

10 CONSULTING GROUP

**Development Plan Report
150 Cookes Road, Doreen**

**Prepared by 10 Consulting Group
On behalf of The Estate of E.B. Cooper**

August 2013

**Amended by TW Consulting
On behalf of Glenncrest Pty Ltd**

August 2017

150 Cookes Development Plan (Amended)

The 150 Cookes Road Development Plan was approved by the City of Whittlesea on 6 August 2013, and amended on 30 August 2017 in accordance with Clause 43.04 (Schedule 5) of the Whittlesea Planning Scheme.

30 August 2017


Signature of the Responsible Authority

This Development Plan was amended in August 2017 to reflect updated strategic context for the site. The changes made to the Development Plan include:

Section	Page/s	Summary of changes made
Contents		- Updated reference to Attachments 9 & 12 to reflect changes outlined below - Updated page numbers as appropriate
1 Overview	1, 2	- Updated to reflect changes proposed throughout document
2.1 Purpose	3	- Reference to amended Development Plan report
2.3 Planning Framework	6, 7	- Updated zoning information - Replacement Map: <i>Figure 3 Zoning Map</i>
3.2 Precinct 2A and the Subject Site	8, 9	- Updated text to reflect current context
3.3 Evolution of the Plan and Road Network	12	- Updated to reflect signalised intersection and status of S.173 Agreement
5 Design Response	20-24	- Replacement Map: <i>Figure 10 Development Plan</i> - Updates Section 5.3 Linear Open Space - to references to rear loaded terrace lots to reflect Figure 10 - Includes Figures 11 & 12 – Cross section profiles for proposed Service Road and east-west road through Local Convenience Centre
5.7 Landscape and Streetscape Contexts	28-30	- Updated species selection - Replacement Map: <i>Figure 16: Street Tree Master Plan</i>
5.8 Development Plan outcomes	31-32	- Updated lot yield statistics to reflect new Indicative Subdivision Layout - Replacement Map <i>Figure 17: Indicative Subdivision Layout</i>
6.3 Transportation System	34-36	- Updated to refer to amended traffic outcomes for the site, and to include reference to Traffic Assessment prepared by GTA Traffic Consultants dated 21 March 2017, which reflects amended Development Plan
6.5 Activity Centres	36-37	- Updated to include reference to Local Convenience Centre
6.6 Local Convenience Centre	37	- New section to include details on role of local Convenience Centre
6.7 Local Convenience Centre Design Principles	38-40	- New Section to include Design Principles for the Local Convenience Centre relating to Built Form, Site Accessibility and Permeability, and Landscape and Amenity.
6.8 Social Infrastructure & Community Development	40	- Updated reference to child care centres
6.9 Housing	41	- reference to lot types
Conclusion	42	- Amended to reflect changes made throughout the document
Footer	All	- Updated Document title
Attachment 7	--	- Renumber existing Attachment "7" as "7A" & insert new map at Attachment 7B - <i>Street Tree Master Plan</i>
Attachment 8	--	- Replacement Map – <i>Development Plan</i>
Attachment 9	--	- Replacement Maps – <i>Indicative Subdivision Layout</i> and <i>Staging Plan</i>
Attachment 12	--	- Inserted New Attachment ' <i>Transport Impact Assessment - GTA Consultants, 21 March 2017</i> ' to respond to amended Development Plan

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1 Overview

This report has been prepared in support of a Development Plan for 150 Cookes Road, Doreen.

The site is identified for residential development by the Whittlesea Planning Scheme and the *Mernda Strategy Plan* and a Local Convenience Centre along the Bridge Inn Road abuttal of the land. The Planning Scheme requires that a Development Plan be prepared to the satisfaction of the Responsible Authority before a planning permit application for subdivision can be considered.

The proposed Development Plan provides for the residential development of the 8.35 hectare site, with an estimated 110 dwellings. These will include conventional detached dwellings, terrace lots with frontage to linear open space and medium density dwellings. Other features include:

- A north-south boulevard style collector road which connects across Cookes Road to Painted Hills Road in the north and to Bridge Inn Road in the south;
- It is envisaged that this road will connect to the extension of Independence Boulevard south of Bridge Inn Road, creating a signalised cross-intersection at this point;
- A landscaped off-road bicycle and pedestrian path along the western side of the collector road, linking into the open space network which includes Plenty Gorge to the south and a school with associated active open space to the north;
- Connection into the Bridge Inn Rise Estate, which is developing to the west of the site as intended by the *Mernda Strategy Plan*, including integration through the use of corresponding street trees;
- Connections to facilitate the future residential development of the area to the east of the site, including two internal road connections and a service road, and preparation of an indicative Concept Plan for this area to ensure a functional road network can be established;
- Extension of the public open space reserve along the frontage of Bridge Inn Road with lots to front the road; and,
- Nomination of a Local Convenience Centre in the south-east corner of the site, as envisaged within the *Mernda Strategy Plan*

The Development Plan is supported by specialist studies, which are explored through this report, and a landscape concept plan. The site was found to be relatively unconstrained through natural and cultural features. The primary issue associated with the development of the site was considered to be the identification by the Strategy Plan of a substantial and indirect open space corridor passing through the site, providing for an off road pedestrian and bicycle trail.

However, a variation to the structure of the development of the site to that provided by the *Mernda Strategy Plan* has been provided to offer a more functional outcome that can integrate with the proposed Painted Hill Road extension. Due to the evolution of the Strategy Plan and development of the area, this change is proposed to ensure that the objectives of the Strategy Plan are met.

The Strategy Plan does not identify the need for a north south collector road through the site, with provision being made for significant traffic movements along Cookes Road to the north, Bridge Inn Road to the south, and through the



subdivisions to the east and the west of the site. However, the proposed partial closure of Cookes Road, delayed development of land to the east of the site, and the delivery of higher residential densities than anticipated by the Strategy Plan has resulted in Council identifying the need for the link through the site. Achieving this connection has become a key influence on the design response of the Development Plan.

The proposed Development Plan delivers both the collector road and off road bicycle and pedestrian trail through the use of a road cross section from the Growth Areas Authority's Engineering Guidelines. The 28.6 metre road reservation is wider than those required for higher order roads by the *Mernda Strategy Plan*. However, it allows for adequate traffic volumes, while also providing generous landscaped nature strips, and shared and pedestrian paths. In addition, the road reservation caters for the function of the linear open space corridor rather than a dedicated reserve as depicted in the *Mernda Strategy Plan*. By using this road profile, the proposed Development Plan is able to achieve a balanced and functional approach to meet both the Strategy Plan's objective regarding the provision of open space connections, and the emerging need for a collector road through the site.

'Rear-loaded' terrace dwellings are proposed to front on to some of the open space formed by the landscaped off-road paths. This provides for the diversity of lot types and passive observation sought by the Strategy Plan. A minimum number of east-west crossings of the path are proposed, while those that do occur will be given landscape treatments to provide visual cues to drivers, pedestrian and cyclists. Where a local east-west road is terminated at the linear open space, the opportunity is created and used for a pocket park.

At its southern extent, the collector road connects to Bridge Inn Road at a point that will ultimately become a four-way signalised intersection into the development to the south. The Development Plan reflects the road alignments and intersection splays required to accommodate a signalised intersection. Neither the connection to or construction of the intersection are contemplated by the Strategy Plan, and will come at additional cost. The Development Plan has been prepared on the basis that negotiations can proceed with the Council to identify equitable cost sharing.

Overall, it is considered that the Development Plan provides for appropriate development of the site, which will integrate with adjoining development and makes a substantial contribution towards achieving the objectives of the *Mernda Strategy Plan*.

2 Introduction

2.1 Purpose

In conjunction with the spatial Development Plan prepared by Breese Pitt Dixon (Ref. # 9225_UD_DP03_V3, dated 24 March 2017), this report has been prepared to address the requirements of Development Plan Overlay – Schedule 5 (Mernda Strategy Plan).

This report has been amended in 2017 to reflect changes to the strategic context of the site, recent Council decisions, the amended Development Plan and development already approved for the site.

2.2 Subject Site

2.2.1 Details

150 Cookes Road, Doreen (the ‘site’) is located to the north of Bridge Inn Road, just over half way between Plenty Road, 2.1 kilometres to the west, and Yan Yean Road, 1.3 kilometres to the east (Figure 1). Its Certificate of Title is included as *Attachment 1*.

The site is a regular shaped allotment with a total area of 8.34 hectares. It has a frontage of 218 metres to both Cookes Road and Bridge Inn Road, which form its northern and southern boundaries respectively.

The site has been developed and used as a relatively large rural residential-style property. However, the surrounding area is gradually being encompassed by urban development, which is consistent with strategic planning for the area.

2.2.2 Features

A feature survey of the site, prepared by CPG Australia, is included as *Attachment 2*.

A summary of these features includes:

- The site is substantially cleared, with the southern half being entirely grass paddock (Figure 2).
- The primary access has been from Cookes Road, with a dwelling and outbuildings located in the north west corner of the site.
- There are two dams on the property; one in the north east corner and one proximate to the southern boundary.
- Vegetation consists primarily of planted rows of Cypress trees which have been used as windbreaks and to delineate paddocks.

The site falls from north to south, with a maximum AHD of 176 metres in the north eastern corner to a minimum of 160 metres at the southern boundary. This represents an overall slope of 1:24, however the fall is slightly steeper in the northern portion of the site.

There are no watercourses or other considerable natural features on the site.

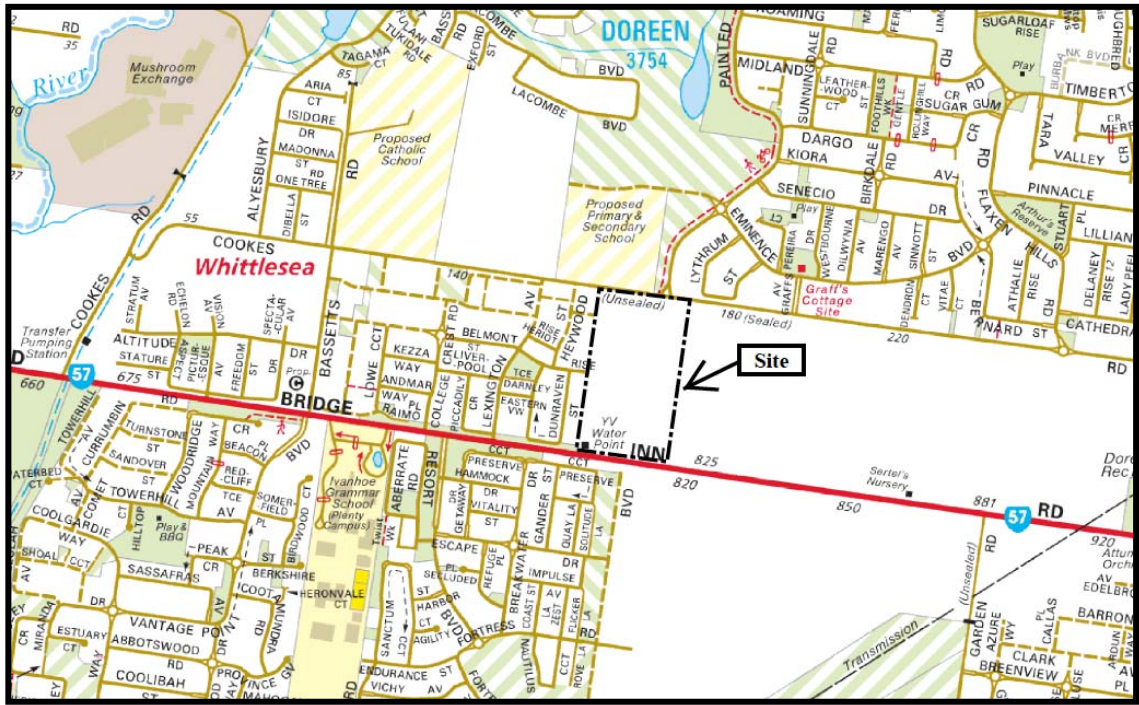


Figure 1: Location Plan (Melways. Approximate site boundary only)



Figure 2: Aerial Photograph (NearMap 2012; Approximate site boundary only)

2.3 Planning Framework

Use and development of the site is subject to the controls of the Whittlesea Planning Scheme.

The Whittlesea Local Planning Policy Framework identifies the Plenty Valley, within which the site is located, as one of Melbourne's priority growth areas. The future development of the site and its context is addressed by the *Mernda Strategy Plan* (January 2008).

The site is zoned **General Residential 1 (GR1Z)**, which provides for the use and development of the site primarily with dwellings at a range of densities and non-residential uses discretionary in the zone, (Figure 3). A number of Overlays also apply to the site to ensure that the site's context and development in its entirety is addressed before planning permit applications for subdivision can be considered.

- **Incorporated Plan Overlay – Schedule 1 (IPO1)** identifies the site as being subject to the *Mernda Strategy Plan*, which is incorporated into the Planning Scheme through the Schedule. The provisions of IPO1 require that any permit for the use and development of the site must be generally in accordance with the Strategy Plan.
- **Development Plan Overlay – Schedule 5 (DPO5)** requires that a Development Plan be prepared for the site, identifying its future use and development and informed by a detailed analysis of the natural, cultural and strategic context. Matters to be considered are detailed in the Schedule and addressed through this report (Figure 4).
The DPO requires that a permit granted must be in accordance with the Development Plan, and that Development Plan must meet the requirements of Clause 56.
- **Development Contributions Plan Overlay – Schedule 5 (DCPO5)** specifies the infrastructure levies payable pursuant to the *Mernda Strategy Plan Development Contributions Plan* as part of the development of the site.

Additionally, the site is subject to the **Vegetation Protection Overlay – Schedule 1 (VPO1)**, which seeks to protect significant native vegetation, particularly of the River Red Gum Grassy Woodland habitat. A planning permit is required for the removal of native vegetation.

Also relevant to the Development Plan is the Particular Provision **Clause 56 – Residential Subdivision**. Clause 56 sets out the objectives and standards in relation to lot design, urban landscape, access and mobility management, water and utilities. These are addressed in Section 6 of this report.

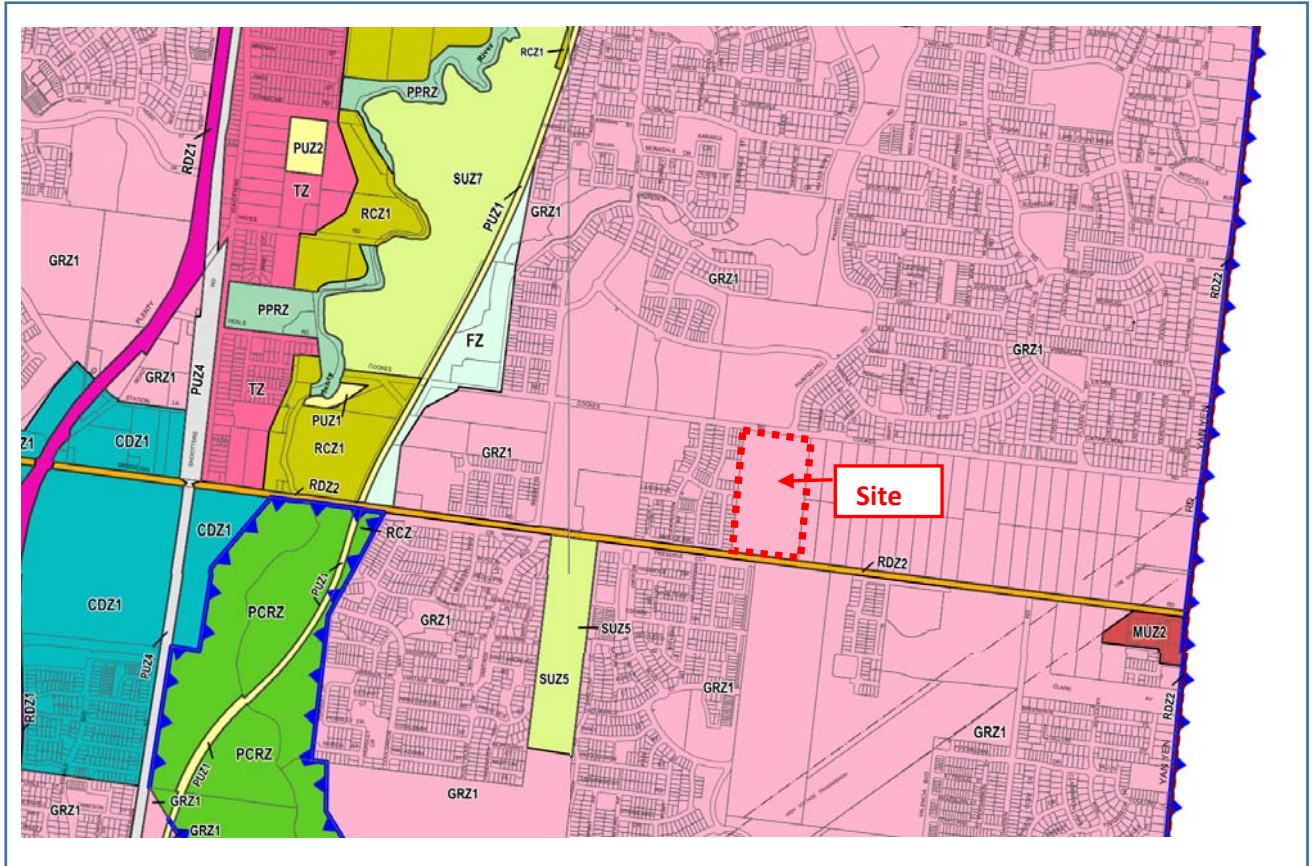


Figure 3: Zoning Plan

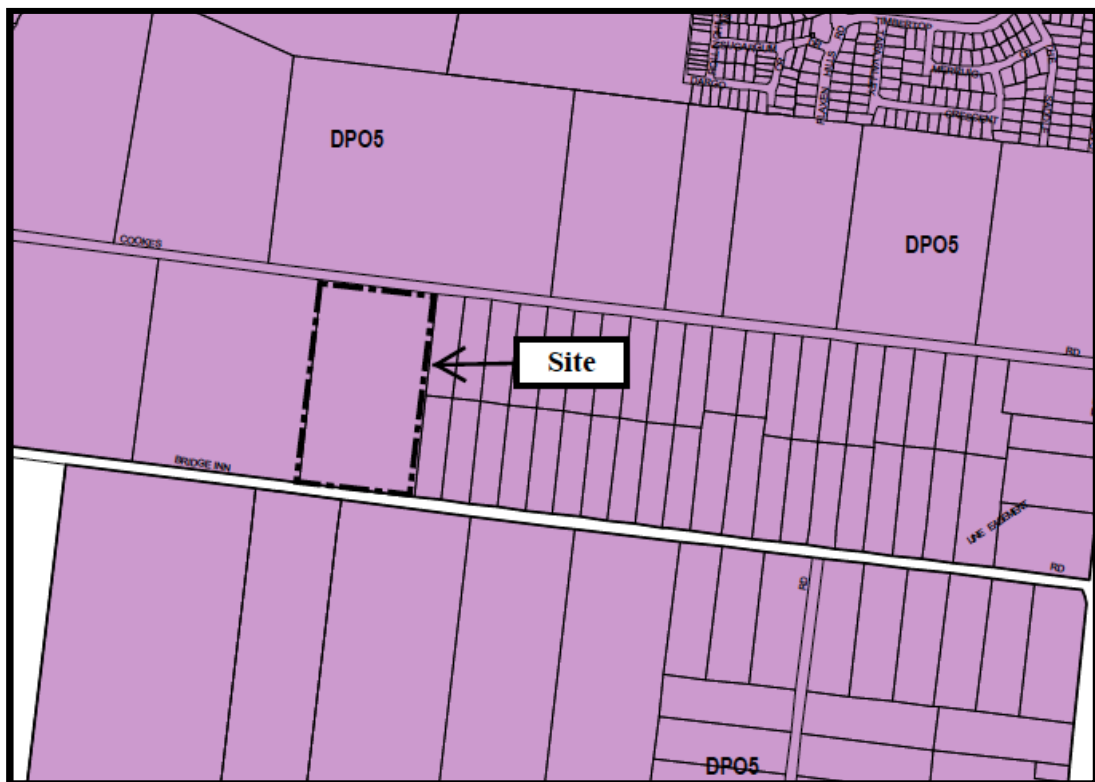


Figure 4: Development Plan Overlay



3 Expectations of the Mernda Strategy Plan

3.1 Overview

The *Mernda Strategy Plan* (the 'Strategy Plan') sets out the structure of land use patterns and movement for the growth area centred on the Mernda Town Centre (Figure 5). With a focus on residential development, the Strategy Plan identifies locations for activity centres, schools, recreation reserves, and areas of low, medium, and standard residential development. It provides a vision and framework for the integrated development of precincts and, ultimately, individual properties.

While land use guidance is provided for each precinct, there are a number of elements that are common across the Strategy Plan. These include provisions regarding lot design, road layout and water sensitive urban design.

The Strategy Plan also provides the framework from which the need for various infrastructure elements has been identified, and forms the critical input for the associated Development Contributions Plan which is an incorporated document in the Whittlesea Planning Scheme and given effect by a Schedule to the Development Contribution Plan Overlay.

3.2 Precinct 2A and the Subject Site

The site is included in Precinct 2A of the Strategy Plan (Figure 6)., The Strategy Plan sets an indicative framework for the preparation of Development Plan areas. It is notable that the majority of the Precinct is already the subject of approved Development Plans and the exception, being land to the east of the site, is constrained by the existing subdivision and land ownership pattern. This is explored further in Section 4.1 of this report.

The framework established by the Strategy Plan and its Precinct 2A include the following of particular relevance to the site.

- The majority of site is identified for standard density residential development (450 – 700 m²).
- A linear open space corridor, incorporating an off-road bicycle and pedestrian trail traverses the site in a north-south direction.
- A local convenience centre is indicated as being located at the intersection of Bridge Inn Road and the open space corridor.
- Bridge Inn Road is identified as a primary arterial road, connecting to Yan Yean Road (secondary arterial) in the east.
- Cookes Road to the north of the site is identified as a sub-arterial road (noting that given constraints along its alignment, it has been downgraded to a local street in the section that has been partially urbanised to date).
- The site is centrally located to Bassetts Road and the future extension of Flaxen Hills Road.
- Painted Hills Road extends north from the site, alongside the public open space corridor, and provides a direct connection the Laurimar Town Centre on Hazel Glen Drive (a primary bus route) which includes retail and office uses, a primary school, active open space, community centre and child care facilities.
- Land to the immediate north of the site is identified for a State Government Primary and Secondary school, being Hazel Glen College K-12.

- An existing private school is established to the south west of the site (Ivanhoe Grammar).
- In addition, land to the north west of the site is designated for a future Catholic School.

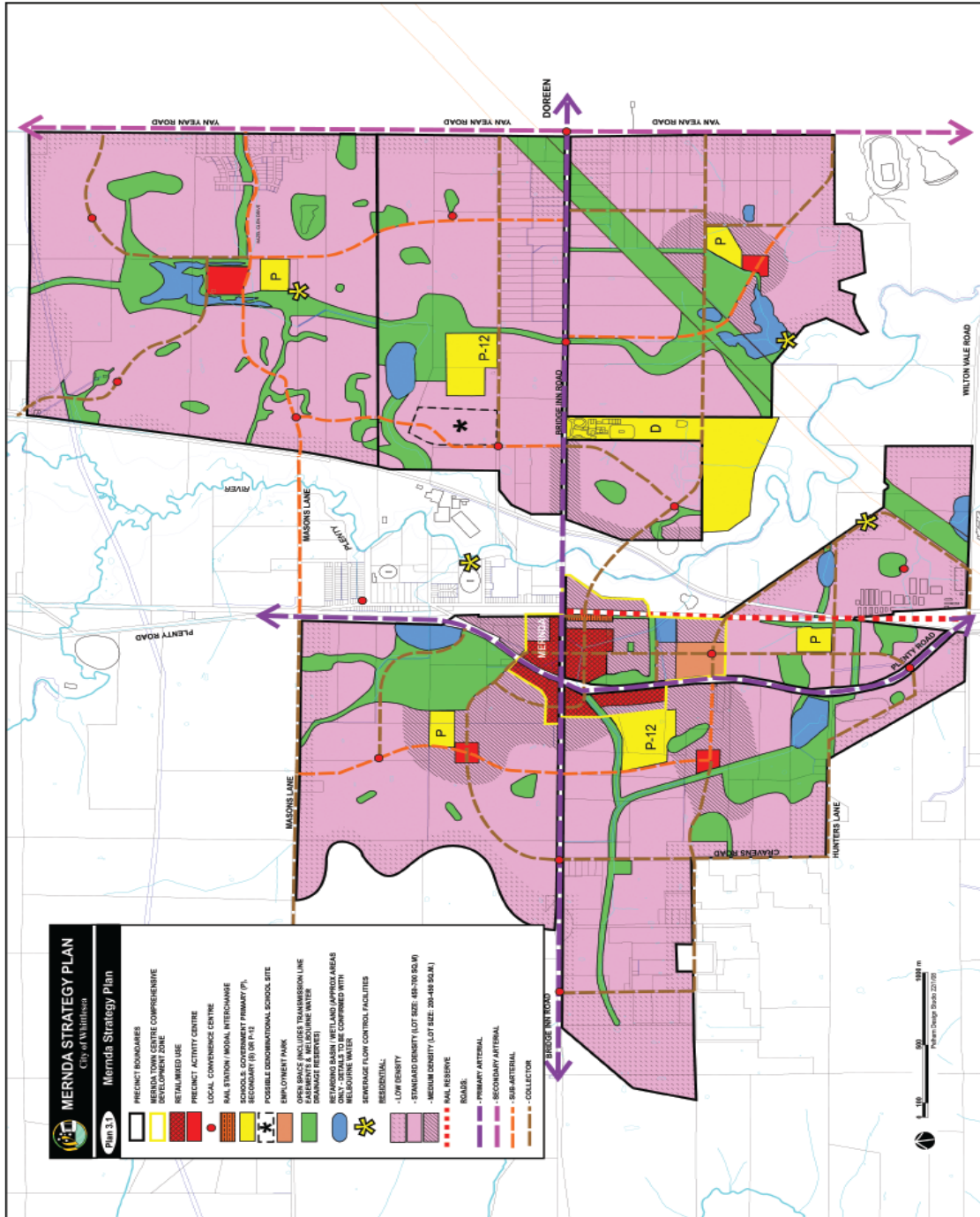


Figure 5: Mernda Strategy Plan

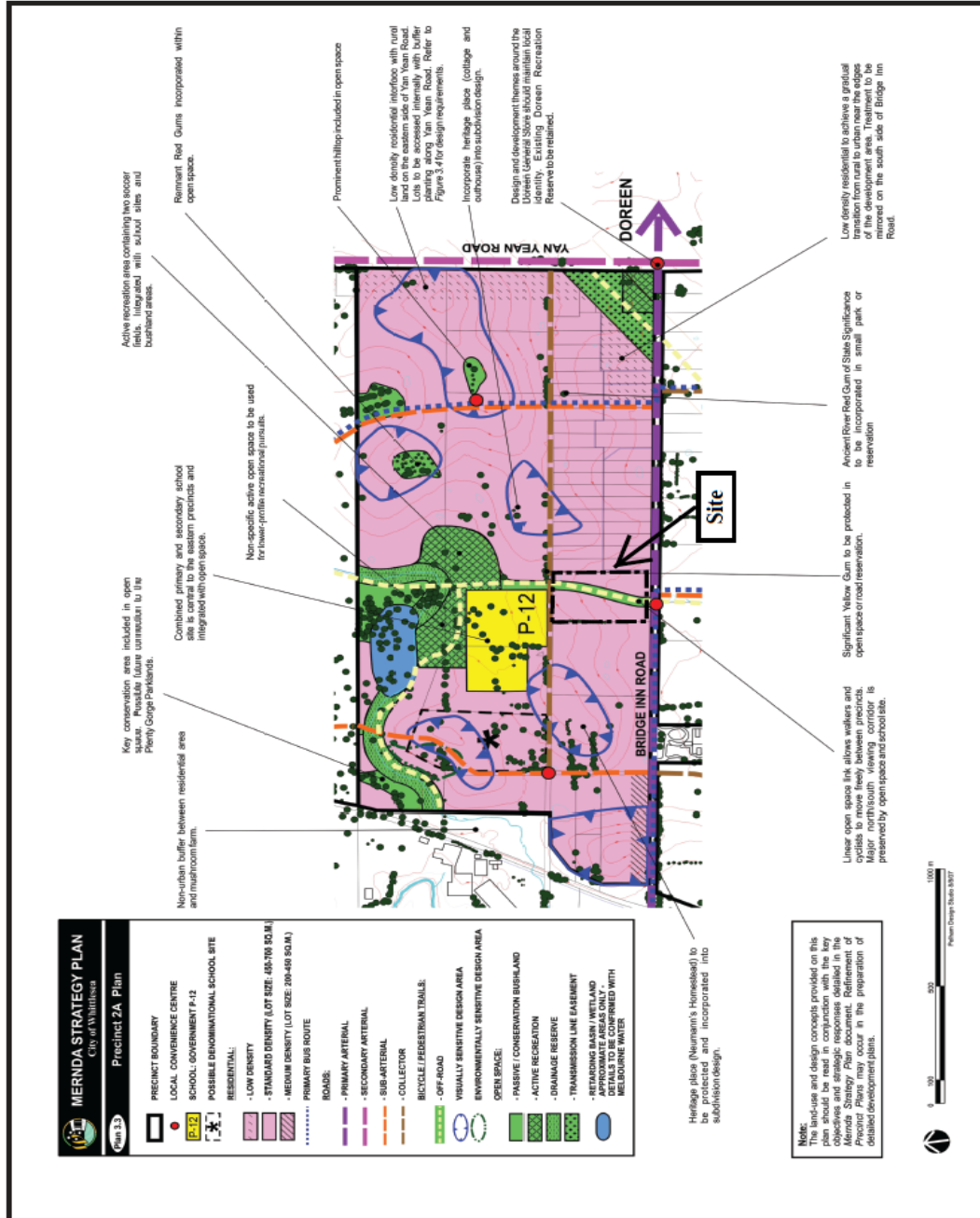


Figure 6: Precinct 2A



3.3 Evolution of the Plan and Road Network

Concepts for the development of the site were originally prepared and presented to Council which incorporated the open space corridor and limited access to Bridge Inn Road, as articulated in the *Mernda Strategy Plan*.

Council advised that it sought to vary the approved *Mernda Strategy Plan* by providing a road with a collector function through the site. This variation is understood to have come about for a number of reasons:

- The intended functionality of Cookes Road as a collector road has been compromised by the decision to close sections of it in order to protect vegetation in the road reservation.
- Residential development in the Mernda area has occurred at higher densities than was conceived by the *Strategy Plan*, resulting in higher traffic volumes than the road network was designed to accommodate.
- The proposed north-south sub-arterial road (Flaxen Hills Road) identified approximately half way between the site and Yan Yean Road is unlikely to be completed in the near future due to the land ownership and subdivision patterns of that area.

Construction of a collector road substantially alters the role of the roads through the site and the character of development that will be achieved. It also creates the need for such a road to connect to Bridge Inn Road, creating a future four-way intersection with the proposed extension of Independence Boulevard, which will require signalisation.

The need for a signalised intersection at this location was not considered as part of the Development Contributions Plan, although it will provide benefits to properties throughout the strategy plan area. Funding arrangements will therefore be the subject of negotiations between the parties.

The Development Plan for the site incorporates a north south collector road within a reduced public open space link. An agreement to the satisfaction of the Responsible Authority with regard to the construction and signalisation of an intersection with Bridge Inn Road has already been entered into with the land owner and registered on the title of the land.

4 Site Analysis

4.1 Development Context

Properties to the north, west and south of the site are progressively being developed generally for residential purposes, generally in accordance with the Strategy Plan and approved Development Plans (Figure 7).

Land to the east of the site is also within Precinct 2A. It is used and developed as rural living type properties, generally in the order of 1 hectare each. Given the smaller lot subdivision and diverse land ownership pattern, it is considered unlikely that these properties will be further developed as intended by the Strategy Plan in the near future.

Land to the south of the site is within Precinct 2B. To the south east, the subdivision and development of Plenty River and Riverstone Estates is substantially progressed.

Areas that are already subject to approved Development Plans create a number of linkages that any development of the site must integrate with. These include:

- The intersection of Painted Hills Road and Cookes Roads, to the north of the site, has been designed so that it can ultimately be constructed as a four way intersection with a roundabout connecting into the site. The construction of this roundabout will be a requirement of the subdivision of 150 Cookes Road.
- The *Bassetts Road Development Plan* creates two east west local streets in the Bridge Inn Rise Estate. These streets, Belmont Rise (constructed) and Clancy Way (proposed) create connections into the central and northern portion of the site from the west.
- The development to the west of the site also establishes the road pavement location and treatment of Bridge Inn Road.
- The Plenty River development to the south of the site has established the location of the linear public open space and, in doing so, the alignment of the sub-arterial to its east, and is discussed further in Section 5.3.

In addition to the established connections, the development of the site needs to consider future connections into land to the east, to ensure that a functional road network can ultimately be established. In order to achieve this, a preliminary road network has been prepared to illustrate how development can integrate with that on the site. This is included as *Attachment 3*.

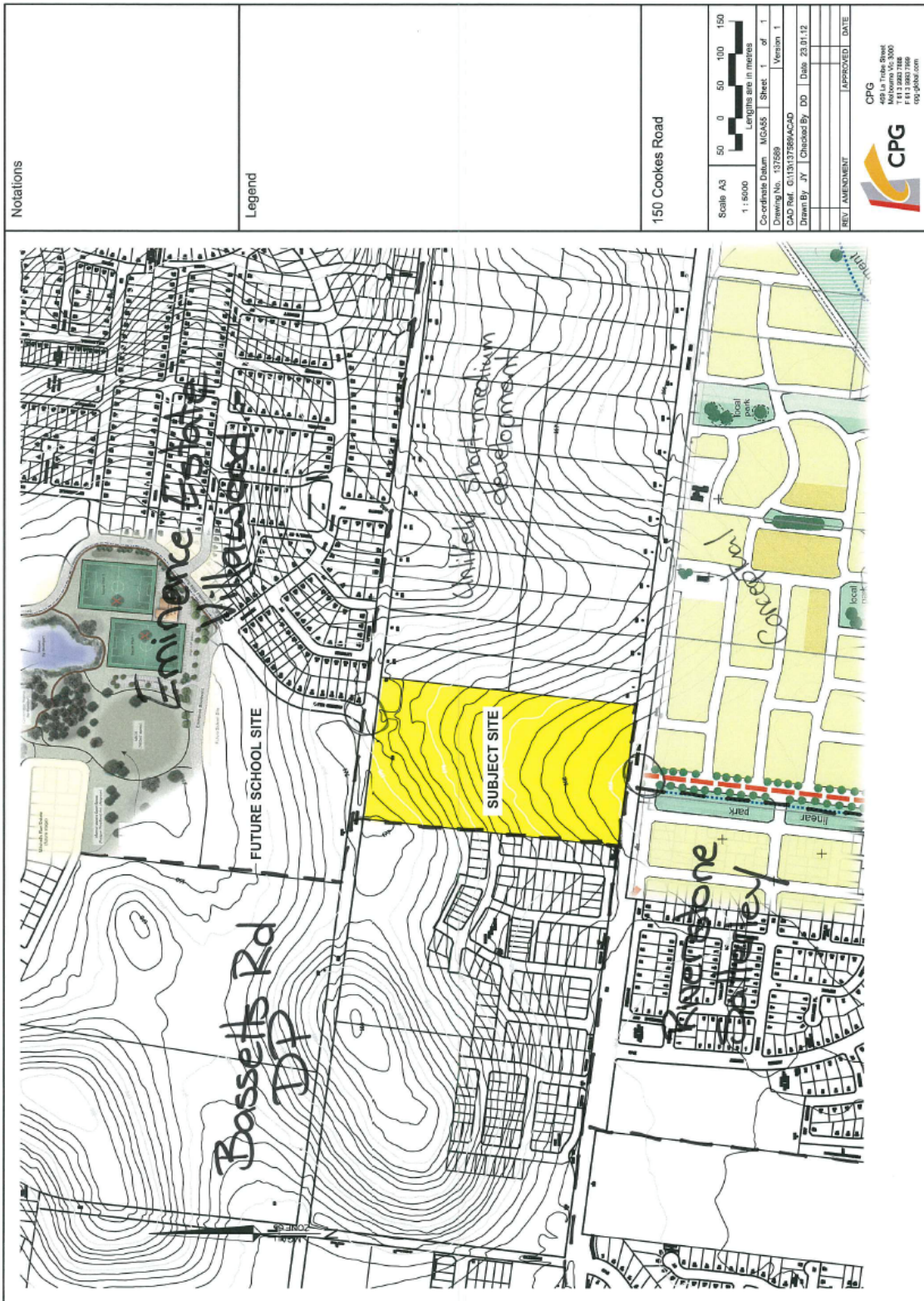


Figure 7: Development Plan Context



4.2 Specialist Studies

A series of specialist studies have been undertaken to determine the natural and cultural values of the site. These studies are appended to this report, and are summarised below.

4.2.1 Flora and Fauna Assessment

A flora and fauna assessment was undertaken by Paul Kelly and Associates (report dated 8 February 2012, *Attachment 4*).

The assessment confirmed that the site is unconstrained by natural values associated with flora and fauna. No threatened species of flora or fauna were recorded on the site, and critical habitat is considered unlikely to occur there. Nonetheless, the report recommends that a translocation plan for Growling Grass Frogs be prepared as a condition to a permit to subdivide due to the presence of dams. This would ensure a contingency plan in the event that the species was identified on site during the development process.

Conclusions of the report state:

- *No flora or fauna of conservation significance was recorded on the site at the time of the assessment.*
- *It is considered that the site is unlikely to provide the critical habitat of any threatened species of flora or fauna. A translocation contingency plan for GGF should be considered as part of the planning process.*
- *The vegetation on the site is classed as Degraded Treeless Vegetation and as such is not subject to the Native Vegetation Framework.*

4.2.2 Cultural Heritage Management Plan

A Cultural Heritage Management Plan (CHMP) has been prepared for the site by Tardis (dated 17 May 2012, *Attachment 5*), and approved by Aboriginal Affairs Victoria. The CHMP comprises a desktop, standard and complex assessment.

The desktop assessment identified that there is one previously registered aboriginal heritage place, an artefact scatter, to the north of the site. There is a number of other Registered Aboriginal Heritage Placed within the wider locality.

The standard assessment (ground surface survey) did not identify any Aboriginal cultural heritage places, however confirmed that Aboriginal cultural heritage is likely within the area. As such, the complex assessment was undertaken.

Four artefacts were located on the site through the complex assessment. These were deemed to form part of the previously identified Aboriginal heritage place, registered to the north of the site. This is described as very low density artefact



scatters in a highly disturbed context, of low scientific significance and general cultural significance¹.

Recommendations of the Cultural Heritage Manage Plan state:

1. *No part of the activity area requires further archaeological investigation or survey.*
2. *All workers involved in ground disturbance activities must be provided with an Aboriginal heritage induction.*
3. *Adopt appropriate contingency plans in the event that unexpected Aboriginal cultural heritage is discovered.*
4. *Rebury the recovered artefacts within the activity area, as close as possible to the original place, after construction and landscape works have ceased.*

4.2.3 Arboricultural Study

An arboricultural assessment of the site has been undertaken Galbraith & Associates (dated 27 January 2012, Attachment 6). An annotated tree survey is included as Figure 8.

The assessment did not identify any trees on site that are recommended for retention in an urban environment. However, clearance zones from two young River Red Gums on the neighbouring property have been recommended.

The findings of the study include:

- *Most of the trees on the property have been planted in shelterbelts.*
- *These rows and scattered trees around the house appear to be have been planted in the last 35 years.*
- *The cypress shelterbelts are somewhat variable in their condition... The useful life expectancies of such rows are not long, being in the order of 70 years. At around this age they tend to shed large branches, posing a hazard risk.*
- *The only other large trees on the site are the Tasmanian Blue Gums which are in poor to fair to poor condition.*
- *There are however two young mature River Red Gums close to the east boundary but situated on the neighbouring property...avoid any excavation works within 5 metres of the boundary opposite tree 25... for opposite tree 26 the clearance zone can be reduced to 3 metres from the boundary.*

¹ Tardis (17 May 2012); *Cultural Heritage Management Plan – 150 Cookes Road, Residential Subdivision*; pvi.



Figure 8: Annotated Tree Survey Plan

4.3 Conclusions

A site analysis plan has been prepared and is included as Figure 9.

Natural and cultural features of the site have limited implications for the Development Plan. Rather, the primary challenge is to provide a suitable road network and connections with adjoining properties.

In summary, the Development Plan needs to respond to the following features of the site:

- There are no trees on site to be retained.
- Excavation works should be avoided in the north eastern corner of the site, proximate to River Red Gums on the adjoining property.
- Views may be attainable from the highpoint at the north western corner of the site.
- The low point of the site runs through the property from the dam in the north eastern corner to the dam centrally located on the southern boundary.
- Access to the site from Cookes Road can be established with a shared four way intersection (round about) with Painted Hills Road.
- Access into the site from Bridge Inn Rise, to the west, requires connection to the existing local roads.

In relation to the site's strategic context, the Development Plan needs to respond to the following:

- The site is identified for residential development and to provide a link in the open space network, contributing an off road bicycle and pedestrian path.
- Council officers have expressed a preference, and traffic engineering requirement, for the establishment of a four way signalised intersection at Bridge Inn Road, with a collector road incorporating a bicycle and pedestrian footpath in place of the wider linear open space identified by the Strategy Plan.
- Consideration needs to be given to impacts of the design on the viability of developing the adjoining properties.
- The Strategy Plan calls for the provision of a diversity of lot types, and passive surveillance of areas of open space.

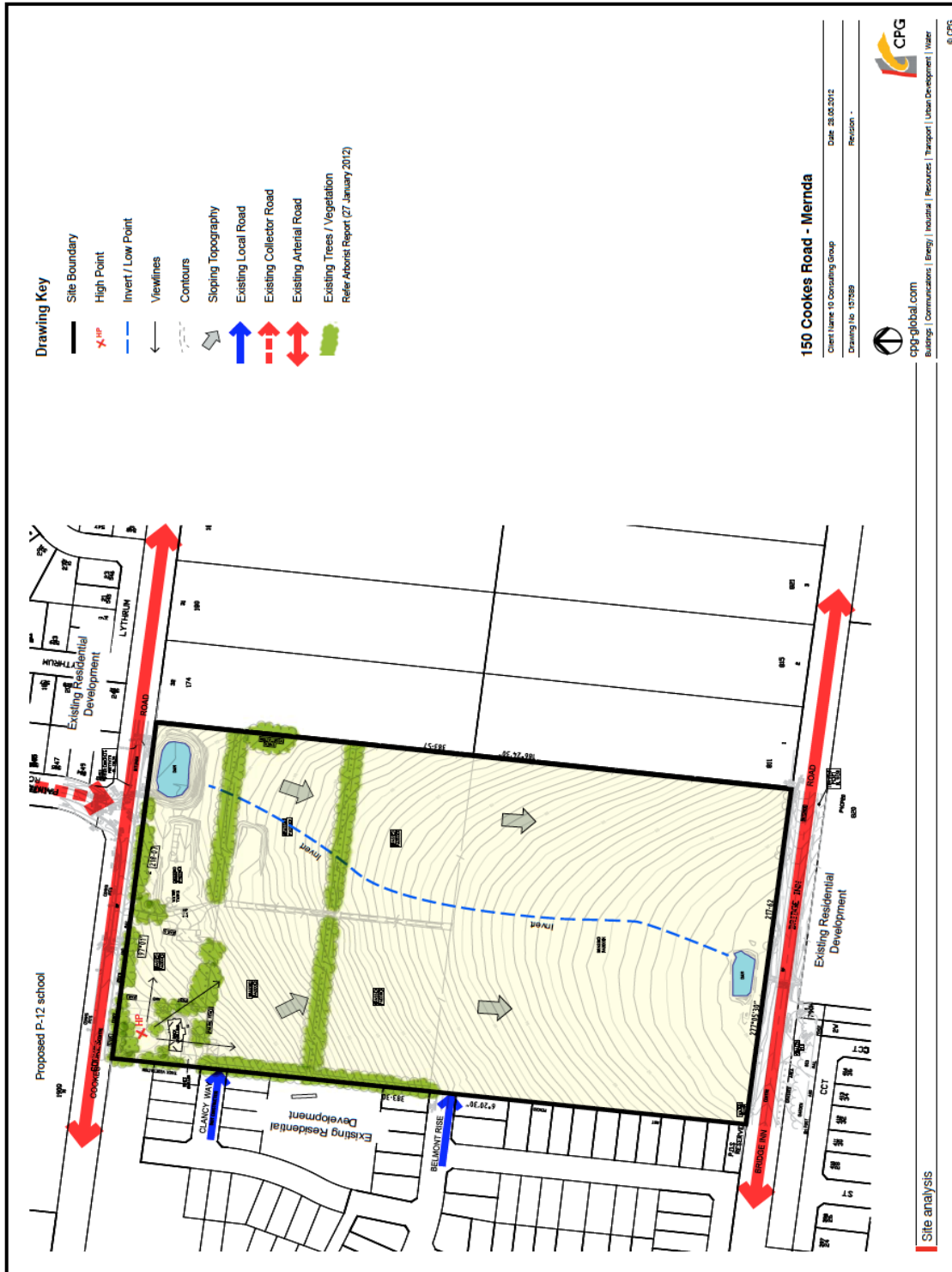


Figure 9: Site Analysis Plan

5 Design Response

5.1 Introduction

The Development Plan responds to the site opportunities and constraints, *Mernda Strategy Plan*, and Council direction in relation to the evolution of the strategy plan.

It is included as Figure 10 (also Attachment 8) and described below.

5.2 Contribution to the Road Network

It is accepted that providing a north-south collector road through the site will contribute to the functionality of the locality as a whole. This is a considerable divergence from the Strategy Plan.

A design response has been negotiated which provides the collector road through the site by reducing the extent of the linear public open space to be provided in a manner which still ensures that this connection is fit for purpose.

The collector road connects Painted Hills Road to the north of the site through to the sub-arterial road to the south of the Bridge Inn Road. The link will, inter alia, provide access to the school to be located on the north-western corner of Cookes Road and Painted Hills Road. This northern intersection is already partially constructed, providing access from Cookes Road north into Painted Hills Road, and will ultimately be constructed as a four-way roundabout.

The connection to the south of Bridge Inn Road does not currently exist. The alignment has been designed to correspond with the linear open space and development plans that have been prepared. While it is understood that Council ultimately intends for this to be a four-way signalised intersection, interim road treatments are proposed and discussed further in the traffic analysis (Section 6.3 and Attachment 10).

Example cross-section profiles of the proposed service road along Bridge Inn Road and the proposed east-west internal road connection through the local convenience centre are at Figures 11 and 12.

5.3 Linear Open Space

The linear open space identified passing through the site by the Strategy Plan forms part of the open space network, as well as part of the bicycle/pedestrian trail network. The network connects areas of active open space and conservation, including open space adjacent to the school to the north of the site and the Plenty Gorge to the south of the site.

The Precinct Plan is annotated with *“The linear open space link into precincts 2A and 1 provides access for walkers and cyclists.”*



Figure 10: Development Plan

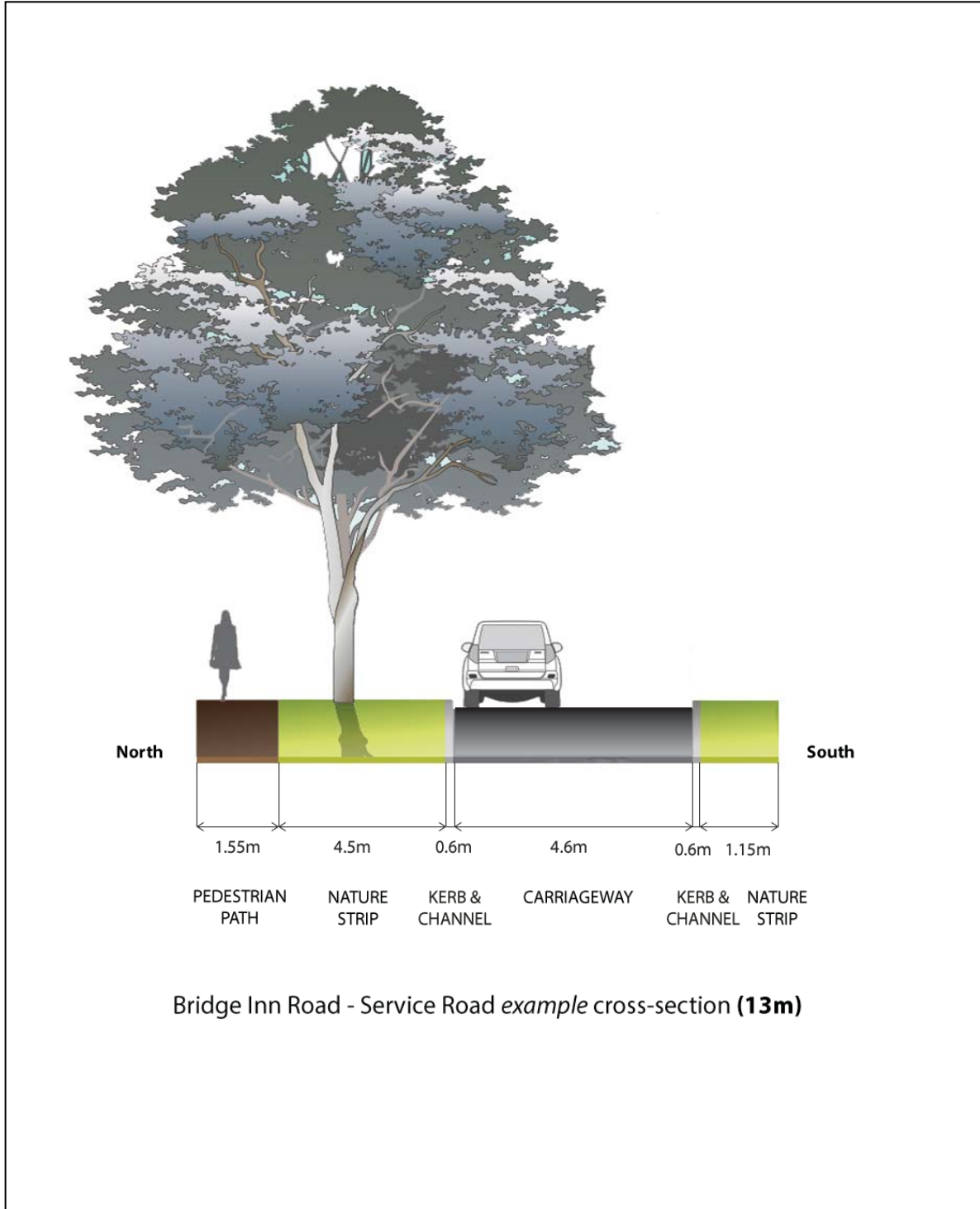


Figure 11: Example of Carriageway Cross Section Profile (Bridge Inn Road Service Road)

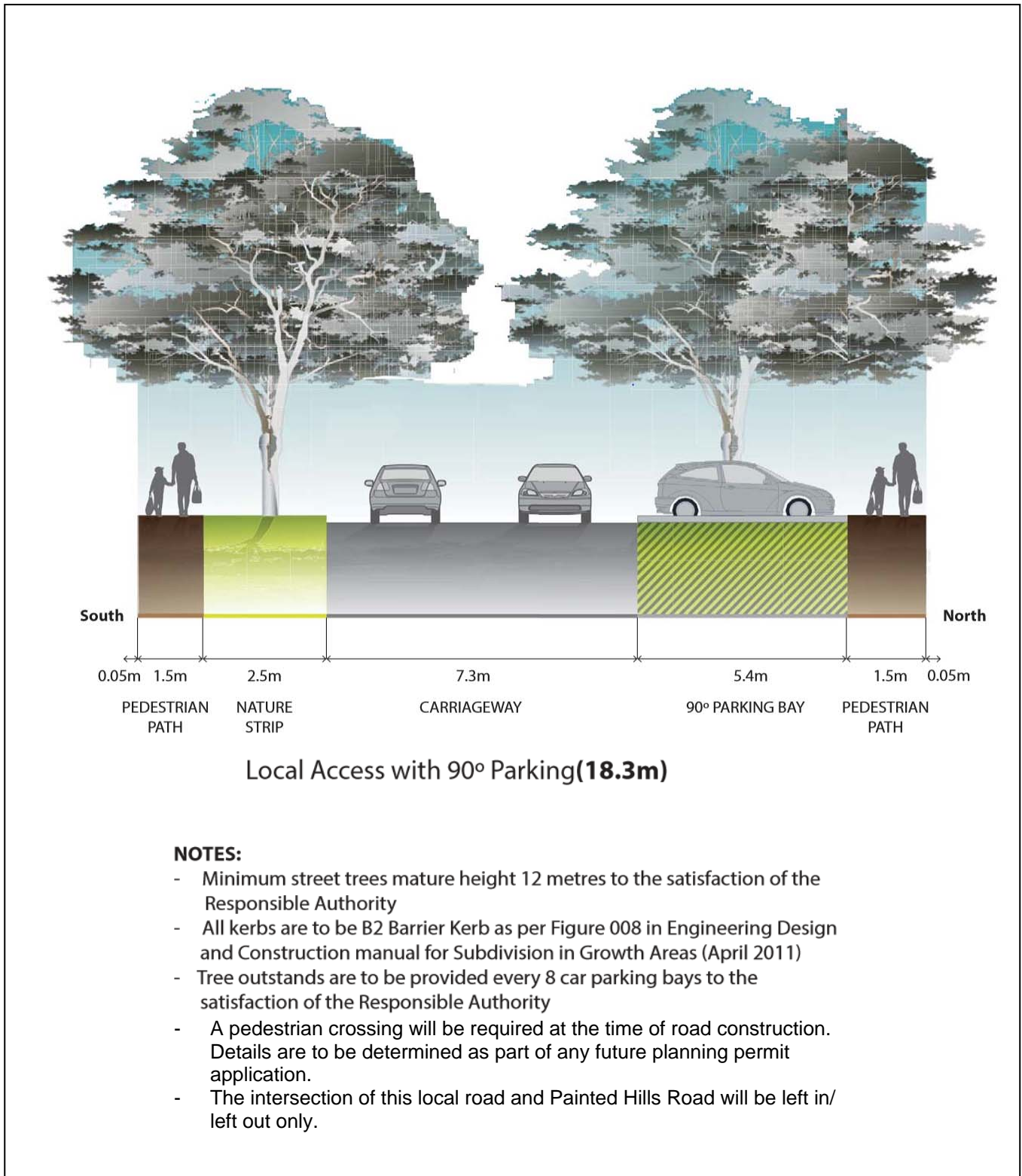


Figure 12: Example of Carriageway Cross Section Profile (Internal east-west road through Local Convenience Centre)

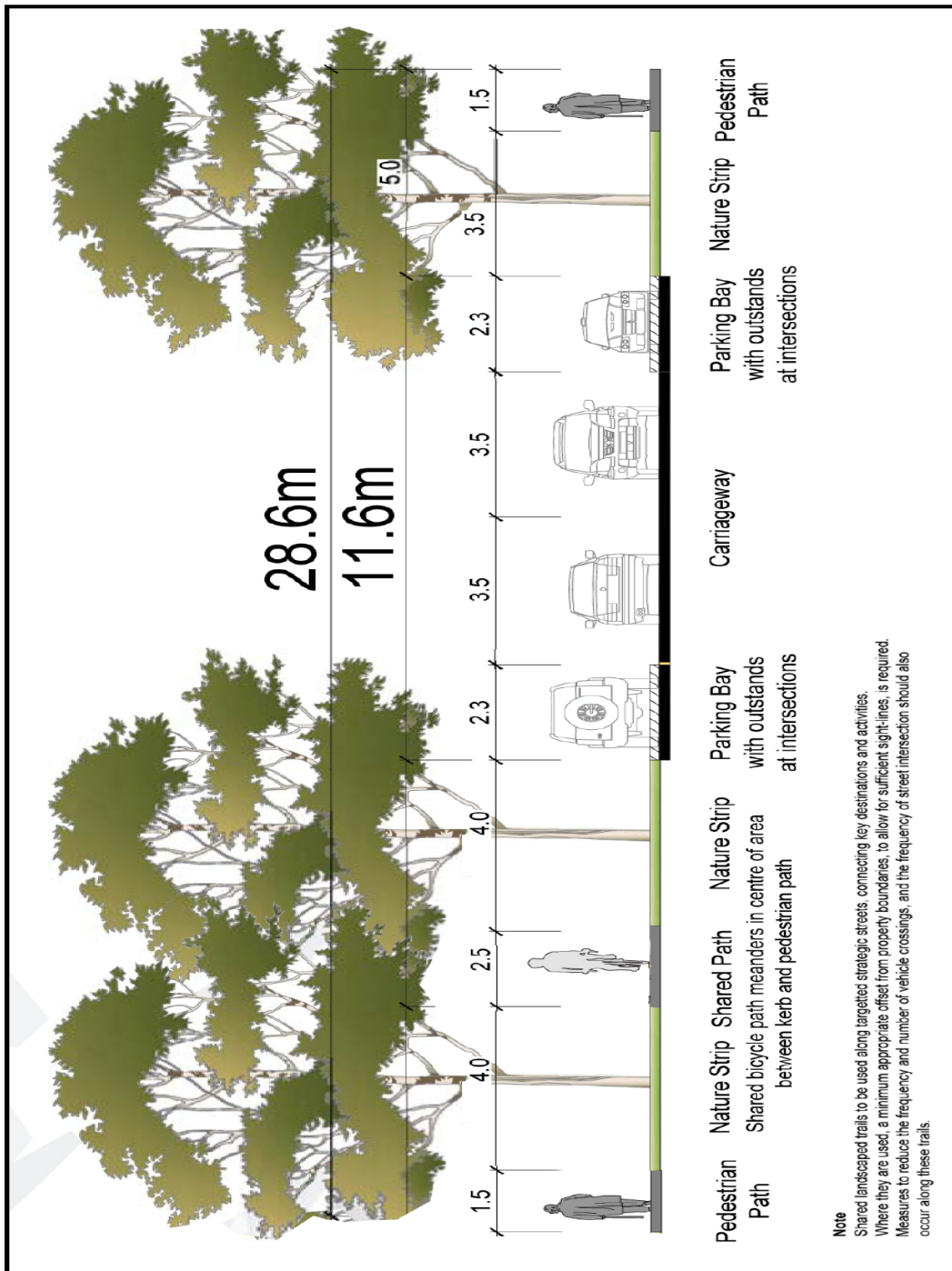


Figure 13: Carriageway Cross Section Profile (Painted Hills Road and linear open space link)



This objective for the linear open space has been achieved by incorporating a 28.6 metre road reservation that will form the north-south collector road through the site. On the western side of the road, a 4 metre nature strip, 2.5 metre shared path, another 4 metre nature strip and a 1.5 metre pedestrian path are provided for (Figure 13)². A pedestrian path will also be provided on the eastern side of the road carriageway.

Use of the 28.6 metre collector road cross section is a substantial increase on the minimum 20.6 metre road reservation required for collector, sub arterial, and secondary arterial roads. However, the wider cross section meets the objectives of the Strategy Plan and Public Transport Victoria and enables the objectives for the linear open space to be met, being to provide a pedestrian and cycling connection, while also providing the collector road through the site and making an open space contribution.

It is a strategic direction of the Strategy Plan that innovative forms of medium density housing are encouraged around open space. Section 3.7 of the Strategy Plan, which addresses the Open Space Network, provides that open space should be fronted by building facades or streets – and not rear fences.

The Development Plan has been designed to provide for some of the linear open space along the collector road and Bridge Inn Road to be fronted by rear-loaded terraced dwellings. In the northern section of the site, the open space will adjoin a number of side fences. This design response has been incorporated to address the steeper land in the northern portion of the site, and to ensure an appropriate lot mix. Design guidelines have been prepared to ensure that these ‘sideages’ appropriately address the open space by providing opportunities for passive surveillance (Attachment 7).

5.4 Integration with Adjoining Properties

The Strategy Plan designates roads in the hierarchy down to the collector level, however local roads are generally to be established through the precinct planning process. Connection points to the adjoining property to the west of the site have already been established, and these local roads are linked through the site in an orderly manner. Lots types are similar, providing for a consistent character between the two developments.

As previously identified, a Development Plan has not been advanced for the properties to the east of the site. To ensure that the proposed local road connections will provide for a functional development of the area to the east, a concept plan has been prepared by CPG Australia that provides an indication of how the local road network might function (Figure 14).

² The pedestrian path will be provided in addition to the shared path where the link is fronted by rear loaded lots.



Figure 14: Local Road Network Concept



The concept plan has been reviewed by Traffix Group which has provided the following comments:

- Good spacing of access points to Bridge Inn Road.
- The easternmost part of the layout would benefit from an additional access to Bridge Inn Road.
- The number of access points to Cookes Road could be reduced, but is likely to be acceptable given the lower order function of Cookes Road.
- Good north-south permeability between Bridge Inn Road and Cookes Road.
- Importantly, the north-south road immediately to the east of 150 Cookes Road:
 - On the west side, the lengths are approximately 220m (north) and 130m (south) (assuming a roundabout in the middle). These are acceptable from a traffic perspective.
 - On the east side, the lengths are approximately 140m and 70m (north) and 130m (south). These are acceptable.
 - The side street on the east side provides an opportunity for a speed control treatment to reduce the length of the street north of the roundabout if desired by Council.
- Traffix Group has no significant concern with this preliminary layout from a traffic engineering perspective which would affect the proposed layout of 150 Cookes Road.

The concept plan is not intended to establish a preferred development outcome for the adjoining land, rather to ensure that the Development Plan for the site does not prejudice its reasonable development. Preparation of the plan by an urban designer and review by a traffic engineer confirms that this has been achieved.

5.5 Conservation of Cultural Heritage

The Cultural Heritage Management Plan requires that the artefacts located on the site be reburied on site, in areas of open space once the subdivision is complete, as close to their original locations as practical.

The four artefacts found on site were located in two test pits along the site's northern boundary. There will be an opportunity for the reburial of these in the linear public open space slightly to the east of the original location, or within the pocket park further to the south.

5.6 Water Sensitive Urban Design

It is noted that the site is covered by a Melbourne Water Drainage Scheme, and as such there is no requirement to provide flood retardation or wetlands to address water quality.

The linear open space and collector road through the site generally align with the lowest point of the site. This enhances the opportunity to provide bio-retention swales within the nature strip. Such an approach could be detailed in landscape plans provided as part of the planning permit process.

The Development Plan also provides the opportunity for the creation of nodal rain gardens in the kerb outstands or pocket park (Figure 15).



Figure 15: Nodal Rain Garden Example

5.7 Landscape and Streetscape Concepts

A landscape concept report has been prepared by David Dreadon (Registered Landscape Architect - AILA) of CPG Australia, and is included in full as Attachment 7A.

The Strategy Plan seeks to achieve a distinctive local character for each precinct, some of which have already been approved. As Precinct 2A will be subject to a number of Development Plans, particular consideration needs to be given to ensuring the Precinct doesn't develop as a number of disjointed parts.

Other features of the landscaping concept at Attachment 7A include:

- A Street Tree Master Plan which provides trees appropriate for each streetscape type.



- Details of a boulevard treatment for the north-south collector road. The street cross section provides for three rows of canopy trees. *Corymbia maculata* is proposed to be used
- Treatment for lots proposed to be fronting onto landscaped areas, including the north-south 'boulevard' and Bridge Inn Road.
- Design treatments for lots with side boundaries to open space.
- An indicative plan for the pocket park, including a large focal tree (golden elm).

An updated Street Tree Master Plan has been prepared in response to the amended Development Plan - 2017 (included at Figure 16 and Attachment 7B). It reflects the general principles outlined in the Landscape Concept Report, but reflects recent Council decisions relating to species selection for this estate.

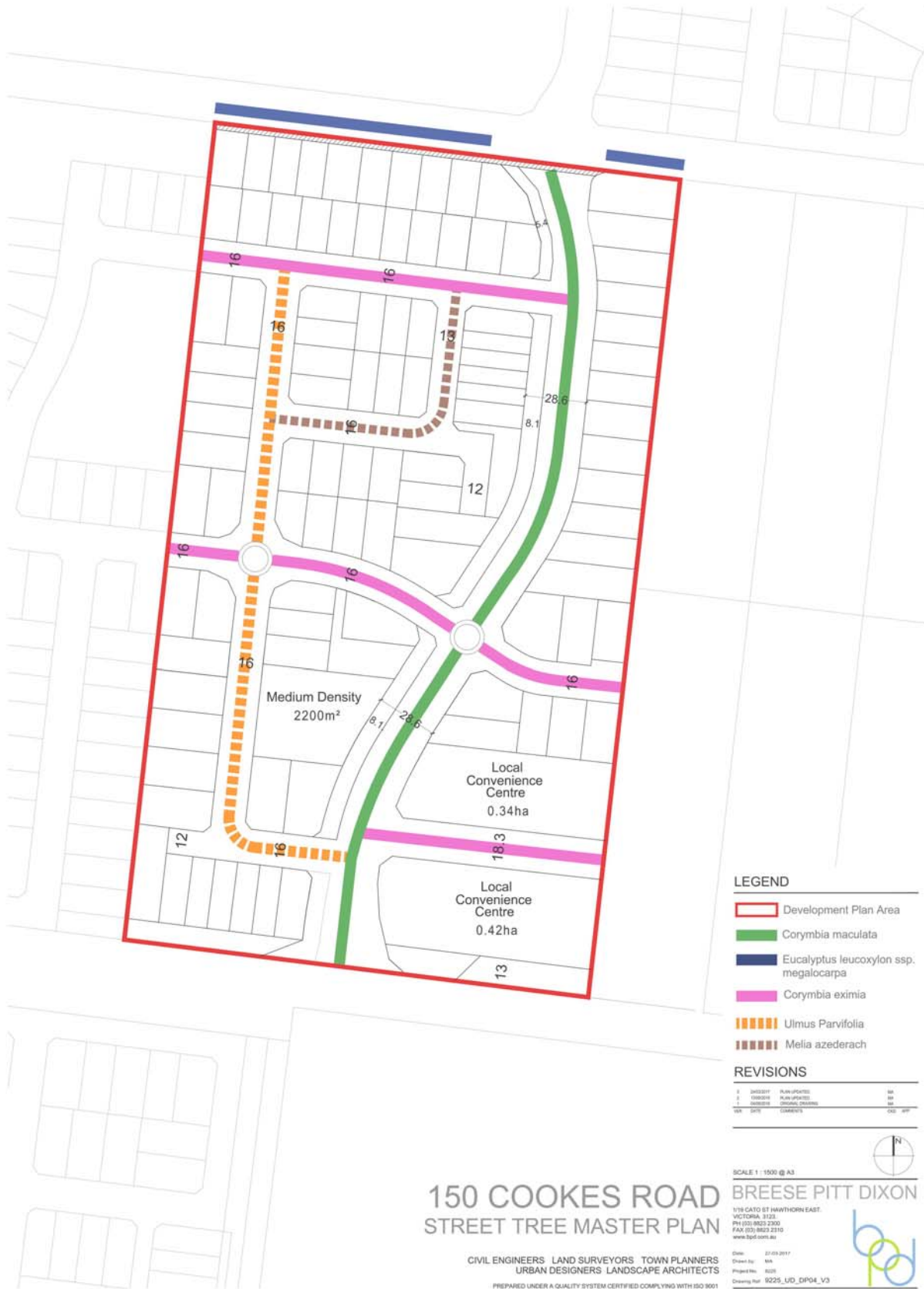


Figure 16: Street Tree Master Plan

5.8 Development Plan outcomes

The Development Plan provides for a residential subdivision with a diversity of lot sizes, appropriate to its location. An example of how the site might be developed in accordance with the Development Plan is provided by the Indicative Subdivision Plan that has been prepared by Breese Pitt Dixon - Mar 2017 (Figure 17/ Attachment 9A), and a Staging Plan (Attachment 9B).

5.8.1 Land Budget

With no encumbered areas, the gross developable area of the site is its full area of 8.35 hectares. The Development Plan provides for it to be developed as follows:

Road Reservation and road widening Cookes Road	2.84 hectares	34.0%
Open Space/Landscaping Reserve	0.17 hectares	2.0%
Residential Lots	4.58 hectares	54.9%
Local Convenience Centre	0.76 hectares	9.1%

While the proportion of the open space provided is less than that anticipated by the *Mernda Strategy Plan*, it is counter-balanced by the proportion of the site dedicated to road reservation. Essentially, as discussed above, the collector road profile through the site is not identified in the Strategy Plan, however has become necessary as a means to ensure adequate traffic circulation. There has been a redistribution of space between the provision of the road and open space. The future community will have adequate access to passive and active areas of open space with the Strategy Plan area.

5.8.2 Lot Diversity, Yield and Population Projections

The Indicative Subdivision Layout illustrates a lot yield of approximately 110 residential lots with an overall average of 417 square metres. This includes 87 lots for conventional, detached dwellings with an average lot size of 450 square metres, varying from lots of 312 square metres to 768 square metres. Thirteen rear-loaded and terraced town house lots have been provided for, with an average size of 350 square metres (ranging between 256 and 667 square metres). The medium density lot has assumed a lot yield of about 10 dwellings (average 220 square metres), but may vary based on design considerations.

This represents a lot yield of approximately 13.2 dwellings per hectares, and a population expectation of 327 persons.

It can be anticipated that the Indicative Subdivision Layout will change during the development process to meet the market and provide servicing efficiency. One possibility is that some of the larger or more irregular lots may be agglomerated to provide integrated housing lots. However, it is considered that the Indicative Subdivision Layout represents a realistic development scenario and overall lot yields are not anticipated to vary greatly.



NOTES

TOTAL SITE AREA:	8.35ha
Transport	
Road Widening Cookes Road	0.05ha
Open Space	
Landscaping Reserve	0.12ha
Open Space	0.05ha
Net Developable Area	8.13ha
Net Residential Area	4.58ha
<small>(Including Standard & Rear loaded Lots and MD site)</small>	
Conventional Residential	
Lot Yield	87 Lots
Minimum Lot Size	312m²
Maximum Lot Size	768m²
Residential Area	3.90ha
Average Lot Size	450m²
Rear Loaded Lots	
Lot Yield	13 Lots
Minimum Lot Size	256m²
Maximum Lot Size	667m²
Residential Area	0.46ha
Average Lot Size	350m²
Medium Density Site	0.22ha
Local Convenience Centre	0.76ha
Road Reserve	2.79ha

LEGEND

- Development Plan Area
- Open Space
- Conventional Lots
- Rear Loaded Lots
- Medium Density Site
- Commercial Site
- Road Widening

REVISIONS

NO	DATE	COMMENTS	DES	APP
1	03/04/2017	LAND BUDGET TABLE ADDED	NA	NA
2	12/08/2018	PLANS UPDATED	NA	NA
3	02/08/2019	ORIGINAL DRAWING	NA	NA

SCALE 1 : 1500 @ A3

150 COOKES ROAD SUBDIVISION CONCEPT

BREESE PITT DIXON

1119 CATO ST HAWTHORN EAST, VICTORIA 3123
 PH (03) 8822 2300
 FAX (03) 8822 2310
 www.bpd.com.au

Date: 03-04-2017
 Drawn by: BMS
 Project No: 9225
 Drawing Ref: 9225_UD_DP01_V3






Figure 17: Indicative Subdivision Layout

6 Design Analysis

6.1 Assessment Framework

There are multiple assessment frameworks for the Development Plan within the Planning Scheme; including the *Mernda Strategy Plan*, Development Plan Overlay – Schedule 5, and Clause 56 – Residential Subdivision. Often, these criteria address the same elements with varying degrees of detail.

Many of the principles of urban design and development for new communities are, appropriately, addressed through the Mernda Strategy Plan. The requirements of the Development Plan Overlay set out detailed requirements to ensure an adequate site analysis is undertaken in applying the Strategy Plan to each precinct or development plan area, many of which are addressed in the foregoing sections. Clause 56 sets out standards relating to liveable and sustainable communities, residential lot design, urban landscape, access and mobility management and utilities. An overriding objective of Clause 56 – stated in Clause 56.02 and re-stated in many of the standards – is that a subdivision should implement any relevant plan or policy set for the area in the Scheme.

As such, the preparation of the Development Plan to be generally in accordance with the Strategy Plan is considered to satisfy many of the objectives of the assessment framework. The divergence from the structure for the site set out for the precinct by the Strategy Plan has been undertaken at the direction of Council officers to assist in meeting the objectives of the Strategy Plan.

This assessment framework is therefore structured around the key objectives and strategic actions as set out in the Strategy Plan, with reference to other policy provisions as necessary.

6.2 Planning and Design

- Although the Precinct in which the site is located is being developed under a number of different development plans, the preparation of this Development Plan has sought to ensure integration with the surrounding precinct through the use of landscaping treatments and preparation of a concept plan for the area to the east of the site.
- The residential densities of 8 lots per hectare identified by the Strategy Plan, first approved in 2004, is relatively low compared to current expectations. Clause 11 of the State Planning Policy Framework includes as a strategy for planning growth areas as being to: *“Encourage average overall residential densities in the growth areas of a minimum of 15 dwellings per net developable hectare.”* Given the amended Council requirement for the provision of a collector road and major linear open space reserve through this estate, and the benefits to the surrounding residential community with the provision of a locally accessible convenience centre on this site, the density of approximately 13.2 dwellings per hectare provided for by the Development Plan is considered to be appropriate.



6.3 The Transportation System

A detailed assessment of the contribution made by the original Development Plan approved in 2012 to the Strategy Plan is provided by Traffic Engineering Assessment prepared by Traffix Group and included as Attachment 10 to this report.

An updated Transport Impact Assessment prepared by GTA Consultants dated 21 March 2017 and included as Attachment 12 to this report, provides an update in relation to the amended Development Plan. Summaries of both Traffic Assessments are included in the tables below.

Significantly, the Development Plan maintains the walking and cycling off-road trail identified as passing through the site. Both a shared path and a pedestrian path are to be provided to the western side of the collector road where it will be fronted by medium density residential lots. This narrows to a shared path towards the south of the site to reduce duplication and provide for intersection treatments and traffic lanes associated with the future four-way signalised intersection at Bridge Inn Road.

Example cross-section profiles of the proposed service road along Bridge Inn Road and the proposed east-west internal road connection through the local convenience centre are at Figures 11 and 12.

Requirements for these roads include:

Proposed Bridge Inn Road Service Road

- The design will need to provide for a deceleration and acceleration lane along Bridge Inn Road to deal with access into and from the proposed service road.

Proposed east-west local road

- A pedestrian crossing will be required at the time of road construction. Details are to be determined as part of any future planning permit application; and,
- The intersection of the east-west local road and Painted Hills Road will be left in/ left out only.



The Traffic Engineering Assessment for the original 2012 Development Plan concludes that:

1. *The proposed development plan has good compliance with the Strategy Plan. In particular:*
 - *It recognises the roles of Bridge Inn Road as a Primary arterial*
 - *An off-road bicycle/pedestrian trail is provided within an open space corridor on the west side of the north-south aligned connector road and connects with the 2.5m wide path on the west side of Painted Hills Road to the north. Ready connection is available to any future shared path south of Bridge Inn Road.*
 - *Road cross sections are to be generally as follows (noting that they will be confirmed through the planning permit process):*
 - *Connector road: The proposed carriageway is 7.0m wide with 2.3m wide indented parking lanes. Whilst these dimensions do not accord with the MSP they are in accordance with the Growth Areas Authority's Engineering Guidelines.*
 - *Local streets: 16.0m wide road reserve, in accordance with the MSP.*
 - *Access driveways: 8.0m, 10.0m and 13.6m wide. These accessways are not detailed in the MSP. This width is sufficient to ensure appropriate access is available to offstreet parking spaces.*
2. *The proposed development plan accords with Council officer's desire for a north-south connector road to form part of a continuous north-south route that connects with Painted Hills Road to the north and with the proposed sub-arterial road to the south.*
3. *The proposed subdivision exhibits a high level of compliance with the requirements of Clause 56 of the Planning Scheme.*
4. *The detailed designs of the proposed roundabouts at Cookes Road/Painted Hills Road and the internal cross road intersection with the north-south connector road will confirm the corner splays required to accommodate these roundabout.*
5. *The detailed design of the Bridge Inn Road/north-south connector road T-intersection will confirm the corner splays required to accommodate it and any future signalised intersection (T-intersection or cross intersection).*
6. *The proposed T-Intersection of Bridge Inn Road/north-south connector road is appropriate and allows the ready conversion to a signalised intersection in the future.*
7. *The proposed connections to the west align with existing roads within that residential subdivision. The proposed connections to the east provide appropriate connections to any future residential subdivision of this land.*

The updated Transport Impact Assessment in relation to the amended Development Plan (March 2017) concludes that:

- (i) The amended Development Plan has a similar road layout to the approved Development Plan, albeit that the road network has been slightly simplified.
- (ii) The external connections proposed in the amended Development Plan are generally similar to those proposed in the approved Development Plan. In addition, the intersection of the north-south connector road and Bridge Inn Road will now be signalised, which will improve the site accessibility.
- (iii) The road reserves in the amended Development Plan are generally consistent with the approved Development Plan and provide adequate width for vehicle movements, property access, pedestrians, cyclists, landscaping and services.
- (v) The internal intersections in the amended Development Plan are generally consistent with the approved Development Plan, with the exception that one intersection will provide an upgraded safety treatment.
- (vi) The amended Development Plan proposes the same walking and cycling arrangements as the approved Development Plan.
- (vii) The amended Development Plan includes the same cross-section for the north-south connector road as the approved Development Plan and therefore the road could continue to accommodate bus services if required.
- (viii) The volume of traffic generated by the residential component of the development under the amended Development Plan will be less than would have been generated under the approved Development Plan.
- (ix) Due to the local convenience centre, the volume of traffic generated by the overall site under the amended Development Plan will be greater than anticipated by the approved Development Plan. However, as this additional traffic will mostly use Bridge Inn Road and the north-south connector road, there will be adequate capacity within these roads to accommodate this additional traffic, and the signalisation of the intersection of Bridge Inn Road and the north-south connector road will ensure that the intersection is able to accommodate the additional traffic.

6.4 Environmental Conservation

The site analysis demonstrated that the site does not contain any fauna, trees or other flora of value that should be maintained.

This supports the development of the site at a higher density than the average proposed by the Strategy Plan or minimum average proposed by the SPPF, as many sites are likely to have higher level of environmental values that require conservation.

6.5 Activity Centres

The Mernda Strategy Plan (refer Figure 5) indicates that a local convenience centre should be located within the vicinity of the Bridge Inn Road abuttal of the site.

The Precinct 2A plan (refer Figure 6) identifies a 'Local Convenience Centre' at the southern extent of the off-road bicycle and pedestrian trail passing through the site.



It is also identified at the northern end of the path in Precinct 2B, to south of Bridge Inn Road.

The Strategy Plan notes that:

“Local Convenience Centres should be distributed to service walkable residential catchments with a radius of approximately 600 metres. These centres would typically contain two or three shops providing basic goods and services. Other attractions such as a telephone boxes, a bus stop and post boxes should also be provided at these locations.”

The activity centre plan identified the location on Bridge Inn Road between the two precincts as having a retail floor area of approximately 250 square metres.

The approved Development Plan for land in Precinct 2B to the south (Ashley Park Development Plan, approved in 2009) identifies a neighbourhood activity centre/mixed use precinct towards the south of the precinct and so did not identify a Local Convenience Centre along Bridge Inn Road within Precinct 2B.

6.6 Local Convenience Centre

The original Development Plan approved in 2012 did not specifically identify a Local Convenience Centre on the site, although it is noted that a convenience shop, convenience restaurant and food and drink premises can locate in a Residential 1 Zone, subject to conditions and the issue of a planning permit. A local convenience centre was therefore not excluded from locating in either precinct.

The amended Development Plan 2017 has recognised that the growth within the area, combined with the lack of a walkable and accessible local convenience centre for residents of the site and immediate surrounding land within 600m of the site, warranted its nomination on the amended Development Plan. The type of activities expected to locate in the local convenience centre would be restricted to those uses which are permissible within a residential zone, and could include convenience shop, take-away food, café or service station, supported by other non-retail uses such as child care or medical centre.

The nomination of the Local Convenience Centre on the land is intended to meet the intent of the *Mernda Strategy Plan* by providing for a small range of retail functions to service a walkable residential catchment of approximately 600m, and supported by some other non-residential/community uses which can locate in a residential zone.



6.7 Local Convenience Centre Design Principles

General design principles for the Local Convenience Centre are as outlined below:

Built Form:

The Local Convenience Centre is to locate at the corner of an arterial road (Bridge Inn Road) and a Collector Road (Painted Hills Road). As such the Local Convenience Centre should be seeking to activate these thoroughfares through appropriate building design, siting and setbacks. Different treatments will be required for the different interfaces.

Consideration should also be given to the east-west local street that passes through the centre of the Local Convenience Centre. This street will also require well designed built form as this street will be the key pedestrian thoroughfare through the site.

The following built form principles should be considered:

- The design of buildings within the Local Convenience Centre should have a relationship with and should interface the public street network.
- Landmark buildings at the intersection of the east-west local street, collector road and Bridge Inn Road should act as a 'focal point' and frame views to and from the Local Convenience Centre.
- Buildings are to provide active frontages and passive surveillance to car parking areas.
- Development adjacent to the Collector Road should have zero front setbacks and provide weather protection (awnings) to provide pedestrian amenity.
- Entry points into buildings are to be clearly visible from the street and parking areas.
- Development proposals must take into account Crime Prevention Through Environmental Design (CPTED) principles.
- Buildings and signage should be designed to have an integrated appearance so as to avoid the appearance of clutter.
- Development should complement and enhance the character of the surrounding area by responding to key visual cues associated with the topography of the Local Convenience Centre and its surrounds.
- Wrapping of car parking edges with built form, to improve interface should be maximised.
- Water tanks, loading service infrastructure, refuse storage areas and other structures (including plant and equipment) that are not part of the building must be located behind the front building line. Where this is not possible or practical, it must be located behind constructed screening using durable and attractive materials.
- Buildings required for Service Station use should contribute to creating activity within the Local Convenience Centre.



Site Access & Permeability

The main premise of Local Convenience Centres within the Mernda-Doreen growth corridor is to promote localisation of services which contribute to a reduction of travel distance to access local services and less dependence on the car.

An east-west local road coupled with pedestrian paths through the site will ensure that the site is accessible from adjoin residential areas and most importantly is pedestrian friendly.

The following site access and permeability principles should be considered:

- The design of the Local Convenience Centre should promote safe and direct accessibility and mobility within and to and from the Centre.
- The Local Convenience Centre should ensure dedicated and continuous pedestrian paths from building entries to footpaths and street crossing points, including connection to the shared path on Bridge Inn Road and collector road.
- Public transport infrastructure/facilities should be planned for commuter friendly/convenient locations and close to pedestrian desire lines and key destinations.
- The Internal east-west local road must be built to Council standards, generally in accordance with the cross-section profile provided at Figure 12, and to include a 1.5 metre wide footpath on both sides.
- Bicycle parking should be provided within the street network and public spaces in highly visible locations and close to pedestrian desire lines and key destinations.
- Clear pedestrian connections should be provided from required off-street parking.
- Vehicular access to properties fronting the arterial road must be from the service road.
- Off-street car parking should be located behind buildings and be easily accessible from the east-west local street and the arterial road service road.
- On street car parking should be provided as parallel or angle parking to encourage short stay parking and should be optimised particularly adjacent to retail uses.
- Off-street car parking should be co-located where possible to optimise opportunities for shared use.
- Car parking areas should be designed to ensure passive surveillance and public safety through adequate positioning and lighting.
- Car parking areas should be designed to provide dedicated pedestrian routes and areas of landscaping.
- Car parking ingress or egress and car parking areas accommodating heavy vehicle movements should be designed to limit the pedestrian/vehicle conflict.



Landscape and Amenity

To realise the role of Local Convenience Centres as pedestrian friendly local hubs, careful consideration is required for embellishment of the centre through landscaping. Landscaping is also required to ensure that the Local Convenience Centre can easily integrate with adjoining sensitive land uses.

The following landscape and amenity principles should be considered:

- The design of a landscape buffer treatment should be provided to alleviate negative noise and amenity impacts.
- Allocation of land uses, building design and interface treatment in the Local Convenience Centre must create a positive address to streets and minimise negative impacts on the amenity of adjacent residential areas.
- Off-street car parking should be landscaped to reinforce high quality street based pedestrian movements.
- Appropriate street furniture should be provided throughout the Local Convenience Centre to enhance user experience.
- Incorporate water sensitive design treatments in parking areas.
- Provide tree planting in car parking areas for shade and amenity (one tree bay provided for every 8 spaces).
- Provide continuous tree planting in the landscape setback along the frontage of the east-west local street and strengthen the street tree treatment to visually buffer commercial development from the residential neighbourhood and other sensitive uses.
- Goods and materials storage areas and refuse areas must not be visible from public areas.
- Fencing forward of building lines and along public streets should be largely transparent and not greater than 1.2m in height.
- Landscaping of all interface areas should be of a high standard as an important element to complement built form.
- Include options for shade and shelter through a contribution of landscape and built form treatments.

6.8 Social Infrastructure and Community Development

The *Mernda Strategy Plan* identifies the range and location of community and recreation facilities that will be required in the area. There is no requirement for any community or social infrastructure to be provided on site, although the bicycle and pedestrian trail makes some contribution as it provides a link to and between areas of active open space and the school identified to the north of the site.

6.9 Housing

The Development Plan provides for a diversity of lot sizes and dwelling types, including conventional density lots, rear-loaded terrace lots and medium density lots.



Local streets are generally on an east-west or north-south orientation. The preferred north-south orientation of smaller lots has not been achieved for the terrace lots on the eastern side of the north-south collector road; an outcome which has been driven by other design imperatives, including the overlooking of open space. However, the lots will be able to have a reasonable depth, of approximately 30 metres, with single storey garages at the rear. An acceptable amount of solar access and appropriate amenity will therefore be able to be achieved in the design of dwellings.

6.10 The Open Space Network

The Strategy Plan identifies the off-road pedestrian and bicycle trail passing through the site as part of the open space network. This has been maintained as part of the collector road that Council has requested be provided on the site.

The Development Plan also provides for a pocket park to be provided adjacent to this linear open space (in the northern section of the site), and an open space reserve along the Bridge Inn Road frontage in the southern section of the site.

These areas of open space will provide important opportunities for passive recreation and informal meetings.

6.11 Servicing and Drainage

A Preliminary Servicing Report has been prepared by CPG Australia (Attachment 11). The report explores the capacity for existing infrastructure to service the site, and its context in relation to the servicing and drainage strategies prepared by Yarra Valley Water and Melbourne Water respectively.

In relation to the location of servicing infrastructure, it is noted that existing overhead power lines in the Cookes Road reservation will be undergrounded as part of the development process.

7 Development Contributions

The Development Contributions Plan Overlay (DCPO) of the Whittlesea Planning Scheme provides for development contributions. Schedule 5 of the DCPO addresses Precinct 2A of the Strategy Plan area, providing for various physical and community infrastructure contributions per developable hectare.

The Schedule summarises contributions prescribed in the *Mernda Strategy Plan Development Contributions Plan*, which is an incorporated document in the Whittlesea Planning Scheme. That plan identifies the scope of works and the contribution to be made by each precinct.

Resolution of development contributions will be dealt with as a condition of any future subdivision permit for the land to be implemented via a Section 173 Agreement under the Planning and Environment Act or similar legally binding agreement, to the satisfaction of Council.

8 Conclusions

The proposed Development Plan provides a site and context responsive solution to the development of the site. It ensures that future subdivision applications and development will provide for a community that is integrated with the surrounding precinct, well connected, and serviced by active and passive open space.

It is estimated that it will provide for 110 dwellings, with opportunities for a diverse range of homes and an average lot size of 417 square metres.

It will also provide for a Local Convenience Centre, as envisaged in the *Mernda Strategy Plan*, to service a walkable residential catchment of approximately 600m, providing convenience goods and services for local residents.

The Development Plan is able to meet both the Strategy Plan's objective regarding the provision of open space connections, and the emerging need for a collector road through the site. In doing so it makes a substantial contribution towards achieving the objectives of the *Mernda Strategy Plan*.

Whittlesea City Council's approval of the Development Plan is requested in order for the development of the land to progress.





Attachment 1 Certificate of Title



Attachment 2 Feature Survey



Attachment 3 Connections to Land to the East



Attachment 4 Flora and Fauna Assessment
Paul Kelly & Associates – Ecological Services
8 February 2012





Attachment 5 Cultural Heritage Management Plan

Archaeology at Tardis – Cultural Heritage Advisors

17th of May, 2012





Attachment 6 Arboricultural Assessment



Attachment 7 Landscape Concepts

7A: Landscape Concept Report

*Prepared by CPG Australia Pty Ltd
David Dreadon AILA*

Based on original Development Plan approved 2012

7B: Updated Street Tree Master Plan

*Prepared by Breese Pitt Dixon
Plan Ref: 9225_UD_DP04_V3*

Based on Amended Development Plan - Mar 2017





Attachment 8 Development Plan
- Amended March 2017

Prepared by Breese Pitt Dixon, 23/03/2017
Plan Ref: 9225_UD_DP03_V3



Attachment 9 Indicative Subdivision Layout & Staging Plan
- Amended Mar 2017

Breese Pitt Dixon, Mar 2017

9A: Indicative Subdivision Plan

Plan Ref: 9225_UD_DP01_V3

9B: Staging Plan

Plan Ref: 9225_UD_DP02_V3



Attachment 10 Traffic Engineering Assessment Report
Traffix Group

Based on Original Development Plan approved in 2012



Attachment 11 Preliminary Servicing Report



Attachment 12 **Transport Impact Assessment**
**- In response to Amendments to Development
Plan**

GTA Consultants, Mar 2017