INSPIRELI COMPETITION – Zahrádky Castle

Student Architectural competition for a conceptual design for a reconstruction of Zahrádky Castle

Competition Conditions

Prague, August 2024

Announcer:

Charles University, Ovocný trh 560/5, 116 36 Prague 1, Czech Republic
e-mail: info@cuni.cz

Competition Organizer:

INSPIRELI AWARDS z.u.
Department of Architecture at CVUT in Prague Thákurova 7,
166 29 Praha 6

Content:

01. Introduction

Competition subject

The subject of the competition is an ideological design for the reconstruction of the premises of Zahrádky castle, which consists of the castle building (it was damaged by fire in 2003), a large castle park, which houses the orangery, the greenhouse and the house of the castle custodian, and the farmhouse in front of the main castle gate.

Type of the competition, conditions to participate

Architectural, student, non-anonymous, open, aiming at students from around the world without restrictions.

Competition Conditions and brief

Competition conditions and brief will also be displayed at the Competition's website at www.inspireli.com/zahradky.

02. Brief

The goal of the competition is to transform the premises of the castle into spaces that the university, in cooperation with the municipality of Zahrádky and the Liberec region, could use as a conference center, including accommodation facilities, a municipality information center and a center for leisure activities.

In the castle building, we would like to build exhibition spaces and a restaurant on the ground floor. On the next floors, a large lecture hall for audience of 100 people and two smaller lecture halls with a capacity of 50 people and utility rooms for conferences should be built. There should also be accommodation spaces with a capacity of up to 120 beds in double rooms and several apartments. We expect the quality of accommodation to be at the level of a three-star hotel.

In the farmhouse, we expect to place a municipal information center, a small exhibition about the history of the village and a café. The orangery could be converted into spaces for organizing chamber concerts or citizen meetings with a capacity of up to 50 people.

During the reconstruction, the external character of all objects must be preserved, the internal layout can be modified as desired. The overall look and feel of the park must be preserved. This means that the location of roads and sidewalks, individual green areas and artistic elements (statues, lapidary, fountain) must be unchanged.

Building of the Castle

Zahrádky Castle was built in the second half of the 16th century. After 1623, Albrecht from Valdštejn became the owner of the castle, who had the original building rebuilt in the Baroque style and founded a park. After 1945, the building served as a youth home and language training center for foreign students.

The four-winged multi-storey building of the castle (it has one subterranean and three above-ground floors and attic) with corner towers was severely damaged by fire in

2003. The northwest part of the building was most affected. In this half, there are burnt-out ceiling/floor structures between the 1st and 2nd above-ground floors, which were partially removed to prevent damaged parts from falling off spontaneously. Access to this part of the building on the 2nd floor is currently prohibited. The 3rd floor is completely closed due to damaged structures. The ground floor of the building is fully accessible.

The original mansard roof, including the historic trusses, burned down or was irreparably damaged by fire. It was completely removed and replaced with a temporary roof made of lattice saddle trusses with Welsh rafters and a roofing made of corrugated sheet. The facade of the dormers and the chimney bodies were professionally renovated.

There are damaged windows in the entire building, which in some places are missing glass, can no longer be closed or are completely missing, so due to the effects of the weather, the building is slowly deteriorating further.

The castle and the castle park are subject to heritage protection as immovable cultural monuments.

The total land area is 73,573 m^2. The built-up area of the castle building is 2,105 m^2.

Building of the Orangery
The orangery is an elongated building on a rectangular plan measuring 38 x 10 m, with the longer side oriented to the south, or to the north. The central glazed part is finished on the west and east sides by two rizalites. Rizalites are brick, single-story buildings covered with a gable roof with a low pitch. Previously, they served as transition spaces between the heated interior and exterior. Architecturally, the rizalites are rendered in an antique style with distinctive cornices and bosses. The northern wall of the orangery is connected along its entire length by a tract that originally performed a technological function connected with the heating of the orangery. Above the northern wall of the orangery rise two distinctive octagonal chimneys.

Construction of the building was apparently carried out in the early 1820s, and the greenhouse part was rebuilt in the mid-1860s. Further building modifications took place in the 1970s. A few years ago, the steel structure of the greenhouse part had rust removed by sandblasting and the entire structure was painted with a protective anthracite paint. The current building does not show any major structural damage to the masonry. Unfinished building modifications and limited maintenance of the building are reflected in the slow degradation of all parts of the building. The gable roof above the northern tract shows failures in the form of a collapse at the point where the chimneys rise to the roof. Before painting the greenhouse structure, the floor was cleaned, which is now covered with a layer of organic material, and in the recesses of the floor, invasive plants have taken hold.

Custodian House
It is a building from the 17th or 18th century in very good structural and technical condition. At the end of the 20th century, it went through a total reconstruction.

The object has a basement. It is based on cut rock with a thickness of 950–1000 mm perimeter stone walls. The other load-bearing walls are 400–600 mm thick. The

basement spaces are roofed with barrel vaults and cross vaults with vaulted bands. In several rooms, the floor is made of concrete screed, in others it is made of clay.

The perimeter walls of the building's ground floor are made of mixed masonry, 600–800 mm thick. Internal load-bearing wall is 500 mm thick, and masonry partitions are 150–300 mm. The ceiling is a 360–380 mm thick beam with a plastered underlay and cover. There are tiles in four rooms, and parquet in the others.

The rafters of the hipped roof are in very good condition. There is 50 – 100 mm of compacted clay on the overlap of the ceiling, then sheet metal covering on the overlap.

Farmhouse
The farmhouse is a rectangular building with an inner rectangular courtyard. It consists of a two-story L-shaped part in the eastern part, which has a basement, and a single-story L-shaped part in the western part, which is without a basement. Both parts have a gable roof. The parts are not connected by any communication.

In the two-story part of the building, there is an entrance passage to the courtyard, from which three internal staircases are accessible to the 2nd floor and to the attic space. On the 1st floor, there was a restaurant with a kitchen and facilities for the kitchen, warehouses and offices. There were stables in the northeastern part. The basement was used as storage for fuel, potatoes, etc. On the 2nd floor, there were rooms, offices, and sanitary facilities. The attic was unused.

In the single-storey part, there were storage areas and a second stable. The attic was used as a hayloft.

The courtyard is paved with basalt cubes and there is a brick well about 20 m deep, which was a source of drinking water. Rainwater from the courtyard is channeled in front of the yard drains into the public sewer. The building has a sewer connection and a 380/220 V electrical connection. The building does not have a water connection to the public water line. The building has a non-functioning cold-water distribution system and part of it has an internal sewage system. Sewage is not treated. The internal electrical distribution – lighting, sockets – are only partially operable. Heating was provided by direct heaters.

The cellar rooms in the basement are vaulted, bricked with sandstone stucco. The floors are clay, the stairs are stone without any other modifications. Cellar rooms are directly ventilated by air ducts with an outlet in the plinth of the perimeter wall. The plinth of the building is also made of sandstone stucco.

The perimeter masonry, internal load-bearing and non-load-bearing masonry, as well as the ceiling vaults on the ground floor of the two-story part are made of brickwork - solid bricks, on lime mortar. The ceiling above the 2nd floor of the two-story part and above the 1st floor of the one-story part of the building is a wooden beam with a cover and a plastered soffit. The roof is a wooden beam with a horizontal stool and cross ventilation. Floor tie beams are the part of the truss, placed transversely from one wall plate to another. The roof is tiled with plain tiles on battens. Chimney bodies are made of bricks, unlined. The floors on the 1st floor consist of concrete screeds, ceramic and stone tiles. The floors on the 2nd floor are wooden decking. The internal staircases

are stone, on brick vaults with spindle walls. The floor of the attic is made of brick tiles.

The windows in the building are wooden, double, with classicistic fittings. The interior doors are in the original parts with wooden cassettes in wooden linings, and in the newly designed parts in steel frames. The entrance door and entrance door to the passage are original wooden ones. There are classic dormers on the roof and in the single-storey part of the building, there are dormers (so-called bull's eyes) and skylights.

In the two-storey part, there is a non-functional cold-water distribution system – the water source is a well in the courtyard, and then the sewage system, which is led into the divided shaft of the courtyard and then into the public sewer. In the entire building there is a 220 V electrical distribution (sockets), but the lighting is only partially functional.

The building has not been maintained since 1945 and has gradually degraded. Currently, the roof gutters are completely devastated and the building is permanently waterlogged. Although the basement and 1st floor spaces do not show increased humidity of the walls and floors, in several places there are obvious static faults – cracks that are caused by the settling of parts of the building. Cracks are visible in the vaults of the ceilings on the 1st floor, in the staircases, and the biggest failure of the load-bearing perimeter masonry is visible in the northeastern part of the two-storey tract, at the point of exit from the stables to the garden – the only entrance portal. However, the deformation and disruption of the structures is not in such a serious state that it is necessary to remove the structure. It is necessary to take into account the repair and static securing of these parts of the building when carrying out reconstruction work.

03. Timeline and Deadlines

- Brief / assignment completed — July-August 2024
- Competition opened, publication of conditions — 1.10.2024
- Presentation of the competition conditions — www.inspireli.com
- Submission of competing proposals — 15.6.2025
- Announcement of Finalist — July 2025
- Competition results announcement — Autumn 2025 (per Announcer)

04. Prizes and Rewards

1. Financial rewards:
    a. 1st Prize 2 500 EUR
    b. 2nd Prize 2 000 EUR
    c. 3rd Prize 1 500 EUR

2. Non-financial rewards

    - In case of execution, the name(s) of the author(s) of the winning design(s)

will be displayed at the appropriate building, which will come from his winning design.

- Invitation to the premises of the Castle and to the Charles University for the Winners

INNOVATIVE SOLUTION PRIZE

Design an unconventional solution with sustainability (Materials, Technology) and consideration (Nature, Local people, Local customs and traditions) in mind. A special prize can be awarded to the project that offers an unconventional to innovative solution that best reflects the requirements of sustainability and use of new technologies.

05. JURY & JUDGING CRITERIA

The participants are encouraged to implement new and advanced technologies as well as sustainable yet diverse building materials into their design to create an architectural masterpiece that is bold in both form and function**.**

Proposal evaluation criteria

The criteria according to which the competition proposals will be evaluated are determined, without order of importance, as follows:

a) Compliance of the proposal with the competition conditions
b) Quality of the architectural solution: originality, creativity and real feasibility of the proposal

Jury:

- Chairman: Martin Maňásek, Bursar of Charles University
- Jury Member: prof. Jan Kuklík, Vice-Rector for Academic Appointments
- Jury Member: dr. Josef Fontana, Vice-Rector for Strategy and Development
- Jury Member: Jitka Baťková, Executive Director of the Rectorate
- Jury Member: Jiří Brandtlík, Technician of the Development Department of the Rectorate

06. REGISTRATION PROCESS

Students can enter the competition individually or in groups (unlimited number of members). Each project that competes in INSPIRELI COMPETITION also competes in the 10th edition of the global INSPIRELI AWARDS competition.

07. SUBMISSION PROCESS &RULES

The announcer of the competition may use student designs, or parts thereof, provided that the authors of these designs, or parts thereof, are awarded as winners and subsequently receive the announced prizes and their name at the Orphanage premises.

INSPIRELI AWARDS reserves the right to make any changes to the competition rules (deadlines, requirements, etc.). It is the responsibility of entrants to check the INSPIRELI

AWARDS website regularly for any changes to the terms and conditions or competition information.

The competition is only a theoretical project of what could be done, and INSPIRELI AWARDS will not be held responsible if the situation with the announcer of the competition changes, local conditions change, or unexpected circumstances happen in the construction of the project. INSPIRELI AWARDS also cannot guarantee that the competition entries will actually be used for the actual design.

INSPIRELI AWARDS reserves the right to change both the prizes and the dates and performance of the entire competition.

Entry and registration are governed by the standard INSPIRELI AWARDS competition rules. https://www.inspireli.com/en/awards/rules

08. TECHNOLOGY ADVISORS

Students will have an opportunity to consult their solutions directly from the engineers of the manufacturing companies – so called „Technological Advisors"- from different fields in construction. Students can contact them directly via contact form at the competition's website and they can answer your questions about certain technologies or products.

Technical studies in main categories for construction from the manufacturing companies might also be part of supporting documentation in order to **educate** the students about **innovations and technologies, sustainable practices and tips from practice** from field professionals. (to be published on the competition website during duration of the competition).

09. ATTACHMENTS:

GPS coordinates of the land: 50.6358544N, 14.5250975E

- Photo-documentation
- Technical documentation (plans, measures, catastral maps, blueprints) – to be specified and can be update on the competition website during duration of the competition
- Overall Plan