

Figure 7: Mundamia Masterplan

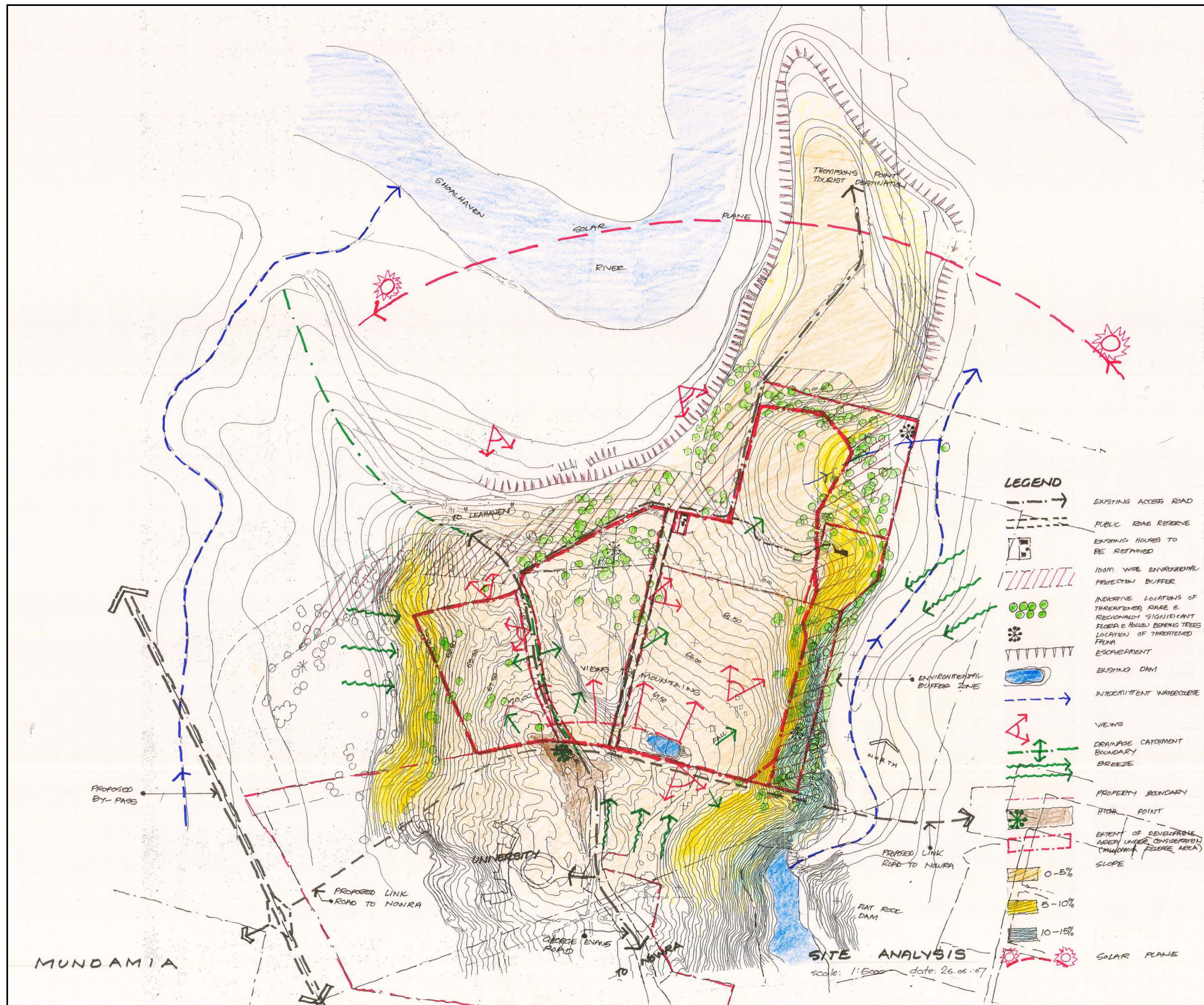


FIGURE 8
Site Analysis Plan
prepared by
Cox Group

The subdivision layout prepared by Allen Price and Associates generally accords with the principles established in the Masterplan prepared by the Cox Group.

Furthermore, in addition to the conceptual layout, SCC adopted 22 Masterplanning Principles to be applied in the development of the Mundamia urban release area (**Table 1**) as follows:

Table 1
Mundamia Urban Release Area Masterplanning Principles

Planning Principles	Comments
1. <i>Provide a residential living area of unique character and ambience which will provide a different choice to Worrigee and West Nowra.</i>	The layout provides an attractive subdivision which will have a unique character through the street pattern which enables distant views to the Cambewarra Mountain range, and closer views to bushland at the edges of the site. This will provide a suitable ambience that will differentiate it from other estates at Worrigee and West Nowra which are based on a hierarchy of roads that include cul-de-sacs accessing collector roads.
2. <i>The rural landscaping along the University access road be extended via a major spine road through the sub-division to northern focal point at Thompson's Reserve.</i>	The proposed road network includes a major spine road that will be appropriately landscaped as an extension of George Evans Road and this continues through to the north of the site. According to the Transport Report of Colston Budd Hunt and Kafes (Annexure 2), the road reserve will result in roadside verges of 5.5 m along each side for effective landscaping. The conceptual Landscape Plan (Annexure 11) shows the provision of roadside landscaping to maintain a rural landscape character.
3. <i>Commercial Centre including a village shop, community hall and public open space be located on the major spine road towards the southern boundary of the properties, within walking distance of the University.</i>	Since initial consideration of the Mundamia Masterplan, through agreement of the main landowners, including SCC, it has been agreed to locate the retail facility (village shop) and community hub (community hall) wholly onto Council land. A File note containing this agreement is contained in Annexure 13 . Proposal respects this arrangement and includes public reserves in the vicinity of the retail/community hub in order to optimise the appeal of this precinct.
4. <i>The passive open space be integrated with the major spine service road rather than "small pocket" reserves.</i>	The most prominent open space is the public reserve which is to be integrated with the commercial precinct adjacent the major spine road. The layout also provides open space on the edges of the site to enable conservation in accordance with the ecological assessment undertaken for the site.
5. <i>The major east/west collector road shown on the Nowra Bomaderry Structure Plan be incorporated as an APZ zone on the southern boundary of the site or not integrated.</i>	The subdivision sketch plan has appropriately considered the future collector road along with identified APZ requirements.

Table 1 (continued)

Planning Principles	Comments
6. <i>The internal road layout and provision of services must allow each owner to develop independently.</i>	The proposed layout and staging will enable other lots within the Mundamia area to develop independently.
7. <i>Both high quality and affordable medium density to be located in the vicinity of the commercial/community area within walking distance of the University.</i>	The proposal includes larger allotments to the south of the proposed commercial precinct which could be developed for higher densities if required which is permissible under the proposed R1 zoning. See below for justification.
8. <i>The existing George Evans Road needs to be retained to provide access to the western residential sector and Jonsson Road to be included as an APZ perimeter road.</i>	The proposal is consistent with this principle.
9. <i>The perimeter road around the total precinct to act as an APZ zone.</i>	The proposal incorporates a perimeter road which also adds to the provision of APZ.
10. <i>Ensure a bus route can circulate through the subdivision, starting and finishing at the Community/Commercial focal point.</i>	The proposed layout facilitates accessibility by buses, with potential bus stops ensuring reasonable walking distances are provided from each proposed allotment (as shown in Plan No. 25489-01 in Annexure 1).
11. <i>As Council has contributed to the water and sewerage capacity, the Council land will be serviced first with spare capacity.</i>	The proposal will be able to be serviced with all necessary infrastructure.
12. <i>The internal subdivision roads should provide rural views at end to the buffer zone.</i>	The layout has been designed to enable views to bushland on the perimeter of the site, and to Cambewarra Mountain in the distance.
13. <i>Solar access will need to be considered for all lots.</i>	The layout is based on a grid pattern which provides most allotments with an east-west alignment, or a north-south alignment. Solar access is considered to be suitable for all lots.
14. <i>Larger lots may be required on steeper slopes.</i>	Contours demonstrate that the site is not unduly steep where development is proposed. This is justified by the Geotechnical Assessment that has been undertaken which is discussed in Section 5.4.3. Notwithstanding this, the eastern portion of the site is the steepest and the subdivision layout does include larger allotments on these lands.
15. <i>Easements will be required for existing services, including the water pipeline.</i>	Easements can be provided as required.
16. <i>Pedestrian/bicycle paths should be strengthened along the major spine road.</i>	Pedestrian pathways are provided along the major spine road and extend to link all destination desire points and public open space areas.
17. <i>The acquisition of land from the Department of Education needs to be undertaken for the main spine road during Stage 1.</i>	SCC has subsequently undertaken the necessary acquisition and road realignment.
18. <i>Staging and implementation of the subdivision should radiate from the central Commercial/Community focal point where possible.</i>	The commercial precinct is at the entry of the subdivision and is to be developed in the first stage. Further staging is mindful of servicing, drainage and APZ requirements.

Table 1 (continued)

Planning Principles	Comments
19. <i>Drainage should be dissipated rather than concentrated and downstream approvals need to be given for staging.</i>	Stormwater drainage is to be undertaken via a series of piped drains and bio-filtration systems. Staging of the development is considerate of drainage requirements.
20. <i>Lot sizes need to be determined at master planning stage and relate to solar access, views, drainage.</i>	Lot sizes enable appropriate residential development and the proposed layout facilitates desirable solar access to the lots. Larger lots are provided where an east-west or north-south orientation is not achieved due to the curvature in the spine road. The road pattern facilitates sight desire lines to points of interest including the Cambewarra Mountain Range and nearby bushland. Drainage has been accounted for in the layout.
21. <i>Consideration be given to architectural covenants over lots, to create a theme or standard.</i>	Consideration has been given to the establishment of architectural covenants however it is considered that this is unreasonable and unnecessary given the controls SCC has in place on dwellings. Further, the subdivision itself will result in the creation of a distinctive character.
22. <i>The ultimate boundary of the precinct to be defined by diversity certification.</i>	The boundary of developable land is determined by the sites constraints, including ecological matters.

The provision of larger allotments specifically for medium density purposes to accommodate university students is not proposed. Consultation with the University of Wollongong indicated that there would be limited demand for student housing in the Mundamia living area, and therefore specific medium density housing for students was not required. Having regard to the wider population, medium density housing is better sited close to areas provided with a more complete range of urban and social infrastructure to most efficiently utilise the services that are provided. Mundamia is not considered to be such an area where medium density should be specifically targeted for increased development. In this regard, the area will be provided with a limited range of commercial and social facilities, and Nowra will still be regularly relied upon by residents to provide the necessary support facilities.

Investigations undertaken by SCC in the preparation of the NBSP included a preliminary assessment on the potential dwelling unit yield through the urban consolidation of existing residential lands. This assessment identified that a potential yield of some 6670 dwellings exists through the urban consolidation process. According to the NBSP, this represents some 35.7% of all new housing stock anticipated to be provided, and as such, it is considered that this will result in the provision of a reasonably diverse and

affordable housing choice for residents of the Shoalhaven, despite no medium density housing specifically being identified at Mundamia.

Notwithstanding the above, a number of lots are of a size and shape, and in a location that could be merged to form an allotment capable of development for higher densities. Furthermore, a number of corner allotments, or lots having a larger area, are sited throughout the proposal and these could be developed for dual occupancy purposes.

On balance, it is considered that the proposal will result in suitable housing style for an area such as Mundamia.

3.4.3.4 *Consistency with NSW SEPP 71*

The provisions of SEPP 71 – Coastal Protection have been assessed in Section 4.2.3 of this EA. The proposal is considered to be compliant with the requirements.

3.4.3.5 *Local Environmental Plans*

The provisions of SLEP 1985 and Draft LEP 2013 have been addressed within Sections 4.5.1 and 4.5.2 of this EA.

3.4.3.6 *Development Control Plans*

The proposal has been assessed against the requirements of DCP No 100 – Subdivision Code adopted by SCC (refer Section 4.6.3).

The site is not subject to any place based DCP, however as outlined above, SCC has adopted a Masterplan which is addressed in Section 3.4.3.

3.4.3.7 *Conclusion*

On the whole, it is considered that the proposal is consistent with all relevant strategic and statutory provisions applying to the site.

3.4.4 *Suitability of the Site for Development*

The proposal has been the subject of extensive separate specialist environmental assessments to properly consider the opportunities and constraints associated with the subject site. These include an ecological assessment, geotechnical and soils analysis, infrastructure provision, bushfire assessment, aboriginal archaeological investigations, traffic assessment, site contamination, along with the preparation of a water cycle management report.

The site has been identified in an Environmental Site Assessment undertaken by Martens Consulting Engineers that site contamination is confined to a restricted area of the site and which has emanated from empty fuel cans, motor oil containers, lubricants