

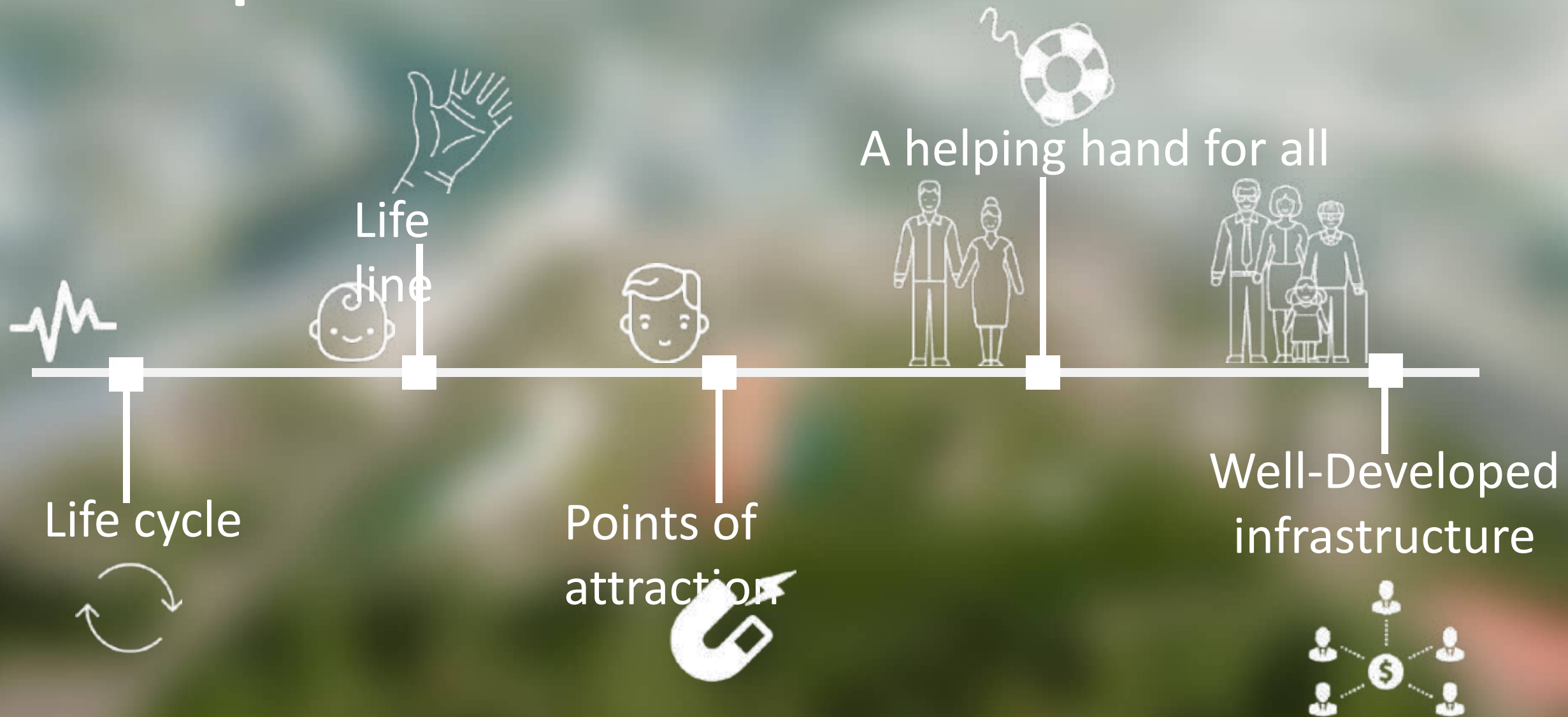


The background of the slide is an architectural rendering of a modern, multi-story residential building named 'LifeLine'. The building features a unique design with numerous balconies, some of which are integrated with vertical gardens and greenery. The facade is composed of light-colored panels and large glass windows. The building is situated in an urban environment, with a street and other buildings visible in the background. The overall atmosphere is bright and modern.

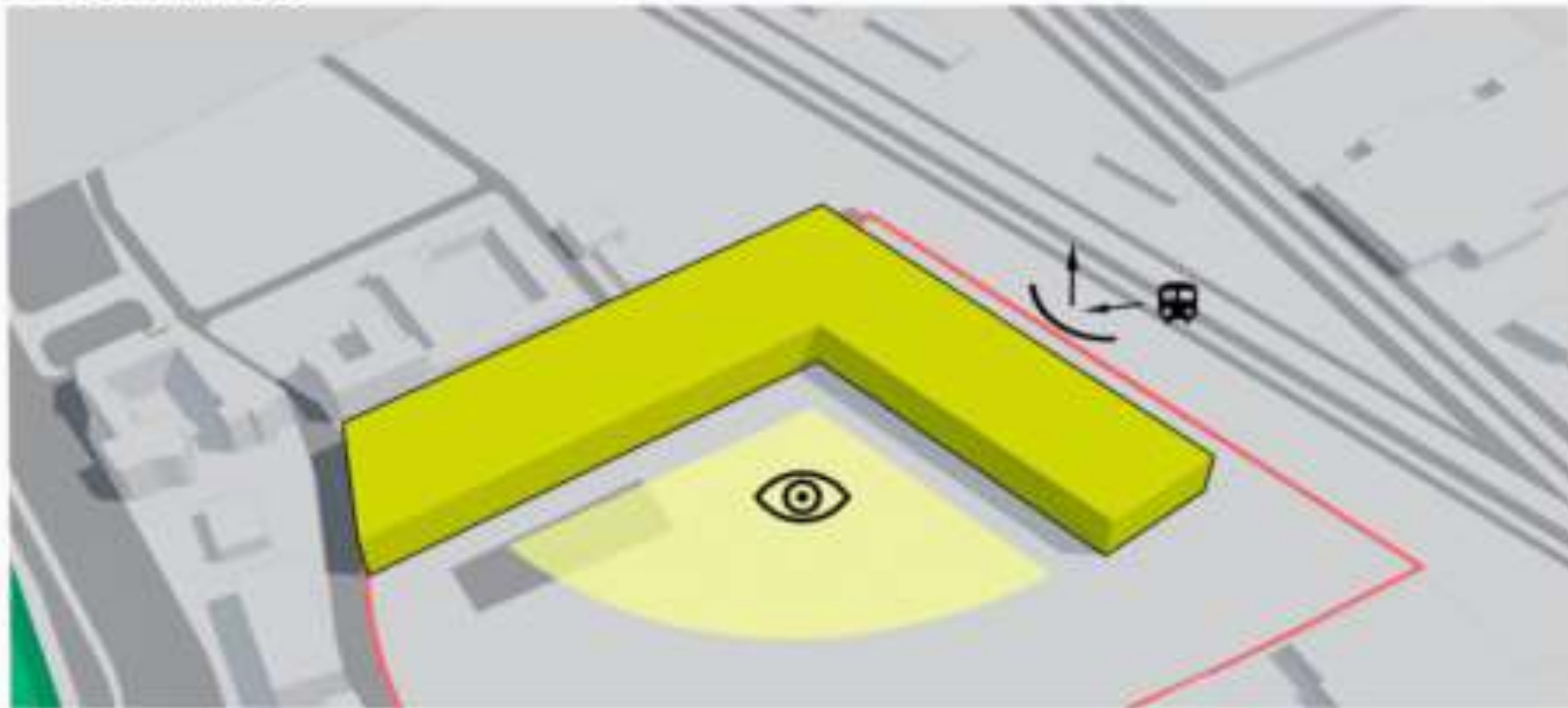
# LifeLine

Urban Park With Historical & Educational Functions

# Concept: LifeLine



**Basic shape. Noise protection.**  
**Site outline**





# Insulation

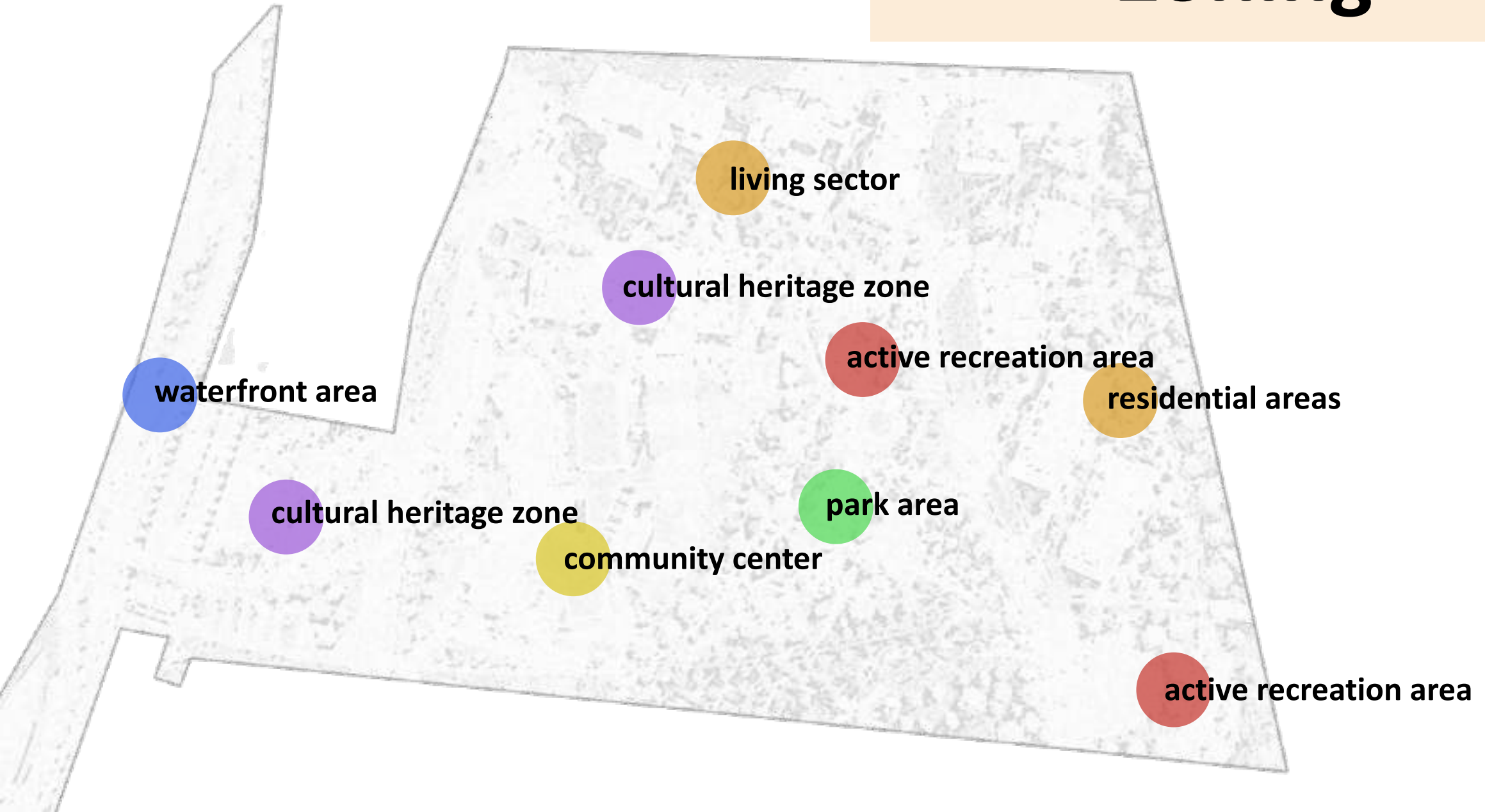


An aerial architectural rendering of a city development plan. The scene shows a mix of urban elements: modern white buildings, older grey structures, green spaces with trees, a winding river on the left, and a multi-lane road with a bridge on the right. A prominent orange rectangular box is overlaid on the right side of the image, containing the text 'General plan'.

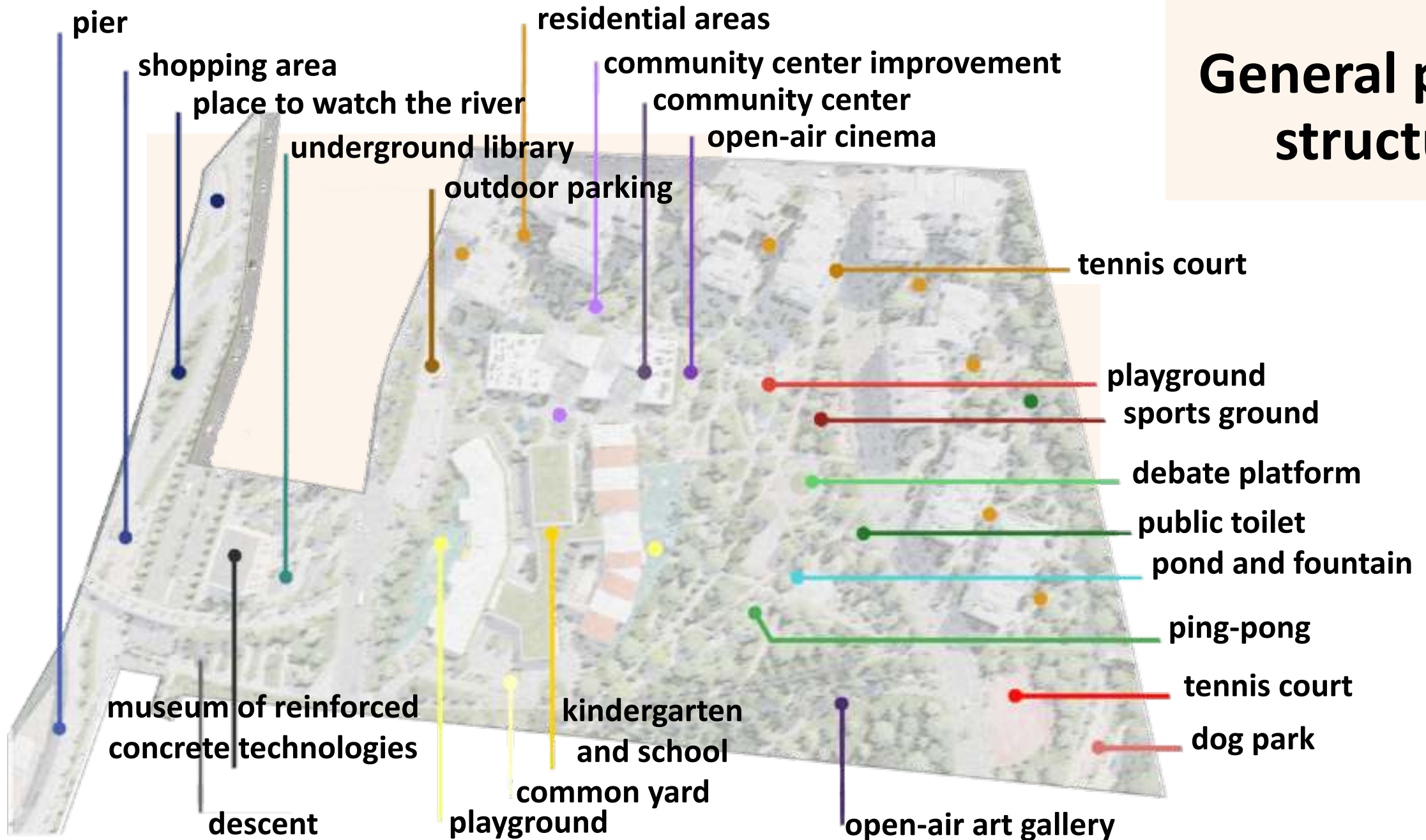
# General plan



# Zoning



# General plan structure:







**Facades**



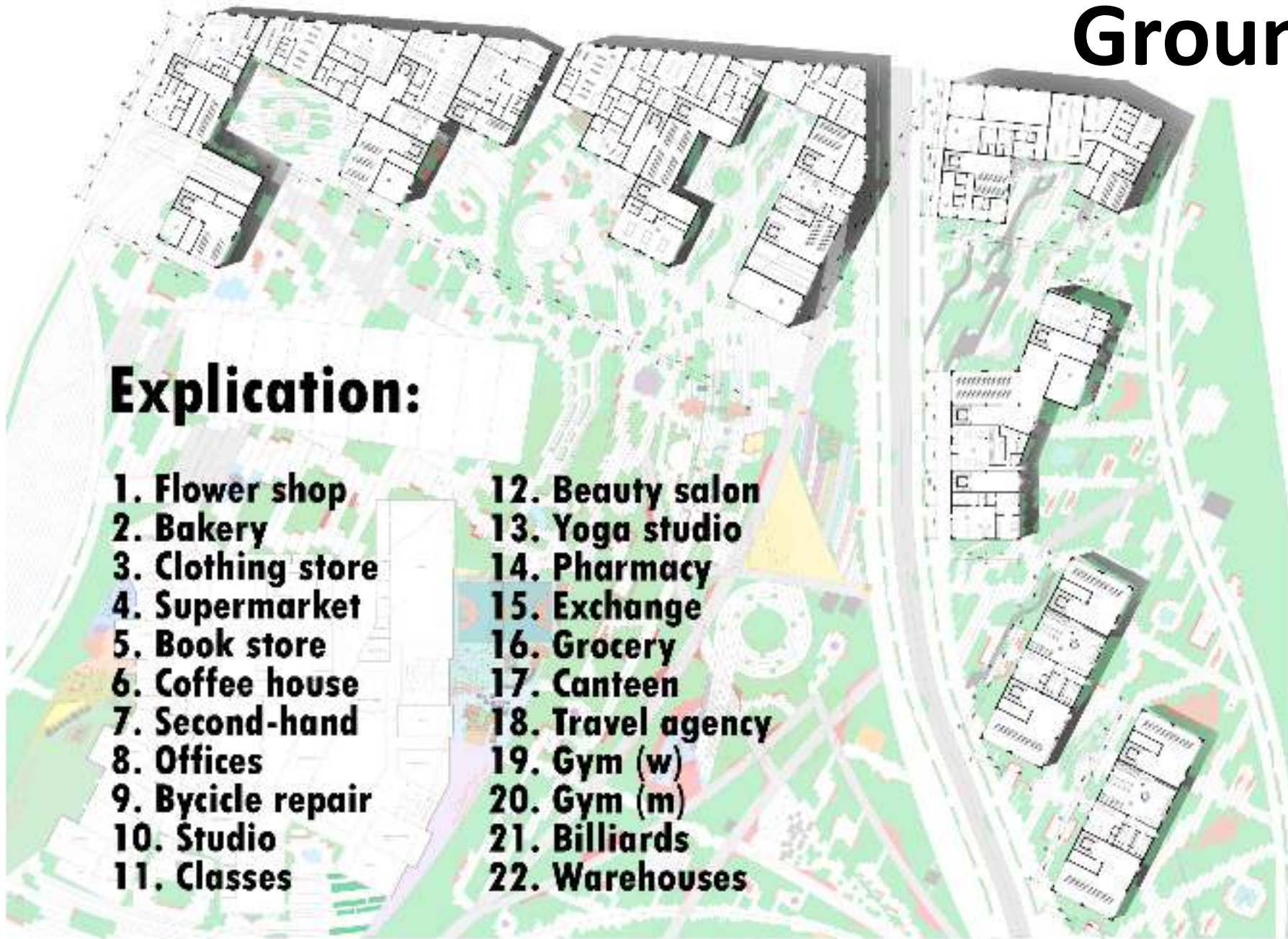




# Ground floor plan

## Explication:

- |                   |                   |
|-------------------|-------------------|
| 1. Flower shop    | 12. Beauty salon  |
| 2. Bakery         | 13. Yoga studio   |
| 3. Clothing store | 14. Pharmacy      |
| 4. Supermarket    | 15. Exchange      |
| 5. Book store     | 16. Grocery       |
| 6. Coffee house   | 17. Canteen       |
| 7. Second-hand    | 18. Travel agency |
| 8. Offices        | 19. Gym (w)       |
| 9. Bicycle repair | 20. Gym (m)       |
| 10. Studio        | 21. Billiards     |
| 11. Classes       | 22. Warehouses    |

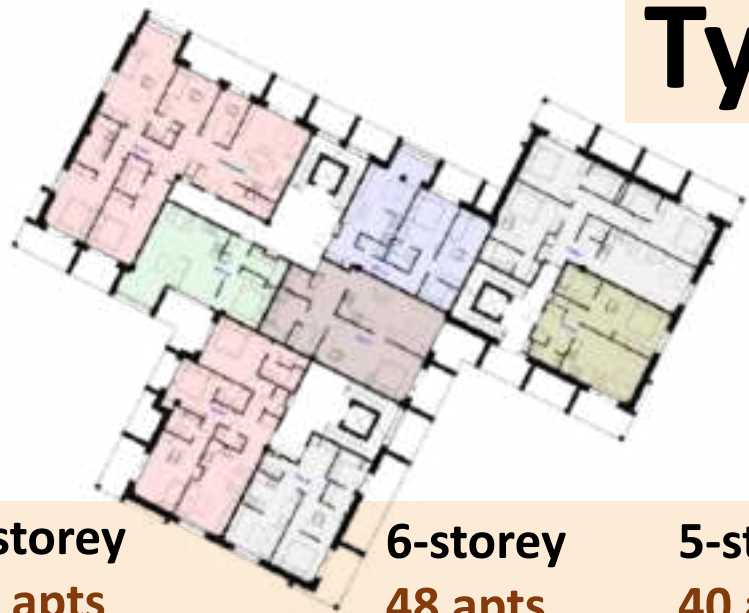




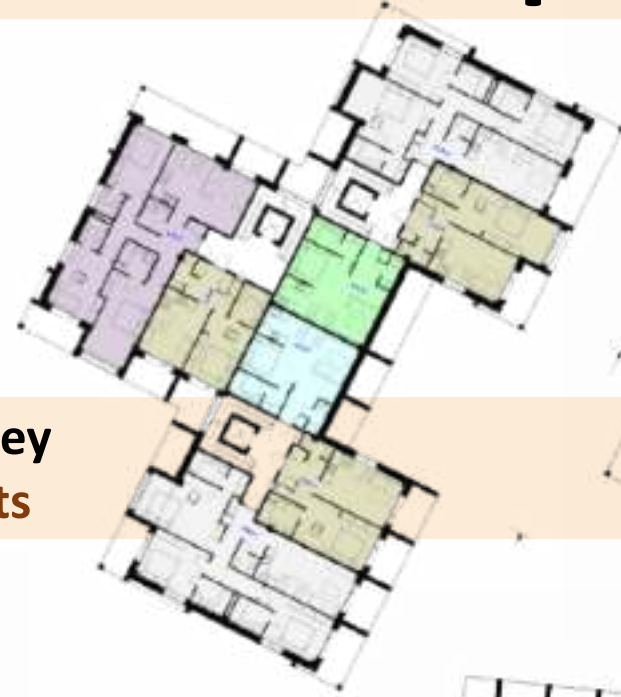
# Typical floor plans



**5-storey**  
**40 apts**



**6-storey**  
**48 apts**



**5-storey**  
**40 apts**



**6-storey**  
**36 apts**



**6-storey**  
**48 apts**



**4-storey**  
**32 apts**



**6-storey**  
**54 apts**

## Studio Apartment < 18 m<sup>2</sup>



## 2-room apartment (for people with disabilities) < 30 m<sup>2</sup>



## 3-room apartment < 73 m<sup>2</sup>





## 4-room apartment < 73 m<sup>2</sup>



## 6-room apartment < 99 m<sup>2</sup>



## 5-room apartment < 88 m<sup>2</sup>

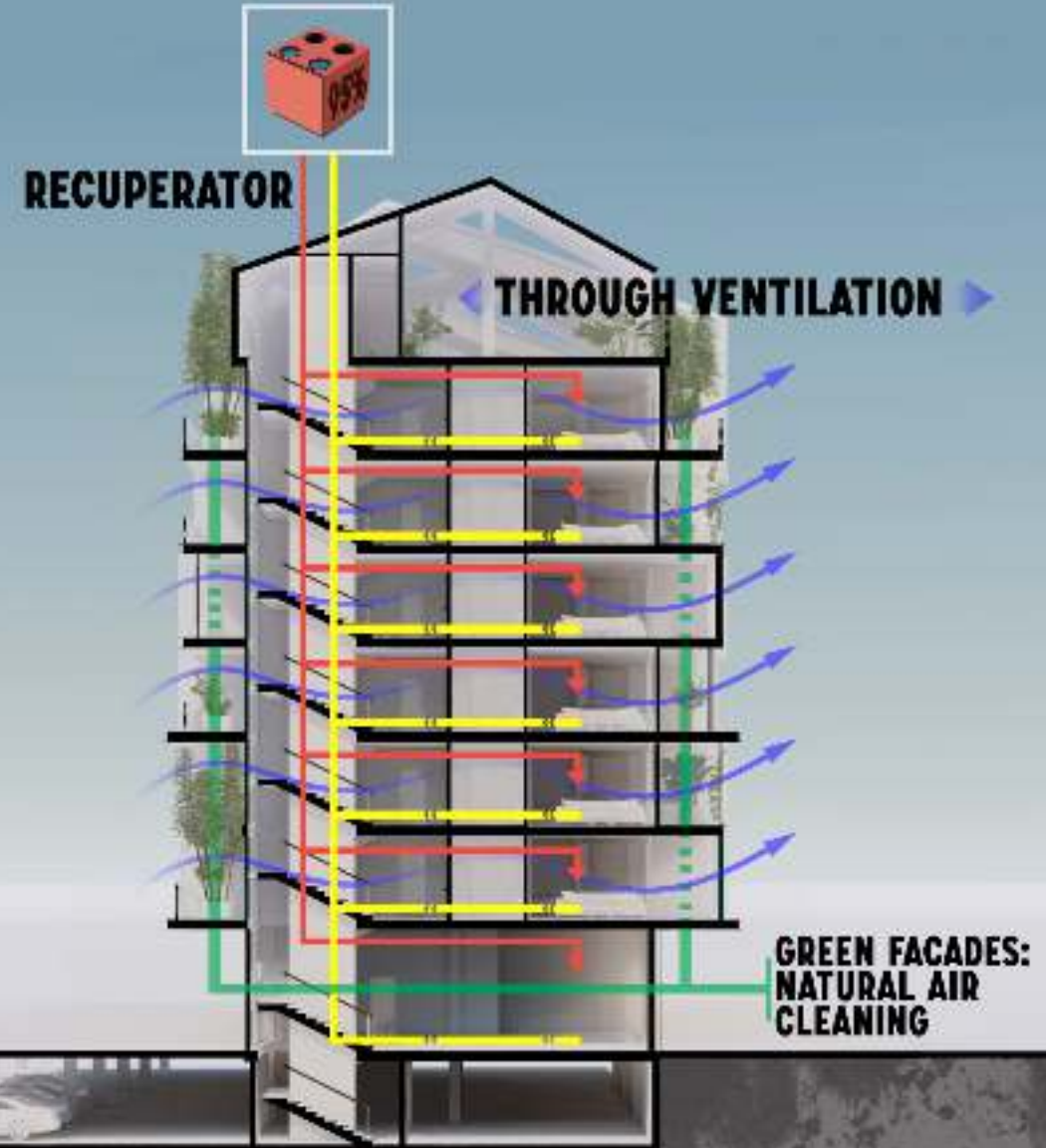
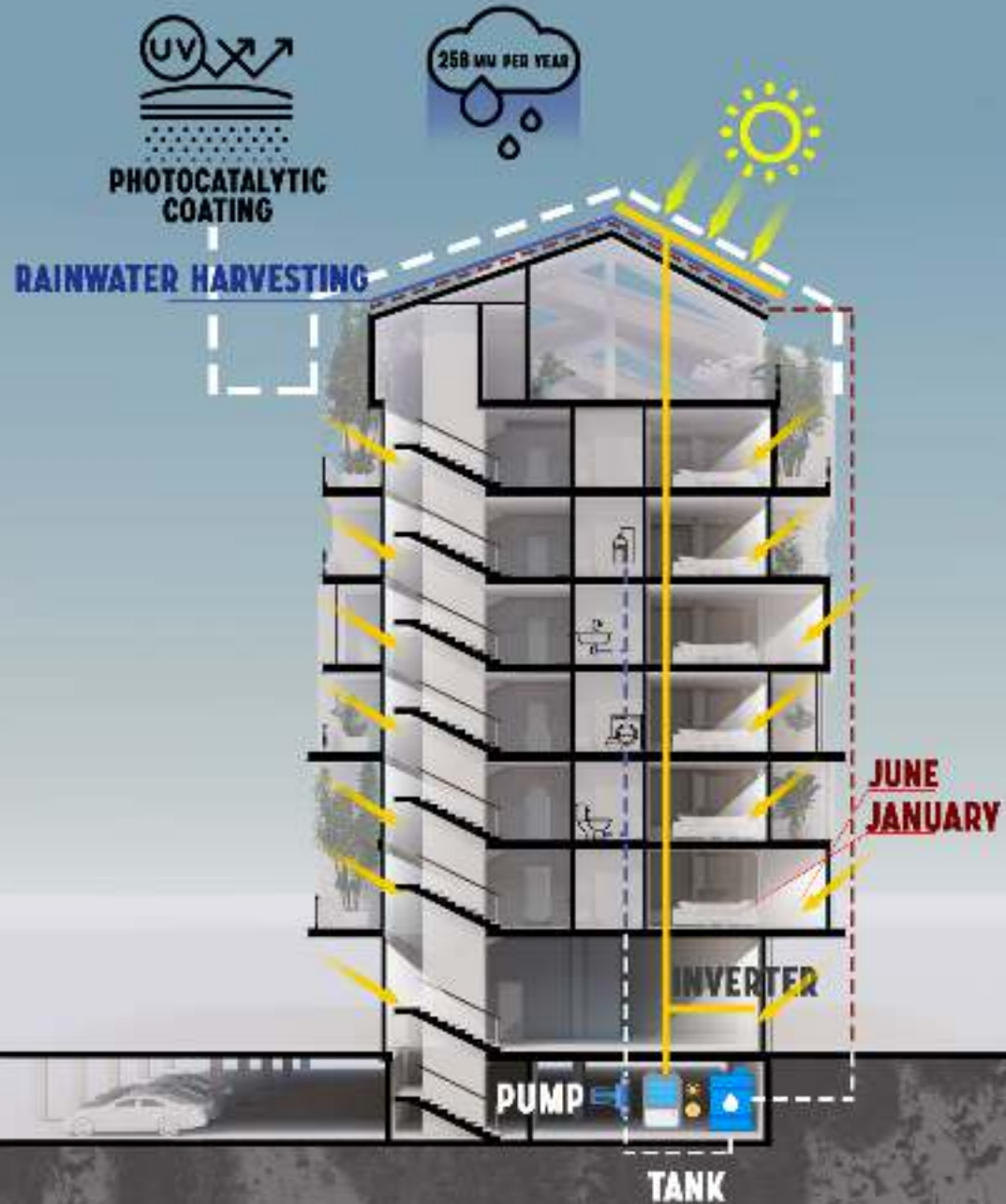








# Sustainability & Air quality



## OPERATED ROOF

Multi Comfort Designer

ISOVER  
Saint-Gobain

CLOSED CONTOUR

ISOVER AKUSTIC  
EP3 RW 25DB

DROPPED CEILING  
SAINT-GOBAIN CEILING  
AKUSTIC® TP1 RW 23DB

COMPOSITE

TRIPLE GLAZED  
WINDOWS  
PLANITHERM®

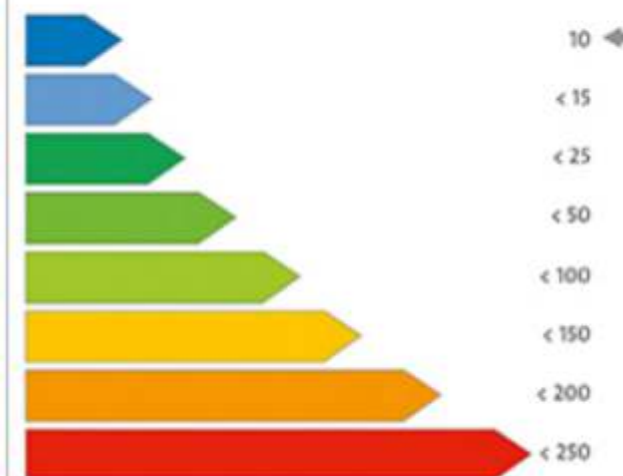
DROPPED CEILINGS  
GYPROC® SAINT-GOBAIN

### CALCULATIONS

#### Specific Heat Demand

Transmission Heat Losses:	56229.00 kWh/a
Ventilation Heat Losses:	20844.75 kWh/a
Total Heat Losses:	77073.75 kWh/a
Internal Heat Gains:	29578.49 kWh/a
Solar Heat Gains:	61824.47 kWh/a
Total Heat Gains:	63878.90 kWh/a
Annual Heat Demand:	8094.85 kWh/a
Specific Heat Demand:	2.74 kWh/(m2a)

#### Energy efficiency classes





#### GREEN COVERING



#### WINDOW ABUTMENT



#### GROUND FLOOR WALL CUT



+29.00  
 +27.30  
 +26.20  
 +25.00  
 +23.50  
 +22.00  
 +20.00  
 +18.00  
 +16.00  
 +14.00  
 +12.00



#### PARAPET ABUTMENT



#### VERTICAL WALL CUT



**vetonit**

**Ecophon**  
SAINT-GOBAIN  
A SOUND EFFECT ON PEOPLE

**Gyproc**  
SAINT-GOBAIN

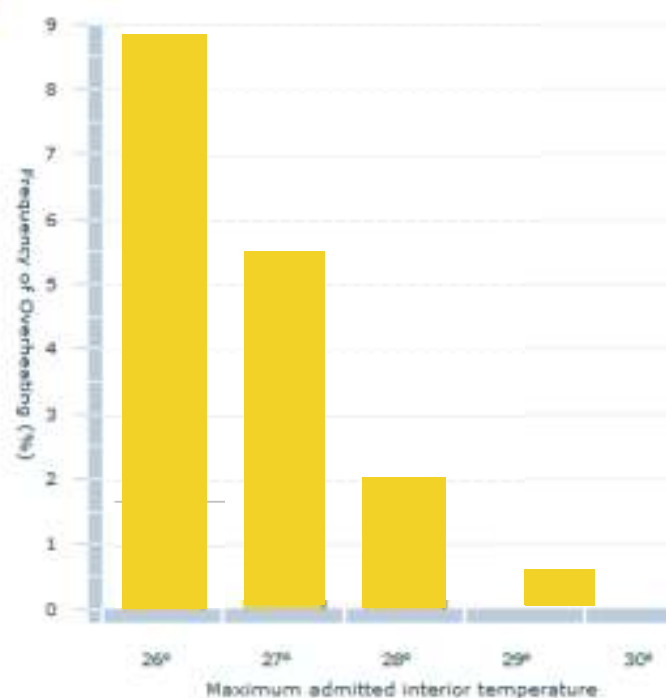
**weber**  
SAINT-GOBAIN

**ISOVER**  
SAINT-GOBAIN

#### CALCULATIONS

##### Overheating

Exterior Thermal Transmittance	806.90 W/K
Ground Thermal Transmittance	39.78 W/K
Ventilation Transmission Ambient	1313.83 W/K
Ventilation Transmission Ground	0.00 W/K
Solar Aperture	409.91 m <sup>2</sup>
Frequency of Overheating	8.86 %







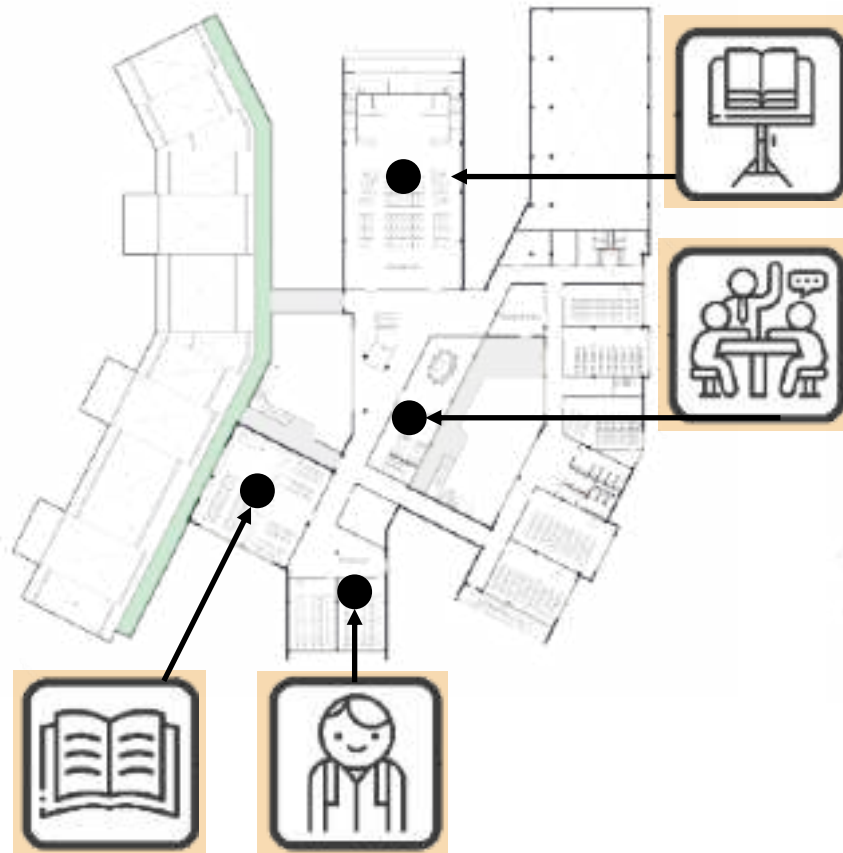
**Kindergarten & School**



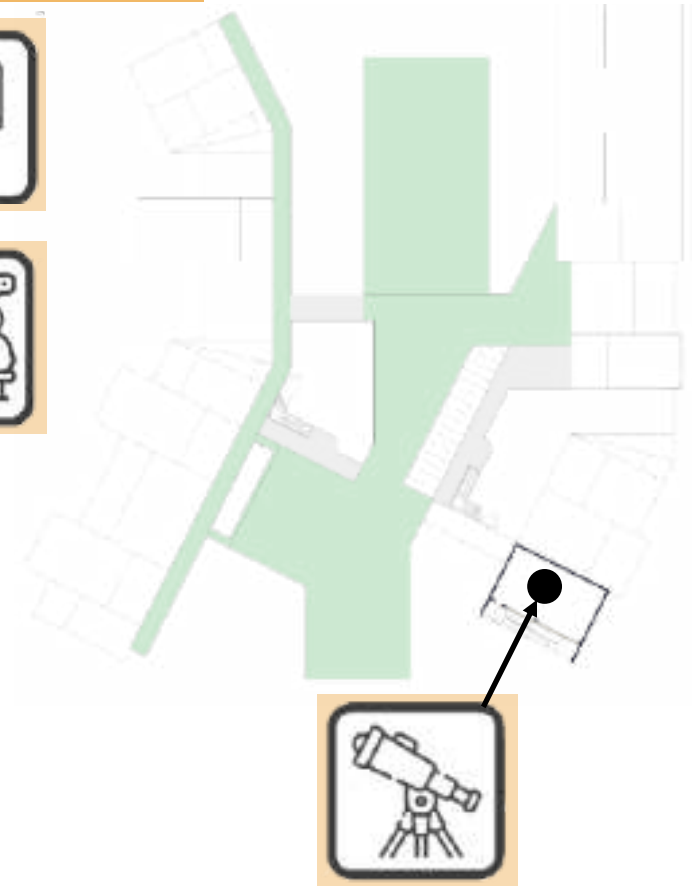
## Ground floor:



## Second floor:



## Third floor:



## Section cut:







# Wind generator Vortex Bladeless

**Vortex Bladeless** allows to lower **production costs for 53%**, reduce **maintenance costs for 80%** and reduce **the carbon footprint** (the total amount of greenhouse gases) **for 40%** in comparison with bladed wind constructions.

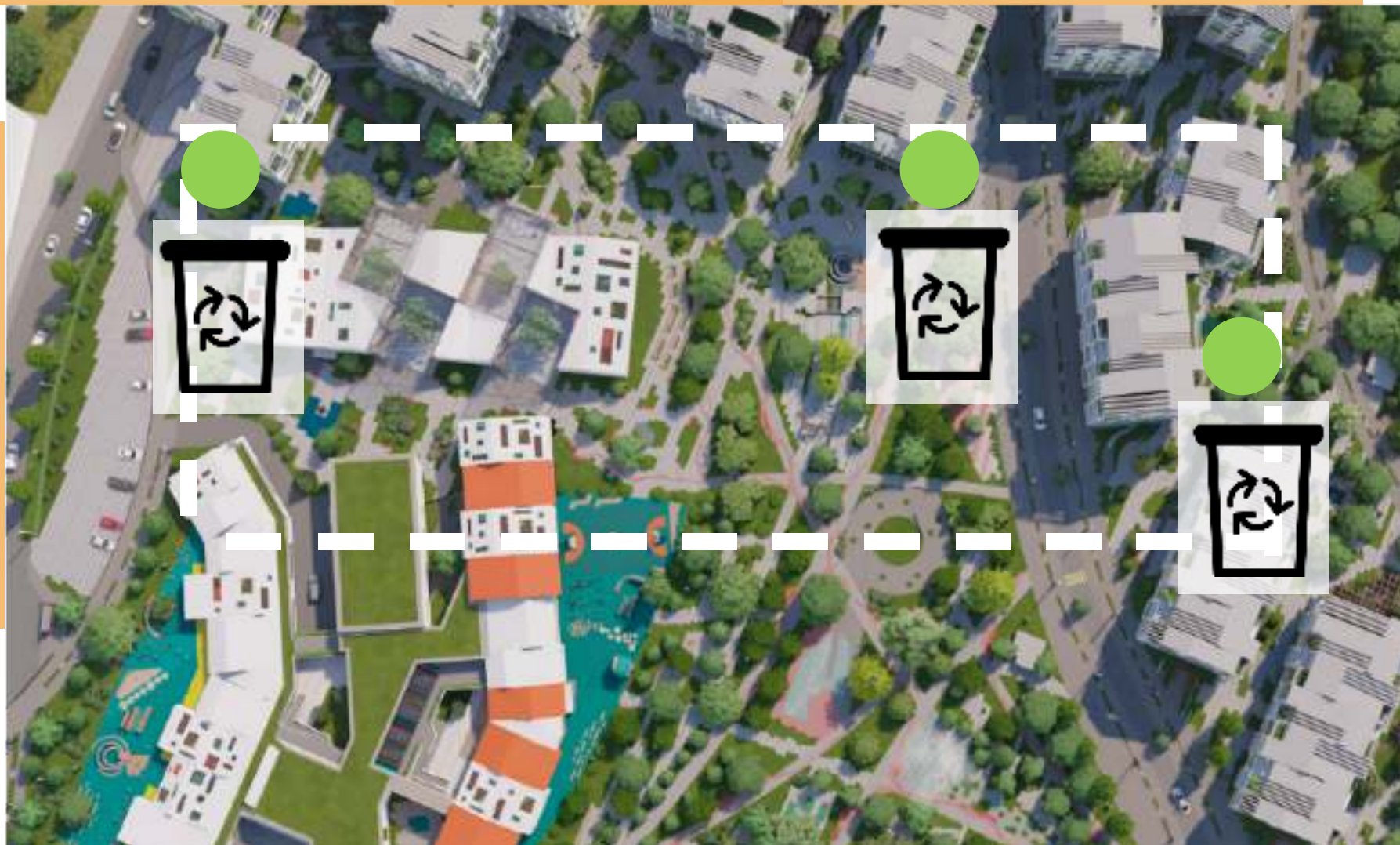
The construction is **almost noiseless** and poses **much less threat to the birds and entire environment**.

One unit of Vortex Bladeless is able to produce **35 040 kW a year**.

There are 20 of such constructions on the site.



# The vacuum waste collection systems (pneumatic waste chute)





# Courtyard landscaping





# Park landscaping





# Revitalization & reconstruction

**Community center**





**Natural light**

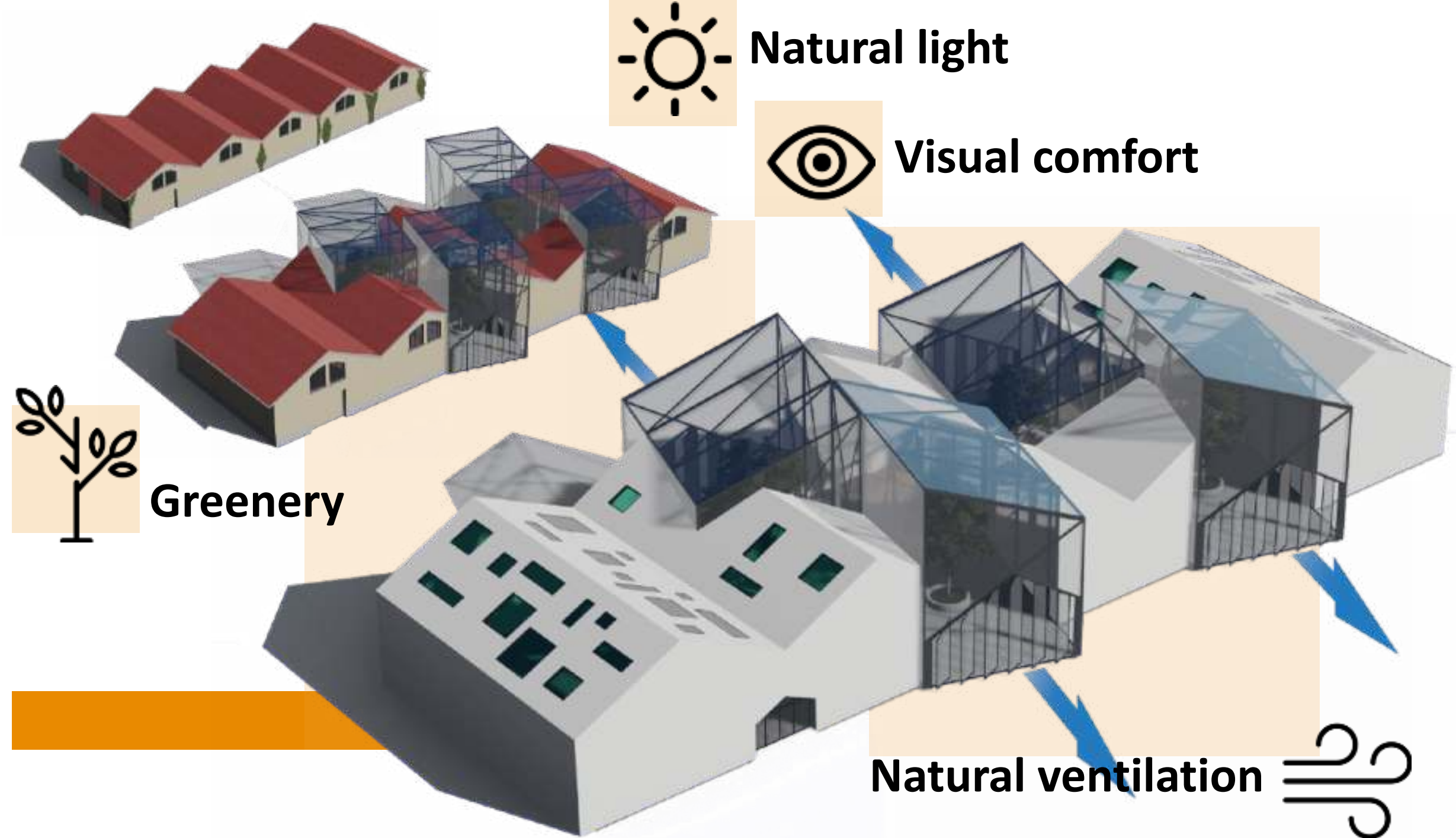
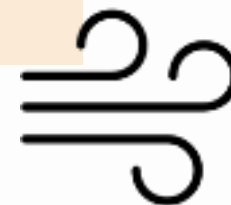


**Visual comfort**



**Greenery**

**Natural ventilation**





# Floor plan



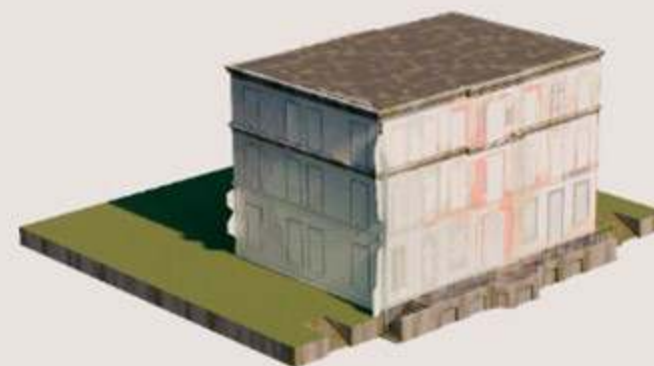


**THE SOCIAL SUPPORT PROGRAM  
SUGGESTS ESSENTIAL SERVICES FOR  
THE HOMELESS (SHOWER, FOOD, LAUNDRY ETC.)  
IN EXCHANGE FOR MAINTENANCE AND  
CLEANING OF THE DISTRICT**

**IMPROVEMENT OF THE  
ADJACENT TERRITORY**



**SOCIAL SUPPORT FOR HOMELESS POINT**



**RESTORATION OF THE ORIGINAL  
ARCHITECTURAL APPEARANCE**





Lightwells for underground premises





**Facilities of adjoining  
territory**



# Playground facilities

