



PHILIP PARADE DEVELOPMENT PLAN

Prepared by NBA Group

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1 Introduction

This Development Plan applies to land referred to as 'Philip Parade' and covers an area of approximately 7.8 hectares. The land is situated directly south of the Churchill Township and is bound by Monash Way to the west as shown in Figure 1 below.

The land is zoned Residential Growth Zone – Schedule 1 (RGZ1) and covered by a Development Plan Overlay - Schedule 5 (DPO5).

The Development Plan Overlay is a planning tool used to guide future development of land. It is commonly used in areas where land is controlled by multiple land owners and an integrated development outcome is required.

The Department of Planning and Community Development (the 'DPCD' – now 'DELWP') outlined the purpose of the DPO as follows:

The DPO prevents the granting of permits under the zone before the Development Plan has been approved. The purpose of this provision is to restrain use and development of the land until a plan has been prepared and ensure that future use and development of the land is carried out in accordance with that plan. The Development Plan details the form and conditions that must be met by future use and development of the land.

The Philip Parade Development Plan (the 'PPDP') has been prepared in accordance with Schedule 5 of the DPO. It provides guidance for development across two allotments in separate ownership and will ensure a cohesive and integrated development.

The Development Plan identifies where roads, reserves and physical infrastructure should be located. The PPDP has been prepared in consultation with Council Officers and is based on best practice urban design principles, it is responsive to site conditions including topography, drainage, vegetation, abuttal to neighbouring uses and site opportunities and constraints.

There are two major components that comprise the Development Plan:

- **The Plan** – depicting a broad urban layout including lot layout, road network, location of reserves and stormwater treatment;
- **The Report** – providing context for the preparation of the Development Plan, summarising existing site conditions, analysing key opportunities and constraints and describing the plan and its implementation.

These two documents should be considered in conjunction with each other.

The Development Plan has been prepared following the preparation of several investigative reports and assessments including:

- **Infrastructure Servicing Report** - an assessment of available infrastructure and its ability to service the proposed development, prepared by Millar Merrigan, June 2016;
- **Ecological Assessment** – an assessment of the ecological features of the site, prepared by Millar Merrigan, June 2016;
- **Stormwater Management Statement** – an assessment of the drainage conditions on site and post development, prepared by Millar Merrigan, November 2016.

These reports can be found within the attached Appendices.

Figure 1 – Context Plan



2 Subject Site Analysis

2.1 Local Context

The Philip Parade Development Plan applies to land immediately south of the township of Churchill.

The Latrobe Planning Scheme identifies Churchill as a 'main town' that is centrally located within the municipality. It was established in the 1960's as a replacement town for Yallourn and designed to accommodate the workforce of the Latrobe Valley power generation industry. The township was planned for an estimated population of 40,000 and as such provided with significant infrastructure which included major water and hydraulic infrastructure, a well-defined commercial area and generous open space areas. The existing population of approximately 5,000 is well below that of which the town was originally planned for and as such the town has substantial areas of undeveloped land available.

In the last decade, Latrobe City Council have undertaken strategic projects to plan and manage growth and change within the municipality over a 30 year period. The *Churchill Structure Plan (2007)* has been incorporated into the planning scheme and provides clear direction to the community, government and the development industry about

appropriate development for the township. The plan includes the subject land as 'Area 4' which is designated for 'future residential' use.

**Figure 2 – Extract of Churchill Structure Plan
Subject site identified as Area 4.**



2.2 Adjoining Land Uses

The subject site interfaces with commercial land to the north, the Eel Hole Creek to the east, residential land to the south and Canterbury Way and Balfour Place to the west. The land is dissected by Philip Parade. As can be seen from the aerial photograph at Figure 9.

The commercial centre of Churchill is immediately **north** of the subject site and can be accessed either via Philip Parade or Monash Way. Abutting the

northern boundary of the site is the Churchill Hotel-Motel and vacant commercial land. Within the township other commercial facilities include two supermarkets, a shopping centre containing specialty stores, a health centre, childcare centre, bank and automotive repairs.

Figure 3 – Existing Commercial area accessed via Philip Parade



Figure 4 – Churchill Hotel abutting the site



The site abuts Eel Hole Creek to the **east**. The creek is contained within a lineal reserve that leads north-south through town to the east of the commercial centre. The reserve contains a walking trail and expanse of native vegetation. Further east of the creek is Federation University, a substantial tertiary centre, and its associated student accommodation.

Figure 5 – Sites abuttal to Eel Hole Creek lineal reserve



The site abuts Canterbury Way and residential land to the **south**. The residential land is developed with an aged care facility and is vacant to the south east and a typical residential estate to the south west. The aged care facility is lined with canopy vegetation providing a visual buffer to the site. The residential estate comprises of allotments that vary in size between 500m² and 1000m² and are developed with single dwellings and associated outbuildings, open space and services.

Figure 6 – Sites abuttal to aged care facility



Figure 7 – Typical character of neighbouring residential estate



The site abuts Canterbury Way and Balfour Place to the **west**. Access to these local streets is available from Monash Way. Further west is the main residential area of Churchill. This area contains a grid pattern of development with single dwellings occupying standard sized allotments. Interspersed throughout the area are three Primary Schools, a number of open space reserves, a police station and sporting facilities.

Figure 8 – Sites abuttal to Balfour Place and Monash Way



2.3 Site Description

The PPDP applies to two parcels of land with an area of approximately 7.8ha, the lots are identified as part of land in Lot 4 on PS309824F (Vol. 10198 Fol. 682) and all of land in PC350767V (Vol. 9976 Fol. 461). Copies of the certificates of title are available at Appendix 1.

It is noted that Lot 4 PS309824F contains split zoning with half of the land contained within the Commercial Zone and the other half the Residential Growth Zone. The PPDP deals only with the portion of the land contained within the Residential Growth Zone.

As shown in Figure 9, the land is irregular in shape and the two parcels are separated by Philip Parade. The land is vacant in nature, it contains no buildings or improvements and is currently unutilised. Previous land practices were for agriculture and as a result the land is highly modified.

The topography of the land is undulating. The western portion generally falls east towards Philip Parade where a drainage line traverses the south eastern corner of the lot. This drainage line is identified by the West Gippsland Catchment Management Authority (WGCMA) as a 'registered waterway'. The eastern portion of the land rises to a central peak that is some 10m higher than the

lower points on the eastern and western boundaries.

In terms of its natural and cultural values, the site is dominated by exotic ground cover that is of low ecological value. It contains a planted windrow of Cypress and two small rows of Oak trees, however contains no patches of native vegetation and no evidence of significant fauna species are available. There are no known registered Aboriginal heritage sites and the land is not considered to be culturally sensitive under the Aboriginal Heritage Regulations.

A number of easements exist throughout the western portion of the Development Plan area for the purposes of drainage, sewerage, electricity and carriageway.

A detailed analysis of site conditions is provided at section 3 below and on the Site Analysis Plan (18732DP1) at Appendix 2.

Figure 9 – Aerial Photograph



3 Site Assessments

The PPDP has been prepared following the preparation of several investigative reports which can be summarised as follows:

3.1 Infrastructure Servicing

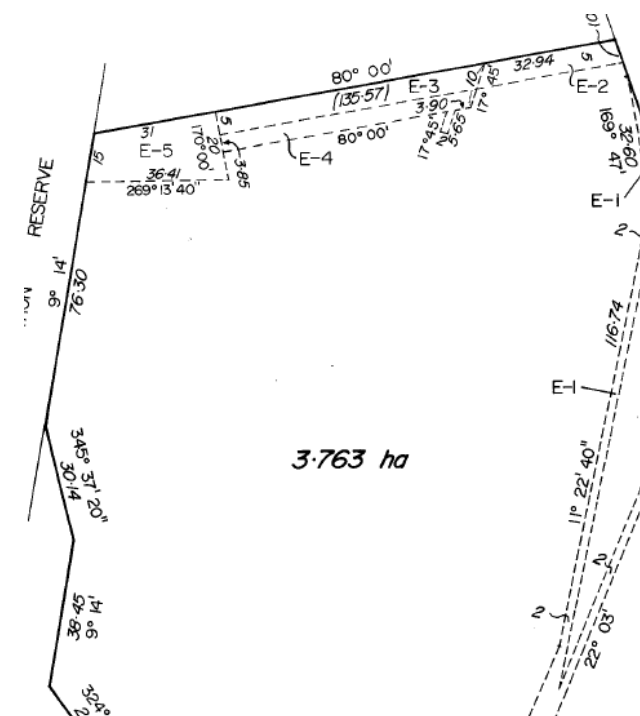
An Infrastructure Servicing Report was prepared by Millar Merrigan (June 2016) and provides an assessment of the infrastructure available within the area and its ability to service the Development Plan area. The report is included as Appendix 3 and provides the following summary of existing conditions:

- Topographically speaking the eastern portion of the site has a ridgeline that runs north-south through the centre of the allotment and tapers down west towards Philip Parade and east towards Eel Hole Creek. The western portion has a gentle slope west to east where a drainage line traverses the south eastern boundary.
- Existing sewerage infrastructure includes two 300mm diameter sewer mains located either side of the Development Plan Area, both of which can be utilised to service the development without creating capacity issues.
- Reticulated Water is readily available and can be extended to service the Development Plan area without creating any capacity issues.
- Existing AusNet overhead powerlines run along the eastern side of Philip Parade and include three pole mounted substations. Discussions with Ausnet have indicated upgrades will be required to service the development including the provision of a new kiosk and underground cables.
- Overhead powerlines are available along the northern boundary of the western portion of the Development Plan Area. This overhead supply can be retired and redirected underground as part of the development of the land.
- APA Group have advised that gas infrastructure exists on the western side of Philip Parade and the Development may be able to be serviced with natural gas. Any works required to service the development with gas would be subject to contributions from the developer.
- Telstra Telecommunications and NBN infrastructure is available within the area and can be extended to service the development with no anticipated capacity issues.

- The responsible authorities for local drainage are West Gippsland Catchment Management Authority (WGCMA) and Latrobe City Council. WGCMA mapping suggests a registered waterway traverses the south eastern corner of the western development plan area as indicated with a blue line in Figure 10 below. Onsite, the blue line could be more accurately described as a degraded drainage line with no environmental values. The drainage line is contained within a drainage and sewerage easement that varies in width and benefits land to the south of the site, as detailed on the Certificate of Title at Appendix 1.

Figure 10 – WGCMA Blue Line





3.3 Public Transport

Latrobe Valley Bus Lines provide the public transport for Churchill on behalf of Public Transport Victoria (PTV).

There are 6 different routes that service Churchill. They are:

- Route 2 – Morwell to Churchill;
- Route 3 – Traralgon to Churchill;
- Route 4 – Churchill to Boolarra via Yinnar;
- Route 7 – Traralgon to Churchill via University;
- Route 9 – Traralgon to Churchill;
- Route 30 – Churchill Town Loop.

As can be seen on the Mobility Plan, the PPDP area is within a 400m radius of two bus stops:

- **Philip Parade Commercial Area** – A stop to the north of the PPDP at the southern extent of the commercial area. This stop is serviced by routes 2, 3, 7 and 30.
- **Amaroo Drive/Philip Parade** – A stop to the north of the site within the existing residential estate. This this is serviced by route 2.

In addition to these stops and located at the northern extent of the commercial area, is the Churchill Shopping Complex bus exchange that is serviced by all 6 routes.

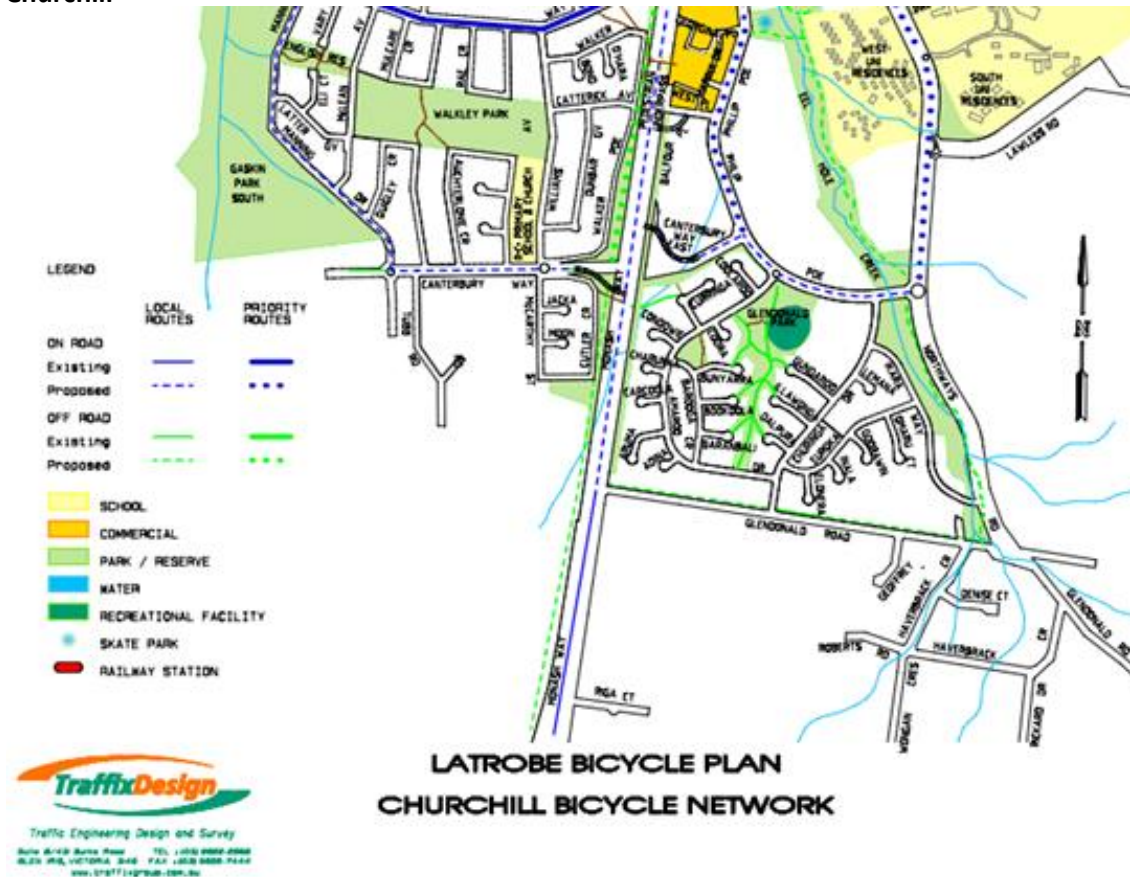
Figure 13 - Mobility Plan showing 400m radius of bus stops



3.4 Bicycle Network

In accordance with the *Latrobe City Bicycle Plan (2007)*, bicycle lanes exist along Philip Parade as a priority route into town. The Bicycle Plan recommends a local route along Canterbury Way however there are no lanes within the existing roadway nor are there any shared pathways.

Figure 14 – Latrobe City Bicycle Network for Churchill



3.5 Ecological Considerations

An Ecological Assessment has been prepared by Millar Merrigan (June 2016) and is included as Appendix 4. The assessment provides the following description of the existing conditions:

- The land is located within the Gippsland Plain Bioregion and historically two ecological vegetation communities (EVC's) occurred within the study area; Swampy Scrub and Grassy Woodland (see Figure 16).
- The site has been extensively cleared, it contains no patches of native vegetation and no longer supports vegetation communities due to past agricultural activities (see Figure 17).
- The study area has been significantly degraded, it supports predominantly introduced vegetation that is of limited value. The dominant groundcover is exotic pasture grass (see Figure 15).
- There are some scattered trees across the site a few of which are indigenous. The PPDP indicates where native vegetation can easily be retained or removal may be considered. Consideration should be given to the retention

or removal of these trees at the subdivision design stage.

- Two flora species listed under the *EPBC Act* and *Flora and Fauna Guarantee Act 1988* were identified within the surrounding area however do not occur on site.
- DPO5 identifies that Growling Grass Frog (*Litoria raniformis*) and Dwarf galaxias (*Galaxiella pusilla*) could be present in the surrounding area however the site does not present suitable habitat for either species.
- The neighbouring Eel Hole Creek could potentially provide suitable habitat for the Growling Grass Frog. Future development should adequately manage stormwater runoff and control sediment to ensure no impact on this potential habitat.

Figure 15: Image of subject site showing exotic pasture



Figure 16: 1700's EVC



Figure 17: 2005 EVC



4 The Development Plan

The Philip Parade Development Plan is illustrated in Figure 18 and Appendix 5. It is a concept for the development of the subject land and will provide the basis for the preparation of future subdivision applications.

The intention of the PPDP is to provide an attractive well designed residential estate that expands on the existing urban area and takes advantage of the lands abuttal to the Churchill Township.

4.1 Residential Growth Zone

The PPDP site area is zoned Residential Growth Zone (RGZ) the Purposes of which include:

- *To provide housing at increased densities in buildings up to and including four storey buildings;*
- *To encourage a diversity of housing types in locations offering good access to services and transport including activities areas;*
- *To encourage a scale of development that provides a transition between areas of more intensive use and development and areas of restricted housing growth.*

The zone provisions need to be read in conjunction with the context of the Churchill township. It must be acknowledged that there is no policy imperative

for higher density housings for this site, certainly four storey buildings would not be appropriate.

The Gippsland Regional Growth Plan identifies Latrobe City as a focal point for urban growth. Latrobe City consists of the combination of Moe, Morwell, Traralgon and Churchill and integration across the four centres is encouraged to support the functioning of a single urban system.

Unlike the other main towns, which have access to regional rail services, Churchill is not a transit city but is principally a 'university town'. Despite the town being originally planned for a population of 40,000 it only contains a fraction of that at around 5,000. The 'Latrobe Structure Plans – Background Report' (Beca 2007) notes that *significant population growth is not expected in Churchill* and notes that the appropriate development of the subject land (denoted as Area 4) with 'high amenity housing choice' was a priority. There is no doubt that this is still a priority 9 years on from this report (see further discussion regarding the Churchill Town Centre Concept Plan at Section 5.1).

4.2 PPDP Response

The PPDP delivers an integrated and sustainable neighbourhood where future residents can choose from differing housing types in a high amenity setting. The PPDP provides for standard residential allotments with the inclusion of some designated medium density housing areas including two sites proposed that are strategically positioned adjacent to proposed public open space reserves. It is noted, given the sites zoning as RGZ, that there would be further development opportunities for standard residential allotments to provide for dual occupancy development and the like, subject to further approval. There are particularly good opportunities for such development on corner sites.

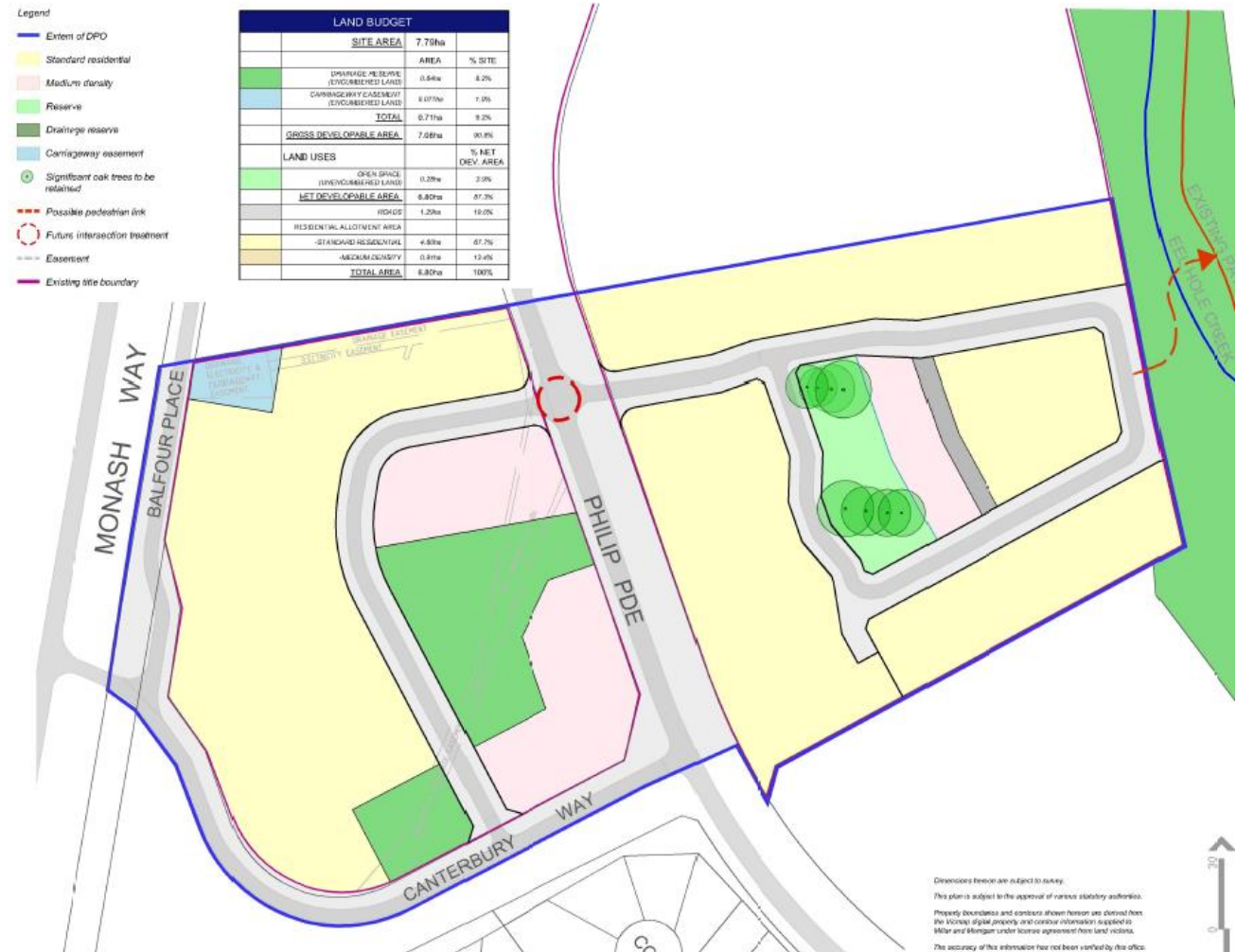
The design has been influenced by the natural features of the site, it ensures that streets are well connected and easy movement through the neighbourhood and to surrounding urban areas is provided. The provision of shared paths within road reserves and public open space reserves will provide a pleasant environment for residents to walk and cycle through the neighbourhood. The sites location within walking distance to the main township of Churchill will encourage alternative modes of travel.

The eastern portion of the site contains an open space reserve situated on the ridge line and containing two parallel rows of attractive Oak trees. Following consultation with Council officers we were advised (email 22nd September 2015) that Council's preference was to retain these trees within an open space reserve.

Water Sensitive Urban Design (WSUD) techniques will ensure a sustainable development in terms of capture, use and treatment of stormwater with the provision of a wetland within an open space drainage reserve. Landscaping around the wetland will improve ecological integrity and provide habitat potential for native flora and fauna.

The key elements of the plan are detailed in the following chapters of this report.

Figure 18 – Philip Parade Development Plan



4.3 Principles & Objectives

The PPDP has been prepared in accordance with a series of strategic objectives based around best practice approach to growth area planning and established provisions of Clause 56 of the Latrobe Planning Scheme. The Metropolitan Planning Authority (MPA) Precinct Structure Planning Guidelines provide clear objectives and direction for delivering sustainable neighbourhood design in growth areas. While these guidelines were developed for metropolitan areas they have relevance in Churchill despite it being a regional centre and have been used to test the key elements of the PPDP.

The objectives of the PPDP are as follows:

Housing:

- Provide for use of residentially zoned land situated immediately south of the commercial township of Churchill.
- Provide increased residential density to meet a range of population needs as the community grows.
- Provide a range of lot sizes that promote housing choice and affordability.
- Provide flexible housing that can meet the needs of varying households as they move through life cycle changes, including aging in place.

- Provide a density of development that is in keeping with the character of Churchill.
- Locate medium density housing sites in high amenity, easily accessible areas.
- Promote active frontages to roads and open space, particularly on corner allotments and medium density sites.

Access and Movement

- Provide connectivity to the existing Township and the services within it.
- Provide safe and convenient street networks that are easily navigated.
- Create a well-connected street network that integrates with the existing road network.
- Promote walkability and cycling through a well-designed shared path network, thus reducing carbon emissions.
- Provide links to the existing pedestrian pathway in Philip Parade.
- Provide pedestrian links to the Eel Hole Creek Reserve and existing pathway within this reserve.
- Ensure street networks are designed to cater for varying choices of movement by the community ie walking, cycling, public transport, car and other motorised vehicles.
- Provide for infrastructure upgrades to the existing road network as necessary.

Open space

- Provide open space areas to accommodate passive recreation whilst also accommodating drainage needs.
- Ensure open space is provided in accordance with Latrobe City's Open Space Strategy.
- Establish a sense of place and community.
- Provide unencumbered land as open space.
- Ensure open space areas are comfortable, well designed and can facilitate passive and active recreation.
- Provide cash in lieu to fund open space improvements in accordance with the Latrobe Play Space Strategy.

Environment

- Utilise natural site features including topography and drainage to guide design.
- Incorporates Water Sensitive Urban Design (WSUD) techniques into open space areas.
- Enhance the environmental values of the site.
- Protect the built environment from flooding, inundation and stormwater drainage.
- Vegetate the Development Plan area in themes that build on the existing character of Churchill.

4.4 Land Budget

The MPA Precinct Structure Planning Guidelines provide the basis for calculating land use. They include the following definitions used in the land budget.

- **Encumbered Land** is constrained for development purposes. Includes easements for power/transmission, sewer, gas, waterways/drainage; retarding basins/wetlands; landfill; conservation and heritage areas. This land may be used for a range of activities (eg walking trails, sporting fields). It is not provided as a credit against public open space requirements, however regard is taken to the availability of encumbered land when determining the open space requirement.
- **Gross Developable Area** is the total precinct area excluding encumbered land, arterial roads and other roads with four or more lanes.
- **Net Developable Area** is land within the precinct available for development. This excludes encumbered land, arterial roads, railway corridor, government schools and community facilities and public open space. It includes lots, local roads and connector streets

Table 1 – Land Budget

	Ha	% Site
TOTAL DEVELOPMENT PLAN AREA	7.79	
ENCUMBERED LAND	0.71	9.2
Drainage reserve	0.64	8.2
Carriageway Easement	0.077	1.0
GROSS DEVELOPABLE AREA	7.08	90.8
OPEN SPACE (UNENCUMBERED)	0.28	3.90
NET DEVELOPABLE AREA	6.80	87.3
Roads	1.29	19.0
Residential Allotment Area		
▪ Standard Density Residential	4.60	67.7
▪ Medium Density Residential	0.91	13.4

5 Land Use Framework

5.1 Housing Density

The PPDP aims to achieve an urban neighbourhood that can provide a density that respects the existing residential character of Churchill and is in accordance with the applicable zoning requirements.

In accordance with DPO5 and Clause 56 of the Latrobe Planning Scheme, the PPDP can provide lot sizes that vary and provide housing diversity and choice.

Clause 21.05 of the Latrobe Planning Scheme spells out Council's vision for main towns. Clause 21.05-3 contains the specific strategies for Churchill and the accompanying Churchill Town Centre Concept Plan denotes the subject site as area 5. This Clause specifically shows Area 4 as being encouraged for 'medium density development' whereas Area 5 encourages 'standard residential development'. Nevertheless the provisions of the RGZ clearly provide for housing diversity and where appropriate increased densities. The PPDP caters for this by providing for some nominated areas of preferred medium density development in areas with high amenity appeal adjacent to proposed open space reserves.

An indicative subdivision plan has been prepared and forms the basis of background reports prepared for the PPDP. The subdivision plan indicates that the PPDP has the potential to accommodate:

- **Standard density lots** – lots that vary between 520sqm and 1123sqm with an average of 665sqm;
- **Medium density lots** – assuming a density of 25 lots per hectare the medium density sites have the potential to yield approximately 23 allotments.

The MPA Precinct Structure Planning Guidelines includes the following definition:

- **Net Housing Density** – The number of houses divided by the net developable area.

It is anticipated that the Development Plan will yield approximately 96 allotments/dwellings - 73 standard density and 23 medium density, representing an overall density of **14 lots per hectare**. The State Planning Policy Framework encourages an average overall density in metropolitan growth areas of 15 lots per hectare,

whilst Latrobe City Council has adopted a preferred density of 11 lots per hectare for growth areas associated with the major towns in the municipality. It is considered that in this circumstance a density of 14 lots per hectare is an acceptable response to the opportunities and constraints of the site, reflects the density of existing residential areas in Churchill and is compatible with the Residential Growth Zone. The proposed density provides the opportunity to provide a variety of allotments suited to the needs of future residents and is the best long term community outcome.

5.2 Housing Diversity

The PPDP provides for a mix of housing types and sizes which provides a diversity of choice for future residents. It will cater for housing affordability, first home buyers, growing households and ageing in place. The following forms of housing will be developed across the subject site:

- **Standard Density** – The majority of the PPDP provides for standard residential allotments; that is lots that vary from approximately 520sqm to 1123sqm. The overall average lot size of standard residential lots is 665sqm which is consistent with the existing density in the developed residential areas of Churchill.
- **Medium Density** – medium density allotments are proposed to provide for smaller housing types on low maintenance allotments. These allotments may be well suited to smaller households or retirees. The medium density housing sites are strategically located in high amenity areas where they overlook proposed open space reserves and access to local facilities and services are readily available. If developed at a density of 25 lots per hectare it is anticipated that the medium density allotments can accommodate approximately 23 dwellings to suit the needs of the local community.

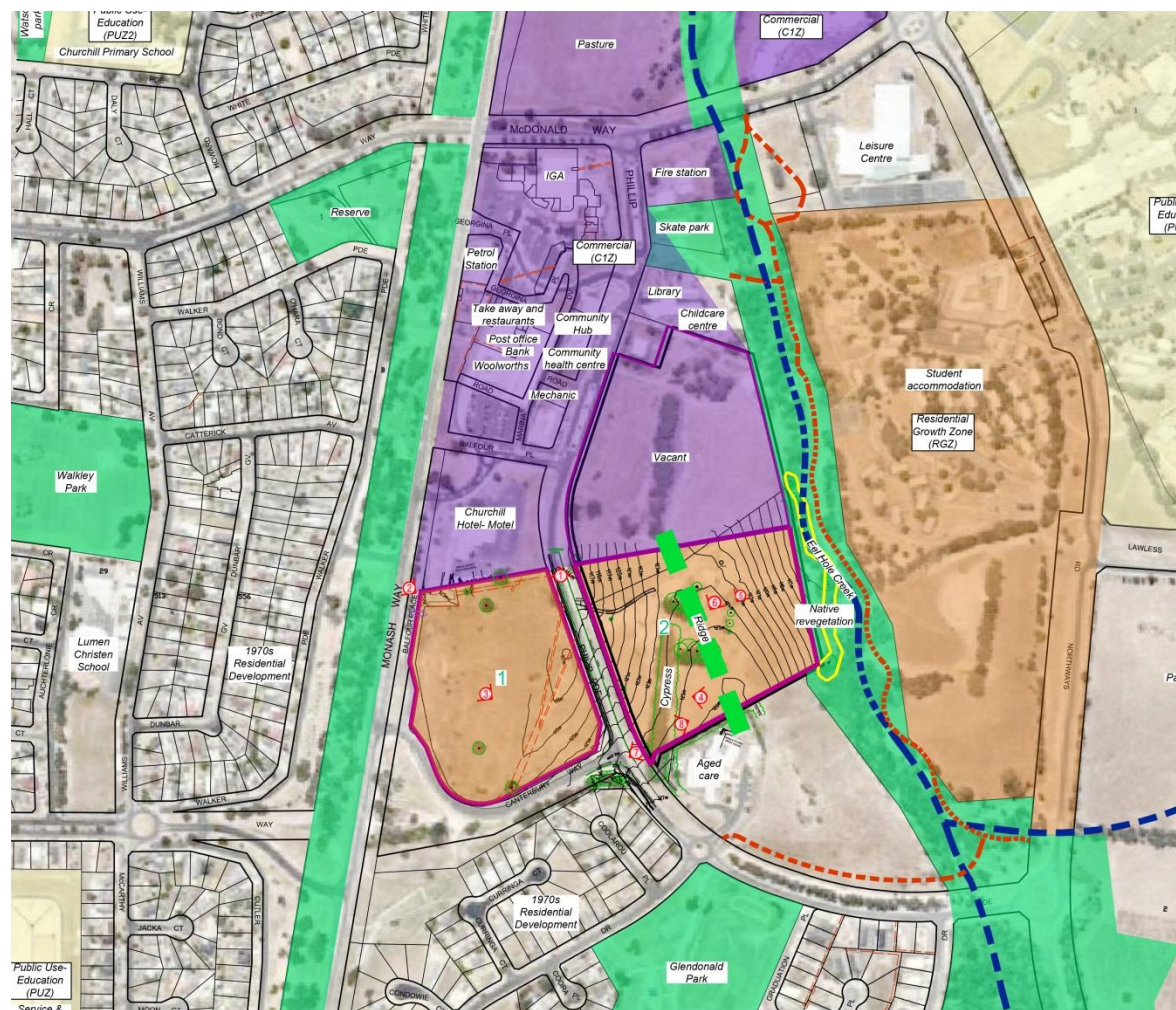
6 Open Space

Churchill is well serviced with a variety of open space areas that are easily accessible to the future residents of the PPDP. Council's adopted *Public Open Space Strategy (March 2013)* includes the following summary of the open space availability in Churchill:

- *Churchill has considerably more open space than the residential average (ie. 36.03ha/1000 people compared to the average of 17.62ha/1000);*
- *Parkland – General Use reserves account for the majority of open space provision in Churchill (ie 57% of all sites and 44.4% of total area provided);*
- *Sports open space accounts for 11% of all sites and contribute over one third of total hectares available (35.8%);*
- *Churchill has a high proportion of Linear Links reserves (ie 16% compared to the City average of 10.6).*

Figure 19 below identifies public open space areas within close proximity to the subject site (shaded green). Of particular interest is Glendonald Park which is situated south of the site and includes walking trails, a basketball court, play equipment and large open spaces for active recreation.

Figure 19 – Existing open space areas within Churchill



The Open Space Strategy includes the following relevant policy:

- *In residential areas, new subdivision be levied at 10% of the net developable area as total public open space of which a minimum 5% must be unencumbered and where required suitable for active open space development.*

It notes that cash should be accepted from a developer in lieu of land where the size of the subdivision does not allow sufficient land to be taken as open space to meet the demand identified within the boundaries of the subdivision, or adequate open space areas are already available within the locality. Cash collected in lieu of land for open space should be invested in embellishment of existing or proposed open space areas such as landscaping and the provision of recreational facilities or play equipment.

As shown on the Open Space Plan (18732DP4) at Appendix 6 approximately 0.92ha of the DP area is to be set aside as open space which equates to 11.1% of the total site area. Of this land, 0.28ha is proposed as unencumbered recreation space (3.6%) whilst 0.64ha is an encumbered drainage reserve (8.2%). The unencumbered open space is contained entirely within the eastern portion of the development plan and the size represents 5% of the

total area of that title. The creation of this open space reserve will satisfy Clause 52.01 for the eastern title whilst the developer of the western title will be required to make a cash in lieu contribution to Council equivalent to 5% of the value of the land, in accordance with Clause 52.01 and to the satisfaction of Council.

The site has abuttal to the lineal reserve that contains the Eel Hole Creek and the PPDP recommends providing a pedestrian connection from the site to the pathway within the Eel Hole Creek reserve. It is envisaged that these works would be undertaken by Council and could utilise the cash in lieu collected (under clause 52.01) from the development of the western portion of the DP. These funds could also be utilised for the embellishment of the proposed open space reserve with seating or play equipment or improvements to Glendonald Park as identified in the Latrobe City Play Space Strategy.

It is submitted that due to the adequate provision of open space within the Churchill Township and the preference of Latrobe City Council, the provision of a combination of land and cash in lieu as payment for open space is considered appropriate in this instance.

Other open space areas including those for general use are available within walking distance to the

site, including Glendonald Park to the south, and as such future residents will have more than adequate areas of open space for the passive and active enjoyment of the outdoors.

The encumbered open space area will be attractively landscaped as discussed, will contain a shared pathway and provides for recreation despite the proposed WSUD feature.

The unencumbered open space area should be provided with an attractive landscape treatment that may include streetscape furniture, a play space, additional landscaping and open grassed areas for recreation.

It is noted that the Churchill Structure Plan does not require the provision of further open space areas within the site.

7 Infrastructure

The provision of infrastructure to service the proposed development is subject to detailed design at the subdivision stage, however the following preliminary advice has been provided.

7.1 Drainage

The relevant authorities for drainage are the West Gippsland Catchment Management Authority (WGCMA) and Latrobe City Council.

As discussed above, a registered waterway traverses the western title of the DP area, however on site the waterway is more accurately described as a degraded drainage line. Downstream this waterway is piped and advice from WGCMA is that they support the piping of the waterway through the site to accord with downstream conditions. As such a 60m wide buffer is not required to be provided around the waterway.

A drainage reserve is provided within the western title to cater for stormwater run off and treatment. This reserve is provided for low flows and sufficient freeboard is provided for high flows. A wetland is proposed to be constructed within the reserve to provide for the treatment of stormwater before it leaves the site. The size of the reserve ensures that it can accommodate a wetland that provides

benefit to the external catchment as detailed in the Infrastructure Servicing Report at Appendix 3. The eastern portion of the land is split into two catchments. Each of these catchments is to be treated by appropriately sized vegetation swales within the road and creek reserve. Detailed drainage design should be undertaken at the subdivision stage and to the satisfaction of the Responsible Authority.

7.2 Sewerage Provision

The relevant service authority for sewer in this area is Gippsland Water. Consultation with Gippsland Water's Land Development Team (Lindsay Nation) has confirmed that there are existing 300mm sewer mains in the vicinity of the site that are capable of servicing the development. Advice from Gippsland Water suggests future sewer design should consider not having direct sewer connections to the 300mm main and the cost of all required assets would be fully borne by the developer.

7.3 Water Provision

The relevant service authority for water in this area is Gippsland Water. Consultation with Gippsland Water's Land Development Team (Lindsay Nation) has confirmed there is sufficient capacity in the existing infrastructure to service the development. Advice from Gippsland Water suggests all

connections and extensions come from the 150mm water main and no direct connections will be allowed to the 300mm distribution main. A reticulation network that taps off the existing network will be required to accommodate the development.

7.4 Electricity Provision

The relevant electricity supplier is Ausnet. AusNet's Design Officer (Emma Bostedt) has advised there is sufficient capacity in the existing network to service the proposed development and the development will be required to provide underground infrastructure.

It is envisaged that the eastern portion of the development will require a kiosk from high voltage power lines that run along the western side of Philip Parade to provide for electricity.

The existing overhead supply along the northern boundary of the eastern portion of the development plan area will be required to be removed as part of future development. Advice suggests that this overhead supply can be retired and the easement will be removed.

7.5 Gas Provision

The relevant service authority for Gas is APA group who have existing gas infrastructure on the western side of Philip Parade. This infrastructure can service the proposed development subject to contributions payable by the developer. Detailed costings can be provided by APA at the time of formal application.

7.6 Telecommunication Provision

The subject site is situated within the current NBN footprint and NBN Co have confirmed that the overall development can be provided with Fibre to the Premises. Commercial agreements between NBN Co and the developer will be required at the subdivision stage. In the event that NBN cannot service the proposed development, Telstra copper service is available.

8 Access & Movement

The PPDP aims to create a safe and convenient neighbourhood that includes a clear and legible street network that provides for access through the development and links with surrounding streets.

A Mobility Plan (18732DP3) has been prepared and is attached at Appendix 7.

8.1 Internal Road Network

The development plan proposes a functional street network that incorporates 16m road reserves for primary roads and 14m road reserves for the secondary road that abuts the open space reserve. Cross sections of the proposed roads are available at the Cross Section Plan (18732DP7) at Appendix 8. Detailed design will be required at the development stage however initial investigations suggest that the proposed road widths can provide for safe and efficient movement.

Separate access is provided to the eastern and western portions of the site via Philip Parade allowing them to be developed independently. The western development plan area contains a single road that links from Philip Parade to Canterbury Way to the south whilst the eastern development plan area contains an internal loop road that allows convenient movement of vehicles throughout.

Latrobe City Council have advised that the construction of a cross intersection on Philip Parade will require the provision of a roundabout to control vehicle movement. Philip Parade is contained within a 30m road reserve and as such there is ample space to accommodate a roundabout within the existing reserve. The responsibility for the roundabout construction would fall on the developer who creates the cross intersection ie. the second development.

The Development Plan provides the opportunity for future lots to be created with frontage to Philip Parade, Canterbury Way and Balfour Place. Each of these roads have capacity to service the development. Double crossings can be provided where possible to minimise disruptions to the streetscape. Where the location of crossings is constrained by obstructed frontages, intersection location, swale drains etc, they should be constructed at the subdivision stage, otherwise crossings can be provided as part of the development of the allotments. Driveways accessing Philip Parade should be located to avoid conflict with the intersection of Philip Parade and Canterbury Way.

The proposed internal road network is to be provided in accordance with Latrobe City Council standards.

8.2 Pedestrian Connectivity

Latrobe City Councils *Healthy Urban Design Good Practice Guideline* in an initiative that aims to accommodate pedestrian and cyclists as a first priority in street, building and open space design. It includes a number of objectives and encourages the provision of user friendly pathways.

The proposed development has been provided with an appropriate shared pathway network as demonstrated on the Mobility Plan at Appendix 7. Paths are provided on each side of the road network and through the proposed reserve. They link with the existing pathways available in Philip Parade and the Eel Hole Creek and provide opportunities for alternative means of travel to the nearby commercial area of Churchill. Pathways should be designed to meet the applicable standards at the subdivision stage.

9 Landscape

The PPDP presents the opportunity to enhance the landscape values of a degraded site. The provision of an appropriate landscape theme can provide a sense of place and community and ensure an attractive development that will enhance the character of Churchill. A Landscape Concept (18732DP5) has been prepared and is attached at Appendix 9.

The PPDP Landscape Concept proposes avenue plantings of large canopy trees on either side of Philip Parade. The provision of high branching canopy trees in this area will provide an attractive streetscape that will be overlooked by future allotments whilst also resulting in a grand entrance to the commercial areas of town. New roads within the PPDP area will also accommodate avenue plantings that will create visual interest and provide the development with a leafy character. The Landscape Concept recommends the incorporation of varying species of canopy trees that can provide hierarchy amongst the proposed roads.

A local reserve on the eastern portion of the site will form the main area of open space for the development. Its location has been determined by existing site conditions with the reserve providing for the retention of some existing large Oak trees. The Oaks provide the development with established

canopy coverage and will form a feature within the reserve. Consideration should be given to additional landscaping within the reserve such as the provision of large canopy trees scattered throughout that will not only provide users with shaded areas but result in potential habitat opportunities for local fauna. Appropriate landscape treatment of this open space area will result in an attractive local park that will be readily accessible for use by residents.

Existing native vegetation throughout the DP area is identified in the attached Ecological Assessment Vegetation Removal plan which indicates four scattered trees across the site. The Ecological Assessment identifies that two of these trees may be removed from the site with offsite offsets provided, however considerations should be given to their retention within allotments at the subdivision design stage. The remaining two are able to be retained within the Philip Parade road reserve.

A drainage reserve is proposed on the western portion of the site which provides for the management of stormwater with a wetland proposed for retardation and treatment. The wetland provides the opportunity to incorporate native plantings that will be visually pleasing, can provide habitat for local fauna and assist with stormwater filtration to ensure the development can meet best practice design principles. The design

of the wetland should reflect a natural environment as demonstrated in Figure 20 rather than a constructed retarding basin. An appropriately designed wetland will enhance the environmental values of the site and provide potential habitat opportunities.

An indicative plant palette is suggested on the Landscape Concept Plan and future planning applications and detailed landscape design should implement species chosen from this palette and to the satisfaction of Latrobe City Council.

Figure 20 – Example wetland



10 Bushfire

The Development Plan area is designated as a Bushfire Prone Area (BPA) (see Figure 21) and as such bushfire construction requirements apply to each lot at building permit stage. A minimum construction level of BAL 12.5 (Bushfire Attack Level) is imposed by *AS3959-2009 Construction of Buildings in Bushfire Prone Areas* and the BAL is increased as the bushfire hazard increases.

The most likely form of bushfire attack to the PPDP area would be from grassfire, which has the potential to spread rapidly across the undeveloped areas of the wider neighbourhood and interact with more substantial vegetation, such as that along Eel Hole Creek. The majority of areas surrounding the subject land are developed, comprising of non-combustible features including buildings, roads and manicured gardens. Once the subject land is developed, the only remaining threats will be from the grassland on the undeveloped area of commercial land to the north and from vegetation along abutting Eel Hole Creek. Neither of these areas present an extreme risk and the PPDP provides reasonable lot depths and a road along the majority of the creek abuttal, to ensure that lots will be capable of complying with AS3959.

The site is not affected by a Bushfire Management Overlay and as such, no bushfire planning requirements are applicable. The PPDP has however appropriately considered bushfire hazard to enable ease of future development and the requirements of AS3959 should be further considered at the development stage.

Figure 21 – Extent of Bushfire Prone Area



11 Implementation

11.1 Staging

As shown on the Staging Plan at Appendix 10 the development can occur in stages with title boundaries, ownership and the provision of infrastructure determining factors when developing the proposed stages. It is envisaged that the development can occur in five stages, two on the eastern portion (E1 & E2) and three on the western portion (W1, W2 & W3).

The development could occur out of sequence to the nominated staging as long as the required infrastructure is provided and easements are created as necessary. The eastern and western portions of the development are completely independent from each other and as such the timing of development can be dictated by the subject title owner.

11.2 Community Infrastructure Levy

The Churchill West Development Plan identified a need for additional Childcare and Preschool services within Churchill and calculated a Development Contribution figure of \$118.34 (excluding GST) per lot based on a contribution by the developer of 20%

of the estimated cost of additional infrastructure required.

The Latrobe City Council have indicated that they intend to levy a contribution of \$123 on lots within the PPDP area and this would be included as a condition of permit to be paid prior to a Statement of Compliance on a stage by stage basis.

11.3 Application Requirements

An application for subdivision should consider the following:

- Subdivision layouts must be generally in accordance with the Philip Parade Development Plan.
- Open space must be provided in accordance with the Philip Parade Development Plan with a cash contribution to be paid for any shortfall of public open space at the discretion of Latrobe City Council.
- Cash in lieu open space payments to facilitate the development of the pedestrian link to Eel Hole Creek, the embellishment of the proposed open space reserve and the improvement of existing open space areas within close proximity to the site, such as Glendonald Park.
- Lots directly abutting reserves should be designed to facilitate passive surveillance.
- Urban Design Guidelines should be developed for lots abutting public areas and registered on applicable titles via a Section 173 Agreement.
- The responsibility for the roundabout construction within Philip Parade would fall on the developer who creates the cross intersection ie. the second developer.
- Street networks must support building frontages with two way surveillance.
- Infrastructure must be designed and constructed in accordance with Council's infrastructure design guidelines and the *Victorian Stormwater Committee Best Practice Guidelines*.
- Drainage infrastructure will be provided in a staged manner in line with the staging plan provided at Appendix 10 and the Stormwater Management Statement at Appendix 12. Stage boundaries, wherever possible, have been located along catchment boundaries.
- Consider the location, species and significance of existing vegetation when determining whether it is to be retained or removed as part of the subdivision.
- Provide appropriate offsite offsets for any native vegetation to be removed at the subdivision stage and to the satisfaction of Latrobe City Council.
- A landscape master plan must be prepared and submitted as part of any subdivision

application. The plan must be generally in accordance with the Landscape Concept Plan and include the following:

- Vegetation to be retained and removed.
- The areas of public open space and road reserves to be planted, including landscape detail.
- The shapes, species, height and placement of trees.
- The location of pedestrian pathways, signage, fencing, public lighting and street furniture.
- The detailed design of drainage areas and WSUD features.
- The landscape design must:
 - Ensure landscaping supports surveillance and provides shade in streets, parks and public open space.
 - Develop appropriate landscapes for the intended use of public open space including areas for passive and active recreation, the exercising of pets, playgrounds and shaded areas.
 - Provide for walking and cycling networks that link with community facilities.
 - Provide appropriate pathways, signage, fencing, public lighting and street furniture.
 - Utilise existing trees and areas of planting as settings for recreational and play areas, and take advantage of their aesthetic qualities as a feature within the development.
- Create low maintenance, durable landscapes that are capable of a long life.
- Streetscapes and public open space must be planted with native vegetation from Councils preferred planting schedule.

Table 2 – Design Response at Permit Stage: East Precinct

Precinct	Design response required
E1	<ul style="list-style-type: none"> • New road reserve off Philip Parade. NB the development that creates a cross intersection at this location will need to construct a roundabout and pedestrian crossing which is to be designed and constructed to the satisfaction of VicRoads and Latrobe City Council. • Provide lots with direct frontage to Philip Parade. • Provide an open space reserve equivalent to 5% of the area of the eastern title as required by Clause 52.01 and to the satisfaction of Latrobe City Council. • Open space area to include Oak trees to be retained. • Landscape concept to be prepared for Open Space Area. Consider the provision of additional landscaping, streetscape furniture and play space ie. seating. • Medium density development to be provided adjacent to open space. • Urban Design Guidelines to be prepared for lots abutting the proposed open space reserve. • Site drainage to be directed to Philip Parade and treated via a vegetated swales to the satisfaction of Latrobe City Council.
E2	<ul style="list-style-type: none"> • Provide for a loop road to allow for vehicles to exit the site without the need to reverse. • Provide for lots to have an active frontage to the Eel Hole Creek Reserve. • Urban Design Guidelines to be prepared for lots abutting the Eel Hole Creek. • Site drainage to be directed to Eel Hoel Creek and treated via a vegetated swale.

Table 3 – Design Response at Permit Stage: West Precinct

Precinct	Design response required
W1	<ul style="list-style-type: none"> • Lots can give direct access to Balfour Place and Canterbury Way. • Existing carriageway easement will need to be factored in to any design. • Electricity easement to be reviewed. • Provide a cash in lieu open space payment on a stage by stage basis to fund the pedestrian crossing to the existing path within Eel Hole Creek, the embellishment of the proposed open space area in 1E and the improvement of existing open space areas such as Glendonald Park. • Drainage to be directed to existing Council drains in Monash Way.
W2	<ul style="list-style-type: none"> • New road reserve off Philip Parade. NB the development that creates a cross intersection at this location will need to construct a roundabout and pedestrian crossing which is to be designed and constructed to the satisfaction of VicRoads and Latrobe City Council. • Creation of link road between Philip Parade and Canterbury Way. • Existing electricity easement to be reviewed. • Creation of drainage reserve in accordance with the recommendations of the Stormwater Management Statement and to the satisfaction of Latrobe City Council and West Gippsland Catchment Management Authority. • Provide a cash in lieu open space payment on a stage by stage basis to fund the pedestrian crossing to the existing path within Eel Hole Creek, the embellishment of the proposed open space area in 1E and the improvement of existing open space areas such as Glendonald Park.

W3	<ul style="list-style-type: none"> • Provide lots with active frontages to Philip Parade and internal road. • Provide lots with active frontages to drainage reserve. • Prepare Urban Design Guidelines for lots abutting the drainage reserve. • Provide a cash in lieu open space payment on a stage by stage basis to fund the pedestrian crossing to the existing path within Eel Hole Creek, the embellishment of the proposed open space area in 1E and the improvement of existing open space areas such as Glendonald Park. • Drainage to be connected to constructed waterway from W2.
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Appendix 1 – Certificates of Title

Appendix 2 – Site Analysis Plan

As prepared by NBA Group & Millar Merrigan 18732DP1

Appendix 3 – Infrastructure Report

As prepared by Millar Merrigan August 2016

Appendix 4 – Ecological Assessment

As prepared by Millar Merrigan August 2016

Appendix 5 – Development Plan

As prepared by NBA Group & Millar Merrigan 18732DP2

Appendix 6 – Open Space Plan

As prepared by NBA Group & Millar Merrigan 18732DP4

Appendix 7 – Mobility Plan

As prepared by NBA Group & Millar Merrigan 18732DP3

Appendix 8 – Cross Section Plan

As prepared by NBA Group & Millar Merrigan 18732DP7

Appendix 9 – Landscape Concept Plan

As prepared by NBA Group & Millar Merrigan 18732DP5

Appendix 10 – Staging Plan

As prepared by NBA Group & Millar Merrigan 18732DP8

Appendix 11 – Design Response Plan

As prepared by NBA Group & Millar Merrigan 18732DP6

Appendix 12 – Stormwater Management Statement

As prepared by Millar Merrigan November 2016

Appendix 13 – Vegetation Removal Plan

As prepared by NBA Group & Millar Merrigan 18732DP9