

#### **DOCUMENT CONTROL DATA**



**Beveridge Williams** Title Nyora Development Plan Melbourne Office Author FW 1 Glenferrie Road Checked  $\mathsf{AB}$ Malvern Vic 3144 **Project** LM PO Box 61 Manager Malvern Vic 3144 **Synopsis** Nyora Development Plan in accordance Tel: (03) 9524 8888 Development Plan Overlay Schedule 10 of the South Gippsland beveridgewilliams.com.au Planning Scheme.

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# **CONTENTS**

1	INTR	RODUCTION	3		
	1.1	DEVELOPMENT PLAN OVERVIEW	3		
	1.2	PURPOSE OF THE DEVELOPMENT PLAN	4		
	1.3	STRUCTURE OF THE DEVELOPMENT PLAN	5		
2	STRATEGIC CONTEXT				
	2.1	NYORA STRUCTURE PLAN	6		
	2.2	NYORA DEVELOPMENT STRATEGY	6		
	2.3	PLANNING SCHEME PROVISIONS	8		
3	SITE	ANALYSIS	10		
	3.1	REGIONAL CONTEXT	10		
	3.2	OVERVIEW SITE ANALYSIS	10		
	3.3	TOPOGRAPHY AND LANDFORM	11		
	3.4	WATERWAYS AND DRAINAGE	12		
	3.5	CULTURAL HERITAGE	13		
	3.6	BUSHFIRE RISK	14		
	3.7	VEGETATION AND HABITAT	15		
	3.8	TRAFFIC AND MOVEMENT NETWORK	17		
4	DESI	GN RESPONSE	20		
	4.1	VISION	20		
	4.2	OUTCOMES	21		
	4.3	DEVELOPMENT SEQUENCING	22		
	4.4	BUILT ENVIRONMENT	23		
	4.5	OPEN SPACE AND NATURAL ENVIRONMENT	24		
	4.6	MOVEMENT NETWORK	24		
	4.7	STAGING AND INFRASTRUCTURE DELIVERY	25		
5	CON	CLUSION	26		

### **APPENDICES**

APPENDIX A. SITE CONTEXT PLAN

APPENDIX B. SITE ANALYSIS PLAN

APPENDIX C. STORMWATER MANAGEMENT STRATEGY

APPENDIX D. CULTURAL HERITAGE ASSESSMENT

APPENDIX E. BUSHFIRE MANAGEMENT STATEMENT

APPENDIX F. FLORA AND FAUNA ASSESSMENT

APPENDIX G. GIANT GIPPSLAND EARTHWORM TARGETED SURVEY

APPENDIX H. DWARF GALAXIAS TARGETED SURVEY

APPENDIX I. SOUTHERN BROWN BANDICOOT TARGETED SURVEY

APPENDIX J. TRAFFIC AND TRANSPORT ASSESSMENT

APPENDIX K. DESIGN RESPONSE PLAN

APPENDIX L. INDICATIVE DEVELOPMENT PLAN

APPENDIX M. OVERALL STAGING PLAN
APPENDIX N. LANDSCAPE MASTERPLAN

#### 1 INTRODUCTION

## 1.1 Development Plan Overview

The Nyora Development Plan is a plan to guide the future development of land to the north of the establish Nyora township.

Land to the north of the existing Nyora Township was identified for the expansion of Nyora following approximately ten years of thorough strategic planning, and is identified for both short and long-term growth within the Nyora Land Use Framework Plan (included within the South Gippsland Planning Scheme at Clause 21.15-5).

The Nyora Development Plan applies to approximately 103 hectares of land as shown in **Figure 1** and is generally bound by Glovers Road along the northern and eastern boundaries. Yannathan Road and an existing low density residential area form the western boundary whilst Lang Lang-Poowong Road and the low density residential area for the southern boundary of the site. The land is subject to the Development Plan Overlay Schedule 10 (DPO10) in the South Gippsland Planning Scheme.

The Nyora Development Plan contains plans, vision and objectives that providing certainty for the community, South Gippsland Shire Council and the development industry. It describes how the land is expected to be developed and how and where services are planned to support development.

#### Key outcomes include:

- Preserve and enhance areas with high environmental value.
- Provide a network of passive and active recreational reserves with linking pedestrian and shared paths.
- Respond to the existing topography of the land.
- Integrate new development with the existing township.
- Use land intended for urban growth in an efficient manner to reduce pressure for further urban expansion into farmland.
- Develop a permeable network of streets that link with the existing township.
- Promote greater housing choice through the delivery of a range of lots capable of accommodating a variety of dwelling types and densities.
- Coordinate development sequencing and staging with the delivery of key infrastructure.

It is estimated that the Nyora Development Plan area will ultimately accommodate approximately 730 dwellings.

The Development Plan will ensure that development of Nyora north enhances the environmental values, improves stormwater functioning to the existing township and provides much needed recreational facilities to a growing community. It has been prepared by Beveridge Williams in consultation with South Gippsland Shire Council, government agencies, service authorities and major stakeholders.

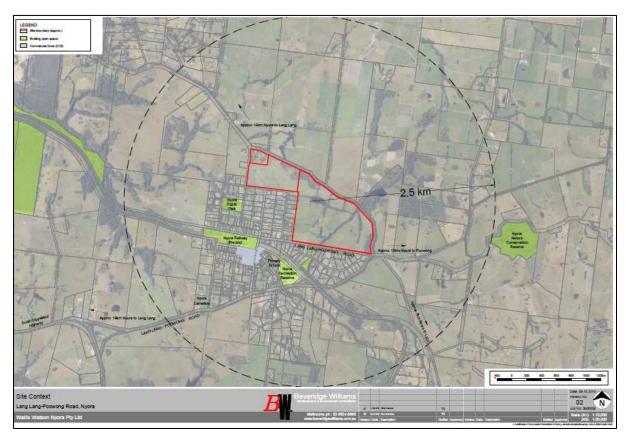


Figure 1: Site Context

## 1.2 Purpose of the Development Plan

The Nyora Development Plan has been prepared to implement the overall vision outlined in the Nyora Land Use Framework Plan. This Development Plan guides land use and development where a planning permit is required, and where the Development Plan Overlay or another provision in the South Gippsland Planning Scheme references this Development Plan. A planning permit application must respond to the Nyora Development Plan and a planning permit must implement the outcomes of the Nyora Development Plan. The outcomes are expressed as the vision and objectives.

## The Nyora Development Plan:

- Provides government agencies, the Council, developers, investors and local communities with certainty about future growth and development.
- Sets out plans to guide the delivery of quality urban environments in accordance with Victorian Government policies and guidelines (listed below).
- Enables the transition from non-urban land to urban land.
- Sets the vision for how land should be developed, illustrates the future urban structure and describes the outcomes to be achieved by the future development.
- Sets out objectives, expectations for land use, development and subdivision.

The Nyora Development Plan is informed by the following policies and guidelines:

- Planning Policy Framework set out in the South Gippsland Planning Scheme.
- Planning Practice Note 23 Applying the Incorporated Plan and Development Plan Overlays (Department of Environment, Land, Water, and Planning, 2015), and the Precinct
- Local Planning Policy Framework of the South Gippsland Planning Scheme.

• Gippsland Regional Growth Plan (Department of Transport, Planning & Local Infrastructure, 2013).

## 1.3 Structure of the Development Plan

The Nyora Development Plan is structured to demonstrate that the plan is responsive to the existing site features, particularly native vegetation and stormwater management, and will provide an integrated and functional urban development. In order to achieve the desired outcomes for the site, the Development Plan includes.

- Strategic Context: Background and context for the preparation of the Development Plan.
- **Site Analysis:** Analysis and identification of key opportunities and constraints.
- **Design Response:** Sets out the Vision and Outcomes, the Development Plan layout and the indicative sequencing of development.

Development must also comply with the other Acts and approvals where relevant; e.g. the Environment Protection and Biodiversity Conservation Act 1999 in the case of biodiversity, or the Aboriginal Heritage Act 2006, in the case of cultural heritage, amongst others.

Not every aspect of the use, development or subdivision of land is addressed in this Nyora Development Plan. There may also be additional technical reports required in support of development at 30 Glovers Road and 951 Yannathan Road. The Responsible Authority may manage development and issue permits as relevant under its general discretion.

#### 2 STRATEGIC CONTEXT

#### 2.1 Nyora Structure Plan

The Nyora Structure Plan (2013) was incorporated into the South Gippsland Planning Scheme in October 2013. The Structure Plan sets the direction for the town's growth and development to the year 2025 and beyond.

Specific to the subject land, the Structure Plan designates 'Future Residential Area' for 30 Glovers Road and 951 Yannathan Road and 379 Lang Lang – Poowong Road as far as the north-south drainage channel. Land east of the drainage channel (still within 379 Lang Lang – Poowong Road) is identified as a 'Long term residential area'. The Structure Plan stipulates that future urban development will occur at the initiation of landowners, when demand can be justified over the site.

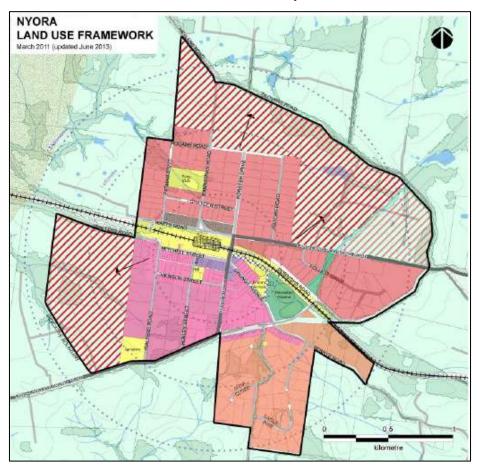


Figure 2: Nyora Land Use Framework Nyora Structure Plan. Not to Scale

## 2.2 Nyora Development Strategy

The Nyora Development Strategy (2016) builds on the key recommendations of the Nyora Structure Plan. The Nyora Development Strategy looks in more detail at the infrastructure needed (drainage, traffic and community facilities) and how development should occur within the township.

The subject land is identified as Precinct F which is designated as a growth area where development will be logical and staged by the developer. Development of Precinct F will have a critical role in contributing to Nyora's population growth, and resulting ability to provide services and facilities on a shorter timescale. Linking Precinct F to the rest of the township by pedestrian and shared paths will be important to connect established areas to the new development.

In the short-to-medium term, the strategy anticipates that development of Precinct F will transform Nyora, stimulate the property market and bring new residents to the township. The Strategy notes that the proposed development will be urban style with typical residential lot sizes around 750m<sup>2</sup>.

A feature of the development will be the creation of new linkages and open space areas that will eventually connect to the established areas of the township. In addition, the strategy identifies the potential to improve stormwater management through the creation of a substantial drainage reserve within Precinct F that will alleviate potential flooding and increase capacity from external catchments

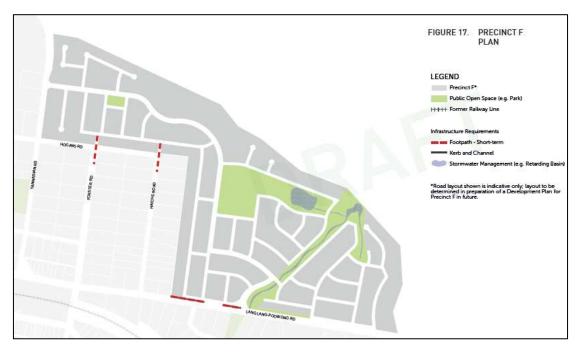


Figure 3: Precinct F – Nyora Development Strategy Source: Nyora Development Strategy. Not to scale

The Strategy identifies the following infrastructure priorities for the precinct:

Table 1: Precinct F – Development Infrastructure Priorities

CATEGORY	WORKS	PHASING	COMMENCEMENT	APPROVAL AUTHORITY	FUNDING
Short Term Growth (Precinct F)	New connector roads / Access streets / Open space / Drainage / Shared paths	Developer-led	Short Term	Developer	Developer / Precinct F Section 173
Main Road Improvements	Lang Lang - Poowong Road / Precinct F Entrance	Development of Precinct F	Short Term	VicRoads	Developer
	Lang Lang - Poowong Road / Davis Street Intersection	Development of Precinct F	Short Term	VicRoads	Precinct F Section 173
	Shared Path - Precinct F to Grundy Avenue	Development of Precinct F	Short Term	Council	Precinct F Section 173 / Developer Contributions
Long Term Growth Precincts	Yannathan Road / Precinct F & D Intersection	Developer-led	Long Term	Developer	Developer / Section 173

## 2.3 Planning Scheme Provisions

#### Clause 15 Built Environment and Heritage

Clause 15 seeks to ensure all new land use and development appropriately responds to its landscape, valued built form and cultural context. The clause aims to ensure planning achieves high quality urban design and architecture that:

- Contributes positively to local character and sense of place.
- Are enjoyable, engaging and comfortable to be in.
- Reflects the particular characteristics and cultural identity of the community.
- Enhances the function, amenity and safety of the public realm.

This state planning policy guides the development of more focused, localised planning policies in the area.

#### Clause 21.15 Local Areas

Clause 21.15-5 established the future character direction for Nyora which 'is seen as a desirable lifestyle location due to its rural character and proximity to major urban centers. It is experiencing strengthening levels of population growth. Planning for the town and new residential areas needs to accommodate new infrastructure and commercial services that support the community's social and employment needs whilst respecting the town's rural character'.

Land use and development objectives for the township of Nyora include:

- Ensure that any proposed use and development of land in Nyora is generally in accordance with the Nyora Framework Plan.
- Ensure that residential growth and land release is staged so that the provision of essential physical, retail and community infrastructure keeps pace with development and strengthens the town's role in providing services.
- Ensure that any subdivision in the Future Residential Areas or Long Term Residential Areas identified in the Nyora Framework Plan does not occur until:
  - Reticulated sewerage can be provided to the land.
  - There is an identified need for additional residential land within the township.
  - A comprehensive assessment, feasibility study and costing has been done of required development infrastructure (roads, drainage, etc) and community infrastructure.
  - A Development Contributions Plan Overlay (or similar infrastructure cost recovery method) based on the above infrastructure studies, has been applied to provide equitable financial contribution towards, or the provision of, development and community infrastructure upgrades required to support new urban residential development.
  - A Development Plan Overlay has been prepared which provides for the integrated development of the entire land having regard to environmental and landscape constraints and opportunities and the town's existing and preferred rural township character.
- Promote residential development that complements the small rural township character of the area.
- Protect the natural environmental qualities and landscape values of the Future Residential Areas and the Long Term Residential Areas identified in the Nyora Framework Plan.

- Ensure vegetation continues as the dominant landscape feature.
- Ensure that residential land release occurs in stages, contiguous and integrated manner with subdivision designs that respond to the topographic, landscape and environmental constraints of the land.
- Ensure development contributes to provision of community services and facilities.
- Create an integrated network of pedestrian and bicycle paths linking features and facilities in and around the township in accordance with the directions of Council's Paths and Trails Strategy 2010 (or as amended) and Melbourne Water's Shared Pathway Guidelines (January 2009) as amended.

The Nyora Development Plan has been prepared in direct response to this policy.

#### Zoning

Zoning is used as a way to control what land uses can occur in a certain area of land, and the relationships to surrounding uses. The General Residential Zone Schedule 1 (GRZ1) applies to approximately 51 hectares of land. The balance of the site (approximately 52 hectares) is zoned Farming Zone (FZ).

The GRZ1 seeks to encourage development that respects the existing neighbourhood character, and a diversity of housing types and housing growth. Development must occur in accordance with the requirements of Clause 56 Residential Subdivision of the Victoria Planning Provisions, which has been considered throughout the preparation of the Development Plan.

The FZ encourages the retention of productive agricultural land. In accordance with the Schedule to the Farming Zone, the minimum lot size for subdivision is 40 hectares. The *Nyora Structure Plan* identifies this land as *long term residential*, within the township boundary however, urban development cannot occur on the FZ land until it is rezoned to the GRZ1.

#### Overlays

Overlays are used as an additional level of control to zones, where local and site-specific requirements can be made as necessary. The Development Plan Overlay Schedule 10 (DPO10) applies to the site, as implemented by Amendment C72 of the South Gippsland Planning Scheme.

The DPO triggers the requirement for the preparation of a Development Plan in order to facilitate coordinated development. This generally occurs prior to any application for planning permits for subdivision.

Schedule 10 to the Development Plan Overlay requires the completion a series of reports including a Biodiversity (including Flora and Fauna) Assessment, Stormwater Management Plan, Traffic Impact Assessment, Cultural Heritage and Bushfire Risk Assessment, to the satisfaction of the Responsible Authority, in support of their proposal.

The Development Plan must also deliver a site analysis, design response and development sequencing to the satisfaction of the Responsible Authority. This document responds to these requirements.

#### 3 SITE ANALYSIS

#### 3.1 Regional context

This Development Plan applies to land at 379 Lang Lang-Poowong Road, 30 Glovers Road and 951 Yannathan Road, Nyora. The Development Plan area is located adjacent to the north-eastern edge of the Nyora township, approximately 500 metres north of the Nyora town centre.

Nyora is the closest South Gippsland Shire township to metropolitan Melbourne, and is located 2 km to the north of the South Gippsland Highway, next to the Melbourne to Leongatha railway corridor, only part of which is now used infrequently as a tourist railway. Primary access to Nyora generally occurs via Lang Lang-Poowong Road.

### 3.2 Overview Site Analysis

The Nyora Development Plan area is generally bound by Glovers Road along the northern and eastern boundaries. Yannathan Road and an existing low density residential area form the western boundary whilst Lang Lang-Poowong Road and the low density residential area for the southern boundary of the site.

The Nyora Development Plan area comprises three land parcels, each in separate ownership. 379 Lang Lang – Poowong Road and 30 Glovers Road is currently used for agriculture whilst 951 Yannathan Road is used for rural living.

The site provides both opportunities and constraints with regard to its distinct site features and environmental features, which allows for creative outcomes within the design process. **Figure 4** provides an overview of the notable site features that will influence the outcomes of the design process. The following sections of this report outline in more detail the site features and opportunities of the existing conditions.

The key site features include:

- The total site area is approximately 103 hectares. Approximately 49% of this land is identified as for short term growth and approximately 51% for long term.
- The site is located north of the existing Nyora township, with frontage to Lang Lang –
   Poowong Drive, and partial frontage to Yannathan and Glovers Roads.
- The site is highly modified and has been extensively cleared for agricultural uses. Remnant native vegetation exists on the site, and is predominantly located along the northern and eastern boundaries as well as the existing drainage channel.
- Thirty-four (34) scattered trees are also located on the site.
- The topography varies from low lying areas, grassy open plains as well as elevated slopes across the site. There are extensive views from the high points, south and east across adjacent farmland and south to the existing township.
- There is a defined drainage line that runs diagonally through the property at 379 Lang Lang —
  Poowong Road, with an offshoot running into a large dam. There are also several smaller
  informal farm drainage systems and isolated dams that are used to support existing
  agricultural operations.
- There are no known impediments to the provision of electricity, water, telephone or sewer to future residential development, though some upgrades and new works will be required.
- The Development Plan area has frontage to Lang Lang Poowong Road Drive (arterial) and Yannathan Road (local arterial).

These site features contribute to the character of the area, and have both informed and been incorporated into the Design Response, with certain elements accentuated through the proposed residential development.

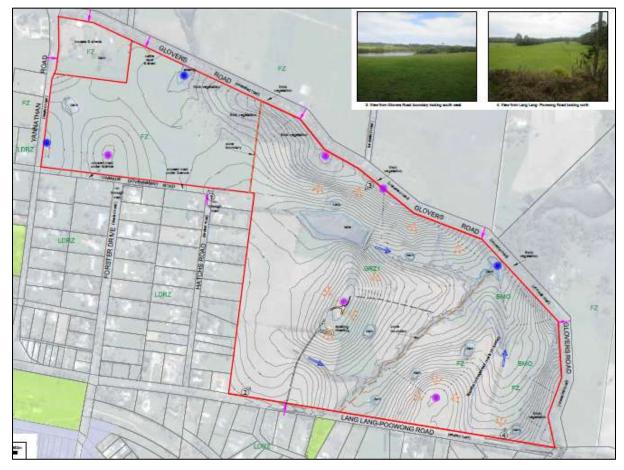


Figure 4: Site Analysis Plan

## 3.3 Topography and landform

The total Nyora Development Plan area is approximately 103 hectares across 3 allotments. The land generally falls to the north and west.

The development area comprises generally open grassy paddocks with scattered paddock trees, as well as areas of dense vegetation and trees around the northern and eastern perimeters. 379 Lang Lang – Poowong Road and 30 Glovers Road The property exhibits a long history of grazing with open paddocks comprise of introduced pasture grasses and broadleaf weeds, namely Cape Weed occurring on site.

There is a defined drainage channel that runs diagonally through the property at 379 Lang Lang – Poowong Road, with an offshoot running into a large dam. The drainage channel and large dam capture water from upstream and assist in the distribution of runoff away from the existing township.

### **Key Design Opportunities**

- Align streets to maximise views towards the existing Nyora Township.
- Design with the topography, to increase the diversity of housing, built product, and lot type.

- Redevelop the existing drainage channel to operate at a high level to capture and treat stormwater from the development area as well as upstream of the site.
- Utilise prominent hill tops to provide open space as seen from key vantage points outside the Nyora Development Plan area, and to provide access for the community to capture key views across the landscape.

## 3.4 Waterways and Drainage

Generally speaking, the site flows from south to north, from an approximate maximum elevation of 127m AHD to an approximate 104m AHD. There is a defined drainage channel that runs diagonally through the property at 379 Lang Lang – Poowong Road. There are also several smaller informal farm drainage systems and isolated dams that are used to support existing agricultural operations.

The major external catchment inflow occurs from the south of the site, primarily in proximity to the existing drainage channel and travels north towards Glovers Road and ultimately deposits flows into farm dams further downstream.

The existing township drainage system only accounts for drainage of the established township, and makes no provision for external catchments. As the development site is located downstream, it is not anticipated that future development will impact the existing drainage system. On the contrary, it is expected that drainage works associated with the development area will improve stormwater management system within the existing and future township area.

### **Key Design Opportunities**

- Align roads to facilitate overland flows.
- Provide access to a network of feature wetlands and drainage reserves to ensure maximum flood storage and to provide stormwater treatment.
- Manage stormwater flow and treatment so that flow from each system is minimized (within site and topography constraints) to minimise site discharge downstream.
- Re-design the existing drainage channel and wetland system on-site to address existing flooding issues within the existing township.



Figure 5: Post Development Catchment Plan
Beveridge Williams Nyora Stormwater Management Strategy

A Stormwater Management Strategy is contained at Appendix C.

## 3.5 Cultural Heritage

A Cultural Heritage Assessment was prepared in 2003 by Andrew Long and Associates. The assessment included a survey of the land which did not identify any Aboriginal archaeological sites within the study area. In addition, the entire area was identified as having low - moderate potential to contain Aboriginal sites. The effectiveness of the field assessment was limited by > 99.5% grass cover which obscured surface visibility, therefore the assessment has had to place greater emphasis on site predictive models for the region to determine the likelihood of Aboriginal sites occurring and surviving in this region. The predictive modelling suggests that there is low - moderate potential for stone artefact occurrences (surface scatters and isolated artefacts) to be present within the study area.

No historical archaeological sites were recorded during the field survey. This can be seen as a reflection of the predominantly pastoral use of the landscape in the post-contact period, which is unlikely to have resulted in significant archaeological features.

As the site is not located in an area of potential sensitivity, a mandatory cultural heritage management plan is not required.

#### **Key Design Opportunities**

• Have regard to the recommendations of a Cultural Heritage Assessment November 2003 within subdivision design at the planning permit application stage. This may include retention of sites within open space in association with some form of landscape interpretation.

A Cultural Heritage Assessment is contained at **Appendix D**.

#### 3.6 Bushfire Risk

379 Lang Lang – Poowong Road is partially affected by the Bushfire Management Overlay (BMO) and all three properties fall within a mapped Bushfire Prone Area. Responsive to this, all three properties have been assessed under the requirements of Clause 44.06 (BMO) of the South Gippsland Planning Scheme, and the associated Clause 53.02.

The *Bushfire Management Statement, October 2018* prepared by Brett Lane and Associates Pty Ltd responds to the requirements for building construction and defendable space, incorporating an assessment of potential bushfire hazards (classified vegetation). This assessment provides the minimum Bushfire Attack Level (BAL) construction requirement, wherein this has been established as BAL- 12.5 across almost the entire site and BAL-19 on a small portion of land already zoned General Residential Zone.

New development will incorporate bushfire protection measures to ensure that all lots are capable of achieving the identified construction standard, that development is sited to minimise risk from bushfire and provides safe access in accordance with the requirements of the responsible authority in submissions for planning permits.

The layout and siting of development will have regard to minimisation of bushfire risk having regard to topography (slope, aspect, orientation), access and vegetation.

### **Key Design Opportunities**

- Incorporate roads into the defendable space
- Provide lots sufficient in size to provide appropriate defendable space zones
- Promote landscape and revegetation compatible with bushfire management.

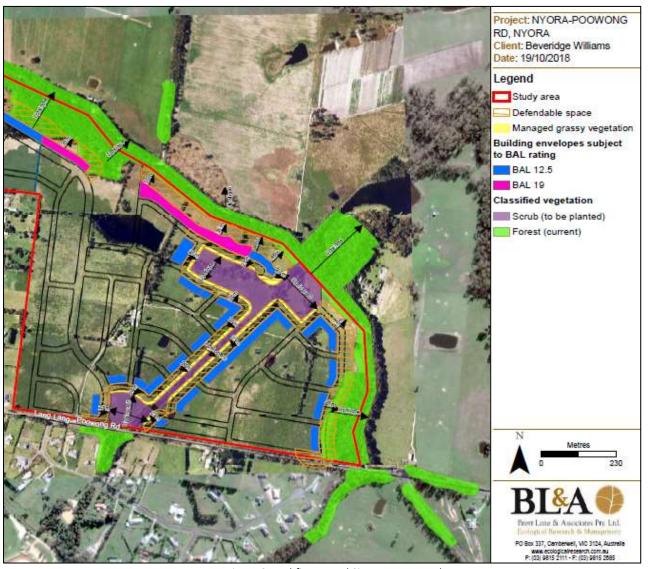


Figure 6: Bushfire Hazard Site Assessment Plan Source: Bushfire Management Statement, October 2018

A Bushfire Management Statement is contained at **Appendix E**.

## 3.7 Vegetation and Habitat

The Nyora Development Plan area is highly modified and has been extensively cleared as part of past agricultural land uses. The Flora and Fauna Assessment undertaken by Brett Lane and Associates was limited to 379 Lang Lang – Poowong Road however as much of the vegetation is contiguous across the three properties and assumptions can be taken from the site-specific assessment. It is noted however that, at the discretion of Council, further consideration of vegetation and habitat may need to be undertaken for the properties at 30 Glovers Road and 951 Yannathan Road in accordance with Development Plan Overlay Schedule 10.

Vegetation largely consists of introduced pasture grasses and broadleaf weeds, namely Cape Weed. The site comprises 13 patches of remnant native vegetation which supports Lowland Forest (EVC 16), Swamp Scrub (EVC 53) and Swampy Riparian Woodland (EVC 83).

The site was also found to support four main fauna habitat types - Native forest, Linear areas of mixed vegetation, Grazing paddocks with scattered trees and Aquatic habitats.

Native forest habitat which occurs along the eastern and northern boundary of the study area is of a higher quality and provides foraging and breeding habitat for small local fauna. Linear areas of Mixed vegetation and aquatic habitats were considered to provide low to moderate quality habitat whilst grazing paddocks with scattered trees (34 trees) were considered to provide low quality habitat for local fauna. Based on the habitat present within the study area, landscape context and the proximity of previous records, the proposed development footprint will not result in any impacts on threatened ecological communities, as none occur in the study area or surrounds.

Targeted surveys for the Giant Gippsland Earthworm, Dwarf Galaxias and the Southern Brown Bandicoot were also undertaken. The results of these surveys confirmed that all three species are unlikely to occur onsite.

Unexpectedly, a hair sample from a Swamp Antechinus was detected during the targeted survey for the Southern Brown Bandicoot. It was determined that the species is initially deemed as unlikely to occur on the basis of no suitable habitat and no recent VBA records in the search region. The one VBA record in the 10-kilometre search region is from 1998, approximately nine kilometres west of the study area. The closest known population is in the Gurdies Nature Conservation Reserve, some 12 kilometres south-west of the study area. Based on the survey results, it is considered possible that Swamp Antechinus occurs in all large contiguous habitat zones in the study area, particularly habitat zones associated with the drainage system and Habitat Zone E. As the habitat zones associated with the drainage system are required to be removed, the development may have an impact on this species. Accordingly, in accordance with the EPBC Act precautionary principle, Swamp Antechinus must be considered resident in the study area given the evidence presented for this above.

Implications under the EPBC act for impacts on Swamp Antechinus as a result of the proposed development are currently being considered in consultation with the technical experts including the possibility of a EPBC Self-Assessment Report for submission to the Commonwealth department.

## **Key Design Opportunities**

- Retention of roadside vegetation along Lang Lang Poowong Road and Yannathan Rod as a key contributor to local character.
- Retain the higher quality areas of vegetation that provide foraging and breeding habitat for local fauna situated in the north and east of the study area.
- Capitalise on the amenity of vegetation through orientation of development.
- Where possible, roads and other infrastructure should be placed away from areas supporting native vegetation
- Capitalise on landscaping and replanting within the drainage reserves (with consideration of bushfire measures) and wetlands.
- Maintain existing conditions along and adjoining Glovers Road.
- Mitigate risk to water quality though best practice sedimentation and pollution control during construction to prevent onsite and offsite impacts to waterways and wetlands.

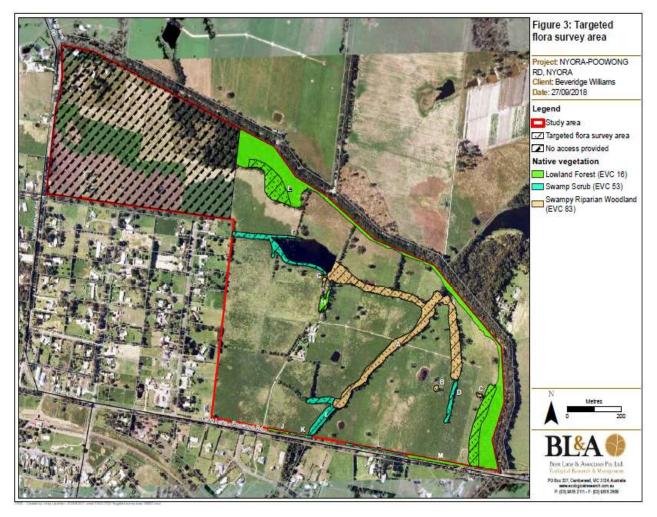


Figure7: Targeted Flora Survey
Source: Brett Lane & Associates Flora and Fauna Assessment, October 2018.

A Flora and Fauna and Targeted Survey Assessments are contained at Appendix F

A Targeted Giant Gippsland Earthworm Survey is contained at Appendix G

A Targeted Dwarf Galaxias Survey is contained at Appendix H

A Targeted Southern Brown Bandicoot Assessment is contained at **Appendix I** 

## 3.8 Traffic and Movement Network

The current access points to the site occur from Lang Lang – Poowong Road, Glovers Road in multiple locations and Yannathan Road.

Lang Lang – Poowong Road is a VicRoads declared arterial road which runs along the subject site's southern boundary. This road comprises a sealed carriageway approximately 8m in width with a single trafficable lane in each direction. The section of Lang Lang-Poowong Road adjacent to the site operates with a speed limit of 80km/h.

Access to the site from Lang Lang – Poowong Road would require upgrading as part of any future development.

Yannathan Road is a local road generally aligned in a north-south fashion along the subject site's western boundary. Yannathan Road runs from the intersection with Glovers Road in the north and Watts Road in the south.

In the vicinity of the subject site Yannathan Road comprises of a sealed carriageway approximately 6m in width with a single trafficable lane in each direction. Yannathan Road operates with a default rural speed limit of 100km/h.

Glovers Road is a local road generally aligned in northwest-southeast fashion along the subject site's north boundary. Glovers Road runs from Yannathan Road in the west and provides access to the land immediately north of the subject site. Glovers Road also runs along the site's eastern boundary running from Lang Lang-Poowong Road and functions as a driveway to a residential dwelling. The section of Glovers Road running along the site's eastern boundary does not meet the section of Glovers Road running along the northern boundary.

The carriageway of Glovers Road is generally unsealed and will remain unchanged as there will be no direct vehicle access to this road from the development area

Safe and convenient access to the site can be provided from both Lang Lang – Poowong Road and Yannathan Road, although the intersections along these roads will need to be upgraded to facilitate traffic movements generated by the future development.

# **Key Design Opportunities**

- Utilise existing road network as connections to the existing town center, recreational facilities and other regional destinations.
- Primary access into the development area to be provided from Lang Lang Poowong Road thus providing a logical connection to the established township area.
- Provide improved road, pedestrian and cyclist connections to the existing township.
- Maintain Lang Lang Poowong Road and Yannathan Road as the higher order connector roads within the surrounding area.

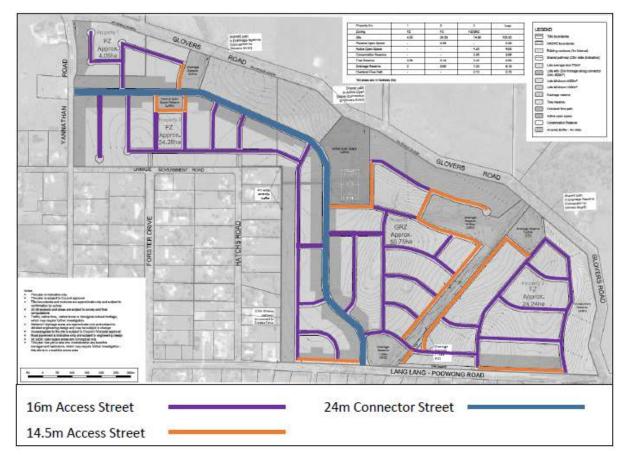


Figure 8: Internal Road Hierarchy Plan Source: Beveridge Williams Traffic and Transport Assessment, October 2018

A Traffic and Transport Assessment is contained at **Appendix J**.

#### 4 DESIGN RESPONSE

The Design Response section sets out the vision for the Development Plan area, addressing the key design opportunities of the site analysis. The vision sets out the design rationale for the Nyora Development Plan.

#### 4.1 Vision

The Nyora Development Plan sets out a framework to create a new residential area that showcases best practice in urban design, landscape architecture and sustainable land development. The development of this area will also create a community that will be integrated with the existing Nyora township and meet the needs of all the current and future residents.

The detailed design of the site will be driven by the natural landform, the landscape character and the environmental features of the area to create a place of outstanding aesthetic quality and high ecological values. It will provide a diversity of housing affordability options through a range of lot sizes.

The development of Nyora North provides an opportunity to demonstrate a range of sustainability initiatives for biodiversity, energy, waste, water and materials and will include:

- The protection of existing remnant native vegetation and the planting of extensive amounts of locally sourced indigenous plant species throughout the open space / drainage network to create habitat and wildlife corridors.
- The utilisation of Water Sensitive Urban Design principles in the master planning of the site
  that will not only ensure that all surface water is detained and treated naturally, but will also
  provide additional passive recreational opportunities and create habitat for native fauna and
  migratory birds.
- Energy conservation through a lot layout design approach that optimises solar orientation to dwellings and encourages the use of energy efficient appliances and solar power.
- Energy efficient street lighting.
- Reducing waste through the construction phase and efficient use of resources.
- Promotion of the use of sustainably sourced materials such as recycled concrete.
- Landscape and building design guidelines to encourage sustainability initiatives.
- Redevelopment of the existing drainage channel to improve protection to the existing township from flooding.

The Nyora Development Plan will promote a healthy, active community through the provision of an extensive interconnected system of public open space with shared walking and cycling paths. More than 17.01 hectares of public open space, in the form of parks, tree, conservation and drainage reserves and linear links, will provide a range of recreational facilities for all ages and abilities. This will facilitate the future establishment of facilities that are lacking in the existing town, including a full-sized soccer pitch and the construction of shared paths both within and external to the site. These spaces will be designed to ensure there is passive surveillance and a safe place for social interaction for existing and future Nyora residents.

In addition to the community infrastructure to be provided within the Nyora Development Plan, a financial contribution to community and physical infrastructure, external to the subject land will be required as part of the rezoning process or conditioned on permit and formalised through a Section 173 Agreement. The purpose of this contribution is to provide the opportunity to improve existing community facilities within the existing township, as determined by the Responsible Authority.

The Design Response Plan is illustrated in Figure 9 and Appendix K.

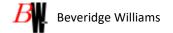




Figure 9: Nyora Design Response Plan

### 4.2 Outcomes

The following objectives describe the desired outcomes for the future development of the area, and guide the implementation of the vision.

- Preserve and enhance areas with high environmental value.
- Provide a network of passive recreational reserves with linking pedestrian and shared paths.
- Respond to the existing topography of the land.
- Integrate new development with the existing township.
- Use land intended for urban growth in an efficient manner to reduce pressure for further urban expansion into farmland.
- Develop a permeable network of streets that link with the existing township.
- Promote greater housing choice through the delivery of a range of lots capable of accommodating a variety of dwelling types and densities.
- Co-ordinate development sequencing and staging with the delivery of key infrastructure.

The Indicative Development Plan is illustrated in Figure 10 below and Appendix L.

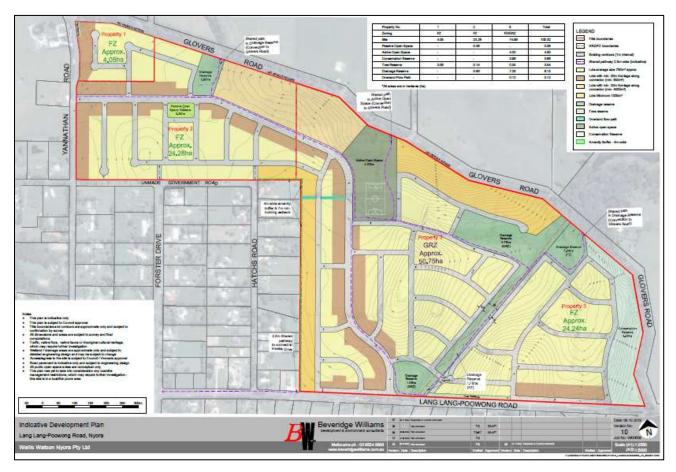


Figure 10: Nyora Development Plan

### 4.3 Development Sequencing

The sequencing of development across the Nyora Development Plan area will largely be determined by the ability to appropriately access and service land, as well as the rate of demand for urban growth. In addition, the FZ land will need to be rezoned to the GRZ before urban development can be considered.

The GRZ land is identified as 'short term growth' in the Nyora Structure Plan. Approximately 330 lots are expected to provide for in the short to medium term. Stage one is expected to provide for approximately 35 lots.

Stage 1 is expected to commence from the south, adjoining Lang Lang – Poowong Road to allow for the extension of existing infrastructure to the development site. Development would progressively extend towards the north in the medium term.

Long term, it is anticipated that the FZ land will be rezoned and development to the east of the existing GRZ land would commence from the drainage reserve vehicle crossing located in proximity to the southern boundary. To the west, growth is expected to commence from Yannathan Road.

An indicative Overall Staging Plan is illustrated in Figure 11 and Appendix M.



Figure 11: Nyora Indicative Overall Staging Plan

#### 4.4 Built Environment

The Development Plan layout has been designed responsive to and integrated with the existing Nyora township. Key elements of the township character include its peri urban setting and vegetated environment, and these elements have strongly influenced the layout.

Due to a history of farming in the area, landscape values are generally limited to the northern and eastern boundaries of the site. The Development Plan provides for the retention of as much of this vegetation as possible, including the incorporation of a conservation reserve along the eastern boundary. The development plan also provides for the incorporation of landscaped buffers along the rear boundaries of the existing dwellings (fronting Hatches Road) and adjoining Lang Lang – Poowong Road in the form of a tree reserve to minimise the development when viewed from outside the Nyora Development plan area.

Larger lots are proposed primarily along the boundary with Glovers Road to enable to retention of vegetation and provide appropriate bushfire defendable spaces areas. Secondary to this, the larger lots will facilitate a diversity of lot sizes to meet the varying needs of the community.

Internal streets and blocks are aligned north-south to maximise views towards the Nyora township to the south and to respond to the site topography. Large lots are proposed in areas where existing vegetation occurs. Larger lots are also proposed along the western boundary of the land where they adjoin the rear boundary of the established residential dwellings. These lots are limited to a maximum of two (2) new lots per existing property boundary to provide a more acceptable interface between the established low density residential area and proposed standard residential area.

Wide lot frontages are proposed along key roads to create separation and a sense of openness between dwellings. Streets will be lined with vegetation to soften the built form and enhance the biodiversity north of the existing township.

A 24m connector street will facilitate movement through the development area. Lots immediately fronting the connector street will provide frontages of not less than 20m in width. Dwellings on these lots will also be set back a minimum of 7m to create an environment of openness and responsive to the character of Nyora.

The IDP provides for an average overall density of 700-800m<sup>2</sup>.

## 4.5 Open Space and Natural Environment

The open space and environmental qualities of the Nyora Development Plan area have been a key driver of the Development Plan layout and vision.

Existing areas of vegetation will be retained wherever possible, particularly along the northern and eastern boundaries of the site where the vegetation is of a higher quality and provides foraging and breeding habitat for small local fauna.

Roadside vegetation will also be maintained along Glovers Road as well as Lang Lang - Poowong Road. A tree reserve adjoining the Lang Lang – Poowong Road Road reserve will also be provided.

The redevelopment of the existing drainage channel is required to facilitate an appropriate stormwater system that can treat and convey from the site (as well as the neighbouring sites at full development). This will result in the removal of existing vegetation. The modified and newly created drainage reserve and wetland system will be re-planted with scrub/wetland vegetation. Canopy trees are also proposed within the drainage reserve in proximity to the shared path network and road reserve. The trees will be planted at intervals that accord with bushfire defendable space requirements.

The Nyora Development Plan responds to potential bushfire risk through the creation of lots sufficient in size to accommodate appropriate defendable space zones.

The active open space reserve has been positioned in proximity on at an elevation that will allow for views back towards the Nyora township. The reserve will support the retention of high quality vegetation whist facilitating a full-sized soccer pitch. The shared path network will also interconnect with the reserve, encouraging pedestrian and cycle moment through the subdivision and beyond.

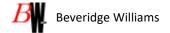
The Landscape Master Plan is contained at **Appendix N**.

#### 4.6 Movement Network

The Nyora Development Plan area has been designed with a clear and legible street network, creating logical connections between residential areas, open space and the Nyora town centre. The existing Nyora road network will be utilised for connections to the town centre and surrounding areas of interest. In particular, Lang Lang — Poowong Road and Yannathan Road will be maintained as the higher order connector roads within the surrounding area.

A central connector road provides north - south east-west connectivity through the Nyora Development Plan area, feeding from Yannathan Road to Lang Lang – Poowong Road.

Access in the short term will be provided via a single access point from Lang Lang-Poowong Road. In the longer term, the eastern section of 379 Lang Lang - Poowong Road will be rezoned and developed into a residential subdivision whereby a secondary access to Lang Lang – Poowong Road will be provided. Access to Yannathan Road will also be provided in the longer term to facilitate development to the west.



All roads within the development plan area will be designed in accordance with Council's engineering standards.

Shared pathways will be introduced to key streets, the linear drainage reserve and open space reserves to enhance walking and cycling opportunities. A shared path will also be provided along Lang Lang-Poowong Road from the subject land to Foster Drive.

## 4.7 Staging and Infrastructure Delivery

No formal staging is proposed within the Nyora Development Plan area, and the aspirations of landowners and their willingness to pay for key service infrastructure will drive the staging of development within landholdings.

However, as a general principle, the first stages of development will be aligned adjacent to existing services to allow immediate development without major infrastructure extensions and works. Progressive development will then align with the extension of water and sewer mains in order to provide logical staging of development. The construction infrastructure will be coordinated to meet service provider requirements.

#### **5 CONCLUSION**

The Nyora Development Plan report articulates a framework for development of the land in accordance with the Development Plan Overlay Schedule 10 and is compatible with the pattern of surrounding development. Specifically, the plan is responsive to the character of the Nyora township and the surrounding rural environment.

The Development Plan incorporates a substantial drainage reserve that will alleviate potential flooding and increase capacity from external catchments. The Plan also incorporates a clear legible road and pedestrian network that integrates with the existing infrastructure that bounds the site.

The Development Plan promotes the retention of exiting vegetation where practicable and fosters revegetation of the site through streetscape planting and landscaped drainage, open space and conservation reserves. Finally, the development provides an appropriate interface with surrounding land uses and encourages built form which is consistent with the rural character of the area.

It is anticipated that any planning permit application for subdivision will satisfy the objectives and standards of Clause 56 (i.e. ResCode) and will be support by outstanding technical investigations for cultural heritage and infrastructure servicing.

# APPENDIX A. SITE CONTEXT PLAN

# APPENDIX B. SITE ANALYSIS PLAN

# APPENDIX C. STORMWATER MANAGEMENT STRATEGY

# APPENDIX D. CULTURAL HERITAGE ASSESSMENT

# APPENDIX E. BUSHFIRE MANAGEMENT STATEMENT

# APPENDIX F. FLORA AND FAUNA ASSESSMENT

# APPENDIX G. GIANT GIPPSLAND EARTHWORM TARGETED SURVEY

## APPENDIX H. DWARF GALAXIAS TARGETED SURVEY

# APPENDIX I. SOUTHERN BROWN BANDICOOT TARGETED SURVEY

# APPENDIX J. TRAFFIC AND TRANSPORT ASSESSMENT

# APPENDIX K. DESIGN RESPONSE PLAN

# APPENDIX L. INDICATIVE DEVELOPMENT PLAN

# APPENDIX M. OVERALL STAGING PLAN

# APPENDIX N. LANDSCAPE MASTERPLAN

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