



**LNK INDUSTRIES**  
LNK GROUP

**REVIEW**

20**17**

16



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**REVIEW**  
20**17**  
16

# EVENTS

# 2016/2017



### Riga HPP dam works

LNK Industries performed the reconstruction of the right-bank drainage system of Riga HPP with the change of road equipment and the reconstruction of low-power and stormwater drainage networks under the contract with the state companies AS Latvijas Valsts Ceļi and Latvenego. Traffic intensity at Riga HPP dam is approx. 9,000 cars per day, and no impact is allowed on the structures and equipment of the HPP during the work. This is the second project of LNK Industries at Riga Hydro Power Plant so far: Previously, the complete overhaul of the part of Riga bypass road Salaspils-Babite (A5) has been made.



### Ventspils promenade and berths

The promenade (length - 1.1 km) of Ventspils Port built more than 20 years ago and being the hallmark of Ventspils has been fully restored, comprising five berths on Ostas str. Load-bearing metal structures and concrete fencing were renovated, the reinforced concrete berth superstructure and metal cap wales were renovated, and also riverbed work was carried out. The operations were carried out on the shore and underwater using special pressure-tight chambers and divers, in difficult weather conditions and even in the winter.



### Crossing Jurmala Highway on foot or by bike

Another new pedestrian/bicycle bridge granted a safe intersection of the highway from Babite station to the village of Pinki. The bridge span consists of a 3-part steel framework 78.24 x 3.67 m manufactured at the TTS factory and supported by steel cables. The bridge was precisely erected almost without stopping traffic on the highway, and meets the high requirements for durability, as it features concrete with high frost and aggressive environment resistance.



### River Breeze Residence on the riverbank

An exclusive residential complex in the centre of Riga - River Breeze Residence - has been topped out. This is the first building of the coastal district Kliversala designed for Pro Kapital Latvia. Its feature is a combination of water and green environment and, therefore, LNK Industries will show its professionalism not only in arranging a strong foundation and two underground floors of the building in the immediate vicinity of the river, but also in landscaping the roof and terraces. The building will feature 48 flats with floor space ranging from 56 to 316 square metres, overlooking the panorama of Old Riga and the river.



### Baltijas Industriālais parks – III stage

The next stage of development of the Baltic Industrial Park (Baltijas Industriālais Parks) at 7a Piedruyas Street is completed by the order of LNK Properties - a commercial real estate management company, which is a part of LNK Group. The park is located in a convenient place at the junctions of the Southern Transport System and provides tenants with complete and ready-to-use industrial, commercial and storage facilities with landscaped premises: parking, bike stands and benches.



### The most youth-friendly district in Riga

The Central Sports District at 116a Krisjana Barona Str. has appeared instead of the abandoned stadium of the University of Latvia. On a total area of 4 hectares, 7,000 sq. m. belong to one of the biggest playgrounds for children. The block has tracks and trails for cycling and roller skating, a football pitch with a race track, courts for basketball, beach volleyball and street workout, a sector for long jumps, equipment rental centres, toilets and changing rooms. The entire premises have a CCTV and lighting system.



### Renewed Daugava stadium

Western tribunes of the Daugava stadium will be rebuilt for the All-Latvian Song and Dance Festival 2018. The number of spectator seats will be increased to 10,000. And, before 2022, multifunctional buildings in the cultural and sports district funded by European organisations will be completed. Thus, the Daugava stadium for athletics events and football matches will become one of the largest investment sites in the modern history of Latvia, which is worth more than EUR 47 million.



### Klaipeda Port overpass

Built by AS LATVIJAS TILTĪ and Kauno keliai, a 330-metre-long overpass in Klaipeda on Njamuno str. connected the premises of Klaipēdos Smeltē with the city road network, eliminating traffic jams at the entrance to the port and cost 27% less than the project of the closest competitor, although there was a total of six competitors. The construction of the overpass was carried out on a special schedule considering traffic on five railway lines. All this is done in less than a year. For the structure, 550 t of metal was used, and constructing floor slabs took 3,296 cubic metres of concrete.



### Energy Management Certificate

LNK Industries is the only construction company in Latvia to implement the energy management system ISO 50001:2011. This allows the efficient use of energy resources and lowers their costs. Previously, the Group's companies implemented quality control systems in the field of management and environmental protection.



### House of Science of the University of Latvia

The second of the three future buildings of the LU Academic Centre at 1 Jelgavas Str. in Riga will become a place of work and study for 430 scientists and teachers of physics and mathematics and medical faculties and 2,000 students. Seven floors of the building will house a laser centre, a museum of medicine and six institutes: the Institute of Astronomy, Institute of Geodesy and Geoinformatics, Institute of Physics, Institute of Atomic Physics and Spectroscopy, Institute for Mechanics of Materials, and Institute of Cardiology and Regenerative Medicine. Investments will amount to EUR 38 million, with the project commissioning scheduled for 2019.



### Mezaparks Great Bandstand will be renovated

Right before the upcoming anniversary All-Latvian Song and Dance Festival, the Mezaparks Great Bandstand will have more capacious spectator stands, so the amphitheatre's height will be 11.5 m. The project of national standing should be ready by 18 June 2018. It will feature new electricity and water supply utilities and roads. Spectator stands for 30,674 people are being built on a strong foundation with 2,196 piles driven into the ground.



### New Life of Riga Art Nouveau

In December 2017, the historical project in the centre of Riga was commissioned - a true pearl of Art Nouveau located at 5 Alberta Street. The project has been highly appreciated by the customer: While maintaining an authentic internal and external architectural solution, the selection of finishing materials of the appropriate historical era allows the building to provide comfort and energy efficiency of the 21st century.



# From the Council of LNK Group

LNK Industries is one of the few or even the only all-round construction companies in Latvia.

## ALL-ROUND BUILDER

There are companies that specialise in some types of work, but LNK Industries can handle everything.

Created as an innovative general contractor, LNK Industries initially engaged in infrastructure projects, quickly adding industrial construction of turnkey facilities and civil engineering to its competencies, up to such exquisite tasks as a restoration of cultural and historical monuments. All these spheres complement each other because even in restoration it is sometimes necessary to use the unique skills of our experts, for example when constructing an underground floor under the hundred-year-old building or restoring its load-bearing structures.

In infrastructure construction, LNK Industries is engaged in both land (motor roads and railways, bridges, overpasses and tunnels) and marine facilities (piers, mooring walls, dredging work). As for the industrial and civil sector, we build factories, public buildings and residential houses as well as engaged in their reconstruction and restoration. In addition, we specialise in the construction of all kinds of foundations, including piled

foundations and foundations with underground floors and effective waterproofing.

Recently, we've gained a new competence – the construction of open-air structures: stadiums, concert stages and sports grounds. In 2017, the largest project of this kind appeared in Riga - sports district at Krisjana Barona Str., and in 2018 we will complete the reconstruction of the Mezaparks Great Bandstand and Daugava stadium for the Song and Dance Festival in celebration of the 100th anniversary of the Republic of Latvia.

The distinctive feature of such projects is that the site should be arranged in such a way as to be operated at any time of the year under the open sky and withstand precipitation, temperature drops and so on. We were the first to implement it in Latvia and presented Riga several public school stadiums, with race tracks, tennis courts, and playgrounds for sports games both with artificial and natural surfaces. My soul rejoices when I pass by this site and see how adults and children are engaged in sports in their free time.

**Alexander Milov**  
EngD, Chairman of the Council  
of LNK Group

**Artyom Milov**  
Chairman of the Board  
of LNK Group

**Vadim Milov**  
Vice-Chairman of the Council  
of LNK Group

“My principle and rule: to invent new things. There is a place for an innovative solution in many elements of work, even when everything seems standard.”

#### PRODUCTION COMPETENCIES

Competencies enhance the versatility of the company because LNK Industries is able to independently design and manufacture many types of the materials, designs and even complex mechanisms: reinforced concrete structures, construction and bridge steel structures with a variety of working (from dozens of welding and 3D milling types to painting) and complex geometry, conveyor systems and non-standard equipment.

At the same time, this department also performs structural and engineering designing. There is a design bureau at the TTS plant with two dozen qualified employees developing the equipment for the sites under construction and fitting it to the existing site so as to optimise all production processes and logistics chains and ensure efficient operation of the customer's enterprise.

The trend in recent years has been design-build projects: The tender is announced on the basis of a preliminary design, and the contractor must then approve and execute the working project. We already have more than a dozen of such projects at our disposal, and each of them had unique features and demanded a solution of unprecedented engineering problems. This is an interesting and creative field of activity for the engineering and technical team of LNK Industries.

The top class of comprehensive works is a turnkey project such as a plant or a port terminal with buildings, process galleries, equipment, cargo and product transportation systems, automation and monitoring. Regarding this category of projects, LNK Industries was involved in the construction of energy and ecological sites, woodworking facilities and, of course, fully automated and multi-purpose port and storage terminals.

#### INNOVATIONS

I am convinced that the only competitive advantage today is the introduction of innovation and the search for an innovative solution. It's always there. It is impossible to win a tender otherwise. Everybody has qualifications, and it is possible to surpass competitors without lowering your price only by offering a modern and creative approach, for dumping is unacceptable for a large company – it is a way to nowhere.

My principle and rule: to invent new things. There is a place for an innovative solution in many elements of work, even when everything seems standard. The process of workflow management is very important. It is always a series of measures. Productivity wouldn't go sky-high if people ran faster or smoked less, but rather when they are properly organised and incorporated into modern technology. There are many examples of such technology: the standard concrete gains strength in 24 days, but the special concrete gains it in 22 hours. Formwork and new approaches to the installation of floor slabs allow passing to the next stage of the project faster - sometimes it's only a matter of percentage, and sometimes they allow to pass to the next stage several times faster.

#### KEY RESOURCE

LNK Industries performs most of our contract works involving our own companies or loyal and proven subcontractors. Our own companies do the key things on which the success of the case depends. And when I talk about the team, I mean the following: If we have a complex project, we create a group of our specialists managed by the representative of the general contractor – LNK Industries – that works with the customer and is responsible for project promotion, commissioning and external



#### EXPORT MAP

LNK Group exports products and services to Finland, Germany, Italy, Denmark, Lithuania, Russia, Belarus, Kazakhstan, Turkmenistan, China and Japan.



# LNK GROUP HOLDING COMPANY

The Group consists of 24 enterprises divided by three strategic fields

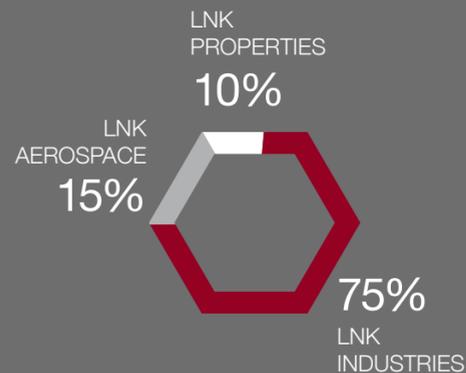


2017

# 1,000+

EMPLOYEES

EMPLOYEE  
DIVISION  
IN LNK GROUP



«I firmly believe that, in order to achieve something, one needs to do more than what is necessary.»

communications. These are just engineering staff members. The project manager supervises people from our own and involved subcontractor organisations (LATVIJAS TILTI, TTS, LT Piling), who are already working at the site.

For the entire process, the following crew is responsible: a project manager, two foremen and a file clerk. ISO, procedures and protocol are not empty words for us, but rather a way to organise the work in an optimal way and ensure transparency of processes and interchangeability of people involved. Therefore, we do not undertake small projects: whether large or local, a construction site still employs a full crew, but it is ineffective on a local scale.

Another distinctive feature of LNK Industries is the use of our own technical base and specialised construction machinery and watercraft. Machinery counts hundreds of units. We recently bought a unique 250-tonne hoisting crane.

Self-reliance greatly facilitates the task of risk management, and we are constantly following this, expanding our competencies. For example, we haven't performed enabling works and constructed pile foundations for a long time. That is why LT Piling was established and equipped with its own pile drivers and drilling devices. We try to keep the key resource in our hands. Therefore, we work steadily and for the long run: in the beginning of 2018, almost all the available portfolio of orders was full. More than 1,000 people are provided with work, which is extremely important for us as a socially responsible company.

Today, LNK Industries plays in the highest league of the industry, steadily maintaining a turnover of over EUR 100 million per year. We have reached beyond Latvia by gaining a foothold in Lithuania and Estonia, we work in Russia and now also in the Northern European market. In Lithuania, our company employs more than 100 people.

## DELIVER MORE THAN OTHERS

The production in any country of the world is a laborious and risky business. However, entrepreneurship comes with a risk. It can be reasonable or unreasonable, and the dividing line is so thin you need to feel it.

We often undertake new and risky tasks. For example, telescopic airstairs for the airport. We had never done that before, but we managed to get the job done perfectly!

I am convinced that, in order to achieve something, you need to surpass yourself, to jump over your head. An element of reasonable risk is necessary; otherwise, there will be no success. There are people who constantly invent problems. On the contrary, I believe that there are no problems - only tasks that need to be solved. At briefings, I forbid making excuses and speaking about why something hasn't been done one way or another. We may only talk about what has been or will be done to make everything happen. It seems very important, if not the most important thing to me. Together we find solutions to difficult tasks, think, read, consult, engage experts and learn. It is not a problem in our time – we live in the open world.

Sometimes, upon the completion of the projects, it is the customers who give us gifts, and not the other way around. Such signs of gratitude are always very pleasant. And inventing, thinking and creating are very interesting things. I am sure that the team of LNK Industries thinks the same way because we are all like-minded people. ●

Sincerely,  
Alexander Milov,  
Chairman of the Council of LNK Group, EngD

# HEAD OFFICE

LNK INDUSTRIES  
REVIEW 2016/2017



# From the Board of AS LNK Industries



**Artyom Milov**  
Chairman of the Board



**Evgeny Lotsov**  
Member of the Board

## VALUES, MEANING, GOALS

Dear partners, colleagues  
and friends,

By establishing itself among the leading companies in Latvia as an innovative general contractor, LNK Industries began the year 2018 with the defining of the brand's values. It is a kind of philosopher's stone of our work - a reference point and a benchmark for employees, an expression of the approach to business and its purpose. Yes, the result of our construction and production activity is expressed in material sites and figures of reports. But for the people, the years of our work, our findings, solutions and

achievements become the meaning of life. We can be proud of our cohesive and professional team - our specialists and core workers who plot unique structures of the 21st century on the region's map year after year. Modern university buildings, stadiums, port terminals, bridges, the Mezaparks Great Bandstand in Riga - all these are biography pages of LNK Industries and every person involved in these projects.

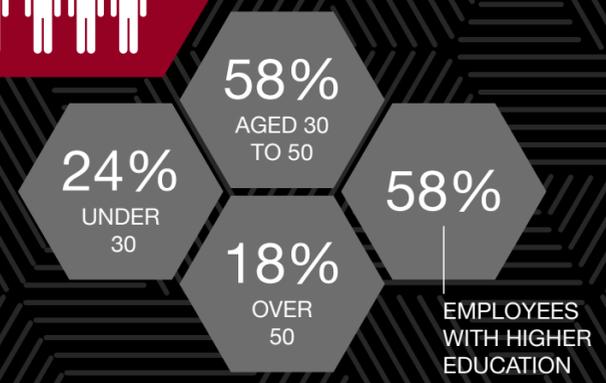
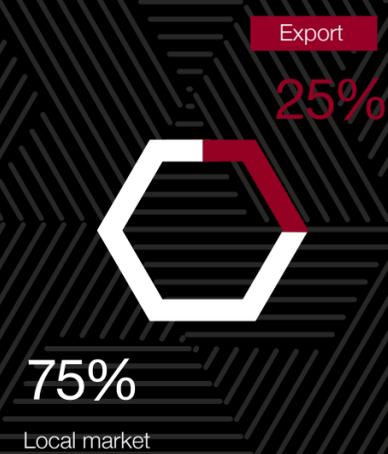
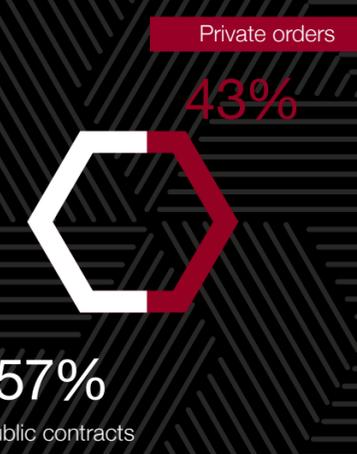
### Construction of Park Inn Hotel building by Radisson

Riga, Latvia. The project was commissioned  
in 2016.

# LNK INDUSTRIES GROUP OF COMPANIES



## SALES PATTERN LNK INDUSTRIES



- PILE DRIVING AND DRILLING RIGS
- VIBRATING PILE HAMMERS 968 to 3000 kN
- CRANES WITH LIFTING CAPACITY OF 4 to 250 TONNES
- MACHINES FOR TRENCH (EARTHWORK) WORK
- EQUIPMENT FOR WATER WORKS (INCLUDING A PONTOON AND A TOWING VESSEL)
- TRUCKS



«Non-standard thinking, high quality, constant development, personal growth, readiness to take on the challenges, reliability, safety and environmental protection – those are the values of LNK Industries as we have defined them.»

Recently, the macroeconomic situation and regional contracts have not been easy on our industry. The mutual sanctions of the EU and Russia directly affect the investment climate. Now, a local aspect has emerged: Due to the actual stoppage of the programme of temporary residence permit issuance in exchange for investments, many residential projects have been curtailed. This has negatively affected both the total investment in our economy and the construction sector in particular.

The deterioration of interstate relations directly affects not only investors, but also large industries, such as cargo transportation and port transits. Unlike Lithuania, the transport and port construction of Latvia is prone to unevenness: after a number of large projects, Latvian ports have faced a slack period, while in Klaipeda the infrastructure is improving constantly and consistently. Estonia is investing heavily in infrastructure projects such as ports, bridges, roads, etc. Recently, in cooperation with local partners, our company has won the competition for the design and construction of a large multi-storey car park at Tallinn airport.

European funds, which could have adjusted and levelled the situation in Latvian construction industry amid the outflow of private investment, wasted too much time on preparing for the distribution. Since the terms of financing development and, therefore, the deadlines for the project implementation cannot be shifted, we expect a very difficult period. On the general background of labour shortages (both engineers and workers), this raises a number of challenges for contractors. Various municipalities and government institutions will release a large number of projects, but who will be building them and how – that's a tough call.

We work in such a small market that 2 or 3 large projects are capable of distorting it. LNK Industries is characterised by a balanced portfolio of orders: usually, we have an equal share of state/municipal and private projects, with a shift of no more than 10% to one or the other. However, we are aware of the difficulties of the current situation.

Legislation and quality control mechanisms are now seen more or less as an edifice. The new Construction Act (passed in 2014) has now become clear to the industry members and customers. Finally, further work has been done to link the Act with other normative acts.

All large facilities have introduced the electronic registration of the number of employees on the construction site, which harmonises the industry and eliminates the envelope salaries. Competition will become more honest. We advocate for this because employees will get full social guarantees and feel more confident, and thus will want to work abroad less. Of course, the levelling of salary costs will cause changes in the market: prices of services will increase, some of the companies will close their business or change the field of activity.

In Latvia, the responsibility of controlling important sites is transferred to the State Construction Control Bureau, and the industry is gradually getting used to it. Having wide powers up to the ability to stop the construction, SCCB performs its functions efficiently, correctly and professionally, not just avoiding interference, but rather actually stimulating both the correct maintenance of works and the registration of corresponding construction documents. This helps to improve quality and supports healthy competition.



### New Residential Building

Riga, Latvia.  
The project is commissioned  
in May 2018.



### Daugava stadium reconstruction

Riga, Latvia.  
The project is commissioned  
in May 2018.

«Over the past period, we have proved that the professional skills of our employees and the construction and production capacities of our company allow us to flawlessly perform a project of almost any engineering complexity. Nevertheless, the goals that our company has set for the coming years are even more ambitious. Achieving them requires corporate values to become an integral part of our daily lives.»

The hallmark projects of LNK Industries: in 2017, the company was responsible for a number of sites of state and regional importance. The erection of spectator stands and the pile base of the Mezaparks Great Bandstand is the matter of honour for us, and it should be ready for the anniversary celebration of the Song and Dance Festival 2018. Tight deadlines and strict requirements for the construction of this facility demanded a clear organisation of the work of hundreds of people, a lot of machines as well as logistics at the site, and our team has successfully coped with all of that and now works ahead of schedule.

A large-scale reconstruction of the Daugava Stadium of Riga has begun, which also hosts the events of the Song and Dance Festival 2018. The athletics and football stadium will get additional stands on the pile bases and noise barriers, its lighting will be improved, new engineering networks will be built, and a complete reconstruction of the indoor premises will be carried out for the convenience of sportsmen, coaches and athletics clubs. The stadium will have a modern access control system for spectators. In 2017, LNK Industries commissioned a sports district on Krisjana Barona Street, which instantly became a favourite place of rest and training for Riga inhabitants of all ages, especially for young people. Of all the similar sites designed and built by us in the Latvian capital, this one is the largest and the most diverse by the use of its tracks and sports equipment.

LNK Industries has continued the expansion of the most modern mineral fertiliser transshipment facility in the Baltic states – Riga Fertilizer Terminal – supplementing it with two dome warehouses

and new underground galleries for the transportation of bulk goods. This fully automated facility featuring the equipment produced at our Transport Technological Systems (TTS) factory works 24/7 according to the FIFO scheme (first in – first out, first loaded – first unloaded), which ensures the preservation of fertiliser quality and loading efficiency. The system of conveyors and galleries allows for quickly switching the transshipment route, which involves more than a hundred different solutions. It is noteworthy that the construction of the second stage was planned by our designers as early as at the start of works on the first one, which greatly facilitated the task of expanding the terminal. It should also be noted that LNK Industries is one of the three companies in the world with the technology need for dome warehouse construction. Having built a number of complex local transport facilities, LNK Industries offered our solutions in foreign markets.

In Lithuania, we continue to strengthen our position in infrastructure construction. In the past period, more than a dozen berths at the sea port of Klaipeda were reconstructed and equipped with utility networks. Some of them we implemented stage by stage, performing the work in a comprehensive manner and with an innovative approach. Truly unique is the project of deepening the gulf near the Curonian Spit with the natural reserve on one side and the port terminal on the other. Here, we had to build a protective wall reinforced with metal piling and anchor tie bars along the protected area in order to deepen the access to berths up to 14.5 m.

Construction of a two-level junction on the Nemuno Street has been added to a list of road facilities in Lithuania including its capital Vilnius. When involved in such projects, the specifics of our work style are in the minimisation of transport restrictions in the city.

Our branch in St Petersburg (Russia) has shown good results, where we were able to gather a strong team of engineers and designers for the development and implementation of engineering designs. This division combines the capabilities of our Riga production cluster with Russian innovations in engineering. We always seek and find synergy in international partnership, the opportunity to improve the potential of knowledge and skills of our team and mutually share achievements.

LNK Industries is gaining a foothold in Scandinavia, where a number of orders for hydraulic structures (such as gateways) and for the supply and installation of metal bridges have already been completed. For us, these are the strategic markets necessary for the development of the company. The beginning of work in any new country or in the new market is always complicated by numerous social aspects, and also that complex engineering projects are implemented far away from home, under other normative acts and in another language. The advantage of LNK Industries in the Scandinavian market is the same as always: comprehensive solutions that provide optimal value for money.

We are not afraid of challenges, both engineering and otherwise, and that allows us to hold a position in the market and actively develop. In 2017, we became the first construction company

to receive the quality system certificate in the field of Energy Management Efficiency (ISO 50001) in addition to our previously obtained international certificates on the implementation of Quality Management System (ISO 9001), Industrial Safety and Labour Protection (OHSAS 18001), and Environmental Protection (ISO 14001). And this is not just a formality for us, but a fixation of the procedures we live by. It's the consolidation of a matrix facilitating daily work of our large team and multidisciplinary knowledge-intensive production.

Public recognition confirms that LNK Industries is acting in the right way. Each year we receive national awards for the best engineering and civil constructions, for the durability and application of modern technologies allowing sites to remain up to date for many years both from the architectural and engineering point of view.

The professional achievements of our employees have been granted high awards. For us, it is evidence of success in systematic work with personnel and an increase of their professional level. In order for this work to have internal incentives, in 2017, LNK Industries established awards for a non-standard approach and purposefulness, granting them to the best employees. We intend to make the awards a tradition. ●

We wish you great achievements and success  
in all your endeavours!

Sincerely,  
The Board of AS LNK Industries

# Awards and recognition



Project "Construction and improvement of the Central Sports District in Riga"



## "Latvian Construction Industry's Annual Award 2016" Competition

**1<sup>st</sup> place in the nomination "Open Public Spaces"** – the project "Playground for sports and active recreation of Riga Secondary School No. 84", general contractor – PS LNK Industries Partnership.

**2<sup>nd</sup> place in the nomination "Renovation of Façades"** – the project "Renovation of the façade of Riga Secondary School No. 6", general contractor – PS LNK Industries Partnership.

**2<sup>nd</sup> place in the nomination "New Engineering Construction"** – the project "Two-level crossroads across the railway and Nemuno street" in Lithuania (Klaipeda) by AS LATVIJAS TILTI, a part of AS LNK Industries, in cooperation with the Lithuanian partner – Kauno keliai.

**3<sup>rd</sup> place in the nomination "New Engineering Construction"** – the project "Pedestrian and bicycle overpass over the motorway A10" in Babite County, implemented by PS LNK Industries Group.

## "Civil Engineer of the Year in Latvia 2016" Competition

**1<sup>st</sup> place in the nomination "Head of Construction Work 2016"** – Juris Latvels.

**2<sup>nd</sup> place in the nomination "Head of Construction Works 2016"** – Evgeny Volkov.

## "Grand Prize of Construction Industry 2016" Competition

**"Engineer of the Year"** – Chief Engineer - Project Manager of AS LATVIJAS TILTI Andrey Bochkaryov.

## "Grand Prize of Construction Industry 2017" Competition

**"Engineer of the Year"** – Head of the Department of International Projects of AS LNK Industries – Vadim Bogdanov.

**"New Engineer of the Year" – Head of Construction Work of AS LNK Industries** - Gints Vanders.

## "Latvian Construction Industry's Annual Award 2017" Competition

**1<sup>st</sup> place in the nomination "Public Outer Space"** – the project "Construction and improvement of the Central Sports District in Riga", general contractor – PS LNK Industries Partnership.

**2<sup>nd</sup> place in the nomination "Reconstruction"** – the project "Reconstruction and restoration of the historic residential building in the quiet centre of Riga", general contractor – AS LNK Industries.

## "Building of the Year in Latvia 2017" Competition

**1<sup>st</sup> place in the nomination "Restoration"** – the project "Residential house at 5 Alberta Street, Riga", general contractor – AS LNK Industries.

## "Civil Engineer of the Year in Latvia 2017" Competition

**3<sup>rd</sup> place in the nomination "Head of Construction Work 2017"** – Head of the Department of International Projects of AS LNK Industries – Vadim Bogdanov.

## Riga Freeport Management Award

The badge awarded to Roberts Trautmanis, the Project Manager of AS LNK Industries, for many years of selfless work and personal contribution to the maintenance of economic activity and development of the Freeport of Riga.

## "Most Sustainable Building and Project" Competition

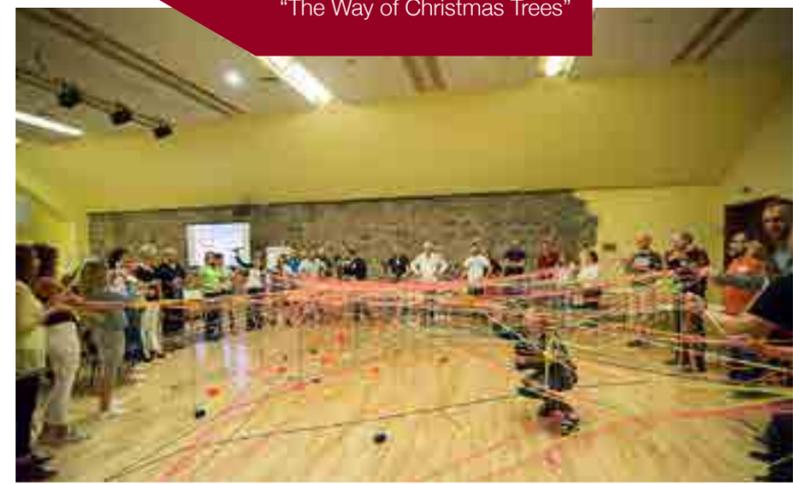
**1<sup>st</sup> place in the nomination "Most Sustainable Building in Latvia 2017"** – the project "Academic Centre of Natural Sciences of the University of Latvia", general contractor – PS LNK Industries Group. ●



The Christmas decoration "Snow Ball" for residents of the city, presented on behalf of the LNK Industries as a part of the annual Riga Festival "The Way of Christmas Trees"

# Corporate Social Responsibility

LNK Industries supports various cultural and sporting events and charity projects, helps orphans and implements projects to popularise a sporty lifestyle.



- LNK Industries supports:
- Jēkabpils Basketball Club
  - Sprīdītis Social Care and Rehabilitation Institution
  - Production of operas: "Eugene Onegin" by Pyotr Tchaikovsky and "Turandot" by Giacomo Puccini in the Latvian National Opera



# Industrial and Civil Construction



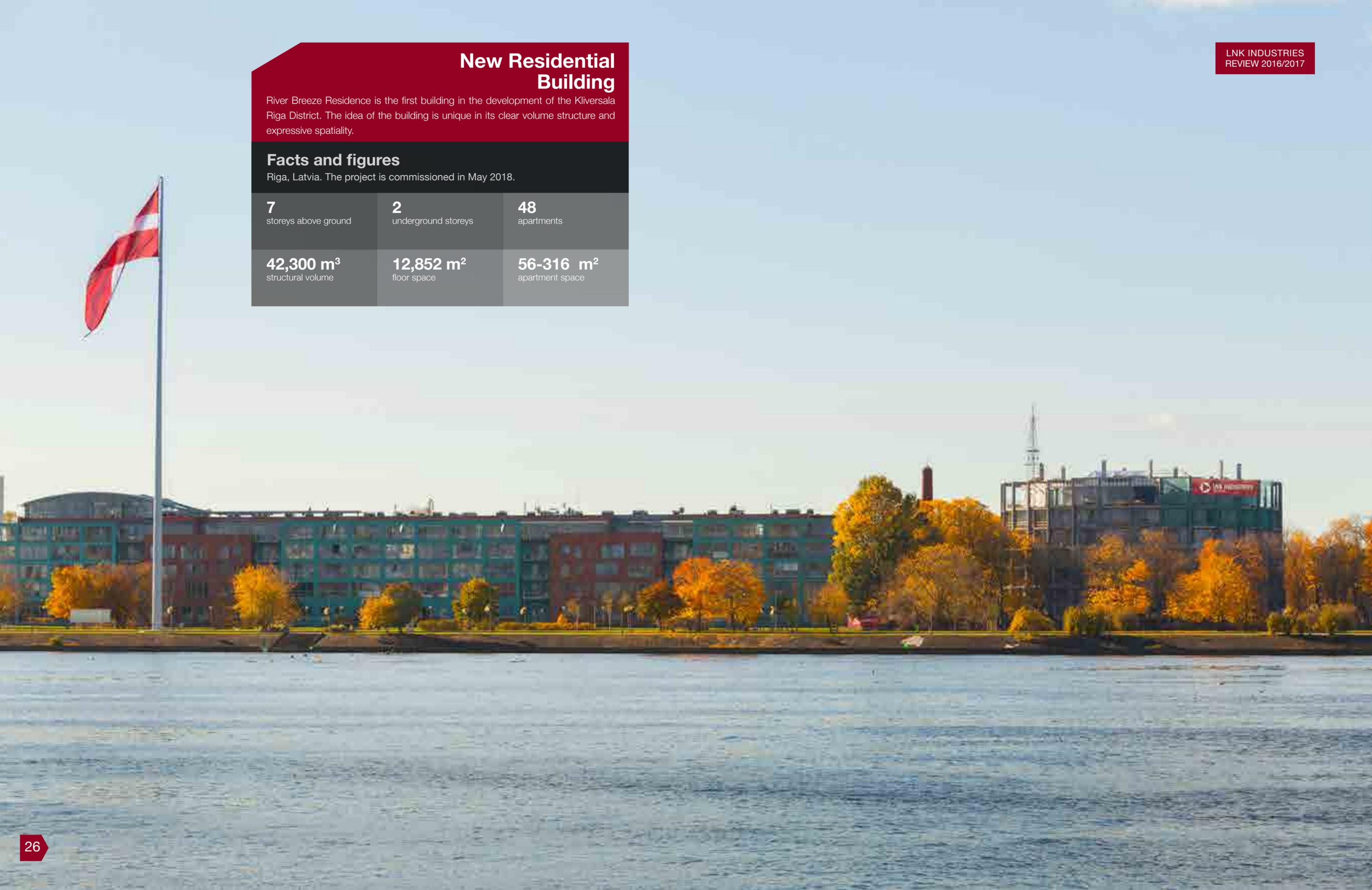
## New Residential Building

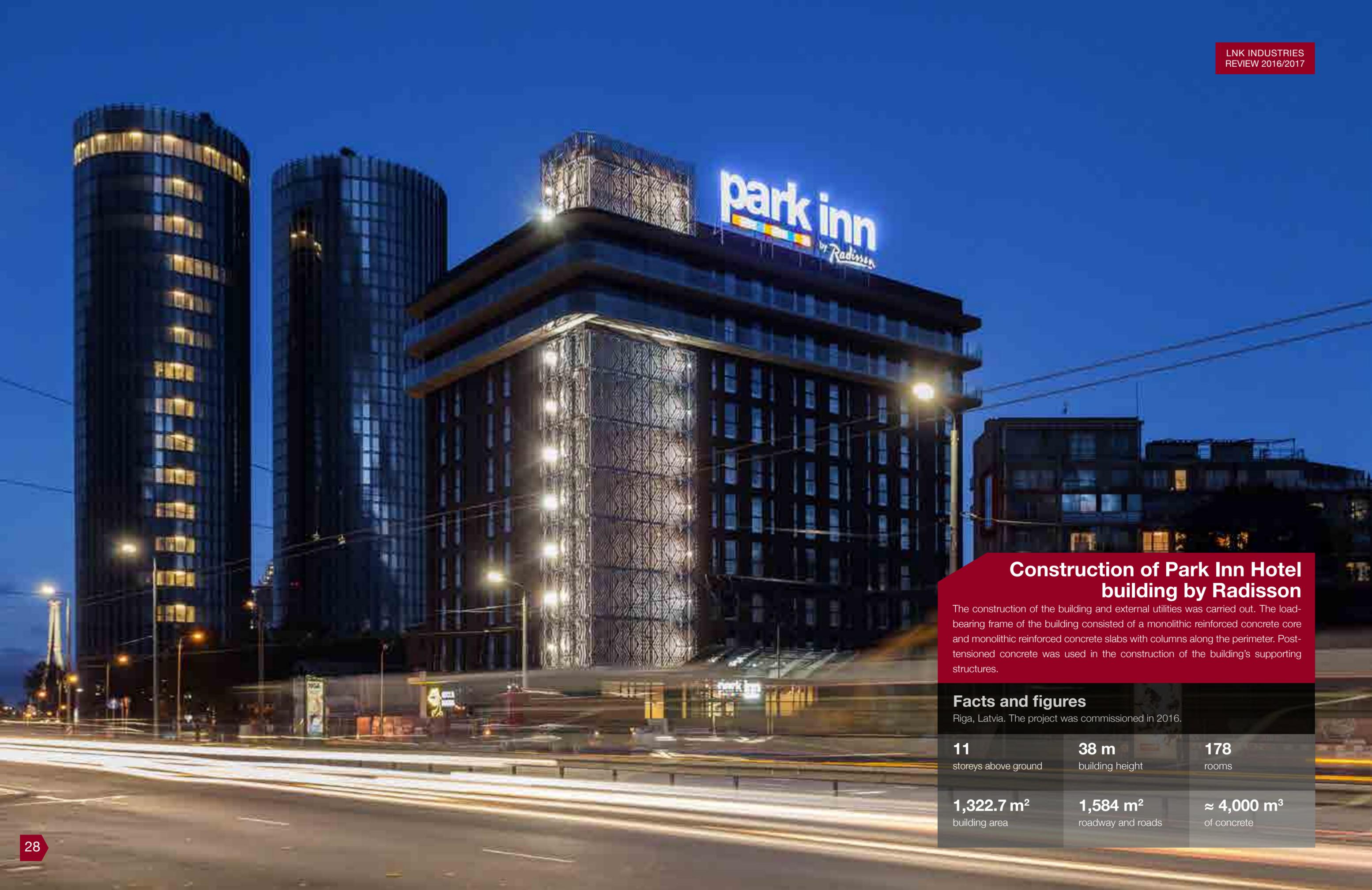
River Breeze Residence is the first building in the development of the Kliversala Riga District. The idea of the building is unique in its clear volume structure and expressive spatiality.

### Facts and figures

Riga, Latvia. The project is commissioned in May 2018.

<b>7</b> storeys above ground	<b>2</b> underground storeys	<b>48</b> apartments
<b>42,300 m<sup>3</sup></b> structural volume	<b>12,852 m<sup>2</sup></b> floor space	<b>56-316 m<sup>2</sup></b> apartment space





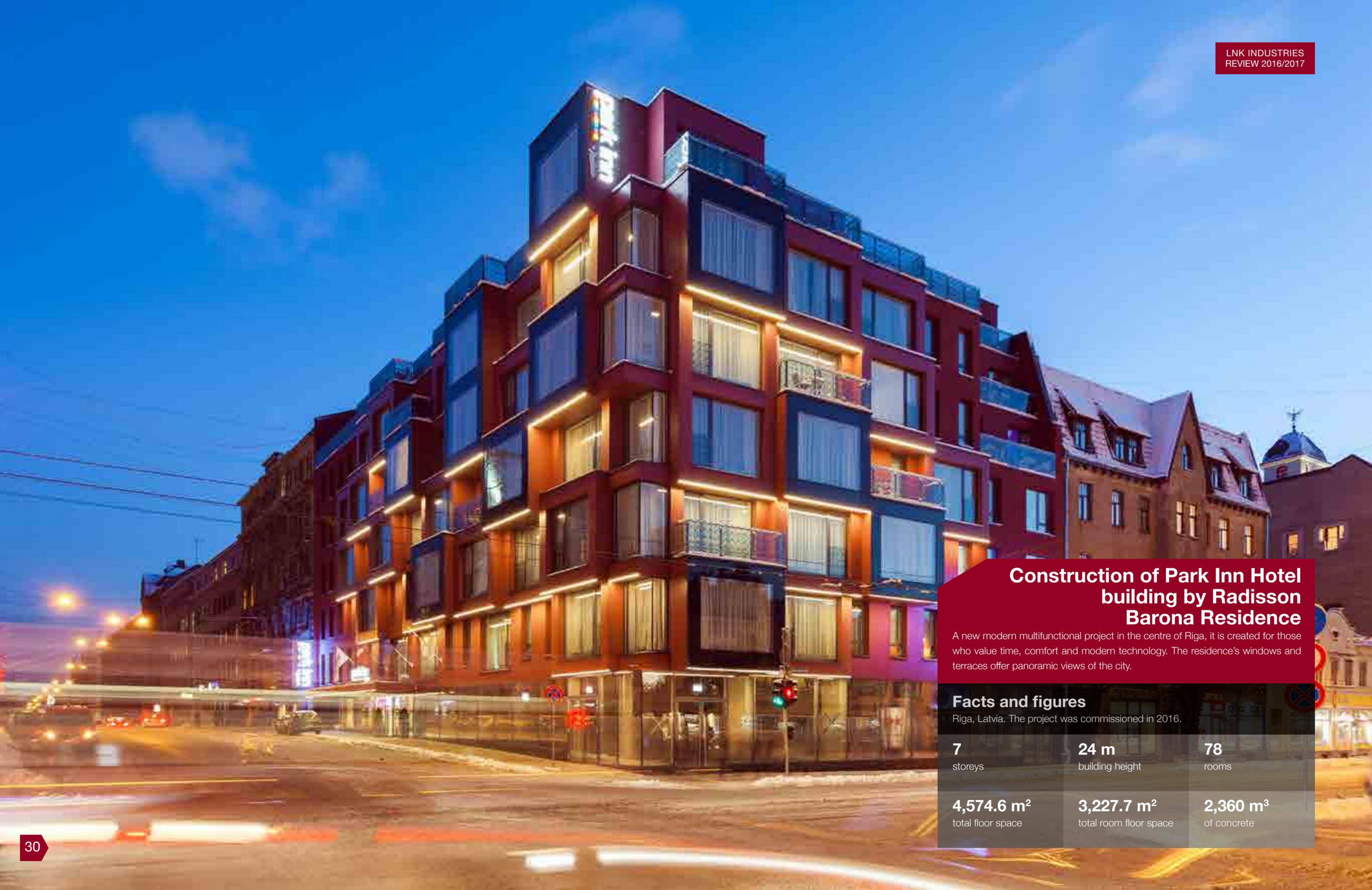
## Construction of Park Inn Hotel building by Radisson

The construction of the building and external utilities was carried out. The load-bearing frame of the building consisted of a monolithic reinforced concrete core and monolithic reinforced concrete slabs with columns along the perimeter. Post-tensioned concrete was used in the construction of the building's supporting structures.

### Facts and figures

Riga, Latvia. The project was commissioned in 2016.

<b>11</b> storeys above ground	<b>38 m</b> building height	<b>178</b> rooms
<b>1,322.7 m<sup>2</sup></b> building area	<b>1,584 m<sup>2</sup></b> roadway and roads	<b>≈ 4,000 m<sup>3</sup></b> of concrete



## Construction of Park Inn Hotel building by Radisson Barona Residence

A new modern multifunctional project in the centre of Riga, it is created for those who value time, comfort and modern technology. The residence's windows and terraces offer panoramic views of the city.

### Facts and figures

Riga, Latvia. The project was commissioned in 2016.

<b>7</b> storeys	<b>24 m</b> building height	<b>78</b> rooms
<b>4,574.6 m<sup>2</sup></b> total floor space	<b>3,227.7 m<sup>2</sup></b> total room floor space	<b>2,360 m<sup>3</sup></b> of concrete

## Baltic Industrial Park (Baltijas Industriālais parks) – III stage of expansion

Construction of 2 new buildings with installation of all utility networks, finishing works and landscaping. One of the most significant facilities with warehouse, office, commercial and industrial premises in Riga.

### Facts and figures

Rīga, Latvia. The project was commissioned in 2017.

**52,975 m<sup>3</sup>**

total structural volume  
of buildings

**13,065 m<sup>2</sup>**

total area  
of the premises

**7,125 m<sup>2</sup>**

total floor area  
of storeys



## Multi-storey apartment building with commercial areas

This is the second building of the Club Central Residence Project in the centre of Riga. The façade of the building will be in harmony with both the aesthetics of Baznicas Street in general, and the first building built as a part of the Club Central Residence Project: similar architectural solutions and tonality are used as well as glass.

### Facts and figures

Riga, Latvia. The project will be commissioned in 2019.

8

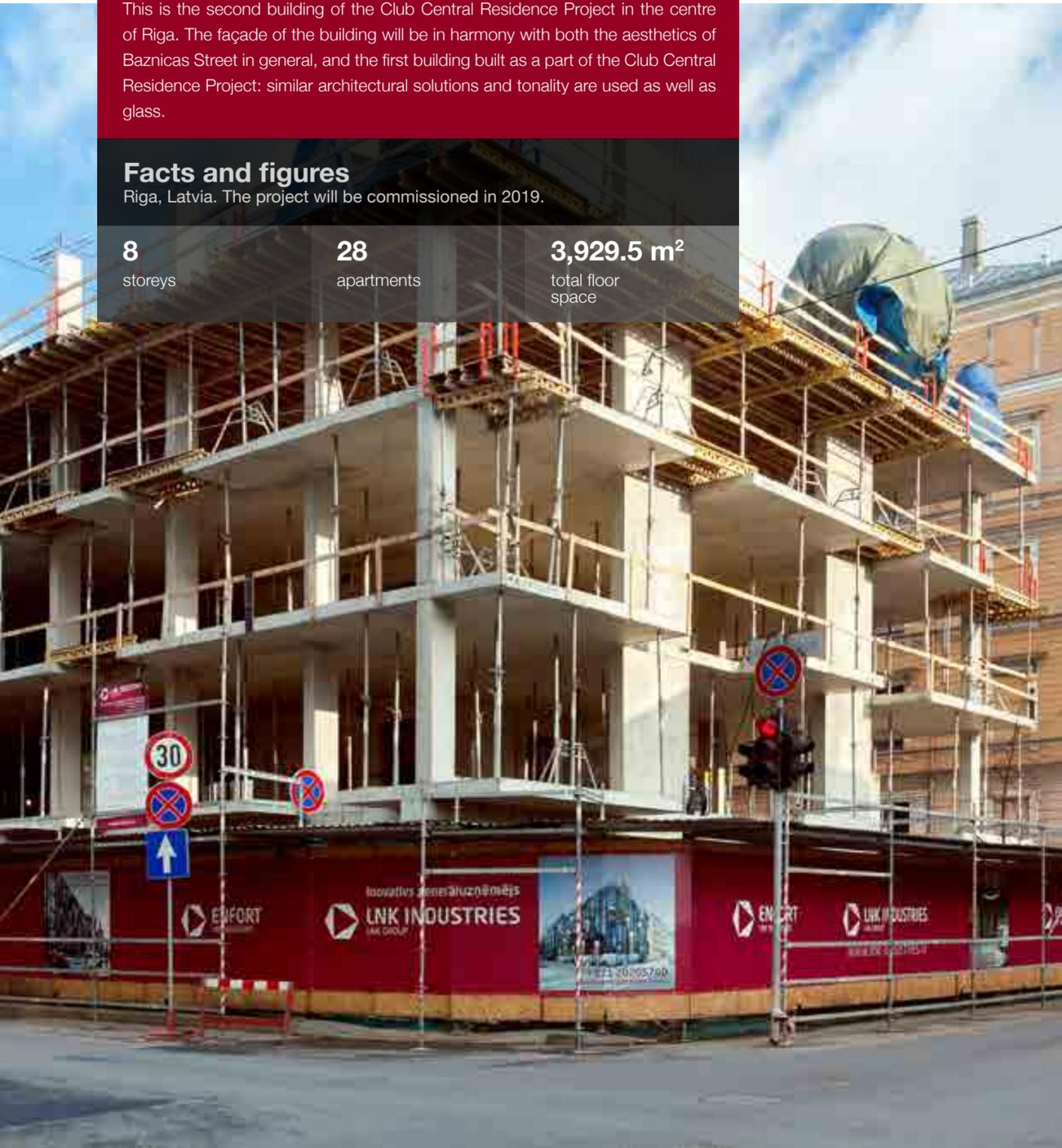
storeys

28

apartments

3,929.5 m<sup>2</sup>

total floor space



## New building – State and Riga municipal police station

Walls of the building are formed of concrete blocks, and the foundation consists of a concrete slab with a volume of 200 m<sup>3</sup>. The roof of the building is formed of steel structures with a total weight of 16.8 t. Additional natural lighting is provided by the upper windows, through which daylight comes in.

### Facts and figures

Riga, Latvia. The project was commissioned in 2017.

40

rooms

2,541 m<sup>2</sup>

total area of the premises

2.7 – 4.4 m

ceiling height



# Restoration and renovation



## Reconstruction and restoration of the historical apartment building

The house was built in 1900 according to the project of Friedrich Sheffel, one of the best Riga architects of the late 19th-early 20th century. After the restoration, the building features 30 apartments of a different size and layout. The basement of the building houses technical and utility premises as well as a library, billiard room and children's playroom. The building retained the original structural volume, shape of the roof, rich finish of the main façade and interior and original layout with three staircases.

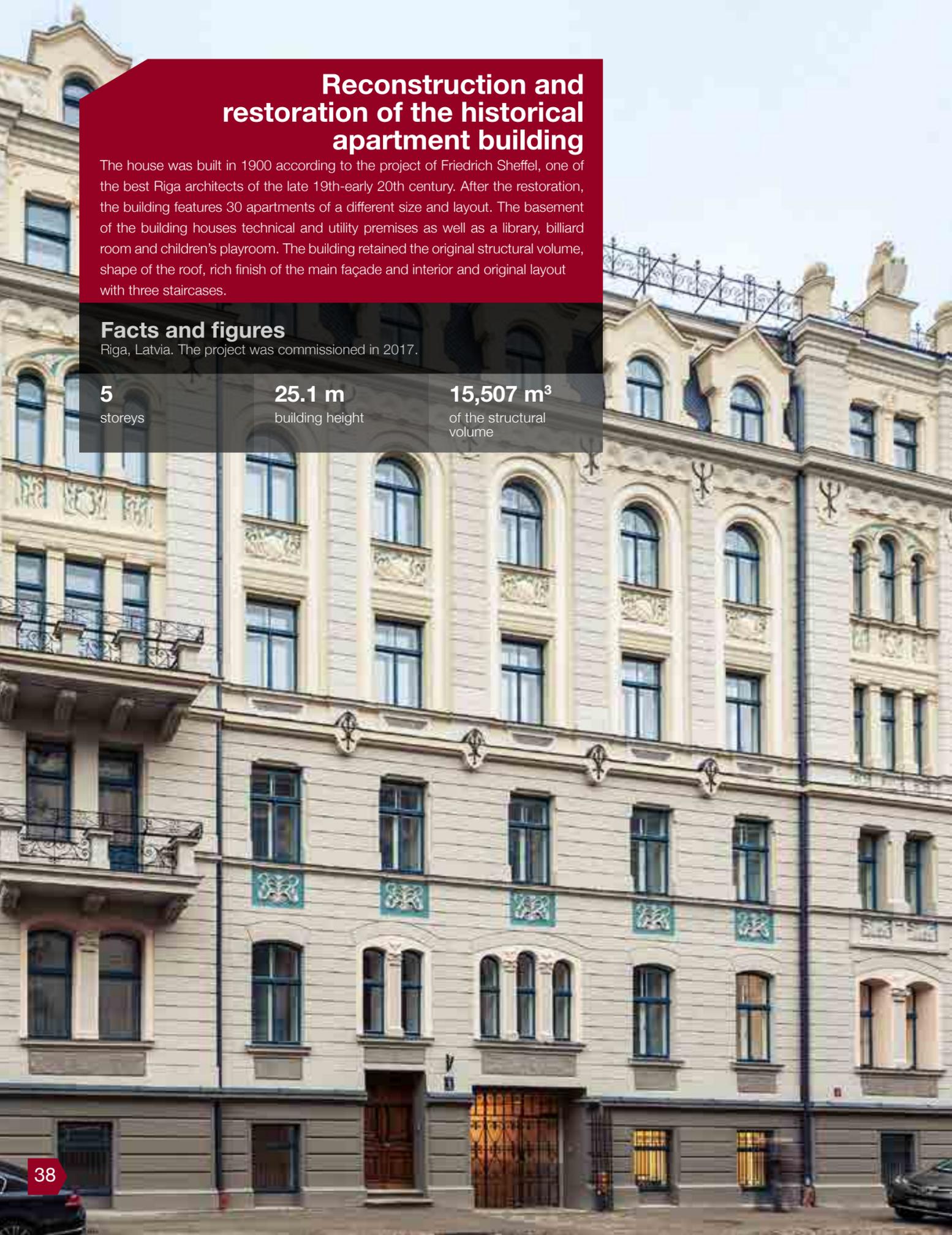
### Facts and figures

Riga, Latvia. The project was commissioned in 2017.

**5**  
storeys

**25.1 m**  
building height

**15,507 m<sup>3</sup>**  
of the structural volume



## Renovation of the Riga Centre Humanitarian Secondary School building

The historical façade of the building has been restored, the night lighting system has been installed and a number of works to improve the accessibility of the school environment and landscaping has been implemented. The kitchen and dining room have been renovated, a new assembly hall has been built and new locker rooms have been installed in the basement. The school premises have been equipped with the necessary furniture and office equipment.

### Facts and figures

Riga, Latvia. The project was commissioned in 2016.

<b>5</b> storeys above the ground	<b>1</b> underground storey	<b>676.5 m<sup>2</sup></b> building area
<b>1,378.88 m<sup>2</sup></b> of façade work	<b>12,008 m<sup>3</sup></b> of the structural volume	<b>2,973.3 m<sup>2</sup></b> floor space



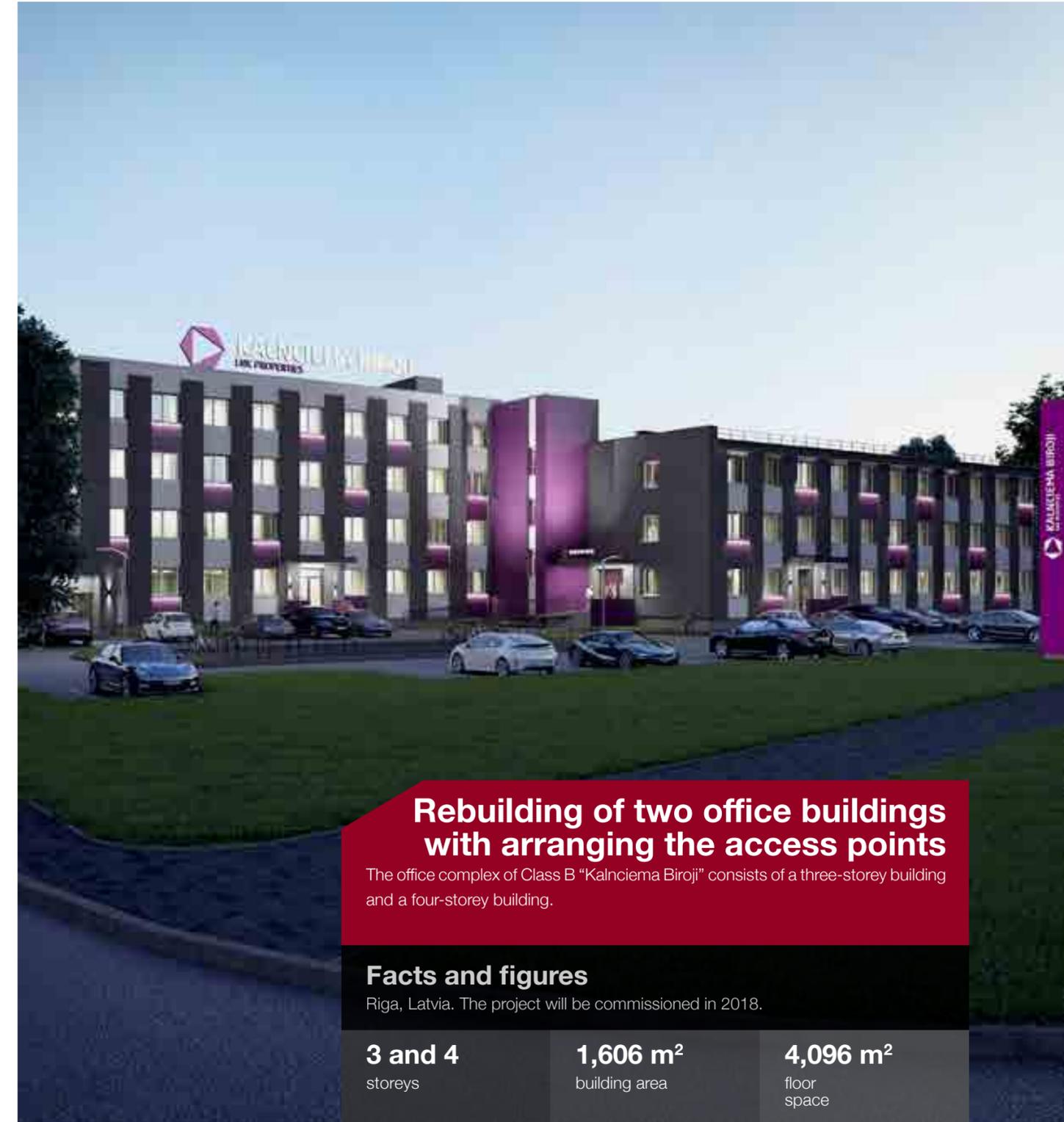
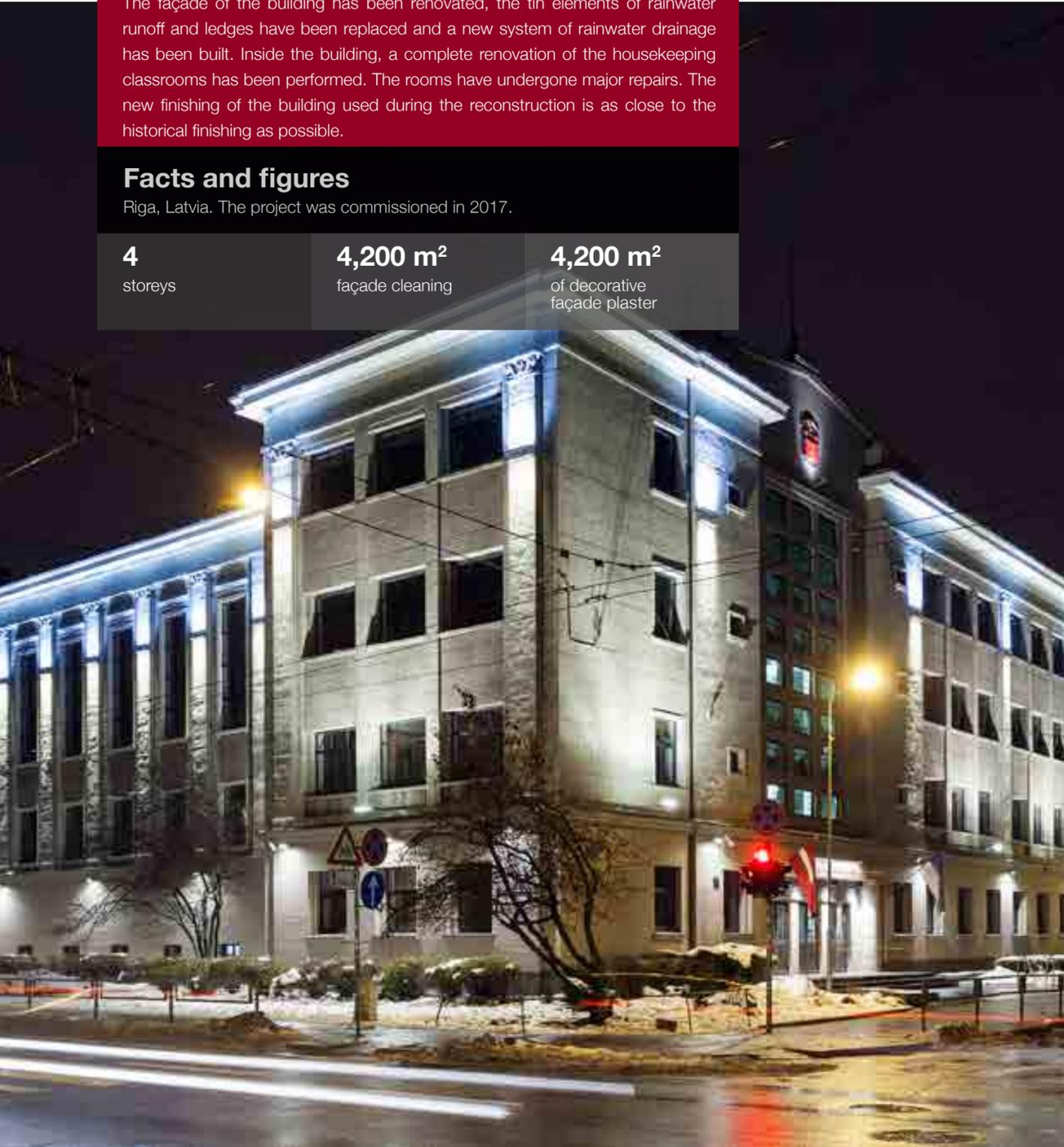
## Restoration of the facade and premises of Riga Secondary School No. 6

The façade of the building has been renovated, the tin elements of rainwater runoff and ledges have been replaced and a new system of rainwater drainage has been built. Inside the building, a complete renovation of the housekeeping classrooms has been performed. The rooms have undergone major repairs. The new finishing of the building used during the reconstruction is as close to the historical finishing as possible.

### Facts and figures

Riga, Latvia. The project was commissioned in 2017.

<b>4</b> storeys	<b>4,200 m<sup>2</sup></b> façade cleaning	<b>4,200 m<sup>2</sup></b> of decorative façade plaster
---------------------	-----------------------------------------------	---------------------------------------------------------------



## Rebuilding of two office buildings with arranging the access points

The office complex of Class B "Kalnciema Biroji" consists of a three-storey building and a four-storey building.

### Facts and figures

Riga, Latvia. The project will be commissioned in 2018.

<b>3 and 4</b> storeys	<b>1,606 m<sup>2</sup></b> building area	<b>4,096 m<sup>2</sup></b> floor space
<b>143 m<sup>2</sup></b> of asphalt	<b>3,921 m<sup>2</sup></b> of a paved road	<b>1,642 m<sup>2</sup></b> of the lawn

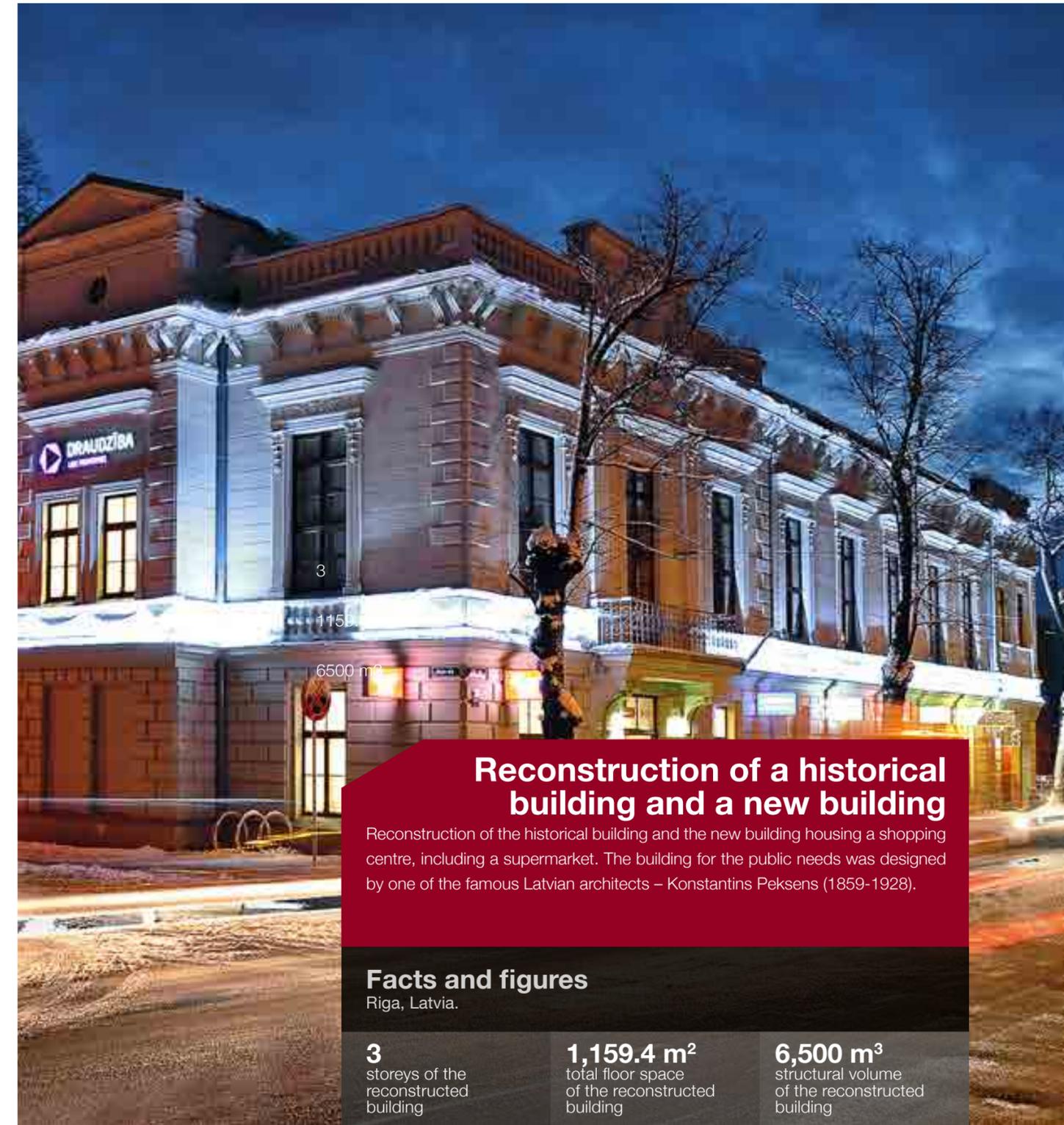
## Renovation of the hotel building

As part of the reconstruction of the hotel building in the centre of Riga, works were carried out in the basement of the building and in its above-ground part. The main works which have been carried out during reconstruction are masonry work, concrete work and slab installation work.

### Facts and figures

Riga, Latvia. The project was commissioned in 2016.

<b>6</b> storeys	<b>23 m</b> building height	<b>19,790 m<sup>3</sup></b> total building volume
<b>1,015.9 m<sup>2</sup></b> building area	<b>198.4 m<sup>2</sup></b> access roads, parking	<b>4,181.4 m<sup>2</sup></b> total floor space



## Reconstruction of a historical building and a new building

Reconstruction of the historical building and the new building housing a shopping centre, including a supermarket. The building for the public needs was designed by one of the famous Latvian architects – Konstantins Peksens (1859-1928).

### Facts and figures

Riga, Latvia.

<b>3</b> storeys of the reconstructed building	<b>1,159.4 m<sup>2</sup></b> total floor space of the reconstructed building	<b>6,500 m<sup>3</sup></b> structural volume of the reconstructed building
<b>2</b> storeys of the new building	<b>1,143.4 m<sup>2</sup></b> total floor space of the new building	<b>4,000 m<sup>3</sup></b> structural volume of the new building

# Infrastructure construction



## Reconstruction of the bridge over the river Lielupe as part of the reconstruction of the A10 highway

The reconstruction of bridge concrete structures, renovation of waterproofing coating, cleaning and painting of the bridge steel structures, installation of new handrails as well as other works were carried out.

### Facts and figures

Sloka, Latvia. The project was commissioned in 2017.

**12 m**

bridge height

**420 m**

bridge length

**1,275 m<sup>3</sup>**

dismantling of reinforced concrete supports and slabs

**5,222 m<sup>2</sup>**

asphalt demolition

**1,753 m**

dismantling of steel railings and barriers

**15,000 m<sup>2</sup>**

cleaning and painting of metal structures



## Construction of an overpass on the premises of the port

The overpass connects the premises of the port and provides the unobstructed access to the terminal. Construction of its frame required 550 tonnes of metal and installation of floor slabs required 3,296 cubic metres of concrete. During the construction of the overpass, we had to remove and reinstall utility networks in another place. The new overpass frees part of the city from traffic jams formed as a result of freight transport travelling to the port and railway traffic.

### Facts and figures

Klaipėda, Lithuania. The project was commissioned in 2016.

**332 m**  
total length

**11.2 m**  
width

**9.2 m**  
width of the roadway,  
including a safety zone

**6**  
supports

**18**  
piles for  
each support

**7.74 m**  
height of reinforced  
concrete supports

## Pedestrian and bicycle bridge across the A10 motorway

The bridge span structure consists of a three-span steel farm supported by steel cables. To reduce the own weight of the structure, the pavement of the overpass has been treated with a special anti-slip coating. This type of coating also serves as a waterproofing layer for concrete structures. Both sides of the pedestrian bridge feature continuous systems of plates - reinforced concrete frames.

### Facts and figures

Babite, Latvia. The project was commissioned in 2016.

**291.51 m**

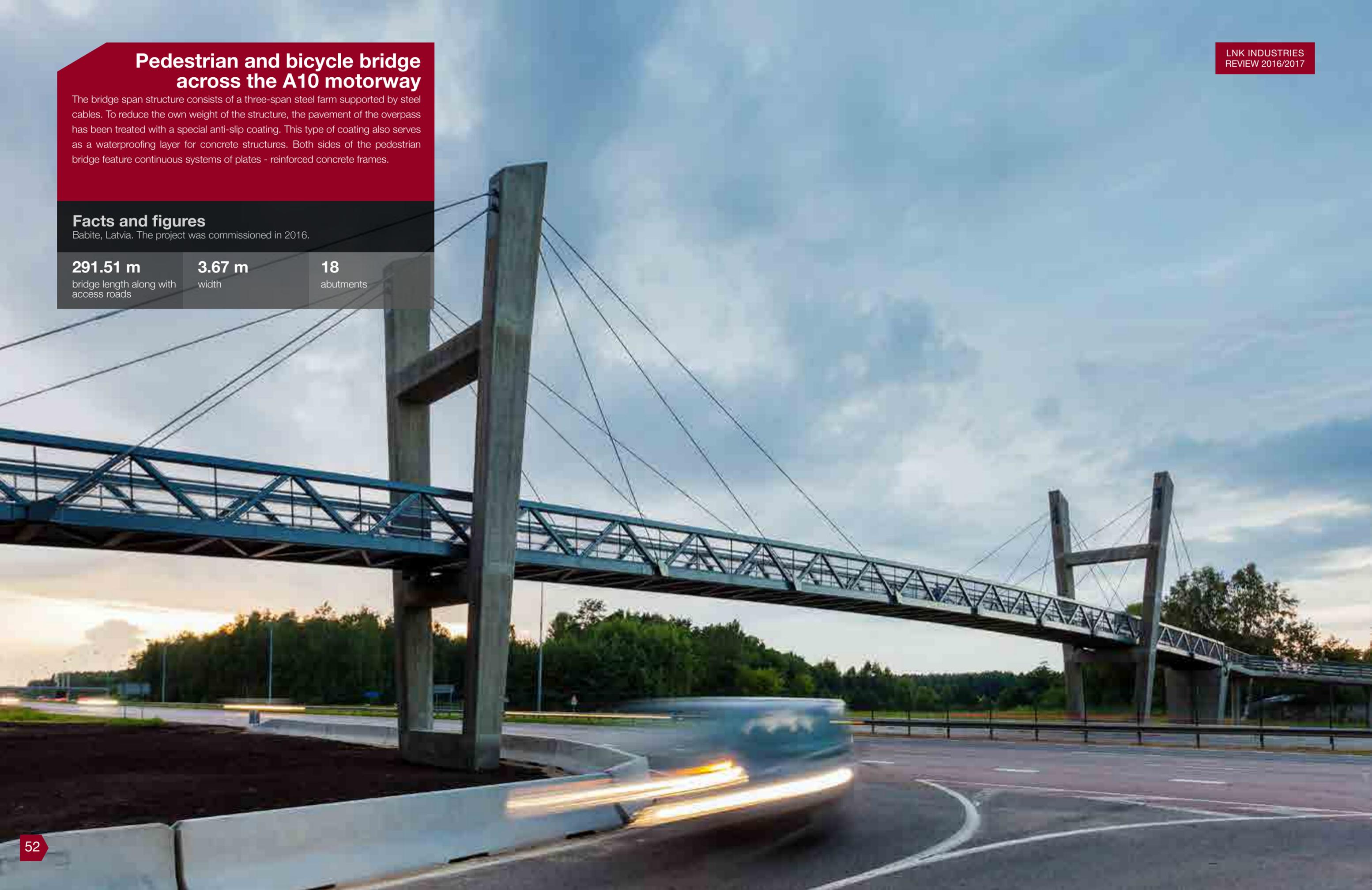
bridge length along with  
access roads

**3.67 m**

width

**18**

abutments



## Riga Fertilizer Terminal III stage

The most modern terminal of transshipment and short-term storage of mineral fertilisers in the region of Northern Europe. The terminal operates by utilising efficient and modern methods of cargo transshipment and storage, which are safe for the environment

### Facts and figures

Riga, Latvia. The III stage will be commissioned in 2018.

**5,685 m<sup>2</sup>**

building  
area

**3,160 m<sup>2</sup>**

access road  
area

**2**

dome  
storages

**25,000 t**

capacity of each  
dome storage

**2**

metal transfer  
points

**2**

underground  
conveyor galleries

**2**

reinforced concrete  
transfer points

**2**

above-ground  
conveyor galleries

**7,888 m<sup>2</sup>**

landscaped  
territory area



## Construction of rainwater collection and accumulation system

As part of reconstruction work, the reconstruction of the covering structure, change of road equipment and rearrangement of low-power and rainwater sewer networks have been carried out. The drainage system will also be rebuilt.

### Facts and figures

Riga, Latvia. The project will be commissioned in 2018.

**13,000 m<sup>3</sup>**

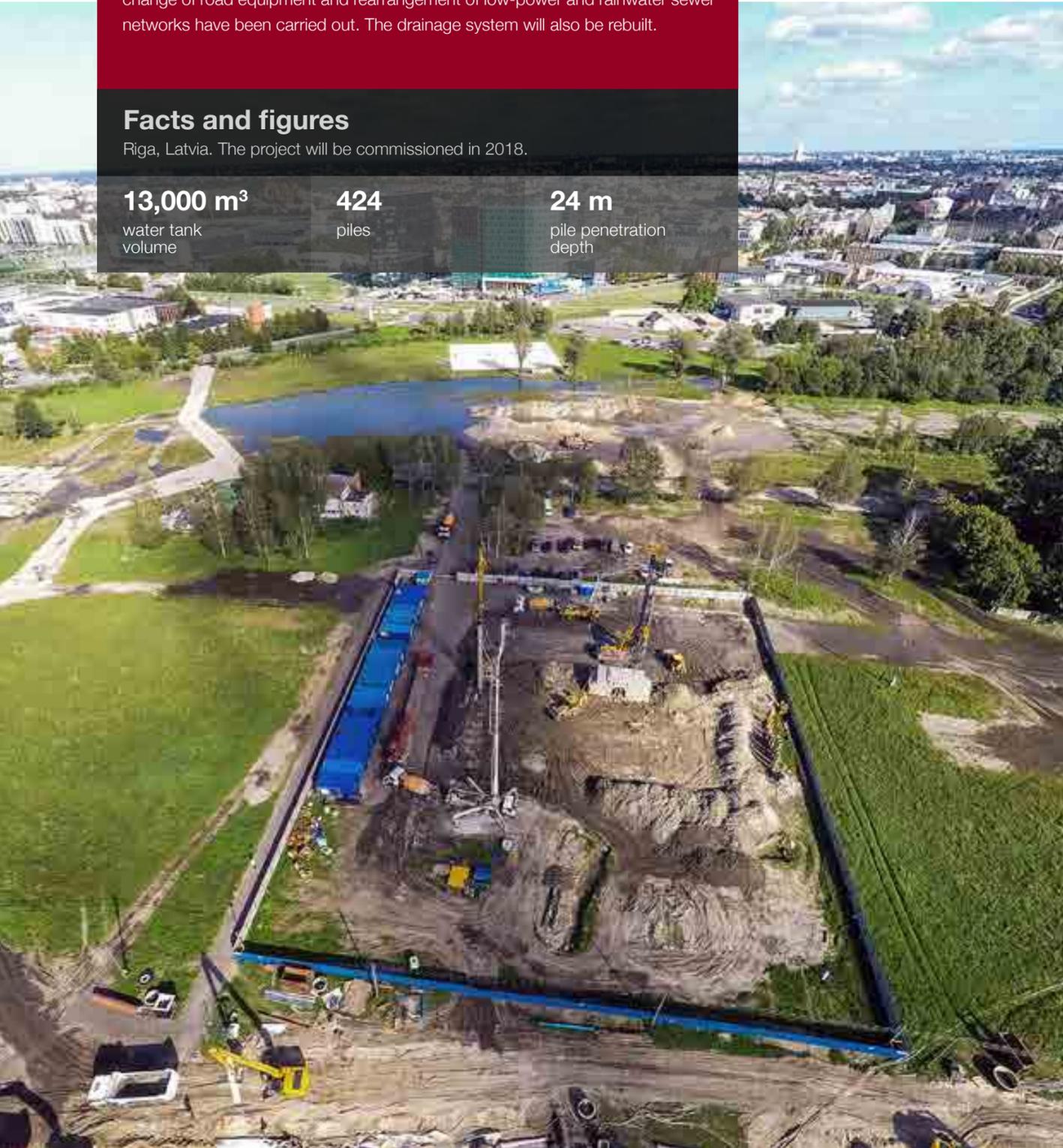
water tank  
volume

**424**

piles

**24 m**

pile penetration  
depth



## Construction of a multi-storey car park for Tallinn Airport

Instead of the old above-ground car park, a new modern three-storey parking is being designed and built. The project involves the construction of the frame of cast-in-situ concrete, installation of elevators and escalators, building of utility premises and rooms for service personnel, mounting of the decorative façade made of specific perforated metal, and installation of security systems.

### Facts and figures

Tallinn, Estonia. The project will be commissioned in 2018.

**44,000 m<sup>2</sup>**

total floor area

**≈ 1,100**

parking spaces

**≈ 11,500 m<sup>3</sup>**

of concrete

## Reconstruction of the main road section and right-bank drainage system of Riga HPP

As part of the reconstruction work, the reconstruction of the covering structure, change of road equipment and rearrangement of low-power and rainwater sewer networks have been carried out. The drainage system will also be rebuilt.

### Facts and figures

Salaspils, Latvia. The project will be commissioned in 2018.

**2.08 km**

site length

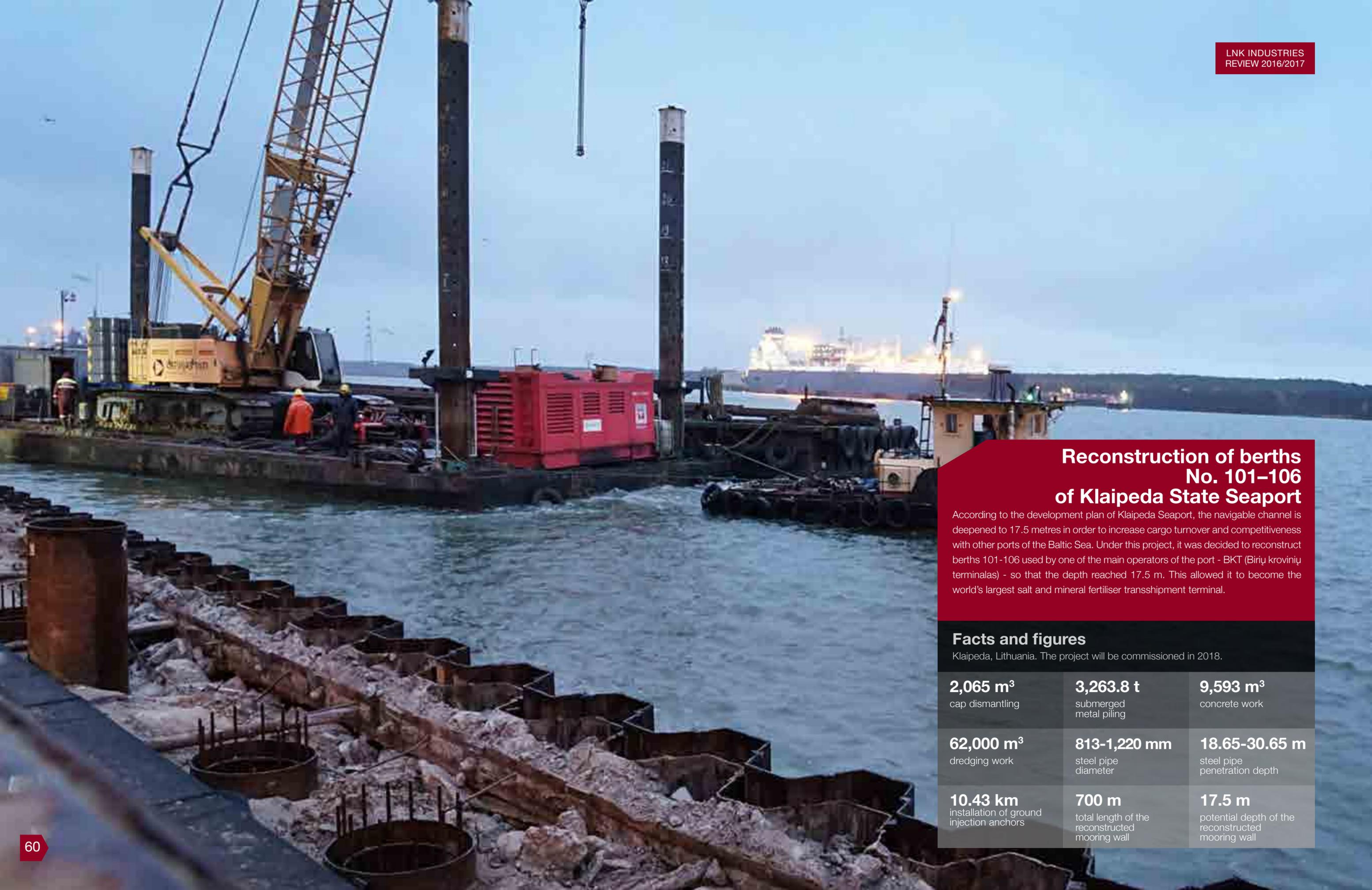
**21,750 m<sup>2</sup>**

site area

**1,854 m**

drainage network reconstruction





## Reconstruction of berths No. 101–106 of Klaipeda State Seaport

According to the development plan of Klaipeda Seaport, the navigable channel is deepened to 17.5 metres in order to increase cargo turnover and competitiveness with other ports of the Baltic Sea. Under this project, it was decided to reconstruct berths 101-106 used by one of the main operators of the port - BKT (Birių krovinių terminalas) - so that the depth reached 17.5 m. This allowed it to become the world's largest salt and mineral fertiliser transshipment terminal.

### Facts and figures

Klaipeda, Lithuania. The project will be commissioned in 2018.

**2,065 m<sup>3</sup>**  
cap dismantling

**3,263.8 t**  
submerged  
metal piling

**9,593 m<sup>3</sup>**  
concrete work

**62,000 m<sup>3</sup>**  
dredging work

**813-1,220 mm**  
steel pipe  
diameter

**18.65-30.65 m**  
steel pipe  
penetration depth

**10.43 km**  
installation of ground  
injection anchors

**700 m**  
total length of the  
reconstructed  
mooring wall

**17.5 m**  
potential depth of the  
reconstructed  
mooring wall



## Restoration of berths No. 19, 20, 21, 22, and 23 of the Ventspils Free Port

As part of the restoration work, the renovation of load-bearing metal structures of berths was carried out, including the restoration of the integrity of mooring walls, application of corrosion coating in the variable water level zone and installation of cathodic protection. In addition, new ladders have been installed, the fenders have been replaced and bottom subgrade level has been restored as well as the reinforced concrete and metal guard rails have been repaired.

### Facts and figures

Ventspils, Latvia. The project was commissioned in 2016.

**1.1 km**  
total length  
of all berths

**> 3,000 m<sup>2</sup>**  
of restored and  
painted matched  
flooring surface

**194**  
new fenders  
installed

# Public buildings and structures



## Scientific Centre of the University of Latvia

The building will be home to Medical and Physics and Mathematics faculties and six institutes, providing students and teachers with an infrastructure that meets modern requirements both for studies and for science and research. It is planned that the building will be visited by 2,000 students daily and up to 430 staff members.

### Facts and figures

Riga, Latvia. The project will be commissioned in 2019.

**7**

storeys above ground

**100,376 m<sup>3</sup>**

volume of the new building

**15**

lecture halls

**19,944 m<sup>2</sup>**

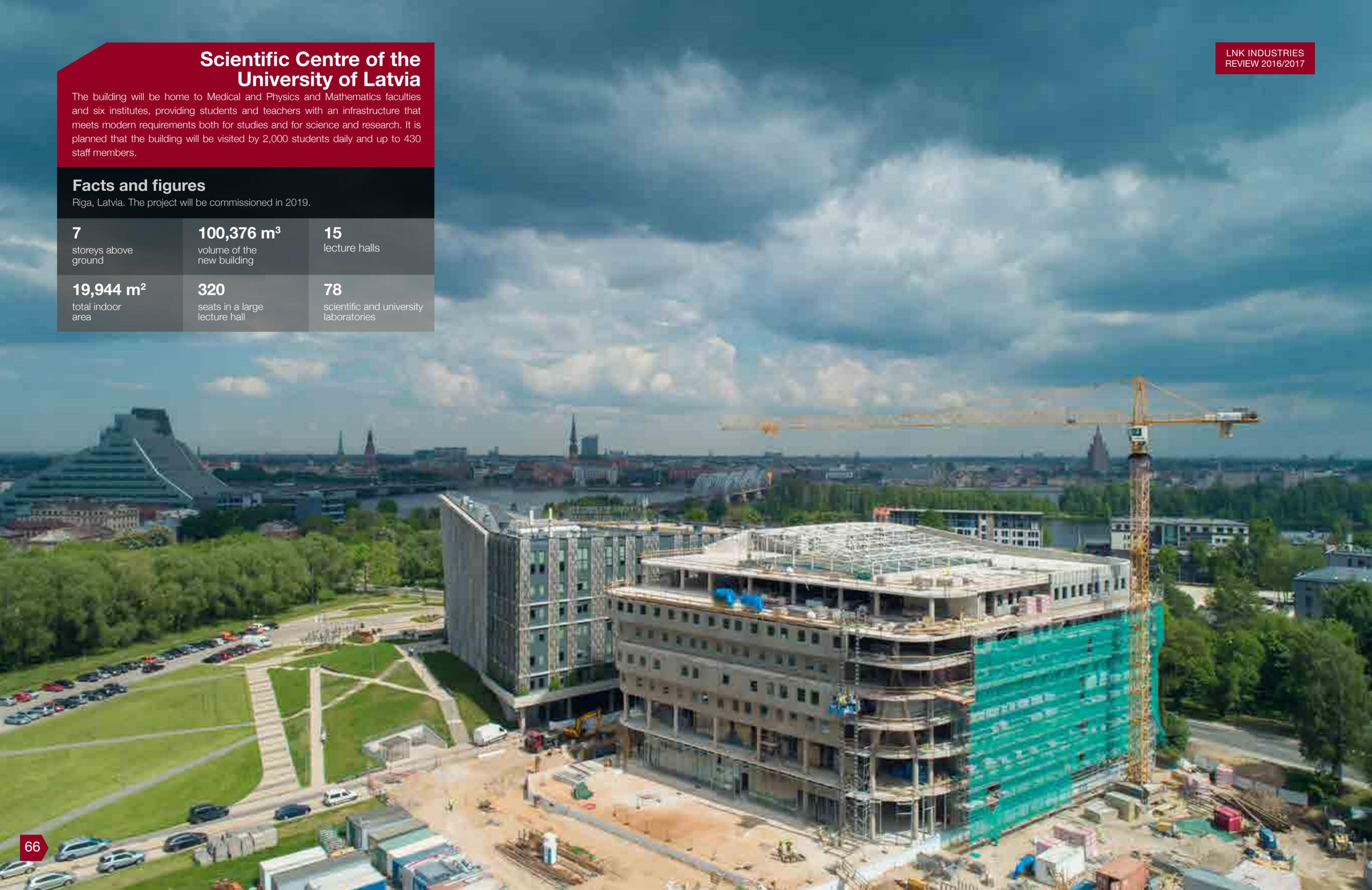
total indoor area

**320**

seats in a large lecture hall

**78**

scientific and university laboratories





## Reconstruction work of the first stage of rearrangement of the Mezaparks Great Bandstand

The reconstruction provides for the arrangement of the spectator platform and the stage for holding the XXVI All-Latvian Song Festival and the XVI Dance Festival in 2018.

### Facts and figures

Riga, Latvia. The project is commissioned in June 2018.

**146,430 m<sup>2</sup>**  
after  
reconstruction

**22,197 m<sup>2</sup>**  
new area of the  
spectator field

**30,000**  
persons are the capacity  
of the spectator platform

**11.5 m**  
height of the spectator  
platform's structure

**100 m**  
width of the choir  
member stands

**9,802**  
places for choir  
members

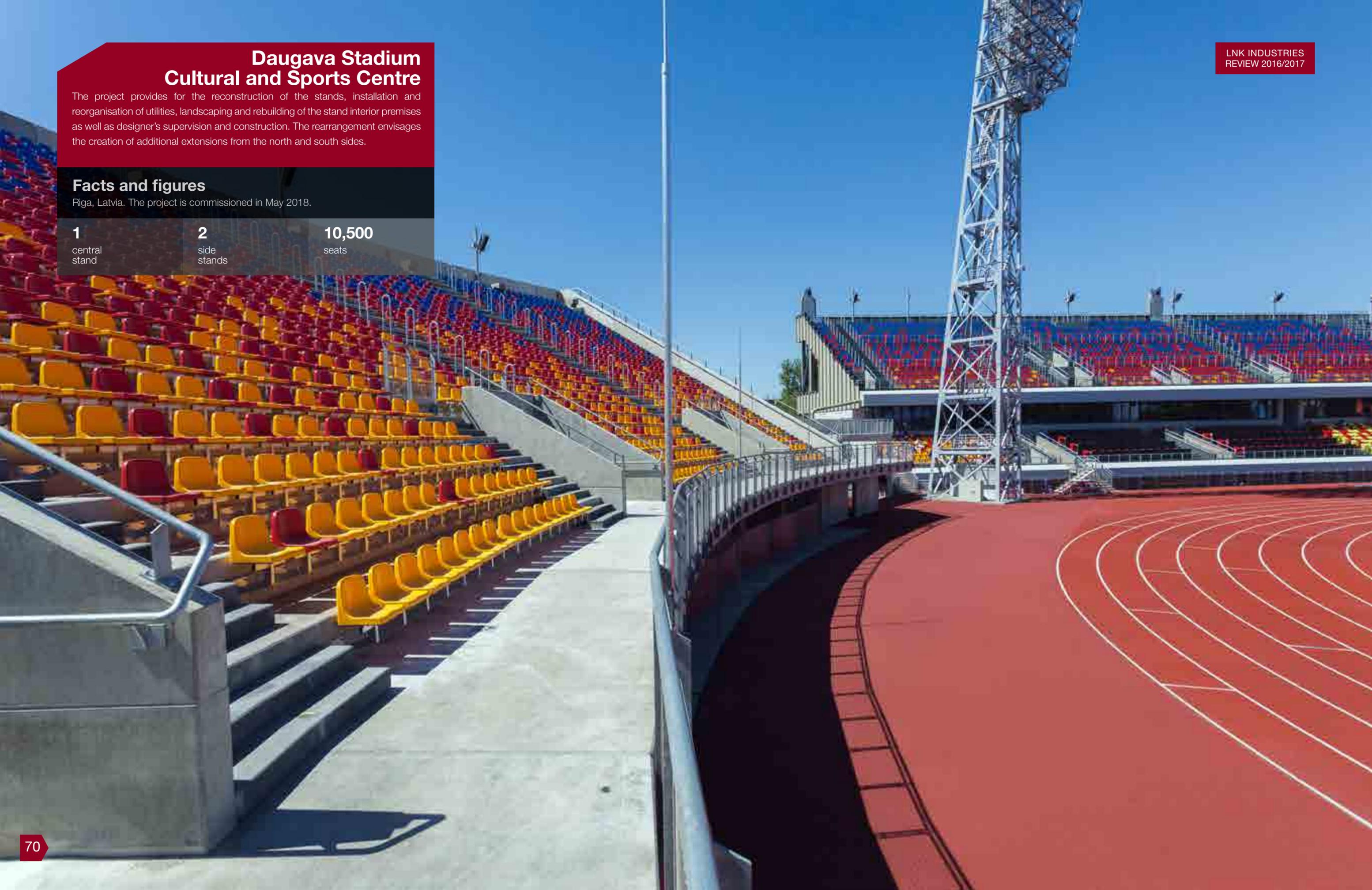
## Daugava Stadium Cultural and Sports Centre

The project provides for the reconstruction of the stands, installation and reorganisation of utilities, landscaping and rebuilding of the stand interior premises as well as designer's supervision and construction. The rearrangement envisages the creation of additional extensions from the north and south sides.

### Facts and figures

Riga, Latvia. The project is commissioned in May 2018.

<b>1</b>	<b>2</b>	<b>10,500</b>
central stand	side stands	seats



## Construction of the stadium and landscaping of it's territory

A football field with a race track, a basketball court, two multifunctional courts, beach volleyball courts, a sector for long jumps, a skatepark and a cycling park, and a platform for street workout are constructed on the territory of the Central Sports District. The entire territory has a CCTV and lighting system.

### Facts and figures

Riga, Latvia. The project was commissioned in 2017.

**40,147 m<sup>2</sup>**

land plot area

**1,216 m<sup>2</sup>**

multifunctional sites

**7,108 m<sup>2</sup>**

walking and  
bicycle paths

**1,760 m<sup>2</sup>**

skatepark area

**2,688 m<sup>2</sup>**

football field

**2,752 m<sup>2</sup>**

cycling  
trail area



# Foundation works



## Scientific Centre of the University of Latvia

Works were carried out in a pit, which accumulated all rainwater and water from drilling pile holes that complicated foundation work. At this site, we also tested piles designed for the load of 420 tonnes, which in our experience is the largest weight for a pile of 600 mm in diameter.

### Facts and figures

Riga, Latvia, 2017.

**182**

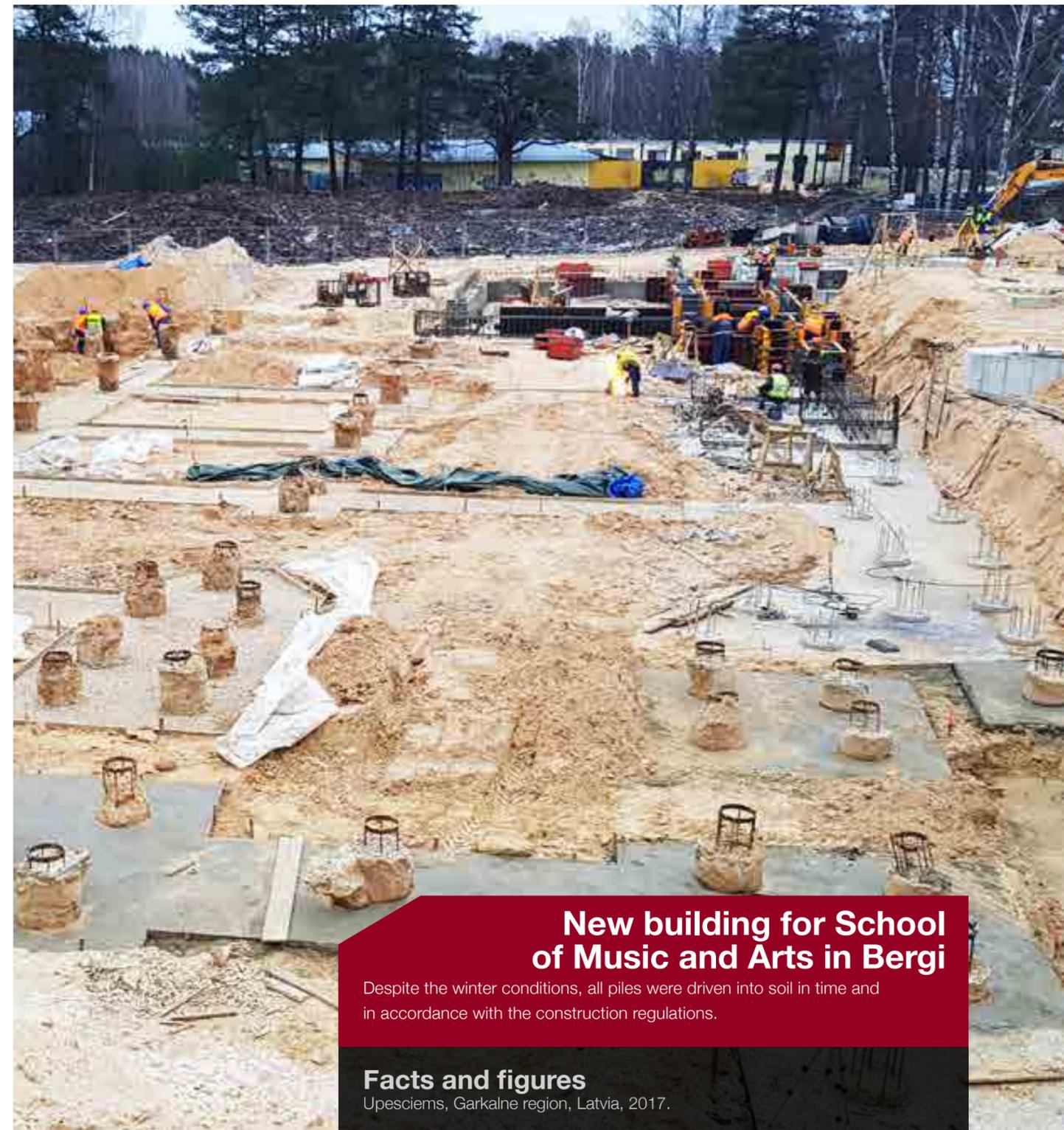
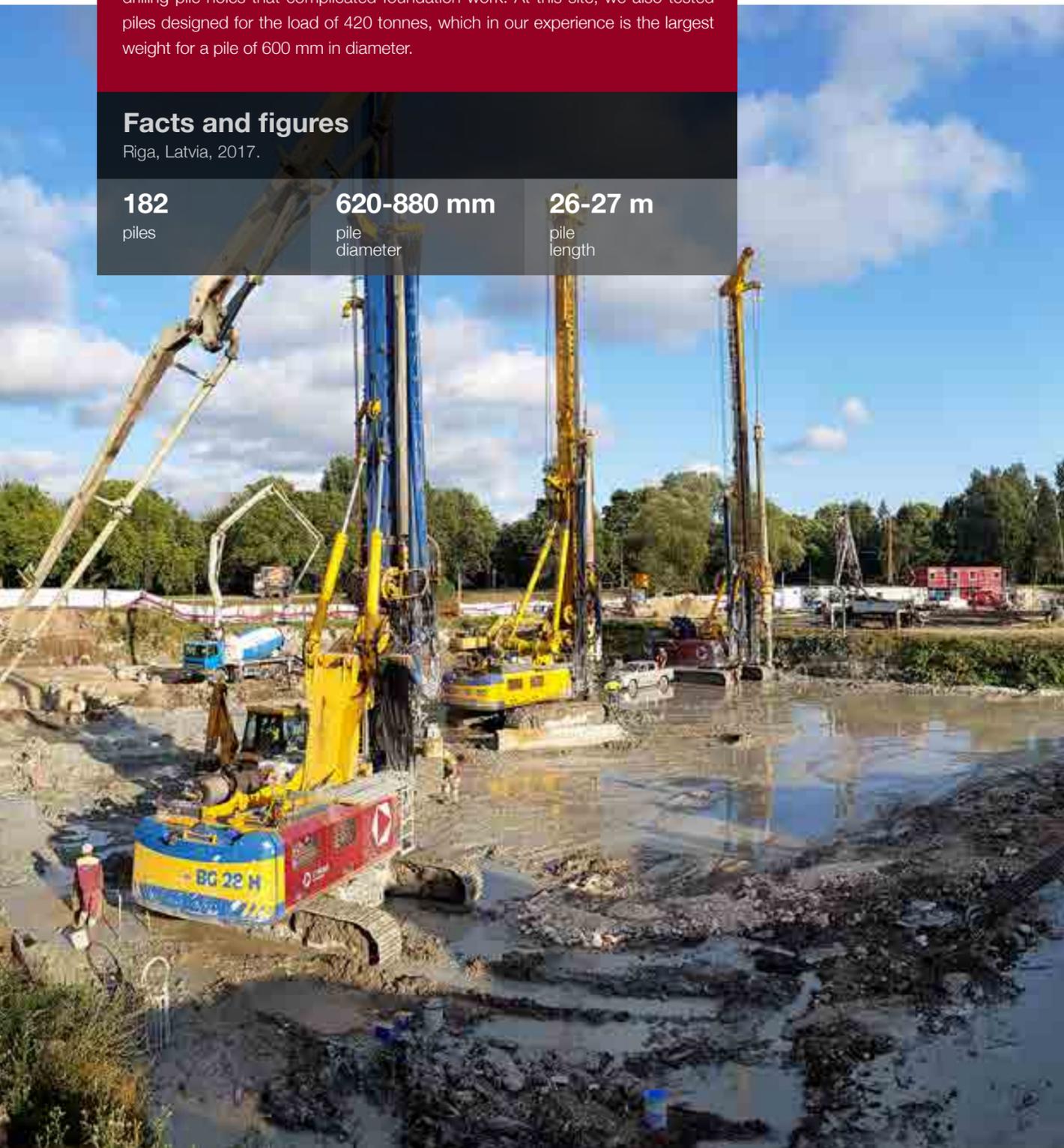
piles

**620-880 mm**

pile  
diameter

**26-27 m**

pile  
length



## New building for School of Music and Arts in Bergi

Despite the winter conditions, all piles were driven into soil in time and in accordance with the construction regulations.

### Facts and figures

Upesciems, Garkalne region, Latvia, 2017.

**286**

piles

**510 mm**

pile  
diameter

**12-14.7 m**

pile  
length

## Second building of the Club Central Residence project

Due to the presence of nearby buildings and the danger of their sagging due to piling works, the production of piles was carried out under tightened supervision. This site was the first to test piles in a piled sheet, without the use of a frame with loads from under the drilling machine.

### Facts and figures

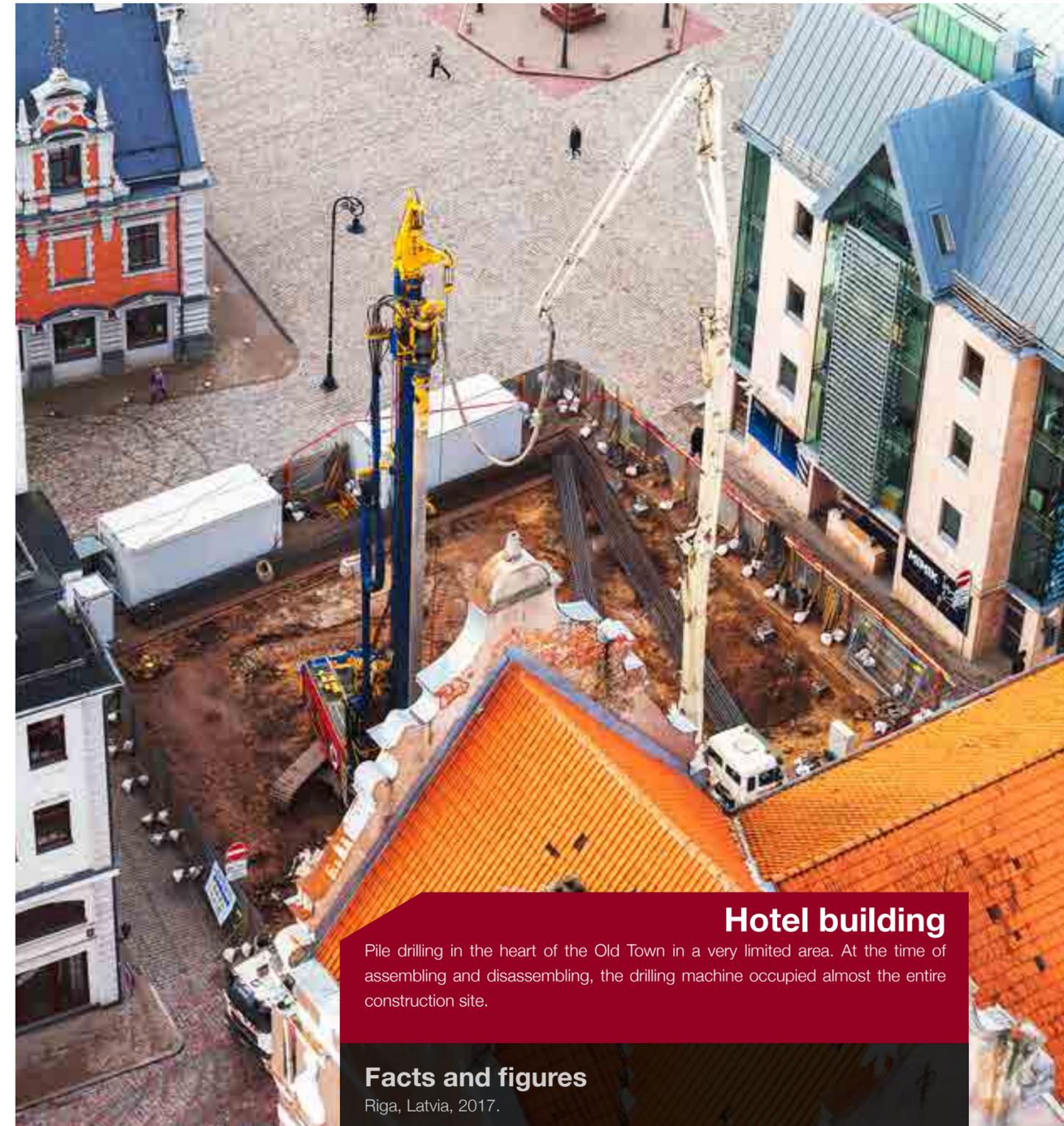
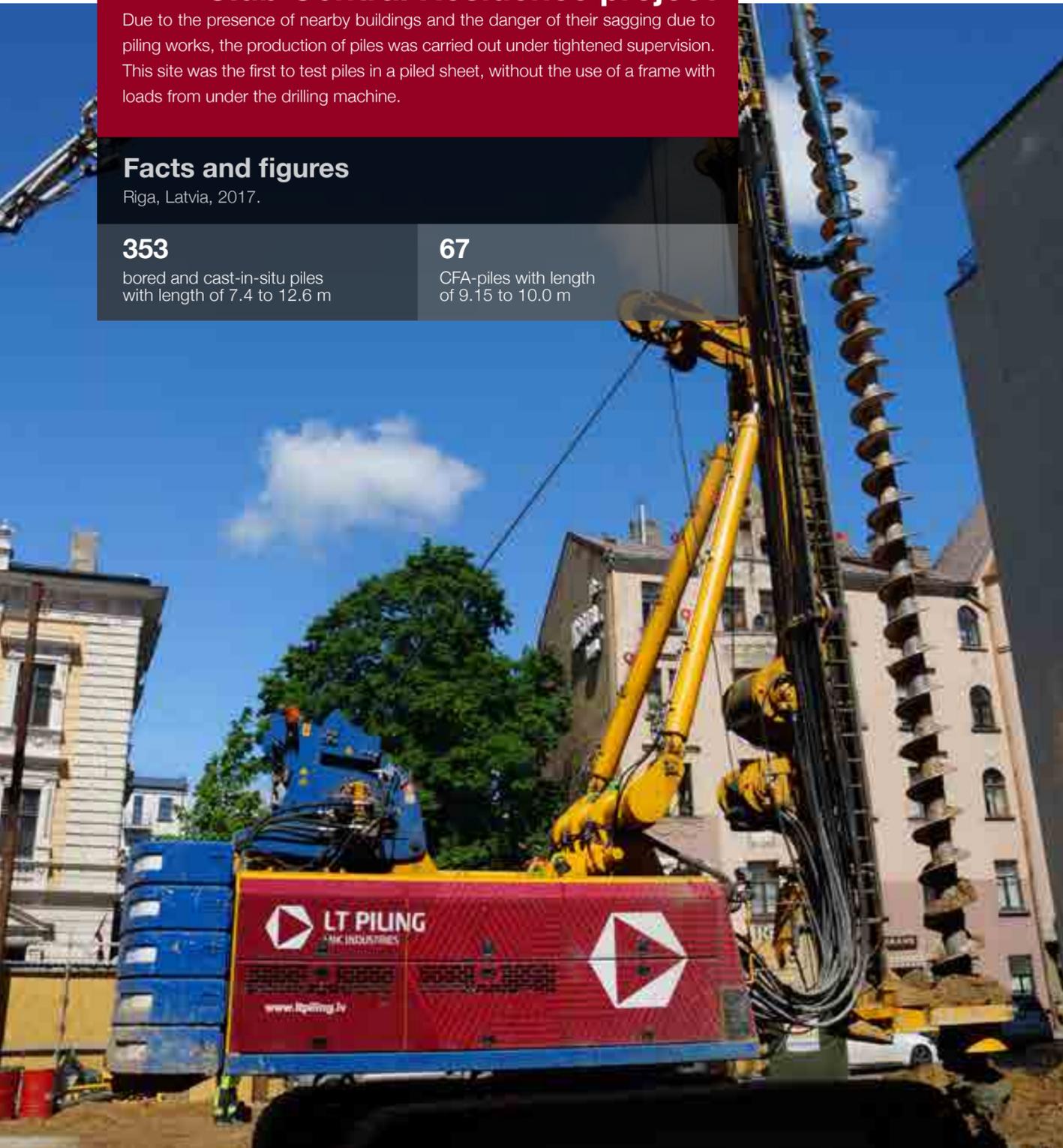
Riga, Latvia, 2017.

**353**

bored and cast-in-situ piles with length of 7.4 to 12.6 m

**67**

CFA-piles with length of 9.15 to 10.0 m



## Hotel building

Pile drilling in the heart of the Old Town in a very limited area. At the time of assembling and disassembling, the drilling machine occupied almost the entire construction site.

### Facts and figures

Riga, Latvia, 2017.

**50**

piles

**420 mm**

pile diameter

**18 m**

pile length

# Production



## Norgesporten Motor Cable Bridge

The single-span box-girder bridge is supported by steel cables. The bridge's body was assembled in situ of 26 unique sections. The bridge has a complex curved shape because the road turning radius on the bridge is 85 metres. According to the architect's instructions, the pylon of a conic section has no visible welds. High strength steels are used in the structure of the bridge.

### Facts and figures

Ørje, Norway. The project was commissioned in 2017.

**530 t**

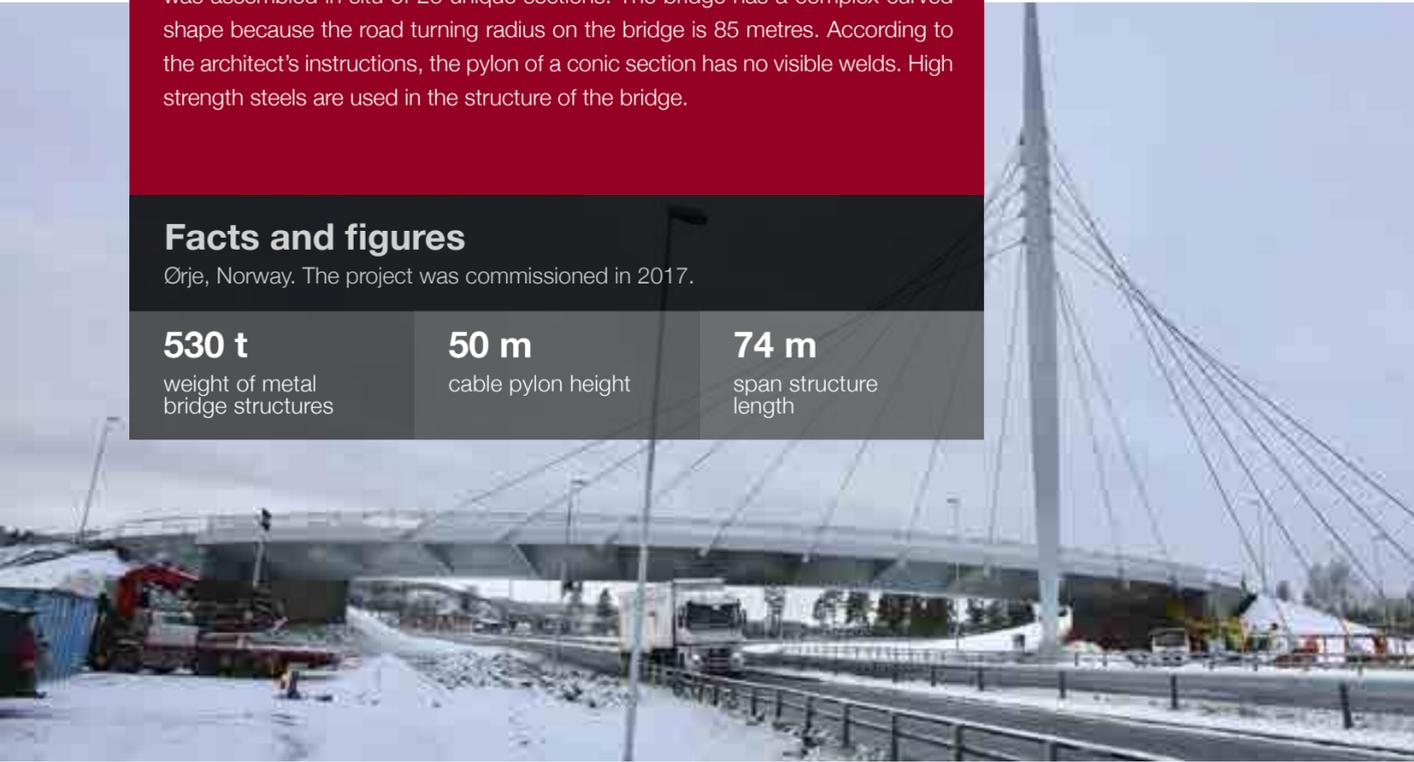
weight of metal bridge structures

**50 m**

cable pylon height

**74 m**

span structure length



## Foundry equipment

The body of the electric arc furnace is made of 25 mm thick P355GH steel and equipped with seven exhaust gutters. The body is assembled with the accuracy of +/-3 mm. The furnace is used for the production of pure silicon. The place of installation: at the factory ELKEM SALTEN in Norway.

### Facts and figures

Norway, 2018.

**51 t**

total weight

**11.7 m**

diameter

**5 m**

height

## Telescopic terminal fingers for the airport

Comprehensive project – production of metal structures and assembly of terminal fingers according to the customer's drawings. Assembly work included wiring and automation, hydraulics, glazing and installation of safety and climate systems. This kind of production was manufactured for the first time.

### Facts and figures

Dubrovnik, Croatia, 2017.

**16.8 m**

length of each of the  
three telescopic sections

**3.8 m x 4 m**

width and height

**> 28 t**

total weight



## Mobile stacker

A mobile stacker for transshipment of coal in the Seaport of the city Vysotsk. It is equipped with a powerful magnet to clean cargo from metal. The adjustable angle of the boom allows to reduce the formation of dust during loading operations. Developed and produced by TTS, by now 6 stackers operate in the port of Vysotsk.

### Facts and figures

Russia, 2016–2017.

**600 t/h**

capacity

**25 m**

conveyor length

**10 m**

cargo stacking  
height

## Flood gate

This project involved the production, delivery and in-situ installation. Steel structure is made of a combination of stainless and structural steels. It features a gate's body heating system preventing ice build-up. The gate's body has a high precision of manufacturing to ensure the tightness of the flood gate.

### Facts and figures

Sweden, 2017.

**90 t**

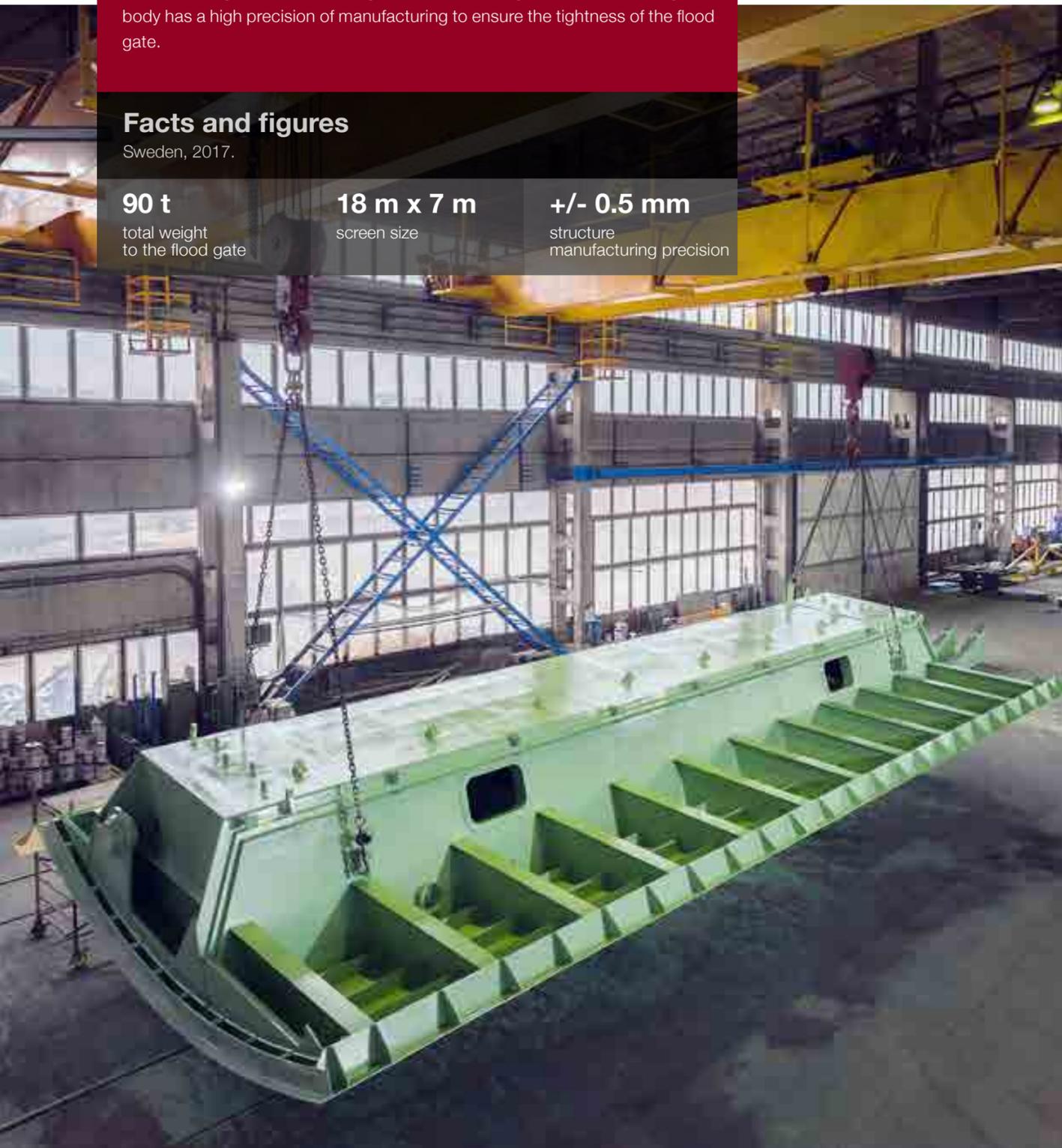
total weight  
to the flood gate

**18 m x 7 m**

screen size

**+/- 0.5 mm**

structure  
manufacturing precision



## Hydroelectric Power Station

A new Hydroelectric Power Station was built on the site of the old one. Steel structures – the main gateways, debris screens and a flushing sluice – were manufactured and mounted.

### Facts and figures

Byafossen, Norway, 2017.

**6.42 m**

debris screen  
height

**18.4 m**

debris screen  
width

**32.4 t**

of stainless steel

**4**

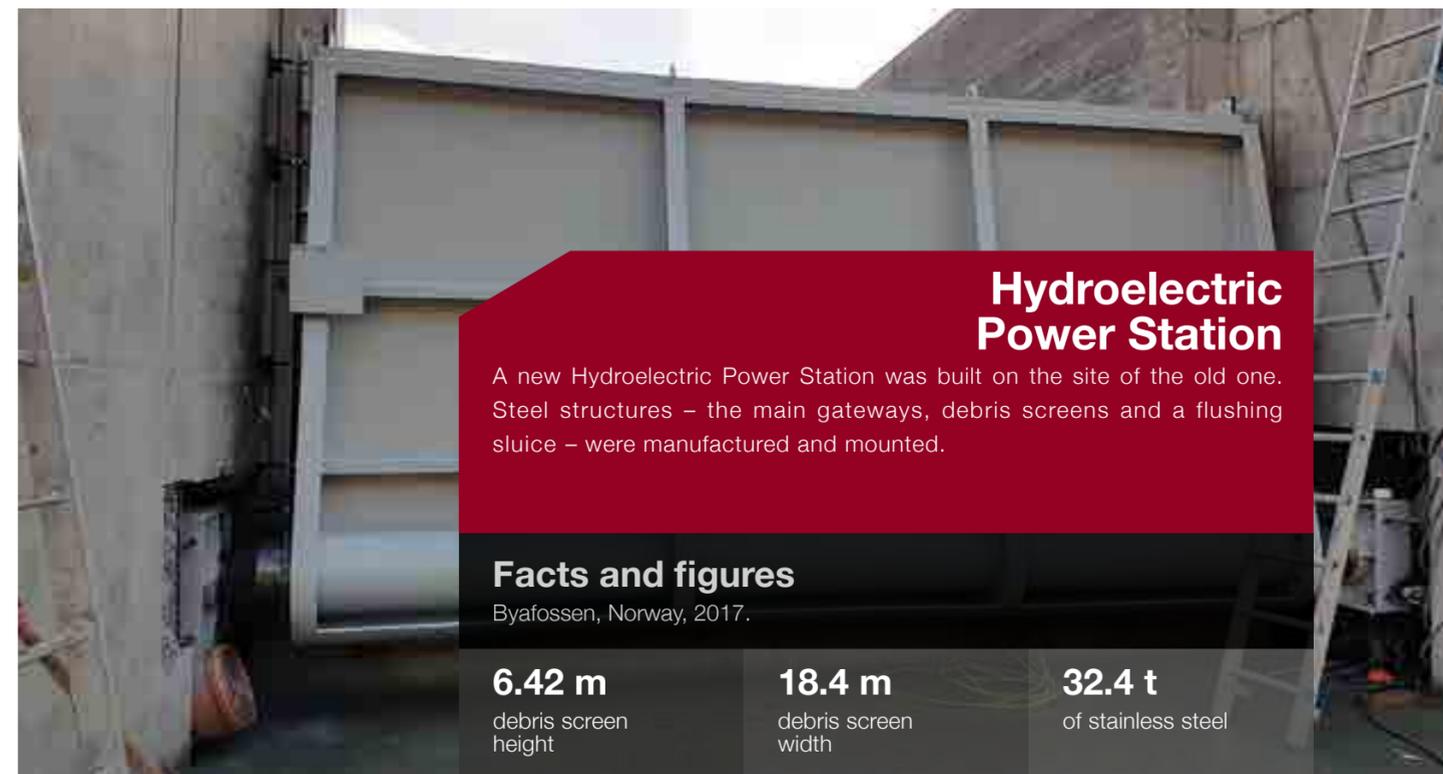
gates 5 x 4.8 m,  
the main gateway

**61.3 t**

total weight  
of steel structures

**4 x 5.1 m**

5.6 t flushing sluice



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