## YM283 ROENEWOUD (NL)

# **Emerging Groenewoud**

The **post-war neighborhood** stands as a significant urban typology, it requires vast attention for **social improvement**, but is also a canvas for **inspiring transformation**. With its potential for achieving housing assignment and sustainable development, it deserves the attention of architects and urbanists to shoulder the responsibility of nurturing its built environment after a span of 50 years.

In this endeavor, a crucial starting point stands above all: a mindful commitment to **building upon the existing space**, rather than resorting to the indiscriminate demolition of structures. The preservation of the neighborhood's historical fabric becomes paramount, weaving a narrative of resilience and honoring the enduring spirit of its inhabitants. By embracing transformation over demolition, the transformation breathe new life into old edifices, infusing them with contemporary purpose while preserving a tangible link to the past.

Emphasizing the values of **social cohesion and fostering a vibrant, healthy community**, this approach considers the residents' well-being and needs. Rather than merely displacing individuals and families, the focus shifts to adding inhabitants, forging a sense of belonging and a shared destiny among the diverse tapestry that will call this revitalized neighborhood home.

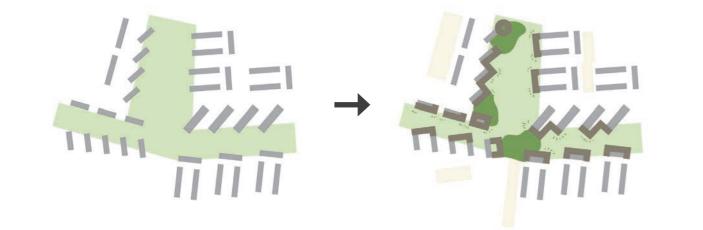
Integral to this vision is the **celebration of green spaces as an identity-defining characteristic**. The preservation of existing trees and green areas becomes a priority, recognizing not only their ecological significance but also their positive impact on the physical and mental health of the community.

In essence, this transformative endeavor envisions a universal yet uniquely tailored solution for the postwar neighborhood.



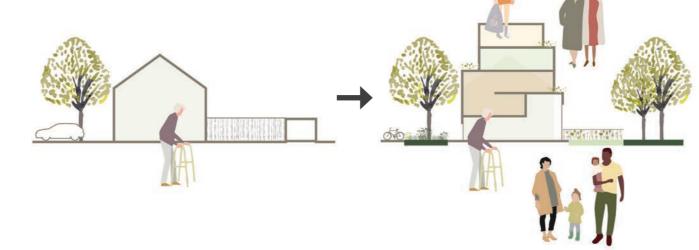
View towards transformed apartment





## "Building in the green"

The concept of "building in the green" takes on a fresh interpretation by seamlessly integrating nature and urban development. This approach involves extending the frontage of existing buildings to embrace green spaces. The interactive interface between facades, entrances, front gardens, and public spaces fosters a sense of community engagement and connectivity. By ensuring an "eye on the street" approach, the neighborhood becomes safer and more inviting. Furthermore, the program aims to design green spaces that not only offer recreational opportunities but also prior-itize social safety and attractiveness, encouraging residents to enjoy and actively participate in a greener, more harmonious urban environment.



## **Densify and diversify**

Currently, the neighborhood exhibits a high percentage of single-family housing, which does not align with the diverse profiles of its residents. To address this, the revitalization plan proposes densification atop existing buildings wherever feasible, transforming each unit while introducing three new housing units in return. The aim is to diversify the housing options by maintaining approximately 40 percent of family-oriented residences with gardens or terraces, while incorporating a mix of smaller units tailored for start-up ventures and single-person households. Additionally, the plan envisions the inclusion of specialized facilities catering to the needs of elderly residents, as well as accommodations tailored to the student population.

## **Engaging program**

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The current neighborhood suffers from being mono-functional, lacking facilities and opportunities for resident engagement with society. The proposed program envisions transforming it into a dynamic mixed-use community, offering education and job prospects. Elderly care, child care, and education services will be incorporated. Community spaces will encourage social interactions, while urban farming and a maker's workshop will promote sustainability and creativity. This comprehensive approach aims to create a vibrant neighborhood where residents can thrive and enjoy a diverse range of opportunities in an inclusive environment.



# YM28 ROENEWOUD (NL)



#### 1. Wooden construction material

In our approach to construction, wood takes center stage as the primary material for both new builds and building renovations. One of the key advantages of wood is its renewability, significantly reducing the carbon footprint associated with the construction process. Moreover, its natural insulating properties ensure excellent thermal performance, regulating indoor temperatures and leading to energy savings by reducing the need for excessive heating or cooling.

Additionally, wood's lighter weight compared to traditional materials like concrete and steel allows for phased development based on building and economic conditions. Many construction elements can be prefabricated off-site, enabling quicker and more efficient on-site assembly, leading to shorter construction timelines and minimizing the impact on the natural environment.

Furthermore, wood acts as a carbon sink, storing carbon dioxide absorbed during the trees' growth, which further contributes to its eco-friendliness and sustainability. Embracing wood as our primary construction material not only supports environmental consciousness but also offers numerous practical benefits for the development and well-being of the community.

#### 2. Housing typology

We have three types of main intervention to the site:

A. Existing single-family houses with pitched roofs undergoing renovation.
Construction Phasing: Phased renovation process to update and improve existing structures.
New Unit Insertion: New units added on top of existing buildings, with updated circulation.
Suitability: More suitable for startups and families looking for single-family living.

B. Existing apartment buildings being renovated.

New Unit Adjacent: Additional units constructed adjacent to existing buildings, utilizing existing circulation where possible.

Suitability: More suitable for families and startups seeking apartment-style living.

C. Newly constructed building with concentrated design to reduce shadow influence, offering apartment-style layout.

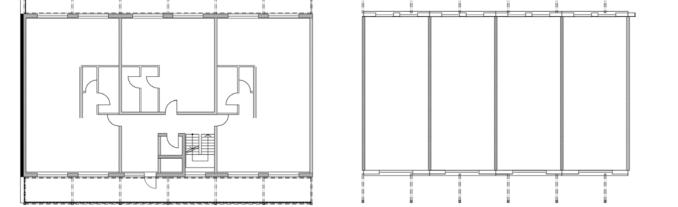
Suitability: More suitable for smaller units, senior housing and startup studios.

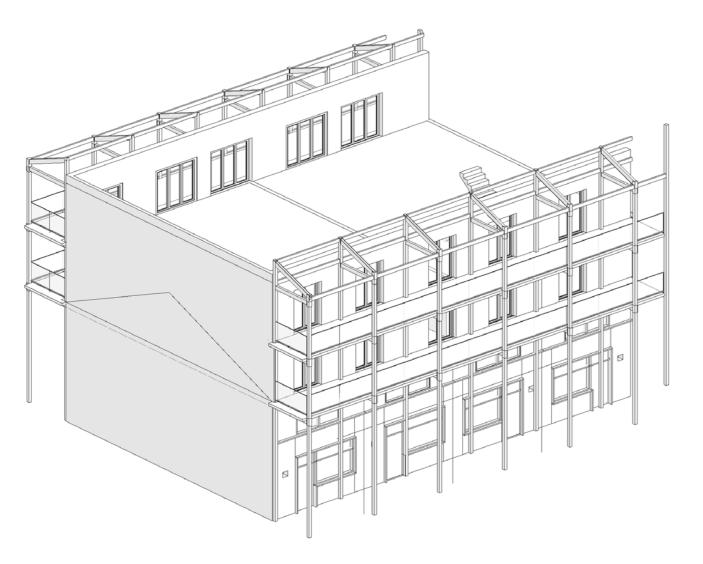
Each housing typology offers distinct features and target demographics, providing a range of options to meet various lifestyle preferences and needs within the community.

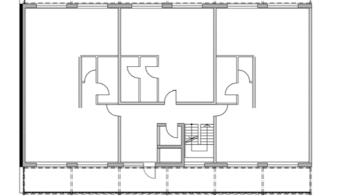
Building transformation typology 1: pitched roof

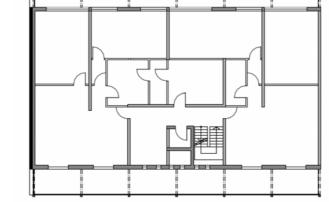
**Building transformation typology 1: apartment** 

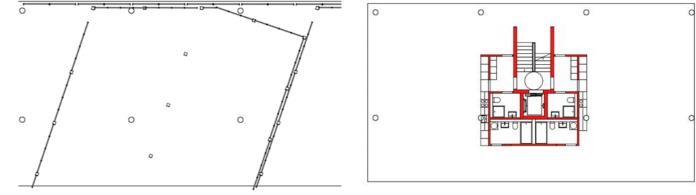
Building new typology 1: parking + urban farming

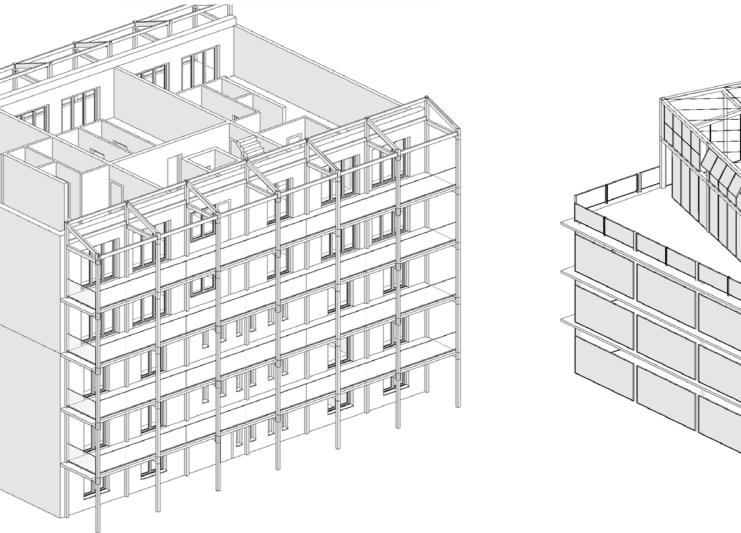


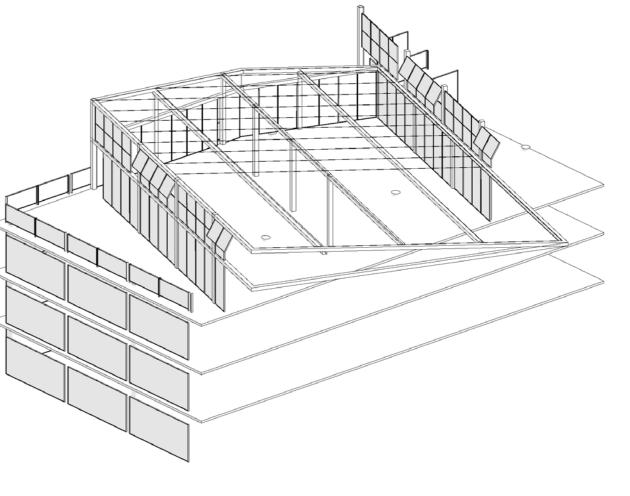














## New harmonious life-cycle

In the new construction, wooden structures are employed, incorporating solar energy and water recycling systems into daily life. This living style seamlessly merges with the existing natural environment, giving rise to a fresh ecological cycle.

The program accommodates diverse target groups, fostering positive interactions: offering additional educational opportunities and playfields to attract new families; makers' space and urban farming create job prospects to retain young residents; and centralized senior residences are integrated with other age groups, while also generating more caregiving job opportunities.

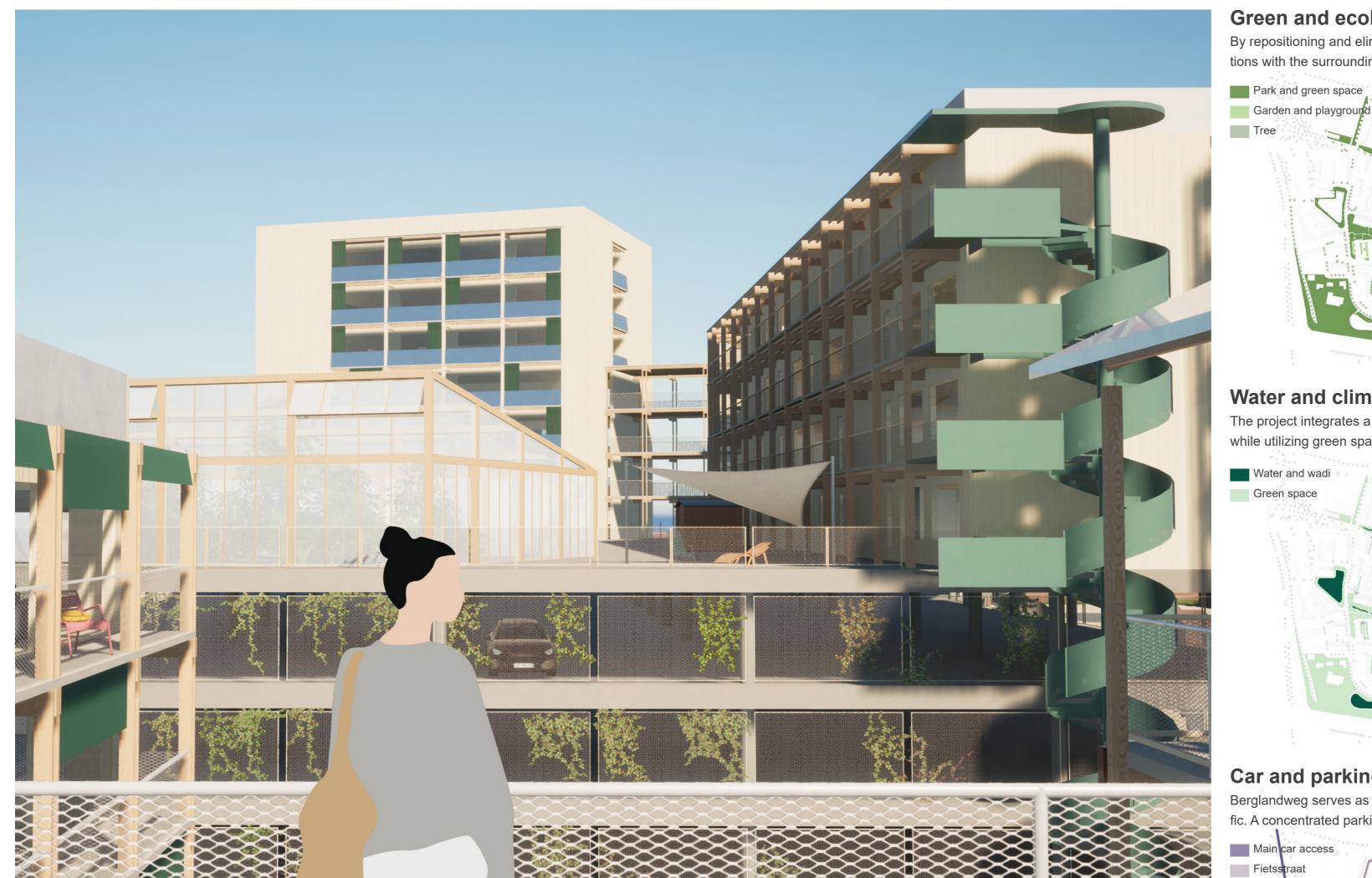
The plan strives to establish a harmonious life-cycle between the natural environment and human living conditions.





Conceptual section

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## Green and ecological connection

By repositioning and eliminating hard barriers like parking, the project aims to establish connections with the surrounding green, creating an ecological network through parks and green streets.



View to new housing complex





### Water and climate adaptation

The project integrates a wadi system for rainwater, enhancing the ecological network's diversity, while utilizing green spaces as cooling elements and water buffers.



## Car and parking

Berglandweg serves as the main car road, fietsstraats allow shared use of cars for destination traffic. A concentrated parking hub is positioned to promote a car-free green heart.



## Bike and pedestrian

The plan minimizes the car's impact by implementing a fine-grain network that prioritizes pedestrians and cyclists, while ensuring easy access to bus stops and creating accessible green spaces.





### Program

The center of Groenewoud features a mix of work and amenities surrounding the green space.



View to Silvrettapark