

10.3 Major and Local Street Networks

The street network proposed, incorporates collector, perimeter and local streets. All roadways in the proposal are proposed to be dedicated to the Council.

The design of each street is adequate to accommodate the likely traffic volumes and will allow for the provision of public transport and pedestrians and cyclist needs.

The street network will create convenient movements for future residents between their homes and higher order roads. This has been achieved by the development providing no more than 2 turning movements at intersections in order to travel from any home to the collector street and the distance from any dwelling to the collector street not exceeding a maximum of 700 metres.

10.4 Pedestrian and Cyclist Facilities

The subdivision layout for stages 2 and 3 will incorporate footpaths as well as wheelchair / pram ramps at intersections and crossing points (refer comments in Section 3.11).

10.5 Public Open Space

Public reserve is to be provided in accordance with an approved open space strategy or development control plan or Council's Section 94 Contribution Plan. The DCP applicable for this site does not address public open space. During a meeting with Shoalhaven Council on 8 May 2006, the proponent was advised that Council was not prepared to accept dedication of the land contained within Stage 5 due to the ongoing maintenance costs. We understand that this position has now been reviewed by the Council and that dedication of Stage 5 land may be possible.

10.6 Street Design and Common Driveway Construction

The engineering design for all streets will conform to Shoalhaven Council's Engineering Design Specification. The streets will also satisfy the minimum required dimensions.

10.7 Utility Services

The design and provision of utility services such as sewerage, water, fire fighting, electricity, street lighting and communication services will conform to the requirements of the relevant service authorities.

10.8 Stormwater Drainage

The design and construction of the stormwater drainage system will be in accordance with the requirements of Shoalhaven Council's Engineering Design Specification.

10.9 Stormwater Quality Management

Patterson Britton & Partners have developed an erosion and sediment management plan that complies with the Shoalhaven Council's Engineering Design Specifications and Environmental Protection Authority Manual. A copy of this plan is included in their report. This plan ensures that the downstream systems will not be adversely affected and that there will be no net increase in pollution levels discharging from the development.

10.10 Allotment Layout

Lots are required to have an appropriate area and dimensions for the siting and construction of dwelling houses and ancillary outbuildings, the provision of private outdoor space as well as convenient vehicle access and parking. The following table identifies the minimum requirements in respect of lot sizes as required by the DCP. As shown in this table, the proposed subdivision layout in stages 2 and 3 complies with these requirements.

Minimum Lot Size and Dimensions as per DCP The minimum lot size in any subdivision is to be 500m ²		Proposed Subdivision The allotments range in size from a minimum of around 600m ² .	Complies / Comment Complies
Rectangular corner lots	Square width 20m Depth 30m	All of the rectangular corner lots achieve these requirements.	Complies
Irregular shaped lots	Square width 12 metres Width at building line 16m Mean width 18m Depth 30m	The layout incorporates several irregular shaped allotments. All achieve the minimum requirements.	Complies

Minimum Dimensions for Residential Lots

The size and dimensions of the allotments in stages 2 and 3 are adequate for the erection of dwellings and ancillary uses. The allotment's size and shape have also compensated for any constraints such as bushfire that may affect the site. Each of the proposed allotments will be provided with a rectangular building platform of minimum dimensions of 15 metres by 15 metres. The orientation of the majority of the allotments will ensure future dwellings will incorporate energy conservation principles.

10.11 Bushfire Mitigation

The objectives of this section of DCP 100 is to prevent the risk of fire in the immediate vicinity of habitable dwellings by adopting suitable protection measures and to coordinate and establish a system of fire breaks to protect life and property.

A bushfire assessment of the site has been completed by Bushfire and Environmental Services and submitted under separate cover. This report has highlighted the following constraints on the site in relation to bushfire:

- (i) The neighbouring properties to the west, south and east have unmanaged vegetation adjoining the common boundaries. An asset protection zone (APZ) of 30 metres will be required from the adjoining vegetation to the edge of future dwellings.
- (ii) A perimeter road or trail will be required between all development and vegetation that is considered bushfire prone. The perimeter road will be required to have a minimum reserve width of 20 metres.
- (iii) A vegetated gully runs down to the existing dam from the western boundary. For the purposes of the bushfire assessment this vegetation has been described as remnant vegetation. A 20 metre APZ will be required from the edge of the remnant vegetation within the gully to the edge of future dwellings.
- (iv) An area of vegetation remains on the property southeast of the existing dam. A 30 metre APZ will be required from the edge of this vegetation to the edge of future dwellings.

The subdivision layout has incorporated a perimeter road around the outside of the subdivision. This road will be a minimum of 20 metres wide. Adjacent to this perimeter road the dwellings will be required to be setback either 30 metres or 40 metres from the southern and western boundaries. The layout of the subdivision compensated for this setback by the depth of these allotments being increased. The vegetated gully referred to in point (iii) above is located in stage 3 of the development. A number of the allotments in this stage are significantly larger than the standard residential lot size to compensate for the required asset protection zones (and also the split zone intended in the rezoning proposal recently exhibited). The proposed subdivision layout achieves the objectives of DCP 100 in terms of bushfire (Figure 7 provides detail of APZ treatments proposed).

11.0 SHOALHAVEN PLANNING POLICY NO. 1 DEVELOPMENT GUIDELINES FOR CERTAIN RESIDENTIAL 2(C) ZONED LAND – MILTON – ULLADULLA

Shoalhaven Planning Policy No 1 Development Guidelines (SPP No 1) applies to certain land zoned Residential 2(c) under SLEP 1985, which is intended to provide for the urban expansion of various townships. This document provides general and specific urban form provisions that will apply to the stages of the development. The controls within the document are applicable to the area within Stage 2 only.

The principal aim of the SPP No 1 is:

To provide for and co-ordinate the subdivision of certain land zoned Residential 2(c) in the Milton-Ulladulla area to ensure the following urban form principles:

- Cohesive access networks;
- Appropriate forms of development; and
- Conserved scenic and ecological values and opportunities for recreation.

The subdivision layout alternatives have been designed to be consistent with the principles of ecologically sustainable development. The subdivision layouts will not affect the biodiversity, habitat or ecosystems of the locality and will conserve the scenic and ecological values of the site. They will also provide for a urban form that is consistent with the existing character of the urban areas to the north and east in Dolphin Point and Burrill Lake as well as providing a street network that forms an efficient access system with a clear hierarchy. In our opinion the concept plan and project applications for Stage 2 and 3 is consistent with the above principle aim.

The general urban form requirements and the specific urban form requirements are discussed below:

11.1 General Urban Form Requirements

11.1.1 Access Network

The Policy aims to provide a network of streets with a clear and logical hierarchy that where practical, disperses rather than concentrates traffic movements. Map 7 of the Policy identifies the in-principles alignments / location for the road types. Figure 11 provides a copy of Map 7 from

the Policy. This map includes an in-principle collector road and perimeter road. The subdivision layout of Stage 1 includes a collector road that is generally in accordance with Map 7 of the Policy. This collector road will be used to access stages 2 and 3.



Figure 11 - Map from Shoalhaven Planning Policy No 1 (courtesy Shoalhaven City Council)

The collector road will extend to the western extremity of stage 3 and part of stage 2. This road will then extend across the site approximately in the central part of stage 2. The location of this road will allow for the collector road to be extended throughout the adjoining residential 2(c) land to the east of the site and adjoin with Dolphin Point Road when this property is developed.

In the preparation of the project applications, various subdivision layouts were considered.

A perimeter road is proposed around the extremities of stage 2 of the development in accordance with Map 7 of the Policy. This perimeter road will allow for easy access for bushfire emergency response and bushfire prone land management as well as ensuring the open space addresses public streets to enable better integration into the subdivision as well as casual surveillance.

The proposal has also incorporated local roads throughout the subdivision.

The access network as identified in stages 1, 2 and 3 is consistent with the access network identified in the Policy.

11.1.2 Form of Residential Subdivision/development

The intent of the Policy is to ensure that residential subdivision and associated development complies with and makes a positive contribution to the intended future urban structure of the Ulladulla district as well as providing residential development that is sympathetic to existing local character, responds to housing demands and promotes the ideals of ecological and community sustainability.

The alternate subdivision layouts have proposed allotments having a minimum area of approximately 600m² to a maximum area of around 4500m². The majority of the allotments within the layouts are standard residential lots as they have an area of between 500m² and 749m².

The size and shape of these allotments in the layouts are sympathetic to the local character of Burrill Lake and Dolphin Point as well as responding to the natural constraints of the site. The layouts will ensure ecological sustainability principles are adopted. At this stage it is not intended to identify particular allotments for medium density development. A proportion of the allotments may be developed for future medium density development subject to market demand. This approach will ensure community sustainability is achieved for the land subdivision.

11.1.3 Public Open Space

Map 7 within the Policy identifies two drainage reserves that are intended as public open space in stage 2. The intent of the Policy is to ensure that open space linkages perform an ecological function, where appropriate, in terms of providing a link between and along areas of ecological significance, such as natural drainage lines.

As identified in the Water Management Strategy report by Patterson Britton and Partners Pty Limited, these drainage reserves in Stage 2 consist of an overland flow path as well as a creek. The subdivision layout has proposed that the flow from the overland flow path, which is minor, to be piped and the creek will be retained. The area of land in the vicinity of creek 2 will provide the ecological link between the wetland and the bushland to the south of the site. This area of land is proposed as public open space.

11.1.4 Water Supply and Sewerage

Water supply and sewerage will be provided on the site and will be integrated with the Council's water supply scheme.

11.1.5 Stormwater

The alternative subdivision layouts for stage 2 has incorporated low impact street drainage design, low impact trunk drainage, infiltration and retention basins. These measures will minimise the stormwater run-off from the new residential development.

11.2 Area Specific Urban Form Requirements

11.2.1 Access Network

The collector and perimeter roads are in accordance with the in-principle alignments on Map 7 of the Policy. This will ensure stages 2 and 3 of the development will provide efficient access within and to other areas of Dolphin Point.

11.2.2 Residential Subdivision

The Policy requires that the predominant form of development for the Burrill Lake / Dolphin Point area is 'standard urban residential'. Standard urban residential lots are defined in this document as having an area of between 500m² and less than 749m². The alternate subdivision layouts has satisfied this requirement as the predominant form of development is 'standard urban residential'.

The Policy also includes scope for the provision of medium density development. The subdivision layouts have not identified individual lots for future medium density development. All of the allotments would be suitable for medium density development and this form of development is permitted on all Residential 2(c) zoned land. Medium density development will only be provided if there is market demand for this form of housing.

12.0 DEVELOPMENT CONTROL PLAN NO. 52 DOLPHIN POINT

The aim of Development Control Plan No. 52 – Dolphin Point ("DCP 52") is to provide a framework for traffic management and development of the subject land, having regard to its environmental and cadastral features, particularly in respect of vehicular access to the Princes Highway. The applicable considerations in respect of DCP 52 include the following:

12.1 Traffic Management

In terms of traffic management, DCP 52 contains requirements in respect of the Princes Highway intersection. The treatment for such access shall comprise a roundabout at the intersection of Wallaroy Drive with the Highway. This roundabout was constructed in connection with Stage 1 of the development. The development does not propose any other vehicular access to the Princes Highway.

12.2 Environmental Controls

DCP 52 requires that the clearing of trees is to be kept to a minimum. The development does not involve the removal of vegetation from the site. The existing remnant vegetation in the wetland area will be retained.

Any development application is to be accompanied with a comprehensive water management and erosion control plan. This has been provided in the water management strategy prepared by Patterson Britton and Partners Pty Limited.

12.3 Development

This part of DCP 52 relates to the 3(g) zoned land or the area of the site identified in Stage 4. As Stage 4 does not form part of the concept approval application or the two project applications, this part of the DCP is not applicable to the development.

13.0 COASTAL POLICY

The 1997 Coastal Policy has a strong integrating philosophy based on the principles of ecologically sustainable developments. The development addresses the four principles of ESD in the following way:

Conservation of Biological Diversity and Ecological Integrity

The site has been cleared of most native vegetation. The existing remnant vegetation in the wetland area and other parts of stage 5 will be retained and protected throughout the subdivision works. These measures will ensure that the biodiversity and ecological value of the areas is retained.

The subdivision layout alternatives will all ensure the siting of future dwellings will make effective use of solar energy and will minimise water usage. This has been achieved by providing appropriate orientation and dimensions for the future lots.

Inter-generational Equity

The project is fulfilling a demand for urban expansion in the Burrill Lake and Dolphin Point area for the benefit of future generations. This will assist with the objective of ensuring that the price of land in the area remains affordable.

Improved Valuation, Pricing and Incentive Mechanisms

The development will be completed in stages. The road and pedestrian network and the passive open space will be constructed by the developer to standards acceptable to Shoalhaven City Council. These will contribute a public asset to the community and will be designed for cost-effective management and maintenance.

The Precautionary Principle

The development will not result in serious environmental damage. The development has been designed to reflect the natural constraints of the site. A preliminary contamination report has been completed by Network Geotechnics Pty Limited, which identified that the site is suitable for residential development.

14.0 COASTAL DESIGN GUIDELINES FOR NSW

The Coastal Design Guidelines for NSW identify particular coastal settlement types and assists in the understanding of urban design issues for coastal area planning for those settlement types.

Dolphin Point and Burrill Lake have been identified as coastal villages. The desired future character is to reinforce scenic and tourist values by maintaining and improving the distinctive way in which the settlement sits within the landscape. The protection of the natural and rural lands is identified as a priority.

The development aims to respond sensitively in form and character to the village by proposing a subdivision layout in Stages 2 and 3 that will retain the single dwelling character of Dolphin Point as well as respecting the natural environment. The wetland, riparian zone and remnant vegetation in Stage 5 provides for the environmental dominance of the landscape and will be protected by preserving these areas and the introduction of water sensitive urban design initiatives.

The concept development is proposed within an area that has been identified by Shoalhaven City Council for growth and reflects the environmental and urban characteristics of the locality.

The concept development plan has proposed an open space network in Stage 5 to be dedicated to the Council. The key features of the open space will be the wetlands, dam and remnant vegetation. These features will not only protect the natural visual setting of the locality but will also contribute to regional ecological systems. In addition, the open space will also create an identity and character for the residential development. The proposed road network has been designed to ensure maximum opportunities for public access and use of the open space area.

The subdivision layout for Stages 2 and 3 has ensured the street pattern responds to the topography and the need for public transport as well as ensuring edge roads to open space and the adjoining bushland. The subdivision pattern has also provided adequate building setbacks to allow for asset protection zones for bushfire management. The subdivision pattern will ensure that all future buildings are designed within their context so as to contribute positively to the settlement character in terms of form, height, footprint, scale, massing, amenity, external appearance and materials.

15.0 OPTIONS

In the preparation of the concept plan, a number of different development options were considered in respect of the subdivision. The various subdivision layout options for stage 2 and 3 have been included in Annexure 7. Options 1 and 3 were not considered the most suitable form of subdivision layout for the following reasons;

- (i) These layouts failed to include the collector road as identified on Map 7 of the Policy. This collector road is important in connecting the Burrill Lake and Dolphin Point urban expansion areas and enabling efficient access within and to other areas.
- (ii) The orientation of the allotments did not encourage the maximum view/outlook for future dwellings.
- (iii) The majority of the allotments would have a non-preferred orientation that would adversely affect the design of future dwellings in terms of energy efficiency and solar access.

The second subdivision layout has been selected as the preferred option for the purposes of the two project applications. This layout is consistent with the current environmental planning instruments and ecological sustainable development principles. The layout will also create an appropriate urban form and character that is consistent with the Burrill Lake / Dolphin Point locality.

16.0 KEY ENVIRONMENTAL ASPECTS OF THE PROPOSAL

- 16.1 Justification for Rezoning and Proposed Development Mix
 - 16.1.1 Rezoning History

In 1991, Don Fox Planning Pty Limited was commissioned by Shoalhaven City Council to prepare an Environmental Study in response to a rezoning request and a development concept plan for the entire site identified in Stages 1 to 5. The development concept plan involved the subdivision of part of the site into approximately 179 lots, 70 to 80 medium density dwellings clustered around a nine-hole golf course as well as a tourist retail complex with associated car parking and recreational facilities.

At the time of the Environmental Study the existing zonings applying to the site under SLEP 1985 included:

- Zone No 1(a) (Rural "A" zone). This was the area identified as Stage 2 in the current plan.
- Zone No 1(b) (Rural 'B' zone). This was the area identified as Stage 1 and 2 in the current plan.
- Zone No 3(g) (Business 'G' (Development Area) zone). This area is identified as Stage 4 in the current plan.
- Zone No 5(d) (Special Uses 'D' (Proposed Arterial Roads Reservation and Widening of Existing Arterial

Road Reservation). This is the area adjacent to Princes Highway.

 Zone No 7(b) (Environmental Protection 'B' (Estuarine Wetlands) zone). This area is identified in Stage 5 of the current plan.

The Environmental Assessment examined the urban capability of the land and demonstrated that the land could be rezoned and could facilitate a development similar to the preliminary concept plan. The Environmental Study concluded the following zonings would be appropriate for the site:

- Zone No 2(c) (Residential 'C' (Living Area) zone);
- Zone No 3(g) (Business 'G' (Development Area) zone);
- Zone No 6(b) (Open Space Recreation 'B' (Private) zone); and
- Zone No 7(a) (Environmental Protection 'A' (Ecology) zone).

These zonings would permit the various components of the development indicated in the development concept plan.

The recommendations of the Environmental Study were adopted by Shoalhaven City Council with the exception of the area of land identified in Stage 3 of the current proposal. The Environmental Study recommended that this area should be rezoned to Residential 2(c), a zoning that would allow for either a golf course or residential development if the golf course did not proceed. Shoalhaven City Council resolved to rezone this area of land to zone no 6(b).

It is no longer intended to pursue that development concept plan.

The current zoning of the 6(b) land permits the following uses:

Buildings for the purpose of landscaping, gardening or bush fire hazard reduction; caravan parks; clubs; community facilities; public utility installations (other than gas holders or generating works); roads; tourist facilities.

As the golf course concept plan will not proceed, consideration was given to other uses that are permitted in the 6(b) zoning. However, given the natural features of the site as discussed in Section 3 of the Environmental Assessment, and the site being located between two residential 2(c) zoned areas, it is considered that a residential zoning to allow a residential subdivision similar to that which has occurred in Stage 1 would be the most appropriate form of development for this part of the land. Such a view is also supported by the environmental study completed by Don Fox Planning Pty Limited.

A rezoning application was submitted to Shoalhaven Council in 2005 to rezone the Stage 3 land from 6(b) to residential 2(c). Such a zoning would allow for a subdivision layout of 25 residential allotments, which would vary in size from a minimum of approximately 650m².

The Department of Planning reviewed the Draft LEP and advised that in accordance with Section 54(4) of the *Environmental Planning and Assessment Act 1979* that the proposed rezoning could proceed.

The Department of Planning LEP Review Panel reviewed the Draft LEP in early 2007. The Panel supported the continuing preparation of the Draft LEP however, advised that a Section 65 Certificate would not be issued until such time as Council reviewed the overall strategic direction for the subject and adjoining land.

The Shoalhaven City Council subsequently sent a Section 65 request to the Department of Planning in May 2007 and on 21 June 2007, a Section 65 Certificate was issued to enable the draft local environmental plan to be exhibited. The exhibition has since taken place.

The exhibited LEP Plan contained a split zoning with part of the land being proposed 7(d2) Environment Protection to preserve an existing riparian corridor. The internal subdivision boundaries in the proposal have been amended to reflect the proposed zone change. It is noted that proposed lots 418 and 419 are now 4446 sqm and 4850 sqm respectively. This will permit the lots to be developed only in accordance with the objectives and permissible purposes within the 7(d2) zone for that part so zoned (refer overlay Map Annexure 11).

16.1.2 Justification for the Project

The development of the Dolphin Point site will provide future housing within a coastal village on land that is cleared and free of known environmental constraints.

Environmental Benefits

The project will offer improved runoff control controls and environmental protection for sensitive coastal and wetlands sites, ensuring the protection of the ecological integrity of nearby Burrill Lake, and offers the opportunity for further plantings of wetland vegetation on the coastal lowlands through an "offset" scheme. The setting aside of lands for conservation will provide a major ecological legacy to the community.

The application addresses issues of sustainable development, drainage and stormwater issues, inclusive of Water Sensitive Urban Design principles (WSUD). WSUD principles form a cornerstone of the residential component of the project, ensuring that water quality of nearby coastal waterways will be protected. All housing in the project will be BASIX compliant, adding to the sustainability features of the project.

Summarising, the project will incorporate the following sustainable development principles:

- Retaining wetland vegetation on the site, to contain stormwater flows and improve water quality impacts on nearby Burrill Lake.
- Treating stormwater leaving the site using a detention basin and gross pollutant trap.
- Adoption of water conservation measures including dual flush toilets and low-flow shower heads.
- Use of water efficient appliances.
- Use of water sensitive landscaping.
- Harvesting of roof water into rainwater tanks to use for non-potable requirements.
- Direction of rainwater tank overflow onto the soil surface to encourage infiltration.
- Minimising the amount of impervious surfaces throughout the development to encourage infiltration.
- Minimising wastewater disposal by reducing potable mains water demand, using water efficient processes and reusing wastewater.

The development will be required to comply with all requirements of BASIX during future applications for development on the site. The proposal is therefore consistent with ESD principles and WSUD objectives.

Visual Benefits

The visual integrity of the locality will be improved through the proposed retention of the forested hillside that forms a backdrop to a part of the village of Burrill Lake, as well as the retention of the swamp forest found on the valley flats at the base of the hill system.

Compliance with Relevant Local and Regional Planning Strategies

The proposed development compliments and is generally consistent with both the Milton Ulladulla Structure Plan and the South Coast Regional Strategy.

The elevated parts of the site were identified for urban development in Shoalhaven City Council's 1996 Milton Ulladulla Structure Plan. Stages 1,2 and 4 were identified for development. Because the original property developer had proposed a golf course in the central part of the site in the first master plan, Stage 3 and other lands downslope were indicated in the structure plan as private open space. North of the existing dam was shown in the structure plan as private open space and wetlands. The site was subsequently zoned in accordance with this structure plan, with the private open space area in Stage 3 becoming a "Deferred" matter, and the proposed tourism site in the south west corner of the site being relocated to where the 3(g) zoning now applies.

The Milton Ulladulla Structure Plan identified the site as a major residential release area to service future anticipated population growth within Burrill Lake and immediate environs. The planned development of this site represents a substantial new contribution to the supply of housing to this coastal village.

The South Coast Regional Strategy sets the regional planning framework which seeks to balance the demands for future growth with the need to protect and enhance environmental values. The Regional Strategy applies to the local government area of Shoalhaven and its primary purpose is to ensure that adequate land is available and appropriately located to sustainably accommodate the projected housing and employment needs of the Region's population over the next 25 years.

The accompanying table indicates the manner in which the proposal addresses the relevant provisions of the South Coast Regional Strategy.

South Coast Regional Strategy Aim	Dolphin Point Project
An additional 26,300 dwellings will be required in the Shoalhaven over the next 25 years, of which 15,800 can potentially be accommodated within existing vacant urban land and existing investigation areas.	The proposal will accommodate a total of 232 residential dwelling sites. Only 25 of these lots require rezoning, and this process is underway.
Protect high value environments including threatened species, vegetation communities	Significant areas have been set aside for nature conservation purposes, as well as conservation "offset" lands
Management of Sensitive Urban Lands	The site has not been designated as being "sensitive urban lands"
Limit new development in areas constrained by flooding, wetlands, scenic or cultural landscapes	The area proposed for development is free of such constraints.
Protect visual character of coastal towns and villages and surrounding landscapes	Key vegetated areas on hillsides and coastal flats to be protected.
Protect coastal lakes and estuaries	The project will be designed using water sensitive urban design measures, to ensure that nearby waterways are protected
Need to protect and reinstate riparian corridors	Riparian corridors to be retained on the valley floor.
Adopt neighborhood planning principles in new development, including easy access to shopping facilities, water and energy efficiency, conservation lands in and around the development	The project will be designed with sustainability at the urban design level including subdivision design, water sensitive urban design and accessibility. These factors will enable compliance with the BASIX scheme at the development application stage. The

	project also proposes the retention of sensitive wetlands and hillside vegetation on the site.
The Department of Planning will only support development as set down in the Milton- Ulladulla Structure Plan	The project generally accords with the provisions of the structure plan as they apply to the site.
Access to energy, sewer and water infrastructure	The site can be adequately provided with infrastructure.
Protect cultural sites and landscapes	No significant cultural sites or landscapes found on the site.

Demand for and Supply of Residential Land

Shoalhaven City Council's Milton Ulladulla Structure Plan identified coastal lands to accommodate future urban growth. These lands have been subsequently zoned for residential purposes.

Dolphin Point is a small coastal village. Almost all existing lots within the village area at Dolphin Point are built upon (leaving aside Stage 1 of the subject project), an indication of the demand for residential land and shortage of potential housing sites in the village.

Available (2001) Census data shows the following:

- The number of dwellings at dolphin Point has increased from 145 in 1991 to 156 in 2001. Significantly, the proportion of unoccupied dwellings has declined over that time period, from 48.3% in 1991 to 43.5% in 2001, a further indication of the demand for full-time residential housing in this coastal village.
- The population of Dolphin Point has increased from 153 persons in 1991 to 207 persons in 2001. Given the shortage of vacant residential allotments at Dolphin Point, further significant population growth in this coastal village will be dependent in large measure on the release of more urban residential lots.

Social Infrastructure

The continuing population growth of the Shoalhaven City

LGA - and in particular its coastal villages, like Burrill Lake/Dolphin Point- will place pressure on existing community facilities.

The South Coast Strategy forecasts that future housing in the South Coast will be dominated by singles and childless couples, primarily made up of persons in the 65+ years age group. The development of the site for housing and other uses will require new facilities to satisfy community demand for services and facilities.

There is limited social infrastructure in the immediate area of Burrill Lake/Dolphin Point, partly as a result of its small size, and partly due to the historical role as a lowkey holiday destination.

The only significant items of community infrastructure at Burrill Lake are the post office, beach car parking areas and park facilities, and two public phones. Other facilities available within the village are set out in the following:

- Shopping facilities, commercial services. Burrill lake offers only two small grocery stores, a liquor outlet (Burrill Lake Cut Price), service station and three restaurants/cafes. All other facilities are offered at nearby Milton-Ulladulla.
- Places of worship. All facilities are offered at nearby Milton-Ulladulla.
- Health services. The village has only one doctor, and no other health services. All other facilities are offered at nearby Milton-Ulladulla.
- Community centres/halls for meeting space and community activities. The village has one community hall. All other facilities are offered at nearby Milton-Ulladulla eg. civic centre.
- Cultural, entertainment and leisure facilities. All facilities are offered at nearby Milton-Ulladulla, such as a bowling club, ex-serviceman's club, and theatre.
- Welfare and support services, police and emergency services. All such facilities are offered at nearby Milton-Ulladulla.
- Open space and recreation facilities. The village has two boat ramps, and barbeque facilities on the

reserves. All facilities are offered at nearby Milton-Ulladulla, such as netball courts, and theatre.

The introduction of more people to the region will sustain a growth in services, which might otherwise not have been warranted.

Shoalhaven City Council has adopted a Contributions Plan. The objective of the community facilities program within the adopted Contributions Plan No. 67 is to provide an adequate standard of community facilities to satisfy social and cultural needs of the future residents of the Shoalhaven City area, as well as Milton-Ulladulla and Burrill Lake/Dolphin Point.

The facilities covered by the Contributions Plan No. 67 comprise:

- City-wide facilities to be located at Nowra: City Library; Arts Centre; and mobile childrens service.
- Facilities to be located at nearby Ulladulla: Branch Library; District Health and Community Care Service; and Community Centre.

The Contributions Plan has been formulated having regard for forecast future population growth in the City, including planned (zoned) urban growth areas at Dolphin Point.

Other community benefits of the proposed development include the following:

- The proposed development incorporates design controls to ensure development is sympathetic to the existing amenity and character of this coastal village. These are documented elsewhere in this report.
- The layout of the proposed subdivision will also facilitate community integration by incorporating street, pedestrian and cycle networks and public open spaces that can be accessed by the wider community.
- Related to the above point, the proposed development will lead to the long term, conservation of a coastal Swamp Sclerophyll Forest that will provide a major ecological legacy to the community at large.

16.2 Potential Development on Adjoining Site (Lot 171 DP1081810, Highview Drive, Dolphin Point)

To the east of the site is an area of land described as Lot 171 DP1081810 Highview Drive, Dolphin Point. This site is zoned part Residential 2(c) and part Environmental Protection Ecology 7(a) under the provisions of SLEP 1985. The majority of the site is zoned 2(c) with only a small portion of the site in the northwestern corner of the site being zoned 7(a).

Consultation has occurred with the representative of the adjoining landowners. As well as this both landowners have engaged the same environmental consultant and consulting archaeologists. The consultations included discussions regarding asset protection zones, future road and other service infrastructure locations and areas to be earmarked for protection for ecological or other reasons.

The applicant for the adjoining property has applied to DoP to undertake a major project proposing the property be subdivided into approximately 170 residential allotments ranging in size from 500m² to 750m². The Director General Environmental Assessment Requirements were issued for this major project on 11 February 2006.

As the site is located adjacent to Stage 2 of the subject site the purpose of the consultation process was to ensure that the layout of Stage 2 and the future layout of the adjoining site will provide for an effective subdivision pattern in terms of vehicular access and the other constraints affecting the site.

The preferred subdivision layout has been developed so that it can occur regardless of whether the development proceeds on the adjoining site or not.

On the assumption that the development does not proceed on the adjoining site, the preferred subdivision layout has adequately addressed traffic, vehicular access and bushfire.

Vehicular access to Stages 2 and 3 will be via a Link Road and the existing residential subdivision in Stage 1. All of the internal roads will be provided in accordance with the principles in Council's Subdivision Code as well as AMCORD. The existing road network will be able to accommodate the additional vehicular traffic generated for Stages 2 and 3 as well as the future growth on the Princes Highway during holiday periods.

In respect of bushfire, the subdivision layout has incorporated an asset protection zone of 30 metres along the southern and eastern boundaries of the site. This consists of a 20 metre wide perimeter road around the outside of the subdivision and any future dwellings being setback 10 metres from the road frontage.

On the assumption that the development on the adjoining site proceeds, it would not result in the need for any changes to the subdivision layout as proposed in this application. The proposal has ensured a principal collector road occurs through the site to enable the efficient access within and to other areas of Burrill Lake and Dolphin Point. A perimeter road has also been provided on both subdivision layouts adjacent to the Barnunj Conservation Area. The combined road layout of both subdivisions will provide a street network with an efficient and purposeful access system as well as providing a clear street hierarchy to this part of Dolphin Point.

The asset protection zones required in terms of bushfire protection will not be required to change if the development on the adjoining site did proceed.

A copy of the plan of subdivision for the adjacent site is provided in Annexure 10.

16.3 Staging of the Development

The development has been identified as containing 5 stages. These stages identify particular components of the proposal only the stages do not suggest chronological order for development. The residential component of the development in stages 2 and 3 relates to the existing residential subdivision in stage 1 by providing a similar lot layout as well as a road network linking stages 1, 2 and 3.

Stage 2 of the development proposes a large residential subdivision containing 136 allotments. It is intended that this stage will be divided into 5 future stages with each stage allowing for the creation of between 22 and 32 allotments in addition to the associated road network. A copy of the proposed staging plan has been included in Annexure 8.

It is intended that all required works as identified in the Statement of Commitments will be completed during stage 1 of the residential subdivision. This will ensure that the appropriate environmental management has been implemented for stages 2, 3 and 5.

16.4 Public Open Space

The concept application does not propose any development in the Stage 5 area at this time other than construction of walking trails developed conceptually and shown in Figure 2.

During a meeting with Shoalhaven City Council Officer's in 2006, the Council advised that it did not wish Stage 5 dedicated due to ongoing maintenance costs. As a consequence of this and as a result of consultations with Officer's from the Department of Planning, as part of the environmental assessment, an urban design review of the Stage 5 land was completed. The purpose of this document was to identify areas with environmental constraints and define possible future potential development parcels. The Council has now reviewed its position in regard to the possible dedication of Stage 5. The Council may itself wish to develop this Stage 5 land to assist in covering future maintenance costs. Such development would be the subject of a future application by or on behalf of that future owner.

The urban design review identified that development would not be possible on the majority of Stage 5 due to the existing environmental constraints including the vegetation, the riparian zone adjacent to the watercourse and the dams. The urban design review identified three potential development parcels on the site with a total area of approximately 2.7 hectares. THIS PROPOSAL DOES NOT SEEK APPROVAL TO DEVELOPMENT INVOLVING THESE LAND PARCELS.

If it were to take place, any development on these parcels of land would be required to be consistent with the zone objectives and permissible uses contained within the Shoalhaven Local Environmental Plan 1985. Such an approach is considered the best solution for this part of the land given its ecological value and limited development potential.

As indicated in earlier parts of the assessment, a walking trial network has been identified.

- 16.5 Traffic Impacts (Construction and Operational)
 - 16.5.1 Car Parking

As the proposed development for Stages 2 and 3 is for subdivision and no development has been proposed in Stage 5, car parking layout has not been identified. Following the subdivision of Stages 2 and 3, it will be necessary for any future development to obtain development consent from the appropriate consent authority. At that stage, on site car parking will be required to be incorporated. The most likely form of development in Stages 2 and 3 will be individual dwelling houses on the newly created allotments. Car parking for such developments is identified in the Shoalhaven City Council's Car Parking Code DCP No 18 and the RTA's Guide to Traffic Generating Developments. For dwelling houses, Council requires 1 space per dwelling. The RTA requires a minimum of one car parking space per dwelling (preferably two). The size and shape of the allotments will ensure the design of each dwelling can accommodate either 1 or 2 car parking spaces.

As previously indicated, no specific development is proposed in Stage 5. The urban design review has identified areas of environmental constraints as well as possible development parcels. Any development on Stage 5 would need to be consistent with the permissible uses in the zoning and require the submission to Council of a development application. At this stage, any future development would be required to demonstrate compliance with Council's DCP for car parking.

16.5.2 Traffic Impact Study

Colston Budd Hunt and Kafes Pty Limited have prepared a detailed transport impact study in respect of the proposed development on Stages 2 and 3. This has been submitted under separate cover. As part of this study, intersection modelling at the junction of the Princes Highway and Wallaroy Drive and the junction of the Princes Highway and Dolphin Point Road was undertaken as well as an assessment in terms of traffic generation.

Traffic generated by the development will have its greatest effects during the morning and afternoon peak periods. Council's Subdivision DCP has identified a higher traffic generation rate than those identified by the RTA. For this reason, the traffic consultants have adopted the Council rate.

The capacity of the road system is largely determined by the capacity of its intersections to cater for peak period traffic flows. For this reason modelling was undertaken using the SIDRA program for the traffic flows. This modelling has also considered the holiday traffic volumes