

PLATTA

Markets are the soul of a city, creating a platform for sustainable urban life.

SOLUTIONS FOR THE FUTURE

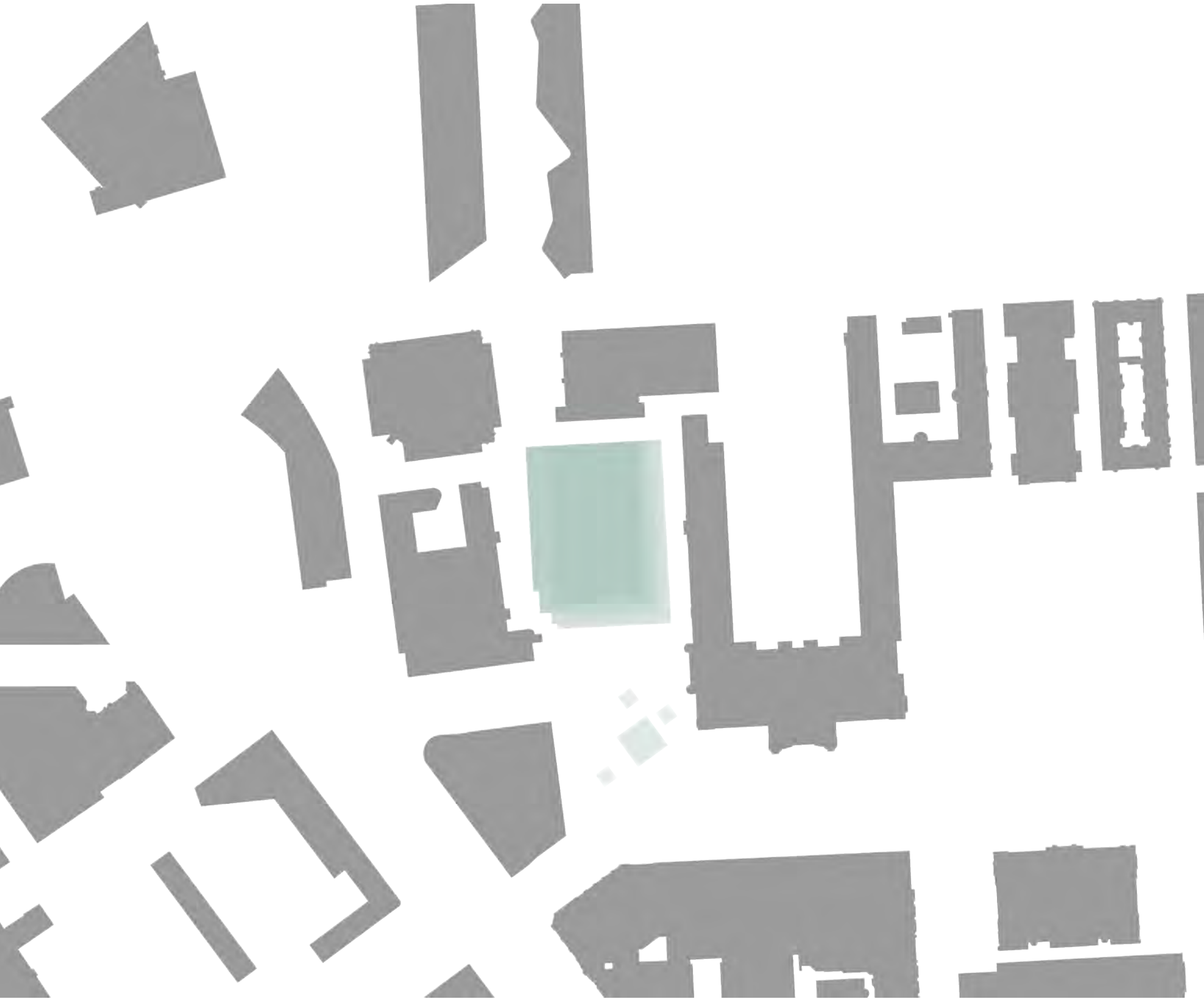
Our cities are living through a historical transition triggered by fast-paced societal, ecological and technological changes. Climate emergency will change the way cities are designed in the future. The pandemia catalysed the adoption of communication technologies across sectors and social groups. Digital services have challenged the need for face to face interactions, rising concerns about the significance of space. This is leading to a radical transformation of urban culture and the way we carry out the fundamental activities of our everyday lives. Yet, the challenges we face are still unsolved, and cities will be the solution. Mobility and construction are the local amplifiers of our global ecological crisis. What we eat has also a big effect on climate change, so new initiatives and pilot projects are needed to change our current food systems and diets. Solving these challenges is not only a technological problem but a question of communal will and lifestyles.

As the success of cities is increasingly reliant on their intangible capitals (such as culture, talent, knowledge and wellbeing), current investments in infrastructures are decreasing their relevance to the growth of urban centres. We are shifting from

purchasing products and ownership to subscribing to services and experiences. The new lifestyles enabled by this transformation are rendering commercial and workspaces obsolete.

Empty office spaces, newly designed malls and local retailers we see today are the outcomes of managing physical spaces as a matter of urban design and digital space as a matter of service delivery. The key step to undertake is to move away from this dichotomy and to combine the best aspects of the physical with the digital in the construction of new buildings.

We bring solutions for spaces for social interaction that foster innovation and meaningful relationships. Central urban spaces will become promoters of sustainable lifestyles and help regenerate the economy of small places. Our project will favour social innovation and it will rekindle the vibrancy of urban life. **New Eliel creates places of attraction and collective joy, bringing people back together.**



VISION

New Eliel will upcycle the area from a traffic infrastructure hub to a new heart of urban life for Helsinki. The location has great hidden potential. Already now it is a highly frequented place in the very centre of the city but in the future, it should better cater to the needs of Helsinki and constantly welcome newcomers from far. As stated in the City Centre Vision of Helsinki (Keskustavisio), the very centre shall both attract and retain people ever better. In line with that, in and around New Eliel there are multiple reasons to come and stay, to encounter people for both business and pleasure, to enjoy urban life. You have reached your destination when arriving at Eliel, you are no longer in transit. You are there.

How to create new spaces to experience urban life? City centre and New Eliel are also stages of non-commercial life. They have public spaces where you do not need to purchase anything to feel welcome, 'loitering' is desirable. The city happens at the eye level, and life is also in between buildings like the City Centre Vision emphasizes. The best experience of it comes on foot and this shows in the way people can access the different transport modes. Like the City Strategy of Helsinki

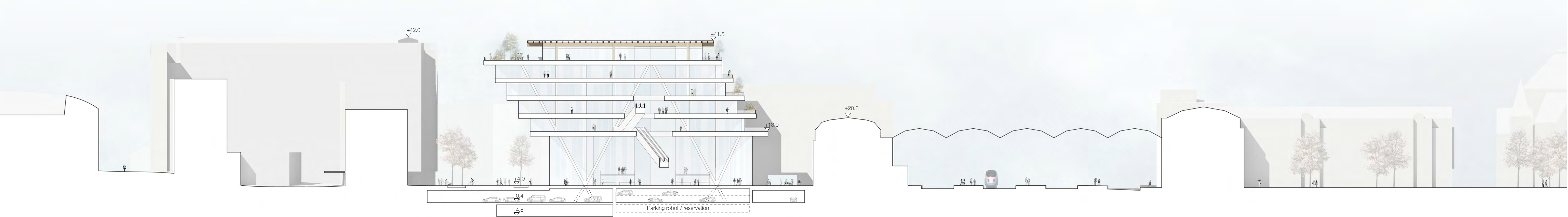
states, "the most functional city in the world" makes everyday life smooth and eventful, and so does New Eliel.

The businesses that get to locate at New Eliel will feel privileged. They get the maximum added value from the location that is both user and service-intensive and has a high symbolic value. They are both creating a foothold and benefiting from it. Their flexible spaces can adjust to the turning of time. This exclusive position gives the property owners the possibility to be generous and devote a considerable amount of the floorspace for city dwellers and visitors that can accommodate them to different uses.

When city centres are planned for the pace of people, not the pace of business, they can cater to both. Public spaces in city centres are the places of lingering ("flâneeraus"), not travelling through, so they should be designed accordingly. The city is best experienced at walking speed.



"NEW ELIEL CAN BECOME THE FLAGSHIP PROJECT IN HELSINKI FOR PROMOTING SUSTAINABLE LIFESTYLE."



Area facade and cross-section, east - west 1:500

Open Platforms

URBAN FABRIC - FUTURE LAYER

Eiel Square is located in the heart of historic Helsinki. The area consists of several layers of developments, each telling a story of its own era. The aim was to create a design, which respects the valuable historic nature of the area. Respecting history means that historic landmark buildings will remain dominant in hierarchy in the urban fabric. Sufficient open urban spaces around important buildings will be preserved. Also, New Eiel will be compatible with the existing buildings in terms of height. In New Eiel, a few design elements use the historic urban grid coordinate system, as traces of reference to the past. The Vltava building will be preserved as a fragment of history, to keep the memories of the past alive. New Eiel will add the next, contemporary layer to the center of Helsinki. The new layer is clearly recognizable as a representative of our time, it shows the way to a better future for Helsinki.

DESIGN STRATEGY - URBAN AND GREEN

Eiel Square area is located in the intersection of the urban block city structure and Töölönlahti Park. Our strategy was to redesign the Eiel area so that its architecture will emerge as a hybrid: it is both urban and green. With the building, it will enter into dialogue with the landmark neighbours. With the green landscape elements, New Eiel will bring fresh air into the city center and it will create a green connection to Töölönlahti park.

ARCHITECTURE - OPEN PLATFORMS

New Eiel offers a chance to introduce new architecture to Helsinki both in content and form. The aim was first to develop the content, then to design suitable architecture for it. Sustainable Market, hybrid program and public terraces offer ideal content to create new urban life for the site in a successful way. Building takes the form of open platforms, stacked in a free sculptural way, hovering in mid-air among the greenery. The simple solution is timeless, content and form become one. The new architecture is friendly and open, inviting everyone to enter.

SPACE - PROGRAMMABLE

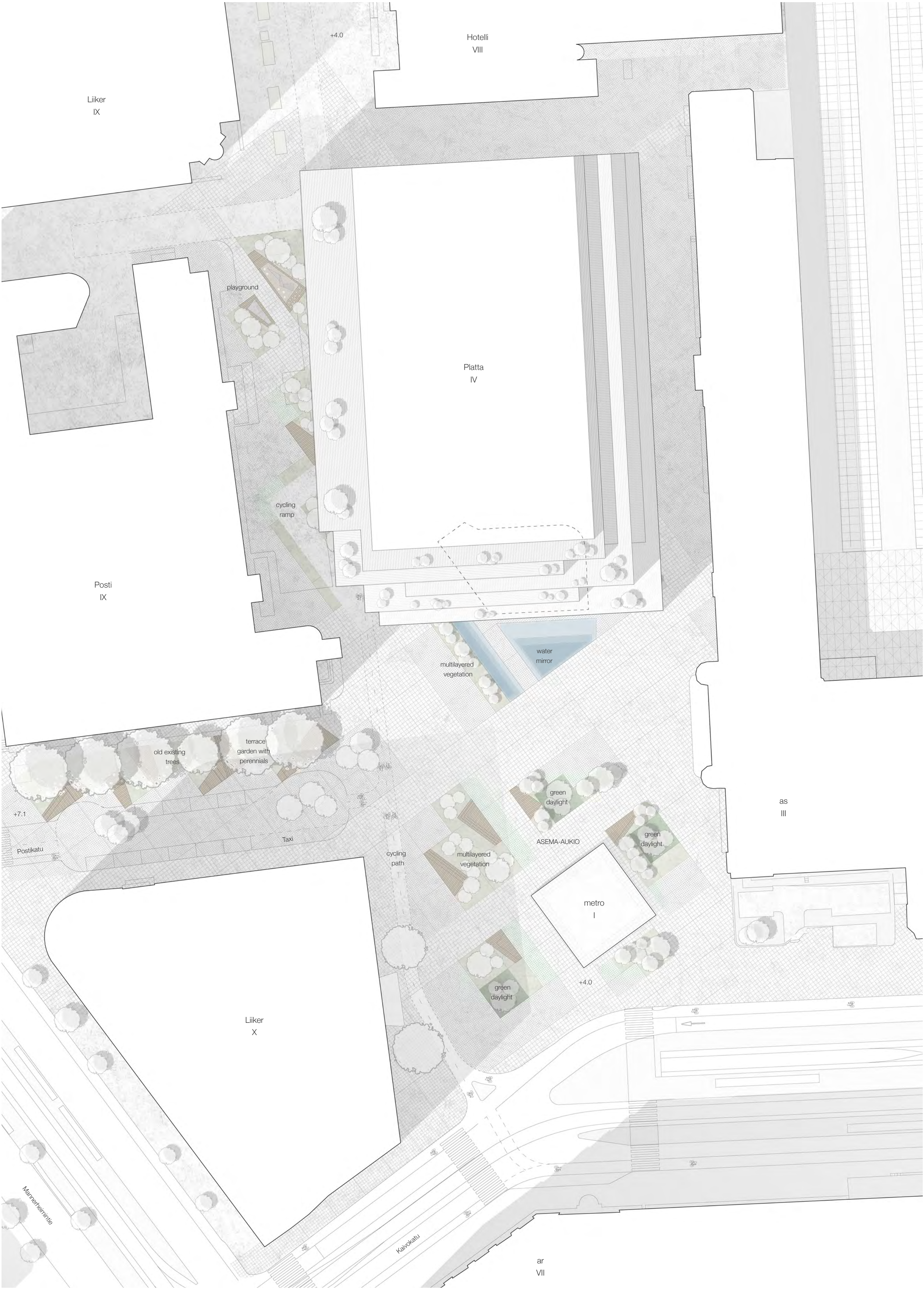
People are not just "users" with "needs" that we "nudge" and "serve", but citizens, with dreams, ambitions, capabilities. Programmable spaces can cultivate the human capital of our cities only when everyone has the freedom of expression in public space. Space and functions can become programmable by the local community, establishing a sense of ownership, identity and commons with the new building. As society will keep changing, so the purpose of structures and design elements will follow - both indoor and outdoor. The aim is to design spaces, which allow everyone to join in programming together.

ACTIVITIES - HUB BASED

The urban block is no longer an impenetrable fortress nor a sole mobility platform. The inclusive urban design will open up the boundaries of the building and make all its structure porous and open at all times. Travelling has been perceived as a derived demand. People move to get to work or school, to go shopping or to reach hobbies. Mobility restrictions have shown that many people do not have to travel because everyday activities can happen at home. Moving becomes more as the main purpose of travelling, which will increase the demand for pleasant environments and transfers and at the same time, it should cater to various needs. For example services, such as grocery shopping should be merged into the trip chains. New Eiel will be the main urban hub that brings together mobility services and human activities.

VALUES - COMMON

New Eiel will foster diversity instead of specialization. This means cultivating the more resilient and regenerative value in our cities: the human capital. It is about creating a space where people come together to build a community. Seeing the city's role in giving the public space for people - the sense of community will rise from the people themselves. Sense of community (yhteisöllisyys) cannot be "organized" but it can be made possible by providing space for it. Eiel Market will form a communal space for "meeting of minds" and doing together. Spaces will be designed to cater the needs and aspirations of all generations: from children to young people and adults to the elderly.





FUNCTIONS / FLOORS

New Eiel is a hybrid building, allowing for free clustering of functions and activities. An ever-changing allocation of spatial resources to bring diversity, inclusion and innovation at the core of Helsinki. The building program is designed to provide activities through the hours of the day, days of the week and be always meaningful to human activities related to seasonal changes. The plan offers activities to re-establish a work-life balance disrupted by the health crisis and make wellness a geographically and socially central function of the city.

In New Eiel, public programmable space flows through the building. The main escalators provide public access to all floors, from the ground to the top, to provide the only public roof terrace experience in Helsinki. For the first time, the city will have a truly open space for locals and visitors to admire the Helsinki skyline. Not only the ground floor and the rooftop will be public. Public programmable spaces will spiral along the main vertical connection to provide a seamless experience of publicness across the building.

1 - TORI

The Floor - The ground level of New Eiel is an extension of the surrounding outdoor public spaces. This is where all the pedestrian flows meet and where others find a shortcut from one place to another of the square. There is no distinction between the public and the private. Glass facades will bring the outdoor and the indoor life together through a seamless visual experience. Seeing through the buildings is also heightening the sense of safety as no blind wall will present on the square.

The Market - The sustainable Market hall provides the core identity of New Eiel. It will provide an opportunity for people to make their everyday life more sustainable. This profile and its central location will make the market valuable to citizens as well as attractive to international visitors. It will be the first contemporary market in the city of Helsinki and it will be open throughout the week and during the day long into the night. It establishes a traditional form of the economy at the core of the city, to help rekindle the local attachments of national producers. Sellers will be

invited from several of the online direct-farm associations active today in Helsinki and special occupancy schemes will be established to give the possibility to micro-producers to bring their products to the core of the city. **The mission of the Market is to promote sustainable lifestyle, change in food systems and our diets.**

With this, we aim to maintain a classic Helsinki tradition and strengthen the feeling of belonging for the local community. This will be a market for everyone and it will be the pulsating core of the city throughout the seasons. **The Market will become the best location to meet people face to face in Helsinki, both for business and for leisure.**

The Stage is the space in the market hall where ideas are shared and public debate will take place. People, associations, universities, companies or other institutions, can program the space by booking the Stage for public events, lectures and open conversations.



Soul of the City



Floor plan - ground floor +4.00 1:250



2 - LAITURI

The Floor - Level 2 follows the openness and publicness of the market hall, offering a space that will represent Finnish creativity, culture and lifestyle. The small village offers the experience of a Finnish Design District on one floor.

Retails - From fashion to design items and books, the retail area will be dedicated to displaying Finnish design and culture. It will be the first place in the centre of the city where Finnish designers have the opportunity to showcase their products in a self-reinforcing cluster that will attract the attention of both local and international visitors.

Public Programmable Space - On this floor, creatives, students and artists will have a dedicated easy access space to display and sell their works. This will ensure the publicness of this floor by offering an opportunity to admire and support young people and emerging youth organisations in the fields of arts and design.

3/4/5 - KOTIPESÄ

The Floor - On levels 3-5, companies can establish their home base and build their identity in Helsinki. After the general adoption of remote working and pervasive information technologies, the role of the workspace will be centred around innovation. Open spaces will favour human interaction and the exchange of ideas between people, which are vital to establishing meaningful relationships after extended covid restrictions. Home Base will be a small and compact solution for the future of work and innovation.

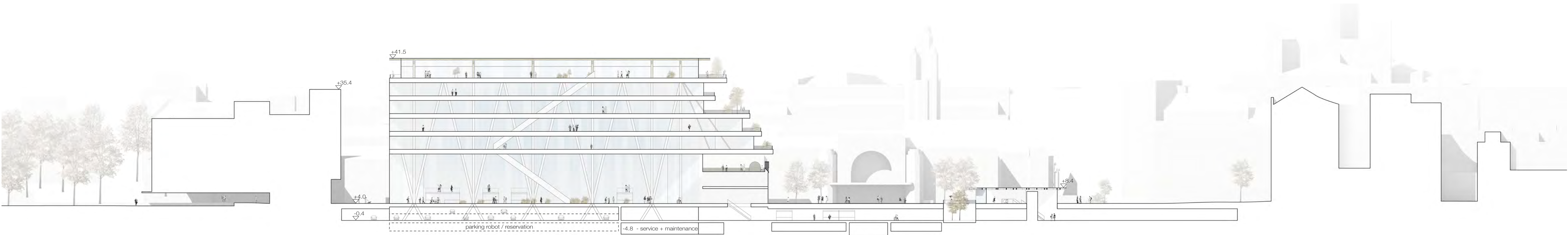
The Home Base - Innovation requires freedom and flexibility and the use of space to provide an agile model to generate ideas. The space will be active across the day and the week, to allow different people to share or focus on their project in the time they find best. Innovation is also about open ideas and casual encounters. To achieve this, leisure areas and lounges will be an integral part of the workplace, and some of them will be open to the public too.

Public Programmable Space: On this floor, there will be working booths, meetings rooms and open spaces that can be utilised with easy access. Future entrepreneurs will find the best place to work on their ideas or invite their clients for a meeting, without the need for traditional office space. These temporary or short-term rentable spaces are going to support a new generation of entrepreneurs, who no longer need large investments to start their operations.

Programming
Together



Facade, south 1:250



Area facade and cross-section, north - south 1:500

Building a Community

6- HÖYRY

The Floor - The open escalators starting from the market hall will reach the public rooftop, spiralling through the Public Programmable Spaces present on each floor. This will provide a refreshed experience for visitors, that will always feel like moving through public space - from the outdoor spaces of the square to the indoor and ultimately to the open terrace. This is the first and only public rooftop of Helsinki, where people can truly experience the beauty of the city without the necessity for paid services. Yet, the floor will be the central space in the city to re-establish a healthy work-life balance after the long social distancing.

The public terrace - The terrace will establish a new relationship between people and the city. The experience is unique: a large public space to enjoy the Helsinki skyline in freedom and company.

The Sauna - Traditional Finnish sauna promotes diversity and inclusion. Sauna is the place where people come together leaving their social and economic status behind. Höyry's sauna is also a central element for the local community to re-establish a healthy work-life balance. After the unbalanced lifestyle imposed by COVID restrictions, the sauna will be a collective space to return to the healthy normal.

Winter Garden - 24/7 wellness units will offer an opportunity to focus on improving your health and they provide spaces for personal care after work. It will be fully integrated with the sauna that together provides a casual space for meetings and enjoyment.

Igloo - A space dedicated to children will be a care facility for people living and working around Eliel square. It will provide a space of enjoyment for the young ones and support families working in the building. This new space will be innovative as it functions as a daycare as much as a fun-hall for the youth, allowing kids of different backgrounds to come together in a joyful and safe environment.

Public Programmable Space - A space that people can utilise with easy access to host activities related to self-care, wellness and personal development. As new online services are increasingly replacing interactions with human instructors, this will be a very personal space where anyone can invite people to take their classes - such as yoga, pilates, meditation etc. This will be a central space to ensure the cultural development of individuals and provide an alternative environment to the digital one for personal development, coaching and the instruction of self-care practices.

...back to the Market

Eventually, everything comes back to the Market, the new center of urban life in Helsinki.

Retailers and creatives from Laituri will present their works, launch new products and organise shows at the Stage.

Innovations and developments from the Kotipesa can be presented in the Stage and instead of the traditional office canteens and meeting rooms, employees and innovators will have a whole market at their disposal. Locals, people working at New Eliel and tourists will mix and meet in a place like no other in Helsinki.

SUSTAINABILITY PRINCIPLES

New Eliel can become the flagship project in Helsinki for promoting sustainability. New Eliel takes a holistic approach to developing new solutions:

1. Lifestyle

Developing innovations around lifestyles and food is sustainable. Food systems and our diet will be central when creating more sustainable urban lifestyles for the future. New ways of working and communal activities are also part of the new sustainable way of life.

2. City

Developing more compact cities against urban sprawl is sustainable. This makes upcycling urban fabric the key to creating better cities.

3. Concept

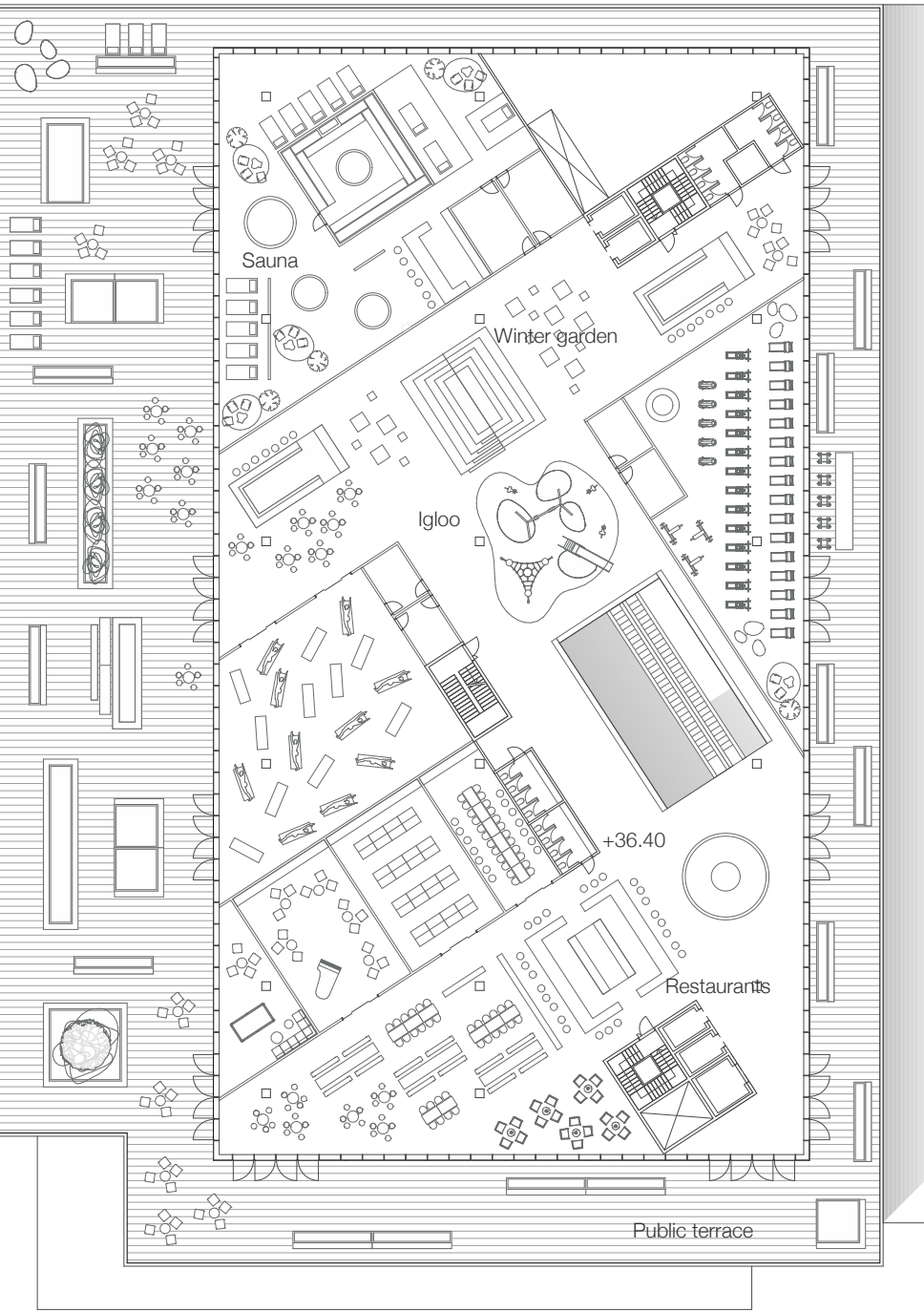
Market Hall concept gives a new type of platform and provides physical spaces for promoting sustainable lifestyle trends: food systems, diet trends, new ways of working, programmable spaces, communal activities etc. The concept aims to make lifestyle changes positive and desirable.

4. Landscape

Landscape architecture with Green Concept and Blue Systems will create a new model for making the inner city more sustainable.

5. Construction

New Eliel can become a laboratory for sustainable construction, showcasing latest innovations on sustainable construction. Top 20 Sustainability Principles for Construction include:



Floor plan - Level 6 +36.40 1:500

1. Reducing heat island effect with landscape concept
2. Making use of buffer zones: terrace overhangs, roof level etc.
3. High performance glazed building envelope
4. Reducing heat gains: Using platforms as shading elements to protect from excessive heat
5. Thermal mass increased by mass of concrete structures
6. Maximizing daylight: Natural light for most spaces
7. Reducing need for mechanical equipment and energy consumption: Radiant slabs for heating and cooling, underfloor air distribution system
8. Saving energy in use: Intelligent adjustable heating and ventilation, efficient heat exchange systems
9. Natural ventilation for spaces where it is possible
10. District heating and cooling
11. Thermal storage for cooling in peak energy costs periods
12. More green landscape for public: Maximizing site green coverage with vegetation
13. Recycled gray water system
14. Recycled rainwater collection pools with clean tech innovation
15. Gravity-driven water treatment reduces need for pumping energy
16. Stormwater harvesting feeds landscape features
17. Using construction materials, which minimize CO2 emissions
18. Natural locally sourced interior materials such as timber
19. Using innovative recycled materials such as paper-plastic composite
20. Making life span of building as long as possible (materials, flexibility)



GREEN CONCEPT

The site used to be the wetland shore of Kluuvilahti bay. The topography and the deep clay sediment on top of Kluuvi fracture zone and displacement define the area as naturally flat and wet. The green concept of New Eliel is inspired by the past agricultural use and coastal ecosystem of the site. The aim is to keep rainwater on site for the use of vegetation. The vegetation consists of low grasses and perennials enabling long views completed with verdant plant communities featuring local species supporting biodiversity. The objective is to create a distinctive recreational and functional environment for people while offering habitat for urban wildlife.

Töölönlahdenkatu, Postikatu and Asema-aukio significantly improve the green and recreational network in the core of the city. As the main green axis, Töölönlahdenkatu is framed with multilayered lush vegetation. The axis also provides a small play area and a direct connection to bicycle parking. On Postikatu, the existing old trees set the basis for terrace gardens following the incline. Wooden terraced platforms provide diverse places to stay and hang out. There are cozy pockets for more peaceful lounging, but also decks for bars and

street food huts to spread out.

Asema-aukio square becomes the new, southernmost peak of Central Park green finger. Flourishing islands of dynamic perennials invite to slow down and to experience the scents and sounds among the plants. For the ones rushing by, the vegetation appears as shapes and colours giving structure for the square. The underground level of the square reaches greenery through submerged light wells filled with multilayered vegetation. Under the canopy ground cover plants, ferns, shrubs and vines form an atmosphere of forest undergrowth to the underground level, so that the level feels like it would be above the ground.

The ensemble of the New Eliel building and the square is naturally integrated into the existing composition of Asema-aukio respecting the important view axis' from Postikatu and Mannerheimintie towards the Central Railway Station. In New Eliel building, a rich variety of vegetation is integrated onto terraces to complete the Green Concept approach and the new green axis.

BLUE SYSTEM

Blue System will be developed for New Eliel to solve rainwater principles. To maintain the existing level of groundwater and levels of perched water, it is essential to retain rainwater on site. Rain collected from the rooftop is first led for the plantings on the top level terrace, then it is led for the vegetation on lower terraces of the building. The rest of the water is collected into the pools in front of Vltava building. Overflow from the pools is infiltrated to become groundwater.

On Postikatu, stormwater is gathered on terraces and it flows down slowly

through a system of cascades. Stormwater from Asema-aukio square is first collected into the vegetation areas. From the vegetation areas water is led and infiltrated into groundwater. With the Blue System, stormwater is led into the sewers only in extreme conditions. The water pools, channels and the vegetation change following various weather conditions. During the rainy seasons, water is constantly visible. When dry weather continues for long, also the water features dry up.

MATERIALS FOR LANDSCAPE

The existing cobblestone paving is reused and combined with new domestic granite slabs. Railings and framings are made of copper, accompanied with wood in the seating areas. With the Green Concept and Blue System, New Eliel will create a co-habitat both for people and other species. The New Eliel forms a new chronological sediment to the core of the city reflecting the values of permissive and humane public urban space open for all.



Facade, west 1:250

TRAFFIC

New Eliel makes it possible to give Eliel Square and Asema Square solely for pedestrians and cyclists: a new public square with urban life will emerge in the center of Helsinki. Car and service traffic will be arranged in underground levels. The new building in Eliel Square is an integral part of the square space and is open on all sides. Diagonal walking paths through the building form logical walking connections, minimizing the barrier effect of the new construction.

Separated 2-way main cycle path runs through the planning area from Töölönlahdenkatu to Kaivokatu. From the cycle path next to Post office building, a ramp leads to the underground bicycle parking. Underground bike parking has nearly 800 2-level bike racks for the user of the new land use and downtown service. Bicycle maintenance services will be offered in connection with parking. The car traffic from Postikujja to Töölönlahdenkatu will be arranged with a bicycle street arrangement in front of Sanoma building.

Taxi station and drop-off area is located on ground level between Post Office and Sokos buildings. Access road to these areas is provided with a 2-way lane via the intersection of Mannerheimintie. This arrangement enables complete removal of the cars from the Asema square between the Railway Station and Sokos.

Car traffic connection into underground runs will use the ramp on Töölönlahdenkatu. Service traffic of New Eliel, railway station and station tunnel will take place from lower level of the basement. The upper parking level will be rearranged in connection with new construction. Currently cramped parking will be designed to be more spacious and additional parking spaces will be provided by robotic parking. The robot parking is possible on 3 levels with a total of 294 parking spaces and basement has 98 parking spaces. In total, 392 parking spaces will be provided within the planning area. The robot parking is positioned so that there is a 1-way drop-off and taxi connection with direct connections to the railway station and new construction. More efficient parking will allow the southern part of the current Eliel parking to be rebuilt as commercial space.

TECHNICAL SOLUTIONS

Structures

The frame structure of New Eliel is constructed with crosswise mega trusses, which support the horizontal slabs. Tilted columns are connected on top and ground levels. Triangular columns form and brace the building. Slabs are supported by cantilevered beams connected to diagonal and vertical columns. The frame is supported from the ground level with a similar up down triangular column system, which delivers forces to foundations. Frame is divided with a movement joint into two blocks, which have similar frame systems.

Foundations

The building will have pile foundations due to clay. Foundations and piling are located so that the foundations from existing and partly demolished underground structures do not intersect. Forces are led from column bundles to underground diagonal columns. These diagonal columns are connected together with the foundation plate and supported with straight and tilted piles. Underground parking bottom slab is on level -0.4 and the estimated bedrock is on level -15.0. The walls and slabs will be made of watertight concrete.

Frame

The building frame rises from the ground level with column bundles. The columns are composite circular steel pipes filled with reinforced concrete. Connections in visible bundles can be done efficiently. The beams are made with composite steel box sections. The beams follow load-bearing column lines in cross-building direction, except in Vitava and where the beams are located in longitudinal direction. Long cantilevered slabs above Vitava hang from beams with tension bars. These bars are connected from top slab level to diagonal columns that take forces down to foundations. Floor slabs are hollow core elements or post tensioned cast in situ concrete. Underground parking is made of watertight concrete. The top level is made with wooden structures. The beams and columns are built using glue-laminated wood and bracing is done by mast columns. The roof is partially glazed and solid sections are built with wooden box elements.

Facades

The building facades are built with structural glazing systems. The glazing is connected between slabs. On ground level, 13 m high glass facade is stiffened with glass fins. On upper levels, normal height glass facades can be done without fins. Glass elements are connected together with structural glazing sealant glue and the openings are built with steel frames.

HVAC Systems

HVAC and automation systems will be designed and built to high sustainable standards to ensure energy efficiency. HVAC and automation devices, ducts and pipes will be designed and installed so that they are easy to maintain and replace. Target indoor climate fulfills criteria of healthy and good indoor climate. High performance air-handling units will be designed and installed to be close to unit service areas. Thus, length of duct routes is minimized. This will diminish installation cost of ducts and increase efficiency of ventilation. Low carbon cooling is arranged from the district cooling system.

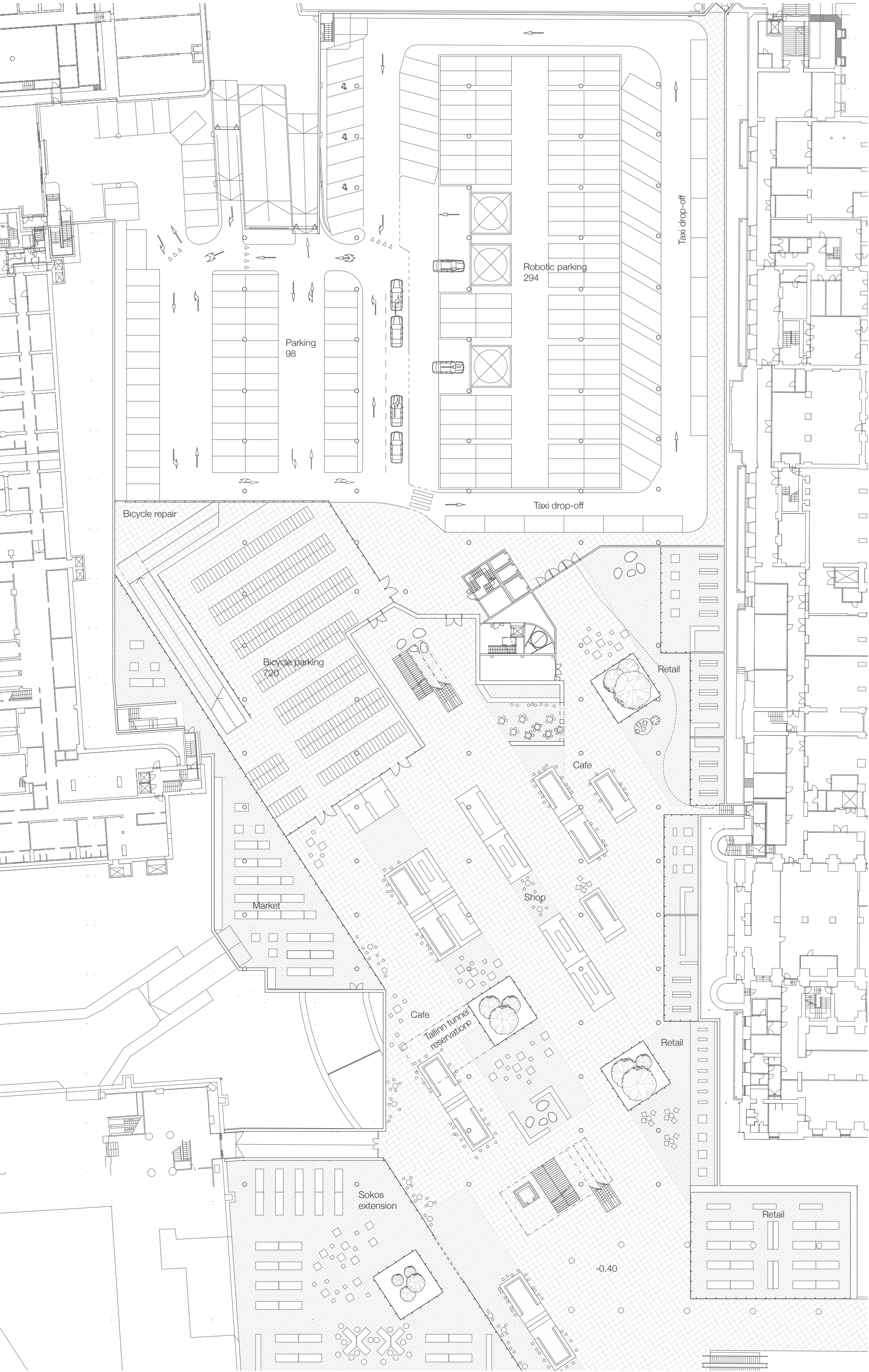
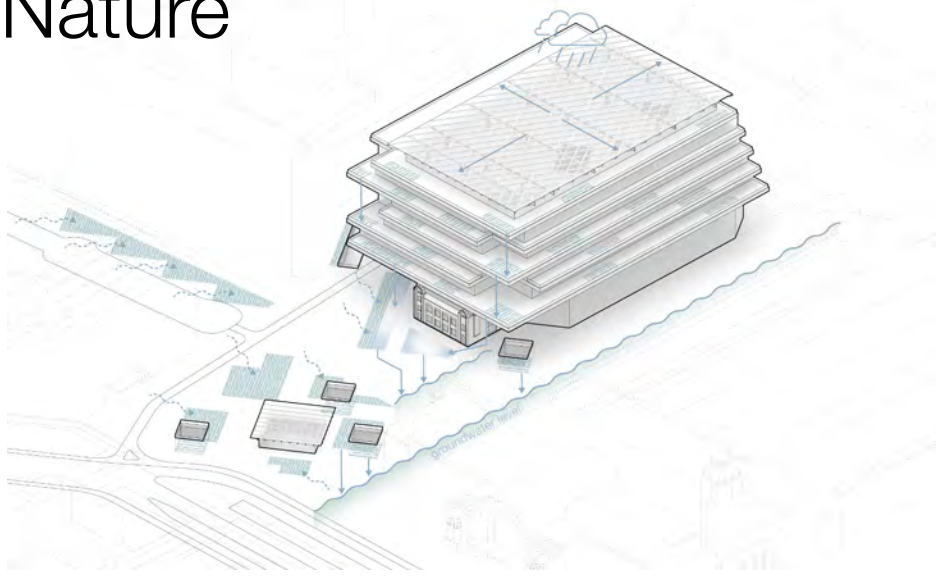
CALCULATIONS

Network level	
Commercial and retail	6950
Parking (cars + bicycle)	6830
Ground level	
Commercial and retail	4035
Vitava	400
Level 2	
Commercial and retail	4960
Covered terrace	415
Vitava	500
Level 3	
Commercial and office	4850
Covered terrace	300
Vitava	500
Level 4	
Commercial and office	4800
Covered terrace	295
Level 5	
Commercial and office	4790
Covered terrace	123
Level 6	
Commercial and retail	3180
Covered terrace	820
Total	43748 bmm²

BLUE SYSTEM

Rainwater, collected from the rooftop, is first led for the plantings on the top floor balcony, then to the lower levels of building. The rest of the water is collected to the pools in front of Vitava building. Overflow from the pools is infiltrated to become groundwater. Stormwater from the paved surfaces is first collected and retained in the vegetation areas. From the vegetation areas water is led and infiltrated to groundwater. According to this blue system stormwater is led to the sewer only in extreme conditions.

Integrating Nature



Floor plan - Network level -0.40 1:500

GREEN SYSTEM

New Eliel area becomes an essential southern extension of Töölönlahti and Central Park green finger. As a main green axis Töölönlahdenkatu is framed with multilayered lush vegetation. On Postikatu the existing old trees set the basis for terrace gardens following the incline. Asema-aukio square proposes to its passersby flourishing islands of dynamic perennials, which invite to slow down and to experience the scents and sounds among the plants. The underground level of the square reaches greenery through submerged light wells filled with multilayered vegetation. Under the canopy ground cover plants, ferns, shrubs and vines form an atmosphere of forest undergrowth to the basement level.



BIODIVERSITY

Green and blue systems of new Eliel aim at increasing biodiversity in the city. Diversity of vegetation attracts animals by providing nutrition and habitats for insects, birds, bats etc. An animal friendly city is a healthy and enjoyable environment, both for people and other species.

