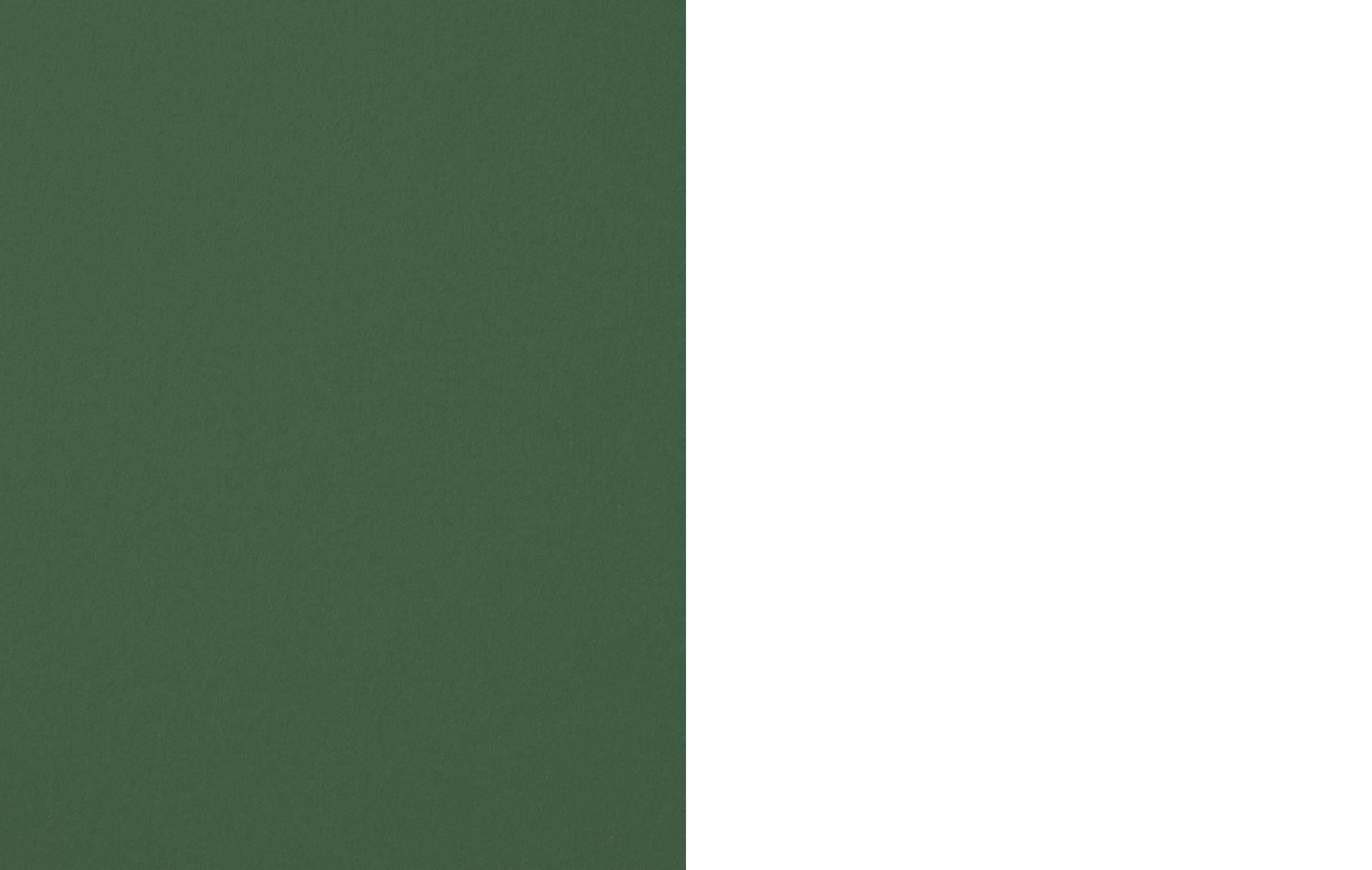


By Stellar Development

ARA ALMELO





Ara Almelo, a destination where people want to be.







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#### STELLAR DEVELOPMENT



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# Naming a Stellar destination

The names of Stellar Development destinations are inspired by the galaxy, in an effort to demonstrate that all destinations form part of a greater whole. The name for Ara Almelo was chosen because "Ara" is the Latin term for "the altar", the place where the Roman gods convened in the ancient myths. We aim to develop this destination by bringing together the four pillars of our brand. The shape and position of the entrance of this destination reflects the name "Ara" at XL Business Park Twente.

# ntroduction

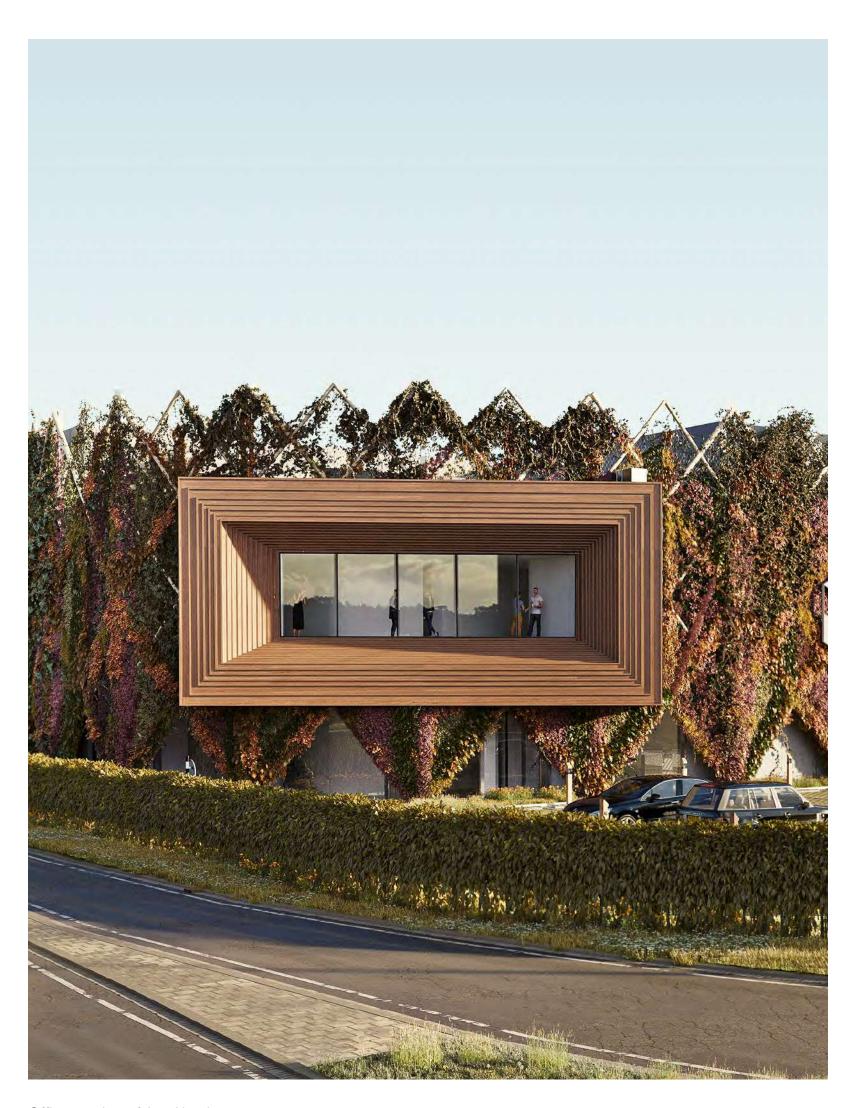
Stellar Development creates firstclass logistics destinations where people want to be. The four distinctive pillars of our projects are nature, architecture, technology, and functionality. Stellar Development's unique logistics destination Ara Almelo is realized in collaboration with Heembouw.

In addition to designing an attractive and functional warehouse, we also wanted to include the interests of people, animals, and nature in the challenge; after all, developing nature-inclusive is part of what we stand for. The 'ecological screen' is our design statement that answers all of the project's development challenges. It is a stunning ecological complement to the destination, giving it its distinctive character, while complying with all requirements and making an impactful contribution to the biodiversity of the area.

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Architect, Diederik de Jonge Heembouw Architecten





Office section of Ara Almelo.

The eye-catching architecture contributes to biodiversity and turns Ara Almelo into the showpiece of XL Business Park Twente.

A ra Almelo is situated next to the entrance to XL Business Park Twente along the A35. This perfect location offered Stellar Development the opportunity to fully define its four brand pillars: nature, architecture, technology, and functionality at the highest quality and level. This results in a destination that is logistically efficient with state-of-the-art technology, surrounded by a unique,

ecological screen measuring almost 14.5 meters high and close to one kilometer long. By giving the brand pillar 'nature' a central location, a strong connection is created to the environment, making it a very appealing destination to be and work in. The eye-catching architecture contributes strongly to biodiversity and turns Ara Almelo into the showpiece of XL Business Park Twente.

Introduction Introduction 21

Warehouse

39,131<sub>m²</sub>

Mezzanine

5,257<sub>m²</sub>

Offices

2,582<sub>m²</sub>

Technical specifications

Warehouse

39,131<sub>m²</sub>

Mezzanine

5,257<sub>m²</sub>

The destination's design is so innovative that it allows for the creation of a pattern of corridors that can be used by both reach trucks and narrow-aisle trucks.

Unique strategic location on the A35, located next to the entrance of XL Business Park Twente. An excellent logistics destination with ideal national and European logistical connections.

The imposing ecological screen is one of the largest in Europe. It envelops the destination and is covered with plants that provide food and shelter to birds and insects year-round. There are also options for putting up logos, so each end-user is clearly visible.

From Q3 2023 onwards, Ara Almelo is available for between one and four possible end-users.

In the design and choice of materials and techniques, the aim is to achieve the lowest possible CO<sub>2</sub> footprint. As a result, Ara Almelo performs 66% better than the legal MPG standard (Environmental Performance for Buildings).

This nature-inclusive destination has everything it needs to contribute significantly to good employment practice. A green working environment has also had a proven positive effect on the productivity, motivation and focus of employees.

Warehouse

39,131<sub>m²</sub>

Mezzanine

#### Warehouse

Warehouse clearance height 12.2 m<sup>1</sup>

Warehouse floor load 50.00 kN/m<sup>2</sup>

Rack point load 90.00 kN

Loading docks 39

Free space overhead doors 3150 x 2910 mm

Warehouse lighting 150-400 Lux

Warehouse flatness class

Super flat floor (DIN-15851-1)

Warehouse heating installation

Underfloor heating

Shipping clearance height

Shipping floor load

4.6 m<sup>1</sup>

Height of concrete plinth 2.50 m<sup>1</sup>

25.00 kN/m<sup>2</sup>

Overhead doors

Loading bay lighting 150-400 Lux

Sprinkler system ESFR K25

Data

Intelligent onestop-solution

Security

Office lighting

Ready for TAPA-A

#### Mezzanine

Floor load 7.50 kN/m<sup>2</sup>

Depth 16 m<sup>1</sup>

#### Terrain

Lot size 70,049 m<sup>2</sup>

Environmental category

3.2

Electric vehicle charging stations 42

Building footprint 40,364.59 m<sup>2</sup>

> Parking spaces 425

Offices

Floor load 4.00 kN/m<sup>2</sup>

150-500 Lux

into the ceiling

Office heating installation System integrated

23 22

Warehouse

39,131<sub>m²</sub>

Mezzanine

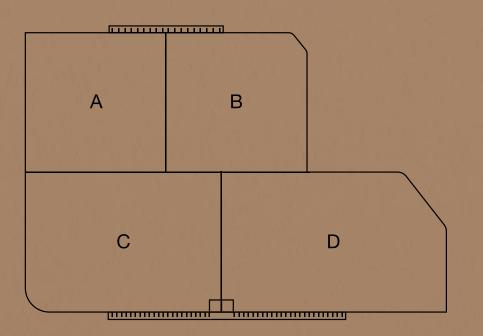
5,257<sub>m²</sub>

#### Warehouse A

Warehouse 7,902 m <sup>2</sup>	Offices 678 m <sup>2</sup>
Mezzanine  955 m <sup>2</sup>	Loading docks
Parking spaces	O

#### Warehouse B

Warehouse 7,902 m <sup>2</sup>	Offices 678 m <sup>2</sup>
Mezzanine 955 m <sup>2</sup>	Loading docks
Parking spaces	



Ara Almelo is available as four independent units, each consisting of its own warehouse, office, mezzanine, and parking area. All floor space includes PFO (lettable floor space)

#### Warehouse C

vvarenouse	Oπices
11,109 m <sup>2</sup>	563 m <sup>2</sup>
Mezzanine	Shipping office
1528 m <sup>2</sup>	48 m <sup>2</sup>
Parking spaces	Loading docks
120	11

#### Warehouse D

Warehouse 12,215 m <sup>2</sup>	Offices 657 m <sup>2</sup>
Mezzanine 1818 m <sup>2</sup>	Shipping office 48 m <sup>2</sup>
Parking spaces 133	Loading docks

Warehouse

39,131<sub>m²</sub>

Mezzanine

5,257<sub>m²</sub>



Nature, architecture, technology, and functionality.
Characteristics of a destination of "stellar" quality.

Ara Almelo is especially unique because of how it blends in naturally with the scenic semi-open Twente landscape, with plots divided by hedges and wooded banks. The unique ecological screen and the pond that is scheduled to be created ensure a natural connection to this characteristic landscape. The screen's size allows it to fit in perfectly with the surrounding built environment, while the vegetation on the screen creates a strong ecological chain between the current business activity and the historical nature in the area.

# Location

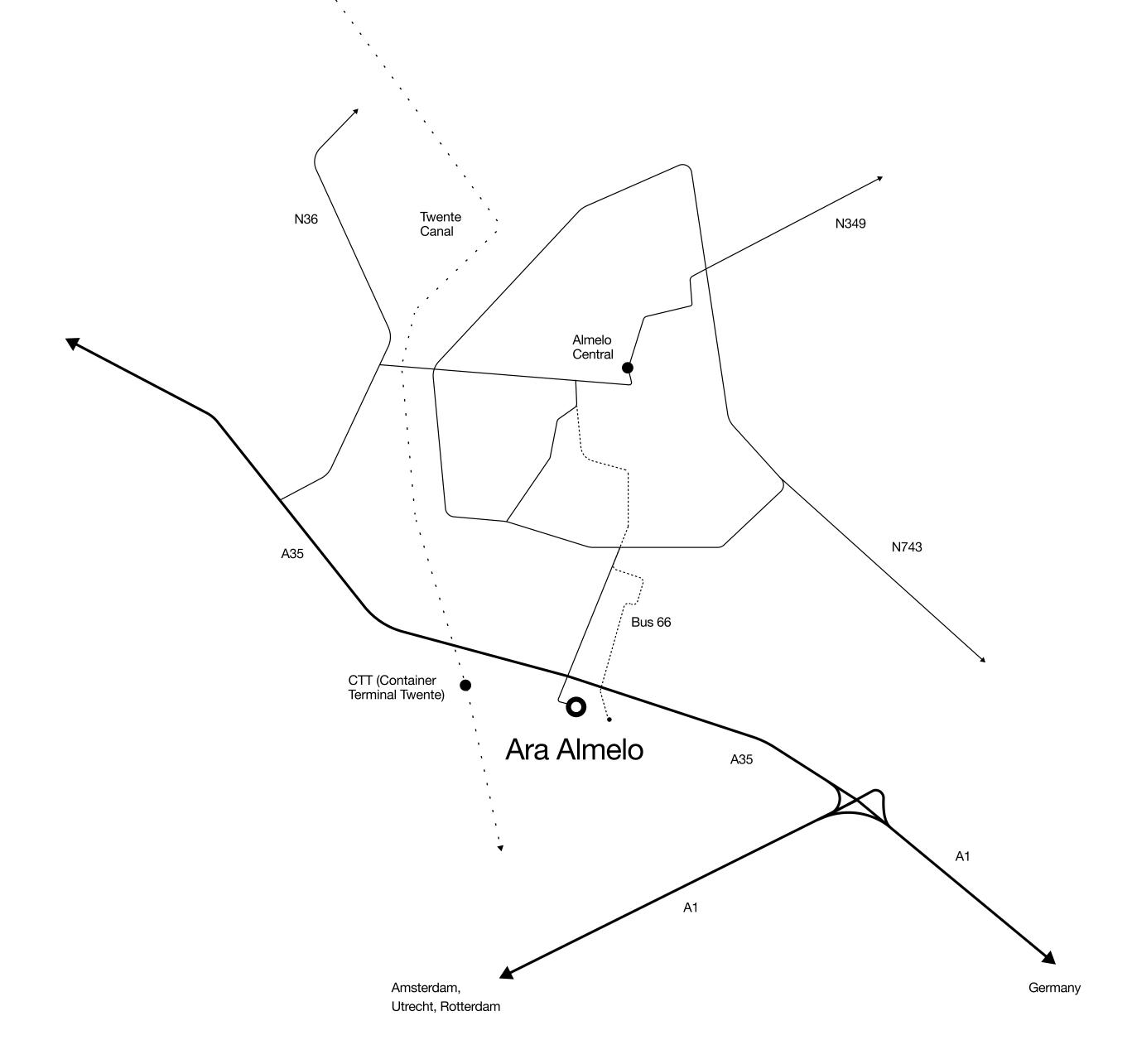
Ara Almelo is situated next to the entrance of XL Business Park Twente along the A35. This destination complies with all logistical specifications that can be expected of a modern warehouse and offers an optimal connection to the Randstad conurbation, the German hinterlands, and Eastern Europe.

XL Business Park Twente is a multimodal business park that is easily accessible by car, by boat, and by train. Its excellent location on the Twente Canal and the presence of the Combi Terminal Twente (CTT) inland terminal, makes it a perfect inland waterway connection to Rotterdam and Hamburg. Rijkswaterstaat is working on the installation of a new turning basin at CTT and on the general enlargement of the waterway down to 2.8 meters deep, which will be ready in the spring of 2023. Twente Airport is located close by (only 15 minutes by car).

The destination is also easily accessible by public transport. The Almelo NS railway station is only 7 kilometers away and offers frequent bus connections to the XL Business Park Twente. The bus stop is 200 meters from the destination.

Address Newton 1, 1a, 2, & 2a, Almelo





#### Freeways

A35 – only 1 minute away A1 – only 6 minutes away

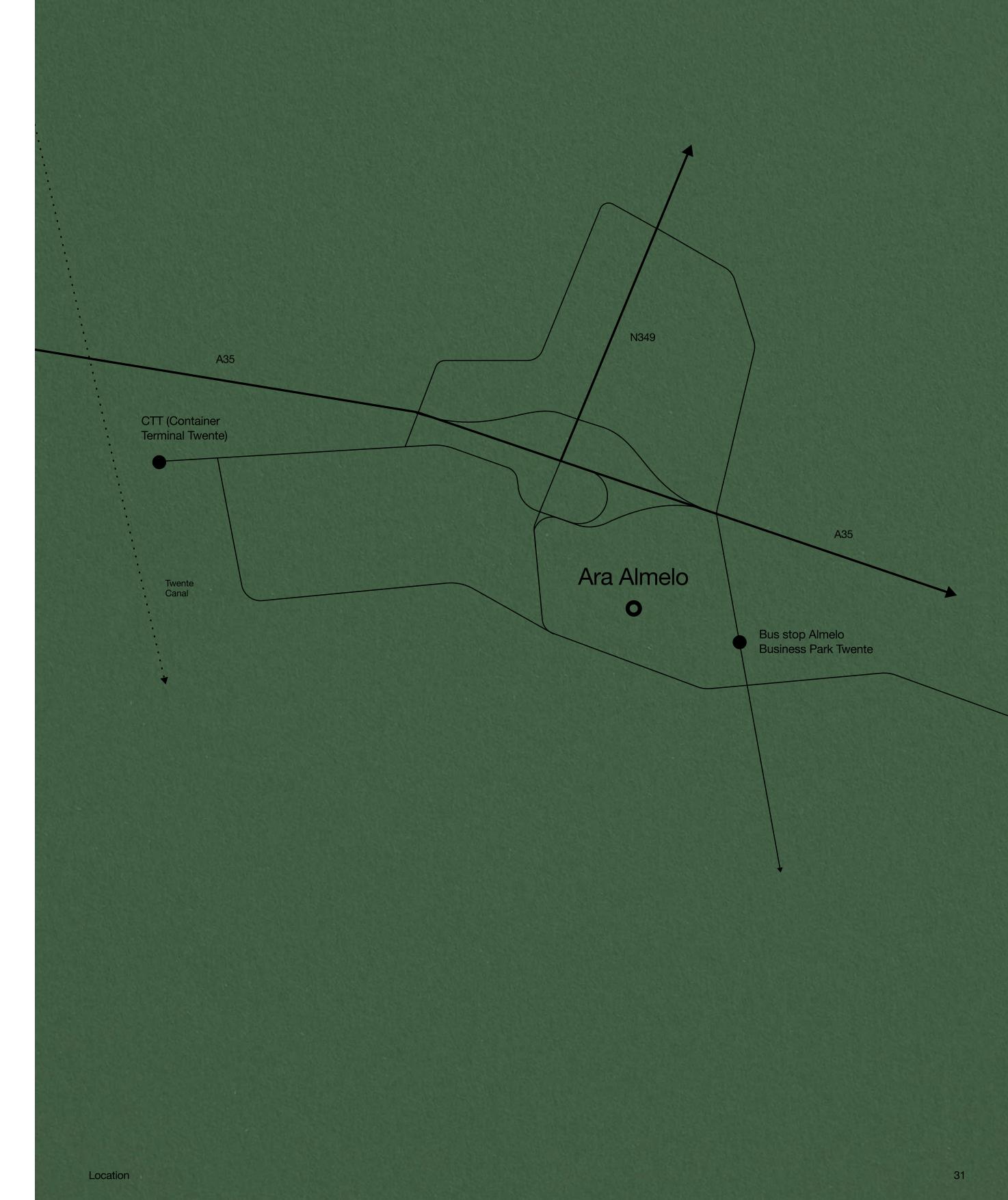
#### Minutes by car

CTT (Container Terminal Twente) – 2 minutes Twente Airport – 15 minutes

#### Public transport

NS Almelo railway station – 16 minutes (from stop Almelo Business Park Twente)

Bus stop 200 meters away



# Floor plans

Terrain

Ground floor overview

First floor overview

Office warehouse A ground floor

Office warehouse A first floor

Office warehouse B ground floor

Office warehouse B first floor

Office warehouse C ground floor

Office warehouse C first floor

Office warehouse D ground floor

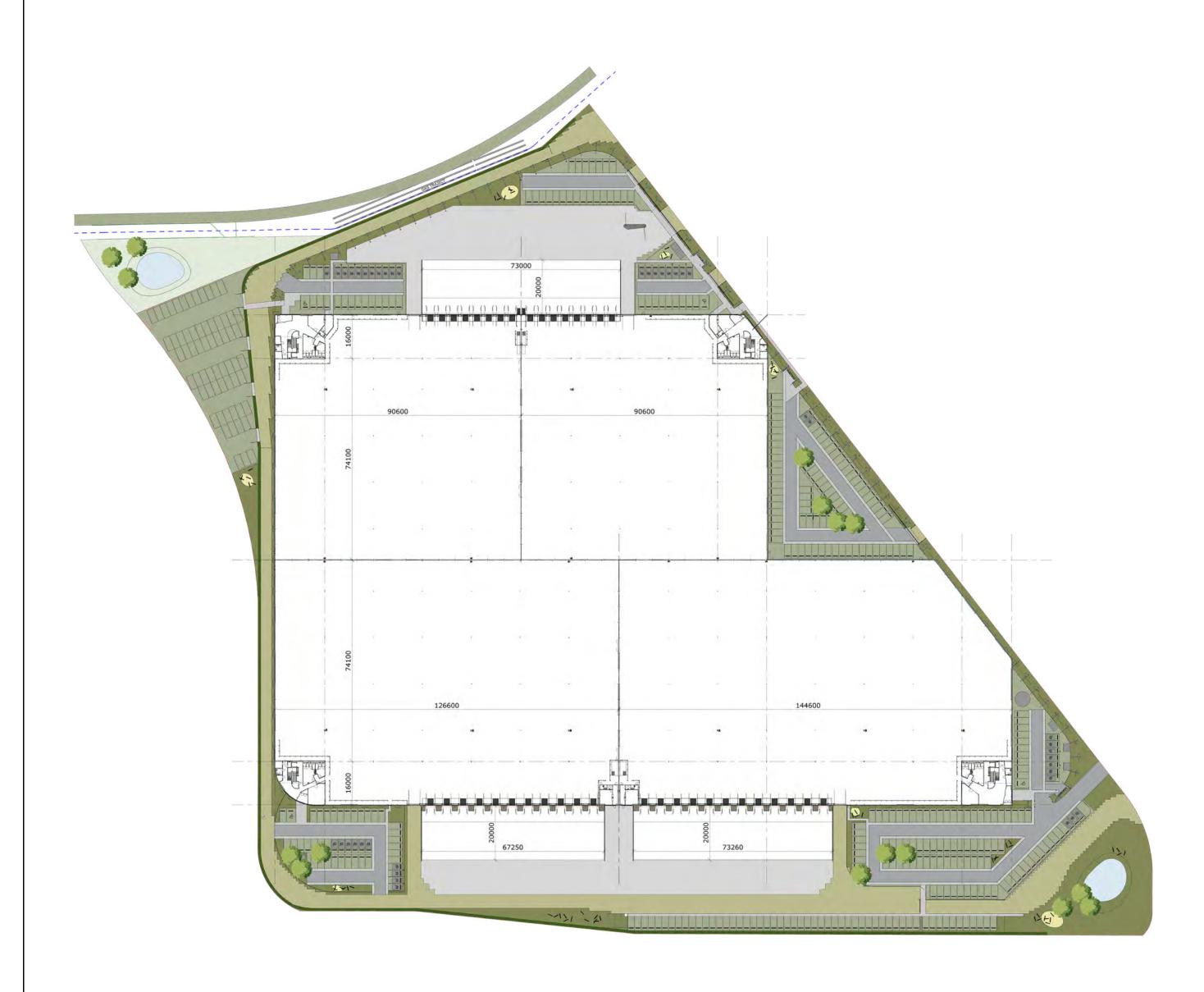
Office warehouse D first floor

Racking

Façades

**Cross Section** 

# Terrain

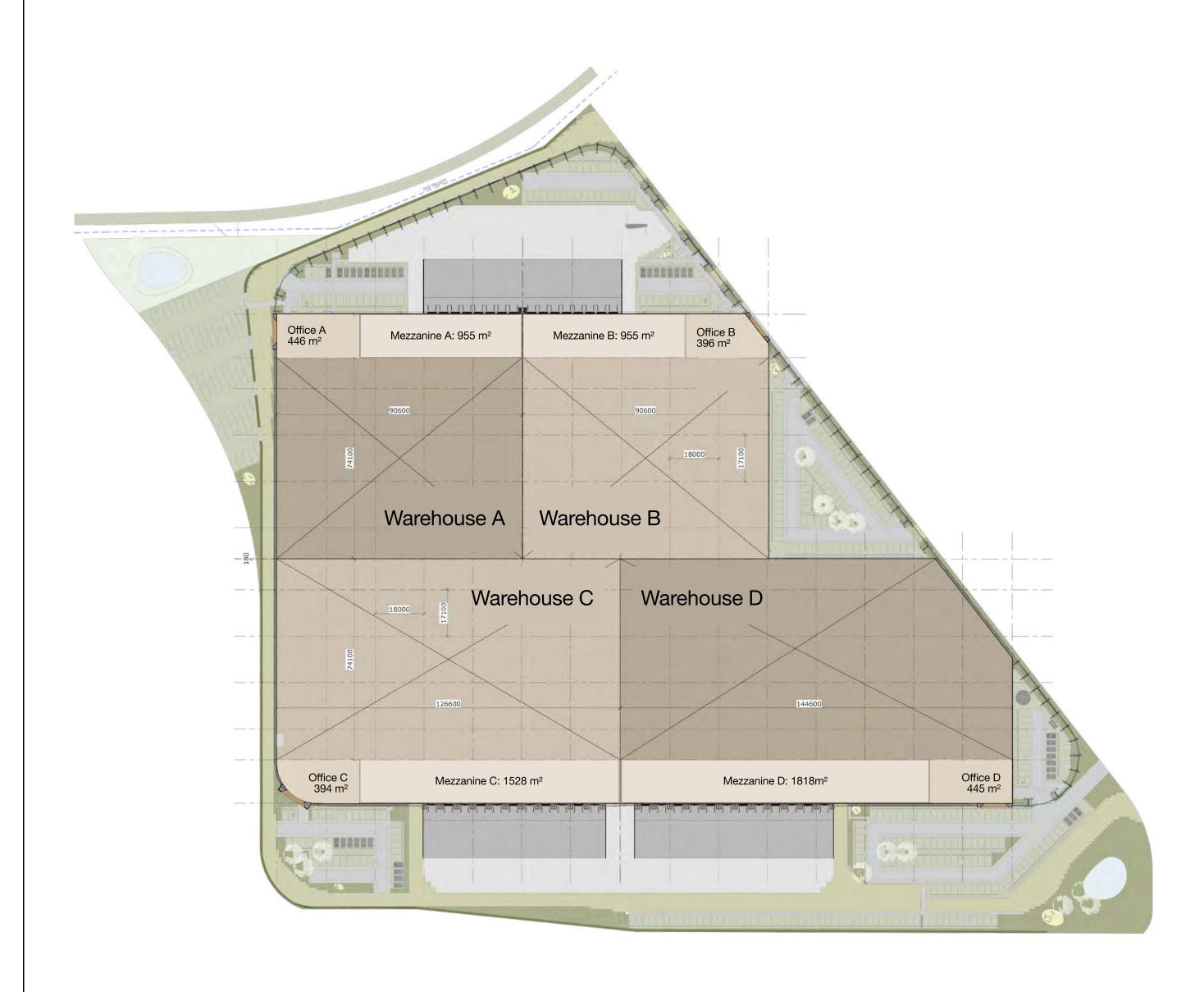


#### Ground floor overview



Clearance height 12.2 m<sup>1</sup>

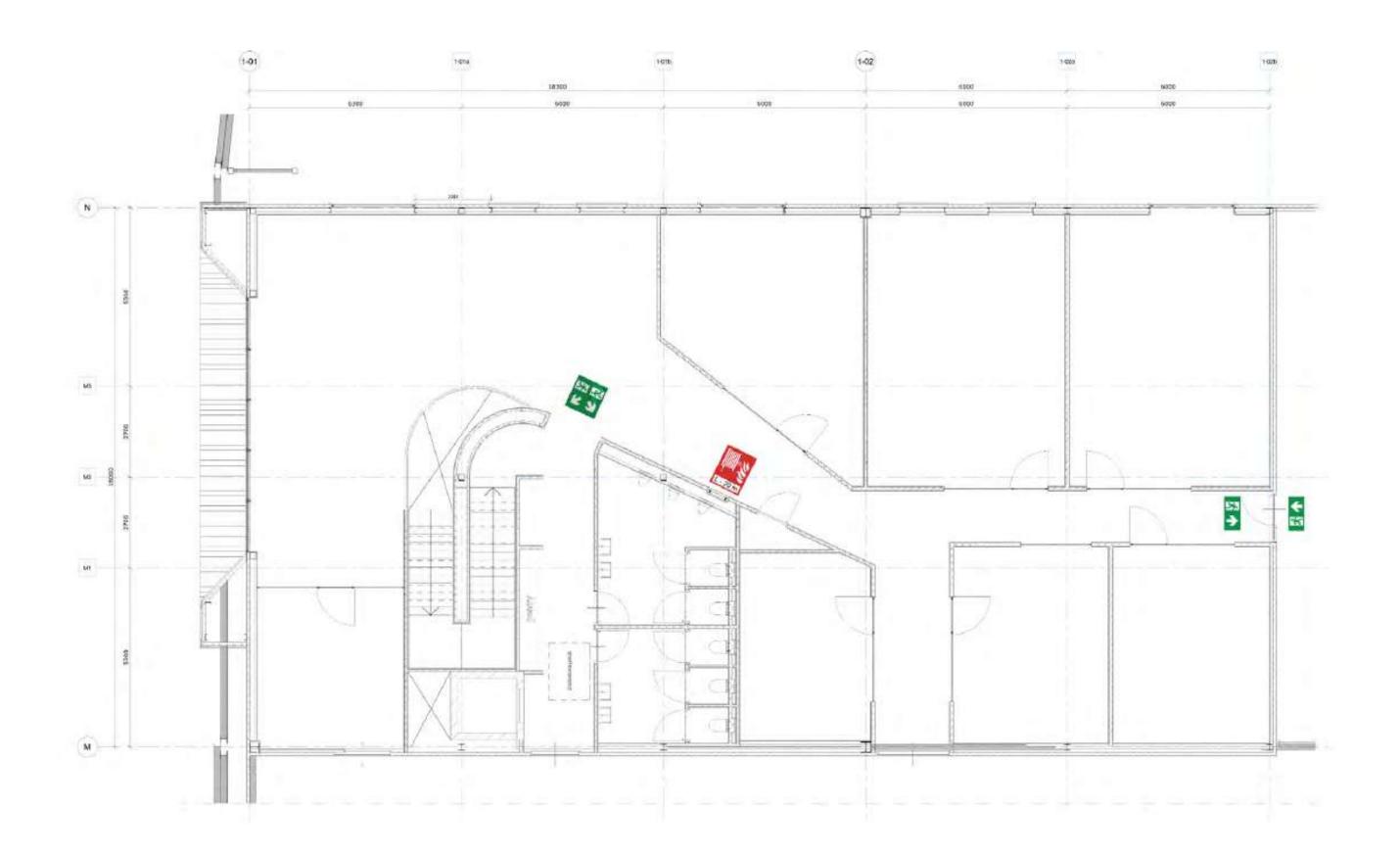
#### First floor overview



#### Office warehouse A ground floor

Office A ground floor 230 m<sup>2</sup>

#### Office warehouse A first floor

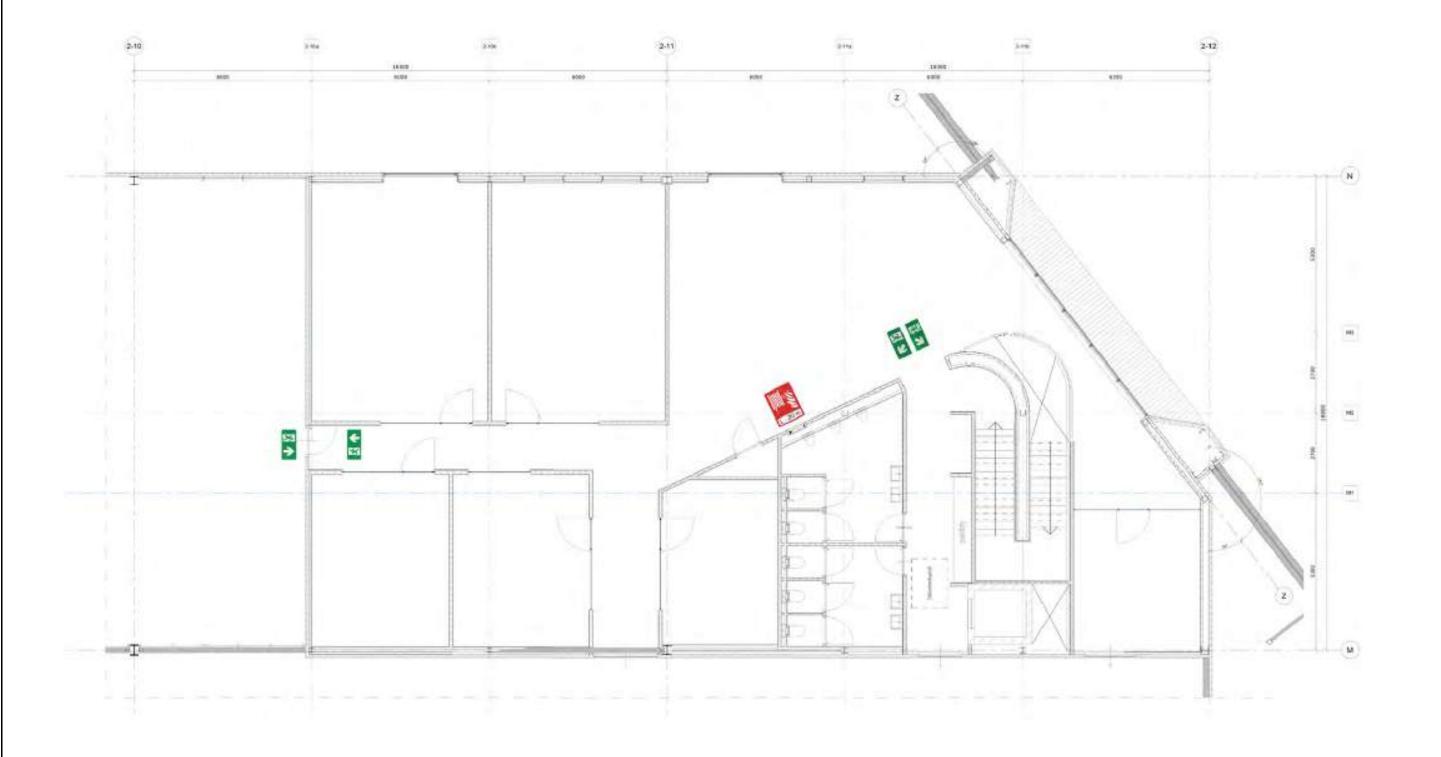


Office A first floor 448 m<sup>2</sup>

## Office warehouse B ground floor

Office B ground floor 186 m<sup>2</sup>

#### Office warehouse B first floor



Office B first floor 402 m<sup>2</sup>

## Office warehouse C ground floor

Office C ground floor 165 m<sup>2</sup>

#### Office warehouse C first floor



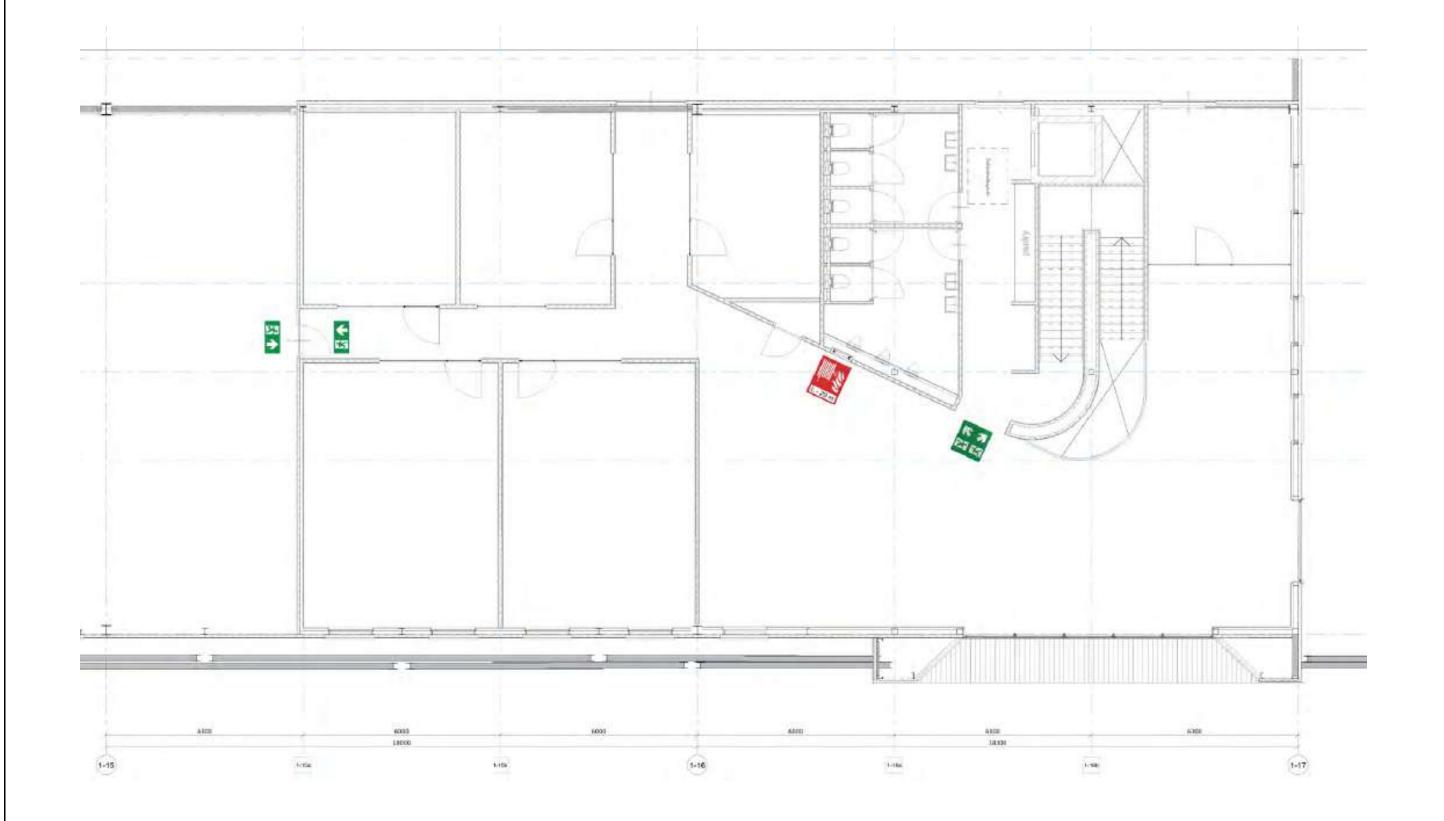
Office C first floor 398 m<sup>2</sup>

## Office warehouse D ground floor

# 

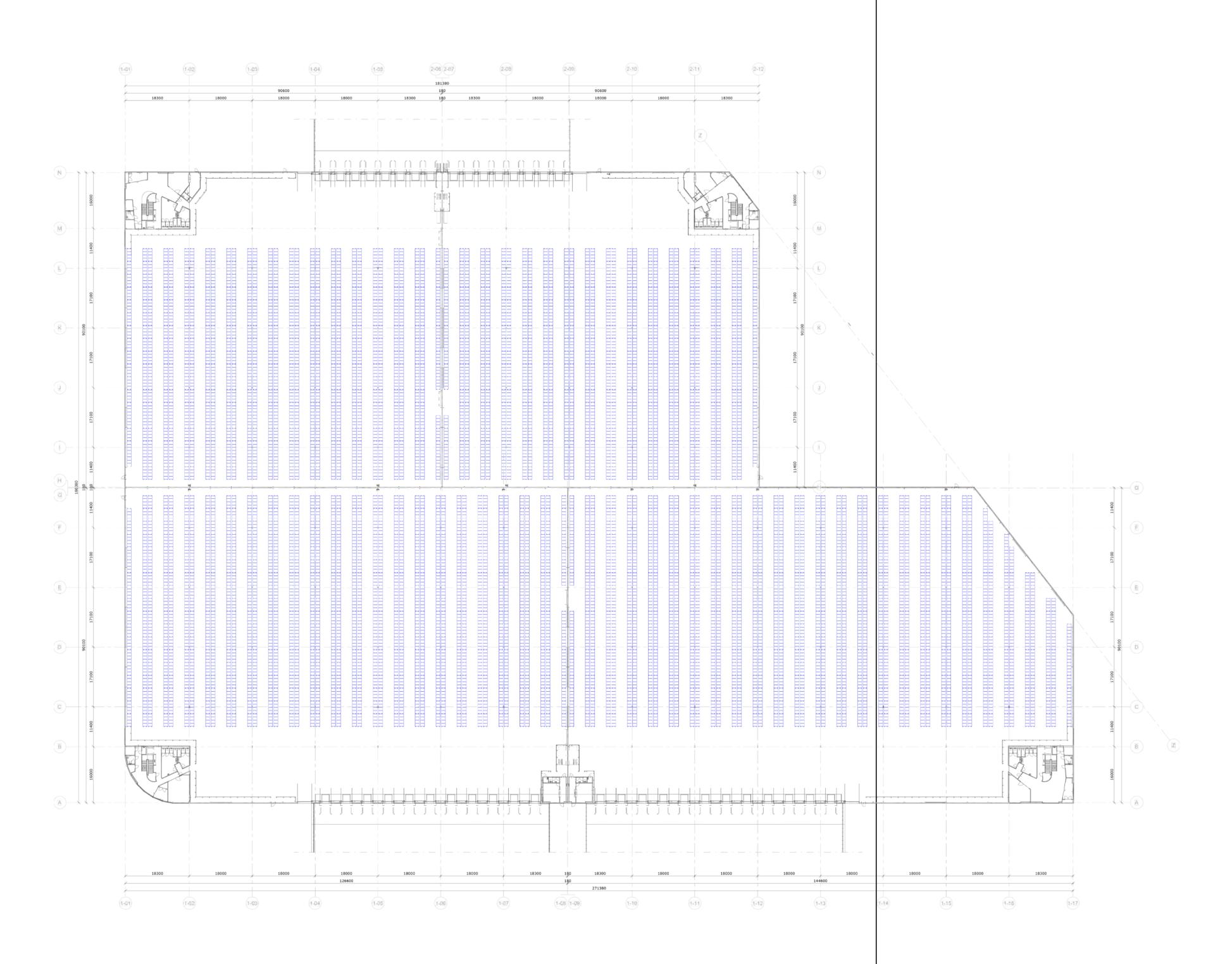
Office D ground floor 209 m<sup>2</sup>

#### Office warehouse D first floor



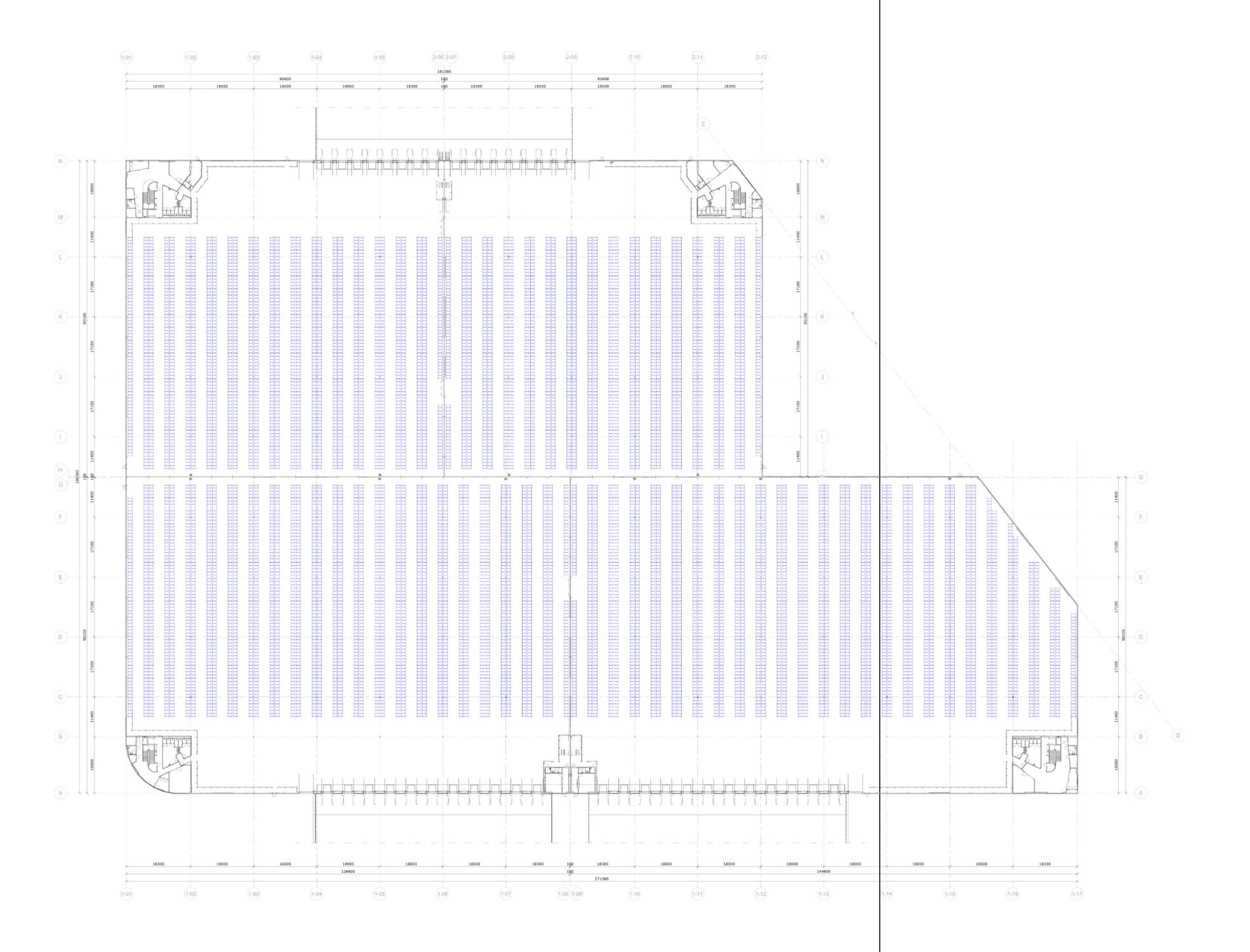
Office D first floor 448 m<sup>2</sup>

# Racking



Technical specifications

# Racking



Warehouse A	Block pallets	Euro pallets
Reach Truck 100%	12,350	12,890
Varrow aisles 100%	16,490	17,200
Warehouse B	Block pallets	Euro pallets
Reach Truck 100%	12,350	12,890
Narrow aisles 100%	16,490	17,200
Warehouse C	Block pallets	Euro pallets
Reach Truck 100%	17,300	18,070
Varrow aisles 100%	23,110	24,120
Warehouse D	Block pallets	Euro pallets
Reach Truck 100%	18,800	19,530
Varrow aisles 100%	24,640	25,730

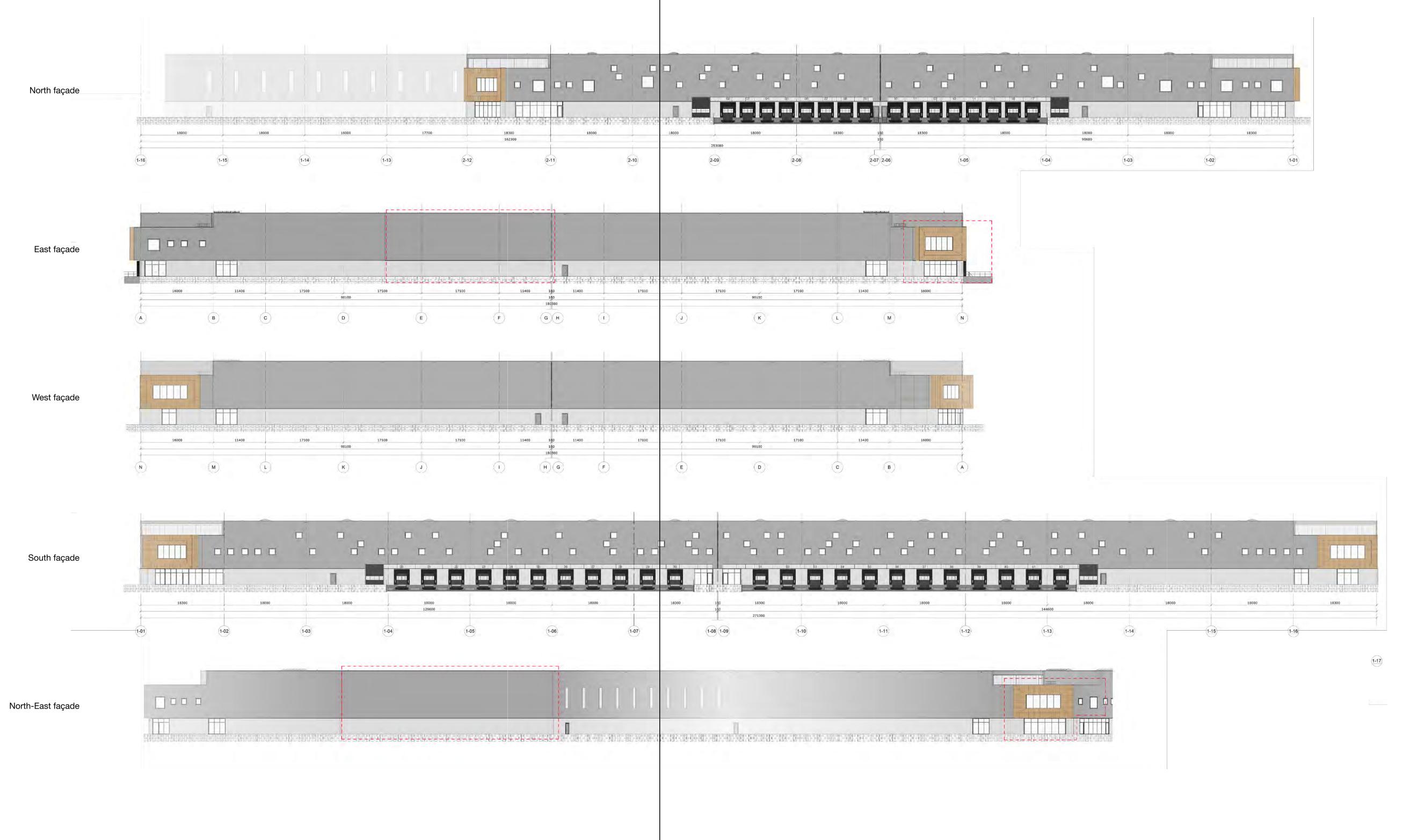
#### These numbers are based on the following principles:

Expedition area behind docks	21.7 m
Maximum clearance height	12.2 m
Maximum height building	13.7 m
Slope (general)	approx. 16 mm/m <sup>1</sup>
Sprinkler system no-go area	1.2 m
Product height	1.8 m
Story height scaffolding ledgers	2.05 m
Top layer	1.9 m
Girder size rack module	3.6 m
Total stacking height	6 layers

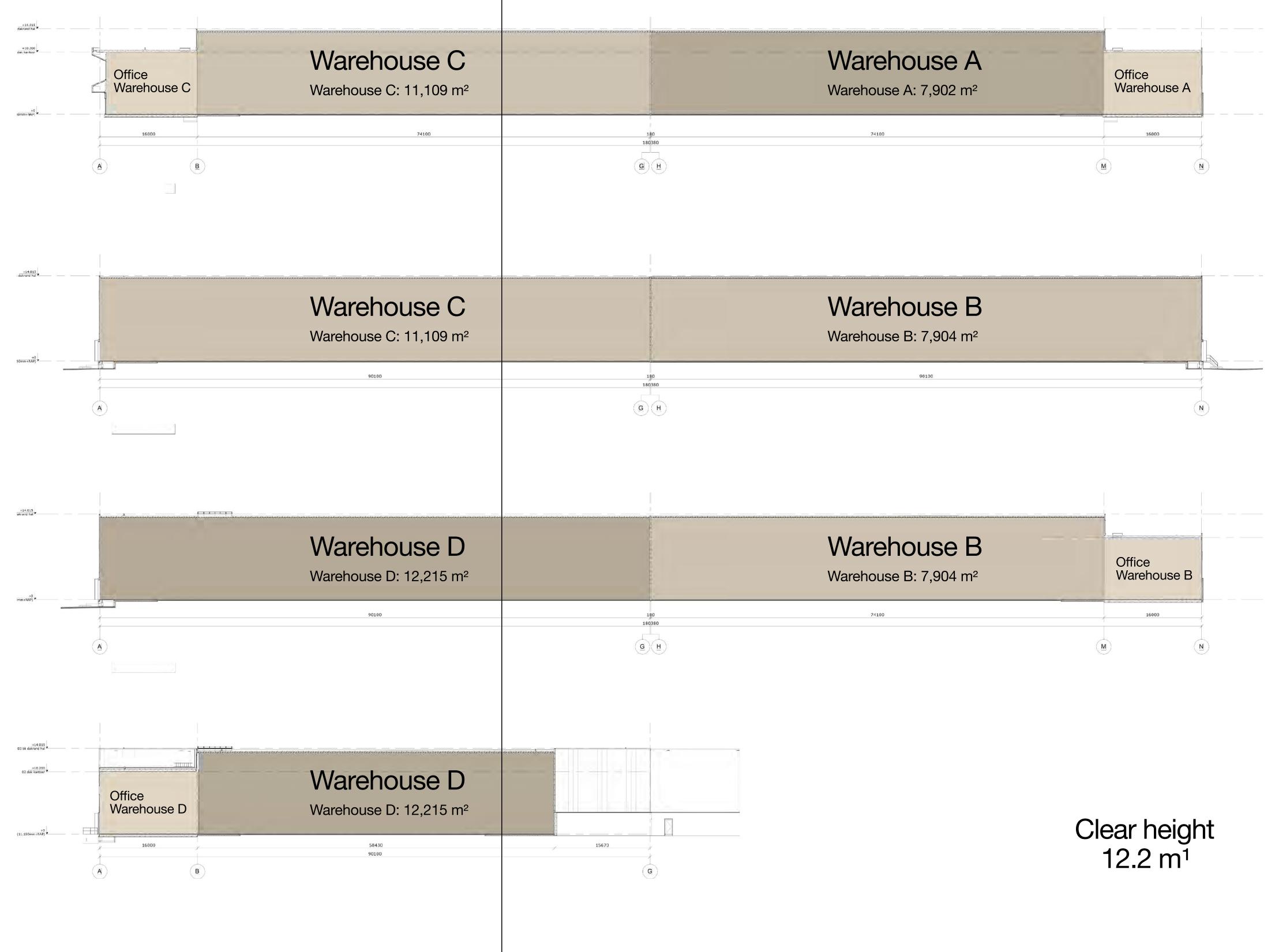
Floor plans Floor plans

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#### Façades



#### **Cross Section**



# Floor plans

Terrain

Ground floor overview

First floor overview

Office warehouse A ground floor

Office warehouse A first floor

Office warehouse B ground floor

Office warehouse B first floor

Office warehouse C ground floor

Office warehouse C first floor

Office warehouse D ground floor

Office warehouse D first floor

Racking

Façades

**Cross Section** 



stellardevelopment.eu/destinations/ara-almelo/floorplans

# Nature

Inspired by the scenic Twente landscape, which is made up of a semi-open landscape and plots closed off with hedges and wooded banks.



Bocage landscape

Nature Nature

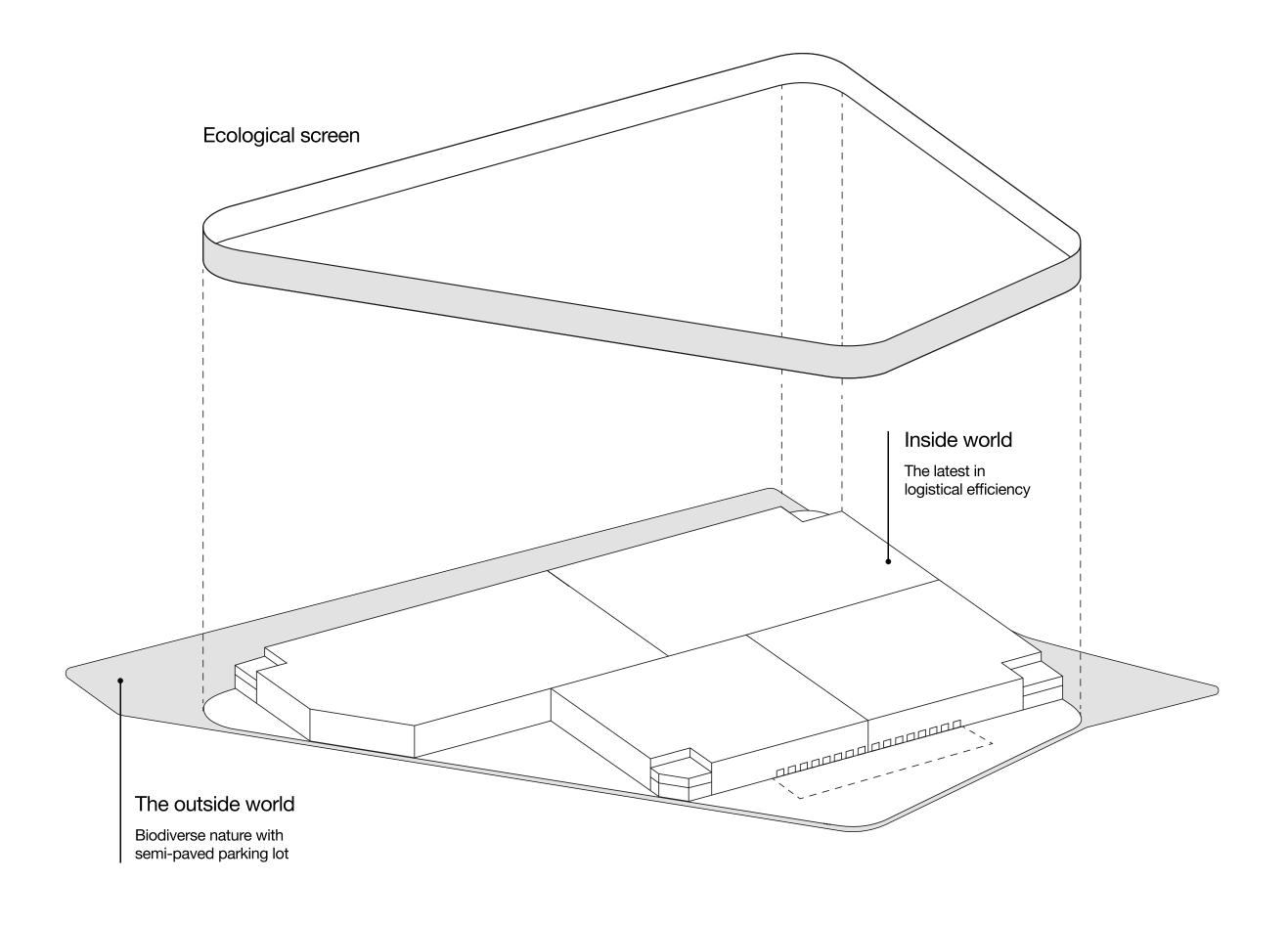




The distinctive ecological screen is one of the largest in Europe.

The screen is fully covered with plants and forms a stunning ecological complement to the destination. The climate-adaptive ecological screen becomes clearly visible along the A35 and forms a veil that hides the logistical activity inside.

Architect, Diederik de Jonge Heembouw Architecten



### Creating a "natural" connection between two worlds.

The ecological screen creates an inside and outside world. The inside world is fully focused on logistical efficiency. The outside world is fully nature inclusive: blossomy grass, semipaved where possible, climate adaptive and of course as biodiverse as possible. With nesting options for various animal species. The screen is the dividing line but also the connection between both worlds. The ecological screen is visible from all over the inside world and people will experience that nature is an integrated part of their stay at the destination. A green working environment also has a proven positive effect on the productivity, motivation and focus of employees.

Architect, Diederik de Jonge Heembouw Architecten

Nature Nature

Surface area of the ecological screen

The fully planted screen is almost 1000 meters long and up to 14.5 meters high, and will provide food and shelter for birds and insects year-round.

## "The ecological screen wraps around the building in a magnificent way."

n designing the outdoor space for Ara Almelo, we have used the scenic Twente landscape as a source of inspiration: the semi-open landscape with plots closed off with hedges and wooded banks. A pond will be created in the open space for the destination with trees to surround it. This environment fits in with the ecological screen, that will be surrounding the building like a "natural facade". The screen is almost 1 kilometer long and will be covered in vines that complement each other in the way they grow and bloom during all seasons, and promote the biodiversity.

The screen connects to the immediate natural and built environment: the business park is called XL Business Park and Ara Almelo provides space to one or multiple major logistics users. The ecological screen "hugs" the destination in a magnificent way and will be an iconic eyecatcher for users and visitors, but also for passers-by who get a stunning view of Ara Almelo from the A35. This means that this extraordinary destination will soon become the showpiece for XL Business Park Twente and the city of Almelo.



68 Nature





Garden and Landscape Architect, Joost Emmerik EMMERIK Garden Design and Research

Nature



## A new nature system for people and wildlife.

The ecological screen is the most visible and characteristic element of Ara Almelo. For the plants, we decided on one main theme: the plants must be able to provide as much food and shelter for birds and insects year-round. If the animals and plants do well then it will contribute to the biodiversity we so desperately need.

Nature also contributes to our physical and mental health. A natural and lively environment will help create a positive working climate. In this context we have also created a connection with the existing natural environment in the area.

By using trees that resemble the ones that already exist in the area, insects will easily be able to find their way within the new Ara Almelo living environment. The creation of new yet familiar nesting environments such as bird houses, bat boxes, and sand, the ideal habitat for some bee species, contribute to this. This results in a renewed eco system ideal for people and animals. The added value for people of being connected to nature from the inside out instead of looking out on grey industrial sites, is huge.

Landscape designer, Annemieke Langendoen HOLLANDSGROEN

Nature Nature 73

# Optimal biodiversity at construction and building level for people and wildlife.

Flora & fauna

16 Trees planted

43
Flower and plant species

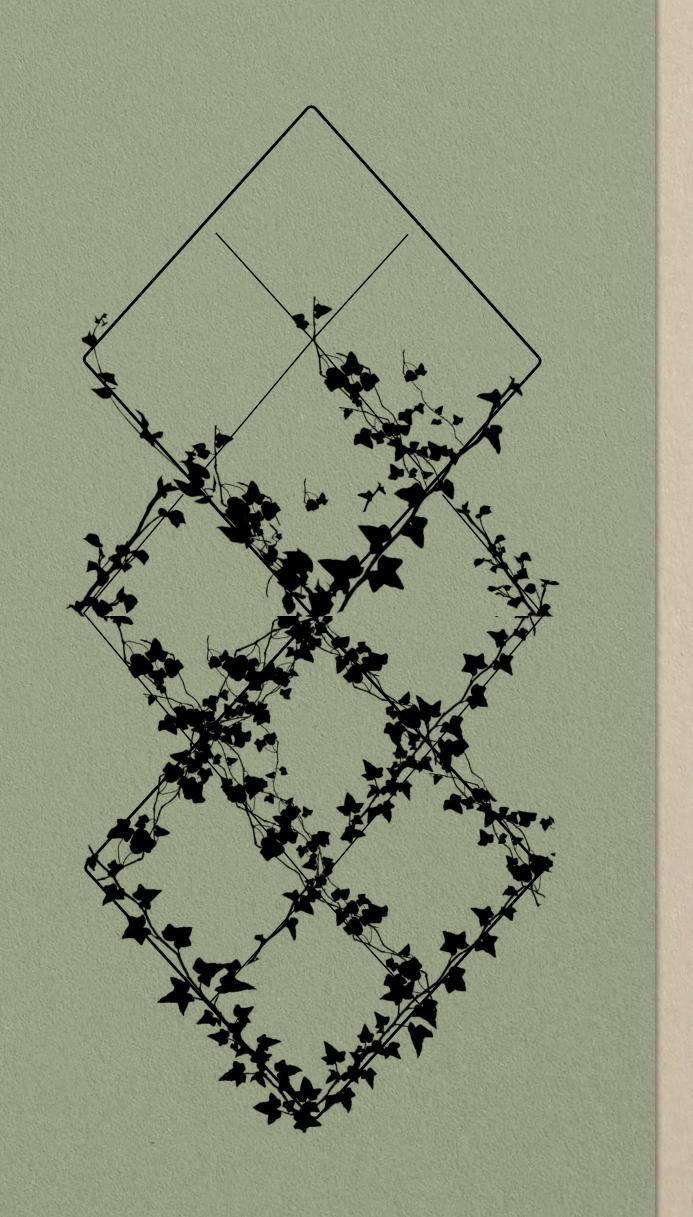
### Optimal biodiversity at construction and

building level people and

The flora planted on the ecological screen has been parametrically designed, depending on its specific needs - focus on the sun, wind intensity, blooming patterns and many other data points - to achieve optimum biodiversity in the area.

We are also building four different types of metal patterns for support, based on plant preferences. This record-breaking architectural structure will allow 43 plant species to develop optimally across the ecological screen spanning a length of almost 1000 meters.

Architect, Diederik de Jonge Heembouw Architecten

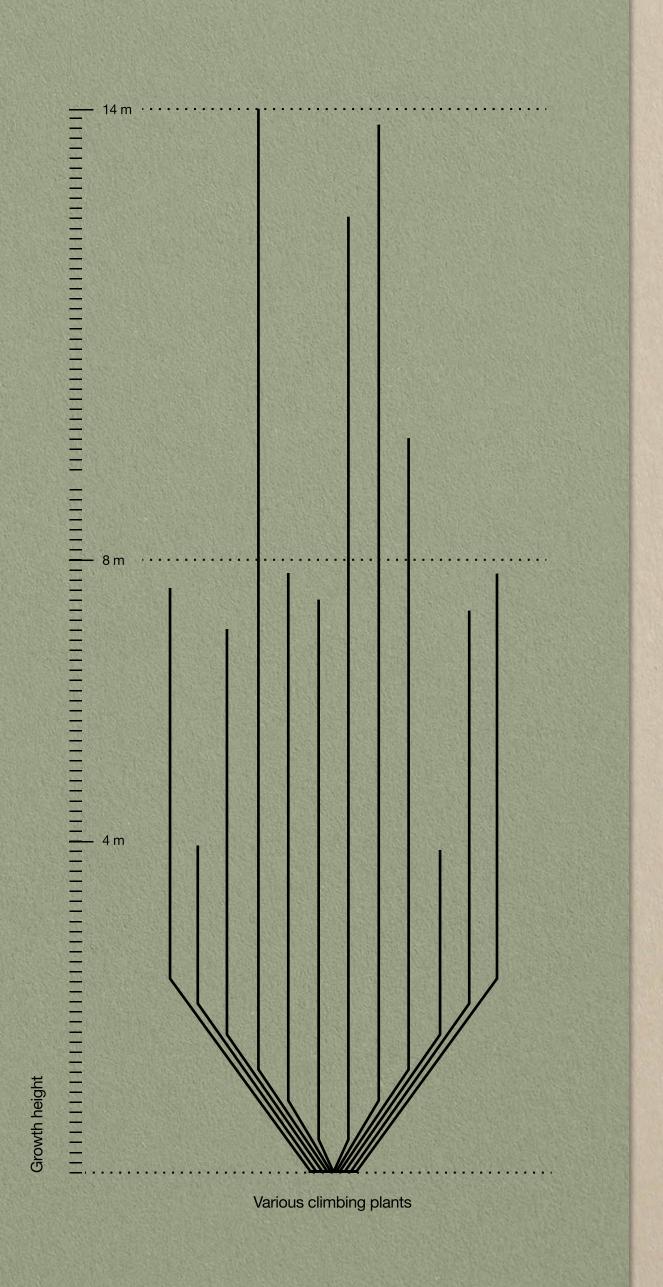


## Optimal biodiversity at construction and building lev To achieve the most optimal growing conditions for each play more than 1000 computer.

people and

To achieve the most optimal growing conditions for each plant, more than 1000 computer simulations have been generated. By combining the knowledge of landscape architects and floral designers, the ideal composition of green with optimal growth patterns has been determined.

By analyzing each type of flora in detail and staying true to the concept of maximizing biodiversity, this unique ecological screen was created



Optimal biodiversity at construction and

at construct building leve people and



Optimal biodiversity at construction and

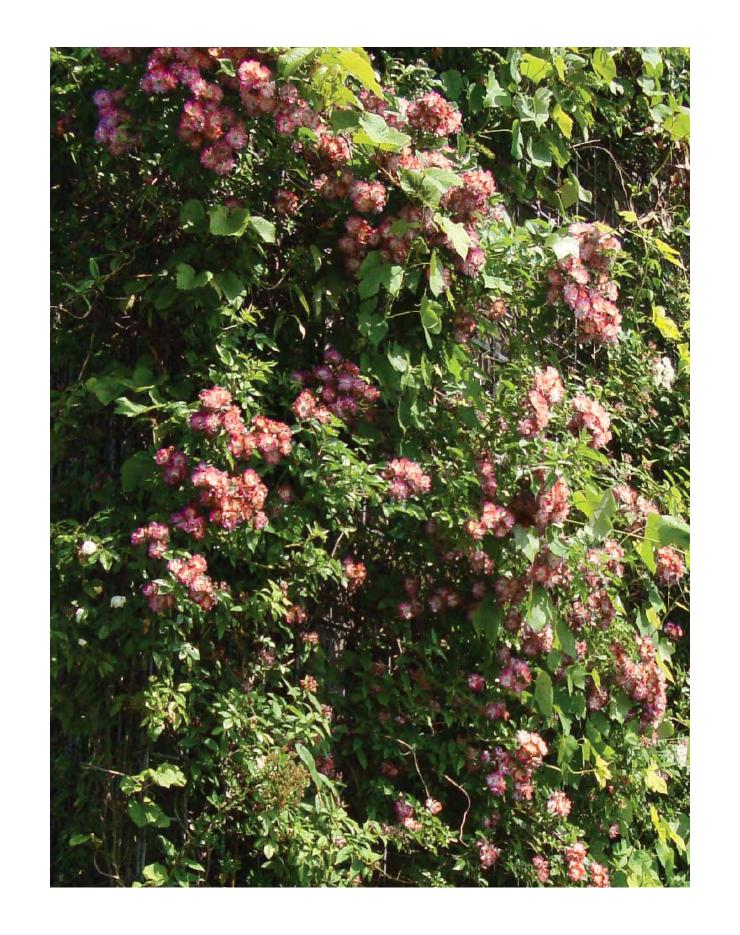
at construct building leve people and



# Optimal biodiversity at construction and building level people and

Carefully mapping blooming periods, nectar values, growth habits and the placement of screen components in terms of the position of the sun, has been the basis for situating the enormous variation of climbing plants in such a way that they will provide adequate nutrition and shelter for local fauna year-round.

Landscape designer, Annemieke Langendoen HOLLANDSGROEN





### Better performance in a natural logistical environment.

Ara Almelo will be an unusual destination in which working and nature will come together in a beautiful and unique way. In the outdoor spaces around this destination, relatively few activities take place and, as a result, there is little disturbance of flora and fauna, making it an inviting place to live for wildlife and plants. By providing a prominent place for nature in the unique, eye-catching ecological screen measuring almost 1 kilometer in length, the working and living environment will become more beautiful and more lively. Fundamental studies have shown that people feel and perform better in a natural environment. Added value is created when people work in a place where care is provided for the environment.

Garden and Landscape Architect, Joost Emmerik EMMERIK Garden Design and Research

Nature 79

#### Gaia connection grid

Ara is a unique example of a logistical destination that is being developed in a nature-inclusive fashion. Working together with Rebel Group, Stellar Development has assessed the ecological, social, and financial effects of this approach, making not only the benefits but also the costs of nature-inclusive construction clearer and more concrete. Ecology does not only yield cost but creates a lot of value specifically, which aligns with the intrinsic motivation to increase investments in nature. The ratio between ecological measures and the yields for various groups have been broadly visualized within the Gaia connection grid, uniquely designed to fit within the

Stellar Development identity. The most important conclusion that can be drawn from this is that nature yields considerable added value and is a connecting factor for both end-user, environment, investor, and developer. That means there are no barriers for fundamental investments in ecological measures.

Gaia is an initiative by Stellar Development and Rebel Group. The name 'Gaia' refers to the birth of the Earth from chaos, which contains all the basic components, the four elements: earth, water, air, and fire. 'Gaia' also refers to the most exact measuring instrument in the universe, launched in 2013.



Nature Nature

For the end users of Ara Almelo, measures have been taken that, according to our research, may lead to a reduction in absenteeism and higher productivity.



Mark Bode, Lianne van Ruijven & Idse Kuipers, Rebel Group.

## Nature contributes to improved wellbeing and inspires people to exercise.

People feel demonstrably better in a natural environment. Nature also inspires people to be more physically active. Less quantifiable, but still relevant, is that a natural working environment contributes to an improved company reputation. The ecological measures at Ara Almelo are constantly monitored and will be carefully safeguarded. The end investor and end-users can use this data to make the contribution of the building clear and even make some adjustments, and learn how the building and business activities can contribute to nature and society. Our research clearly shows that the environment benefits from social and economic advantages of the optimized ecological circumstances. The quantifiable aspects (such as CO2 storage and improvement of air quality) and the qualitative effects help optimize and clearly show various matters such as absenteeism, carbon storage, sanitation, and water damage.

Strategic advisor, Mark Bode Rebel Flora and Fauna

#### Read the full report stellardevelopment.eu/brochures/gaia/en

Nature Nature

### Architecture

Ara Almelo will be receiving the BREEAM® NL Very Good certificate and complies with the EU Taxonomy Regulation, as an innovative frontrunner in the industry.



Scan the code to read more about EU Taxonomy



Stellar Development and reflected in Ara Almelo. One of the ambitions is to achieve a BREEAM score of Very Good, by reducing energy requirements. The building components, for example, consist of carefully-chosen sustainable materials and sandwich panels were used to create the façade. These panels are light and reduce the use of materials by 12%. After completion of the destination, extensive tests will be performed to see if the insulation value and the air density comply with the BREEAM standard of

Very Good. In addition to complying with these BREEAM requirements, Ara Almelo is one of the first logistical buildings in the Netherlands to comply with the EU Taxonomy Regulation; a transparent classification system that was devised based on the Paris Climate Agreement, in order to objectively determine what is truly sustainable and what is not. The goal is to make investments more reliable and transparent and to tackle greenwashing. Stellar Development welcomes the EU Taxonomy, in the knowledge that what we build today shapes the world of tomorrow.



#### The design of Ara Almelo prioritizes the interests of people, nature, and animals.

The idea for the ecological screen was conceived in close cooperation with the landscape architect, climbing plant specialist, ecologist and structural engineer. The contribution of these experts has resulted in this unique design and the optimization of the plot. This allows Ara Almelo to provide a maximum contribution to the biodiversity of the area. The interests of people, nature and animals were prioritized to the fullest extent in this task. In cooperation with Heembouw, Stellar Development has the ambition to develop in a nature-inclusive manner. Ara Almelo fulfills this ambition.

Architect, Diederik de Jonge Heembouw Architecten

Architecture Architecture 93

Circular design and construction contribute to a lower MPG score of the building.

A stunning performance in sustainability.



statie Gebouwen (MPG)-standard.

## Circular design and construction contribute to a lower MP Being an architectural builder Heembouw is able to carefully so construction materials at an earl By making conscious, sustainable.

Being an architectural builder
Heembouw is able to carefully select
construction materials at an early stage.
By making conscious, sustainable
choices in this context, it has become
possible to positively influence the MPG
score and to lower the carbon footprint
of this destination. By taking natureinclusive measures, the destination even
stores 8.25 tons of CO<sup>2</sup> (in accordance
with the National Institute for Public
Health and the Environment (RIVM
model). This corresponds to 21 flights
from Amsterdam to Rome.

The MPG standard for the government is 1.0 for utility buildings. The score of this destination amounts to 0.336, the unit indicated in €/business floor space/ year, so that is 66% below the standard mentioned. A stunning, sustainable performance which has been achieved through the use of circular sandwich panels and the possibility to create steel foundations instead of concrete piles under the building.

\*The MilieuPrestatie Gebouwen (MPG)-standaard is a measuring instrument created by the Dutch government for measuring the environmental impact of applied materials used in the construction or refurbishing of a building. The environmental impact of each material is expressed in shadow costs. At this time the measuring instrument is only required in the construction of homes and office buildings. We introduce this method to logistical destinations.



Lower than the 1.0 MilieuPrestatie Gebouwen (MPG)-standard.

Architecture 9

Creating a design that meets everyone's needs, requires a broad scope of professional expertise.



The ecological screen is partially situated along the façade of the destination. The free-standing components consist of steel frameworks designed to mimic the growth direction of the plants. All parts of the screen will be made of steel, providing an optimal soil for the various types of plants to grow.

The vegetation design was created in a digital, parametric format, with input from the landscape architect and designer and with a focus on ensuring maximum biodiversity. Together, the used materials add an extra dimension to the special destination that is Ara Almelo, making it a unique place to work. The ecological screen also helps optimize the wellbeing of people in the area; as a natural environment encourages people to exercise more, for example by cycling to work more often. The absorption of air pollutants such as particulate matter by trees and plants will improve air quality.

Architect, Diederik de Jonge Heembouw Architecten

Architecture Architecture 99



The entrance of Ara Almelo aligns with our four brand pillars, allowing our identity to be recognizable from the outside in. Materializations and the shape of the ecological screen are reflected in the design of the entrance and elsewhere.

We offer end-users the possibility of aligning the remaining office and flex spaces with the total design.

### The entirety of used materials adds an extra dimension to this extraordinary destination.

he concrete plinth that frames the destination aligns with the dynamics of the natural environment. The entrance of the offices allows for a seamless flow between the outdoors and the indoors, creating a stylish connection to the ecological screen outside. This highlights the wooden screen and the lines of sight in a stunning fashion; this semi-circular side next to the staircase will be created using surface divisions made from

oak veneer. The entrance to each office will be marked by a true green eyecatcher: a delightful place to sit, surrounded by numerous trees. On the outside, an access route will be created for trucks using semi-paving in the form grass concrete tiles. Grass will be planted both within and outside the ecological screen, allowing a seamless flow into the grasslands beyond the destination.

Architecture



102 Architecture

The entirety of used materials adds an extra dimension to this extraordinary destination.

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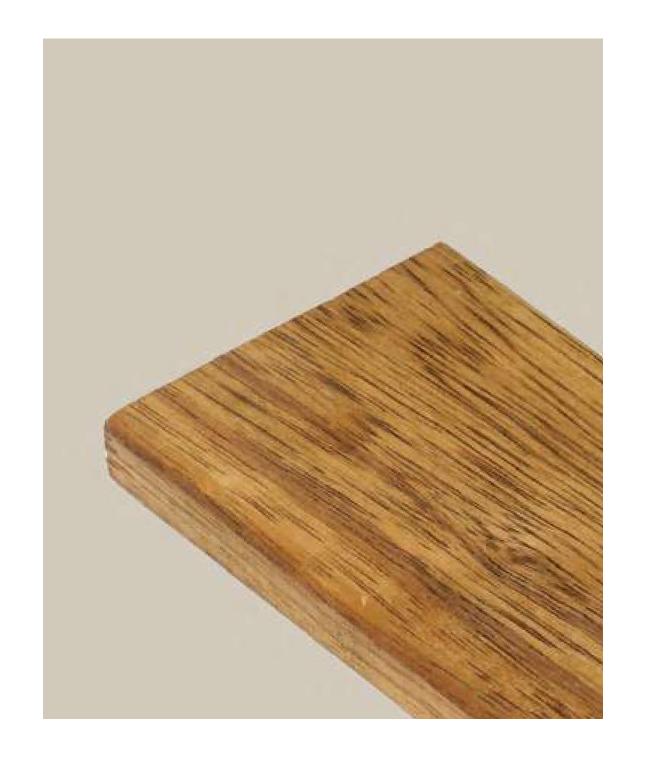
Architect, Diederik de Jonge Heembouw Architecten

Architecture 10

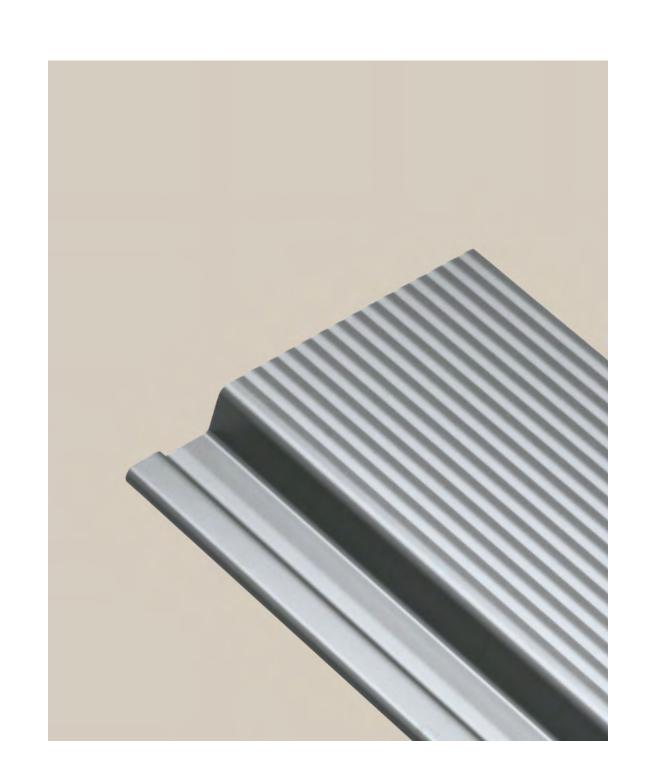
A selection of materials for Ara Almelo.







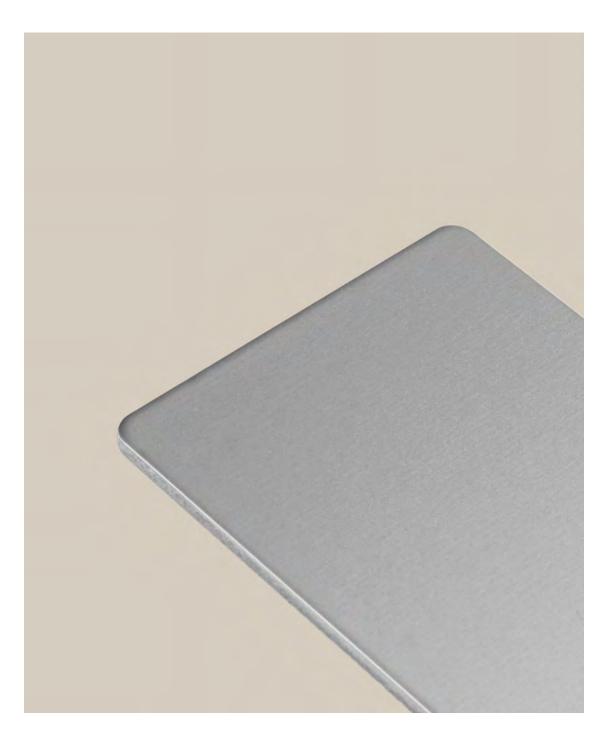
Sustainable Plato wood



Sandwich panel



Structural steel



Composite blinds

Architecture Architecture 105





#### Framing the view

The window frames are made from sustainable Plato wood. This allows them to be organically integrated into the ecological screen and contribute to the spectacularly warm appeal of the destination.

Architecture 109

### Inside Ara Almelo: functional and inspiring.

Behind the characteristic ecological screen, the inside world contains offices, distribution warehouses, and parking spaces. For the entrance to the office we wanted to include the needs of people, nature, and animals into the assignment. Stellar Development and Heembouw aim to combine nature-inclusive construction with a logistical destination of the highest quality. Ara Almelo was designed as efficiently as possible and the decision to use rich, natural materials and colors accentuates the unique design of the destination.

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The interior of Ara Almelo is in line with the Stellar Development identity. All installations have been covered in a white coating. And the windows provide extra daylight in the working environment, all contributing to a pleasant workplace.

Architect, Diederik de Jonge Heembouw Architecten

Architecture 111

# Technology

Charging stations for electrical cars are located near the parking spaces. They are available for both staff and visitors.

The rows of LED-lighting in the corridors will be fitted with presence detection sensors, which prevent unnecessary and wasted burning hours. The entire building is fitted with LED-lighting.



For the driving route of the trucks, SIM concrete plates (a semi-paving made specifically for heavy traffic) will be used in the form of grass concrete tiles. Inside the ecological screen, these robust tiles will also be planted with grass so they become part of the blooming grasslands on the outside of the destination.

With a rooftop surface measuring approximately 40,000 m², there is the option of providing electricity to almost 2,000 homes after the installation of solar panels.

No matter how future tenants develop, Ara Almelo is absolutely ready to grow along.

Our sector is developing at an incredibly fast pace. Ara Almelo is set to become a state-of-the-art distribution center that is completely ready for the logistical future in all areas. The number of e-commerce transactions continues to grow, markets are becoming more international, and clients have high expectations when it comes to delivery speed, return shipments, and service levels. Logistical services play into this using a close-knit distribution network and investments in work and automation. Super fast data processing and the use of robots and possibly even drones could provide future answers to the needs in the market.



## A state-of-the-art distribution center.

This vision has been leading in the choices for the technology used at Ara Almelo. For example, at the destination, a Last-Mile network, Capella, based on Polymer Optical Fiber (FiberUnlimited) has been integrated into the light lines, which can very easily be activated and adjusted to make Wi-Fi, cameras, Bluetooth location tracking or the use of drones possible. The lighting has also been measured to such a degree that it can be dimmed by default down to the desired lux value, meaning light is always available. In short, no matter the developments in the world of logistics: expect Ara Almelo to be ready for them!

Capella is the technological breeding ground developed for the logistical world of today.

An innovative light & data transport system, based on the ultra-thin Polymer Optical Fiber (POF) cable.

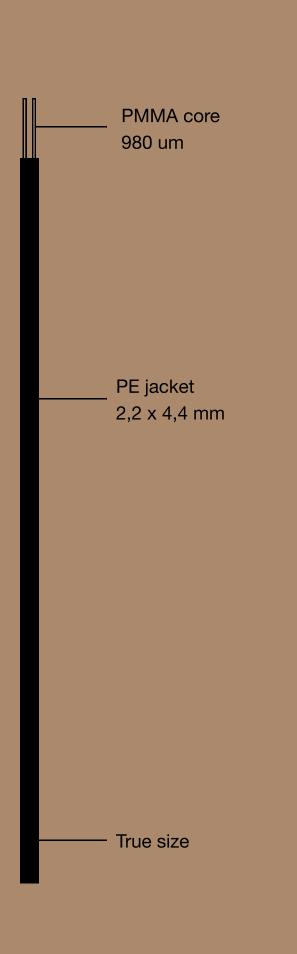
Capella is the technological breeding grand developed a focular logistical with the with the with the ground end-to-

In the times we live in, technology serves as the breeding ground for continuous development. It's important to stay socially and economically relevant, with a focus on man and nature.

In the logistical world, costs associated with this "technological breeding ground" have always been billed to the end-user and are frequently only paid after development has been completed, which is far from ideal.

Capella has been able to turn this process around completely, and offers end-users a technological breeding ground that has been developed for the logistical world of today.

Capella is a one-stop solution that makes led-lighting and integrated network and data transport possible via an innovative light and data traffic system, based on the ultra-thin Polymer Optical Fiber (POF) cable.



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# Capella is the technological breeding grand with Deve with a manage of the first technologistical with the first technologistic and the firs

With the use of Capella, Stellar
Development will provide the end-user
with maximum flexibility, minimal risks,
manageable costs and opportunities in
the fields of innovation (such as
robotization and drone-ready solutions,
improved safety and optimal
connectivity via the infrastructure of the
light).

The basis of this breeding ground consists of:

- 1. Polymer Optical Fiber (POF) cable
- 2. E-line next by TRILUX
- 3. A modular flexible indoor data network
- 4. Dynamic light regulation in the offices (Mymesh) including links to climate control
- 5. Modular emergency lighting system in the lobby and offices

These functionalities are remotely monitored and managed, allowing the end-user to respond proactively instead of reactively to changing needs and possible emergencies.

The system uses sensor technology to adapt to all possible circumstances, making it possible for brightness to be adapted locally whenever possible.

Temporary work in the warehouse for example, allowing the lux values to be increased locally (maximum lux value of 400 Lux in the lobby, 150 Lux more than is the standard).

Capella is an initiative by Stellar Development and has been made possible through a unique connection between innovative specialists, TRILUX, FiberUnlimited, ChessWise, and Inotec. The installation will be completed by De Groot.

The name 'Capella' refers to the appearance of four celestial bodies as a bright star.

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Capella is the technological breeding gradeveloped logistical worted today.

"Stop using the cables of yesteryear for the connectivity of tomorrow. This is a waste of materials, energy, time, speed, capacity, and money."



CEO, Steven Sleker, FiberUnlmited

"Stop using the cables of yesteryear for the connectivity of tomorrow. This is a waste of materials, energy, time, speed, capacity, and money."



CEO, Steven Bleker, FiberUnlimited

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Read more about Capella stellardevelopment.eu/capella



## Functionality



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### Security measures that give you peace of mind.

Ara Almelo has been structurally prepared for a TAPA certification (Transported Asset Protection Association). For example, the property has been fully fitted with concrete plinths up to 2.5 meters to reduce the risk of burglary. The destination's site will be closed off from the public road using 1.8m high fencing. Part of the fencing has been integrated into the characteristic ecological screen and parts are standalone along the site boundary. The entrance of the destination is secured using barriers with check points for visitors and drivers. The driving and walking routes of individuals are separated from the logistical driving route by a fence, which can be safely crossed in two places.

Functionality Functionality



### Warehouse

- Clearance height of warehouse: 12.2 m<sup>1</sup>
- Clearance height of shipping area: 4.6 m<sup>1</sup>
- Maximum warehouse floor load: 50 kN/m²
- Maximum floor load of the shipping area: 90kN
- Maximum floor load in the shipping area is 25 kN/m²
- Super-flat floor (Din 15.185, category 1)
- Sprinkler system: K25 for the hall roof grid, SSU sprinklers above the overhead doors and K14 above and below the mezzanine.
- 4 overhead doors on ground level (4.0 x 4.5m¹)
- 39 electrically-operated dock doors (3.0 x 3.2m¹) and dock levelers (2.0 x 2.5 m¹)
- Fire alarm and evacuation systems and fire hose reel carts
- Energy label A+++
- Warehouse brightness: 150-400 lux in accordance with Capella by Stellar Development
- Expedition light intensity: 150-400 lux Capella by Stellar Development
- Hall is heated with underfloor heating

### Mezzanine

- Clearance height of the mezzanine floor is 6.5 m<sup>1</sup>
- Mezzanine floor depth: 16.0 m<sup>1</sup>
- Maximum floor load mezzanine floor: 7.5 kN/m²
- Light intensity on the dispatch zone: 150-400 lux in accordance with Capella by Stellar Development
- Sprinkler installation in the roof grid of the foyer using sprinkler type K25

### Office

- Own central entrance to office
- Luxurious entrance on the first floor
- Includes pantry block and sanitary group per shipping office
- Data solution in accordance with Capella by Stellar Development
- Heating and cooling with VRF system.
- Light intensity offices/meeting rooms and office for the shipping department: 500 lux in accordance with Capella by Stellar Development
- Light intensity corridor: 250 lux in accordance with Capella by Stellar Development
- Light intensity circulation space: 100 lux in accordance with Capella by Stellar Development
- Light intensity canteen: 200 lux in accordance with Capella by Stellar Development
- Light intensity technical areas: 225 lux in accordance with Capella by Stellar Development
- Light intensity toilets: 100 lux in accordance with Capella by Stellar Development
- Sprinkler installation in the office: SSP K80 sprinkler

### Sustainability

- MPG score of approximately 0.35/m² business floor space/year
- BREEAM Very Good
- All-electric building installation
- Sustainable lighting concept in accordance
- Separate water drainage system
- Nature-inclusive
- Water buffer through the collection of rain water and use for irrigation system for façade plants
- Complies with EU Taxonomy regulation

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