

Freshwater Wetlands	5.94ha within Wetland	Retained in its entirety	5.94ha
TOTAL	19.22ha		22.76ha

In addition to the above there will be a minor increase in the impact on the Swamp Oak Floodplain Forest EEC as a result of the proposed relocation of the southern access road (approximately 0.5ha – 0.1ha of which is located on the subject site and the remaining 0.39ha on the adjoining Council owned STP site. In addition a further 0.13 ha of disturbed Red Gum Open Woodland (a low condition EEC) and a very small area (0.03ha) of Bangalay Sand Forest will be affected by the relocated access.

The additional lands impacted by the relocated southern access road are part of regeneration areas for the proposed development. The areas of impacted EEC's (0.66ha) will be accommodated on a 1:1 offset basis in a revised restoration layout with cleared grasslands adjoining the northern boundary of the STP.

The impact of the proposed relocation of the southern access road is discussed in further detail in Section 5.7.1 of this report.

In general terms the proposal results in a maintained and improved outcome for the three EEC's detailed above.

- (e) **Valuation Principle** – The approach taken for this project has been to assess the environmental impacts of the proposal and identify appropriate safeguards to mitigate adverse environmental effects. The mitigation measures include the cost of implementing these safeguards in the total project cost.

3.7 ENVIRONMENTAL PLANNING INSTRUMENTS (EPIS)

3.7.1 Application of EPIs to Part 3A Projects

To satisfy the requirements of section 75(2)(d) and (e) of the Act, this report includes references to the provisions of the environmental planning instruments that govern the carrying out of the project and have been taken into consideration in the environmental assessment of the project. A summary of compliance with the relevant EPIs is at **Appendix B**.

The provisions, including development standards of local environmental plans, and development control plans are not required to be strictly applied in the assessment and determination of major projects under Part 3A of the Act. Notwithstanding, these standards and provisions are relevant considerations as the DGRs require the proponent to address same. Accordingly the objectives of a number of EPIs and the development standards therein and other plans and policies that substantially govern the carrying out of the project are appropriate for consideration in this assessment as follows:

3.7.2 State Environmental Planning Policy (Major Projects) 2005

The Major Projects SEPP applies to the site. The proposal satisfies the Major Project criteria in the SEPP on the basis of the proposed development being the subdivision of land in a residential zone creating more than 25 lots in the coastal zone. This has been discussed in more detail in Section 3.1 of this report.

3.7.3 State Environmental Planning Policy No. 71 – Coastal Protection (SEPP 71)

SEPP 71 applies to the land and development within the coastal zone (clause 4) as defined by the *Coastal Protection Act 1979*. The subject site is located within the coastal zone. SEPP 71 provides aims of the Policy (clause 2) and matters for consideration (clause 8) when assessing development proposals. The Policy has been made to ensure that development in the NSW coastal zone is appropriate and suitably located, there is a consistent and strategic approach to coastal planning and management and there is a clear development assessment framework for the coastal zone. The major themes of SEPP 71 include retention of visual amenity, protection of the coastal foreshore in relation to amenity, public access, wildlife corridors, water quality, views, items of heritage and suitability of development within the area. The proposal is considered to be consistent with the provisions of SEPP 71 and this is discussed in more detail at **Appendix B**.

3.7.4 State Environmental Planning Policy No. 14 – Coastal Wetlands

The Bevia Wetland is classified under SEPP 14. The purpose of the Policy is to ensure that coastal wetlands are preserved and protected in the environmental and economic interests of the State. The SEPP provides aims of the Policy (clause 2) and restrictions on the development of certain land (clause 7).

The natural attributes of the Bevia Wetland will be preserved through the:

- creation of vegetated buffers (minimum 50 metres, extending to 200 metres in some locations) around its perimeter,
- creation of vegetated riparian zones along drainage lines and watercourses which drain to the Wetland; and
- implementation of a comprehensive water management plan as part of the future development which will ensure that the quantity and quality of urban runoff does not compromise the water quality of the Wetland.

The proposal is considered to be consistent with the provisions of SEPP 14 and a detailed assessment of the proposal against the provisions of the SEPP is provided at **Appendix B**.

3.7.5 State Environmental Planning Policy No. 11 – Traffic Generating Developments (SEPP 11) (Now State Environmental Planning Policy (Infrastructure) 2007)

Schedule 2 of SEPP 11 applies to subdivision of land into 50 lots or more. The Policy aims to provide the RTA an opportunity to make representations in respect of developments which are significant generators of traffic. In this regard, the proposal was referred to the Local Traffic Committee in which the RTA is represented.

The application was also referred directly to the RTA and no objection to the proposal was raised, advising that George Bass Drive is an unclassified regional road and indicating that the assessment of road safety and traffic impacts associated with this development is a matter for Council.

Council's issues in relation to the proposed access are discussed in section 5.7 of this report.

3.7.6 State Environmental Planning Policy No. 44 – Koala Habitat Protection (SEPP 44)

The aims of SEPP 44 are to encourage the proper conservation and management of areas of natural vegetation that provide habitat for koalas to ensure a permanent free-living population over their present range and reverse the current trend of koala population decline by requiring the preparation of plans of management, identification of areas of core koala habitat and the inclusion of areas of core koala habitat in environment protection zones. The site contains one tree species (*Eucalyptus tereticornis*) listed as koala feed trees in Schedule 2 of the SEPP however it constitutes less than 10% of trees on the site (less than the 15% required by the SEPP).

The site is not considered to contain "Potential Koala Habitat" as defined under the provisions of SEPP 44.

3.7.7 State Environmental Planning Policy No. 55 – Remediation of Land (SEPP 55)

The aim of SEPP 55 is to provide for remediation of contaminated land for the purpose of reducing the risk of harm to human health or the environment and requiring that any remediation work meets certain standards and notification requirements.

The EA included a preliminary contamination assessment involving a review of historical use of the site, a groundwater bore search, review of council records and historical aerial photographs, a search of regulatory Notices or Orders and a site inspection.

Whilst the overall potential for contamination is considered to be low, total of 37 sites were identified as Potential Areas of Environmental Concern, 10 of which were deemed to be Areas of Environmental Concern. Requirements for additional investigations being undertaken and further detailed information being prepared to accompany any future applications are recommended as part of the concept approval.

3.7.8 Lower South Coast Regional Environmental Plan No. 1 (LSCREP 1)

The REP applies to the site as it is located in the Lower South Coast Region. The requirements of LSCREP 1 are addressed in **Appendix B** and the proposal is consistent with those requirements.

3.7.9 Lower South Coast Regional Environmental Plan No. 2 (LSCREP 2)

The REP applies to the site as it is located in the Lower South Coast Region. The requirements of LSCREP 2 are addressed in **Appendix B** and the proposal is consistent with those requirements.

3.7.10 Eurobodalla Rural Local Environmental Plan 1987 (LEP)

The LEP was gazetted on 12 November 1987. An assessment against the requirements of the LEP is included at **Appendix B** and the proposal is considered to be consistent with those requirements.

3.8 OTHER PLANS AND POLICIES

The Proposal has been considered against the following non-statutory documents:

3.8.1 South Coast Regional Strategy

The primary purpose of the Regional Strategy is to ensure that the significant natural and scenic assets that define the region's character and underpin its economy are not compromised by growth. It will do this by ensuring that land is available in appropriate locations to sustainably accommodate the projected population growth and associated housing, employment and environmental needs over the next 25 years. The Strategy sets 'Outcomes' and 'Actions' for various components including the natural environment, natural hazards, housing and settlement, economic development and employment growth, rural landscape and rural communities.

Of specific relevance to this application is the aim of the Strategy to cater for a housing demand of up to 45,600 new dwellings by 2031 to accommodate an additional 60,000 people expected in the region. The realisation of the proposed development will yield 792 residential allotments which will make a significant contribution to meeting projected housing demand in the region.

A full assessment of the proposal against the aims and objectives of the Strategy is provided at **Appendix C**.

3.8.2 NSW Coastal Policy 1997 and NSW Coastal Design Guidelines

The *NSW Coastal Policy 1997* responds to the fundamental challenge to provide for population growth and economic development without placing the natural, cultural, spiritual and heritage values of the coastal environment at risk. The Policy is based on the principles of ecologically sustainable development and addresses a number of key coastal themes including population growth, coastal water quality issues and establishing a comprehensive and representative system of reserves. The *NSW Coastal Design Guidelines* aim to ensure that future developments and redevelopments are sensitive to the unique natural and urban settings of coastal places in NSW. The Guidelines provide an urban design focus for the coastal context. The coastal policies and guidelines are relevant legislation and planning provisions applying to the site. The issues are discussed in more detail at **Appendix C**.

3.8.3 Eurobodalla Urban Settlement Strategy

The Strategy was adopted by Council on 5 December 2006 and implements Council's Sustainable Living Policy by providing guidance in planning for and maintaining and allowing for growth to create a sustainable and healthy economy, community and environment. The Strategy is aligned with the South Coast Regional Strategy released by the Department in 2006.

The proposed development has been assessed against the relevant principles and actions set out in the Strategy (refer **Appendix C**) and has been found to be generally consistent with same.

3.8.4 Development Control Plan No. 160 Rosedale Urban Expansion Zone (DCP 160)

The DCP came into effect on 22 November 1989 and divides the land to which the Plan applies into a series of 6 precincts. The DCP was prepared to ensure that due consideration is given to the relevant physical, social and economic factors affecting the land and to provide for orderly and economic development.

The DCP is designed to provide the framework within which developers should work in subdividing the land within the Urban Expansion Zone. An assessment of the proposed development against the provisions of the DCP is provided in **Appendix C** and the proposal has been found to be generally consistent.

3.8.5 Development Control Plan No. 156 Rural Subdivision (DCP 156)

The DCP came into effect on 16 December 1987 and provides controls for the subdivision of rural land. Part of the subject site is zoned Rural 1(c) and as a consequence, the proposal has been assessed against the provisions of the DCP (refer **Appendix C**).

The DCP is designed to provide the framework within which developers should work in subdividing the land within the Urban Expansion Zone. An assessment of the proposed development against the provisions of the DCP is provided in **Appendix C** and the proposal has been found to be generally consistent, with the exception of the minimum allotment size. This issue has been addressed in Section 3.2 and Section 5.1 of this report.

4. CONSULTATION AND ISSUES RAISED

4.1 PUBLIC EXHIBITION DETAILS

The Department received a total of 40 submissions comprising 32 submissions from the public (including 3 residents' groups) and 8 submissions from public authorities as part of the exhibition of the originally submitted application from 6 March to 7 April 2008. Public submissions were received from Eurobodalla Shire Council, Department of Environment and Climate Change, Roads and Traffic Authority, Rural Fire Service, NSW Department of Education and Training, Department of Lands, Department of Primary Industries, and the Department of Water and Energy.

The 32 submissions from the public all raised objections to the proposal. There were no submissions in support.

A Preferred Project Report was lodged on 10 July 2008 and as the changes to the nature of the project were not significant, it was not re-exhibited but was placed on the Department's website.

4.2 SUBMISSIONS FROM THE PUBLIC

4.2.1 Summary of issues raised in public submissions

The following issues were raised in the public submissions:

- Traffic and Access
 - general concern about the quantum of traffic generated by the proposed development and the ability of the local road network to accommodate it (refer further detail at Section 5.7);
 - concern about the safety and environmental impacts of the proposed location of the southern access road (Bevan Road alignment, west of the Wetland) – requested that a location to the east of the Wetland be investigated. As indicated previously in this report, the Proponent has relocated the proposed southern access road and this is discussed in further detail at Section 2.3 and Section 5.7.1.
- Infrastructure – concern about the ability of existing infrastructure / services to accommodate the additional demand generated by the proposed development (refer further detail at Section 5.3.2 and Section 5.14).
- Urban Design / Subdivision Design / Lot Sizes / Density
 - proposed lot sizes do not comply with Council's Settlement Strategy and are not consistent with surrounding areas (refer further detail at Section 1.2.2, Section 3.8.3, Section 5.1 and Appendix C);
 - the proposed subdivision in the part of the site zoned Rural 1(c) in the south western corner does not comply with Council's policy for subdivision of rural residential land (refer further detail at Section 3.2, Section 3.8.5, Section 5.1 and Appendix C);
 - general concern about the scale and density of development (refer further detail at Section 5.1.2).
- Environmental Impact
 - impacts on flora and fauna (Section 5.4);
 - impacts on water quality in the Wetland and Saltwater Creek (Section 5.5 and Section 5.6)
 - concern about the proposed boardwalk traversing the Wetland (note – the Proponent has deleted this element from the proposal as a result of the relocation of the southern access road); and
 - adequacy of proposed buffers (Section 5.5.4).
- Amenity

- size of the development and resultant population will erode existing high amenity of the area; (Section 5.2.4)
- development is out of character with the existing low density development in the locality (section 5.2.4)
- Bushfire Risk (refer Section 4.3.2 and Section 5.8)
- Visual Impact (refer Section 1.2.2 and Section 5.2)
- Social and Economic Impact (Section 5.3)
 - no economic analysis of the need for commercial / retail facilities is provided (Section 5.3.2);
 - proposal does not make provision for medium or low cost housing (Section 5.3.1).
- Strategic Planning Issues (Section 1.2.2, Section 3.8 and Appendix C)
 - concern about location of the proposed development (should be closer to existing centres such as Moruya or Batemans Bay;
 - impact of such a large development on the 3 hamlets (Rosedale, Guerilla Bay and Barlings Beach) will result in urban sprawl and will result in a loss of settlement type and character.

It is considered that the above issues where relevant, have been addressed by the proponent (in its Response to Submissions) and in the recommended modifications to the Concept Plan as documented in this report. Detailed discussion of the key issues of the proposal is contained in section 5 of this report. A summary of the submissions received is included at **Appendix D**. The proponent responded to these submissions as part of the Preferred Project Report and the proponent's response to the issues raised in the submissions is included at **Appendix F**.

4.3 SUBMISSIONS FROM PUBLIC AUTHORITIES

The following submissions were received from public authorities:

4.3.1 Eurobodalla Shire Council

Extensive discussions between the Proponent, the Department and Council have been undertaken during the course of the assessment of the Concept Plan. Council's primary issues are as follows:

- buffer to the adjacent Sewage Treatment Plant – the original Concept Plan did not provide the minimum 400m wide buffer between the STP and any proposed residential allotments (a total of 38 residential lots were shown in the south eastern corner of the site which fell within the sphere of influence of the STP). Council indicated that it would be prepared to consider residential development in this area at some time in the future provided the proponent can demonstrate to Council's satisfaction that the location of any lot satisfies the relevant odour management criteria for residential dwellings.

Response:

The Proponent has amended the Concept Plan, by identifying a "deferred" area, effectively deleting 38 lots affected by the STP buffer. This area will be the subject of a separate project or development application.

In this regard, it is recommended that a condition be included in the concept approval which requires that any application for development in the "Deferred Area" as shown on Drawing No. CA-003-K – Concept Subdivision Plan, shall demonstrate to the satisfaction of Council and DECC that any future development can satisfy the relevant odour management criteria for residential dwellings.

- concern about the location of the proposed Southern Access Road using the Bevia Road alignment in terms of environmental impacts on the Wetland and traffic / safety issues.

Response:

In response to the concerns raised by both Council and the general public in this regard, the Proponent now proposes that the southern access road be relocated to the east of the Bevia Wetland, adjacent to the Tomakin Sewage Treatment Plant. This has been identified by Council as the preferred location for the southern access.

The adjusted location of the southern access road has been incorporated in the Preferred Project Report and is discussed in detail in Section 5.7.1 of this report.

- concern about the proposed northern access road to George Bass Drive, specifically the ability of the intersection at Bevia Road to achieve safe and efficient design.

Response:

The Proponent has submitted preliminary intersection design drawings which demonstrate the functionality of the proposed intersection. Council has reviewed this information and has expressed the view that it should be restricted to a left-in / left-out arrangement and that the provision of an additional road connection should be investigated through the adjoining Rosedale Farm site, to connect with George Bass Drive at Rosedale Parade.

The Proponent has incorporated an undertaking in the Statement of Commitments to explore the possibility of providing such a connection, subject to it being ecologically and physically possible.

Notwithstanding the above, the Department is satisfied that adequate vehicular access to / from the site can be achieved via the proposed northern access road, whether or not a connection is ultimately achieved via the adjoining site. This issue is discussed in detail in Section 5.7.2 of this report.

- upgrade of the existing Burri Road to the north of the site. Council has indicated that the additional traffic movements on Burri Road that are likely to be generated by the proposed development are within the capacity of the road and no further assessment is required. However, Council has advised that it will negotiate with the Proponent to seal Burri Road to the boundary of the subject land as part of the contributions that the development will attract.

Response:

This is a matter for Council and the Proponent. The proposed development will attract contributions towards public infrastructure and community facilities at development application stage, which will be calculated and levied in accordance with the Council's Section 94 Contributions Plan.

- Internal collector road should be constructed to Council's required standards and dedicated to Council as a public road.

Response:

The Proponent has confirmed that this is the intention. In addition, the Schedule of Requirements for future project or development applications will make reference to the need for the standards and requirements of Council to be satisfied.

- minimum lot sizes – Council has confirmed that it has no objection to the range of lot sizes proposed as part of the Concept Plan.

Response:

The proposed lot sizes range from 450 – 1,600sqm in the southern part of the site; 450 – 1,750sqm in the central area; and between 750 – 8,550sqm in the northern part of the site.

Although some lot sizes are smaller than the DCP requirements (DCP Nos. 156 and 160), they are considered to be consistent with the recommendations of the Sensitive Urban Lands Review, the South Coast Regional Strategy and the Eurobodalla Settlement Strategy and are considered to be satisfactory.

4.3.2 NSW Rural Fire Service (RFS)

The RFS has reviewed the proposed development under the Planning for Bushfire Protection 2006 and has recommended appropriate conditions. On 10 April 2008, the RFS provided comment and conditions on the amended PPR and these are reflected in the modifications to the Concept Plan and the schedule of information required to be submitted as part of any subsequent project or development application at **Tag A**.

4.3.3 NSW Roads and Traffic Authority (RTA)

The RTA has advised that George Bass Drive is an unclassified regional road and as such considers that the assessment of road safety and traffic impacts associated with the proposed development is a matter for Eurobodalla Shire Council.

In response to a direct request from the Proponent, the Authority further advised that it has reviewed the existing 100km/h speed zone on George Bass Drive and does not support a reduction in the speed limit. Accordingly, any connection to the existing public road network associated with the subject proposal should comply with minimum safe intersection sight distance requirements as detailed in the RTA Road Design Guide. This will be included in the schedule of requirements for any subsequent project or development applications associated with the Concept Plan.

4.3.4 Department of Primary Industries (DPI)

The DPI has raised no objection to the proposal, subject to the inclusion of conditions contained in the correspondence dated 25 March 2008. These requirements are reflected in the schedule of requirements for any subsequent project or development applications associated with the Concept Plan at **Tag A**.

DPI has confirmed that the WSUD stormwater management measures and water quality monitoring strategy is satisfactory. DPI also concurs with the commitment for the design and construction of the four watercourse crossings of Saltwater Creek.

4.3.5 Department of Water and Energy (DWE)

The DWE reviewed the original proposal and the proposed relocation of the southern access road detailed in the Preferred Project Report and has provided comments and recommended appropriate conditions pertaining to:

- (i) the protection and rehabilitation of the wetland, associated vegetation and the vegetated buffer around the wetland; and
- (ii) the protection and rehabilitation of the watercourses and riparian corridors on the site.

These requirements have been incorporated as appropriate, as either modifications to the Concept Plan or as matters to be addressed in future applications.

4.3.6 Department of Education and Training

The Department has advised that existing government schools serving the Rosedale community currently have no surplus accommodation capacity to cater for the additional students that would be generated by the proposed development.

The site is within the catchment areas for Broulee Public School and Batemans Bay High School. Both these schools are managing existing student demand with supplementary demountable classrooms. Any further residential growth would necessitate further additional facilities needs at these schools.

The Department has confirmed that the proposed development would generate the need for the equivalent of 5 additional primary homebases and 5 additional secondary general learning spaces, plus associated spaces. These would be provided on the existing abovementioned school sites, both of which are of the Department's optimum site size (and can therefore accommodate the additional learning spaces).

Accordingly, the Department has advised that it has no requirements for land for school purposes in relation to the proposed development.

4.3.7 Department of Environment and Climate Change (DECC)

In correspondence, dated 26 March 2008, DECC confirmed that it had reviewed the documentation submitted in respect of the Major Project Application and was satisfied that the plans, reports and the recommendations contained therein addressed all the Department's issues.

The information submitted by the Proponent in support of the alternate location for the southern access road in the area between the Wetland and the Sewage Treatment Plant, was referred to DECC for review and comment on 30 June 2008.

In correspondence dated 18 July 2008, DECC confirmed that either option for the southern access road could be acceptable, subject to various recommendations. These requirements have been incorporated as appropriate, as either modifications to the Concept Plan or as matters to be addressed in future applications.

4.3.8 Department of Lands

A number of Crown Public Roads traverse the subject site. The Department has not raised any objection to the proposed development, but has provided advice regarding the process and procedure for the closure and purchase of Crown Roads and transfer to Council. This information has been incorporated in the Schedule of Requirements for Future Applications at Tag A

4.3.9 Nature Conservation Council

The Nature Conservation Council objects to the proposed development on the basis of its impact on flora and fauna species listed under the *Threatened Species Conservation Act 1995* and on the Bevan Wetland. It makes two recommendations, as follows:

- (i) that the development not be approved, for the sake of the recorded and any other threatened species potentially on site. At the very least, a Species Impact Statement should be compiled and reviewed appropriately, forestalling any development; and
- (ii) that the proposed subdivision ought not to be approved for the sake of protecting the endangered ecological communities on site from the detrimental effects of development and human occupation of the numerous proposed residential lots.

In relation to point (i) above, the Proponent has undertaken extensive survey and analysis of both flora and fauna on the site and the legislative requirements of both the *Environmental Planning and Assessment Act 1979* and the *Threatened Species Conservation Act 1995* have been satisfied.

A total of six (6) threatened fauna species have been recorded on the site – Powerful Owl, Glossy Black Cockatoo, Eastern Freetail Bat, Greater Broad-nosed Bat, Eastern Bentwing Bat and Yellow-bellied Glider.

Three (3) endangered ecological communities were also recorded on the site – Swamp Oak Floodplain Forest, River Flat Eucalypt Forest on Coastal Floodplains; and Freshwater Wetlands on Coastal Floodplains. The Proponent has satisfactorily demonstrated that the proposed development will result in a net increase in the quantum of all three EEC's (refer Section 3.6).

Furthermore, there is no requirement for the preparation of a Species Impact Statement and the Proponent has satisfied the *Draft Guidelines for Threatened Species Assessment* (DECC and DPI July 2005).

As to point (ii), it is considered that the proposed development incorporates sufficient restoration and revegetation works and provides habitat corridors throughout the development to facilitate the ongoing viability of the ecological communities.

5. ASSESSMENT OF ENVIRONMENTAL IMPACTS

Key issues considered in the Department's assessment of the Environmental Assessment, Preferred Project Report and consideration of the draft Statement of Commitments submitted by the Proponent include the following:

- Subdivision, lot sizes and urban design;
- Visual Impact, Amenity and Scale;
- Social and Community;
- Environmental Protection (Threatened Flora and Fauna and Ecological Corridors);
- Riparian Management;
- Water Cycle Management;
- Traffic and Access;
- Bushfire;
- Flooding and Climate Change;
- European and Aboriginal Heritage;
- Location of future residential development near the Sewage Treatment Plant (STP).
- Infrastructure Provision;
- Soil and Contamination.

5.1 SUBDIVISION, LOT SIZES AND URBAN DESIGN

5.1.1 Minimum Lot Sizes

Subdivision is permissible in both the Urban Expansion Zone and the Rural 1(c) zone. The proposal has been assessed against the aims and objectives and the relevant provisions of the Eurobodalla Rural Local Environmental Plan 1987 (as amended) and has been found to be consistent – refer **Appendix B**.

Similarly, an assessment of the proposal against the provisions of Eurobodalla Council's DCP No. 160 - Rosedale and DCP No. 156 - Rural Subdivision (refer **Appendix C**) demonstrates that it either complies or is consistent with all relevant objectives and controls, with the exception of Clause 4.2 Lot Sizes and Subdivision Density in DCP 156 – Rural Subdivision which provides that:

For areas where specific constraints maps are yet to be determined, lots created should have an average area of 2ha or more in order to maintain the "semi rural character" of land zoned Rural Small Holdings.

The average lot size principle is used to protect environmentally sensitive areas from the effects of development without unduly restricting the overall development potential of the land. The average lot size may be achieved either by intermingling of several different lot sizes within the subdivision according to environmental constraints or by the clustering of smaller lots in either one or several areas to protect larger environmentally sensitive areas elsewhere on the land.

Lots less than 5,000sqm or the re-subdivision of environmentally sensitive land will not be permitted.

A small area of the site (7.23ha) in the south western corner is zoned 1(c) and it is proposed to be subdivided into 26 lots ranging in size between 558 and 3,665sqm, with the larger lots arranged around the edge of the site where it adjoins the existing Barlings Drive subdivision (also zoned Rural 1(c)). This results in an average lot size in this area of 1,642sqm.

Notwithstanding the numerical non-compliance with the DCP provisions, Council has examined the proposal and has confirmed that it supports, in principle the range of proposed lot sizes.

The South Coast Regional Strategy includes a set of Sustainability Criteria against which any proposal for lands not already identified for urban expansion must be assessed. A full assessment of the proposal for the part of the site zoned 1(c) against the Sustainability Criteria is included at **Appendix C** and clearly demonstrates that the land satisfies these requirements.

5.1.2 Density of Development

One of the objections raised by the public in the submissions was in relation to the scale and density of development. In this regard it should be noted that:

- the site was originally identified (and zoned) for urban expansion by Council in 1987. In the preparation of DCP 160 – Rosedale Expansion Zone, Council undertook an analysis of the environmental capacity of the land to accommodate a range of urban development including dwelling houses, medium density development (townhouses, villas etc), residential flat buildings and up to 1,500sqm of retail / commercial floor space;
- the Sensitive Urban Lands Review in 2006 concluded that the western portion of the lands zoned for urban expansion (this specifically applies to the subject site) are mostly suitable for urban development, particularly in view of the past land clearing and farming use and that residential development should aim to achieve a range of housing types to meet demographic change, with a higher overall yield than traditionally achieved in adjoining areas, to make better use of land resources and utility services;
- the South Coast Regional Strategy released in 2006 recognises the site for future urban development and as being integral to the delivery of housing targets (up to 45,600 new dwellings) by 2031; and
- the Eurobodalla Settlement Strategy released in December 2006 stipulates the application of minimum lot sizes to land zoned Urban Expansion at Rosedale of 1,200sqm. The average lot size achieved on the subject site as a result of the Concept Plan will be 1,500sqm. It should be noted therefore, that the site will actually achieve a lesser density than was contemplated in the Strategy, however the intensity of development has been determined following careful analysis of the environmental constraints and the resultant development is respectful of the environmental capacity of the site.

On the basis of the extensive physical analysis of the environmental capacity of the site, together with the provisions of various strategic planning documents prepared by both the Department and Council, it is considered that the scale and density of the proposed development is satisfactory in this context.

5.1.3 Urban Design

The proponent was required to identify the extent of potential development footprints, building envelopes and built form controls, and any significant vegetation to be removed. In this regard it should be noted that the Concept Application does not seek approval for any built form and that any subsequent development will be the subject of separate applications to be submitted to Council.

Notwithstanding the above, the Proponent has prepared a set of draft Urban Design Guidelines to accompany the application which identifies building zones for each allotment and sets out the controls on the general nature and architectural style of buildings. It is envisaged that the final detail of the Design Guidelines will be negotiated with Council.

The schedule of requirements for future applications includes a requirement for site specific development standards/guidelines to be prepared and submitted to Council when development consent is sought for development application for the first stage of development. Council have advised the Department that they will seek to incorporate specific development standards (produced by the proponent) to guide future development on the site into the shire-wide Development Control Plan that Council is currently preparing.

5.1.4 Subdivision

The concept subdivision layout has been examined and has been found to be generally satisfactory in that it:

- adequately addresses pedestrian and vehicle safety and surveillance of streets and public spaces;
- makes provision for substantial conservation areas and areas of open space across the site;

- makes provision for a logical road network which provides through access across the site and facilitates pedestrian and bicycle movement to, within and through the site; and
- takes into account passive solar design principles in terms of lot orientation.

5.1.5 Staging

The Concept Application indicates that subdivision and development of the project will be carried out in stages, with a 10 – 15 year development horizon. The Proponent has provided an indicative staging plan showing 3 primary stages, however it should be noted that Staging of the project will be largely determined by market forces and subject to Council approval.

The indicative staging is as follows:

- Stage1 land to the north of the main east-west riparian zone
- Stage 2 land between the Knoll and the main east-west riparian zone
- Stage 3 the southern part of the site between the Knoll and the Bevia Wetland

The following table provides a summary of the lot sizes in each of the aforementioned stages:

Lot type (m2)	Dwllgs / Lots per Stage	Mix	Lot Size (m²)	
			From	To
STAGE 1 – NORTH				
Small – 450 to 550	0	0%	0	0
Std – 551 to 650	0	0%	0	0
Std – 651 – 800	16	6%	751	799
Std – 801 to 1200	164	64%	801	1198
Rural – 1201 to 4000	72	28%	1205	3259
Rural – 4000 +	4	2%	4490	8547
Sub Total	256	100%	Average 1229	
STAGE 2 – CENTRAL				
Small – 450 to 550	82	51%	450	549
Std – 551 to 650	20	13%	551	647
Std – 651 – 800	17	11%	662	776
Std – 801 to 1200	24	15%	809	1164
Rural – 1201 to 4000	17	11%	1216	1740
Rural – 4000 +	0	0%	0	0
Sub Total	160	100%	Average 704	
STAGE 3 – SOUTH				
Small – 450 to 550	222	59%	450	550
Std – 551 to 650	65	17%	551	646
Std – 651 – 800	35	9%	651	798
Std – 801 to 1200	19	5%	806	1132
Rural – 1201 to 4000	35	9%	1256	3966
Rural – 4000 +	0	0%	0	0
Sub Total	376	100%	Average 667	
TOTAL	792 lots			

The Staging Plan is indicative and will be reconsidered at the DA stage when market forces and infrastructure / servicing issues can be assessed in detail.

5.1.6 Titling Arrangements

Implementation of the Concept Plan and the form of development will be achieved through the use of Community Title legislation. The land will be developed and subdivided under the Community Land Development Act 1989, with management arrangements established in accordance with the provisions of the Community Land Management Act 1989.

This approach allows for ongoing regulation of activities, including maintenance within the entire development area, within individual allotments, within bushfire protection areas, conservation areas and within common community association areas.

Land retained in shared ownership by members of the Community Title Scheme is known as Association Property. It is commonly called a Community Lot. All roads within the proposed development, other than the spine road connecting the northern and southern ends of the site to George Bass Drive, will be part of the Community Lot.

5.2 VISUAL IMPACT, AMENITY & SCALE

5.2.1 Views from the Site

A combination of undulating topography and vegetation (largely external to the site) creates a series of viewsheds across the site within which the proposed development will occur. Distant views of the ocean (to the south) (**Figure 10**) are available from the northern part of the site but are inhibited to some degree by existing vegetation and the local topography.

Views to the south from the knoll and ridge in the centre of the site are more expansive and take in the wetland, views of Broulee Island in the middle distance and views of Mt Dromedary in the far distance.

Views from the site to the east are largely limited by vegetation and topography although limited views to the ocean horizon are available above the treeline in the northern part of the site.

Views to the west are limited to localised views of the trees (Mogo State Forest) and other heavily vegetated properties.



Figure 10 – View to ocean from the northern portion of the site. View of Broulee Island in the distance

5.2.2 Views of the Site

The Proponent has also provided a visual analysis which confirms that views into the site from adjoining public areas are limited as summarised below and shown in **Figure 11**:

Location	Visual Impact
Barlings Beach	The site is not visible from the beach
Tomakin	Limited views of the vegetation on the central knoll and surrounding pastures, distant views of the treeline at the northern end of the site
George Bass Drive	There are limited views across the wetland from the south western corner of the site, near the Bevia Road intersection with George Bass Drive.

Views from the Caravan Park directly opposite the site are obscured by existing vegetation surrounding the wetland.

There are limited views of the site through the trees in the vicinity of the STP.

On this basis it is concluded that the visual impact of the proposed development on the site at a local level will be within reasonable limits.

Distant views of the higher parts of the site may also be available from points further to the south, including Mossy Point, the southern end of Broulee Beach and Broulee Island. The impact of future development on the parts of the site that are visible from these locations is expected to be mitigated by the distance, the scale of the development (domestic scale buildings on large lots), the implementation of landscaping requirements on individual properties and planting in the public domain (street trees, open space etc).

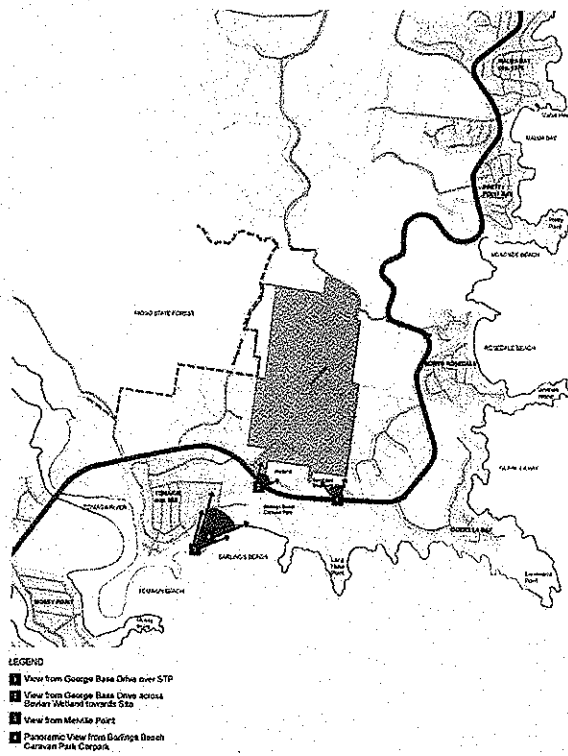


Figure 11 Views of the site

(Source: Environmental Assessment Report Bevia Road Concept Plan)

5.2.3 Conclusion

Notwithstanding the size of the site, the visual impact of the future residential development will be naturally mitigated by virtue of the:

- Topography
- Existing vegetation
- Proposed revegetation works to be undertaken by the Proponent
- Scale of future development (2 storey, domestic scale)
- Landscaped area controls embodied in the draft Urban Design Guidelines which it is anticipated will ultimately be adopted by Council as a DCP to guide ongoing development of the site.

5.2.4 Amenity & Scale of Development

One of the issues raised in the public submissions has been that by virtue of its size (scale), the proposed development is out of character with low density development in the area and as a consequence will erode the level of amenity currently enjoyed in this locality.

The majority of the site was identified for Urban Expansion in 1987, when detailed site investigations were initiated by Council to determine the environmental capacity of the land to accommodate future urban development. Council subsequently prepared and adopted DCP 160 – Rosedale Expansion Area which acknowledged the development potential of the land and identified a minimum average lot size of 1,200sqm.

Further detailed investigations undertaken by the Independent Panel into Sensitive Urban Lands, which was commissioned by the Minister for Planning in 2006 and which informed the South Coast Regional Strategy (released in December 2006), confirmed that the site is appropriate for urban development and indeed, that it should aim to achieve a higher overall yield than traditionally achieved in adjoining areas to make better use of land resources and utility services.

Council subsequently released the Eurobodalla Settlement Strategy which also stipulates an average minimum allotment size of 1,200sqm.

The site has been the result of further detailed analysis of the physical and environmental constraints inherent to the site which has determined the extent of developable area and has ultimately resulted in an average minimum allotment size that is significantly larger than the recommended minimum, thereby resulting in a lesser density than was originally envisaged for the site.

The prevailing character of the proposed development is residential and on a domestic scale (i.e. no greater than 2 storeys). The detailed development controls to guide future development will be the subject of a separate process with Council – this has been included in the schedule of requirements for future applications as part of the concept approval.

In addition, the concept plan provides for the:

- retention and enhancement of existing vegetation
- implementation of revegetation programs
- implementation of a comprehensive water management plan which will maintain and enhance the quality of water filtering into the Bevan Wetland and the Saltwater Creek catchment
- preservation of areas of ecological and scenic significance.

The proposed development is therefore considered to be appropriate in terms of its scale and density and, in view of the range of environmental features and safeguards to be implemented as part of the redevelopment of the site, is not expected to significantly impact on the amenity of the local area.

5.3 SOCIAL AND COMMUNITY

5.3.1 Range of Housing Types

The Application only seeks Concept Approval for subdivision. It is recommended that future applications be dealt with under Part 4 of the Act, with built form and detailed subdivision plans the subject of separate applications to be submitted to and determined by Eurobodalla Shire Council.

The concept plan provides for a range of lot sizes which will ultimately accommodate a variety of built forms which will translate to varying categories of density and affordability. The lowest density development will occur in the northern part of the site where lot sizes range between 750 and 8,550sqm, gradually increasing in density towards the south - the central portion of the site includes lot sizes ranging between 450sqm and 1,750sqm, whilst the southern part of the site will provide lots between 450sqm and 1,600sqm. Specific sites, primarily in the central and southern areas have been identified on the concept plan as being appropriate for dual occupancy development.

One of the issues raised in the public submission relates to a perceived deficiency in the proposal to provide for low cost housing. As indicated above, the proposal does not seek approval for built form. Notwithstanding, the range of lot sizes is considered to be sufficiently varied to provide opportunity for the future development of lower cost accommodation. The draft Urban Design Guidelines indicates that a portion in the southern area of the site will be allocated for dual occupancy lots.

Further, the Eurobodalla Settlement Strategy (2006) (the Strategy) recognises housing affordability in the shire to be an issue. The Strategy stipulates that ways in which affordability issue can be addressed through planning including: increasing housing density, providing housing choice, and integration through design. The strategy supports the facilitation of a range of housing styles, types and sizes across the shire to cater for an ageing population, declining occupancy rates and all socio-economic profiles.

The Strategy outlines actions for Council to address affordable housing issue in Eurobodalla. Action SP41 of the Strategy recommends including principles in a development control plan to encourage the development of modular housing and other building design options that can be adapted to various stages of life. The schedule of requirements for future applications (Tag A) includes a requirement for site specific development standards/guidelines to be prepared by the proponent relating to items, such as built form. The requirement also stipulates that the development standards incorporate principles which encourage building design options that can be adapted to various stages of life and consideration of lower cost accommodation.

5.3.2 Social and Economic Context

An analysis of 2001 Census data for Eurobodalla reveals that 35% of new residents to the LGA were aged between 50 and 69 in 2001 and that this age group comprises 29% of the local resident population. These figures reflect a growing retirement community being attracted to this area.

The imminent retirement of the baby boomer generation (the first baby boomer will turn 65 in July 2011) could be expected to have an impact on the demand for housing in locations such as Rosedale.

Families are also attracted to the area because of the high level of amenity it provides.

Rosedale has access to a range of services and facilities – district and regional shopping facilities, educational establishments, health services and aged care facilities.

In addition, Council has confirmed that Section 94 contributions will be levied on the future proposed development which will provide / augment community infrastructure and facilities to satisfy the additional demand generated by residents of the proposed development.

On this basis it is considered that the economic and social context within which this proposal occurs is conducive to a residential development of this scale and nature.

5.3.3 Economic Analysis

One of the issues raised in the public submissions was that the application does not provide any justification in the form of an economic analysis for the inclusion of retail / commercial facilities within the development.

In this regard it should be noted that:

- the Urban Expansion zoning provides for a range of land uses including retail and commercial floor space;
- Council's DCP 160 – Rosedale Expansion Area provides for up to 1,500sqm of commercial / retail floor space (the proposed Concept Plan contemplates a maximum of about 1,100sqm); and
- any such development will be the subject of a future application which will be considered and determined by Council, and this level of detail would be more appropriately be provided at that time.

5.4 ENVIRONMENTAL PROTECTION

5.4.1 Threatened Flora and Fauna

A total of six (6) threatened fauna species listed under the *Threatened Species Conservation* (TSC) Act (1995), have been recorded on the site – Powerful Owl, Glossy Black Cockatoo, Eastern Freetail Bat, Greater Broad-nosed Bat, Eastern Bentwing Bat and Yellow-bellied Glider.

Three (3) endangered ecological communities were also recorded on the site – Swamp Oak Floodplain Forest, River Flat Eucalypt Forest on Coastal Floodplains; and Freshwater Wetlands on Coastal Floodplains. The Proponent has satisfactorily demonstrated that the proposed development will result in a net increase in the quantum of all three EEC's (refer Section 3.6).

The EA includes a suite of specialist reports which address various issues pertaining to flora and fauna. The Flora and Fauna Assessment provides a comprehensive evaluation of threatened species and EEC's recorded on the site or considered likely to occur on the site. In summary, the Concept Plan makes provision for:

- protection of the Bevia Wetland from direct and indirect impacts from upslope stormwater and other possible environmental impacts using a comprehensive Water Management Strategy which employs Water Sensitive Urban Design;
- riparian restoration;
- weed and erosion control;
- installation of protective fencing and signage;
- prohibition of domestic animals with the exception of companion animals;
- conservation of vegetation on The Knoll and its incorporation in a major corridor of open space, running east-west across the site;
- connectivity with adjacent areas of vegetation and habitat resources, including between the Wetland and the Mogo State Forest through the creation of vegetation corridors;
- a total of 168 hollow bearing trees have been identified on the site, 80% of which are proposed to be retained largely because they fall within the riparian zones or the open space / ecological corridors that are proposed to be implemented. The remaining 20% (33 trees) are located within the developable area and may need to be removed to accommodate development, however this will not be known until such time as building envelopes are finalised. In order to ensure that this aspect is fully addressed as part of detailed design, the schedule of requirements for future applications includes a condition which requires future applications to address;
- three (3) Ecological Endangered Communities (EECs) (comprising Swamp Oak Floodplain Forest, Riverflat Eucalypt Forest and Freshwater Wetlands) have been identified on the site, all of which are located primarily in the southern part of the site, adjacent to the Bevia Wetland. These communities will be maintained and / or expanded as a result of the proposed protection and restoration works.

The impacts on the EECs are summarised in the following table:

EEC	Existing Area	Impact / Mitigation Works	New Area
Swamp Oak Floodplain Forest	11.23 ha	1.78ha removed / modified 5.04ha to be revegetated in cleared lands Net improvement 3.2ha	14.49ha
Riverflat	2.05ha	0.36ha removed / modified	2.43ha

Eucalypt Forest	(fragmented stands)	0.74ha to be revegetated in cleared lands and improved from its currently disturbed state Net improvement 0.38ha	
Freshwater Wetlands	5.94ha within Wetland	Retained in its entirety	5.94ha
TOTAL	19.22ha		22.76ha

In response to the findings of the Flora and Fauna Assessment, the Proponent has prepared a Conservation and Land Use Management Plan (CLUMP), which defines the land use capabilities of the site and an Ecological Site Management Plan which details the methodologies for managing the ecological values of the site. The recommendations contained within these documents are called up in the Proponent's Statement of Commitments, which will form part of the concept approval.

The ecological information submitted as part of this application (Flora and Fauna Assessment, the Ecological Assessment, the CLUMP and the Ecological Site Management Plan) has been reviewed by both DECC and the Department and it is concluded that the proposal, including the amendments incorporated in the Preferred Project Report, will achieve a maintained or improved result for threatened flora, EEC's and a number of threatened fauna species which are known to occur or with the potential to occur on the site.

5.4.2 Ecological Corridors

The concept plan (as originally proposed) provided 2 ecological corridors, as depicted on **Figure 13**.

Ecological corridor 1 will form the northern most, east-west corridor, linking vegetation within the Mogo State Forest adjoining the western boundary with vegetation adjoining the eastern boundary of the site.

Ecological corridor 2 will form a southern east-west corridor which incorporates the parkland area known as the "The Knoll" (refer to **Figure 13**). This corridor will link vegetation within the Mogo State Forest adjoining the sites western boundary with pockets of vegetation adjoining the eastern boundary of the site. In addition, the revegetation and regeneration of this corridor will provide connectivity between the retained remnants, Banksia Scrub (in the area of 'The Knoll') and Spotted Gum/Ironbark Forest and Blackbutt Woodland on the eastern boundary of the site.

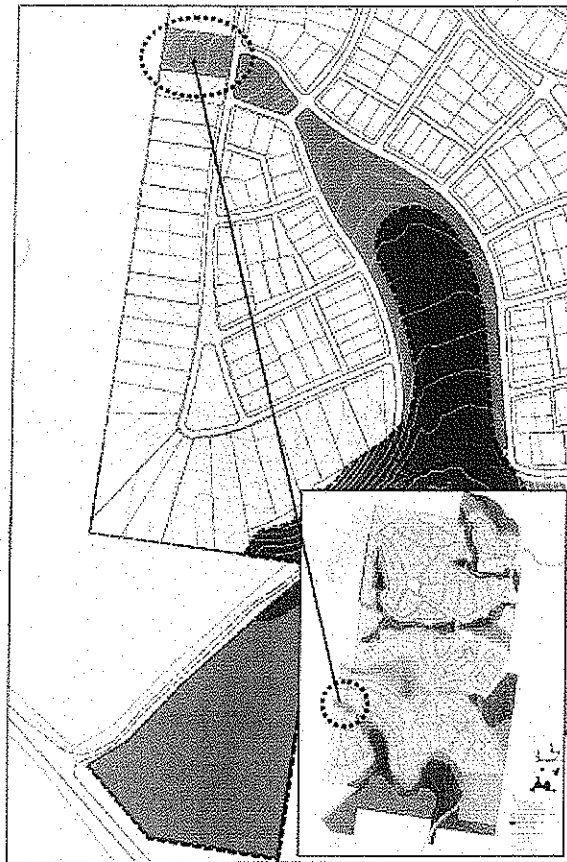
Following the consultation with relevant agencies, the Department and DECC raised concern with the need to provide of an additional ecological corridor in the south-western portion of the site, between the Bevia Wetland and Mogo State Forest.

It was considered that this corridor should be a fundamental feature of the ecological design of this site. The corridor connects areas of high ecological function such as the wetland and the large biodiversity refuge of the forest. It would allow for the adequate movement of species between these areas for a range of uses including access to drought refuge, breeding and seasonal access to food sources. The truncated riparian reserves proposed, whilst adequate for water quality maintenance, do not perform such functions.

The connection to the Bevia wetland is highly desirable for biodiversity sustainability and attainable with some redesign of the subdivision layout. There is capacity to establish a link between the wetland, the state forest and the ridge corridor.

The Department advised the proponent of this issue in a 'Summary of Issues' letter (dated 23 June 2008).

The Proponent subsequently amended the concept plan (as part of the Preferred Project Report) to include the creation of a 40 metre wide (minimum) extension to the south-western habitat corridor which connect the Bevia Wetland to the Mogo State Forest, as depicted in **Figure 12**. The proposed amendments are considered to be adequate in addressing this issue.



Plan suggesting location of new habitat corridor in south-western portion of the site

Figure 12 Additional ecological corridor added to the site

(Source: Preferred Project Report – Bevan Road Concept Plan, dated July 2008)

5.5 RIPARIAN MANAGEMENT

5.5.1 Watercourses

The five (5) watercourses (see **Figure 13** below) within the site have been allocated a Category 3 classification, as mapped by former Department of Natural Resources (now Department of Water and Energy) as part of the *Eurobodalla Riparian Corridor Objective Study* (RCOS). As such, a general riparian buffer zone of 10 metres was required either side of these channels, measured from 'top of bank'. The Department of Water Energy has agreed to reductions at pinch points on the basis that appropriate landscaping is provided to an equivalent of 10 metres.

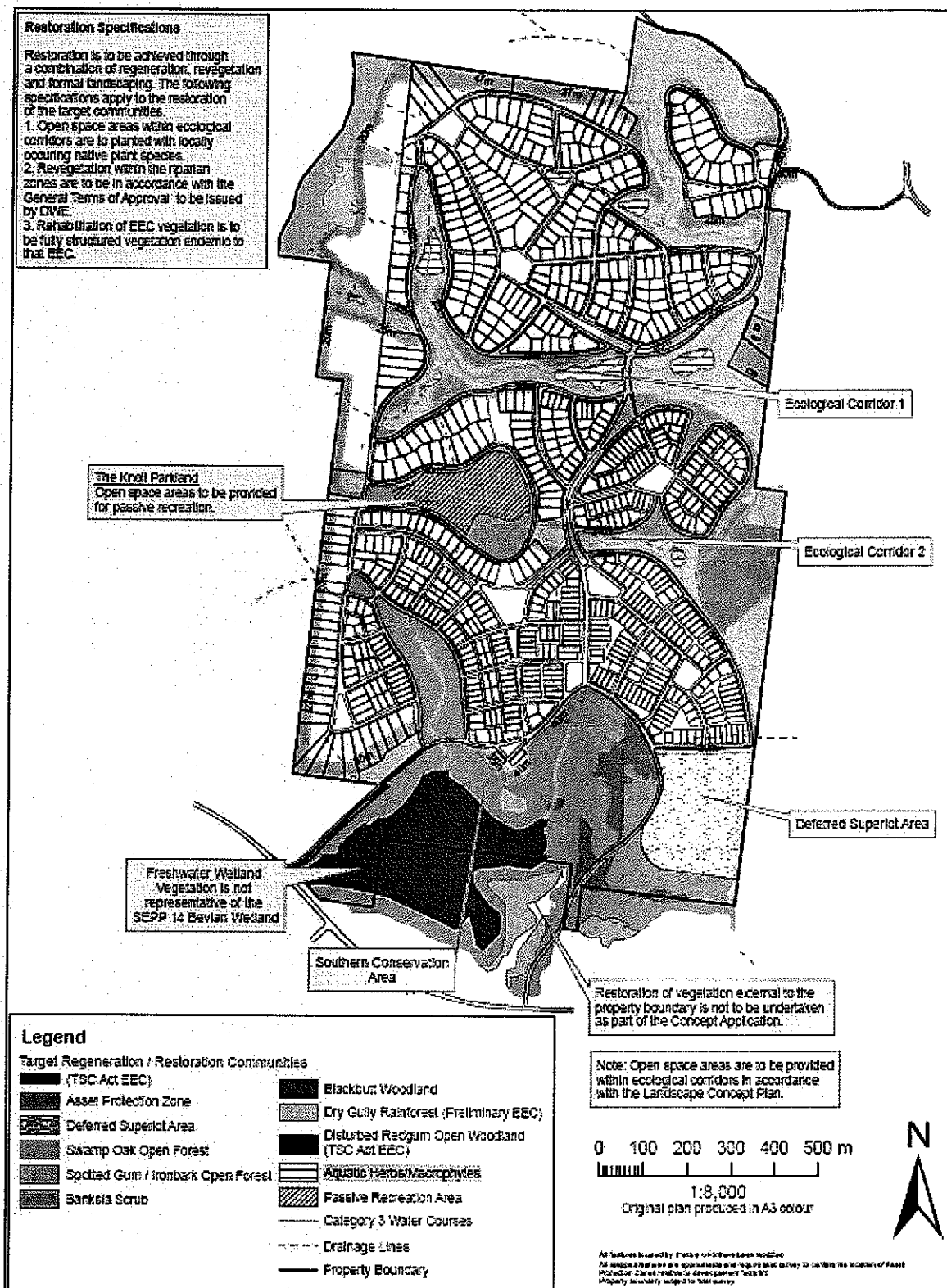


Figure 13 Plan illustrating Ecological Corridors, riparian zones, watercourses and EECs

(Source: Preferred Project Report – Bevan Road Concept Plan, dated July 2008)

All drainage lines and watercourses will be regenerated or revegetated to re-establish functional riparian corridors. Four (4) watercourse crossings are proposed. The application has been reviewed by the Department of Primary Industry (DPI) and no objection to the crossings has been raised, subject to the design and construction of the watercourse crossings being undertaken in accordance with the DPI's Policy and Guidelines (this has been addressed in the schedule of requirements for future applications).

The Proponent has committed to commencing revegetation works prior to development of the area to provide a safeguard to water quality within Saltwater Creek and Bevia Wetland. A Works Program has been included in the Ecological Site Management Plan which details the range of works to be undertaken in the pre-construction, construction and post-construction phases of the project.

5.5.2 Saltwater Creek

Water Sensitive Urban Design (WSUD) measures will be implemented across the site, incorporating best practice stormwater management measures. These design principles will maintain the water flows and improve the water quality entering Saltwater Creek.

WSUD measures include:

- gross pollutant traps
- bio-retention strips and grass swales along roadsides
- rainwater tanks provided to all future dwellings; and
- various other water detention measures.

In addition, a monitoring program is proposed to measure the performance of the water quality measures.

5.5.3 Bevia Wetland

The extent of the Wetland has been ground-truthed and the high water mark of the wetland was surveyed. A minimum 50 metre wide buffer is proposed from the high water mark. In some areas the buffer extends to 200 metres, encompassing the southernmost conservation zone where restoration works are proposed. In addition to the wetland buffer, retention basins and asset protection zones are proposed which provide additional buffer areas to the wetland.

Stormwater treatment measures will be installed in the southern (Bevia Wetland) catchment in a similar manner to those detailed above for the northern catchment that drains to Saltwater Creek. The implementation of these measures will improve water quality over existing conditions and maintain water flows to the Wetland.

Two dry retention ponds will be installed within asset protection zones to control peak stormwater discharge and provide further settlement for suspended sediments.

The Proponent will undertake regeneration works in the EEC's surrounding the Wetland (Swamp Oak Floodplain Forest and River Flat Eucalypt Forest) to enhance these areas and ensure that they continue to function as a natural filtration zone to the Wetland.

5.5.4 Summary

The Department of Environment and Climate Change has reviewed the extent and nature of works proposed as part of the ecological package (Flora and Fauna Assessment, Ecological Assessment, CLUMP and the Ecological Site Management Plan as well as the amendments to the proposal detailed in the Preferred Project Report) and has confirmed that it is satisfied with the information, design plans and recommendations contained therein.

The Proponent worked closely with officers of the Department of Water and Energy throughout the design process. In reviewing the Environmental Assessment, DWE has confirmed that the riparian zones / buffers to be implemented across the site are satisfactory, subject to the inclusion of certain requirements for any future development applications. These have been incorporated in the approval documentation.

5.6 WATER CYCLE MANAGEMENT

The Ecological Assessment Report which forms part of the EA documentation fully addresses each of the following policies, however the following paragraphs summarise the relevant initiatives to be implemented as part of the proposed development.

5.6.1 NSW Coastal Policy

The Coastal Policy broadly conforms to ESD principles and recognises the importance of controlling public access to fragile coastal environments. Key points of relevance in this instance are:

- conservation of biological diversity and ecological integrity
- protection of the health, diversity and productivity of the environment
- incorporation of environmental costs within the development
- utilisation of the precautionary principle in setting guidelines on ecosystem health and function.

Two areas have been identified as key aquatic environments with conservation value – Bevia Wetland and a number of Category 3 watercourses. External to the site, the linking Saltwater Creek Intermittently Closing and Open Lake and Lagoon (ICOLL) and Batemans Bay Marine Park have also been considered in the preparation of the Water Management Strategy for the site.

Protection of the Bevia Wetland and watercourses will be managed through the implementation of best practice stormwater management measures including gross pollutant traps, grass swales and detention basin which will control overland flow velocities and sediment transport.

Drainage lines will be restored through revegetation works and the lands surrounding Bevia Wetland will also provide an important restoration zone (EEC's). The implementation of WSUD measures will ensure that water leaving the site and entering the ICOLL and eventually the Marine Park will also be managed.

The reduction, re-use and recycling of stormwater will be encouraged through the inclusion of rainwater tanks to each dwelling.

In addition, the proponent has undertaken to monitor and report on water quality to assess, manage and modify impacts caused by the change in land use.

5.6.2 Wetland Management Policy

The salient points in relation to the policy include:

- Bevia Wetland experiences wet and dry cycles in response to rainfall events;
- the Wetland will be rehabilitated to allow for near-natural aquatic processes to occur. Part of the rehabilitation process will include selective removal of non-native and non-local pest flora and fauna species. Vegetated buffer zones will surround drainage lines and tributary streams, forming part of the open space network across the site.

5.6.3 Estuary Management Policy

The Estuary Management Program was established in 1992 to restore and protect estuaries along the NSW coast. The program focuses on improving or maintaining the overall health and functionality of an estuary and maintaining the integrity of the whole system.

In summary, the implementation of the WSUD principles throughout the development of the site (as set out in the Water Management Strategy) will prevent degradation of the aquatic ecological communities within the site and those linked externally (Saltwater Creek ICOLL and Batemans Bay Marine Park).

5.6.4 NSW State Rivers and Estuary Policy

The intention of the Policy is to:

- protect and manage ecosystem processes and associated values
- engender commitment to resource sustainability, consciously balanced against other social and economic values
- ensure rivers and estuaries continue to provide a quality environment, supporting a full range of community needs and amenities.

The Concept Plan incorporates ESD principles in the design, which will be implemented throughout the construction and maintenance phases of the development. Remnant areas of native forest and wetland will be retained and incorporated into green areas that are integral to the development. Environmentally degraded areas will be rehabilitated. Improvements in biodiversity will also be achieved through the revegetation of certain areas, and the prevention of future degradation through the management of urban runoff.

5.6.5 Water Quality

The water sensitive urban design (WSUD) measures proposed to be employed as part of the development include the installation of water tanks to all future dwellings, grass swales within road reserves, gross pollutant traps, retention basins and the revegetation of riparian zones. These measures will protect the important water bodies within the site (Bevia Wetland) as well as protecting the important aquatic habitats off site such as Saltwater Creek and Batemans Bay Marine Park.

5.6.6 Sediment and Erosion Management

The primary concern in this regard is the preservation of the natural function of the Bevia Wetland and groundwater dependent ecosystems.

A series of Water Sensitive Urban Design elements will be implemented as part of the Water Management Strategy for the site. These elements include a combination of rainwater retention (re-use) and infiltration in bioretention systems and are designed to mimic existing hydrology in order to maintain the quantum of existing surface runoff and the balance between surface and shallow through-flow (groundwater) flows.

5.7 TRAFFIC AND ACCESS

A Traffic Impact Assessment was prepared as part of the EA documentation and examined the existing traffic conditions as well as addressing the likely impact of additional traffic volumes generated by the proposed development.

The analysis concludes that the proposed development will not significantly affect the operation of the surrounding road network, provided appropriately controlled intersections are introduced at the northern and southern access roads with George Bass Drive.

Council has examined the proposal in terms of traffic impact and has raised no concern with the volume of traffic likely to be generated by future development and the ability of the local road network to accommodate it. Council has however, raised some concern about the safety aspects of the proposed northern access, specifically the intersection with George Bass Drive. This aspect is discussed in greater detail in Section 5.7.2 below.

5.7.1 Southern Access Road

As indicated previously in this report, Council expressed environmental and traffic safety concerns about the proposed use of the existing Bevia Road alignment (western side of the Wetland) as the primary southern access to the site, in particular that:

- upgrading of the road would encroach into the edge of the wetland and wetland trees;
- the proposed width of the road (6.5m wide carriageway) is not adequate for a major distributor road into the proposed development; there is also a side cut that would be exposed on the western side of the Bevia Road which may require additional road reserve to accommodate the necessary cut and catch drains;
- the junction of Bevia Road with George Bass Drive is poorly placed in terms of separation to the junction into Barlings Beach estate raising significant safety concerns; and
- the construction of the intersection would also require major widening of George Bass Drive upstream and downstream of the existing culvert under George Bass Drive. Inevitably this widening would encroach on the wetland.

Council, in consultation with the proponent and the Department, subsequently identified a more appropriate location for the southern access road between the eastern edge of the Wetland and the Tomakin Sewage Treatment Plant using land located within an existing unformed Council road reserve and Crown Road Reserve. This solution also necessitated use of part of the STP site.

Accordingly, Council resolved at its meeting of 24 June 2008 to dedicate a 20 metre wide strip of the STP site (Lot 5 in DP 264630) for public road, subject to:

- (a) all costs associated with the dedication including Council's reasonable legal costs being borne by the proponents;

- (b) the proponents entering into a planning agreement to expend an amount equivalent to the market value of the land proposed to be dedicated as public road on local public infrastructure;
- (c) market value of the land being determined by a registered valuer;
- (d) in addition to (b) the proponent be responsible for all costs associated with the provision of suitable vegetative screening of the treatment plant along the proposed road if required and any necessary relocation of existing water and sewer infrastructure within the proposed road.

The Proponent has incorporated the terms of Council's resolution into the Statement of Commitments.

5.7.2 Northern Access Road

The Concept Plan seeks approval for the primary northern access between the site and George Bass Drive at the existing intersection generally following the alignment of the existing Bevia Road and has entered into an agreement with the adjoining land owner to use and upgrade this section of road as part of the proposed development. Refer to **Figure 14**.

Council has expressed concern about the ability to achieve safe and efficient design at this intersection and is of the opinion that any access at this point should be restricted to a left-in, left-out arrangement. Furthermore Council has indicated that the opportunity to provide a future road connection between the development and the adjoining Rosedale Farm site (ultimately connecting to George Bass Drive at its intersection with Rosedale Parade) should be pursued (depicted on **Figure 14**).

The Proponent has submitted preliminary intersection design drawings which demonstrate the functionality of the intersection. However, the detailed design of the northern intersection at Bevia Road / George Bass Drive will be the subject of a future application to Council at which time it can be determined whether the intersection can accommodate the full range of vehicle movements or whether it will be restricted to left-in / left out.

In relation to the possibility of providing a connection to a future road through the adjoining Rosedale Farm site to link up with a new intersection at George Bass Drive / Rosedale Parade the Proponent has confirmed as part of the Statement of Commitments that should the Rosedale parade extension be constructed in the future, that it would undertake to construct a connection within its property boundary, provided it is demonstrated to be both ecologically and physically possible.

Whilst a connection in this location may be desirable in terms of connectivity and integration of the new development with existing development in the area, the environmental impacts have not been assessed, nor can Council or the adjoining land owner provide any degree of certainty that this connection is achievable. As such it is appropriate that this matter is the subject of a future application to Council.

Based on the information submitted by the Proponent, the Department is satisfied that adequate vehicular access to / from the site can be achieved whether or not the Rosedale Parade connection is ultimately achieved.

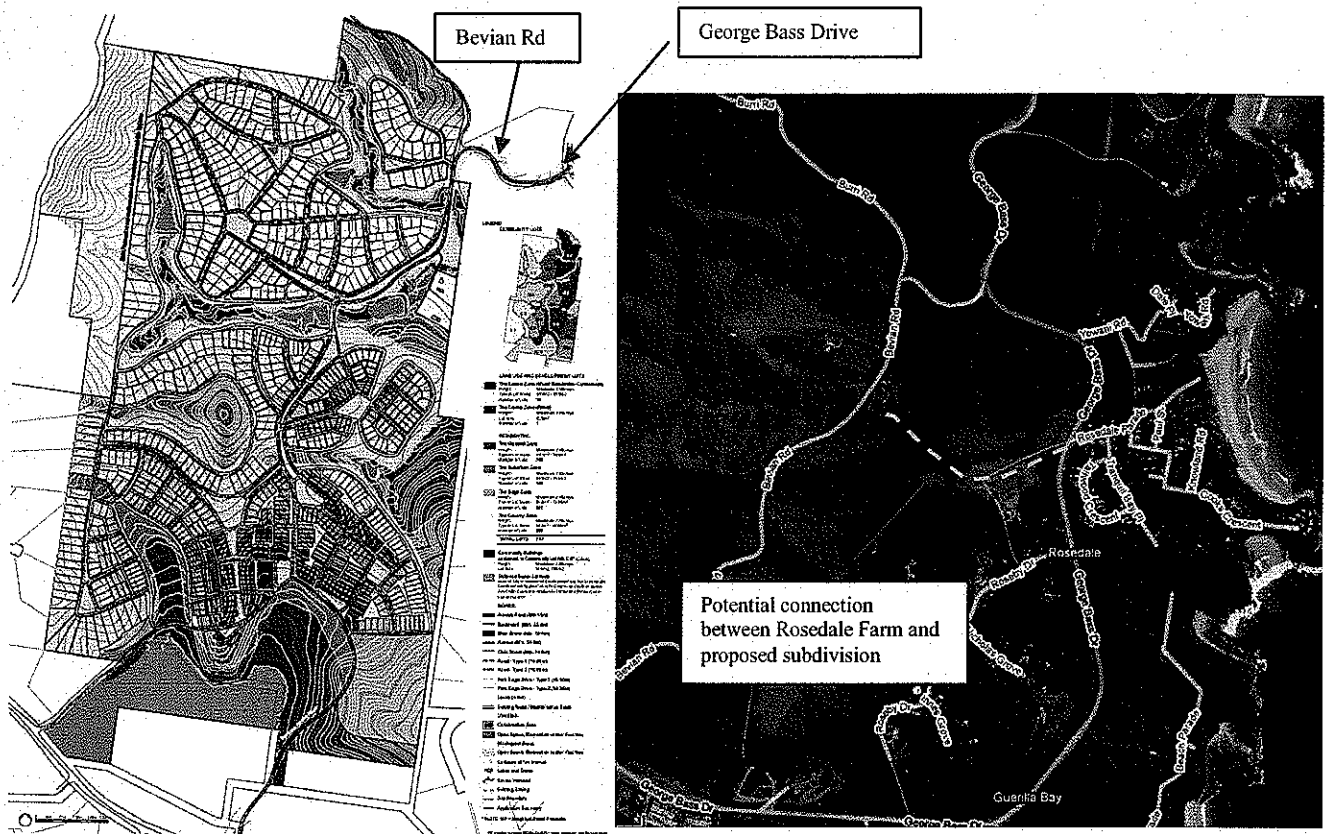


Figure 14 Plan depicting location of northern road access to George Bass Drive and potential connection between Rosedale Farm and proposed subdivision

(Source: Preferred Project Report – Bevia Road Concept Plan, dated July 2008 and <http://maps.google.com> 2008)

5.8 BUSHFIRE

A Bushfire Protection Assessment Report accompanies the EA, which provides an assessment of the protection measured required for the development to guard against the potential impact of bushfires and includes recommendations in relation to fuel management, construction standards / building protection, access, bushfire education and land ownership responsibility.

A Fuel Management Plan has also been prepared to accompany the EA which identifies strategies to minimise fuel loads and the impact of hazard reduction works in environmentally sensitive areas.

The application was referred to the Rural Fire Service for review and comment. In correspondence dated 10 April 2008, it identified a range of requirements for future applications, which have been noted in the recommendations as well as raising two specific issues as follows:

1. *At the Issue of subdivision certificate and in perpetuity, asset protection zones (APZ) shall be provided as detailed within the Bushfire Protection Assessment (ref:6052B2), including Schedule 1, dated September 2007, as prepared by Conacher Travers. The only modification to the above is that the proposed 34 metre APZ to the north of Zone 1 (as shown on Schedule1) shall be increased to provide an APZ of 41 m in this location.*
2. *The Asset Protection Zones (APZs) required as part of the development will encompass land that will be located within a riparian corridor/area. Ecological management of the riparian area may conflict with that required for the APZs. In this regard the applicant will need to Liaise with the NSW Department of Natural Resources (now known as the Department of Water and Energy, DWE) to identify their management requirements (to ensure they) do not conflict with those required for the APZs by the NSW Rural Fire Service.*

The Proponent has amended the Concept Plan (in respect of Point 1) above and has confirmed (in an undated letter prepared by Travers Environmental and received by the Department via email on 5 August 2008) that there is no overlap between the designed APZs and the riparian corridors agreed with officers of DWE. The amended Concept Plan was referred to the RFS for review and comment on 6 August 2008. Confirmation that RFS's concerns have been adequately addressed was received via email on 7 August 2009.

5.9 FLOODING

A Flood Impact Assessment accompanies the EA and has regard to the requirements of the Floodplain Development Manual (2005). The Assessment concludes that even for a worst case flood scenario the development would:

- not be adversely affected by the flooding as all proposed development would be outside the 100 year flood event;
- not adversely impact flooding for other development upstream of the site; and
- not adversely impact flooding downstream of the site as peak flows would be maintained at or below existing rates.

The stormwater drainage system will be designed on a minor / major system approach as recommended by the Floodplain Development Manual – minor storms would be conveyed by a pipe drainage system and the road system would provide a major flow path catering for runoff in excess of the pipe capacity. The road and pipe system would be designed to ensure safe flow conditions in the streets for both pedestrians and vehicles.

5.10 CLIMATE CHANGE

The site does not have direct frontage to the coast or coastal waterways, being approximately 500 metres from Barlings Beach.

The Flood Assessment Report prepared in accordance with the DECC Guideline and submitted as part of the EA documentation indicates that the northern part of the site is sufficiently elevated and distant from the coast to ensure that any influence from potential sea level rise would be dissipated well before the eastern boundary of the site.

In relation to the Bevia Wetland the report indicates that the flood levels adopted for the wetland are controlled by the level of George Bass Drive at RL 4.2m AHD. Adopting the worst case scenario (0.91m by 2100) which is considered to be unlikely given the volume of flood storage available in lower lying areas downstream of the site, would bring the flood level of the Wetland up to RL 5.11m AHD. The report indicates that future development around the Wetland will achieve a minimum ground level of approximately RL 7m AHD (which translates to a total freeboard in the order of 1.89m).

Accordingly, the site is not at risk of inundation or increased coastline hazards within this timeframe.

Climate change and associated predicted temperature rises will lead to an increase in the average number of days when the Forest Fire Danger Index (FFDI) rating is very high to extreme. The combined frequency of days with very high and extreme FFDI ratings is likely to increase from 4-25% by 2020 and 15-70% by 2050, with the increase in fire weather risk being greater away from the coast.

These estimates are from a CSIRO study of climate change impacts on fire weather in south-east Australia carried out in 2005. The study also highlights a number of uncertainties when assessing the impacts of fire weather risk associated with climate change, such as:

- Changes in rainfall thresholds;
- Changes in ignition and fuel loads; and,
- Changes in El Nino-Southern Oscillation events under climate change.

There is an increased risk of fire weather associated with climate change, as indicated by the FFDI predictions mentioned, however at this stage the regional impacts cannot be as easily quantified with any certainty. The coastal location would appear to be an advantage, with a lesser risk than inland areas. Given the uncertainties, the application of current requirements embodied in Planning for Bushfire Protection, 2006 is a logical response and the requirements from the Rural Fire Service and those within the Conacher Travers Bushfire Protection Assessment should provide an adequate level of protection within the 2050 horizon. The recommended

modifications to the Concept Plan at **Tag A** contain a number of requirements from the Rural Fire Service relating to the provision of Asset Protection Zones and requirements regarding construction standards in different parts of the site depending on fire hazard and risk.

5.11 HERITAGE

5.11.1 European Heritage

There are no heritage items on the site listed in the Eurobodalla Rural LEP 1987. The Proponent has elected to retain the former Rosedale Cheese Factory (located in the north eastern part of the site) which was purpose built in the 1930's. It is envisaged that the building will be adaptively reused for residential purposes.

A Cultural Heritage Assessment accompanies the EA which examines the impact of the Concept proposal on items of heritage and archaeological significance. The assessment involved a surface archaeological survey, followed by a program of archaeological subsurface testing and also included consultation with the local Aboriginal communities and satisfies the requirements contained in DECC's *Draft Guideline for Aboriginal Cultural Heritage Impact Assessment and Community Consultation* (2005).

5.11.2 Aboriginal Heritage

Two (2) Aboriginal archaeological sites were identified in the course of field survey, together with eight (8) areas of archaeological potential (HS 1 – 8). The archaeological sites (RUR1 and RUR2) have low and moderate potential respectively for undisturbed archaeological deposit. All the HS areas are located along alluvial flats and basal slopes adjacent to tributary streamlines and have been assessed to be of low to moderate significance.

The Statement of Commitments confirms that the management and mitigation strategies outlined in the Cultural Heritage Assessment will be implemented throughout all phases of the project. To supplement the Commitments, the Department has included requirements for future applications for the preparation of an *Aboriginal Heritage Management Plan*. The Department considers these commitments and requirements for future applications to be adequate.

The Department of Environment and Climate Change reviewed the documentation submitted as part of the Concept Application in relation to Aboriginal Cultural Heritage and confirmed that it was satisfied with the reports and recommendations contained therein and had no further comments on the application.

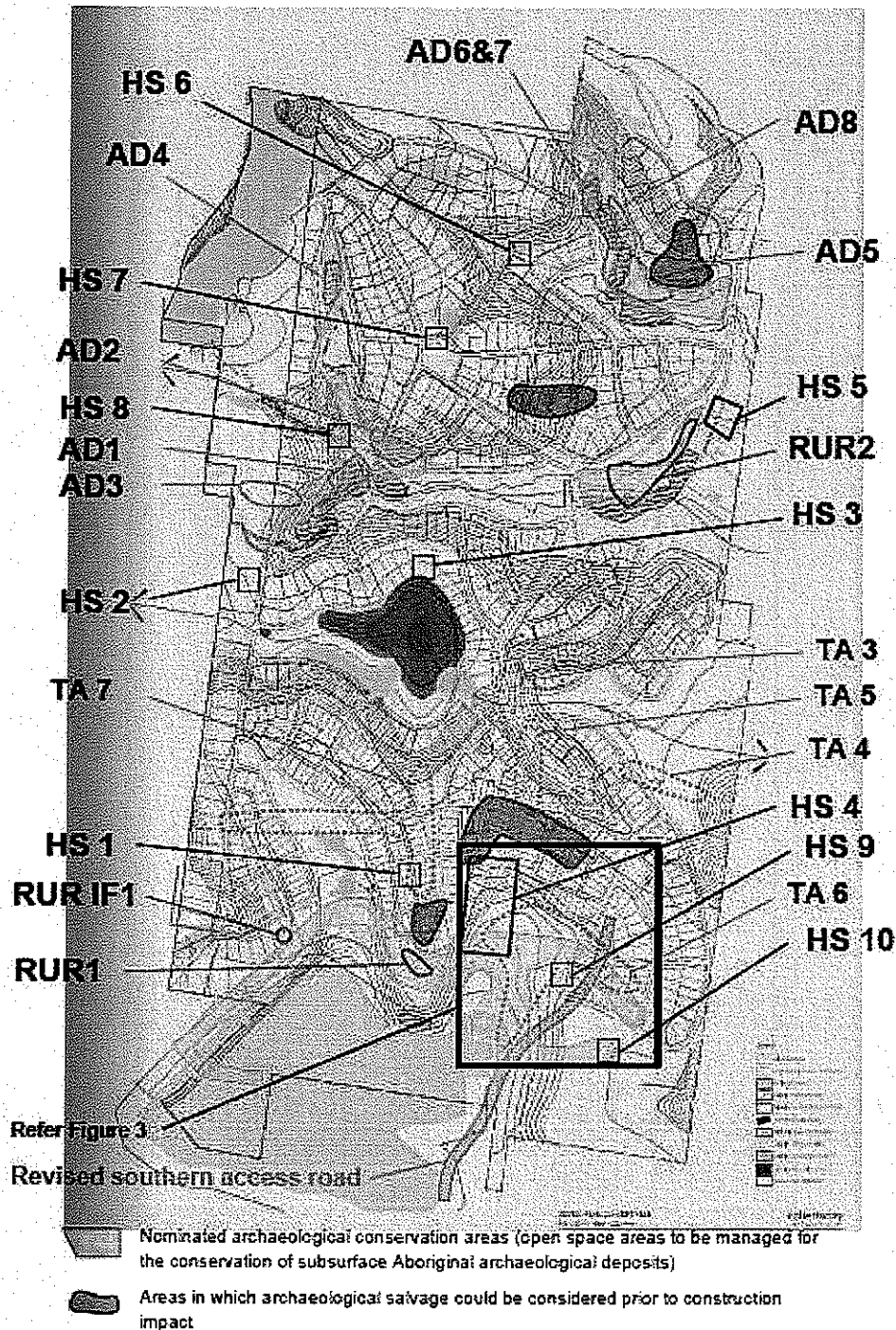


Figure 15 Aboriginal Heritage sites

(Source: Environmental Assessment Report Bevia Road Concept Plan)

5.11.3 Relocation of the Southern Access Road

The Proponent has submitted an archaeological assessment of the possible impacts to the known and potential archaeological resource within the proposed access road alignment. Surface testing was undertaken and two artefacts were located within the vicinity of the road reserve, including an isolated find on an animal track and a ground exposure revealing two artefacts. Both findings were considered to be of low potential. This was because of their low representative and education value and the common nature of the artefact types, material and characteristics.

Due to the longevity of the application and the time required to undertake detailed subsurface testing, the Department sought DECC's agreement to the inclusion in the Schedule of Requirements for Future Applications a requirement that future applications which seek approval for the southern entry access road from George Bass Drive should include evidence that preliminary Aboriginal archaeological testing (which may include surface and subsurface testing) has been undertaken to the satisfaction of the Department of Environment and Climate Change and the Department of Planning. The proponent has also included a Statement of Commitment which commits to additional subsurface testing in future development applications which include the southern entry access road.

DECC has confirmed in advice dated 6 August 2008 that this arrangement is satisfactory.

5.12 LOCATION OF FUTURE RESIDENTIAL DEVELOPMENT IN THE VICINITY OF TOMAKIN SEWAGE TREATMENT PLANT

The Tomakin Sewage Treatment Plant (STP) is located to the south of the subject site. A suitable buffer between the proposed residential allotments and the STP is required to ensure future residents are not impacted from odour, noise or visual impacts from the STP. During the consultation process, Council raised concern about the proximity of the proposed development to the STP and the buffer distance.

Council has advised that it requires the provision of a 400 metre buffer between the Sewerage Treatment Plant and any proposed residential allotments. Council confirmed that further expansion / augmentation works within the plant will occur in the future to meet the demand generated by ongoing development in the area. Accordingly, the current fenceline around the extent of the existing plant (from which it is understood the Proponent has taken as its starting point for the original buffer) does not reflect its ultimate size nor the boundary from which the buffer is to be measured. As such, the 400 metre radial buffer should be measured from the extremity of the augmented STP.

For residential development to occur within the 400 metre buffer, there is a need to demonstrate that the location of any lot satisfies the relevant odour and noise management criteria for residential dwellings.

As part of the Preferred Project Report, the Proponent has amended the Concept Plan by deleting any residential lots within the 400m buffer from the STP (as measured from the extremity of the STP augmented works) and has identified an area of land in the south eastern corner of the site as a "Deferred Area" (see Figure 7).

No development in concept is inferred or approved in the Deferred Area. This part of the site will be subject to a separate application and any future application in this area must demonstrate to Council's satisfaction, that relevant odour and noise management criteria for future development can be met. A suitable condition has been incorporated in the schedule of requirements for future applications to confirm that the Deferred Area will be subject to a future development application.

5.13 SOIL AND CONTAMINATION

5.13.1 Contamination

The EA includes a preliminary contamination assessment involving a review of historical use of the land, a groundwater bore search, review of council records and historical aerial photographs, a search of regulatory Notices or Orders and a site inspection.

Based on the preliminary assessment the consultants concluded that the overall potential for contamination is low.

Notwithstanding the above, a total of 37 sites were identified as Potential Areas of Environmental Concern, 10 of which were deemed to be Areas of Environmental Concern. The consultants have indicated that these isolated areas of the site can be made suitable for residential development following remediation and validation of these areas.

In light of the above, it is recommended that any approval issued in respect of this application includes a schedule of requirements for additional investigations / further detailed information / matters to be addressed as part of any subsequent project or development applications associated with the Concept Plan. Any future applications which are proposed on land identified as a Potential Area of Environmental Concern must be accompanied by a Detailed Investigation report which may in turn generate the need for the preparation of a

Remediation Action Plan and consent to be obtained for remediation works and the issue of a Validation Statement.

5.13.2 Acid Sulphate Soils

Council's Acid Sulphate Soils Map notes that the majority of the site has no known occurrence of Acid Sulphate Soils, with the exception of the south-western part of the site having been identified as having low potential.

The Proponent commissioned field investigations to determine the existence of Acid Sulphate Soils on the site with particular focus on the south-western part of the site, in particular the areas which may be disturbed (future roads, stormwater detention etc) in closest proximity to the wetlands. The findings of the core hole testing regime confirmed that there was no evidence of potential sulphate oxidation.

5.14 STATEMENT OF COMMITMENTS

A copy of the Proponent's Statement of Commitments, which forms part of the Preferred Project Report is included at Appendix F. In summary, it confirms that the following environmental management and mitigation measures will be implemented as part of any future development on the site, consistent with the Concept Plan approval:

- hours of operation (for construction)
- site security
- appointment of an Ecologist for the life of the project
- preparation and implementation of induction manuals, training and contract management
- availability of site construction plans
- undertaking to obtain all relevant approvals and licenses
- bushfire prevention and hazard reduction works
- protection of existing vegetation identified to be retained
- tree protection
- fencing
- weed control
- pest species management
- threatened species management
- bush regeneration works
- habitat management
- landscape treatment (concept)
- controls on the keeping of domestic pets
- erosion and sediment controls
- groundwater management
- stormwater and nutrient control
- management of cut and fill
- monitoring, auditing and reporting
- protection of cultural heritage
- protection of EEC's and the habitats of threatened hollow tree – dependant fauna
- confirmation of the intention to enter into a Voluntary Planning Agreement with Council in relation to the preferred location of the southern access road

5.15 INFRASTRUCTURE PROVISION

5.15.1 Infrastructure Capacity

A Services and Infrastructure report forms part of the documentation submitted as part of the Environmental Assessment which confirms that:

The site is not connected to sewer at this time however, Council has confirmed that there is sufficient capacity planned at the adjacent sewage treatment plant (STP) to accommodate demand generated by this development. Provision of sewerage reticulation, pumping stations and rising mains to the STP will be the responsibility of the developer;