

### 1 INTRODUCTION

The purpose of the Wyee West Area Plan is to provide a strategic and coordinated approach to the development of land located to the west of the existing Wyee township. The Area Plan will ensure that the land is developed in an efficient manner, considering environmental, social and economic issues affecting the site.

This Area Plan is to be read in conjunction with the relevant part of Lake Macquarie Development Control Plan (LM DCP) 2014. Where the provisions of this Area Plan are inconsistent with the controls in the relevant part of LM DCP 2014, the provisions of this Area Plan will prevail.

### 1.1 BACKGROUND

The development of the land subject to this area plan for residential subdivision has been made possible by the construction of a wastewater treatment plant within the site. The treatment plant was partially funded by a grant from the Australian Government's Building Better Regional Cities program. That program was designed to fund infrastructure that supported the provision of affordable housing.

### 1.2 EXTENT OF AREA PLAN

This Area Plan applies to the land outlined in heavy edging as shown in Figure 1.

Justification: This section is proposed to be removed since the wastewater treatment plant has never been used and is proposed to be removed and replaced with residential development. This has been enabled by a recent rezoning of the land from SP2 to R2.



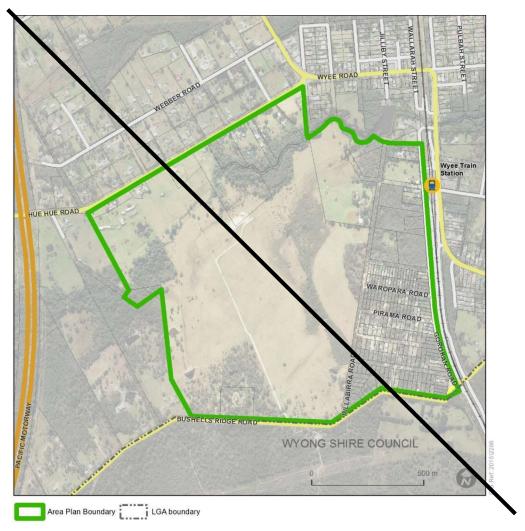


Figure 1 - Extent of the Area Plan

**Justification:** Figure 1 has been updated to include Precinct D and to include new subdivisions and newly constructed roads.





Figure 1 - Extent of the Area Plan



### 1.3 EXISTING CHARACTER

Wyee is located adjacent to the southern boundary of Lake Macquarie Local Government Area and is on the main northern railway line and main road that links Morisset to Doyalson. The Sydney-Newcastle M1 Motorway is located to the West of the township.

The Wyee township comprises predominantly low-density residential allotments with detached housing, interspersed with rural properties and rural residential allotments. The town centre is situated on Wyee Road, and comprises a small commercial/retail centre.

Wyee is located within a rural landscape and it is physically and visually separated from the nearby urban settlements of Morisset, Wyee Point and Doyalson. Because of the small size of the settlement, and its shape and topography, glimpses of a rural landscape are frequently viewed from points within the town.

### 1.4 ENVIRONMENTAL ATTRIBUTES AND CONSTRAINTS

### **Flooding**

Mannering Creek is a significant landscape feature that traverses the site in addition to a tributary entering from the south. Land adjacent to Mannering Creek and the tributary is flood prone and identified as a Flood Planning Area in *Lake Macquarie Local Environmental Plan 2014* (LMLEP 2014), as shown in Figure 2.

### **Biodiversity**

The site provides a range of biodiversity values, including the general provision of habitat and connectivity, threatened species, and Ecological Endangered Communities. The key biodiversity features of the site include:

- Two riparian corridors containing Endangered Ecological Communities;
- Important Squirrel Glider corridor and habitat for denning and foraging; and
- Threatened flora species including Tetratheca Juncea and Angophora Inopina.

The high ecological value land has been mapped as £2 C2 Environmental Conservation or identified as Environmentally Sensitive Land in LMLEP 2014, as shown in Figure 2. The retention, conservation and rehabilitation of the environmental corridors is an important priority. Vegetation within areas identified as Environmentally Sensitive Land must either be retained or, if removed, appropriately offset.

**Justification:** The environmental zones (i.e. E1, E2, E3 and E4) have been changed to conservation zones (i.e. C1, C2, C3 and C4). The changes reflect the updated zone names.



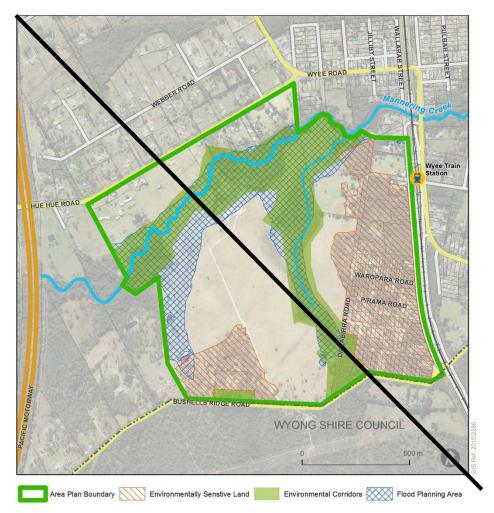


Figure 2 - Environmental Attributes and Constraints

**Justification:** Figure 2 has been updated to include Precinct D and to include new subdivisions and newly constructed roads.





Figure 2 – Environmental Attributes and Constraints



### 1.5 DESIRED FUTURE CHARACTER

In 2010, Council adopted the Wyee Structure Plan following public exhibition. That plan provides strategic direction for the planning and future development of Wyee. Principle 1 – Desired Future Character and Urban Form of the Wyee Structure Plan states that 'Wyee will continue to exhibit the visual and aesthetic character of a rural village'.

The desired urban structure of the site is outlined in Figure 3 and aims to:

- · Maintain and enhance environmental corridors,
- Establish a perimeter road to define the edge of open space and conservation areas,
- · Locate roads and entries for efficient access and connectivity through the site and between the Precincts,
- Designate an area within the site for sport fields, netball courts, a local park and dog exercise area in a central location and free from environmental constraints.
- Provide safe pedestrian and cycle paths linking to the existing road network, recreation facilities and Wyee train station.
- · Provide a range of lot sizes to accommodate a variety of dwelling types including affordable housing, and
- Minimise potential for risk from bushfire and flooding.





Figure 3 - Wyee West Structure Plan

**Justification:** Figure 3 has been updated to include Precinct D and to include new subdivisions and newly constructed roads.





Figure 3 - Wyee West Structure Plan



### 1.6 PRECINCTS

Three distinctive precinct areas have been identified within the land to which this Area Plan applies, as outlined in Figure 4. Each precinct has its own specific development controls.



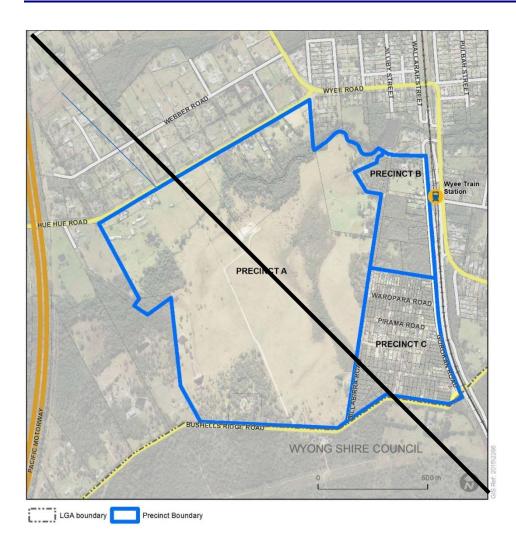


Figure 4 - Precinct Boundaries

**Justification:** Figure 4 has been updated to include Precinct D and to include new subdivisions and newly constructed roads.





Figure 4 - Precinct Boundaries



### Precinct A – Low Density Residential

This land comprises approximately 120 hectares of mostly cleared grazing land and also contains important ecological corridors and communities. Precinct A is the largest of the three precincts and will comprise predominantly low density housing on a range of lot sizes, including a component of affordable housing. Precinct A will contain new recreation facilities including sport fields and amenities, a local park, netball courts, dog exercise area and shared pathways. The enhancement of the riparian corridors will contribute to the visual amenity and bushland setting of the site by providing a natural backdrop to the residential area.

### Precinct B - Medium Density Residential

Precinct B is located within 400 metres of the train station and is envisaged to contain predominantly medium density housing, such as town houses and villas. Medium density development is suitable in this location due to its accessibility to the Wyee train station and village centre. Single dwellings will only be permitted on small lots (between 200m<sup>2</sup> and 450m<sup>2</sup>).

Precinct B contains habitat that forms part of an existing conceptual Squirrel Glider corridor through the site.

### Precinct C - Paper Subdivision

Precinct C, located adjacent to the railway line, comprises 199 existing residential sized lots in Deposited Plan 7506. The land is known as the Wyee West Paper Subdivision and was created in 1914. The subdivision pre-dates the legislative requirements for anyone subdividing land to construct essential infrastructure. Until recently the land had limited development prospects due to its former rural zoning and lack of infrastructure. The land has generally remained undeveloped and un-serviced. Precinct C also contains habitat that forms part of an existing conceptual Squirrel Glider corridor through the site.

In 2013, the majority of lots within the paper subdivision were rezoned from rural to residential. Despite the residential zoning, the paper subdivision still lacks the essential infrastructure to enable Council to grant consent to dwellings on these allotments. The paper subdivision will require sealed roads, drainage, reticulated water and sewerage, electricity and telecommunications. Landowners are responsible for the cost of the infrastructure.

Fifteen (15) lots are zoned £2 C2 Environmental Conservation under the LMLEP 2014 to conserve and enhance the high ecological value of this land which forms part of an important Squirrel Glider corridor. These lots are not suitable for residential development and accordingly will not require essential infrastructure.

**Justification:** The environmental zones (i.e. E1, E2, E3 and E4) have been changed to conservation zones (i.e. C1, C2, C3 and C4). The changes reflect the updated zone names.



### Precinct D - Low Density Residential

Precinct D is located west of Precinct A and comprises the property known as 1377 Hue Hue Road, Wyee, as well as part of Digary Road. This land has an area of approximately 4.5 hectares and mostly contains cleared grazing land in the northern section of the site, as well as some remnant forest with important ecological communities in the southern section. Precinct D will comprise predominantly low-density housing on a range of lot sizes in the northern section of the site and will retain the C2 zoned land in the southern section.

**Justification:** This section has been included in the DCP to provide an overview of Precinct D.



### 2 DEVELOPER CONTRIBUTIONS

Several items need to be provided to achieve the environmental and development objectives of the site: These include:

- Pedestrian/cycleway links;
- Road and traffic infrastructure;
- Stormwater management infrastructure;
- · Native vegetation and riparian corridor rehabilitation and ongoing management in environmental zoned land; and
- Provision of land for new sports fields, netball courts, local park and dog exercise area.

Public community facilities that will be required as a result of population growth in Wyee are specified in Lake Macquarie City Council Development Contributions Plan 2012 - Morisset Contributions Catchment.

There are several options available to deliver these items that may be used in combination, including:

- Conditions of consent for future development applications;
- Section 7.11 contributions;
- Dedication of land to Council;
- Works in kind; and
- Voluntary planning agreements.



### 3 PRECINCT A – LOW DENSITY RESIDENTIAL

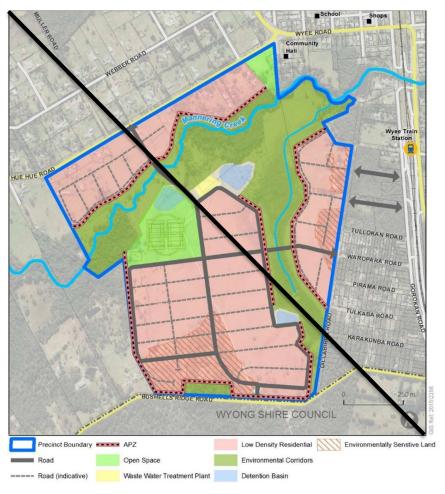


Figure 5 - Precinct A: Subdivision Design and Layout Plan

**Justification:** Figure 5 has been updated to include the indicative roads adjacent to Precinct A.



Part 12 – Precinct Area Plans - Wyee West

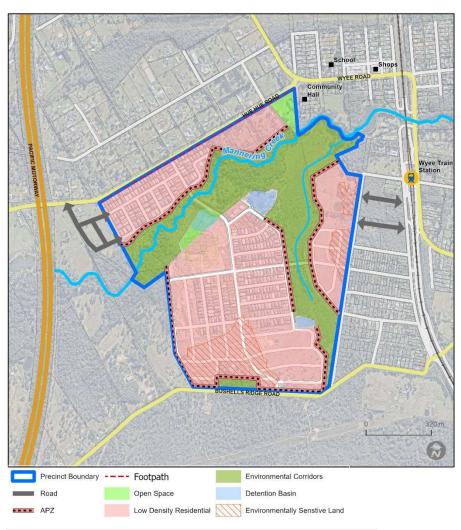


Figure 5 – Precinct A: Subdivision Design and Layout Plan



### 3.1 DEVELOPMENT STAGING

### **Objectives**

- a. To ensure the subdivision of the land is undertaken according to a logical sequence, having regard to the provision of infrastructure and identified community facilities.
- b. To ensure the timely establishment of environmental rehabilitation works required in accordance with Section 3.10 3.9 of this Area Plan.

#### Controls

- 1. Any application for subdivision must be accompanied by a staging plan, indicating the number of residential lots and infrastructure included in each stage.
- 2. The staging plan must clearly indicate the extent of environmental rehabilitation work to occur as part of each stage of the subdivision and the proposed management regime for conservation areas.

#### 3.2 SUBDIVISION DESIGN AND LAYOUT

### **Objectives**

- a. To ensure the subdivision layout is designed to integrate with the surrounding neighbourhood and the natural environment.
- b. To ensure the ecological attributes of the site are protected and enhanced.
- c. To provide a highly accessible network of pedestrian and shared pathways that encourage walking and cycling to local destinations, including, shops, sporting and community facilities and public transport.
- d. To ensure the subdivision of the subject land provides adequate protection form hazards such as flooding and bushfire.
- e. To mitigate adverse impacts of new intersections on the amenity of existing residents and to maintain safe access to existing residences.

#### **Controls**

**Justification:** This change just seeks to correct a mistake (i.e. the text relates to section 3.9 and not 3.10).



- 1. The subdivision layout should generally be consistent with Figure 5.
- 2. The subdivision layout must be designed to ensure passive surveillance of open space and recreation facilities.
- 3. The developer of Precinct A shall determine the impact of the proposed intersection of the new collector road with Hue Hue Road on the ability of residents of 1432 and 1434 Hue Hue Road to safely access their properties from both directions. Where necessary, the developer shall, in consultation with the respective landowners, meet the reasonable expense of relocating the driveways of these properties to allow safe access to and from Hue Hue Road. Additionally, the developer shall construct a solid wall along the front boundary of 1432 Hue Hue Road to the extent necessary to mitigate the effect of headlights of vehicles exiting the proposed collector road on the existing dwelling.

### 3.3 SITE BENCHING

### **Objectives**

- a. To ensure that subdivision design and layout responds to the site's characteristics.
- b. To maintain site stability.
- c. To avoid unnecessary clearing and reshaping of land at subdivision stage.
- d. To ensure that cut and fill does not significantly alter the flow of water or exacerbate flooding.

#### **Controls**

- 1. Benching of allotments created under Clause 4.1B of LMLEP 2014 is permitted at subdivision stage if:
  - i. The height of any retaining walls does not exceed 1.5 metres;
  - ii. All retaining wall designs include a sub-soil drainage system;
  - iii. Retaining walls are permitted near lot boundaries but must be located entirely on the lot being retained, including all necessary sub-soil drainage;
  - iv. Retaining walls are designed to accommodate the surcharge loading of future dwellings, or a restriction will be placed on the lots to ensure that buildings are not built within the influence zone of the retaining wall;
  - v. Retaining walls are constructed of decorative masonry or similar high-quality materials;



vi. The side-to-side cross fall on the resulting benched lots does not exceed 5%.

#### Notes:

- 1. Benching is excavation and / or filling of the natural slope of land to create flat building sites. The earthworks are held in place by a retaining wall.
- 2. Section 3.27 of Part 3 Development within the Residential Zones of LM DCP 2014 contains controls for cut and fill that apply in addition to those provided above. Where benching is undertaken at the subdivision stage, retaining walls may be near the allotment boundary as long as the structure and associated drainage is located entirely on one lot. Where retaining walls are proposed at the development application stage for an individual lot, only the provisions under Section 3.27 of Part 3 of the DCP apply and the retaining wall must be offset from the allotment boundary.

### 3.4 OPEN SPACE AND RECREATION

### **Objectives**

a. To ensure that public open space provided is of the appropriate quantity and quality to meet the recreational and social needs of the community.

#### **Controls**

1. Open space shall be provided onsite in accordance with the requirements of Table 1.

**Table 1 – Open Space Requirements** 

Open Space Type	Number	Minimum Area Required (m2)
Sportsground (2 playing fields)	1	32,500
Netball Courts	2	1,750 (combined area)
Local Park	1	5,000
Dog Exercise Area	1	5,000



**Note:** The location and configuration of open space as shown in Figure 5 is indicative and subject to final survey and design.

#### 3.5 PEDESTRIAN AND BICYCLE LINKS

### **Objectives**

a. To ensure the development provides a pedestrian and cycle network with access to key destinations within the site and surrounding area, including the existing and proposed recreation areas, shops, Wyee Public School and Wyee train station.

#### **Controls**

- 1. Pedestrian and cycle routes must be conveniently linked to recreation and community facilities, the Wyee train station, and the external road network, as shown in Figure 3.
- Where practical, shared pedestrian/cycle pathways should be incorporated into the road reserve on the undeveloped side of perimeter roads, thereby contributing to Asset Protection Zones and providing a 'hard edge' to conservation land.

### 3.6 FRONTAGE TO EXISTING ROADS

### **Objectives**

- a. To ensure new dwellings are orientated towards existing roads in order to:
  - integrate with the existing township,
  - · make efficient use of existing infrastructure, and
  - provide better streetscape amenity along existing roads

#### **Controls**

 Where practical, lots along Hue Hue Road and Bushells Ridge Road should be orientated towards the existing road.

#### Note:

1. If orientating lots towards Bushells Ridge Road cannot be practically achieved due to minimum Asset Protection Requirements and building setbacks, Council may consider a variation to the above control. The onus is on the applicant to demonstrate (supported by a Bushfire Report) why a variation to the control is required.



- 2. If, prior to residential subdivision of the relevant stage adjacent to Bushells Ridge Road, land adjacent to and south of Bushells Ridge Road, located within the Wyong Local Government Area, is developed for a use considered unsuitable to be faced by residential dwellings, Council will consider a variation to the above control. In this circumstance, a vegetated buffer area may be necessary between Bushells Ridge Road and residential allotments.
- 3. Where lots are not orientated towards Bushells Ridge Road, one consistent fence (using timber palings or similar) must be erected along the rear of all lots adjacent to Bushells Ridge Road and screened with landscaping to the satisfaction of Council. Fencing and landscaping details are to be submitted with the Development Application for the relevant stage of subdivision and the works shall be completed prior to release of the Subdivision Certificate.

#### 3.7 WATER QUALITY MANAGEMENT

### **Objectives**

- a. To ensure ecologically valuable land and associated watercourses are protected.
- b. To rehabilitate creek banks that have been subject to damage from erosion
- c. To ensure the stormwater drainage system is designed to maintain the natural watercourse and to minimise future environmental impacts.

#### **Controls**

- 1. Stormwater from developed areas should be treated prior to discharging into a natural watercourse.
- 2. Eroded sections of the bank of Mannering Creek (including and upstream of Lot 1 DP 785709) are to be rehabilitated and stabilised by revegetation with suitable native species for the width of the €2 C2 zone in conjunction with construction of the proposed road link crossing the creek.
- 3. Stormwater and water quality facilities should be primarily located within the R2 Low Density Residential zoned part of the site. If any stormwater and water quality structures are positioned within the €3 C3 zoned land, these facilities must be designed to integrate with revegetation works and ensure adequate flow paths are maintained. No facilities are to be located in the €2 C2 zone.

**Justification:** The environmental zones (i.e. E1, E2, E3 and E4) have been changed to conservation zones (i.e. C1, C2, C3 and C4). The changes reflect the updated zone names.



### 3.8 BUSHFIRE

### **Objectives**

- a. To minimise any risks to life and property from bushfire hazards.
- b. To ensure that any risks associated with bushfire are appropriately managed.

#### **Controls**

- 1. The subdivision plan should provide for a perimeter road between the bushfire prone land and the development lots.
- 2. Asset Protection Zones must be established within the residential zoned part of the site and require minimal maintenance (i.e. incorporate perimeter road).

### 3.9 VEGETATION MANAGEMENT

### **Objectives**

- a. To protect and enhance biodiversity values within land zoned for conservation.
- b. To ensure the riparian and wildlife corridors associated with Mannering Creek and its tributaries are rehabilitated and appropriately managed, including establishing habitat suitable for arboreal fauna.
- c. To ensure that the loss of biodiversity arising from development of the land is offset to mitigate the impact of that development.
- d. To provide for the long-term rehabilitation and management of land zoned for conservation.

#### **Controls**

1. A Vegetation Management Plan must be prepared for the Precinct in accordance with Council's Vegetation Management Plan Guidelines prior to subdivision.



- 2. Secure tenure of the E2 C2 Environmental Conservation Land is necessary to ensure the long-term protection, rehabilitation and management of the E2 C2 land. This may be achieved by:
  - i. Dedication of E2 C2 land to Council or an acceptable management agency following implementation of the Vegetation Management Plan for a period of 10 years;
  - ii. Entering into a legally binding agreement (e.g. Planning Agreement) to establish a mechanism to provide ongoing management of E2 C2 land (e.g. an endowment fund);
- 3. All required on-site biodiversity offsets must be planted and functioning to the satisfaction of Council, prior to removal of any vegetation identified as Environmentally Sensitive Land in LMLEP 2014 (Clause 7.20).
- 4. Rehabilitated conservation lands should be protected by adequate drainage and weed controls, as well as fencing to deter unauthorised vehicular access.

#### Note:

- i. Preparation of the Vegetation Management Plan (VMP) may be carried out in stages corresponding with stages in subdivision of the site. For example, subdivision of that part of Precinct A between Hue Hue Road and Mannering Creek must include a VMP for land zoned £2 C2 adjacent to the proposed subdivision up to the northern bank of the creek [excluding land likely to be disturbed during construction of the proposed road crossing of the creek]. The final VMP must provide for, but not be limited to:
  - a. Re-establishment of native vegetation along riparian corridors, in endangered ecological communities and in fauna movement corridors (including removal of rubbish, weeds and planting with suitable native species);
  - b. Stabilisation of creek and drainage lines within the site using soft engineering (i.e. mimic natural systems such as properly constructed bed controls, pools and riffles);
  - c. Rehabilitation of habitat suitable for squirrel gliders, including establishment of a continuous canopy of preferred habitat trees such as Swamp Mahogany (*Eucalyptus Robusta*) augmented with artificial structures where necessary to allow movement through the site and for habitat augmentation (e.g. installing nest boxes to compensate for loss of hollows).
  - d. Details of the number and location of *Angophora Inopina* to be replanted in the E2 C2 land to compensate for loss of individuals for development (replanting of *Angophora Inopina* must be provided at a ratio of 5:1);
  - e. Future management arrangements for the E2 C2 land including funding, monitoring and timeframes;

**Justification:** The environmental zones (i.e. E1, E2, E3 and E4) have been changed to conservation zones (i.e. C1, C2, C3 and C4). The changes reflect the updated zone names.

**Justification:** The environmental zones (i.e. E1, E2, E3 and E4) have been changed to conservation zones (i.e. C1, C2, C3 and C4). The changes reflect the updated zone names.



- f. The standard of rehabilitation to be achieved should result in a weed free, self-maintaining ecosystem to ensure minimal maintenance is required over the long term; and
- g. Inclusion of the treatment of the interface between the land to be conserved and areas to be developed as urban.
- ii. If any offset land is to be managed by or dedicated to any other organisation or trust other than Lake Macquarie City Council, suitable documentation is to be provided to Council to provide certainty that:
  - a. The criteria and arrangements in the section are satisfied, and
  - b. Adequate financial resources have been secured in perpetuity of the subject land.
- iii. In determining these controls, no seven-part test has been undertaken. Should Council's assessment of the seven-part test conclude that a significant impact will result from development of the land, then development and offset arrangements will require concurrence from the NSW Office of Environment and Heritage.



### 4 PRECINCT B – MEDIUM DENSITY RESIDENTIAL

### **Objectives**

- To ensure development within the precinct integrates (or provides for future integration) with the remainder of the precinct
- b. To ensure that medium density development provides for a sympathetic transition to the low density housing.
- c. To provide a mix of medium density housing such as town houses and residential flat buildings.
- d. To recognise potential impacts of the rail corridor on new development.

#### **Controls**

- A structure plan for the whole of Precinct B must be prepared to Council's satisfaction prior to consent being
  granted to any residential development within the precinct. The structure plan must have involved consultation
  with other landowners within the precinct, including with the relevant Aboriginal Land Council for any parcels
  subject to Aboriginal Land Claims.
- 2. Roads must be provided generally in accordance with Figure 6.
- 3. Development consent must not be granted for development unless Council is satisfied that the cumulative impact from residential development on the biodiversity values is minimal, or has been appropriately mitigated or offset.
- 4. Reticulated water and sewerage must be available, or adequate arrangements have been made to make them available, prior to Council granting consent for residential development.
- 5. Proposed development fronting Gorokan Road must have regard to "Development Near Rail Corridors and Busy Roads Interim Guidelines" (released by the NSW Department of Planning).



Figure 6 - Precinct B: Indicative Roads

### 5 PRECINCT C – PAPER SUBDIVISION

### **Objectives**

- a. To ensure that essential infrastructure is in place prior to dwellings being constructed.
- b. To ensure that infrastructure is provided in a logical and coordinated manner.
- c. To ensure that adverse impacts of development on environmentally sensitive land are minimised or offset in a coordinated manner.

#### **Controls**

- 1. Dwellings must not be approved until essential infrastructure is in place, or adequate arrangements have been made to make them available. Essential infrastructure includes:
  - i. Reticulated water,
  - ii. Reticulated sewerage,
  - iii. Properly constructed roads,
  - iv. Stormwater drainage,
  - v. Electricity, and
  - vi. Telecommunications.
- 2. All landowners of land zoned residential will need to contribute to the cost of infrastructure through an agreed scheme.
- 3. Development consent for dwellings should not be granted unless Council is satisfied that the cumulative impact from residential development on biodiversity values is minimal, or has been appropriately offset.

**Note:** The investigation and resolution of biodiversity matters should be undertaken as part of preparing an agreed scheme to provide essential infrastructure to the land.



### 6 PRECINCT D – LOW DENSITY RESIDENTIAL



Figure 7 - Precinct D: Indicative Roads, APZs, stormwater basin and environmental corridor

**Justification:** Figure 7 has been included to show the location of indicative roads, APZ's, stormwater basin and environmental corridor for Precinct D.



### 6.1 SUBDIVISION DESIGN AND LAYOUT

### **Objectives**

- To ensure the subdivision layout is designed to integrate with the surrounding neighbourhood and the natural environment.
- b. To ensure the ecological attributes of the site are protected and enhanced.
- c. To provide a highly accessible network of pedestrian and shared pathways that encourage walking and cycling to local destinations, including, shops, sporting and community facilities and public transport.
- d. To ensure the subdivision of the subject land provides adequate protection form hazards such as flooding and bushfire.
- e. To mitigate adverse impacts of new intersections on the amenity of existing residents and to maintain safe access to existing residences.

**Controls** 

1. The subdivision layout should generally be consistent with Figure 7.

### 6.2 FRONTAGE TO EXISTING ROADS

### **Objectives**

- a. To ensure new dwellings are orientated towards existing roads in order to:
  - i) integrate with the existing township,
  - ii) make efficient use of existing infrastructure, and
  - iii) provide better streetscape amenity along existing roads

Controls

1. Where practical, lots along Hue Hue Road and Jarvis Road should be orientated towards the existing road.

**Justification:** These objectives and control have been added to provide guidance in regard to the subdivision layout of Precinct D.

**Justification:** These objectives and control have been added to ensure that new residential lots face existing roads (i.e. Hue Hue Road and Jarvis Road).



### 6.3 NOISE AND VIBRATION

### **Objectives**

a. To ensure development achieves acceptable levels of amenity in relation to road noise and vibration.

#### **Controls**

1. Development within the red hatched area as shown in Figure 8 must be accompanied by an acoustic report and vibration study demonstrating acceptable noise and vibration levels for the development can be met. If the acoustic report and vibration study recommend noise and/or vibration mitigation measures to be put in place, the development application must demonstrate how these measures have been incorporated into the design of the development.

Justification: The noise and vibration objective and control have been added to address concerns raised in a submission in relation to noise impacts from the M1 on future development on the site. The control seeks to ensure that potential noise and vibration matters are considered and assessed at the DA stage and that appropriate noise and vibration mitigation measures are put in place if required.





Figure 8 - Precinct D: Map showing properties requiring an acoustic report and vibration study as shown in the red hatched area.

**Justification:** Figure 8 has been included to show where future development will require to undertake an acoustic report and vibration study.



### 6.4 PEDESTRIAN AND BICYCLE LINKS

### **Objectives**

a. To ensure the development provides a shared path that links with the existing shared path to provide access to key destinations within the surrounding area, including the existing and proposed recreation areas, shops, Wyee Public School and Wyee train station.

#### **Controls**

- The shared path must be conveniently linked to the existing shared path which provide access to recreation and community facilities, the Wyee train station, and the external road network.
- 2. Where practical, the shared path should be incorporated into the road reserve on the undeveloped side of perimeter roads, thereby contributing to Asset Protection Zones and providing a 'hard edge' to conservation land.

6.5 BUSHFIRE

### **Objectives**

- a. To minimise any risks to life and property from bushfire hazards.
- b. To ensure that any risks associated with bushfire are appropriately managed.

### **Controls**

- 1. The subdivision plan should provide for a perimeter road between the bushfire prone land and the development lots.
- Asset Protection Zones must be established within the residential zoned part of the site and require minimal
  maintenance (i.e. incorporate perimeter road) and should be to the satisfaction of Council and the NSW Rural Fire
  Service.

Justification: These objectives and controls have been added to ensure that the new shared path will connect to the existing one and to ensure that, where practical, the shared path will be incorporated into the road reserve to contribute to a 'hard edge' Asset Protection Zone, which will help to minimise bushfire related risks.

Justification: These objectives and controls have been added to ensure that there is a perimeter road between the bushfire prone land and the development lots to reduce the bushfire related risks and to ensure that Asset Protection Zones comply with bushfire standards.



### 6.6 FLOODING

### **Objectives**

- a. To minimise any risks to life and property from flooding hazards.
- To ensure that any risks associated with flooding are appropriately managed.

#### **Controls**

- Land in the R2 zone and affected by the probable maximum flood can only be used for stormwater management.
- 2. Residential development is to be located outside of land affected by the probable maximum flood.
- Proposed roads and residential lot levels to be designed to provide safe egress from flood waters.

### 6.7 STORMWATER AND WATER QUALITY MANAGEMENT

### **Objectives**

- a. To ensure ecologically valuable land and associated watercourses are protected.
- b. To ensure the stormwater drainage system is designed to maintain the natural watercourse and to minimise future environmental impacts.

### **Controls**

- 1. Stormwater from developed areas must be treated prior to discharging into a natural watercourse.
- 2. Stormwater and water quality facilities must only be located within the R2 Low Density Residential zoned part of the site as shown in figure 7.

### 6.8 VEGETATION MANAGEMENT

### **Objectives**

- To protect and enhance biodiversity values within land zoned for conservation.
- b. To ensure the riparian and wildlife corridors associated with Mannering Creek and its tributaries are rehabilitated and appropriately managed, including establishing habitat suitable for arboreal fauna.

Justification: These objectives and controls have been added to ensure that residential development is not allowed on land affected by the probable maximum flood in order to reduce flood related risks but that infrastructure like stormwater management basin can be located in the probable maximum flood area.

Justification: These objectives and controls have been added to ensure that stormwater is located outside of C2 Environmental Conservation zoned land and is treated before entering Mannering Creek to protect the water quality. In addition, the objectives and controls also seek to ensure that stormwater management and water quality facilities do not have adverse impacts on the environment.



- To ensure that the loss of biodiversity arising from development of the land is offset to mitigate the impact of that development.
- d. To provide for the long-term rehabilitation and management of land zoned for conservation.

#### Controls

- 1. A Vegetation Management Plan must be prepared for the Precinct in accordance with Council's Vegetation Management Plan Guidelines prior to subdivision.
- 2. Secure tenure of the C2 Environmental Conservation Land is necessary to ensure the long-term protection, rehabilitation and management of the C2 land. This may be achieved by:
  - i. dedication of C2 land to Council or an acceptable management agency following implementation of the Vegetation Management Plan for a period of 10 years;
  - ii. entering into a legally binding agreement (e.g. Planning Agreement) to establish a mechanism to provide ongoing management of C2 land (e.g. an endowment fund);
- 3. Rehabilitated conservation lands should be protected by adequate controls to:
  - i. maintain hydrological regime and water quality as close as practical to predevelopment,
  - ii. manage access,
  - iii. manage impacts over the long term, and
  - iv. prevent damage during construction.

#### Note:

- 1. The Vegetation Management Plan (VMP) must provide for, but not be limited to:
  - a. Enhancement of native vegetation along riparian corridors, in endangered ecological communities and in fauna movement corridors (including removal of rubbish, weeds and planting with suitable native species as required);
  - b. Removal of foreign material from creek;
  - c. Rehabilitation of habitat suitable for squirrel gliders, including enhancement and habitat augmentation (e.g. installing nest boxes to compensate for loss of hollows).

**Justification:** These objectives and controls have been added to ensure that the environmental values of the site are retained and protected.



- d. Future management arrangements for the C2 land including funding, monitoring and timeframes;
- e. The standard of rehabilitation to be achieved should result in a weed free, self-maintaining ecosystem to ensure minimal maintenance is required over the long term; and
- f. The treatment of the interface between the land to be conserved and areas to be developed for urban use.
- 2. If any offset land is to be managed by or dedicated to any other organisation or trust other than Lake Macquarie City Council, suitable documentation is to be provided to Council to provide certainty that:
  - a. The criteria and arrangements in the section are satisfied, and
  - b. Adequate financial resources have been secured in perpetuity of the subject land.
  - c. These controls are based on the understanding that the biodiversity offset scheme is not triggered.