



**PROGRESS: 100% - COMPLETED**  
AUSTRIA/BÖHEIMKIRCHEN/2016-18

## HARMONIOUS CONTRAST

### Böheimkirchen Community Centre

**Text:** Markus Huber

**By constructing a new community centre and renovating the old town hall, PORR has refreshed the face of Böheimkirchen town centre.**

Constructing the new community centre while simultaneously renovating the town hall required well considered logistical and technical solutions. In addition architectural details also had to satisfy the Federal Monuments Authority Austria (BDA).

### Background

The notion of building a new, expanded town hall in Böheimkirchen was first mooted back in 2008. To facilitate the construction of the planned new building with a multi-purpose hall, library and police station, a plot of land was purchased at the entrance to the town centre. An international architectural competition, launched in 2012, was won by the firm NMPB. However, the modern design led to a public campaign which favoured redeveloping the old town hall over constructing a wholly new building. Following a referendum and a series of mediation meetings, the local authority backed down. In 2013, it purchased the plot of land neighbouring the town hall and the architectural firm produced a new design with a reduced space allocation plan. In September 2015, a two-stage, EU-wide call for tenders was issued with the aim of integrating as many companies from the region as possible in the project. PORR Bau GmbH,

### Project data

<b>Employer</b>	Marktgemeinde Böheimkirchen
<b>Contractor</b>	PORR Bau GmbH
<b>Order type</b>	Generalunternehmer
<b>Project type</b>	Building construction, Public buildings, offices, revitalisation
<b>Project scope</b>	Renovation of the listed official building and new civic centre as an annex
<b>Order volume</b>	9.2 million euros
<b>Construction start</b>	06/2016
<b>Construction end</b>	02/2018

Lower Austria branch emerged as the best value bidder and secured the assignment of main contractor.



**DESPITE DETAILED PLANNING, WE REACHED THE LIMITS OF FEASIBILITY DUE TO THE COMPLEXITY AND THE NARROW CONSTRUCTION SITE.**

*Markus Huber*  
**Project Manager, PORR Bau GmbH**

## Accessible route from the market square to the parish church

The most popular motif for tourist photos in Böheimkirchen is the town hall, with its structured Gründerzeit façade and the parish church rising behind it. Until now, however, the route between the two landmarks was rather laboured. Once construction work is complete, there will be an accessible route from the market place up to the parish church. As part of this, a new steel bridge has been erected; accessible via a lift in the stairwell foyer, it is connected to the church mound and the flight of steps behind the building.

The confined building site at the heart of the town meant that sophisticated, well considered traffic concepts were necessary. A circular one-way traffic system was implemented in the centre of Böheimkirchen for the entire construction period. Large prefabricated elements, such as the hollow-core planks for the assembly room ceiling, could only be delivered on a Saturday afternoon once the regional farmer's market had finished. Any required road closures had to be requested ahead of time and publicised in the town.



The stairwell foyer in the new community centre provides an accessible route to the church mound. Source: PORR

## Main challenges

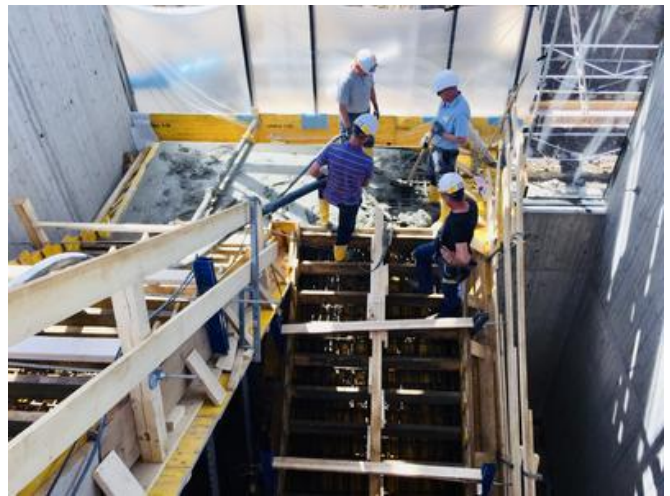
While renovation of the town hall was ongoing, a former confectionery shop on the neighbouring plot of land had to be demolished and replaced with a new building. Securing the old retaining wall bordering the parish church proved a particularly difficult task. After extensive survey work, PORR inserted a 14m-long pre-stressed tie-rod into the church mound.



Considerable effort went into securing the church mound's retaining wall and the structured Gründerzeit façade. Source: PORR

## Foundations and structural work

Work to lay the foundations and enclose the excavation pit for the new build used in-situ concrete large bored piles with a combined length of 600m. Deep drilling work will allow geothermal energy to supply energy for the building. All storeys were planked, reinforced and concreted using in-situ concrete. The 14m-high exposed concrete walls were erected using exposed shuttering with concealed joints. The individual planed boards in the shuttering could only be used once due to the desired optics. Indeed, numerous planks were rejected for failing to meet quality requirements. In total, 9km of boards were used to implement the exposed concrete elements. A complicating factor was that these walls were erected in inclement weather conditions between December and March, and had to be protected for the remainder of the construction period.



PORR workers concrete the final flight of stairs. Source: PORR

## Renovating the old town hall

To avoid damaging the array of heritage-listed elements of the old town hall, work on the existing building had to be carried out with the utmost care. Consequently, the building envelope was reinforced with a rigid steel framework construction while work was carried out. The old foundations were also strengthened, and the walls dried out in a special procedure. The old roof framework was broken down and replaced with a new steel structure. Elaborate techniques to renovate the plasterwork breathed new life into the structured Gründerzeit façade.





The new roof framework required a steel construction as the uppermost cornices of the old town hall featured a rooflight throughout. Source: PORR

## Interior design

The interior spaces are an architectonic masterpiece. Wood, concrete and glass elements combine to create an extraordinary atmosphere. The oak panelling that adorns the walls and ceilings of the public spaces is also complemented by solid wood parquet flooring. Floor-to-ceiling solid wood doors provide access to the assembly room – each door weighs around 400kg. All circulation areas have been finished with polished screed, with the same concrete material used in the cast stone steps of the main staircase. The landings in the stairwells are cantilevered. All balustrades have been covered in oak cladding and feature internal LED strips.



Each of the floor-to-ceiling solid wood doors weighs around 400kg. Source: PORR

## A regional project

To adhere to the regionality principle set down in the call for tenders, PORR tasked local companies with the majority of the work. Indeed, all contracts were awarded to companies based in Böheimkirchen itself or in the immediate vicinity. The individual tasks included: demolition work, earthworks, constructional steelwork, joinery, glazing, plasterwork, flooring installation, heating, ventilation, plumbing, electrical installations, window renovation, paintwork, roofing work,

landscape design and a blower door test. Effective collaboration between all parties was crucial in ensuring that technical and architectonic challenges were overcome to the full satisfaction of the client. One aspect to note is that, despite the often highly demanding and technically complex work required, work on the building site was performed without any accidents.

At the opening ceremony, attended by State Governor Johanna Mikl-Leitner, Mayor Johann Hell characterised the project perfectly: “With our new building, the face of our market town has been tangibly and permanently transformed. With the courage to embrace innovation – while retaining the town’s historic structure – this project provides a focal point in the town centre. We are proud of our modern, contemporary and citizen-orientated community centre. We owe particular thanks to PORR and the team of architects at NMPB Architekten for the excellent collaboration.”

## Technical data



### 2.500m<sup>2</sup>

Gross surface area

### 805m<sup>2</sup>

Plot area

### 1.500m<sup>3</sup>

Excavation

Construction pit depth	4,0m
Paving	400m <sup>2</sup>
Bored piles	600m
Steel incorporated	40t
Concrete incorporated	1.800m <sup>3</sup>
Reinforced concrete	220t
Exposed shuttering	600m <sup>2</sup>
Wall panelling	450m <sup>2</sup>
Baffle ceiling panelling	1.100m <sup>2</sup>
Polished screed	580m <sup>2</sup>
Post and beam façade	1.050m <sup>2</sup>





In the final weeks of execution planning, the new build was particularly striking in the evening hours. Source: PORR