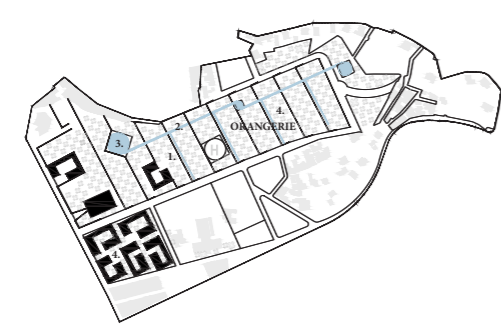


URBAN REFERENCES

- a. Project site, year 1956. Historic orange trees orchards.
- b. Espasiva system, 1969. Jero Utxoa.
- c. Courtyard house to Procsida, 1938. Bernard Rudofsky.



WALLS AND WATER PROTECTION

- 1. Retaining walls of stone (bancales).
- 2. Rain water canals.
- 3. Rain water tanks.
- 4. Orange trees orchard. Garden with aromatic shrubs, palm and pine trees.



CIRCULATION AND URBAN PERMEABILITY

- 1. Proposal for roadways as an articulating element. This strategic enclave is provided with basic emergency facilities: fire station, police, heliport and a road link to the regional hospital.
- 2. Interior roadways. Velocity limited (30 km/h).
- 3. Pedestrian pathways and bike routes.
- 4. Pedestrian connection with the historic orchards route.

City scale

The project site is located in the north-east of Alzira, between La Alquerieta and El Torretó districts. The area was well-known as an orange trees orchard (a). Currently is an area under renewal process. Revitalization and integration between the territory and the use of all the resources (natural, ecological, infrastructural) is a fundamental requirement in planning future vision of the area. The proposal is defined as an integrated and continuous set that brings together the areas of greatest environmental, cultural, social, visual, recreational spaces and ecological and functional connections that relate to each other.

ORANGERIE is the principal axis that should articulate the future urbanism in this area of Alzira, as an element capable of linking to each other the open spaces, the historic uses of this area (a) and facilities of the city and putting them in direct connection to their territory. The value of the landscape of orange trees have progressively lost relevance and for this reason ORANGERIE proposes to recover the social, productive, identity and environmental values of this historic territory, based on the canonic structure of the orange trees orchard: an orthogonal grid of orange trees, stone walls, water ponds and beautiful ornamental gardens. The different interior roads proposed in the current urban planning are transformed in pathways and slow routes adorned with orange trees and palm trees.

ORANGERIE proposes to move the main car axis of the current urban planning from the middle of the area to the south, using the streets "Carrer Massalavés" and "Carrer Sant Salvador" as a slow urban routes, bypassing the project site. This proposal has the intention to develop the ORANGERIE project as a green urban infrastructure of Alzira. It aims to provide outdoor recreational areas, protect social area and inhabitants as well as the ecological pattern of the site and the cultural and landscape historic values, enhance the visual landscape and preserve areas of physical and visual transitions between different uses and activities. Its ultimate goal is to improve the quality of life of citizens, maintaining biodiversity, the historic character and ecological processes, such as the pillars that should be based the territory's sustainability in the long term.

Urban resilience

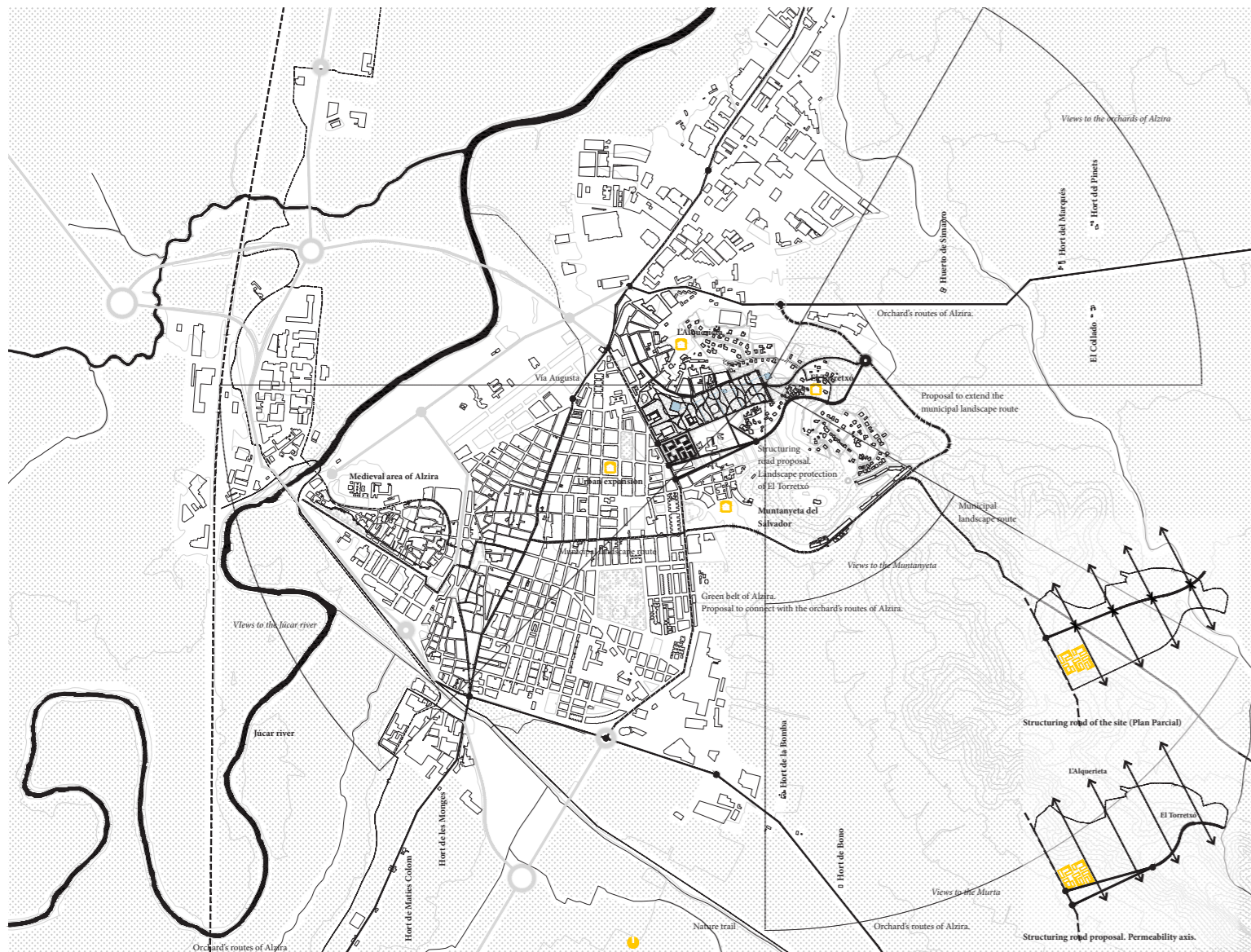
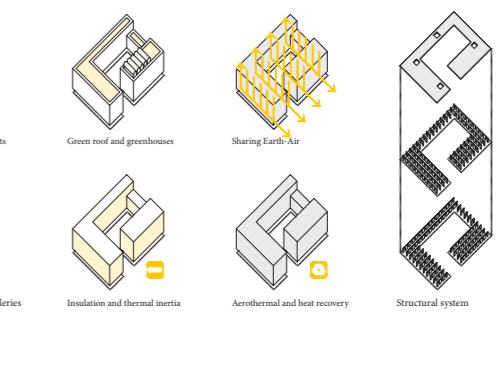
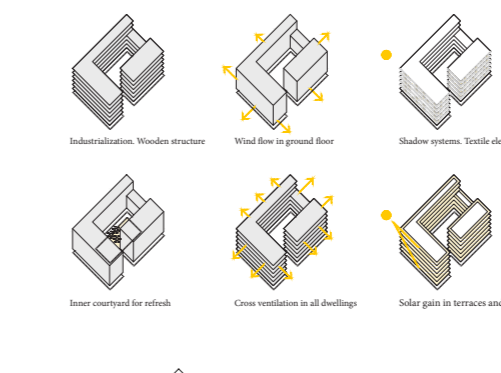
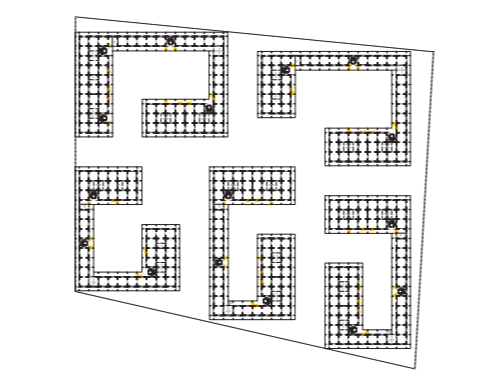
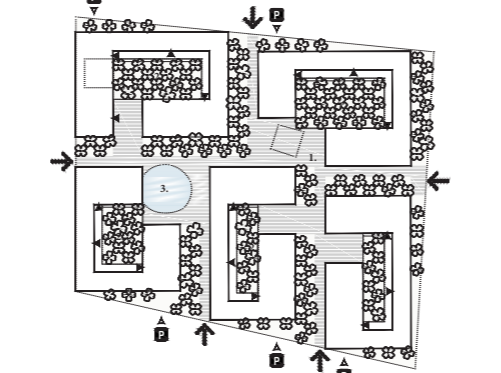
We use some architectural references to build the idea of the project. Our proposal takes an urban configuration based on the "Espasiva building system" designed by Jero Utxoa (b). The proposal recognizes and respects the historical condition of the site, symbolically relating to the agriculture and the orange tree orchards. The materials, the light, the shapes, the scheme of the facade and the new public space create a bridge between the productive past of the place with the time in which we currently find ourselves.

Each residential building develops the block building scheme with an inner courtyard (c). The courtyards are conditioned by two features. On one hand, there is their anthropological condition, as spaces for relationships, as propitious places for the intimacy of the people who live and work in the building, generating opportunities for social interaction that otherwise would never have existed.

On the other hand, there is its climatic condition, as a passive and natural system of environmental control against the high temperatures that the environment suffers. The courtyards regulate the temperature inside the residential buildings, with trees, shrubs and water ponds. They also generate drafts, allow natural lighting inside and its contact with the outside, nature and the constant light.

The building uses a garden roof and we also propose a light structure as a greenhouse for the community oriented to the south. The decision to use green roof has advantages not only in terms of visual impact on the surrounding landscape, but it also has great benefits at thermal and acoustic level. It providing a system for collections and storing the rain water to use for the irrigation of external spaces, roof included.

Finally, the three words that would summarize this proposal are: **simplicity, flexibility and functionality.**



LANDSCAPE: ENVIRONMENTAL AND AESTHETICAL ISSUES.
Regarding bioclimatic challenges in the project, we aim to create a vegetal gradient guided by a sustainable landscape design.

- 1. The edge promenade. Trees: 50% orange trees, 20% palm, 20% pine, 10% cypress. Shrubs: 80% lawn and 20% aromatic shrubs. Hardscape materials: linear concrete paving, gravel and pigmented asphalt.
- 2. Inner Courtyards. Trees: 90% orange trees and 10% palm trees. Shrubs: 50% lawn, 25% flower beds and 25% aromatic shrubs.
- 3. The water pond. Trees: pine trees. Shrubs: 90% lawn, 10% flower beds.

STRUCTURAL SYSTEM.

- 1. In order to considerably reduce the execution time, it is proposed that the main structure above ground be made with prefabricated panels of cross-laminated wood (CLT system) with high ecological qualities.
- 2. The slabs will be made in concrete using the double sheet typology, with interior lightening based on recycled materials. This solution achieves very substantial savings in the amount of concrete compared to a conventional slab.

GARDEN ROOF + GREENHOUSES.

- 1. Garden roof. Environment-friendly innovation in the building materialisation, ultimately aimed at contributing to the indispensable decarbonisation process.
- 2. Greenhouses to recover the social, productive, identity and environmental values of this historic territory, based on the agriculture and the orange trees orchards.

