



SATAMALAHTI
NEW URBAN FRONT
SWAN 5010

SATAMALAHTI MIKKELI

NEW URBAN FRONT



MIKKELI_Swan 5010

Light, Space and Temperature

How to qualify a city making it never without losing its identity?

By taking advantage of its features to make it distinctive and inviting. The presence of the lake Salmaa and the topographic features of the old city with the harbour are igniters to propose a new centrality that can put Mikkeli as a contemporary urban referential.

"They gave us memory to have roses in winter."

As an important administrative center, place of education and communication, Mikkeli is a crossroad between northern and southern Finland, occupying a strategic geographical position which the new project is able to strengthen.

Despite the city's history is firmly related to the Salmaa Lake and its entire network of canals, the railway barrier difficult enormously its relation, and avoids the full enjoyment of the lake.

The lakeshore is undoubtedly the most attractive place in this proposed new town. The proposal builds future, taking advantage of the extensive coast line offered to the city, using it to enable a more prestigious urban and enthusiasms. This new urban front will be an Urban Park ready to receive art, culture, sport and leisure. This great collective space, with nearly 500m long, will balance the relationship between the city and the lake, inviting the residents and visitors to have *"roses all year long."*



Process and Urban Design

The solution proposes two models according to the area of intervention:

Nearby the consolidated city - sub-area 1 and 2, the project reinterprets the continuity of the urban grid extending it to the lake Salmaa. In furthest areas - sub-area 3 and 4 dispersed deployments are drawn proposing more "natural" environments.

Beyond that, the design process uses a system capable of integrating specific data to differentiated zone. This system is formalized in an urban pattern subdivided into several scenarios whose main characteristic will be defined in the assembly process. The rules aim to have distinctive and varied answers to the different users and agents involved in the planning process. Placement and program give definitions rise to 12 scenarios coded according to the specific area to organize. This will be 12 urban representations, 12 places of action.

URBAN DESIGN

Energy, Proximity and Nature

Approaching the city to the lake is made by using a fairly concise concept materialized in just three gestures:

- Definition of new access and transport systems;
- Introduction of attraction factors (new cultural, shopping and leisure facilities);
- Promotion of energy conservation and production building systems;

Nature

Offering more public spaces.

For the public meeting and enjoyment of the lake, we propose outdoor meeting areas and interior protected ones.

In sub-area 1, squares and gardens are drawn to emphasize urban life. The competitiveness and attractiveness of places and regions pass through the supply of qualified public places, spaces that creates identity and pride. In this sense, we consider the pedestrian space the major generator of inclusion and social satisfaction, because it allows greater proximity between citizens and them with nature.

In sub-areas 3 and 4 the project reinforces the contact with outdoor spaces assigning to each one generous public gardens to enjoy the landscape and sunlight.

Proximity

Strengthening the existing connections and proposing new ones.

The project includes two new street connections and the qualification of the pedestrian crossing above the railway to the lake area.

For the sub-area 1, it is proposed a new bridge over the railway, connecting the Savolahdenkatu Street to the Satama Harbor. By taking advantage of the topographic difference between the center and the railway station area, the project proposes an aerial passage that also gives access to the upper parking lot along the railway. Besides serving the station, this parking also serves the office buildings above and shops below.

The existing pedestrian walkway, over the railway station will be completely changed by redesigning totally its east end. A commercial building will give support to it, accompanying the access throughout the lower floor up until the higher one.

For the sub-area 2 the project draws up a tunnel under the railway allowing quick access between the consolidated city and this new area of business and services.

Sub-area 3 will be related to the existing road structure and takes advantage of the new bridge proposed to the east, parallel to VT 5.

Sub-area 4 uses the existing road network and proposes only one new street.

Energy

Promoting solutions for the energy conservation and production

The buildings are organized so that they act as large community centers usable even in winter, enabling energy savings. Their concentration in "scenarios" mean that they can work together interchanging energy production. Each building will produce electric energy by a non invasive aeolian system. This system consists in the use of natural ventilation system of each fraction as a energy producer. The heated air flow generated by each accommodation space and the thermal differential between the cold air outside and warm air inside will cause updrafts that, properly channeled, can generate electricity trough mini turbines. Simultaneously, the burning of biomass will produce heat for heating systems. Energy conservation will be ensured by the application of constructive methods that enable the creation of a "thermal jacket" that will keep the internal heat retained, minimizing losses. The construction materials should incorporate a large percentage of timber, either as a coating material or as structural material. The induction of the use of environmentally friendly means of transport, the intermodal basis of the hub-like stations trough "bike and ride" and sharing transport systems may save energy as well.



GENERAL VIEW FROM VT5 HIGHWAY



SUB-AREA 1 GENERAL VIEW

Ecological concept

The ecological concept defines a set of rules to ensure a minimal environmental footprint. This purpose will be achieved by ensuring:

Biodiversity - Share of urban space with nature including greater biodiversity by adding more green naturalistic spaces.

Concentration of construction - Promote greater density and building height in more restricted areas, freeing soil.

Multimodal transport - Intermodal transport with the prevalence of use of public transport or environmentally friendly transport, taking advantage of the railway.

Promotion of environmentally friendly mobility - Shorter and comfortable links by bike lanes and pedestrian pathways, allowing the introduction of breakpoints in each subarea.

Production and energy conservation - Promote the use of local raw materials in new buildings construction by using wood for interior and exterior finishes and structures. Each building should be able to produce some of its electricity for consumption by the inclusion of interiors micro wind turbines. The burning of biomass should be privileged for the heating system.



INTERMODAL TRANSPORT ECO FRIENDLY TRANSPORT MICRO WIND TURBINES BIOMASS COMBUSTION



New transport and access system

New railway station

The proposed new railway station will function as an intermodal hub, with easy connections to various means of transport. Car and bicycle parking, buses and taxis will work in the new building, within the old station.

As a gateway to the city, modal interface and place of transition between the city and the lake, the railway station is vital on the definition of the new urban front. Although the project doesn't develop its modernization, this proposal imagines the coverage of the station and the introduction of underground access to the platforms and their linkage to the Jetty's area. Its central location is crucial to the qualification of the entire subarea 1. On the lakeside, the new station will benefit from two public car parks.

Walkways

The project predicts that all proposed spaces and lots will be served by large and comfortable walkways. This network will be complete with new access along the shore of the lake, connecting all four project areas. Special emphasis is given to the cycling and pedestrian bridge over the railway which is enriched by connecting it with a "commercial ramp".

A "street-like" building will reinforce its importance within the urban context, proposing a commercial space that climbs with ramp and stairs from 79,5 meter, near the Science Center to the higher quota of the passage. Taking advantage of the difference between higher part of the city and the lowest part of it by the lake it is also proposed a new pedestrian and car bridge in the northern part.

New Roads

The project includes new road links over and under the rail approaching the city to the lake. Other road links to the different areas were limited in order to offer the largest possible area of green space.



Cycling routes

Every intervention is served by bike paths that are implanted in two ways: in conjunction with walkways, or isolated through the landscape.

Car Parks

The project respects the minimum ratio of one car parking space for every 85 m² of construction, as described in the competition brief.

In sub-area 1, two public car parks are proposed: one underground - along the new street, with a capacity for 152 places, and another elevated, leaning against the new station, for 363 cars. There will be also a surface parking along the new street parallel to the pier, offering 82 seats. In the residential area of this zone, parking spaces satisfy the ratio. The buses parking for the Science Center is proposed to the south part of sub-area 1, along the railway, to ensure the lowest visual impact.

In sub-area 2, there are two major parking lots. The first one supports the shopping center, with a 160 places capacity on the surface. Another 120 places will be underground the building. Ensuring the parking demand for office and commercial buildings there is also an outdoor parking for 112 cars. In addition, lots further north will have parking along the streets.

In sub-area 3, the public parking offer will be lower and divided in two areas - one that serves the nursery with 19 places and other for the office buildings with capacity for 120 vehicles. The housing set reserves 38 covered parking places for each building of 21 vertical villas, plus some more for visitors. Zone 4 allows the parking of 227 cars on the surface while the nursery will have a basement parking floor for 40 cars.

Attractive factors

Cultural, Shopping and Leisure Facilities

Because of its location the sub-area 1 presents a clear ability to become the new city center and one of the brands for Mikkeli. Confirming this capacity, the project organizes the south part of this area by proposing a set of buildings and spaces that will enhance this quality.

Science Center

The Science Center is proposed to be an emblematic building. Its position on the lakeshore intends to strengthen its exceptionality and thus allow public enjoyment.

With its enigmatic visual image, the Science Center intends to correspond to a research building type. The visual relationships from outside to inside and its shape are related to the way the internal program is organized. The external image results from the internal organization that proposes spaces, pathways and corridors that invite discovery: each compartment grabs itself to the facade to take maximum advantage of natural light while the spaces leftover originate the corridors.

Hotel

The hotel building will be the tallest of Mikkeli and is positioned on the axis of the street Hallituskatu as a counterpoint to the Cathedral. Its volumetric shape intends to enrich the new image of the city and offer to the tourists and guests a new view of the Satamalahdi region. It will have 120 high standard rooms, offering a world-class hotel unit with spa and conference center. The centrality of the building, its proximity to the lake and its appealing image, both story and biomorphic will easily contribute to become the new icon for the region.

Commercial Ramp - "Street-like" building

This building aims to solve a city difficulty - how to comfortable and attractively connect the city area to the Satami Harbor. This building will be a high quality commercial space, a meeting space and connection one. The solution presented comprises 30 shops ranging from 20sqm to 250sqm areas. Formally it is intended to complement the Science Center and create a noise protective device for the public square in front.

Public Square

The Main Square is the space between the Science Center, the hotel and the dock. It has over 10,000m² of available surface. Its shape, size and orientation allow to host in tranquility a series of cultural and popular events. In this space one can assemble stages and tents for any festivals, fairs or other events. The way this space interacts with the surrounding areas, allows it to obtain synergies and thereby make it versatile and changeable throughout the year.

The two proposed car parks - the underground one and the "aerial" one may be used as longitudinal crossers beneath or above the public square. As provisional options they can release car traffic from the square.



Guest Harbor

The pier was divided in two in order to provide an approximate length of 500 meters, as requested by the competition brief. It stretches along almost the entire length of the shoreline, although releasing the Science Center front. This new harbor is supported by a building in the northern part, in order to improve operating conditions and have a welcome center for tourists.

Schools

For the entire intervention area it is proposed three nurseries with areas ranging between 2,372 m² and 3,078m². Positioned one at each residential area, the largest one is on the sub-area one, and the smallest will be on the sub-area 3.

Recreation and Park areas

The four sub-areas offer different types of spaces for recreational use. While the sub-area 1 proposes a urban park along the shore with stony pavement, the sub-areas 3 and 4 try to not intervene neither on shore line nor on the soil allowing it to maintain the natural characteristics of the place. In all four sub-areas, the project proposes the plantation of local trees.

Housing

The project aims to offer different housing options within the three sub-areas 1, 3 and 4. For the first one it is proposed a city-like apartments type. For the sub-area 3 it a family type is drawn, and for the fourth sub-area there are three different typologies ranging from small apartments in three towers to medium family houses with private gardens.



Built typologies

Sub-area 1 - "HUB city"

This will be an area of collaborative space concentrating facilities for the central city; services, transportation, culture and commerce. It will have two main spaces - the HUB area containing the Science Center and the housing area to the north.

The housing neighbor will have apartment floors, with public external spaces surrounding the lot. The blocks are oriented only for the south, east and west quadrants. There are two types: - only one front blocks -10 meters wide, facing south; and two front blocks -14 meters wide facing east and west. In both cases, ground floors will have private gardens. Parking places will be outdoor. The location of parking lots, afforestation and access is made to ensure that south solar exposure will never be compromised.

Sub-area 2 - "tertiary city"

There are building spaces for traditional commerce and large areas for one shopping center. Services are distributed on higher and compact volumes. The entire area has numerous parking places, taking advantage of the nearby railway station.

Sub-area 3 - "family city" celebrating nature

It is mainly a residential area, using its landscape uniqueness as the main criteria for its deployment. While close to the city, it is far enough to be more related with nature and the lake.

3 conditions for its configuration - acoustic protection, sunlight and shade, landscape views.

It is proposed two sets of four housing blocks. Each building has 7 floors and is fully oriented to the south. It also has its own channel view towards the landscape. From an organization that refers to the original grid of the urban plan of Mikkel, the proposed pattern adopts various placements due to solar gain and views.

Each building houses 21 apartments, 18 of them as duplex typologies, organized in a gallery way running around an internal covered patio. This space is intended to be used by everyone, children and adults throughout the year and communicates directly with the garages and docks below.

These buildings use a thermal "coat" that surrounds each building. Its construction is simultaneously about compression of the private space and the expansion of the community ones, establishing a friendly relationship with the environment and the landscape.

Internal linkages draw "streets" and "squares" capable of being enclosed and heated - this winter micro-city promotes communal life all year-round, even during the most inclement weather. The housing towers acts as urban nodes in the horizontal network of the basement. This basement also contains equipments and other facilities for the inhabitants.

The south fronts of the towers have balconies that can be open in summer or closed in the winter. The rear courtyard acts as a vertical winter garden.

The apartments are to be subdivided as individual houses arranged in a vertical block. The coverage plane over the basement will be a private green park.

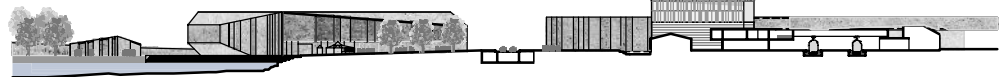
Along each housing set there will be an office tower. Small commercial buildings will mark both tops of this area, and one nursery will be placed in the south entrance of the area. The zone will have a pedestrian and cycling connection to the central city below the VI 5 highway.

Sub-area 4 - "park city"

The neighborhood is defined along a single street, freeing as much space as possible for green areas. There are three types of housing: small apartments in the tower; family apartments in a row and cottage-like houses closer to the lake.

A nautical club is next to the lake, and it can function as community center, café and meeting space.

The lakeshore is treated as a green park and will be crossed by a cycle and pedestrian road.



Building stock

The project seeks to obtain the maximum autonomy of each lot to generate greater autonomy. This will promote fastest and easiest management for the intervention area.

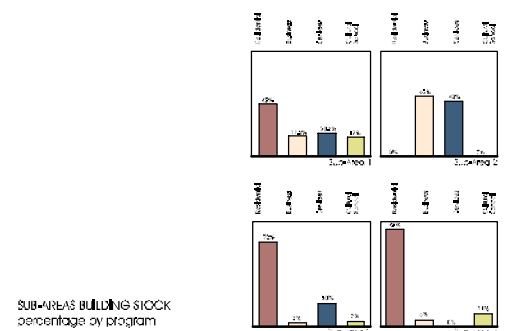
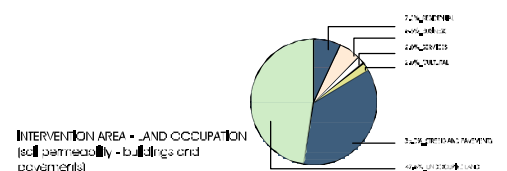
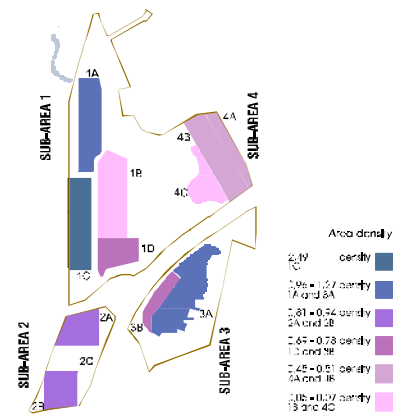
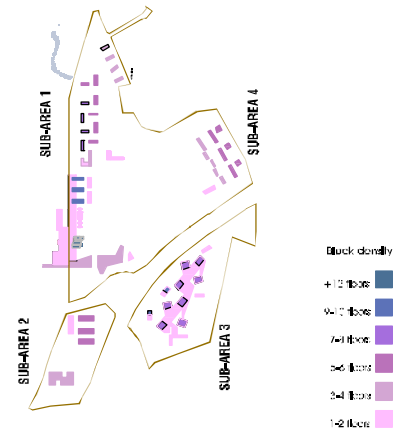
Sub-area 1 - (from 130,000 up to 200,00 m²) - It is proposed a value close to the minimum -133,966 m², in order to provide maximum public space. As the future central area of Mikkel, it seems essential to guarantee enough space ensuring it as the "guest room" of the city.

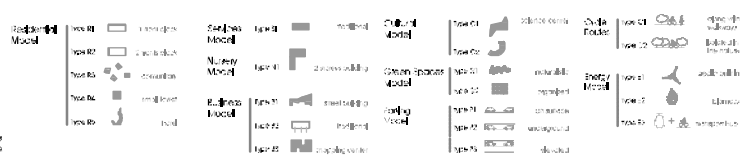
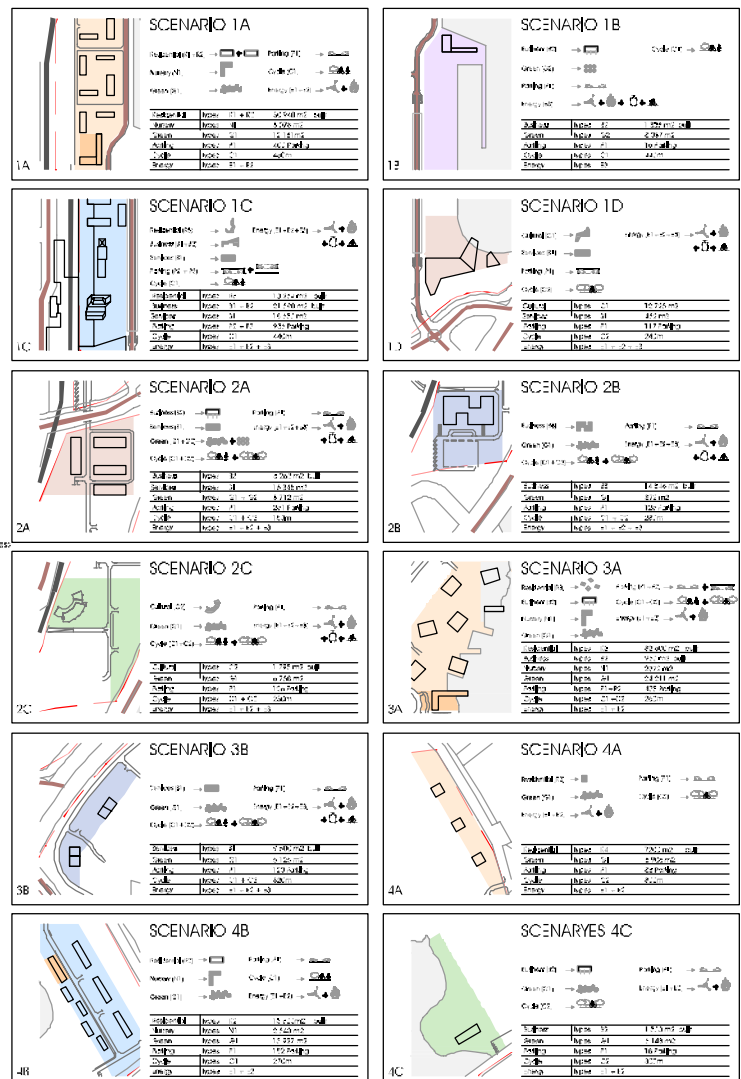
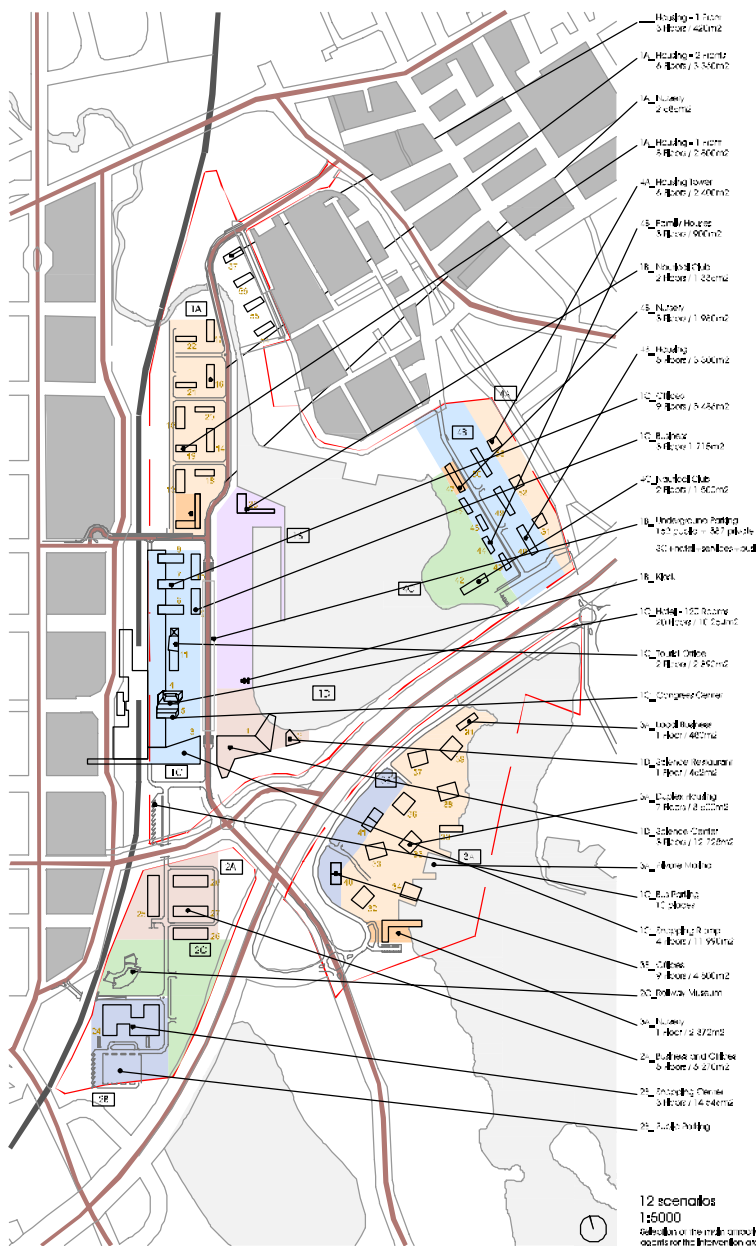
Sub-area 2 - (from 20,000 up to 50,000 m²) - It is proposed a building right in the average value - 36,356 m², reserving free space surrounding the old train maintenance building as hoping to become historical patrimony for the place.

Sub-area 3 - (from 40,000 up to 80,000 m²) - It is proposed a building right in the average value -66,194 m².

Sub-area 4 - (from 15,000 up to 30,000 m²) - Looking at this zone as landscape one, it is proposed medium value - 24,840 m²

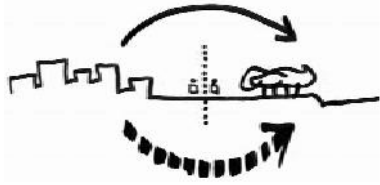
Innovative high-quality land-use for Mikkel's Satamalahti area that is technically and financially feasible.





Scenario	Lot #	Deployment (m²)	Program	Floors			Total Area (m²)	Total Contribution (m²)	Block Density	Area Density	Green Spaces (m²)	Parking			Building Footprint Inter. Area
				Area	Count	Total						Built	Min	Max	
s. Bloque 1	1	5,100	residential	2	1	3 floors	2,358 m² + 4890 m² = 7248 m²	12,736 m²	0.49	1.61	0	112	0	0	13,000 m² to 220,000 m²
	2	467	residential	1	0	1 floor	462 m²	462 m²	1	1.61	0	0	0	0	
	3	2,214	business	5	1	4 floors	14,000 + 3,000 m² = 17,000 m²	11,392 m²	0.63	1.61	0	117	0	0	
	4	10,645	high medium business + parking	2	1	3 floors	19,195 m² + 21,635 m²	40,830 m²	0.76	1.61	0	213	0	0	
	5	1,199	hotel	1-20	0	20 floors	430 m² + 9,364 m² = 9,794 m²	10,264 m²	0.50	0.63	0	202	0	0	
	6-8	1,407	residential	9	0	9 floors	292,496 + 7,461 m² = 3,000 m²	3,000 m²	1.00	1.61	0	276	0	0	
	9-10	1,350	business	8	0	3 floors	365 + 2,678 m² = 3,043 m²	3,043 m²	0.97	1.61	0	122	0	0	
	11	1,195	high school	2	0	3 floors	4,119 m² + 890 m²	2,863 m²	0.2	1.61	0	23	0	0	
	12	1,527	museum	2-11	0	3 floors	201 + 3 + 1,323 m² = 1,527 m²	3,070 m²	0.98	1.61	0	54	0	0	
	13, 15	1,120	residential	6	0	3 floors	2,590 m² + 4,450 m²	3,700 m²	0.8	1.61	0	175	0	0	
	14, 15, 17	1,086	residential	6	0	3 floors	2,590 m² + 3,600 m²	3,700 m²	0.8	1.61	12,161	119	0	0	
	19, 21	730	residential	8	0	3 floors	2,390 m² + 3,400 m²	3,700 m²	0.8	1.61	0	86	0	0	
13, 21, 15	1,080	residential	6	0	3 floors	2,390 m² + 2,130 m²	3,700 m²	0.8	1.61	0	71	0	0		
23	960	business	1-1	0	3 floors	960 + 5,400 m² = 6,360 m²	1,358 m²	1.35	0.05	8,027	15	0	0		
IC.A		21,444 m²					135,966 m²				1492		1492		
s. Bloque 2	24	4,528	business	2	1	3 floors	1,050 m² + 3,478 m² = 4,528 m²	11,576 m²	0.21	0.72	373	126	0	0	
	25	1,300	business	2	0	3 floors	1,530 m² + 3,000 m²	2,500 m²	0.2	1.01	0	40	0	0	
	26-28	8,162	residential	6	0	3 floors	4,150 m² + 4,012 m²	8,162 m²	0.5	1.01	6,714	221	0	0	
IC.A		9,788 m²					36,356 m²				387		387		
s. Bloque 3	29	1,164	museum	2	0	2 floors	1,164 m²	2,327 m²	0.2	1.61	0	25	0	0	
	30-31	990	business	1	0	1 floor	990 m²	1	1.61	0	11	0	0		
	32-36	19,662	residential	14-7	0	8 floors	11,958 + 7,704 m² = 23,662 m²	49,324 m²	0.67	1.61	34,944	356	0	0	
	38	10,111	business	2-14	0	10 floors	2,600 + 7,511 m² = 10,111 m²	11,200 m²	0.6	0.78	8,128	122	0	0	
IC.A		20,008 m²					66,194 m²				386		386		
s. Bloque 4	42	750	business	2	0	2 floors	750 m² + 1,930 m²	1,930 m²	0.2	0.77	6,143	16	0	0	
	43-44	1,700	residential	5	0	5 floors	2,300 m² + 930 m²	3,230 m²	0.4	1.61	0	42	0	0	
	47	600	museum	8	1	1 floor	600 m² + 3,600 m² = 4,200 m²	3,600 m²	0.2	0.45	13,927	40	0	0	
	48-50	1,980	residential	6	0	5 floors	2,560 m² + 2,300 m²	3,860 m²	0.5	1.61	0	100	0	0	
	51-55	1,700	residential	6	0	3 floors	2,400 m² + 2,400 m²	3,800 m²	0.5	0.61	6,902	85	0	0	
IC.A		6,730 m²					24,840 m²				238		238		
other areas	54-57	1,080	residential	8	0	8 floors	4,400 m² + 1,280 m²	5,680 m²	0.3	0.45	6,646	14	0	0	
IC.A		1,680 m²					5,040 m²				78		78		

SATAMALAHTI - MIKKELI
NEW URBAN FRONT



GENERAL VIEW, SATAMALTAHTI



GENERAL VIEW FROM THE HIGHWAY

Light, Space and Temperature

How do we create a vibrant atmosphere without losing the identity?

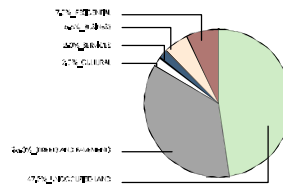
By taking advantage of its location to make it distinctive and **highlight** the presence of the lake skyline and the topography, showcasing the identity with the harbor use further to propose a new concept for the central Mikkeli as a contemporary urban environment.

• The program is intended to have a certain identity.

As an intervention, it highlights better places of recreation and community life. It will be located between modern and custom buildings, ensuring a strategic geographical position with the new public space to be created.

Besides the **public space**, it will respond to the harbor use and provide a network of energy, the harbor, better material conditions, and create the environment of the lake. The building will be designed to be a part of the lakefront, designed to be a part of the lakefront, taking advantage of the existing local building to create a program that can be used for a new urban front will be a urban park space to include cultural, social and leisure, this great public space will reach 50m long will balance the relationship between the city and the lake, making the response and able to have a new concept.

INTERVENTION AREA - LAND OCCUPATION
soil permeability + buildings and pavements



URBAN DESIGN
Energy, Flexibility and Nature

Name

Climate, energy and nature
For the building, energy and nature are the main factors for the design process. In addition, the urban and general design to create a vibrant urban life, the concept of energy and nature will be the main focus. The design will be a part of the lakefront, designed to be a part of the lakefront, taking advantage of the existing local building to create a program that can be used for a new urban front will be a urban park space to include cultural, social and leisure, this great public space will reach 50m long will balance the relationship between the city and the lake, making the response and able to have a new concept.

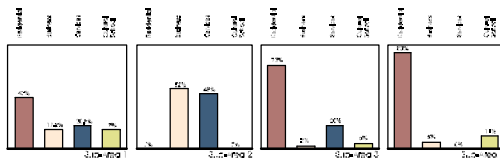
Flexibility

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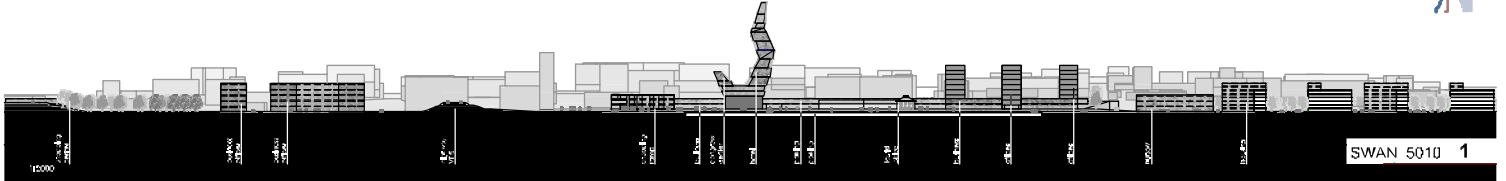
Energy

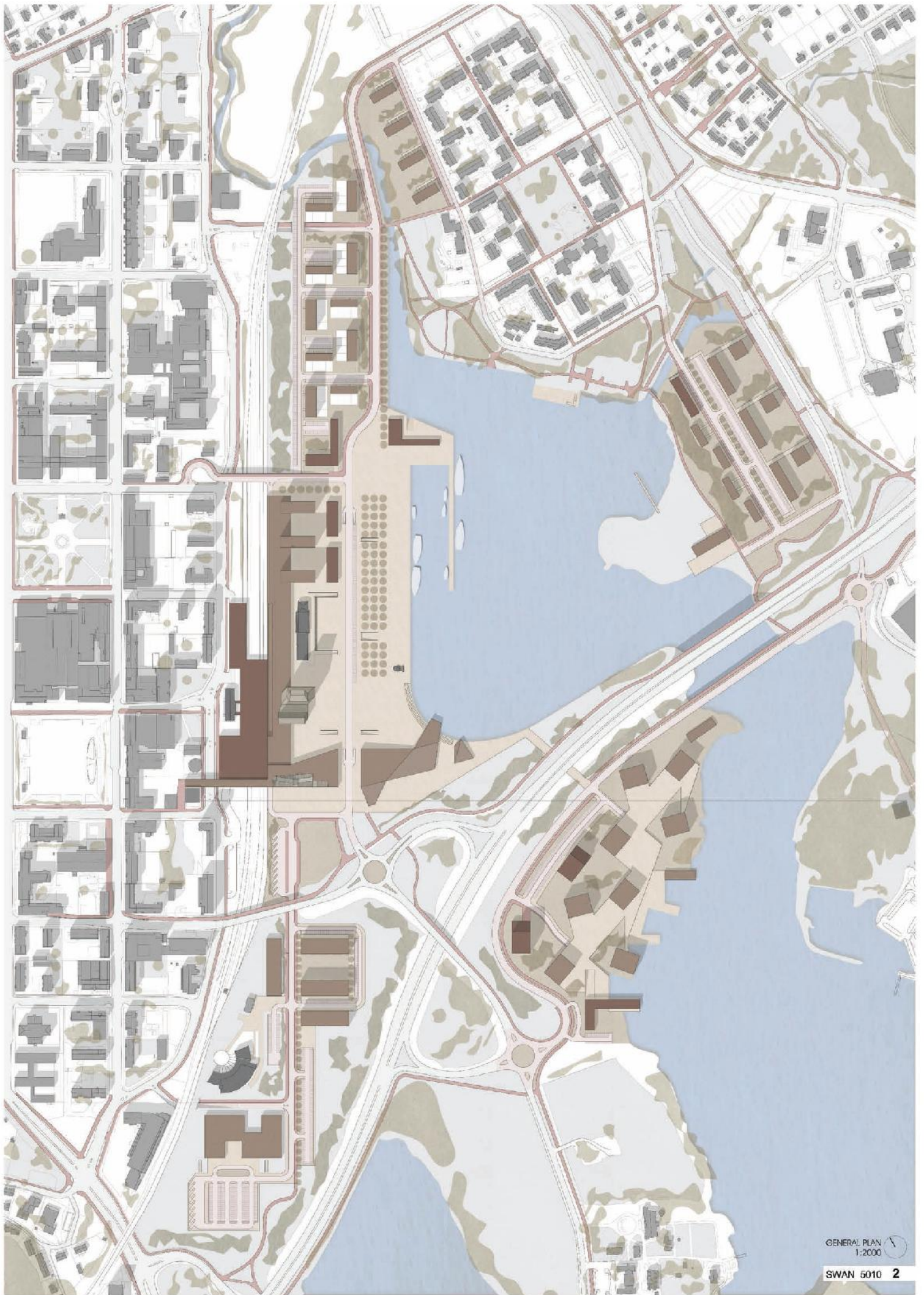
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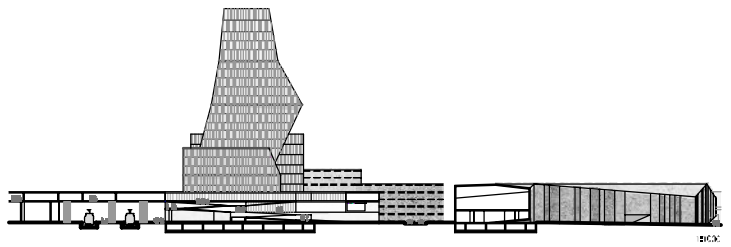
SUBURBAN BUILDING STOCK
percentage by program



ECOLOGICAL CONCEPT







Process and Urban Design

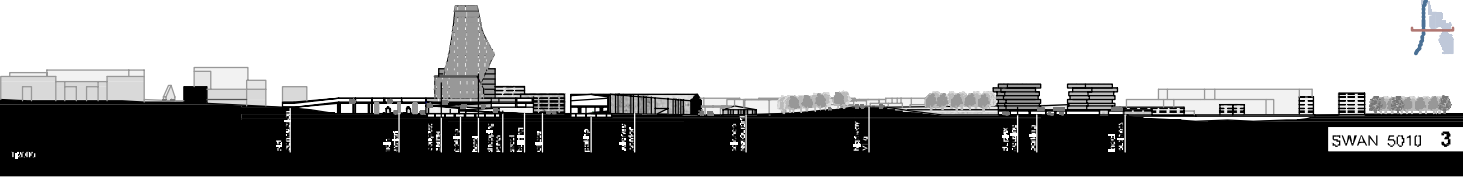
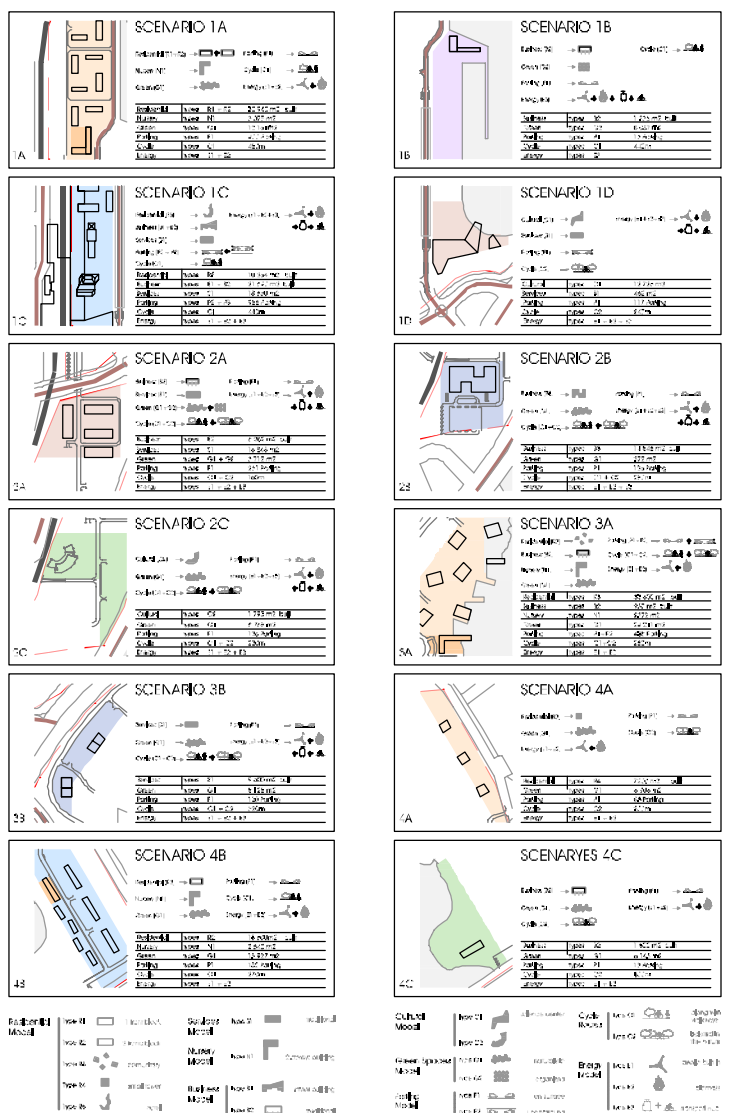
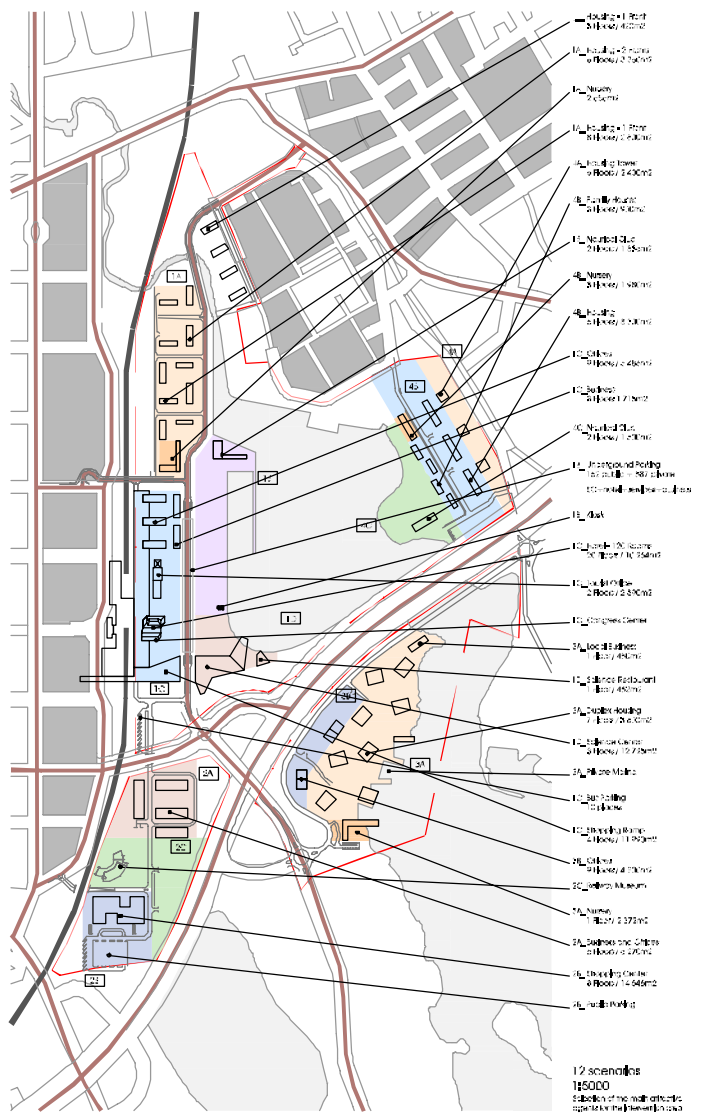
The building process is based on the process of urban design. The building is designed as a series of interconnected volumes, creating a dynamic urban environment. The design process involves a series of iterations, starting from a conceptual urban form and evolving into a detailed architectural plan. The building is designed to be a catalyst for urban development, creating a new urban center and a new urban environment.

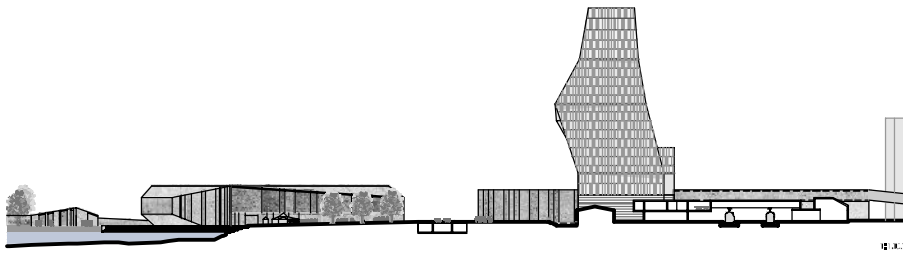
Artistic factors - cultural shopping and leisure facilities
 The building is designed to be a catalyst for urban development, creating a new urban center and a new urban environment. The building is designed to be a catalyst for urban development, creating a new urban center and a new urban environment. The building is designed to be a catalyst for urban development, creating a new urban center and a new urban environment.

Composition - a dynamic building

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Ecological concept

The ecological concept defines a series of rules to ensure a minimal environmental footprint, this concept will be collected by ensuring:

Ecologicaly = share of urban space with nature including green infrastructure by adding more green infrastructure spaces.

Concentration of construction = Promote greater density and building height in more polluted areas, trading soil.

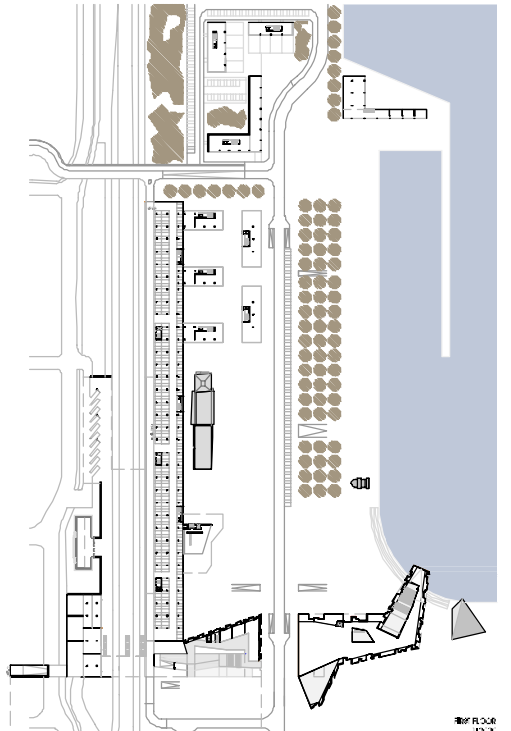
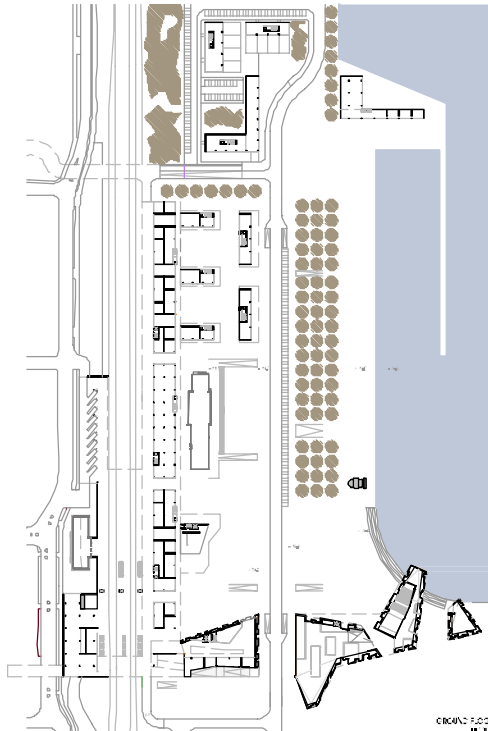
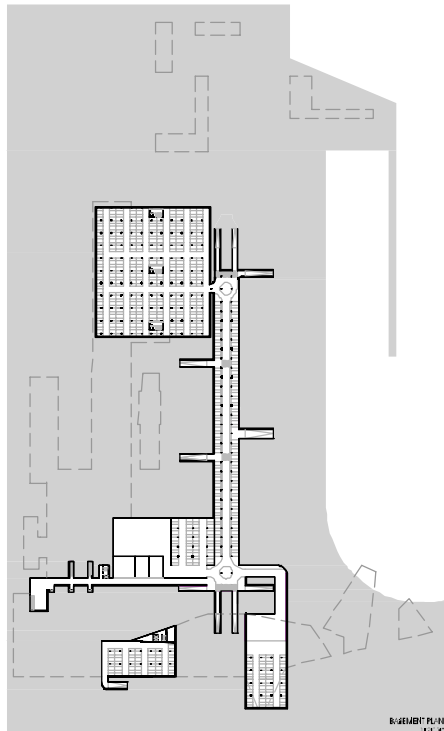
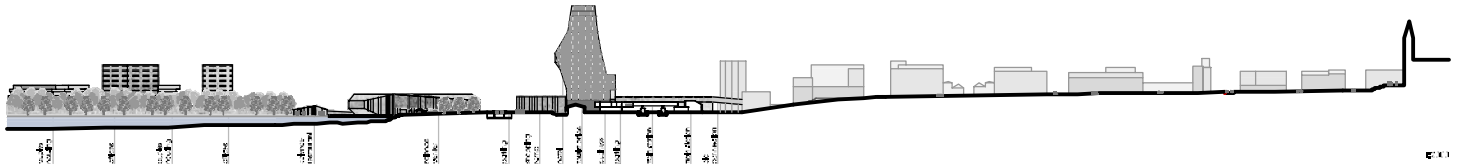
Multifunctional transport = Integrate transport with the avoidance of use of public transport or environmental friendly but social, taking advantage of the office.

Integration of environmental friendly mobility = Share and combine the use of bike lanes and pedestrian paths with walking, the distribution of green infrastructure and urban spaces.

Reduction and energy consumption = Reduce the use of fossil fuels, improve the building construction, or using solar panels for heating and cooling. These are objectives that can be achieved by providing a series of guidelines for consumption by the inclusion of the building envelope, the building of biomass should be designed for the heating system.

Scenario 1 = "AUS city"

It will be diverse and collaborative space concerning to colleges in the central city, banks, restaurants, culture and commerce. It will have low multi spaces in the city area containing the Science Center and the shopping area to the north. The building will have three apartment blocks with public garden spaces surrounding the site. The blocks are taller only for the south side and was designed to be two years only for the 10m area. The building south side will be taller to meet the building and was in both areas, ground floor will have outdoor parking and the office. The outdoor parking will be located in a central area and will be designed to ensure that south side people will never be compromised.



Sub-area 3 - Form of celebratory routes

The model is a spatial composition that borrows influences of the main elements for its development, with close to the city, it is or enough to be more abstract with nature and the lake.

These conditions for development consist of: aesthetic, budget and areas, landscape views.

The program has one of four building blocks, each building has 7 floors and 110 units. It also has its own central flow towards the landscape from an organization that refers to the central axis of the urbanization of the lake, the proposed program adapts various urban models for public spaces.

Each building has 21 apartments, 18 of them of single bedrooms, adapted to the program very during the day or internal covered public spaces is intended to be used by residents, children and adults throughout the year and community spaces of the program and make happy.

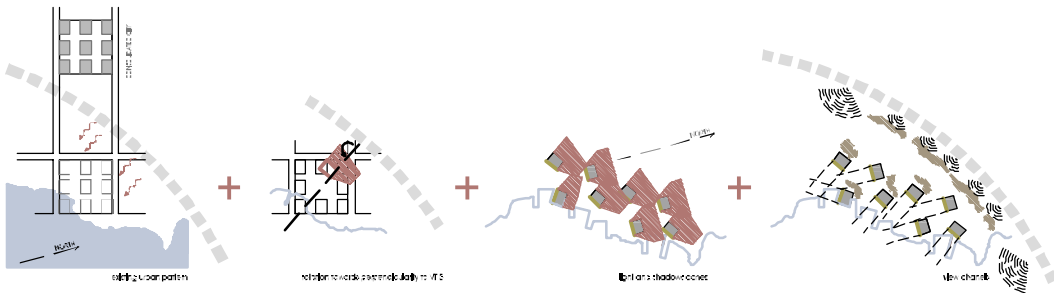
These buildings use a central courtyard for a central courtyard in its construction. It has a horizontal structure organization of the public space and the organization of the community space, establishing a family relationship with the organization and the program.

Internal spaces are flexible and transferable, capable of be organized and re-organized, which internally provides a common space for all the residents, the housing uses public spaces in the internal network of the basement, the apartment also contains an elevator and other facilities for the residents.

The main front of the houses, some strategies that can be open in summer or closed in the winter, the air circulate acts as a vertical street system.

The common use to be established or individual houses arranged in a vertical block, the coverage plane over the common use to be a public green park.

Along with the building, there will be small commercial buildings on the both sides of the lake, and the existing buildings in the south entrance of the lake, the area will have a pedestrian and cycling connection to the central city, follow the Main Highway.



SUB-AREA 3 - URBAN PATTERN

REFERENCE TO LANDSCAPE VISIBILITY TO CITY

INTERNAL SHADOWS COVER

NEW CHANNEL



GROUND FLOOR

FLOOR TYPE

1st floor

2nd floor

3rd floor

4th floor

5th floor