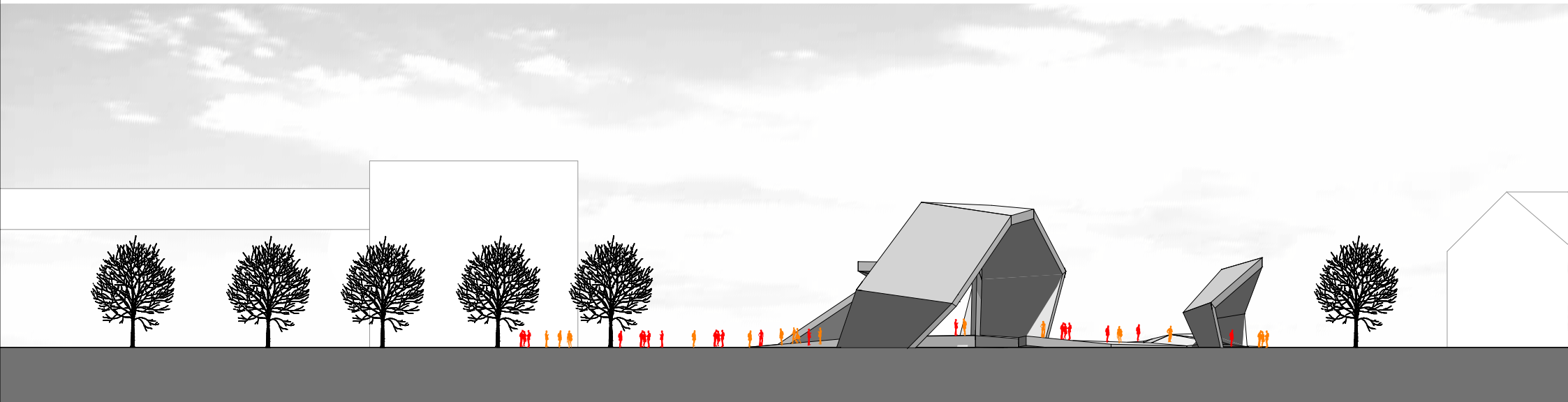
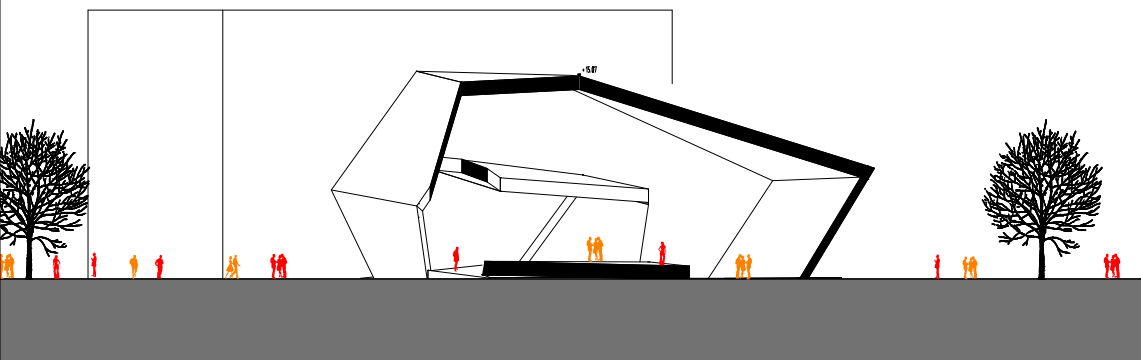


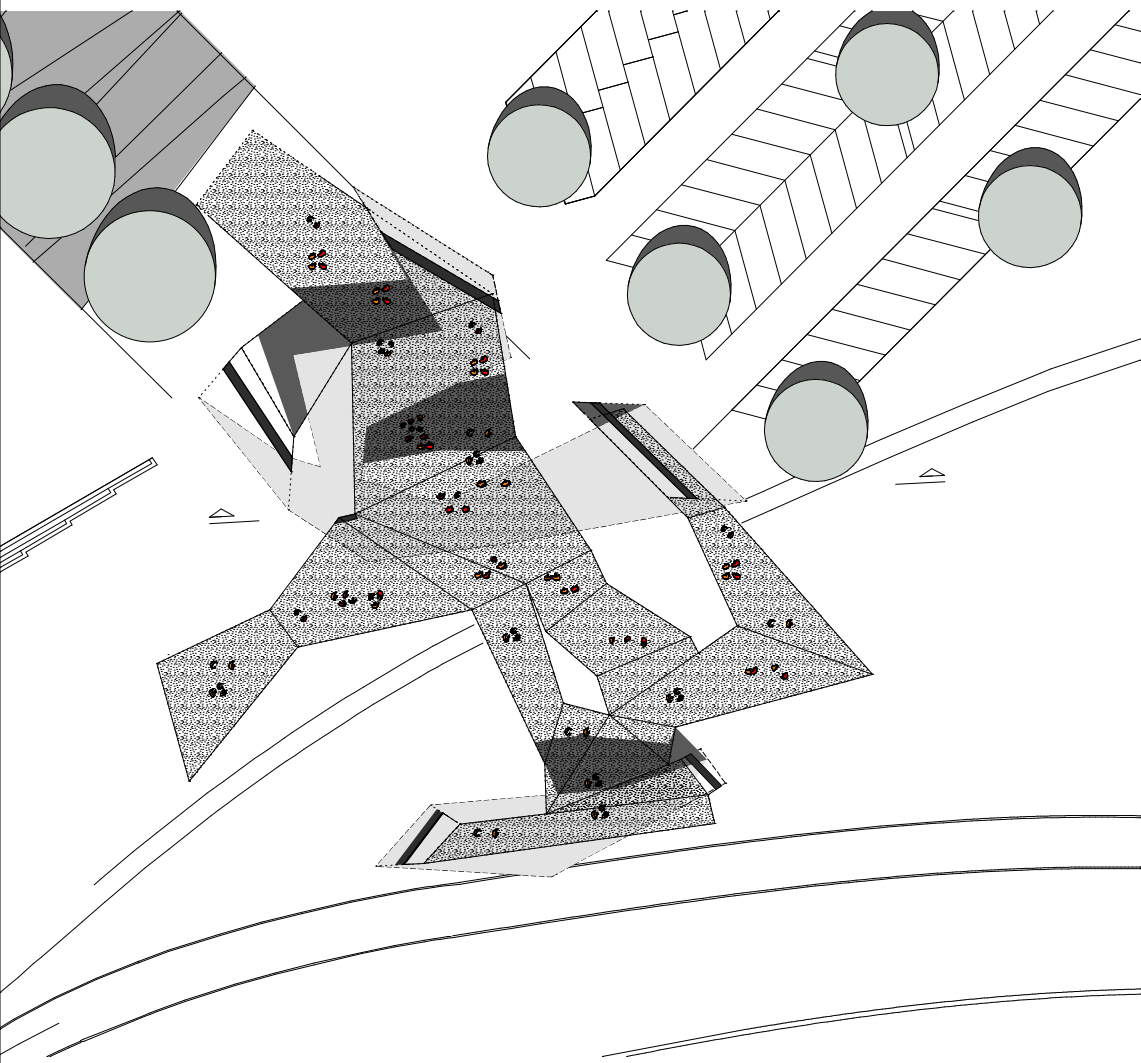
Elevation Northwest 1:200



Elevation West 1:200



Cross Section 1 - 1 1:200



Ground Plan 1:200

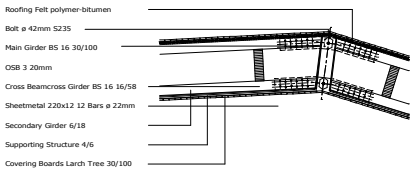
Structural Design

Exemplary a pre-dimensioning for the main arch (Section 1-1) based on the diagramm of moments in the girders and in the joints was made. Statically most advantageous was the two-hinged arch on clamped supports. Horizontal forces will be absorbed by the clamped base and by the wind bracing in the first field.

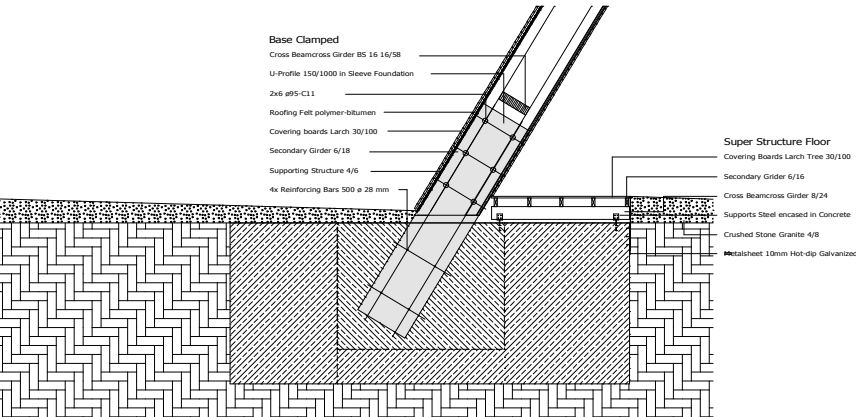
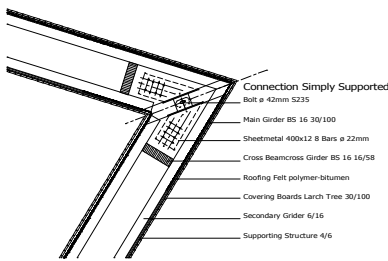
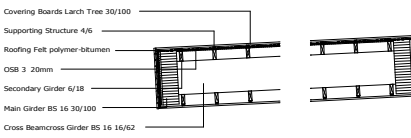
By calculated proving, each arch area consist of two main girders BS 16 cross section 30/100. The main girders are adjusted by cross beamcross girders BS 16 cross section ~ 16/60.

A roofing felt on the weather side is supposed to be the water protection. The roofing felt is installed on the supporting structure containing secondary girder and OSB 3 boards. The larch covering boards are fixed directly on the ventilated supporting structure. To achieve a permanent ventilation and to avoid possible appearing thawing water the main girders will be build without roofing felt on the side which is not exposed to weathering.

Connection Flexurally Rigid



Cross Section



Detail Cross Section 1:50

