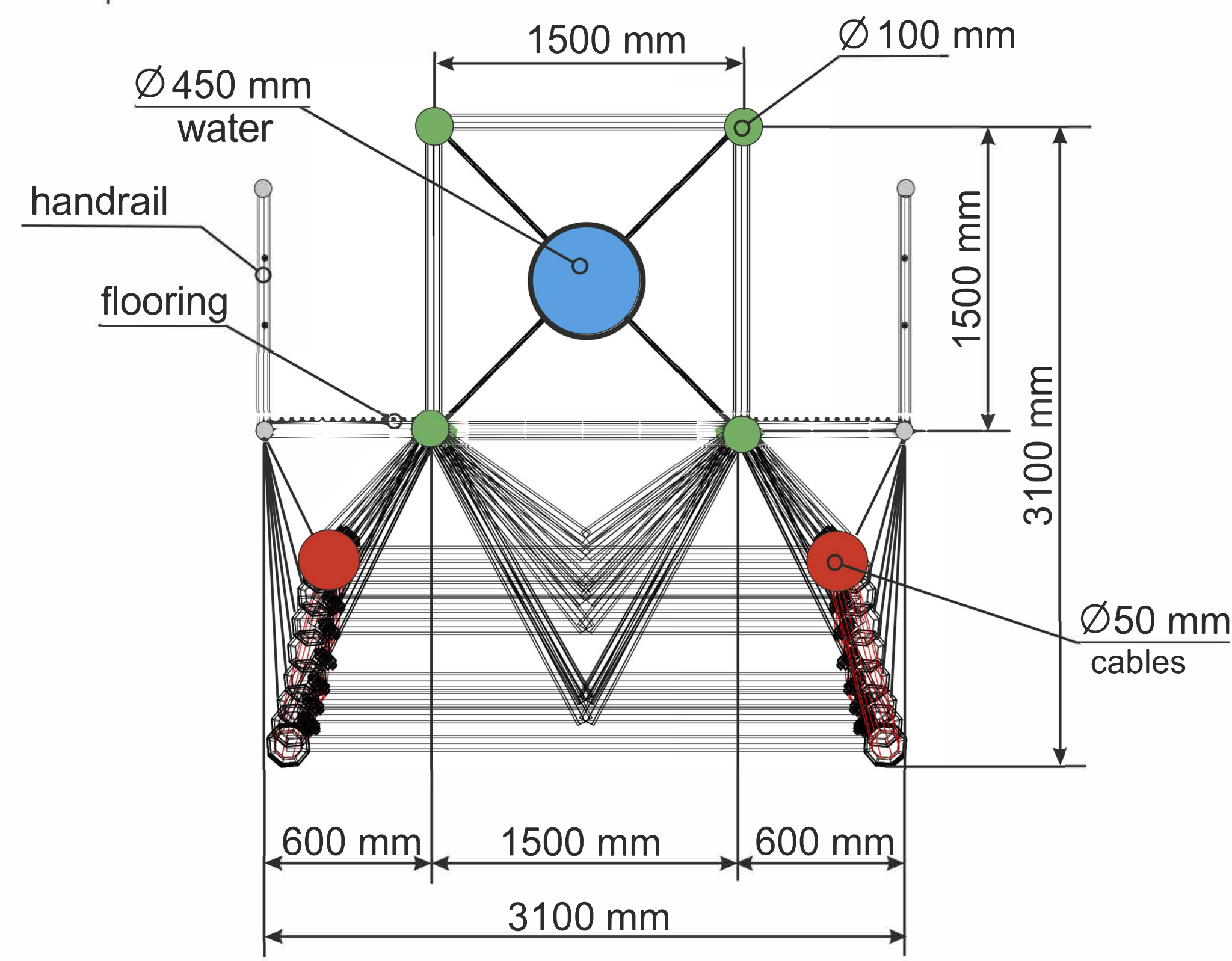
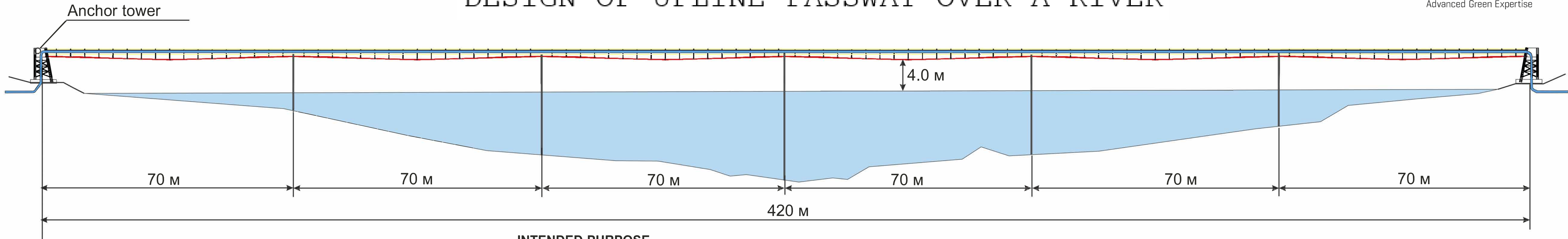


DESIGN OF UPLINE PASSWAY OVER A RIVER



INTENDED PURPOSE

The passway is designed for transferring a waterpipe of 450 mm diameter, as well as 2 passages with a width of 600 mm each, which are used as pedestrian passages, and service areas in case of maintenance and repair. In case of need, it is possible to install additional wiring systems, such as electrical cable, fiber optic cable, etc.

THE STRUCTURE

The passway represents steel pre-stressed cable-beam structure that includes flexible (upper and lower) cable booms on reinforced concrete buoyant foundation with total span of 420 m (6 spans of 70 m each).

MAJOR STRUCTURAL ELEMENTS:

- Foundation with use of augercast prestressed anchors;
- Supporting galvanized cables of a double-rope lay attached to intermediate supports using special turning lodgements;
- Anchor devices on terminal towers;
- A lattice from corrosion-resistance pipers, positioned inside the tubes of bearing cables which are prestressed with a total force of up to 210 tons.

TECHNICAL SPECIFICATIONS:

- the passway is to be constructed from light metal structures, which can be dismantled easily if necessary;
- height: from 2.7 m (at towers) to 3.1 m (in the middle of spans);
- air draught is up to 4 m;
- width with service aprons - 3.1 m

