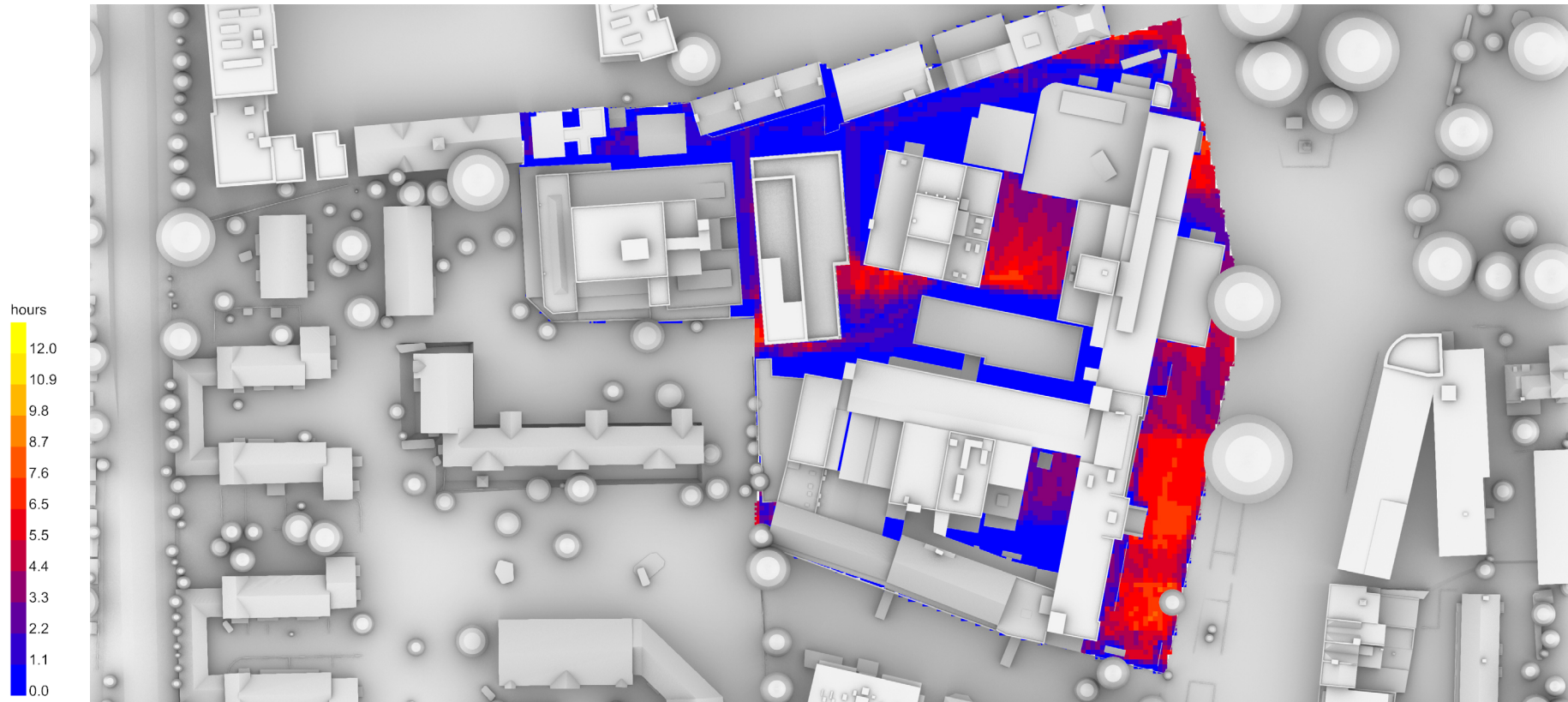


02.03 Shading Analysis: Spring

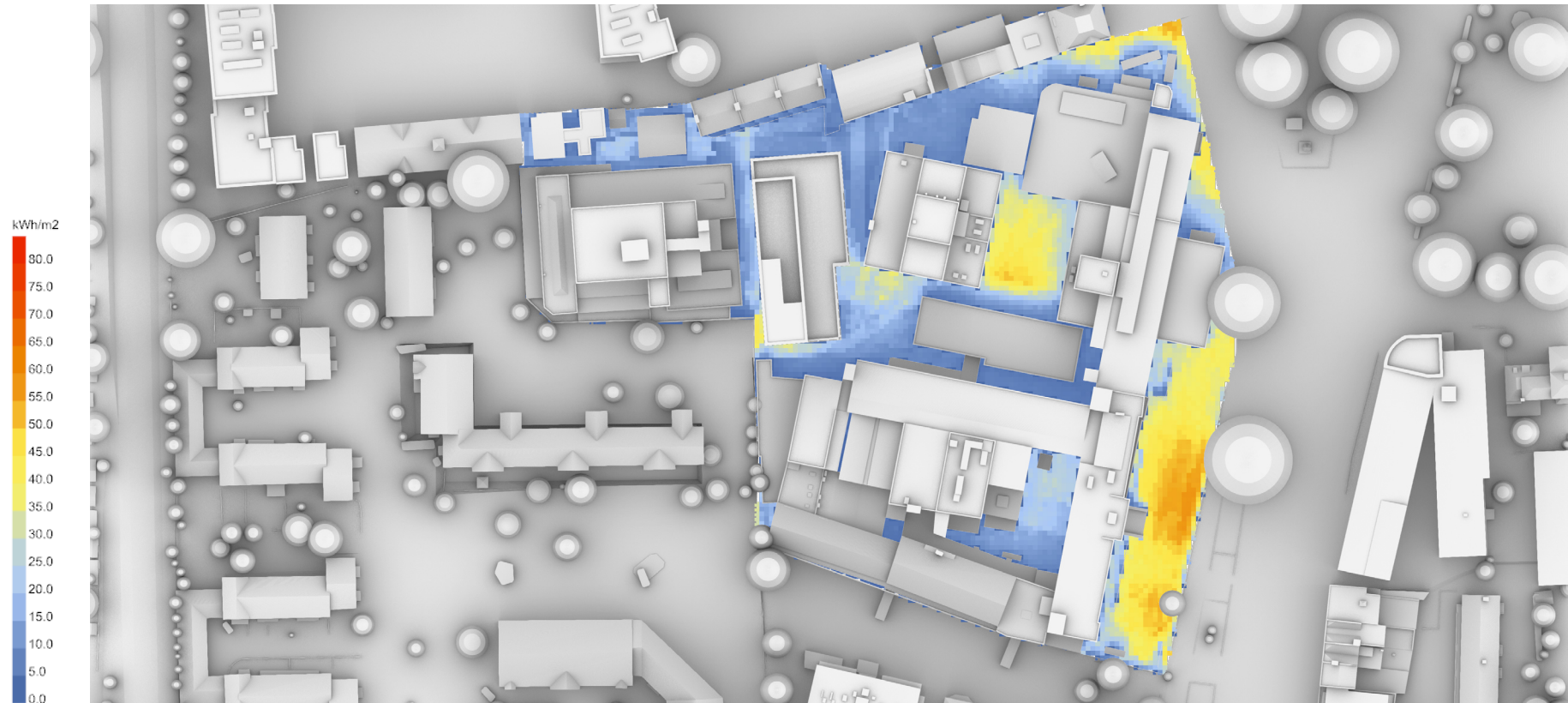
Sunlight Hours / Solar Radiation

The sunlight study shows a range from 1 to 4 hours of direct sunlight in March. Some areas have very low sun access; the minimum required for a public space is 2 hours per day.

As for the solar radiation, it is a reflection of the areas that are the most exposed, as seen on the main road to the east side of the site as well as the courtyard that faces the construction centre.



Sunlight hours Spring equinox (Daily resolution)



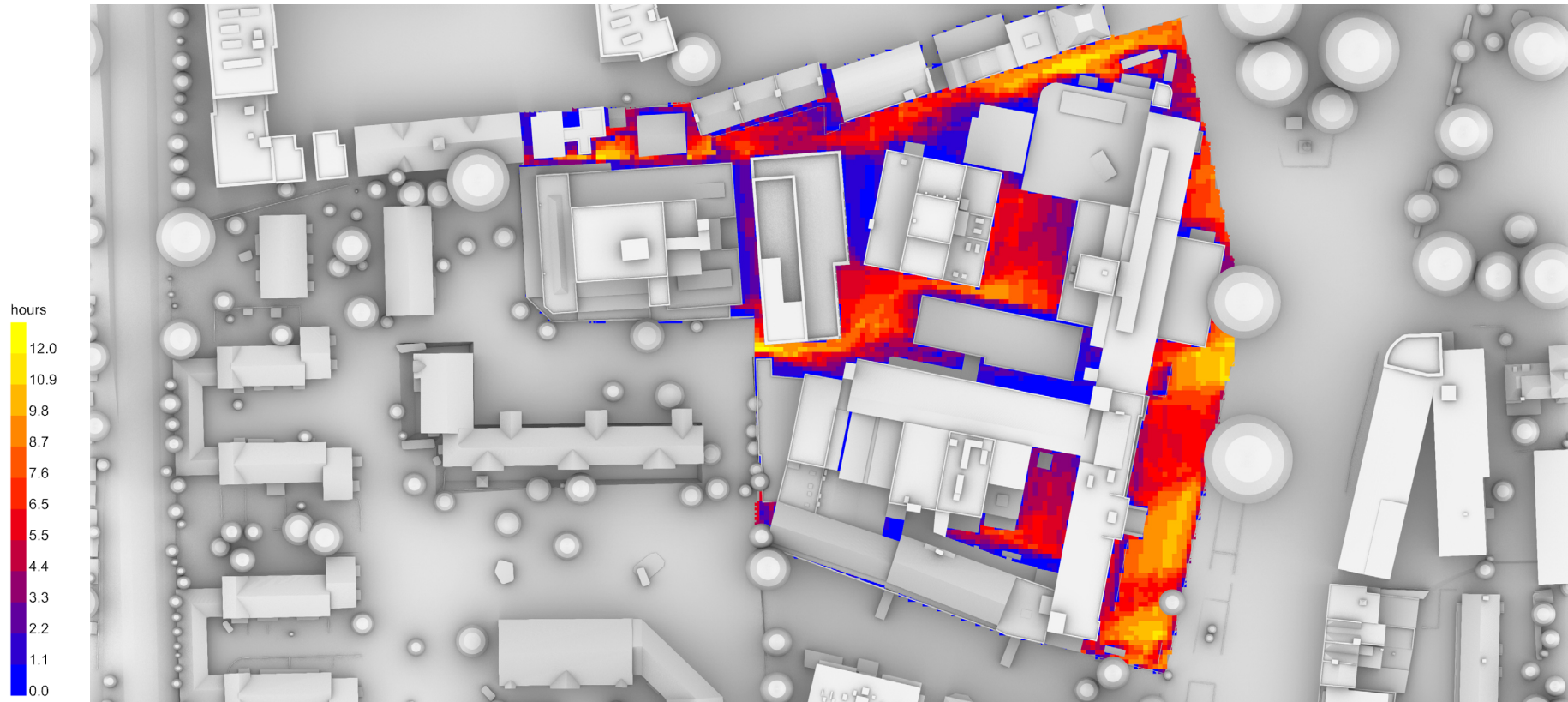
Cumulative Solar radiation in the month of March

02.04 Shading Analysis: Summer

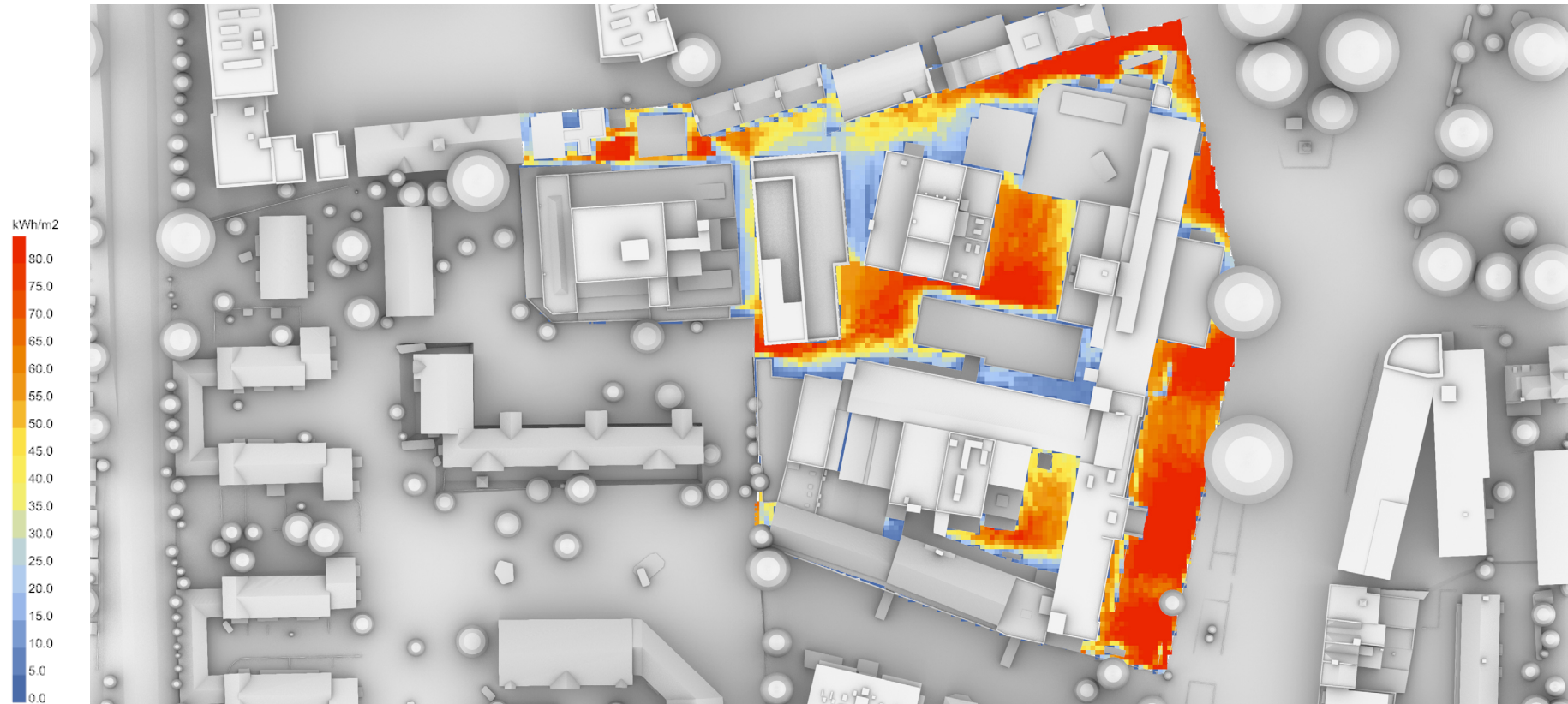
Sunlight Hours / Solar Radiation

The sunlight hours seen on the summer solstice are an indication of the maximum solar access it will receive across the year, with an average of 5 hours of direct sunlight per day.

Although the sun is at its highest position, the northeast side of the building hardly receives any direct sunlight, while a minimal amount can be seen on the west side. The solar radiation study in summer shows that most areas receive between 20 and 80 kwh/ m2.



Sunlight hours Summer Solstice (Daily resolution)



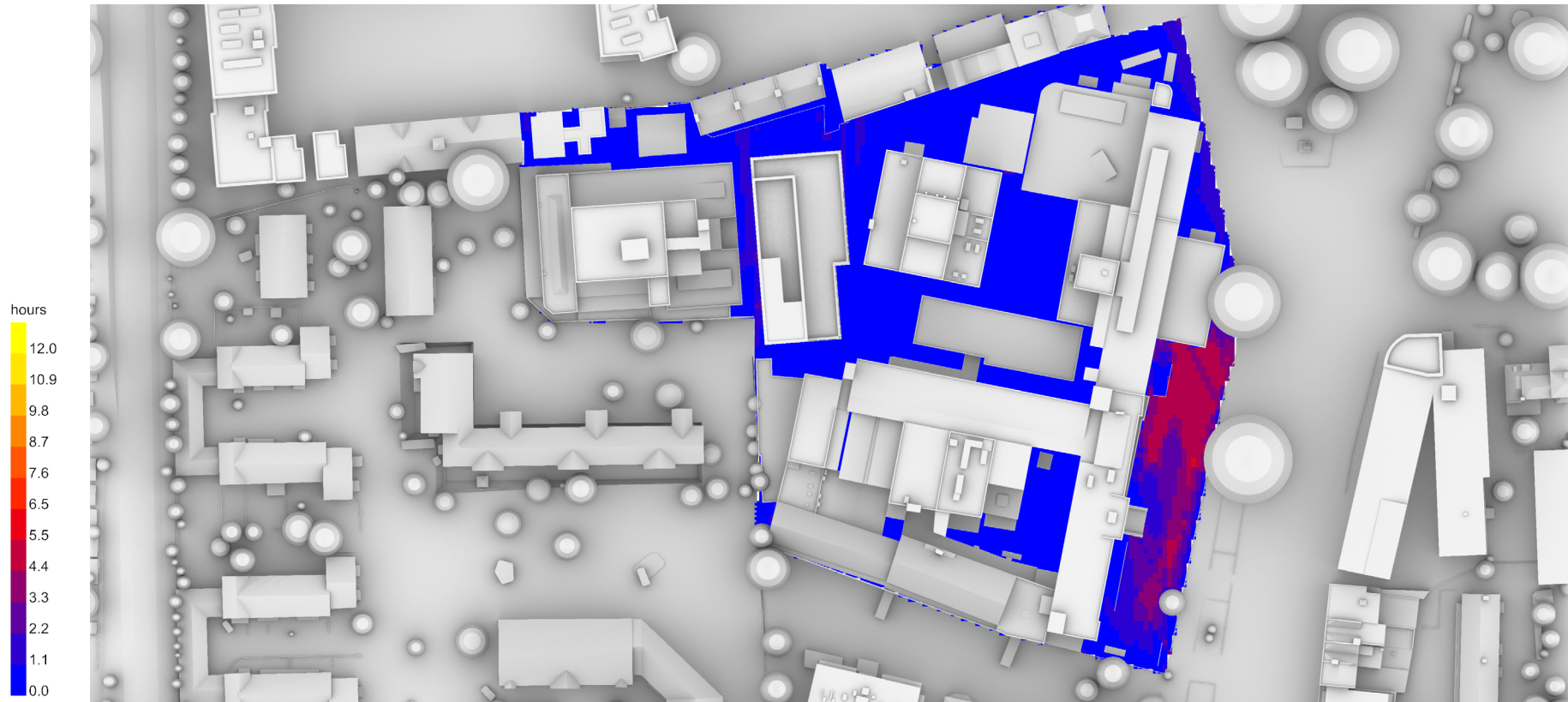
Cumilative Solar radiation in the month of June

02.05 Shading Analysis: Winter

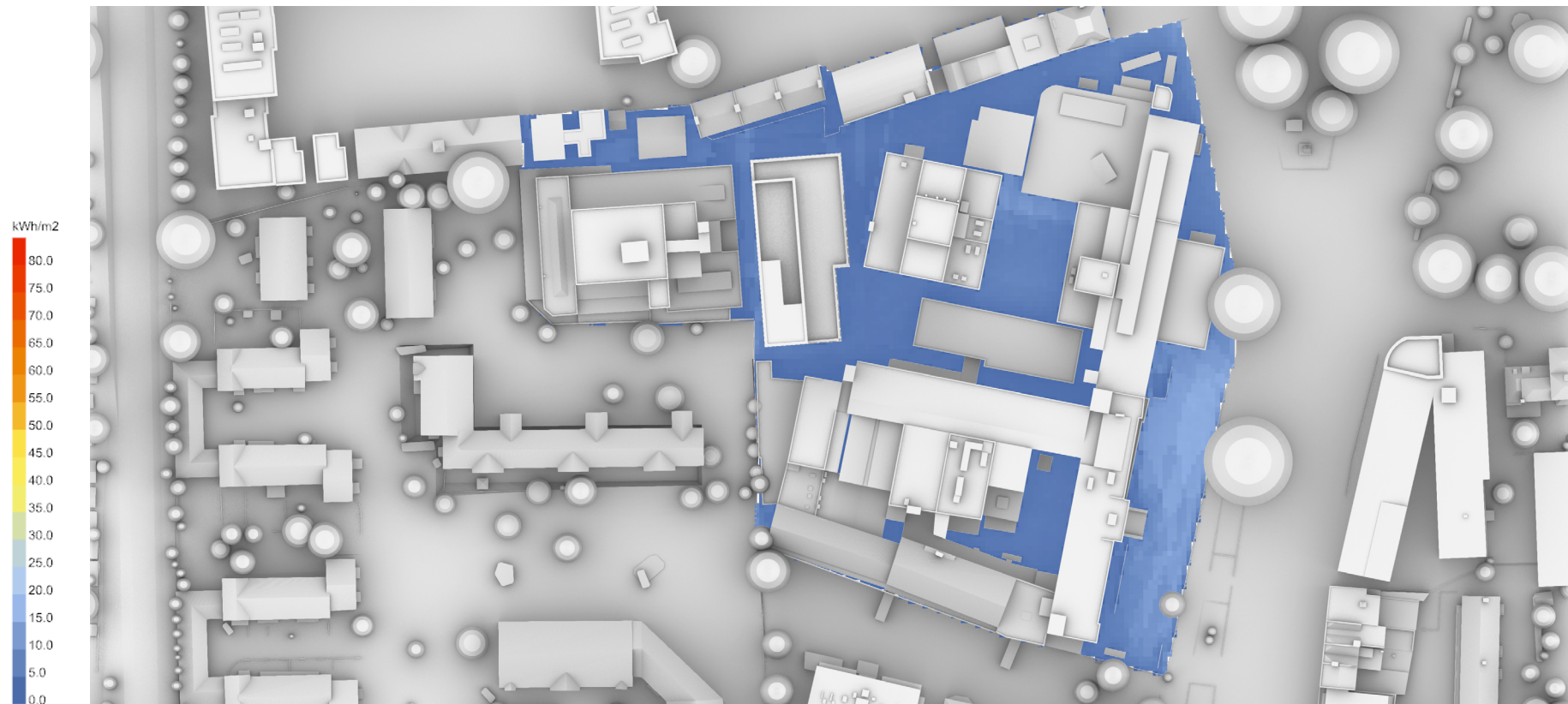
Sunlight Hours / Solar Radiation

The sunlight hours received across the site in winter are minimal. Most of the site receives no sunlight at all in winter, with the exception of the east side, which is exposed to the road.

The solar radiation is low, indicating an overcast sky that is seen in December.



Sunlight hours Winter solstice (Daily resolution)



Cumulative Solar radiation in the month of December

02.06 Thermal Comfort

U.T.C.I.

Spring period, the month of March

The month of March shows an average UTCI temperature of 15 °C across the site and a slightly lower temperature on the east side of the proposed construction centre. The categorization according to UTCI across most of the site is no thermal stress; however, a slight cold stress can be seen in the same area due to higher wind speeds.



U.T.C.I categorisation March 8am to 4pm



U.T.C.I temperature for the month of March 8am to 4pm