

## TOWN HOUSE / SERVICE AND MEETING CENTRE WITH UNDERGROUND CAR PARK - „NEW CENTER BRUCHKÖBEL“ Bruchköbel (Germany)

### NEW BUILDING

**Client:** Town Municipal Bruchköbel

**Architects:** Kramm & Strigl Architekten und Stadtplaner GbR,  
Darmstadt

**Our services:**

Full structural design  
Establishing the basis  
Preliminary design  
Final design  
Approval documentation  
Execution drawings

Construction of a new service and community centre with citizens' office, multipurpose function room, city council chambers, magistrate's chambers, city administration and gastronomy, underground car park and plant rooms

#### Building

- triple-structured building, predominantly in solid construction (reinforced concrete)
- base area approx. 55 m x 40 m, access hall/magistrale as a central passage flanked on both sides with likewise multi-storey blocks
- due to nearby stream the design water level up to upper face of the finished floor, for buoyancy safety reasons foundations on tension piles, grid 3.0 m x 3.0 m
- elastically bedded base plate
- constructional grid (reinforced concrete columns) 7.80 m x 8.70 m

#### Reinforced concrete flat slabs

- cantilevers, e.g. 1st floor over the ground floor
- reinforced concrete beams above the function room on the ground floor, spanning 16 m
- deep beams with a height of one or two storeys
- steel/glass structure forming a gable roof above the access hall, made of welded steel girders IPN 260, distance 1.25 m, filled with laminated safety glass, 1.25 m x 4.0 m
- wooden construction forming the roofing of the two side buildings, e.g. above the city council chambers, timber truss girders, spanning 16.0 m, truss shoes at the base
- sliding partition walls with upper mounting and guide fixed on the wooden trusses
- stiffening via solid staircase cores
- prefabricated connecting bridges between the buildings flanking the main access point, each bridge being fixed on one side and pivoted on the opposite side
- specially designed self-supporting, single-run steel cheek stairs, spanning 12 m, connecting the upper floors

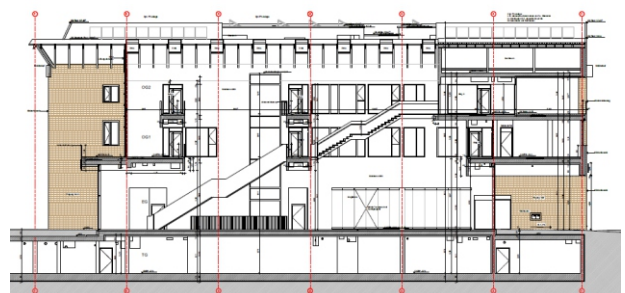
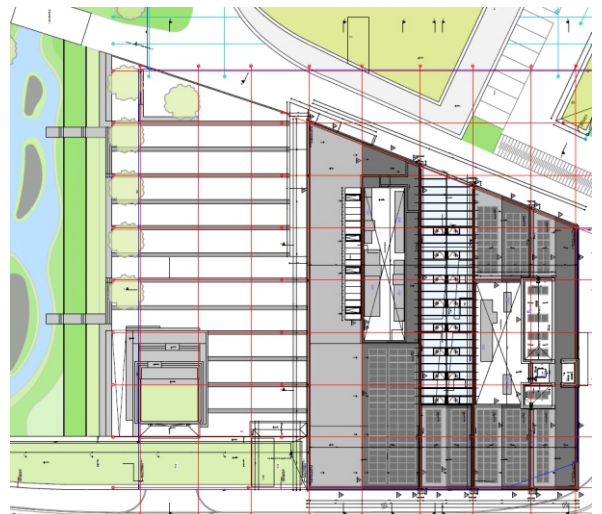
#### Underground car park

- 216 parking spaces
- two separated sections constructed in reinforced concrete construction
- reinforced concrete columns grid 7.80 m x 8.70 m
- designed as white tank
- base area of the underground car park is a multiple of the floor area of the building
- in a further building phase, a supermarket is planned to be built on the underground car park

**Completion:** 2022



Cross section: Triple-structured complex with access hall as a central passage flanked on both sides with building, underground car park covering a multiple of the building ground area



Cross section: Multi-storey access hall with a steel/glass structure as a roofing, floors connected by self-supporting single-run steel cheek stairs