

Heals Road, Mernda Development Plan

Development Plan approved by the City of Whittlesea on 18 September 2007, in accordance with Clause 43-04 Schedule 16 of the Whittlesea Planning Scheme.

08/11/2007

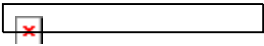
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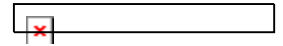
**Development Plan Application
Heals Road, Mernda
Planning Report**

September 2007

Prepared by Coomes Consulting Group on behalf of Mernda
Land Subdivision Pty Ltd

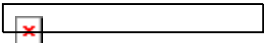
Note: This report has been revised and updated in light of the specific comments and resolutions regarding the Heals Road Development Plan contained within the 29 May 2007 and 18 September 2007 Council Reports.





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1 Introduction

The purpose of this report is to outline and provide justification in support of a proposed Development Plan for land located at Heals Road in Mernda (refer to Figure 1).

This report outlines the proposed Development Plan, details the planning policy context applicable to the Development Plan and provides an assessment and justification of the Development Plan against the relevant policy context.

1.1 Background

A number of detailed pre-application discussions have taken place with Council to ensure that the proposed Development Plan (and any ensuing subdivision applications) is in accordance with the strategic vision for the area. As an outcome of these discussions, a number of modifications have been made to the design and layout of the Development Plan prior to formal submission.

1.2 Application Details

This application seeks approval for:

- A Development Plan for the whole of that land covered by Development Plan Overlay (Schedule 16) and located north of Bridge Inn Road, south of Heals Road and east of Schotters Road.

1.3 Procedural Outcomes

It is anticipated that this current application will result in the approval of an overall Development Plan to guide the future use, development and subdivision of the land.

2 The Application Site

2.1 Site Location

The Development Plan Area (DPA) is located in Mernda, approximately 25km northeast of the Melbourne CBD. The land is generally bounded by the Plenty River to the East, Bridge Inn Road to the south, existing residential properties fronting Schotters Road to the west and existing residential properties fronting Heals Road to the north. The site is contained within the City of Whittlesea's Plenty Valley locality, and the Mernda/Doreen area.

The DPA is located upon the eastern side of Schotters Road and the southern side of Heals Road, Mernda.

Figure 1: DPA Locality Map



2.2 Site Description

The DPA has an area of approximately 6.42 hectares and is irregularly shaped. The landform of the site is generally flat, being located upon a volcanic plain incised by the Plenty River to the east. The site falls away sharply at the eastern boundary to the Plenty River.

Most of the DPA is currently occupied by open grazing land, an activity which has led to the almost complete absence of indigenous ground flora. Four existing dwellings and associated outbuildings are located upon the site, and these are surrounded by a mix of mature exotic and native vegetation.

A recent Flora and Fauna Assessment undertaken upon the DPA (refer to Brett Lane and Associates report submitted in support of this application) indicates that the DPA has generally been cleared of mature significant vegetation, with indigenous native vegetation limited to two Red Gums located centrally upon the site and a variety of immature eucalypts planted along fence lines.

A recent Archaeological Assessment of the DPA (refer to Andrew Long & Associates report submitted in support of this application) identified that there are two aboriginal and one historical (i.e. European) archaeological sites are present upon the DPA.

2.2.1 Titles and Restrictive Covenant Details

The DPA is comprised of 5 properties described as follows:

- Part Lot 22 on Plan of Subdivision 053355; Volume 08135, Folio 785.
- Part Lot 1 on Title Plan 403685; Volume 08225, Folio 757.
- Crown Allotment 38A Section 3 Parish of Yan Yean
- Part Lot 3 on Plan of Subdivision 206437; Volume 09761, Folio 714

There are no encumbrances or restrictive covenants that apply to the DPA (refer to copies of title contained at Attachment 1 to this report)

2.3 Surrounding Context

2.3.1 Locational attributes

The DPA has proximate and convenient access to a wide range of facilities and services, which are illustrated in Figure 1 of this report.

These include:

- The open space of the Plenty River corridor;
- The recreational facilities of the Mernda Recreational Reserve, including open space, sports ground, pavilion, netball and basketball facilities and a community centre and senior citizens club;
- The recreational facilities of the Mernda Angling Club;
- The future Mernda Town Centre is planned for the immediate area south west of the DPA;
- Mernda Primary School is located approximately 800m from the site and connected by a main road and bus service;
- A number of bus routes (No. 562 & No. 582 to Eltham Train Station) service the main roads adjacent to the subject site;
- Other services within a 1km radius include a hotel, two churches, a café and garden centre, vineyard and the Mernda Mechanics Institute.

2.3.2 Northern Boundary

The northern boundary of the DPA is irregular and abuts Heals Road, a sealed collector road. The site boundary travels around a number of residential dwellings along Heals Road. Two vacant lots along Heals Road, included in the DPA, provide dual points of access to the site from the road. Residential development along Heals Road is characterised by 1970s and 80s style development of traditional, single storey detached dwellings.

Adjacent to the northern boundary is the Mernda Recreational Reserve and Angling Club; including sports ground and pavilion, open space, netball and basketball facilities and a senior citizens club. This reserve is contained within the Public Park and Recreation Zone

Figure 2 Mernda Recreation Reserve, Northern Boundary



Figure 3 Mernda Community Centre and Senior Citizens Club, Northern Boundary



2.3.3 Eastern Boundary

The Plenty River corridor constitutes an important interface to the immediate east of the DPA. The DPA has an irregular eastern boundary which follows the alignment of the Plenty River, which in the vicinity of the DPA is contained predominantly within a Rural Conservation Zone and partly within a Public Park and Recreation Zone.

The Plenty River corridor immediately adjacent to the DPA is heavily vegetated with boxthorn, blackberry bushes and some native regrowth.

Figure 4 Plenty River, Eastern Boundary



2.3.4 Southern Boundary

The southern boundary of the DPA directly abuts Bridge Inn Road, a Road Zone Category 2 providing connection between the DPA and the principle road network (Yan Yean Road to the east and Plenty and Epping Roads to the west).

Bridge Inn Road connects with Plenty Road to the east where a small amount of services are located. These services are expected to grow significantly in the future as the location of the proposed Mernda Town Centre.

2.3.5 Western Boundary

The western boundary to the DPA is irregular and follows the line of residential lot boundaries along Schotters Road. Residential development along Schotters Road is characterised by traditional, single storey detached brick and weatherboard dwellings, mostly from the 1970s and 80s. The majority of dwellings are set back from the road with some form of garden or landscaping. Five of the 25 lots are vacant along the stretch of road from Bridge Inn to Heals Road, representing the underutilisation of land in an area that is earmarked for growth.

Bus route No. 562 runs along Schotters Road.

Figure 5 Surrounding Area, Western Boundary



Figure 6 Surrounding Area, Western boundary



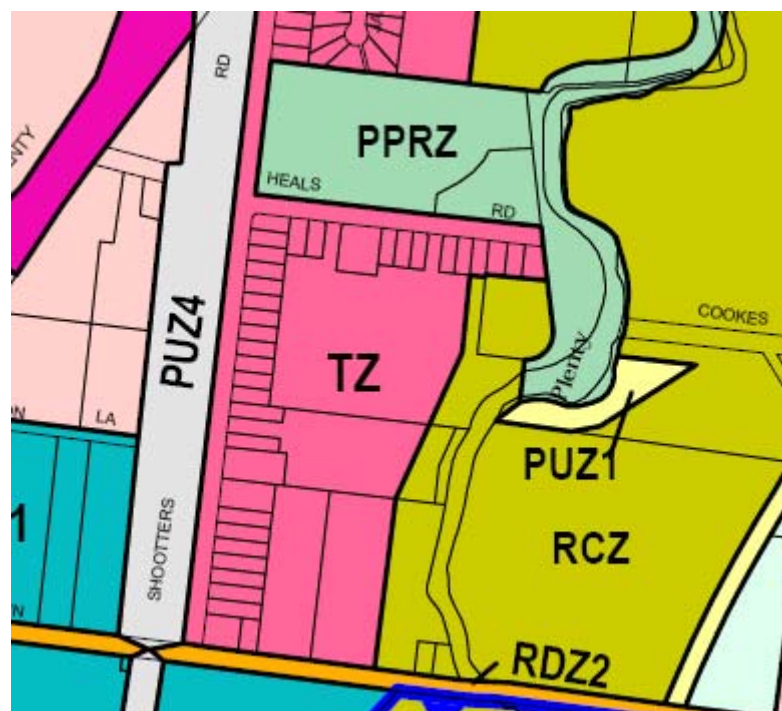
3 Planning Context

This section details the relevant Zone and Overlay provisions applicable to the DPA, and discusses the policy context within which the Development Plan application must be considered.

3.1 Zones

As detailed on Figure 8 below, the DPA is contained within the Township Zone.

Figure 8 Zoning



3.1.1 Township Zone

The purpose of the Township Zone is:

- To implement the State Planning Policy Framework and the Local Planning Policy Framework, including the Municipal Strategic Statement and local planning policies.
- To provide for residential development and a range of commercial, industrial and other uses in small towns.
- To encourage residential development that respects the neighbourhood character.

3.2 Overlays

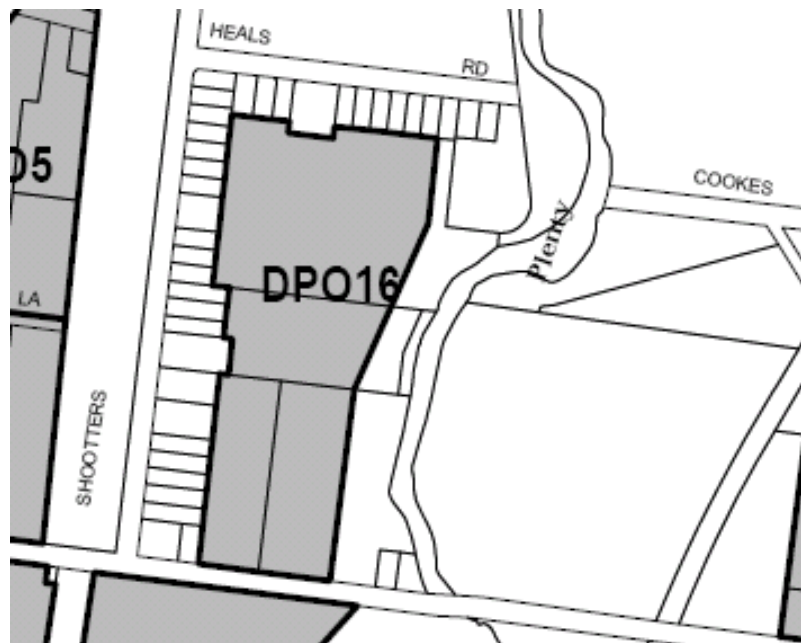
As detailed on Figures 9 to 10 below, two Overlays apply to the DPA;

- Development Plan Overlay – Schedule 16 (DPO16)
- Vegetation Protection Overlay – Schedule 1 (VPO1)

3.2.1 Development Plan Overlay

As shown on Figure 9 the DPA is entirely contained within a Development Plan Overlay – Schedule 16 (DPO16).

Figure 9 Development Plan Overlay (Schedule 16)



The purpose of the Development Plan Overlay is:

- To implement the State Planning Policy Framework and the Local Planning Policy Framework, including the Municipal Strategic Statement and local planning policies.
- To identify areas which require the form and conditions of future use and development to be shown on a development plan before a permit can be granted to use or develop the land.
- To exempt an application from notice and review if it is generally in accordance with a development plan.

Schedule 16 to the DPO relates to the “Mernda Township Development Plan”, and an assessment of the proposed Development Plan against the requirements of Schedule 16 is contained at Section 5 of this report.

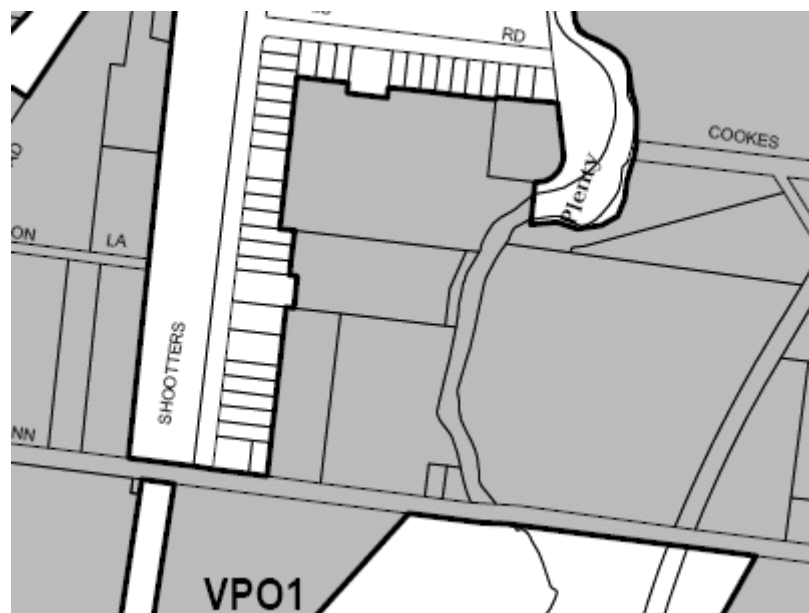
Development Plan Trigger

Pursuant to Clause 43.04-1, a permit must not be granted to use or subdivide land, construct a building or construct or carry out works until a development plan has been prepared to the satisfaction of the responsible authority. Section 5 of this report details how the Development Plan addresses the requirements of Schedule 16 to the Development Plan Overlay.

3.2.2 Vegetation Protection Overlay

As shown on Figure 10 the DPA is entirely contained within a Vegetation Protection Overlay – Schedule 1 (VPO1).

Figure 10 Vegetation Protection Overlay (Schedule 1)



The purpose of the Vegetation Protection Overlay is:

- To implement the State Planning Policy Framework and the Local Planning Policy Framework, including the Municipal Strategic Statement and local planning policies.
- To protect areas of significant vegetation.
- To ensure that development minimises loss of vegetation.
- To preserve existing trees and other vegetation.
- To recognise vegetation protection areas as locations of special significance, natural beauty, interest and importance.
- To maintain and enhance habitat and habitat corridors for indigenous fauna.
- To encourage the regeneration of native vegetation.

Schedule 1 to the VPO relates to Significant Vegetation (River Red Gum Grassy Woodland). The Statement of Nature and Significance of Vegetation to be Protected by Schedule 1 is as follows:

Native vegetation in the Plenty Valley and surrounding areas of Mernda, Doreen and South Morang play an important role in the maintenance of the environmental and rural character providing areas of natural habitat for flora and fauna and assisting with minimising soil erosion and maintaining soil qualities. Vegetation within the Redgum Grassy Woodlands of particular significance includes; River Red Gum, Black Box, White Box and Grey Box, Yellow Box and various native grasses.

Permit Trigger

Pursuant to Clause 42.02-2, a permit is required to remove, destroy or lop native vegetation.

3.3 Planning Policy Context

3.3.1 State Planning Policy Framework

A range of State Planning Policies are applicable, with varying degrees of relevance, to the proposal:

Clause

12.01	Metropolitan development
12.02	A more compact city
12.03	Better management of metropolitan growth
12.05	A more prosperous city
12.06	A great place to be
12.06	A fairer city
12.07	A greener city
12.08	Better transport links
14.01	Planning for urban settlement
15.01	Protection of catchments, waterways and groundwater
15.02	Floodplain management
15.09	Conservation of native flora and fauna
15.10	Open space
16.01	Residential development for single dwellings
16.02	Medium density housing
17.01	Activity centres
17.05	Agriculture
18.02	Car parking and public transport access to development
18.03	Bicycle transport
18.09	Water supply, sewerage and drainage

3.4 Local Planning Policy Framework (LPPF)

A range of Local Planning Policies and MSS objectives are applicable, with varying degrees of relevance, to the proposal:

Clause

21.04	Vision
21.05	Growth areas framework
21.06	Objectives, strategies and action
22.01	Open space
22.02	Rural land character areas, siting, use and development
22.04	Subdivision design
22.10	River Red Gum protection area
22.11	Development contributions plan policy
22.13	Telecommunications conduit policy

An assessment of the proposal against the relevant planning policies is discussed in the Planning Assessment and Justification contained at Section 4 of this report.

4 Site Analysis and Design Response

Attachment 2 details the key characteristics and attributes of the DPA and its surrounding context as described in the previous sections of this report, and Attachment 3 details the future context for the site as set out by the Mernda Strategy Plan.

These key characteristics and attributes are the basis from which the design response as detailed at Attachment 4 and the ensuing Development Plan as detailed in the following sections of this report has been formulated.

5 The Development Plan

The Development Plan for the subject site as set out at Attachment 7 to this report will guide future use, development and subdivision of the land at Heals Road, Mernda in accordance with the requirements of Schedule 16 to the Development Plan Overlay.

The Development Plan provides for the use and development of land contained within the Township Zone for urban (residential) purposes. The proposed urban structure has been resolved in discussion with Council and provides for future residential development with dwelling densities increasing moving south across the site towards Bridge Inn Road.

The Development Plan provides a high level of internal circulation, with all internal streets connected to two north-south streets, which in turn provide external connection to Heals Road and Bridge Inn Road. An additional external connection is provided to Schotters Road.

The Development Plan provides for a pedestrian and cyclist network incorporating footpaths to all internal streets and a shared path (2.5m wide) adjacent to the Plenty River Corridor.

During pre-application discussions, Council advised that the area of land adjacent to the DPA contained within the Rural Conservation Zone would not be suitable for residential development. Council has confirmed its support for this land to be utilised as the open space contribution for individual land parcels within the DPA, in lieu of additional open space within the allotments (predicated on a 2.5m shared path being constructed and appropriate landscaping being undertaken to the satisfaction of the responsible authority by the affected landowner/developer).

The subdivision design has responded accordingly; with passive open space provided adjacent to the Plenty River Corridor incorporating a 2.5m shared path, upon land outside of the Development Plan area falling within the Rural Conservation Zone.

The current zoning of this future passive open space parcel of land will be maintained, and the land will be handed over to Council as public open space upon subdivision of the land.

The location of the Development Plan site in close proximity to the future Mernda Town Centre and opposite the Mernda Recreation Reserve, support its future use and development for residential purposes, and particular supports a gradation of densities towards Bridge Inn Road. The Development Plan provides for an increase in residential densities within the Urban Growth Boundary, and represents an efficient use of land in accordance with State and Local planning policy.

6 Planning Assessment and Justification – Policy

6.1 Assessment of the Proposal against the Relevant Planning Policy Framework

For the sake of brevity and clarity, the following assessment addresses the key State and Local Planning Policy Framework and the Development Plan's response to that framework under specific topic headings.

6.1.1 Metropolitan Development and Settlement

Relevant Policies

State

Clause 12.01	A more compact city
Clause 12.05	A great place to be
Clause 12.07	A greener city
Clause 14.01	Planning for urban settlement

Clause 16.01	Residential development for single dwellings
Clause 16.02	Medium density housing
Clause 17.01	Activity centres
Clause 19.01	Subdivision
Clause 19.03	Design and built form

Local

Clause 21.05	Growth areas framework
Clause 21.06	Objective, strategies and actions
Clause 22.02	Rural land character areas, siting, use and development
Clause 22.03	Dwelling Density and Excisions in Rural Areas Policy
Clause 22.04	Subdivision design

Key Policy Directions

In regard to settlement and metropolitan development, the aforementioned State and Local policies seek to:

- Facilitate development that takes full advantage of existing settlement pattern and investment in transport, communication, water and sewerage and social facilities
- Provide for increased residential densities to help consolidate urban areas.
- Create urban environments that are better quality, safer and more functional; provide more open space and an easily recognisable sense of place and cultural identity.
- Encourage residential development that improves housing choice, and that promotes energy efficiency and sustainability.
- Encourage subdivisions that are site responsive and located in areas with access to physical and community infrastructure. Subdivisions

should provide a range of lot sizes, a convenient and safe road network, appropriate pedestrian and cycle paths, sufficient useable public open space and low vulnerability to fire.

- Encourage a hierarchical strategic approach to development in accordance with the Whittlesea Growth Area Framework
- Channel growth into designated areas according to the residential growth area framework plan, which focuses on the Plenty River Valley
- Update and enhance the image of the City of Whittlesea focussing on the retention of local environmental features and urban and landscape qualities, including the protection of green corridors.
- Plan for leisure and recreation needs of existing and future residents

Development Plan Response

The proposed Development Plan fulfils the above mentioned objectives as follows:

- The proposal serves to consolidate and expand on an area earmarked for urban development. The underutilised site has excellent access to existing infrastructure and services, including major roads, public transport, recreational facilities, schools and community services, as detailed in Section 2 of this report.
- A high quality urban environment is provided by the Development Plan, which provides for a functional and safe street network and promotes an active interface between the future residential area and the Plenty River corridor.
- The Development Plan provides for the creation of a broad range of lot sizes, ensuring that future residential development on the site will cater for a wide range of future housing needs.
- The road network ensures future lots within the DPA will be generally oriented north-south and east-west in order to promote energy efficiency and solar access.
- The DPA falls inside the Plenty Growth Corridor, which is the focus of the strategic growth framework for the City of Whittlesea.
- The Mernda/Doreen area is currently zoned for urban development
- The layout of the DPA is site responsive and takes into account the rural landscape character and the restraints of the Plenty River corridor. The Development Plan integrates with the established residential surrounds by providing for a range of lot sizes and a connected and accessible road network.
- By providing extensive passive open space adjacent to the Plenty River Corridor and links to existing facilities such as the Mernda Recreation Reserve to the north of Heals Road, the Development Plan provides for both formal and informal recreational and leisure needs of existing and future residents.

6.1.2 Environment and Open Space

Relevant Policies

State

Clause 12.07	A greener city
Clause 15.01	Protection of catchments, waterways and groundwater
Clause 14.01	Planning for urban settlement
Clause 15.09	Conservation of native flora and fauna
Clause 15.10	Open space

Local

Clause 22.01	Open space
Clause 22.02	Rural Land Character Areas, siting, use and development
Clause 22.04	Subdivision design
Clause 22.10	River Red Gum protection area

Key Policy Directions

In regard to environment and open space, the above mentioned State and Local policies seek to:

- Minimise impacts on the environment to create a sustainable path for future growth and development.
- Assist with the protection and of catchments and waterways and assist with the protection and conversation of biodiversity, including native vegetation retention and provision of habitats for native plants and animals and control of pest plants and animals.
- To assist the creation of a diverse and integrated network of public open space commensurate with the needs of urban communities.
- Avoid inappropriate development within the 1 in 100 year floodplains.
- Protect the River Red Gum areas within the future urban areas of Mernda/Doreen through the application of the Vegetation Protection Overlay

Development Plan Response

The Development Plan meets the abovementioned State and Local policy objectives as follows:

- Providing a generous buffer zone between the future urban development and the Plenty River Corridor, thereby ensuring the maintenance of natural drainage function, stream habitat, wildlife corridor and landscape values. Additionally, it ensures that inappropriate development does not occur in the 1 in 100 year flood plain area.
- The Development Plan provides for the creation of an integrated network of open space along the Plenty River Corridor, and efficiently

links into existing open space and recreational facilities at the Mernda Recreation Reserve

- The Development Plan provides for the retention of two River Red Gums and the landscaping of the Development Plan area and adjacent passive open space with appropriately selected species, to enhance the vegetated character of the site and surrounds.

6.1.3 Neighbourhood Character and Design

Relevant policies

State

Clause 12.05	A great place to be
Clause 14.01	Planning for urban settlement
Clause 16.01	Residential development for single dwellings
Clause 19.01	Subdivision
Clause 19.03	Design and built form

Local

Clause 22.02	Rural Land Character Areas, siting, use and development
Clause 22.04	Subdivision design
Clause 22.11	Development Contributions Plan Policy
Clause 22.13	Telecommunications conduit policy

Key Policy Directions

In regard to neighbourhood character and design, the abovementioned State and Local Policies seek to:

- Ensure that the design and layout of new residential development respects the established neighbourhood character.
- Improve the synergy between private and public spaces.
- To ensure new development has high quality amenity and makes a positive contribution to preferred character of the neighbourhood.
- Maximise traffic safety by ensuring that vehicular movements associated with the new or modified crossings do not conflict with the street traffic flow and the pedestrian, cyclist and motorist visibility.
- Retain the existing low density rural character of the Plenty Valley, whilst encouraging growth in the area.
- Ensure that proposed subdivisions are site responsive and create a sense of place.
- Ensure that new subdivisions include adequate services and infrastructure at an early stage of development.

Development Plan Response

The Development Plan fulfils the aforementioned State and Local policy objectives as follows;

- The surrounding character of the DPA is dominated by single dwellings, set back from the road with some form of landscaping or garden. The Development Plan provides for complementary development in the northern portion of the DPA, with street based medium density in key locations (such as fronting the Plenty River and on the north side of the southern east-west street) and "cottage" lots in corner locations, and increasing densities towards Bridge Inn Road.
- The DPA retains a connection to the Plenty River corridor immediately to the east and provides for a continuation of the surrounding landscape character through proposed streetscape plantings.
- The proposed street network promotes a high level of pedestrian and vehicular connectivity and both within the subdivision and to existing street networks and the recreation reserve.
- The rural character of the Plenty Valley, within which the DPA is located, will be retained by providing an active interface with the Plenty River Corridor whilst sensitively introducing a more urban form of development, balanced with appropriate streetscape treatment.

6.1.4 Amenity (on and off site)

Relevant Policies

State

Clause 12.05	A great place to be
Clause 14.01	Planning for urban settlement
Clause 16.01	Residential development for single dwellings
Clause 16.02	Medium density housing
Clause 19.03	Design and built form

Local

Clause 22.01	Open space
Clause 22.02	Rural land character areas, siting, use and development
Clause 22.04	Subdivision design

Key Policy Directions

In regard to amenity (on and off site), the above mentioned State and Local policies seek to:

- Ensure that new developments do not adversely impact on the amenity of existing neighbouring areas; and,

- Ensure that new residential areas are provided with a high standard of amenity.

Development Plan Response

The Development Plan complies with the abovementioned State and Local policy objectives as follows:

- The Development Plan for a high level of on-site amenity, by providing a safe, convenient and connected road network, optimal solar orientation of lots, and outlook to and integration with the passive open space reserve adjacent to the Plenty River Corridor.
- The amenity of neighbouring properties will be protected from inappropriate future development within the DPA through the application of Clauses 54 or 55 of the Whittlesea Planning Scheme, as appropriate.

7 Planning Assessment and Justification – Zone and Overlay

7.1 Township Zone

The Development Plan is consistent with the applicable decision guidelines of the Township Zone as contained at Clause 32.05. A detailed analysis of the Development Plan against the applicable objectives and standards of Clause 56 is submitted in support of this application. In particular, it is noted that the Development Plan:

- Provides for future residential development through a subdivision layout that respects established residential character and supports the growth and development of the Mernda town centre.
- Is integrated with a range of existing and proposed services and facilities in the surrounding area.
- Provides open space in accordance with the needs of future residents and to the benefit of the Plenty River corridor
- Provides for an internal movement hierarchy that facilitates safe and efficient movement within the subdivision, and from the subdivision to surrounding attractors.

7.2 Development Plan Overlay (Schedule 16)

Schedule 16 to the DPO relates to the “Mernda Township Development Plan”. Pursuant to Schedule 16, a Development Plan must show:

- Application of the principles of the relevant incorporated plan;

Development Plan Response

The relevant incorporated plan for this area is the **Mernda Local Structure Plan Part 1 (Mernda Incorporated Plan)**, which provides a framework for the integrated development of up to 3,000 residential lots across the Laurimar Estate and the existing Mernda township (including the DPA).

The proposed Development Plan applies the principles of the Mernda Incorporated Plan (as set out at Section 4.3) as follows:

- The Development Plan applies to land contained within the Township Zone, which provides for residential development consistent with the infill development principles of the LSP.
- The Development Plan provides for both conventional densities as well as providing for a gradation of densities towards Bridge Inn Road and the town centre.
- The Development Plan provides for infill development to increase population within the existing township.

- The Development Plan provides for a linear network of open space along the Plenty River.
- The Development provides for a safe and efficient internal road network that maximises the use of the Plenty River environs.
- All services are available to the Development Plan area and requisite infrastructure will be provided in accordance with the requirements of Clause 56. Melbourne water has advised that they do not object to the proposal subject to further detail being provided for any further approvals (i.e. planning permits), and that there are proposed works forming part of Melbourne Water's Mernda Central Drainage Scheme within the DPA. Yarra Valley Water has advised that the area is not currently serviced by the sewerage system, and that the developer(s) will be required to design and construct a number of specified water supply assets to service the proposed development. Copies of these authorities advice to Council during exhibition of the DP is contained at Attachment 9 to this report.

- Co-ordination of different land ownerships;

Development Plan Response

The DPA consists of four parcels of land in separate ownership. The Development Plan has been developed to provide a co-ordinated urban development across land held in different ownerships, and demonstrates how the whole of the land will be developed in an integrated manner.

- Local road network

Development Plan Response

The proposal includes a highly accessible and integrated street network. The internal network promotes a high level of pedestrian and vehicular connectivity both within the Development Plan Area and to the surrounding road network. Proposed cross sections are provided at Attachment 6 to this report.

In accordance with Council's 26 May 2007 resolutions, a Traffic Impact Assessment has been prepared for the DPA (refer to Attachment 8). The key findings of that report are as follows:

Estimated traffic generation rates:

- 940 daily vehicle trips

Recommendations for external road and intersection upgrades:

- Minor intersection improvements at the Heals Road / Schotters Road intersection; and
- Allowance for full service road frontage to Bridge Inn Road is recommended

Note: -The Traffic Impact Assessment Report identifies that a left turn lane at Schotters Road and Bridge Inn Road intersection is already warranted, without additional Development Plan traffic;

Recommendations for internal road cross sections and intersections:

- Proposed street reservations are adequate

Recommendations regarding east-west vehicular and pedestrian connectivity within the DPA:

- The east-west street linkage central to the Development Plan is a necessary inclusion.

The Development Plan has been revised to address the key recommendations of the Traffic Impact Assessment Report.

Medium Density Development

In locations with medium density development, such as in the southern portion of the development plan, alternative on-street parking configurations, such as angled or 90 degree parking are to be considered to accommodate higher densities. Suitable cross sections are to be provided at planning permit stage.

- Subdivision design, including lot densities;

Development Plan Response

The layout of the Development Plan provides for a range of densities to be provided across the site, ranging from conventional densities in the north to higher densities located towards Bridge Inn Road.

In accordance with Council's 26 May 2007 resolutions, the Development Plan has been revised to relocate the southern portion of the westernmost north-south road slightly to the east, to increase the depth of the blocks along the western side of this road. The relocation of this road acts to:

- increase the developability of the western portion of the DPA;
- ensure the two southern landholdings can develop independently from one another; and
- Provide sufficient flexibility to enable alternative development outcomes (i.e. laneways for rear loaded building products, larger blocks for multi-unit sites etc) in this part of the DPA.

As is noted on the Development Plan the expected form of medium density development within the DPA is street-based medium density (i.e. terrace lots not exceeding three storeys).

As shown on the Development Plan, an alternative, integrated housing site is proposed upon 26 Schotters Road. The provision of an integrated housing site on this part of the Development Plan will be subject to any future proposal demonstrating achievement of the following performance criteria, to the satisfaction of the Responsible Authority:

- The maintenance of vehicular access into the Development Plan Area from Schotters Road.
- The maintenance of pedestrian and cycle linkages through the integrated housing site from Schotters Road to the passive open space area adjacent to the Plenty River Corridor.
- Two to three storey medium density development.
- On-going protection of two identified River Redgums.
- Provision of vehicle access through the integrated housing site to the Plenty River Boulevard
- Provision of passing opportunities for vehicles

- A range of dwelling types including flats, units, terraced and semi-detached houses;

Development Plan Response

The Development Plan provides for the creation of a broad range of lot sizes, ensuring that future residential development of the DPA will cater for a wide range of housing needs.

As noted above, the Development Plan provides for a range of densities across the site, in particular higher densities towards Bridge Inn Road. Details of individual dwellings will be duly assessed against the provisions of Clause 54 and 55 of the Whittlesea Planning Scheme at the relevant permit stage.

- Topographic details;

Development Plan Response

Attachment 2 to this report includes the site analysis plan for this site, showing topographic details.

These details are broadly indicated within the Development Plan context.

- Location of pedestrian and bicycle access through residential areas;

Development Plan Response

It is proposed that pedestrian paths be provided along all internal streets, and that a concrete shared path (2.5m wide) be provided within the passive open space reserve adjacent to the Plenty River Corridor. Each development will be responsible for the construction of this shared path for the full length of their parcel at time of subdivision, and ultimate path alignment will be determined at planning permit stage in association with DSE.

- Location and layout of non-residential uses, including activity centres;

Development Plan Response

The location of the DPA in proximity to the future Mernda Town Centre suggests that there would be low demand for non-residential uses and activity centres within the DPA. It is not proposed to include non-residential land uses or an activity centre within the Development Plan area.

- A conceptual level landscape plan including the location and retention of existing vegetation;

Development Plan Response

A conceptual level landscape plan is provided at Attachment 5 to this report. All existing indigenous vegetation in the open space area adjacent to the Plenty River corridor will be retained and enhanced through the planting of appropriate, local and indigenous species.

Further approval of landscape plans at the planning permit stage will need to be referred to the Mernda River Land Management Group and DSE, to ensure that proposed works do not conflict with the current land management projects being undertaken by these groups.

Streetscape planting will also incorporate local and indigenous species, to be selected at planning permit stage when street profile details are resolved. Additionally, those trees recognised as having high significance, namely the two Red River Gums located in the middle of the DPA, are retained in the proposed Development Plan.

- Identification of significant environmental and cultural features and measures to preserve and enhance these features.

Development Plan Response

Flora and fauna and cultural heritage assessments for all landholdings within the DPA were undertaken as a precursor to the preparation of the Development Plan. The proposed plan is a response to the findings of these reports. Trees recognised as having high importance have been retained for their environmental significance. Additionally, the Development Plan has provided for a large amount of land to remain undeveloped in response to environmental concerns along the Plenty River.

No sites of high cultural value were discovered within the Development Plan area. The future use and development of the DPA will accord with the specific management recommendations as set out in the Cultural Heritage Assessment Report, to mitigate risks to cultural heritage values of the area in accordance with best-practice.

8 Conclusion

This report outlines and provides justification in support of a proposed Development Plan for Heals Road, Mernda.

The proposed Development Plan has been designed to respond to the strategic vision for the Mernda area, the established character and features of the site, as well as to the character of the surrounding area. The rural character of the Plenty Growth Corridor, within which the DPA is located, will be retained by providing an active interface with the river reserve, whilst sensitively introducing a more urban form of development in accordance with local growth strategies.

Further, the Development Plan has been revised in light of the specific comments and resolutions regarding the Development Plan as contained within the 29 May 2007 Council Report.

This report finds that the Development Plan, and the form of urban development that it provides for, is entirely consistent with the zoning and controls of the land, and with relevant State and Local planning policies.

The Development Plan provides for future residential development that is appropriately located, and which will respond to its relevant locational context. As such, it is submitted that the Council consider the Development Plan favourably.

9 Attachment 1 - Copies of Title

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REGISTER SEARCH STATEMENT Land Victoria

Security no : 124020916664Y

Volume 08225 Folio 757
Produced 26/02/2007 04:11 pm

LAND DESCRIPTION

Lot 1 on Title Plan 403685E (formerly known as part of Crown Allotment 39
Section 3 Parish of Yan Yean).
PARENT TITLE Volume 03908 Folio 453
Created by instrument A744099 25/05/1959

REGISTERED PROPRIETOR

Estate Fee Simple
Joint Proprietors

KELVIN WILLIAM BIRTHISEL
MARY ETHEL BIRTHISEL both of 14 MATLOCK ST WEST PRESTON
L777828T 16/07/1985

ENCUMBRANCES, CAVEATS AND NOTICES

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DIAGRAM LOCATION

SEE TP403685E FOR FURTHER DETAILS AND BOUNDARIES

ACTIVITY IN THE LAST 125 DAYS

NIL

STATEMENT END

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TITLE PLAN		EDITION 1	TP 403685E		
Location of Land Parish: YAN YEAN Township: Section: 3 Crown Allotment: 39 (PT) Crown Portion: Last Plan Reference: Derived From: VOL 8225 FOL 757 Depth Limitation: NIL		Notations ANY REFERENCE TO MAP IN THE TEXT MEANS THE DIAGRAM SHOWN ON THIS TITLE PLAN			
Description of Land / Easement Information			THIS PLAN HAS BEEN PREPARED FOR THE LAND REGISTRY, LAND VICTORIA, FOR TITLE DIAGRAM PURPOSES AS PART OF THE TITLES AUTOMATION PROJECT COMPILED: 13/04/2001 VERIFIED: AK		
<table border="1"> <tr> <th>TABLE OF PARCEL IDENTIFIERS</th> </tr> <tr> <td>WARNING: Where multiple parcels are referred to or shown on this Title Plan this does</td> </tr> </table>				TABLE OF PARCEL IDENTIFIERS	WARNING: Where multiple parcels are referred to or shown on this Title Plan this does
TABLE OF PARCEL IDENTIFIERS					
WARNING: Where multiple parcels are referred to or shown on this Title Plan this does					

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REGISTER SEARCH STATEMENT Land Victoria

Security no : 124020916604P

Volume 08219 Folio 577
Produced 26/02/2007 04:08 pm

LAND DESCRIPTION

Crown Allotment 38A Section 3 Parish of Yan Yean.
PARENT TITLE Volume 00801 Folio 084
Created by instrument A751230 04/06/1959

REGISTERED PROPRIETOR

Estate Fee Simple

Joint Proprietors

MARK RODNEY DOPPER

SHARON ANN WILDBOURNE both of 625 BRIDGE INN RD MERNDA 3754

W157579U 13/07/1999

ENCUMBRANCES, CAVEATS AND NOTICES

MORTGAGE W157580U 13/07/1999
CITIBANK LTD

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REGISTER SEARCH STATEMENT Land Victoria

Security no : 124020916068W

Volume 09761 Folio 714

Produced 26/02/2007 03:41 pm

LAND DESCRIPTION

Lot 3 on Plan of Subdivision 206437C.
PARENT TITLE Volume 07922 Folio 028
Created by instrument LP206437C 03/08/1987

REGISTERED PROPRIETOR

Estate Fee Simple
Sole Proprietor

LOLA NIKOLAOU of 77 IRONBARK ROAD DIAMOND CREEK VIC 3089
AB637253M 18/10/2002

ENCUMBRANCES, CAVEATS AND NOTICES

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plan or imaged folio set out under DIAGRAM LOCATION below.

DIAGRAM LOCATION

SEE LP206437C FOR FURTHER DETAILS AND BOUNDARIES

ACTIVITY IN THE LAST 125 DAYS

NIL

STATEMENT END

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A	B	C	D	E	F
<p>OFFICE USE ONLY</p> <p>LP206437C</p> <p>EDITION 1</p> <p>PARISH / TOWNSHIP / CHART</p> <p>1.</p> <p>NOTATIONS</p> <p>LAND APPROPRIATED OR SET APART</p> <p>USE OF THE M.A.B.W. FOR PLUMB</p> <p>PURPOSES PURSUANT TO SECTION 258 BA</p> <p>OF THE M.A.B.W. ACT</p> <p>TO BE COMPLETED WHERE APPLICABLE</p> <p>THIS SURVEY HAS BEEN CONNECTED TO PERMANENT</p> <p>MARKS NOS :</p> <p>IN PROCLAIMED SURVEY AREA NO.</p> <p>THE LAND TO BE SUBDIVIDED IS SHOWN ENCLOSED BY</p> <p>THICK LINES</p> <p>TITLE REF : VOL. 7922 FOL. 028</p> <p>LAST PLAN REF :</p>	<p>PLAN OF SUBDIVISION</p> <p>COUNTY BOURKE</p> <p>PARISH YAN YEAN</p> <p>SECTION 3</p> <p>CROWN ALLOTMENT 37 (PART)</p> <p>NUMBER OF SHEETS IN PLAN : 1</p> <p>NUMBER OF THIS SHEET : 1</p> <p>SCALE</p> <p>1:1000</p> <p>ORIGINAL SCALE</p> <p>1:1000</p> <p>ORIGINAL SHEET SIZE</p> <p>A2</p>	<p>PLAN APPROVED</p> <p>AT 3-8-1987</p>			
<p>36</p> <p>GOVERNMENT (SCHOTTERS ROAD) ROAD</p> <p>3</p> <p>1-4-65 m²</p> <p>RESERVE No. 1 FOR DRAINAGE AND SEWERAGE PURPOSES 114.5 m²</p> <p>PLENTY RIVER</p> <p>APPROX. TRUE NORTH</p> <p>13.71</p> <p>43.45</p> <p>19°06'20"</p> <p>0°12'</p> <p>40</p> <p>109.27</p> <p>270°07'</p> <p>34.78</p> <p>30.24</p> <p>270°07'20"</p> <p>109.01</p> <p>0°12'</p> <p>182.08</p> <p>90°12'</p> <p>180°12'</p> <p>15</p> <p>57.32</p> <p>270°12'</p> <p>1707</p> <p>15</p> <p>57.32</p> <p>89°36'</p> <p>15</p> <p>57.32</p> <p>269°36'</p> <p>65.98</p> <p>0°12'</p> <p>47.07</p>		<p>CERTIFICATE OF MUNICIPAL CLERK</p> <p>CODICIL REF.</p> <p>MUNICIPALITY</p> <p>CERTIFICATE A</p> <p>THIS PLAN ACCORDS WITH A PLAN</p> <p>SEALED BY THE COUNCIL UNDER SECTION 548B OF THE LOCAL GOVERNMENT ACT 1986 ON</p> <p>CONFIRMED BY THE PLANNING APPEALS BOARD ON</p> <p>AND A REQUIREMENT/NO REQUIREMENT PURSUANT TO SECTION 548C OF THE LOCAL GOVERNMENT ACT 1986</p> <p>HAS BEEN MADE</p> <p>DATE</p> <p>MUNICIPAL CLERK</p>		<p>CERTIFICATION BY SURVEYOR</p> <p>206437C</p> <p>DATE</p> <p>BY 15-4-88</p> <p>AND BY 1-6-88</p>	

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Security no : 124020916538L

Volume 09761 Folio 715

Produced 26/02/2007 04:03 pm

LAND DESCRIPTION

Reserve 1 on Plan of Subdivision 206437C.
PARENT TITLE Volume 07922 Folio 028
Created by instrument LP206437C 03/08/1987

REGISTERED PROPRIETOR

Estate Fee Simple
Joint Proprietors
PASQUALE SCHIAVELLO
ROSA SCHIAVELLO both of 1 SADIE STREET GLENROY
LP206437C

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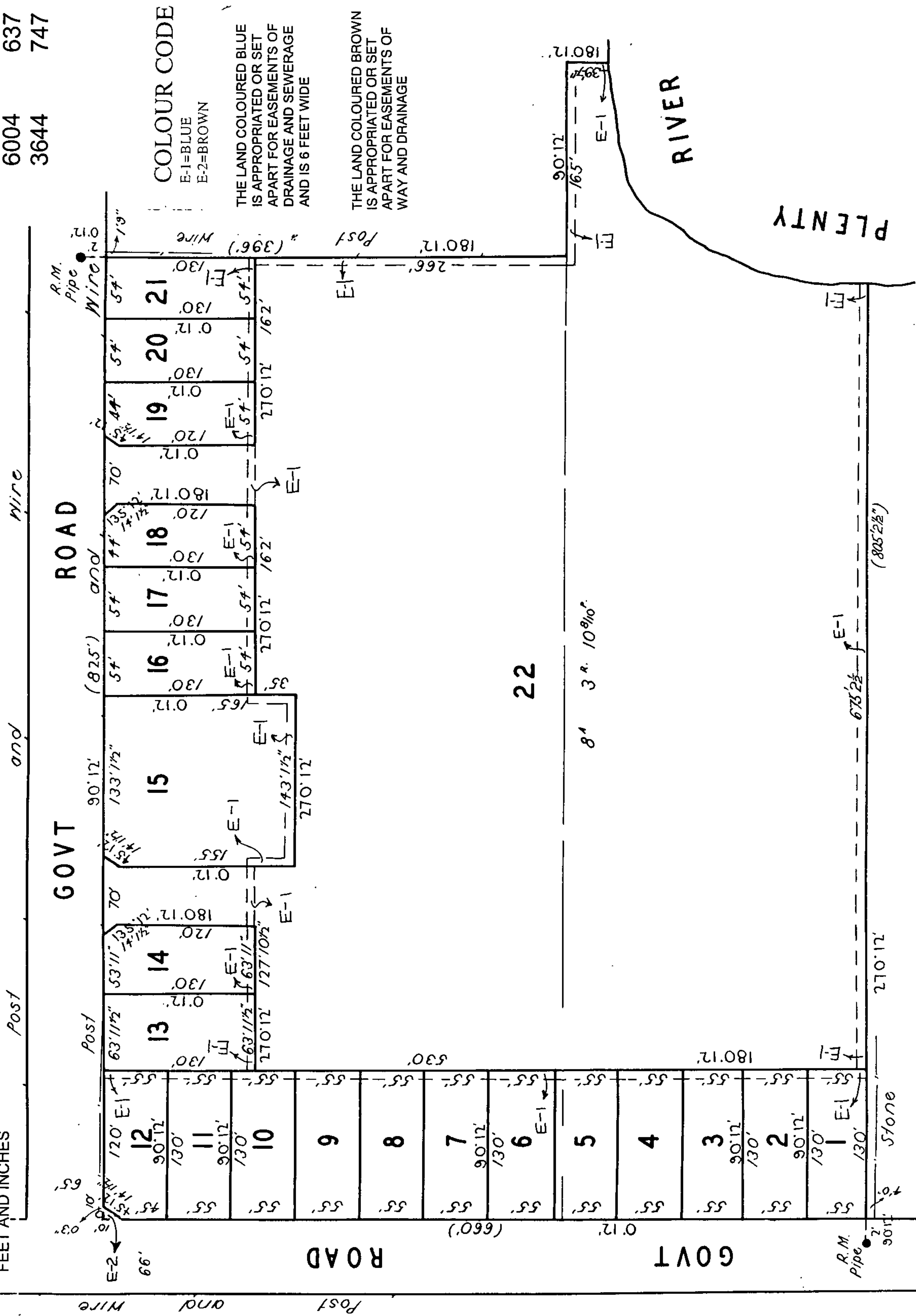
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<p>LP206437C EDITION 1 PARISH / TOWNSHIP / CHART</p>		<p>NOTATIONS</p> <p>LAND APPROPRIATED OR SET APART E-1 USE OF THE M.H.B.W. FOR PERMANENT PURPOSES PURSUANT TO SECTION 259 BA OF THE M.H.B.W. ACT.</p>		<p>TO BE COMPLETED WHERE APPLICABLE THIS SURVEY HAS BEEN CONNECTED TO PERMANENT MARKS NOS : IN PROCLAIMED SURVEY AREA NO. THE LAND TO BE SUBDIVIDED IS SHOWN ENCLOSED BY THICK LINES TITLE REF : VOL.7922 FOL.028</p>		<p>PLAN OF SUBDIVISION</p> <p>COUNTY BOURKE PARISH YAN YEAN SECTION 3 CROWN ALLOTMENT 37 (PART)</p>		<p>NUMBER OF SHEETS IN PLAN : 1 NUMBER OF THIS SHEET : 1</p> <p>SCALE 1:1000</p>		<p>PLAN APPROVED AT 3-8-1987</p>	
<p>OFFICE USE ONLY</p>		<p>APPROX. TRUE NORTH</p>		<p>RESERVE No. 1 FOR DRAINAGE AND SEWERAGE PURPOSES 114.5m²</p>		<p>PLENTY RIVER</p>		<p>CERTIFICATE OF MUNICIPAL CLERK COUNCIL REF.</p>		<p>CERTIFICATE BY SURVEYOR</p>	
<p>36</p>		<p>1 57.32 270° 12' 57.32 860 m²</p>		<p>2 57.32 89° 36' 57.32 860 m²</p>		<p>3 1.465 m²</p>		<p>CERTIFICATE A THIS PLAN ACCORDS WITH A PLAN SEALED BY THE COUNCIL UNDER SECTION 568B OF THE LOCAL GOVERNMENT ACT 1988 ON CONFIRMED BY THE PLANNING APPEALS BOARD ON AND A REQUIREMENT NO REQUIREMENT PURSUANT TO SECTION 568B OF THE LOCAL GOVERNMENT ACT 1988 HAS BEEN MADE</p>		<p>CERTIFICATE B THIS PLAN ACCORDS WITH A PLAN EXEMPTED FROM SUBDIVISION 01 OF DIVISION 39 OF PART XIX OF THE LOCAL GOVERNMENT ACT 1988 BY</p>	
<p>90° 12' 180° 12' 17.07</p>		<p>180° 12' 57.32 860 m²</p>		<p>180° 12' 57.32 860 m²</p>		<p>109° 27' 270° 07'</p>		<p>MUNICIPALITY</p>		<p>DATE</p>	
<p>47.07</p>		<p>17.07</p>		<p>17.07</p>		<p>34.78</p>		<p>DATE</p>		<p>DATE</p>	
<p>0° 12'</p>		<p>0° 12'</p>		<p>0° 12'</p>		<p>0° 12'</p>		<p>DATE</p>		<p>DATE</p>	
<p>GOVERNMENT (SCHOTTERS ROAD) ROAD</p>		<p>GOVERNMENT (SCHOTTERS ROAD) ROAD</p>		<p>GOVERNMENT (SCHOTTERS ROAD) ROAD</p>		<p>GOVERNMENT (SCHOTTERS ROAD) ROAD</p>		<p>DATE</p>		<p>DATE</p>	

PLAN OF SUBDIVISION
OF CROWN ALLOTMENTS 35 & 36 SECTION 3
PARISH OF YAN YEAN
COUNTY OF BOURKE

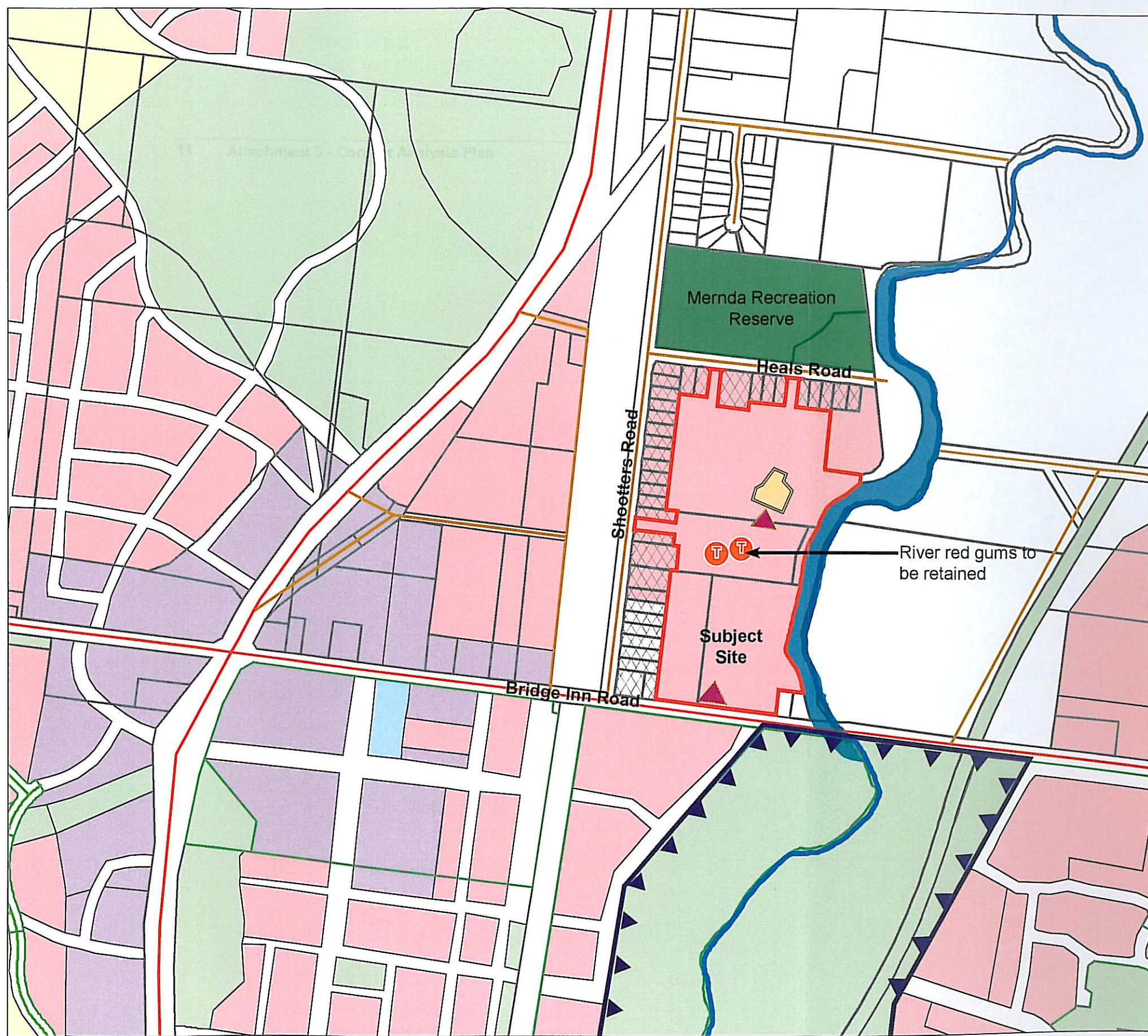
LP 53355
EDITION 1
APPROVED 21/3/61

VOL.8135 FOL.258
6004 637
3644 747

MEASUREMENTS ARE IN
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






10 Attachment 2 - Site Analysis Plan



Drawing Key:

-  Subject site boundary
-  Existing dwelling to be removed
-  Remnant River Red Gums
-  AAV sites (low significance)
-  Existing residential development
-  Mernda Recreation Reserve
-  Plenty River corridor
-  Urban Growth Boundary for Metropolitan Melbourne

Mernda Strategy Plan Directions and Recent Approvals:

-  Residential
-  Schools
-  Open space
-  Employment
-  Proposed parcels
-  Community Activity Centres
-  Main roads
-  Local roads
-  River

11 Attachment 3 - Context Analysis Plan



Heals Road, Mernda

Client	Mernda Land Subdivision Pty Ltd	Sheet	1 of 1
Reference No	140826	Revision	1
Drawing Status	PRELIMINARY	Date	08/06/2006
Map Reference	Melway 390J9	Drawn	Brian Canty

NORTH

Co-ordinate Datum

MGA55

Scale 1 : 2500

file name 140826 Vicmap Base.dwg layout name A3L @ 2500

file location \\melfs\data\14\140826\Development Plan 09_08_07\Attachment 2 - Site Analysis Plan\

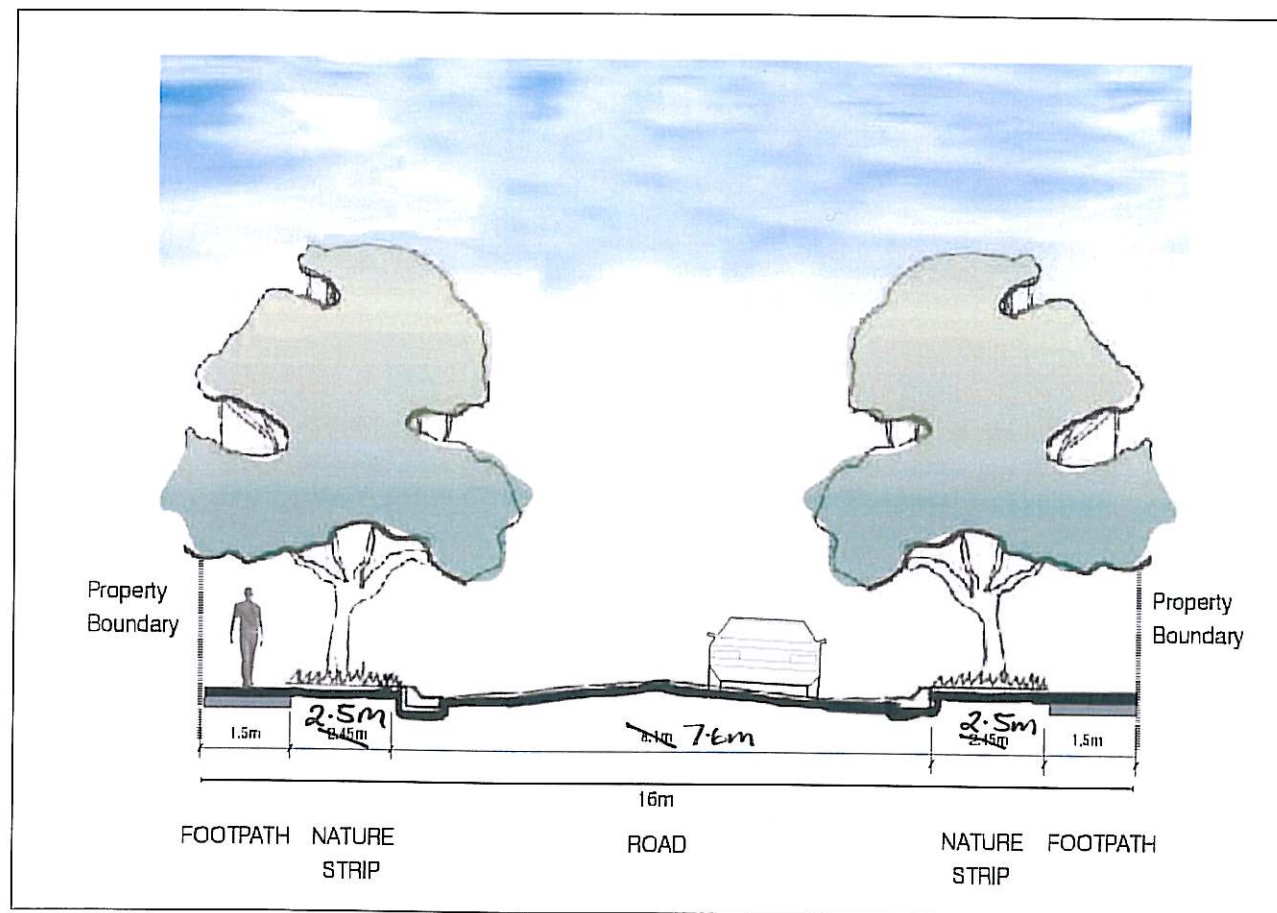
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plot date Fri 08 Dec 2006 10:51 Standard Drawing MP A3 L - Version 16 06 05

12 Attachment 4 – Design Response

13 Attachment 5 - Conceptual Level Landscape Plan

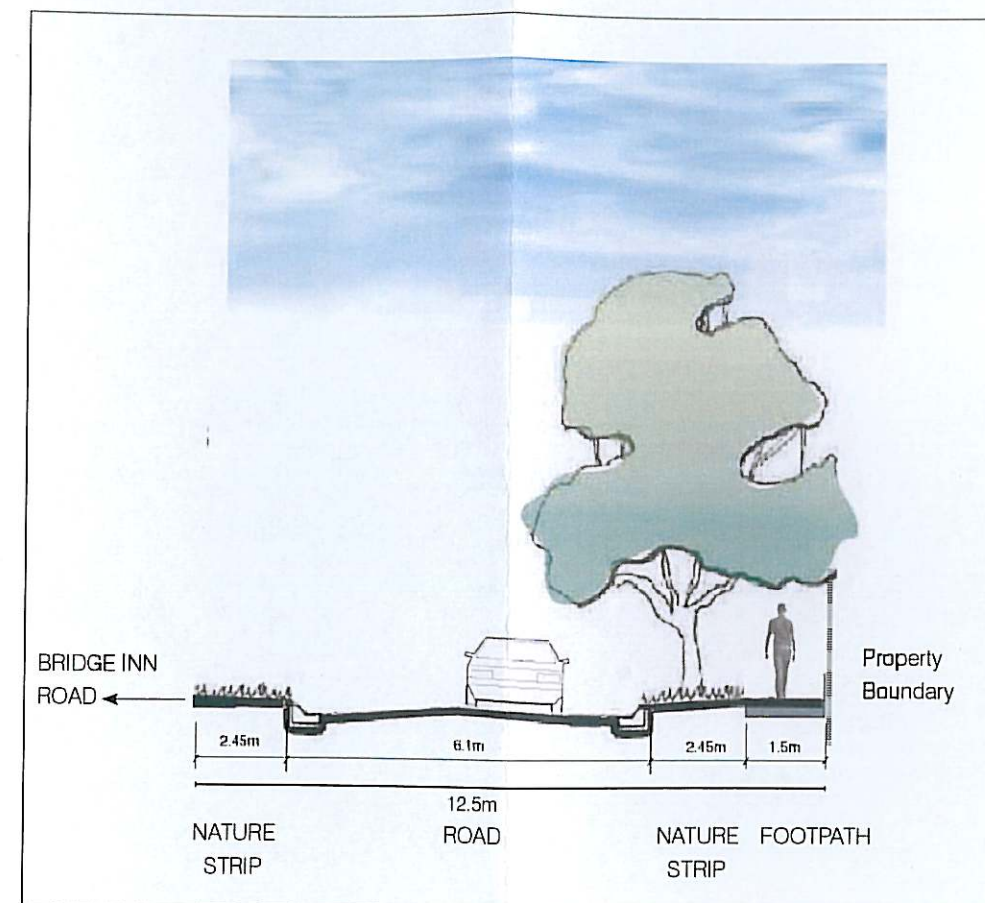
14 Attachment 6 – Proposed Internal Road Cross Sections



ACCESS STREET

and Reserve edge road.

(nature strip and shared path on reserve side to be incorporated into reserve. Shared path alignment to be determined at landscape plan stage).



SERVICE ROAD

NB: Alternative cross-sections may be required to accommodate on-street parking (at a rate of one space per dwelling) in locations with medium density housing. i.e. angled parking.

Heals Road, Mernda

Client Mernda Land Subdivision Pty Ltd Date 26.02.2007

Drawing No 01 Revision 00

Coomes Consulting Group Pty Ltd
24 Albert Road PO Box 305 South Melbourne VIC 3205 T 61 3 9993 7888 F 61 3 9993 7999
44 Welsford Street PO Box 926 Shepparton VIC 3632 T 61 3 5831 4448 F 61 3 5831 4449

Engineering Surveying Planning Urban Design Landscape Architecture
Sustainability and Environment Agribusiness Project Management

coomes consulting

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15 Attachment 7 – Development Plan



LEGEND

- Extent of 1 in 100 year flood-line Limit
- Natural Waterway
- Flood Plain
- Existing Property Boundaries
- Development Plan Area
- Shared Pathway 2.5m width
- Existing Trees
- Residential
- Linear Open Space

Heals Road, Mernda

Client Mernda Land Subdivision Pty Ltd	Sheet - of -
Reference No 140826	Revision 15
Drawing Status PRELIMINARY	Date 25/09/07
Map Reference Melway 390J9	Drawn ML

NORTH **Co-ord. Datum** MGA55 **Scale** 1 : 2500

file name 140826UUU00.dwg layout name A3L @ 2500-DP
file location G:\14\140826\ACAD\
last saved by hirenb
plot date Fri 07 Sep 2007 17:06

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Standard Drawing MP A3 L - Version 14 11 06

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Engineering Surveying Urban Design Planning Sustainability and Environment
Landscape Architecture Agribusiness Project Management Strategic Consulting

DLIC
Environmental
Endorsed
Company

16 Attachment 8 – Traffic Impact Assessment Report

TTM Consulting (Vic) Pty Ltd



HEALS ROAD MERNDA DEVELOPMENT PLAN TRAFFIC IMPACT ASSESSMENT

Prepared By

**TTM Consulting (Vic) Pty. Ltd.
Suite 301,
2 Wellington Parade,
East Melbourne Vic 3002**

For

**Coomes Consulting Group Pty. Ltd.
24 Albert Road,
South Melbourne Vic 3206**

Enquiries	:	Jim Higgs
Phone	:	(03) 9419 0911
Fax	:	(03) 9415 9456
Email	:	email@ttmconsulting.com.au

1. INTRODUCTION AND SCOPE

The Heals Road Mernda Development Plan, prepared by Coomes Consulting Group Pty. Ltd. was considered by Whittlesea City Council at a meeting on 29th May 2007. Council resolved, inter alia, that it would issue a request for a Traffic Impact Assessment for the Development Plan area, including :-

- Estimated traffic generation rates,
- Recommendations for external road and intersection upgrades,
- Recommendations for internal road cross sections and intersections,
- Recommendations regarding east west vehicular and pedestrian connectivity within the Heals Road Development Plan area, and
- The functionality of the proposed Bridge Inn Road services road.

This report provides a response to that request by Whittlesea City council.

2. THE SUBJECT LAND

The land is located between the rear of the lots that front the eastern side of Schotters Road and the Plenty River north of Bridge Inn Road and south of lots fronting the south side of Heals Road in Mernda.

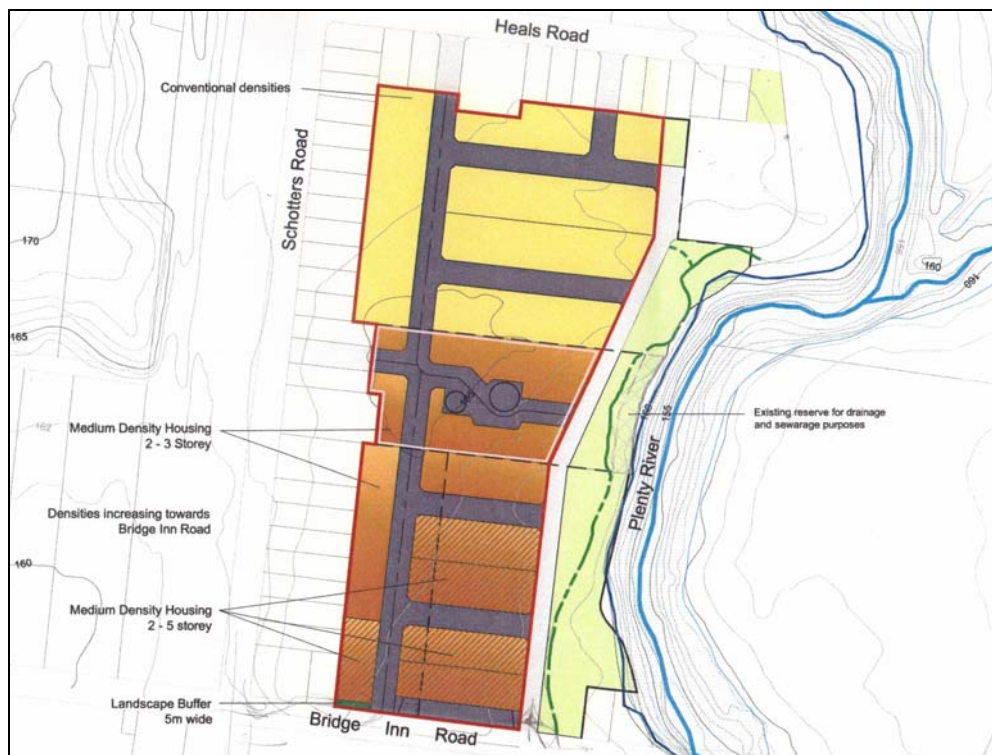
The site is approximately 6.4 hectares in area, and is located within 10 minutes walk time of the future Mernda Town centre on the south side of Bridge Inn Road, and within 5 minutes walk time of the future Mernda Railway Station. Schotters Road is the eastern boundary of the railway reservation, north of Bridge Inn Road. A large park and ride transport facility is proposed on this land when public transport facilities are provided at the railway station site, which is just to the south of Bridge Inn Road.

The following extract from Melways shows the location of the subject land.



3. THE HEALS ROAD DEVELOPMENT PLAN

The Coomes Consulting Group Pty. Ltd. drawing Referenced 140826 and dated 02/03/2007 is the basis of this report. The Development Plan is appended in full, and the key component is copied below.



4. EXISTING ROADS NEAR THE SITE

4.1 Heals Road

Heals Road carries minimal traffic, probably fewer than 100 daily vehicle movements. It has a sealed pavement about 3.5 metres wide, with “rural” style side swales. Low density housing abuts the south side, and the Mernda Recreation Reserve the north.



HEALS ROAD LOOKING EAST

4.2 Schotters Road

Schotters Road has a sealed carriageway of about 8.2 metres width, with kerb and channel along the east side.

Traffic volume is estimated at around 1,500 movements per day.



SCHOTTERS ROAD LOOKING NORTH

4.3 Bridge Inn Road

Bridge Inn Road has a sealed carriageway of about 6.5 metres width. At the intersection with Schotters Road there is a “Type B” passing lane for right turn entry, but no left turn lane. The absence of left turn lane may be due to a large Telstra pit located on the corner.



BRIDGE INN ROAD LOOKING EAST



LOOKING WEST FROM SCHOTTERS ROAD INTO BRIDGE INN ROAD

5. LIKELY DEVELOPMENT YIELD

The Heals Road Development Plan area of about 64 hectares includes the following approximate nominated areas :-

- Medium Density Housing, 2-5 storeys 1.1ha
- Medium Density Housing, 2-3 storeys 1.2ha
- Conventional Density Housing 2.2ha
- Street Reservations 1.9ha

Allowing for the expected densities, the approximate development yield is set out below :-

Development Form	Area	Density*	Dwelling Units
Conventional Density	2.2	20	45
Medium Density, 2-3 storeys	1.2	40	50
Medium Density, 2-5 storeys	1.1	60	65
Totals	4.5		160

* Net of Road Reservation and Open Space, i.e. lot density only.

Overall, this represents a development density of 25 dwellings per net hectare, that is with area including developed land plus street reservations. That may be slightly optimistic in consideration of that part of the Council resolution that refers to building height preferences, but nonetheless the estimate is a conservative basis for a traffic impact assessment.

6. TRAFFIC GENERATION

The subject area is exceptionally well located in respect of the ability of future residents to walk to and from local facilities and services, and to utilize public transport. Local services within walking distance, existing and/or proposed, include :-

- Mernda Town Centre (proposal) about 750 metres
- Mernda Rail Station (proposed) about 500 metres
- 562 Bus Route (existing) (to/from Greensborough) on Schotters Road
- Mernda Primary School (existing) 800 metres
- Mernda Recreation Reserve (existing) 200 metres
- Plenty River (existing) 200 metres
- Bridge Inn Hotel (existing) 800 metres
- Post Office/General Store (existing) 600 metres
- Major Bus Network, focused on Mernda Town Centre and Station (existing) 200 metres

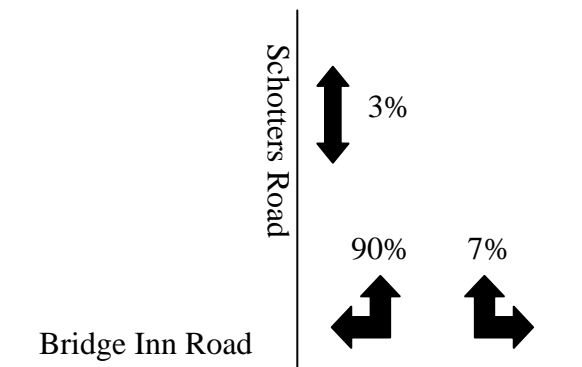
Accordingly we are estimating household traffic generation rates in accordance with the estimates provided in the following table :-

Development Form	Dwelling Units	Vehicle Trips per Day per Dwelling	Daily vehicle Trips
Conventional Density	45	7	315
Medium Density, 2-3 storeys	50	6	300
Medium Density, 2-5 storeys	65	5	325
Totals	160		940

7. DISTRIBUTION OF VEHICULAR TRAFFIC

The vast majority of workplace, entertainment, education, retail and community facilities that will be used by future residents of the subject area is located to the south-west. Laurimar will have a secondary school, but there is also the proposed Mernda P-12 school south west of the subject land. There is minimal, if any, employment to the south east, and virtually nothing to the north.

The following distribution of vehicular traffic is estimated on the basis of the location of existing future employment, retail, community, educational and recreational facilities :-



8. FUTURE ROAD NETWORK AND TRAFFIC DEMANDS

8.1 Arterial Roads

Key relevant transport planning includes the following :-

- Bridge Inn Road widened to provide a four lane carriageway with a wide central median to accommodate significant trees.
- Street network through the Mernda Town Centre site, with signal controlled intersections and several alternative routes between Bridge Inn Road/Schotters Road and Plenty Road.
- The “E6” arterial road, on the alignment of Bindts Road and possibly connecting with the Metropolitan Ring Road to the south, near Dalton Road and Plenty Road.

Locally, the duplication of Bridge Inn Road is the only influence on the design of traffic facilities for the Heals Road Development Plan.

Traffic Demand Modeling by Ashton Traffic for Whittlesea City Council (2004) suggests that Bridge Inn Road may have a daily traffic loading of about 21,000 vehicle movements by Year 2021.

8.2 Locally : Schotters Road

The area of potential redevelopment within the “catchment” of Schotters Road, south of Masons Lane, is around 25 hectares plus the Heals Road Development Plan area. A total dwelling yield of around 500 units can easily be envisaged, and perhaps that may be greater when the public transport objectives of Council are realized.

Assuming 0.5 outbound AM peak hour vehicle trips per dwelling for all of the Schotters Road “catchment”, and the directional distribution of traffic as described at Section 6, the intersection at Bridge Inn Road will need to accept about 230 right turning vehicles per hour in the AM peak.

If Bridge Inn Road carries 21,000 vehicles per day by Year 2021 (per Ashton), and peak hourly flow is 9% of daily total with 2/3 in the peak direction (typically measured in outer suburbs), then the AM peak hour flow on Bridge Inn Road will be about :-

- Eastbound 630 vehicles per hour
- Westbound 1,260 vehicles per hour
- Total 1,890 vehicles per hour

Sidra analysis suggests a definite need for traffic signals, as shown by the Give Way analysis demonstrated by the outputs below :-

- Degree of Saturation on right turn from Schotters Lane 3.6
- Queue Distance (95%) 857 metres
- Level of Service F

With signals at Schotters Road, there will be no opportunity for any other median openings between Schotters Road and the Plenty River.

Reducing the right turn exit demand to 150 vehicles per hour in the Sidra analysis still shows for the right turn out of Schotters Road :-

- Degree of Saturation 2.36
- Queue Distance (95%) 461 metres
- Level of Service F

Again, this indicates a warrant for signals.

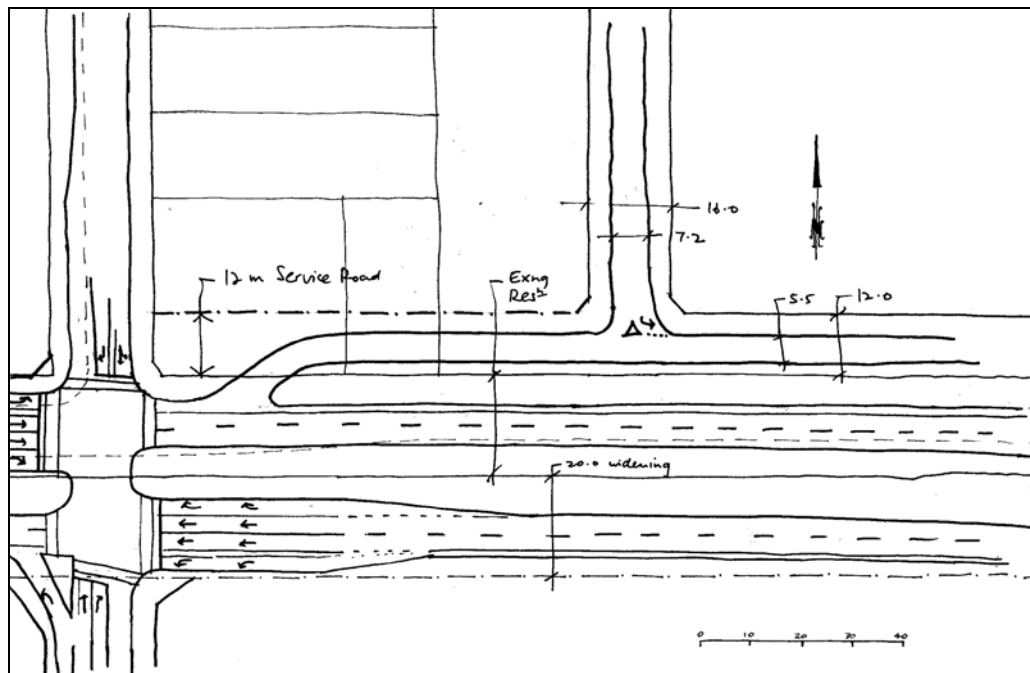
9. INTERSECTION CONFIGURATION : SCHOTTERS ROAD/BRIDGE INN ROAD

The intersection is expected to connect with a street on the south side of Bridge Inn Road, along the eastern side of the railway corridor.

Service road is proposed in the Heals Road Development Plan, which we consider an appropriate treatment along the arterial road frontage.

Conventional service road terminal treatment at the entry uses a “half-lane” set back on the approach to the entry, with the location such that U-turners can enter the service road in a fairly direct movement. That means that the service road entrance should be close to the signal controlled junction, per AustRoads Guide to Traffic Engineering Practice Part 5.

The following diagram shows how a conventional arrangement work be laid out.



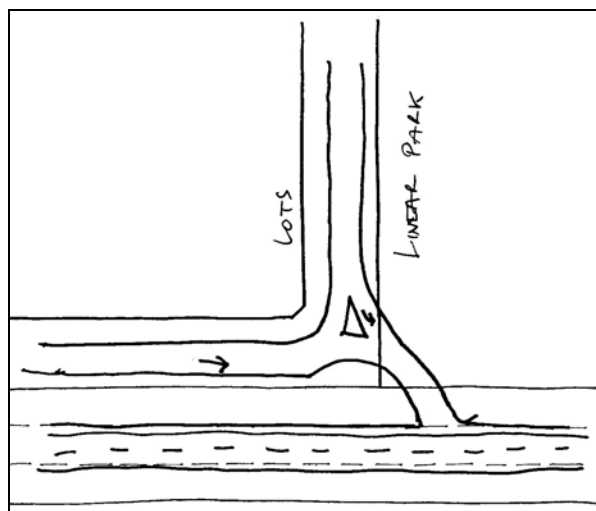
This suggests that the Development Plan should be modified to include service road reservation full width along the Bridge Inn Road abutment, rather than including the 5 metres wide landscape buffer on the west of the main north-south street.

Further, the properties to the immediate west should be involved in the service road when it is constructed to its ultimate form.

10. SERVICE ROAD TERMINAL EAST END

The “park edge boulevard” intersection with the service road should be configured such that westbound traffic in the service road is eliminated.

To do this an eastward extension of the service road will be necessary, as shown in the following sketch.



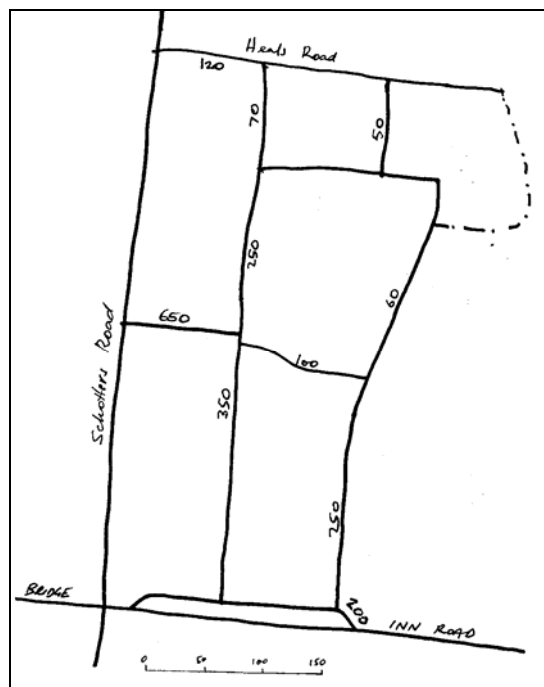
This will require an inner amendment to the Development Plan.

11. NEED FOR EAST-WEST CONNECTION

The Development Plan shows an east-west street linking to Schotters Road. That is appropriate because otherwise the street block would be about 450 metres, way in excess of Clause 56 guidance and such that pedestrian and vehicular permeability are severely compromised.

12. LOCAL TRAFFIC VOLUMES

The following diagram shows the estimated daily volumes of vehicular traffic on the Development Plan internal streets.



As can be seen there are no street that will carry any more than about 650 vehicles per day.

The impact on Schotters Road is about 700 daily vehicle movements, and on Heals Road only about 120 daily movements.

13. APPROPRIATE INTERNAL STREET FORMS

Because of the low traffic volumes all internal streets can be classified as “Access Place” or “Access Street : Level 1” pursuant to Clause 56.06-8 of the Planning Scheme.

The following outcomes are derived :-

- | | |
|----------------|--|
| ○ Service Road | 5.5 metres carriageway in 12.5 metres reservation, 1.5 metres footpath |
| ○ Park Edge | As above |

- “Courtyard Street” in Medium Density Precinct Special design, to incorporate parking, landscaping, footpath, carriageway
- Other Streets (two sided) 7.2 metres carriageway, 16 metres reservation, 1.5 metres footpath both sides

14. EXTERNAL TRAFFIC IMPACTS

14.1 Schotters Road Mid-Block

It is our opinion that taking Schotters Road up by a maximum of around 700 daily vehicle movements does not require any change to the current configuration.

14.2 Schotters Road Intersection at Bridge Inn Road

The volume of left turning traffic warrants a left turn lane, Type AUL per AustRoads Guide to Traffic Engineering Practice. This left turn is actually warranted already, and Council could consider an appropriate cost sharing arrangement.

The “Type B” right turn facility that is already present will be adequate to accommodate the existing traffic plus the Development Plan traffic.

14.3 Heals Road

A single lane carriageway with grassed verges can accommodate 200 plus daily vehicle movements. We see no particular reason for the Development Plan to be responsible for widening of Heals Road. If properties on the southern edge are redeveloped to a higher density, then a construction requirement to provide kerbed edge and pavement of either 5.5 metres or 7.2 metres width, depending upon the redevelopment density, should be strongly considered.

14.4 Heals Road Intersection with Schotters Road

Arguably the Development Plan could be requested to contribute to (or provide) works to provide 5.5 metres clear carriageway width, with 6 metres kerb return radius, for say 15 metres back from the line of the through kerb in Schotters Road. That would give a firm basis for two car lengths on the eastern approach.

Right turning traffic, Schotters Road into Heals Road, will be minimal at about 5 vehicle movements per hour during the PM peak hour. That does not warrant anything more than BAL treatment, which is shoulder sealing per AustRoads Part 5.

14.5 Interim Service Road Access : Bridge Inn Road

There are two basic options for the service road treatment prior to completion to ultimate form :-

- Have internal access only, with egress by way of the eastern terminal intersection, or
- Provide temporary left and right turn entry point for the central street.

The second option will involve construction of sealed shoulders on the south side of Bridge Inn Road (BAL) and a left turn lane from Bridge Inn Road.

Either would be satisfactory.

15. SUMMARY AND CONCLUSIONS

The following points are made in summary :-

1. The Development Plan should be modified to allow for full service road frontage, including an easterly extension as described in this report.
2. The east-west street linkage central to the Development Plan is a necessary inclusion.
3. The street reservations proposed are adequate, but some consideration might be given at detailed design stage, to additional parking and streetscape quality in the north-south street where densities will be highest.
4. Minor intersection improvements at Heals Road and Schotters Road, as described, are suggested.
5. A left turn lane n Bridge Inn Road for Schotters Road is appropriate.
6. Entry to the service road can be deferred until the ultimate configuration is provided, but the easterly exit, enabling all turns, should be provided.
7. Alternatively, a temporary intersection with left turn lane and shoulder widening, could be provided.

Subject to the above we see no traffic engineering or related reasons why the Development Plan should not be approved.

TTM Consulting Pty. Ltd.



J. D. Higgs

**17 Attachment 9 – Yarra Valley Water and Melbourne Water
Advice**

**Date:** 23 April 2007**Case Number:** 3-253286**GEORGE SAISANAS****WHITTLESEA CITY COUNCIL****DX 97406****THOMASTOWN**

WHITTLESEA CITY COUNCIL	
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Yarra Valley Water Ltd
ABN 93 066 902 501Lucknow Street
Mitcham Victoria 3132Private Bag 1
Mitcham Victoria 3132

DX 13204

Facsimile (03) 9872 2500

Email: enquiry@yvw.com.au**Customer Reference Number:****EasyDevelop PRELIMINARY SERVICING ADVICE****Project Number:** 253590**Development Address:** 15A HEALS ROAD, MERNDA**Development Description:** Proposed Development

We are pleased to provide you with PRELIMINARY SERVICING ADVICE for your development.

The following pages contain your preliminary servicing conditions which you will be required to meet should the development proceed.

PRELIMINARY SERVICING ADVICE is provided free of charge as a service to the development community.

If you are going to proceed with this development you are strongly advised to address the issues raised prior to lodging the application for COMPLETE SERVICING ADVICE. Application forms are available from Yarra Valley Water's web site at www.yvw.com.au or by contacting Yarra Valley Water directly. COMPLETE SERVICING ADVICE application fees will be invoiced after we have completed the assessment of the development.

Should you have any other queries please contact me either by phone or email as indicated below.

Janine Ryan**Title:** Development Liaison Officer**Phone:** 9872 1465**Email:** jryan@yvw.com.au

Thank you for the opportunity to comment on the draft development plan for Heales Road, Mernda.

Yarra Valley Water has the following comments:

Water Supply

The Yarrambat System is approaching capacity due to the substantial growth in the Mernda Doreen area.

In the future the system will be augmented through the construction of the Mernda Reservoir and associated infrastructure, expected 2010.

Existing Yarrambat Reservoir System capacity may be accessed through submission of complete servicing advice application, on a first come first served basis, until the existing capacity is exhausted.

If or when capacity is available, the development can connect to the DN100 Heals Rd main, DN100 Bridge Inn Rd Main and DN150 Bridge Inn Rd main.

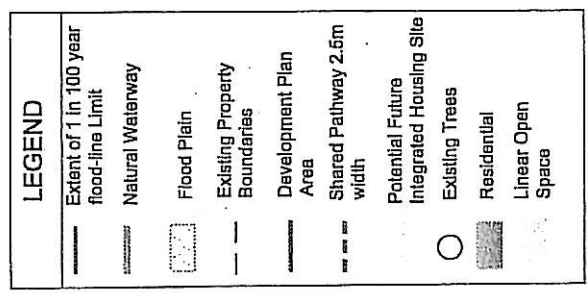
The developer will be required to design and construct the assets indicated on the attached plan.


Sewerage

This area is currently not serviced by the sewerage system.

The attached Sewer Catchment Development Plan shows the major sewerage outfall system planned for this area. Note that alignments shown on the plan are indicative only.

Case: 3-25-26

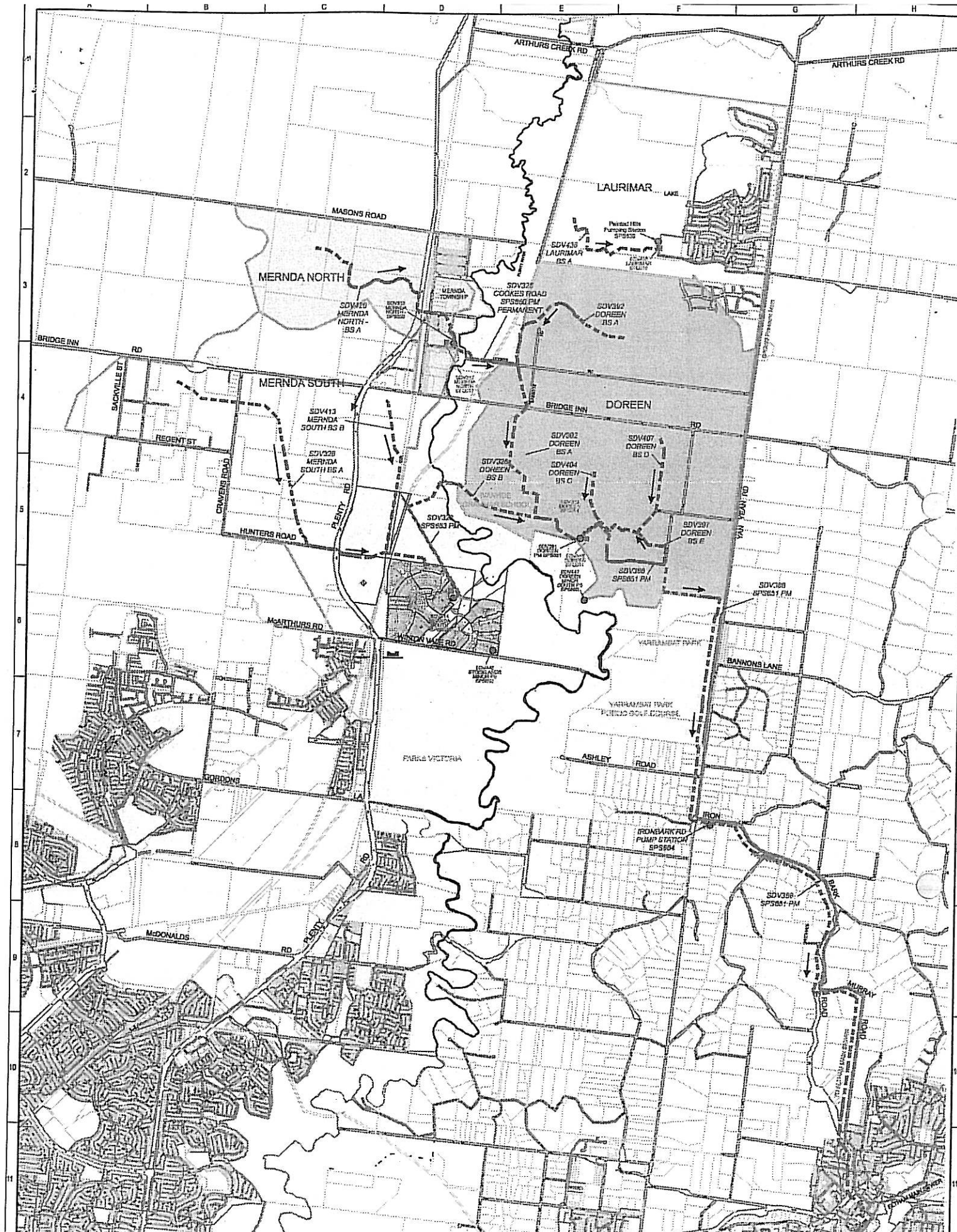




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Reference No	140828	Revision	11
Drawing Status	PRELIMINARY	Date	26/02/2007
Map Reference	Melway 390J19	Drawn	ML
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	Scale 1 : 2500	layout name AXL 2503-UP	
file location C:\1140828\ACAN plot date Fri 26 Feb 2007 17:41 © Cosmos Consulting Group Pty Ltd Standard Drawing for A/L - Version 11.00			

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24 Albert Road PO Box 305 South Melbourne VIC 3205 T 01 3 9693 7969 F 01 3 9693 7959
Engineering Surveying Urban Design Planning Sustainability and Environment
Landscape Architecture Agribusiness Project Management Strategic Consulting

coomes consulting

Development Plan



 <p>Yarra Valley Water</p>	<p>Legend</p> <ul style="list-style-type: none"> Proposed Branch Sewer Proposed Rising Main Sewer Flow Direction Proposed Pumping Station Proposed Sewage Flow Control Site Sewage Treatment Plant Catchment boundary 	<p>N</p>  <p>0 250 500 1000m</p>	<p>prepared by P.Fergusson</p> <p>date prepared 2 April 04</p> <p>approved by S.Hart</p> <p>date revised</p>	<p>Service Enhancement Sewer</p> <p>MERENDA/DOREEN LOCAL CATCHMENT PLAN</p> <p>drawing no. SES_SGP_L0900_v1</p> <p>CAD ref. L:\SES\PLANS\LCMP\LCMP09\lscdp09_14.dgn</p>
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Melbourne Water

Melbourne Water Corporation
ABN 81 945 386 953
100 Wellington Parade
East Melbourne 3002 Victoria
PO Box 4342
Melbourne 3001 Victoria
Telephone 131 722
Facsimile 03 9235 7200
www.melbournewater.com.au

17 April 2007

Chief Executive Officer
Whittlesea City Council
Locked Bag 1
BUNDOORA VIC 3083

Melbourne Water Ref: 84607
Applicant Ref: 165433

Dear Sir/Madam

Property: Heals Road, Mernda Development Plan

Thank you for your letter of 22/3/2006 regarding the above property. Melbourne Water has the following comments to make regarding the Development Plan.

General Comments:

- 1) Melbourne Water does not object to the preliminary proposal, but more detail will be required for any further approval.
- 2) There are proposed works within this property, they form part of Melbourne Water's Mernda Central Drainage Scheme and are detailed later under the heading 'Drainage Works'.

Melbourne Water would also like to advise of the drainage requirements for the proposed infrastructure within this property.

Drainage Agreement:

Prior to the issue of a Statement of Compliance, the Owner will need to enter into and comply with an agreement with Melbourne Water Corporation, under Section 269A of the Melbourne and Metropolitan Board of Works Act 1958, for the provision of drainage works and the acceptance of surface and storm water from the subject land directly or indirectly into Melbourne Water's drainage system. The agreement may include the following components.

Drainage Contributions:

A drainage agreement for this property will include the payment of drainage contributions, where a property is being subdivided/developed. These contributions are used to recover the cost of constructing drainage works such as main drains, retarding basins, waterway improvements and flood mitigation works that service properties such as your clients. The contributions are based on the increased load on the drainage system created by the development.

Stormwater Quality:

The Urban Stormwater Best Practice Environmental Management Guidelines require that runoff from all new developments (including redevelopments) be treated to comply with the following, 'Best Practice' standards criteria: Removal of 80% of the suspended solid annual load, 45% of total phosphorus and 45% of total nitrogen annual loads.

As of the 1st of September 2005, Melbourne Water will be introducing a 'Stormwater Quality Offset Strategy' to consistently and equitably apply stormwater quality standards to all developments greater than 0.4Ha. This strategy allows the following two options for any new development.

1. Compliance with Best Practice objectives through on-site treatment works will reduce the stormwater quality charge component of the drainage contributions. The works must satisfy Melbourne Water's standards and must be designed with the software package 'MUSIC' (Model for Urban Stormwater Improvement Conceptualisation), or alternatively through the use of the 'WSUD Engineering Procedures Manual' available on the Melbourne Water's website <http://wsud.melbournewater.com.au> which provides the procedures for the design of various treatment measures.
2. Non-compliance with Best Practice objectives will require the payment of the stormwater quality component of the drainage contributions. This money will help fund water quality works, elsewhere in the catchment.

For further information on the strategy, please refer to Melbourne Water's Land Development Manual website.

Drainage Scheme Works

A drainage agreement for this property will require the construction of permanent works in conjunction with the development as outlined by the appropriate drainage scheme. As discussed earlier a review of the Mernda Central Drainage Scheme has identified that there are permanent Melbourne Water works to be constructed on this property. These include a pipeline underneath Plenty Road connecting the properties to the west as well as pipeline works running through the site in an easterly direction

Such works will require that several surveys be undertaken to determine the most efficient and environmentally friendly design outcomes. These include, but are not limited to, a 'Flora & Fauna' assessment, a 'Geomorphological' review and an 'Archaeological' investigation, which would all guide the most appropriate waterway design. Design approval from Melbourne Water and any other relevant authorities may be required prior to commencement of the drainage works.

Please refer to the attached plans for a layout of the proposed works and any overland flow paths, which must be catered for by the development. The following table details the expected drainage works and design criteria for their sizing.

Node Ref.	Length (m)	Comments/Ownership
R1-R2	86	<i>Council pipeline Asset</i> 5 year ARI pipeline ▪ 525mm pipe diameter
R2-R3	181	<i>Council pipeline Asset</i> 5 year ARI pipeline East of Plenty Road. ▪ 675mm pipe diameter
R4-R3	70	<i>Council pipeline Asset</i> 5 year ARI pipeline ▪ 375mm pipe diameter
R3-R5	120	<i>Council pipeline Asset</i> 5 year ARI pipeline ▪ 675mm pipe diameter
ST17	NA	Silt Trap

Further to the above mentioned works the following 100 Year overland flow paths must be catered for within the development

Please be advised that this information may be refined and/or modified upon any application for a drainage offer/agreement.

Overland Flow Paths

Melbourne Water expects that upon any application for certification of any subdivision plan associated with the property, due consideration will be given to the alignment of roads and reserves with any adjoining estates, to ensure continuity and provide uninterrupted conveyance of overland flows.

Before starting works separate application, direct to Melbourne Water, must be made for any new or modified storm water connection to Melbourne Water's drains or watercourses. Before accepting an application, evidence must be provided demonstrating that Council has considered that it is not feasible to connect to the local drainage system.

Water Sensitive Urban Design

WSUD is a design process that enables localised collection and treatment of stormwater runoff. Melbourne Water acknowledges the potential for Water Sensitive Urban Design to be incorporated into the development to enable sustainable management of stormwater across the property and to compliment the social and environmental values of the area.

Melbourne Water recommends that initiatives such as sediment ponds, bio-filtration systems, grassed swales, grey water re-use, rainwater tanks and porous soils be consider in the design of the complex. Stormwater runoff from paved areas can also be a valuable resource for irrigating trees, grassed areas and landscaped garden beds.

Please contact Melbourne Water to discuss how WSUD principles will enhance the proposed development or visit our website at www.melbournewater.com.au

Melbourne Water look forward to further discussion on the above and advise that this information is only preliminary and forms no contractual agreement between your company and Melbourne Water. Melbourne Water reserves the right to alter any or all of this information at any time.

If you have any enquiries, please contact me on telephone 9235 2212.

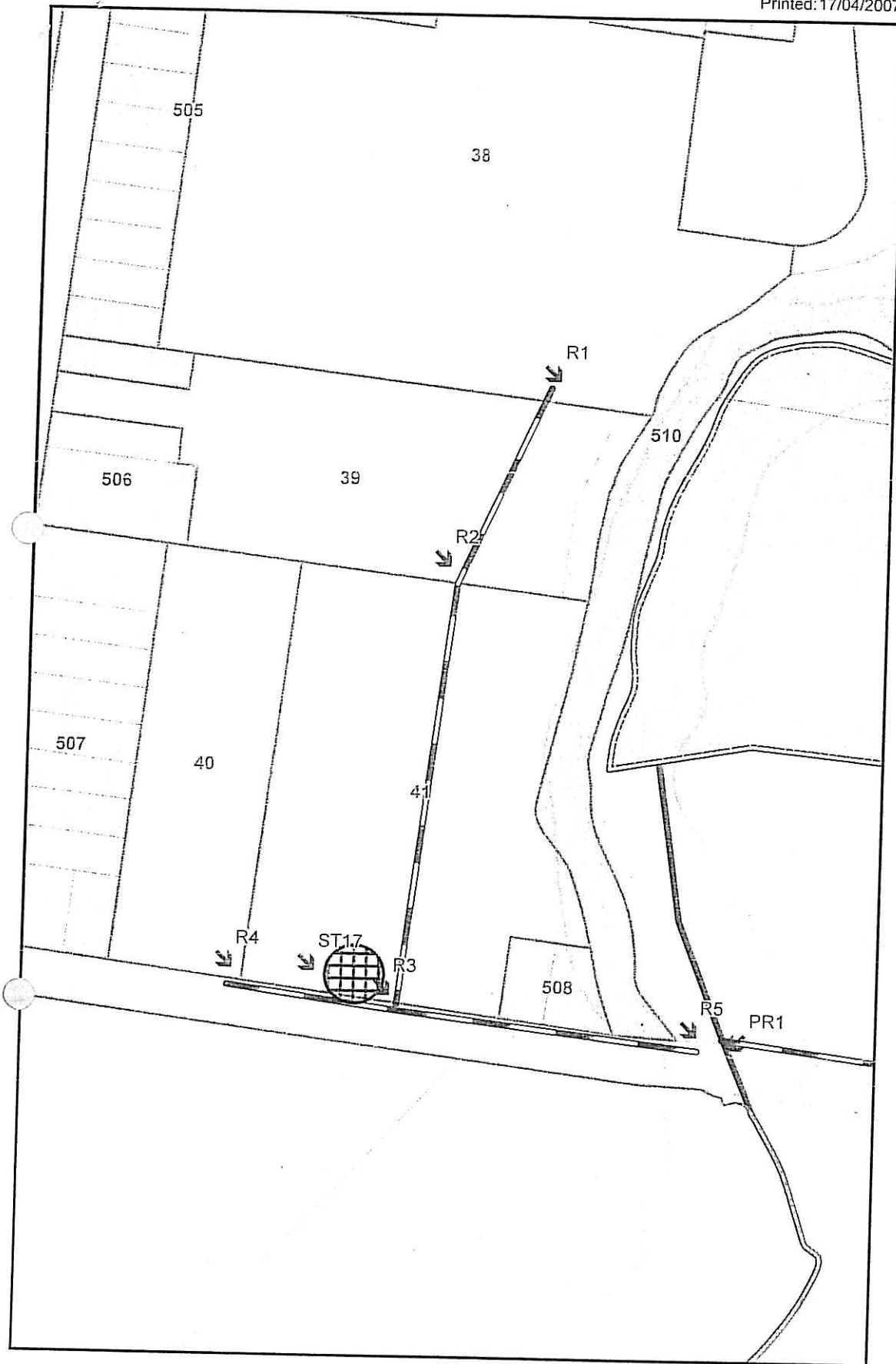
Yours sincerely



THOMAS COUSLAND
DEVELOPER WORKS

Heals Rd

Printed: 17/04/2007



- Scheme Boundary
- Property (unpaid)
- Property (partly paid)
- Property (fully paid)
- Contribution
- Stage (Allocated)
- Stage (WIP)
- Stage (Finalised)
- Nodes
- Ghost Nodes
- Pipeline
- Ghost Pipeline
- Culvert
- Soft Engineering
- Channel
- Lowflow pipeline with grassed overflow channel
- Cleanout Works
- Silt Trap
- Litter Trap
- Retarding Basin
- Wetland

0 100 200m

Scale: 1:2500

NORTH

Melbourne Water Corporation shall not be responsible or otherwise liable in anyway for loss of any kind including, without limiting the generality of the foregoing damages, costs, interest, loss of profit, or special loss or damage, arising from any error, inaccuracy, incompleteness, or other defect in this information. By receiving and accepting this information the recipient acknowledges that Melbourne Water Corporation makes no representative as to the accuracy or completeness of this information. The exact location of Melbourne Water Corporation's assets as set out in this information should be confirmed on site by the recipient prior to the commencement of the work.

The Drainage Scheme Information Shown on this Plan is current as of: 17/04/2007



Melbourne
Water