

### Weaving Ecology into the Urban Fabric

These five projects are presented together as a collective response addressing climate change mitigation and ecological restoration in urban public space through diverse but complementary strategies on various scales. Together, these projects form an integrated vision of ecological urbanism—multiscalar, inclusive, and grounded in place. Their shared commitment to ecological thinking, social resilience, and spatial transformation embodies the core values of the Bachelor's Degree Landscape Architecture at URJC and demonstrates how landscape architecture can lead urban adaptation to climate change.





**Country/City** Madrid ( Spain)  
**University / School** Universidad Rey Juan Carlos  
**Academic year** 2024 - 2025  
**Title of the project** Urban Edges, Living Systems: Weaving ecology into the urban fabric  
**Authors** Lucía Sanchez Andrés / Mario Gómez Ocaña



**Title of the project** Urban Edges, Living Systems: Weaving ecology into the urban fabric  
**Authors** Lucia Sanchez Andrés / Mario Gómez Ocaña  
**Title of the course** Landscape Planning  
**Academic year** 2024 - 2025  
**Teaching Staff** Silvia Guiomar Ribot Gil / Alba Rodriguez Illanes  
**Department / Section / Program of belonging** Landscape Architecture Degree  
**University / School** Universidad Rey Juan Carlos



**Written statement, short description of the project in English, no more than 250 words**

In the current context of the climate crisis, it is essential to supply urban areas by making use of their natural surroundings. This project is situated in the urban and rural development zone near Doñana, a territory of high ecological value and sensitivity. It approaches the urban as the main producer within a complex territorial system, while natural buffers act as its environmental protection.

In this way, the transition from natural to urban is redefined by understanding the landscape not as a residual space, but as multifunctional infrastructure. Moreover, the project promotes ecological and spatial resilience while fostering a more sustainable and symbiotic relationship between urban life, the environment and local production systems

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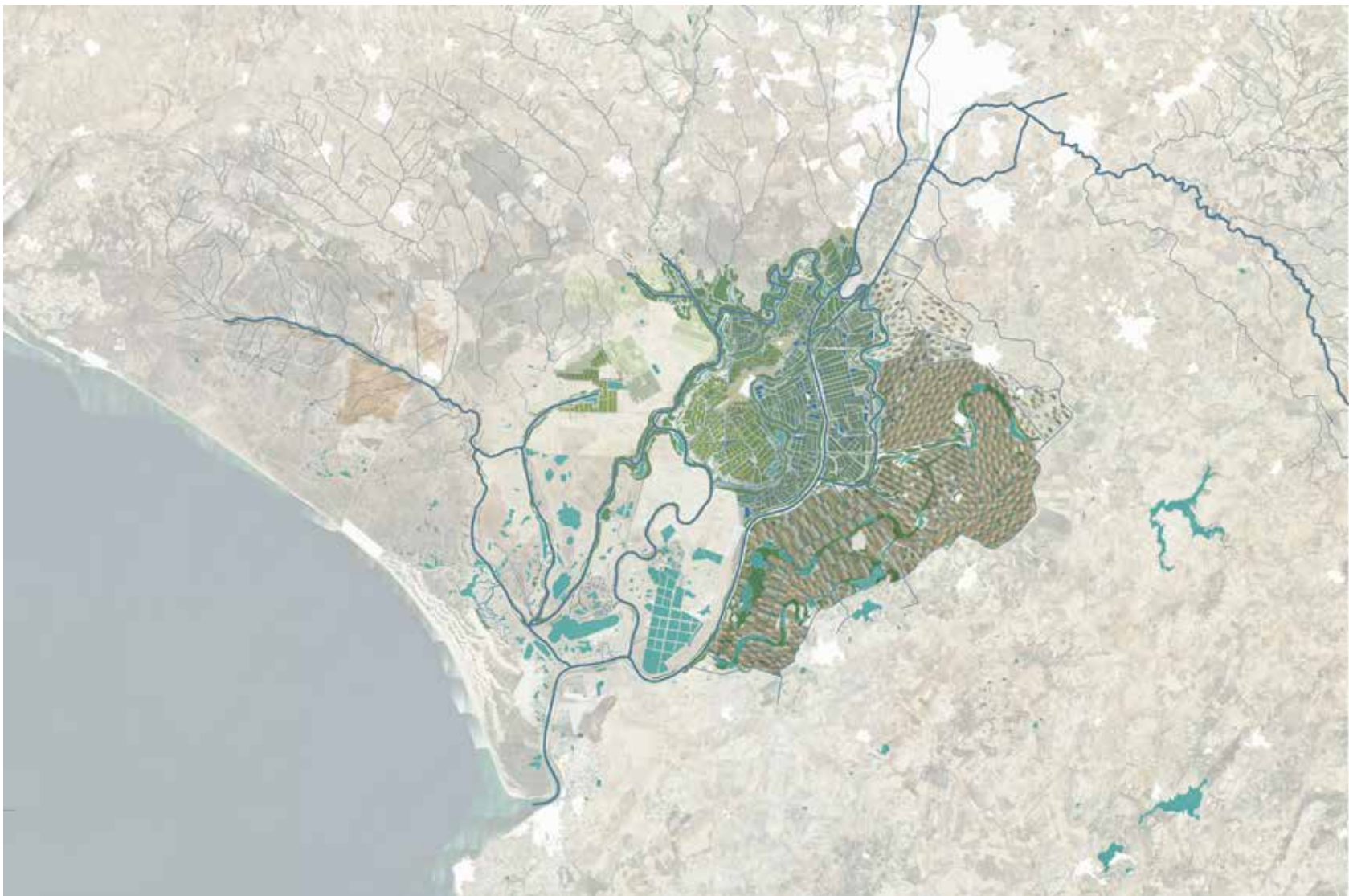
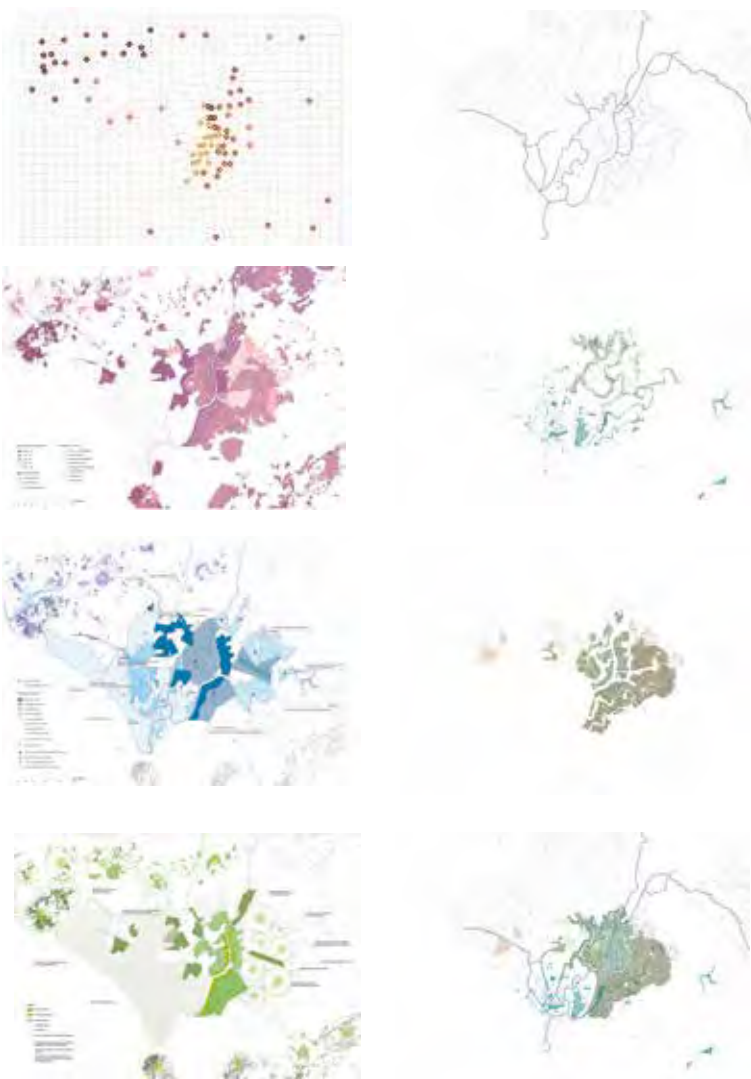
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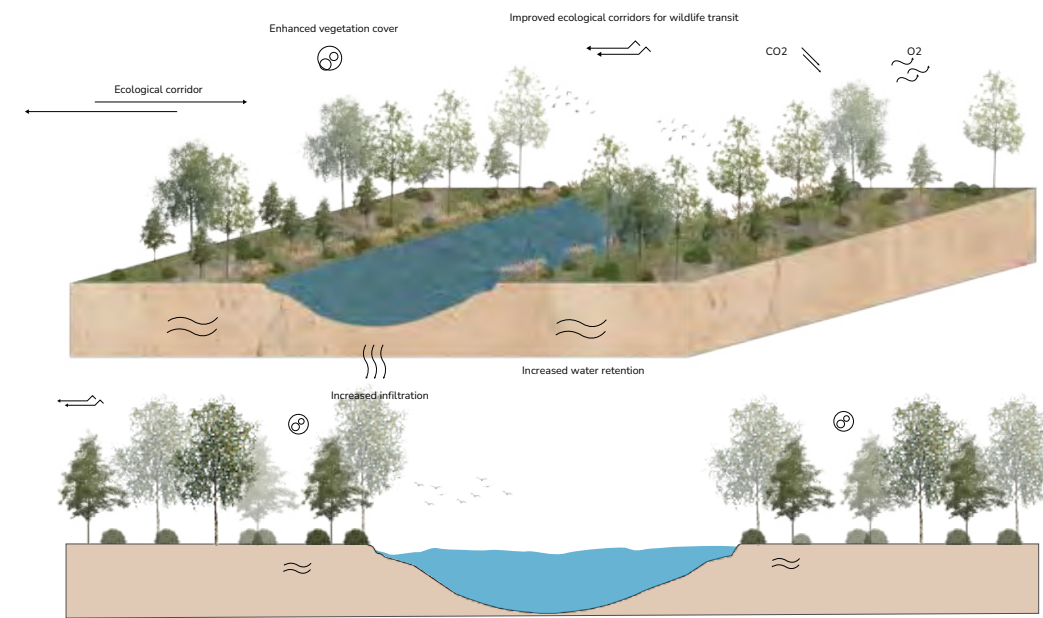




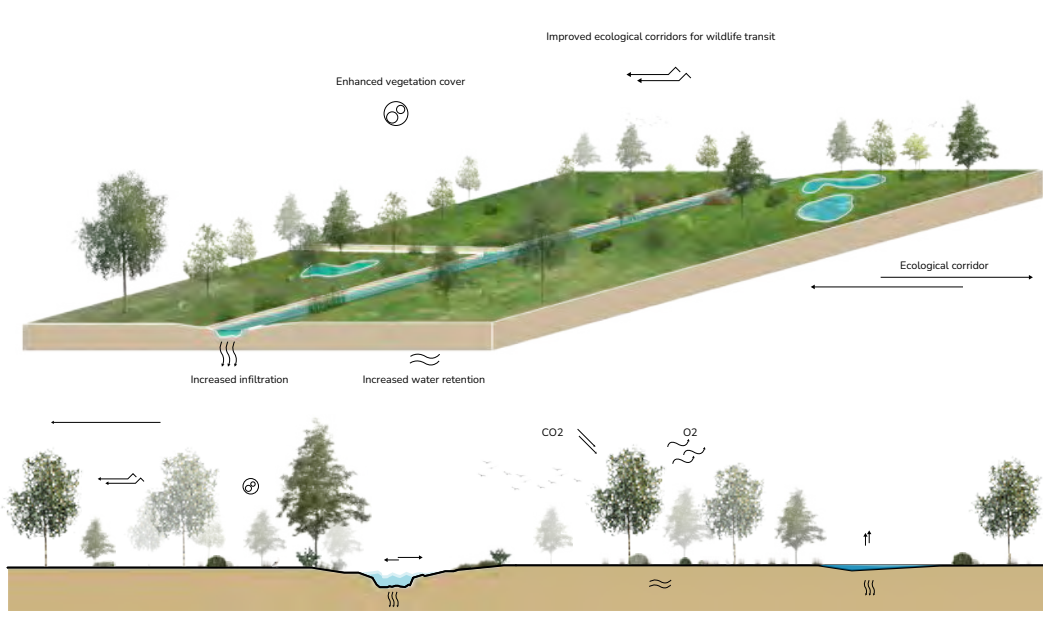
The critical areas had been studied and the solutions to the ones that are the worst are about water and territorial strategies, improving agricultural areas and promoting a self-sustaining landscape.



This proposal envisions the creation of buffer zones and naturalized islands around urban edges, forming a network of sustainable agricultural production that highlights the region's distinctive landscape. Simultaneously, new ecosystems are established as ecological extensions of Doñana, strengthening ecological connectivity and resilience to climate change. The strategy aims to protect and redefine urban and rural edges as living systems capable of integrating environmental, productive and social functions thus offering a renewed future for the urban landscape and its relationship with the surrounding natural environment.



For the buffers options close to the riverbank are presented that propose a new supply model for the urban centers located near the working areas. Thus being an extension of urban areas and working with the landscape in a less harmful way.



Additionally, these types of buffers aim to reduce water consumption while enhancing the agricultural productivity characteristic of this region. This is achieved through the implementation of large ecological corridors that serve as wildlife refuges, as well as by establishing water recapture and infiltration measures that promote a more sustainable management of the resource.



## NETWORK OF URBAN BIOCLIMATIC SHELTERS



Country/City Madrid (Spain)  
 University / School King Juan Carlos University  
 Academic year 2024 - 2025  
 Title of the project Network of Urban Bioclimatic Shelters  
 Authors María José Villabona Cortés





Title of the project	Network of Urban Bioclimatic Shelters
Authors	María José Villabona Cortés
Title of the course	Final Year Project
Academic year	2024 - 2025
Teaching Staff	Cristina del Pozo Sánchez y Sonia Delgado Berrocal
Department / Section / Program of belonging	Landscape Architecture Degree
University / School	King Juan Carlos University

Written statement, short description of the project in English, no more than 250 words

The project proposes the development of an Urban Network of Bioclimatic Shelters in Torrejón de Ardoz to strengthen climate resilience in response to rising temperatures and heatwaves, with a particular focus on protecting the most vulnerable groups.

The municipality faces environmental and social shortcomings, such as a lack of vegetation and fragmented green infrastructure, which exacerbate the urban heat island effect.

As a response, the project envisions a connected network of shelters and nodes, rather than isolated interventions, ensuring safe, accessible, and equitable distribution throughout the city.

These interventions, based on spatial, climatic, and social analyses, aim to mitigate the effects of heat, enhance urban quality, and promote social inclusion.

The project exemplifies the principles of urban ecology by integrating nature, the built environment, and social well-being into a more just, resilient, and replicable urban model.

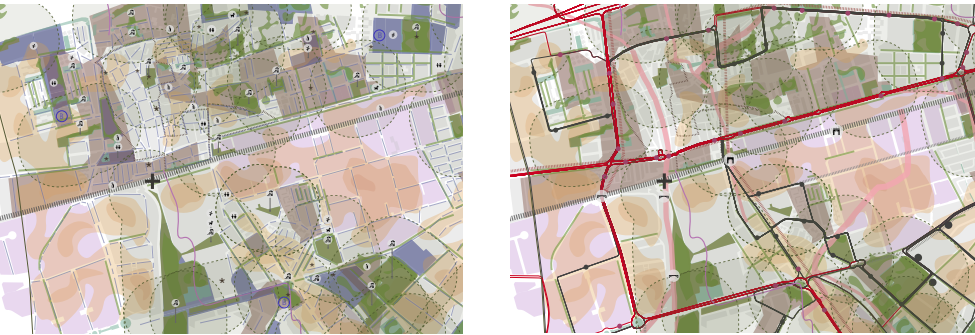
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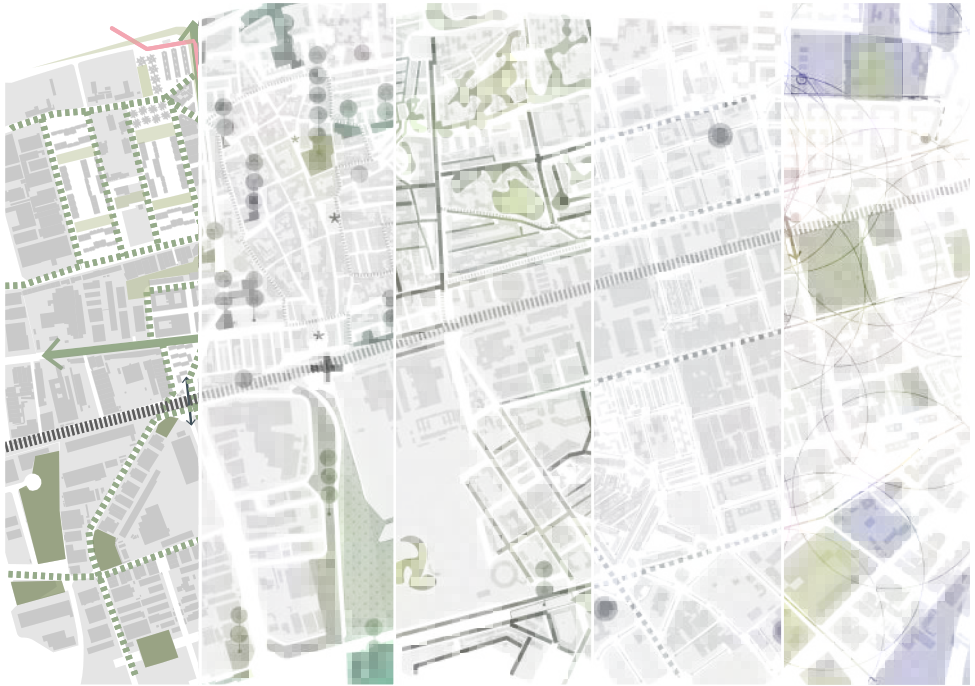


WHY A NETWORK OF SHELTERS?



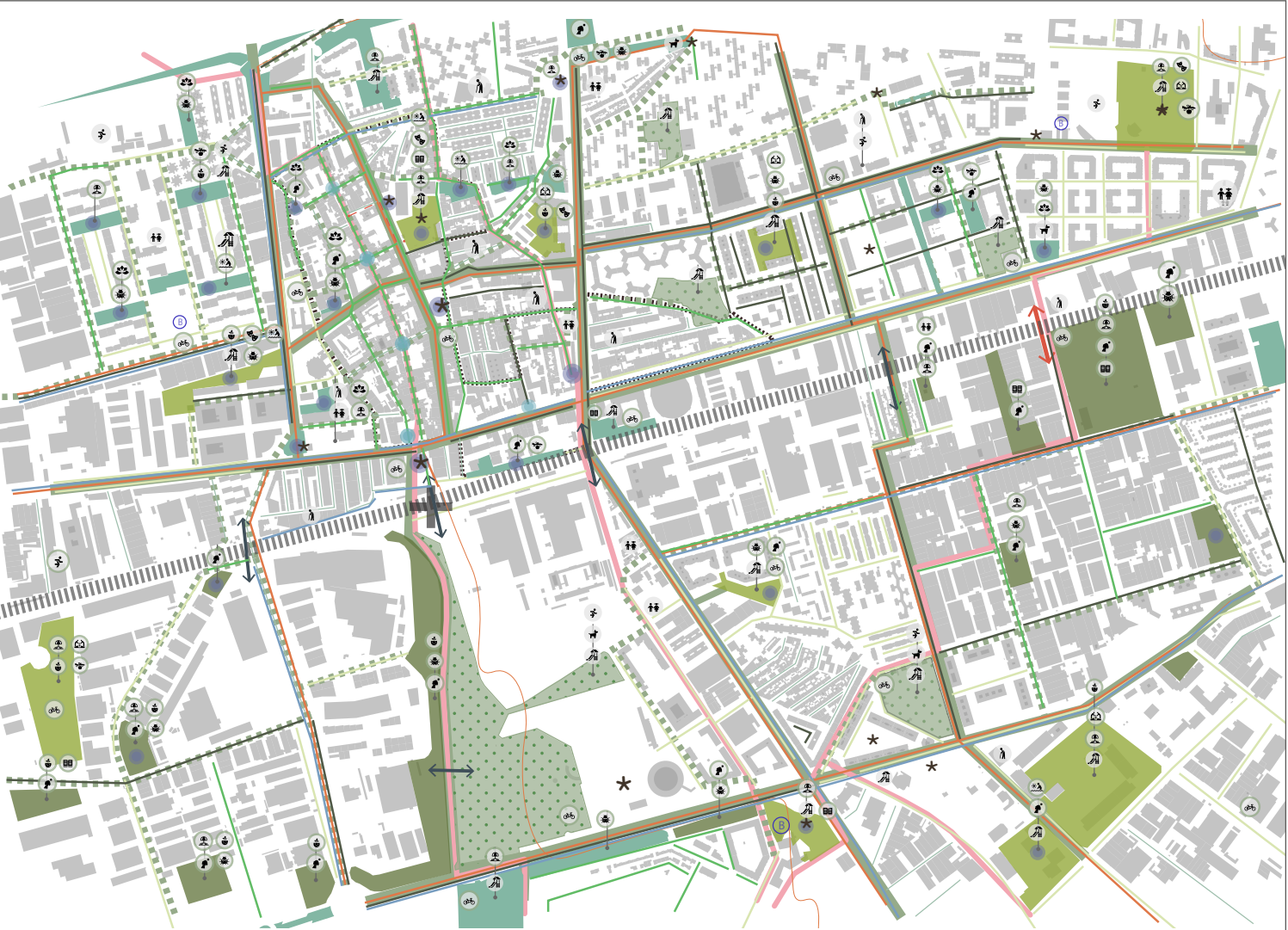
Areas affected by urban heat islands, low vegetation cover, and high social vulnerability have been identified, intensifying thermal exposure in critical urban zones. A fragmented structure is observed in the green, blue, and mobility infrastructures. These deficiencies support the prioritisation of interventions to establish an equitable and functional network of bioclimatic shelters.

WHERE AND HOW WILL THIS PROPOSAL BE IMPLEMENTED?



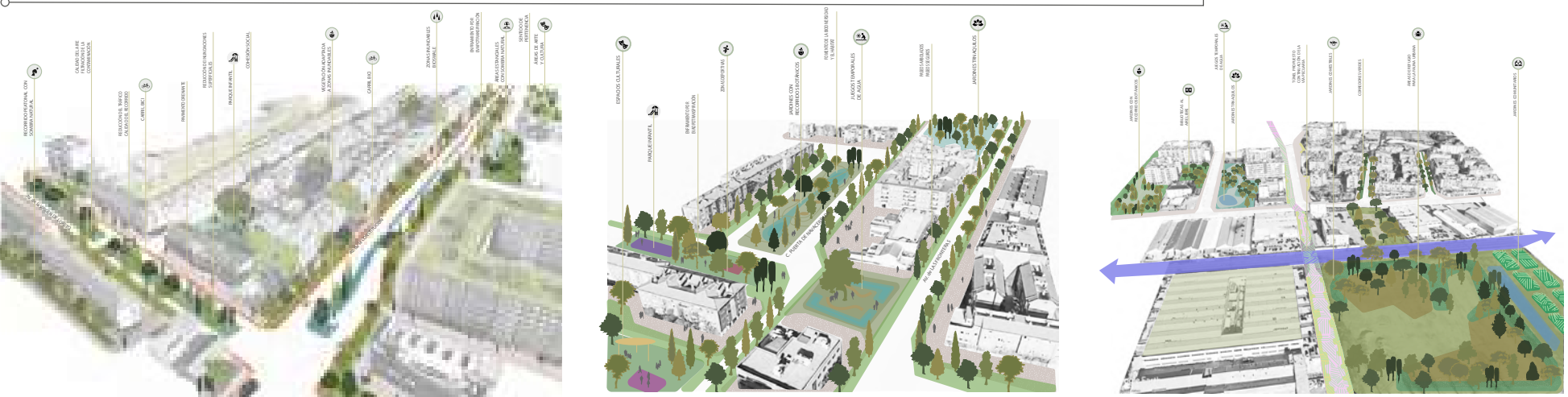
The project proposes a network of hierarchical green corridors to enhance urban resilience and thermal comfort. It envisions accessible nodes and shelters functioning as urban climate refuges in the face of extreme heat. The renaturalisation of urban voids, the integration of water as a regenerative tool, and the promotion of soft mobility complete a more sustainable, connected, and liveable urban system.

WHAT IS PROPOSED?



A proposal is presented that combines all these strategies into a unified vision, where the defined principles are territorialised and translated into concrete actions that prioritise improved climatic comfort, urban biodiversity, and citizens' quality of life. The masterplan represents not only the sum of its parts, but also an opportunity to rebuild the urban landscape according to a new logic: greener, more liveable, and better adapted to climate change.

WHAT WILL THESE SPACES LOOK LIKE?







Monumentos/arquitectura

Usos

Unidades del paisaje

Caminos y accesos

Árboles existentes

Vegetación alta

Vegetación media

Vegetación baja



Country/City  
University / School  
Academic year  
Title of the project  
Authors

Madrid, Spain  
Universidad Rey Juan Carlos  
2024-2025  
Children's Trail  
Elena Jiménez Ortiz



Title of the project	Children's Trail
Authors	Elena Jiménez Ortiz
Title of the course	Landscape Architecture Projects II
Academic year	2024-2025
Teaching Staff	Anna Laura Jeschke and Javier Malo de Molina
Department / Section / Program of belonging	Landscape project design
University / School	Universidad Rey Juan Carlos



Written statement, short description of the project in English, no more than 250 words

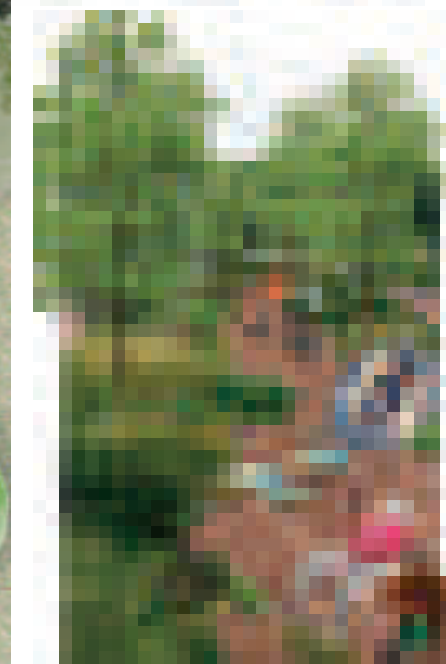
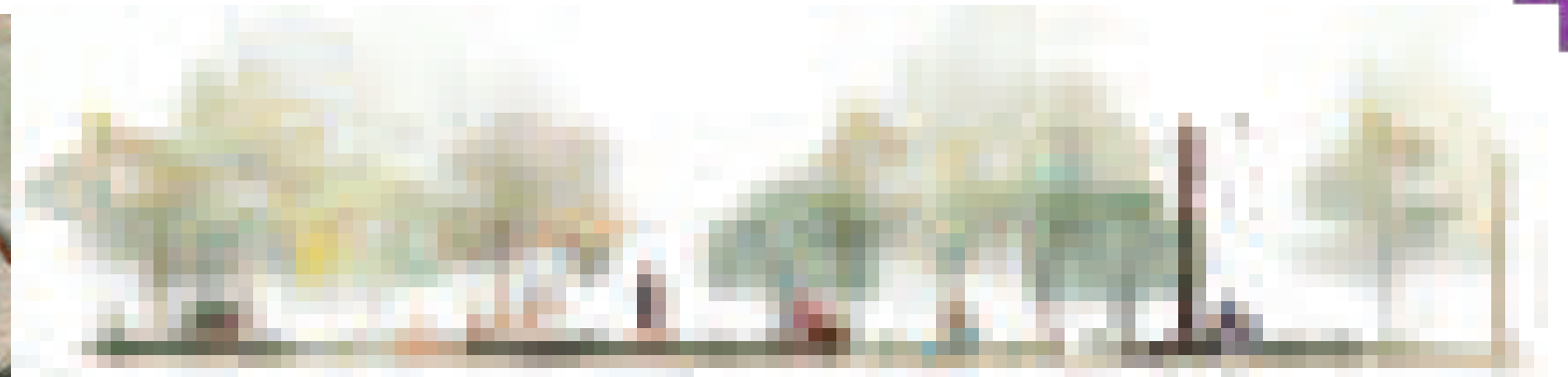
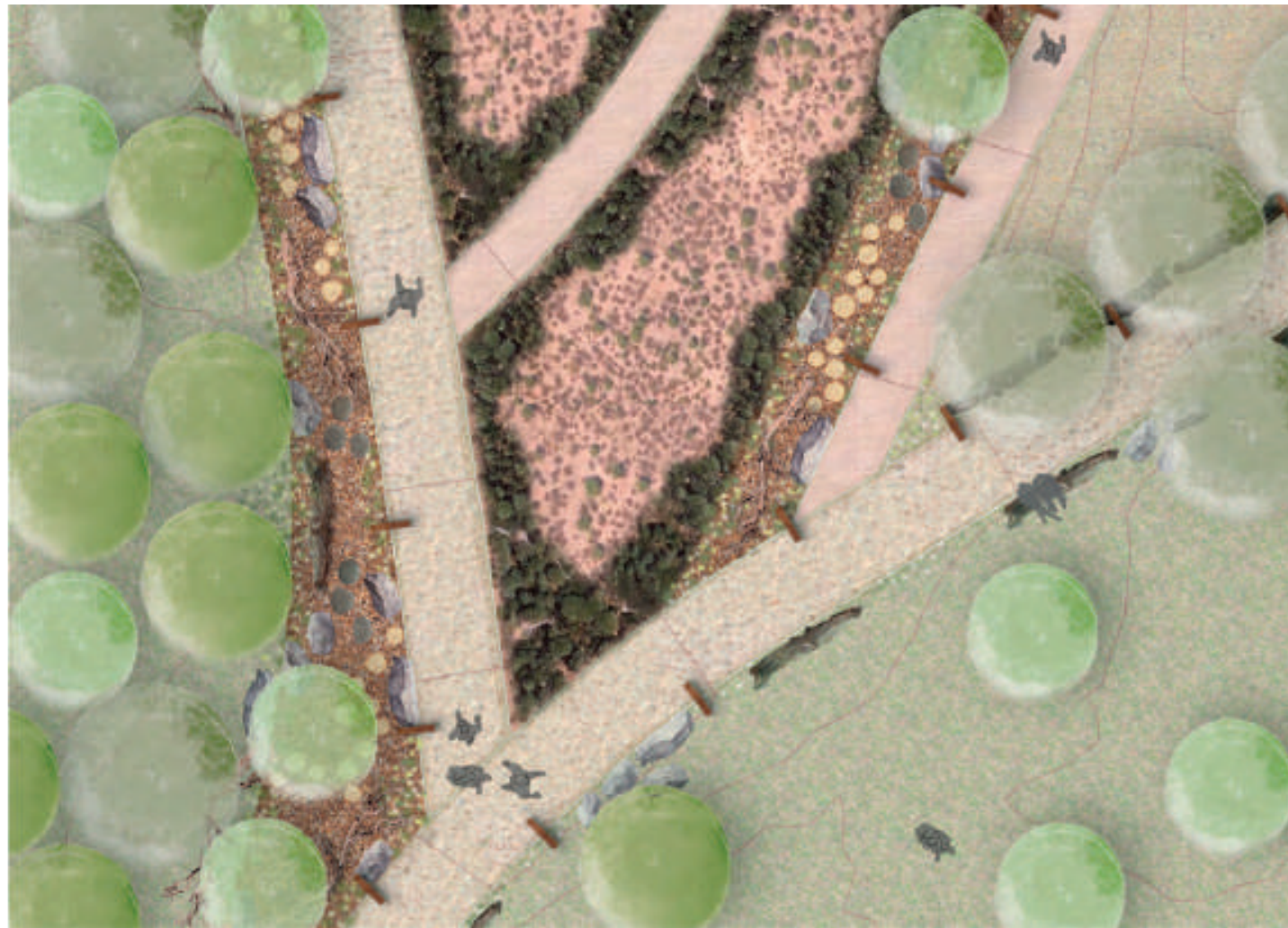
Children's Trail is a carefully designed urban landscape project located in Montecarmelo. It aims to create a safe, playful, and inclusive environment within the city's parks, encouraging imagination and physical activity in children. The design focuses on pathways integrated into the natural landscape, featuring interactive elements such as climbing stones, balancing logs, and areas of sand or grass. Each main path includes a smaller trail accessible to both children and adults, promoting shared use and intergenerational connection. This layout creates a gentle transition between the urban fabric and the surrounding natural environment, encouraging interaction with nature. Special attention is given to phytindicator species, which signal the presence of oak woodlands (encinares) in early stages of natural succession. To protect these areas, restricted zones are enclosed with native species from the Carpetano oak ecosystem. These green barriers prevent human intrusion and support natural regeneration. Observation areas throughout the park offer visitors the chance to observe nature without disturbing it, fostering environmental awareness. Through its thoughtful combination of play, ecology, and design, Children's Trail promotes healthy childhood development while enhancing biodiversity and climate resilience in the urban landscape.

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The project acts as a bridge between the natural landscape and the urban environment, integrating elements of both. While the pathways activate the space for families, the surrounding vegetation and careful design foster a close connection with nature. The result is a dynamic and multifunctional space where the city and nature meet, offering a meaningful experience for all ages.



Restricted areas



Garden of memories



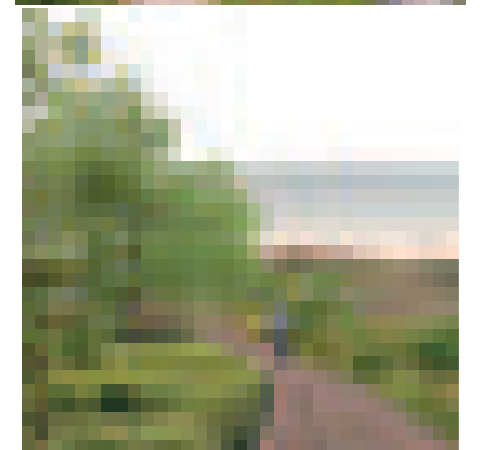
Outdoor furniture



Vegetation strata

The seasonal planting approach is based on creating a dynamic, sustainable, and visually appealing environment throughout the year. This strategy not only ensures a constantly evolving visual experience but also optimizes natural resources. Species will be selected according to the seasons to provide varied textures and a rich palette of colors.

This continuous change will enrich the user experience, offering a space that visually evolves in harmony with the seasons of the year.



Discreet interventions with sculptures that recall the previous use of the land, maintaining its original functionality in harmony. Utilizing rubble found on the vacant lot to promote the use of recycled materials.







Natural reserve El Pardo



Highway M-40



Montecarmelo neighbourhood



New park - Ray of light



New green infrastructure



Country/City Madrid, Spain  
 University / School Universidad Rey Juan Carlos  
 Academic year 2024-2025  
 Title of the project Ray of light  
 Authors Isabel González Romero



Title of the project	Ray of light
Authors	Isabel González Romero
Title of the course	Landscape Architecture Projects II
Academic year	2024-2025
Teaching Staff	Laura Jeschke and Javier Malo de Molina
Department / Section / Program of belonging	Landscape Architecture Degree
University / School	Universidad Rey Juan Carlos



Written statement, short description of the project in English, no more than 250 words

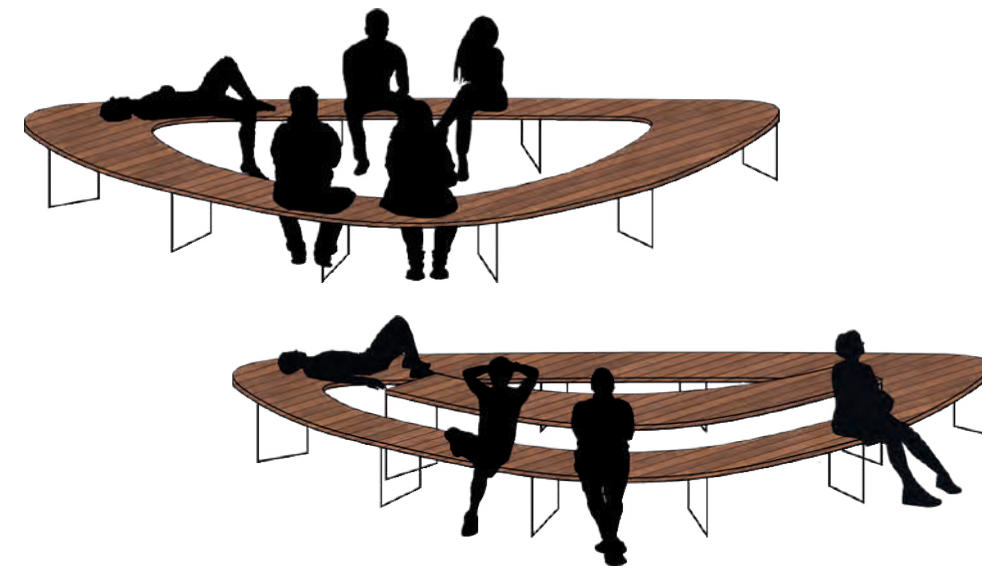
Ray of light is located in an urban environment, Montecarmelo, on the outskirts of Madrid city. The main idea of the project is to connect this neighborhood, characterized by inactive public spaces and lack of green areas, with the El Pardo natural reserve located on the other side of the highway. To achieve this, a design based on three levels of vegetation is proposed, creating a progressive experience for the user. The initial area, adjacent to the neighborhood and home to the historic Fuencarral Cemetery, is transformed into an evolving forest through a dense tree canopy that evokes isolation and connexion with nature . As the user moves forwards enters a second atmosphere: an open space without roof but with a limited perspective that hides the horizon, encouraging introspection. Finally, the journey culminates at the clear of light, a space with low vegetation that fully reveals the spectacular natural landscape of El Pardo beyond the highway. This natural transition bridges the urban core with its natural surroundings, improving ecological connectivity and significantly reinforcing the neighborhood's resilience to climate change.

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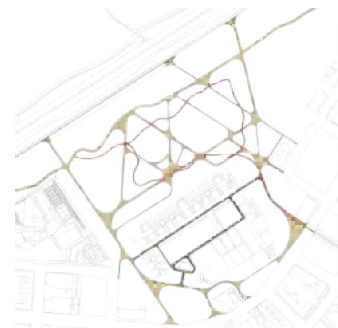
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The pavements, trees, and furniture are strategically arranged to create scenes of lights and shadows, highlighting the stay areas. These spaces, generated by the intersections of pathways and conceived as small “clearing lights” become warm and ephemeral spots inviting contemplation and social gathering.

PATHWAYS



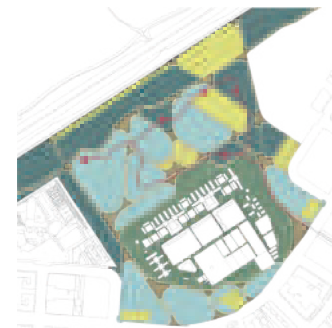
VEGETATION



TREE CANOPY



LANDSCAPE ROOMS

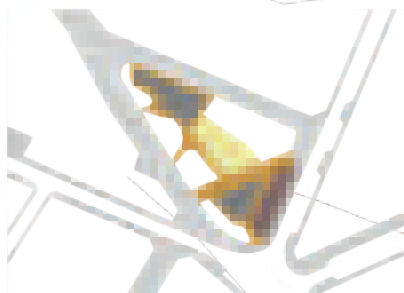


“Corners of enjoyment” appear scattered across the parks as small resting areas equipped with various amenities for users’ leisure. The park is also crossed by the “path of movement,” a bike lane that connects strategic points of a sports circuit.





## HARDSCAPE



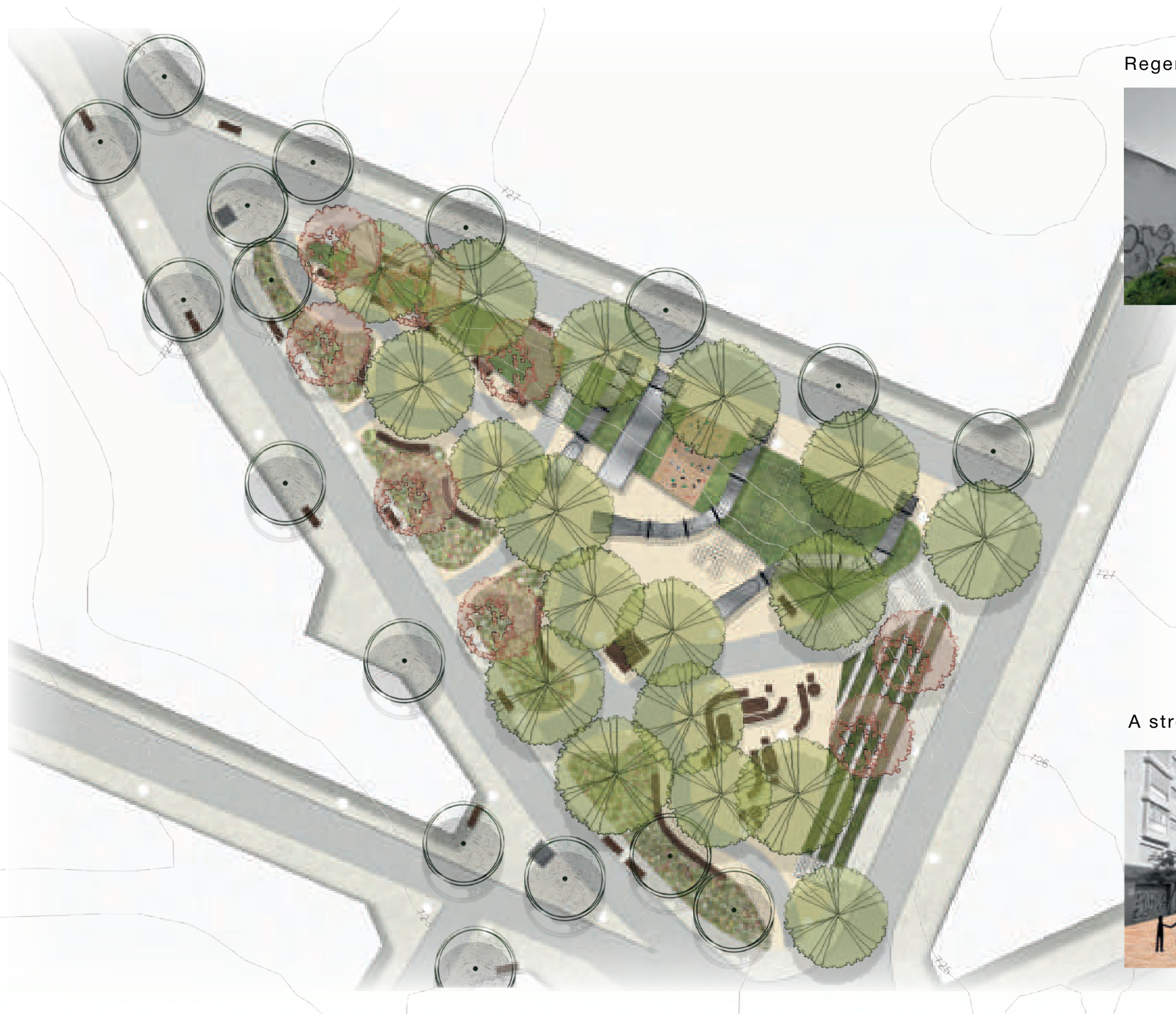
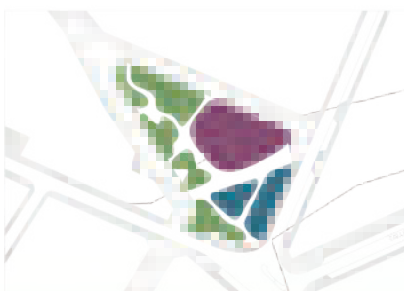
## SOFTSCAPE



## PATHWAYS



## LANDSCAPE ROOMS



## Regenerating abandoned sites!!



## Green infrastructure!!



## A street for pedestrians!!



Country/City Madrid, Spain  
 University / School Universidad Rey Juan Carlos  
 Academic year 2024-2025  
 Title of the project Encounters where bustle meets calm  
 Authors Isabel González Romero



Title of the project	Encounters where bustle meets calm
Authors	Isabel González Romero
Title of the course	Landscape Architecture Projects II
Academic year	2024-2025
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This project approaches landscape as a living system, where ecology, social interaction, and perception converge in the urban district of Tetuan.

A green corridor is proposed to overcome the duality of the place; a dense, discontinuous and bustling southern street network over a wide, orderly, and quiet northern area.

This pathway serves as a connective and transitional axis, linking areas of intense urban activity with others of introspective nature. It fosters a climatic refuge where both people and urban wildlife can find relief, while also functioning as a genuine place for social interaction.

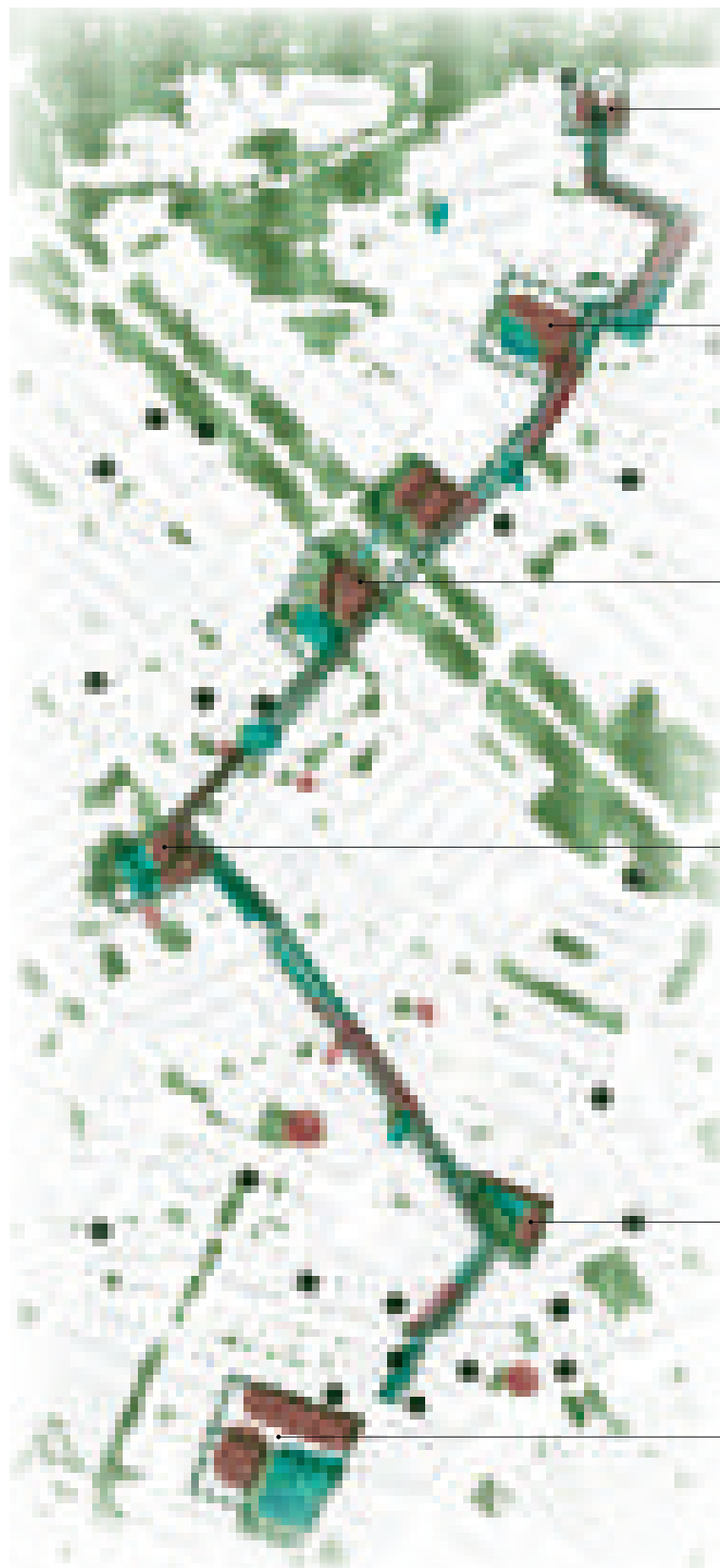
Along the pathway, five squares serve as strategic nodes, focussing the project on Pinos Alta. The square's design follows the same conceptual approach proposed for the corridor. Areas of calm and vibrancy alternate offering three atmóspheres: restful natural gardens, an alternative recreational zone integrated into the existing topography and a large communal area that fosters social skills and engagement with the natural environment. The intervention becomes a vital cityscape within a predominantly hardscape urban realm.

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Square Norte

Square Joaquín Dicenta

Square Ventilla Almenara

Square Luis Javier Benavides

Square Pinos Alta

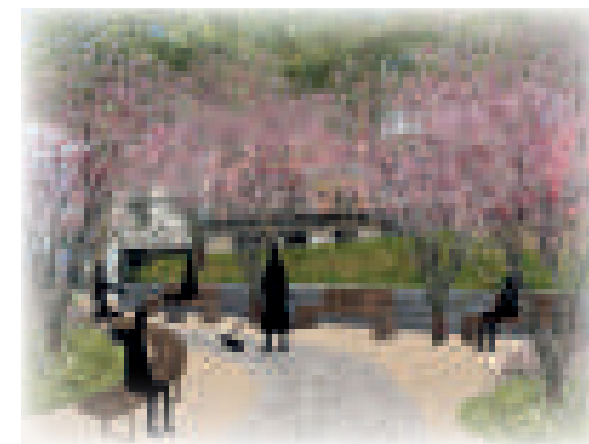
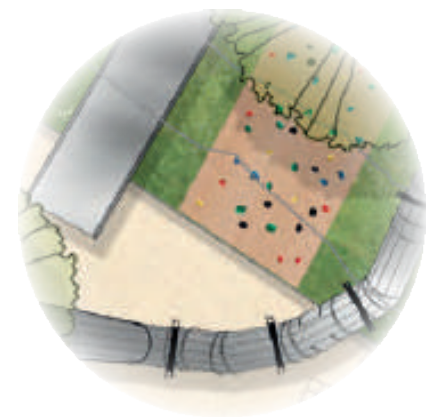
Square La Remonta



**Meeting spaces** where people can gather and engage in community activities in connection with nature, located next to a terraced urban garden.



**Recreational area** integrated in the topography of the terrain. Existing slopes and elevations are used to incorporate slides and climbing areas that allow safe and fun leisure.



**Serenity gardens** composed of sunken ornamental herbaceous flower beds are structured along a winding path. The tree canopy, the natural scents and the ergonomic furniture invite users to relax and disconnect from the urban environment.

