

3.7 Hydrology

The drainage catchment in the vicinity of the site is generally bounded by the Princes Highway in the west, Dolphin Point Road in the north extending onto Highview Drive in the east and generally following an informal track through bushland to the south.

Currently, flows from upstream catchments enter the site at four points along the site boundary of Stages 2 and 3. Flows will traverse the site via two existing creeks and two existing overland flow paths. This is demonstrated in Figure 6 provided by Patterson Britton & Partners. Creek 1 and overland flow path 1 naturally drain to the existing dam while creek 2 and overland flow path 2 discharges approximately 150 metres downstream of the existing dam. From the downstream site boundary, runoff flows via a natural creek line to Burrill Lake.

It is expected that flows in the overland flow paths and creeks modelled would not vary significantly between pre development and post development conditions.

The stormwater management strategy to be implemented on the site would incorporate best practise water sensitive urban design measures. The water quality aspect of this strategy would include measures such as gross pollutant traps, a water quality control pond near the outlet of the catchment, rainwater tanks, and bio-retention basins. These water quality measures proposed, would improve the quality of the water leaving the site, thereby exceeding the Council objective for no net increase in pollution levels. The DECC's minimum recommended reduction in pollutant load would also be met.

The Water Management Strategy concludes that the proposed development is expected to comply with all relevant stormwater management issues raised in the DoP Director General's Environmental Assessment requirements dated 15 February 2006.

3.8 Flora and Fauna

3.8.1 Flora

The majority of the site within Stages 2 and 3 support two vegetation communities being Introduced Grasslands and Paperbark Shrubland. Of these vegetation communities the Introduced Grasslands occur across the majority of the site and comprise predominantly exotic grasses, weeds and herbs with occasional remnant trees along the boundaries of the site. The Paperbark Shrubland

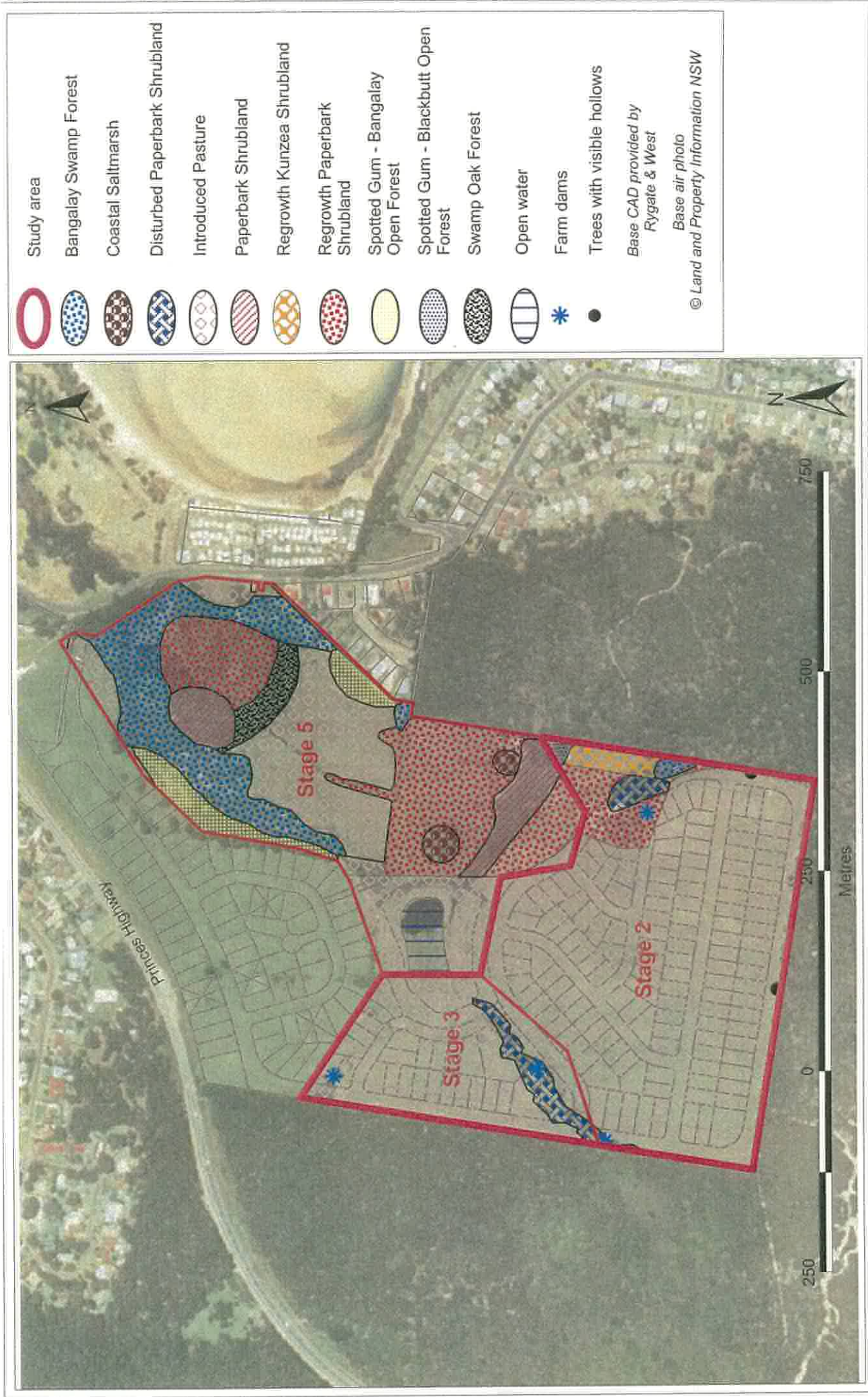


FIGURE 5 – Vegetation Map (Courtesy of Bushfire and Environmental Services Pty Limited)

community is generally located in association with the creeks in the east and west and various parts of the floodplain. Parts of this community have been disturbed by the construction of farm access tracks and farm dams, rough grazing, slashing and clearing. The disturbed areas are in various stages of regeneration.

Very small areas of Bangalay Swamp Forest, Kunzea Shrubland and Spotted Gum-Blackbutt Forest occur in the east and northeast of stage 2.

Within stage 5 there is a mosaic of vegetation communities associated with coastal floodplains in low-lying areas including Swamp Oak Forest, Bangalay Swamp Forest, Paperbark Shrubland and Coastal Saltmarsh. At higher levels, generally on the eastern and western margins of the floodplain, there are open forests that are dominated by Spotted Gum, Blackbutt and Bangalay.

The key biodiversity conservation issue associated with the proposal was identified as the endangered ecological community *Swamp sclerophyll forest on the coastal floodplains of the North Coast, Sydney Basin and South East Corner bioregions* and appropriate impact mitigation and offsets for this community are recommended to be incorporated into the proposal, including:

- a) Retention of 0.38 ha of *Swamp sclerophyll forest* in the west of the study area (stage 3) and 0.43 ha to the east of the study area (stage 2).
- b) Provision of *Swamp sclerophyll forest* to the north-east of the study area (Stage 5) as an offset for disturbances of this vegetation in the study area.
- c) Management of retained and offset *Swamp sclerophyll forest* via an approved vegetation management plan.
- d) Securing of the management of retained and offset *Swamp sclerophyll forest* by implementation of the approved vegetation management plan by the future owners of the affected land via positive covenants placed on the titles of the affected land.
- e) Provision of roads adjoining the *Swamp sclerophyll forest* wherever possible to provide a line of demarcation between disturbed areas and protected areas.

- f) Provision of an appropriate perimeter fence for the *Swamp sclerophyll forest*.
- g) Preparation of a vegetation management plan for the retained and offset *Swamp sclerophyll forest* to address issues such as protection and maintenance of the vegetation, weed control, vegetation enhancement, control of access, monitoring and fire management.
- h) Design of water cycle management and water quality treatment systems for the proposal that maintain the existing hydrologic regime in the area of the *Swamp sclerophyll forest* and protect the community from the adverse water quality impacts.

The extent, magnitude and significance of the impacts of the proposal on threatened species, populations and ecological communities listed on the *NSW Threatened Species Conservation Act 1995* and *NSW Fisheries Management Act 1994* were assessed in accordance with the Draft Guidelines for Threatened Species Assessment (Department of Environment and Conservation, Department of Planning, 2005) in the context of the proposed mitigation measures and offsets and it was concluded that the proposal:

- will maintain or improve biodiversity values;
- is unlikely to reduce the long-term viability of local populations of threatened species, populations or ecological communities;
- is unlikely to accelerate the extinction of threatened species, populations or ecological communities; and
- will not affect critical habitat

The location of the vegetation communities has been identified in Figure 5.

Further detailed information regarding species of conservation significance can be found in the accompanying flora and fauna report.

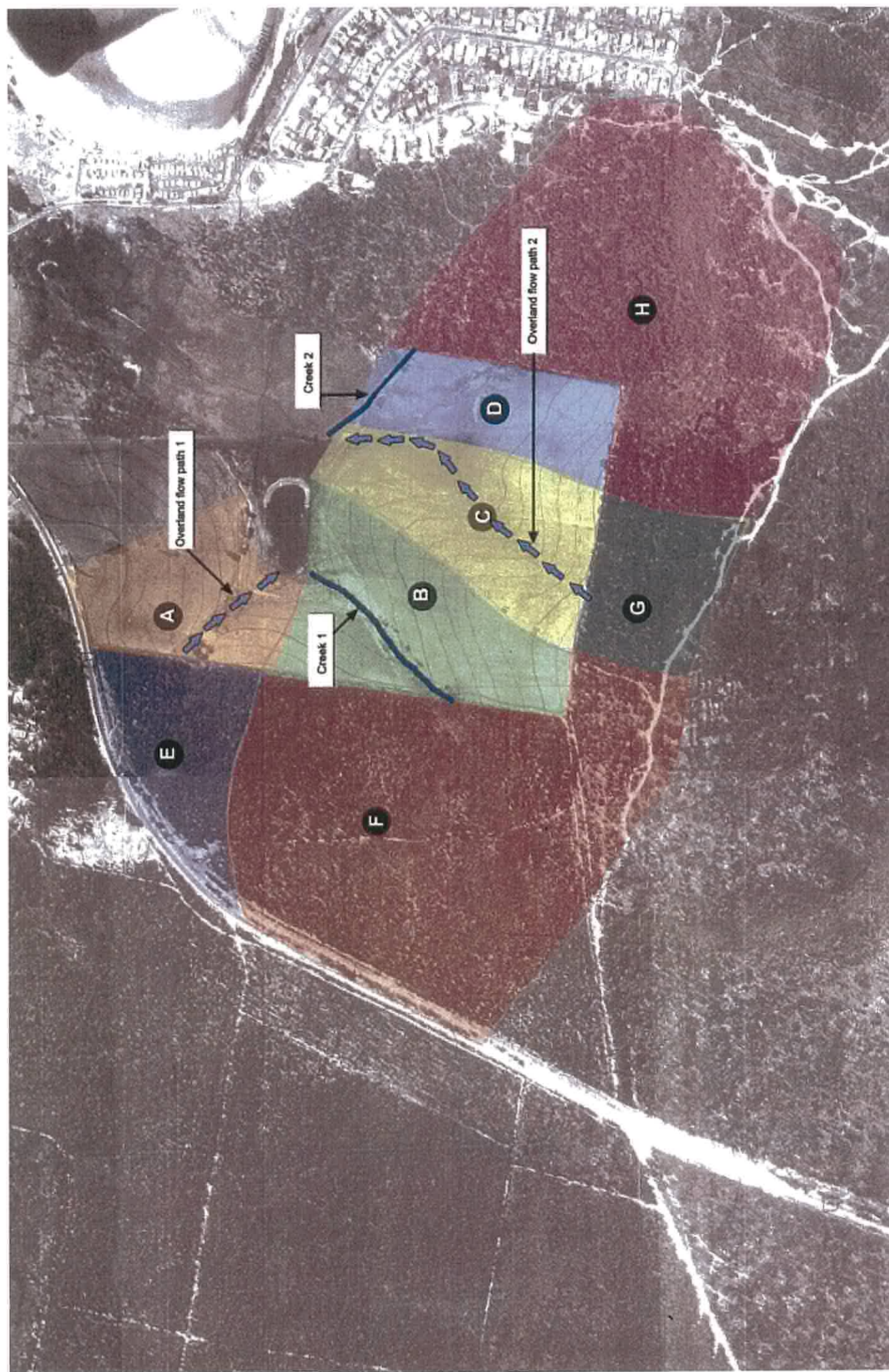


FIGURE 6 – Catchment Plan (Courtesy Patterson Britton & Partners Pty Limited)

3.8.2 Fauna

The fauna habitats located on the site are those generally associated with introduced grasslands with occasional remnant trees and Paperbark Shrublands containing farm dams.

A total of 51 faunal species have been identified as inhabiting the site. This comprises 1 introduced species and 50 native species. There were a total of 7 mammals, 38 birds and 6 amphibians. A detailed species list has been included in the Flora and Fauna Assessment prepared by Bushfire and Environmental Services Pty Limited.

Surveys targeting threatened species resulted in the detection of one threatened species, the Glossy Black-cockatoo listed as Vulnerable on the schedules of the *NSW Threatened Species Conservation Act 1995*.

The two known feed trees of the Glossy Black-cockatoo to be removed for the proposal will not impede the ability of the local population to successfully forage in the locality. Impact mitigation for this species will involve preferential use of Black She-oak in landscaping for the proposal to provide foraging resources for the species.

3.9 Climate

Climatic data was recorded from a weather station at Ulladulla, as this was the closest recording station relative to the site. The climatic data does not represent a major constraint to future development. It is however important in terms of bushfires and drainage. The following provides a summary of the rainfall, temperature and surface wind analysis.

The area has a total annual rainfall of over 1292mm with a maximum average rainfall of approximately 148mm during the month of June and a minimum average rainfall of approximately 68mm occurring in the month of July. The wettest period generally corresponds with the summer months.

The mean daily temperature was highest for January and February with a maximum of approximately 24.3°C and a minimum in July of approximately 7.2°C.

The main characteristic wind evident is the northeasterly onshore wind that develops around 3pm throughout the year.

3.10 Bushfire

Shoalhaven Council has mapped the site as bushfire prone land. Although the site is cleared grassland, the surrounding vegetation poses some threat to the site. Areas of unmanaged bushlands occur to the south, west and east of the site. The Bushland to the south and west form part of Barnunj State Conservation Area. To the east is private land.

Bushfire and Environmental Services Pty Limited has completed a detailed bushfire assessment for the site. This report has been provided under separate cover.

The bushfire assessment has concluded that there are several bushfire related constraints. These include the following:

- (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 above constraints have been identified in figure 7. These constraints do not prevent the proposed development however do have implications for the subdivision layout.

3.11 Traffic and Access

The road network in the vicinity of the site includes Princes Highway, Dolphin Point Road and Link Road. The Princes Highway is the major transport route connecting Sydney and Melbourne via the South Coast. It passes through Ulladulla and Burrill Lake to the north and Lake Tabourie to the South.

Dolphin Point Road runs east from Princes Highway, south of the bridge over Burrill Lake. The intersection of Dolphin Point Road with Princes Highway is an unsignalised t-intersection

controlled by give way signs. Dolphin Point Road provides access to tourist accommodation and open space and recreational areas adjacent to Burrill Lake. It also connects to Highview Drive, which provides access to the residential properties in Dolphin Point.

Link Road runs west from Dolphin Point Road. The intersection of Link Road and Dolphin Point Road is an unsignalised T-intersection controlled by stop signs. Link Road connects to a roundabout that accesses the existing residential subdivision in Stage 1. From this roundabout there is a connection to a recently constructed roundabout at the Princes Highway/Wallaroy Drive intersection.

Colston Budd Hunt and Kafes Pty Limited undertook traffic counts during weekday morning and afternoon peak periods. This demonstrated that the highest traffic flows occurred on the Princes Highway, which carried some 480 to 550 vehicles per hour two-way. Dolphin Point Road and Link Road carried lower flows of some 80 to 1000 vehicles per hour two-way. These traffic volumes would be subject to seasonal variations given the number of holiday homes and tourists visiting the Shoalhaven area, particularly in the summer months.

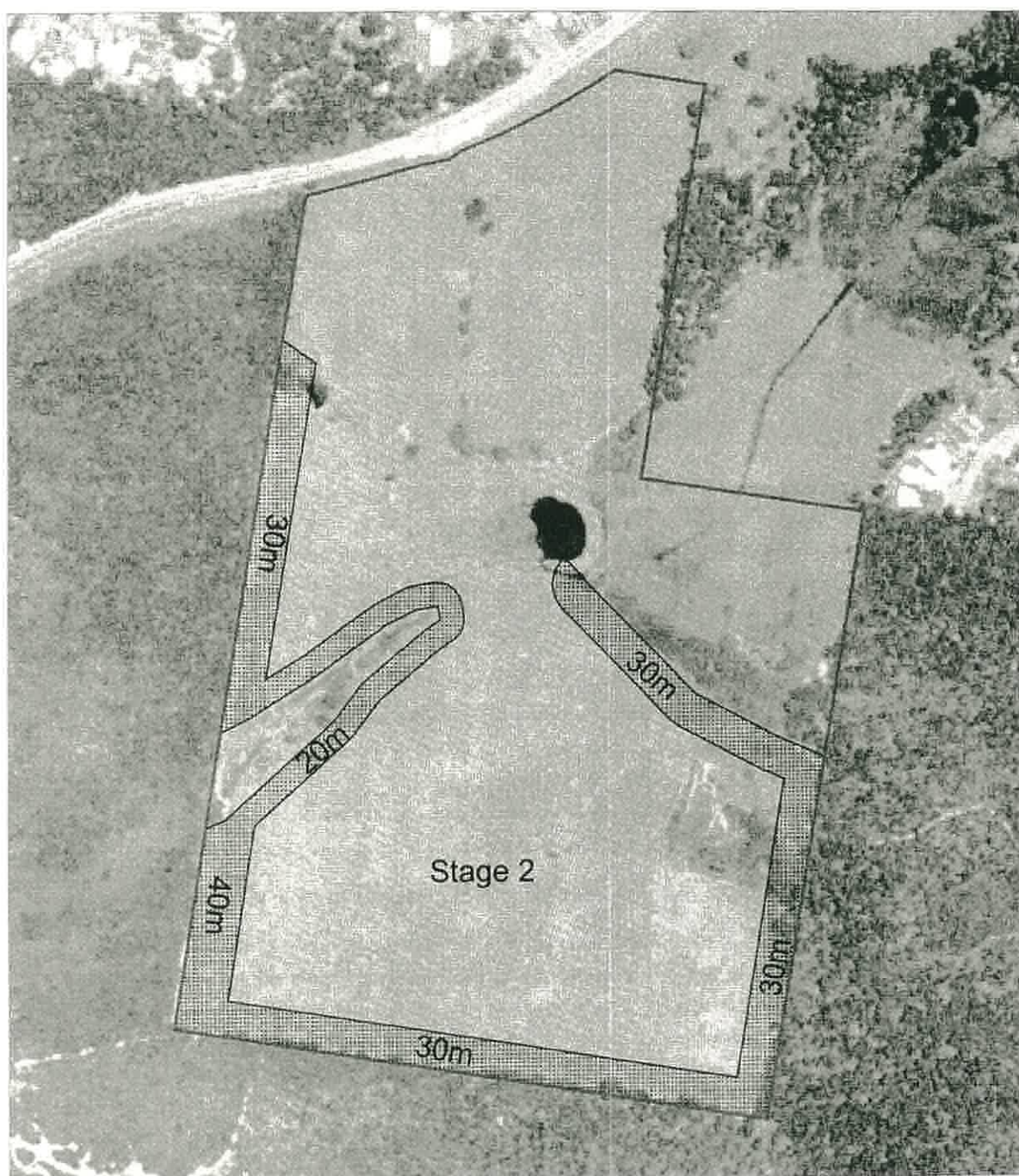
Observations of the intersections of Princes Highway and Dolphin Point Road and Link Road revealed that the intersections are operating at appropriate levels of service during the morning and afternoon peak periods.

A commitment is to be made to provide speed control devices on longer roads in the subdivision.

All road ways will be dedicated to the Council.

It is noted that the perimeter road (Wuru Drive extension) is provided with a 20 metre reserve width, including an 11 metre carriageway. The road width is appropriate for bus movements. At stops, localised indented bays providing an additional 0.5 metre carriageway width can be provided.

In accordance with Councils Subdivision Code, footpaths will be provided in the verges of the proposed 18 and 20 metre wide roads. Footpaths will therefore be provided adjacent to the bus route and stops. Other streets will be provided with verges on both sides for pedestrian use. Bus stops will be located at appropriate intervals so that dwellings are within 400 metres walking distance. However it is also likely that future bus services may operate on a hail and ride basis and this would further reduce walking distances.



Lot 1, DP 1045990
Princess Highway,
Dolphin Point



Asset protection zones

Figure 7 - Bushfire Constraints (Courtesy Bushfire and Environmental Services Pty Limited)

3.12 Heritage and Archaeological Sites

The site does not contain any buildings, work, relic, tree or place that has been identified as an item of environmental heritage under Schedule 7 of the Shoalhaven Local Environmental Plan 1985 or Schedule 1 of the Illawarra Regional Environmental Plan No 1. The site is also not listed with the National Trust of Australia or the Heritage Office.

The NSW *National Parks and Wildlife Act 1974* (as amended) provides the primary basis for the legal protection and management of Aboriginal sites within New South Wales. The rationale behind the Act is to prevent unnecessary or unwarranted destruction of Aboriginal objects and to protect and conserve objects where such action is considered warranted. Under the terms of the NSW *National Parks and Wildlife Act 1974* (as amended), it is an offence for a person to:

- (i) Knowingly destroy, damage or deface an Aboriginal object or place, or knowingly cause or permit the destruction, defacement or damage to an Aboriginal object or place, without first obtaining the consent of the Director-General of the Department of Environment and Conservation (NSW).
- (ii) Disturb or excavate any land, or cause any land to be disturbed or excavated, for the purpose of discovering an object, without first obtaining the consent of the Director-General of the Department of Environment and Conservation (NSW); and
- (iii) Collect on any land an object that is the property of the Crown, other than an object under the control of the Australian Museum, without obtaining appropriate authorisation from the Director-General.

South East Archaeology was commissioned by the owners of the site to undertake an Aboriginal heritage impact assessment of the subject site. This commenced in 2003.

The heritage investigation proceeded in several phases. Initial surface surveys were conducted in 2003 and 2004, but assessment of the potential impacts of the proposal on Aboriginal heritage was constrained by low conditions of surface visibility. To excavate or disturb land for the purposes of discovering an Aboriginal object, approval to a Section 87 'Preliminary Research Permit' application is required. A Section 87 Permit #1952 was issued by the Department of Environment

and Conservation (DEC) on 19 June 2004 to undertake sub-surface test excavations.

The subject site was divided into a number of different 'environmental/cultural contexts'. The test excavations were undertaken within sixteen separate areas and involved a sample from each identified context within the study area. In total, 347 test units each measuring 0.25m² in area were excavated, resulting in a total excavation area of 86.75m².

Detailed analysis of the data was undertaken, examining issues such as the integrity of the evidence, nature of stone materials and artefact types, nature of Aboriginal activities, spatial distribution of the evidence and age of the evidence.

The nature of the evidence was compared with other sites in the region and a number of similarities and differences identified. There is a high degree of similarity between the evidence in Stage 1 and Stages 2-4. No specific aspects of Stages 2-4 evidence appear to be rare or unusual or not replicated elsewhere within the region.

Figure 8 (Courtesy South East Archaeology Pty Limited 2005) illustrates the location of the findings of the archaeological investigation. Sites 1, 2 and 4 were assessed as being of moderate scientific significance within a local context and low scientific significance within a regional context. Site 3 was assessed as being of low scientific significance within both local and regional contexts.

Development of the site in accordance with the proposal as described in Stages 2-4 may cause impacts to the identified Aboriginal heritage sites 1, 2, 3 and 4. South East Archaeology has in the past recommended that the proponent should seek and obtain from former DEC, a Section 90 Consent with Salvage permit for the development impact area, inclusive of all identified Aboriginal heritage evidence within this area, in consultation with the local Aboriginal community. In accordance with that recommendation a Section 90 Consent application was lodged with DEC on 15th March 2006 and a consent has been issued.

It is noted that the DECC *Interim Community Consultation Requirements for Applicants* was introduced in January 2005. Written advice from NSW DECC is that the Policy is not required to be implemented for this project which commenced prior to 1 January 2005. In any case as noted above Section 90 consent numbers 2618, 2619 and 2620 issued on 17 January 2007.

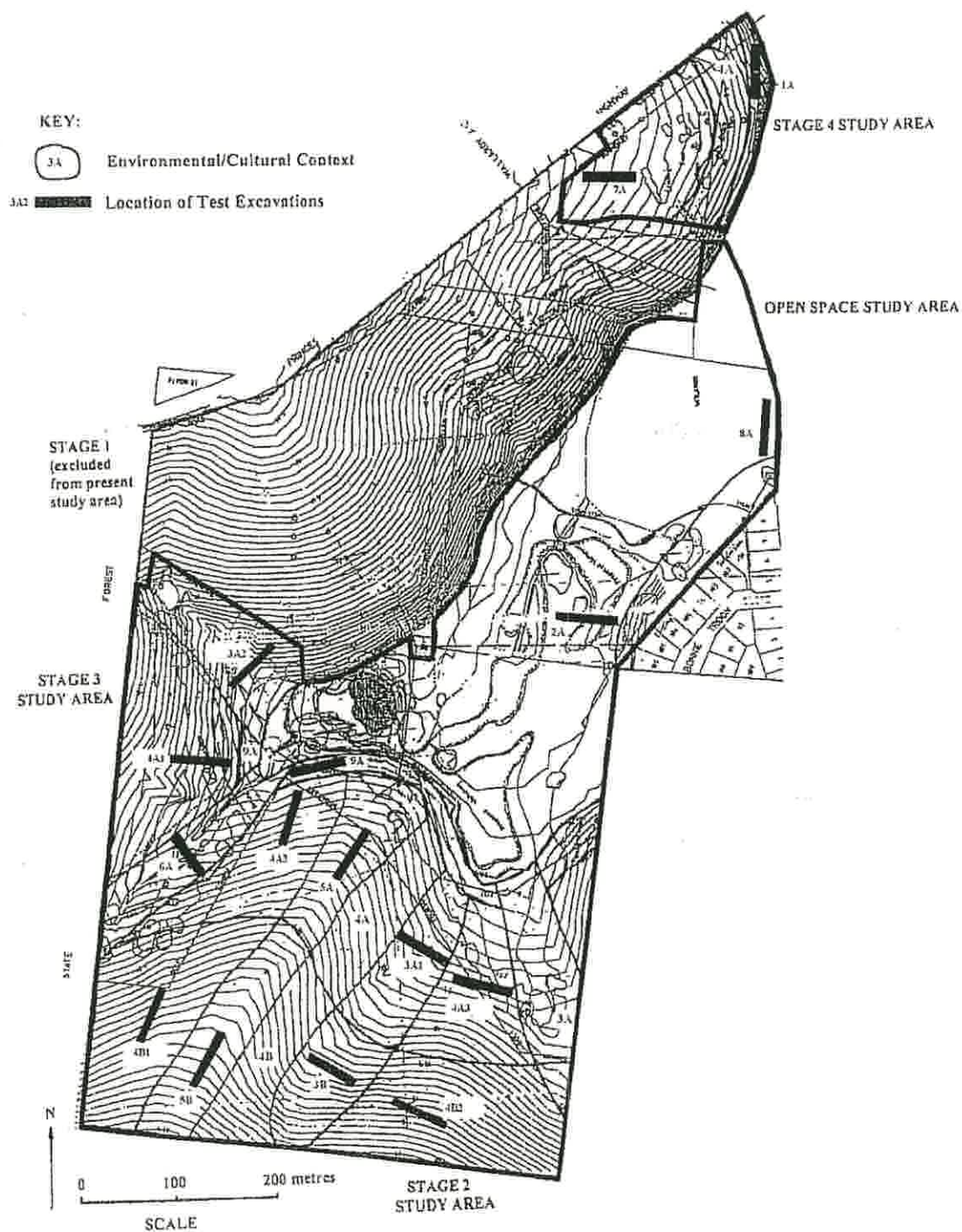


Figure 8 - Environmental/Cultural Contexts of "The Dairy" and Location of Stage 2-4 Test Excavations. Courtesy: *Dolphin Point, Near Burrill Lake, on the South Coast of New South Wales: Volume B*. South East Archaeology Pty Limited 2005.

4.0 STATUTORY FRAMEWORK

The subject site is affected by numerous statutory planning instruments as well as several strategic plans. The purpose of this section of the report is to identify the relevant planning instruments and strategic plans and demonstrate that the development is consistent with these documents and will achieve the appropriate state, regional and local planning outcomes.

The relevant instruments for consideration in assessment of the concept plan are as follows:

1. *State Environmental Planning Policy (Major Projects) 2005*
2. *State Environmental Planning Policy No 71 – Coastal Protection*
3. *State Environmental Planning Policy No 55 – Remediation of Land*
4. *Illawarra Regional Environmental Plan No 1*
5. *Shoalhaven Local Environmental Plan 1985*
6. *Subdivision Development Control Plan 100 – Subdivision Code*
7. *Shoalhaven Planning Policy No. 1 Development Guidelines For Certain Residential 2(c) Zoned Land – Milton – Ulladulla*
8. *Development Control Plan No 52 – Dolphin Point*
9. *NSW Coastal Policy 1997*
10. *Coastal Design Guidelines for NSW.*

5.0 STATE ENVIRONMENTAL PLANNING POLICY (MAJOR PROJECTS) 2005

The development proposed has taken into account the provisions of State Environmental Planning Policy (Major Projects) 2005. The aims of the SEPP MP are listed following and are addressed in relation to the project and concept plans:

- (a) *To identify development to which the development assessment and approval process under Part 3A of the Act applies;*
- (b) *To identify any such development that is critical infrastructure project for the purposes of Part 3A of the Act;*
- (c) *To facilitate the development, redevelopment or protection of important urban, coastal and regional sites of economic, environmental or social significance to the State so as to facilitate the orderly use, development or conservation of those State significant sites for the benefit of the State;*
- (d) *To facilitate service delivery outcomes for a range of public services and to provide for the development of major sites for a public purpose or redevelopment of major sites no longer appropriate or suitable for a public purpose;*
- (e) *To rationalise and clarify the provisions making the Minister the approval authority for development and sites of State significance, and to keep those provisions under review so that the approval process is devolved to councils when State planning objectives have been achieved;*

The second and forth aim are not applicable to the proposed development.

In respect of the first aim, the proposed development falls under Schedule 1 and Schedule 2 of the SEPP MP as follows:

Schedule 1 – Group 5 Residential, commercial or retail projects

The estimated capital investment value of the project is \$115 million. This figure is based on the completed development of the land. In this regard it is noted that the Minister has not provided confirmation that the development is important in achieving State and regional planning objectives and therefore part 3A of the Act is not triggered in this context.

Schedule 2 – Coastal Areas

The site is identified within a coastal zone. As the major project application involves subdivision of residential land into more than 25 lots, it is defined as comprising State significant development. (Clause 1(l) of Schedule 2).

The proposed development is identified in Schedule 2 and therefore is of State significance. As such Part 3A of the *Environmental Planning and Assessment Act 1979* ("the Act") applies.

The site is of State significance due to its coastal location and its size, being one of the largest landholdings within the Burrill Lake/Dolphin Point area. The concept and project plans will allow for the subdivision of the land currently zoned Residential 2(c) and dedication of open space in a manner that provides for an appropriate form of development, a cohesive access network and conservation of the scenic and ecological values of the site. The development also fulfils the aims and objectives of all applicable planning instruments. The proposed development promotes and coordinates the orderly and economic use of the subject site.

In light of the State and regional significance of the project, it is desirable to have a consistent and comprehensive assessment and decision-making process for development approval as provided for in Part 3A of the Act, as amended in accordance with objective (b).

The proposed development is consistent with the aims of SEPP MP.

6.0 STATE ENVIRONMENTAL PLANNING POLICY NO. 71 - COASTAL PROTECTION

State Environmental Planning Policy No 71 – Coastal Protection (SEPP 71) aims to ensure that development in the NSW coastal zone

is appropriate and suitably located, that there is a consistent and strategic approach to coastal planning and management and to ensure there is a clear development assessment framework for the coastal zone.

Clause 7 of SEPP 71 requires the consent authority to take into consideration the matters set out in Clause 8 when it prepares a draft local environmental plan or determines a development application. Although this application is for a concept plan and project applications under Part 3A of the *Environmental Planning and Assessment Act, 1979*, for the sake of completeness, it is considered relevant for the matters to be considered. These matters are as follows:

- (a) *The aims of this Policy set out in clause 2 – The proposed development satisfies the aims of SEPP 71.*
- (b) *Existing public access to and along the coastal foreshore for pedestrian or persons with a disability should be retained and, where possible, public access to and along the coastal foreshore for pedestrians or persons with a disability should be improved – This is not relevant to the concept plan or project applications.*
- (c) *Opportunities to provide new public access to and along the coastal foreshore for pedestrians or persons with a disability – This is not relevant to the concept plan or project applications.*
- (d) *The suitability of development given its type, location and design and its relationship with the surrounding area – The proposed development is consistent with the zoning and the desired future character of the area. The subdivision layout provides for appropriate urban form and character. In our opinion, the site is suitable for the form of development proposed.*
- (e) *Any detrimental impact that development may have on the amenity of the coastal foreshore, including any significant overshadowing of the coastal foreshore and any significant loss of views from a public place to the coastal foreshore – The development will not result in overshadowing of the coastal foreshore or any significant loss of views from a public place to the coastal foreshore. In our opinion the proposed development will not result in any detrimental impact to the coastal foreshore.*
- (f) *The scenic qualities of the New South Wales coast, and means to protect and improve these qualities – The future development of these sites is unlikely to detract from the scenic qualities of the NSW coast. The majority of site is already devoid of vegetation and it is proposed to retain those areas of vegetation that are of ecological significance. The residential subdivision has been designed to ensure that it is compatible with the surrounding areas.*

For these reasons, the development will not adversely affect the scenic qualities of the coast.

- (g) *Measures to conserve animals (within the meaning of the Threatened Species Conservation Act 1995) and plants (within the meaning of that Act), and their habitats* – The site has previously been used as a dairy and has been cleared of most vegetation. The areas of remnant vegetation will be preserved within the ecologically most significant part of the site. This will ensure that the redevelopment of the site will not materially adversely affect any animals or plants (within the meaning of the *Threatened Species Conservation Act 1995*) or their habitats.
- (h) *Measures to conserve fish (within the meaning of Part 7A of the Fisheries Management Act 1994) and marine vegetation (within the meaning of that Part), and their habitats* – As the site is not located on the coastal foreshore, the proposed development will not affect any fish, marine vegetation or their habitat.
- (i) *Existing wildlife corridors and the impact of development on these corridors* – The subject site does not contain any wildlife corridors.
- (j) *The likely impact of coastal processes and coastal hazards on development and any likely impacts of development on coastal processes and coastal hazards* – The subject site is located approximately 400 metres, at its closest part, from the coast. The site is not a 'sensitive coastal location' and coastal processes and coastal hazards are unlikely to have a significant impact on the development. The development will not have any impact on the coastal processes and coastal hazards.
- (k) *Measures to reduce the potential for conflict between land-based and water-based coastal activities* – As the proposed development is physically separated from the coast by other development, there will be minimal potential for conflict between land-based and water-based coastal activities.
- (l) *Measures to protect the cultural places, values, customs, beliefs and traditional knowledge of Aboriginals* – A detailed archaeological investigation of the site was undertaken by South East Archaeology. This report indicates that the site contains 4 locations where Aboriginal artefacts were found. These sites were however either moderate to low scientific significance within a local context and low scientific significance within a regional context. Given these findings and the conservation measures undertaken, the impact of the development on the cultural places, values, customs, beliefs and traditional knowledge of Aboriginals is in our opinion acceptable. Lot layouts were selected to preserve and accommodate areas nominated by South East Archaeology.

- (m) *Likely impacts of development on the water quality of coastal waterbodies* – During the construction of the proposed development, appropriate sediment erosion control devices will be utilised. A detailed water management and erosion control plan has been submitted as part of the Patterson Britton and Partners Pty Limited report. This will ensure that the development will prevent nutrients and sediments from entering the wetland and coastal waterbodies during construction. The proposed development will not discharge untreated stormwater into a coastal waterbody.
- (n) *The conservation and preservation of items of heritage, archaeological or historic significance* – The site has not been identified within any environmental planning instrument as being an item of heritage or historic significance. The site does contain Aboriginal artefacts and appropriate conservation measures have been undertaken.
- (o) *Only in cases in which a council prepares a draft local environmental plan that applies to land to which this Policy applies, the means to encourage compact towns and cities* – The site is already located within the Burrill Lake / Dolphin Point locality and will not contribute to the expansion of Ulladulla.
- (p) *Only in cases in which a development application in relation to proposed development is determined:*

 - (i) *The cumulative impacts of the proposed development on the environment, and*
 - (ii) *Measures to ensure that water and energy usage by the proposed development is efficient.* – The proposed development will not result in cumulative impacts that would significantly adversely affect the environment. The development is consistent with the desired future character of the locality. The subdivision layout provides for sustainable development by providing appropriate orientation in terms of energy efficiency and will not adversely affect the biodiversity, habitat or ecosystems in the locality.

7.0 STATE ENVIRONMENTAL PLANNING POLICY NO. 55 - REMEDiation OF LAND

The provisions of SEPP 55 require the consent authority to consider, when assessing a development application, the potential for a site to be contaminated. The subject site has a history of use for agricultural purposes. A preliminary contamination report has been completed by Network Geotechnics Pty Limited for Stages 2 and 3 and has been submitted under separate cover. This report has concluded that the site is considered unlikely to contain contamination, which would limit its suitability for residential developments.

8.0 ILLAWARRA REGIONAL ENVIRONMENTAL PLAN No 1

Part 7 of Illawarra Regional Environmental Plan No 1 contains provisions relating to living areas. The objectives relating to living areas are:

- (a) *To ensure that urban expansion is orderly and efficient having regard to the constraints of the natural environment and that sufficient land is available to prevent price rises resulting from scarcity of land;*
- (b) *To ensure that new residential land or land for higher density development is only developed where there are adequate utility and community services available or there is a commitment from the relevant authorities or developer to provide those services;*
- (c) *To provide for a range of lot sizes, dwelling types and tenure forms to cater for varying households needs in all local government areas;*
- (d) *To ensure that residential development does not take place on hazard-prone lands; and*
- (e) *To minimise bush fire risks to urban development.*

In our opinion the concept plan and project applications are consistent with these objectives. The areas identified as Stages 2 and 3 are intended for future residential subdivision. These areas can be developed with adequate utility and community services. This report identifies the constraints that affect the site to ensure that the subdivision occurs in an orderly and efficient manner and gives adequate consideration to the natural environment and minimises bushfire risk.

9.0 SHOALHAVEN LOCAL ENVIRONMENTAL PLAN 1985

9.1 Permissibility and Zone Objectives

The area of the site affected by the concept plan and project applications is subject to a number of zonings pursuant to the Shoalhaven Local Environmental Plan 1985. These zonings include Residential 'C' (Living Areas) 2(c), Open Space – Recreation B (Private) 6(b) and Environmental Protection A (Ecology) 7(a). Figure 9 identifies the present zonings in respect of the land.



That part of the site identified in Stage 2 of the project application is zoned Residential 2(c). Clause 9 of the SLEP 1985 identifies that all development, other than development that is prohibited, is permissible with the consent of Council. The following uses (purposes) are prohibited in the 2(c) zone:

Advertising structures; amusement parks; animal boarding establishments; bulk stores; bulky goods retailing; car repair stations; caravan parks; drive-in theatres; industries (other than those specified in Schedule 6); intensive animal husbandry; junk yards; liquid fuel depots; motor showrooms; retail plant nurseries; road transport depots; roadside stalls; sawmills; sexual services premises; timber yards; transport terminals; turf farming; warehouses.

Subdivision is not identified as a prohibited use. Accordingly, the proposed development is permissible in the 2(c) zone with the consent of the consent authority.

The objective of the 2(c) zone is contained in the SLEP 1985 as follows:

- *The objectives are to provide for new residential areas with a range of housing types with provision for urban facilities to serve the local community.*

The subdivision layout will provide for low-density development as well as medium density development should it be demanded by the market. The subdivision will incorporate an appropriate road network consisting of a collector road as well as a perimeter road and other services such as water and sewerage. In our opinion, each of the alternative subdivision layouts would satisfy the objective of the 2(c) zone.

The area identified as Stage 3 on the project application is currently zoned Open Space – Recreation B (Private) 6(b) (deferred Residential 2(c)). Shoalhaven City Council has considered a rezoning application to rezone this area to Residential 2(c). A Section 65 Certificate was issued on 21 June 2007 to enable the draft Local Environmental Plan to be publicly exhibited. The exhibition has now taken place.

The site is currently zoned 6(b) and clause 9 of the SLEP 1985 identifies the following uses as permissible with development consent:

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.

Roads are a permitted use pursuant to the current zoning.

The area identified as Stage 5 on the concept plan is zoned Open Space – Recreation B (Private) 6(b) and Environmental Protection A (Ecology). The permissible uses within the 6(b) zoned land are identified above.

The objective of the 6(b) zone is recited below:

- *The objectives are to identify land where private recreation facilities are and may be developed.*

The following uses are permissible with development consent in the area of land zoned 7(a):

Agriculture; aquaculture (other than development above high water mark); bed and breakfast accommodation; dwelling house; roads; structures for educational and recreational purposes which assist in promoting and interpreting the area's ecological values; utility installations (other than gas holders or generating works).

The objectives of the 7(a) zone are:

- *To protect and conserve important elements of the natural environment, including wetland and rainforest environments;*
- *To maintain the intrinsic scientific, habitat and educational values of natural environments;*
- *To protect threatened species and habitats of endangered species;*
- *To protect areas of high biodiversity value; and*
- *To protect and enhance water quality in the catchment.*

At this stage no development is proposed within Stage 5 apart from construction of walking/bicycle trails. This notwithstanding as part of the environmental assessment, an urban design review has been conducted to identify environmental constraints. Areas where development should not occur have been identified including remnant vegetation, a riparian zone, and the two dams. By retaining these areas on the site, any future development on the remaining land would ensure that biodiversity is maintained. Retention of these areas would also result in the enhancement of the scenic qualities of the locality as well as maintaining the habitat and educational values of the natural environment.

Any future development on the remaining areas of the land that has been identified as a future development parcel would need

to be consistent with the permitted uses identified in the 6(b) and 7(a) zoning listed above.

9.2 Subdivision

Clause 10 of the SLEP 1985 specifies that land cannot be subdivided without the consent of the Council.

9.3 Soil, Water and Effluent Management

Clause 26 of the SLEP requires Council to be satisfied that a development has made adequate arrangements for the provision of a water supply, facilities for the removal of sewage and for the drainage of stormwater and other surface water from the land.

As part of any development it will be necessary to provide an adequate water supply. The water reticulation to stage 1 of the development was designed to cater for the future stages in regard to connection points into the existing trunk main system and upsizing of reticulation mains in stage 1 to ensure adequate supply to future stages.

Shoalhaven Water has prepared a draft sewerage strategy for the servicing of lands on the southern side of Princes Highway. This has involved the construction of a new sewer pumping station in stage 1 which has been designed to service the future stages within this environmental assessment. The Ulladulla Waster Water Treatment Plant has recently been constructed and is operational. This plant has been designed to cater for increased capacity including this development (Refer to Annexure 9 for further detail plus plans).

The method of stormwater disposal has been addressed in the Patterson Britton report that has been submitted under separate cover. This report demonstrates that future development will not discharge untreated stormwater into any coastal waterways or the wetland area on the site.

9.4 Development of Certain Lands – Dolphin Point

Clause 40D of the SLEP 1985 requires that the consent authority is not to consent to an application to subdivide land to which this clause applies unless plans and documentation have been submitted showing:

- (a) *The intended staging of the proposed development, the relationship of that staging to the capacity of the sewerage system to adequately cope with the proposed development and the measures proposed to overcome*

any inadequacies; It is proposed to stage the development within stage 2 to provide for the orderly development of land as well as ensuring the appropriate timing of the release of the land. Stage 1 of the development has been designed to accommodate the increased capacity required for the future stages of this development in respect to sewerage and water infrastructure.

- (b) *The measures proposed for ongoing soil and water management, including sedimentation, erosion and pollution control, to ensure maintenance of water quality in the wetland and in Burrill Lake and including rehabilitation of existing drains to and through the wetland;* This issue has been addressed in detail in the report prepared by Patterson Britton and Partners Pty Limited. The ongoing soil and water management will include the introduction of rainwater tanks, gross pollutant traps, water quality control pond and bio-retention basins. These proposed treatment measures will create the framework for the best management practices to achieve the treatment targets for the site required by Shoalhaven Council's Subdivision Code and DECC requirements.
- (c) *Designs of surface drainage works and proposals for isolation of potential contaminations and sedimentation during the construction phase;* A detailed erosion and sediment control plan to be utilised on site during construction has been included in the report prepared by Patterson Britton and Partners Pty Limited. The objective of this plan is to minimise sediment movement off site and as a result minimise the contamination of adjacent areas during the construction works. Such measures will include sediment retention ponds, stabilised site access, diversion drains, sediment fences, stockpile protection as well as maintenance of the sediment and erosion control measures.
- (d) *Existing vegetation and proposed additional planting which will enhance the value of the wetland and any artificial wetlands proposed, assist in maintaining water quality and enhance the role of streams as habitats corridors;* The development has proposed to retain as much of the riparian vegetation and other vegetation on the site as possible. In addition, it is also intended to enhance the riparian zones as well as parts of stage 5 with additional vegetation. This work has been detailed in the flora and fauna assessment prepared by Bushfire and Environmental Services.

10.0 DEVELOPMENT CONTROL PLAN NO. 100 - SUBDIVISION CODE

DCP 100 is applicable to the project application involving the subdivision in Stages 2 and 3.

The aims of this DCP are as follows:

- *To encourage high quality urban design and residential amenity;*
- *To set appropriate environmental criteria for subdivision development;*
- *To provide a comprehensive design approach for residential, rural, industrial and commercial subdivision;*
- *To provide a user friendly document with flexible performance-based criteria to guide development; and*
- *To provide for the ecologically sustainable subdivision of land.*

To achieve these aims, the DCP has included objectives as well as performance criteria in respect of various design elements. The design elements include the following:

10.1 Site Analysis Urban

Section 3 of this report contains a detailed analysis of the site. This addresses issues such as the site location, local and regional context, land uses of the site, surrounding land uses, topography, hydrology, fauna and flora, climate, bushfire, traffic and access, heritage and archaeological sites. A site analysis plan has been included in Figure 10.

10.2 Residential Neighbourhood Design

The subdivision layout alternatives have been developed to reflect the site analysis and the controls contained in Shoalhaven Planning Policy No. 1 Design Guidelines. The subdivision layout has given appropriate consideration to any constraints that affect the site such as bushfire and Aboriginal archaeological sites.

The street network has provided a clear and logical hierarchy by incorporating collector and perimeter roads. Following the redevelopment of the land to the east, this road network will provide a layout that ensures suitable external connections as well as a high level of internal accessibility.

The subdivision is consistent with the character of the Burrill Lake and Dolphin Point and complements existing attractive streetscapes and landscapes as well as providing passive open space.