

- Consulting
- Design
- Planning
- Supervision



Lukishan

Berlin · Hamburg · Vienna

# Tell us what you need – we translate your visions into technical concepts!



### **BIKINI BERLIN**

Conversion of the listed building ensemble across from the Kaiser-Wilhelm-Memorial-Church consisting of big high-rise building, Zoopalast, Bikini House, small high-rise building and parking garage as well as addition of an Event-Shopping-Center in a trough-like excavation pit

**Europacity, Berlin** Construction of a new high-rise building (18 floors) and offices (7 floors) on a joint parking garage (3 basement levels) on 4.200 m<sup>2</sup> at the Berlin Central Station



### Museumshöfe/Kompetenzzentrum, Berlin

Conversion and renovation of a listed barracks building for use as offices, storage and library for the Staatliche Museen in Berlin including the existing supporting structure as well as planning of a new scientific center of excellence protected by a trough excavation pit

**Pantaenius House, Hafencity Hamburg** Design of the excavation pit next to the dock and of the partial demolition of the "New Wharfage" as well as their integration into the supporting structure concept of the trench casing and horizontal bottom seal



### Hotel de Rome – OpernCarrée, Berlin Conversion, renovation and extension of the former GDR-Staatsbank at the Bebelplatz

by addition of two upper floors and a new building with 3-level waterproof basement



#### Leipziger Platz, Berlin

Construction of an up to 9-floor superstructure over the subway taking into account all settling aspects at a length of approx. 120 m and planning of a subterranean construction at the side with up to 4 waterproof basement levels on approx. 20.000  $m^2$ 



### Grand Hotel Heiligendamm

Support structure planning of the façade safeguarding, gutting and demolition work of the hotel; construction of service buildings, parking garage, villas, apartments and staircase to the beach with pier and protection against storm tides

**LED-Cube o2 World, Berlin** Planning of Europe's largest scoreboard incl. chain guide lifting mechanism



### City Bridge Frankfurt/Oder

Building of the new bridge with a length of approx. 250 m parallel to the old bridge and disassembly of the latter once the new bridge was moved laterally to its final position; planning of all sub-structures in the interim and final positions, the bridge pier and the structures supporting the bridge during lateral movement



Mendelssohn-Bartholdy-Park, Berlin Support structure planning of the excavation pit and of the structure of a 7-storey residential building above the subterranean travel track of the subway at the Potsdamer Platz **Excavation pit S21 Central Station, Berlin** The civil engineering structure consisting of several partial excavation pits of the train line S21 is embedded approx. 18 m in the subsoil with a rear-anchored base



Kurfürstendamm, Berlin Residential and business premises: Support structure planning of the excavation pit as interior bracing with central ring **Shopping Center, Wuppertal** Support structure planning for demolition and construction of a shopping center while using the existing basement as trench casing and the existing bottom seal for the new locations of the supports



**Lock Templin, Brandenburg** Replacement taking into account the deformation sensitivity of the rigid frame bridge



Pump Station Niegripp, Sachsen-Anhalt Replacement



Airport BER, Berlin-Brandenburg Design of excavation pit of the western two-track rail link – routing of the 2.7-km-track mainly as trough route as well as underground in the area of the terminal





### Infrastructure Project Karlsruhe

Tunnel Kaiserstraße for the urban railway project with southern junction Ettlingerstraße in the city center: Support structure planning of the excavation pits and underground stations of the railway tunnel of the West-East-Axis

### WE ALSO DESIGN YOUR SUPPORTING STRUCTURE!

Our performance spectrum comprises consulting, design, planning and supervision of building projects in all areas of construction engineering. Many of our large-scale projects are not only ambitious engineering tasks, but also place high demands on the project management with many parties involved, in part also abroad.

We always thrive to realize economic and thus frequently innovative and individual solutions. Our long list of satisfied clients, all relevant certifications and the continuously increasing number of our dedicated staff ever since our foundation in 1999 show that we know our business. Today approximately 35 dedicated, experienced civil engineers and CAD-designers are eager to work for you!

### SOLON AG, Berlin

Construction of a multi-storey production hall made of pre-fabricated parts of reinforced concrete and of an administration building constructed as a solid structure of reinforced concrete with thermal component activation; roof surface as waterproof construction without further sealing







**Berolinahaus, Alexanderplatz 1, Berlin** Conversion of the listed building from the basement up to the 3<sup>rd</sup> floor to a shopping center by enlarging the existing support grid using bracing

structures of reinforced concrete and steel composite structures on the 4<sup>th</sup> floor



### **Our Performance Spectrum**

#### **Building construction**

### New buildings

- Residential buildings
- Office, laboratory and administration buildings
- Hotels
- Industrial buildings
- · Retail, shopping centers
- Hospitals
- · Parking garages, underground parking lots
- Schools, scientific institutions
- Embassies

### Construction work in existing buildings

- Restoration of support structures
- Retrofit of support structures
- Listed buildings
- Below-grade constructions
- Extensions, annexes
- Preservation of existing structures
- Review of existing situation
- Evaluation of the existing standing fabric
- Façade safeguarding
- Sealing design

### Special constructions

- LED-Installations
- Scoreboards, radio masts
- Billboard masts
- Temporary structures
- Supporting structures for art works (Program Percentage for Art)

### **Structural Engineering**

### **Excavation pits**

- Water drainage systems
- Ground water models
- Berlin-type support system and sheet
  pile walls
- Diaphragm walls and cut-off walls
- Bored pile walls
- Anchorings, bracings, provisional floor slabs to transfer compression stress
- Tight bases
- Shafts

### Underpinnings

### Hydraulics engineering

- Locks
- Weir systems
- Culverts
- Pump stations
- Fish ladders
- Embankments, shoreline stabilizations
- Marinas
- Storm water retention reservoirs
- Bridges
- Bridge superstructures
- Bridge substructures
- Structures for lateral movement of bridges, elements, etc.
- Bridge lifting

### **Tunnel structures**

- Open-cut tunneling
  - Cut-and-cover methods
- Drop-shafts/caisson
- Pipe jacking

- Consulting engineers
- Certified technical experts
- Design, project engineering, planning and supervision of building constructions and civil engineering structures in all stages
- Experts' opinions
- · Individual solutions for individual needs

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### **Evidence preservation and quality assurance**

- Preservation of evidence
- Quality control and monitoring of the execution
- Preparation of QC-plans for special foundations
- Site management
- Engineering supervision
- Engineering monitoring
- EHS in the planning and execution stages

#### Inspection and Expertise

- Experts' opinions in the area of civil engineering and geo-technology
- Subsoil expertise
- Experts' opinions for riparian rights actions
- Reviews of existing situations, damage analyses
- Construction/structural testing
- Technical Due Diligence
- Experts' evidence/learned treatise
- Certified technical expert design engineer for protection and restoration of concrete parts
- Welding engineer
- Licensed Professional Engineer in the State of Vienna (Austria)
- Sworn and certified technical expert in the areas building construction, foundations, structural analysis, bridge building, steel and metal work, concrete construction and reinforced concrete construction