

## **E5.5 Bayshore Village**

### **E5.5.1 Where this Section Applies**

This section applies to the land defined by a heavy black line on Map E5.2 known as Bayshore Village, and identified as Lot 3 DP1004514, Bayshore Drive, Byron Bay. It is bounded by the Byron Bay Arts and Industry Estate to the south, the West Byron Sewage Treatment Plant to the west, regenerating heathland, shrubland and low woodland to the north, and the Sunrise Beach residential estate to the east.

In the event of any inconsistency between Section E5.5 and other Chapters of this DCP, the provisions of Section E5.5 shall prevail.

### **E5.5.2 Objectives of this Section**

The primary purpose of this Section is to provide standards for the future development of the site. To assist in this regard, the objectives of this Section are to:

1. Promote and implement the principles of ecologically sustainable development identified in aims of Byron LEP 2014, in the planning, development and management of the site;
2. Contribute to the implementation of the Byron Shire Affordable Housing Strategy, the Byron Biodiversity Conservation Strategy, the Byron Shire Cultural Policy, and the Byron Shire Social Plan;
3. Define a compatible mix and density of business, office, residential, retail, light industry and other development on parts of the site;
4. Enhance and protect the bio-physical environment, particularly the Wallum vegetation and wildlife habitat adjacent to the site;
5. Enhance and protect ground water and surface water quality and hydrology;
6. Ensure that the siting, scale and intensity of development enhance and protect Byron Bay's social and cultural qualities by:
  - a) responding to local and regional values, community needs and aspirations;
  - b) reflecting Byron Bay's character and scale;
  - c) ensuring that development of the site contributes to the range of services available and the identity of West Byron; and
  - d) ensuring that site access does not compromise the amenity or safety of adjacent residential areas.



## E5.5.3 Desired Future Character and Development Principles

### E5.5.3.1 Statement of Desired Future Character

Bayshore Village provides a vibrant and sustainable urban environment, which enhances social equity, economic vitality, environmental performance and sustainability, and cultural expression within the Byron Bay community.

It provides a wide range of housing and employment choice and has strong connections to nearby shops, industry, town services, facilities and transport corridors.

A mix of housing types and small scale creative enterprises contribute to the neighbourhood's vitality and the town's identity. **Dwelling** types reflect the household profile of Byron Bay. Smaller **dwelling**s and multiple dwelling types cater for Byron's higher than average proportion of group households and lone person households. Integrated work and living spaces provide affordable and flexible opportunities for small scale businesses. Commercial ventures provide for local employment, **creative industries** and an outlet for goods and services produced on the site.

Land is used efficiently and energy and water use is minimised. The community actively contributes to the enhancement and maintenance of important habitats on adjoining land. Buffers are provided to these adjoining habitats, and to bushfire hazards and the West Byron Sewage Treatment Plant. Edges are well defined, the public domain is safe and permeable and amenity is fostered by transitions between uses and by integrated site planning.

### E5.5.3.2 Planning Principles

The desired future character reflects the following planning principles:

1. Social Equity
  - a) Enables the co-location of uses to provide housing close to employment opportunities while ensuring potential conflict between the different land uses is minimised;
  - b) Provides a range of low cost live/ work solutions that will enable creative artisans/business people to establish an economically achievable base; and
  - c) Includes a mix of housing, ownership patterns, prices and building types for a diverse community.
2. Economic Vitality
  - a) Provides a mix of employment opportunities with particular emphasis on **creative industries**;
  - b) Facilitates a density of development (with amenity) which makes cost effective use of scarce land; and
  - c) Embraces the concept of shared opportunities and synergies within the surrounding neighbourhood, which contributes to overall efficiencies.
3. Environmental Performance
  - a) Facilitates a smaller environmental footprint than traditional suburban development;



- b) Utilises a site sensitive approach which provides filters and buffers protecting the ecological values of adjoining lands;
  - c) Provides for habitat enhancement that integrate with work previously undertaken on adjoining land to restore significant new wetland habitat; and
  - d) Incorporates the treatment, recycling and reuse of stormwater.
4. Cultural Expression
- a) Encourages a clustering of artistic and lifestyle based small scale industries; and
  - b) Promotes the cultural identity of the area by building upon the commercial / services and industrial base in the surrounding neighbourhood.

### **E5.5.3.3 Achieving the Desired Future Character**

This Plan aims to achieve the Desired Future Character of the site as described in Section E5.5.3.1 by:

- 1. Providing a Precinct Plan for the major elements of Bayshore Village (refer to Map E5.3);
- 2. Specifying Principles that must apply to development of the site;
- 3. Specifying objectives, performance criteria and prescriptive measures for a number of environmental elements relevant to the future development of Bayshore Village; and
- 4. Specifying ecological enhancement measures that are to be undertaken in adjoining habitats.

### **E5.5.3.4 Precinct Plan**

- 1. The Bayshore Village Precinct Plan (Map E5.3) identifies the major bio-physical elements that will make up the structure of the developed site. These elements include:
  - a) Major entries/ exits;
  - b) Internal access connections;
  - c) Land use 'precincts', including:
    - i) Precinct 1 - Residential – two, three and four bedroom detached **dwelling**s, each including an associated one bedroom **dwelling** and home offices/ **workspaces**.
    - ii) Precinct 2 - light industrial area.
    - iii) Precinct 3 - 'live/ work' areas.
    - iv) Precinct 4 - mixed use, business premises/ office premises/ living area.
    - v) Precinct 5 - ecological enhancement.
- 2. The Precinct Plan provides a framework for development in Bayshore Village. It will assist developers and designers to obtain an understanding of the context for their proposed development. Components of the plan include the following:



a) Major entries/ exits

The major entries/ exits for Bayshore Village will be from the West Byron STP access road, at the northern frontage of the site. Entry-only service access and entry-only access to car parking areas within the site will be from Bayshore Drive, at the eastern frontage of the site.

b) Precinct 1: Residential Area

The overriding aim of this Precinct is to achieve low-rise building forms that are 'environmentally-friendly' and that reflect the Byron Bay style. Building forms range from detached one bedroom **dwelling**s to 3-4 bedroom detached **dwelling**s providing a variety of options to suit household size and needs.

c) Precinct 2: Light Industry area

The light industry area is predominantly located in the western part of the site, allowing connectivity to the 'live/ work' **workspaces**. Flexible floor space arrangements will allow for a variety of usage options, with an emphasis on **creative industries**.

d) Precinct 3: Live / work area

The live/ work **workspaces** and self-contained accommodation for those that wish to live and work from home, in an environment that is supportive of creative pursuits.

e) Precinct 4: Mixed use area

This area provides for a mix of business, retail and living spaces that are well connected to other areas within Bayshore Village via a common area in the middle of the precinct. Many of the individual uses in this precinct will be linked to the creative endeavours undertaken in the live/ work and light industrial parts of Bayshore Village.

f) Precinct 5: Ecological Enhancement

Existing low lying areas or swales on adjoining lands will be extended and revegetated with sedgeland and wet heathland plant species of local provenance to improve wetland habitats and increase important habitat components for local fauna species, particularly the Wallum frogs (Wallum Sedge frog, *Litoria olongburensis*, Wallum froglet *Crinia tinnula*). Appropriate restrictions on the title of the property (Lot 3) will ensure that the community will continue to contribute to the maintenance of these important Wallum frog habitats.

## **E5.5.4 Design and Development Controls**

Section E5.5.4 contains a range of controls which reflect environmental and design aspects of the future development of Bayshore Village.

### **E5.5.4.1 Land Use, Management and Environmental Assessment**

#### **Background**

A key characteristic of villages is the mix of uses that occur throughout them. Mixing uses facilitates a vibrant and safe environment by day and by night. The close proximity of workplaces and housing reduces travel distances and creates affordable and accessible urban environments. The economic viability of the development is supported over its life



cycle by the provision of both housing and productive uses. Provision of a variety of housing types and configurations supports a diversity of households and reflects local demands for differentiated and affordable housing options.

The site has a number of constraints which will require detailed environmental assessment as part of any future development application for the site. These constraints include proximity to the West Byron Sewage Treatment Works and its primary access road, potential **acid sulfate soils**, and various ecological constraints.

### Objectives

1. *To achieve the Desired Future Character for the site as defined by Section E5.5.3.1;*
2. *To facilitate the creation of a **mixed use development** with a diversity of housing and employment choice and optimum density that reflects the environmental capability of the site and the socio-economic and cultural context; and*
3. *To assess and mitigate potential environmental impacts.*

### Performance Criteria

1. Utilise the site and building layout to maximise the potential for acoustic privacy by providing adequate building separation within the development and from neighbouring buildings;
2. In Precinct 1, utilise front fences and walls to enable use of private open space abutting the West Byron Sewage Treatment Plant access road to provide an acoustic barrier to vehicle movements;
3. In **mixed use development**, ensure loading bays, garbage collection areas etc are located away from bedrooms and other quiet areas in the residential component;
4. Provide diverse **dwelling** types within Precincts 1, 3 and 4;
5. Provide **workspaces** to be used for a home office or **creative industry** within Precinct 1; and
6. Allow for one-bedroom accommodation in association with **workspaces**.

### Prescriptive Measures

1. Land Use and Density
  - a) Distribute land uses across the site in accordance with the Precinct Plan (Map E5.3) and the consistent land uses and densities outlined in Table E5.1; and
  - b) Provide for a maximum of 82 **dwelling**s within the site.

**Table E5.1 – Land Uses Consistent with Desired Future Character**

Precinct	Consistent Land Uses	Maximum Densities
<p>1</p> <p>Residential</p> <p>Land Area:</p> <p>approximately 13,391 m<sup>2</sup></p> <p>Built Gross Floor Area</p> <p>6,500m<sup>2</sup></p>	<p>Residential <b>dwelling</b>s and</p> <p><b>dual occupancies</b></p> <p><b>workspaces</b></p> <p><b>creative industries</b></p>	<p><u>Residential</u></p> <p>A maximum of 34 <b>dwelling</b>s.</p> <p><b>Dwelling</b>s to include one, two, three or four bedrooms,</p> <p>Up to and including 17 of the 34 <b>dwelling</b>s may be provided as one-bedroom detached <b>dwelling</b>s located in association with a larger (two, three or four bedroom)</p>



Precinct	Consistent Land Uses	Maximum Densities
		<p><b>dwelling</b> <b>Workspaces</b></p> <p>Individual <b>workspaces</b> may be provided in association with either the 1 bedroom <b>dwelling</b>s or the larger <b>dwelling</b>s</p> <p>Individual <b>workspaces</b> in Precinct 1 should not exceed 50m<sup>2</sup> in floor area</p>
<p>2 <b>Light Industry</b> Land Area: approximately 4,570 m<sup>2</sup> Built Gross Floor Area 3,500m<sup>2</sup></p>	<p><b>Creative industry</b> or <b>light industry</b>, with shared common area, amenities and café facilities</p>	<p>A maximum total light industrial floor space of 3,500m<sup>2</sup></p>
<p>3 Live/ Work Land Area: approximately 3,768 m<sup>2</sup> Built Gross Floor Area 3,500m<sup>2</sup></p>	<p>Residential <b>dwelling</b>s <b>Workspaces</b> <b>Creative Industries</b></p>	<p><b>Residential</b> 32 <b>dwelling</b>s maximum One-bedroom <b>dwelling</b>s only Each to be physically attached to an individual <b>workspace</b> <b>Workspaces</b> Average of 60m<sup>2</sup> floor area per <b>dwelling</b> Total maximum of 3,500m<sup>2</sup> floor area</p>
<p>4 Mixed Use Land Area: approximately 10,844m<sup>2</sup>. Built Gross Floor Area 6,500m<sup>2</sup></p>	<p>Retail, business, residential (only associated with a business use), café, health spa Community facilities, such as a multi purpose community building Common area including recreational facilities and pool</p>	<p><b>Retail</b> Maximum total floor space 2,400m<sup>2</sup> <b>Business</b> Maximum total floor space 2,400m<sup>2</sup> <b>Residential</b> A maximum of 16 residential units may be provided in this area, provided that each is attached to and integral with commercial uses <b>Café</b> Maximum floor space of 300m<sup>2</sup> <b>Health Spa</b> Maximum floor space of 800m<sup>2</sup> <b>Community / Recreational facilities</b> Minimum area of 125m<sup>2</sup></p>
<p>5 Ecological (Land Area approximately 2,967m<sup>2</sup>)</p>	<p>Ecological Enhancement</p>	<p>No buildings allowed</p>



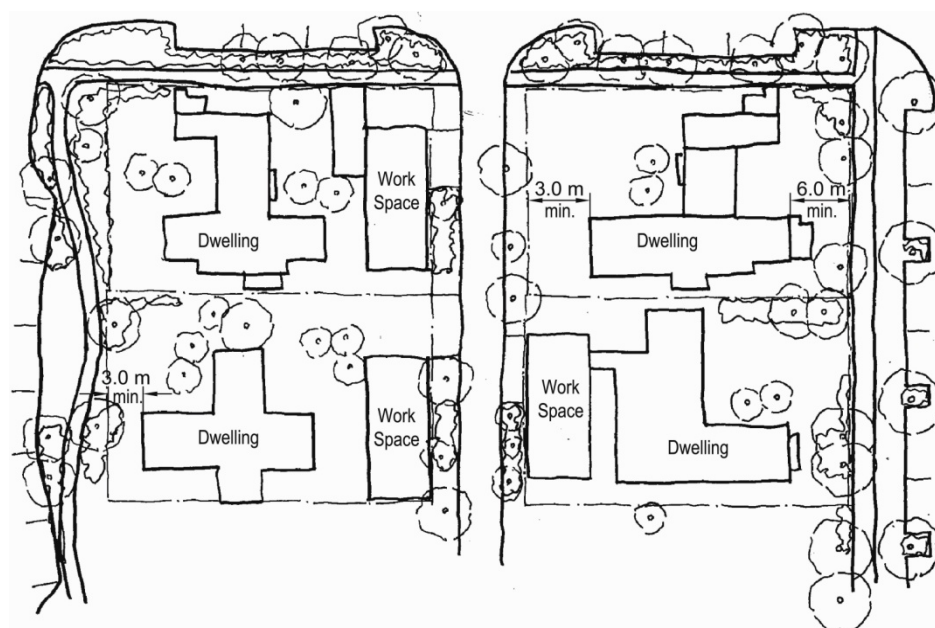


## 2. Setback

Provide **setbacks** within the development consistent with the minimum distances outlined in Table E5.2 and Figure E5.1.

**Table E5.2 – Setbacks**

Land Use	Minimum Setback	Distance (m)
<b>Dwellings</b> (Precinct 1)	External road	6
	Internal Lanes (indicative roads C and D on Map E5.3)	0m for laneway <b>workspaces</b> or garages; 3m for detached <b>dwellings</b>
	Other internal roads	3
	Adjoining buildings	0
Industrial (Precincts 2, 3)	External Property (lot) Boundary	20
	Internal roads	2
Mixed Use (Precinct 4)	Bayshore Drive	7
	Sewage Treatment Plant access road	4
	Internal Roads	0



**Figure E5.1 – Indicative setback responses**

## 3. Buffering

- Provide a minimum 20m **setback** between **dwellings** and the western and north-western site boundaries, where these adjoin the adjacent Wallum frog habitats;
- Provide a minimum 5m **setback** between **dwellings** and the internal boundary between Precincts 1 and 5, located in the north-western corner of the site;
- For industrial uses within Precinct 2, a provide a minimum 2 metre vegetated area between buildings and between buildings and internal road A (see Map E5.3); and

- d) Provide buffering from the Byron Bay Sewerage Treatment Works in the form of a minimum 20m buffer along the north western boundary of the site (this acknowledges the buffer provided in the original subdivision of the land, by the creation of Lot 1 DP 1004514).

#### 4. Environmental Assessment

The following environmental assessment reports must be prepared as part of any development application for the site:

- a) Preliminary **Acid Sulfate Soils** Assessment;
- b) Preliminary Contaminated Land Assessment;
- c) Preliminary Acoustic Report;
- d) Preliminary Odour Assessment; and
- e) **Site Waste Minimisation and Management Plan** and assessment consistent with the requirements of Chapter B8 Waste Minimisation and Management.

#### **E5.5.4.2 Car Parking**

##### **Background**

An integrated 'live/work' approach to development, characterized by the inclusion of **workspaces** in detached and attached residential **dwelling**s, presents the opportunity for *dual use* of parking spaces, thereby reducing the overall parking demand of the proposed development.

Dual use of parking spaces occurs when the same parking space can serve more than one component of a development, such as where residents of living areas also operate businesses in the attached workplaces. In circumstances where the parking demand generated by residents is satisfied by parking provided to serve the living areas, there is no need to satisfy the parking demand generated by residents' use of the workplaces.

A **mixed use development** also provides the potential for *complementary use* of parking spaces. This occurs when the peak parking demand of one component of the proposed development does not coincide with the peak parking demand of another.

##### **Objectives**

1. *To provide sufficient parking to satisfy the needs of the proposed development taking into account the potential for dual and complementary use of parking spaces; and*
2. *To assist in achieving the Desired Future Character for the site as defined by Section E5.5.3.1 by minimising the total area of hard stand car parking within the site.*

##### **Performance Criteria**

1. Provide on-site car parking appropriate to the needs of both residents and off-site workers, with consideration to potential for dual use and complimentary use of spaces;
2. **Dual Use Parking** - apply the concept of dual use parking, as described above, as appropriate to the nature of the proposed site development. In this regard it is not unreasonable to expect that the actual parking demand generated by the workplace floorspace in the commercial precinct (most notably the office floorspace), and in the





industrial precinct, will be up to 30% less than the parking requirement which is calculated without regard to the duplication of parking provision, which is a consequence of the integrated “live/work” approach to the development. It should be noted, however, that it is possible that not all of the workforce employed by businesses that occupy the workplaces incorporated in integrated ‘live/work’ components of a **mixed use development** will also be residents of that development. For example, a resident operating a business from a workplace could employ a non-resident/residents to assist in the operation of the business;

3. **Complementary Use** - seek to reduce the total number of car parking spaces associated with a **mixed use development** proposal by comparing peak demands of each use by time of day, day of the week, and season. Where the varied parking demand for proximate uses allows joint use of a single parking space or facility, a reduced number of spaces is strongly encouraged;
4. Located shared parking spaces to be convenient to all users;
5. Provide non-residential parking on internal streets and accessways, providing that such parking does not affect the capacity of the internal access system to allow efficient internal movement of vehicles and pedestrians; and
6. Provide cycle access and facilities within the site, consistent with the requirements of Chapter B5 Providing for Cycling.

### Prescriptive Measures

Provide on-site car parking in accordance with standards outlined in Table E5.3. Total provision of car parking is to consider potential for *dual use* and *complementary use*, as described above.

**Table E5.3 – Car Parking Standards**

Type of Development	Minimum Car Parking Provision	Special Requirements
<b>Precinct One - Residential</b>		
large <b>dwelling</b> s - 3 or 4 bedrooms	2 spaces per <b>dwelling</b>	<ul style="list-style-type: none"> <li>1 space must be capable of being covered (stacked car parking will not be acceptable)</li> </ul>
small <b>dwelling</b> s – 1 bedroom	1 space per <b>dwelling</b>	
visitor car parking	1 space per 4 <b>dwelling</b> s	
<b>Workspace</b>	1 space per <b>workspace</b>	
delivery / service vehicles	1 space per 50 units	<ul style="list-style-type: none"> <li>Visitor parking can be used if designed for dual use</li> </ul>
<b>Precinct Two – Light Industrial</b>		
light industry	1 space per 40 m <sup>2</sup> gross floor area x 70%	1 per cent of spaces to be provided for people with a <b>disability</b>
delivery/ service vehicles	1 space per 800 m <sup>2</sup> gross floor area	
<b>Precinct Three – Live Work Area</b>		
small <b>dwelling</b> s (1bedroom)	1.5 spaces per <b>dwelling</b>	1 per cent of spaces to be provided for people with a <b>disability</b>
visitor car parking	1 space per 4 <b>dwelling</b> s	



Type of Development	Minimum Car Parking Provision	Special Requirements
<b>Workspace</b>	1 space per <b>workspace</b>	
delivery / service vehicles	1 space per 800 m <sup>2</sup> gross floor area	
<b>Precinct 4 – Mixed Use</b>		
retail	1 space per 20 m <sup>2</sup> gross floor area	1 per cent of spaces to be provided for people with a <b>disability</b>
office / professional rooms/ business premises	1 space per 40m <sup>2</sup> gross floor area x 70%	
spa	1 space per 20m <sup>2</sup> gross floor area	
small <b>dwelling</b> s (1 or 2 bedrooms)	1.5 spaces per <b>dwelling</b>	
large <b>dwelling</b> s (3 or 4 bedrooms)	2 spaces per <b>dwelling</b>	
visitor car parking	1 space per 4 dwellings	
delivery / service vehicles	1 space per 400 m <sup>2</sup>	

### E5.5.4.3 Building Design

#### Background

The climate, coastal location and the evolving culture of Byron Bay has given rise to a 'Byron style' which can be characterised as informal, light weight construction and is referred to in this Section as the 'Byron vernacular' and the 'Byron style'. Achieving the Byron vernacular will ensure that the site will be characterised by lush vegetation, open spaces and linked landscaped areas, sloping rooflines, timber and glass structures typical of the local Byron style of lightweight construction and tropical appearance (refer to Figure E5.2).

An opportunity exists for Bayshore Village to be an intense living and working environment of a considerably higher density than suburbia. Consequently, a high degree of detailed design resolution is required in the architecture and urban design.

The density proposed for the site means that the form and layout of each building needs to consider its relationship to its immediate neighbour and its context in the street. It means that the creation of identifiable and well defined space in the public domain is more important than the individual building and garden. Further, it means that gardens and the landscaping on private lots need to contribute to the public domain. The issue of overshadowing will also need to be carefully considered in any design for the site.

Building design should:

1. Reinforce the structure of the public domain;
2. Respond to climate and local 'Byron vernacular';
3. Ensure privacy and amenity are maintained;
4. Contribute to high environmental performance; and
5. Ensure an adequate level of solar access is provided to living areas.





**Figure E5.2 – Indicative examples of Byron vernacular**

### Objectives

1. *To achieve the Desired Future Character for the site as defined by Section E5.5.3.1;*
2. *To ensure that buildings on the site reinforce the structure of the public domain, respond to climate and the 'Byron vernacular', ensure that privacy and amenity are maintained, and contribute to high environmental performance;*
3. *To ensure that residential development will not significantly increase the overshadowing of adjoining properties; and*
4. *To ensure that occupants of buildings will enjoy the optimum use of winter sunlight and summer shade.*

### Performance Criteria

1. Provide low-rise (two **storey** maximum) building forms that are in proportion to street trees;
2. Provide rear lane vehicular access to housing sites to facilitate a coherent, safe and visually pleasing streetscape and negate the need for private hard surfaced driveways;
3. Provide articulation and variety in building forms and utilise screening features to facilitate visual interest, privacy and energy efficiency;
4. Ensure that the width and internal layout of buildings facilitate natural cross ventilation;
5. Design entrances so that they are a clearly identifiable element of the building in the street;
6. Utilise durable materials and finishes;
7. No roof should have a highly reflective surface; any metal roof must have a colorbond or equivalent finish in a colour approved by Council. White or light coloured roofing will not be approved where it's likely to be intrusive;
8. Locate habitable rooms and open spaces away from noise sources and utilise car parking areas and zero side building **setbacks** to provide a buffer to noise sources;
9. In Precinct 1, design and construct development adjoining the West Byron Sewage Treatment Plant access road to ensure that acceptable living conditions can be created within **dwellings**, particularly in relation to noise and odour;
10. Incorporate lush vegetation to provide shade and screening; and



11. Orientate **dwelling**s and design building roof and shade structures to maximise solar access into private open space areas and internal living spaces during winter months.

### Prescriptive Measures

1. Provide details of building materials and surface colours for assessment with the development application;
2. External materials must demonstrate consistency with the 'Byron vernacular' and must be light weight in appearance and can include various forms of cladding including pre-painted corrugated steel, fibrous cement, weatherboard and timber;
3. Allow zero side **setbacks** and boundary walls to efficiently utilise the site, create an urban edge to streets, minimise building material and energy usage, and enable the provision of private internal open space;
4. Design buildings to ensure a minimum of 3 hours of sunshine to the living area of **dwelling**s between 9am and 3pm mid winter;
5. Coordinate and integrate building services, such as drainage pipes and air conditioners, with overall façade and **balcony** design;
6. Coordinate security grills/ screens, ventilation louvres and **car park** entry doors with the overall façade design;
7. Provide operable walls and large openings to allow for windows and doors to be opened during summer and closed in winter;
8. Incorporate mosquito mitigation devices;
9. Locate living areas with direct access to private outdoor spaces; and
10. Avoid large expanses of any single material.

#### E5.5.4.4 Site and Open Space Design

##### Background

The flat topography and high water table of the site and the sensitive wetland habitats of its context mean that managing stormwater runoff will be important. Minimising impervious surfaces across the site is critical to the reduction of stormwater runoff. This issue will also be supported by building design and infrastructure design elements of this Section.

The provision of areas for communal exchange, relaxation, education and contemplation will support the village concept. At the same time, territorial reinforcement of public and private space will facilitate efficient utilisation of the land and discourage crime opportunities.

Universal **access** will need to be built into the design of the site at ground level in order to produce a village that is supportive of people with the range of physical and mental functionality.

The mixed use nature and density of the proposed land use pattern and the availability and augmentation of existing cycling and walking networks delivers an opportunity to provide wide transport choice. Minimising and integrating vehicular parking is a demand management measure that can further support, walking, cycling and public transport. Locating visitor parking within the street system reduces the footprint of **dwelling** sites.

##### Objectives

1. *To achieve the Desired Future Character for the site as defined by Section E5.5.3.1; and*



2. *To minimise the impervious footprint of the site, provide communal and private open space, delineate the public or private role of space and facilitate universal access.*

### Performance Criteria

1. Provide common open space to facilitate communal exchange and foster a sense of community;
2. Locate communal open space so that it exists as a focal point for the development;
3. Provide private outdoor open space areas in **dwelling** sites as an extension of living spaces, to allow yards to be fully planted as landscaped **deep soil areas** and to maximise pervious areas;
4. Provide private open space for **workspaces** by way of open space **balconies** as an extension of living spaces;
5. Provide adequate facilities for storage, clothes drying and waste management while minimising their visual and amenity impacts;
6. Provide universal **access** throughout the site by providing **continuous accessible paths of travel** and some housing and car parking specifically designed to support persons who have reduced physical or cognitive function;
7. Ensure communal open space areas are useable and accessible to all including those persons with a **disability**;
8. Ensure passive surveillance of the communal open space area;
9. Improve the amenity of open space with landscape design by:
  - a) providing appropriate shade in the form of **locally indigenous** trees or structures;
  - b) providing accessible routes through the space and between buildings; and
  - c) screening cars, communal drying areas, swimming pools and the courtyards of ground floor residential buildings;
10. Contribute to streetscape character and the amenity of the public domain by:
  - a) relating landscape design to the desired proportions and character of the streetscape;
  - b) using planting and landscape elements appropriate to the scale of the development; and
  - c) allowing for locating **public art** where they can be viewed by users of open space and/ or from within courtyards and the public domain;
11. Improve the energy efficiency and solar efficiency of **dwelling**s and the microclimate of private open spaces. Planting design solutions include:
  - a) **locally indigenous** trees for shading low-angle sun on the eastern and western sides of a buildings;
  - b) locating **locally indigenous** dense-foliaged trees well away from the building to permit winter sun access;
  - c) varying heights of different species of **locally indigenous trees** and shrubs to shade walls and windows; and
  - d) locating pergolas on **balconies** and courtyards to create shaded areas in summer and private areas for outdoor living.



## Prescriptive Measures

### 1. Public Open Space

- a) Provide a minimum of 2,000m<sup>2</sup> of public / communal open space, with at least one central location having an area of not less than 450m<sup>2</sup>. As part of the first development application for the site, a multi-purpose community building, with a floor area of at least 150m<sup>2</sup> should be provided; and
- b) Orientation of communal open spaces to the north with a minimum of three hours of sunlight between 9am and 3pm mid winter provided to at least 50% of the communal open space area.

### 2. Private Open Space

- a) A private open space balcony must be provided for each **dwelling** where the residential component is not located on the ground floor (note this includes dwellings that contain a **dwelling** on the first floor and **workspaces** / office on the ground floor). Within the commercial precinct, such private open space **balconies** must have a minimum area of 10m<sup>2</sup> and a minimum length and width of 2.5m. In all other precincts, the private open space **balconies** must have a minimum area of 15m<sup>2</sup> and a minimum length and width of 2.5m;
- b) Private open space **balconies** must have appropriate orientation and adequate provision for winter sun and summer shade; and
- c) Each **dwelling** that has residential component on the ground floor must have a minimum **landscaped area** of 90m<sup>2</sup>, so located that occupants will have access to an area of private open space at ground level, not located in the front **setback**, having a minimum area of 30m<sup>2</sup> and a minimum length and width each of 4m, excluding any area used for vehicle circulation or car parking.

### 3. Universal Access

- a) Provide a minimum of one **dwelling** as **adaptable housing**, designed in accordance with AS4299, for every 10 **dwellings** or part thereof;
- b) Design facilities for disabled persons (including car parking) to comply with the Australian Standard 1428 (Pt 1 and 2), the Building Code of Australia and the *Disability Discrimination Act 1992* (as amended);
- c) Provide **continuous accessible paths of travel** from all public roads and public spaces, as well as throughout the ground level internal spaces of **adaptable housing dwellings**; and
- d) Design **adaptable housing dwellings** in accordance with AS 1428 Pts 1, 2 and 4 and AS 4299 Adaptable Housing.

## E5.5.4.5 Lot Size and Subdivision

### Objectives

1. *To provide lots of sufficient size to satisfy the needs of future residents and occupants, and which will accommodate well designed and innovative development;*
2. *To encourage diversity in lot size and opportunities for a variety of housing/building choice; and*
3. *To ensure that lot design takes into account the natural features of the site and locality.*





## Performance Criteria

1. Lots must be of sufficient area to allow for the siting of **dwelling**s / buildings including provisions for private open space, **landscaped area**, vehicle access and car parking and to permit solar access; and
2. Lot sizes and design must enable **dwelling**s / buildings and driveways to be sited to protect natural or cultural features, and respond to site constraints including topography, bushland, soil, erosion, drainage, and bushfire risk.

## Prescriptive Measures

1. The minimum lot size requirements for the site (including residential community title) shall be in accordance with Byron LEP 2014.
2. Lots must enable the construction of a built form which is sympathetic to the established character of the area.
3. Subdivision of the site is to occur only through strata and/or community title subdivision.
4. There is no minimum **allotment** size for strata subdivision provided the **allotment** boundaries substantially correspond with parts of any building intended for separate ownership. Demonstration of compliance with the Building Code of Australia with regard to fire separation and egress will be required prior to subdivision approval.
5. In the case of strata or community-title subdivisions, car spaces are not to be given separate lot numbers, and all visitor spaces are to be included within common property. All private landscape area attached to a **dwelling** shall be identified on the subdivision plan as being part of the appropriate **dwelling** unit/ lot. All common **landscaped areas** and community facilities shall be identified as being within the common property.

## Community Title Subdivision Provisions

Community Title legislation enables the creation of private development lots and common property (community lot) where proposed future uses of the private lots can be specified in a community management statement and future use of common property can be specified in a development contract. A community title scheme is managed by the community association.

### 1. Development Contract

A Development Contract must be provided for all community title schemes. A draft of the contract must be provided with the DA for subdivision. The Development Contract operates primarily as a construction agreement between the developer and members of the community title scheme in relation to the use of common property areas and in relation to the provision of various facilities or amenities. The development contract is signed by the developer and the Council.

### 2. Management Statement

A Management Statement must be provided for all community title schemes. A draft of the Management Statement must be provided with the DA for subdivision. The final Management Statement must be lodged with the Land and Property Information office for registration with the final subdivision plan. The Management Statement should contain details of the design concept for future development within the scheme; architectural and landscape guidelines for future development; and rules regarding access to land; use of common property; services; insurance etc.

The Management Statement must clearly indicate that:



- a) The maintenance of all internal roads and community buildings/ facilities shall remain the responsibility of the relevant neighbourhood association;
- b) Car parking spaces are appropriately allocated and identified as being for the sole use of individual live/ work premises within Precinct 3, and for the sole use of residents within the **dwelling**s associated with the Mixed Use Precinct (Precinct 4);
- c) The detached one-bedroom **dwelling**s within Precinct 1 are to be contained within the same lot as an associated two, three or four bedroom **dwelling**;
- d) The **workspaces** within Precinct 1 are to be contained within the same lot as an associated two, three or four bedroom **dwelling**;
- e) The one-bedroom **dwelling**s within Precinct 3 are to be contained within the same lot as an associated **workspace**; and
- f) The **dwelling**s within Precinct 4 are to be contained within the same lot as an associated commercial space.

#### E5.5.4.6 Street Design

##### Background

The flat topography of the site presents both opportunities and constraints for the layout of streets and lots. It enables a well connected grid pattern to be imposed on the site, but presents challenges for the provision of an efficient and effective drainage network.

The linear dunal landform patterns that are dominant in the area run in a north-west to south-east direction. Design of a street pattern that reflects this natural morphology will also ensure that vistas are maintained to Mt Warning and ranges of the hinterland.

Streets provide multiple opportunities such as vehicle and pedestrian circulation, a corridor for services and drainage, meeting places and separation between buildings and uses. Streets also provide an opportunity to 'show-case' the artistic endeavours of residents.

Internally, Bayshore Village will include a principle road from the major entry points on the Sewage Treatment Plant access road (Indicative Road A on Map E5.3). Secondary connected roads (Indicative Roads B and E on Map E5.3) serve the various development areas, with smaller laneways serving individual sites (Indicative Roads C and D on Map E5.3). The principal and secondary roads include footpaths/ cycleways, whilst laneways are **shared zones**.

##### Objectives

1. *To achieve the Desired Future Character for the site as defined by Section E5.5.3.1; and*
2. *To create a street network that reflects the features of the site, that is highly permeable for people movement, that incorporates service infrastructure and native landscaping, and that is attractive, legible and safe.*

##### Performance Criteria

1. Provide a logical, efficient and safe access point from the adjoining STP access road for light industry, accommodation and live/ work **workspaces**;
2. Provide both primary access roads and laneways that create a legible hierarchy, to promote safety, functional efficiency, and amenity and streetscape benefits;



3. Provide legible and logical pedestrian links to surrounding areas;
4. Provide a street and site layout that incorporates front and rear access roads/ lanes to enable different use functions to be separated;
5. Reduce the visual dominance of vehicles in the street by incorporating **locally indigenous** street tree planting, general landscaping and by moving vehicle entrances to rear lanes;
6. Cluster visitor parking at key locations to maximise utilisation, reduce impervious surfaces, and encourage pedestrian circulation;
7. Incorporate **water sensitive urban design** measures into the street stormwater management system;
8. Provide engineering and landscaping treatments associated with circulation that engender a 'slow movement environment' to facilitate pedestrian and vehicular safety; and
9. Utilise **locally indigenous** flora throughout the street system to reflect surrounding wetland and floodplain rainforest landscapes, condition water, provide suitable habitats for native fauna and minimise bushfire risks.

### **Prescriptive Measures**

1. Provide internal car parking along the southern and western boundaries of the site to edge the adjacent sedgeland and swamp forest;
2. Orientate roads in a predominantly north-west to south-east axis to reflect the historic dunal morphology of the area and to maximise views of Mt Warning;
3. Where appropriate, accommodate road reserves within bushfire asset protection zones, particularly on the southern and western boundaries;
4. Provide road access from the existing road network at the following locations:
  - a) two locations along the Sewage Treatment Plant access road; and
  - b) south east corner of the site and further north along Bayshore Drive, as entry only for service and access to car parking;
5. Locate all visitor car parking spaces within the internal street system;
6. Locate car parking spaces associated with industrial units and live/ work **workspaces** within the street;
7. Provide internal roads with pavement and reserve widths that comply with dimensions stated in Table E5.4 (Note: indicative internal road types shown on Map E5.3);
8. Provide grassed swales and/or infiltration trenches to capture, treat and convey road runoff;
9. For roads or laneways with low traffic volumes (i.e. in the vicinity of 50 vehicles per day) and car parking areas, have pavements that are porous to promote the infiltration of stormwater;
10. Provide dense planting, with locally native grasses and street trees rather than turf, within road reserves;
11. Accommodate driveway access within laneways that are used to access car parking within individual lots rather than on the individual **allotment**; and
12. Design legible circulation systems, which ensure the safety of users by:
  - a) isolating commercial service requirements, such as loading docks, from residential access, servicing needs and primary outlook;



- b) locating clearly demarcated residential entries directly from the public street;
- c) clearly distinguishing commercial and residential entries and vertical access points; and
- d) providing safe pedestrian routes through the site, where required.

**Table E5.4 – Road Pavement and Reserve Widths**

Road Type	Road function	Pavement / Reserve Width	Verge Width	Surface
A	Two-way Road (Local Street)	6.5m / 17m	5.25m both sides. Includes parallel parking, footpaths and vegetated swales as required	Road – asphalt with flush concrete edge
B	One-way Laneway	4m / 17m	Total 13m, variable each side. Includes parallel parking and passing bays	Road and parking bays – permeable surface
C	One-way Laneway	4m / 9m	2.5m both sides. Pedestrian / vehicle shared space	Permeable surface
D	One-way Laneway	4m / 5.5m	Total 1.5m. Pedestrian / vehicle shared space	Permeable surface
E	Part One-way; part Two-way Road (Local Street)	6.5m / 20m	6.75m both sides. Includes 90° nose-in parking, infiltration areas and fire-retardant planting	Road – asphalt with flush concrete edge. Permeable parking bays
F	One-way Laneway	4m / 6m	1m both sides. Vehicular entry only	Road – Asphalt with flush concrete edge

#### E5.5.4.7 Water Cycle Management

##### Background

Flat topography, seasonally high water table, sensitive nearby wetland habitats, and limited existing public drainage system present challenges to water cycle management on the site. Given these constraints, it is imperative that the design minimises runoff and reduces water use at the commencement of the water cycle management train. An integrated approach to water cycle management is also critical to efficiently utilise and manage water resources.

**Water sensitive urban design** measures are available at all stages of the water cycle management system. These range from minimising the footprint of the development, to adopting household water use minimisation and stormwater capture devices, to incorporating bioretention treatment into street design, to reusing treated wastewater for site irrigation and toilet flushing.

SEPP No. 71 requires that a consent authority refuse consent to development if it: *“will, or is likely to, discharge untreated stormwater into the sea, a beach, an estuary, a coastal lake, a coastal creek or other similar body of water, or onto a rock platform”*.



The wetland systems to the south-west and west of the site demand a water management regime that ensures that water leaving the site is appropriately treated and managed.

### Objectives

1. *To achieve the Desired Future Character for the site as defined by Section E5.5.3.1;*
2. *To ensure that management of surface water and **ground water** on the site is consistent with the principles of Integrated Water Cycle Management and **water sensitive urban design**; and*
3. *To protect the area's sensitive ecological and geophysical environment, particularly by ensuring that water released into the **ground water** and adjacent swales is low in pH and nutrients.*

### Performance Criteria

1. Utilise uncontaminated, low pH, low nutrient fill to provide for drainage of stormwater within and from the site;
2. Minimise building footprints by including double **storey** building forms in order to maximise pervious open space areas;
3. Minimise impervious surfaces dedicated to vehicular access and manoeuvring by minimising the length of driveways and parking provided within individual house sites;
4. Incorporate water use minimisation measures, such as water saving devices, into building designs;
5. Minimise filling of the site by adopting above-surface drainage regime with the use of swales;
6. Council may consider variations to its engineering standards to allow swale drainage, as an alternative to standard kerb and gutter drainage, if it can be demonstrated that the swale drainage design could be adapted to conform to standard kerb and gutter drainage in the event of system failure;
7. Avoid the need for deep basins or permanent pools for the detention of stormwater by incorporating shallow detention areas or swales across the site which fully drain following rainfall events;
8. Utilise car parking areas for the detention and treatment of stormwater runoff from roads;
9. Ensure that stormwater leaving the site is treated to a quality equal or better to pre-development quality;
10. Ensure that stormwater flow rates leaving the site are no greater than pre-development flow rates;
11. Manage the flow and quality of water leaving the site to avoid adverse impacts upon adjoining sensitive wetland areas, particularly in relation to maintaining low pH and low nutrient levels;
12. Maximise the reuse of treated wastewater and stormwater for non potable purposes such as garden watering and toilet flushing within site capability and public health limits; and
13. Minimise wet weather inflow / infiltration with appropriate sewerage system.



## Prescriptive Measures

1. Provide an Integrated Water Cycle Management Strategy with any application, demonstrating how the performance criteria will be achieved. This Strategy must also address system maintenance and how this will be achieved;
2. Provide an impervious bund between the site and sedgeland to the south, west and north to ensure that the majority of stormwater is infiltrated into the ground through a filtering system on-site. Allow for the over-topping of the impervious bund in a manner that ensures a diffuse rather than concentrated flow;
3. Provide dual reticulation within the site for the reuse of recycled water from the West Byron sewage treatment plant (STP) for toilet flushing in all buildings and watering of public spaces;
4. Provide rainwater tanks for all **dwelling**s in Precinct 1 and for all buildings in other precincts;
5. Private courtyards are to minimise surfaces with impervious materials. Where timber decking is provided, water must be capable of infiltrating into the soil beneath the deck;
6. Contribute to water and stormwater efficiency by integrating landscape design with water and stormwater management, by:
  - a) using **locally indigenous** plants with low water demand to reduce water consumption;
  - b) using **locally indigenous** plants with low fertiliser requirements;
  - c) using **locally indigenous** plants with high water demand, where appropriate, to reduce run off from the site;
  - d) utilising permeable surfaces; and
  - e) incorporating wetland filter systems using **locally indigenous** plant species;
7. Employ sub-surface irrigation for watering of public spaces, using recycled water with scheduling to avoid over-watering and adverse impacts to soils and **groundwater**;
8. Employ swale drainage within drainage systems to promote infiltration and treatment of stormwater. Swales shall be designed to minimise maintenance requirements with the use of **locally indigenous** plant species or alternative coverings such as river pebble;
9. Council will require the body corporate of Bayshore Village to enter into an appropriate management agreement for the maintenance of any drainage swale on the public roads (Bayshore Drive and the West Byron STP access road) fronting the site;
10. Design drainage systems to achieve (or better) the following stormwater quality objectives:

a) Coarse Sediment (< 0.5mm)	80% retention of average annual load
b) Fine Sediment (< 0.1mm)	60% retention of average annual load
c) Total Phosphorus	50% retention of average annual load
d) Total Nitrogen	50% retention of average annual load
e) Litter (> 5mm)	70% retention of average annual load
f) Hydrocarbons, fuels, oil and grease	90% retention of average annual load
11. Ensure that stormwater flow rates from the developed site are no greater than pre-development flow rates. Stormwater measures shall be employed to maximise dispersed flow from the site as opposed to localised concentrated flows;





12. Design stormwater detention areas within public spaces to be fully draining following rainfall events. The maximum depth of water in the detention areas during rainfall events shall be 200mm;
13. Design car parking areas to facilitate stormwater detention and treatment;
14. Employ suitable technologies within the sewerage system to minimise **excavation** depths and employ suitable pipe technologies to minimise inflow and infiltration into the system; and
15. Carry out all **excavation** above the existing water table and in a way that does not change the natural characteristics of the water table.

#### **E5.5.4.8 Ecological Enhancement**

##### **Background**

Bayshore Village is almost devoid of non-grass vegetation, having been slashed for decades. Three (3) vegetation communities occur on the site. These are swamp forest (small clump on southern boundary), sedgeland (located in depressions across the site) and grassland (majority of the site). No threatened plant species have been identified on the site.

The threatened Wallum Froglet (*Crinia tinnula*) has been recorded on and adjacent to the site and the threatened Wallum Sedge frog *Litoria olongburensis* occurs adjacent to the site. The site itself offers marginal habitat for the Wallum froglet as a result of degradation due to past disturbance.

A Compensatory Habitat Agreement exists between the land owner and Council, which will substantially enhance Wallum frog habitats and provide linkages between existing habitats of importance for these species. The development of the Bayshore Village site will implement and inform the development of this compensatory habitat agreement.

##### **Objectives**

1. *To achieve the Desired Future Character for the site as defined by Section E5.5.3.1; and*
2. *To assist and increase ecological restoration being undertaken to the west of the site and extend ecological restoration into the site.*

##### **Performance Criteria**

1. Continue to contribute to the establishment and maintenance of Wallum frog habitats being created on adjoining land;
2. Provide restored Wallum frog habitat within the area shown on Map E5.3 as Precinct 5 by way of sedge planting and the creation of shallow ephemeral ponds that link with sedgeland to the west when inundated;
3. Where possible, provide or contribute to additional habitat establishment and maintenance on adjacent land in Council ownership;
4. Provide stormwater control measures that mimic the pre-development hydrological regime and minimize overland discharge to the Wallum frog habitat areas;
5. Optimise local biodiversity conservation by site plantings to **locally indigenous**; and
6. Utilise locally native flora species throughout the street system to reflect surrounding wetland and floodplain rainforest landscapes, condition water, provide suitable habitat for native fauna species and minimize bushfire risks.



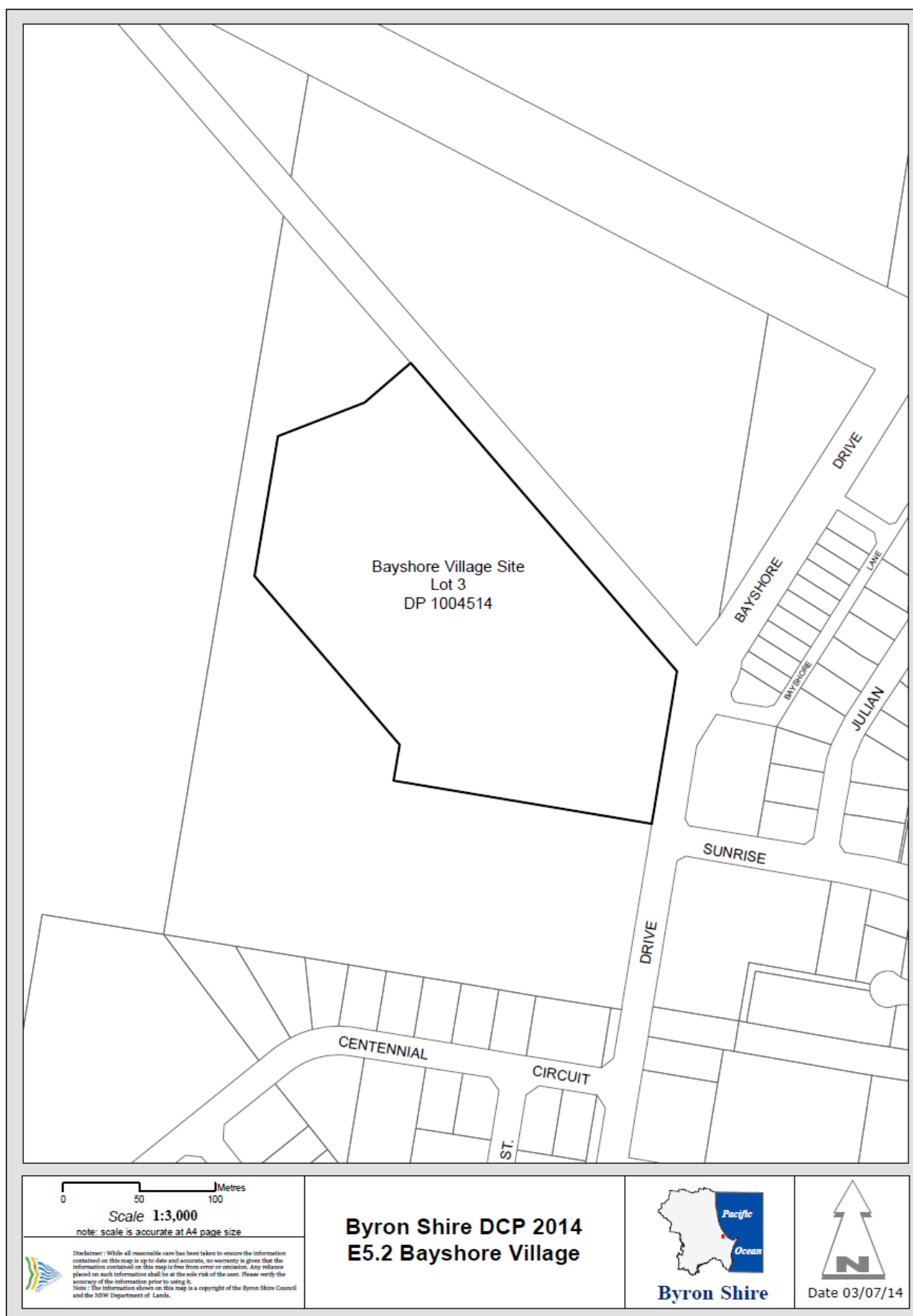
## Prescriptive Measures

Habitat restoration within the site is to consist of:

1. the creation of shallow swales in the ground surface along the western fringe of the Bayshore Village property to facilitate periodic and shallow ponding of water;
2. the extension of a deeper swale located on adjoining land to the north-west of the Bayshore Village property to connect adjacent wetland habitats with wetland restoration within the site at Precinct 5;
3. revegetation of the western fringe of the Bayshore Village property with **locally indigenous** wetland plant species;
4. landscaping and revegetation generally throughout the remainder of the property with **locally indigenous** plant species;
5. integration or linking of densely planted areas along streets, within public/communal open spaces and within private **dwelling** sites; and
6. **dwelling** designs which include large decks as outdoor living areas so that the remaining yard area can be planted out to provide habitat and allow for movement of local opportunistic fauna species.



## Map E5.2 – Bayshore Village



**Map E5.3 – Bayshore Village Precinct Plan**

