

KALMAR

## IDENTITY OF KALMAR

Kalmar's identity builds on images where the natural environment, open horizons and the relationship between water and land, are essential.

*The intervention will prioritize the conservation of the environment to ensure the quality of life of people who inhabits it.*

### Intervention strategy: No Construction, Minimization, Reuse.

#### NO CONSTRUCTION = respect

As a resignation to the addition of elements, prioritizing the value of preexistence, voids and territory. No Construction is a sign of respect to the place, the territory or the city and an ethic that assumes that economic values should not be the only to validate architectural or landscape future interventions.

**It is proposed to preserve the wetland areas and the natural environment, and advocate for their maintenance and care.**

#### MINIMIZATION = cleaning

As a reduction in size and impact, of all those elements whose presence distorts the land and the environment, looking for intervention based in reducing the impact on the system at different levels: visual, environmental, energetical, etc..

**It is proposed to select the area of intervention under minimum impact criteria.**

#### REUSE = recovery

As a review of the possibilities of existing infrastructures and plots, opposite the opening of new areas of intervention. Enabling actions that are committed to check pay-off and take advantage of the existing, before any proposal of using not yet built areas.

**It is proposed an optimization of the existing urban fabric and network.**



Kalmar Identity

*"Unique, living frame and meeting place of the people, the landscape is crucial to material, mental and spiritual welfare of individuals and societies. Source of inspiration, allows a trip, both individually and collectively, in space, time and collective imagination.*

*It plays an important role of general interest in cultural, ecological, environmental and social fields; is a favorable resource to economic activity, whose protection, management and planning can contribute to job creation, contributing to the formation of local cultures. It is also a fundamental component of the European natural and cultural heritage, and its protection, management and planning entails rights and responsibilities for all. "*

*European Landscape Agreement*

KALMAR

strategy REGIONAL SCALE

**No Construction: in new areas.**

**Minimization of impact: environmental, visual, energetic.**

**Re-definition of consolidated void.**

**PRESERVATION AND ENHANCEMENT OF TERRITORY**

Appreciate the territory as limited and finite asset, meaning that any land is landscape and the importance of this. Preserving the territory with a long-term strategy perspective, opposite to invasive and irreversible short-term, waste interventions.

Create city and create countryside at the same time. And do both the same way, interacting with each other and in the memory and in the evolution of the population, as a physical and emotional framework for the development of their activities.

City life is also on one hand, interaction and communication, which means **relationship**, and, on the other, peace, tranquility and nature contact; **isolation**.

Create more City and, at the same time, more Countryside, is the synthesis of the two models, the urban and territorial. Experience shows that these two models can be maintained and developed if the mobility model favors nodes or cores configuration, obstructing the jump to urban sprawl.

This set conforms to the best scenario for new uses and functions of public space, and brings us closer to the most advanced stage of an ecosystem in its succession; understanding that an ecosystem is the multivariate relationship between organisms and the environment in a given space, and that for its sustainability, one of the basic principles is to promote **diversity**, which necessarily involves the **increase of resilience**.

**PRESERVATION AND ENHANCEMENT OF WETLANDS**

The intervention arises from the highest respect and reluctance to intervene in wetlands areas and its surroundings, both for their ecological and environmental values as well as social, cultural and economic.

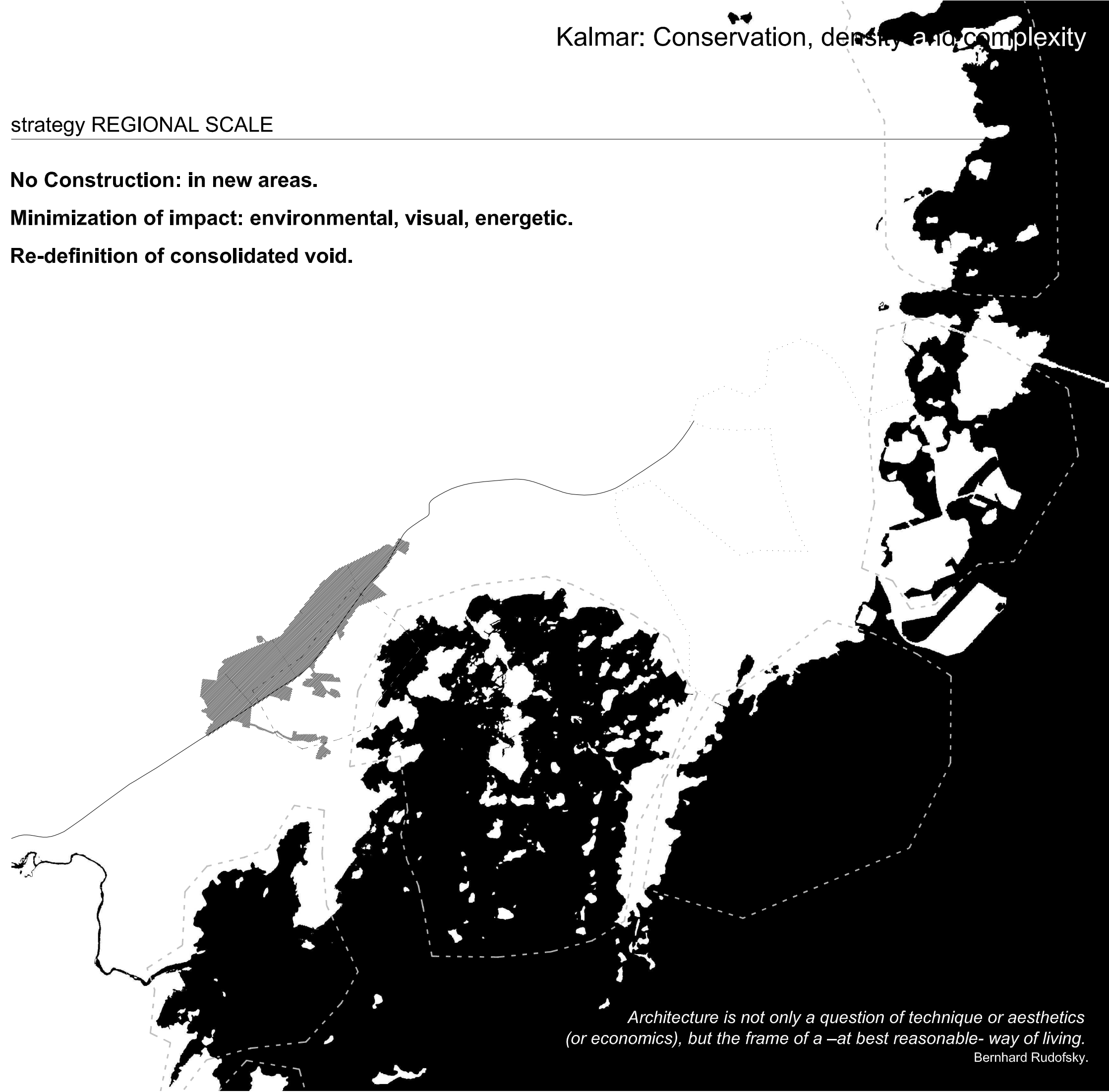
Kalmar is listed in the Ramsar List of Wetlands of International Importance as defined by the Ramsar Convention for the Conservation and Sustainability Movement of Wetlands, recognizing the fundamental ecological functions of wetlands and their economic, cultural, scientific, and recreational value.

0017SUE-04 | Ottenby-Kalmar | Sweden | 12/05/1974 | 1610 | 56 ° 12'N 16 ° 24'E

0018SUE-05 | Ölands ostkust-Kalmar | 12.05.1974 | 8460 | 56 ° 27'N 16 ° 36'E

Wetlands, vast swaths of floodplains are carriers of unique ecosystems that have a huge diversity and therefore attach great **resilienceto** the vast ecosystem which conforms the whole intervention area.

Water makes up a sign of identity of Kalmar, a border and a **boundary** which has always identified the city and must therefore be respected as a place of recreation and leisure as well as a place associated with production and transportation. It is then essential for the desirable development (the one mentioned above) of Kalmar, the full protection of wetlands and coastal lands.



*Architecture is not only a question of technique or aesthetics (or economics), but the frame of a –at best reasonable- way of living.*  
Bernhard Rudofsky.

strategy INTER - URBAN SCALE

**Intensive urban planning, vs. extensive town planning.**

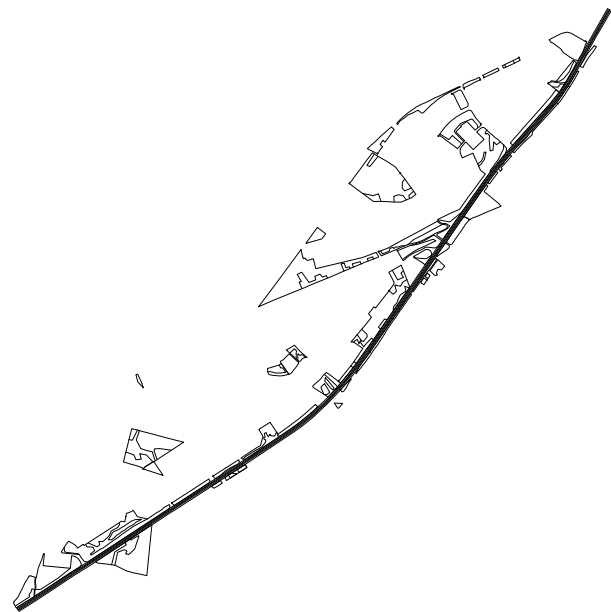
**Re-structuring of communications.**

**Criteria of economic, social, environmental and cultural sustainability.**

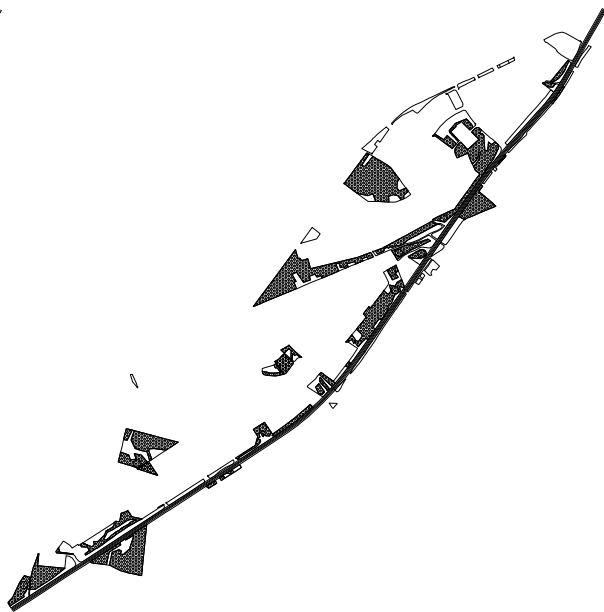
**Re-definition of the main road as an integrator element: town and countryside.**

**Identifying areas of intervention**

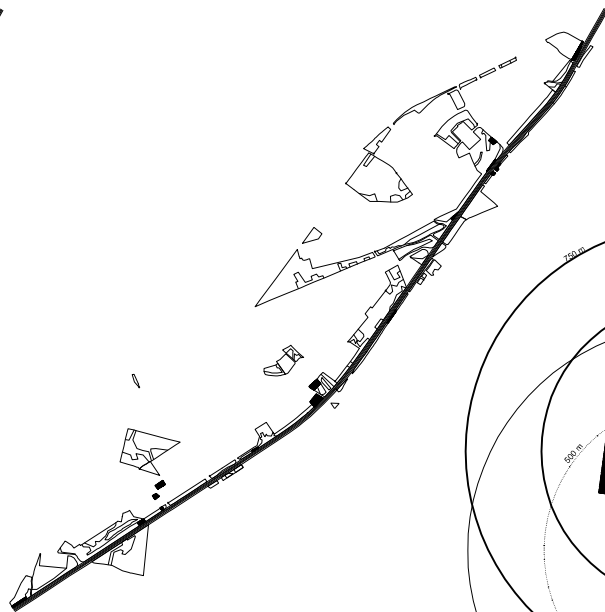
**1. SELECTION OF VOIDS AND GAPS.**  
- Selection of vacant plots, currently unoccupied (minimum of 5 meters in any direction).



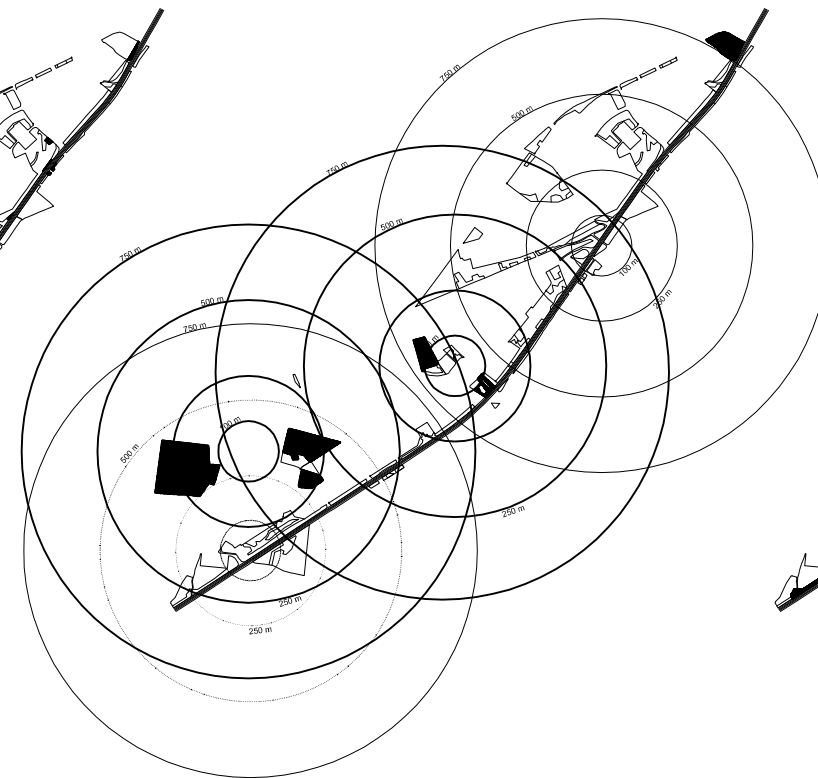
**2. PRESERVATION OF WOODLAND AREAS**  
- Study of trees and vegetation in vacant lots.  
- Green areas, where it's possible to inscribe a circle of 25m of diameter.  
- Space trees in other cases.



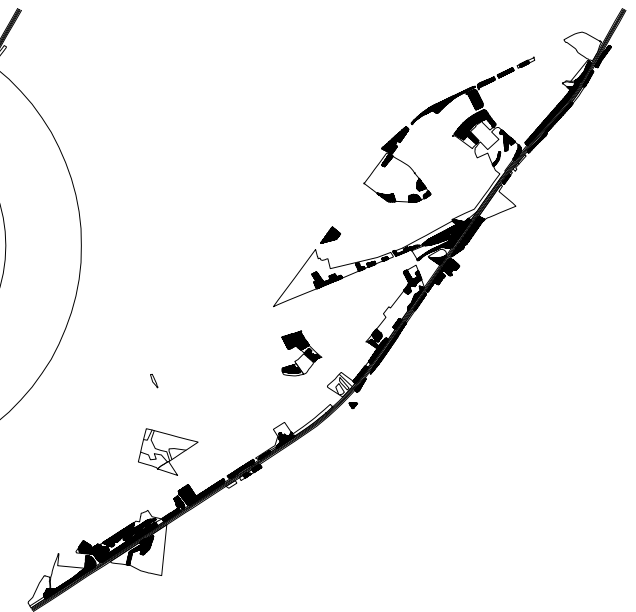
**3. URBAN ROAD**  
- Reduction of the road to two lanes.  
- Creation of sidewalks in other current roads.  
- Parking areas every 500 m, outside the areas of greatest congestion.  
- Parking limited in the rest of the tracks.



**4. CAR TROUBLE**  
- Located in the buildable areas, selection-parking zones every 500 m, outside the areas of greatest congestion.  
- Parking limited in the rest of the track.



**5. MIXED USE**  
In the remaining buildable areas, consider mixed-use residential and tertiary (trade, workshops, professional studies)  
The road passes esje is an axis and SOCIAL COMMERCIAL



## KALMAR

### EXTENSIVE PLANNING: unsustainable

The sprawling city implicates an exponential increase of infrastructures and land use. Public space in this city is compartmentalized, each corresponding to a function. This means mono-cultivation as the most basic ecosystem, with minimum adaptability and social relationship but maximum deterioration and pollution.

To allocate large amount of territory to the extensive urban occupancy as a result of understanding the land, the city, society and the environment from the priority of consumption and growth has resulted in many cases, in zoning and disintegration of the city and its society. This is a homogeneous and simple scheme which gives precedence to the extensive and individual versus the inclusive and participatory, putting richness and simplicity ahead of complexity, and unlimited and irresponsible where it should be sustainable and rational.

The zoned urban sprawl involves:

- Elevated energy costs, in transportation, maintenance, supplies, etc..
- Occupation and use of land without optimization criteria.
- Segregation and social differentiation.
- Dependence of vulnerable groups (children, elderly ...)
- Prevalence of private transport with its associated problems (noise, pollution,...)
- Proliferation of monopolies in trade and supplies.
- Distancing of the natural environment.

Compactness therefore facilitates contact, exchange and communication, which are, as known, the essence of the city. It strengthens contacts and they enhance the relationship between the elements of the urban system.

*It is proposed an intensive urban development, which optimizes the energy cost, consumes less land and seeks the basis of economic, social, environmental and cultural sustainability. A compact city which facilitates contact, exchange and communication, bases of the city and facilitators of the relationship between the elements of the urban system.*

### URBAN INTENSIFICATION PROCESS

To provide new buildings and meet housing and equipment needs, we proceed to increase the density of the existing urban grid, from the occupation of the voids and gaps.

- Detection and analysis of gaps and voids in the consolidated urban grid.
- Preservation of woodland areas.
- Location of new equipment in relation with the existing.
- Occupation of the urban voids with new types and mixed uses.

### INFRASTRUCTURE

Infrastructure optimization is a long term investment as in the real price of energy destined for transport, environmental externalities that its consumption brings, should be included. A non optimized network involves in the long-term, subsidize inefficiency, un-sustainability and environmental degradation.

The intervention proposes: **Enhancing the future road E22**, which will absorb intercity traffic between different cores. **Redefinition of Road-25**, which will take on a new character, being a main road for public transportation, bicycles and pedestrians.

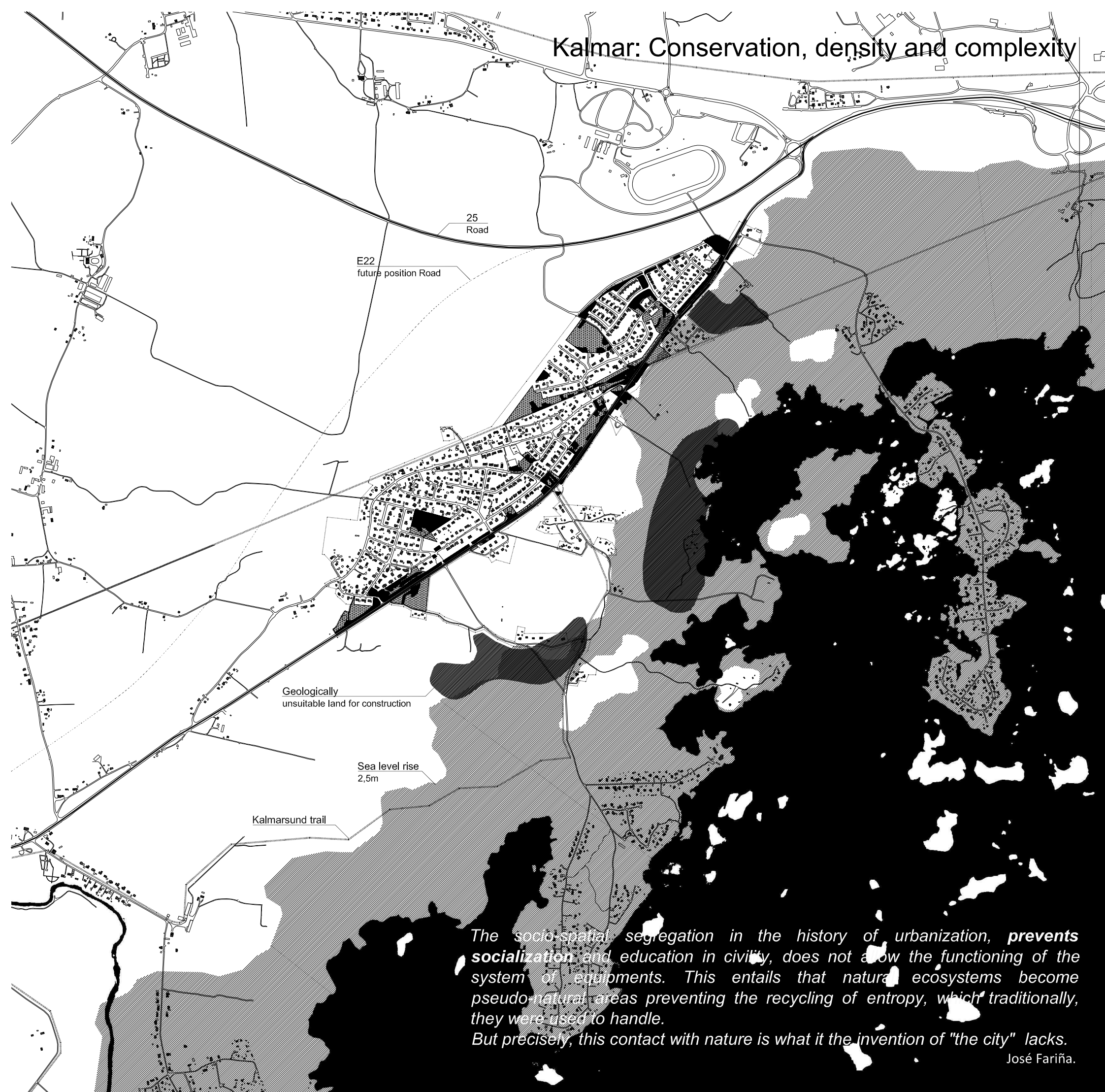
The intervention it is resolved without the need to build new roads or infrastructures, but enhancing and adapting the existing ones.

### ROAD-25, NOW: NEW-STREET 25

The intervention proposes the revision and reuse of empty spaces within the consolidated urban grid; many of these areas are associated with road-25. We suggest a change in the character of this road, with the following characteristics: - Road for public transport, bicycles and pedestrians. - Backbone axis of the new urban cores. - Place of relationship between town and countryside. - Linear element around which buildings increase their density. - Reduced to two lanes. - Extension of sidewalks. - Creation of associated parking lots (every 500 m).

### GENERATION OF NEW NODES

After the analysis of the distances, and following the line of the new-street 25, it is intended to equip the city in a way new urban cores will arise, interdependent and equipped, contributing to the mix of uses and the strengthening of the social network.



*The socio-spatial segregation in the history of urbanization, prevents socialization and education in civility, does not allow the functioning of the system of equipments. This entails that natural ecosystems become pseudo-natural areas preventing the recycling of entropy, which traditionally, they were used to handle.*

*But precisely, this contact with nature is what it the invention of "the city" lacks.*

José Fariña.

# KALMAR: CONSERVATION, DENSITY and COMPLEXITY

COMPLEXITY OF THE GRID: Efficiency | KOMPLEXITET: Effektivitet

RINKABYHOLM\_SÖDRA STADEN\_KALMAR\_SWEDEN

KALMAR

## E/C

**E = energy needed by the system | C = urban complexity**

This equation is an expression of **urban efficiency** and becomes the guide in the role of sustainability, as its evolution over time shows the two aspects related to it: urban complexity and consumption of resources, and as consumption increases, it simplifies supporting ecosystems and urban organization.

The current problem is that this process towards urban efficiency is not the path chosen today to build the city. The one chosen, increases organized information (in complexity), but makes a waste of resources at the expense of competition as strategy. Per unit of energy used, urban complexity is certainly reduced since, as mentioned, the logic of urban efficiency is not the logic followed.

**Reducing pressure** on support systems and **increasing urban complexity** are part of the same equation to walk towards sustainability.

### Inefficient Town: **E/C**

Less < HABITABLE

Less < SUSTAINABLE

Pressure mounts on support system (places where resources are generated and waste goes back).

Reduce the Urban Complexity: **Dispersed / zoned / private / dependent city.**

**E increases, C decreases:** *Individual Performance / Disperse / Segregate / Private.*

**E increased by:** *Waste / uncontrolled consumption / high-impact construction / segregation of uses*

### Efficient Town: city of knowledge. **E/C**

More > HABITABLE

More > ECOLOGICAL

More > SUSTAINABLE

Reduce pressure on support systems.

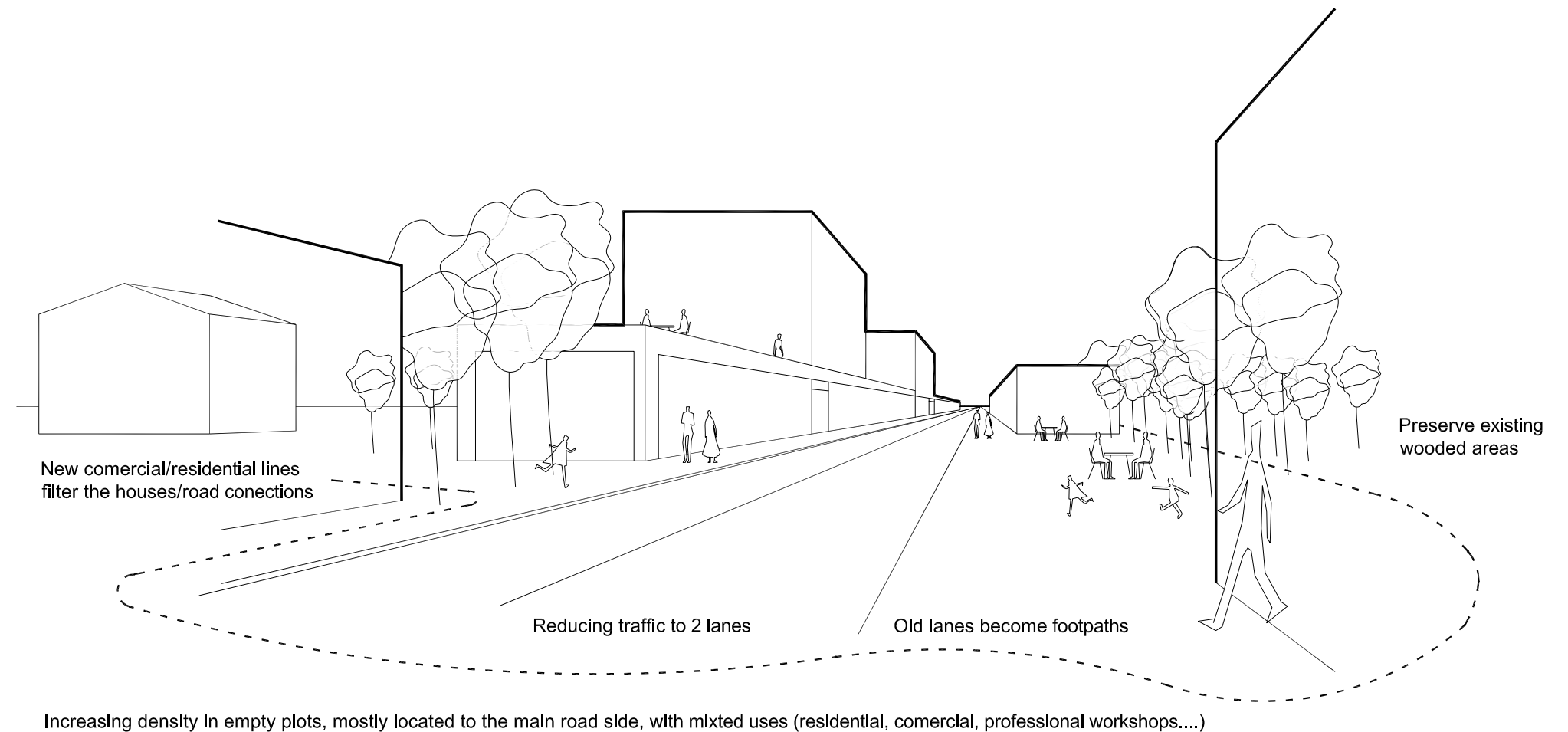
Increase urban complexity: **Compact / diverse / public movement / self-sufficient city.**

**E decreases, C increases:** *Global Movements/ General Actions / Compact / Diverse / Public*

**E decreased by:** *information / knowledge / relationships between people and groups that enhance the social and economic capital.*

City model in which priorities are: **equality**, coexistence and **social cohesion**, livability, solidarity, **culture and urban education**, as well as urban compactness, conservation and rehabilitation of historical and popular heritage.

**So for a real sustainable city, we would need to talk about one based on less energy needed by the system and more urban complexity. This model reduces pressure on support systems (places where resources are generated and waste goes back) and increases complexity by making urban compact, diverse, public and self-sufficient.**



# KALMAR: CONSERVATION, DENSITY and COMPLEXITY

strategy URBAN SCALE

**Diversification of uses and typologies.**

**Creation of new centers (poli-central city).**

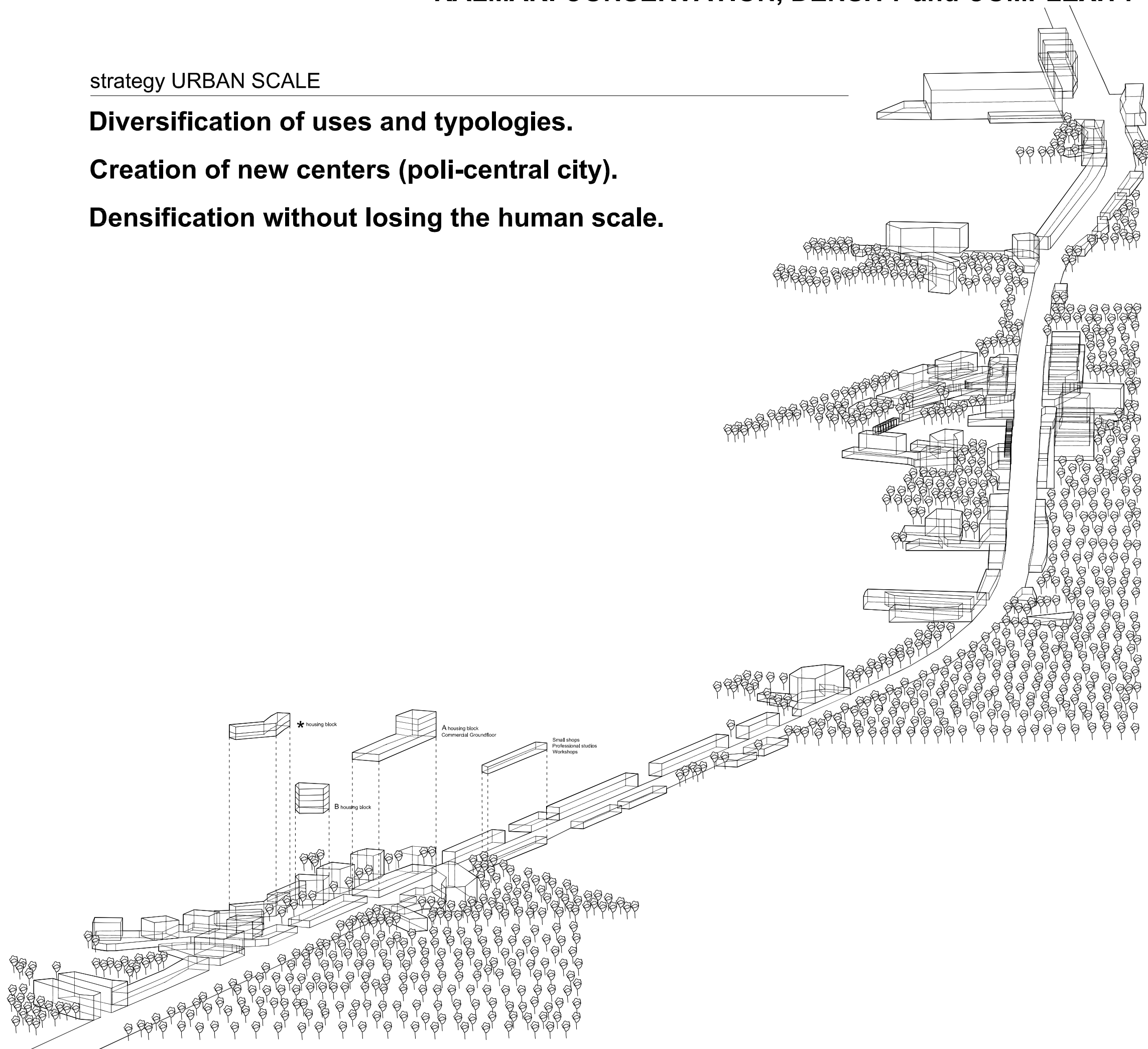
**Densification without losing the human scale.**

KALMAR

Commercial Groundfloor

A+B housing blocks

\* semi-detached housing



# KALMAR: CONSERVATION, DENSITY and COMPLEXITY

## COMPACT CITY

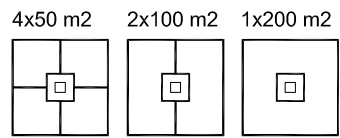
This model of **compact city** can accommodate **different uses**, where each district is home to everything and in quantity. The residences, the market, the church, trade, services, are nearby and provide the majority of the urban functions. The complexity in these cities is high in most of its grid.

The separation between people with different incomes in the compact city is lower than the one imposed by the diffuse city.

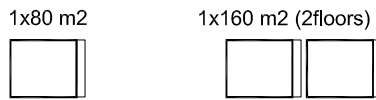
The **increase of complexity** in a limited space implicates an **increase of trajectories of relationship** between the various bearers of information, allowing the increase of synergies of all kinds, including those of economies of agglomeration and urbanization.

	Density housing/ha	Residential houses	Facilities Public area	Commercial/ others area	Open Spaces Public area
<b>Ideal</b>	30		10 m2/person minimum		15 m2/pers minimum
<b>Current</b>	5	600 houses / 1800 people	3.8 ha	0.5 ha	
<b>Proposal</b>	15	1209 houses / 2919 people	3.5 ha	3.4 ha	12 ha
<b>Total</b>	15	1809 houses / 4719 people	7.3 ha 15.2 m2/pers	3.9 ha	25 m2/pers

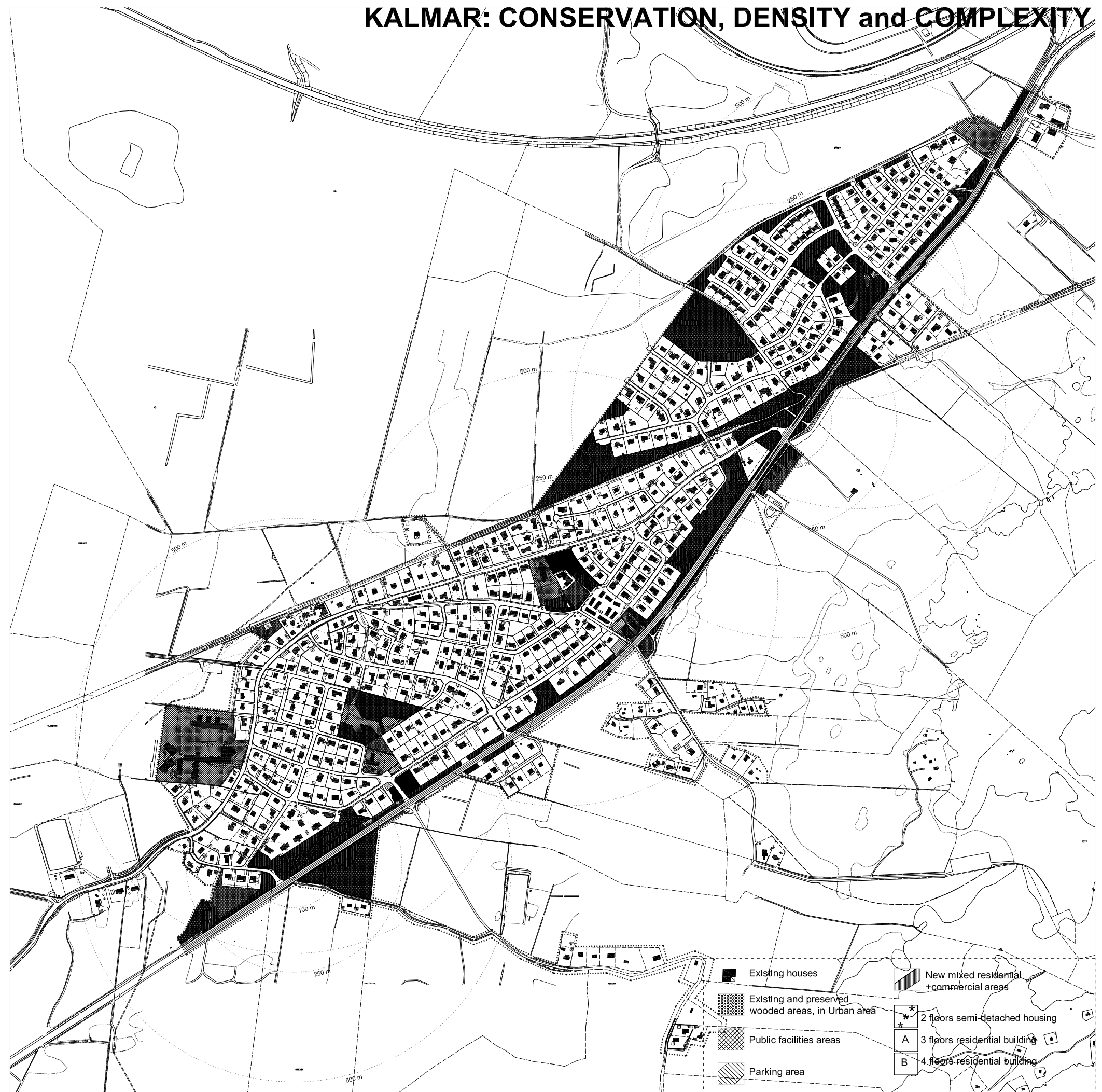
## A B HOUSING BUILDINGS Options per floor



## \* SEMI-DETACHED HOUSING Options per house



NEW HOUSING	BLOCK TYPOLOGY	HOUSING TYPOLOGY Options per floor	% FLOOR TYPOLOGY per block	Number of blocks in the proposal	Floors per block	FLOORS with this typology HOUSING			People per housing	People in this typology
	A	B	*			3	4	2		
A	4 x 50m2		20%	50	x3	30	120	x1	120	
	2 x 100m2		70%			105	210	x3	630	
	1 x 200m2		10%			15	15	x5	75	
B	4 x 50m2		20%	65	x4	52	208	x1	208	
	2 x 100m2		70%			182	364	x3	1092	
	1 x 200m2		10%			26	26	x5	130	
*	2 x 80m2		60%	166	x2	100	200	x2	400	
	1 x 160m2		40%			66	66	x4	264	
<b>TOTAL IN PROPOSAL</b>							<b>1209</b>		<b>2919</b>	
							housing		people	



- Existing houses
- Existing and preserved wooded areas, in Urban area
- Public facilities areas
- Parking area
- 2 floors semi-detached housing
- 3 floors residential building
- 4 floors residential building
- New mixed residential + commercial areas