

Site Analysis and Site Planning

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1. Introduction

- **Site analysis:** the systematic study of a site's physical, environmental and contextual conditions before design.
- **Site planning:** arranging buildings, circulation and open space on a site to respond to those findings.

2. Site Analysis Factors

- **Physical:** topography, soil, hydrology, vegetation and existing structures.
- **Climatic:** sun path, prevailing winds, rainfall and microclimate.
- **Contextual:** access, surrounding uses, views, noise and cultural significance.

3. Tools and Methods

- Site surveys, contour maps, GIS data and photographic documentation gather information.
- SWOT analysis and overlay mapping help synthesise constraints and opportunities.
- Sun and shadow studies inform orientation and energy strategy.

4. Site Planning Principles

- Respond to topography to minimise earthwork and manage drainage.
- Orient buildings for daylight, ventilation and views while ensuring privacy.
- Organise vehicular, pedestrian and service circulation safely and efficiently.

5. Importance

- Good analysis reduces cost, environmental impact and design conflicts.
- It grounds the design in its specific place and regulatory context.
- Effective site planning improves usability, comfort and sustainability.