

CLASSICAL WEIMAR

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Engineering geological conditions and problems:

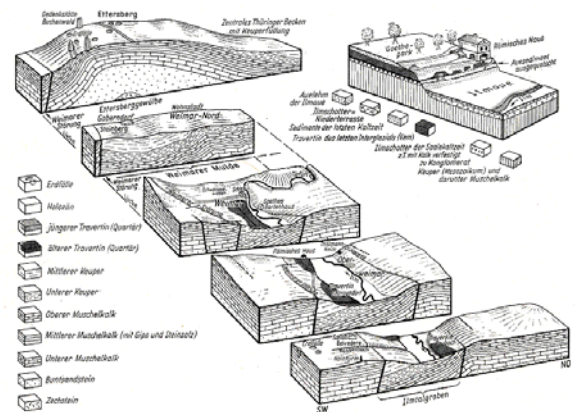
Having carved out its valley through easily erodable Keuper rocks, following the NW-SE striking Ilm valley graben, the river Ilm has deposited various fluvial terrace sediments of gravel, sands, and mud. Along the valley margin fresh water limestones (Travertin) also occur. The complex patterns of Quaternary deposits often result in unfavourable geo-engineering conditions.

North and south of the city center the area rises towards the graben border faults. Here the uppermost Muschelkalk contains thick layers of marlstone and clay stone that show episodic swelling and shrinking with fluctuating amounts of rainfall and ground water levels. Volumetric changes within the building ground has caused damages to some buildings (Belvedere).

Frequently appearing dolines along the Upper Muschelkalk outcrops outside the graben area are due to subsrosion of Middle Muschelkalk sulfates which are located only a few decametres underneath the surface. Such dolines especially occur along the Ettersberg hill and near Belvedere Palace.



Weimar Belvedere Palace



Geological block diagram

Other information:

The unparalleled role of the city as a centre of intellectual life in the 18th, 19th and 20th centuries shapes the city's face with buildings and park grounds of great cultural importance.

This includes magnificent examples of interior design in the European classical style dating from around 1800. The places where the poets and their patrons lived and worked remain as witnesses to Classical Weimar: Goethe's home, Schiller's home and the three palaces - Belvedere, Ettersburg and Tiefurt with their unique grounds.

References on studies already performed:

Geologie und Geotope in Weimar und Umgebung, 1. Aufl. (1999), Thüringer Landesanstalt für Geologie.
 WAGENBRETH, O. & STEINER, W. (1982): Geologische Streifzüge. - Leipzig.