

medium density housing

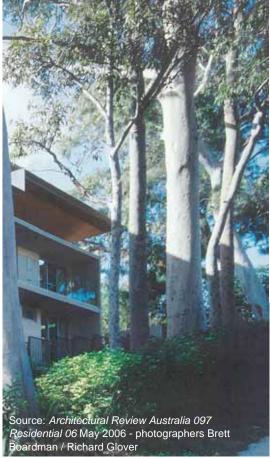
Building forms and footprints have been carefully arranged to consider topography, maximising solar access to apartments and cross ventilation, and minimising overshadowing to open spaces. The design of the apartment blocks should use the visual interface with the bushland at the lower floors and the use of roof gardens on the top storeys to provide for a variety of apartment types.

The siting and internal plans of buildings should optimise north-facing units for solar access, and cross ventilation. It is encouraged that units requiring balconies should be designed such that the balconies should be an extension of the living spaces. These balconies should have the ability to be used as outdoor rooms through the use of shutters.

The aesthetic of these buildings should borrow from the robust form of the existing educational buildings through the use of rhythm and defined shadow lines. The buildings should be articulated using defined geometrical forms and contrast of light and shade. It is not envisaged however, that this new development adopts the same materials or construction technique of the existing building. A careful selection of contemporary materials needs to be adopted that complement the existing building and landscape setting.

The facades to these buildings require defined articulation and modulation to break down the overall large forms of the individual apartment blocks into a smaller domestic scale.









dem

small lot integrated housing

The small lot integrated housing provides smaller, easily managed housing lots where the residents have a reduced area of private open space. It is envisaged that they will use the public open spaces for recreation.

Small lot integrated housing is particularly effective in addressing physical site considerations such as topography and existing vegetation.

Housing size should be carefully controlled on these sites to ensure sufficient private open space as well as solar access to all living areas and the private open space.

In keeping with the surrounding residential area, it is proposed that the new small lot integrated housing be 1 - 2 storeys.

Architectural design guidelines with a palette of materials and finishes should be established to provide consistency for the small lots and to ensure compatibility with the other medium density components.







$_{ m dem}$

individual lots

Larger individual lots with an area of approximately 750m2 are located along the western and northern boundaries. They are adjacent to existing similar residential lots on Winchester Avenue and Lyle Avenue.

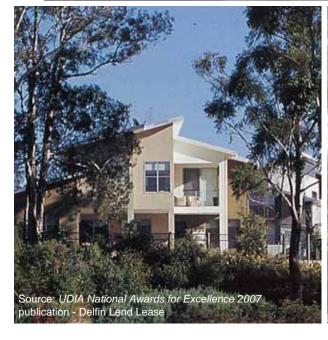
The houses are to be sited to retain significant trees and bush outcrops where possible. Buildings would be sited to ensure minimal overshadowing impact and to ensure privacy of adjoining lots.

In keeping with the surrounding residential area, it is proposed that new individual lot housing be 1-2 storeys.

Architectural design guidelines with a palette of materials and finishes would be established to provide consistency for the individual lots and to ensure compatibility with the other small lots and medium density components.











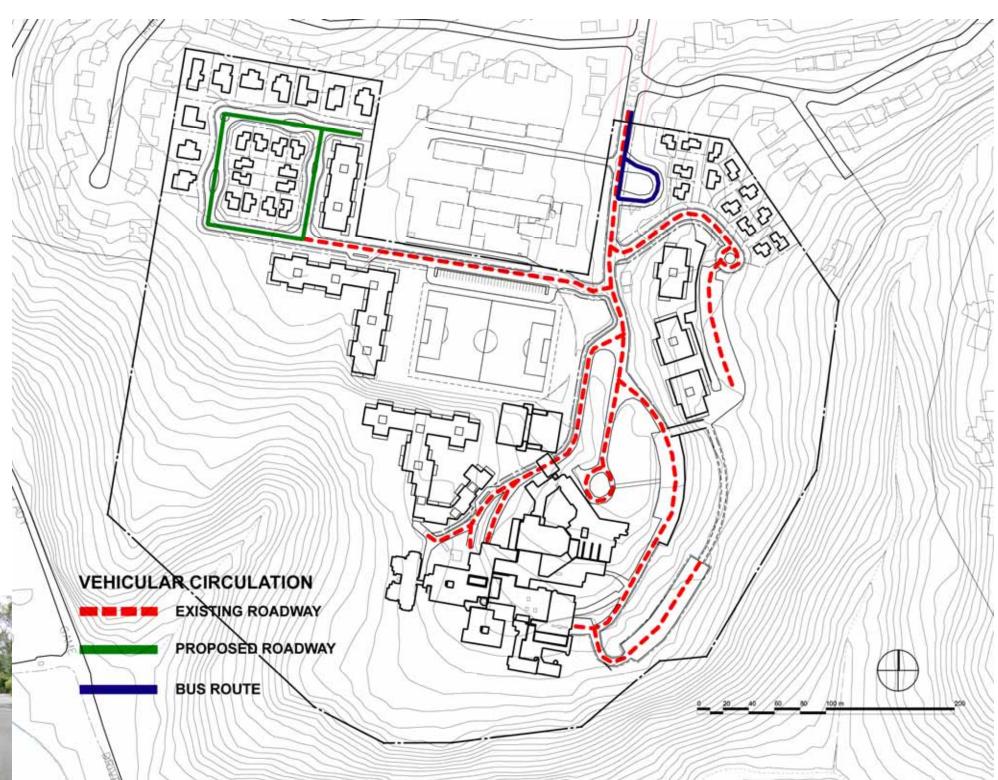
vehicle circulation

The concept plan has been arranged to provide access to all individual lots, medium density housing and potential reuse of the existing buildings' accommodation with minimal introduction of new roads.

Additional new roads in the north-west sections of the site allow for emergency bushfire truck access. Existing roads are maintained where possible, retaining their bushland character and natural edges. The only new roads in the existing north-west carpark are constructed in a similar manner with natural rock cuttings used to define kerbing and street planting selected to enhance the bushland setting.

It is important to note that the new roads in the north-west part of the site would be located on the existing carpark.

The existing road network allows for emergency vehicle access. A fire trail is located to provide emergency access to the perimeter of the developed area in accordance with current regulations. Where possible, existing roads and carpark areas are used to provide this access.









3



pedestrian network

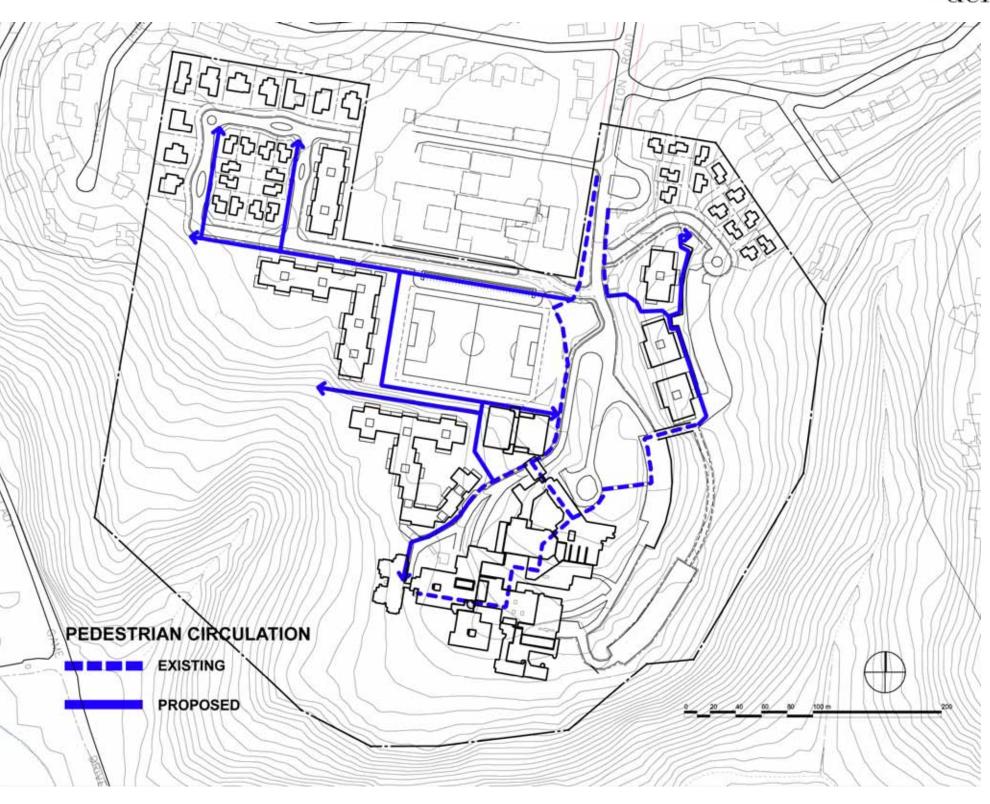
The concept for pedestrian circulation has been derived from the original concept of the internal street for the educational facility. This internal street is extended into the courtyard spaces of the medium density housing where the internal street becomes an external garden walk.

All access to medium density dwellings is via this courtyard garden walk which helps to activate and provide surveillance of the communal open spaces.

Convenient pedestrian access is provided for the community to interconnect the residential areas with the transport (bus stop), recreation areas (both active and passive) and community facilities and alternate use opportunities (within the existing buildings).

The main principles for pedestrian circulation are:

- Permeability permeability for pedestrians' movement networks requires a different response to permeability for vehicular movement. Typically, pedestrians will only comfortably walk 400 metres before they decide to drive. To discourage excessive vehicular movement and promote pedestrian activity pedestrians are provided with alternative routes wherever possible. The pedestrian network forms a lattice with as few barriers to movement as possible.
- Legibility legibility is provided for the pedestrian network with clear direction as well as clear choice of travel routes.
- Lighting lighting is to be provided to illuminate pathways.
- Safety Safety and security for the pedestrian is achieved by way of passive surveillance between the motorist and pedestrian. This means integration rather than separation with the road network wherever this is appropriate.





drop off/pick up points and carparking

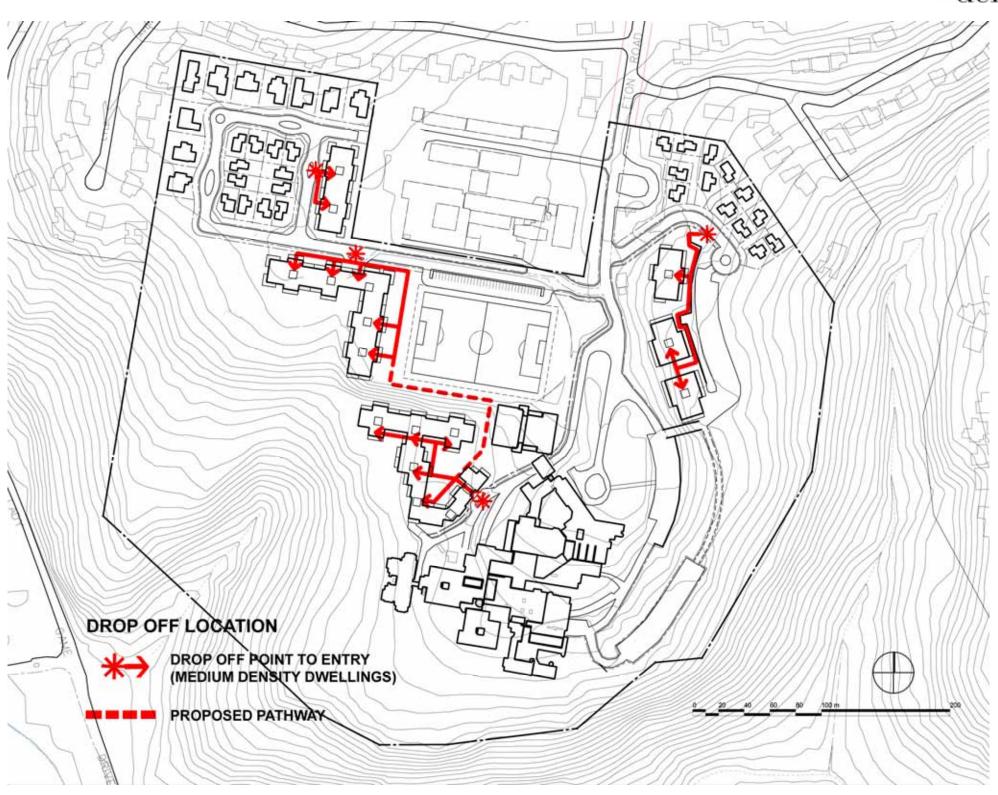
Drop off and pick up points for the medium density dwellings are located along the road network. These points provide access for pedestrians into the garden courtyards.

The drop off and access points for the existing buildings are maintained at the current location. There is potential to reinstate the original entry depending on the future reuse of the existing buildings.

Basement carparking is provided for medium density dwellings whilst all integrated small lot housing and individual housing are to have car spaces within their allotments.

Carparking would be provided for the existing buildings both in the current basement, and the two existing on-grade carparks to the east.

Service access would be provided for the residential dwellings either via the basement areas or in lay-bys and paved entry areas. Service access to the existing buildings would be retained in its current location.





open space

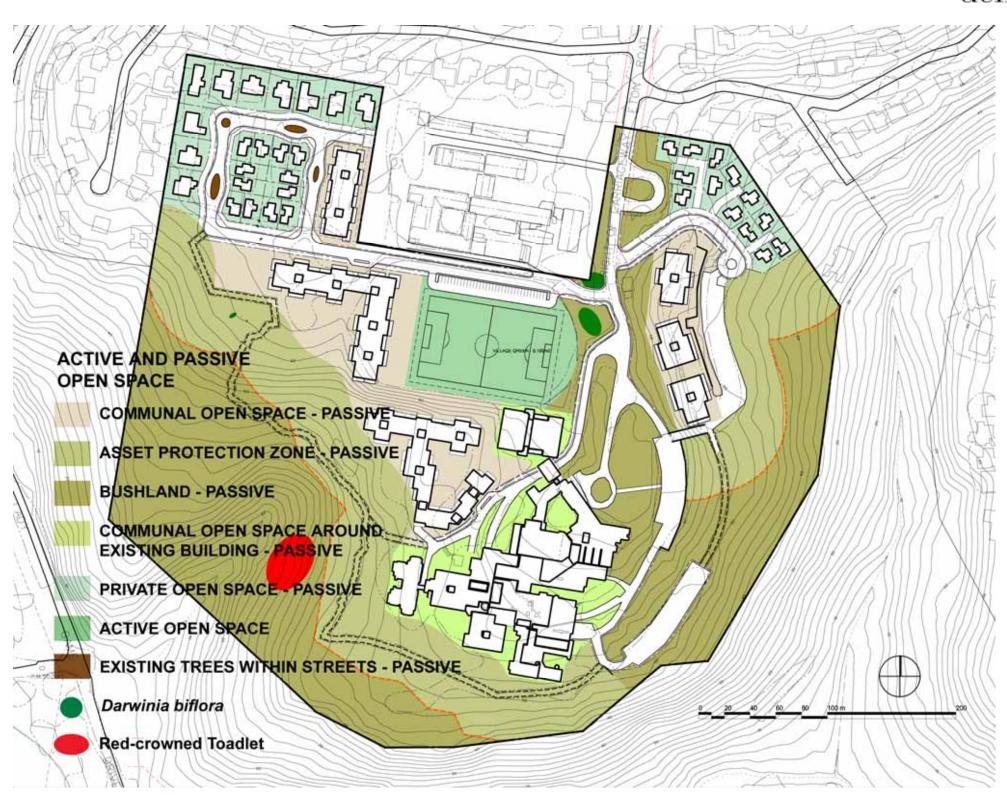
The concept plan provides for a variety of different spaces ranging from a playing field for organised sporting activity to communal open spaces to private open spaces within the individual allotments.

The design of the open space aims to facilitate pedestrian circulation and best maximise site opportunities for recreational uses thereby enhancing the amenity of the development for residents and the community.

The public open spaces provide for active and passive recreation whilst the communal open spaces are for passive recreation uses.

Different planting hierarchies will define the public and private spaces. Public areas will comprise a broader, less detailed planting approach sympathetic to the natural environment.

Communal and private spaces will incorporate a greater variety and mix of native species while still reflecting the essential bushland character of the site.



University of Technology, Sydney, Kuring-gai Campus

3