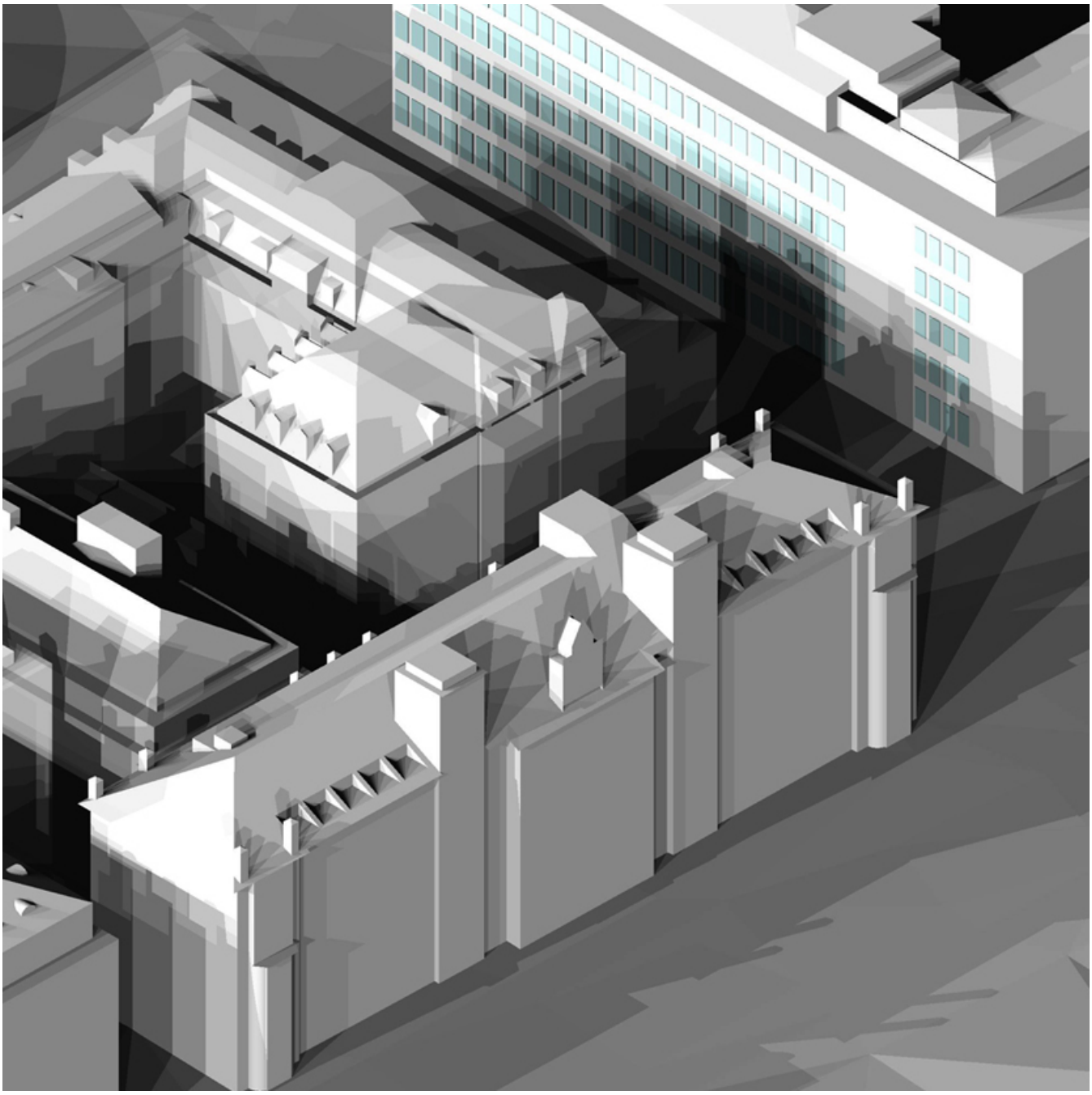
Shadow Calculations for High Rise Projects



Client

Private and public sector enterprises

Facts

Period	2008 - 2021
Project Country	Switzerland

EBP supports developers, planners and public agencies in various tasks relating to shadow impact diagrams in the context of high rise Projects.

Various cantons have introduced legislation to prevent the development of high rise buildings that would have a significantly negative impact on surrounding residential zones by their shadow projection. Developers and Planners submitting applications for high rise building permits in these cantons are required to demonstrate on the basis of plausible shadow projection diagrams that the high rises in question will not have a significantly negative impact.

Drawing on its extensive experience in the calculation of shadow projection diagrams in the context of its involvement in numerous high rise projects completed by public and private sector developers, EBP provides various services to developers, planners and public agencies.

For developers and planners

- CAD-based 3D modelling of site-specific shadow projection diagrams for building projects or existing buildings on an average summer and / or winter day
- CAD-based calculation and visualisation of 2 and 3-hour shadow projection diagrams referenced to the floor plans and façades of neighbouring buildings for high rise projects and comparable, standard construction projects (from the preliminary study phase to the submission of the development applications)

For public agencies

- GIS-supported analysis for the 3D identification of cantonal or municipal reference points that can be used in the context of sun angle calculation (e.g. based on geographical midpoints)
- Derivation and calculation of sun angle tables for average summer and winter days in relation to specific spatial positions
- Drafting of tutorials for planners interested in creating shadow projection diagrams (based on existing legislation)
- Expert evaluations of 2 and 3-hour shadow diagrams for applications for high rise building permits, including short reports and visual representations

Contact Persons

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