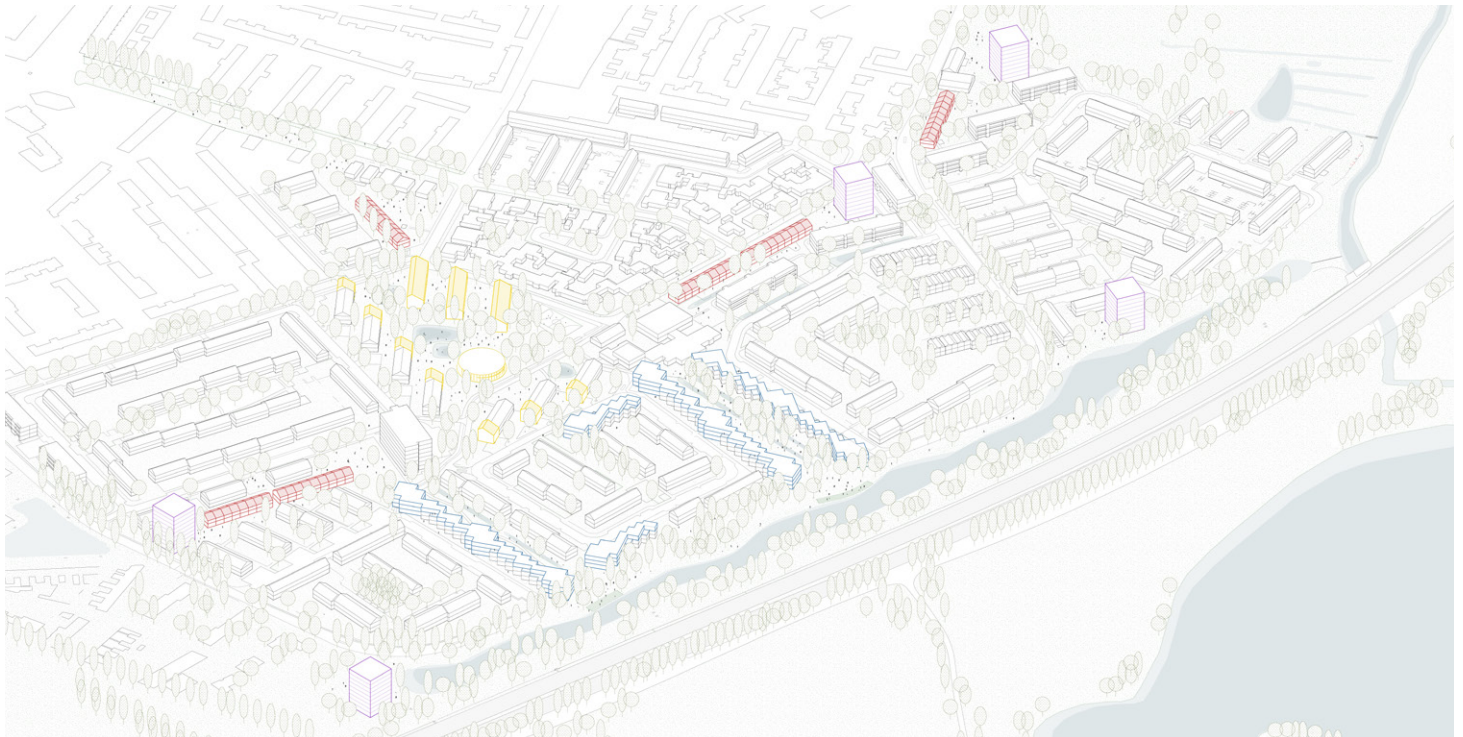


# GROENEWOOD (NL) BRICOLAGE CITY



1.

## **Introduction**

In response to the pressing housing shortage in Tilburg and the broader Netherlands, the project aims to propose innovative architectural solutions that cater to the evolving needs of modern society. The Groenewoud neighborhood presents a unique opportunity for transformative spatial interventions that not only address the demand for new residences but also accommodate the changing dynamics of living and working.

With an increasing percentage of people working from home, the traditional boundaries between domestic and professional spaces are blurring, giving rise to the concept of the “workhome.”

By reimagining the built environment through a lens of adaptability, sustainability, and social cohesion, the project seeks to contribute to the broader discussion on representative housing typologies in the post-COVID era. The exploration of the “workhome” concept, as coined by Frances Holliss, plays a pivotal role in shaping the design approach, reflecting the changing needs and aspirations of modern residents.

The proposal starts with a reflection on the role of the garden city in the 21st century. The project consists of a series of punctual interventions that are the result of a careful typological and volumetric analysis of the neighbourhood. The result of a sensitive analysis of the existing context

is a series of punctual interventions that harmoniously densify Groenewoud and preserve the balanced proportion between green areas and built environments (typical of garden cities).

## ***Tilburg and the Housing Emergency in the Netherlands.***

Tilburg, a thriving city witnessing rapid urbanization, faces an unprecedented housing shortage in the midst of population growth and demographic shifts. As part of the Municipality of Tilburg’s city-wide densification task, approximately 25,000 housing units are planned to be added within the city limits. The Tilburg South region, including the Groenewoud neighborhood, must accommodate around 2,000 new homes between Ringbaan Zuid and the A58 freeway.

The demand for suitable residences in Tilburg is further exacerbated by the COVID-19 pandemic, which has impacted the dynamics of living and working. With the rise of remote work and flexible working arrangements, the traditional concept of home is transforming, presenting an opportunity to reimagine the spatial configurations of housing typologies.

In light of these challenges and opportunities, our project aspires to contribute to a comprehensive solution that not only addresses the housing shortage but also celebrates the synergy between residential, professional and shared spaces.

1. Axonometric view

## ***The Project: New Housing Typologies.***

### **1. The Student House:**

Involving the extension of the existing buildings in Ardennenlaan, Vogezenlaan, and Juralaan, the student house exemplifies the combination of living and studying spaces. The repetition of volumes in the existing building provides each house with multiple orientations, fostering a strong connection to the outdoors. The ground floor serves as a communal hub, offering shared spaces (kitchens, dining rooms, and study areas) and facilitating interaction and community-building among students. Moreover, the top floor features a sequence of shared terraces, creating an inviting outdoor space for social gatherings and collaborative activities.

### **2. The Tower:**

Symbolizing the city's boundaries and offering captivating views of the Dutch landscape, the tower integrates seamlessly with its surroundings. The permeable ground floor offers shared amenities, laundry, and workspaces, promoting inclusivity and collaboration. The upper floors comprise traditional apartments catering to the diverse needs of residents. Finally, the top floor hosts shared gardens, fostering a sense of camaraderie and shared responsibility among the tower's inhabitants.

### **3. The Longhouse:**

Inspired by the classic row-house typology, the longhouse epitomizes a balanced interplay of function and aesthetics. Each module, measuring 9x6 meters, emphasizes efficiency and spatial quality. The ground floor is dedicated to shared communal spaces. On the first floor, one of the two bedrooms is thoughtfully connected to a mezzanine floor, harnessing the roof's incline for enhanced utility and space optimization.



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### **4. The Atelier House (One Module):**

Embodying creativity and productivity, the atelier house module harmoniously attaches to the existing buildings in the central park. Drawing inspiration from the pitched roof concept, the new volume rises from the existing building's height (two floors) while following the same roof slope, reaching an additional floor. Each floor accommodates an apartment with one bedroom, juxtaposed with an adjacent workspace/atelier area. This architectural symbiosis fosters a seamless integration of living and creative pursuits, nurturing an enriching environment for residents.

### **5. The Shared Atelier House:**

Cultivating a collaborative living experience, the shared atelier house comprises six modules, arranged to foster community engagement. On each floor, the apartments are complemented by a shared workspace area in front, inviting a dynamic exchange of ideas and talents. This housing typology caters to artists and young professionals seeking a harmonious balance between shared life and privacy. The shared spaces in front of the apartments serve as versatile areas for various activities, encouraging vibrant interactions and community bonding.

***The Project as the Resolution of Analysis of Existing Typologies, Volumes, and Facades.***

The proposal starts with an analysis of the existing housing typologies, building volumes, and facades in the Groenewoud neighborhood. This examination ensures a seamless integration of new housing typologies with the neighborhood's existing fabric. The proposal strives to achieve a harmonious blend of functionality, aesthetics, and sustainability.

***Rethinking Boundaries. Vegetation as a Divider between Private, Semi-public, and Public Spaces.***

The design redefines spatial boundaries by incorporating vegetation as a pivotal element. The existing brick walls are transformed into green limits. Green spaces act as natural dividers, delineating private, semi-public, and public areas within the residential complex. The strategic placement of vegetation fosters a sense of harmony and balance, enhancing the quality of life for residents and promoting a strong sense of community.

The integration of green elements not only adds aesthetic value but also serves practical purposes, such as improving air quality, mitigating urban heat island effects, and managing stormwater runoff. By embracing nature-based design principles, the project aims to create a sustainable and resilient environment that aligns with the ethos of the Groenewoud neighborhood. All the selected trees and plants fall within Tilburg hardiness zone (8a).

***Common Spaces to Encourage Shared Activities.***

Recognizing the significance of communal spaces in fostering social interactions, the design emphasizes the creation of shared amenities that encourage vibrant community engagement. Community gardens, event spaces, and other shared facilities serve as catalysts for social gatherings, cultural events, and cooperative activities among residents.

By nurturing a sense of belonging and shared responsibility, these common spaces play a vital role in cultivating a close-knit and harmonious neighborhood. As the Groenewoud community comes together in these shared spaces, our project actively contributes to the enrichment of social bonds and collective experiences.



3.



### ***Flood Risk Analysis: Proposal for Bioswales and Vegetation Palette.***

Acknowledging the growing challenges posed by climate change, the project addresses potential flood risks through a comprehensive flood risk analysis. The proposal includes the incorporation of bioswales, landscape elements designed to manage stormwater, and a diverse vegetation palette that aids in water absorption and retention.

The strategic placement of bioswales, combined with the implementation of sustainable landscaping practices, not only enhances the neighbourhood's flood resilience but also contributes to the overall ecological health of the area. As we transition towards a more sustainable future, the bricolage city serves as a role model for nature-inspired urban design that takes climate change adaptation and mitigation into account.

### ***Conclusion:***

In conclusion, the proposal responds adeptly to the housing emergency in the Netherlands by introducing an array of forward-thinking housing typologies that cater to the diverse needs of modern society. With the profound impact of the COVID-19 pandemic, the concept of the "workhome" has emerged as a prominent aspect of contemporary living, necessitating a new paradigm in architectural design.

The design proposals embody the fusion of residential and professional and leisure spaces, celebrating the coexistence of living and working. By providing adaptable and sustainable housing options, the Bricolage City aims to address the growing demand for flexible living arrangements in a post-pandemic world.

Moreover, the project's meticulous analysis of existing typologies, volumes, and facades ensures a seamless integration of new architectural interventions with the neighborhood's existing fabric. This comprehensive approach enables us to optimize functionality, aesthetics, and sustainability, shaping Groenewoud into a thriving and inclusive community.

As part of our commitment to resilience, we propose the strategic use of vegetation as a natural divider between private, semi-public, and public spaces. With a climate-conscious focus, the project incorporates flood risk analysis, proposing the implementation of bioswales and a diverse vegetation palette to enhance flood resilience and sustainable water management. This approach ensures that Groenewoud remains a resilient and vibrant neighborhood, well-prepared to face the challenges of climate change.

Additionally, the creation of common spaces, such as community gardens and event areas, fosters social cohesion, encouraging vibrant interactions and shared experiences among residents. These communal amenities nurture a strong sense of community pride and ownership, further enriching the Groenewoud living experience.

In summary, the Bricolage City stands as a testament to the power of innovative architectural design in addressing the housing shortage and embracing the evolving needs of society. By designing for the new workhome paradigm and emphasizing sustainability, inclusivity, and community engagement, the proposal envisions a future where Groenewoud thrives as a dynamic and resilient living environment, fostering a strong sense of belonging and shared purpose among its inhabitants.