

Cascata Urbana

The Cascata Urbana project combines a dense, sustainable neighbourhood with an agricultural focus. The emphasis is on understanding water as a resource and thinking in terms of staggered cycles, for example by using surface water and grey water within the built structure for agricultural purposes in a systematic irrigation system for fields and neighbourhood gardens.

At the same time, strategic new links are to be created to better connect the quarter to the surrounding context, thereby making newly created qualities accessible beyond the neighbourhood. The urban design is characterised by morphological approaches, further developing existing paths and connections and integrating existing buildings into the new settlement development. The aim was to seal as little land as possible with a highly densified neighbourhood.

The area above the large cistern will be designed as a wild natural space with flood-resistant plants, some of which may be partially submerged. This area will not be maintained, only wooden walkways will provide formal connections and allow visitors to experience the wild natural space.

With these new attributes and the new characteristic urban terraces, the neighbourhood sees itself as a new, self-confident urban building block that creates synergies at various levels and promotes local ecological cycles.

Urban Structure

Hydroscape

Recreation Nature, Neighborhood Nature, Productive Nature, and Infra-Nature shape a resilient urban landscape. On 7 hectares, blue and green infrastructure creates a foundation for a climate-ready city. Rain gardens and water terraces act as ecological connectors — filtering water, enhancing biodiversity, and linking spaces through nature.

Built Structure

Around 400 new housing units are created through high-density development on a small footprint, primarily on public land. The design carefully integrates the existing built fabric — only non-renovatable structures are dismantled and recycled. This approach balances growth with sustainability, preserving character while enabling transformation.

Mobility

The existing street grid is retained and reimagined with car-free streets, mobility hubs, and peripheral parking garages, prioritizing people and reducing street space by up to 50%. A new bike and pedestrian link connects the site to the train station and the regional cycling network. A landscape-integrated service road ensures functional access.

Everyday City

A new residential quarter emerges as a series of character-rich ensembles, shaped by blue and green terraces. It connects seamlessly to existing urban functions while opening space for new uses. Designed to attract diverse residents, it fosters vibrant new communities alongside the existing ones. A lively boulevard forms the urban spine.

Urban Typology

Hydro-Courtyard

Rather than relying on large, monolithic urban blocks, we pursued a more adaptable approach — smaller, more flexible plots that enable a diverse mix of building types. Living spaces are intentionally interwoven with social housing, self-build initiatives, and community-oriented hubs. This strategy fosters collaboration by bringing together existing residents, individuals, collectives, investors, and developers to co-shape the neighborhood.

Character of Public Space

Urban Terrace

The design's centerpiece features two urban terraces offering panoramic views of the Alcantara Valley and serving as lively gathering places. Active ground-floor uses—such as restaurants, bakeries, and cafés—frame these spaces. A Community Hub housed in an existing building acts as an early activator during the planning phase. New connections link green spaces and mark the arrival point of a bridge connecting to Lisbon's western urban and natural areas.

The Boulevard

The original four-lane road is reduced to two lanes, enhancing pedestrian quality of life. Active ground floors and sponge city trees with ample root space define the new boulevard.

Shaded Alleyways

In the narrow, 8–10 m-wide, shaded alleyways, the community type introduces targeted setbacks to improve daylight. It also leads to the Hydro-Courtyard.

Community-Rain Gardens

At the transition between buildings and green spaces, community gardens and walkways are integrated, along with water access points. Building levels are graded and staggered to follow the terrain.

Stormwater Retention Landscape

The area above the large cistern becomes a wild, unmanaged landscape with flood-resistant, partially submerged plants. Wooden walkways offer formal access for visitors.