

## SHOALHAVEN DEVELOPMENT CONTROL PLAN 2014

### CHAPTER G11 – SUBDIVISION OF LAND

#### SECTION 5.13 – RESIDENTIAL ALLOTMENT LAYOUT

##### **5.13 Residential Allotment Layout**

**Note:** This section is mostly aimed at lots with one dwelling house or vacant land. The section could apply to dual occupancy if the minimum lot size is met. Refer to Section 5.24 for Dual Occupancy subdivision provisions and Chapter G13: Dual Occupancy Development.

The specific objectives are to:

- i. Provide a range and mix of lot sizes to suit a variety of dwellings and household types, with areas and dimensions to meet user requirements.
- ii. Provide lots that are oriented to enable the application of energy conservation principles.
- iii. Provide lots of sufficient size to protect environmental features and take into account site constraint.
- iv. Provide smaller lots in locations adjacent to neighbourhood centres, public transport stops and adjacent to higher amenity areas.

General

P79 Lots have the appropriate area and dimensions for the siting and construction of a dwelling and ancillary outbuildings, the provision of outdoor space, convenient vehicle access and parking.

A79.1 Minimum standard residential lot size in any residential subdivision is 500 m<sup>2</sup>.

Complies. Proposed residential lots vary in size between 516 m<sup>2</sup> and 1041 m<sup>2</sup> and provide ample opportunity for siting dwellings and ancillary structures with suitable orientation.

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<i>Performance Criteria</i>	<i>Acceptable Solutions</i>	<i>Comments</i>	
P80 Lot areas and dimensions take into account the site natural opportunities and constraints.	A79.2 Lot shape and dimension: <hr/> <b>Rectangular non-corner lots</b> 16 m square width minimum 30 m minimum depth <hr/> <b>Rectangular corner lots</b> Square width 20 metres Depth 30 metres <hr/> <b>Irregular shaped lots</b> Square width 12 m Width at building line 16 m Mean width 18 m Depth 30 m <hr/> <b>Corner Splays</b> 4m minimum	Proposal complies with lots suitably shaped to enable appropriate development.	
	A79.3	Small scale infill subdivision on flood prone land – For small scale infill subdivisions a nominal building envelope of approximately 15 m wide and 21 m deep, sited in accordance with the requirements of Chapter G12: Dwelling Houses, Rural Worker’s Dwellings, Additions and Ancillary Structures be provided above the 1% flood level on each proposed lot in the subdivision.	Not applicable – not flood prone land.
	A80.1	The subdivision lot design positively responds to: <ul style="list-style-type: none"> <li>• Slope and desirability of minimising earthworks/retaining walls associated with dwelling construction.</li> <li>• natural or cultural features;</li> </ul>	The natural opportunities and constraints of the site have been considered in relation to lot size and design and the layout of the subdivision.

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<i>Performance Criteria</i>	<i>Acceptable Solutions</i>	<i>Comments</i>									
P81 Provide coincidental legal and practical access.	<ul style="list-style-type: none"> <li>• soil erosion and bushfire risk;</li> <li>• Special features such as trees and views, including identification of mature stands of trees to be retained and supplementary planting.</li> </ul> A81.1 Each lot is to have coincidental legal and practical access in a rural and/or residential subdivision.	Complies.									
<u><i>Battle-axe lots</i></u> P82 Lots ensure dimensions for the siting and construction of residential development and ancillary outbuildings or facilities.	A82.1 Battle-axe lots to have a minimum lot size of 650 m <sup>2</sup> , excluding access handle.	Complies.									
P83 Lots design makes adequate provision for access to the property.	A83.1 Multiple use access corridor as follows: <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th style="text-align: center;">Access</th> <th style="text-align: center;">No. of Lots</th> <th style="text-align: center;">Pavement Width</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">4 m</td> <td style="text-align: center;">1 to 4</td> <td style="text-align: center;">3.0 m</td> </tr> <tr> <td style="text-align: center;">6.0 m</td> <td style="text-align: center;">5 to 6</td> <td style="text-align: center;">5.0 m</td> </tr> </tbody> </table> A83.2 The right of way pavement to be of reinforced concrete for 3 or more lots as detailed in Council's <i>Engineering Design Specification, chapter D1</i> .	Access	No. of Lots	Pavement Width	4 m	1 to 4	3.0 m	6.0 m	5 to 6	5.0 m	Not applicable – no multiple use handles proposed.
Access	No. of Lots	Pavement Width									
4 m	1 to 4	3.0 m									
6.0 m	5 to 6	5.0 m									
P84 Lots design ensures that a suitable building area of relatively flat land is available.	A84.1 Rectangular building envelope with minimum dimensions of 15 m x 1 5m is available.										

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<i>Performance Criteria</i>	<i>Acceptable Solutions</i>	<i>Comments</i>
P85 Minimise overshadowing and privacy impacts on adjoining residents.	A85.1 Side boundary building setbacks of 5m to adjoining property boundaries, except where a lesser dimension is provided.	
<u>Small lot subdivision</u>		
P86 Lot sizes are consistent with Council's adopted strategic planning documents, including Shoalhaven LEP 2014.	A86.1 Small lot subdivision (lots sizes less than described in General above) are located in accordance with Council's adopted strategies or within a locality clearly identified in this document as suitable for such development.  AND A86.2 Lot areas conform to minimum requirements set out in the relevant Shoalhaven LEP 2014.	Not applicable – not small lot subdivision.          Not applicable – not small lot subdivision.
P87 Lot design considerations: <ul style="list-style-type: none"> <li>• Building envelope – setbacks, building to boundary, height, floor levels, and northern boundary setback for solar access.</li> <li>• Building details – frontage orientation, privacy, street surveillance and window location, screening, style elements, roof form, colours and materials.</li> <li>• Parking - number of spaces, locations, access.</li> <li>• Private open space - location, dimensions, qualities.</li> <li>• Fence - heights, materials, detailing, retaining walls.</li> <li>• Services - easements, stormwater, air conditioners.</li> <li>• Landscaping – protection of existing streets, space for shade trees.</li> </ul>	A87.1 Small residential lots: <ul style="list-style-type: none"> <li>• minimum lot size 350 m<sup>2</sup>;</li> <li>• minimum frontage 15 m;</li> <li>• Battle-axe lots to be 25% greater in area than adjoining lots including access handles.</li> </ul> A87.2 Detailed area plans (DAP) for small lots are to include: <ul style="list-style-type: none"> <li>• parking and access:</li> <li>• provide two spaces per dwelling within the lot, one of which may be in tandem;</li> <li>• Specify vehicle access points to optimise on-street parking, parking must be accessed from a laneway where available.</li> <li>• Specify the garage location and size and ensure it is set back behind the frontage of the dwelling.</li> </ul>	Not applicable – not small lot subdivision.          Not applicable – not small lot subdivision.

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<ul style="list-style-type: none"> <li>• Noise buffering – dwelling design and layout to protect from external noise, provision of noise buffering walls.</li> <li>• Storage space – potential location and size.</li> <li>• Energy efficiency – window location, shading, shared boundary walls.</li> <li>• Setting on lot in relation to shape – retaining walls, cut and fill.</li> <li>• Encroachments - porches and verandas, utilities, reciprocal right-of-way, party walls.</li> </ul>	<ul style="list-style-type: none"> <li>• Building envelope and windows:                             <ul style="list-style-type: none"> <li>○ specify the minimum frontage setback and maximum building height, building to boundary</li> <li>○ locations and wall heights, and other side and rear setbacks, e.g. relating to solar access, tree</li> <li>○ protection easements;</li> <li>○ Specify any critical window locations and treatment, eg for solar access, shading, frontage outlook or limit overlooking or noise intrusions.</li> </ul> </li> <li>• Private open space &amp; fencing:                             <ul style="list-style-type: none"> <li>○ ensure a minimum private outdoor area of 60 m<sup>2</sup> with minimum dimension of 5 m, located at the side or rear of the dwellings;</li> <li>○ Limit front fence height to a maximum of 1 m if solid and to 1.5 m if more than 50% transparent.</li> </ul> </li> </ul>	
<p>P88 Integrated small lot subdivision or multi dwelling lots must only be located in multi dwelling zones as defined in Shoalhaven LEP 2014.</p>	<p>A88.1 Development is to comply with Chapter G13: Dual Occupancy Development of this DCP.</p>	<p>Not applicable – not small lot subdivision.</p>

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### CHAPTER NB1 : MUNDAMIA URBAN RELEASE AREA

<i>Performance Criteria</i>	<i>Acceptable Solutions</i>	<i>Comments</i>
<b>5. DESIGN CRITERIA</b>		
<b>5.1 Neighbourhood design</b>		
<b>Objectives:</b>		
<ol style="list-style-type: none"> <li>1. To create a safe and interesting urban environment that meets the diverse and changing needs of the community and offers a wide choice in good quality housing.</li> <li>2. To create a mix of lot sizes, residential densities and dwelling types to create a unique and appealing residential area.</li> <li>3. To achieve high quality built form and aesthetics of buildings, streetscapes and public spaces</li> <li>4. To ensure a range of land uses are provided that generally conform to the DCP Plan.</li> <li>5. To ensure that subdivision layouts capitalise on the natural environment and rural outlook.</li> <li>6. To establish a neighbourhood identity through appropriate landscaping</li> <li>7. To enhance community interaction and outdoor activity</li> <li>8. To ensure that development incorporates ESD principles for both subdivision design and construction of buildings, including solar access.</li> </ol>		
Provide a range of residential densities with a high proportion of medium density development.	<ol style="list-style-type: none"> <li>1. The minimum residential densities are:                             <ol style="list-style-type: none"> <li>a. Medium Density – 20 dwellings/ ha.</li> <li>b. Detached Residential – 12 dwellings/ ha.</li> </ol> </li> </ol>	The entire subdivision will yield a density of 11.69 dwellings per hectare. It is considered that this reasonably reflects the requirements of the DCP given the significant constraints (ecological / bushfire / stormwater detention ponds) that restrict the extent of developable land within the subject site.
	<ol style="list-style-type: none"> <li>2. A minimum of 20% of all dwellings in the Urban Release Area (URA) will be medium density dwellings (includes dual occupancies).</li> </ol>	The proposal provides for 47 dual occupancy and multi dwelling houses, representing 13.3 % of the total housing stock proposed which represents a reasonable proportion and exceeds the 9% currently attained in the Shoalhaven LGA (based on 2011 census).

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<i><b>Performance Criteria</b></i>	<i><b>Acceptable Solutions</b></i>	<i><b>Comments</b></i>
Provide for a range of lot sizes to accommodate different densities and dwelling types.	<ol style="list-style-type: none"> <li>1. Larger, medium density lots to be concentrated around the neighbourhood hub within 400 m walking distance, and</li> <li>2. Medium density lots can be provided throughout the URA but must be nominated and approved by the consent authority at the time of subdivision approval. No higher density uses will be permitted around the perimeter of the URA adjacent to bushfire asset protection zones.</li> </ol>	<p>All of the multi dwelling/medium density allotments are sited within 400 m of the neighbourhood hub.</p> <p>Multi dwelling lots are identified on the Subdivision Plan (<b>Annexure 1</b>) prepared by APA, and no higher density allotments are sited on the perimeter of the site, or adjacent to bushfire asset zones.</p>
Provide for a range of dwelling types to provide housing choice in the URA.	<ol style="list-style-type: none"> <li>1. Development could include detached and medium density housing (including villas, flats, terraces, townhouses, studio flats and dual occupancies).</li> </ol>	<p>Proposal provides for 305 residential allotments (86.7%), nine dual occupancy allotments and 6 multi dwelling sites providing a good variety of housing choice.</p>
Provide for dual occupancy developments, preferably on larger corner lots.	<ol style="list-style-type: none"> <li>1. The overall target is for a minimum of 5% of single residential lots to be assigned for dual occupancy development.</li> <li>2. Subdivision of dual occupancy development is permissible for such lots only where these are nominated on the approved overall subdivision plan for each major landholding.</li> </ol>	<p>Approximately 3% of allotments are assigned for dual occupancy development which is considered reasonable.</p> <p>Noted and matter for further development. Proposed Subdivision Plan (<b>Annexure 1</b>) includes the identification of dual occupancy allotments.</p>
Provide short and longer distance views to the surrounding rural outlook.	<ol style="list-style-type: none"> <li>1. Design of street patterns is to create view corridors to the rural outlook.</li> </ol>	<p>Proposal provides view corridors to Mt Cambewarra (north south orientation) and surrounding forested land (east west) which complies with requirements.</p>
Neighbourhood identity should be reinforced through similar landscaping of public reserves, along the main spine road and along other key roads in the area.	<ol style="list-style-type: none"> <li>1. You must submit landscaping plans as part of any subdivision application that are consistent with the Landscape Strategy for the URA (Section 7.8 of this DCP); or</li> </ol>	<p>Landscaping Plan prepared by Peter Phillips Landscape Architect (PPLA) submitted with application. The plan prepared by PPLA identifies street trees species to provide a co-ordinated theme. This plan, although prepared in support of the earlier subdivision layout, is suitable for consideration at this time, and can be supplemented with a more detailed landscaping design prior to issue of subsequent Construction Certificates.</p>

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<i>Performance Criteria</i>	<i>Acceptable Solutions</i>	<i>Comments</i>
	2. You must submit landscaping plans as part of any subdivision application that demonstrates improvements to the Landscape Strategy for the URA (Section 7.8 of this DCP).	Noted and consider that the Landscaping Plan prepared by PPLA is appropriate, and can be supplemented by more detailed plans prior to issue of a Construction Certificate.
Provide for local public reserves throughout the URA with road frontages on at least 2 sides.	1. Local public reserves must comply with the requirements of the Shoalhaven City Council Public Open Space Plan, or 2. Local public reserves are to demonstrate improvements to the Shoalhaven City Council Public Open Space Plan.	Proposal provides for three open space reserves with a total of 4, 607 m <sup>2</sup> of such area. This open space, coupled with that to be provided in the adjoining subdivision proposed by Shoalhaven Council will result in the provision of open space that exceeds the requirements.
Provide for legible subdivision layouts that allow for good solar access.	1. The subdivision layout shall be designed to maximise the number of north-south orientated lots.	Proposal provides for good solar access with allotments principally oriented north-south, and where not possible, generally being east-west to optimise direct sunlight to long boundaries. Proposal complies.
<b>5.2 Neighbourhood Hub</b>		
<b>Objectives:</b>		
<ol style="list-style-type: none"> <li>1. To create a focal point for the URA that will service the needs of the Mundamia and broader West Nowra community.</li> <li>2. To create a neighbourhood hub that functionally and aesthetically integrates the neighbourhood shopping centre with the adjoining community/child care centre and central open space.</li> <li>3. To create a development that is attractive when viewed from the access roads and central public open space.</li> <li>4. To provide high quality design within the neighbourhood hub area to reduce the bulk and scale of the buildings</li> <li>5. To create a mix of dwelling types and opportunities for higher density residential accommodation in close proximity to the neighbourhood hub.</li> </ol>		
Provide for a range of commercial and community uses.	1. You must demonstrate how land uses within the neighbourhood hub area are consistent with or provide a demonstrated improvement to the Neighbourhood Hub concept design.	The Subdivision Plan ( <b>Annexure 1</b> ) prepared by APA includes a commercial allotment adjacent the Neighbourhood Hub which can be incorporated into any development that may eventuate in this location.
Provide for active uses to street frontages, central open space and public spaces where possible in the neighbourhood hub.	1. Ground level development in the neighbourhood shopping centre to be open to the street or public areas to encourage activation, with minimal impediments to visual connections between internal and external spaces; and	Not applicable at subdivision stage. Proposed subdivision layout does not frustrate attainment of this requirement.

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<b>Performance Criteria</b>	<b>Acceptable Solutions</b>	<b>Comments</b>
	<ol style="list-style-type: none"> <li>2. The medical centre and community/child care centre are to provide frontages which provide demonstrated interest and activation to the street in other ways.</li> <li>3. Car parking and similar hard stand areas should be located such that they do not dominate the streetscape. Ideally car parking should be located behind the built form.</li> </ol>	
Development in the Neighbourhood hub should be appropriate bulk and scale and provide design relief as the building increases in height.	<ol style="list-style-type: none"> <li>1. Development within the neighbourhood hub area is to be a maximum of 2 storeys, or</li> <li>2. Council may consider an increase to 3 storeys where appropriate, if quality design and strong justification is provided. A 3rd story would need to be recessed from the front building alignment, and</li> <li>3. Development shall be broken down into small elements, avoiding long and large areas of continuous walls, and utilising built form elements such as pavilions with individual roof elements.</li> </ol>	Not applicable at subdivision stage. Proposed subdivision layout does not frustrate attainment of this requirement.
Design to incorporate safer by design principles, including good passive surveillance.	<ol style="list-style-type: none"> <li>1. Central open space and public domain areas should be viewable from the main spine road, active shop frontages and residential areas and should be sufficiently lit up at night.</li> </ol>	Not applicable at subdivision stage. Proposed subdivision layout does not frustrate attainment of this requirement.
Provide for medium density living in close proximity to the neighbourhood hub.	<ol style="list-style-type: none"> <li>1. Shop top housing and medium density housing is encouraged around the neighbourhood hub.</li> </ol>	Not applicable at subdivision stage. Proposed subdivision layout does not frustrate attainment of this requirement.
No vehicular access to the neighbourhood hub should be provided from the Spine Road.	<ol style="list-style-type: none"> <li>1. Rear service access is to be provided to the retail and community/childcare centre.</li> </ol>	Not applicable at subdivision stage. Proposed subdivision layout does not frustrate attainment of this requirement.
Provide for central open space to service the needs of the community.	<ol style="list-style-type: none"> <li>1. The neighbourhood hub should comprise a minimum of 5,000 m<sup>2</sup> of central public open space.</li> </ol>	Not applicable to this Preferred Project as open space proposed in conjunction with MP09_0056. This PP does not frustrate attainment.

<i>Performance Criteria</i>	<i>Acceptable Solutions</i>	<i>Comments</i>
<b>5.3 Movement and Access</b>		
<b>Objectives:</b>		
1. To ensure a well connected network allows effective movement into and around the neighbourhood for vehicles, pedestrians and cyclists. 2. To encourage walking, cycling and the use of public transport		
Provide a legible street hierarchy to allow effective movement of vehicles (including buses) throughout the URA including: <ul style="list-style-type: none"> <li>• A main spine road</li> <li>• Major residential streets</li> <li>• Minor residential streets</li> <li>• Perimeter roads for both access and bushfire asset protection</li> </ul>	1. Road layout must be consistent with the trunk routes shown on the DCP Map  2. Road design must allow for bus movements and indented bus bays along the bus route shown in the DCP Map.	Proposal incorporates the trunk routes identified on the Masterplan and which include: <ul style="list-style-type: none"> <li>• Main spine road,</li> <li>• Major residential roads,</li> <li>• Minor residential roads,</li> <li>• Perimeter road for access and fire fighting purposes.</li> </ul> Proposed Subdivision Plan prepared by APA ( <b>Annexure 1</b> ) identifies a suitable bus route to service the Mundamia URA.
Provide for lateral cycle/ pedestrian routes linking the neighbourhood shopping centre, public open space and the main north-south shared pathway.	1. Shared pathways must be provided along trunk routes shown on the DCP Map	Noted and can be incorporated.
<b>5.4 Entrance/Gateway</b>		
<b>Objectives:</b>		
1. To create a sense of arrival and establish a neighbourhood identity through the development of a boulevard road entry and a special residential area along the spine road into the URA. 2. To create a unique residential living area with high quality built form and attractive street presentations.		
Provide an attractive entrance into the URA through a boulevard road.	1. You must demonstrate how the entrance into the URA is consistent with the Gateway Streetscape Detail Map in any subdivision or development application, or	The proposal incorporates a widened road reserve at the entry to the subdivision to enable the Gateway Streetscape to be provided.

<i>Performance Criteria</i>	<i>Acceptable Solutions</i>	<i>Comments</i>
	2. You must demonstrate how the entrance into the URA provides a demonstrated improvement to the Gateway Streetscape Detail Map in any subdivision or development application.	The proposal incorporates the Gateway Streetscape treatment as shown in the plan prepared by Peter Phillips and which includes the identification of street species to ensure consistency of theme.
Provide for highly articulated, medium density development within the special residential area that compliments and frames the boulevard entry into the URA.	1. Terrace style housing within the special residential area is encouraged.  2. Front building lines to be 3 m back from the lot boundary, with rear setbacks 7.5 m from the boundary to allow for vehicle parking.  3. Front boundaries shall be defined using landscaping to frame the boulevard entry.	Noted that this provision only encourages terrace style housing. The subdivision layout provides for a range of allotments, some of which could be developed with terrace style housing if market demand warrants such a design approach.  Noted and subject to separate development application.  Noted and subject to separate development application.
Dwellings on both sides of the spine road will have no direct, front vehicular access.	1. Vehicles will gain access from service lanes to the rear as shown on the Gateway Streetscape Detail Map.	Noted however the nature of the subdivision and traffic safety does not warrant prohibition on vehicular access via main spine road.
<b>5.5 Environment</b>		
<b>Objectives:</b> <ol style="list-style-type: none"> <li>1. To protect and maintain areas of natural bushland, riparian corridors and native habitats identified for retention, in and immediately adjacent to, the URA, in particular, areas identified as containing <i>Pterostylis Sp. Flat Rock Creek</i> (Spring Tiny Greenhood Orchid Sp. Flat Rock Creek) and <i>Triplarina nowraensis</i> (Nowra Heath Myrtle);</li> <li>2. To minimise the change to the hydrological flows (surface and subsurface) due to development in the stormwater catchment.</li> <li>3. To achieve a neutral or reduced post development pollutant load compared to existing conditions.</li> </ol>		

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<i>Performance Criteria</i>	<i>Acceptable Solutions</i>	<i>Comments</i>
1. Provide for the retention of threatened species and their habitats.	<p>1. Significant clusters of <i>Triplarina nowraensis</i> (Nowra Heath Myrtle) to be protected through areas of either public open space or undeveloped parts of lots, and</p> <p>2. Significant clusters of Hollow Bearing Trees to be protected through areas of either public open space or undeveloped parts of lots.</p>	<p>Significant clusters of <i>Triplarina nowraensis</i> (Nowra Heath Myrtle) are protected in the ecological reserve.</p> <p>Hollow bearing trees have been identified in the assessments of SLR Consulting. The majority of hollow bearing trees are sited within the ecological reserve to ensure their retention.</p>
2. Provide supplementary groundwater recharge to achieve no net change in hydrological flows	<p>Structures/devices, such as roadside bio swales, that promote groundwater recharge shall be located in the public domain. The amount of recharge required is dependent on the impervious area created by development. Requirements for a range of impervious areas are provided at Figure A.</p> <p>Typical cross sections for a roadside bio swale are provided at Appendix B. In conjunction with these swales, recharge may be incorporated into devices that also achieve water quality and onsite detention (OSD) objectives. A typical OSD wetland and bioremediation basin section is shown at Appendix C.</p> <p>Recharge areas shall be hydraulically connected to the threatened species habitats down slope of the development. Designs shall consider:</p> <ul style="list-style-type: none"> <li>• Subsurface drainage under pavements and buildings in conjunction with seepage level spreaders (or similar distribution system) to avoid seepage concentration;</li> <li>• Permeable road and footing sub-base to ensure that buildings and roads do not impede groundwater flows;</li> <li>• Under road culverts at specific locations; and</li> </ul>	<p>Proposal subject to Stormwater Management Assessment prepared by Martens Consulting Engineers (<b>Annexure 2</b>) which has considered stormwater discharges from the site with a view to achieve pre-development flows.</p> <p>Report of Martens Consulting Engineers identifies groundwater recharge via roadside bioretention swales along site roads across the entire development which will best replicate pre-development recharge conditions.</p>

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<i>Performance Criteria</i>	<i>Acceptable Solutions</i>	<i>Comments</i>
	<ul style="list-style-type: none"> <li>• Specific siting of roadside swale and bioswale and bioremediation basin outlets to discharge flows such that discharges are dispersed evenly and freely to reach these areas.</li> </ul> Devices shall be located to ensure recharge is distributed across the site.	
3. Surface flow regimes shall mimic predevelopment flows for peak stormwater discharges up to and including the 1 in 5 year storm.	OSD solutions should be integrated into open spaces and must be designed with consideration to ongoing maintenance requirements and public safety. OSD and water quality requirements should be incorporated into a single device.	OSD areas have been identified in four locations within the proposed open space areas.
4. Stormwater outlets are to be engineered to ensure that discharge regimes as near as possible mimic predevelopment flow regimes.	Outlets shall include an appropriate flow spreader/energy dissipater to replicate existing flow conditions. A nominal 20 m setback should be established between site stormwater outlets and areas of sensitive vegetation.	Incorporated into the recommendations of Martens Consulting Engineers.
5. Annual average sediment and nutrient loads to receiving environments shall be reduced through the implementation of water quality improvement structures.	The stormwater 'treatment train' should be designed to maintain post-development water quality as near as possible to pre-development condition to minimise impacts on native vegetation, whilst also adhering to the following post-development pollution retention targets:  Total Suspended Solids – 85% Total Phosphorus – 65% Total Nitrogen - 45% Gross Pollutants – 90%	Assessment of Martens Consulting Engineers has included the full stormwater treatment train and complies with the retention targets as outlined.

<i>Performance Criteria</i>	<i>Acceptable Solutions</i>	<i>Comments</i>
<b>5.6 Bushfire Protection</b>		
<b>Objectives:</b> To ensure that appropriate bushfire assessment and mitigations measures are undertaken in developing this land.		
<b>Standards:</b> 1. You must demonstrate how any development or subdivision application complies with the Planning for Bushfire Protection Guidelines.  2. A perimeter road must be included in any subdivision application for access and bushfire asset protection.  3. No higher density residential uses will be permitted around the perimeter of the URA adjoining asset protection zones.		Proposal is accompanied by a Bushfire Protection Assessment prepared by Eco Logical Australia which demonstrates compliance with the requirements of PBP.  Proposal incorporates a perimeter road to protect all allotments. Advice from Eco Logical Australia ( <b>Annexure 5 – Bushfire Protection Assessment</b> ) is that this complies with RFS Guidelines - <i>Planning for Bushfire Protection</i> .
<b>5.7 Landscape Strategy</b>		
<b>Objectives:</b> 1. To create a unique and quality subdivision that embraces the native bushland character of the surrounds, connecting residents with the natural environment. 2. To create a quality and pleasant environment that encourages outdoor activities and social interaction creating a sense of place for the subdivision. 3. To achieve continuity and containment providing a high quality setting for the housing development. 4. Promote biodiversity through careful plant selection and integration of landscaped bioswales and landscaped retention ponds within the subdivision. 5. Encourage native plantings within private development to reinforce the natural bushland character of the subdivision 6. Provide landscaped entrances and roundabouts to the development with native grass planting and sculptures utilising the natural elements of the area.		

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<i>Performance Criteria</i>	<i>Acceptable Solutions</i>	<i>Comments</i>
<p><b>Strategy:</b></p> <p>The road network surrounding and within the subdivision will be unified with street trees, which when mature, will be the most prominent landscape element. They are intended to help define boundaries, reduce traffic speeds, provide shade and habitat for fauna, and be integrated with stormwater management systems. Mundamia will be formed by green streets which create a sense of place.</p> <p>The overall landscaping strategy is to be based around local native species endemic to this area. The theme established by the landscaping along George Evans Road to the University campus should be carried through the Urban Release Area.</p> <p>Such a theme applies to public areas being road reserves, public open spaces and the front yards of all proposed lots. Species are to be nominated and shown by developers/ subdividers on overall landscape plans of their land and submitted to the Consent Authority for approval and must be consistent with the Species List in Appendix D.</p> <p>Street tree planting is to be consistent with the Landscape Strategy Map below. The centre of the URA is to consist of traditional, boulevard style street planting to reinforce the grid pattern of the subdivisions and the outlying areas are to consist of less formal, clusters of trees to soften the visual impact of the built form and blend in with the natural environment.</p> <p>Colours used in public open spaces, streetscaping and community facilities should be in harmony with the surrounding native bushland and must be consistent with the colour pallet provided in Appendix E. The planting and material palette reinforces the existing native bushland and landscape in the area immediately surrounding and bordering the URA.</p> <p>The proposed vehicle, pedestrian and cycleway access routes along the major residential streets are shown on the DCP Map. A concept landscape strategy for these major residential streets is shown in the cross section below.</p>		<p>Noted. Proposed landscaping is shown in the Landscaping Plan prepared by PPLA.</p> <p>Further details can be provided where necessary prior to issue of relevant Construction Certificates.</p>
<p><b>Principles:</b></p> <ol style="list-style-type: none"> <li>1. Provide extensive land scaping and tree planting in all streets and retain existing trees where possible, particularly in open space areas.</li> <li>2. Land scaping and street planting shall provide continuity and take the focus off the built form.</li> <li>3. Provide continuity and consistency in the streetscape with linear elements such as trees, colour, garden and materials, ensuring it continues through the intersections.</li> </ol>		<p>Noted. Proposed landscaping is shown in the Landscaping Plan prepared by PPLA.</p> <p>Further details can be provided where necessary prior to issue of relevant Construction Certificates.</p>

<i>Performance Criteria</i>	<i>Acceptable Solutions</i>	<i>Comments</i>
4. Driveway crossovers to be same colour and material as foot path to provide continuity. 5. Consistent use of street furniture throughout the subdivision will ensure continuity and a sense of place. 6. Deciduous trees (preferably native) on East-West orientated streets. 7. Landscaping of verge between path and kerb shall be native grass to reduce maintenance. 8. Use of public art and unique landscaping will be used at the intersections to the main roads and will be used to signal a point of arrival. 9. Water sensitive urban design elements shall be integrated into the open space area and in certain streetscapes.		
<b>5.8 Residential Character</b>		
<b>Objectives:</b>		
1. To create a unique residential living area with high quality built form and attractive street presentations. 2. To offer a wide choice in good quality housing that meets the diverse and changing needs of the community. 4. To minimise the effects of development on the local stormwater hydrology		
Dwellings shall be appropriate bulk and scale and provide design relief as the building increases in height.	1. Dwellings are to be a maximum of 2 storeys with the 2nd storey set back from the bottom level.	Noted and subject to separate future development application.
Dwellings shall provide an attractive street presentation.	1. The front facade must contain the entrance to the house and shall face the street 2. Dual occupancies on corner lots must utilise both street frontages, one for each dwelling. 3. Houses located on corners shall address both street frontages to add to the overall streetscape appeal.	Noted and subject to separate future development application.
Development shall be broken down into small elements, avoiding long and large areas of continuous walls, and utilising built form elements such as pavilions with individual roof elements.	1. Continuous walls exceeding 6m in length must incorporate design elements to soften the visual impact to the street frontage.	Noted and subject to separate future development application.

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<i><b>Performance Criteria</b></i>	<i><b>Acceptable Solutions</b></i>	<i><b>Comments</b></i>
Provide for a range of materials, colours and finishes in building designs to create attractive dwellings.	<ol style="list-style-type: none"> <li>1. The use of a mix of materials/colours and finishes is essential for the front facade of all dwellings and desirable for the remaining facades, and</li> <li>2. Colours shall reflect the natural surrounds. Bright colours and black will not be supported.</li> <li>3. Face brick is to be smooth or matte finish and uniform in shape. Brick blends are not accepted.</li> <li>4. All roofs shall be sheet metal, in a colour that compliments the house colour, with eaves overhanging a minimum of 450mm.</li> </ol>	Noted and subject to separate future development application.
Provide for garages and carports that do not dominate the streetscape.	<ol style="list-style-type: none"> <li>1. Garages must be set back a minimum of 1 m behind the building line of the dwelling.</li> <li>2. Garages must have a maximum width of 6 m and occupy no more than 50% of the frontage.</li> <li>3. Garage doors must compliment the colours of the home and be plain panels or roller doors without patterns.</li> <li>4. Vehicle crossovers to footpaths are to be 3m for single garages and 3.5m for double garages. The crossover shall be constructed perpendicular to the carriageway kerb.</li> <li>5. Driveways must be constructed of plain coloured concrete, asphalt or pavers. Driveway crossovers shall be the same colour and material as foot path to provide continuity.</li> </ol>	<p>Noted and subject to separate future development application.</p> <p>Noted and subject to separate future development application.</p> <p>Noted and subject to separate future development application.</p>
Provide ancillary structures that complement the building design.	<ol style="list-style-type: none"> <li>1. Letterbox design shall complement house design and colour.</li> <li>2. Rear and side boundary fencing to be 1.8 m high Colorbond fencing.</li> </ol>	Noted and subject to separate future development application.

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<i>Performance Criteria</i>	<i>Acceptable Solutions</i>	<i>Comments</i>
	<ol style="list-style-type: none"> <li>3. Fences for rear and side boundaries shall be setback 2 m behind the main building line.</li> <li>4. For corner lots, a fence is permissible forward of the main building line on the secondary street frontage where that fence is providing privacy to the principal area of private open space. Such a fence shall be offset a minimum distance of 12 m from the primary street lot boundary.</li> <li>5. All service areas containing items such as bins, water tanks, clotheslines, A/C units etc, shall be located to the rear or side of the building and be adequately screened.</li> </ol>	
Provide quality landscaping on individual lots.	<ol style="list-style-type: none"> <li>1. Each lot shall contain a minimum of 1 tree in the front yard. The tree must have protective fencing around it during construction.</li> <li>2. Front boundary definition shall be created through landscaping.</li> </ol>	Noted and subject to separate future development application.
Provide adaptable housing to suit the lifetime needs of occupants.	<ol style="list-style-type: none"> <li>1. As a minimum, 50% of medium density dwellings (including dual occupancies) provided in the URA are to meet adaptable housing standards equivalent to Class C Adaptable Houses in AS4299-1995.</li> </ol>	Noted and subject to separate future development application.
<b>5.9 Staging</b>		
<p>All subdivision applications are to include an internal staging plan, in accordance with the following and indicating how the proposal will ensure the targets in the DCP will be met.</p> <p>Initial stages are to start from the southern boundary of the URA and will require the relocation / construction of George Evans Road along the new alignment up to the southern end of the Crown road reserve.</p>		<p>The Subdivision Plan prepared by APA incorporates staging of the development and which shows the development being undertaken in 11 stages. Staging commences along the main spine road and in the vicinity of the neighbourhood hub, and thence radiates out in a general north to south manner.</p> <p>The Staging Plan adopted by APA complies.</p>

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<i><b>Performance Criteria</b></i>	<i><b>Acceptable Solutions</b></i>	<i><b>Comments</b></i>
<p>Thereafter, stages are to progress northwards to give access to the proposed neighbourhood centre. Subdivision for the neighbourhood centre and the adjoining central public reserve is to occur within release of the first 25% of lots.</p> <p>Releases after that should radiate out from the neighbourhood centre to promote the centre's presence and importance in the release area.</p>		<p>Development of the neighbourhood centre is the responsibility of Shoalhaven City Council and outside of the control of this Proponent.</p> <p>Staging Plan complies.</p>
<b>6. CONTRIBUTIONS</b>		
<p>Localized infrastructure requirements are to be provided as conditions of consent for each development e.g. local roads, footpaths, shared cycleway / footpaths, drainage and local reserve areas.</p> <p>Development will also be levied contributions towards community infrastructure in line with Shoalhaven Contributions Plan 2010 and Shoalhaven Council's Development Servicing Plan.</p> <p>Infrastructure projects to be included in a Planning Agreement or Shoalhaven Contributions Plan 2010 include but are not limited to:</p> <ul style="list-style-type: none"> <li>• Contributions towards external traffic improvements</li> <li>• Realignment and construction of George Evans Road to provide access to the URA</li> <li>• Central Open Space within the URA</li> <li>• A community centre/ child care centre within the URA</li> <li>• Any works associated with drainage measures to protect ecologically sensitive areas, and</li> <li>• Contributions towards Citywide and planning area wide contributions projects i.e. sports fields.</li> </ul>		<p>Noted.</p> <p>Section 94 Contributions to be paid at each stage prior to release of subdivision certificate.</p> <p>The Draft Contributions Plan prepared by Shoalhaven Council identifying facilities attributable to the URA as including:</p> <ul style="list-style-type: none"> <li>• Land acquisition;</li> <li>• Local roads;</li> <li>• Intersection upgrades;</li> <li>• Open space embellishment;</li> <li>• Child care centre.</li> </ul> <p>This is in addition to other projects already adopted in Council's comprehensive CP and which include citywide projects such as sports fields.</p>

<i>Performance Criteria</i>	<i>Acceptable Solutions</i>	<i>Comments</i>
<p><u>Large lot residential subdivision</u></p> <p>P89 Large lot residential subdivision is to contribute to the variety of lots sizes available for low density development.</p>	<p>A89.1 Minimum dimensions for low density residential lots 2000 m<sup>2</sup> to 4000 m<sup>2</sup>:</p> <hr/> <p><b>Rectangular corner lots</b></p> <ul style="list-style-type: none"> <li>• 35 m square width;</li> <li>• 55 m depth;</li> <li>• 2000 m<sup>2</sup> area.</li> </ul> <hr/> <p><b>Rectangular non-corner lots</b></p> <ul style="list-style-type: none"> <li>• 30 m square width;</li> <li>• 55 m depth;</li> <li>• 2000 m<sup>2</sup> area.</li> </ul> <hr/> <p><b>Irregular shaped lots</b></p> <ul style="list-style-type: none"> <li>• 30 m square width or battle-axe lots;</li> <li>• 55 m mean depth;</li> <li>• 2000 m<sup>2</sup> area, excluding access handle.</li> </ul> <hr/> <p><b>Access corridors to battle-axe lots</b></p> <ul style="list-style-type: none"> <li>• Single access width 6 m;</li> <li>• Multiple use right of way as detailed for battle-axe lots P7/AS7.</li> </ul> <hr/> <p><b>Building line</b></p> <ul style="list-style-type: none"> <li>• 12.5 m from front boundary;</li> <li>• 5 m from side boundary;</li> <li>• 6.3 m side boundary setback to street.</li> </ul> <hr/>	<p>Not applicable – not large lot subdivision.</p>

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<i>Performance Criteria</i>	<i>Acceptable Solutions</i>	<i>Comments</i>
	<p>A89.2 Minimum dimensions for low density residential lots 4000 m<sup>2</sup> to 10,000 m<sup>2</sup>:</p> <hr/> <p><b>Rectangular corner lots</b></p> <ul style="list-style-type: none"> <li>• 40 m square width;</li> <li>• 55 m depth;</li> <li>• 4000 m<sup>2</sup> area.</li> </ul> <hr/> <p><b>Irregular shaped lots or battle-axe lots</b></p> <ul style="list-style-type: none"> <li>• 40 m square width;</li> <li>• 65 m mean depth;</li> <li>• 4000 m<sup>2</sup> area, excluding access handle.</li> </ul> <hr/> <p><b>Access corridors to battle-axe lots</b></p> <ul style="list-style-type: none"> <li>• Single access width 6 m;</li> <li>• Multiple use right of way as detailed for battle-axe lots P7/AS7.</li> </ul> <hr/> <p><b>Building line</b></p> <ul style="list-style-type: none"> <li>• 20 m from front boundary;</li> <li>• 7.5 m from side boundary;</li> <li>• 10 m side boundary setback to street.</li> </ul> <hr/>	Not applicable – not large lot subdivision.
P90 Ensure that the overall development is as energy efficient as possible and ensure that reasonable solar access is achievable for each lot. Subdivision design must maximise and protect solar access for each dwelling. The design is to define lot size, shape, orientation, the solar setback line and possibly a building height envelope. For any given lot these factors will determine the ideal locations of northern walls and the solar access time of north facing windows.	<p>A90.1 80% of lots in a new subdivision have 5 star solar access, and the remainder either 4 or 3 stars.</p> <p>A90.2 Lot sizes reflect reasonable consideration of the impact of topography and expect to maximise solar access.</p> <p>A90.3 Lots are of a suitable shape to permit the location of a dwelling with suitable solar access and private open space.</p>	<p>Proposed lots will enjoy north-south orientation, or alternatively an east-west aspect.</p> <p>Lot layout maximises solar access.</p> <p>Lot layout maximises solar access.</p>

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<i>Performance Criteria</i>	<i>Acceptable Solutions</i>	<i>Comments</i>
	A90.4 Lots should be orientated so that one axis is within 300 east and 200 west of true solar north (see Figure 10).	Lot layout complies.
	A90.5 North-facing slopes improve opportunities for solar access. Small lots are best suited to north-facing slopes with gradient of less than 15% (or 1:9). South facing slopes impose a penalty on solar access, large lots/lowest densities are therefore best suited to south facing lots.	Not applicable.
	A90.6 Sloping sites are suitable for medium to large lots only.	Noted.
	A90.7 Subdivision design to consider the variation in the sun path during the year.	Noted.
	A90.8 Locate 350 m <sup>2</sup> – 450 m <sup>2</sup> lots on land with less than 15% (1:9) slope across the frontage.	Not applicable.
	A90.9 Lots > 450 m <sup>2</sup> are capable of containing a building platform rectangle 10 m x 15 m.	Complies.
	A90.10 Variable setbacks and zero building lines are a means of maximising solar opportunity, especially with small or narrow lots. Setbacks are manipulated to maximise solar access for all lots.	Noted.