

2 site assessment

This section describes the natural and physical attributes of the site. It also identifies the site specific issues influencing the design of future development of Claydon Park.

A detailed site analysis has been undertaken by the project team for the site and surrounding area. This analysis has been used as the basis for the subsequent preparation of site planning options and the preferred concept master plan.

Fig 1 shows the regional and urban context of the site in relation to the coastline Budawang Ranges, Lake Burrill and the urban areas of Milton and Ulladulla.

Figure 2, 3 & 4 show the main features of the site and adjacent land uses.

2.1 Location

Claydon Park is located in Shoalhaven situated immediately adjacent to the Milton urban area, and approximately 400m from the Princes Highway.

The site is near the coast (approximately 3.5kms) and has views to the western ranges (Budawangs). The site is within the Burrill Lake catchment area.

Nowra is located 60kms to the north, and Ulladulla is 7kms to the south.

The site is currently occupied by two residential dwellings and associated farm structures, as well as being used for dairy cattle.

2.2 Site Area and Dimensions

The subject site consists of Lot 2 and Lot 3 and has a total area of approximately 40ha.

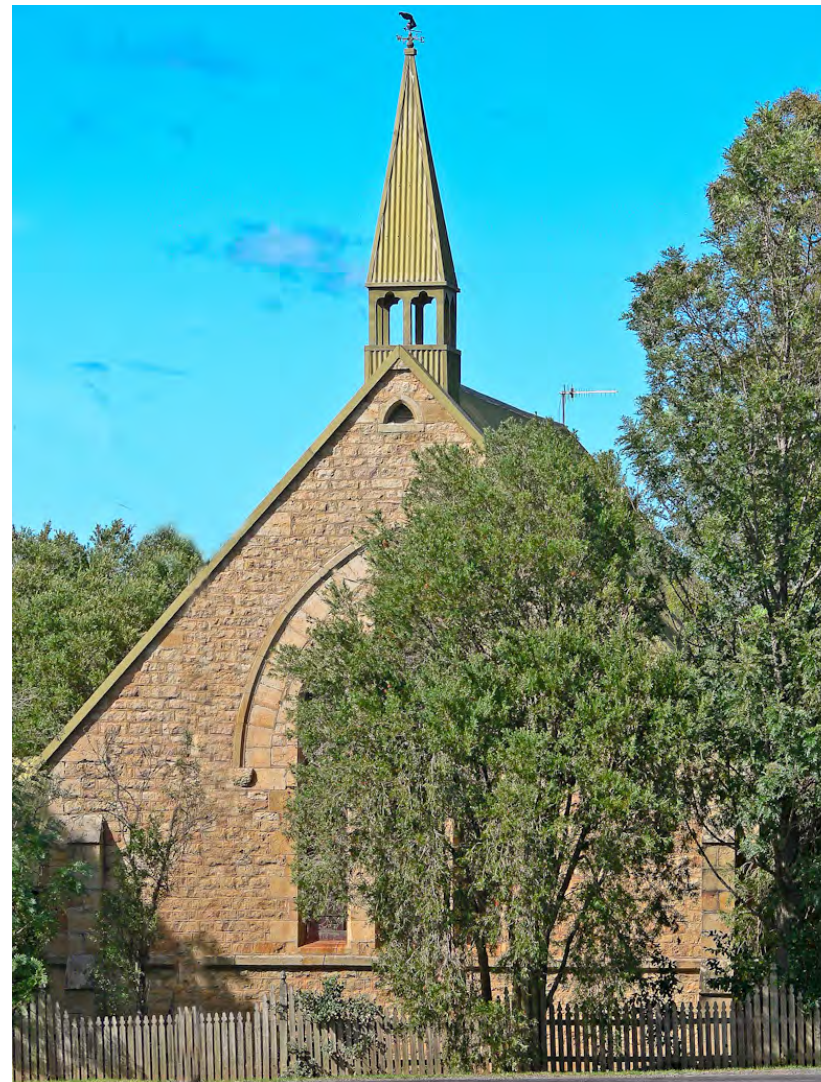
The subject site has an irregular shape. There are three separate frontages to Croobyar Road, as well as two separate frontages to Wilfords Lane. Refer Figure 2.

2.3 Adjacent Development

The site adjoins the southern side of the Milton urban area and is 300m from the town centre.

The main land uses to the immediate north of the site are residential dwellings and a tennis court. There is an industrial estate and schoolyard as well as rural residential dwellings to the east. Rural land and scattered housing abuts the southern and western boundaries.

The Milton Showground and several rural residential dwellings are located between the site and Croobyar Road.



The historic properties adjacent to Claydon Park are respected and valued.

2.4 Local Character

Milton is a small rural town that has grown intermittently since the late 1830's and displays a variety of building styles, designs and streetscapes.

The oldest part of the town including most of the commercial buildings extends along the ridgeline traversed by the Princes Highway. New residential development has occurred off the ridge-line on either side of the town centre.

There are a number of rural residential dwellings in the immediate town catchment area, as well as a small industrial estate and showground on the southern side of town near the subject site.

Housing in Milton demonstrates a range of building materials and styles, including sandstone, stone rubble, brick, timber and fibro. Residential development is generally single storey, although there are some two-storey structures.

The existing character of Croobyar Road is summarised below:

- A two-lane urban fringe road street containing multiple cross-overs to individual dwellings
- 50km road speed, down to 40kms in the school zone
- limited kerb, gutters and footpaths
- limited street lighting
- no street trees in verge
- single and two storey housing on the northern with street frontages ranging from 20m to 33 m
- mixture of front fence designs and materials
- no consistent front yard landscape planting
- varying front setbacks, with a large shed retailing antiques on the northern boundary line immediately opposite the entrance to Claydon Park
- a heritage building (ex church) immediately east of the main site entrance
- a bus stop and shelter immediately adjacent to the site.
- Wilfords Lane has the following characteristics:
- A narrow undulating rural road with no kerbs, gutters, lighting or footpaths
- 50km road speed
- Provides access to a small industrial estate east of the subject site
- Multiple access points along the Lane.

Figure 3: Site Survey



Figure 4: Site Analysis

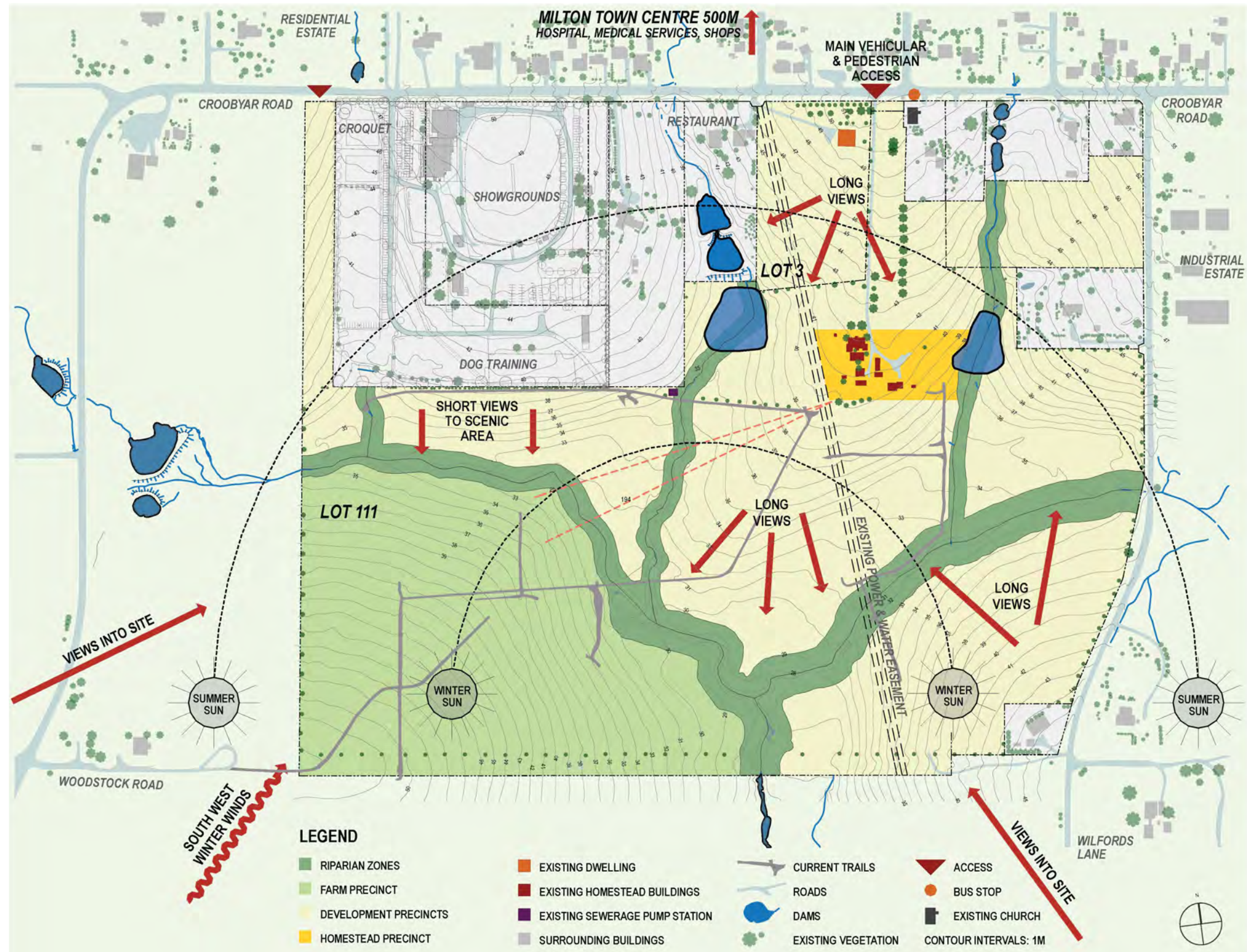
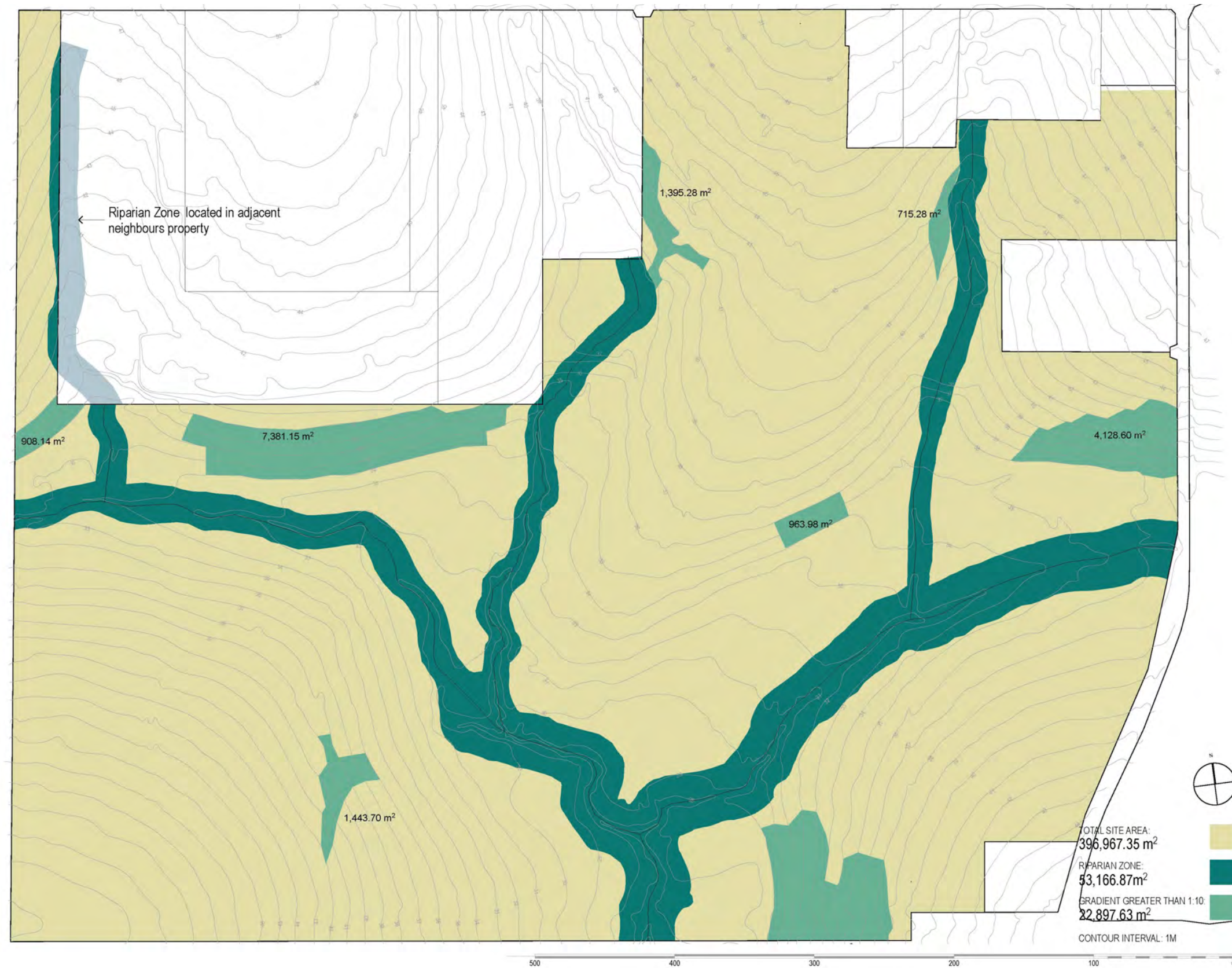


Figure 5: Site Gradients



2.5 Natural Environment

This part of the site assessment covers the natural features of the subject site.

2.5.1 Landform and Drainage

Claydon Park has an undulating landform. The highest point is RL 52m (south-west corner), and the lowest elevation is 26m at the southern boundary.

There are no steep gradients anywhere on Claydon Park that would impede development of the proposed seniors living community.

The dominant drainage pattern on the site comprises four (4) un-named permanent water courses, two of which drain from the urban catchment of Milton. The site currently contains two water storage ponds and has three further water storage ponds approved through the NSW Department of Water Resources. It is anticipated that these three ponds will be constructed shortly.

The site ultimately drains into the Burrill Lake catchment.

All riparian zones have been mapped and analysed by Hughes Trueman Pty Ltd, in consultation with Garry Druett, Claydon Parks Environmental and Riparian Zone Manager, in terms of flooding potential and water quality issues. The proposed development is contained in precincts separated from the riparian corridors running through the site.

There is no evidence of a history of flooding on the site.

2.5.2 Geology, Soils and Geotechnical Conditions

Soils on the site are fertile and together with the existing drainage pattern offer good growth potential for landscape, community vegetable gardens and orchards as proven by the success of the many diverse and appealing trees and shrubs planted over the last twenty five years by the landholder.

There is no evidence of severe soil erosion on the site, reflecting the undulating topography, vegetation cover and good soil structure.

A detailed geotechnical report has not been undertaken on-site to date but will be completed prior to construction of individual stages. However, site investigations indicate that there are no geotechnical constraints to development.

Ground water has not been assessed but is unlikely to be adversely affected by the development. There is no evidence of significant groundwater problems from adjacent properties, although there is some seepage from the Showground along its western boundary with Claydon Park.

2.5.3 Orientation and Microclimate

The site generally has good aspect and exposure to the north, allowing opportunities for residential design that capture passive solar access and amenity.

The combined site is partly sheltered from prevailing winds by surrounding developments to the north, but is exposed to prevailing winter winds from the south-west.

The subject site is not overshadowed by existing buildings on adjacent sites.

2.5.4 Flora and Fauna

Site inspections and desktop research with NPWS confirm there is no evidence of remnant native vegetation or endangered plant or animal species on Claydon Park. However, the current landowner has commenced an extensive and successful replanting program that is creating a landscape framework for future development of Claydon Park.



Claydon Park contains several perennial and non-perennial streams that will be upgraded and environmentally managed.

2.5.5 Existing Landscape Character

The site was cleared of all native vegetation well over 100 years ago. The site is now covered in pasture grasses.

New planting has been undertaken by the current property owners to establish a strong landscape character adjacent to the homestead and around the perimeter of the site. There are also several rows of coral trees that provide a distinct landscape feature.

Figure 3 shows the location of significant (planted) trees on site, including the boundary lines and these have been considered in the site planning process for the concept master plan.

A number of adjacent properties in Croobyar Road and Wilfords Lane have established strong landscape planting zones adjacent to the site which add character and provide landscape screening in both directions to and from the site.

The landscape character beyond the site is dominated by cleared grazing paddocks in an undulating topography and the town of Milton on higher land to the north of the site. There are distance and attractive views of the Budawang Ranges to the west.

2.5.6 Riparian Zone

The site is divided into four (4) distinct riparian zones which converge on the central southern boundary. These zones contain permanent water courses which drain areas beyond as well as the subject site.

There are two large storage ponds on the subject site and several upstream in the immediate proximity of the site. Licenses have been approved with NSW Department of Water Resources for an additional three ponds.

The two main creeks on the property are classed as Category 2 streams. The primary role of streams of this category is to:

- maintain the viability of native riparian vegetation
- provide suitable habitat for terrestrial and aquatic fauna
- provide bed and bank stability
- protect water quality
- protect in-stream aquatic vegetation.

The policy of the Department of Natural Resources is to maintain or improve the environmental function and values of Category 2 streams and the adjoining riparian zones.

The Department generally requires that water quality controls are expected to be contained within a development site and that the natural environmental function of receiving creeks and waters should not be affected by adjacent development. The Department has also advised that if it was proposed to alter the extent of the riparian zone, it would have to be demonstrated that any works were consistent with DNR riparian management objectives and that the natural function and process of the creeks on-site were being enhanced.

The riparian management objectives could be achieved if:

- the “core riparian zone” (CRZ) is 20m wide measured from the top of bank
- there is a 10m wide vegetated buffer on the edge of the CRZ
- the riparian zone is rehabilitated with native vegetation
- any road crossings maintain riparian connectivity
- there is a suitable interface between the riparian area and urban development
- water quality treatment ponds are located outside of the CRZ and vegetated buffer. Encroachment into the riparian area may be possible if the impact on riparian function is minimised
- stormwater discharge is treated before it enters the stream.

The above requirements will be adopted and implemented in the proposed development of Claydon Park to ensure not only that government policy is being addressed but also that these riparian zones are improved and managed in a way that will enhance the residential amenity of the seniors living community.

2.5.7 Bushfire

The site is not listed in Council’s primary bushfire hazard zone.

Bushfire risk is considered to be low given the following considerations:

- Nature of fuel load
- Proximity to bushfire fighting services
- The availability of town water and five large capacity water storage ponds on site
- Good access from adjacent streets for bushfire fighting equipment, and there is good internal site access via the proposed local road network.

No special bushfire planning requirements are required for the development.

2.6 Human Environment

This section of the site assessment deals with human influences on the site.

2.6.1 Existing Land Use and Property Access

The site contains several freestanding structures including a group of single storey farm buildings in the central part of the site, and a two storey house on the Croobyar Road frontage (Lot 3). There is also an internal network of access tracks and paddock fencing, as well as two substantial on-stream water storage ponds, with another three ponds approved by the Department of Water and Energy.

There is no public open space in the immediate vicinity of Claydon Park other than the Milton Showground which is located on Croobyar Road west of the main entrance to Claydon Park.

The proposed development will contain large pockets of landscaped communal open space for use by residents and guests. The Medical Health & Care Precinct will also have landscaped internal courtyards with appropriate pathways and security measures for all categories of resident.

An extensive communal open space network of walking trails is planned for the overall project as part of the Claydon Park master plan.

2.6.2 Infrastructure Services

The site is partially serviced by an existing sewer line, as well as town water, electricity and telecommunications. The Milton sewerage network has been recently upgraded and will have the capacity to accommodate the proposed development at Claydon Park.

There is a major electricity and water easement running across the central part of the site from Croobyar Road to the southern boundary. This represents a constraint on site development for structures along the easement, although the land can be used for landscape purposes and roads.

2.6.3 Easements

The site includes an electricity and water easement which traverses the whole site in a roughly north-south direction (xxm). This easement can be traversed by internal roads (subject to detailed engineering design) but cannot be developed for housing.

There is also a sewerage pumping station adjacent to the site near the SE corner of the showground. Refer Figure 4.

2.6.4 Traffic, Street Network and Site Access

A traffic report was prepared for the DA on Lot 3 by Hughes Trueman in 2005. The existing road network and traffic environment are summarised below:

- 3 rural roads bound the property to the north and west (Croobyar Road) and to the east (Wilfords Lane)
- Croobyar Road forms the main east-west connection between the Princes Highway and the hinterland, and carries the main traffic volume in the vicinity of the site
- There are multiple street crossings to individual houses along Croobyar Road, including 2 crossovers onto the site
- There are 6 local roads off Croobyar Road on the northern side leading into Milton township.

Claydon Park currently has 3 vehicle entry / exit points to adjacent roads, and potential for another 3 cross-overs subject to Council approval which would dissipate traffic from adjacent streets.

There is no data on reported accidents for roads in the vicinity of the site although consultations with local residents confirm that traffic speed and pedestrian safety along Croobyar Road are seen to be problems locally despite the introduction of 40 and 50kpm speed limit zones.

Council data on traffic flows along Croobyar Road and Wilfords Lane indicate relatively low traffic volumes without a distinct peak period.

Access from Croobyar Road to the Princes Highway is via a signalised intersection about 750m to the east of the site.

The analysis of the existing conditions shows that:

- The intersections are coping with the existing traffic volumes
- The mid-block traffic volumes are well within the carrying capacity of the road network
- An evaluation of the intersection performance showed that there were no significant delays or queuing occurring for any turn movement
- Over the last five years the number of reported accidents has been low and reflects the low traffic volumes.

Informal on-street parking is generally available along Croobyar Road. Currently parking demand is low in the vicinity of the site.

A public bus shelter is located in Croobyar Road adjacent to the main entry. This can be relocated in proximity to the site to improve traffic circulation at Wason Street without loss of convenience to bus patrons.

There are no constructed pedestrian footpaths on either side of Croobyar Road or adjacent streets close to the site.

2.6.5 Visual Assessment

Views into the site from adjoining properties and public vantage points are restricted.

The site is not readily visible from much of the Milton urban area or main public vantage points including the Princes Highway, because of its position in a valley rather than on a prominent ridgeline, and the fact that most of the site is downhill of existing urban development along Croobyar Road.

Views into the site from housing and traffic along Croobyar Road are limited because of the undulating nature of the road and the relatively small street frontage of Claydon Park.

The site is only overlooked from the south by a handful of dwellings.

Views from the site look across rural land to the Budawang Ranges in the west, to rural land in the south, and to the urban area of Milton to the north. There are a number of attractive local views within the site to local features including the ponds, riparian zones, recently planted landscaping and the restored heritage homestead and out-buildings.

2.6.6 Heritage Resources

Aboriginal Heritage

Desktop studies confirm that there are no sites or areas of potential Aboriginal archaeological deposits.

It is noted however, that if an Aboriginal artefact is discovered on site during the development process, all construction works would be required to cease and contact made with the National Parks and Wildlife Service (NPWS). Work could not resume without the written authority of the Service.

European Heritage

Schedule 7 of the Shoalhaven Local Environmental Plan (2002) contains a list of heritage items in Shoalhaven City area. This list has been amended since DA consent on Lot 3 to include the Claydon park farmhouse and curtilage as an item of local heritage significance.

The other listed heritage items in the vicinity of the site include the previous church building (now occupied as a residence) and associated cemetery. These items are located adjacent to the existing (and proposed) main entrance to Claydon Park.

The heritage values of the farm house and buildings, church and cemetery will be protected as part of the proposed development. These items have been treated as assets in the planning process and will be protected with open space and landscaping to contribute to local residential amenity. The homestead group of buildings will become an active community centre for residents and visitors.

The Milton street network was laid out on a strong grid plan. This grid pattern will be reflected in the local street network within Claydon Park.

A heritage impact assessment of the proposed development of Claydon Park as a seniors living community was undertaken by bhi Heritage Consultants in August 2007. Refer separate Technical Report. This report confirmed the importance of the heritage items listed above, but concluded that the then proposed development would not have a deleterious impact on heritage resources.

The current Concept Master Plan is considered to have even less heritage impact for the following reasons:

- Demolition of the two storey Mediterranean-style brick and tile building on Croobyar Road
- Extension of the open space zone adjacent to the old church and graveyard
- Building designs and materials in better keeping with the established rural character of the local area (refer Figure 14 below).



Claydon Park has strong ties to early settlement in the district.

2.7 Summary Opportunities and Constraints

The subject site has a combined area of approx 40 ha and can be divided into a number of distinct precincts for assessment and planning purposes as summarised in Table 1. The main site constraints and opportunities are summarised below.

Table 1: Site Precincts

Precinct	Approx Area (ha)	Main Features
Woods	2	Frontage to Croobyar Rd; Contains x2 storey house; gentle slope; planned trees at front
Claydon	8.3	Main farmhouse and out buildings in landscaped setting; access via driveway from Croobyar Rd; gentle slope
Jinks	2	Vacant paddock with frontage to Wilfords Lane; slopes to west and south; attractive views of Claydon Park and Budawang Ranges
Rixon	4.6	Vacant paddock with access to Wilfords Lane; gentle northern slope and aspect
Ingold	3.1	Narrow land strip at rear of showground with southerly aspects/views; access from Croobyar Rd
Medical Health &	1.2	Vacant paddock with access to Wilfords Lane; slopes to west and south; attractive views of Claydon Park and Budawang Ranges
Riparian	9	Four creeks converging at southern edge of site
Agricultural	9	Vacant paddock in SW corner; north-east aspect



View to Claydon Park from South-West.



Claydon Park from South-East Corner at Wilford's Lane.

2.7.1 Constraints

The main constraints affecting development of the site are:

- location of the riparian zone including drainage lines must be protected and enhanced in accordance with government policy – this will become a major environmental feature of the site with new landscaping, water storage ponds, inter-connected walking tracks and general habitat zone that will be available to all residents and guests
- whilst the site is not in a high bushfire hazard zone, the site will be managed to ensure that it has adequate protection in light of possible future threat
- the 33 kV overhead power line, water supply easement and sewage pumping station on the site have an impact on the location of future development but do not represent major site constraints
- there are no areas of native flora on site which require retention as the site has been cleared of native vegetation for over 100 years
- the presence of heritage resources including Claydon Park homestead, and the adjacent (ex) church and cemetery will be treated as assets in the overall development and are not considered as constraints. The curtilage around these resources will be protected and enhanced.

2.7.2 Opportunities

The main opportunities presented by the site are:

- A large consolidated parcel of land located adjacent to Milton township on the NSW south coast
- Scope for a comprehensive master planning and development incorporating the character of Milton, in a way which is more difficult in smaller developments
- Proximity to the range of urban services and amenity offered by Milton including medical facilities, shops, and community uses
- views from the elevated parts of the site and the landscaped setting provided by the hills to the west and south
- the existing landscape character and rural setting with scope to maintain the 150 year history of the site as a Boutique dairy and jersey stud
- use of the existing heritage farmhouse as a community centre
- scope for use of existing access/egress points to the site
- use of riparian zones which must be maintained offer an opportunity to implement Water Sensitive Urban Design (WSUD) principles and to provide extensive informal recreation opportunities
- Scope for additional water storage ponds on site that will act as recreational features: irrigation; water self sufficiency, as well as attracting wildlife and improving water quality
- the presence of distinct areas within the site that offer the opportunity to maximise diversity in living environments
- several arrival points to the site each with a different character.

2.7.3 Summary

The above assessment confirms that the site has a number of substantial opportunities for development as a seniors living community.

No constraints have been identified that would substantially impair development of the site as a seniors living community, or which cannot be addressed in the subsequent detailed planning and design stages of the project to enhance the final development outcomes and future residential amenity.

