Emergency Health Centre
to an epidemic crisis point of a mountain area (cold, intemperate weather conditions)

Design area: next to a motorway, in front of a city, connected directly to a parking plot.

The current task is to design and place a temporary building of emergency health action on the circumscribed fictive area. The visualized scenario is that health officers screen people arriving to the city for a dangerous infectious disease. The passengers of cars should stay in their seats, the test takes only some seconds, but the infected people have to be placed immediately to the building - waiting for a transport to hospital maximum 4-6 hours long.

Room program:

- sluice vestibule (to disinfect hands and dress a protection slip, mask and cap) 2x 6 m^2
- waiting space with reception and self-service drink machine 40 m^2
- separation rooms (each for one bed) 10x 6 m^2
- changing room for staff 10 people,
  with bathroom (2 showers, 2 sinks, 1 WC) 2x 15 m^2
- WC unit male (2 cubicles+ 1 urinal) female (2 cubs)
  1 free accessible WC
  bathroom for patients (shower+WC+sink) 2x 4 m^2
  cleaner's room 4 m^2
- storage of accessories 18 m2
- surgery room with dressing corner 18 m2
- staff room (kitchenette) 10 m^2
- garbage storage normal 4 m^2
- garbage storage biohazard 10 m^2

Wandering of the program up to +/- 10% is accepted

The task is to design a simple building for temporary use, erected of recyclable elements. One of the most important condition is the quick realisation, the main structures should be chosen considering that. The envelope of the building should bear harsh weather conditions too (-10 C).

The concept of the loadbearing structure should be defined: materials, structural skeleton, bracing, foundation. Pay attention for both the vertical and horizontal loads!

Layers, used materials on the sections (floor, wall etc.) should be listed and described.

Provided drawings:
- site plan 1:500

To submit:
- site plan 1:500
- floor plan(s) 1:200
- section (min.1 characteristic) 1:200
- elevation (min.1 characteristic) 1:200
(with adequate representation of the used materials)
- perspective, concept sketches
- loadbearing structure sketches
  (section and plan or 3D) 1:200
- calculation of the dead-load of the roof
  (1 m^2 load)
- sketch the moment diagram (without values)
  of any element of the roof
- structural connection
  between the roof and the wall 1:10
- detail (min. 2 characteristic) 1:10 or 1:5
  with all the layers (thermal insulation, waterproofing, finishing etc.)

Formal requirements: **All drawings must be traditional hand-drawings**. CAD drawings of any kind are not accepted! The clear and correct technical presentation is important. Pdf or jpg format is required.

Evaluation aspects:
Functional design, forming of the building's elevations and volume, its architectural, and aesthetic appearance, its connection with the surroundings, and ambitious elaboration are all important at the evaluation. **The structural sketches, details and calculations are important parts of the task**, they must prove the structural and constructional knowledge of the applicant.

The task must be an independent work of the applicant - this includes all drawings, the whole project. In case of finding two, or more obviously identical projects all of them will be considered as invalid and will be automatically disqualified without evaluation.

The task must be uploaded within 300 minutes.

Lecturers of Faculty of Architecture of BME

Budapest, 1 February 2025.