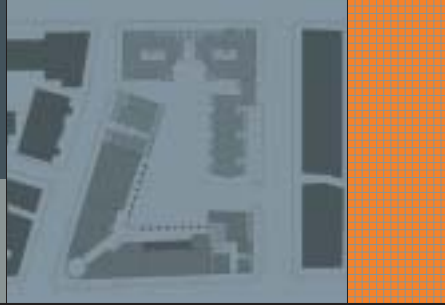

.Part 02

Site Design

Tools for improving the design of residential flat buildings



.Residential Flat Design Code

.Part 02



.Site Analysis

Site analysis is an important part of the design process. Development proposals need to illustrate design decisions, which are based on careful analysis of the site conditions and their relationship to the surrounding context. By describing the physical elements of the locality and the conditions impacting on the site, opportunities and constraints for future residential flat development can be understood and addressed in the design.

Site analysis should include plan and section drawings of the existing features of the site, at the same scale as the site and landscape plan, together with appropriate written material. Information may include but is not limited to: (see Table A: Pre-Development Application Requirements for additional information on local context requirements)

- site dimensions, site areas, north point
- location of site in relation to shops, community facilities and transport
- form and character of adjacent and opposite buildings in the streetscape, including both sides of any street that the development fronts
- location and use of any existing buildings or built features on the site
- location and important characteristics of adjacent public, communal and private open spaces
- location, use, overall height (storeys, metres) and important parapet/datum lines of adjacent buildings
- location and height of existing windows and balconies on adjacent properties facing the site
- location, height and characteristics of adjacent walls and fences
- location of major trees on site, on adjacent properties and street trees, identified by size and botanical or common names
- topography, showing spot levels and contours 0.5 metre intervals for the site, adjoining streets and land adjoining the site
- views to and from the site
- prevailing winds
- orientation and overshadowing of the site and adjoining properties by neighbouring structures and trees
- geotechnical characteristics of the site and suitability of development
- pedestrian and vehicular access points (existing and proposed)
- location of utility services, including electricity poles, stormwater drainage lines, natural drainage, kerb crossings and easements
- location of any infrastructure easements or rights of way
- significant noise sources on and in the vicinity of the site, particularly vehicular traffic, train, aircraft and industrial operations noise
- assessment of site contamination, proposed remediation strategy and a statement from a recognised expert that the site can be remediated and made suitable for the proposed uses.

A written statement explaining how the design of the proposed development has responded to the site analysis must accompany the development application. (see Table B: Development Application Recommendations in the Appendices)

.Sample Site Analysis

This example illustrates a selection of sketches that could be produced as part of a site analysis. It is a sample only. Because each site is different, the sketches required to describe a particular site, its opportunities and its constraints will vary. An appropriate site analysis should consider the list of items on the previous page, the information sheets in the Design Code and the Pre-DA and DA recommendations listed in Appendix 2 and 3.

This example is divided into two parts:

- 1- the contextual documentation illustrates and describes the basic topics which will inform the design process
- 2- the analysis diagrams illustrate and notate major design decisions in relation to the site layout and the adjacent context. These decisions inform the site and building design process.




The example site is a small infill site in a suburban area adjacent to a main shopping street. The development proposal amalgamates three smaller sites and demolishes three detached buildings and their associated outbuildings.



02.01.

Building Use

The context includes a main shopping street with retail uses on the ground floor (shops, cafes) and generally commercial uses or retail support on the second storey. Occasionally the second storey is used for shop top housing. The remaining building uses are housing. Although the context is predominantly single family detached dwellings, a residential flat building is located across the street from the site.

-  retail/commercial
-  single family houses
-  residential flats



02.02.

Building Height

The context is a low scale residential neighbourhood adjacent a traditional two to three storey shopping street.




-  one storey
-  two storey
-  three storey
-  four storey



02.03.

Circulation

The street hierarchy includes a main north-south shopping street, local residential streets and laneways. The site is located on an east-west local residential street. Across from the site, a north-south residential street intersects with the site street. Laneways provide rear access shops and cafes along the shopping street as well as to the site.




-  vehicular circulation
-  pedestrian circulation
-  service access

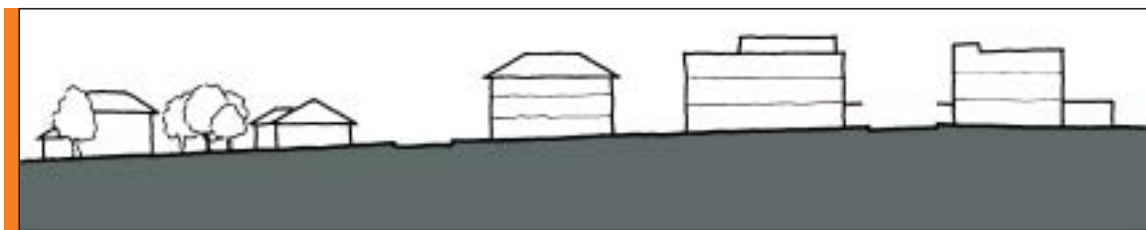


02.04.

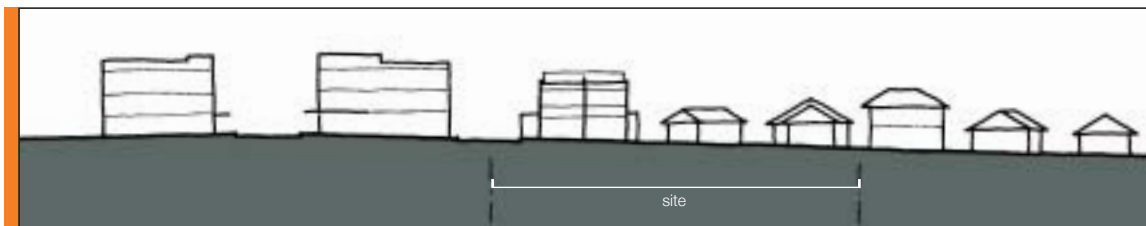
Open Space, Landform + Views

The context slopes from the north-east to the south-west providing high level views from the site to the valley beyond. A view corridor from the street to the north terminates at the site. Prevailing breezes originate from the north east. Front landscape setback and rear gardens with mature trees characterise the open space.

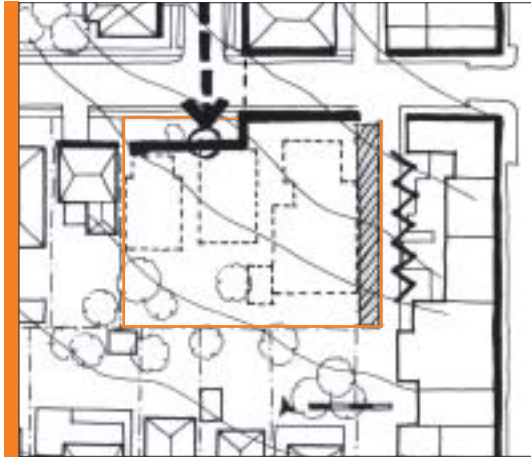
-  open small spaces + mature trees
-  views
-  prevailing breezes



02.05. South Elevation of Street. A laneway separates the street edge aligned buildings along the shopping street and the smaller detached building to the west.



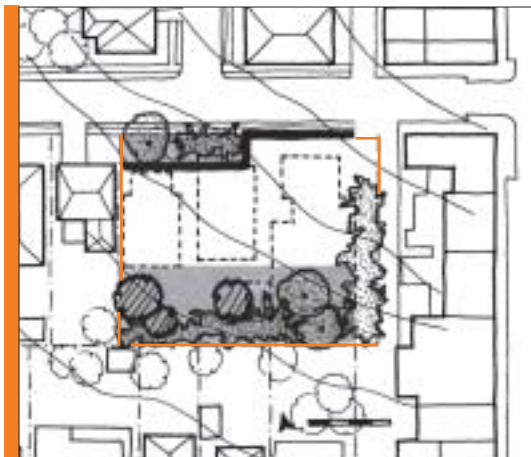
02.06. North Elevation of Street. The building heights step down the slope from east to west.



02.07.

Building Edges

The analysis proposes to match the street edge alignment of the shopping street and the residential flat building across the street. A front setback is then introduced to correspond to existing setbacks along the residential street. The view corridor is noted as a potential elevation response. A buffer is proposed along the laneway to protect the residential amenity of the development.



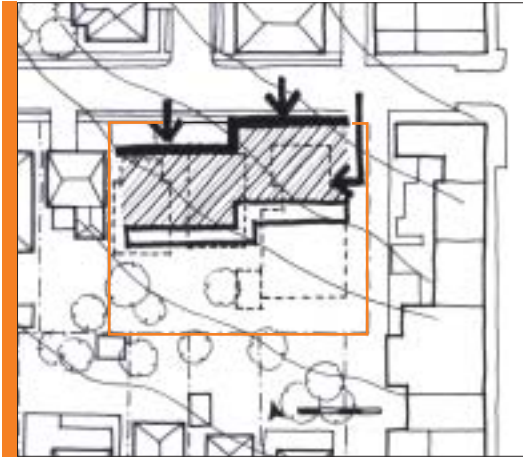
02.08.

Landscape Response

The analysis proposes to maintain the rear landscape areas and existing trees. Additional trees and planting are incorporated into the design. New planting is proposed along the laneway. A front landscape setback is included.



02.09. North South Section. A street edge alignment is proposed to help define the streetscape. The carpark, located under the building footprint, allows for deep soil planting in the rear garden. The topography falls away from the building exposing the carpark along the rear garden. There is a potential for garden apartments to locate along this edge and to provide an improved elevation to the communal open space.



02.10.

Access and Parking

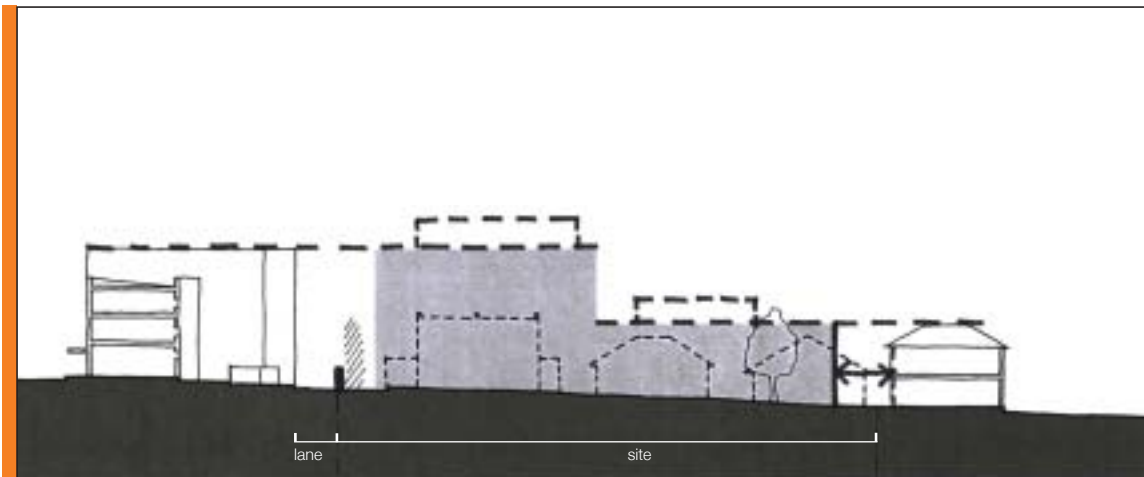
Vehicular access to the development is proposed from the laneway. Pedestrian access is from the street. It is divided into two main entries to articulate the street edge and maintain the existing rhythm of entries along the street. Parking is located under the building footprint. The southern edge may require special attention if the slope of the site exposes the parking level.



02.11.

Building Performance

A narrow building footprint is proposed to capture prevailing breezes and to facilitate natural ventilation. All apartment units have living areas facing north and receive suitable access to daylight.



02.12. East West Section. The proposed building heights step down the street in relation to the topography and the existing buildings. An additional storey may be possible if it is setback from the front and side facades. New fencing, a small side setback and a landscape buffer are proposed along the laneway. A larger side setback is proposed adjacent to the single house to ensure adequate privacy and amenity for residents on both sites.