



55 Regent Street, Mernda- Development Plan

The Development Plan was approved by the City of Whittlesea on 4 February 2020, in accordance with Clause 43-04 Schedule 27 of the Whittlesea Planning Scheme.

4/2/2020

Signature of the Responsible Authority

55 REGENT ST, MERNDA DEVELOPMENT PLAN

WHITTLESEA CITY COUNCIL

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1. Introduction

This Development Plan applies to land referred to as **'55 Regent Street, Mernda'** and covers an area of approximately 6.61ha. The land is situated on the south-western periphery of Mernda.

The Development Plan will guide future use and development of the site and will complement approved development plans for surrounding land within the Mernda Town Centre and the wider Mernda growth area.

The Development Plan has been prepared with careful consideration of the surrounding precincts which form part of the *Mernda Strategy Plan* and in accordance with the *Development Plan Overlay, Schedule 27*. It will provide an appropriate transition to the Quarry Hills Regional Parkland to the south, as well as current and future development to the east and west.

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

As a result of these considerations, the Development Plan will:

- Provide seamless integration into the surrounding developed areas in terms of scale, built forms and amenity;
- Provide a range of lot sizes that promote housing choice and affordability;
- Maximise the value of embedded open space areas both internal and surrounding the site;
- Recognise and enhance the habitat value of open space areas through the retention of significant native vegetation;
- Minimise impacts on topography through design principals including minimising cut and fill, retaining walls and batter slopes as much as possible; and
- Maximise the benefits of the southern interface with the Quarry Hills Regional Park.

The Development Plan has been informed by the following investigative reports and assessments (these reports can be found within the attached Appendices):

- **Infrastructure Servicing and Stormwater Management Report** – an assessment of available infrastructure and its ability to service the proposed development, prepared by *Millar | Merrigan, September 2019*.
- **Traffic Impact Assessment** – an assessment of the surrounding road network and its ability to accommodate the proposed development, prepared by *O'Brien Traffic, September 2019*.
- **Arboricultural Assessment Report** – an assessment of all significant vegetation onsite, prepared by *Tree Logic, 20 February 2019*.
- **Cultural Heritage (Preliminary Assessment)** – a desktop assessment on the cultural heritage values of the site by *Benchmark Heritage, November 2017*.
- **Preliminary Environmental Site Assessment** – a desktop and site assessment of historical activities and potential contamination of soil by *Compass Environmental, 25 October 2017*.

All cultural heritage matters are to be considered in line with the Cultural Heritage Management Plan prepared by Matt Barker.

The northern portion of the site is located within the Melbourne Strategic Assessment program area. Actions associated with urban development are subject to requirement of the Commonwealth Environment Protection and Biodiversity Conservation Act 1999.

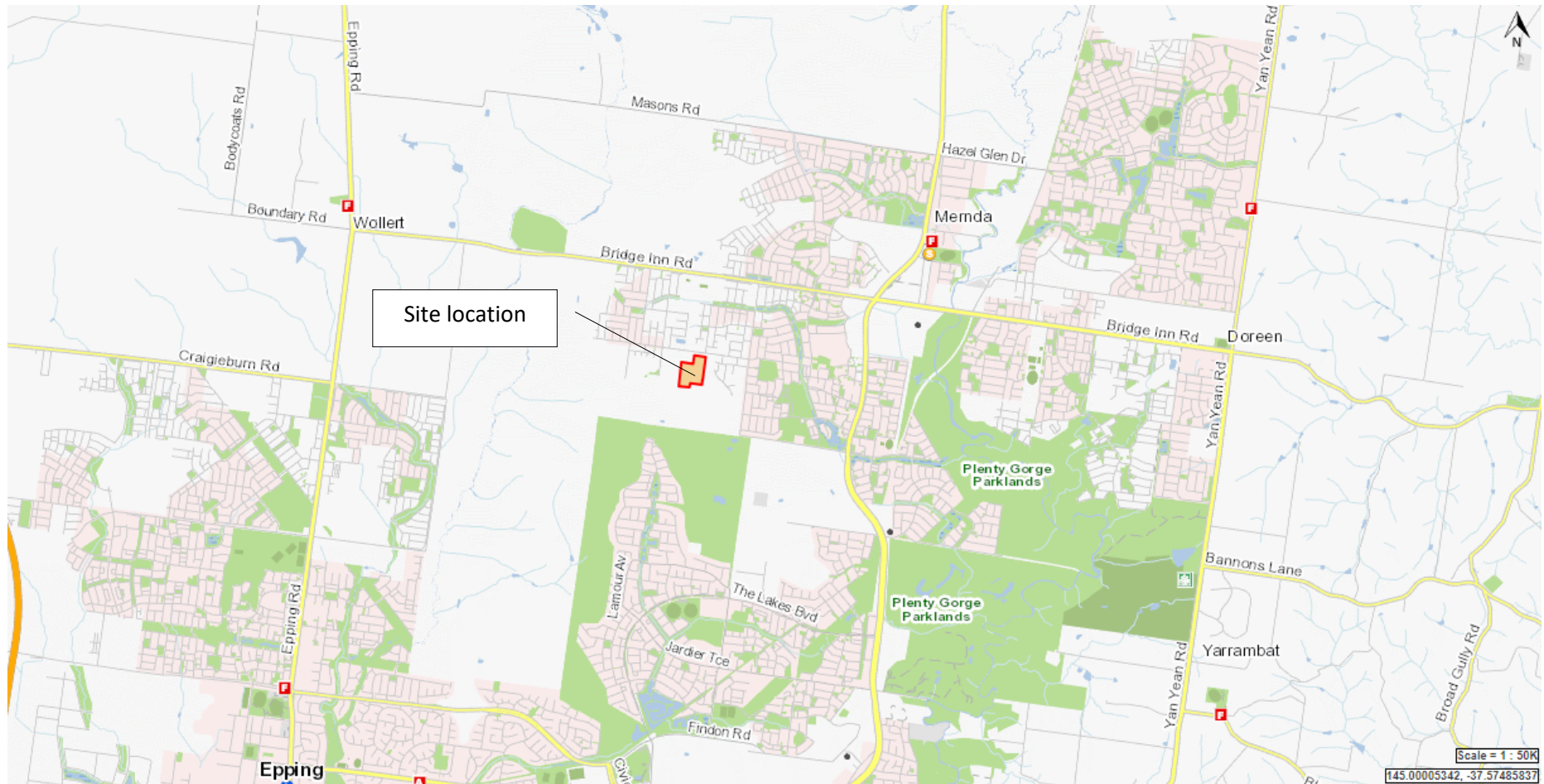


Figure 1 : Surrounding use and development map

2. Local Context and Site Description

2.1 Regional Context

The subject site is situated approximately 25 kilometers north-east of the Melbourne Central Business District and is contained within the Northern Growth Corridor (also known as the Plenty Valley Corridor) as indicated in Figure 2.

As part of the State Government's initiative to provide additional housing opportunities within growth areas, the Urban Growth Boundary (UGB) was expanded and included the northern portion of the subject site in 2012. Subsequent to these changes, the Whittlesea Planning Scheme was amended via Amendment C199 (25 January 2017) to rezone and apply new overlays to the site.

Mernda is a designated 'Major Activity Centre,' whereby a broad range of goods and services, housing, employment, public transport and social interaction is to be consolidated within. It is well located to complement the network of activity centres across the northern growth area and accommodate future growth.

The North Growth Corridor Plan also shows potential to improve public transport infrastructure within Mernda through a rail extension from South Morang and marking Bridge Inn Road as a principal road to accommodate public transport.

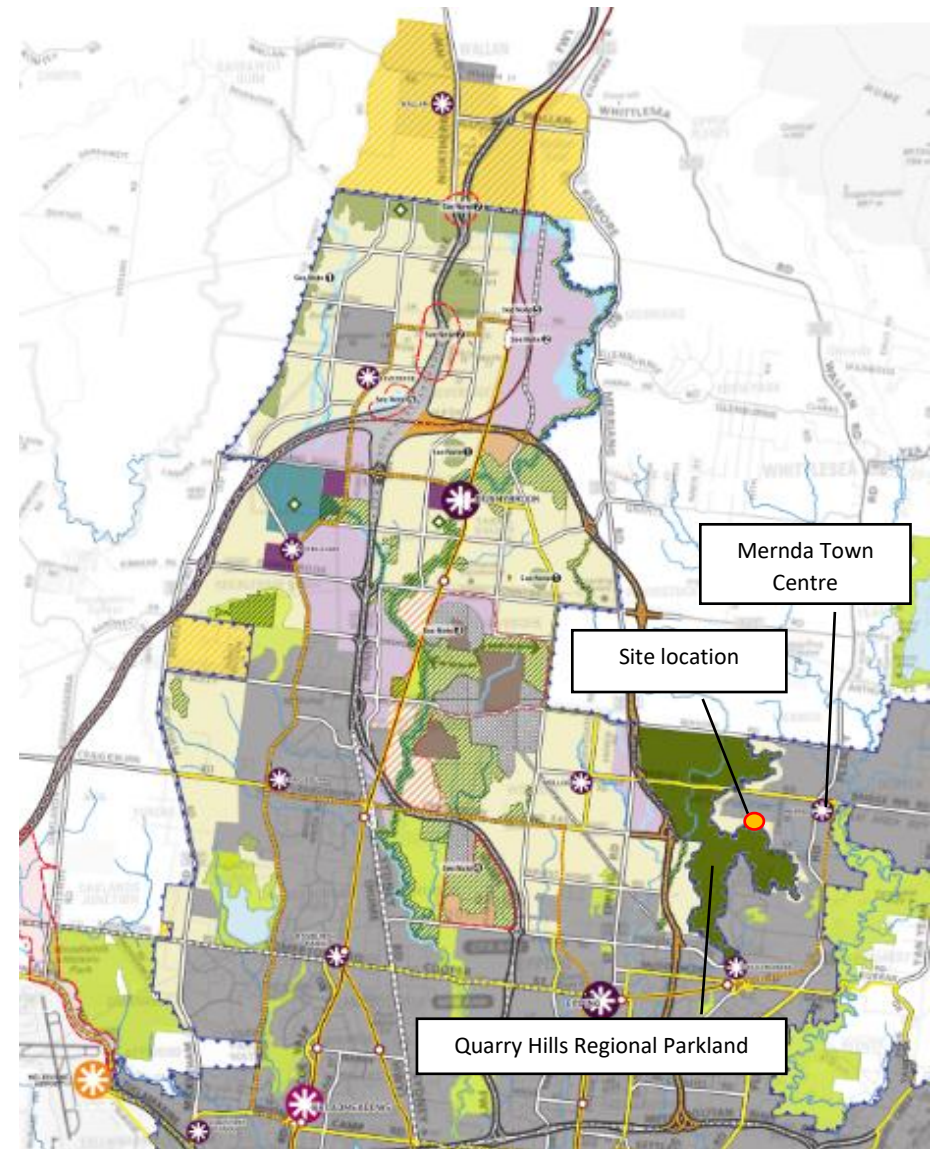


Figure 2 : North Growth Corridor Plan (Growth Area Authority)

The proposed future Quarry Hills Regional Parkland is a large expanse of open space that is located to the south and west of the subject site. The regional parkland aims to protect significant biodiversity, geological, cultural heritage and landscape values of the municipality. The Urban Growth Boundary was applied along the 185-195 metre contour, as such the subject site will contribute approximately 60% of the total site to the parkland with the remainder of the land deemed suitable for residential development.

2.2 Local Context

Mernda is a rapidly growing residential area comprising of approximately 17 square kilometers. It is estimated that by 2036 the population of Mernda will increase by about 68% from 16,800 (2015) to an estimated 28,200.

The Mernda Activity Centre is expected to accommodate over 30,000 square metres of retail space for supermarkets and shops and around 80,000 square metres for commercial use for offices, small businesses, medical facilities, gym and childcare.

The subject site is currently surrounded by rural land; however, it is expected that land to the north, east and west of the site will in time be rezoned to accommodate future residential development, consistent with the UGB.

The two major arterial roads which service the area, is Plenty Road which extends from the south; and Bridge Inn Road which intersects the area in an *east – west* direction.

2.3 Development Plan Area

This Development Plan refers to land known as 55 Regent Street, Mernda. It is an irregular shaped allotment located to the south of Regent Street and comprises an area of 6.61 hectares. The property is under single ownership and the Certificate of Titles associated with the land is contained within Appendix 1.

The site was historically used for pasture and recreational horse use and is void of any built structures. Other notable features include a single dam located toward the centre of the site.

The land is currently split-zoned as *General Residential Zone, Schedule 1 (GRZ1)* and *Rural Conservation, Schedule 1 (RCZ1)*. The separate zoning is defined by the UGB which is aligned with the 185-195 land contour.

The southern portion of the site is covered by the *Significant Landscape Overlay, Schedule 2 (SLO2)*; whilst the northern portion of the site is affected by the *Vegetation Protection Overlay, Schedule 1 (VPO1)* and the *Development Plan Overlay, Schedule 27 (DPO27)*. See Figure 3 for mapping details.

In terms of native vegetation, there are some large remnant Manna Gums identified toward the north-centre of the site and a large patch of remnant vegetation toward the south-east corner of the site.

Other vegetation noted onsite include a group of Dutch Elm toward the eastern edge of the site and a variety of planted vegetation along the external perimeter of the site. Some small regrowth shrubs (less than 10 years old) are also located toward the north-western boundary of the site.

A detailed assessment of significant trees onsite has been undertaken by Tree Logic P/L and is included within Appendix 7.

Access to the site can be gained via an unmade road reserve located to the north-east of the site, which extends south from Regent Street.

The topography of the site falls significantly from south to north by 38.92 metres. There are significant views to the surrounding hilltops, particularly to the south.



Figure 3: Planning zoning map

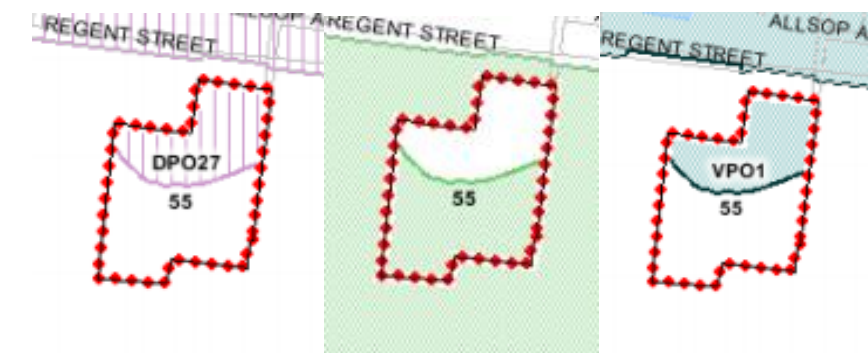


Figure 4 : Applicable planning overlays: DPO27, SLO2 and VPO1

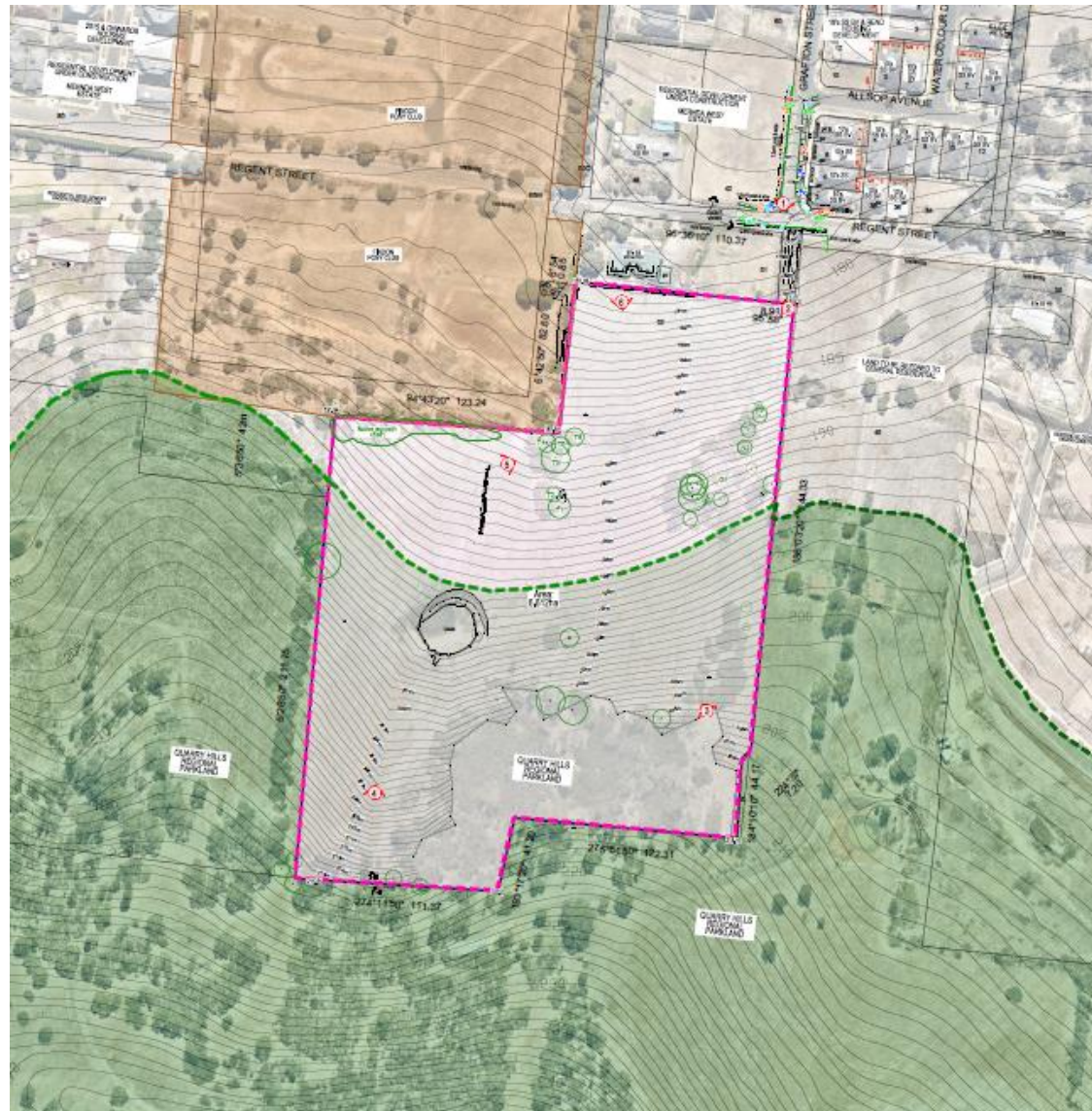


Figure 5 : Site and Context Plan

2.4 Surrounding Area

The following provides a description of the surrounding land uses.

It is noted that to the west of the subject site land is currently zoned *Rural Conservation* and is proposed to be rezoned to *General Residential* consistent with the Urban Growth Boundary in the near future.

North

The northern portion of the site abuts a low density residential property and positioned directly opposite this, across Regent Street, is a similar low density residential property. Each of these properties maintain sizeable dwellings on very large lots.

Across Regent Street to the north, land is zoned as *General Residential*. The *Mernda West Development Plan* indicates that the majority of this land will be developed with standard density housing. The construction of housing and roads are well underway within this area.

To the north-west of the site, is a property which maintains abuttal to Regent Street and is occupied by Findon Pony Club. Several scattered trees and earthen access tracks are present across the property.

Image 1: Typical housing styles constructed to the north of Regent Street, opposite the site.



Image 2: Looking north to emerging residential developments, from within the site



South

Land to the south is to be reserved for the Quarry Hills Regional Parkland. The regional parkland aims to preserve the significant hilltops and natural environs of the municipality. The border is to be defined by the Urban Growth Boundary along the 185 -195 contour line.

East

Land which abuts the site to the east is utilised for agricultural purposes and is currently undeveloped with the exception of two farm buildings. An unmade road extends south from Regent Street, past the dam and towards the woodland. This land has recently been rezoned to General Residential (Schedule 1).

Further east, is residential land currently under construction with the majority of roads completed. This land will be developed with standard density residential housing.

West

Land which abuts the site to the west is utilised for agricultural purposes and is currently undeveloped. This land is expected to be developed for residential purposes, once the land is rezoned.

Further west is residential land currently, under construction and is guided by the Mernda On The Park Development Plan.

Image 3: Views south-west toward the existing dam and Quarry Hills



Image 4: Views north-west toward from within the site



3. Development Plan

The Development Plan 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 (Residential Subdivision) of the Whittlesea Planning Scheme.

Furthermore, the Development Plan has been prepared in accordance with the relevant planning zoning and overlay requirements, along with the existing and future conditions of the surrounding area.

Schedule 27 to the Development Plan Overlay stipulates the following key requirements:

- The provision of an appropriate transition and interface between the Development Plan area and the proposed Quarry Hills Regional Parklands;
- An appropriate treatment of park interfaces to create clear visual and physical connections with the parkland which maximises active interfaces to the park boundary and avoids rear fence abutments;
- The designation of specific land uses, including non-residential land uses and their integration with existing or future development on land abutting the site;
- Provision for a diverse range of allotment densities and dwelling types. A statement of housing outcomes, population and lot yield targets must be submitted;
- Provision of subdivision layouts which allow for innovative urban design and built form responses that are responsive to the site, surrounds and any parkland interfaces; and
- The preparation of a landscape strategy, cultural heritage management plan, stormwater management plan, transport strategy and arboricultural survey.

The Development Plan is shown in Figure 7 below. It provides an overall layout to guide future subdivision and development for the site at 55 Regent Street.



Figure 6 : Development Plan

3.1 Design intent

The key design principles of the Development Plan are as follows:

- **Housing**
 - Provide for the use of residential land and its integration with existing or future development on land abutting the site;
 - Provide a range of lot sizes that promote housing choice and affordability; and
 - Ensure active interface with abutting reserves.
- **Open Space & Landscape**
 - Protect and retain River Red Gums and other native trees in open space reserves;
 - Ensure a detailed design response to the natural topography and sight lines of the site;

- Ensure the contribution of streetscapes to the amenity of the Development Plan area;
- Provide visual and physical links between open space and key landscape features and their integration with bicycle and pedestrian networks;
- Enhance open space areas with new landscape and facilities appropriate to function;
- Recognise and enhance the habitat value of open space areas that are of ecological significance;
- Provide a local reserve to serve as a key public recreation space for future residents; and
- Contribute 60% of the land as regional open space (Quarry Hills Regional Parkland) to preserve the environmental values of the municipality.

▪ **Access and movement**

- Promote active frontages to roads and open space, particularly on corner allotments;
- Provide logical connectivity within the site and to surrounding land;
- Provide a safe, legible and interconnected street and path network; and
- Ensure future road networks integrate with the existing road network and provides external links for future growth.

▪ **Site responsive**

- Retain significant native vegetation where deemed significant within the landscape;
- Future subdivision to respond to the sloping nature of the land, to minimise the need for cut and fill as part of future housing development and maintain significant views to the Quarry Hills Parkland.

3.2 Land Use and Density

The Development Plan aims to achieve an urban neighbourhood that can provide a range of dwelling varieties and a density that respects the surrounding area. Particular regard should be made towards providing an appropriate transition between the residential development and regional parkland located to the south.

There is no local precinct plan which applies to the site. However, this Development Plan seeks to develop the site in consideration of the existing zoning and overlays of the site, along with the surrounding existing and future conditions. The land has been separated into the following categories:

Encumbered land is constrained for development purposes. In the case of 55 Regent Street, the regional parkland to the south is to be preserved for future recreational and conservation purposes. Additionally the proposed local reserve is preserved for the protection of significant trees.

Gross/Net developable area is the total precinct area excluding encumbered land and roads.

The total Site Area is 6.61 hectares.

The total Development Plan Area is 2.65 hectares (developable area).

The Gross developable area comprises an approximate net residential area of 1.8 hectares, featuring a mixture of standard residential lots and some larger residential lots at the interface of the Quarry Hills Regional Parkland, set within a network of local streets.

The Development Plan area will yield approximately total of 40-46 lots, distributed as follows:

Table 1: Lot distribution

Lot Sizes	Number of Lots	Percentage of Development
200-300 sqm	~1	2%
300-400 sqm	~23	50%
400-500 sqm	~22	48 %

Table 2: Land budget

	Area	Percentage%
TOTAL SITE AREA	6.61ha	100% (of overall site)
ENCUMBERED LAND	4.052ha	61.5% (of overall site)
<i>Land preserved for the Quarry Hills Regional Parkland</i>	3.95ha	60% (of overall site)
<i>Land preserved for the local reserve</i>	1,020sqm	1.5% (of overall site) 3.85% (of DP area)
NET DEVELOPABLE AREA (NDA)	2.65ha	40% (of overall site)
▪ Roads	0.97ha	36.66% (of DP area)
▪ Residential allotment area	1.8ha	66.16%(of DP area)

'DP area' refers to area affected by the Development Plan Overlay

Note: Minor encroachment of road pavement into the Quarry Hills Parkland is permitted, subject to Council approval.

3.3 Servicing and infrastructure

The provision of infrastructure to service the proposed development is subject to detailed design at the subdivision stage, however, preliminary advice is provided within the Stormwater Strategy and Infrastructure Report by Millar Merrigan (included as Appendix 8).

Millar Merrigan has made enquiries of the following service authorities to determine the current location and capacity of existing infrastructure

assets and the potential for these to cater for the development of the site for residential purposes as proposed:

Utility	Authority
Sewerage	Yarra Valley Water
Water	Yarra Valley Water
Drainage	Melbourne water
Electricity	AusNet
Gas	APA Group
Telecommunications	NBN Co.

Detailed design of this infrastructure will be completed in line with Industry standards and permit conditions during the next phase of the project.

3.4 Open Space & Landscape

The Development Plan presents the opportunity to enhance the landscape values of the surrounding area and site through the provision of open space and new landscaping (see Figure 8).

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 Mernda.

Open space is provided in the form of a local and regional parkland to preserve the environmental qualities of the site and provide for recreation.

The Development Plan has considered the existing trees onsite and provides recommendations on their retention and removal.

A Landscape Concept Plan has been prepared and is attached at Appendix 5.

Streetscape

The Landscape Concept Plan proposes an avenue of large canopy trees on both sides of new roads within the Development Plan area, that will create visual interest and provide the development with a leafy character. The Landscape Concept Plan recommends the incorporation of varying species of canopy trees that can create a sense of hierarchy amongst the proposed roads.

Local Reserve (encumbered land)

The proposed local reserve will comprise of approximately 1,020 square metres (which equates to 3.85% of the Net Developable Area) and will provide an excellent space for recreation and for the preservation of significant vegetation.

Consultation with Council indicated a preference to retain native vegetation onsite which have been assigned a higher arboricultural rating. The proposed local reserve aims to preserve this vegetation and maintain natural habitat for local fauna.

The local reserve will also form a key public recreation space for residents and provides excellent scope for embellishments such as seating and play equipment as indicated on the Landscape Concept Plan.

Quarry Hills Regional Parkland (encumbered land)

Approximately 60% of the overall site will be dedicated to the Quarry Hills Regional Parkland which aims to preserve and enhance the significant biodiversity, geological, cultural heritage and landscape values of the municipality. It is noted that the land is zoned as Rural Conservation and is subject to a Significant Landscape Overlay.

The Regional Parkland will provide for both passive and active recreational use such as walking on the trail network, bird watching, enjoying views from shelters, horse riding, cycling/mountain biking and

a range of other uses (refer to Quarry Hills Park Master Plan for further details).

Clause 52.10 - Open Space provision

Clause 52.10 Public Open Space Contribution and Subdivision of the Whittlesea Planning Scheme requires a person who proposes to subdivide land to make a contribution to Council for public open space to an amount of 5% of the site.

It should be noted that the Development Plan contributes approximately 3.85% (1,020sqm) of the Net Developable Area as a local parkland and approximately 60% of the total land for the regional parkland.

A cash contribution or the provision of land for the regional parkland, may be accepted in lieu of the provision of open space within the developable area is at the discretion of the responsible authority.



Figure 7: Landscape Concept Plan

3.5 Access and movement

The Development Plan 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 future residential sites.

An Access Concept Plan has been prepared and is attached at Appendix 6.

Site access

The progression of this Development Plan is out of sequence with planning for adjoining land, which has resulted in access constraints and insufficient space to accommodate the full road network for the extension of Grafton Street. Access is dependent on negotiated and constructed outcomes on third party land. This will require agreements with adjoining landowners.

Given the uncertainty of access outcomes, two access proposals are outlined as part of this Development Plan, which will require further consideration and detailed design with the lodgment of a Planning Application (see Figure 9). One of the access options outlined below must be selected as part of any future planning application, no temporary or interim access arrangements are permitted. A surveyor will be required to prepare the relevant title plan to show the true land required from the access option chosen below.

Option A: Access from Mortar Ridge through 45 Regent Street, Mernda

Access option A is Council's preferred alternative access outcome for the site, as the extension of Mortar Ridge along the Quarry Hills Regional Parkland is a consistent approach to development in the area. Access could be provided west from Mortar Ridge, Mernda into the site and would:

- align the road reservation with the boundary of Quarry Hills Regional Parkland for the full extent;

- be constructed in line with Council Standards and consist of a 14.5 metre road reservation; and
- be subject to Council approval.

Should Option A be selected, the future planning application must consider stormwater outfall connections to Regent Street. Any connection must be contained in a linear drainage reserve of up to 8 metres in width to accommodate piped flows. Alternative arrangements may be considered by Council, subject to demonstration of suitable stormwater engineering design at the time of detailed subdivision.

Option B: Access from Grafton Street, Mernda

Access could be provided through the extension of Grafton Street, Mernda south into the site and would:

- include the construction of a roundabout;
- consist of a 16 metre road reservation (access street);
- require an agreement with the landowner of 51 Regent Street, Mernda for the acquisition of land for the construction of a 16 metre road reservation;
- require an agreement with the landowner of 45 Regent Street, Mernda for the acquisition of land to facilitate the splay for the construction of the roundabout;
- accommodate the full road network for the extension of Grafton Street, Mernda with services positioned in their ultimate location;
- provide the road connection in line with the current alignment Grafton Street, Mernda for the provision of a roundabout; and
- be constructed in line with Council Standards.

This Development Plan does not obligate any adjoining landowner to provide access. An agreement between the landowner of 55 Regent Street, Mernda and the landowner in which access will be provided from must be entered in to as part of any planning application.



Figure 8: Access Concept Plan

Internal road network

16-meter road reserves throughout the Development Plan area will accommodate the bulk of the traffic and provide for a logical road network. A road reserve of 14.5 metres will abut the regional parkland to the south. The central north-south road reserve will reduce from 16 metres to 14.5 metres at the northern end to reduce the encroachment of the road reserve into existing Tree Protection Zones.

The development plan proposes a functional internal street network that incorporates varying sized road reserves to accommodate proposed traffic generation. The typical cross section of the proposed roads vary from 14.5 metres to 16 metres and will provide for safe and efficient movement throughout the development.

The design of the road network, creates future road links to surrounding growth areas. The proposed internal road network is to be provided in accordance with Whittlesea Council standards. See Figure 10 and Appendix 6 for further details on typical cross sections.

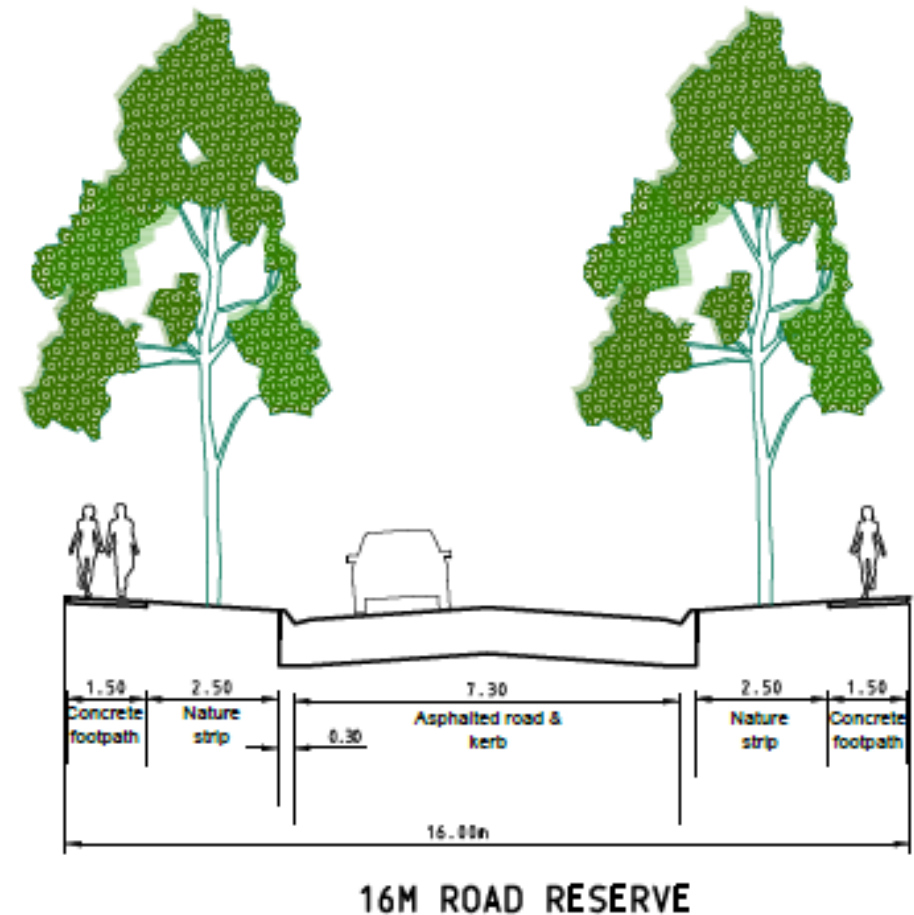


Figure 9: Typical cross sections (16m road reserve).

Pedestrian connectivity

The proposed development has been provided with an appropriate shared pathway network as demonstrated on the Access Concept Plan. Footpaths are provided as part of each road reserve. The pathway location inside the local reserve will be determined as part of future detailed design.

Pathways should be designed to meet the applicable standards at the subdivision stage.

3.6 Slope and retaining walls

The developable area of the site has a significant fall of 14 metres in a southerly direction. Due to the sloping nature of the site, future development must seek to avoid significant cut and fill through an innovative design response. Future developments should avoid the construction of retaining walls above 1.5 metres in height.

A slope analysis and retaining wall plan is provided and attached at Appendix 12.

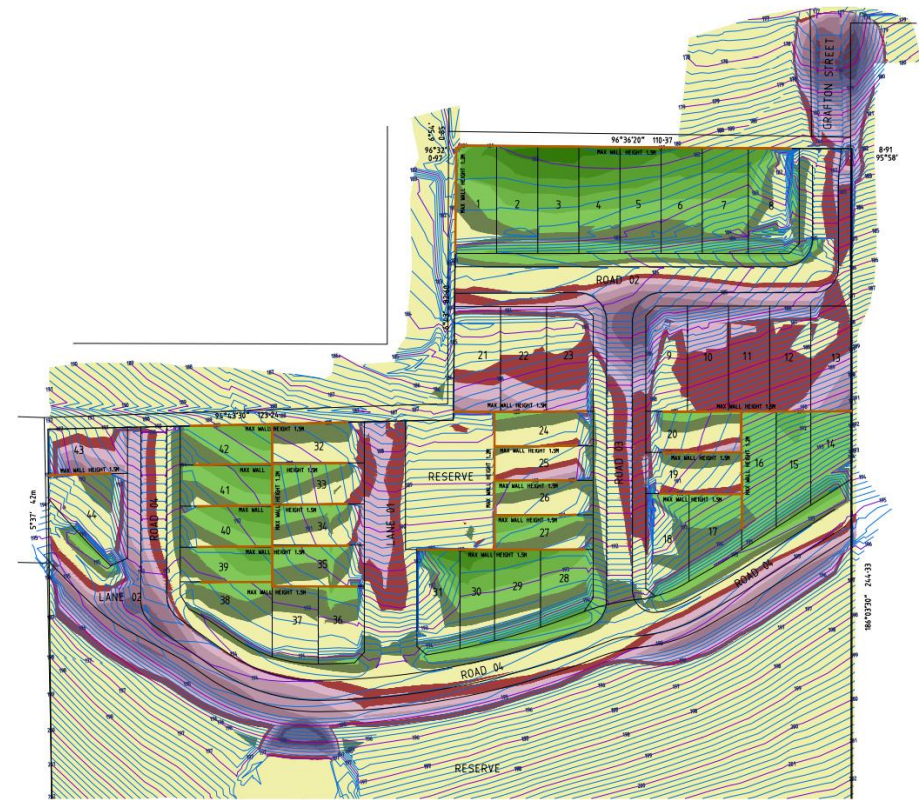


Figure 10 : Preliminary Earthworks Plan

3.7 Cultural Heritage

The site has been identified as a site of cultural heritage significance, as such permit must not be granted to use or subdivide land, until a Cultural Heritage Management Plan has been prepared and approved in accordance with the Aboriginal Heritage Act 2006. The contingency plans outlined within the approved document must be adhered to as part of future development.

3.8 Flora and Fauna/Biodiversity

The northern portion of the site is located within the Melbourne Strategic Assessment (MSA) program area; therefore, actions associated with urban development are subject to habitat compensation fees which will fund the delivery of the MSA's program's commitments to the State and Commonwealth Government. The fees are used to protect and manage land with important biodiversity values, which mitigates the impacts of urban development in the growth corridors. For summary of obligations refer to Appendix 11.

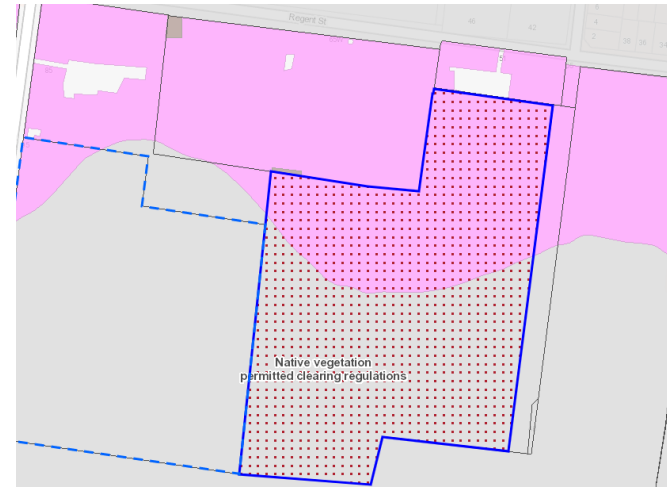


Figure 11 : Area where Biodiversity Conservation Strategy applies (NVIM tool)

4. Bushfire Management

The site is not affected by a Bushfire Management Overlay however it is contained within a designated Bushfire Prone Area (BPA) (refer to Figure 13) and as such bushfire construction requirements apply to each future lot at building permit stage. A minimum construction level of Bushfire Attack Level 12.5 (BAL) is imposed by *AS3959-2009 Construction of Buildings in Bushfire Prone Areas* and the BAL is increased as the bushfire hazard increases. Vegetation and slope within 100 metres of a dwelling is considered in determining the BAL.

Clause 13.02-1S Bushfire Planning, seeks to strengthen the resilience of settlements and communities to bushfire through risk-based planning that prioritises the protection of human life. In accordance with Settlement Planning, population growth is to be directed to low risk locations, being those assessed as having a radiant heat flux of less than 12.5kilowatts/square metre under *AS3959-2009*.

The form of a bushfire attack to the Development Plan area would be predominantly from grassfire, which has the potential to spread rapidly from the south (which is designated to be regional parkland), east and west of the site. Future strategic plans earmark the opportunity for residential development to the east and west, however currently the undeveloped parcels of land are considered a bushfire risk. The forested areas towards the peak of the hill to the south are also within the 100m assessment area.

Future landscaping within the Development Plan area will not be of a scale that creates any additional bushfire hazard or risk.

The Development Plan has appropriately considered bushfire hazard through the provision of a perimeter road and generous separation between forested areas to the south and the proposed residential areas.

Council will be the public land manager for the proposed reserve which forms part of the Quarry Hills Regional Parkland and low-threat conditions to achieve BAL-12.5 construction can easily be provided.

With respect to Grassland interfaces to the north-west, east and west, the developer will be required to implement management of abutting land to ensure that low threat conditions present and BAL-12.5 construction can be achieved.



Figure 12 : Bushfire prone areas

5. Detailed Site Assessments

5.1 Infrastructure servicing

A Stormwater Strategy and Infrastructure Report has been prepared by Millar Merrigan 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 8 and provides the following summary of existing conditions.

Topography

The subject site falls towards Regent Street approximately 39 metres from the southern boundary.

Stormwater

The site is located within the Mernda South water drainage scheme.

Considering that the zoning restricts the developable areas of the site to approximately 2.9 hectares and the natural fall of the site is towards Regent Street, it is likely the stormwater runoff generated from a 5 year storm event (20% AEP) will be required to be conveyed into the Melbourne Water drainage

The drainage will be designed to accommodate an efficient and logical subdivision layout that will connect into the Melbourne Water drainage network along Regent Street or up Grafton Street. The specific location of the connection is to be confirmed. There is an existing swale drain in the property to the north west that could provide a path for overland flows from the western portion of the subdivision until such time that the future road network is constructed.

Sewer

No reticulated sewerage exists within the Development Plan area. Yarra Valley Water sewer assets service lots to the north of Regent Street and far east of the site, where construction is underway. It is anticipated that the subdivision will be required to connect into the point at Grafton Street.

Water

Reticulated water is not available within the site. Yarra Valley Water water asset maps shows that multiple reticulated water mains run along Regent Street. There are no anticipated issues with regard to supply and Yarra Valley Water will determine which main the subdivision is to connect into, upon formal application.

Electricity

Ausnet Services are the responsible authority for electricity supply in the area. The site does not appear to be serviced with electricity. An investigation into the area unveiled both high and low voltage power present along Regent Street. It is likely that the subdivision will be able to obtain electrical supply for residential and street lighting purposes from the existing services in Regent Street.

Gas

The responsible authority for gas supply is APA Group. It is assumed that the site is not currently serviced by natural gas infrastructure. According to the asset information, there is an existing distribution gas main running along Regent Street that may be available for the subdivision to obtain service from.

Telecommunications

The site does not appear to be serviced with telecommunications infrastructure. It is likely that infrastructure will be provided through NBN Co, which is currently rolling-out in the local area.

5.2 Road network

The surrounding roads have been assessed in the Traffic Impact Assessment by O'Brien Traffic (see Appendix 9) with respect to future development.

The Development Plan area does not have direct abuttal to any existing roads; however, a 8.91 metre wide unmade road reserve connects the site to Regent Street along the eastern boundary of the site.

Access to the site as considered in Section 3.5 Access and Movement will be determined at the Planning Application stage and is subject to landowner agreement and detailed design.

One option for access to the subject site is through the widening of Grafton Street. Grafton Street could be widened to provide a 16m wide road reserve. The intersection of Grafton and Regent Street would then be controlled by a roundabout.

Based on the layout of the surrounding road network and nearby existing / future major activity generators, it is reported that critical movement is the right-turn out of the subject site with 42 right turning vehicles anticipated in the AM peak hour; and the left-turn into the subject site with 32 left-turning vehicles anticipated in the PM peak hour (see Figure 14).

For access via Mortar Ridge, the traffic movements likely to be generated by the proposal would disperse across the surrounding network.

It was concluded that based on the predicted traffic volumes generated by the future development would not have any significant effect on the existing road network.



5.3 Soil conditions

Compass Environment was engaged to conduct a Preliminary Environmental Site Assessment of the site to provide information on potential contamination of the soil.

Due to past rural/grazing practices, including the possible use of mechanical farm equipment and the possible presence of imported fill and building demolition rubble.

All recommendations and conclusions can be found in the report attached as Appendix 13.

5.4 Vegetation

Tree Logic was engaged to undertake an arboricultural assessment to provide information on the current status, condition and arboricultural value of the trees located within the study area. The full report is included as Appendix 7.

A total of six large Manna Gums were identified north-centre of the site, along with a group of Dutch Elm situated toward the eastern boundary (see Figure 15). Under the Vegetation Protection Overlay, only native vegetation requires planning permission for removal.

Five of the six Manna Gums were assigned a 'moderate' arboricultural rating, reflecting their fair condition and their potential to provide long-term landscape and ecological value to the area.

Tree Protection Zones are to be applied to all trees to be retained, in accordance with the City of Whittlesea Tree Protection Guidelines.

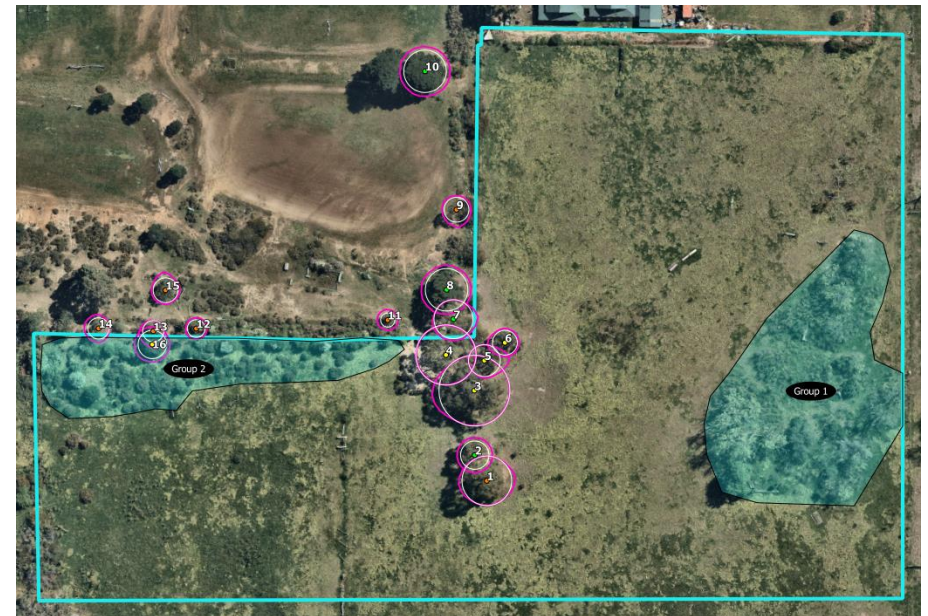


Figure 14 : Tree and shrub location plan

5.5 Aboriginal cultural heritage

A due diligence assessment has been carried out by Benchmark Heritage, to assess the cultural heritage significance of the land and concluded:

The study area remains largely undisturbed (other than the footprint of the dams) and displays some potential for buried sub-surface Aboriginal cultural material to be present. The likelihood of locating further Aboriginal cultural material is high.

Given the high likelihood of locating further Aboriginal cultural material, a mandatory Cultural Heritage Management Plan (CHMP) is required under Section 47 of the Victorian Aboriginal Heritage Act (2006) for future development.

6. Implementation

An application for subdivision should consider the following:

- Subdivision layouts must be generally in accordance with the Development Plan.
 - Subdivision layouts must meet the requirements of *Clause 56: Residential Subdivision* at the discretion of Whittlesea City Council.
 - Open space must be provided in accordance with the Development Plan and *Clause 52.01: Public Open Space Contribution and Subdivision*, with a cash contribution to be paid for any shortfall of public open space at the discretion of Whittlesea City Council.
 - Lots directly abutting reserves should be designed to facilitate passive surveillance.
 - Preparation of *Urban Design Guidelines* to manage the interface between lots that back or side onto public open space areas.
 - Street networks must support building frontages with two-way surveillance.
 - Provide for walking and cycling networks that link with existing pathway and provide for circulation to town in accordance with *Healthy by Design Guidelines*.
 - Infrastructure must be designed and constructed in accordance with Council's infrastructure design guidelines and the Victorian *Stormwater Committee Best Practice Guidelines*.
 - A *Cultural Heritage Management Plan* must be prepared for areas of the site considered culturally sensitive in accordance with the Aboriginal Heritage Regulations 2007 and to the satisfaction of Whittlesea City Council.
 - Subdivision design should give consideration to the retention and protection of native vegetation where possible.
- The removal of Native Vegetation is to occur in accordance with *Biodiversity Conservation Strategy for Melbourne's Growth Corridors*.
 - A landscape master plan should be prepared and submitted as part of any subdivision application or completed as part of a permit condition. The plan must be generally in accordance with the Landscape Concept Plan.
 - The developer should pay Council the cost of purchasing, planting and maintaining street trees for 12 months.

7. References

Mernda Strategy Plan – Incorporated Document, Approved October 2004, Amended January 2008 (City of Whittlesea)

Mernda on the Park Development Plan, February 2015 (Urbis)

Park Hill Estate Development Plan, March 2016 (JCA Land Consultants)

Mernda West Development Plan

City of Whittlesea, Place Snapshot: Mernda,
[<https://www.whittlesea.vic.gov.au/building-planning-development/future-development-plans/place-snapshots-a-guide-to-development-in-your-area/place-snapshot-mernda/>] accessed May 2018

Department of Environment, Land, Water and Planning, Obligations in the Biodiversity Conservation Strategy Area
[<https://nvim.delwp.vic.gov.au/>] accessed May 2018

Appendix 1 – Certificate of Titles

Appendix 2 – Site and Context Plan (2 sheets)

Appendix 3 – Development Plan (2 sheets)

Appendix 4 – Design Response Plan

Appendix 5 – Landscape Concept Plan

Appendix 6 – Access Concept Plan

Appendix 7 – Arboricultural Assessment Report

Appendix 8 – Stormwater Strategy and Infrastructure report

Appendix 9 – Traffic Impact Assessment

Appendix 10 – Preliminary Cultural Heritage Assessment

Appendix 11 – Biodiversity Conservation Strategy Obligations

Appendix 12 – Preliminary Earthworks Plan

Appendix 13 – Preliminary Environmental Site Assessment