

HET PLATFORM

UTRECHT (NL), 2015–2020

Building over rail lines

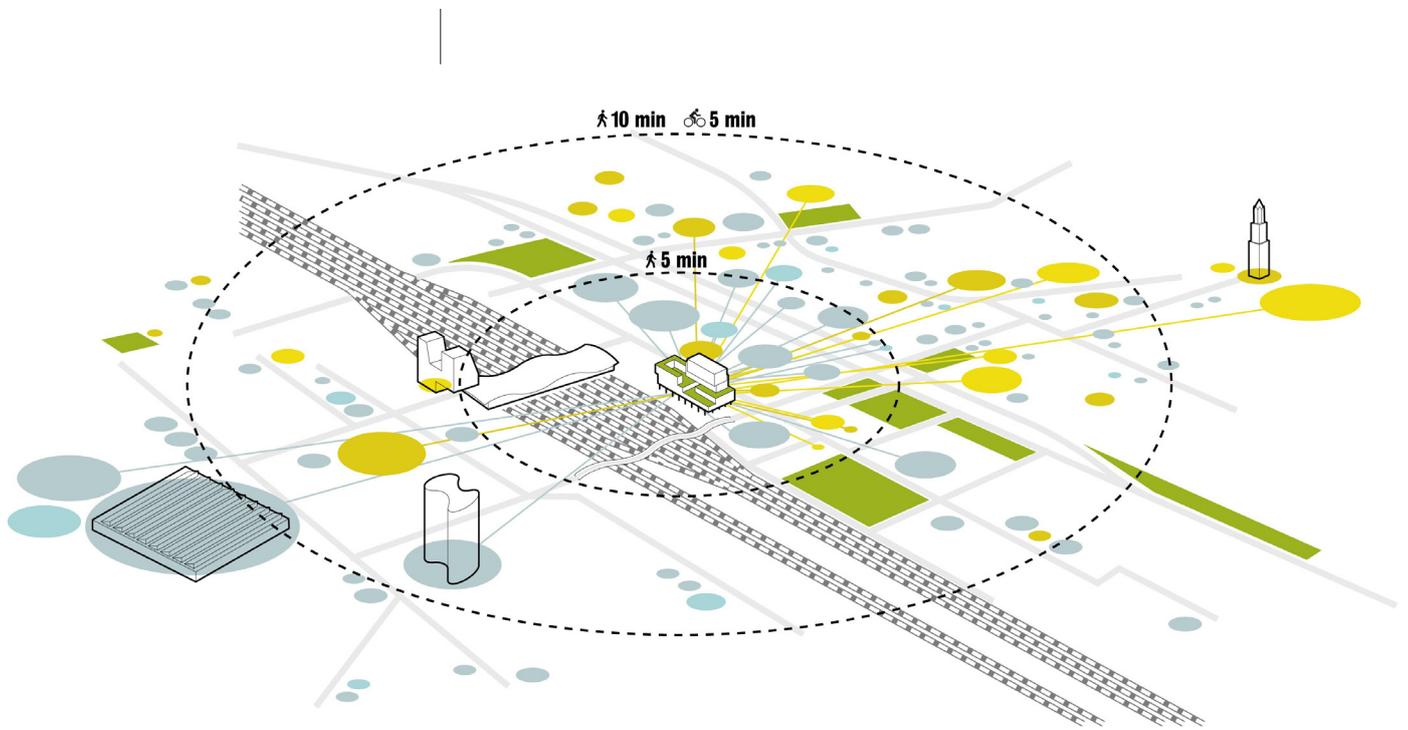


Introduction

'Building over rail lines' is a topical theme: In 2019 the Dutch Railway company (NS) and 4 major cities in the Netherlands signed an agreement to further investigate the possibilities. Technology and financial feasibility are no longer serious obstacles; In fact constructing above tracks actually offers opportunities. For example, creating a solution for the current housing shortage. Who doesn't want to live and work in the heart of the city, close to public transport and all other facilities?

Het Platform

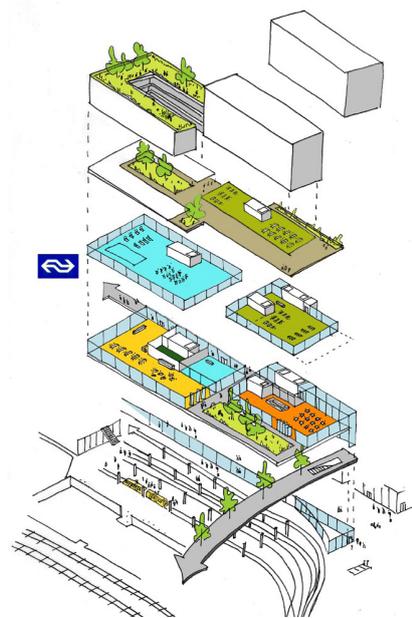
Het Platform is a perfect example of a building that is literally built on top of a station. Multiple use of space is an important exponent of the integral sustainability strategy within this project. In addition to more than 200 apartments, the building includes facilities such as a restaurant, fitness, common bicycle parking and communal roof terraces. The realization of Het Platform fits within the vision of VenhoevenCS that the stimulation of public transport and pedestrian and bicycle traffic contributes to a healthier living environment in the city.



To create a station area that is not only a “transfer machine”, but also an attractive and socially safe living area, the design of the public space around Het Platform and all transitions between inside and outside, public and private, formed an essential part of the design.

Transit Oriented Development

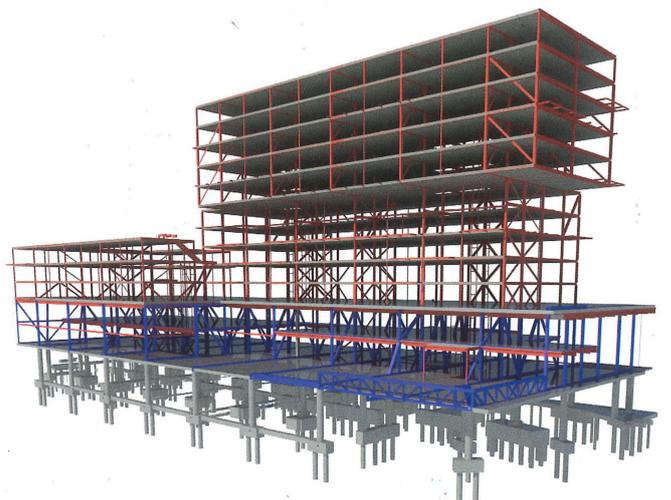
For VenhoevenCS, building on and near stations has long been a focus point. The many studies into high-density development around stations, also known as transit oriented development, and various designs of autarkic Microcities illustrate this. As a government advisor on infrastructure, Ton Venhoeven advised on many projects regarding sustainable infrastructure and mobility networks.



Smart Lightweight construction

The construction of Het Platform, above the station of De Uithoflijn and directly adjacent to Utrecht Central Station, was a technical challenge that demanded maximum ingenuity from all advisors involved. More than 200 apartments and 4.000 m2 of facilities had to be built and opened up on a minimum footprint of 170 m2.

Together with IMd Raadgevende Ingenieurs, VenhoevenCS developed a structural design as a construction with 3D trusses, integrated in the building layers with public facilities. This construction functions as a transfer structure between the apartments above and the public transport station at ground level. Originally the





construction was meant to be a concrete table with a thickness of approximately 1.80 m. By executing the table in floor-high steel trusses with prefabricated concrete floors, a lightweight construction system was created. The tram station asked for a 12 meter free span between the columns. This grid continues in the higher-level structures. Thanks to this smart construction design, the costs, construction time and environmental impact were limited.

Logistic challenge

In addition to the technical challenges, the construction of Het Platform was also a logistical challenge. The building site in the center of Utrecht, right next to the Hoog Catharijne station, required a very tight transport schedule and extra supervision. The building itself even functioned as a construction site, because there was hardly any space to store material at the building plot.

Other examples of Transit Oriented Development and projects on and around stations within the portfolio of VenHoevenCS

A railway station often forms an obstacle that divides a city in two parts. A design philosophy that returns in all our designs, from station renewals to urban strategies, is to remove the barriers and make smooth and logical connections between the different parts of the city.

Below: Station Alkmaar with bicycle parking completed 2015
Photo: Ossip van Duivenbode



Below: CIAM XXI - City of the Future. Research project commissioned by BNA Research et al. (2018)



Below: Dong Feng Transit-Oriented Development Strategy, Beijing (2018-2019)



PROJECT DATA

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| Name | Het Platform |
| Location | Moreelsehoek, 3511 GC Utrecht |
| Programme | 15.000 m2 gfa living: 201 apartments. Around 4.000 m2 facilities a.o. e-sports training facilities, a foodcourt (related to living, working and relaxing), fitness, wellness, bicycle parking. |
| Surface area | 18.500 m2 gfa |
| Periode | Start design 2015 - Completion 2020 |
| Client | Het Platform B.V. (ABC Planontwikkeling + Westplan Investors) and the Municipality of Utrecht |

CREDITS

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| Team VenhoevenCS | <p><i>Competition design</i> Ton Venhoeven, Cécilia Gross, Jos-Willem van Oorschot, Danny Esselman, Piotr Gierek.</p> <p><i>Design development</i> Ton Venhoeven, Cécilia Gross, Danny Esselman, Tjeerd Hellinga, Piotr Gierek, Nerea Sáenz Compañón, Lorenzo de Navascués Y Lauzet, Maria Ángeles Reinares San Martín.</p> <p><i>(Pre) Construction and site work</i> Ton Venhoeven, Danny Esselman, Arjen Zaal, Tjeerd Hellinga, Max Fler, Eliza Mante, Mai Henriksen.</p> <p><i>Interior Design</i> Arjen Zaal, Eliza Mante.</p> <p><i>Technical design</i> Louis van Wamel, Arjan Pot, Peter Rugebregt, Robin Boenning, Natasja Cvetkovic.</p> |
| Other Partners | ABC Nova (project management), IMd Raadgevende Ingenieurs (construction engineering), Bouw21 (contractor), VDNDP (technical drawings). |
| Images | VenhoevenCS and IMd Raadgevende Ingenieurs |
| Photos | Ossip van Duivenbode |

VenhoevenCS is an innovative design office for architecture, urbanism and infrastructure. Ton Venhoeven started the office in 1995, which over the years has grown into international practice with 5 partners and more than 40 architects, urban planners, interior architects and technical engineers. The main focus of VenhoevenCS is creating sustainable, healthy and inclusive living environments.