

Nike

European Logistics Campus

*From zero-energy to energy positive
through innovative design*



JASPERS-EYERS ARCHITECTS



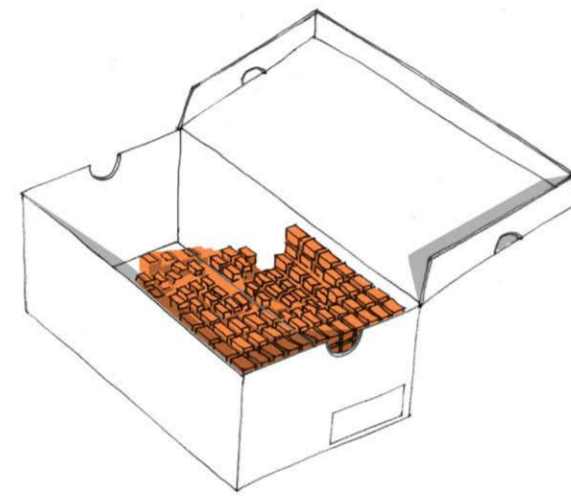
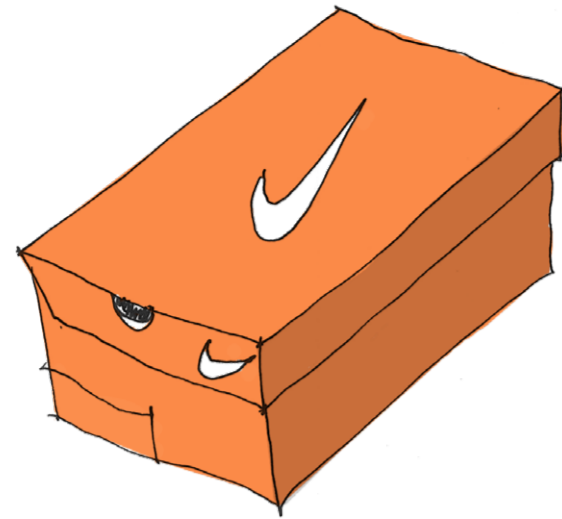
Design brief and site considerations

The NIKE European Logistics Campus is an administrative and logistics center with outsized proportions since the building with a total area of 195,216 square meters is 252 meters long and 125 meters wide while the cornice height is 45 meters. The administrative and logistics complex is spread over an area of 17.5 hectares and is designed to

provide the Nike products to distributors, retailers and online shoppers across Europe. NIKE European Logistics Center provides within a landscaped environment both industrial and storage quarters as well as state-of-the-art office areas.

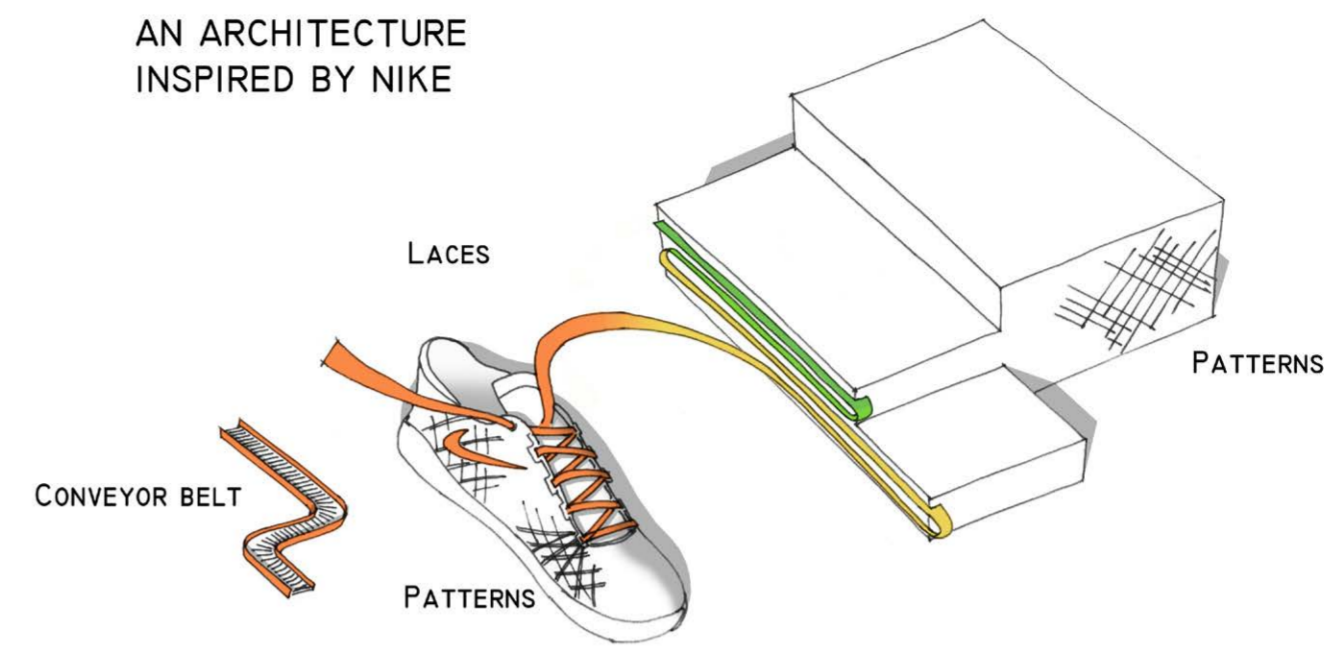
A wide variety of sustainable features are offered of which one of the most visually spectacular one is the 1.3-km long green serpentine along the west façade. Probably, the world's longest such hanging green façade, it provides 3,000 sqm of green façade which integrate useable

spaces for the people, sun protection and hidden emergency routes. The design has been based on three focus points: fossilfree operations, closed loop flows and a healthy and biodiverse environment and thus creating an example of sustainability.

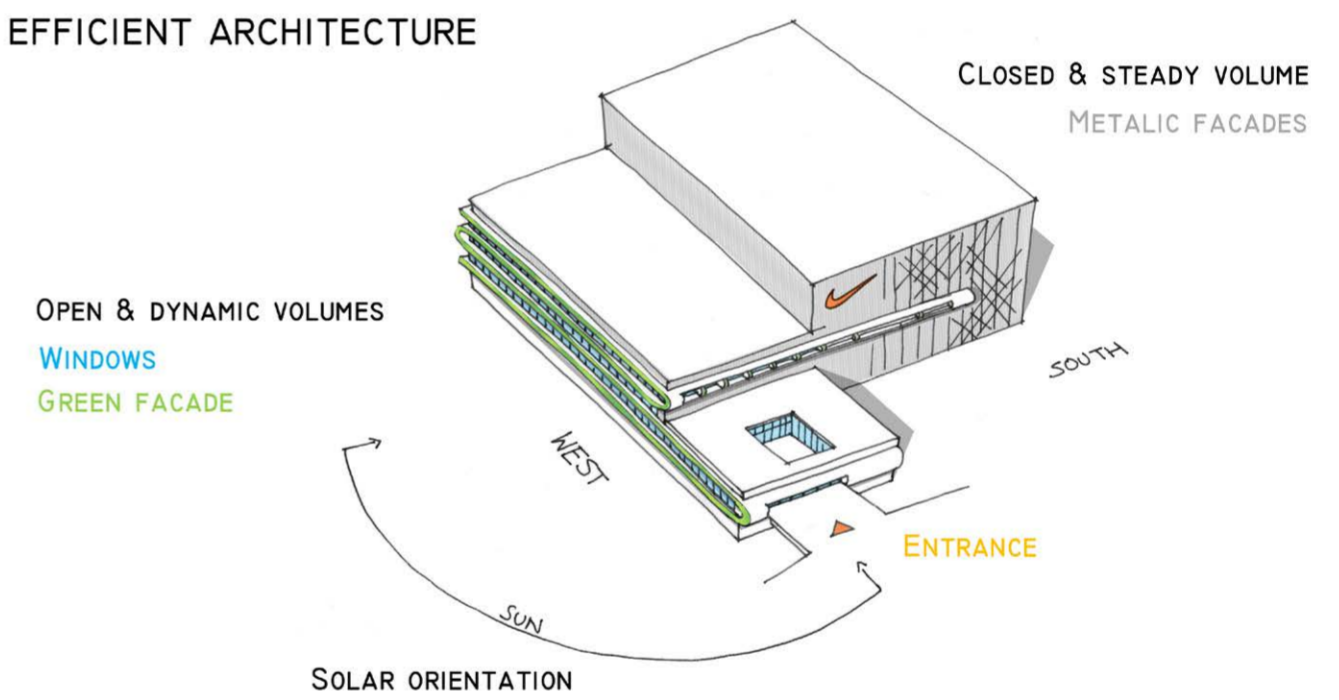


A BIG SHOEBOX.
Containing 5 millions of shoeboxes

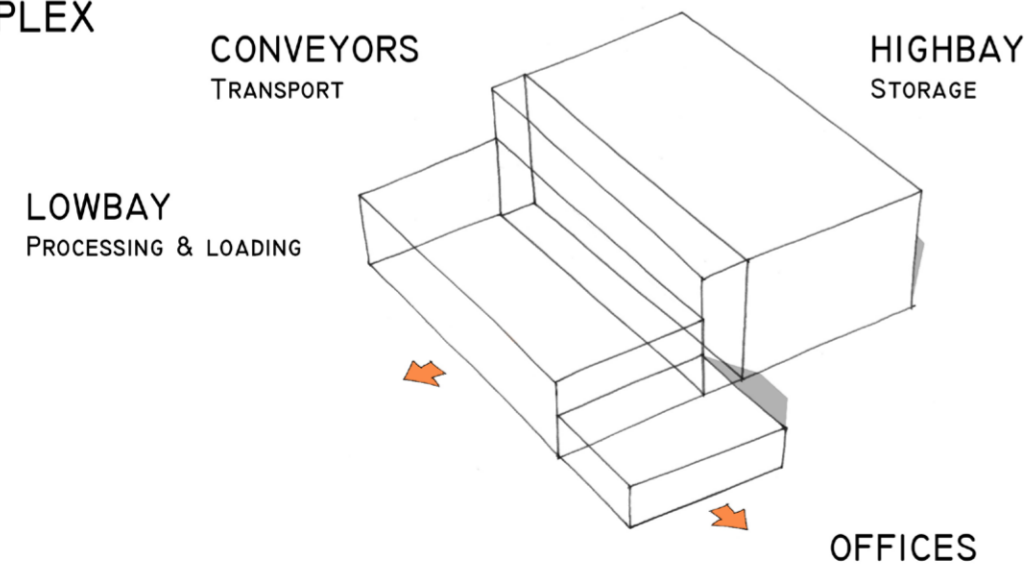
AN ARCHITECTURE
INSPIRED BY NIKE



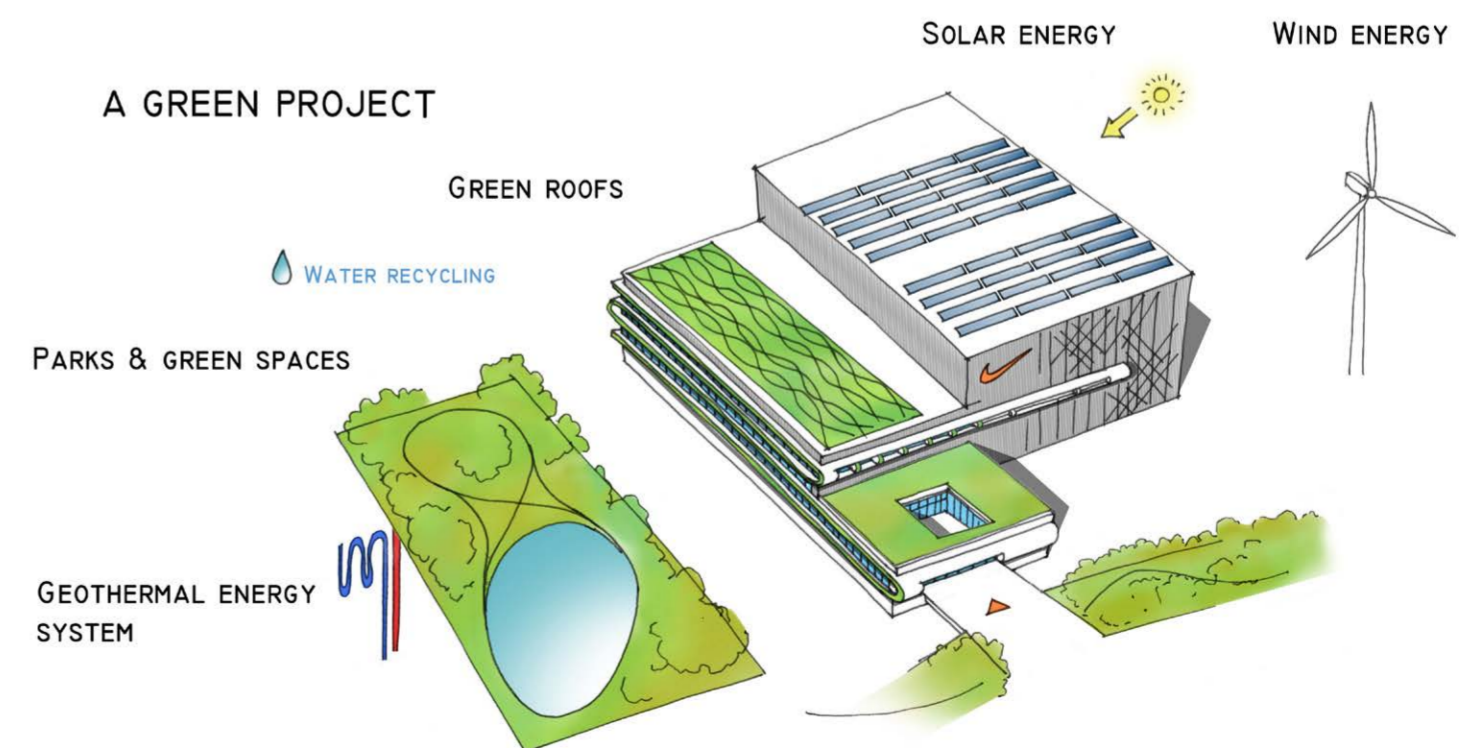
AN EFFICIENT ARCHITECTURE



A BIG COMPLEX



A GREEN PROJECT





WINGS
phase 1 - completed

Following the client's brief, the project aims at consolidating a series of sites previously located in several cities in Belgium and in The Netherlands. The location along the Albert water canal (and the E313 Motorway) and not far away from Antwerp, Europe's second-largest seaport, was a major decision in order to reach energy-neutrality for the now completed phase one and a project creating more energy than used for the second phase already under progress. The building is a perfect translation of Nike's philosophy. Waste and material use have been reduced on all fronts. Thus, the metal stack construction of the storage

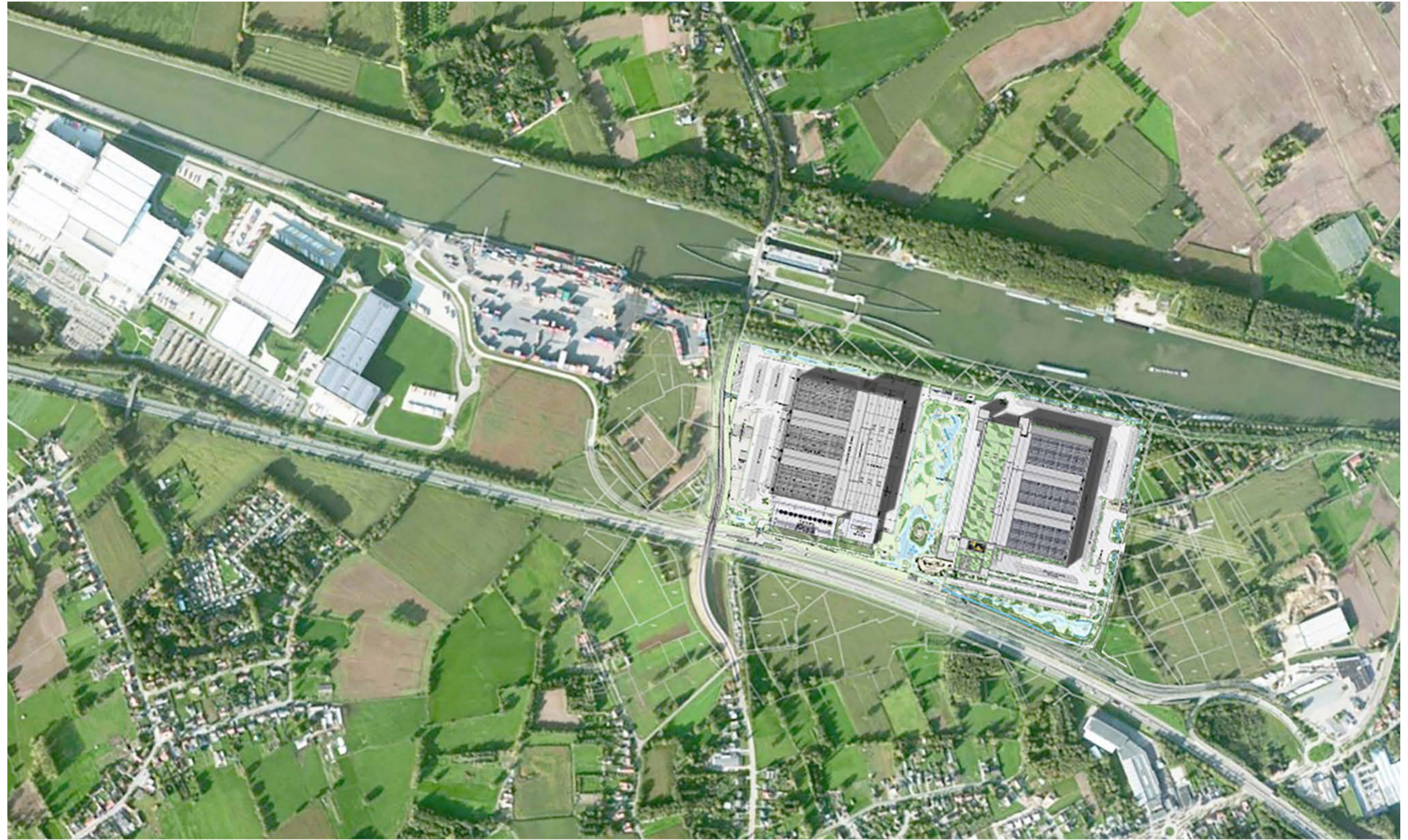
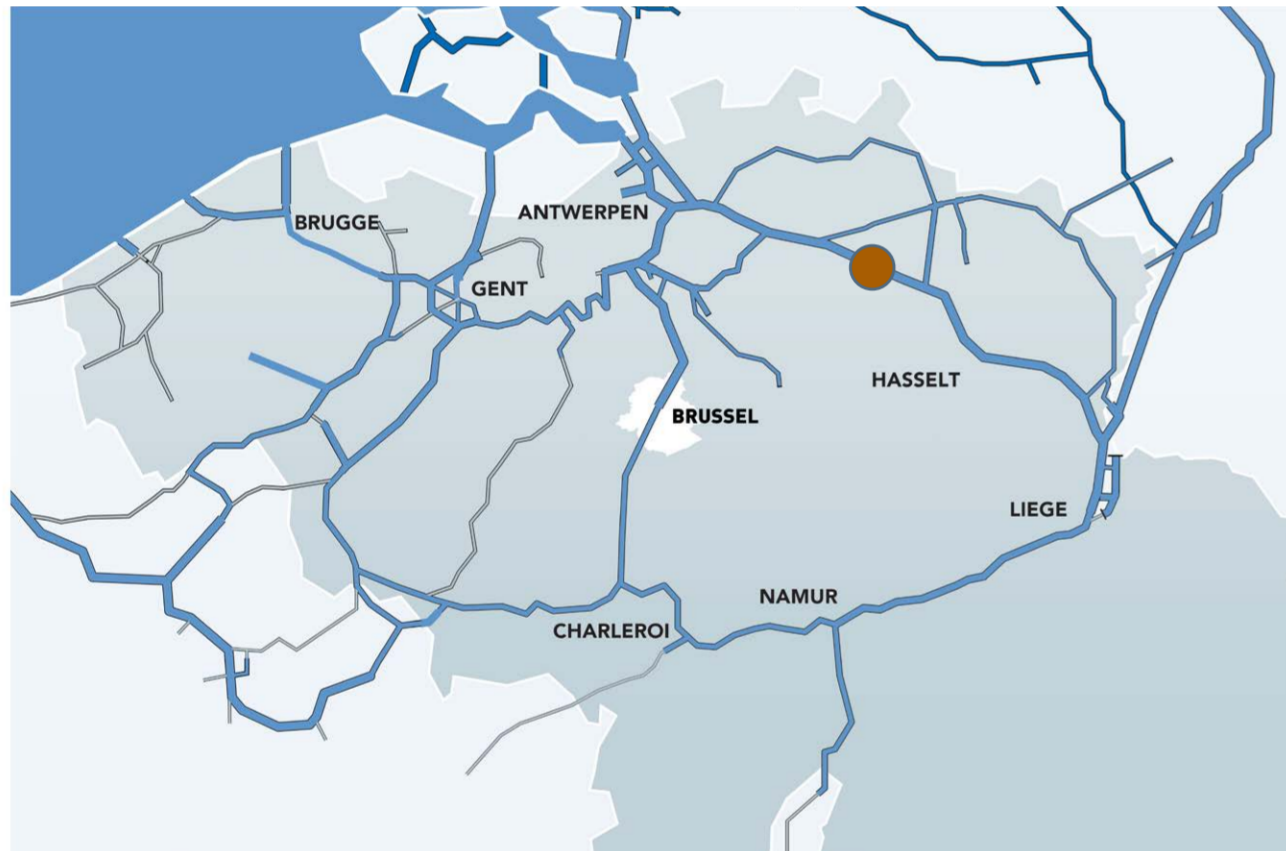
racks in the highest component of the building (the "Highbay") bears both the roof and the facade. The cranes that ride to and from the immense hall are hybrid: the braking energy is converted into driving force. The presence of the Albert Canal is put to optimal use: 99% of the goods containers are brought to the site by barging. The logistics is to serve Europe up to Moscow and from the start the project has been designed to become the "NIKE flagship logistics center" which now stands as standard to follow when designing/implementing new NIKE logistics center all over the world.

NIKE European Logistics Campus offers a wide variety of sustainable features as its design has been based on three focus points: fossil-free operations, closed loop flows and a healthy and biodiverse environment and thus creating an example of sustainability. The use of the sun, the wind, the water, the land and the biomass energy through sun panels (photovoltaic and heat), wind turbine, hydro power station, KWO (geothermal) and biomass power station as well as innovative uses of metal and cement combined with an overall design which integrates natural elements along the façade as a "natural" extension of a

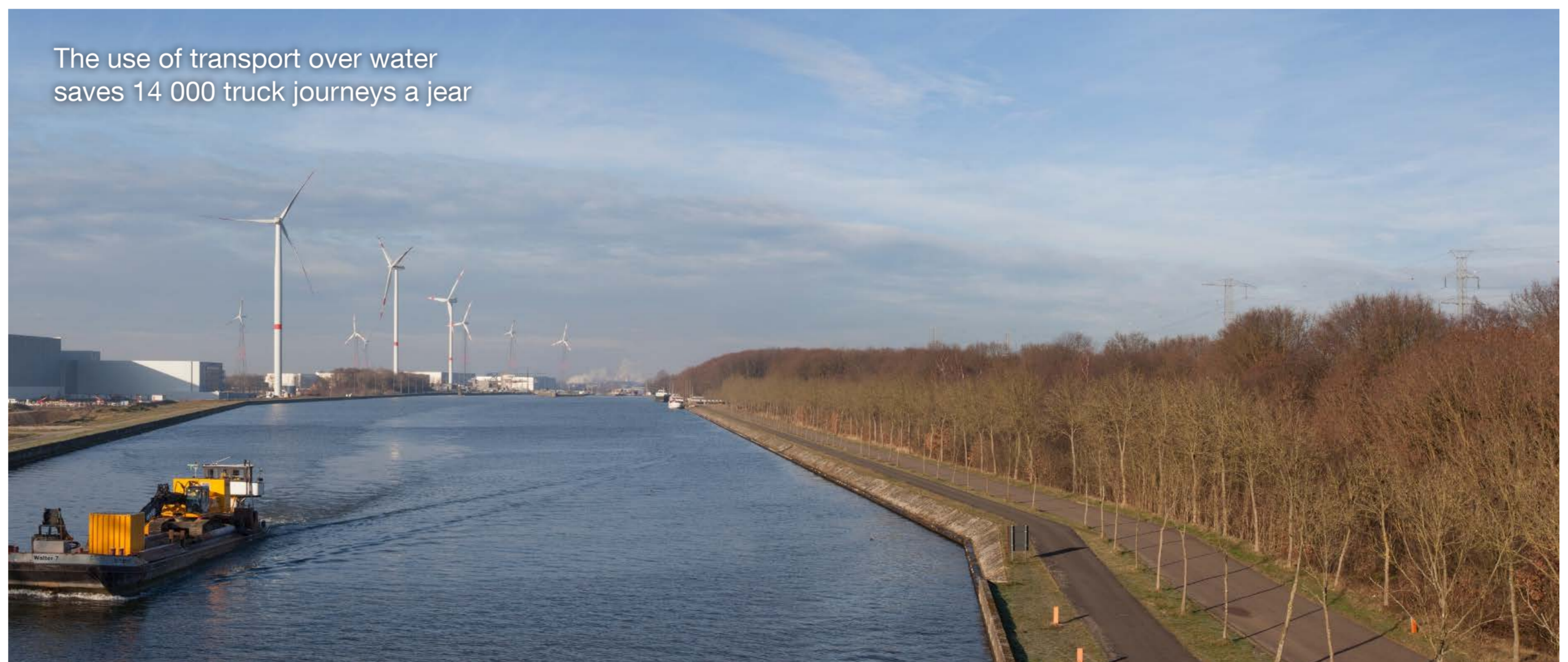
newly built landscaped park has created a logistics center unmatched among all the existing NIKE logistics centers and as such has become the benchmark within the NIKE group and some sort of "flagship NIKE logistics center" all the NIKE logistics centers being currently designed anywhere in the world should be looking at as example to follow. Considering the scale and size of the 252-m long building, the design/development team is especially pleased that the NIKE European Logistics Center has now become the flagship by which all other NIKE projects are being judged.



THE COURT
phase 2 - in progress

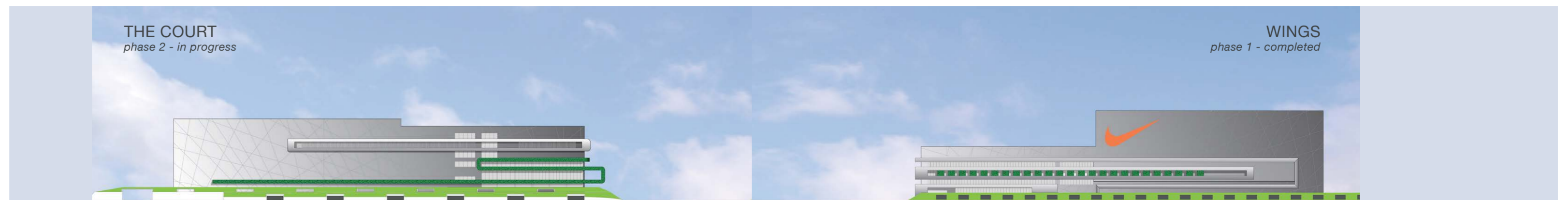
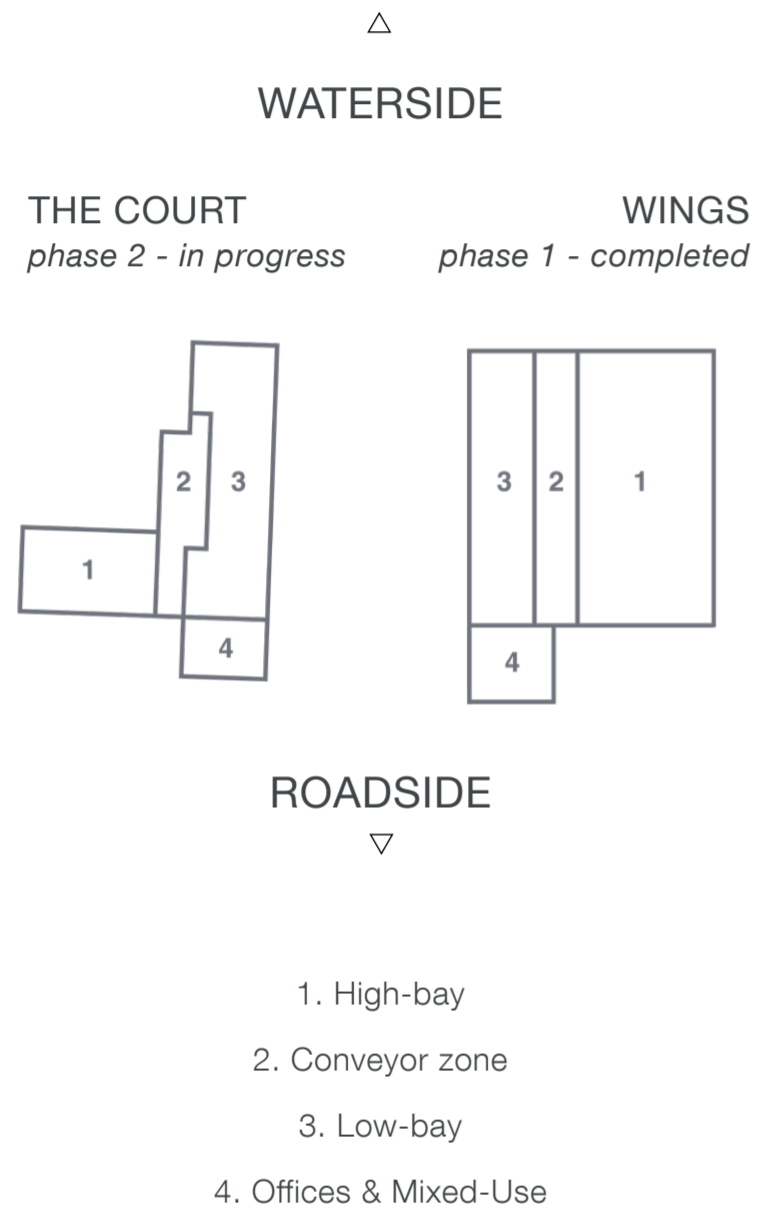


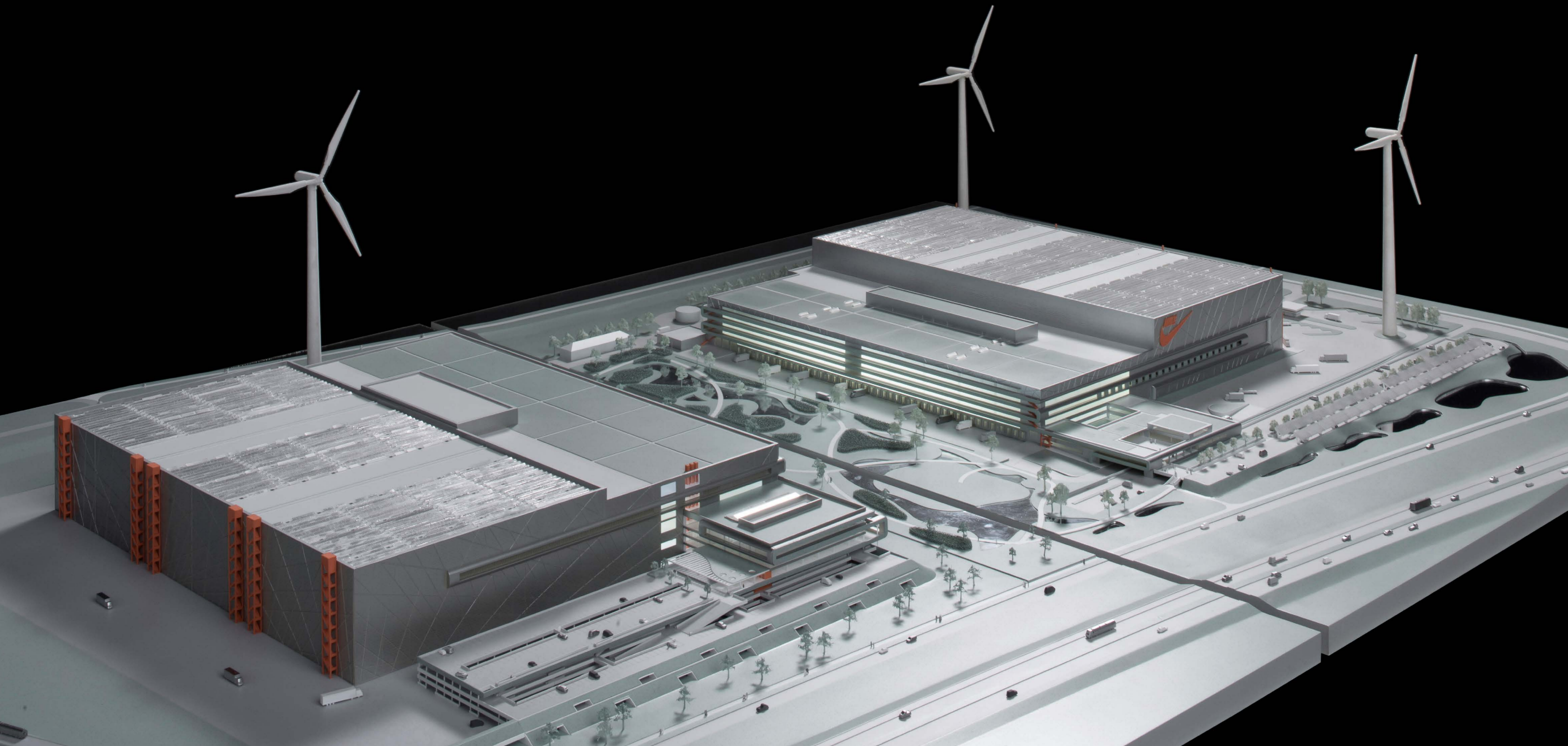
The use of transport over water saves 14 000 truck journeys a year



Location

Located next to the Albert water canal in Laakdal in between Antwerp and Brussels with easy access to E313 Motorway, the Nike European Logistics Campus consists of three distribution centres in Laakdal, a distribution center in Ham and a fifth one in Herentals. The NIKE Campus coordinates all logistical activities between 200 factories and 200.000 shipping addresses. All Nike shoes and clothes that are sold in Europe, the Middle East or Africa, pass through the European Logistics Campus first. 99% of the containers arrive to the logistics center via the next-door Albert water canal.





Architecture and use of space

The Nike European Logistics Center has been designed as a “green industrial campus”, built around a central green space on the west side. This green park has an area of 46,666 square meters and serves as a green lung in the campus. The 30,566-square-meter high volume HIGH BAY building is composed of blind walls taking into account the function of “storage silo” of HIGH BAY. The 107,140-square-meter LOW BAY building located on the west side (central green area) and south (parallel to the E313 highway)

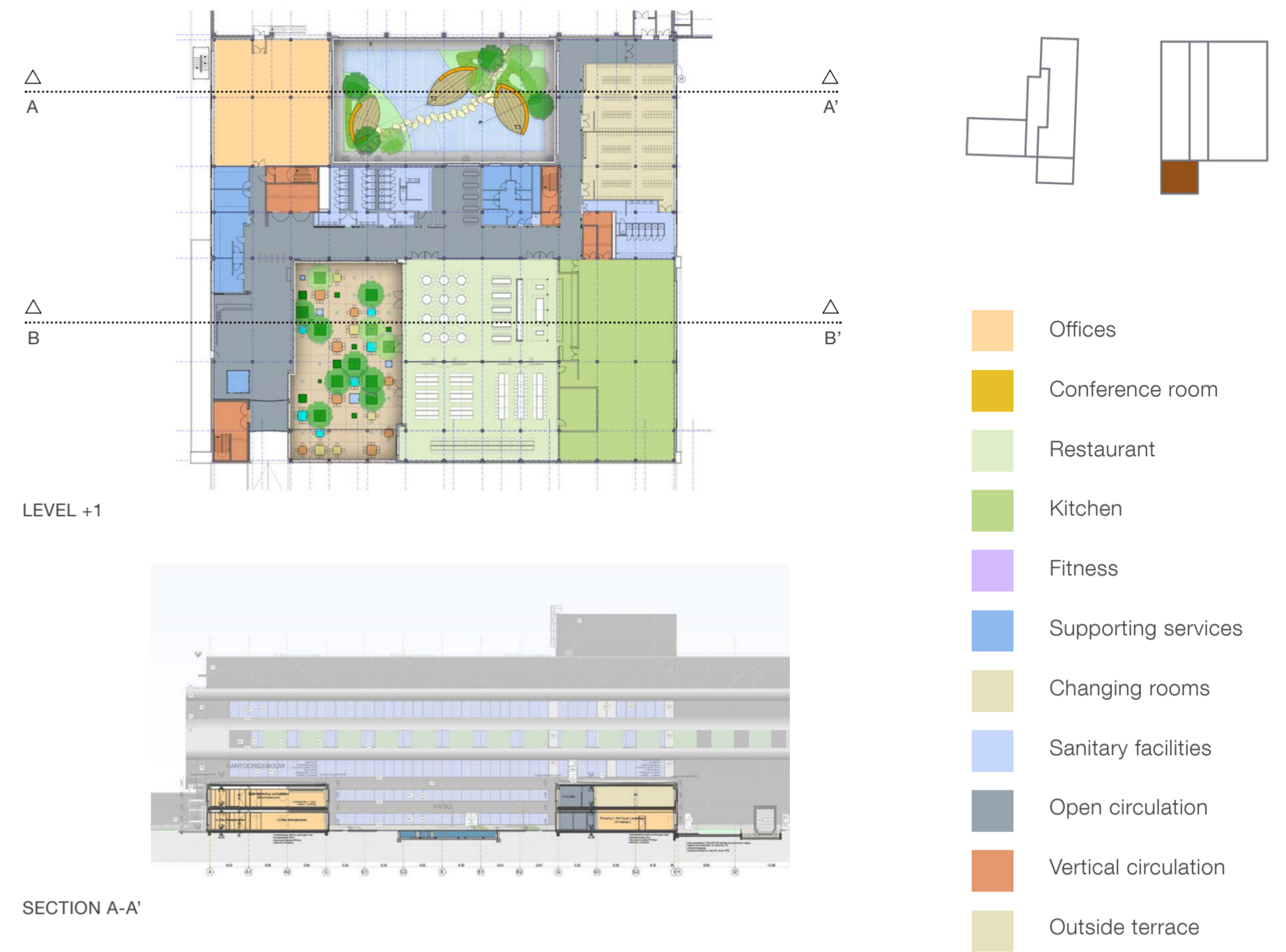
has a widely breakthrough continuous horizontal windows facade. It is in the LOW BAY building that the products are sorted, labeled and packaged for shipment by shipping docks or stored in the HIGH BAY building. Facing the E313 highway, the 5,175 square meters of offices are located on the south side and form a 2-storey lowrise building. The green façade of the office wing continues along the west side of the building to form a link with the green central area.



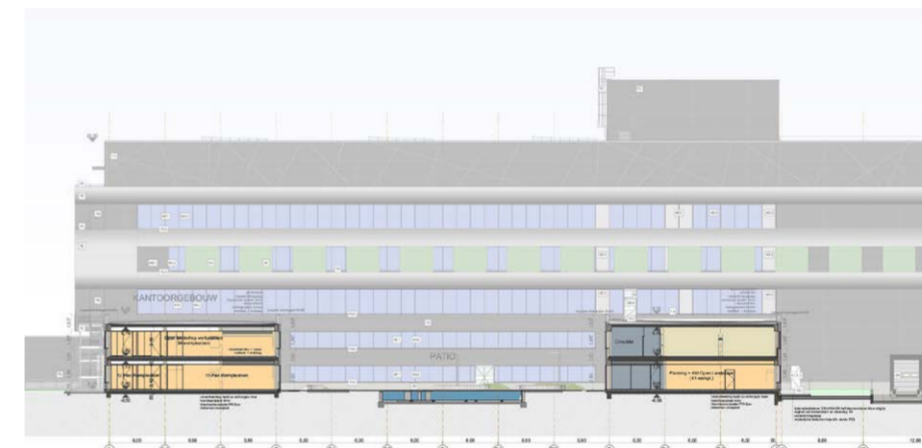




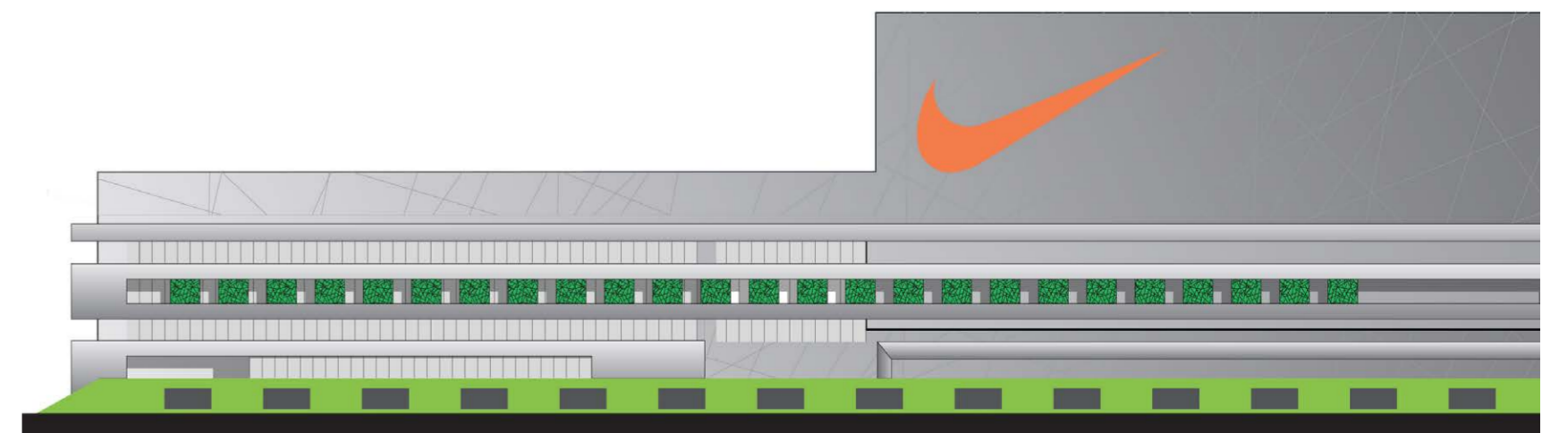
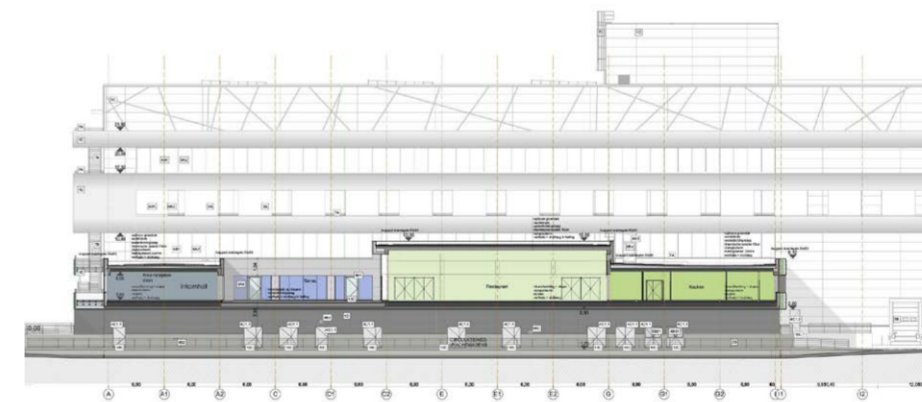
WINGS



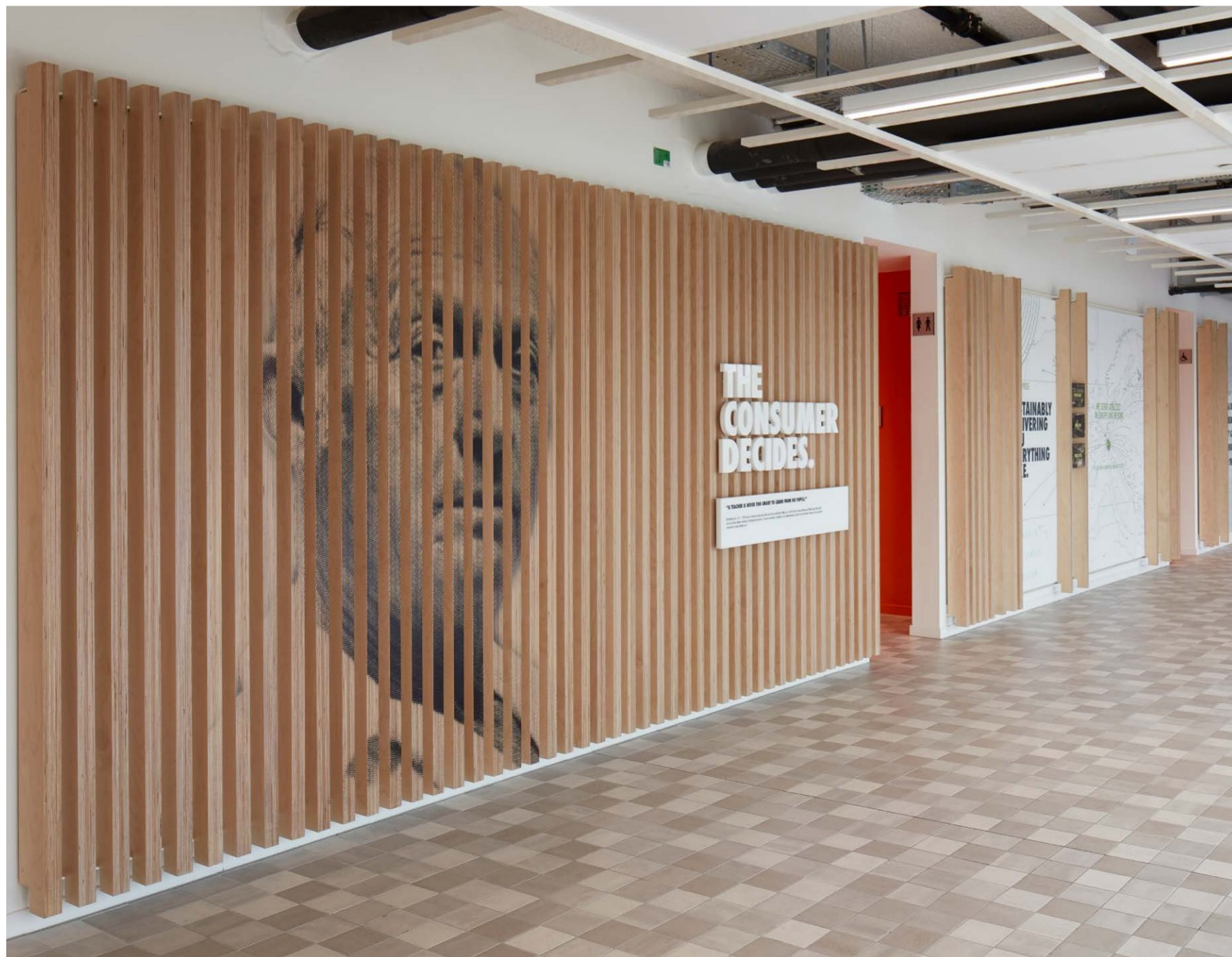
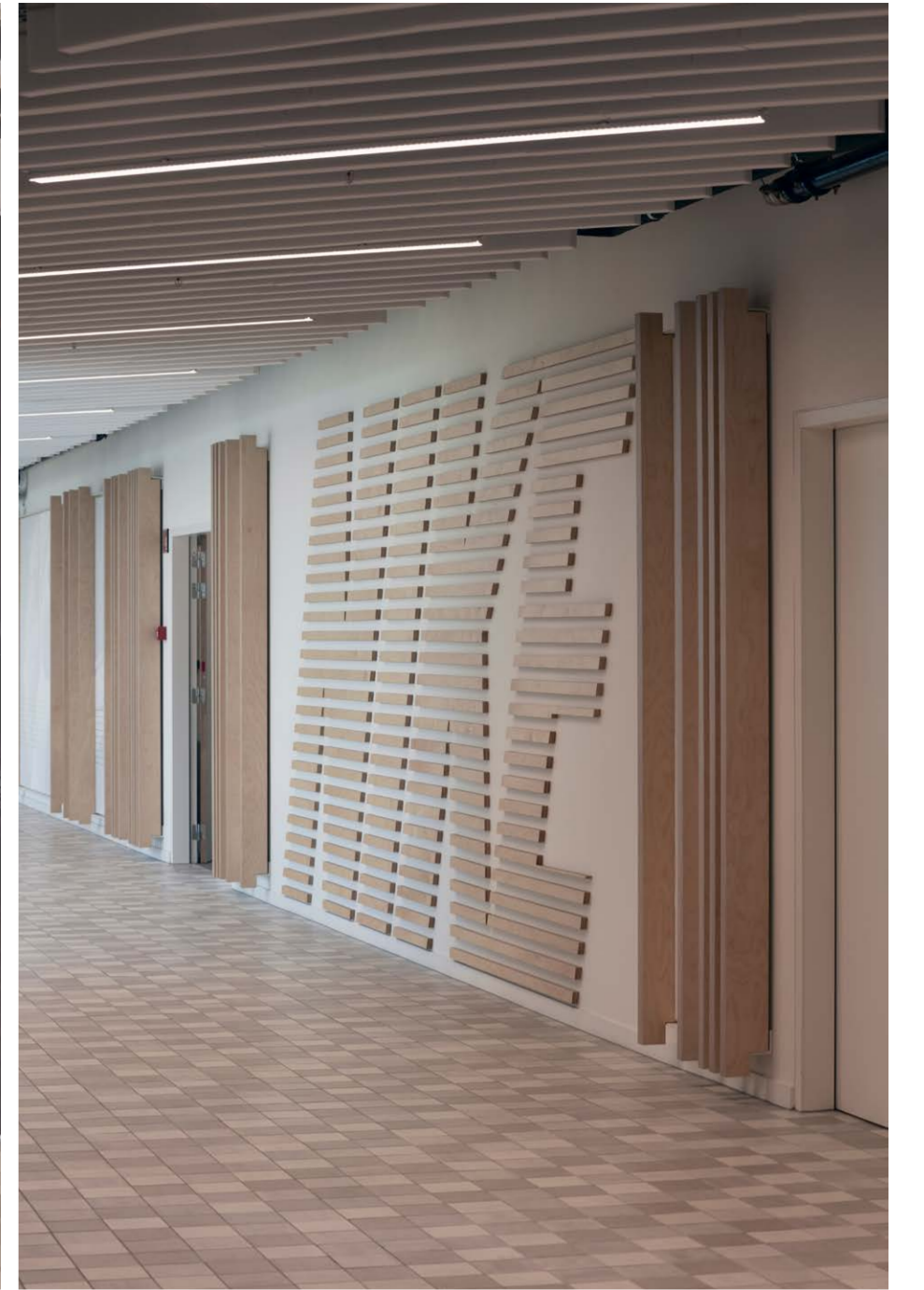
SECTION A-A'



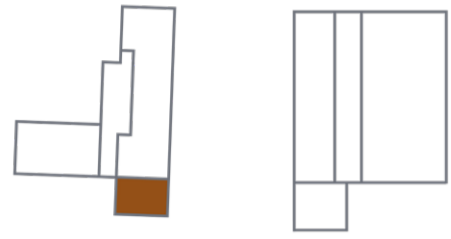
SECTION A-A'





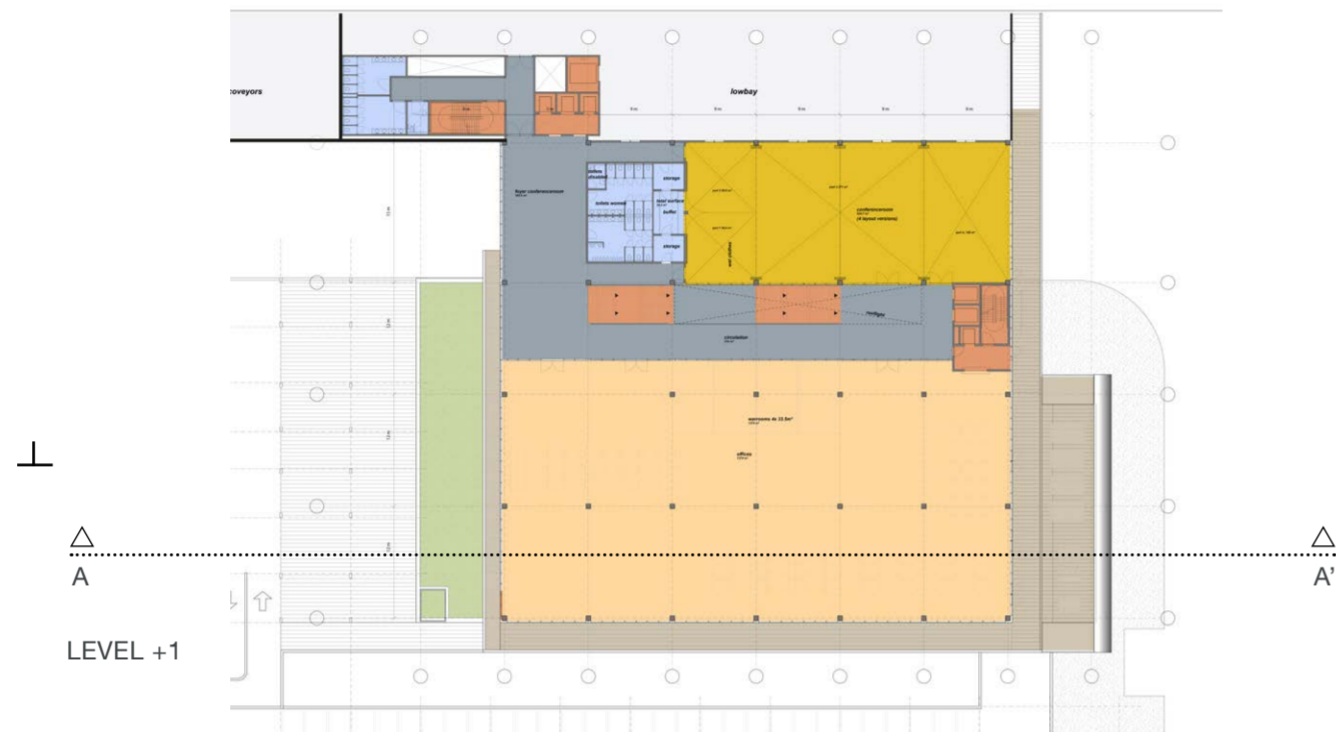


THE COURT



SECTION A-A'

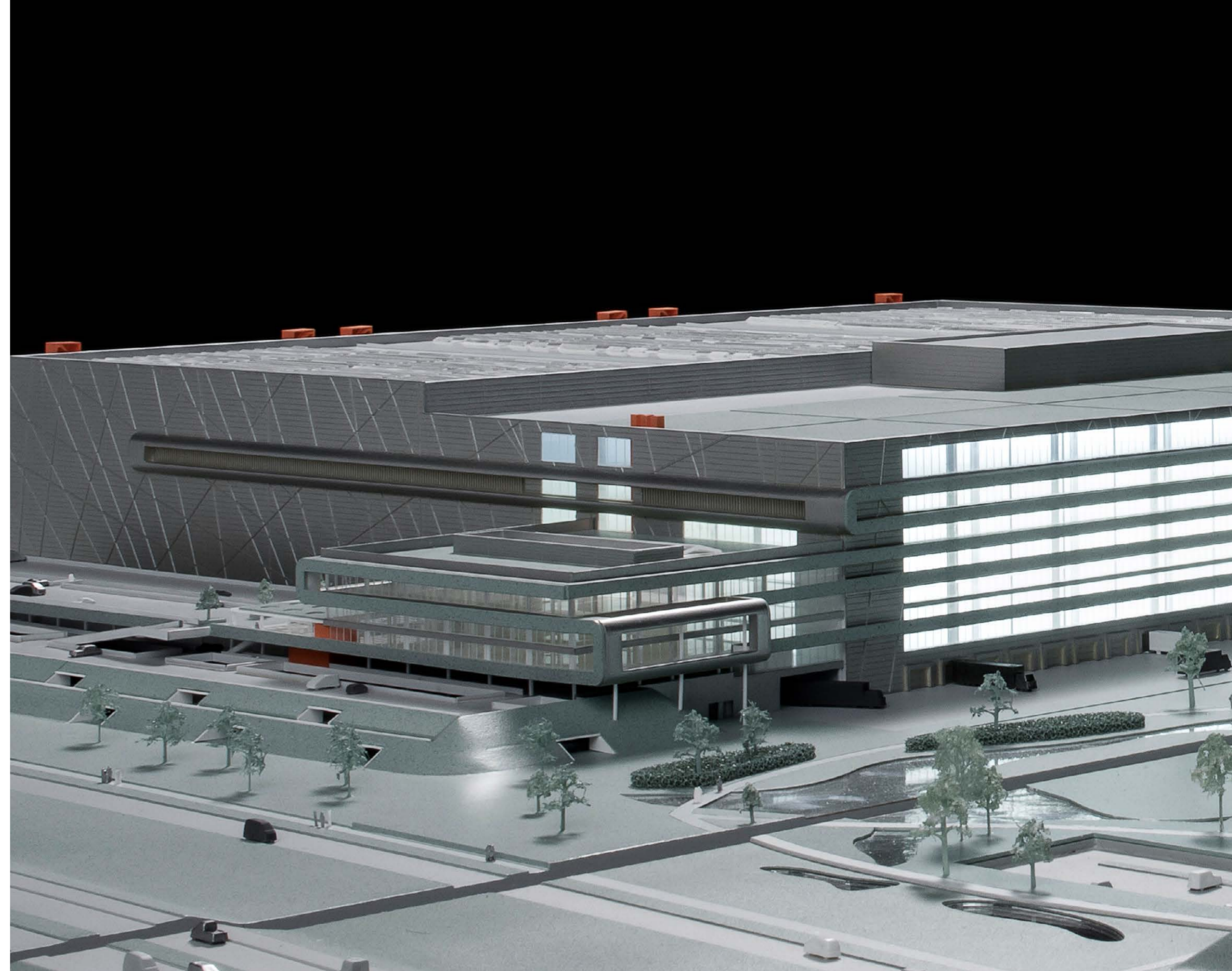
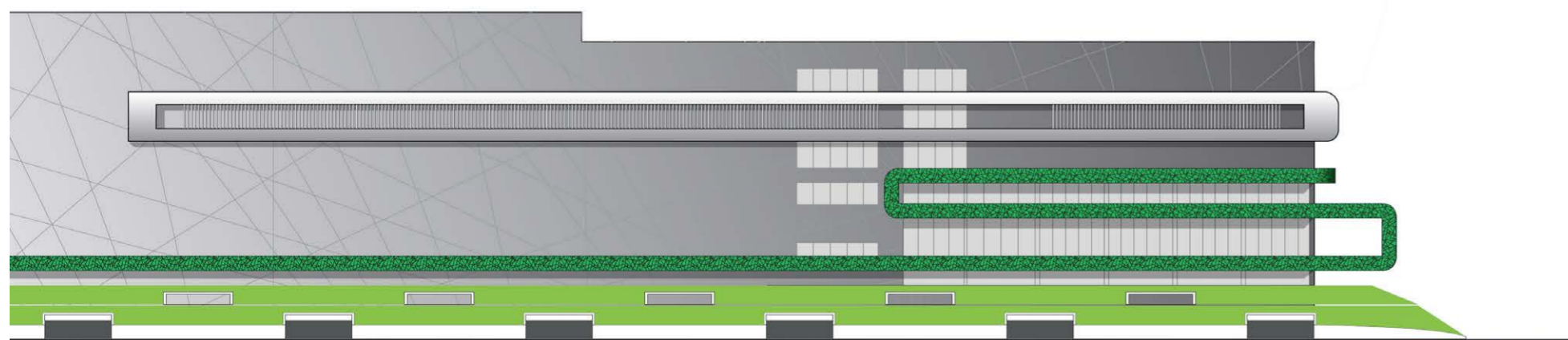
- Offices ■
- Conference room ■
- Restaurant ■
- Kitchen ■
- Fitness ■
- Supporting services ■
- Changing rooms ■
- Sanitary facilities ■
- Open circulation ■
- Vertical circulation ■
- Outside terrace ■



LEVEL +1



LEVEL +2







Sustainability, Energy conservation and Innovation

E1

List all materials, design and construction elements that reduce the building's energy consumption

The design of Wings I has been based on three focus points: Fossil-free operations, closed loop flows and a healthy and biodiverse environment and thus creating a shining example of sustainability.

Focus on using less materials in the first place, and reduce the materials life cycle impacts by looking at recycled, renewable or CO2-based materials.

Wings' design focuses on integrated design needing less materials in the first place, and then on reducing the materials' life cycle impacts.

Use simplification and lightness as a guiding design principle and aim to reduce the amount of materials needed: for instance clad rack building for high bay.

Recycled materials: thermoplasts or composites from recycled polyester or cotton apparel and foam, thermoplasts and flooring elements from Nike Grind

CO2-based building materials. CO2 based polymers, bio-composites, structural wood elements.

Using these materials visually prominent will have an inspirational and educational effect on employees and visitors. For the operational processes in the buildings cartons use accounts for a large part of the operational carbon impact of the current Nike DC. Wings reduces this impact by increasing packaging reuse in its process.

E 2A

List any environmentally friendly and sustainable construction materials and techniques used

All buildings are ventilated, naturally for the Highbay were no people are working (only storage). In the Lowbay and Offices all ventilation is done air handling units who are equipped with F7 and F9 filters, heating and cooling batteries (connected to KWO), with heat energy recuperation unit, with humidification and dehumidification to obtain a humidity control between 40 and 70%. The air rates are also calculated to obtain an IDA class 1 (highest classification). To ameliorate the air quality and the energy consumption, the air intakes are orientated towards the main wind directions. All exhaust air is located at more than 12m of each intake and in the opposite direction of the main wind direction.

The wellbeing is also ameliorated by maximizing the daylight factor and concentrate all working space in daylight areas. Concerning the thermal comfort, the PMV simulation gives a comfort rate between -0.5 and +0.5 what means that less than 10% of people will be dissatisfied. For the future, 50% of the land is to remain free of any construction in order to allow the newly built landscaped park to grow as scheduled and remain a useful amenity for all the NIKE employees.









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