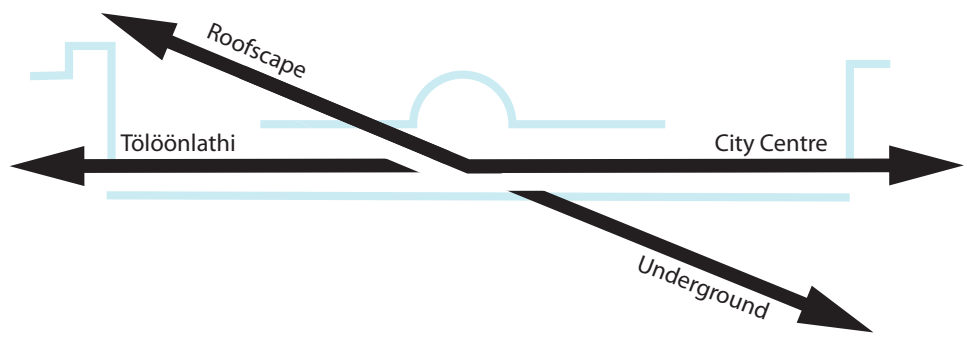
Sequence of public spaces



Area plan Scale: 1:2.500

# KLYYGA

ELIEL SQUARE



Our concept is grounded on the site and our motto is: KLYYGA – which means “the crossing” in Helsinki slang. The 2 city grids defined by the Helsinki railway station and the direction of Mannerheimintie meets at Elielinaukio and Asema-aukio. The vast public spaces are framed by the identities of the historical building architecture in the heart of Helsinki. The goal is to reconnect functions above and below ground and use the existing framework to reshape the area into a new public urban realm. The project consists of a stepping building adapting to the environment, an inviting urban furniture, and open spaces for human activities and movement of people.

The KLYYGA-strategy is a system of crossings to reconnect city, landscape, and people to create a more dynamic and livable area west of the historical Railway station. The new building volume is designed on daylight analysis for interior program and for more livable streetscapes. The stepping skyline is characterized by adaption to the adjacent building heights, material use, energy harvesting, and dynamic programs. The historic Vltava building is embraced to create a new quarter as a new milestone in the site history. The wood, stone and glass architecture add a new personality with a porous ground floor to become the new Elielinaukio. The sequence of public spaces is recreated into 3 different personalities: Asema-Aukio Square with a large urban wooden furniture as the new orientation point with entrance to the metro, the new Elielin puistikko, and

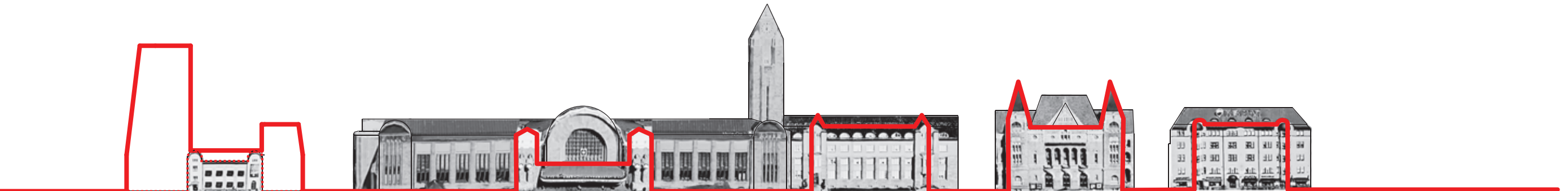
adjacent streetscapes. We define a generous common urban carpet that ties the urban realm together with the buildings at grade. The stone carpet is made of a diamond shape pattern to emphasize on the 2 grid directions in the city plan. Asema-aukio highlights the Central station west entrance as the landmark with a strong visual connection to Mannerheimintie. The new urban furniture defines a new urban orientation point that also connects to underground areas. This “urban free room” is a meeting point and a destination to enjoy with good sun exposure, flexible program, and an inviting wooden personality. The furniture invites you to sit, walk or lay down, to go to, go through, be under it or stay on.

We reduce surface parking to a minimum and reintroduce an urban landscape park east of the Postitalo building. The new Elielin puistikko is inspired by the diverse nature of the Helsinki archipelago landscapes. Like small islands the landscape has a vast diversity of native plants on built up terrain for natural systems for water runoff and habitats of urban nature. The park links back to the recreational green structure axis through Töölönlahdenkatu north of the site. Existing and new trees add green structure and frames the street. The terraced roof tops have a combination of solutions for harvesting energy, rainwater collection, plantings, and open wooden terraces. The overall mobility concept is to change from car and bus traffic to green mobility to prioritize walkability and 2-wheel traffic. Bicycle lanes and generous bicycle parking areas is prioritized. Existing parking garage is reduced

in size and transformed to retail area, bicycle parking and taxi drop off. A transportation hub at Basement level 1 strengthened the Interconnections between the public transport systems and link the Pissararata railway, Asema tunnel, future Tallin tunnel and the metro together with the new retail area. The Sokos retail areas are connected to the new Elielinaukio retail areas. The entrances to the underground crossing are easy to find east of the Vltava building and through the new furniture at Asema-Aukio.

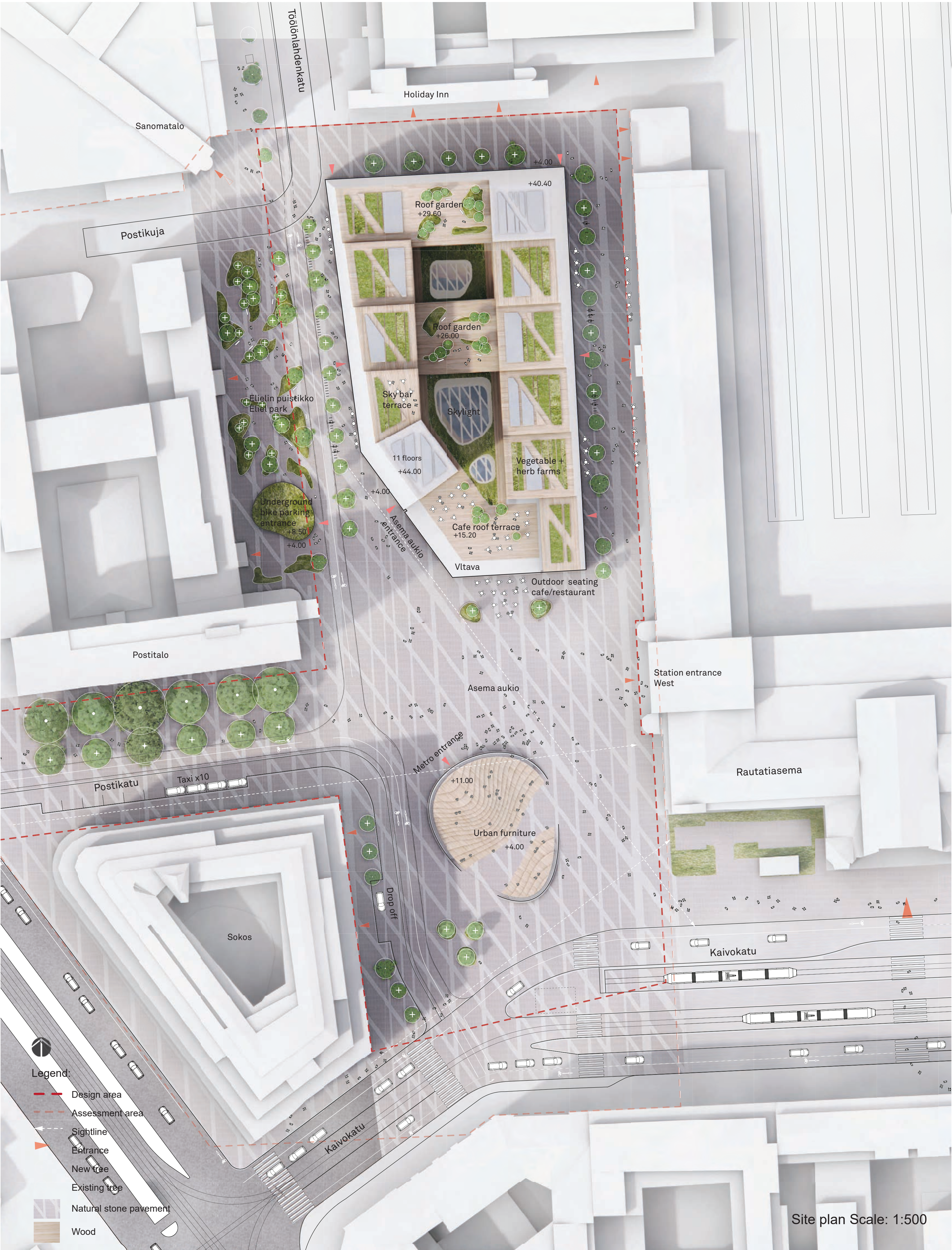
The purpose of the design is to supplement, integrate and revitalize the urban fabric of the Elielinaukio and Asema-aukio area while taking into consideration the valuable surroundings of the area and improving the comfort, safety, and connectivity of central Helsinki’s busiest pedestrian environment in terms of pedestrian footfall.

The KLYYGA project seeks to identify a sustainable design solution that offers adequate land-use efficiency, high-quality solutions for public transport, streets, and squares. A large diversity of functional content, from office jobs, hotel and shops to urban green and meeting places and still respecting the distinctive characteristics of the cityscape in downtown Helsinki. KLYYGA is adapting to fit in and adding to contemporary Helsinki. KLYYGA invites to social interaction, openness and equality and future urban dynamics.

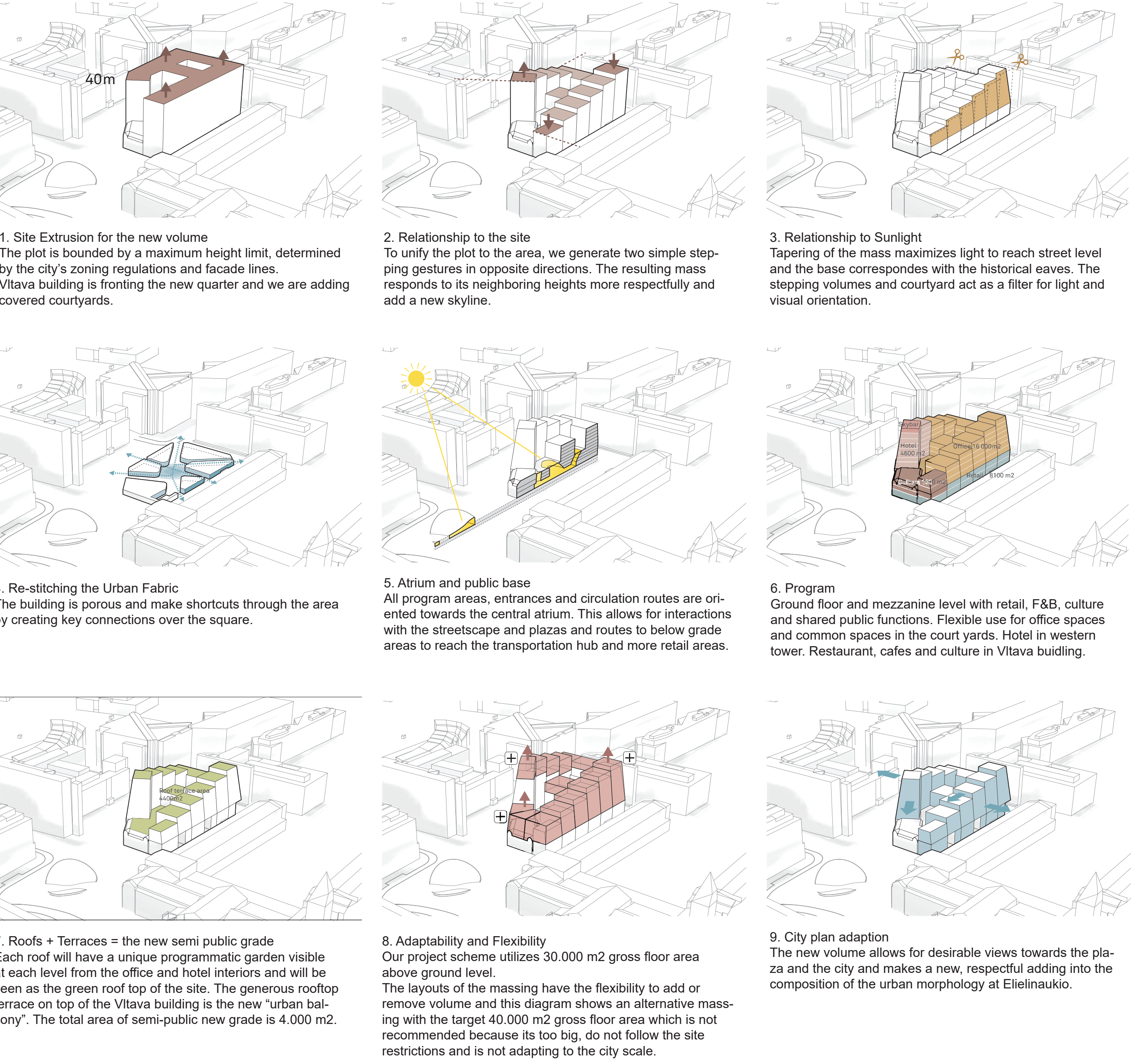


Historical skyline with the new skyline embracing the Vitava building

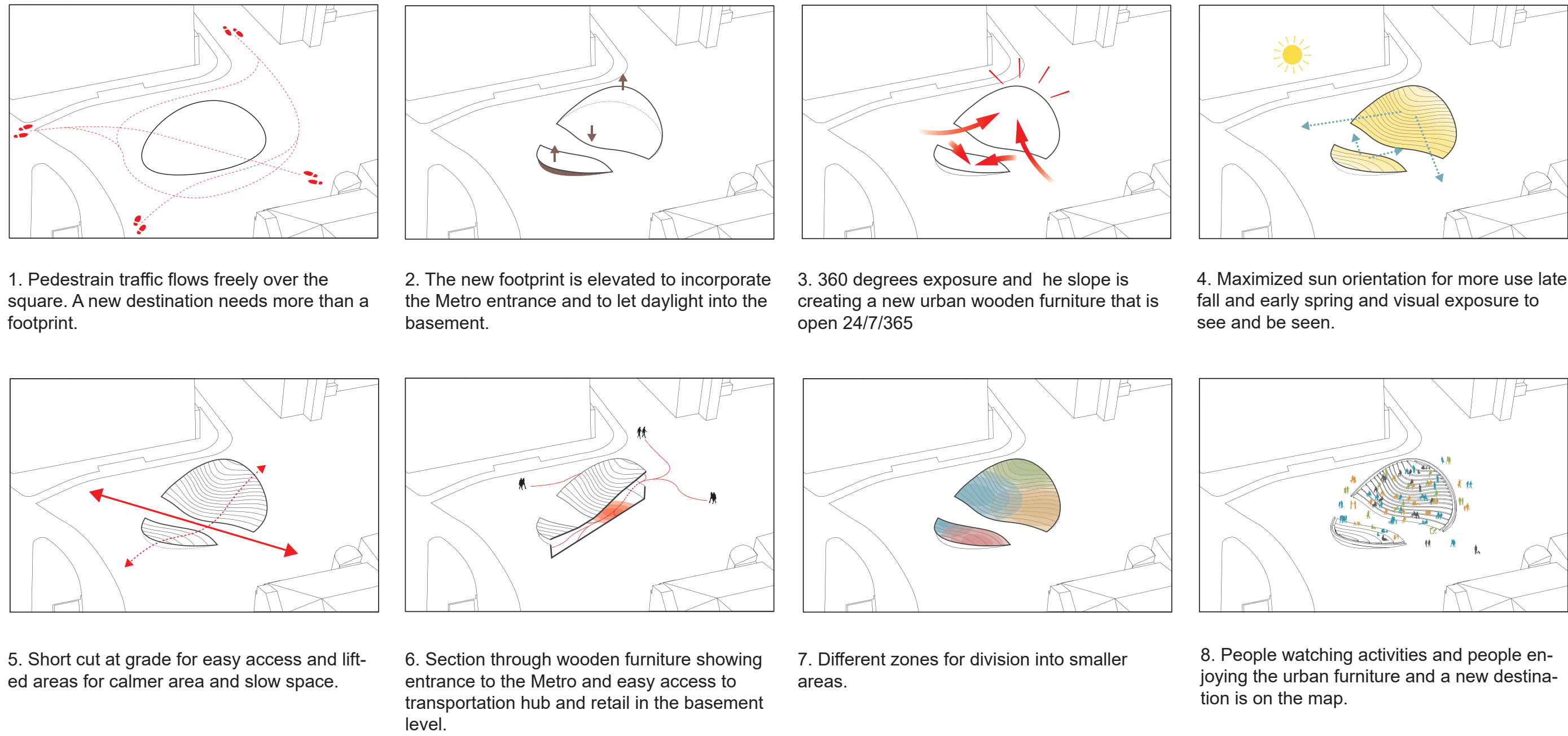




Concept build up for the new building quarter



The Urban Furniture - concept at Asema-Aukio



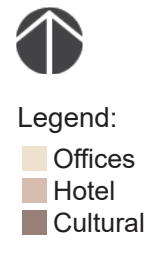




Plan 3rd floor Scale: 1:500



Plan 6th floor Scale: 1:500



Flexibel plan layouts

We have located a new boutique Hotel in prime location on the western corner of the quarter. The hotel will have a public ground floor, restaurant with direct access to the Vltava roof terrace and a roof top bar. Hotel can easily adapt to be larger if larger tenant will need more floor space for hotel rooms.

The main program from 2nd floor and stepping up in the building volume is for office working spaces. The footprint of the quarter makes slim lamellas that frame the court-yards which provide suitable width with good daylight performance for permanent working spaces. The depth of the courtyard areas connects the offices spaces with what we

call "the bridge". These bridges work as common spaces for co-working, coffee stops, technical spaces and meeting rooms. Flexibility in layouts and mixture of tenants can be adapted for larger or smaller areas.

The stepping of the volume creates more terrace that are making a green personality for the whole complex. Interior materials are based on environmentally friendly materials, preferable Finnish wood materials with an aim to be outstanding in performance and flexible use. The large common terrace connects the cultural program in the Vltava buildings 3rd floor, the hotel, and public vertical connections to grade.

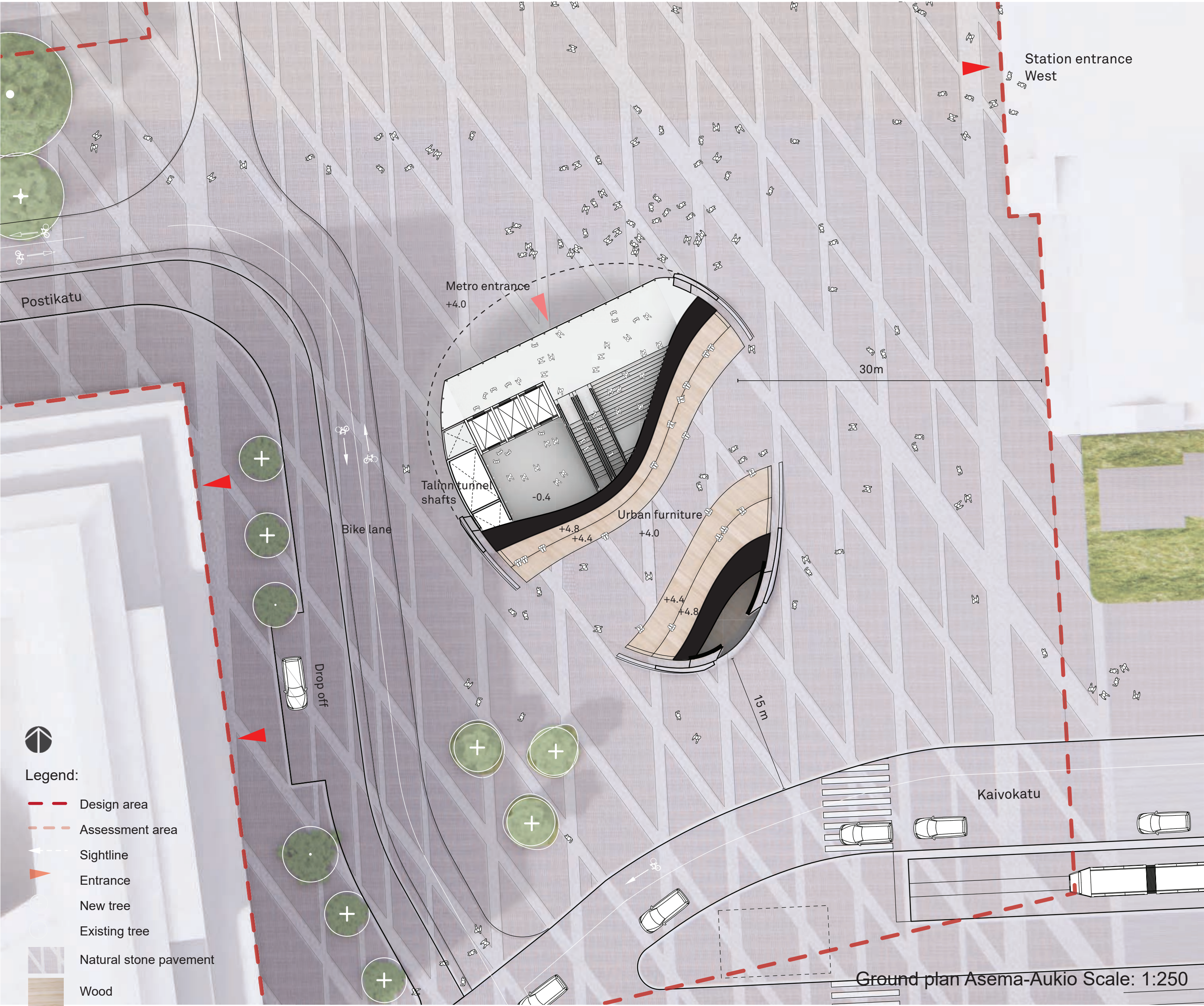




The urban furniture: a public destination at Asema-Aukio



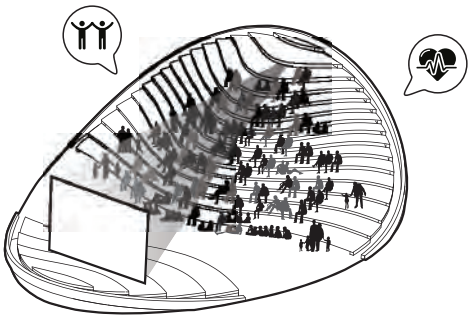
View towards the wooden urban furniture with the first snow



Urban wooden furniture

The urban wooden furniture is the hang out spot on Asema-Aukio. The lifted object makes an “island” that is in its own “time capsule” and at the same time part of the city pulse of Helsinki. The materials are a combination of granite, glass, and wood. The rim is clad with Finnish very light gray granite and holds a ramp that acts as a balcony front, protecting the wooden stepping seating. The generous stepping wooden furniture invites citizens, travelers, and visitors to come once or as often as you like. The program is flexible and can be used by anyone who wants to interact, its open 24/7.

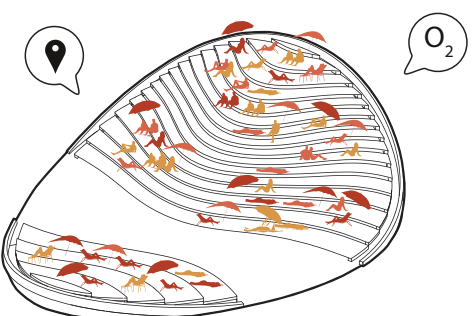
The elevated wooden structure also is the entrance to the below grade areas with the metro, transportation hub and retail. The entrance faces north to maximize sun exposure for people to enjoy the south facing stair. The entrance has elevators, escalators and a stair and the openness of the raisers of the wooden steps makes it a lighter structure and at the same time, it lets the daylight in. At night, the indoor light seeps through and make an ephemeral atmosphere.



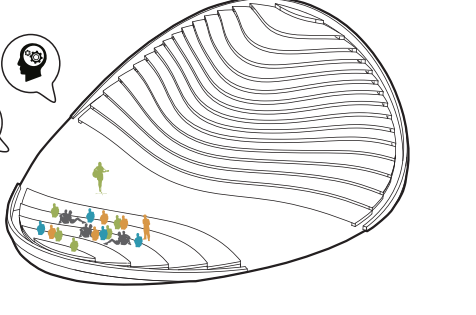
Outdoor Cinema + Sports



Tango Night



Sunbathing



Small Events Stage



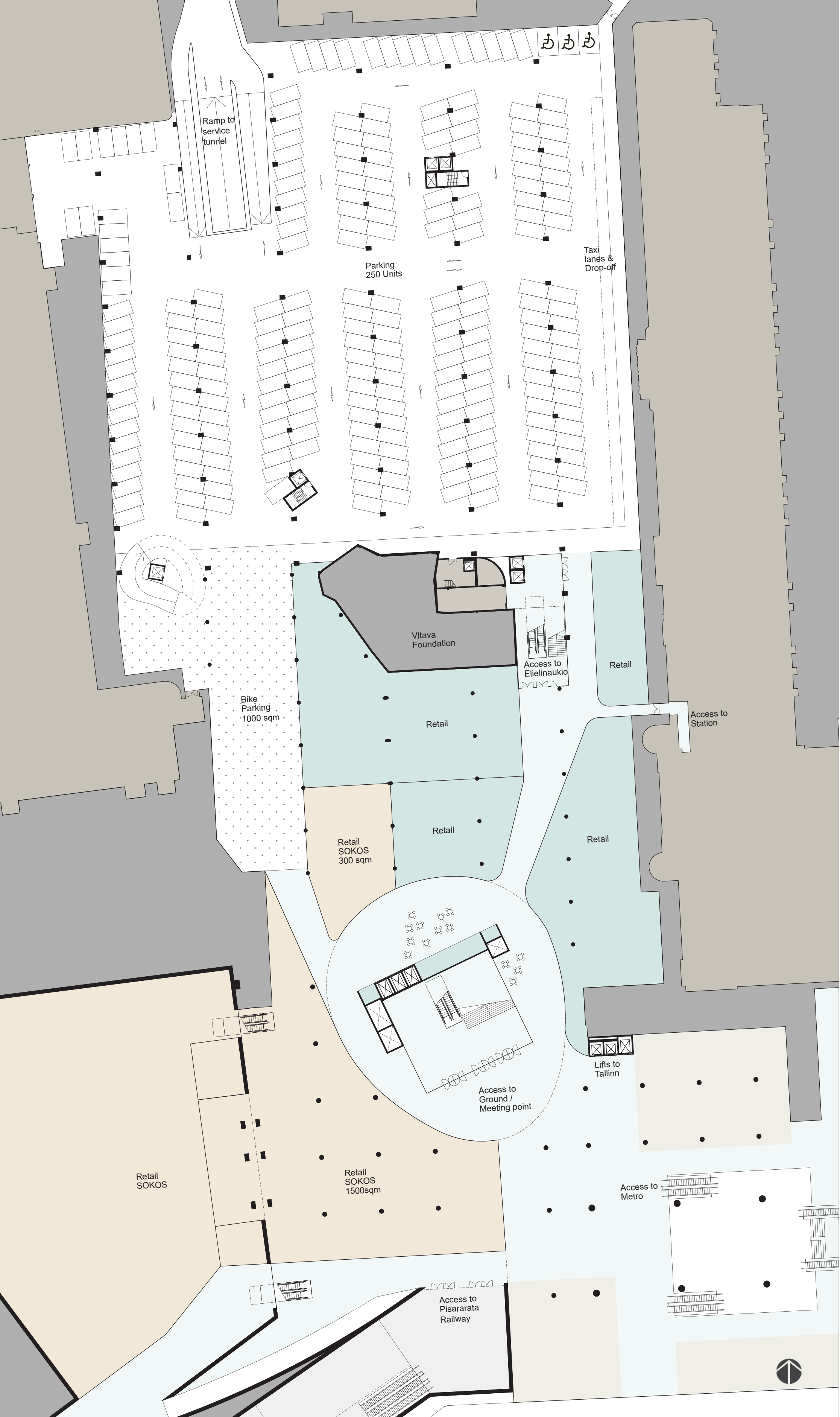
Large Events Bandstand

The overall mobility concept is to change from car and bus traffic to green mobility to prioritize walkability and 2-wheel traffic.

Bicycle lanes are widened to 4m and curb edges 40mm to make an even and flexible surface that prioritizes walkability and accessibility. The bike lane west of the urban furniture is followed by a one-way car lane with drop off area east of Sokos.

Pedestrians have the highest priority and can freely move across the new Asema-Aukio, stop and enjoy the wooden furniture, easily travelers can orientate to go to the tram stop, metro station below grade or directly to the Central railway station entrances.

Basement 1 - Transportation hub, parking and retail



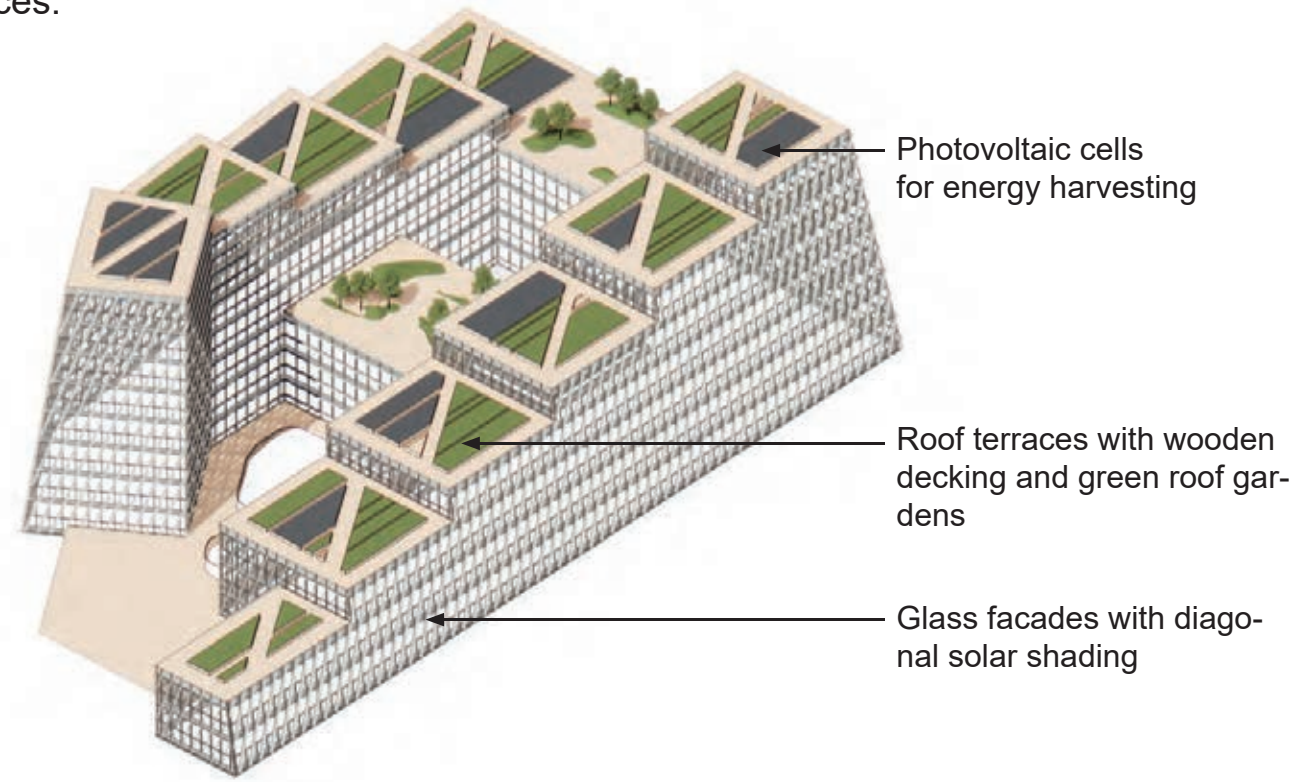
At basement 1 the structural system is renewed and is part of the structural system of the new building volume. Column grid is 15,6 x 7.8m. The car parking accommodates 250 parking spaces and HC parking, electrical cars, carpools, and new environmentally friendly vehicles are prioritized. A new bicycle ramp provides a separate access to the basement directly from the bicycle lane at grade. The curved ramp makes cyclist slow down before parking in the 1000m2 generous indoor bicycle parking area. An elevator makes the it easy for pedestrians to pick up their parked bicycles. The new retail- and transportation hub is located south of the Vitava building. Here the existing slabs and structural grid is reused. This is the new The public transport meeting point. The Pöytäkatu railway, the Asema tunnel, and

the metro are linked together with the new retail area. Sokos gets 1.800 m2 retail areas with direct access to Sokos basement and connects to the new Elielinaukio retail areas with elevators, stair, and escalator east of the Vitava building. The Tallin tunnel is placed next to the metro and shafts are incorporated into the urban furniture. The main entrance to the metro from Asema-Aukio is through the new furniture with lifts, escalators, and a generous stair. The stepping furniture will act as a light source to the underground open space with changing light and shadows throughout the day and get ambient light and will be seen as a light beacon at nighttime and winter days.

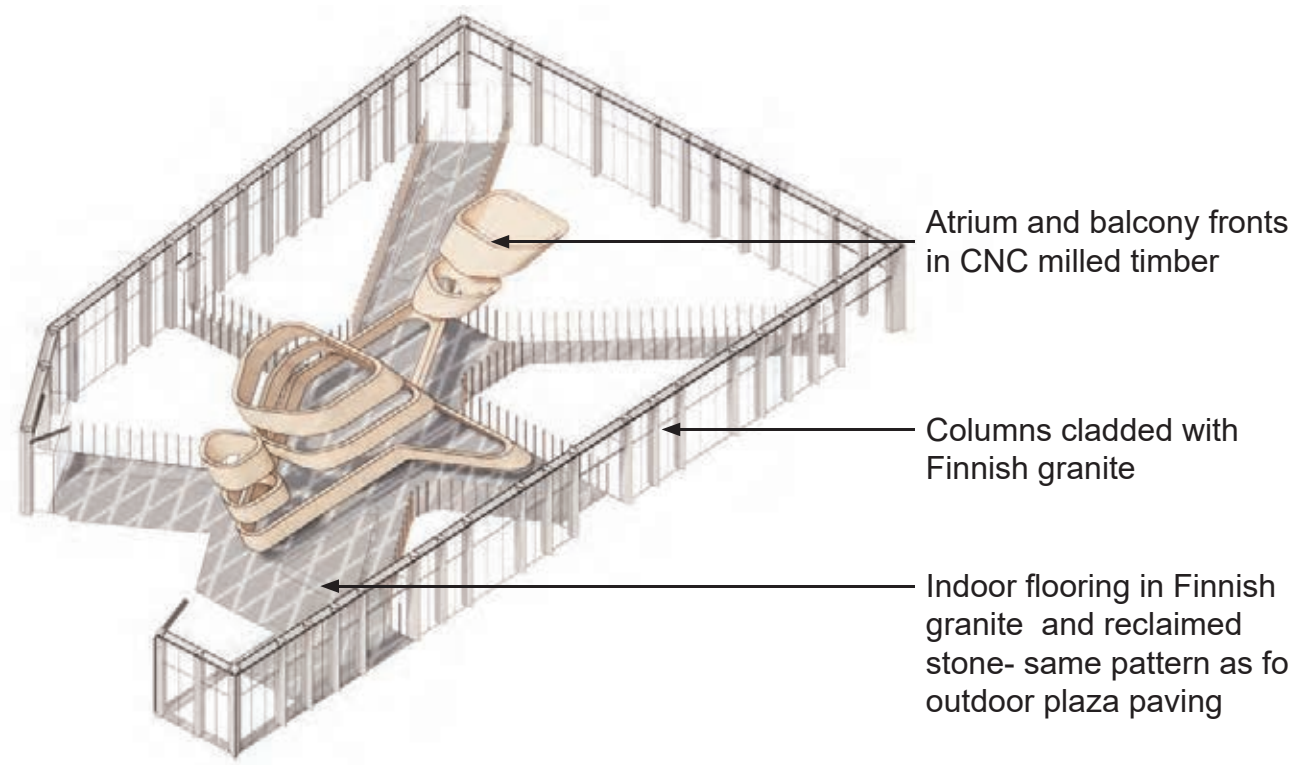


Axonometry of the design concept

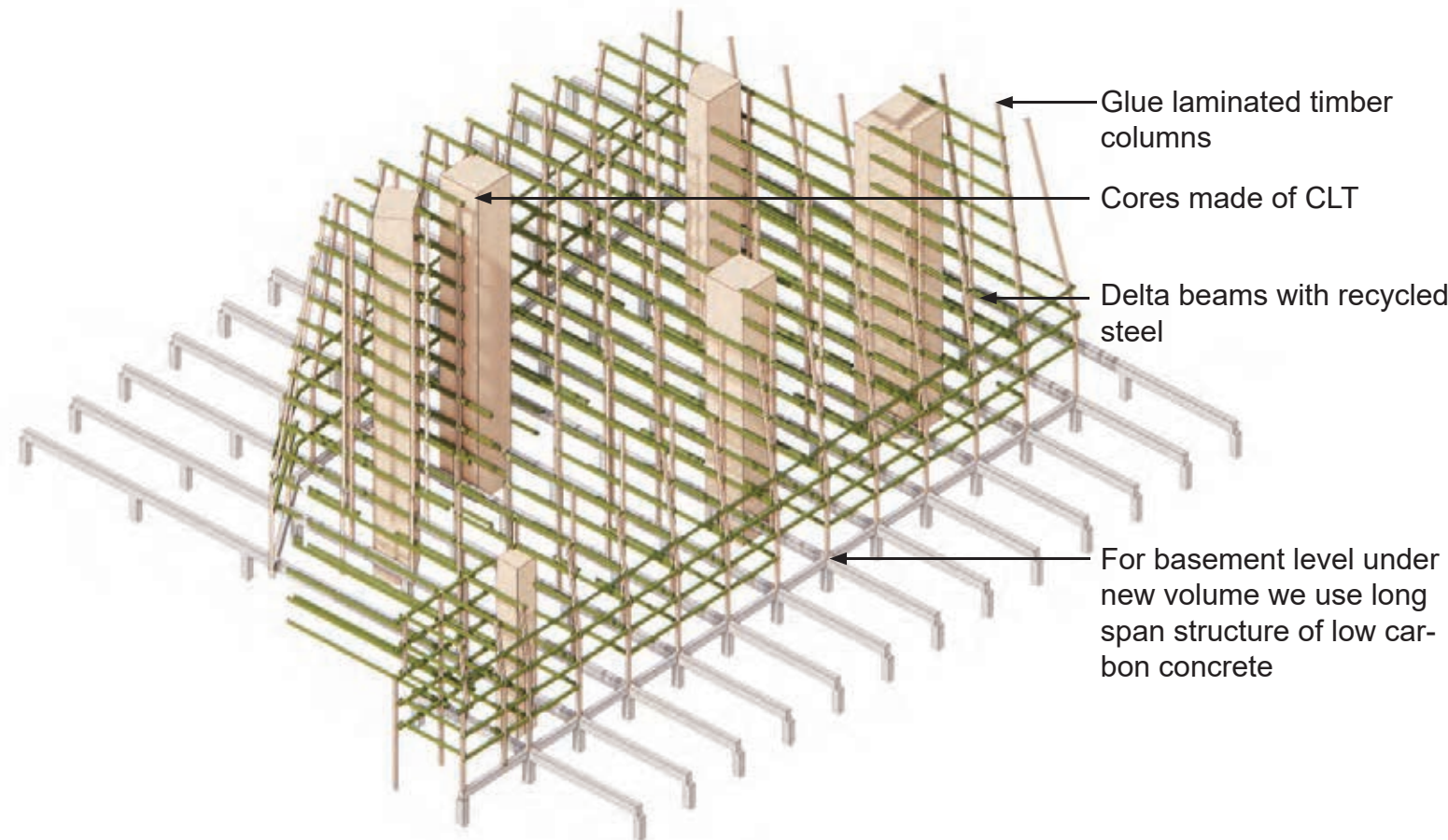
Top volume with roof terraces.



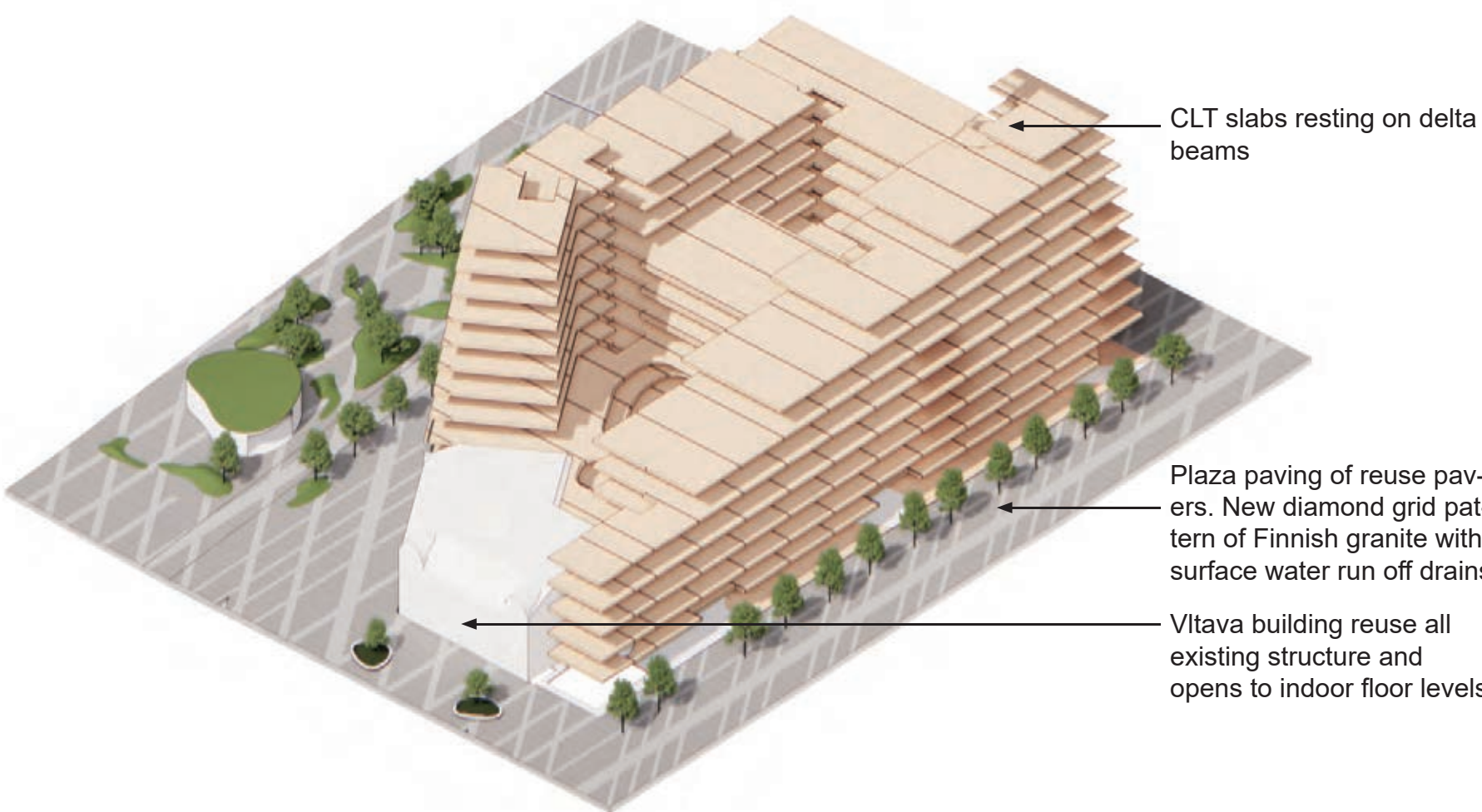
Base volume with public, social areas. The height corresponds to the eaves of the Central station



Primary building structure



Levels, floors and plaza carpet

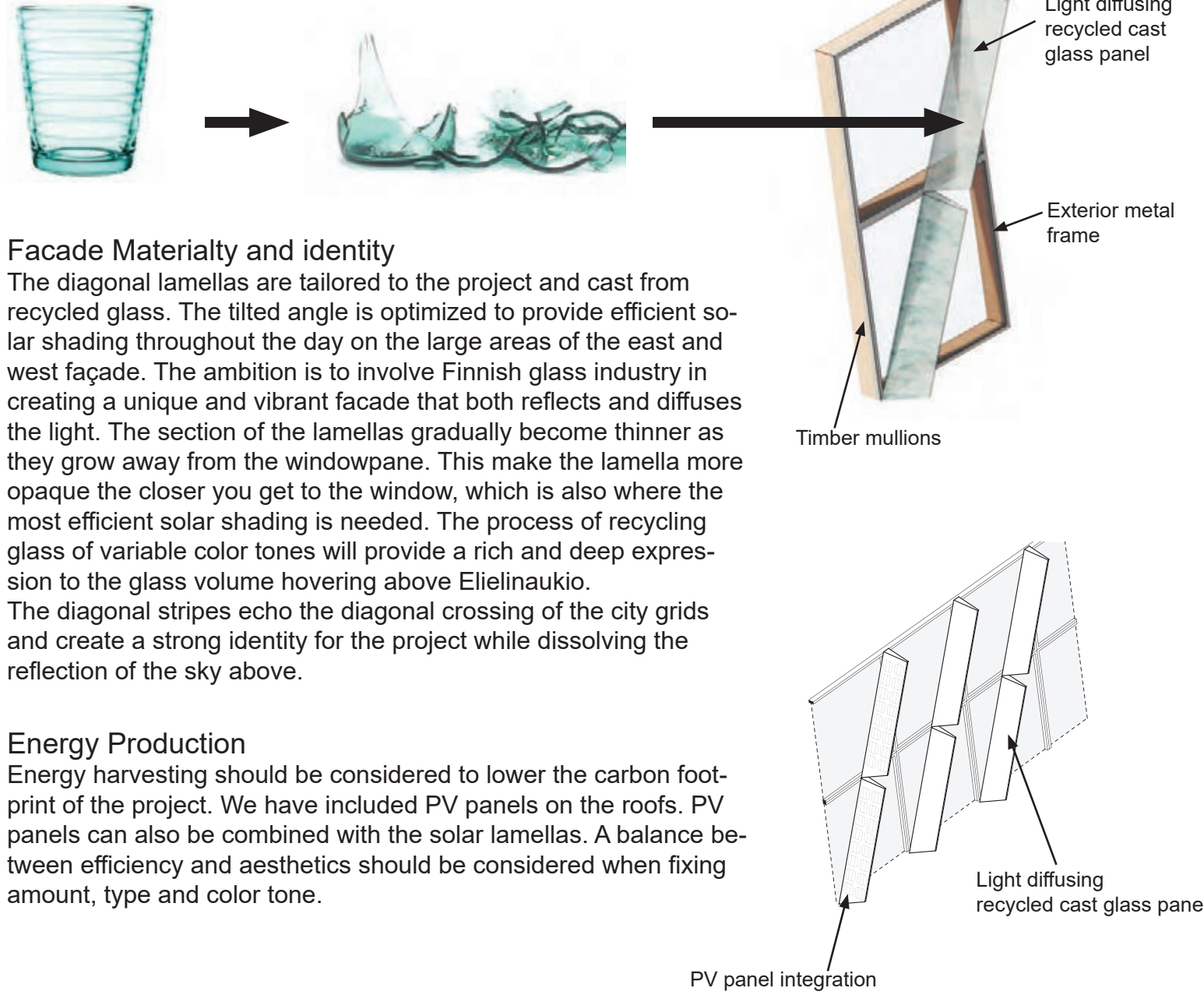
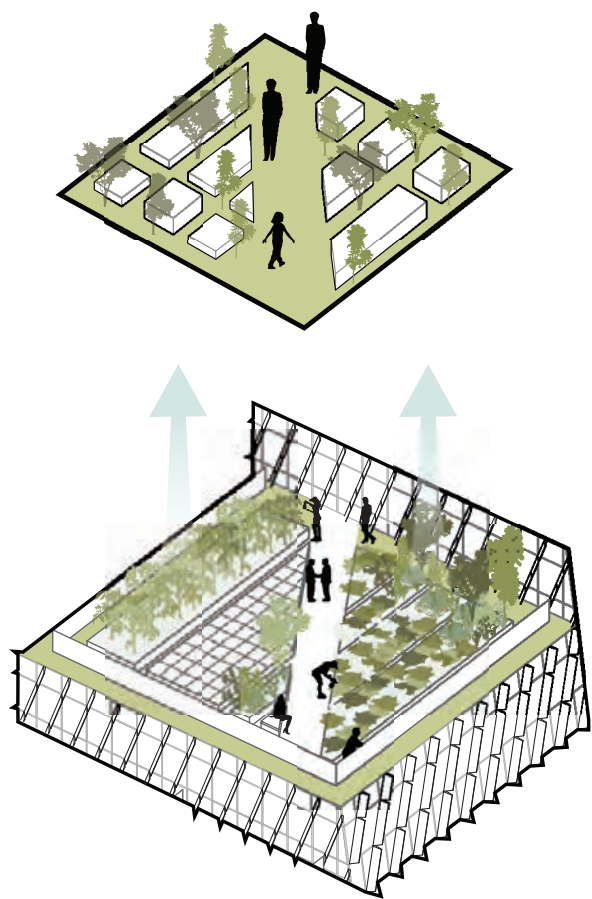


Sustianable Design principles

**Roof gardens: Productive and sensory Garden**  
The roof gardens produce a variety of fruits, vegetables and herbs for culinary uses and a taste of Helsinki. Even KLYYGAs own honey is produced in the roof terrace beehives. Here you will be able to enjoy everything from a sensual garden of fragrant herbs to a meal of locally produced vegetables. Buzzing bees and butterflies are attracted to local plants and fragrant herbs and create vibrant roofscapes for relaxing and hanging out.

**Transpiration through green roofs**  
Green roofs are highly effective at thermal balancing, using natural transpiration in summer to cool the roof areas that are most exposed to direct radiation, while the biological activity in the soil preserves warmth in winter.

**Facade modularity**  
The top facade consists of a modular grid of 1.56 m, which matches to the building grid of 7.6m x 15.6m. It is designed to be flexible and accommodate multiple functions including hotel. It can also fit windows openable inward if desirable. The structural framework is from solid timber with the glazing units applied to the outside with a silicone joint or exterior metal frame.

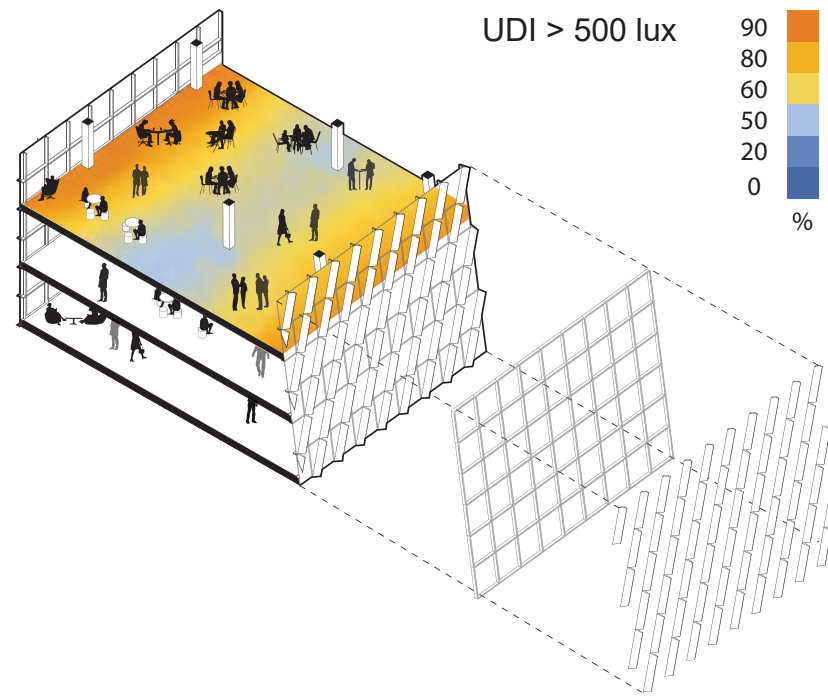


**Facade Materiality and identity**  
The diagonal lamellas are tailored to the project and cast from recycled glass. The tilted angle is optimized to provide efficient solar shading throughout the day on the large areas of the east and west facade. The ambition is to involve Finnish glass industry in creating a unique and vibrant facade that both reflects and diffuses the light. The section of the lamellas gradually become thinner as they grow away from the windowpane. This make the lamella more opaque the closer you get to the window, which is also where the most efficient solar shading is needed. The process of recycling glass of variable color tones will provide a rich and deep expression to the glass volume hovering above Elielinaukio. The diagonal stripes echo the diagonal crossing of the city grids and create a strong identity for the project while dissolving the reflection of the sky above.

**Energy Production**  
Energy harvesting should be considered to lower the carbon footprint of the project. We have included PV panels on the roofs. PV panels can also be combined with the solar lamellas. A balance between efficiency and aesthetics should be considered when fixing amount, type and color tone.

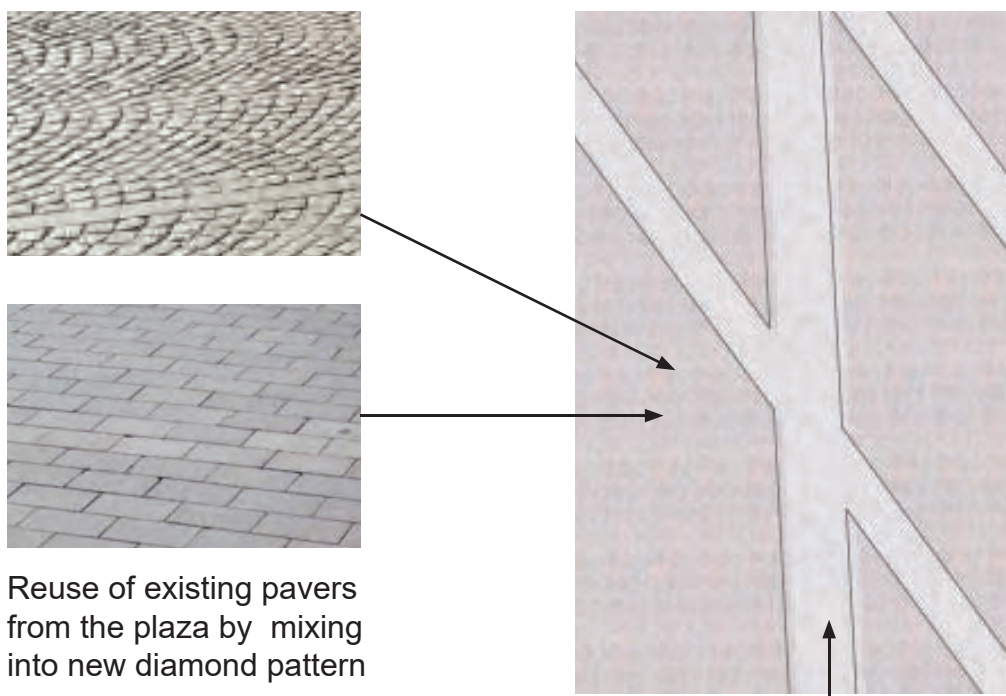
**Shading and Daylight**  
The facade design with diagonal shading allows for ample daylight to the interior of the building reducing the artificial lighting demands and therefore the overall energy consumption. Useful daylight (UDI), >500 lux for workplaces, is achieved for more than 50% of the occupied time throughout the entire floor.

Overall the diagonal shading provides better glare control compared to horizontal shading, as it reduces the glare-prone areas without sacrificing the amount of incoming daylight to the interior of the building. Our analysis indicates the facade reduces the amount of glare hours by almost by 30% when compared to horizontal shading.



**Materiality - Warm, timber core meets mineral, urban Shell.**  
For all components in the new built project, we propose that materials should be easily dismantlable and after lifespan put into stock to be reused. This goes to both the existing materials and for all new materials used in the Elielinaukio project. The highest carbon reduction is achieved by applying structure and interior finishes in locally sourced timber. We visualize spruce as the main material. Timber columns, exposed timber slab ceilings and all facade mullions and retail interior mullions in timber. The interior is crowned by sculpted (cnc milled timber) balcony fronts bringing daylight into the atrium and interior plaza. The top of the building stands out as a shimmering glass volume. The base is framing large open glazing units with generous diamond shaped granite columns that relate to the minerality of the city and are welcoming to touch.

The plaza should reuse as much as possible of the existing quality materials. The diamond-shaped cells of the diagonal pattern are filled with a mixture of reclaimed stone from the site. The diagonal stripes in the plaza, as well as the base column cladding and the edge of the urban furniture is made of locally processed Finnish granite. For the column cladding horizontally stacked relatively small format stone allows to utilize quarry leftover formats. The same paving flows into the atrium space and interacts with the warm and soft timber interior.

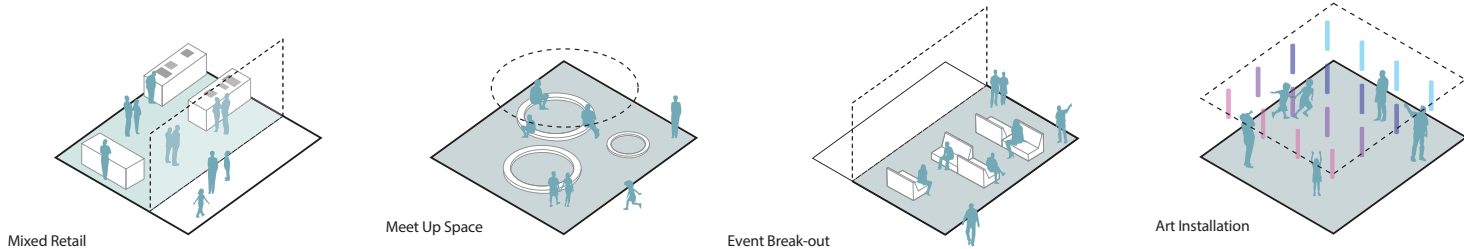


**Water Management**  
At roof tops and at ground level circular water handling is important even if all the surfaces are sealed as the premises are set on top of the existing basement that is covering all the public square.

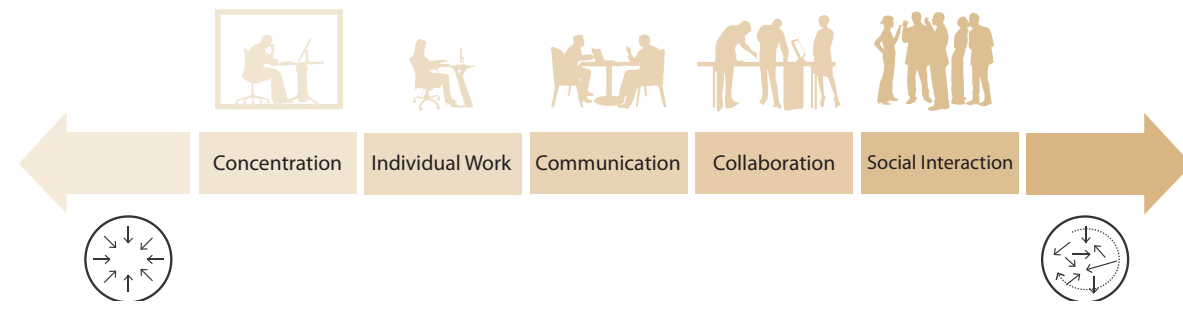
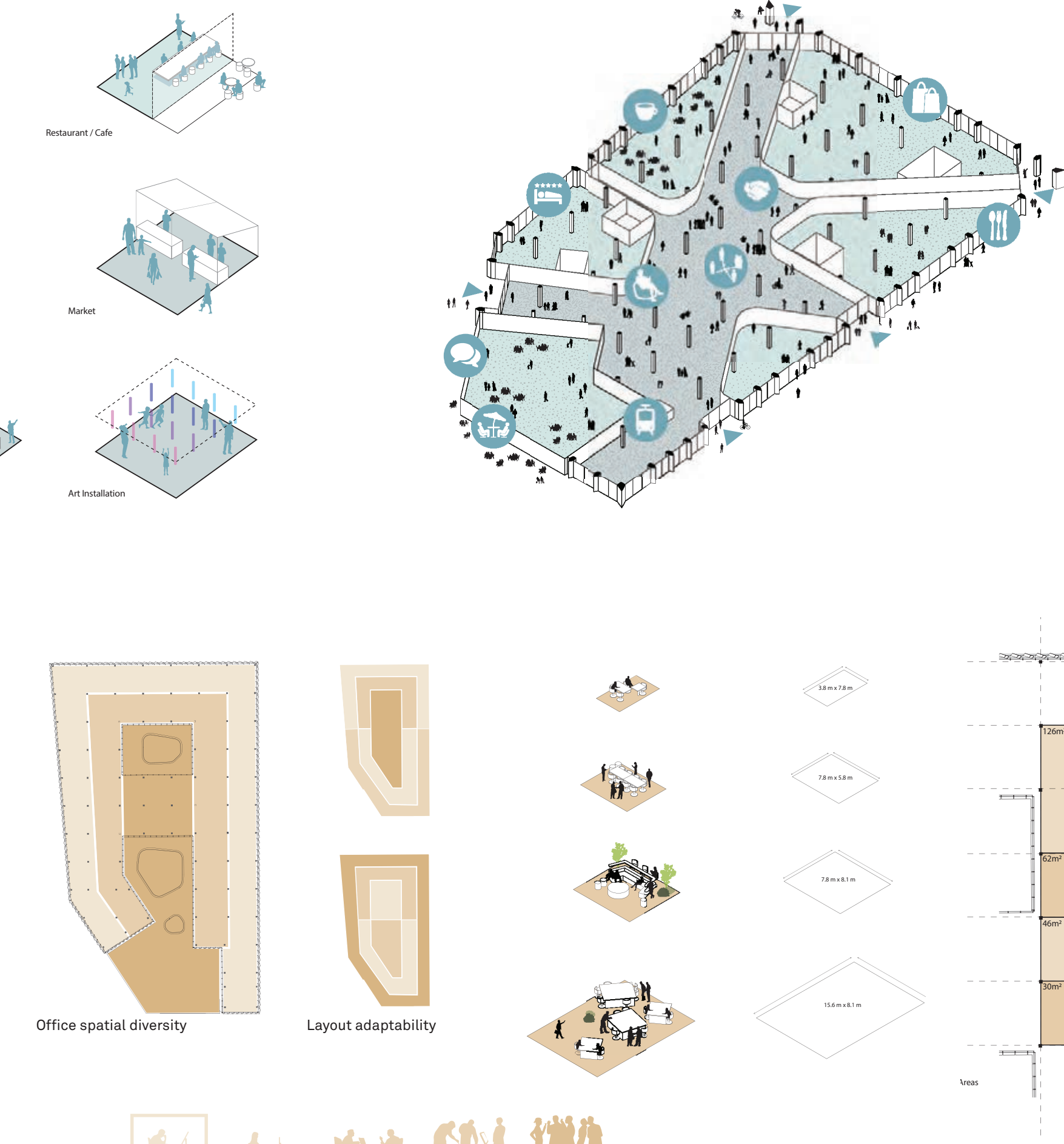
Rainwater collection and climate adaptation is integrated in the landscape through a series of roof gardens that let water gradually seep into the built-up ground while being filtered and stored for further irrigation uses. Surface water runoff is directed to new rain gardens that is part of the build up of the tree plantings and the new landscape islands in the Elielin puistikko.

**The Base - Interior Public Social Arena**  
The generous plaza floor creates new opportunities for moving through the quarter. Flower shop pop up stores and amenities create new public activities and a relaxing atmosphere for informal meetings and breaks to take place. Co-working spaces, lounges, cultural program and retail mix with cafes, bars, take away and restaurants makes a vibrant energy during daytime, lunch hours and late nights.

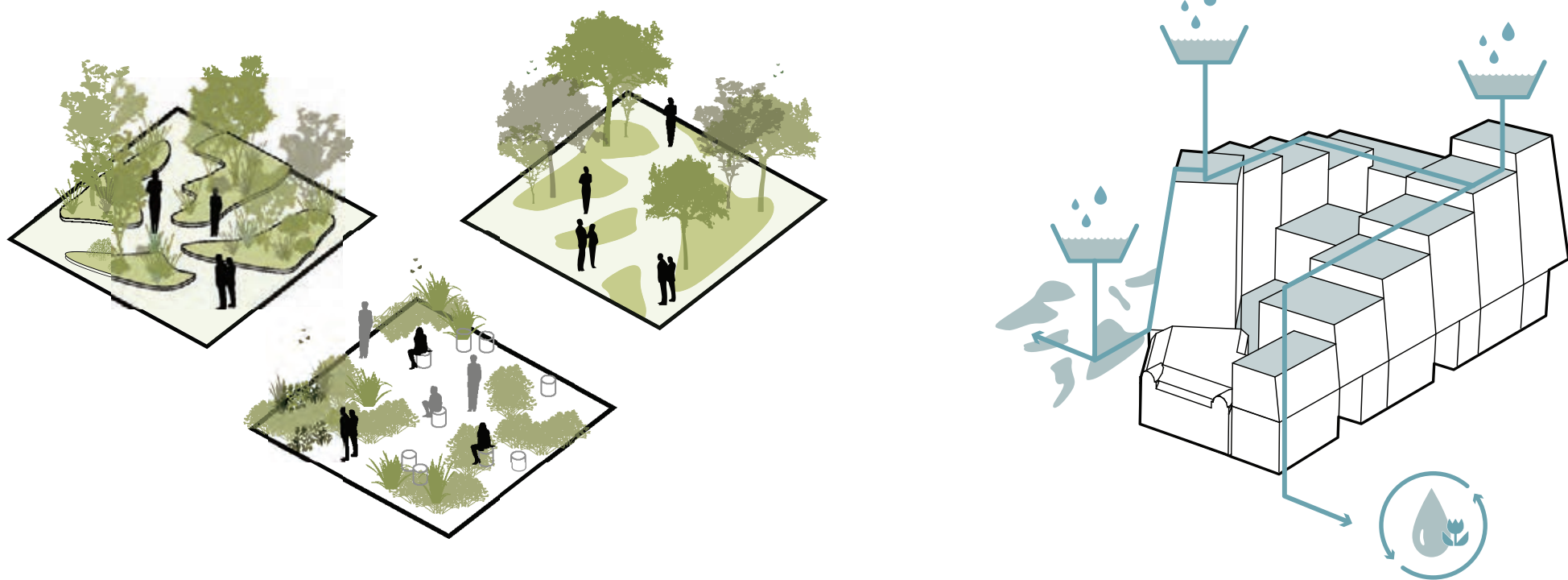
The Mezzanine level consist of a mix of health functions such as dentist, doctor, hairdresser, nail design and informal meeting points and co-working spaces



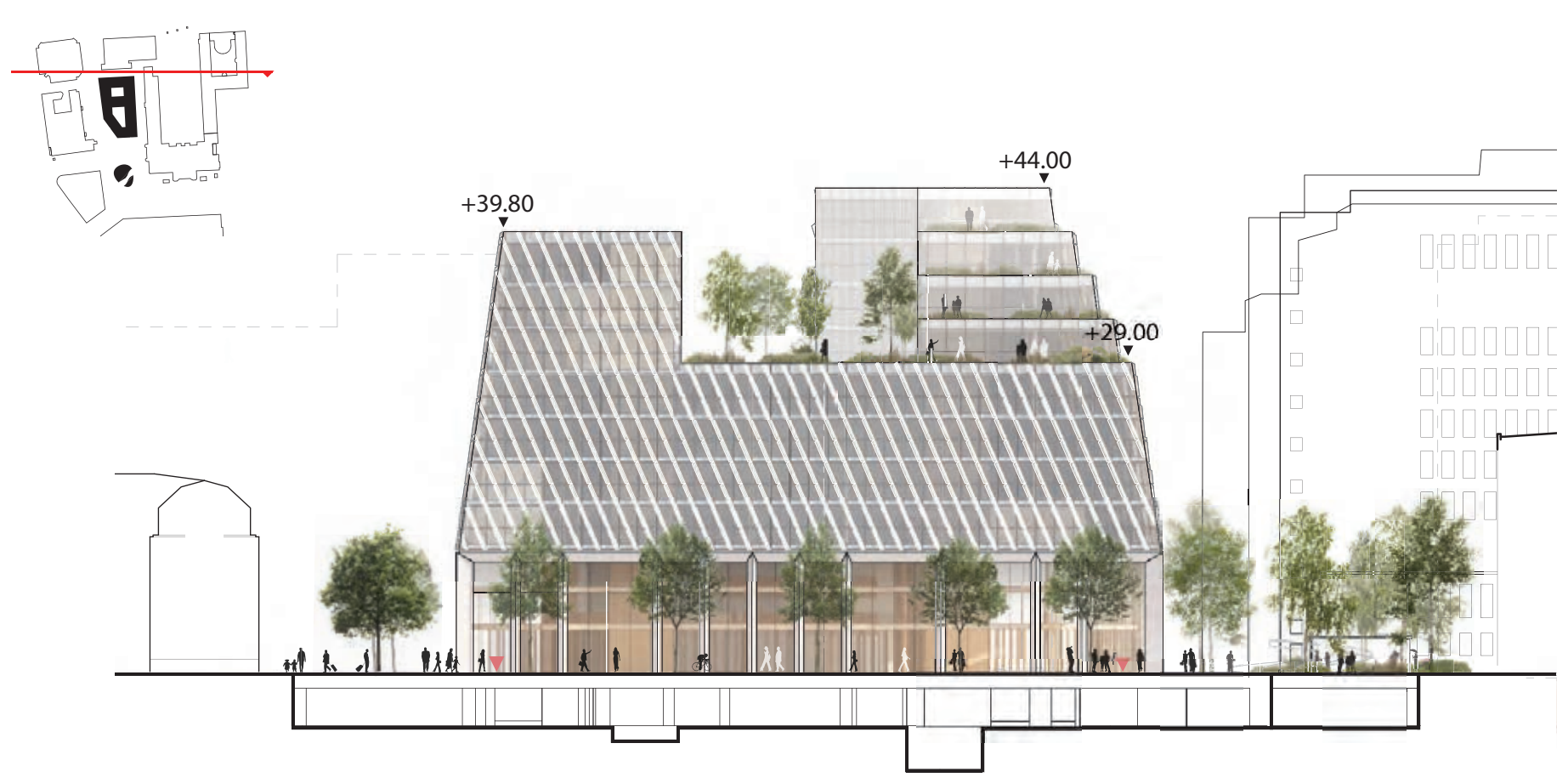
**Flexibility in structure**  
The goal has been to design a structure with a minimum carbon footprint and maximum flexibility for functions and potential reuse of elements. The structural grid for the new building is based on 7.8 x 15.6 m construction grid which is stepping up towards surrounding buildings. Floor heights slab to slab are 7.0 m for ground floor including a perforated mezzanine. Following floor to floor heights of 3.6 m for office/co-working spaces and hotel which provides flexible use and program of the new volume. The relatively generous heights are proven optimal for slow moving air flow that reduces the energy consumption for ventilation. We suggest using an efficient mechanical ventilation with heat recovery. This will need to be studied further in future development. The structural frames are built up by glue laminated wooden columns and combined with recycled steel Delta beams for maximizing ceiling height and adaptable functional program. The timber structure is modular so it can be reused for future development.



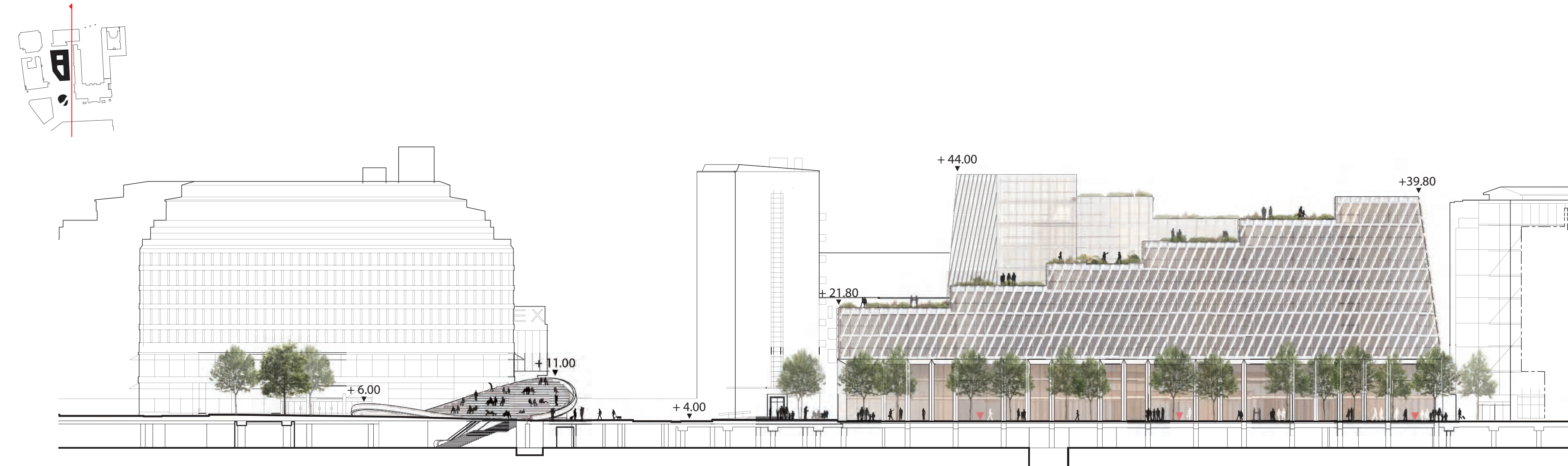
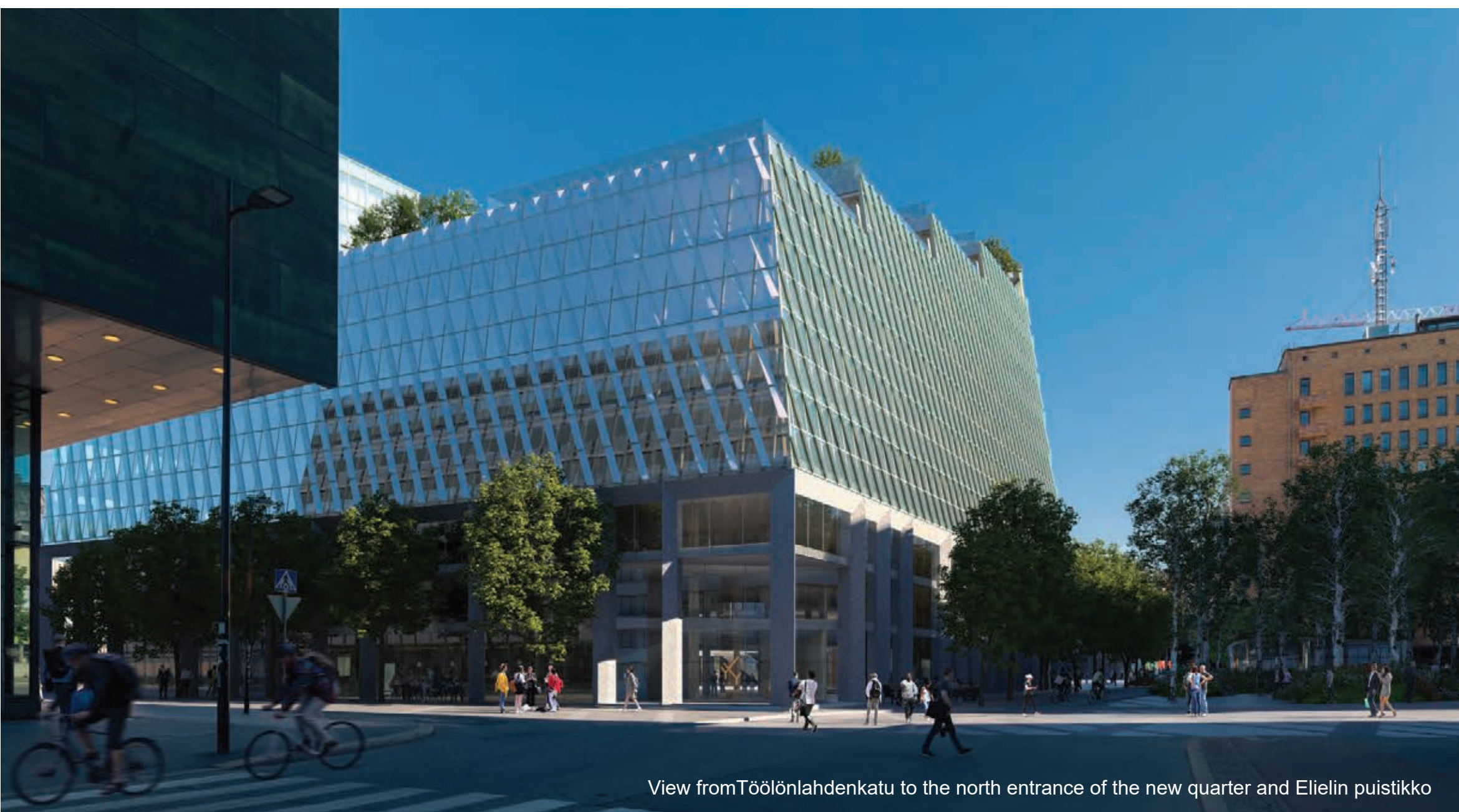
Basic components in the grid makes flexibility for use as collaborative and informal areas. More tenants can share common areas







North elevation Scale 1:500



East elevation Scale 1:500



Cross section Scale 1:250



