Site Analysis

This is the first in a series of fact sheets produced by the District Council of Mount Barker on Sustainable Residential Subdivision Design. Council’s Development Plan identifies a number of areas within and adjacent to existing townships that are intended for residential development. A number of policies within the Development Plan require that residential development, including residential subdivisions, satisfy a range of sustainability objectives and principles.

This is one of five fact sheets which cover the following topics:

- Site Analysis
- Energy Efficiency
- Water Sensitive Urban Design (WSUD)
- Biodiversity, Open Space and Buffers
- Sustainable Transport

What is a site analysis?

Prior to preparing a residential concept, designers will need to visit the site, study maps and other information and discuss the opportunities and constraints with various authorities in order to better understand the characteristics and context of the site. The site analysis will inform the design choices that are made and signal to the planning authority why particular choices may have been favoured above others. It will also allow the designer to maximise the potential of a particular piece of land.

It is therefore a useful tool in reconciling the sometimes competing design objectives for a particular site. For example, the site analysis process may explain why the design concept has responded more sensitively to the prevailing landform at the expense of achieving the ideal orientation of allotments for solar access purposes.

The site analysis generally results in an annotated plan of the site and adjacent land, which then forms the basis for generating design options. This annotated plan can then be submitted to the planning authority along with the plan of division, and will usually assist the approval process and minimise delays. An example of a site analysis plan is provided on the next page.

What information needs to be considered?

The detail and extent of information that should be collected and considered will vary depending on the size, complexity and context of a residential development project. The following checklist would generally apply in varying degrees of detail for any residential land division project.

Site Information

- contours and geotechnical conditions where relevant (e.g. contaminated soils, filled areas, rocky outcrops)
- existing drainage, creek lines, wetlands, groundwater soaks, services and easements
- existing vegetation including the location of significant trees and remnant vegetation
- buildings including any that could be retained or that may be heritage listed
- views to and from the site
- access and connection points
- orientation, microclimate and noise or other pollution sources
- fencing and boundary locations

Surrounding Context

- location and use of adjacent and nearby buildings and sites
- the nature and proximity of adjacent land uses (e.g. industry, primary production, schools, community facilities, centres)
- views and solar access enjoyed by adjacent residents
- street reserve features such as services poles, street trees, kerb crossovers, bus stops, other services
- built form and character of adjacent and nearby development, including character housing, fencing, garden styles
- direction to and distances from local shops, schools, public transport stops, public open space and other community facilities
relationships to existing public open space and opportunities for integration, including possible linkages with existing walking / cycling paths
up-stream and down-stream stormwater management considerations
significant vegetation on adjacent properties
differences in levels between the site and adjacent land
likely long term development outcomes for adjacent land (e.g. retained as primary production or earmarked for urban development)
proposals for traffic management in the adjacent streets
potential for connections to existing movement networks (e.g. roads, off-road paths)
noise or other pollution sources.