NAVALMORAL DE LA MATA (ES)

Suturing water, memory and biodiversity together

Navalmoral de la Mata forms a territory marked by a rich overlap of heritage layers. This landscape combines natural and anthropic elements: from streams and ponds that structure the water environment to agricultural areas, industrial buildings, and wooded masses. Additionally, historical paths (cañadas and coladas), urban infrastructure, and the historic centre are intertwined, generating a diverse mosaic that narrates the evolution and complexity of the territory, now divided and fragmented by mobility infrastructure (high-speed rail line and N-V highway) and the disorderly deployment of industrial estates.

The project proposes to make this landscape legible, traversable, and experiential again, reconnecting the different scales that shape it. This re-suturing has a multi-scalar character (XL-L-M-S) and seeks to integrate territorial dynamics with everyday life, the natural with the built, in a network of spaces that allows inhabitants not only to connect the two sides of the rail line but also to rediscover the place through new sensory, historical, and spatial experiences.

Scale XL-L. A heritage territory

The intervention, at the XL-L scale, proposes a new city-territory model for Navalmoral de la Mata and its surroundings, understanding this place as part of a living and complex ecosystem. Instead of imposing urban growth, the project bets on a respectful dialogue with the territory's heritage values: water, biodiversity, and cultural memory. This new approach is intertwined with the existing city, respecting its urban fabric and proposing solutions that overcome historical barriers, such as the rail line and the N-V highway, which have fragmented Navalmoral de la Mata and its territory since the 19th century.

The project seeks to reconnect both sides of this still-existing infrastructure, integrating them with the agricultural and natural landscape, and generating a continuous and harmonious relationship between city and environment.

To reconnect these three heritage layers, the central proposal revolves around the creation of a new hybrid infrastructure:

- A metabolic infrastructure is proposed that incorporates a new network of four layers: road infrastructure, drainage infrastructure, ecological infrastructure, and heritage infrastructure, highlighting the value of ancient historical paths (cañadas and coladas). New transportation interchanges are also provided to allow cars to be left in peripheral areas and promote other pacified mobility networks.
- A new drainage structure is designed to better manage flood-prone areas, both at high elevations (nateros or agricultural terrace systems) in the hills surrounding the city to the south and at low elevations (floodable parks), while highlighting the water heritage of the place, such as streams and ponds. A new network of public spaces and facilities provides urbanity and acts as a climate refuge, requalifying the empty spaces around the rail line.
- New residential growth is organized around the proposed metabolic infrastructures, adopting an open urban typology that facilitates direct connection with the agricultural and natural landscape. This strategy of compactness and concentration aims to avoid the concept of "sprawl" while improving urban efficiency and protecting the territory's heritage value.

This network is projected as a multifunctional system capable of absorbing and responding to contemporary challenges such as sustainable mobility, climate change adaptation, biodiversity improvement, and the need to generate inclusive spaces. All of these are linked to a dialogue with their heritage structures, generating a territorial identity project.

The city is, in this sense, an evolving artifact that cannot be thought of all at once or in a final state. Therefore, the project is structured in four phases that allow for a progressive and flexible implementation of the new territorial model, incorporating the fourth dimension (time) as a fundamental variable.

In Phase 1, the aim is to solve the current and immediate problems faced by Navalmoral de la Mata:

- Decongesting traffic through a peripheral ring equipped with mobility interchanges. These spaces allow private vehicles to be left and promote new mobility (pedestrian and bicycle) in the interior of Navalmoral de la Mata and the proposed green spaces. This interchange strategy will allow for more than 2,000 parking spaces to be located at strategic points on the peripheral ring.
- Maintaining the two underground vehicle passages proposed by ADIF in the central section and proposing that the elevated road passage in contact with Los Viñazos be also underground. The construction of the high-speed rail line must be an opportunity to rethink the wounds left by infrastructure in this territory, and this action is key to initiating urban growth towards the east of the municipality in a fluid manner.
- Reducing the risk of existing flooding risk by introducing terrace systems in the high parts of the mountain and infiltration spaces in the low-lying areas near the rail line.
- Enabling elevated passages over the rail line, which are integrated into green public spaces, maintaining the existing pedestrian bridge around the train station, as well as replacing the proposed underground pedestrian passages with three elevated passages, safer and designed from a gender perspective in urban planning.

Phase 2 focuses on environmental and landscape recovery in the railway line's surroundings. The streams are enhanced, new wetlands are generated, vegetation is improved, and green routes are developed, creating a central park as an attraction point by activating voids that promote ecological connectivity. Additionally, following this territorial connection strategy, the Los Viñazos area is implemented, currently in a state of abandonment, by decanalizing the stream and generating an urbanism that integrates morphologically and spatially with the agricultural landscape and territorial dynamics.

Phase 3 is divided into two stages:

- **Phase 3.1**: proposes the most impactful and temporary changes depending on Navalmoral de la Mata's growth rate, mainly linked to the development of the Expacio Navalmoral logistics and industrial centre. A new territorial metabolic infrastructure (mobility, ecology, water, and heritage) is generated, absorbing future residential growth and creating a compact urbanism that articulates with the agricultural and landscape territory. Implementing a new upper mobility ring is crucial at this point, ensuring general traffic doesn't congest the ring established in Phase 1.
- **Phase 3.2**: contemplates residential urban growth if necessary, following the logic of compact and concentrated urbanism around metabolic infrastructures, already articulated by a mature green structure.

The development of paths and routes through streams and agricultural territory is completed, transforming Navalmoral de la Mata into a productive, ecological, and community support that closes the cycle of this new regenerated territory.

L-M Scale: A Platform of Environments

The study area becomes the central axis for reconnecting Navalmoral de la Mata with its territory. The project aims to give identity and requalify a series of urban voids currently disconnected from each other, located on the margins of the railway line. Through five main strategies, it proposes to transform these forgotten spaces into a new urban axis full of life and meaning.

1. Connection of environments

Distinct environments are identified based on factors such as humidity level, vegetation, relationship with the urban fabric, uses, and existing routes. This gives rise to a variety of spaces: the water park, the oak forest, the central square, the industrial estate garden, the floodable park, the parking-park, and an agricultural urbanism that intertwines with the environment.

2. Reconnecting with water

The railway line's margins are transformed into a drainage and infiltration system. The floodable park helps mitigate flood risks, while integrating systems for collecting water on roofs and permeable spaces.

3. Reconnecting with vegetation: a climate refuge

Based on humidity level and urban pressure, four types of landscapes are created: humid (associated with streams), dryland, urban, and transitional. Additionally, the standards of the 3, 30, 300 indicator are put on the table, which, combined with pergolas in public spaces, help shape a central green axis that acts as a climate refuge.

4. Reconnecting with uses

Activities of local, urban, and territorial scale are proposed on both sides of the railway line. This diversity of uses generates public spaces with different dynamics and intensity levels, depending on their location.

5. Reconnecting with mobility

Elevated walkways are proposed to improve safety and urban continuity over the railway line. A winding axis runs through all the new landscapes of the platform, incorporating mobility interchanges - such as hybrid parking for cars and bicycles - that promote pedestrian and cycling mobility at the city and territory scale.

6. Reconnecting with views

Reconnecting not only at the level of mobility but also visually becomes a central strategy of the project. The proposal for elevated walkways is used to locate spaces for staying and viewing the territory, which even connect the citizen with the Sierra de Gredos as a geographical landmark and backdrop of the city of Navalmoral de la Mata.

M-S Scale: The experience and time of the landscape

The M-S scale focuses on the most micro and sensory aspects of the project. Not only on how spaces are used, but also on how they are experienced, managed, and involve the community and the environment. Time is the main tool for thinking about these dynamics.

Wet environments and streams

These are islands of freshness that decrease the ambient temperature, reducing the urban heat island effect. In these spaces, wetlands appear that retain water while creating habitats for birds and offering viewpoints. This space and its experience change throughout the year with the arrival of birds, water fluctuation, and vegetation changes.

Oak forests

Reintroduces the local landscape of oak forest near the urban core. It has a general recreational character, without the need for conventional urban gardening, generating large areas for citizens to enjoy in a more free way.

Floodable park

The flood risk leads us to create a park that absorbs water demand during rainy periods. This park is designed to adapt to different flood levels:

- Level -3: nature and biodiversity, contact with the water table (humid environment)
- Level -2: soft uses such as orchards and picnics (humid environment)
- Level -1: medium-intensity activities such as sports courts (transition environment)
- Level 0: permanent use spaces with dryland vegetation (dryland environment)

Parking-park

Aims to requalify, while maintaining its main use to support high-speed train users, a parking area near the train station and the existing elevated walkway, to integrate this space into the whole and enable it to absorb city events such as markets, fairs, or concerts.

Industrial estates

Although their incorporation is proposed in Phase 3, the estates play a key role in connecting Los Viñazos with the residential fabric of Navalmoral de la Mata and the natural park. The estates are adapted for public and cultural uses, incorporating sustainability strategies such as photovoltaic panels and rainwater management on their roofs.

Elevated walkways

The walkways become central elements in reconnecting the two sides of Navalmoral de la Mata. Instead of underground passages, the project proposes walkways accompanied by topography and vegetation that open up as viewpoints towards the territory.

Los Viñazos

Los viñazos represent a new urbanism that combines three main strategies:

- Uncovering the canalised stream and transforming it into a space of freshness and biodiversity.
- Creating a diagonal of public spaces that connect Navalmoral de la Mata to the territory to the east, accompanied by facilities that provide urbanity.
- Developing buildings that open up to the agricultural landscape and integrate it into urban life.

Overall, the project for Navalmoral de la Mata proposes a comprehensive transformation of the territory based on reconnecting with its natural, cultural, and social values. From the large territorial scale to the most intimate daily experience, a new urban narrative is woven that highlights the value of water, biodiversity, and the memory of the place. Through metabolic infrastructures, resilient landscapes, multifunctional public spaces, and a compact and respectful growth strategy, a more legible, habitable, and cohesive city-territory is built. This proposal not only responds to current challenges, such as mitigating the presence of the railway line, but also imagines a future where city and territory coexist in balance, driven by sustainability, local identity, and active participation of its inhabitants.