

WATER WORLD

A vast waterpark is the crown jewel in a masterplan designed to enhance the city of Debrecen in Hungary. Tom Anstey speaks to Peter Bordás, the architect behind the iconic addition to the city

Debrecen is Hungary's second-largest city. One of the country's most important cultural centres in Europe, the 9th century settlement is undergoing a HF200bn (US\$653.8m) transformation – its most significant in nearly three decades.

Called the New Phoenix Plan (Új Főnix Terv) the investment programme started in 2004 and has so far included a new cultural centre, the conversion of Great Forest Park's outdoor stage, a new stadium and a sports pool among its developments. Still to come are a transformation of the Debrecen Cultural Park's zoo and theme park, and a new architecture icon for the city – the Aquaticum Water Park.

Based in Nagyerd – also known as the Great Forest of Debrecen – the combination of spa, lido and waterpark will be presented in unique fashion, with a structure of cascading waterfalls laid out over multiple storeys.

In 2015, Debrecen Spa held an architecture competition, inviting entries to build an iconic waterpark for the Aquaticum Spa and Wellness Centre. The city laid out the plans with the intention of creating a "high-quality, loveable, family centred and attractive waterpark".

Following a judging process, Hungarian firm BORD Architectural Studio were selected to design the new attraction.

Green architecture

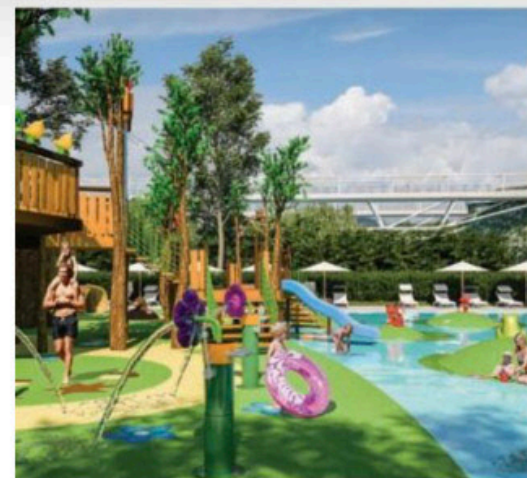
With offices in Budapest, Debrecen and Zurich, BORD was founded by Peter Bordás in 2006 and places its focus on creating environmentally conscious and sustainable buildings, a key feature for the new waterpark, which will be enveloped by the protected Great Forest.

Considering the existing forest surroundings, the planned scheme follows the original layout of an old lido that previously occupied the site.

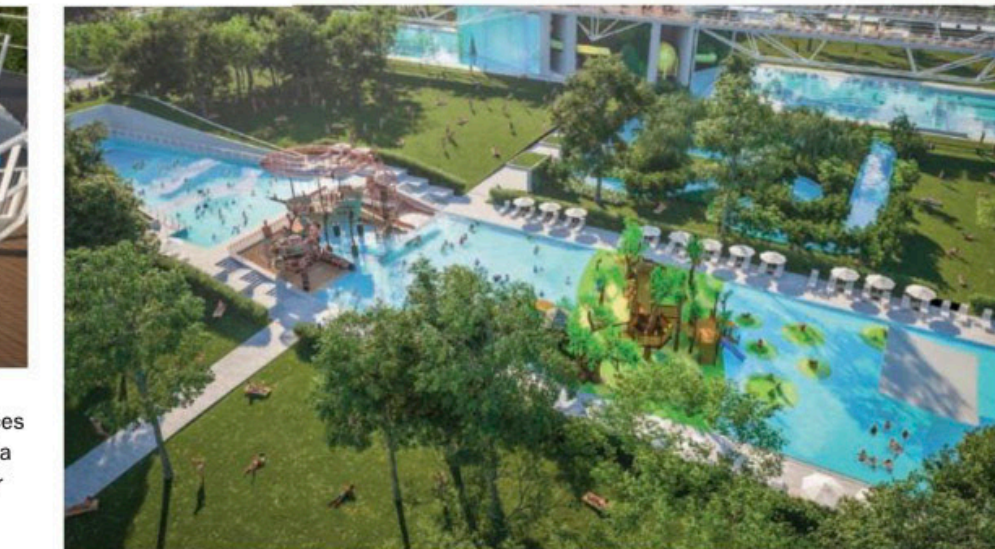
"This was an experiment for us really that resulted in the creation of an unconventional, three-dimensional water experience, which at its heart features a cuboid shaped visual module made entirely of water, reflects the green colours of the surrounding," says Bordás. "Our concept was to place the different theme elements



The development is a long term, large scale investment strategy involving Nagyerdei Stadium and the rehabilitation of Békás lake



At the heart of Nagyerdo forest, the waterpark has been conceived as a centre of wellness



into this environment as if they were pieces of a mosaic. In the middle we visualised a statue-like design that elevates the water and greenery to a different dimension, emphasising the outstanding natural surroundings of the Great Forest."

Inspiration from nature

Debrecen is located on Hungary's Great Plains, a dry region in the eastern part of the country. Protected by Natura 2000 – the European Commission's network of core breeding and resting sites for rare and threatened species – the forest is home to the steppe iris flower, as well as several rare species of beetle, butterfly and bat.

"We build each project around a story, which inspires the architectural concept and leads the project like a guiding thread, giving individuality to each of our buildings," says Bordás.

"In this particular case, we imagined a tiny puddle in the middle of the desert. Then we visualised a pair of magic hands pulling a cube out of this mass of water.

"This newly-created world, this little oasis, then gradually began to fill up with life. All sorts of plants and animals dwelled in it and finally the forest appeared too, treasuring the waterpark as the symbol of life at its centre.

"At the core of the forest hides the waterpark, which uses water so rich in minerals that it offers natural healing remedies for a number of ailments. These geographical circumstances, the presence of spa water and the protected forest all

LÁSZLÓ PAPP, MAYOR OF DEBRECEN

What do you want to achieve with the development?

"The goal is to create a grove in the Great Forest, which will attract the people of Debrecen in winter. Not only can waterpark guests use these restaurants, but also those who are walking in the streets and exploring the forest."

What kind of challenges did you face?

"There have been comments saying that water coming from a 12m (40ft) wall will make a lot of noise. The design team of Péter Bordás has come up with a practical solution for this: the water wall will get a glass cover, so the water will not be too loud."

When can we expect the first guests?

"We will all be able to splash here next summer."



inspired our work. The story behind the concept should remind us how important it is to protect the environment."

Tourism aspirations

The waterpark has been created primarily for the citizens of Debrecen, but it's also expected to be a tourist draw with capacity for up to 6,000 people a day.

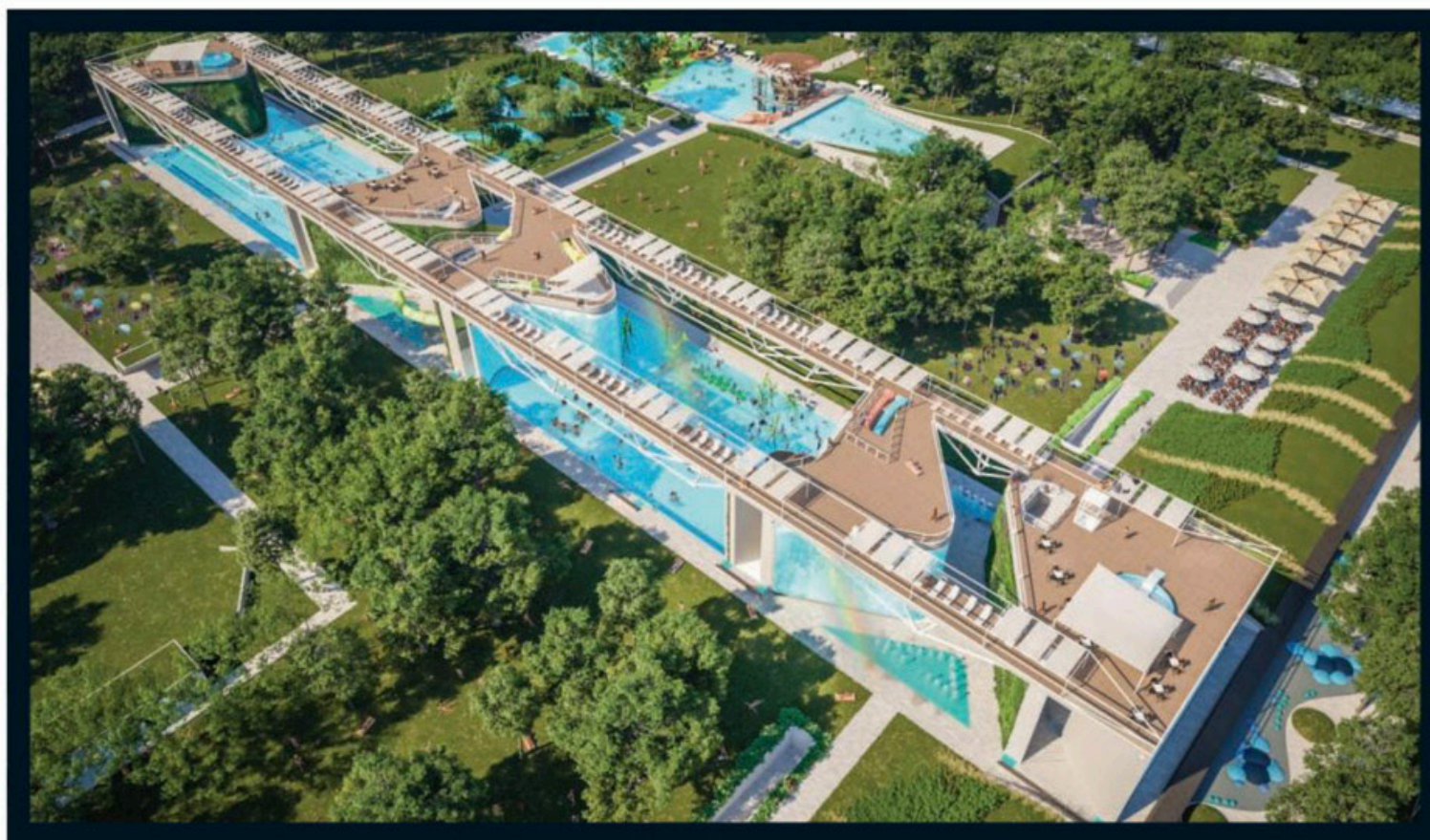
The waterpark is laid out as an open, freely accessible construction that encompasses adventure and sport pools into one space. Each pool experience is separated by walls that will either be covered by glass with water cascading down like a curtain, or will be covered by green plants as a living wall.

Above will sit a 12 metre-high (40 foot) sun deck, with loungers, spa pools and entry to waterslides, which are being supplied by Hungarian manufacturer Eleven.

The largest space will be a 1,160sq m (12,500sq ft) adventure pool featuring a water cave, a lazy river, a bar and four different types of slides.

A second 1,100sq m (11,800sq ft) space will offer visitors training pools and a water polo pool. Nearby will be a diving pool with three diving stages up to 4m (13.1ft).

The kids' area has its own distinct look different from most waterparks.



IT'S THE LONG-TERM PLAN OF THE CITY TO MAKE THE PARK FOREST A SIGNIFICANT DESTINATION FOR BOTH DOMESTIC AND FOREIGN TOURISM



► Tied in with its surroundings, instead of brightly coloured waterslides, attractions will be clad in wood. Based on the 2002 animated science fiction action adventure film *Treasure Planet* – an adaptation of Robert Louis Stevenson's adventure novel *Treasure Island* – Eleven and BORD dreamed up a pirate ship supported by a zeppelin, with

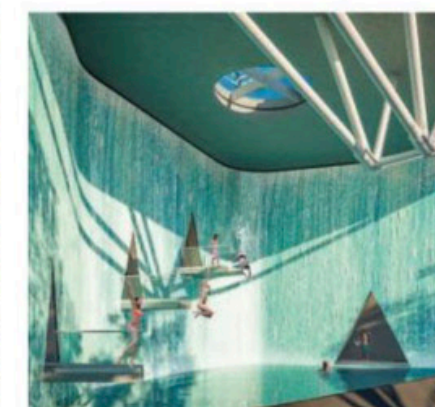
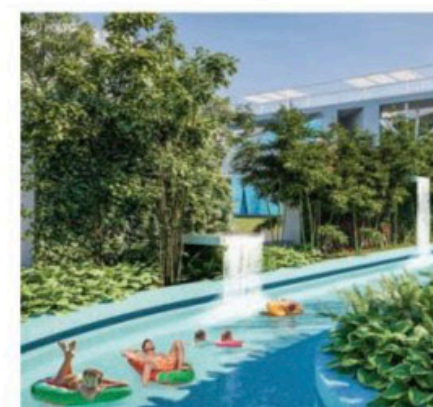
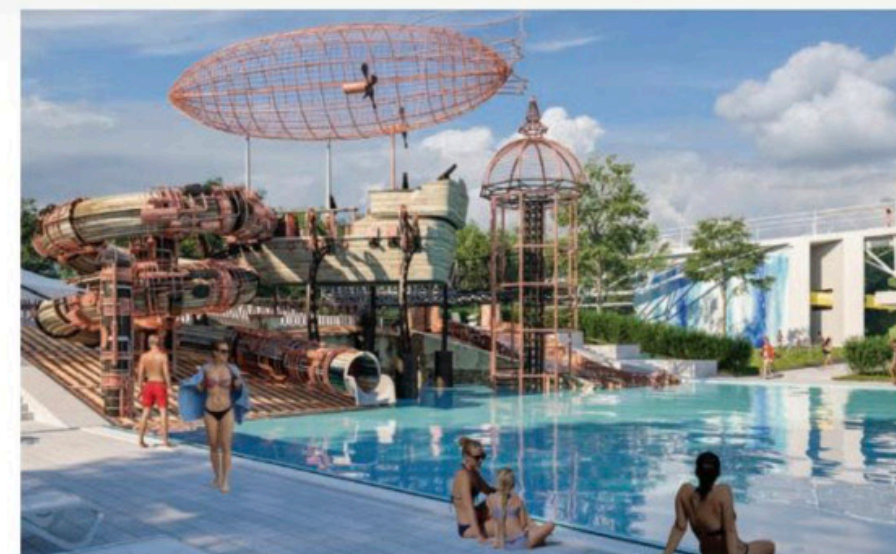
water cannon and slides coming out of the structure. The area also offers 990sq m (10,650sq ft) for swimming, a 290sq m (3,100sq ft) spray park and a 620sq m (6,670sq ft) wave pool.

A second block will feature the main entrance and a food court. Restaurants in the area will not only serve visitors to the spa, but will also be accessible to walkers

on the Nagyerdei path outside the building. Also planned are thermal pools and a children's theatre. Overall, the waterpark will cover 5,700sq m (61,300sq ft).

"On the long, flat volumes of the building, a green, wave-like roof slopes up from the direction of the spa," explains Bordás.

"The central visual attraction of the spa is the 12m cuboid. This module is open and



Creating an active connection with nature was a high priority during the project, with its influence resonating throughout the entire waterpark development

permeable on all sides and encompasses several functions, such as the thermal bath, relaxation areas, pools, slides, sunbathing area and bars."

Making progress

Debrecen-based firm Hunep Universal Construction is acting as general contractor for the development, which is currently progressing. Breaking ground in November 2018, the site reached its highest point at the end of July, with a topping out ceremony held to mark the occasion.

"We are well on schedule," says Bordás. "The central attraction and the entrance area are structurally complete. The kids' world is still under construction and we plan to open to the public on 1 May 2020."

With such a substantial development, there have been challenges and with its Natura 2000 status and a remit set out by the city, BORD was under strict guidelines.

"We've designed something in a treasured forest area where environmental protection is the top priority," says Bordás.

"On the construction side of things, we had to build arched concrete surfaces,

which presented a challenge and then, technically, we had to find a way to deal with the immense vapour and sound coming off of our artificial waterfalls."

Developing Debrecen

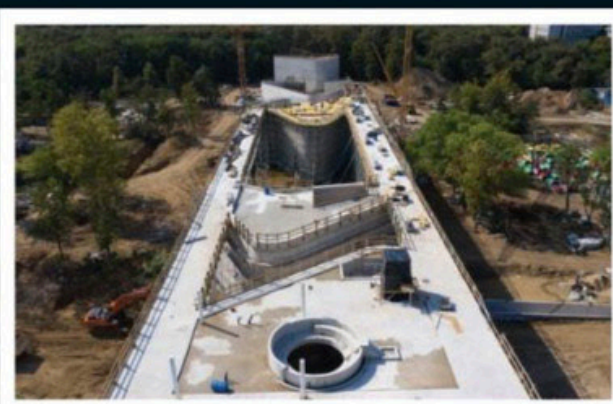
For the city, Aquaticum represents the next step in its vision for the future. With the Great Forest known as the most popular area for sports, relaxation and leisure activities, the renewal of the lido as an extensive waterpark facility "will enhance that reputation even further."

"It's the long-term plan of the city to make the park forest a significant destination for both domestic and foreign tourism," says Bordás. "The most strikingly visible innovations of this project include Nagyerdei Stadium, Bekas Lake, the Nagyerdei Open Air Theatre, Nagyerdei Water Tower and the Mist Theatre. One of the last elements of the renovations is the waterpark."

"The city requested a concept that could become another iconic representative of Debrecen and Nagyerdo and we look forward to welcoming visitors in 2020." ●



Debrecen-based Hunep Universal Construction is acting as general contractor, with the development on course to open in May 2020



ÚJ FÖNIX TERV

Employment

The New Phoenix Plan encompasses Debrecen's entire infrastructure. In addition to investments, the plan has focused on economic development for both large and small operations. To this end, new areas of industry are being designated, with enhanced support for innovation and high-value industrial development. Called the Employment Pact, the scheme aims to create thousands of new jobs across multiple sectors.

Transport

The transport development programme will be crucial to improving business and tourism links for the city, while also making everyday life for its residents easier and more comfortable.

Improvements include the main railway station on Petöfi Square, with transport links improved to include more tram and intercity bus services.

A new bypass is being built to better connect the airport and the southern area with the rest of the city. Road resurfacing is also taking place, transport hubs are being expanded and new cycle paths are being built.

Districts

New housing developments will address deficiencies in the city dating back decades in some places. Around these developments, parks, playgrounds and parking infrastructure will be renovated, with particular focus on the eastern and southern districts of Debrecen.

Nagyerdei Stadion

Opened in 2014, the HF11.5bn (US\$43.7m) Nagyerdei Stadion has the capacity for 20,340 spectators, making it the third-largest football stadium in Hungary. The stadium primarily hosts Debreceni Vasutas Sport Club's home matches and features rail seats to facilitate safe standing at domestic matches. It's also the home stadium for the Hungarian national football team.

Debrecen Cultural Park

Located in the Great Forest, Hungary's oldest conservation area, Debrecen Cultural Park opened in 1958 as the country's first zoo outside the capital Budapest. The park also now houses a botanical garden and amusement park and is undergoing a multi-million dollar transformation, which will largely be completed by the end of 2019.